SM No. CSTPSD937100002

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

(EXEMPT)

12
Paving Ms Highway 605 from Interstate 10 to Ms Highway 67, known as Federal Aid Project STP-SDP-9371-00(002) / 101214, in the County of Harrison, State of Mississippi.

Project Completion: 362 Time Units
Project Completion: 12/30/1899

NOTICE

BIDDERS MUST PURCHASE A BOUND PROPOSAL
FROM MDOT CONTRACT ADMINISTRATION DIVISION
TO BID ON THIS PROJECT.

Electronic addendum updates will be posted on www.goMDOT.com

SECTION 900

OF THE CURRENT
(1996) STANDARD SPECIFICATIONS
FOR ROAD AND BRIDGE CONSTRUCTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

JACKSON, MISSISSIPPI

BIDDER CHECK LIST
(FOR INFORMATION ONLY)

_____ All unit prices and item totals have been entered in accordance with Subsection 102.06 of the Mississippi Standard Specifications for Road and Bridge Construction.

_____ If the bid sheets were prepared using MDOT's Electronic Bid System, proposal sheets have been stapled and inserted into the proposal package.

_____ First sheet of SECTION 905--PROPOSAL has been completed.

_____ Second sheet of SECTION 905--PROPOSAL has been completed and signed.

_____ Addenda, if any, have been acknowledged. Second sheet of Section 905 listing the addendum number has been substituted for the original second sheet of Section 905. Substituted second sheet of Section 905 has been properly completed, signed, and added to the proposal.

_____ DBE/WBE percentage, when required by contract, has been entered on last sheet of the bid sheets of SECTION 905 - PROPOSAL.

_____ Form OCR-485, when required by contract, has been completed and signed.

_____ The last sheet of the bid sheets of SECTION 905--PROPOSAL has been signed.

_____ Combination Bid Proposal of SECTION 905--PROPOSAL has been completed for each project which is to be considered in combination (See Subsection 102.11).

_____ Equal Opportunity Clause Certification, when included in contract, has been completed and signed.

_____ Subcontract Certificate, when included in contract, has been completed and signed.

_____ The Certification regarding Non-Collusion, Debarment and Suspension, etc. has been executed in duplicate.

_____ A certified check, cashier's check or bid bond payable to the State of Mississippi in the principal amount of 5% of the bid has been included with project number identified on same. Bid bond has been signed by the bidder and has also been signed or countersigned by a Mississippi Resident Agent for the Surety with Power of Attorney attached or on file with the Department's Contract Administration Engineer.

_____ Non-resident Bidders: ON STATE FUNDED PROJECTS ONLY, a copy of the current laws regarding any preference for local Contractors from State wherein domiciled has been included. See Subsection 103.01, Mississippi Standard Specifications for Road and Bridge Construction, and Section 31-7-47, MCA, 1972 regarding this matter.

Return the proposal and contract documents in its entirety in a sealed envelope. DO NOT remove any part of the contract documents; exception - an addendum requires substitution of second sheet of Section 905. A stripped proposal is considered as an irregular bid and will be rejected.

Failure to complete any or all of the applicable requirements will be cause for the proposal to be considered irregular.

(09/2004)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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COMBINATION BID PROPOSAL,
CERTIFICATE OF PERFORMANCE - PRIOR FEDERAL AID CONTRACTS,
CERTIFICATE REGARDING NON-COLLUSION, DEBARMENT AND SUSPENSION,
SECTION 902 - CONTRACT FORM, AND SECTION 903 - CONTRACT BOND FORM,
FORM -- OCR-485,
ESCROW AGREEMENT FOR CONTRACT BID DOCUMENTS,
HAUL PERMIT FOR BRIDGES WITH POSTED WEIGHT LIMITS.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Sealed bids will be received by the Mississippi Transportation Commission in the Office of the Contract Administration Engineer, Room 1013, Mississippi Department of Transportation Administration Building, 401 North West Street, Jackson, Mississippi, until 9:30 o'clock A.M., Tuesday, February 22, 2005; thereafter, bids will be received in the First Floor Auditorium of the Mississippi Department of Transportation Adminstration Building, Jackson, Mississippi, until 10:00 o'clock A.M., Tuesday, February 22, 2005, and shortly thereafter publicly opened for

Paving Mississippi Highway 605 from Interstate 10 to Mississippi Highway 67, known as Federal Aid Project No. STP-SDP-9371-00(002) / 101214, in the County of Harrison, State of Mississippi.

The attention of bidders is directed to the Contract Provisions governing selection and employment of labor. Minimum wage rates have been predetermined by the Secretary of Labor and are subject to Public Law 87-58 1, Work Hours Act of 1962, as set forth in the Contract Provisions.

The Mississippi Department of Transportation hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, religion or national origin in consideration for an award.

The award of this contract will be contingent upon the Contractor satisfying the DBE requirements.

Bid proposals must be acquired from the MDOT Contract Administration Division, Room 1013, MDOT Administration Building, 401 North West Street, Jackson, Mississippi, 39201, Telephone (601) 359-7744 or FAX (601) 359-7940. These proposals are available at a cost of Ten Dollars ($10.00) per proposal. Specimen proposals are also available at the MDOT Contract Administration Division at a cost of Ten Dollars ($10.00) per proposal, or can be viewed or downloaded at no cost at www.gomdot.com.

Plans may be acquired on a cost per sheet basis from MDOT Plans Print Shop, Room 1100, MDOT Administration Building, 401 North West Street, Jackson, Mississippi, 39201, Telephone (601) 359-7460 or e-mail at plans@mdot.state.ms.us or FAX (601) 359-7461.

Plans will be shipped upon receipt of payment.

Bid bond, signed or countersigned by a Mississippi Resident Agent, with Power of Attorney attached or on file with the Contract Administration Engineer of the Department, a Cashier's check or Certified Check for five (5%) percent of bid, payable to STATE OF MISSISSIPPI, must accompany each proposal.

The attention of bidders is directed to the provisions of Subsection 102.07 pertaining to irregular proposals and rejection of bids.

LARRY L. "BUTCH" BROWN
EXECUTIVE DIRECTOR

(FAP)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1M **CODE: (IS)**

DATE: 1/2/96

SUBJECT: Governing Specifications

The current l996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction adopted by the Mississippi Transportation Commission is made a part hereof fully and completely as if it were attached hereto, except where superseded by special provisions, or amended by revisions of the Specifications contained herein. Copies of the specification book may be purchased from the Construction Division.

A reference in any contract document to controlling requirements in another portion of the contract documents shall be understood to apply equally to any revision or amendment thereof included in the contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3M **CODE: (IS)**

DATE: 1/2/96

SUBJECT: Restriction On Tricalcium Aluminate Content And Source Of Fly Ash

All references to the term "Portland Cement Concrete" in the Mississippi Standard Specifications for Road and Bridge Construction, contract plans and documents, and the Department's Standard Operating Procedures shall be deemed to mean a concrete mixture composed of cementitious materials, water, fine and coarse aggregates, and admixtures when specified or permitted.

The Department has substantiated that for technical reasons concrete mixtures used in certain classes of application must have restrictions on the tricalcium aluminate content and source of fly ash used for replacement of portland cement. The need for the restrictions set forth herein have been documented.

In the event of a written request by interested persons, the documentation will be made available for review at the Department's Central Laboratory located at 412 East Woodrow Wilson Avenue, Jackson.

Except for those classes of application which are excluded herein, the tricalcium aluminate content of the portland cement portion of cementitious materials used in stabilization and concrete mixtures shall not exceed eight percent (based on aluminum or aluminum oxide content). At the Contractor's option, the cementitious material may be portland cement (Type I or II), portland cement (Type III when permitted), blended hydraulic cement (Type IP), portland cement combined with ground granulated blast furnace slag or portland cement combined with fly ash.

The addition of fly ash as a replacement for cement will not be permitted in blended hydraulic cement (Type IP), portland cement combined with ground granulated blast furnace slag or portland cement (Type III) when specified in the contract.

The restrictions on tricalcium aluminate content and source of fly ash are not applicable for the following classes of application:

a) manufacture of prestressed structure members, concrete pipe, post and right-of-way markers and

b) construction of bridge decks, curbs, rails and intermediate caps.

The replacement of portland cement with fly ash shall not exceed 20 percent and the replacement rate (by mass) shall be one part fly ash for one part cement. The scales for determining the mass of fly ash shall meet the requirements of cement scales as set forth in Subsection 501.03.2.3.

When blended hydraulic cement (Type IP) is incorporated in the work or when portland cement is replaced with ground granulated blast furnace slag or fly ash, cylinder tests shall be used as a guide for the removal of falsework and forms as set forth in Column B of Subsections 601.03.6.3 and 804.03.15; and concrete pavement shall not be opened to traffic until cylinder tests have attained a compressive strength of 25 MPa or may be opened after a curing period of 28 days.

In addition to meeting the requirements set forth in Subsection 714.05, the source of fly ash must have been approved for listing in the Department's "List of Approved Sources of Fly Ash for Concrete Mixtures in Sulfate Areas" prior to its use.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4M **CODE: (IS)**

DATE: **1/2/96**

SUBJECT: **Use of Ground Granulated Blast Furnace Slag (GGBFS)**

Subject to the conditions set forth herein and at the Contractor's option, GGBFS may be used as a replacement for portland cement as the cementitious material in concrete mixtures and in cement-soil or cement-soil-aggregate mixtures. The replacement of portland cement with GGBFS shall not exceed 50 percent by mass of the total cementitious material and the replacement rate (by mass) shall be one part GGBFS for one part portland cement. Only one mineral admixture will be allowed for portland cement replacement in any mixture.

The addition of GGBFS as a replacement for portland cement will not be permitted in blended hydraulic cement, portland cement combined with fly ash or portland cement (Type III), when specified in the contract.

In addition to meeting the requirements set forth in Subsection 907-714.06, the source of GGBFS must have been approved for listing in the Department's "List of Approved Suppliers of Grade 120 - Ground Granulated Blast-Furnace Slag".

Concrete mixtures containing portland cement combined with GGBFS shall not be mixed or used alternately with concrete mixtures containing other cementitious materials in any structure or part thereof that, in its permanent position, will be visible above the ground.

When GGBFS is proposed to be used in concrete mixtures, the Contractor shall furnish the concrete mixture design with documentation of performance characteristics (based on trial batching or plant produced mixtures) to the Engineer for review prior to use. The approval of the mixture design will be based on verification of performance at the beginning of production.

When GGBFS is used for replacement of portland cement in concrete mixtures, cylinder tests shall be used as a guide for the removal of falsework and forms as set forth in Column B of Subsections 601.03.6.3 and 804.03.15 and concrete pavement shall not be opened to traffic until cylinder tests have attained a compressive strength of 25 MPa or may be opened after a curing period of 28 days.

Scales for determining the mass of GGBFS shall meet the requirements of cement scales as set forth in Subsection 501.03.2.3.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6M **CODE: (IS)**

DATE: 1/2/96

SUBJECT: Status of Right-of-Way, Utility Adjustments and Potentially Contaminated Sites

Although it is desirable to have acquired all rights-of-way and completed all utility adjustments and work to be performed by others prior to receipt of bids, it is not considered to be in the public interest to wait until each and every such clearance has been obtained. The bidder is hereby advised of unacquired rights-of-way, relocatees and utilities which have not been completed.

The status of right-of-way and utility adjustments and potentially contaminated sites are set forth in attachments entitled "Status of Right-of-Way", "Status of Utility Adjustments" and "Status of Potentially Contaminated Sites."

In the event right of entry is not available to ALL parcels of right-of-way and all work complete that is to be accomplished by others on the date set forth in the contract for the Notice to Proceed, the Department will issue a restricted Notice to Proceed upon written request of the Contractor.

STATUS OF RIGHT-OF-WAY
STP-SDP-9371-00(002)
101214/302000
HARRISON COUNTY
January 13, 2005

All rights of way and legal rights of entry have been acquired, **except:**

NONE.

ASBESTOS CONTAMINATION STATUS OF BUILDINGS
TO BE REMOVED BY THE CONTRACTOR
STP-SDP-9371-00(002)
101214/302000
HARRISON COUNTY
January 13, 2005

Reference is made to notices to bidders entitled "Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP)" and "Removal of Obstructions".

The following pertinent information is furnished concerning asbestos containing materials (ACMs), if any, found in buildings to be removed by the Contractor.

This is a paving project for which no Right of Way is required.
There are no buildings in the contract to be removed.

STATUS OF POTENTIALLY CONTAMINATED SITES
STP-SDP-9371-00(002)
101214/302000
HARRISON COUNTY
January 13, 2005

THIS IS A PAVING PROJECT FOR WHICH NO RIGHT OF WAY IS REQUIRED. NO INITIAL SITE ASSESSMENT WILL BE PERFORMED. IF CONTAMINATION ON EXISTING RIGHT OF WAY IS DISCOVERED, IT WILL BE HANDLED BY THE DEPARTMENT.

UTILITY STATUS REPORT

STP-SDP-9371-00(002) / 101214

Harrison County

January 13, 2005

This is to certify that there are no utilities that will conflict with proposed construction on the above project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 29M **CODE: (IS)**

DATE: **4/9/96**

SUBJECT: **Selection of Optional Items**

Bidders are hereby advised that, because of a change by the Department in classifying "Optional" items, the bid schedule for this project lists as "Optional" items that formally have been listed as "Alternate".

The summary of quantities sheet(s) in construction plans printed prior to the effective date of this change may list as "Alternate" items that are listed as "Optional" in the bid proposal.

When this contradiction occurs, the listing in the bid schedule is correct and bidders are to disregard the contradicting listing on the summary of quantities sheet(s) in the construction plans.

Bidders should pay close attention to the items classified in the bid schedule as "Optional" items.

With the change by the Department in classifying optional items, a change will be required of the Contractor in the selection of optional items. (Refer to 907-101-2, 907-102-4 and Section 905)

WHEN THE BID SCHEDULE LISTS OPTIONAL ITEMS, THE CONTRACTOR'S SELECTION MAY, BUT IS NOT REQUIRED TO, BE MADE AT THE TIME OF BIDDING. FOR OPTIONAL ITEMS NOT PRE-SELECTED, THE CONTRACTOR'S SELECTION SHALL BE MADE PRIOR TO OR AT THE TIME OF EXECUTION OF THE CONTRACT.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 32M **CODE: (IS)**

DATE: 5/8/96

SUBJECT: Soft Metric Reinforcing Steel

Anywhere in the plans, proposal or specifications reference is made to Grade 400 or Grade 500 reinforcing steel, it shall be understood that Grade 420 and Grade 520 reinforcing steel are the correct grades.

Anywhere in the plans, proposal or specifications reference is made to AASHTO Designation: M 31M, it shall be understood that AASHTO Designation: M 31M, as amended by special provision, shall apply.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 33M **CODE: (IS)**

DATE: 5/8/96

SUBJECT: ASTM or AASHTO Designation

Whenever in the specifications reference is made to an ASTM or AASHTO Designation No., the metric edition in effect on the date of advertisement for bids shall apply, provided a metric version exists, regardless of whether or not the Designation No. shown in the specifications carries a "M" to signify metric version.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 37M **CODE: (SP)**

DATE: 6/21/96

SUBJECT: Substitution of Reinforcing Steel - Soft Metric to Imperial

Bidders are hereby advised that, at their option, imperial (inch-pound) reinforcing steel for cast-in-place or pre-cast concrete structures may be substituted for soft metric reinforcing steel in accordance with the following table. The spacing or total number of bars will remain as shown on the contract plans.

Soft Metric Bar Designation No.	Imperial Bar Designation No.
13	4
16	5
19	6
22	7
25	8
29	9
32	10
36	11

Computation of quantities for final payment will be based on approved order lists.

The basis of payment will be in metric units. The conversion factor to use in the conversion to and from metric is as follows:

1 pound = 0.4536 kilogram

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 74M **CODE: (IS)**

DATE: **3/31/97**

SUBJECT: **Plant Pest Quarantines Information**

AT THE REQUEST OF THE U. S. DEPARTMENT OF AGRICULTURE, PLANT PEST CONTROL INFORMATION CONCERNING DOMESTIC QUARANTINES IS CITED AS FOLLOWS:

The entire state of Mississippi has been quarantined for the Imported Fire Ants. Soil and soil-moving equipment operating in the state will be subject to plant quarantine regulations. In general, these regulations provide for cleaning soil from equipment before it is moved from the state. Complete information may be secured from the State of Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry, P. O. Box 5207, Mississippi State, Mississippi 39762-5207 -- Telephone 325-3390.

IMPORTED FIRE ANT QUARANTINES

THE FOLLOWING REGULATED ARTICLES REQUIRE A CERTIFICATE OR PERMIT FOR MOVEMENT:

1. Soil, separately or with other things, except soil samples shipped to approved laboratories*. Potting soil is exempt, if commercially prepared, packaged and shipped in original containers.

2. Plants with roots with soil attached, except houseplants maintained indoors and not for sale.

3. Grass sod.

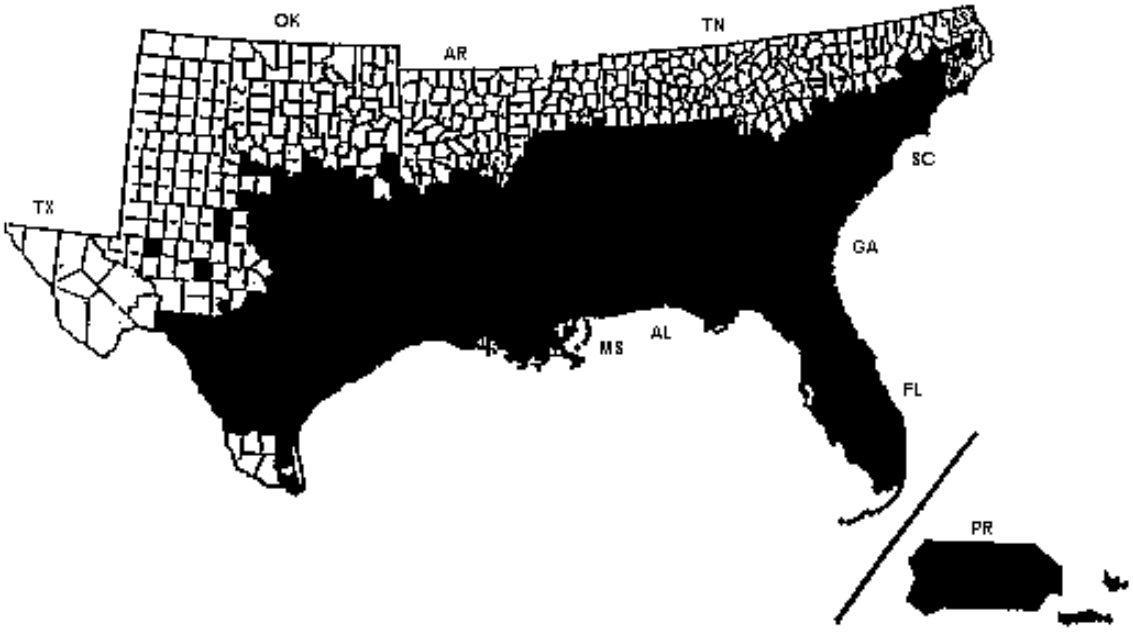
4. Baled hay and straw that have been stored in contact with the soil.

5. Used soil-moving equipment.

6. Any other products, articles, or means of conveyance of any character whatsoever not covered by the above, when it is determined by an inspector that they present a hazard of spread of the imported fire ant and the person in possession thereof has been so notified.

* Information as to designated laboratories, facilities, gins, oil mills, and processing plants may be obtained from an inspector.

Imported Fire Ant Quarantines



Conditions of Movement.

Counties entirely colored are completely regulated; Counties partially colored are partially regulated.

■ Regulated Area.

Restrictions are imposed on the movement of regulated articles as follows:
From colored areas into or through white areas.

Consult your State or Federal plant protection inspector or your County Agent for assistance regarding exact areas under regulation and requirements for moving regulated articles. For detailed information, see 7 CFR 301.81 for quarantine and regulations.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 405M **CODE: (SP)**

DATE: 9/29/98

SUBJECT: Mowing

Current specifications require that the Contractor mow certain locations within the right-of-way. In most cases, these mowing operations are to be performed at no additional cost to the State. Changes to our standard specifications by special provision have allowed payment for mowing operations in certain cases. When a pay item is provided in the contract, and when directed by the Engineer, mowing will be measured and payment made at the fixed price per hectare included in the contract, with the exception of the mowing operations required during re-fertilization of existing vegetation. Subsection 213.03 of the standard specifications require that "when fertilizer is to be applied to existing vegetation, incorporation shall be accomplished immediately after the application by mowing the vegetation to a height of approximately 100 millimeters". Costs associated with mowing operations during re-fertilization shall continue to be included in the payment for re-fertilization, pay item 213-C: Superphosphate and no separate payment will be made.

Bidders are hereby advised that costs for the mowing operations associated with re-fertilization of existing vegetation, as set out in Subsection 213, will NOT be measured for separate payment and will be included in the bid price for Superphosphate (Pay Item 213-C). When a pay item is provided in the contract, and when directed by the Engineer, mowing operations will be measured and payment made at the fixed price per hectare included in the contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 432M **CODE: (IS)**

DATE: 11/10/98

SUBJECT: Concrete Base for Bridge End Pavement

The plans specify a certain thickness of hot mix asphalt under the bridge end pavement.

The Contractor may substitute Class "B" Structural Concrete base in lieu of the hot mix asphalt.

The concrete base shall be constructed in one course on a prepared base in accordance with these specifications, and in reasonably close conformity with the lines, grades, thickness, and typical cross-sections as shown on the plans or as directed.

The concrete base will be allowed to cure 24 hours prior to placement of the bridge end pavement. A 25-mm premolded expansion joint will be required along the face of the paving bracket.

The concrete base will be paid for as the hot mix asphalt for which the substitution was made, calculated as follows:

Metric tons of hot mix asphalt allowed = Area * Thickness * 0.00235

Area = square meters of portland cement concrete bridge end pavement
Thickness = concrete base thickness in millimeters

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 506M **CODE: (IS)**

DATE: 9/30/99

SUBJECT: Prompt Payment

Bidders are hereby advised that the Prime Contractor must pay their subcontractor(s) for satisfactory performance of their contracts no later than a specific number of days from receipt of payment from the Department.

Therefore, Prime Contractors are hereby advised of the following:

(a) Within 15 calendar days after receiving payment from the Department for work satisfactorily performed, the Prime Contractor shall make prompt payment to all sub-contractors or material suppliers for all monies due.

(b) Within 15 calendar days after receiving payment from the Department for work satisfactorily completed, the Prime Contractor shall promptly return all retainage monies due to all sub-contractors or material suppliers.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 526M **CODE: (IS)**

DATE: 6/11/99

SUBJECT: Alterations In Bidding Process

Bidders are hereby advised that they may either use the traditional method of entering their bid information by hand on Section 905--Proposal, or may insert printed information obtained from the available Electronic Bid System (EBS).

It is the responsibility of every bidder to check for any addendum or modification to the contract document(s) for which they intend to submit a response. It shall be the bidder's responsibility to be sure they are in receipt of all addenda, pre-bid conference information, and/or questions and answers provided at, or subsequent to, the pre-bid conference, if any are issued.

The Mississippi Transportation Commission assumes no responsibility for defects, irregularities or other problems caused by the use of electronic media. Operation of this electronic media is done at the sole risk of the user.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 575M **CODE: (IS)**

DATE: 2/24/2000

SUBJECT: ON-THE-JOB TRAINING PROGRAM

Bidders are hereby advised that the Department's policy for administering On-The-Job Training has been changed. Affective in the March 2000 letting, payment for training hours will be handled as outlined in Special Provision 906-4. A pay item for trainees will no longer be included in individual construction projects. Payment for training individuals will be processed in accordance with the conditions in MDOT's ON-THE-JOB TRAINING PROGRAM (Special Provision 906-4).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 664M **CODE: (IS)**

DATE: 5/02/2001

SUBJECT: ERRATA AND MODIFICATIONS TO 1996 STANDARD SPECIFICATIONS BOOK

Page	Subsection	Change
101-4	101.02	In the fourth line change the word “six” to “6.1”.
104-4	104.02.3	Change the unit of pay item 104-A from “lump um” to “lump sum”.
105-4	105.06	In the sixth line of the third paragraph change "Contractor’s” to “Contractor”.
714-9	714.13.12	In Note 3 of Table I, change “EOS” to “AOS”.
721-3	721.03	In the first line of the second paragraph change "banks” to “blanks”.
721-3	721.03	In the first line of the third paragraph change "banks” to “blanks”.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 665M **CODE: (IS)**

DATE: **5/02/2001**

SUBJECT: **Substitution of Cold Plastic Traffic Markings**

Bidders are hereby advised that, at their option, cold plastic traffic markings may be used in lieu of hot applied thermoplastic markings. Substitution will only be allowed for pay items 907-626-AA through HH. Substituted cold plastic markings shall be of the same color and width as that required for the hot applied stripe. Unless otherwise specified, the markings, whether hot applied or cold plastic, shall be of the same type material for the entire project. Material and construction requirements for substituted cold plastic traffic markings shall meet the requirements of Section 628 of the Standard Specifications or as amended by special provision. The layout and spacing for substituted cold plastic traffic markings will remain as shown in the plans, or in the contract documents, for hot applied thermoplastic markings. Measurement of substituted cold plastic traffic markings shall be made in accordance with Section 628 of the Standard Specifications or as amended by special provision. Payment for substituted cold plastic traffic markings shall be made at the unit price bid for the appropriate hot applied thermoplastic marking.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 708M **CODE: (SP)**

DATE: 9/13/2001

SUBJECT: Placement Of Granular Material

The Contractor shall be required to place granular material on the shoulders at any time a differential of fifty five millimeters (55 mm) or more exists between the present pavement edge and the shoulder grade. This condition may exist prior to any preliminary leveling, after the placement of the preliminary leveling, after the placement of the surface course. In any event, whenever or wherever, a 55-mm differenital exists between the pavement edge and the shoulder material, this condition shall be corrected by the placement of the shoulder material to correct the differential.

SUPPLEMENT TO NOTICE TO BIDDERS NO. 724M

DATE: 12/10/2001

The goal is 7 percent for the Disadvantaged Business Enterprise.

The bidder's execution of the signature portion of the proposal shall constitute execution of the following assurance:

> The bidder hereby gives assurance pursuant to the applicable requirements of "Transportation Equity Act for the 21st Century -- TEA-21" and "Part 26, Title 49, Code of Federal Regulation" that the bidder has made a good faith effort to meet the contract goal for DBE participation for which this proposal is submitted.

A pre-bid meeting will be held in the first floor auditorium of the Mississippi Department of Transportation Administration Building, 405 North West Street, Jackson, Mississippi at 2:00 P.M. on the day preceding the date of the bid opening.

This meeting is to inform DBE firms of subcontracting and material supply opportunities. Attendance at this meeting is considered of prime importance in demonstrating good faith effort to meet the contract goal.

SUPPLEMENT TO NOTICE TO BIDDERS NO. 724M

DATE: 08/13/2004

Delete the second paragraph under the heading DIRECTORY on page 3 and substitute the following:

To initially count toward meeting the goal, the DBE firm must be on the Department's list of "Certified DBE Contractors" that is attached to this proposal and approved by MDOT. DBE credit is received only when the DBE firm has been paid for the work they performed on the project.

Delete the first paragraph under the heading REPLACEMENT on page 3 and substitute the following:

If a DBE Subcontractor cannot perform satisfactorily, and this causes the OCR-481 commitment to fall below the contract goal, the Contractor shall take all necessary reasonable steps to replace the DBE with another certified DBE Subcontractor or submit information to satisfy the Mississippi Department of Transportation that adequate good faith efforts have been made to replace the DBE. The replacement DBE must be a DBE who was on the Department's list of "Certified DBE Contractors" when the job was awarded, and who is still active All DBE replacements must be approved by the Department.

Delete subparagraph (3) on page 5 under the heading AWARD, and substitute the following:

(3) Bidder must submit **with the bid proposal** a list of all firms that submitted quotes for material supplies or items to be subcontracted. This information must be submitted on form OCR-485 in the back of the contract proposal.

Delete the first sentence of subparagraph (2) on page 6 under the heading DBE REPORTS, and substitute the following:

At the conclusion of the project the Contractor will submit to the Project Engineer for verification of quantities and further handling Form OCR-482 whereby the Contractor certifies to the amounts of payments made to each Contractor/Supplier.

Delete subparagraph (5) on page 6 under the heading DBE REPORTS, and substitute the following:

(5) OCR-485: The bidder must submit **with the bid proposal** a list of all firms that submitted quotes for material supplies or items to be subcontracted.

(6) OCR-487: Only used by Prime Contractors that are certified DBE firms. This form is used in determining the exact percentage of DBE credit for the specified project. It should be returned to MDOT with the OCR-481 form, or can also be returned with the Permission to Subcontract forms (CAD -720 or CAD-725).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 724M **CODE: (IS)**

DATE: 12/10/2001

SUBJECT: DISADVANTAGED BUSINESS ENTERPRISES IN FEDERAL-AID HIGHWAY CONSTRUCTION

This contract is subject to the "Transportation Equity act for the 21st Century -- TEA-21" and applicable requirements of "Part 26, Title 49, Code of Federal Regulations." Portions of the Act are set forth in this Notice as applicable to compliance by the Contractor and all of the Act, and the MDOT DBE Program, is incorporated by reference herein.

The Department has developed a Disadvantaged Business Enterprise Program that is applicable to this contract and is made a part thereof by reference.

Copies of the program may be obtained from:

Office of Civil Rights
Mississippi Department of Transportation
P. O. Box 1850
Jackson, Mississippi 39215-1850

POLICY

It is the policy of the Mississippi Department of Transportation to provide a level playing field, to foster equal opportunity in all federally assisted contracts, to improve the flexibility of the DBE Program, to reduce the burdens on small businesses, and to achieve that amount of participation that would be obtained in a non-discriminatory market place. In doing so, it is the policy of MDOT that there will be no discrimination in the award and performance of federally assisted contracts on the basis of race, color, sex, age, religion, national origin, or any handicap.

ASSURANCES THAT CONTRACTORS MUST TAKE:

MDOT will require that each contract which MDOT signs with a subrecipient or a contractor (and each subcontract the prime contractor signs with a subcontractor) includes the following assurances:

> "The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federally assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as MDOT deems appropriate."

DEFINITIONS

For purposes of this provision the following definitions will apply:

"Disadvantaged Business" means a small business concern: (a) which is at least 51 percent owned by one or more socially and economically disadvantaged individual(s) or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individual(s); and (b) whose management and daily business operations

are controlled by one or more of the socially and economically disadvantaged individual(s) who own it. It is important to note that the business owners themselves must control the operations of the business. Absentee ownership or title ownership by an individual who does not take an active role in controlling the business is not consistent with eligibility as a DBE under CFR 49 Part 26.71.

CONTRACTOR'S OBLIGATION

The Contractor and all subcontractors shall take all necessary and reasonable steps to ensure that DBE firms can compete for and participate in the performance of a portion of the work in this contract and shall not discriminate on the basis of race, color, national origin, religion or sex. Failure on the part of the Contractor to carry out the DBE requirements of this contract constitutes a breach of contract and after proper notification the Department may terminate the contract or take other appropriate action as determined by the Department.

When a contract requires a zero percent (0%) DBE goal, the Contractor still has the responsibility to take all necessary and reasonable steps to ensure that DBE firms can compete for and participate in the performance of the work in the contract. All work performed by a certified DBE firm is considered to be a "race neutral" measure and the Department will receive DBE credit towards the overall State goals when the DBE firm is paid for their work. If the Prime Contractor is a certified DBE firm, the Department can receive DBE credit only for the work performed by the Prime Contractor's work force or any work subcontracted to another DBE firm. Work performance by a non-DBE subcontractor is not eligible for DBE credit. DBE credit is received when the DBE firm is paid.

CONTRACT GOAL

The goal for participation by DBEs is established for this contract in the attached Supplement. The Contractor shall exercise all necessary and reasonable steps to ensure that participation is equal to or exceeds the contract goal.

The percentage of the contract that is proposed for DBEs shall be so stated on the last bid sheet of the proposal.

The apparent lowest responsive bidder shall submit to the Contract Administration Division OCR Form 481, signed by the Prime Contractor and the DBE Subcontractors, no later than the 10th day after opening of the bids.

FORMS ARE AVAILABLE FROM THE CONTRACT ADMINISTRATION DIVISION

The OCR-481 Form must contain the following information:

The name and address of each certified DBE Contractor / supplier;

The Reference Number, percent of work and the dollar amount of each item. If a portion of an item is subcontracted, a breakdown of that item (including quantities and unit price) must be attached, detailing what part of the item the DBE firm is to perform and who will perform the remainder of the item.

If the DBE Commitment shown on the last bid sheet of the proposal, does not equal or exceed the contract goal, the bidder must submit, with the proposal, information to satisfy the Department that adequate good faith efforts have been made to meet the contract goal.

Failure of the lowest bidder to furnish acceptable proof of good faith efforts, submitted with the bid proposal, shall be just cause for rejection of the proposal. Award may then be made to the next lowest responsive bidder or the work may be readvertised.

The following factors are illustrative of matters the Department will consider in judging whether or not the bidder has made adequate good faith effort to satisfy the contract goal.

(1) Whether the bidder attended the pre-bid meeting that was scheduled by the Department to inform DBEs of subcontracting opportunities;

(2) whether the bidder advertised in general circulation, trade association, and minority-focus media concerning the subcontracting opportunities;

(3) whether the bidder provided written notice to a reasonable number of specific DBEs that their interest in the contract is being solicited;

(4) whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested;

(5) whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goal;

(6) whether the bidder provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;

(7) whether the bidder negotiated in good faith with interested DBEs and did not reject them as unqualified without sound reasons based on a thorough investigation of their capabilities; and

(8) whether the bidder made efforts to assist interested DBEs in obtaining any required bonding or insurance.

DIRECTORY

Included with this Bid Proposal is a list of "Certified DBE Contractors" which have been certified as such by the Mississippi Department of Transportation.

To count toward meeting the goal, the DBE firm must be on the Department's list of "Certified DBE Contractors" that is attached to this proposal. DBE credit is received only when the DBE firm has been paid for the work performed on this project.

REPLACEMENT

If a DBE Subcontractor cannot perform satisfactorily, and this causes the OCR-481 commitment to fall below the contract goal, the Contractor shall take all necessary reasonable steps to replace the DBE with another certified DBE Subcontractor or submit information to satisfy the Mississippi Department of Transportation that adequate good faith efforts have been made to replace the DBE. All DBE replacements must be approved by the Department.

Under no circumstances shall the prime or any subcontractor perform the DBE's work (as shown on the OCR-481) without prior written approval from the Department. See "Sanctions" on Page 6 for penalties for performing DBE's work.

When a Contractor proposes to substitute/replace/terminate a DBE that was originally named on the OCR-481, the Contractor must obtain a release (in writing) from the named DBE explaining why the

DBE Subcontractor cannot perform the work. A copy of the original DBE's release must be attached to the Contractor's written request to substitute/replace/terminate along with appropriate Subcontract Forms for the substitute/replacement/terminated Subcontractor, all of which must be submitted to the DBE Coordinator and approved, in advance, by MDOT.

GOOD FAITH EFFORTS

To demonstrate good faith efforts to replace any DBE that is unable to perform successfully, the Contractor must document steps taken to subcontract with another certified DBE Contractor. Such documentation shall include no less than the following:

(a) Proof of written notification to certified DBE Contractors by certified mail that their interest is solicited in subcontracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.

(b) Efforts to negotiate with certified DBE Contractors for specific items shall include as a minimum:

(1) The name, address, and telephone number of each DBE contacted;

(2) A description of the information provided about the plans and specifications for those portions of the work to be subcontracted; and

(3) A statement of why agreements were not reached.

(c) For each DBE contacted that was rejected as unqualified, the reasons for such conclusion.

(d) Efforts made to assist each DBE that needed assistance in obtaining bonding or insurance required by the Contractor.

Failure of the Contractor to demonstrate good faith efforts to replace a DBE Subcontractor that cannot perform as intended with another DBE Subcontractor, when required, shall be a breach of contract and may be just cause to be disqualified from further bidding for a period of up to 12 months after notification by certified mail.

PARTICIPATION / DBE CREDIT

Participation shall be counted toward meeting the goal in this contract as follows:

(1) If the Prime Contractor is a certified DBE firm, only the value of the work actually performed by the DBE Prime can be counted towards the project goal, along with any work subcontracted to a certified DBE firm.

(2) If the Contractor is not a DBE, the work subcontracted to a certified DBE Contractor will be counted toward the goal.

(3) The Contractor may count toward the goal a portion of the total dollar value of a contract with a joint venture eligible under the standards of this provision equal to the percentage of the DBE partner in the joint venture. The joint venturer must submit a Joint Venture Eligibility Form provided by the Mississippi Department of Transportation.

(4) Expenditures to DBEs that perform a commercially useful function may be counted toward the goal. A business is considered to perform a commercially useful function when it is

responsible for the execution of a distinct element of the work and carries out its responsibilities by actually performing, managing, and supervising the work involved.

(5) The Contractor may count 100% of the expenditures for materials and supplies obtained from certified DBE suppliers and manufacturers that produce goods from raw materials or substantially alters them for resale provided the suppliers and manufacturers assume the actual and contractual responsibility for the provision of the materials and supplies. The Contractor may count 60 percent of the expenditures to suppliers that are not manufacturers, provided the supplier performs a commercially useful function in the supply process. Within 30 days after receipt of the materials, the Contractor shall furnish to the DBE Coordinator invoices from the certified supplier to verify the DBE goal.

(6) Any work that a certified DBE firm subcontracts or sub-subcontracts to a non-DBE firm will not count towards the DBE goal.

(7) Only the dollars actually paid to the DBE firm may be counted towards the DBE goal.

AWARD

Award of this contract to the low bidder will be contingent upon the following conditions:

(1) Concurrence from Federal Highway Administration, when applicable.

(2) Bidder must submit to the Contract Administration Division for approval, Form OCR-481 (DBE Commitment) no later than the 10th day after opening of the bids, or submit information with the bid proposal to satisfy the Department and that adequate good faith efforts have been made to meet the contract goal.

(3) Bidder must submit to Contract Administration Division a list of all firms that submitted quotes for material supplies or items to be subcontracted no later than 10 days after opening of the bids. This information must be submitted on form OCR-485.

Prior to the start of any work, the bidder must notify the Project Engineer, in writing, of the name of the designated "DBE Liaison Officer" for this project. This notification must be posted on the bulletin board at the project site.

DEFAULT

In the event the Contractor defaults on this project and the Surety Company is called upon to complete the contract, the DBEs named on the original OCR-481 Forms must be given the opportunity to perform the work subcontracted to them by the original contractor unless the DBE requests, in writing, to be released. The DBE commitment percentage entered on the last bid sheet of the proposal shall remain in force as a provision of the contract, but only the contract goal established by MDOT in this proposal must be met or exceeded to fulfill the terms of the contract. The Contractor may list DBE Subcontractors and items that exceed MDOT's contract goal, but should unforeseen problems arise that would prevent a DBE from completing its total commitment percentage, the Contractor will meet the terms of the contract as long as it meets or exceeds MDOT's Contract Goal. For additional information, refer to "Replacement" section of this Notice.

DBE REPORTS

(1) OCR-481: Refer to "CONTRACT GOAL" section on page no. 2 of this Notice to Bidders for information regarding this form.

(2) OCR-482: At the conclusion of the project the Contractor will submit to the Project Engineer for verification of quantities and further handling Form OCR-482 whereby the Contractor certifies to the amounts of payments made to each DBE Contractor/Supplier to satisfy the contract goal. The Project Engineer shall submit the completed Form OCR-482 to the DBE Coordinator (Office of Civil Rights). Final acceptance of the project is dependent upon Contract Administration Division's receipt of completed Form OCR-482 which they will receive from the Office of Civil Rights.

(3) OCR-483: The Project Engineer/Inspector will complete Form OCR-483, the Commercially Useful Function (CUF) Performance Report, in accordance with MDOT S.O.P. No. OCR-03-09-01-483. Evaluations reported on this form are used to determine whether or not the DBE firm is performing a CUF. The Prime Contractor should take corrective action when the report contains any negative evaluations. DBE credit may be disallowed and/or other sanctions imposed if it is determined the DBE firm is not performing a CUF. This form should also be completed and returned to the DBE Coordinator (Office of Civil Rights).

(4) OCR-484: Each month, the Contractor will submit to the Project Engineer OCR-484 certifying payments to all subcontractors.

(5) OCR-485: The Contractor (apparent low bidder) will submit to Contract Administration Division within 10 days from the opening of the bids, a list of all firms that submitted quotes for material supplies or items to be subcontracted.

SANCTIONS

The Department has the option to enforce any of the following penalties for failure of the prime Contractor to fulfill the DBE goal as stated on the OCR-481 Form or any violations of the DBE program guidelines:

(1) Disallow credit towards the DBE goal

(2) Withhold progress estimate payments

(3) Deduct from the final estimate an amount equal to the unmet portion of the DBE goal

(4) Recover an amount equal to the unmet contract goal

(5) Debar the Contractor involved from bidding on Mississippi Department of Transportation projects.

(6) Deduct from the Contractor's final estimate all or any combination of the following.

Offense	Percentage of the monetary amount disallowed from (1) above	Lump Sum
# 1	10%	$ 5,000 or both
# 2	20%	$ 10,000 or both
# 3	40%	$ 20,000 & debarment

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 726M **CODE: (IS)**

DATE: **12/10/2001**

SUBJECT: **DBE Goals**

Bidders are hereby advised that the participation of a DBE Firm can not be counted towards the Prime Contractor's DBE goal until the amount being counted towards the goal has been paid to the DBE.

Form OCR-484 has been developed to comply with this requirement. Prime Contractors will submit this form to the Project Engineer no later than the 20th of each month. This form should be submitted monthly showing all firms even if the Contractor has paid no monies to the firm during that estimate period (negative report). The Project Engineer will attach this form to the monthly estimate before forwarding the estimate to the Contract Administration Division for processing.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 741M **CODE: (IS)**

DATE: 02/27/2002

SUBJECT: Work In Proximity Of High Voltage Power Lines

Bidders are hereby advised of Section 45-15-1, et seq., Mississippi Code of 1972, regarding the performance of work in the proximity of high voltage overhead power lines. It is the Contractor's responsibility to comply with those statutory requirements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 777M **CODE: (IS)**

DATE: **05/22/2002**

SUBJECT: **Payments to Subcontractors**

Bidders are hereby advised that each month, the Contractor will submit to the Project Engineer form OCR-484 certifying payments to all subcontractors. Form OCR-484 can be obtained from the Office of Civil Rights Division, MDOT Administration Building, 401 North West Street, Jackson, MS, or at the MDOT website under the *Business Section, Construction Contracts and Bidding, Disadvantaged Business Enterprise (DBE), Applications and Forms for the DBE Program*.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 779M **CODE: (IS)**

DATE: 06/07/2002

SUBJECT: Contract Overpayment(s)

Bidders are hereby advised that by the execution of the contract for this project, the Contractor agrees that it has the duty to and will immediately reimburse the Mississippi Transportation Commission, without any demand therefore, for any overpayment(s) of which it has knowledge, or through due diligence, should have knowledge.

By the execution of the contract for this project, the Contractor also agrees that if the Mississippi Transportation Commission has made any overpayment(s) to the Contractor on any previously executed contract(s), the Mississippi Transportation Commission may notify the Contractor in writing of the nature and the amount of the overpayment(s). If the Contractor fails to remit the overpayment(s) to the Mississippi Transportation Commission within sixty (60) calendar days from the date of such notice, interest shall accrue from the date of such notification until payment is made in full at the rate of one percent (1%) per month until fully paid.

By the execution of the contract for this project, the Contractor also agrees that the Mississippi Transportation Commission may offset and withhold a sum equal to any overpayment(s) on any previously executed contract(s), plus interest, where applicable, against any sums due the Contractor under the terms of this contract or any other active contract(s).

By the execution of the contract for this project, the Contractor also agrees that if any overpayment(s) are made by the Mississippi Transportation Commission to the Contractor under the terms of this contract the Mississippi Transportation Commission shall have the right to offset and withhold that amount, plus interest, where applicable, from any sums which the Mississippi Transportation Commission might owe the Contractor on any other active contract(s) or any contract(s) executed subsequent to the execution of this contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 803M **CODE: (IS)**

DATE: **09/17/2002**

SUBJECT: **Federal Bridge Formula**

Bidders are hereby advised that Federal Highway Administration Publication No. FHWA-MC-94-007, **BRIDGE FORMULA WEIGHTS**, dated January 1994, is made a part of this contract when applicable.

Prior to the preconstruction conference, the Contractor shall advise the Engineer, in writing, what materials, if any, will be delivered to the jobsite via Interstate route(s).

Copies of the **BRIDGE FORMULA WEIGHTS** publication may be obtained by contacting:

Federal Highway Administration
400 7th Street, SW
Washington, DC 20590
(202) 366-2212

or

http://ops.fhwa.dot.gov/freight/regulate/sw/

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 804M **CODE: (IS)**

DATE: 09/26/2002

SUBJECT: Certification of Traffic Control Devices

Category 1 Traffic Control Devices

Category 1 traffic control devices are defined as low-mass, single-piece traffic cones, tubular markers, single-piece drums, and delineators.

The Contractor shall certify to the Project Engineer by a letter ONLY stating that the Category 1 traffic control devices, furnished and used, either meet the requirements of NCHRP Report 350 or were purchased prior to October 1, 1998.

All documentation supporting the certification is to be kept on file by the Contractor subject to review by the Department at any time. Support documentation shall be kept on file for two years after the completion of the project.

The Contractor may self-certify Category 1 Traffic Control Devices. In order to make the self-certification, the Contractor shall have as a minimum the following support documentation regarding the certification.

1. A title, e.g., "Certification of Crashworthiness";
2. Name and address of vendor making the certification;
3. Unique identification of the certificate (such as serial number) with numbered pages and the total number of pages;
4. Description and unambiguous identification of the item tested;
5. Identification of the basis for self-certification process used and to what test level of NCHRP Report 350. This basis as crash test experience with similar devices or years of demonstrably safe operational performance;
6. A signature and title, or an equivalent identification of the person(s) accepting responsibility for the content of the certification, however produced, and the date of issue;
7. A statement that the certification shall not be reproduced except in full.

All documentation supporting the self-certification is to be kept on file by the Contractor subject to review by the Department at any time. Support documentation shall be kept on file for two years after the completion of the project.

The Contractor's letter to the Project Engineer shall state that all Category 1 traffic control devices, furnished and used, were purchased after October 1, 1998 and met the requirements of NCHRP Report 350, or that the Category 1 traffic control devices, furnished and used, were purchased prior to October 1, 1998.

Category 2 Traffic Control Devices

Category 2 traffic control devices are defined as barricades, intrusion detectors, vertical panel assemblies, portable sign supports, drums with warning lights, and cones with warning lights.

The Contractor shall certify to the Project Engineer by a letter ONLY stating that the Category 2 traffic control devices, furnished and used, either meet the requirements of NCHRP Report 350 or were purchased prior to October 1, 2000. The Contractor's letter shall state that all Category 2 traffic control devices, furnished and used, were purchased after October 1, 2000 and met the requirements of NCHRP Report 350, or that the Category 2 traffic control devices, furnished and used, were purchased prior to October 1, 2000.

Category 3 Traffic Control Devices

Category 3 Traffic Control Devices are items similar to Category 2 but have a mass of more than 45 kilograms. Category 3 Traffic Control Devices include concrete barrier, truck mounted attenuators (TMAs), workzone crash cushions, and fixed sign supports.

Concrete barrier and fixed sign supports, furnished and used, and purchased after October 1, 2002 must meet the requirements of Report 350.

The Contractor shall furnish a letter ONLY certifying that all concrete barrier and fixed sign supports purchased after October 1, 2002 meets the requirements of NCHRP Report 350. Concrete barrier and fixed sign supports purchased prior to October 1, 2002 may be used without written certification until they complete their normal service life.

Work zone crash cushions and truck mounted attenuators (TMAs), furnished and used, and purchased after October 1, 1998 must meet the requirements of Report 350.

The Contractor shall furnish a letter certifying that all work zone crash cushions and TMAs purchased after October 1, 1998 meets the requirements of NCHRP Report 350. Work zone crash cushions and TMAs purchased prior to October 1, 1998 may be used without written certification until they complete their normal service life.

Contractor's Letter to the Project Engineer

The following is an example of a letter to the Project Engineer.

"I, *(Contractor's name)*, certify that the Category 1 traffic control devices used on this project and purchased after October 1, 1998 meet the requirements of NCHRP Report 350 and all Category 1 traffic control devices used on this project not meeting NCHRP Report 350 were purchased prior to October 1, 1998.

I also certify that the Category 2 traffic control devices used on this project and purchased after October 1, 2000 meet the requirements on NCHRP Report 350 and all Category 2 traffic control devices used on this project not meeting NCHRP Report 350 were purchased prior to October 1, 2000.

I also certify that except for concrete median barrier, all of the Category 3 traffic control devices crash cushions and truck mounted attenuators used on this project and purchased after October 1, 1998 meet the requirements on NCHRP Report 350 and all Category 3 crash cushions and truck mounted attenuators used on this project not meeting NCHRP Report 350 were purchased prior to October 1, 1998."

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 812M **CODE: (SP)**

DATE: 10/23/2002

SUBJECT: Submission of Form OCR-485

Bidders are hereby advised that prior to the November 2002 letting, Form OCR-485 was completed by the apparent low bidder and submitted 10 days after opening of the bids. Beginning with the November 2002 letting, Form OCR-485 will be completed by **ALL BIDDERS** submitting a bid proposal and **must be included in the bid proposal package**. Failure to include Form OCR-485 in the bid proposal package will cause the Contractor's bid to be considered **irregular**.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO.840M **CODE: (SP)**

DATE: 03/19/2003

SUBJECT: Storm Water Discharge Associated with Construction Activity (≥ 2.0 Hectares)

PROJECT: STP-SDP-9371-00(002) / 101214 – Harrison County

A Construction Storm Water General NPDES Permit to discharge storm water associated with construction activity is required.

The Department has acquired Certificate of Permit Coverage MSR-103279 under the Mississippi Department of Environmental Quality's (MDEQ) Storm Water Construction General Permit. Projects issued a certificate of permit coverage are granted permission to discharge treated storm water associated with construction activity into State waters. Copies of said permit, completed Construction Notice of Intent (CNOI), and Storm Water Pollution Prevention Plan (SWPPP) are on file with the Department.

Prior to the execution of the contract, the successful bidder shall execute and deliver to the Executive Director an original signed copy of the completed Prime Contractor Certification (Form No. 1).

Failure of the bidder to execute and file the completed Prime Contractor Certification (Form No. 1) shall be just cause for the cancellation of the award.

The executed Prime Contractor Certification (Form No. 1) shall be prima facie evidence that the bidder has examined the permit, is satisfied as to the terms and conditions contained therein, and that the bidder assumes the responsibility for meeting all permit terms and conditions and for performing permit requirements including, but not limited to, the inspection and reporting requirements of Part IV. For this project, the Contractor shall furnish, set up and read, as needed, an on-site rain gauge.

In accordance with Part IV.B, the Contractor shall display proof of coverage at a conspicuous place accessible by the public on or at the edge of the construction site.

The Contractor shall make inspections in accordance with Part IV.D and shall furnish the Project Engineer with the results of each weekly inspection as soon as possible following the date of inspection. A copy of the form provided in Part VII with the inspection portion completed shall be sufficient. The weekly inspections must be documented on the Monthly Inspection Report and Certification Form. The Contractor's representative and the Project Engineer shall jointly review and discuss the results of the inspections so that corrective action can be taken. The Project Engineer shall retain copies of the inspection reports.

An amount equal to 25 percent (25%) of the total estimated value of the work performed during each period in which the Contractor fails to submit the completed Monthly Inspection

Report and Certification Form to the Project Engineer will be withheld from the Contractor's earned work. Thereafter, on subsequent successive estimate periods, the percentage withheld will be increased at the rate of 25 percent per estimate period in which the non-conformance with this specification continues. Monies withheld for this non-conformance will be released for payment on the next monthly estimate for partial payment following the date the submittal of the completed Monthly Inspection Report and Certification Form is brought back into compliance with this specification.

Upon successful completion of all permanent erosion and sediment controls for a covered project, accepted and documented by the Engineer, a completed Notice of Termination (NOT) of Coverage form (provided in Part VIII.) shall be submitted to the Office of Pollution Control. All the monthly inspection forms will be submitted at this time with the Notice of Termination (NOT) of Coverage form. If no sediment and erosion control problems are identified, the prime contractor will receive a termination letter from the Office of Pollution Control.

In summary, prior to the execution of the contract, the successful bidder shall execute and deliver to the Executive Director an original signed copy of the completed Prime Contractor Certification (Form No. 1). Also, prior to the commencement of construction on the project, the Contractor shall transmit by letter an original signed copy of the completed Prime Contractor Certification (Form No. 2) to the Office of Pollution Control, P.O. Box 10385, Jackson, Mississippi 39289-0385. Copies of the completed Prime Contractor Certification (Form No. 2) and letter of transmittal shall be furnished the Project Engineer as proof of the required filing with the Office of Pollution Control. At project completion, when accepted and documented by the Engineer, a Notice of Termination of Coverage will be submitted to the Office of Pollution Control along with all monthly inspection forms.

Securing a permit (s) for storm water discharge associated with the Contractor's activity on any other regulated area the Contractor occupies, shall be the responsibility of the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 853M **CODE: (SP)**

DATE: 05/12/2003

SUBJECT: Removal of Construction Signs

Bidders are hereby advised that upon receipt of the Final or Partial Maintenance Release, as documented in writing by the State Construction Engineer, the Contractor shall have fifteen (15) calendar days in which to remove all construction signs on the project. It is agreed that if the signs are not removed within the fifteen (15) calendar days the signs shall be considered abandoned and shall become the property of the Mississippi Transportation Commission which may remove, use, and/or dispose of such signs as it sees fit.

The Contractor shall place and maintain appropriate construction signs for any additional work on the project after the Maintenance Release has been issued. These construction signs will not be measured for separate payment. Payment for these signs shall be included in Pay Item No. 618-A, Maintenance of Traffic.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 863M **CODE: (SP)**

DATE: 6/19/2003

SUBJECT: Submittal of Hydrated Lime Shipping Tickets

In accordance with Subsection 907-401.02.3.1 of the specifications, the Contractor shall provide the District Materials Engineer with a copy of each shipping ticket from the supplier including the project number, date, time and weight of hydrated lime shipped and used in Hot Mix Asphalt (HMA) production.

The Contractor is advised that an amount equal to twenty-five percent (25%) of the total value of HMA items performed during the initial estimate period in which the Contractor fails to submit the hydrated lime shipping tickets to the District Materials Engineer will be withheld from the Contractor's earned work. Non-conformance with this specification for successive estimate period(s) will result in the total value (100%) of HMA items performed during this period(s) being withheld from the Contractor's earned work. Monies withheld for this non-conformance will be released for payment on the next monthly estimate following the date the submittal of hydrated lime shipping tickets to the District Materials Engineer is brought back into compliance with this specification.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 894M **CODE: (SP)**

DATE: 10/10/2003

SUBJECT: Conversion Factors for MDOT Field Manual for HMA Pavements

Bidders are hereby advised that the Field Manual For Hot Mix Asphalt Pavement, revised March 1, 2003, is only available in the English version.

Any reference in Notice to Bidders, Special Provisions, Plans, and the Mississippi Standard Specifications for Road and Bridge Construction to the latest edition of the MDOT Field Manual for Hot Mix Asphalt shall be understood that the English version of the Field Manual is applicable.

In order to utilize the English version of the Field Manual, conversions will be made in accordance with MDOT's "Metric Criteria Transportation Projects" booklet, copies of which are available in the Planning Division or Construction Division of MDOT. All conversions will be a "soft conversion" from Metric units to English units.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 896M **CODE: (IS)**

DATE: 10/20/2003

SUBJECT: Fuel Tax Applicability to Bidders and Contractors

Bidders are hereby advised that the "Mississippi Special Fuel Tax Law", Section 27-55-501, et seq. and it's requirements and penalties apply to any contract for construction, reconstruction, maintenance or repairs, for contracts entered into with the State of Mississippi, any political subdivision of the State of Mississippi, or any Department, Agency, Institute of the State of Mississippi or any political subdivision thereof.

The Mississippi State Tax Commission will be notified of the name and address of the Contractor that is awarded this contract. The Contractor will be subject to an audit during the life of this contract to make certain that all applicable fuel taxes are being paid promply as outlined in Section 27-55-501, et seq.

In addition to any audits performed by the Mississippi State Tax Commission, the Department also reserves the right to audit the Contractor's records during the life of this contract to make certain that all applicable fuel taxes are being paid promply as outlined in Section 27-55-501, et seq.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 936M **CODE: (IS)**

DATE: 06/18/2004

SUBJECT: Gopher Tortoises

Bidders are hereby advised that the Contractor will be required to make special considerations regarding gopher tortoises on this project. In addition to the normal required documentation associated with borrow pits, the Contractor shall, for each site used to obtain or dispose of materials associated with this project, provide the Engineer with a letter from a qualified biologist certifying that the site was inspected prior to any clearing of vegetation or disposal of project materials and that the site is not inhabited by gopher tortoises, or appropriate avoidance measures have been installed. No individual lacking the proper State or Federal license shall touch or otherwise harass a gopher tortoise.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 937M **CODE: (IS)**

DATE: 07/15/2004

SUBJECT: Fiber Reinforced Concrete

Bidders are hereby advised that synthetic structural fibers meeting the requirements of Subsection 907-711.04 may be used in lieu of wire mesh in some items of construction. Substitution of fibers for wire mesh will be allowed in the construction of paved ditches, paved flumes, paved inlet apron, driveways and guard rail anchors. Substitution in any other items of work must be approved by the State Construction Engineer prior to use.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 977M **CODE: (SP)**

DATE: 01/14/2005

SUBJECT: Contract Time

PROJECT: STP-SDP-9371-00(002) / 101214 – Harrison County

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable time units are assessed, or any extension thereto as provided in Subsection 907-108.06. It is anticipated that the Notice of Award will be issued by not later than **March 9, 2005** and the date for issuing the Notice to Proceed / Beginning of Contract Time will be **April 7, 2005** .

Should the Contractor request a Notice to Proceed earlier than **April 7, 2005** , the date the Notice to Proceed is issued will also be the Beginning of Contract Time date.

Allowable Time Units will be **362** .

The contract time has been based on Column "**B**" of the Table of Time Units, in Subsection 907-108.06.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 978M **CODE: (SP)**

DATE: 01/04/2005

SUBJECT: Specialty Items

PROJECT: STP-SDP-9371-00(002) / 101214--HARRISON COUNTY(IES)

Pursuant to the provisions of Section 108, the following work items are hereby designated as "Specialty Items" for this contract. Bidders are reminded that these items must be subcontracted in order to be considered as specialty items.

CATEGORY: CURB

Ref No	Pay Item	Description
710	609-D	Combination Concrete Curb and Gutter Type 2
720	609-D	Combination Concrete Curb and Gutter Type 3A

CATEGORY: EROSION CONTROL

Ref No	Pay Item	Description
140	212-B	Standard Ground Preparation
150	907-213-A	Agricultural Limestone
160	213-B	Combination Fertilizer (13-13-13)
170	213-C	Superphosphate
180	214-A	Seeding (Bermudagrass)
190	214-A	Seeding (Tall Fescue)
200	214-A	Seeding (Crimson Clover)
210	214-A	Seeding (Bahiagrass)
220	215-A	Vegetative Materials for Mulch
230	216-A	Solid Sodding
240	907-217-A	Ditch Liner
250	219-A	Watering

CATEGORY: GUARDRAIL

Ref No	Pay Item	Description
680	606-B	Guard Rail (Class A, Type 1), Metal Post
690	606-D	Guard Rail, Bridge End Section, Type I, Metal Post
700	907-606-E	Guard Rail, Terminal End Section

CATEGORY: GUARDRAIL

Ref No	Pay Item	Description
1240	630-F	Delineators (Guard Rail)(White)
1250	630-F	Delineators (Guard Rail)(Yellow)

CATEGORY: LANDSCAPING

Ref No	Pay Item	Description
271	230-B	Tree Planting (Bald Cypress)
272	230-B	Tree Planting, Live Oak
273	230-B	Tree Planting (Southern Magnolia)
274	230-B	Tree Planting, Swamp Red Maple
275	230-B	Tree Planting (Tulip Tree)
276	230-B	Tree Planting (White Oak)

CATEGORY: PAVEMENT MARKING

Ref No	Pay Item	Description
990	907-626-AA	150-mm Thermoplastic Traffic Stripe (Skip White)(2.25-mm min.)
1000	907-626-BB	150-mm Thermoplastic Traffic Stripe (Continuous White)(2.25-mm min.)
1010	907-626-CC	150-mm Thermoplastic Edge Stripe (Continuous White)(1.50-mm min.)
1020	907-626-EE	150-mm Thermoplastic Traffic Stripe (Continuous Yellow)(2.25-mm min.)
1030	907-626-FF	150-mm Thermoplastic Edge Stripe (Continuous Yellow)(1.50-mm min.)
1040	907-626-GG	Thermoplastic Detail Stripe (150-mm Equivalent Length)(White)(2.25-mm
1050	907-626-GG	Thermoplastic Detail Stripe (150-mm Equivalent
1060	907-626-HH	Thermoplastic Legend (White)(3.00-mm min.)
1070	907-626-HH	Thermoplastic Legend (White)(3.00-mm min.)
1080	907-627-K	Red-Clear Reflective High Performance Raised Markers
1090	907-627-L	Two-Way Yellow Reflective High Performance Raised Markers
1100	907-628-A	150-mm Cold Plastic Traffic Stripe, Skip White
1110	907-628-BB	150-mm Cold Plastic Traffic Stripe, Continuous White
1120	907-628-EE	150-mm Cold Plastic Traffic Stripe (Continuous Yellow)
1130	907-628-H	Cold Plastic Legend (White)

CATEGORY: ROADWAY STAKING

Ref No	Pay Item	Description
1620	907-699-A	Roadway Construction Stakes

CATEGORY: SIGNING

Ref No	Pay Item	Description
1140	630-A	Standard Roadside Signs (Sheet Aluminum, 2.03-mm Thickness)
1150	630-A	Standard Roadside Signs (Sheet Aluminum, 3.18-mm Thickness)
1160	630-B	Interstate Directional Signs (Bolted Extruded Aluminum Panels, Ground
1170	630-C	Steel U-Section Posts (4.46 kg/m)

CATEGORY: SIGNING

Ref No	Pay Item	Description
1180	630-D	Structural Steel Beams (W150 x 14)
1190	630-E	Structural Steel Angles & Bars (12 mm x 63 mm Flat Bars)
1200	630-E	Structural Steel Angles & Bars (90 mm x 90 mm x 6 mm Angles)
1210	630-E	Structural Steel Angles & Bars (100 mm x 100 mm x 8 mm Angles)
1220	630-F	Delineators (Flexible Post Mounted)(Crossover)(Type I)(Green)
1230	630-F	Delineators (Flexible Post Mounted)(Crossover)(Type I)(Yellow)
1260	630-F	Delineators (Post Mounted)(Single Yellow)
1270	630-F	Delineators (Post Mounted)(Double Yellow)
1280	630-F	Delineators (Post Mounted)(Single White)
1290	630-F	Delineators (Post Mounted)(Double White)
1300	630-K	Welded & Seamless Steel Pipe Posts (DN 100)

CATEGORY: TRAFFIC CONTROL

Ref No	Pay Item	Description
770	907-619-A1	Temporary Traffic Stripe (Continuous White)
780	907-619-A1	Temporary Traffic Stripe (Continuous White) (Type 1 Tape)
790	907-619-A2	Temporary Traffic Stripe (Continuous Yellow)
800	907-619-A2	Temporary Traffic Stripe (Continuous Yellow) (Type 1 Tape)
810	907-619-A3	Temporary Traffic Stripe, Skip White
820	907-619-A4	Temporary Traffic Stripe, Skip Yellow, Type 1 Tape
830	907-619-A5	Temporary Traffic Stripe (Detail)
840	907-619-A5	Temporary Traffic Stripe (Detail) (Type 1 Tape)
850	907-619-A6	Temporary Traffic Stripe (Legend)
860	907-619-A6	Temporary Traffic Stripe (Legend) (Type 1 Tape)
870	907-619-A6	Temporary Traffic Stripe (Legend) (Type 1 Tape)
880	907-619-C6	Red-Clear Reflective High Performance Raised Marker
890	907-619-C7	Two-Way Yellow Reflective High Performance Raised Marker
900	619-D1	Standard Roadside Construction Signs (less than 0.9 square meter)
910	619-D2	Standard Roadside Construction Signs (0.9 square meter or more)
920	907-619-E3	Changeable Message Sign
930	619-G4	Barricades (Type III) (Single Faced)
940	619-G4	Barricades (Type III) (Double Faced)
950	619-G4	Barricades (Type III) (Single Faced) (Permanent)
960	619-G5	Free Standing Plastic Drums
970	619-G7	Warning Lights (Type "B")

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 979M **CODE (SP)**

DATE: 01/06/2005

SUBJECT: Placement of Fill Material in Federally Regulated Areas

PROJECT: STP-SDP-9371-00(002) / 101214 – Harrison County

A Permit (404, General, Nationwide, etc.) for placing fill material federally regulated sites is required.

The Department has acquired the following permit for permanently filling at regulated sites that are identified during project development:

Nationwide Permit No. 14 (Waters of U.S.) - All sites with area less than 0.10 acre

Copies of said permit(s) are on file with the Department.

Securing a permit(s) for the filling of any other regulated site, the purpose of which is temporary construction for the convenience of the Contractor, shall be the responsibility of the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 981M **CODE: (SP)**

DATE: **1/10/2005**

SUBJECT: **Petroleum Products Base Prices For Contracts Let in February, 2005**

REFERENCE: **Subsection 907-109.07**

The following base prices are to be used for adjustment in compensation due to changes in costs of petroleum products:

FUELS

	Per Gallon	Per Liter
Gasoline	$1.5503	$0.4095
Diesel	$1.6157	$0.4268

MATERIALS OF CONSTRUCTION

ASPHALT CEMENT	Per Gallon	Per Ton	Per Liter	Per Metric Ton
Viscosity Grade AC-5	$0.8184	$194.17	$0.2162	$214.03
Viscosity Grade AC-10	$0.8249	$195.71	$0.2179	$215.73
Viscosity Grade AC-20	$0.8159	$193.57	$0.2155	$213.37
Viscosity Grade AC-30	$0.8159	$193.57	$0.2155	$213.37
Grade PG 64-22	$0.8099	$192.14	$0.2139	$211.79
Grade PG 67-22	$0.8038	$190.71	$0.2124	$210.22
Grade PG 76-22	$1.1521	$273.33	$0.3043	$301.29
Grade PG 82-22	$1.4061	$333.60	$0.3715	$367.72

EMULSIFIED ASPHALTS

Grade EA-4 (SS-1)	$0.7475	$0.1975
Grade RS-2C (CRS-2)	$0.7678	$0.2028
Grade CRS-2P	$0.9065	$0.2395

PRIMES

Grade EA-1 & MC-70	$1.0127	$0.2675

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO.982M **CODE: (SP)**

DATE: 01/14/2005

SUBJECT: COOPERATION BETWEEN CONTRACTORS

PROJECT: STP-SDP-9371-00(002)/101214 --- HARRISON COUNTY

The Bidder's Attention is hereby call to Subsection 105.07, Cooperation Between Contractors, of the 1996 Edition of the Mississippi Standard Specification for Road and Bridge Construction.

This project adjoins projects STP-0064-01(016)/101208 & STP-0064-01(017) & STP-0064-01(018)/101209 that are currently under construction. The Contractors shall cooperate with each other and with the Department during construction of the adjoining projects.

The successful bidder shall familiarize himself with the existing contracts referred to above and comply with the provisions of Subsection 105.07, Cooperation Between Contractors.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO.983M **CODE: (SP)**

DATE: 01/14/2005

SUBJECT: SEQUENCE OF OPERATIONS

PROJECT: STP-SDP-9371-00(002)/101214 --- HARRISON COUNTY

Bidders are hereby advised that the following sequence of operations shall be observed:

Placement of pavement through the 19 mm course on southbound SR 605 from station 17+641 (White Star Road) to station 19+275 (Jordan Road) shall be the first item of work. Local traffic using NB 67 from White Star Road to Jordan Road shall be placed on the SB lanes as soon as practical. This is to restore local traffic to a paved surface as soon as possible.

Construction of Phase 1, Phase 2 and Phase 3 on SR 67 as per TC-15 through TC-23 shall be the second item of work. Surface course shall not be placed from the Beginning of Construction on SR 67 and station 18+300 or from 19+550 to the End of Construction on SR 67 to avoid placement of temporary pavement markings on surface course. These limits may be adjusted as necessary by the Project Engineer. This is to insure that appropriate phases of traffic control can be implemented on adjoining projects without delay.

Implementation of Phase 2 traffic control on SR 605 as per TC-1B shall not take place until SR 605 main line pavement has been placed from the bridges at station 9+244.157 LT and station 9+239.157 RT to the EOP. This is to minimize the duration of inconvenience to traveling public due to the temporary detour at the BOP.

SUPPLEMENT TO FORM FHWA-1273

The following MINIMUM HOURLY WAGE RATES have been predetermined by the Secretary of Labor in Wage Determination Decision No. MS030027 dated 6/13/2003.

AREA 6A - COUNTIES

HANCOCK, HARRISON AND JACKSON

PAYROLL CODE	CLASSIFICATION	MINIMUM HOURLY WAGE RATE
100	Air Tool Operator (Jack Hammer/Air Comp.)	$6.25
105	Asphalt Raker	6.25
108	Mason Tender (Cement Mason Helper)	7.50
110	Carpenter	8.67
120	Cement Mason (Finisher)	8.33
130	Electrician	12.00
131	Mechanic (Heavy Equipment)	9.68
135	Oiler-Greaser	6.55
140	Form Setter	7.00
145	Grade Checker (Asphalt Crew)	7.35
150	Ironworker, Reinforcing (Tie Steel)	12.36
155	Ironworker, Structural	13.89
160	Laborer, Unskilled	5.77
165	Pipelayer	7.45
175	Painter (Structural Steel)	5.43
180	Piledriverman	7.50
185	Truck Driver (All Types)	6.14
190	Joint Filler	5.15
195	Joint Setter	5.15
197	Welder	10.14
	POWER EQUIPMENT OPERATORS	
205	Aggregate Spreader Operator	7.31
212	Asphalt Broom (Sweeper) Operator	5.63
214	Asphalt Paving Machine/Spreader Operator	7.50
215	Asphalt Distributor Operator	6.40
216	Asphalt Plant Operator	6.31
220	Backhoe (Shovel) Operator	7.67
225	Bulldozer Operator	8.40
235	Concrete Finishing/Curing Machine Operator	8.45
240	Concrete Paving Machine Operator (Spreader)	8.97
250	Concrete Saw Operator	8.56
255	Concrete Breaker/Hydro-Hammer Operator	8.24
270	Loader (All Types)	7.75
275	Milling Machine Operator	10.75
280	Mixer Operator (All Types)	8.12
285	Motor Patrol (Grader) Operator	9.10
290	Mulcher Machine Operator	5.33
295	Earth Auger Operator	8.50
300	Piledriver Machine Operator	8.13
305	Roller Operator (Self-Propelled)	6.26
310	Scraper Operator (All Types)	6.83
315	Striping Machine Operator	7.63
320	Tractor Operator (Track Type)	6.83
325	Tractor Operator (Wheel Type)	5.96
330	Trenching Machine Operator	8.88
350	Crusher Feeder Machine Operator	5.50
360	Crane (Dragline) Operator	9.47
365	Guardrail Post Driver	8.57

Authorized Payroll Code may be used in lieu of classification titles on weekly payrolls submitted to this Department. Codes or classification titles not conforming to those listed will not be acceptable.

SUPPLEMENT TO FORM FHWA-1273

DATE: 6/15/94

SUBJECT: Final Certificate and Contract Provisions for Subcontracts

All subcontracts shall be in writing and contain all pertinent provisions and requirements of the prime contract.

Each "Request for Permission to Subcontract" (Mississippi Department of Transportation Form CAD-720) shall include a copy of subcontract for review by the Mississippi Department of Transportation. The federal contract provisions may be omitted from the subcontract copy submitted for review provided the Contractor certifies that the provisions will be physically incorporated into the agreement furnished to the Subcontractor.

In lieu of submitting a copy of the subcontract for review, the Contractor may certify that the subcontract agreement is in writing and that it contains all the requirements and pertinent provisions of the prime contract.

Each Subcontractor will be required to provide a copy of the subcontract agreement for contract compliance reviews, along with physical evidence (copy of FHWA-1273) that requirements and pertinent provisions have been provided for review and adherence.

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4, and 7;
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant

of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly takecorrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. **Training and Promotion:**

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward

qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within thetime limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of $10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. **General:**

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. **Classification:**

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. **Payment of Fringe Benefits:**

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. **Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:**

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level ofprogress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wagedetermination for the classification of work actually performed.

5. **Apprentices and Trainees (Programs of the U.S. DOT):**

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. **Withholding:**

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the

same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. **Overtime Requirements:**

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. **Violation:**

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. **Withholding for Unpaid Wages and Liquidated Damages:**

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. **Compliance with Copeland Regulations (29 CFR 3):**

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. **Payrolls and Payroll Records:**

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned,

without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than $1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provideall safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary,

hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false represen-tation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended andsupplemented;

Shall be fined not more that $10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such require-ments.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. **Instructions for Certification - Primary Covered Transactions:**

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowinglyrendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

2. **Instructions for Certification - Lower Tier Covered Transactions:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions of $25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive

Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for female participation in each trade (percent)
From April 1, 1978 until March 31, 1979	3.1
From April 1, 1979 until March 31, 1980	5.1
From April 1, 1980 until March 31, 1981	6.9

Until further notice	Goals for minority participation for each trade (percent)
SHSA Cities:	
Pascagoula - Moss Point	16.9
Biloxi - Gulfport	19.2
Jackson	30.3
SMSA Counties:	
Desoto	32.3
Hancock, Harrison, Stone	19.2
Hinds, Rankin	30.3
Jackson	16.9
Non-SMSA Counties:	
George, Greene	26.4
Alcorn, Benton, Bolivar, Calhoun, Carroll, Chickasaw, Clay, Coahoma,Grenada, Itawamba, Lafayette, Lee, Leflore, Marshall, Monroe,Montgomery, Panola, Pontotoc, Prentiss, Quitman, Sunflower,Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Union, Washington, Webster, Yalobusha	26.5
Attala, Choctaw, Claiborne, Clarke, Copiah, Covington, Franklin, Holmes, Humphreys, Issaquena, Jasper, Jefferson, Jefferson Davis, Jones Kemper, Lauderdale, Lawrence, Leake, Lincoln, Lowndes, Madison, Neshoba, Newton, Noxubee, Oktibbeha, Scott, Sharkey, Simpson, Smith, Warren, Wayne, Winston, Yazoo	32.0
Forrest, Lamar, Marion, Pearl River, Perry, Pike, Walthall	27.7
Adams, Amite, Wilkinson	30.4

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in CFR Part 60-4 shall be based on its implementation of the Equal Opportunity clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is to the county and city (if any), stated in the advertisement.

5. The notification required in Paragraph 3 shall be addressed to the following:

Contract Compliance Officer
Mississippi Department of Transportation
P.O. Box 1850
Jackson, Mississippi 39215-1850

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-101-3M **CODE: (IS)**

DATE: **06/11/2004**

SUBJECT: **Definitions**

Section 101, Definitions and Terms, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-101.02--Definitions. Delete the definition of "Optional Items" on page 101-8 and substitute:

Optional Items-Items listed in the bid schedule of the proposal which are considered to be comparable for the purpose intended, and the Contractor is required to make a selection prior to or at the time of execution of the contract.

After the definition for Underground Storage Tanks on page 101-12, add the following:

Wetlands - As defined in EPA and Corps of Engineer's (Corps) regulations and clarified in the Corps 1987 Wetlands Delineation Manual, or sequent Federal wetland delineation manuals.

Delete Figure 1 at the end of Section 101 on page 101-13, and substitute the following:

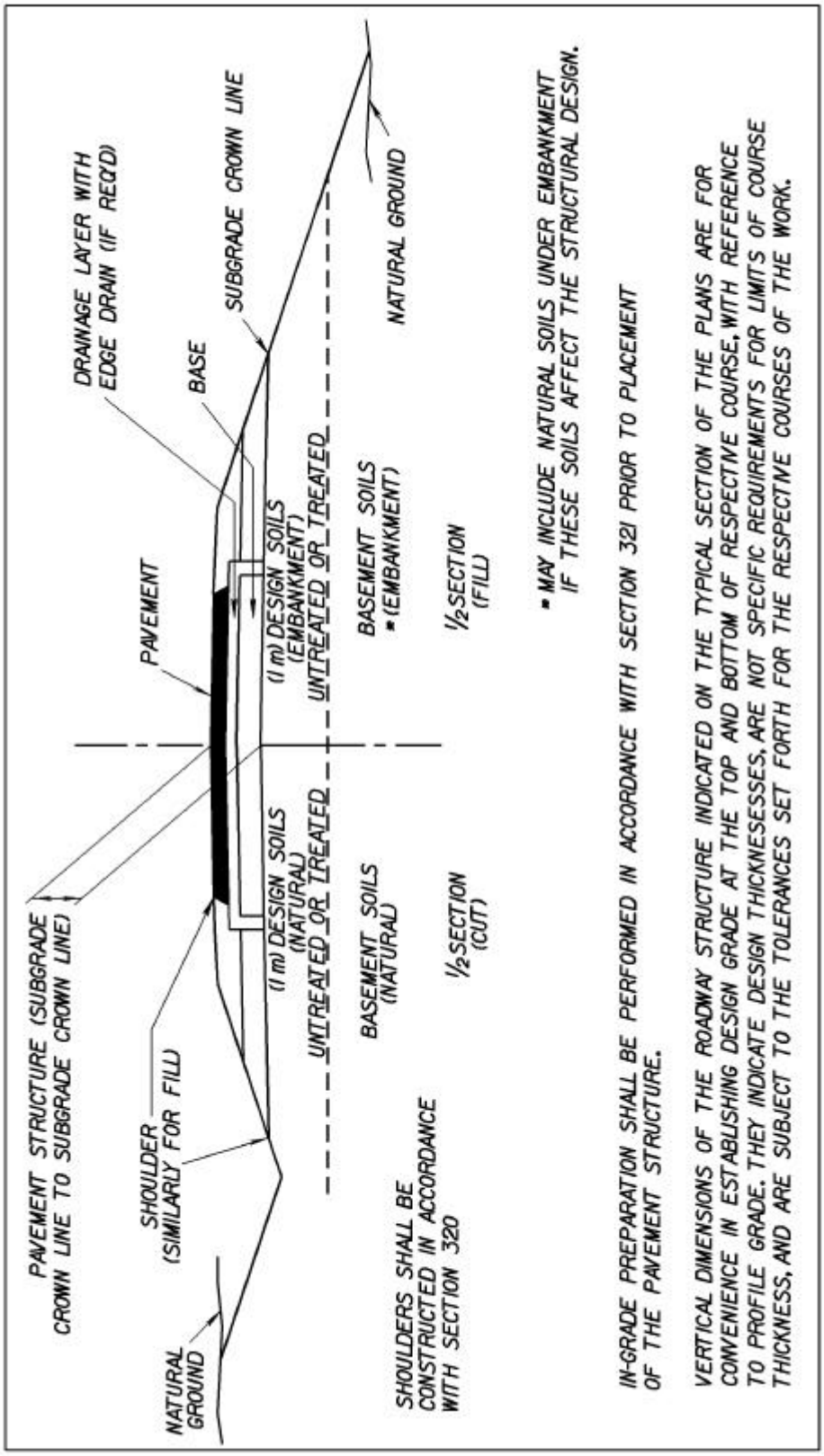

FIGURE 1 - REFERENCE DIVISION 100 - PAGE 101-1

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-102-4M **CODE: (IS)**

DATE: 03/01/2002

SUBJECT: **Preparation of Proposal**

Section 102, Bidding Requirements and Conditions, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-102.06--Preparation of Proposal. Delete in toto the second full paragraph on page 102-4 and substitute:

Bid sheets generated by the Department's Electronic Bid System (EBS) along with a completed proposal package will constitute the official bid and shall be signed on the last sheet of the EBS generated bid sheets and delivered to the Department in accordance with the provisions of Subsection 102.09.

Bidders are cautioned that using older versions of the EBS will result in improperly printed bid sheets. The latest version of the EBS can be obtained at no cost from the MDOT Contract Administration Division or at the MDOT website, www.mdot.state.ms.us.

If bidders submit EBS generated bid sheets, then the bid sheets included in the proposal should not be completed. The EBS generated bid sheets should be stapled together and included in the bid proposal package in the sealed envelope. If both the forms in the proposal and the EBS generated bid sheets are completed and submitted, only the EBS generated sheets will be recognized and used for the official bid. The diskette containing the information printed on the EBS generated bid sheets should be placed in the pouch located on the inside of the front cover of the bid proposal package. Bid sheets printed from the EBS should be a representation of the data returned on the diskettes. To have a true representation of the bid sheets, the Bidder must copy the inputted unit prices back to the diskette by using the option titled "Copy Project File To Floppy Disk" from the drop-down menu under "Projects". Otherwise, the unit prices bid will not be recorded to the diskette. Bidders are cautioned that failure to follow proper diskette-handling procedures could result in the Department being unable to process the diskette. **Any modification or manipulation of the data contained on the diskette, other than entering unit bid prices, will not be allowed and will cause the Contractor's bid to be considered irregular.**

When the bid schedule lists optional items, the Contractor's selection may, but is not required to, be made at the time of bidding. For optional items not pre-selected, the Contractor's selection shall be made prior to or at the time of execution of the contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-103-3M **CODE: (IS)**

DATE: 12/2/99

SUBJECT: **Execution and Approval of Contract**

Section 103, Award and Execution of the Contract, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-103.01-Consideration of Proposals. Delete the third paragraph of Subsection 103.01 on page 103-1, and substitute the following:

In consideration of contract proposals which are equal to or in excess of $50,000 and financed 100% with State funds, a nonresident bidder domiciled in a state having laws granting preference to local Contractors will be considered for such contracts on the same basis as the nonresident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. When a nonresident Contractor submits a bid equal to or in excess of $50,000 on a contract financed 100% with State funds, a copy of the current laws from the state of domicile and an explanation thereof pertaining to treatment of nonresident Contractors shall be attached. If no preferential treatment is provided for Contractors in the state of domicile and contracts are awarded to the lowest responsible bidder, a statement to this effect shall be attached. Should the attachment not accompany the bid when submitted, the Contractor shall have 10 days following the opening of the bids to furnish the required information to the Contract Administration Engineer for attachment to the bid. As used herein, the term "resident Contractors" includes a nonresident person, firm or corporation that has been qualified to do business in this State and has maintained a permanent full-time office in the State of Mississippi for two years prior to January 1, 1986, and the subsidiaries and affiliates of such a person, firm or corporation.

907-103.04--Return of Proposal Guaranty. Delete the third paragraph of Subsection 103.04 on page 103-2 and substitute the following:

In the event no award is made within **30 days** after the opening of bids, the Executive Director may permit the successful bidder to replace the certified check or cashier's check with a satisfactory bidder's bond.

Delete in toto Subsection 103.07 on page 103-2, and substitute the following:

907-103.07--Execution and Approval of Contract. The successful bidder to whom the contract has been awarded shall sign and file with the Director the contract and all documents required by the contract within **10 days** after the contract has been mailed to the bidder. The contract may require certain documents be submitted at an earlier date, in which case, those documents shall be submitted within the time frame specified. If the contract is not executed by the Department within 15 days following receipt of the signed contract and all necessary documents, the bidder shall have the right to withdraw his bid without penalty. No contract is in effect until it is executed by all parties.

907-103.08--Failure to Execute Contract. Delete in toto Subsection 103.08 on page 103-2, and substitute the following:

Failure of the bidder to execute the contract and file acceptable bond within **10 days** shall be just cause for the cancellation of the award and forfeiture of the proposal guaranty which shall become the property of the Department, not as a penalty but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be readvertised at the discretion of the Department.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-1M **CODE: (IS)**

DATE: 1/2/96

SUBJECT: Partnering Process

Section 104, Scope of Work, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-104.01--Intent of Contract.

After the end of Subsection 104.01 on page no. 104-1, add the following:

907-104.01.1--Partnering Process.

COVENANT OF GOOD FAITH AND FAIR DEALING:

This contract imposes an obligation of good faith and fair dealing in its performance and enforcement.

The contractor and the Department, with a positive commitment to honesty and integrity, agree to the following mutual duties:

A. Each will function within the laws and statutes applicable to their duties and responsibilities.

B. Each will assist in the other's performance.

C. Each will avoid hindering the other's performance.

D. Each will proceed to fulfill its obligations diligently.

E. Each will cooperate in the common endeavor of the contract.

VOLUNTARY PARTNERING:

The Mississippi Department of Transportation intends to encourage the foundation of a cohesive partnership with the contractor and its principal subcontractors and suppliers. This partnership will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance and completion within budget, on schedule, and in accordance with plans and specifications.

This partnership will be bilateral in make-up, and participation will be totally voluntary. Any cost associated with effectuating this partnering will be agreed to by both parties and will be shared equally.

To implement this partnering initiative prior to starting of work in accordance with the requirements of Subsection 108.02 Notice to Proceed and prior to the preconstruction conference, the contractor's management personnel and MDOT's District Engineer will initiate a partnering development seminar/team building workshop. The Contractor working with the assistance of the District and the State Construction Engineer will make arrangements to

determine attendees for the workshop, agenda of the workshop, duration, and location. Persons required to be in attendance will be the MDOT key project personnel, the contractor's on-site project manager and key project supervision personnel of both the prime and principal subcontractors and suppliers. The project design engineers, FHWA and key local government personnel will be also be invited to attend as necessary. The contractors and MDOT will also be required to have Regional/District and Corporate/State level managers on the project team.

Follow-up workshops may be held periodically throughout the duration of the contract as agreed by the contractor and Mississippi Department of Transportation.

The establishment of a partnership charter on a project will not change the legal relationship of the parties to the contract nor relieve either party from any of the terms of the contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-104-4M

DATE: 5/03/2004

SUBJECT: **Minor Alterations to the Contract**

In the first paragraph of Subsection 907-104.02.3 on page 1, change the $5,000 to $10,000.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-4M **CODE: (IS)**

DATE: **04/11/2003**

SUBJECT: **Minor Alterations to the Contract**

Section 104, Scope of Work, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 104.02.3 on pages 104-3 and 104-4, and substitute the following:

907-104.02.3--Minor Alterations to the Contract. When the Department makes alterations in the details of construction or specifications that are minor in nature, the Resident or Project Engineer may elect to make an equitable adjustment to the contract under the provisions of this subsection. Minor alterations shall be defined as those alterations to the contract that are not addressed in the Standard Specifications, or supplements thereto, and are valued at less than $5,000.00. The District Engineer shall designate, in writing, the Resident or Project Engineer authorized to execute the Class I Supplemental Agreement. The Resident or Project Engineer and Contractor shall agree upon the scope of work and a lump sum amount, within the above stated limit, for the work to be performed. The agreement shall be reflected in a Class I Supplemental Agreement signed by the Resident or Project Engineer and the Contractor's authorized representative, which, when it bears both the signature of the Resident or Project Engineer and Contractor, shall constitute the scope of work and basis of payment under the item "Minor Alterations to the Contract." Work shall not proceed until both parties sign the agreement.

Any adjustment of contract time due to Minor Alterations will be in accordance with Subsection 108.06 of the Standard Specifications.

Payment will be made under:

907-104-A S/A: Minor Alterations to the Contract - lump sum

(This pay item is not to be included on the plans or in the contract proposal)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-5M **CODE: (IS)**

DATE: 06/11/2004

SUBJECT: **Differing Site Conditions**

Section 104, Scope of Work, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-104.02.2--Differing Site Conditions. Delete the first, second and third paragraphs of Subsection 104.02.2 on page 104-3, and substitute the following:

During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the Contractor shall promptly notify the Engineer in writing of the specific differing conditions before the affected work is performed.

Upon written notification by the Contractor, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.

No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice. The written notice shall be submitted upon the forms provided and required by the Department.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-6M **CODE: (IS)**

DATE: 06/11/2004

SUBJECT: **Removal and Disposal of Materials**

Section 104, Scope of Work, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-104.05--Removal and Disposal of Structures and Obstructions. Change the title of Subsection 104.05 on page 104-6 to the following:

907-104.05--Removal and Disposal of All Materials From the Project.

At the end of the fourth paragraph of Subsection 104.05 on page 104-6, remove the period at the end of the sentence and add the following:

, but any such delays shall not entitle the Contractor to nor shall such delays justify or be the basis for any monetary damages against the Commission, Department or any of its officers or employees.

Delete the eighth and ninth paragraphs of Subsection 104.05 on page 104-6 and substitute the following:

When the contract documents indicate certain materials or other matter for removal or removal from the right-of-way permitted and disposed of at locations provided by the Contractor, the Contractor shall furnish the Engineer a copy of a release from each property owner for the servitude of the land. The Contractor shall also furnish the Engineer a certified letter stating that the area of disposal is not in a wetland. The State, the Commission, the Department, or any of its officers or employees will have no ownership or liability whatsoever for materials or matter removed thus from the right-of-way.

All removals by the Contractors are to be made in accordance with the provisions of Section 201, Section 202 and Section 203.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-2M **CODE: (IS)**

DATE: 06/11/2004

SUBJECT: **Load and Speed Restrictions**

Section 105, Control of the Work, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete the first paragraph of Subsection 105.13 on page 105-7, and substitute the following:

The Contractor shall determine and comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the project. The Department shall not have any obligations to determine or inform the Contractor of any legal load limitations of any municipality, county or the State of Mississippi. A special permit will not relieve the Contractor of liability for damages which may result from the moving of material or equipment.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-3M **CODE: (IS)**

DATE: 06/11/2004

SUBJECT: **Claims**

Section 105, Control of the Work, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-105.17--Claims for Adjustments and Disputes. Delete the first paragraph of Subsection 105.17 on page 105-10, and substitute the following:

It is in the public interest that the Department have early or prior knowledge of an existing or impending claim of any nature by the Contractor so that the Department may appropriately consider modifying the details of the work or other actions of the Department which might result in mitigation or elimination of the effect of the act or conditions objected to by the Contractor and so that the Department may institute appropriate procedures, as required, to keep strict account of actual costs and to verify, at the time, facts upon which a claim is made. Therefore, if in any case the Contractor deems that additional compensation is due for work or materials not covered in the contract or not ordered by the Engineer as Extra Work, or if the Contractor deems that adjustment in the contract time should be made because of any of the reasons provided for in the contract as a basis for an extension of time, the Contractor shall immediately notify the Engineer in writing of an intention to make such claim for additional compensation before beginning the work on which the Contractor bases the claim. If the nature of the claim is such that the Contractor can not fully identify all aspects of the claim, the Contractor shall have 30 calendar days from the date of the incident to provide the Engineer with written documentation clearly identifying the claim issue(s) and all other logically related work items or phases. If such written notification is not given by the Contractor in accordance with these specifications and the Engineer and the Department's Audit Division, or other authorized persons, are not afforded proper facilities by the Contractor for keeping strict account of actual costs or verification at the time of facts upon which a claim for contract adjustment is made, the Contractor hereby agrees that failure to provide written notice has denied the Department the prerogative of verifying additional time, materials, equipment, labor and making adjustments in the work which might remove or alleviate the conditions for which a claim might be made, and the Contractor further agrees that such failure on the Contractor's part shall be a conclusive waiver of any claim, or part thereof, including the waiver of any such claim for damages before a court of law.

Delete the third paragraph of Subsection 105.17 on pages 105-10 and 105-11, and substitute the following:

Any such notice shall be in writing on a form provided by the Department for such purpose and shall describe in detail any act of omission or commission by the Department or its agents that allegedly caused or contributed to the condition for which a claim may be made and the nature of

the claim and shall provide all documentation to support any such claim. The Contractor shall deliver or mail the notice to the Project Engineer and retain proof of such delivery.

Delete the fifteenth paragraph of Subsection 105.17 on pages 105-12, and substitute the following:

Any part of a claim based on after-the-fact general statements of costs such as "Normal cost of such work", "computed as a percentage of .... etc." or other such indefinite statements shall not justify or be the basis for the payment of or award of any damages and will be denied or returned to the Contractor without action.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-4M **CODE: (IS)**

DATE: 12/02/2004

SUBJECT: **Cooperation By Contractor**

Section 105, Control of the Work, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-105.05--Cooperation by Contractor. In the third sentence of the second paragraph of Subsection 105.05 on page 105-3, change "Notice to Proceed" to "Notice of Award".

At the end of Subsection 105.05 on page 105-4, add the following:

The Contractor shall also designate a responsible person whose primary duty shall be to monitor and maintain the effectiveness of the erosion control plan, including NPDES permit requirements. The Engineer shall be furnished with the telephone numbers where the Contractor's responsible person and a substitute, authorized to act in the absence of the responsible person, may be reached at all times when not on the project. This in no way modifies the requirements regarding the assignment and availability of the superintendent.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-106-1M **CODE: (IS)**

DATE: 1/2/96

SUBJECT: Convict Produced Materials

Section 106, Control of Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After the end of Subsection 106.12 on page no. 106-5, add the following:

907-106.13--Convict Produced Materials.

Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:

1. Produced by convicts who are on parole, supervised release, or probation from a prison or

2. Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.

Qualified prison facility means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-106-2M **CODE: (IS)**

DATE: 06/11/2004

SUBJECT: Contractor Pit and Quarry Sites

Section 106, Control of Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-106.02.2--Contractor Furnished Sources. Delete the fourth and fifth paragraphs of Subsection 106.02.2 on page nos. 106-1 and 106-2, and substitute the following:

All pits and quarry sites are subject to approval from the Mississippi Department of Environmental Quality, Office of Geology, as set forth in Subsection 907-107.23.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-7M **CODE: (IS)**

DATE: 10/22/2003

SUBJECT: **Liability Insurance**

Section 107, Legal Relations and Responsibility to Public, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows

Delete Subsection 107.14.2.1 on page 107-12 and substitute the following:

907-107.14.2.1--General. The Contractor shall carry contractor's liability (including subcontractors and contractual) with limits not less than: $300,000 each occurrence; $1,000,000 aggregate; automobile liability - $500,000 combined single limit - each accident; Workers' Compensation and Employers' Liability - Statutory & $100,000 each accident; $100,000 each employee; $500,000 policy limit. Each policy shall be signed or countersigned by a Mississippi Resident Agent of the insurance company.

The Contractor shall have certificates furnished to the Department from the insurance companies providing the required coverage. The certificates shall be on the form furnished by the Department and will show the types and limits of coverage.

Delete the first paragraph of subparagraph (a) in Subsection 107.14.2.2 on page 107-13 and substitute the following:

(a) **Railroad Protective Liability Insurance** shall be purchased on behalf of the Railroad Company with limits of $2,000,000 each occurrence; $6,000,000 aggregate applying separately to each annual period for lines without passenger trains. If the line carries passenger train(s), railroad protective liability insurance shall be purchased on behalf of the Railroad Company with limits of $5,000,000 each occurrence; $10,000,000 aggregate applying separately to each annual period.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-8M **CODE: (SP)**

DATE: 11/13/2003

SUBJECT: **Contractor's Protection Plan**

Section 107, Legal Relations and Responsibility to Public, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows

Delete in toto Subsection 107.22.1 on page 107-18 and substitute:

907-107.22.1--Contractor's Protection Plan. At the preconstruction conference or prior to starting any work on the project, the Contractor shall submit to the Engineer for approval, an erosion control plan to supplement permanent erosion control work required under the contract. As a minimum, the plan shall include the following:

1. Plan profile sheets (11" x 17" or larger) of the entire project showing the locations of erosion control devices (pay items) such as silt fence, hay bales, silt basins, slope drains, etc. Also, showing the locations of other measures (absorbed items) such as brush barriers, diversion berms, etc. that the Contractor may elect to use to prevent siltation.

2. A plan for disposal of waste materials, if applicable.

3. A detailed schedule of operations at locations of high siltation potential to clearly indicate how siltation of streams, lakes and reservoirs and the interruption of normal stream flows will be held to a practical and feasible minimum.

The plan shall be updated as needed during the progress of the project. Work shall not be started until an erosion control plan is approved by the Engineer.

The Engineer will have the authority to suspend all work and/or withhold payments for failure of the Contractor to carry out provisions of the erosion control plan and/or proper maintenance thereof.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-9M **CODE: (IS)**

DATE: 06/11/2004

SUBJECT: Contractor's Responsibility For Work

Section 107, Legal Relations and Responsibility to Public, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-107.09--Construction Over or Adjacent to Navigable Waters and Wetlands. Delete the fourth paragraph of Subsection 107.09 on page 107-8 and substitute the following:

The permits will only cover work shown on the plans. Should temporary construction be proposed for the Contractor's convenience in the areas set out in the permits, the Contractor shall apply for and furnish a copy of the required permits to the Engineer before proceeding with the temporary construction.

907-107.11--Use of Explosives. Delete the first paragraph of Subsection 107.11 on page 107-10 and substitute the following:

The use of explosives is not permissible under any condition or on any project unless approved in writing by the Engineer. When using explosives, the Contractor shall exercise utmost care not to endanger life and property including the new work. The Contractor shall be responsible for all damage resulting from the use of explosives and shall indemnify and hold harmless the Commission, the Department, and any of its officers or employees.

907-107.17--Contractor's Responsibility For Work. After the second paragraph of Subsection 107.17 on page 107-15, add the following:

Damage to items of construction, caused by the traveling public on a project or section(s) of a project open to traffic, shall be repaired by the Contractor. The Contractor will be paid for repairing such damage to certain acceptably installed items of construction at the contract unit price(s) for the applicable item(s) used in the repair. An acceptably installed item shall be complete-in-place meeting the requirements of the specifications. The acceptably installed items of construction eligible to receive payment for repair of damage caused by the traveling public shall be items used for signing, safety and traffic control. The eligible items shall be limited to traffic signal systems, signs and sign supports, lighting items, guard rail items, delineators, impact attenuators, median barriers, bridge railing or permanent pavement markings. If damage to the above items necessitate only minor repairs, in lieu of total replacement, the work shall be performed in accordance with Subsection 109.04, or as directed by the Engineer. Damage not meeting the requirements to qualify for repair payment shall be repaired at no additional cost to the State.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-10M **CODE: (IS)**

DATE: **06/11/2004**

SUBJECT: **Environmental Protection**

Section 107, Legal Relations and Responsibility to Public, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-107.22.3--Pit Operations. Delete the second paragraph of Subsection 107.22.3 on page 107-19.

907-107.22.5--Special Temporary Erosion Control. Delete the first and second paragraphs of Subsection 107.22.5 on page 107-20, and substitute the following:

The plans may designate special temporary erosion control work such as fast growing grasses or other designated temporary features for problem areas during grading, paving or other construction work. Unless otherwise provided, quantities for such temporary features shown on the plans will be included in items for which bids are to be received. The Contractor shall perform all designated temporary work as indicated on the plans or provided in the contract or as directed by the Engineer at the time and in the manner deemed to provide the most effective deterrent to siltation.

Any emergency temporary erosion control will be authorized and used only under conditions or causes created solely by the State or unforeseeable causes beyond the control of the Contractor. The Engineer shall be the sole judge as to the use and payment of emergency temporary erosion control work. Unforeseen special emergency erosion control features not contemplated in the plans or contract documents and determined by the Engineer to be essential for the prevention of siltation and pollution for conditions or causes created solely by the State or unforeseeable causes beyond the control of the Contractor shall be performed as Extra Work.

907-107.23--Material Pits. Delete the second paragraph of Subsection 107.23 on page 107-21, and substitute the following:

Prior to opening a new pit or enlarging an existing pit, the Contractor will furnish the Engineer either a copy of the "Notification of Exempt Operations" or a copy of the (permanent or temporary) Class II Permit approval from the Mississippi Department of Environmental Quality, Office of Geology. The Contractor shall also obtain a letter stating that the pit site is satisfactory from an archaeological and historical standpoint from the Mississippi Department of Archives and History, Historic Preservation Division, Jackson, Mississippi. All costs involved in obtaining clearance shall be borne by the Contractor. Delays encountered in obtaining clearance will not be a reason for extension of contract time. This requirement is not applicable to

commercial sources.

When the contract requires the Contractor to dispose of excavated material, the Contractor shall, prior to removal, furnish the Engineer with a copy of a letter from the land owner stating that the Contractor has the right to place material on the said property. The Contractor shall also furnish the Engineer with a letter stating that the property is not in a wetland. Delays encountered in obtaining this information will not be a reason for extension of contract time. This requirement is not applicable to commercial sources.

The Contractor is further reminded of and shall comply with the requirements of the Clean Water Act Amendments requiring National Pollutant Discharge Elimination System (NPDES) permits for discharges composed entirely of storm water from active or inactive surface mining operations, excluding work areas covered by a U. S. Army Corps of Engineers Clean Water Act Section 404 Permit. Questions or problems concerning NPDES permits should be directed to the Mississippi Department of Environmental Quality (MDEQ), Office of Pollution Control, Industrial Branch, Jackson, Mississippi.

The Contractor shall, before a regulated area is opened or enlarged as a material pit, obtain from MDEQ the necessary Mining Storm Water NPDES Permit(s) authorizing the discharge of storm water subject to the terms and conditions of said permit. All costs involved in obtaining the permit(s) shall be borne by the Contractor. Delays encountered in obtaining the permit(s) will not be a reason for extension of contract time.

For regulated commercial sources, the owner(s) shall bear the responsibility for meeting the requirements of the NPDES permitting process.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-11M **CODE: (IS)**

DATE: 1/02/2003

SUBJECT: Liquidated Damages Table

Section 108, Prosecution and Progress, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

Delete the table in Subsection 108.07 on page 108-12, and substitute the following:

Schedule of Deductions for Each Day of Overrun in Contract Time

Original Contract Amount		Daily Charge
From More Than	**To and Including**	**Per Calendar Day**
$ 0	$ 100,000	$ 140
100,000	500,000	200
500,000	1,000,000	300
1,000,000	2,000,000	450
2,000,000	5,000,000	650
5,000,000	10,000,000	750
10,000,000	-----	1,400

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-16M **CODE: (IS)**

DATE: 06/04/2004

SUBJECT: Determination and Extension of Contract Time

Section 108, Prosecution and Progress, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 108.06 on pages 108-7 through 108-11, and substitute the following:

907-108.06--Determination and Extension of Contract Time.

907-108.06.1--General. Unless otherwise indicated in the contract, contract time will be established on a time unit basis. The span of time allowed for the completion of the physical features of work included in the contract will be indicated in the contract documents as total number of time units allowed and will be known as "Contract Time." The completion date will not be specified but will be determined by the number of time units allowed for completing the work.

The span of time allowed in the contract is based on the quantities used for comparison of bids. If satisfactory fulfillment of the contract requires performance of work in greater quantities than those set forth in the proposal, the time allowed for completion will be increased in time units in the same ratio that the cost of the added work, exclusive of the cost of work altered by Supplemental Agreement for which a time adjustment is made for such altered work in the Supplemental Agreement, bears to the total value of the original contract unless it can be established that the extra work was of such character that it required more time than is indicated by the money value. In such cases, reasonable time will be allowed. Original contract value and/or time shall be understood to include work and/or time added or removed by supplemental agreement.

During the months of December, January and February, Time will only be assessed in the miscellaneous phase, unless otherwise specified in the Contract.

Except as required for the miscellaneous phase assessment, time will not be charged for Saturdays, Mississippi legal holidays as defined in the contract, and other Department recognized holidays unless the Contractor performs work. Time charges for Saturdays or the noted holidays will be assessed only to the phases on which the Contractor actually works.

Except as required for the miscellaneous phase assessment, time will not be charged for Sundays, even though the Contractor is permitted or required to perform work as provided by the contract.

Time will not be charged during any required waiting period for placement of permanent pavement markings as set forth in Subsection 618.03 provided all other work is complete except growth and coverage of vegetative items as provided in Subsection 210.01.

907-108.06.1.2--Contract Time Assessment. The time required to complete the work has been determined by using time units from one of the columns in the following TABLE OF TIME UNITS. Column A will be used for projects consisting primarily of earthwork; Column B will be used primarily for base and pavement projects; Column C will be used for projects consisting primarily of bridges and structures; and Column D will be used primarily for overlay projects. The column applicable to the contract will be indicated in the contract documents.

TABLE OF TIME UNITS

Month	Column A	Column B	Column C	Column D
January	5	5	6	7
February	5	7	8	9
March	9	9	11	13
April	13	14	14	17
May	17	19	19	19
June	19	20	22	19
July	21	22	23	18
August	21	22	23	18
September	20	20	22	17
October	15	17	17	15
November	10	11	11	12
December	5	4	4	6
Calendar Year	160	170	180	170

Allocation of time units for a fractional part of a month will be computed as a proportion of the listed time units for the applicable month.

Time unit assessment will be based on soil and weather conditions and other specific conditions cited in the contract. The Engineer will determine on each applicable day the extent that each work phase in progress could have been productive, regardless of whether the Contractor worked on that phase.

When the Contractor worked or could have worked eight hours or more on a phase, a maximum of eight hours will be shown as productive hours available for that phase.

A phase will not be considered for assessment unless at least four consecutive satisfactory hours are available prior to noon. If the Contractor elects to work on such a day, time will only be assessed in the phase(s) in which the Contractor actually works.

The "miscellaneous" phase will not be considered a controlling phase and used in the assessment of time units except when shown as the only phase in progress. Under this condition, time units,

monthly time units divided by monthly calendar days, will be assessed in accordance with the applicable column in the TABLE OF TIME UNITS.

Time unit assessment for controlling phases will be based on the Average Value per Time Unit (AVTU) of each phase that should be in progress. Time unit assessment for each phase will begin on the time unit number shown on the approved progress schedule for the beginning of the phase; or if work is commenced on a phase earlier than shown on the progress schedule, time unit assessment will begin on the first day of an estimate period following the previous period in which 15 percent of the value of a phase has been earned except a phase shall not commence in the months of December, January and February.

The AVTU of each controlling phase will continue to be included in the determination of available time units until the physical features of the phase have been satisfactorily completed or until the approved progress schedule indicates an interval of no activity. When the nature of the work requires the phase to be split, time charges in the phase will cease when the work in a portion of the phase has been completed, and will re-start when the items of the work in the next portion of the phase begin. If work has not begun in the next portion of the phase, time charges will begin when the time unit number shown on the approved progress schedule for the beginning of the next portion of the phase has been met or exceeded when rounded to the tenth of a time unit.

When the Engineer determines that a controlling phase has been completed as indicated above and there are no other controlling phase(s) in progress at that time, time units will be assessed based on the AVTU of the next immediately scheduled phase(s).

For each day during the contract time, except Sundays and Saturdays and holidays on which the Contractor does not work, the ratio of the AVTU of each phase scheduled to be in progress to the total AVTU of all the phases scheduled to be in progress will be determined. Each ratio thus determined will be multiplied by the satisfactory hours available for the respective phase.

The product thus determined for each phase will be the proportionate productive hours for that phase. The proportionate hours for each phase will be added and the sum divided by eight with the quotient rounded to the nearest one-tenth (0.1). This number will be the time unit assessment for that day unless the number before rounding is less than two-tenths (0.2) and the assessment is assigned as zero (0.0) time units.

The Engineer will maintain a daily cumulative assessment of available time units throughout the duration of contract time. When the cumulative time unit assessment is equal to the total number of allowed time units, contract time shall expire.

Each month the Engineer will furnish the Contractor with a report showing the number of available time units assessed during the estimate period and the cumulative time unit assessment to date. The Contractor should review the Engineer's report as to the accuracy of the assessment and confer with the Resident or Project Engineer to rectify any differences. Each should make a record of the differences , if any, and conclusions reached. In the event mutual agreement cannot be reached, the Contractor will be allowed a maximum of 15 calendar days following the ending date of the

monthly report in question to file a protest Notice of Claim in accordance with the provisions of Subsection 105.17. Otherwise, the Engineer's assessment shall be final unless mathematical errors of assessment are subsequently found to exist, and any claim of the Contractor as to such matter shall be waived.

The percentage elapsed time will be calculated as a direct ratio of the time units assessed to the total time units provided in the contract, or as modified by Supplemental Agreement.

The percent of completion of the work will be determined by the ratio of the value of the part of the work accomplished to the total contract amount, or amount as modified by Supplemental Agreement.

When the progress of the work lags more than 20 percent behind the approved progress schedule or the schedule becomes unrealistic because soil and weather conditions have permitted work on some phases and not on others, the Contractor should immediately submit a revised schedule for approval in order that the Engineer's daily assessment will be based on a more realistic schedule. The beginning date for the revisions on the schedule shall be the beginning date of the next report period after the submission. The revised progress schedule shall be accompanied by a written statement from the Contractor indicating any additional equipment, labor, materials, etc. to be assigned to the work to ensure completion within contract time. The total allowed time units shown on the revised progress schedule shall not exceed the total allowed time units in the original contract. Approval of the revised progress schedule shall in no way be construed as a waiver of the provisions of Subsection 108.07. In the event the Contractor does not submit an approvable revised progress schedule, the progress schedule in effect will continue to be used for the daily assessment of time units.

907-108.06.1.3--Extension of Time. If the Contractor finds it impossible, for reasons beyond the Contractor's control, to complete the work within the contract time or as extended in accordance with this subsection, the Contractor may, prior to the expiration of the Contract Time as extended, make a written request to the Engineer for an extension of time, justifying the granting of the request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, the time for completion may be extended in such amount as the conditions justify.

Revision to the contract time will be determined by adding the number of time units representing the calendar days of delay to the number of time units at the time of the extension.

If the completion of the project is extended into a season of the year in which completion of certain items would be prohibited or delayed because of seasonal or temperature limitations, the Engineer may waive the limitations provided the completion of the work will not result in reduced quality. When determined that completion of the items out-of-season will cause a reduction in the quality of the work, the completion of the project will be further extended so the items may be completed under favorable weather conditions. In either case, the Engineer will notify the Contractor in writing.

907-108.06.1.4--Cessation of Contract Time. When the Engineer by written notice schedules a final inspection, time will be suspended until the final inspection is conducted and for an additional 14 calendar days thereafter. If after the end of the 14-day suspension all necessary items of work have not been completed, time charges will resume. If a project is on liquidated damages at the time a final inspection is scheduled, liquidated damages will be suspended until the final inspection is conducted and for seven (7) calendar days thereafter. If after the end of the 7-day suspension all necessary items of work have not been completed, liquidated damages will resume. When final inspection has been made by the Engineer as prescribed in Subsection 105.16 and all items of work have been completed, the daily time charge will cease.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-18M **CODE: (IS)**

DATE: **12/02/2004**

SUBJECT: **Notice To Proceed**

Section 108, Prosecution and Progress, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-108.02--Notice To Proceed. Delete the third and fourth paragraphs of Subsection 108.02 on page 108-3, and substitute the following:

If the Department delays the issuance of the Notice to Proceed, the Beginning of Contract Time will automatically be adjusted equal to the number of calendar days of the delay. When the revised date falls on Sunday or a holiday the following day will be the Beginning of Contract Time. The contract time will be extended automatically as provided in Subsection 907-108.06, and the Department will furnish the Contractor a revised progress schedule as provided in Subsection 108.03.1.

Upon written request from the Contractor and if circumstances permit, the Notice to Proceed may be issued at an earlier date subject to the conditions stated therein. The Contractor shall not be entitled to any monetary damages or extension of contract time for any delay claim or claim of inefficiency occurring between the early issuance Notice To Proceed date and the Notice to Proceed date stated in the contract.

907-108.04.3--Temporary Suspension of Work. Delete the last sentence of the second paragraph of Subsection 108.04.3 on page 108-6, and substitute the following:

The failure of the Contractor to submit the written report within the seven-day period officially constitutes a waiver of any claims for additional time or damages. The request shall set forth the reasons and support for such adjustment.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-7M **CODE: (IS)**

DATE: 12/12/2002

SUBJECT: Measurement and Payment for Changes in Costs of Construction Materials (Fuels and Asphalt)

Section 109, Measurement and Payment, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

Delete line 20, page 109-8 and add the following subsection:

907-109.07 - Changes in Material Costs. Because of the uncertainty in estimating the costs of petroleum products that will be required during the life of a contract, adjustment in compensation for certain materials is provided as follows:

Bituminous Products--Each month the Department will acquire unit prices from producers or suppliers who supply the State highway construction industry with bituminous products. The average of all quotes for each product will serve as the base price for contracts let in the subsequent month.

Fuels--Selected cash price quotations for bulk gasoline and diesel fuel will be taken from Platt's Oilgram PAD 2 and PAD 3. The appropriate adjustment per liter for gasoline and diesel fuel will be added to the quotations to allow for taxes and markups. The prices thus determined will serve as the base prices for contracts let in the subsequent month.

The established base prices for bituminous products and fuels will be included in the contract documents under a Notice to Bidders entitled "Petroleum Products Base Prices For Contracts Let In (Month and Year)."

Each month thereafter, the Engineer will be furnished with the current monthly prices. Adjustments for change in cost will be determined from the difference in the contract base prices and the prices for the period that the work is performed and for the quantities completed, provided the price change in a product is more than five percent. Adjustments may increase or decrease compensation depending on the difference between the base prices and prices for the estimate period.

The adjustments will be determined for the quantities of bituminous products and the average fuel requirements for processing a unit of work as set forth herein.

COST ADJUSTMENT FACTORS FOR FUEL USAGE

Item of Work	Units	Code	Diesel	Gasoline
Excavation & Embankment (Except Structure and Foundation)	liters/cubic meter	(E)	1.44	0.74
Granular Materials, Stabilizer Aggregates or Coarse & Seal Aggregates	liters/cubic meter or liters/metric ton	(GM) (GT)	4.36 2.59	2.82 1.67
Subgrade & Base Mixing Items	liters/square meter	(M)	0.199	0.127
Hot Mix Asphalt (HMA)	liters/metric ton	(B)	10.72	3.25
Asphalt Drainage Course	liters/square meter	(D)	2.20	0.67
Portland Cement Concrete Base & Pavement	liters/square meter	(C)	0.50	0.68
Bridge Items, Structural Concrete, Pipe Culverts, (Including Foundation & Structure Excavation and all other Concrete related items)	liters/$1000	(S)	41.6	49.2

CONSTRUCTION MATERIALS

The items and quantities subject to compensation adjustment:

ADJUSTMENT CODE

(A1) Asphalt for HMA mixture -- theoretical liters based on job mix formula and unit mass of 1.010 kilograms per liter (new asphalt only for recycled HMA mixture).

(A2) Asphalt for Surface Treatment -- pay quantity in liters.

(A3) Asphalt for Prime -- pay quantity in liters.

(A4) Asphalt for Curing Seal -- 1.13 liters per square meter.

(A5) Asphalt for Bituminous Treated Roving -- 2.26 liters per square meter.

(A6) Asphalt for Asphalt Drainage Course -- theoretical gallons per square meter based on job mix formula and unit mass of 1.010 kilograms per liter.

Any difference between checked final quantity and the sum of quantities shown on the monthly estimates for any item will be adjusted by the following formula:

FA = (FCQ - PRQ) x EA

Where: FA = Final Adjustment
FCQ = Final Checked Quantity
PRQ = Total Quantity Previously Reported on Monthly Estimate
EA = Total Adjustment Shown on Monthly Estimate

The final adjustment is to consider any error(s) that may have been made in the computations of monthly adjustments.

After the expiration of contract time, including all authorized extensions, adjustments will be computed using fuel and material prices that are in effect at the expiration of contract time.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-10M **CODE: (IS)**

DATE: **06/11/2004**

SUBJECT: **Partial Payments**

Section 109, Measurement and Payment, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-109.06.1--General. After the second paragraph of Subsection 109.06.1 on page 109-6, add the following:

Each month the Contractor receives a monthly progress estimate, the Contractor shall review the Engineer's progress estimate as to the accuracy of the quantities. Should the Engineer's estimated quantity for any pay item be greater than a tolerance of plus or minus ten percent (±10%) of the Contractor's estimated quantity, the Contractor shall confer with the Resident or Project Engineer to rectify any differences. Each should make a record of the differences, if any, and conclusions reached. In the event mutual agreement cannot be reached, the Contractor will be allowed a maximum of 15 calendar days following the ending date of the monthly estimate in question to file in writing, a protest Notice of Claim in accordance with the provisions Subsection 105.17. Otherwise, the Engineer's estimated quantities shall be considered acceptable pending any changes made during the checking of final quantities and any claim by the Contractor shall be considered to have been waived.

907-109.06.2--Advancement on Materials. Delete the fourth sentence of the first paragraph of Subsection 109.06.2 on page 109-7, and substitute:

To qualify for advance payment, materials must be stored or stockpiled on or near the project or at other locations approved by the Engineer; ; or in the case of prestressed concrete members that may require being produced at an out-of-state location, the prestress members shall be produced and may be stored at the commercial manufacturer’s yard provided it is a PCI certified plant on the Department’s List of Approved Prestress & Precast Plants and it is located within the continental United States; or in the case of prestressed concrete members that may require being produced at an out-of-state location, the prestress members may be stored at the location of the commercial manufacturer’s yard provided it is a PCI certified plant on the Department’s List of Approved Prestress & Precast Plants and it is located within the continental United States; or in the case of structural steel members that may require fabrication at an out-of-state location, the fabricated members may be stored at the location of the commercial fabricator's yard provided it is located within the continental United States.

Delete the second paragraph of Subsection 109.06.2 on pages 109-6 & 109-7, and substitute the following:

Advancements will not be allowed until the Project Engineer has received triplicate copies of material invoices and certified test reports or acceptable certificates of conformance, and in the case of materials stored at the commercial producer's/fabricator's yard, the material shall be positively identified for the specific project and a Certificate of Storage issued by the State Materials Engineer, another designated Department employee or a designated representative of the Department. Requests for advancements on fabricated structural steel members and prestress concrete members stored out-of-state will be denied when the Department does not have available a designated representative to issue a Certificate of Storage.

Delete the first sentence of the third paragraph of Subsection 109.06.2 on page 109-7, and substitute the following:

The Contractor shall make suitable arrangements to the satisfaction of the Engineer for storage and protection at approved sites or, in the case of materials stored at the commercial producer's yard located in Mississippi or, in the case of fabricated structural steel members stored at the commercial fabricator's yard or prestress concrete members stored at a commercial manufacturer's yard located within the continental United States, the Contractor shall make arrangements with the producer/fabricator for suitable storage and protection.

Delete the third full paragraph on page 109-7, and substitute:

Unless specifically provided for in the contract, advance payment will not be made on materials, except for fabricated structural steel members or prestress concrete members, stored or stockpiled outside of the State of Mississippi.

Delete in toto Subsection 109.06.3 on pages 109-7 and 109-8, and substitute the following:

907-109.06.3--Retainage. Regardless of the value of the earned work based on the value of work scheduled for completion by the approved progress schedule, no deduction for retainage will be made from payments and advancement of materials due to the Contractor. Likewise, the Contractor shall not withhold any retainage from any payments due to a Subcontractor or Supplier.

907-109.10--Payment of Withheld Funds. Delete in toto Subsection 109.10 on page 109-8, and substitute the following:

907-109.10--Blank.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-203-1M **CODE: (IS)**

DATE: 11/26/2002

SUBJECT: Excavation and Embankment

Section 203, Excavation and Embankment, of the 1996 Metric Edition of Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

907-203.03--Construction Requirements.

907-203.03.8.7--Compaction of Embankments. Delete the fifth paragraph of Subsection 203.03.8.7 on page 203-11 and substitute the following:

For basement and design soils, the required density shall be 95.0 percent and 98.0 percent, respectively. If a density test fails within minus two percent (-2.0%), 93.0 to 95.0% or 96.0 to 98.0%, of the required density, a verification test will be performed and the average of the two tests will be the test value for the lot. If this test value does not meet the required density (95.0 or 98.0%), the lot shall be rejected. If the original test value exceeds minus two percent (-2%) of the required density, no verification test will be performed and the lot shall be rejected.

907-203.05--Basis of Payment. Delete the first, fifth, and ninth pay item, description and unit of measure shown on page 203-13, and substitute the following:

907-203-A: Unclassified Excavation (_____) - per cubic meter
FM or LVM

907-203-E: Borrow Excavation (_____)(Class____) - per cubic meter
FM, FME or LVM

907-203-EX: Borrow Excavation (AH)(_____)(Class _____) - per cubic meter
FME or LVM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-209-1M **CODE: (IS)**

DATE: 12/10/2001

SUBJECT: Geotextile Fabric for Stabilization

Section 907-209, Geotextile Fabric Stabilization, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

907-209.05--Basis of Payment. Add the "907" prefix to the pay item listed on page 209-2.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-213-2M **CODE: (IS)**

DATE: 09/23/2004

SUBJECT: Agricultural Limestone

Section 213, Fertilizing, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-213.05--Basis of Payment. Delete the first sentence of the first paragraph of Subsection 213.05 on page 213-2 and add the following as the first paragraph of this subsection.

Agricultural limestone will be paid for at the contract unit price per metric ton. Grade "A" agricultural limestone with an equivalent neutralizing value (ENV), determined in accordance with Subsection 907-715-02.2.1.3 of between 60.0% and 62.9% will be paid for at half (½) the contract unit price per ton. No payment will be made for Grade "A" agricultural limestone with an ENV less than 60.0%.

Add the "907" prefix to pay item number 213-A in Subsection 213.05 on page 213-2.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-217-1M **CODE: (SP)**

DATE: 12/10/99

SUBJECT: Ditch Liner

Section 217, Ditch Liner, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-217.05--Basis of Payment. Add the "907" prefix to pay item number 217-A in Subsection 217.05 on page 217-2.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-223-1M **CODE: (SP)**

DATE: 9/29/98

SUBJECT: Mowing

Section 907-223, Mowing, is added to and made a part of the 1996 Metric Edition of the Standard Specifications for Road and Bridge Construction as follows:

907-223.01--Description. When the contract includes a pay item for mowing, the Contractor shall perform litter removal and mowing of obnoxious vegetation or excess growth as directed by the Engineer in accordance with the provisions contained herein. Mowing shall also be required, when necessary, for the safe and convenient passage of traffic, as required in Subsection 104.04, Maintenance of Traffic. The importance of public safety and workplace safety can not be overemphasized. Special attention is made to Subsections 107.06, 107.07 and 107.10 of the Standard Specifications.

Prior to mowing, the Contractor shall pick up and properly dispose of all trash and debris within the area to be mowed and along any adjacent roadway shoulders. Trash and debris picked up and piled or bagged on the roadside must be removed from the right-of-way by the close of the work day. Piles or bags will not be allowed to remain on the roadside overnight. All trash and debris is defined as all trash, debris, litter, junk, rubbish, paper, cardboard, glass, cans, styrofoam cups, discarded items, garbage, old tires, treads, etc. The Contractor will not be required to pick up such items as cigarette butts, tiny chips of grass or other small items not readily visible to the traveling public.

The Engineer will advise the Contractor of the area to be mowed and the time to begin the mowing operations. The Engineer may delay mowing of lespedezas or crimson clover until after these plants have gone to seed. Mowing may be delayed to retain and promote desirable wildflower growth.

Mowing will be to a height of not more than 150 millimeters and will include trimming adjacent to culvert ends, guard rail, sign posts or other appurtenances. Trimming adjacent to objects inaccessible by mower shall be performed by hand mowers, weed-eaters, sling blades, or any acceptable means necessary to complete the work. Care shall be taken not to damage trees, plants, shrubs, delineators or other fixtures which are part of the facility. Any damages by the Contractor's operations to signs, delineators, other traffic control devices or other appurtenances shall be corrected immediately at no additional cost to the State.

The quantity of mowing will be affected by actual conditions which occur during construction and may be eliminated entirely at the direction of the Engineer.

907-223.02--Blank.

907-223.03--Construction Requirements.

907-223.03.1--General. The Contractor shall perform the work throughout the entire project on those areas directed by the Engineer. The Contractor shall take full advantage of weather and soil conditions, and no attempt shall be made to mow while the areas are deemed to be wet enough to cause damage to the soil or vegetation. Care shall be taken to use methods and

mowers that will provide even, uniform mowed areas, and not damage adjacent vegetation and structures. Excessive clippings of sufficient magnitude to smother or retard grass growth shall be removed to allow growth of existing or new grass.

The Contractor shall begin mowing operations within two weeks after receipt of the Engineer's order to begin mowing. If the Contractor fails to begin the work within that time period the Engineer shall notify the Contractor in writing that the work is not being prosecuted properly, and therefore, future progress payments may be withheld in accordance with Subsection 105.01 of the Standard Specifications.

907-223.03.2--Equipment. Equipment used for mowing operations shall be of sufficient size, type and condition to perform the work satisfactorily. Mowers may be rotary, flail, sickle or combination thereof as necessary to efficiently accomplish the work. Rotary mowers shall be equipped with safety chains or other devices to prevent flying stones, rocks, cans, etc. from striking persons or property. Change or adjustment of the equipment or operator may be required if at any time during the mowing operation, the Engineer determines that the equipment, or operators of the equipment, are not performing satisfactorily.

When required for the Contractor's mowing operations, appropriate traffic control devices shall be installed in accordance with the MUTCD.

907-223.04--Method of Measurement. Mowing, complete and accepted, will be measured by the hectare. Litter removal and any required traffic control devices will not be measured for separate payment, but will be included in the fixed contract price for mowing.

907-223.05--Basis of Payment. When ordered by the Engineer, mowing, except as required in Subsection 213.03, will be paid for at the fixed contract unit price per hectare indicated in the bid schedule, which price shall be full compensation for removing and disposing of litter, all equipment, tools, labor, traffic control devices and incidentals necessary to complete the work.

Payment will be made under:

907-223-A: Mowing - per hectare

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-234-1M **CODE: (IS)**

DATE: **12/10/2001**

SUBJECT: **Silt Fence**

Section 907-234, Silt Fence, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

907-234.05--Basis of Payment. Add the "907" prefix to the pay items listed on page 234-2.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-304-6M **CODE: (SP)**

DATE: 1/6/2000

SUBJECT: Crushed Stone Base

Section 304, Granular Courses, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows for Crushed Stone Base ONLY:

907-304.02--Materials.

907-304.02.1--General. Delete the first sentence of Subsection 304.02.1 on Page 304-1 and substitute the following:

Materials used in this work shall conform to the requirements of 703.07 and shall meet the following requirements:

Size 825

Sieve Size	Percent Passing
50 mm	100
37.5 mm	90 - 100
25.0 mm	75 - 98
12.5 mm	60 - 85
4.75 mm	40 - 65
2.36 mm	28 - 54
1.18 mm	19 - 42
300 µm	9 - 27
75 µm	4 - 18

907-304.03--Construction Requirements.

907-304.03.6--Shaping, Compacting and Finishing. Add the following to the last paragraph on page 304-3:

For crushed stone courses, the required density shall equal or exceed 99.0 percent with no single density test below 95.0 percent.

907-304.05--Basis of Payment. After the last pay item listed on page 304-5, add the following:

907-304-I: Crushed Stone Base (Size 825) - per metric ton

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-306-3M **CODE: (IS)**

DATE: 01/03/2002

SUBJECT: Asphalt Drainage Course

Section 907-306, Asphalt Drainage Course, is added to the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-306 -- ASPHALT DRAINAGE COURSE

907-306.01--Description. This work shall consist of the construction of a bituminous drainage course composed of a mixture of crushed aggregate and asphalt cement properly laid upon a prepared surface, in accordance with these specifications and in conformity with the lines, grades, thickness, and typical sections shown on the plans.

907-306.02--Materials.

907-306.02.1--Aggregates. The aggregate shall be a size no. 57 crushed limestone, sandstone or granite conforming to the quality requirements of 703.01, 703.02 and 703.03.

907-306.02.2--Bituminous Material. The bituminous material used in the mixture shall be petroleum asphalt cement, Grade PG 67-22, unless otherwise designated, meeting the requirements of 907-702.

907-306.02.3--Hydrated Lime. Hydrated lime shall meet the requirements of 714.03.2 for lime used in soil stabilization.

907-306.02.4--Composition of Mixes. The mixture shall be have an asphalt cement content of 2.5 percent by mass of total dry aggregate and production shall conform thereto within a production tolerance of plus or minus 0.4 percent. Hydrated lime shall be used at the rate of one percent (1%) by mass of the total dry aggregate.

The temperature of the completed mix shall be 112 ±8º C .

907-306.03--Construction Requirements.

907-306.03.1--Weather Limitations. The asphalt drainage course shall not be placed on a wet or frozen surface, or when weather conditions will prevent proper handling, compacting or finishing of the mixture. No asphalt mixture shall be placed when either the surface or the air temperature is less than 5º C, as measured in the shade and away from any heat source.

907-306.03.2--Stockpiling. Aggregates shall be reclaimed from the stockpile so as to minimize segregation. Aggregates that have been mixed with earth or foreign material, or become coated with undesirable material shall not be used.

907-306.03.3--Asphalt Mixing Plant. The asphalt mixing plant for asphalt drainage course shall conform to the requirements of 907-401.03.2.

907-306.03.4--Blank.

907-306.03.5--Blank.

907-306.03.6--Hauling Equipment. Hauling equipment shall conform to the requirements of 907-401.03.3.

907-306.03.7--Spreading Equipment. The asphalt mixture shall be spread with a bituminous paver meeting the requirements of 907-401.03.4.

907-306.03.8--Rollers. Rollers shall conform to 907-401.03.5 with the following exceptions:

(a) Pneumatic-tired rollers shall not be used.
(b) Rollers shall not weigh less than 7.3 metric tons nor more than 10.8 metric tons.
(c) Vibratory rollers, if used, shall only be operated in the static mode.

907-306.03.9--Spreading and Finishing. Asphalt drainage course mixture shall be deposited and spread on an approved surface. On areas where irregularities or unavoidable obstacles preclude spreading by mechanical equipment, the mixture shall be deposited, spread, raked and luted by hand tools.

The asphalt drainage course shall be spread and compacted in one layer to a 100-mm thickness.

907-306.03.10--Compaction. Compaction shall consist of rolling by vibratory rollers operated in the static mode or steel-wheeled tandem rollers. Compaction shall be achieved by the application of 1 to 3 complete roller coverages with a steel-wheel, two-axle tandem roller weighing not less than 7.3 metric tons nor more than 10.8 metric tons, as directed by the Engineer. Compaction shall not begin until the temperature of the mixture has cooled to less than 65º C and shall be completed before the mixture is less than 38º C. Asphalt drainage course shall not be cooled with water.

907-306.03.11--Surface Tolerances. The surface, excluding shoulders, will be tested after final rolling at selected locations using a 3-meter straightedge. The variation of the surface between any two contacts with the surface shall not exceed 10 millimeters. All bumps or depressions exceeding this requirement shall be corrected by removing defective work and replacing with new material as directed at no additional cost to the State.

907-306.03.12--Thickness Requirements. The maximum allowable deficiency shall be 10 millimeters. When the thickness deficiency exceeds 10 millimeters, the Contractor shall remove the deficient material and replace at no additional cost to the State.

When stringline grade controls are eliminated for the placement of the asphalt drainage course, the thickness shall be determined by cores taken from the completed pavement in accordance with Subsection 907-403.03.3. When the thickness deficiency exceeds 10 millimeters, payment will be made on a pro rata basis of the required thickness.

Example:

Measured thickness = 75 mm
Minimum allowable thickness = 90 mm

$$\text{Payment} = \frac{75\text{ mm}}{90\text{ mm}} = \text{Eighty-three percent (83\%) of the bid item price}$$

907-306.03.13--Construction Traffic and Equipment Restriction. Construction traffic and equipment operating on the completed asphalt drainage course shall be restricted to only that directly involved in placement of the pavement layer on the asphalt drainage course. The asphalt drainage course shall not be used as a haul road for delivery of materials. Trucks delivering paving materials shall enter immediately in front of the paver and after emptying, shall depart immediately therefrom. Twisting and turning traffic shall not be allowed. The Contractor shall protect the asphalt drainage course from becoming clogged with dirt or foreign materials resulting from the operation of construction traffic and equipment. Damage to asphalt drainage course by construction traffic and equipment shall be corrected through repair or replacement of the damaged area at no additional cost to the State.

907-306.04--Method of Measurement. Asphalt drainage course, complete in place and accepted, will be measured by the square meter. Measurement will be determined by multiplying the width of the drainage course by the length of the drainage course. The width for measurement will be the plan width, including widening where called for, or as otherwise authorized by the Engineer. The length will be measured horizontally in accordance with Section 109.

907-306.05--Basis of Payment. The quantity of asphalt drainage course, complete in place, accepted and measured as prescribed, will be paid for at the contract unit price per square meter and shall be full compensation for furnishing all labor, equipment, materials, tools, and supplies and for all other costs including producing, screening, loading, hauling, stockpiling the asphalt drainage course aggregate, furnishing the asphalt cement, mixing, spreading, compacting the asphalt drainage course, and all other work necessary for the construction of the asphalt drainage course.

Payment will be made under:

907-306-A: Asphalt Drainage Course - per square meter

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-321-1M **CODE: (IS)**

DATE: 01/03/2002

SUBJECT: In-Grade Preparation

Section 321, In-Grade Preparation, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-321.01--Description.

907-321.01.1--Applicability. Delete the last paragraph of Subsection 321.01.1 on page 321-1 and substitute the following:

Unless otherwise specified, the in-grade preparation course shall be the top 150 millimeters of the design soil.

907-321.03--Construction Requirements. Delete Subsections 321.03.7.2.1, 321.03.7.2.2, 321.03.7.2.3 and 321.03.7.2.4 on pages 321-4 through 321-6 and substitute the following:

907-321.03.7.2.1-For Design Soil.

	Tolerances From Design Grade
a. Where the top portion of the design soil is to be lime treated or lime-fly ash treated and the next course is stone or is to be chemically treated -	
- Before Treatment	-25 mm (1)
- Treatment In Place	±25 mm (2)
b. Where the top portion of the design soil is to be cement treated and the next course is stone or is to be chemically treated -	
- Before Treatment	-25 mm
- Treatment In Place	-25 mm
c. Where the design soil is not to be treated and the next course is stone or is to be treated or untreated -	
- Preparation In Place	-25 mm
d. Where the design soil is not to be treated and a superimposed course is not required under this contract -	
- In Place	±25 mm

Notes: (1) From the design grade established before spreading lime to allow for bulking.

(2) From the design grade established for bulked material.

907-321.03.7.2.2--For Bases.

The surface tolerances from design grade before placing base material shall be the tolerances from design grade in place as set out herein for design soils.

Grade stakes or other reference points shall be set at 10-meter intervals; when tested longitudinally, the maximum deviation when measured at the midpoint (five meters) shall be ±12 millimeters.

a. Where a base course is not to be treated and the next course is to be bituminous pavement -

- In Place ±12 mm

b. Where a base course is stone or is to be cement treated and the next course is a drainage layer -

- In Place ±12 mm

c. Where a base course is to be lime-fly ash treated and the next course is a drainage layer -

- In Place ±12 mm (3)

d. Where a base course is stone or is to be cement treated and the next course is to be bituminous pavement -

- In Place ±12 mm

e. Where a base course is to be lime-fly ash treated and the next course is to be bituminous pavement -

- In Place ±12 mm (3)

Note: (3) From the design grade established for bulked material.

Where stone is specified, it shall meet the requirements of Special Provision 907-304.

907-321.03.7.2.3-For Drainage Layers.

Where a drainage layer is required - - In Place +3 mm -10 mm

907-321.03.7.2.4--For Any Course.

a. Where a course is to be stone or is to be treated or untreated and the next course is a drainage layer or bituminous pavement -

- In Place ±12 mm

b. Where a course is stone or is to be treated, followed by a drainage layer and portland cement concrete pavement -

- Under the Form Line or Track Line ±3 mm (4)
- Elsewhere -25 mm (5)

Notes: (4) The Contractor may construct the course at the form line to a tentative grade having a tolerance of not more than minus 12 millimeters, in which case the Contractor shall, at no additional cost to the State, bring the surface of the base at the form line to the specified grade and density with materials and methods approved by the Engineer and consistent with the requirements for foundation formation for forms or tracks required under the contract.

(5) Provided the Contractor places at no additional cost to the State, at the time of placing portland cement concrete base course or pavement, the additional concrete necessary to compensate for the deficiency from a true design base grade.

907-321.05--Basis of Payment. Add the "907" prefix to the pay item listed in Subsection 321.05 on page 321-8.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-401-9M **CODE: (IS)**

DATE: 12/15/2004

SUBJECT: Hot Mix Asphalt (HMA)

Section 401, Plant Mix Pavements-General, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is deleted in toto and replaced as follows:

SECTION 907-401 - HOT MIX ASPHALT (HMA) - GENERAL

907-401.01--Description. These specifications include general requirements that are applicable to all types of HMA along with the specific requirements for each particular mixture when deviations from the general requirements are necessary.

This work consists of the construction of one or more lifts of HMA in accordance with these specifications and the specific requirements for the mixture to be produced and in reasonably close conformity with the lines, grades, thicknesses and typical sections shown on the plans or established by the Engineer.

907-401.01.1--Definitions.

Maximum Sieve Size - Maximum sieve size is the smallest sieve size at which 100 percent of the aggregate passes.

Nominal Maximum Sieve Size - The nominal maximum sieve size is one sieve size larger than the first sieve to retain more than 10 percent of the aggregate.

Maximum Density Line - The maximum density line is a straight line plot on the FHWA 0.45 power gradation chart which extends from the zero origin point of the chart through the plotted point of the combined aggregate gradation curve on the nominal maximum sieve size.

Mechanically Fractured Face - An angular, rough, or broken surface of an aggregate particle created by crushing as determined by ASTM Designation: D 5821.

907-401.02--Materials.

907-401.02.1--Component Materials.

907-401.02.1.1--General. Component materials will be conditionally accepted at the plant subject to later rejection if incorporated in a mixture or in work which fails to meet contract requirements.

907-401.02.1.2--Aggregates. The source of aggregates shall meet the applicable requirements of Section 907-703.

907-401.02.1.2.1--Coarse Aggregate Blend. Mechanically fractured faces by mass of the combined mineral aggregate coarser than the 4.75 mm sieve:

Mixture	Percent Fractured Faces, minimum
25 mm	70 (one face)
19 mm*	80 (one face)
12.5 mm	90 (two face)
9.5 mm	90 (two face)
4.75 mm	90 (two face)

* When used on routes requiring polymer modified asphalt, the top intermediate lift (19 mm mixture), including travel lane and adjacent lane, shall have at least 90 percent two fractured faces minimum. When placed on an existing portland cement concrete surface, all intermediate lifts (19 mm mixture) shall have at least 90 percent fractured two faces minimum.

The maximum percentage by mass of flat and elongated particles, for all mixes other than 4.75 mm, maximum to minimum dimension greater than 5, shall not exceed 10% for all mixtures. This shall be determined in accordance with ASTM D 4791, Section 8.4, on the combined mineral aggregate retained on the 4.75 mm sieve.

907-401.02.1.2.2--Fine Aggregate Blend. Of all the material passing the 2.36 mm sieve and retained on the 75 µm sieve, not more than 60 percent shall pass the 600 µm sieve.

Uncrushed natural sand shall pass the 9.5 mm sieve and may be used, excluding the content in RAP, in the percentages of the total mineral aggregate by mass set out in the following table:

Mixture	Maximum Percentage of Natural Sand by Total Mass of Mineral Aggregate		
	HT	MT	ST
25 mm	10	10	20
19 mm	10	10	20
12.5 mm	10	10	20
9.5 mm	10	10	10
4.75 mm	25	30	30

907-401.02.1.2.3--Combined Aggregate Blend.

Design Master Range

Mixture:	25 mm	19 mm	12.5 mm	9.5 mm	4.75 mm
Nominal Maximum Sieve Size	25.0 mm	19.0 mm	12.5 mm	9.5 mm	4.75 mm
Sieve Size	Percent Passing				
37.5 mm	100				
25.0 mm	90-100	100			
19.0 mm	89 max.	90-100	100		
12.5 mm	-	89 max.	90-100	100	100
9.5 mm	-	-	89 max.	90-100	95-100
4.75 mm	-	-	-	89 max.	90-100
2.36 mm	16-50	18-55	20-60	22-70	-
1.18 mm	-	-	-	-	30-60
75 µm	4.0-9.0	4.0-9.0	4.0-9.0	4.0-9.0	6.0-12.0

For MT and HT mixtures, the combined aggregate gradation of the job mix formula, when plotted on FHWA 0.45 power chart paper, shall fall entirely below the Maximum Density Line on all sieve sizes smaller than the 4.75 mm sieve. However, MT and HT mixtures having a minimum fine aggregate angularity index of 44.0 (ASTM C1252, Method A) may be designed above the maximum density line.

The 9.5 mm mixtures shall have a minimum fine aggregate angularity of 44.0 for HT and MT mixtures and 40.0 for ST mixtures when tested on combined aggregate in accordance with ASTM C1252, Method A. The 4.75 mm mixtures shall have a minimum fine aggregate angularity of 45.0 for all design levels when tested on combined aggregate in accordance with ASTM C 1252, Method A.

The minus 425 µm fraction of the combined aggregate shall be non-plastic when tested according to AASHTO T 90. The clay content for the combined aggregate used in underlying layers shall not exceed 1.0 percent, and when used in top layers shall not exceed 0.5 percent by mass of the total mineral aggregate when tested according to AASHTO T 88.

907-401.02.1.3--Bituminous Materials. Bituminous materials shall meet the applicable requirements of Section 907-702 for the grade specified.

Tack coat shall be the same neat grade asphalt cement used in the mixture being placed or those materials specified for tack coat in Table 410-A on the last page of Section 410. Emulsified asphalt shall not be diluted without approval of the Engineer.

907-401.02.1.4--Blank.

907-401.02.1.5--Hydrated Lime. Hydrated lime shall meet the requirements of 714.03.2 for lime used in soil stabilization.

907-401.02.1.6--Asphalt Admixtures. Additives for liquid asphalt, when required or permitted, shall meet the requirements of Subsection 702.08.

907-401.02.1.7--Polymers. Polymers for use in polymer modified HMA pavements shall meet the requirements of Subsection 907-702.08.3.

907-401.02.2--Blank.

907-401.02.3--Composition of Mixtures.

907-401.02.3.1--General. Unless otherwise specified or permitted, the HMA shall consist of a uniform mixture of asphalt, aggregate, hydrated lime and, when required or necessary to obtain desired properties, antistripping agent and/or other materials.

The total amount of crushed limestone aggregate for mixtures, excluding 4.75 mm mixtures, when used in the top lift, shall not exceed 30 percent of the total combined aggregate by mass.

Hydrated lime shall be used in all HMA at the rate of one percent (1%) by mass of the total dry aggregate including aggregate in RAP, if used. The aggregate, prior to the addition of the hydrated lime, shall contain sufficient surface moisture. If necessary, the Contractor shall add moisture to the aggregate according to the procedures set out in Subsection 907-401.03.2.1.2.

The Contractor shall obtain a shipping ticket for each shipment of hydrated lime. The Contractor shall provide the District Materials Engineer with a copies of each shipping ticket from the supplier, include the date, time and mass of hydrated lime shipped.

Mixtures will require the addition of an antistripping agent when the Tensile Strength Ratio (MT-63M) and/or the Boiling Water Test (MT-59M) fail to meet the following criteria.

Tensile Strength Ratio (TSR - MT-63M)	
Wet Strength / Dry Strength	85 percent minimum
Interior Face Coating	95 percent minimum
Boiling Water Test (MT-59M)	
Particle Coating	95 percent minimum

Reclaimed asphalt pavement (RAP) materials may be used in the production of HMA in the percentages of the total mix by mass set out in the following table:

HMA Mixture	Maximum percent RAP by total mass of mix
4.75 mm	0
9.5 mm	15
12.5 mm Top Lift	15
12.5 mm Underlying Lift	30
19 mm	30
25 mm	30

During HMA production, the RAP shall pass through a maximum 50-mm square sieve located in the HMA plant after the RAP cold feed bin and prior to the RAP mass determining system.

Crushed reclaimed concrete pavement may be used as an aggregate component of all HMA pavements. When crushed reclaimed concrete pavement is used as an aggregate component, controls shall be implemented to prevent segregation. Crushed reclaimed concrete pavement aggregate shall be separated into coarse and fine aggregate stockpiles using the 9.5 mm or 12.5 mm sieve as a break-point unless otherwise approved by the Engineer in writing.

907-401.02.3.1.1--Mixture Properties.

ALL MIXTURES	Percent of Maximum Specific Gravity (Gmm)
N_{Design}	96.0
$N_{Initial}$	Less than 90.0
$N_{Maximum}$	Less than 98.0

VMA CRITERIA	Minimum percent
25 mm mixture	12.0
19 mm mixture	13.0
12.5 mm mixture	14.0
9.5 mm mixture	15.0
4.75 mm mixture	16.0

Mixtures with VMA more than two percent higher than the minimum may be susceptible to flushing and rutting; therefore, unless satisfactory experience with high VMA mixtures is available, mixtures with VMA greater than two percent above the minimum should be avoided.

The specified VFA range for 4.75 mm nominal maximum size mixtures for design traffic levels >3 million ESAL's (HT Mixtures) shall be 75 to 78 percent, for design traffic levels of 1.0 to 3 million ESAL's (MT mixtures) 65 to 78 percent, and for design traffic levels of <1.0 million ESAL's (ST mixtures) 65 to 78 percent.

DUST/BINDER RATIO (4.75 mm)
(Percent Passing 75µm / Effective Binder Percent) 0.9 to 2.0

DUST/BINDER RATIO (9.5 mm, 12.5 mm, 19 mm & 25mm)
(Percent Passing 75µm / Effective Binder Percent) 0.8 to 1.6

907-401.02.3.2--Job Mix Formula. The job mix formula shall be established in accordance with Mississippi Test Method: MT-78M, where N represents the number of revolutions of the gyratory compactor.

Compaction Requirements:	$N_{Initial}$	N_{Design}	$N_{Maximum}$
High Type (HT) Mixtures (19 mm, 12.5 mm, 9.5 mm & 4.75 mm)	7	85	130
Medium Type (MT) Mixtures (19 mm, 12.5 mm, 9.5 mm & 4.75 mm)	7	65	100
All Standard Type (ST) Mixtures; 25 mm HT & MT Mixtures	6	50	75

At least 10 working days prior to the proposed use of each mixture, the Contractor shall submit in writing to the Engineer a proposed job-mix formula or request the transfer of a verified job-mix formula as set forth in the latest edition of MDOT's Field Manual for HMA and TMD-11-78-00-000M. The job-mix formula shall be signed by a Certified Mixture Design Technician (CMDT).

The Department will perform the tests necessary for review of a proposed job-mix formula for each required mixture free of charge one time only. A charge will be made for additional job-mix formulas submitted by the Contractor for review.

Review of the proposed job-mix formula will be based on percent maximum specific gravity at $N_{Initial}$, N_{Design}, and $N_{Maximum}$, VMA @ N_{Design}, resistance to stripping, and other criteria specified for the mixture.

The mixture shall conform thereto within the range of tolerances specified for the particular mixture. No change in properties or proportion of any component of the job-mix formula shall be made without permission of the Engineer. The job-mix formula for each mixture shall be in effect until revised in writing by the Engineer.

A job-mix formula may be transferred to other contracts in accordance with conditions set forth in the Department's Field Manual for HMA.

The Contractor shall not place any HMA prior to receiving "tentative" approval and a MDOT design number from the Central Laboratory.

When a change in source of materials, unsatisfactory mixture production results (such as segregation, bleeding, shoving, rutting over 3 millimeters, raveling & cracking) or changed conditions make it necessary, a new job-mix formula will be required. The conditions set out herein for the original job-mix formula are applicable to the new job-mix formula.

907-401.02.4--Substitution of Mixture. The substitution of a one (1) size finer mixture for an underlying lift shall require written permission of the State Construction Engineer, except no substitution of a 4.75 mm mixture will be allowed. A 9.5 mm mixture may be substituted for the 12.5 mm mixture designated on the plans as the top lift or pre-leveling. The 19 mm mixture may be substituted for the 25 mm mixture in trench widening work. Any substitution of mixtures shall be of the same type. No other substitutions will be allowed. The quantity of substituted mixture shall be measured and paid for at the contract unit price for the mixture designated on the plans. The substitution of any mixture will be contingent on meeting the required total structure thickness and maintaining the minimum and/or maximum laying thickness for the particular substituted mixture as set out in the following table.

Mixture	Single Lift Laying Thickness (millimeters)	
	Minimum	Maximum
25 mm	75	100
19 mm	55	75
12.5 mm	40	50
9.5 mm	25	40
4.75 mm	12.5	20

907-401.02.5--Contractor's Quality Management Program.

907-401.02.5.1--General. The Contractor shall have full responsibility for quality management and maintain a quality control system that will furnish reasonable assurance that the mixtures and all component materials incorporated in the work conform to contract requirements. The Contractor shall have responsibility for the initial determination and all subsequent adjustments in proportioning materials used to produce the specified mixture. Adjustments to plant operation and spreading and compaction procedures shall be made immediately when results indicate that

they are necessary. Mixture produced by the Contractor without the required testing or personnel on the project shall be subject to removal and replacement by the Contractor at no additional cost to the State.

907-401.02.5.2--Personnel Requirements. The Contractor shall provide at least one Certified Asphalt Technician-I (CAT-I) full-time during HMA production at each plant site used to furnish material to the project. Sampling shall be conducted by a certified technician or by plant personnel under the direct observation of a certified technician. All testing, data analysis and data posting will be performed by the CAT-I or by an assistant under the direct supervision of the CAT-I. The Contractor shall have a Certified Asphalt Technician-II (CAT-II) available to make any necessary process adjustments. Technician certification shall be in accordance with MDOT SOP TMD-22-10-00-000M, MDOT HMA Technician Certification Program. An organizational chart, including names, telephone numbers and current certification, of all those responsible for the quality control program shall be posted in the contractor's laboratory while the asphaltic paving work is in progress.

907-401.02.5.3--Testing Requirements. As a minimum, the Contractor's quality management program shall include the following:

(a) Bituminous Material. Provide Engineer with samples in a sealed one liter metal container at the frequency given in MDOT SOP TMD-20-04-00-000M.

(b) Mechanically Fractured Face. Determine mechanically fractured face content of aggregates retained on the 4.75 mm sieve, at a minimum of one test per day of production.

(c) Mixture Gradation. Conduct extraction tests for gradation determination on the mixture. Sample according to the frequency in paragraph (i) and test according to Mississippi Test Method MT-31M.

(d) Total Voids and VMA. Determine total voids and voids in mineral aggregate (VMA), at N_{Design}, from the results of bulk specific gravity tests on laboratory compacted specimens. Sample according to the sampling frequency in paragraph (i) and test according to the latest edition of MDOT's Field Manual for HMA.

(e) Asphalt Content. Sample according to the sampling frequency in paragraph (i). Determine the asphalt content using one of the following procedures.

(1) Nuclear gauge. (Mississippi Test Method MT-6M)
(2) Incinerator oven. (AASHTO T 308, Method A)

(f) Stripping Tests. Conduct a minimum of one stripping test at the beginning of each job-mix production and thereafter, at least once per each two weeks of production according to Mississippi Test Method: MT-63M and one stripping test per day of production according to Mississippi Test Method: MT-59M. Should either the TSR (MT-63M) or the boiling water (MT-59M) stripping tests fail, a new antistrip additive or rate shall be established or other changes made immediately that will result in a mixture which conforms to the specifications; otherwise, production shall be suspended until corrections are made.

(g) Density Tests. For 25 mm, 19.5 mm, 12.5 mm & 9.5 mm mixtures, conduct density tests as necessary to control and maintain required compaction according to Mississippi Test Method: MT-16M, Method C (nuclear gauge), or AASHTO T 166.

(Note - The nuclear gauge may be correlated, at the Contractor's option, with the average of a minimum of five pavement sample densities.) For 4.75 mm mixtures, conduct density tests as necessary to control and maintain required compaction according to AASHTO Designation: T 166.

(h) Quality Control Charts. Plot the individual test data, the average of the last four tests and the control limits for the following items as a minimum:

Mixture Gradation (Percent Passing) Sieves:
12.5 mm, 9.5 mm , 2.36 mm, 1.18 mm, 600 µm and 75 µm.
Asphalt Content, Percent
Maximum Specific Gravity, G_{mm}
Total Voids @ N_{Design}, Percent
VMA @ N_{Design}, Percent

NOTE: For 4.75 mm mixtures, Quality Control Charts for mixture gradation are not required on the 2.36 mm and 600 µm sieves. For 4.75 mm mixtures, as a minimum, Quality Control Charts for mixture gradation shall be kept on the 9.5 mm, 1.18 mm and 75 µm sieves. For all mixtures other than 4.75 mm, Quality Control Charts for mixture gradation are not required on the 1.18 mm sieve.

Keep charts up-to-date and posted in a readily observable location. Charts may be kept on a computer, however, the charts shall be printed out a minimum of once each production day and displayed in the laboratory. Note any process changes or adjustments on the Air Voids chart.

(i) Sampling Frequency. Conduct those tests as required above at the following frequency for each mixture produced based on the estimated plant tonnage at the beginning of the day.

Total Estimated Production, metric tons	Number of Tests
50-800	1
801-1700	2
1701-2700	3
2701+	4

(j) Sample Requirements. Obtain the asphalt mixture samples from trucks at the plant. Obtain aggregate samples from cold feed bins or aggregate stockpile. Save a split portion of all mixture samples at the laboratory site in a dry and protected location for 14 calendar days. At the completion of the project, the remaining samples may be disposed of with the approval of the Engineer.

NOTE: Material placed in a storage silo from a previous day's production shall be randomly sampled and tested when removed for placement on the roadway. Such sample(s) shall be independent of the day's production sampling frequency and shall be used in calculating the four (4) sample running average.

The above testing frequencies are for the estimated plant production for the day. If production is discontinued or interrupted, the tests will be conducted at the previously established sample tonnage points for the materials that are actually produced. If the production exceeds the estimated tonnage, sampling and testing will continue at the testing increments previously

established for the day. A testing increment is defined as the estimated daily tonnage divided by the required number of tests from the table in 907-401.02.5.3 paragraph (i).

In addition to the above program, the following tests shall be conducted on the first day of production and once for every eight production samples thereafter, with a minimum of one test per production week.

Aggregate Stockpile Gradations (AASHTO T-11 and T-27)

Reclaimed Asphalt Pavement (RAP) Gradation (Mississippi Test Method MT-31M)

Fine Aggregate Angularity for all 4.75 mm and 9.5 mm mixtures and all MT and HT mixtures designed above the maximum density line. (ASTM C 1252, Method A)

Testing of the aggregate and RAP stockpiles during production will be waived provided the Contractor provides the Engineer with gradation test results for the materials in the stockpile determined during the building of the stockpiles. The test results provided shall represent a minimum frequency of one per one thousand metric tons of material in the stockpile. If the Contractor continues to add materials to the stockpile during HMA production, the requirements for gradation testing during production are not waived.

907-401.02.5.4--Documentation. The Contractor shall document all observations, records of inspection, adjustments to the mixture, and test results on a daily basis. All tests conducted by the Contractor in accordance with 907-401.02.5.3(h) shall be included in the running average calculations. If single tests are performed as a check on individual HMA properties, between regular samples, without performing all tests required in 907-401.02.5.3(h), the results of those individual tests shall not be included in the running average calculations for that particular property. The Contractor shall record the results of observations and records of inspection as they occur in a permanent field record. The Contractor shall record all process adjustments and job mix formula (JMF) changes on the air void charts. The Contractor shall provide copies of all test data sheets and the daily summary reports on the appropriate Mississippi DOT forms to the Engineer on a daily basis. The Contractor shall provide a written description of any process change (including blend proportions) to the Engineer as they occur. Information provided to the Engineer must be received in the Engineer's office by no later than 9:00 AM the day after the HMA is produced. Fourteen days after the completion of the placement of the HMA, the Contractor shall provide the Engineer with the original testing records and control charts in a neat and orderly manner.

907-401.02.5.5--Control Limits. The following control limits for the job mix formula (JMF) and warning limits are based on a running average of the last four data points.

Item	JMF Limits	Warning Limits
Sieve - % Passing		
12.5 mm	± 5.5	± 4.0
9.5 mm	± 5.5	± 4.0
2.36 mm	± 5.0	± 4.0
1.18 mm (For 4.75 mm mixtures ONLY)	± 4.0	± 3.0
600 µm	± 4.0	± 3.0
75 µm	± 1.5	± 1.0
Asphalt Content, %	-0.3 to +0.5	-0.2 to + 0.4
Total Voids @ N_{Design}, %	± 1.3	± 1.0
VMA @ N_{Design}, %	– 1.5	– 1.0

907-401.02.5.6--Warning Bands. Warning bands are defined as the area between the JMF limits and the warning limits.

907-401.02.5.7--Job Mix Formula Adjustments. A request for a JMF adjustment signed by a CAT-II may be made to the Engineer by the Contractor. Submit sufficient testing data with the request to justify the change. The requested change will be reviewed by the State Materials Engineer for the Department. If current production values meet the mixture design requirements, a revised JMF will be issued. Adjustments to the JMF shall conform to the latest edition of MDOT's Field Manual for HMA. Adjustments to the JMF to conform to actual production shall not exceed the tolerances specified for the JMF limits. Regardless of such tolerances, any adjusted JMF gradation shall be within the design master range for the mixture specified. **The JMF asphalt content may only be reduced if the production VMA meets or exceeds the minimum design VMA requirements for the mixture being produced.**

907-401.02.5.8--Actions and Adjustments. Based on the process control test results for any property in question, the following actions shall be taken or adjustments made when appropriate:

(a) When the running average trends toward the warning limits, the Contractor shall consider taking corrective action. The corrective action, if any, shall be documented. All tests shall be part of the contract files and shall be included in the running average calculations.
(b) The Contractor shall notify the Engineer whenever the running average exceeds the warning limits.
(c) If two consecutive running averages exceed the warning limit, the Contractor shall stop production and make adjustments. Production shall only be restarted after notifying the Engineer of the adjustments made.
(d) If the adjustment made under (c) improves the process such that the running average after four additional tests is within the warning limits, the Contractor may continue production with no reduction in payment.
(e) If the adjustment made under (c) does not improve the process and the running average after four additional tests stays in the warning band, the mixture will be considered unsatisfactory. Reduced payment for unsatisfactory mixtures will be applied starting from the stop point to the point when the running average is back within the warning limits in accordance with Subsection 907-401.02.6.3.
(f) Failure to stop production and make adjustments when required shall subject all mixture produced from the stop point to the point when the running average is back within the warning limits to be considered unsatisfactory. Reduced payment for unsatisfactory mixtures will be applied in accordance with Subsection 907-401. 02.6.3.
(g) If the running average exceeds the JMF limits, the Contractor shall stop production and make adjustments. Production shall only be restarted after notifying the Engineer of the adjustments made.
(h) All materials for which the running average exceeds the JMF limits will be considered unacceptable and shall be removed and replaced by the Contractor at no additional cost to the State. The Engineer will determine the quantity of material to be replaced based on a review of the individual testing data which make up the running average in question and an inspection of the completed pavement. If the Engineer decides to leave the mixture in place because of special circumstances, the quantity of mixture, as defined above, will be paid for in accordance with Subsection 907-401.02.6.3.
(i) Single test results shall be compared to 1.7 times the warning and JMF limits. If the test results verified by QA testing (within allowable differences in Subsection 907-401.02.6.2) exceed these limits, the pay factor provided in Subsection 907-401.02.6.3 will apply for the quantity of material represented by the test(s). Single test limits will be used for the acceptance of projects when insufficient tonnage is produced to require four (4) Contractor's tests.

(j) The above corrective action will also apply for a mixture when the Contractor's testing data has been proven incorrect. The Contractor's data will be considered incorrect when; 1) the Contractor's tests and the Engineer's tests do not agree within the allowable differences given in Subsection 907-401.02.6.2 and the difference can not be resolved, or 2) the Engineer's tests indicates that production is outside the JMF limits and the results have been verified by the Materials Division. The Engineer's data will be used in place of the Contractor's data to determine the appropriate pay factor.

907-401.02.6--Standards of Acceptance.

907-401.02.6.1--General. Acceptance for mixture quality (VMA and total voids @ N_{Design}, gradation, and asphalt content) will be based on random samples tested in accordance with the latest edition of MDOT's Field Manual for HMA. Pavement densities and smoothness will be accepted by lots as set out in 907-401.02.6.4 and 907-401.02.6.5.

907-401.02.6.2--Assurance Program for Mixture Quality. The rounding of test results will be in accordance with Subsection 700.04.

The Engineer will conduct assurance tests on split samples taken by the Contractor. These samples may be the regular quality management samples or a sample chosen by the Engineer anytime during production. The frequency will be equal to or greater than ten percent of the tests required for the Contractor quality control and the data will be provided to the Contractor within two asphalt mixture production days after the sample has been obtained by the Engineer. At least one sample shall be tested from the first two days of production. The Engineer may select any or all of the Contractor retained samples for assurance testing. All testing and data analysis shall be performed by a Certified Asphalt Technician-I (CAT-I) or by an assistant under the direct supervision of the CAT-I. Certification shall be in accordance with MDOT SOP TMD-22-10-00-000M, MDOT HMA Technician Certification Program. The Department shall post a chart giving the names and telephone numbers for the personnel responsible for the assurance program.

The Engineer shall be allowed to inspect measuring and testing devices to confirm both calibration and condition. The Contractor shall calibrate and correlate all testing equipment in accordance with the latest version of the Department's Test Methods.

Random differences between the Contractor's and Engineer's split sample test results will be considered acceptable if within the following limits:

Item	Allowable Differences
Sieve - % Passing	
9.5 mm and above	6.0
4.75 mm	5.0
2.36 mm	4.0
1.18 mm (For 4.75 mm mixtures ONLY)	3.5
600 µm	3.5
75 µm	2.0
AC Content	0.4
Specimen Bulk SG (Gmb) @ N_{Design}	0.030
Maximum SG (Gmm)	0.020

In the event that; 1) the comparison of the Contractor's and Engineer's test results are outside the allowable differences in the above table, or 2) if a bias exists between the results (such that one of

the results is predominately higher or lower than the other) and the Engineer's results fail to meet the JMF control limits, the Engineer will investigate the reason immediately. The Engineer's investigation may include testing of the remaining split samples, review and observation of the Contractor's testing procedures and equipment, and a comparison of split sample test results by the Contractor quality control laboratory, Department quality assurance laboratory and the Materials Division. The procedures outlined in the latest edition of MDOT's Field Manual for HMA may be used as a guide for the investigation. In the event that the Contractor's results are determined to be incorrect, the Engineer's results will be used for the quality control data and the appropriate payment for the mixture will be based on the procedures specified in Subsection 907-401.02.5.8 (see Subsection 907-401.02.5.8(j)).

The Engineer will periodically witness the sampling and testing being performed by the Contractor. The Engineer, both verbally and in writing, will promptly notify the Contractor of any observed deficiencies. When differences exist between the Contractor and the Engineer which cannot be resolved, a decision will be made by the State Materials Engineer, acting as the referee, and will in writing promptly notify the Contractor. If the deficiencies are not corrected, the Engineer will stop production until corrective action is taken.

907-401.02.6.3--Acceptance Procedure for Mixture Quality. All obviously defective material or mixture will be subject to rejection by the Engineer. Such defective material or mixture shall not be incorporated into the finished work. If the defective material has already been placed in the work, the material shall be removed and replaced at no additional cost to the State.

The Engineer will base final acceptance of the asphalt mixture production on the results of the Contractor's testing for total voids and VMA @ N_{Design}, gradation, and asphalt content as verified by the Engineer in the manner hereinbefore described and the uniformity and condition of the completed pavement. Areas of pavement that exhibit nonuniformity or failures (materials or construction related) such as but not limited to segregation, bleeding, shoving, rutting over 3 millimeters, raveling, slippage, or cracking will not be accepted. Such areas will be removed and replaced at no additional cost to the State.

Bituminous mixture placed prior to correction for deficiencies in VMA and total voids @ N_{Design}, gradation, or asphalt content, as required in 907-401.02.5.8 and determined by the Engineer satisfactory to remain in place will be paid for in accordance with the following pay factors times the contract unit price per metric ton.

Pay Factor for Mixture Quality *

Item	Produced in Warning Bands	Produced Outside JMF Limits (Allowed to Remain in Place)
Gradation	0.90	0.75
Asphalt Content	0.85	0.75
Total Voids @ N_{Design}	0.70	0.50
VMA @ N_{Design}	0.90	0.75

* The minimum single payment will apply.

907-401.02.6.4--Acceptance Procedure for Density. Each completed lift will be accepted with respect to compaction on a lot to lot basis from density tests performed by the Department. For normal production days, divide the production into approximately equal lots as shown in the following table. When cores are being used for the compaction evaluation, randomly obtain one core from each lot. When the nuclear density gauge is being used for compaction evaluation, obtain two random readings from each lot and average the results (see Chapter 7 of the latest

edition of MDOT's Field Manual for HMA). Additional tests may be required by the Engineer to determine acceptance of work appearing deficient. The Contractor shall furnish and maintain traffic control for all compaction evaluations (including coring) required in satisfying specified density requirements.

Lot Determination

Daily Production - Metric Tons	Number of Lots
0-300	1
301-600	2
601-1000	3
1001-1500	4
1501-2100	5
2101-2800	6
2801+	7

907-401.02.6.4.1--Roadway Density. The density requirement for each completed lift on a lot to lot basis from density tests performed by the Department shall be as follows:

1. For all single lift overlays, with or without leveling and/or milling, the required lot density shall be 92.0 percent of maximum density.

2. For all multiple lift overlays (two (2) or more lifts, excluding leveling lifts), the required lot density of the bottom lift shall be 92. 0 percent of maximum density. The required lot density for all subsequent lifts shall be 93.0 percent of maximum density.

3. For all pavements on new construction, the required lot density for all lifts shall be 93.0 percent of maximum density.

When it is determined that the density for a lot is below the required density (93.0 percent or 92.0 percent) but not lower than 91.0 or 90.0 percent of maximum density, respectively, the Contractor will have the right to remove and replace the lot(s) not meeting the specified density requirements in lieu of accepting reduced payment for the lot(s).

When it is determined that the density for a lot is above 96.0 percent, the Engineer shall notify the Contractor who will make plant adjustments to resolve the problem.

When it is determined that the density for a lot is below 91.0 or 90.0 percent, respectively, the lot(s), or portions thereof shall be removed and replaced in accordance with Chapter 7 of the latest edition of MDOT's Field Manual for HMA at no additional cost to the State. A corrected lot will be retested for approval. No resampling will be performed when pavement samples are used for determining density.

At any time the average daily compaction (the total of the percent compaction for the lots produced in one day divided by the total number of lots for the day) does not meet the required percent compaction or more for two consecutive days, the Contractor shall notify the Engineer of proposed changes to the compactive effort. If the average daily compaction does not meet the required percent compaction or more for a third consecutive day, the Contractor shall stop production until compaction procedures are established to meet the specified density requirements.

Each lot of work found not to meet the density requirement of 92.0 percent of maximum density may remain in place with a reduction in payment as set out in the following tables:

PAYMENT SCHEDULE FOR COMPACTION OF 92.0 PERCENT OF MAXIMUM DENSITY

Pay Factor	Lot Density ** % of Maximum Density
1.00	92.0 and above
0.90	91.0 - 91.9
0.70	90.0 - 90.9

** Any lot or portion thereof with a density of less than 90.0 percent of maximum density shall be removed and replaced at no additional cost to the State.

PAYMENT SCHEDULE FOR COMPACTION OF 93.0 PERCENT OF MAXIMUM DENSITY

Pay Factor	Lot Density *** % of Maximum Density
1.00	93.0 and above
0.90	92.0 - 92.9
0.70	91.0 - 91.9

*** Any lot or portion thereof with a density of less than 91.0 percent of maximum density shall be removed and replaced at no additional cost to the State.

The compaction pay factors and mixture quality pay factor (Subsection 907-401.02.6.3) will each apply separately. However, the combined pay factor shall not be less than 0.50 for any mixture allowed to remain in place.

907-401.02.6.4.2--Trench Widening Density. The density for trench widening on a lot to lot basis shall be determined from density tests performed by the Department using pavement samples (cores).

When it is determined that the density for a trench widening lot is below 89.0 percent but not lower than 88.0 percent of maximum density, the Contractor will have the right to remove and replace the lot(s) not meeting the specified density requirements in lieu of accepting reduced payment for the lot(s).

When it is determined that the density for a trench widening lot is above 95.0 percent, the Engineer shall notify the Contractor who will make plant adjustments to resolve the problem.

When it is determined that the density for a trench widening lot is below 88.0 percent, the lot(s), or portions thereof shall be removed and replaced in accordance with Chapter 7 of the latest edition of MDOT's Field Manual for HMA at no additional cost to the State. A corrected lot will be retested for approval. No resampling will be performed when pavement samples are used for determining density.

At any time the daily compaction (the total of the percent compaction for the lots produced in one day divided by the total number of lots for the day) does not meet 89.0 percent compaction or more for two consecutive days, the Contractor shall notify the Engineer of proposed changes to the compactive effort. If the average daily compaction does not meet 89.0 percent compaction or more for a third consecutive day, the Contractor shall stop production until compaction procedures are established to meet the specified density requirement.

Each lot of trench widening work found not to meet the density requirement of 91.0 percent of maximum density may remain in place with a reduction in payment as set out in the following table:

PAYMENT SCHEDULE FOR COMPACTION
(TRENCH WIDENING WORK)

Pay Factor	Lot Density *** % of Maximum Density
1.00	89.0 and above
0.50	88.0 - 88.9

*** Any lot or portion thereof with a density of less than 88.0 percent of maximum density shall be removed and replaced at no additional cost to the State.

The compaction pay factors and mixture quality pay factor (Subsection 907-401.02.6.3) will each apply separately. However, the combined pay factor shall not be less than 0.50 for any mixture allowed to remain in place.

907-401.02.6.5--Acceptance Procedure for Pavement Smoothness. When compaction is completed, the lift shall have a uniform surface and be in reasonably close conformity with the line, grade and cross section shown on the plans.

The smoothness of each applicable lift will be determined by using a California Profilograph to produce a profilogram (profile trace) at each designated location. The surface shall be tested and corrected to a smoothness index as described herein with the exception of those locations or specific projects that are excluded from a smoothness test with the profilograph.

The profilograph, furnished and operated by the Contractor under supervision of the Engineer, shall consist of a frame at least 7.5 meters in length supported upon multiple wheels having no common axle. The wheels shall be arranged in a staggered pattern so that no two wheels will simultaneously cross the same bump. A profile is to be recorded from the vertical movement of a sensing mechanism. This profile is in reference to the mean elevation of the contact points established by the support wheels. The sensing mechanism, located at the mid-frame, may consist of a single bicycle-type wheel or a dual-wheel assembly consisting of either a bicycle-type (pneumatic tire) or solid rubber tire vertical sensing wheel and a separate bicycle-type (pneumatic tire) longitudinal sensing wheel. The wheel(s) shall be of such circumference(s) to produce a profilogram recorded on a scale of 1:300 longitudinally and 1:1 (full scale) vertically. Motive power may be provided manually or by the use of a propulsion unit attached to the center assembly. In operation, the profilograph shall be moved longitudinally along the pavement at a speed no greater than 5 KPH so as to reduce bounce as much as possible. The testing equipment and procedure shall comply with the requirements of Department SOP.

The Contractor may elect to use a computerized version of the profilograph in lieu of the standard profilograph. If the computerized version of the profilograph is used, it shall meet the requirements of Subsection 907-401.02.6.6.

The smoothness of each applicable lift will be determined for traffic lanes, auxiliary lanes, climbing lane and two-way turn lanes. Areas excluded from a smoothness test with the profilograph are acceleration and deceleration lanes, tapered sections, transition sections (for width), shoulders, crossovers, ramps, side street returns, etc. The roadway pavement on bridge replacement projects having 300 meters or less of pavement on each side of the structure will be excluded from a test with the profilograph. Pavement on horizontal curves having a radius of less than 300 meters at the centerline and pavement within the superelevation transition of such

curves are excluded from a test with the profilograph. The profilogram shall terminate five meters from each transverse joint that separates the pavement from a bridge deck, bridge approach slab or existing pavement not constructed under the contract.

A profilogram will be made for each applicable lift. The measurements will be made in the outside wheel path of exterior lanes and either wheel path of interior lanes. The wheel path is designated as being located 0.9 meter from the edge of pavement or longitudinal joint. The testing will be limited to a single profilogram for each lift of a lane except that a new profilogram will be made on segments that have been surface corrected. When surface corrections are required and/or made, a new profilogram will be made. The new profilogram shall meet the requirements of Subsection 907-403.03.2.

Each applicable lift will be accepted on a segment to segment basis for pavement smoothness. When the profile index requirement of the lift is 475.0 millimeters per kilometer, no segment of the lift with a profile index greater than 475.0 millimeters per kilometer shall be allowed to remain in place without correction. For the purpose of determining pavement smoothness and contract price adjustment for rideability (Subsection 907-403.03.2), each day's production will be sub-divided into sections which terminate at bridges, transverse joints or other interruptions. Each section will be sub-divided into segments of 0.1 kilometer. Where a segment less than 0.1 kilometers occurs at the end of a section, it will be combined with the preceding 0.1-kilometer segment for calculation of the profile index. The last five meters of a day's lift may not be obtainable until the lift is continued and for this reason may be included in the subsequent segment.

A profile index will be determined for each segment as millimeters per kilometer 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 millimeters. The totaled count of millimeters is converted to millimeters per kilometer to establish a smoothness profile index for that segment.

Individual bumps and/or dips that are identified on the profilogram by locating vertical deviations that exceed 10 millimeters when measured from a chord length of 7.5 meters or less shall be corrected regardless of the profile index value of the segment. Surface correction by grinding shall be in accordance with Subsection 907-401.02.6.7. The Contractor shall also make other necessary surface corrections to ensure that the final profile index of the segment meets the requirements of Subsection 907-403.03.2.

Segment(s) exceeding the accepted profile index value shall be corrected as specified in Subsection 907-403.03.4. All such corrections shall be at the expense of the Contractor.

Scheduling will be the responsibility of the Contractor with approval of the Engineer, and the tests shall be conducted within 72 hours after each day's production unless authorized otherwise by the Engineer. The Contractor will be responsible for traffic control associated with this testing operation.

907-401.02.6.6--Computerized Profilograph.

907-401.02.6.6.1--General The computerized profilograph, furnished and operated by the Contractor under the supervision of the Engineer, shall be equipped with an on-board computer capable of meeting the following conditions.

Vertical displacement shall be sampled every 75 millimeters or less along the roadway. The profile data shall be bandpass filtered in the computer to remove all spatial wavelengths shorter than 0.6 meter. This shall be accomplished by a third order, low pass Butterworth filter. The

resulting band limited profile will then be computer analyzed according to the California Profilograph reduction process to produce the required millimeters per kilometer index. This shall be accomplished by fitting a linear regression line to each 0.1 kilometer of continuous pavement section. This corresponds to the perfect placement of the blanking band bar by a human trace reducer. Scallops above and below the blanking band are then detected and totaled according to the California protocol. Bump/Dip analysis shall take place according to the California Profilograph reduction process.

The computerized profilograph shall be capable of producing a plot of the profile and a printout which will give the following data: Stations every 7.5 meters, bump/dip height and bump/dip length of specification (10.0 millimeters and 7.5 meters respectively), the blanking band width, date of measurement, total profile index in millimeters per kilometer for the measurement, total length of the measurement, and the raw millimeters for each 0.1-kilometer segment.

907-401.02.6.6.2--Mechanical Requirements. The profilograph shall consists of a frame 7.5 meters long supported at each end by multiple wheels. The frame shall be constructed to be easily dismantled for transporting. The profilograph shall be constructed from aluminum, stainless steel and chromed parts. The end support wheels shall be arranged in a staggered pattern such that no two wheels cross a transverse joint at the same time. The relative smoothness shall be measured by the vertical movement of an 200 millimeters or larger diameter sensing wheel at the midpoint of the 7.5-meter frame. The horizontal distance shall be measured by a 500-mm or larger diameter pneumatic wheel. This profile shall be the mean elevation referenced to the twelve points of contact with the pavement established by the support wheels. Recorded graphical trace of the profile shall be on a scale of 1:1 (full scale) vertical motion of the sensing wheel and 1:300 horizontal motion of the profilograph.

907-401.02.6.6.3--Computer Requirements. The computer shall have the ability to produce output on sight for verification. The computerized output shall indicate the profile index for each specified section of roadway. Variable low and high pass third-order Butterworth filtering options shall be available. The printout shall be capable of showing station marks automatically on the output. Blanking band positioning for each specified section of the roadway shall be placed according to the least squares fit line of the collected data. Variable bump and dip tests shall be available to show "must correct" locations on the printout. The computer must have the ability to display on screen "must correct" conditions and alert the user with an audible warning when a must correct location has been located. The computer must have the ability to store profile data for later reanalysis. The measurement program must be menu driven and IBM compatible. User selected options, identification, calibration factors, and time and date stamps shall be printed at the top of each printed report for verification. The control software must be upgradeable. A power source shall be included for each profilograph and be capable of supplying all power needs for a full days testing.

907-401.02.6.7--Surface Correction. Corrective work to bumps shall consist of diamond grinding in accordance with these specifications or methods approved by the Engineer. All surface areas corrected by grinding shall be sealed with a sealant approved by the Engineer.

907-401.02.6.7.1--Diamond Grinding. Grinding of asphalt surfaces shall consist of diamond grinding the existing asphalt pavement surface to remove surface distortions to achieve the specified surface smoothness requirements.

907-401.02.6.7.2--Equipment. The grinding equipment shall be a power driven, self-propelled machine that is specifically designed to smooth and texture pavement surfaces with diamond blades. The effective wheel base of the machine shall not be less than 3.6 meters. It shall have a set of pivoting tandem bogey wheels at the front of the machine and the rear wheels shall be

arranged to travel in the track of the fresh cut pavement. The center of the grinding head shall be no further than 0.9 meter forward from the center of the back wheels.

The equipment shall be of a size that will cut or plane at least 0.6 meter wide. It shall also be of a shape and dimension that does not encroach on traffic movement outside of the work area. The equipment shall be capable of grinding the surface without causing spalls at joints, or other locations.

907-401.02.6.7.3--Construction. The construction operation shall be scheduled and proceed in a manner that produces a uniform finish surface. Grinding will be accomplished in a manner to provide positive lateral drainage by maintaining a constant cross-slope between grinding extremities in each lane.

The operation shall result in pavement that conforms to the typical cross-section and the requirements specified in 907-401.02.6.7.4. It is the intent of this specification that the surface smoothness characteristics be within the limits specified.

The Contractor shall establish positive means for removal of grinding residue. Solid residue shall be removed from pavement surfaces before it is blown by traffic action or wind. Residue shall not be permitted to flow across lanes used by public traffic or into gutters or drainage facilities, but may be allowed to flow into adjacent ditches.

907-401.02.6.7.4--Finished Pavement Surface. The grinding process shall produce a pavement surface that is smooth and uniform in appearance with a longitudinal line type texture. The line type texture shall contain parallel longitudinal corrugations that present a narrow ridge corduroy type appearance. The peaks of the ridges shall not be more than two millimeters higher than the bottoms of the grooves.

The finished pavement surface will be measured for riding quality. The grinding shall produce a riding surface which does not exceed either the specified profile index or the specified bump and dip limit.

907-401.02.7--Nuclear Gauges.

907-401.02.7.1--Nuclear Moisture-Density Gauge. The nuclear gauge unit used to monitor density shall contain a full data processor which holds all calibration constants necessary to compute and directly display wet density, moisture, and dry density in kilograms per cubic meter. The data processor shall compute and display the percent moisture and percent density based on dry mass.

907-401.02.7.2--Nuclear Asphalt Content Gauge. The Contractor shall furnish and calibrate, unless designated otherwise in the contract, a Troxler Nuclear Asphalt Content Gauge (Model 3241 or updated model) or a Campbell Nuclear Asphalt Content Gauge (Model AC-2) or an approved equal.

907-401.03--Construction Requirements. Mississippi DOT has adopted the "Hot-Mix Asphalt Paving Handbook" as the guideline for acceptable HMA construction practices.

907-401.03.1--Specific Requirements.

907-401.03.1.1--Weather Limitations. The mixture shall not be placed when weather conditions prevent the proper handling and finishing or the surface on which it is to be placed is wet or frozen. At the time of placement, the air and pavement surface temperature limitations shall be equal to or exceed that specified in the following table:

TEMPERATURE LIMITATIONS

Compacted Thickness	Temperature
Less than 40 millimeters	13°C
40 millimeters to 50 millimeters	10°C
55 millimeters to 75 millimeters	7°C
Greater than 75 millimeters	5°C

When paving operations are discontinued because of rain, the mixture in transit shall be protected until the rain ceases. The surface on which the mixture is to be placed shall be swept to remove as much moisture as possible and the mixture may then be placed subject to removal and replacement at no additional cost to the State if contract requirements are not met.

907-401.03.1.2--Tack Coat. Tack coat shall be applied to previously placed HMA and between lifts, unless otherwise directed by the Engineer. The tack coat shall be applied as a spray coating, fog coating, or "spider webbing". Construction requirements shall be in accordance with Subsection 407.03.

907-401.03.1.3--Blank.

907-401.03.1.4--Density. The lot density for all dense graded pavement lifts, except as provided below for preleveling, wedging [less than fifty percent (50%) of width greater than minimum lift thickness], ramp pads, irregular shoulder areas, median crossovers, turnouts, or other areas where the established rolling pattern cannot be performed, shall not be less than 92.0 percent of the maximum density based on AASHTO Designation: T 209 for the day's production. If a job-mix formula adjustment is made during the day which affects the maximum specific gravity, calculate a new average maximum density for the lot(s) placed after the change.

Pavement core samples obtained for determining density which have a thickness less than two times the maximum size aggregate permitted by the job-mix formula will not be used as a representative sample.

Preleveling, wedging [less than fifty percent (50%) of width greater than minimum lift thickness], ramp pads, irregular shoulder areas, median crossovers, turnouts, and other areas where an established rolling pattern cannot be obtained shall be compacted to refusal densification.

907-401.03.2--Bituminous Mixing Plants.

907-401.03.2.1--Plant Requirements.

907-401.03.2.1.1--Cold Aggregate Storage. The cold storage for hydrated lime shall be a separate bulk storage bin with a vane feeder or other approved feeder system which can readily be calibrated. The system shall provide a means for easy sampling of the hydrated lime additive and verifying the quantity of lime dispensed. The feeder system shall require a totalizer.

The hydrated lime additive equipment shall be interlocked and synchronized with the cold feed controls to operate concurrently with the cold feed operation which will automatically adjust the hydrated lime feed to variations in the cold aggregate feed. A positive signal system shall be

installed which will automatically shut the plant down when malfunctions cause an improper supply of hydrated lime or water.

The plant shall not operate unless the entire hydrated lime system is functioning properly.

907-401.03.2.1.2--Cold Aggregate Feed. The hydrated lime shall be dispensed dry or as a slurry (1 part hydrated lime to 3 parts water) directly onto the composite aggregate between the cold feed and the dryer.

When hydrated lime is introduced dry, a spray bar or other approved system capable of spraying all aggregate with water shall be installed in order to maintain all aggregate at the moisture condition set out in Subsection 907-401.02.3.1 prior to addition of the hydrated lime. An alternate system for spraying the coarse aggregate stockpiles may be allowed when approved by the Engineer. The approved equipment and methods shall consistently maintain the aggregate in a uniform, surface wet condition. The moisture content of the aggregate-hydrated lime mixture, following spraying and mixing, shall be introduced into the automatic moisture controls of the plant.

The aggregate-hydrated lime mixture shall be uniformly blended by some mechanical means such as a motorized "on the belt" mixer or pug mill located between the cold feed and the dryer. Other mixing devices may be used subject to approval by the Engineer.

A maximum of forty five (45) percent of the total aggregate blend may be fed through any single cold feed bin. If the JMF calls for more than forty five (45) percent of a specific aggregate, that aggregate must be fed through two (2) or more separate cold feed bins.

907-401.03.2.1.3--Dryer. The efficiency of drying aggregates shall be such that the moisture content of the top HMA mixture shall not exceed 0.50 percent by mass of the total mixture, and the moisture content of all the underlying mixtures shall not exceed 0.75 percent by mass of the total mixture being produced.

907-401.03.2.1.4--Blank.

907-401.03.2.1.5--Control of Bituminous Material and Antistripping Agent. Specified bituminous materials from different manufacturers or from different refineries of a single manufacturer shall not be mixed in the plant's asphalt cement supply system storage tank and used in the work without prior written approval of the Engineer. Approval is contingent upon the Engineer's receipt of three copies of the manufacturer's certified test report(s) from the Contractor showing that the bituminous material blend conforms to the specifications.

A satisfactory method of determining the mass or metering shall be provided to ensure the specified quantity of bituminous material. Provisions shall be provided for checking the quantity or rate of flow. Mass determining or metering devices shall be accurate within plus or minus one-half percent.

The antistripping agent shall be injected into the bituminous material immediately prior to the mixing operation with an approved in-line injector system capable of being calibrated so as to ensure the prescribed dosage.

An in-line spigot for sampling of asphalt shall be located between the asphalt storage tank and the antistripping agent in-line injector.

907-401.03.2.1.6--Thermometric Equipment. An armored thermometer of adequate range and calibrated in 2°C increments shall be fixed at a suitable location in the bituminous line near the charging valve of the mixer unit.

The plant shall be equipped with an approved dial-scale, mercury-actuated thermometer, pyrometer or other approved thermometric instrument placed at the discharge chute of the dryer to measure the temperature of the material.

When the temperature control is unsatisfactory, the Engineer may require an approved temperature-recording apparatus for better regulation of the temperature.

907-401.03.2.1.7--Screens. A scalping screen shall be used.

907-401.03.2.1.8--Dust Collector. The plant shall be equipped with a dust collector constructed to waste or return collected material. When collected material is returned, it shall be returned through a controlling device which will provide a uniform flow of material into the aggregate mixture.

907-401.03.2.1.9--Safety Requirements. A platform or other suitable device shall be provided so the Engineer will have access to the truck bodies for sampling and mixture temperature data.

907-401.03.2.1.10--Blank.

907-401.03.2.1.11--Truck Scales. The specifications, tolerances and regulations for commercial mass determining and measuring devices as recommended by the National Bureau of Standards [National Institute of Standards and Technology (NIST) Handbook 44] shall govern truck scales used in the State of Mississippi, except mass determining devices with a capacity of 4536 kilograms or more used to determine the mass of road construction materials (i.e. sand, gravel, asphalt, fill dirt, topsoil and concrete) shall have a tolerance of one-half of one percent (1/2 of 1%) in lieu of the requirements of Handbook 44 and shall be regulated by the Mississippi Department of Transportation.

Scales shall be checked and certified by a scale company certified in heavy truck masses by the Mississippi Department of Agriculture and Commerce. In the case of scales used for measurement of materials on Department of Transportation projects, certification shall be performed in the presence of an authorized representative of the Department or a copy of the certification may be furnished for scales that have been checked and certified within the last six months for use on other Department of Transportation projects and are still in the position where previously tested. Scales that have not been checked and certified under NIST Handbook 44 guidelines, except for the herein modified tolerances allowed, shall be so checked and certified prior to use for measurement of materials on Department of Transportation projects. Tests shall be continued on six month intervals with the test conducted in the presence of an authorized representative of the Department.

Truck scales shall be accurate to one-half of one percent of the applied load, shall be sensitive to 10 kilograms, and shall have a graduation of not more than 10 kilograms.

The Contractor may use an electronic mass determining system approved by the Engineer in lieu of truck scales. The system shall be equipped with an automatic print out system which will print a ticket for each load with the following information:

MDOT, Contractor's name, project number, county, ticket number, load number, pay item number, item description of the material delivered, date, time of day, haul vehicle number, gross mass, tare mass, net mass and total daily net mass.

When approved by the Engineer and materials are measured directly from a storage bin equipped with load cells, exceptions may be made to the gross and tare mass requirements.

The ticket shall also have a place for recording the temperature of HMA mixtures, if applicable, and the signatures of MDOT's plant and roadway inspectors. The load numbers for each project shall begin with load number one (1) for the first load of the day and shall be numbered consecutively without a break until the last load of the day. The Contractor shall provide MDOT with an original and one copy of each ticket. When the ticket information provided by the Contractor proves to be unsatisfactory, MDOT will use imprinter(s) and imprinter tickets to record load information. All recorded masses shall be in kilograms and shall be accurate to within one-half of one percent of the true mass, and the system shall be sensitive to 10 kilograms. The Engineer will require random loads to be checked on certified platform scales at no cost to the Department.

When an electronic mass determining system utilizes the plant scales of a batch plant, the system may be used only in conjunction with a fully automatic batching and control system.

907-401.03.2.2--Additional Requirements for Batching Plants.

907-401.03.2.2.1--Plant Scales. The plant batch scale mass shall not exceed the platform scale mass by more than one percent (1%).

907-401.03.2.3--Additional Requirements for Drum Mixing Plants.

907-401.03.2.3.1--Plant Controls. The plant shall be operated with all the automatic controls as designed and provided by the plant manufacturer. If the automatic controls malfunction, brief periods of manual operations to complete the day's work or to protect the work already placed may be conducted with the approval of the Engineer. During manual operation, the Contractor must continue to produce a uniform mixture meeting all contract requirements.

907-401.03.2.3.2--Aggregate Handling and Proportioning. A screening unit shall be placed between the bins and the mixer to remove oversized aggregate, roots, clayballs, etc.

907-401.03.2.4--Surge or Storage Bins. Surge and/or storage systems may be used at the option of the Contractor provided each system is approved by the Department prior to use. Surge bins shall be emptied at the end of each day's operation. Storage silos may be used to store mixtures as follows:

19-mm & 25-mm mixtures ---------- 24 hours
9.5-mm & 12.5-mm mixtures ---------- 36 hours

The storage silos must be well sealed, completely heated and very well insulated. The mixture when removed from the storage silo shall be tested to ensure that it meets all the same specifications and requirements as the mixture delivered directly to the paving site. See Subsection 907-401.02.5.3, subparagraph (i) for sampling and testing requirements.

907-401.03.3--Hauling Equipment. The inside surfaces of each vehicle bed shall be coated with a light application of water and thin oil, soap solution, lime water solution or other approved

material to prevent the mixture from sticking. Diesel fuel or gasoline shall not be used to lubricate vehicle beds. Truck beds shall be raised to drain excessive lubricants before placing mixture in the bed. An excess of lubricant will not be permitted.

907-401.03.4--Bituminous Pavers. The screed or strikeoff assembly shall be capable of vibrating and heating the full width of the mixture being placed and shall lay the lift with an automatic control device to the specified slope and grade without tearing, pulling or gouging the mixture surface.

907-401.03.5--Rollers. All rollers shall be self-propelled units capable of maintaining a smooth and uniform forward and reverse speed as required for proper compaction. They shall be equipped with adjustable scrapers, water tanks, mats and a device for wetting the wheels or tires to prevent the mixture from sticking. Adhesion of the mixture to the rollers will not be permitted. The use of diesel fuel or gasoline for cleaning roller wheels or tires or to aid in preventing the mixture from sticking to the wheels or tires is prohibited.

All rollers shall be in good mechanical condition, free from leaking fuels and lubricants, loose link motion, faulty steering mechanism, worn king bolts and bearings. They shall be operational at slow speeds to avoid displacement of the mixture and capable of reversing direction smoothly and without backlash.

907-401.03.6--Preparation of Grade. The foundation upon which HMA pavement is to be placed shall be prepared in accordance with the applicable Section of the Standard Specification.

Unless otherwise directed, tack coat shall be applied to the underlying surface on which the mixture is to be placed. Emulsions, if used, must be allowed to "break" prior to placement of the bituminous mixture.

Bituminous mixture shall not be placed against the edge of pavements, curbs, gutters, manholes and other structures until sprayed with a thin uniform tack coating. The tack coat shall be protected until the mixture has been placed.

Existing HMA pavements that require preliminary leveling or patching in advance of placing the bituminous mixture shall be sprayed with a tack coat material and then brought as nearly as practicable to uniform grade and cross section. The material shall be placed by hand or machine in one or more compacted layers approximately 50 millimeters or less in compacted thickness.

907-401.03.7--Blank.

907-401.03.8--Preparation of Mixture. The temperature of the mixture, when discharged from the mixer, shall not exceed 170°C.

907-401.03.9--Material Transfer Equipment. Except for the areas mentioned below, when placing the top intermediate lift and/or the top lift of HMA pavements, the material transferred from the hauling unit shall be remixed prior to being placed in the paver hopper or insert by using an approved Materials Transfer Device. Information on approved devices can be obtained from the State Construction Engineer. Areas excluded from this requirement include: temporary work of short duration, detours, bridge replacement projects having less than 300 meters of pavement on each side of the structure, acceleration and deceleration lanes less than 300 meters in length, tapered sections, transition sections (for width), shoulders less than three meters in width, crossovers, ramps, side street returns and other areas designated by the Engineer.

907-401.03.10--Spreading and Finishing. Grade control for HMA pavements shall be established by stringline at least 150 meters ahead of spreading, unless placement is adjacent to curb and gutter, concrete pavement, or other allowed grade control.

The mixture shall be spread to the depth and width that will provide the specified compacted thickness, line, grade and cross section. Placing of the mixture shall be as continuous as possible. On areas where mechanical spreading and finishing is impracticable, the mixture may be spread, raked and luted by hand tools.

Immediately after screeding and prior to compaction, the surface shall be checked by the Contractor and irregularities adjusted. When the edge is feathered as in a wedge lift, it may be sealed by rolling. Irregularities in alignment and grade along the edges shall be corrected before the edges are rolled.

Hauling, spreading and finishing equipment shall be furnished that is capable of and operated in such a manner that the rolling operation will satisfactorily correct any surface blemishes.

The longitudinal joint in the subsequent lift shall offset that in the underlying lift by approximately 150 millimeters. However, the joint in the top lift shall be at the centerline or lane line.

907-401.03.11--Compaction. After the mixture has been spread and surface irregularities corrected, it shall be thoroughly and uniformly compacted to the required line, grade, cross section and density.

907-401.03.12--Joints. Joints between previously placed pavement and pavement being placed shall be so formed as to insure thorough and continuous bond.

Transverse construction joints shall be formed by cutting the previously placed mixture to expose the full depth of the lift.

The contact surface of transverse joints and longitudinal joints, except hot joints, shall be sprayed with a thin uniform tack coating before additional mixture is placed against the previously placed material.

Longitudinal joints shall be formed by overlapping the screed on the previously placed material for a width of at least 25 millimeters and depositing the quantity of mixture to form a smooth, tight joint.

907-401.03.13--Pavement Samples. The Contractor shall cut samples from each lift of HMA at the time and locations designated by the Engineer. The samples shall be taken for the full depth of each lift and shall be of a size approved by the Engineer but not to exceed 77 500 square millimeters. Tools used for cutting or coring of samples shall be of the revolving blade type such as saw or core drill. Cores shall be taken using a 75.0 to 100.0-mm inside diameter coring bit The sample hole shall be filled, compacted and finished by the Contractor to conform with the surrounding area. No additional compensation will be allowed for furnishing samples and repairing the areas with new pavement.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-403-7M **CODE: (SP)**

DATE: 02/10/2003

SUBJECT: Hot Mix Asphalt (HMA)

Section 403, Hot Bituminous Pavement, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is deleted in toto and replaced as follows:

SECTION 907-403 - HOT MIX ASPHALT PAVEMENT

907-403.0l--Description. This work consists of constructing one or more lifts of HMA pavement meeting the requirements of Section 907-401 on a prepared surface in accordance with the requirements of this section and in reasonably close conformity with the lines, grades, thicknesses, and typical cross sections shown on the plans or established by the Engineer. This work shall also include applicable in-grade preparation of the underlying course in accordance with Section 321.

907-403.02--Material Requirements. Materials and their use shall conform to the applicable requirements of 907-401.02.

907-403.03--Construction Requirements.

907-403.03.1--General. Construction requirements shall be as specified in 907-401.03 except as otherwise indicated in this section or applicable special provisions.

907-403.03.2--Smoothness Tolerances. Except as noted herein, the finished smoothness of each lift shall conform to the designated grade and cross section within the following tolerances from grade stakes or other grade reference points set at 10-meter intervals:

	Lower* & Leveling Lifts	Lower* Intermediate Lift	Top Intermediate Lift	Surface Lift
Maximum deviation from grade and cross section at any point	13 mm	10 mm	6 mm	6 mm
Maximum deviation from a three-meter straight edge	10 mm	6 mm	3 mm	3 mm
Profile Index (PI) (millimeters/kilometer)	-	-	710	475

Note: Where more than four (4) lifts of HMA are required, all lifts, excluding the top three (3) lifts, shall meet the requirements of the lower lift.

* When tested longitudinally from a stringline located equidistant above points 15 meters apart, the distance from the stringline to the surface at any two points located approximately four meters apart shall not vary one from the other more than the maximum deviation allowed above from a three-meter straight edge.

Where only one intermediate lift is required, it shall meet the smoothness requirements for lower intermediate lifts and shall have a Profile Index of not more than 945 millimeters per kilometer. The surface lift shall have a Profile Index of not more than 475 millimeters per kilometer.

Where only a leveling lift and a surface lift are required, the surface lift shall meet the smoothness requirements for lower intermediate lifts, and shall have a Profile Index of not more than 945 millimeters per kilometer.

Where only a surface lift is required, the Contractor shall determine the existing surface profile index at no additional cost to the State. The finished surface lift shall have a profile index of sixty percent (60%) of the profile index of the existing surface or 945 millimeters per kilometer, whichever is greater.

Where milling is required to remove undesirable material and/or correction of the cross-slope and only one (1) lift is required, the lift shall have a Profile Index of not more than 710 millimeters per kilometer

Where milling is required to remove undesirable material and/or correction of the cross-slope and a leveling lift and a surface lift are required, the surface lift shall have a Profile Index of not more than 710 millimeters per kilometer.

Where milling is required to remove undesirable material and/or correction of the cross-slope and two (2) lifts are required, the lower lift shall have a Profile Index of not more than 710 millimeters per kilometer and the surface lift shall have a Profile Index of not more than 475 millimeters per kilometer

Grade stakes or other grade reference points set at 10-meter intervals and maximum deviation from grade and cross section will not be required provided an approved profile averaging device with extreme contact points with surface at least nine meters apart is furnished and properly used for the four conditions set forth herein; however, all other surface requirements are applicable.

(a) Overlays with one overall lift.

(b) Overlays with two or more overall lifts -- for each lift above the first overall lift provided each underlying overall lift is within the allowable tolerances.

(c) Surface lift of new construction provided the underlying lift is within the allowable tolerances.

(d) Full-depth asphalt construction for lifts above the lower lift provided the lower lift is within the specified tolerances for the lower intermediate lift.

Approved contacting type profile averaging devices are those devices capable of working in conjunction with a taut string or wire set to grade, or ski-type device with extreme contact points with the surface at least 10 meters apart. Approved non-contacting type profile averaging devices are laser type ski devices with at least four referencing mobile stations at a minimum length of 7.3 meters, or an approved equal.

When approved by the Engineer, a short ski or shoe may be substituted for a long ski on the second paving operation working in tandem.

During the finishing and compacting of pavement lifts, it shall be the responsibility of the Contractor to check the surface and joints for progress toward conformance to surface requirements set forth herein. Variations from surface requirements exceeding the allowable tolerances shall be corrected at the Contractor's expense.

When a portland cement concrete pavement is to be placed on a HMA lift, the finished top of the HMA lift shall meet the requirements of Sections 32l and 50l.

When the Profile Index for the final surface lift is less than or equal to three hundred and forty seven millimeters per kilometer (347 mm / km), per segment, a unit price increase will be added. The following schedule lists the Profile Index range and the corresponding contract price adjustment:

Profile Index millimeters / kilometer / segment	Contract Price Adjustment percent of HMA unit bid price
less than 158.0	108
158.1 to 221.0	106
221.1 to 284.0	104
284.1 to 347.0	102
347.1 to 475.0	100
over 475.0	100 (with correction of PI $\leq$ 475.0)

Contract price adjustments for rideability shall only be applicable to the surface lift and furthermore to only the segment(s) or portions of the segment(s) of the surface lift that require smoothness be determined by using a profilograph and then only when the surface tolerance requirements include a profile index of 475 mm / km.

Segment(s) or portions thereof representing areas excluded from a smoothness test with the profilograph shall also be excluded from consideration for a contract price adjustment for rideability.

Any contract price adjustment for rideability will be applied on a segment to segment basis to the pay tonnage, determined in accordance with Subsections 907-401.02.6.5 and 907-403.04, for the segment(s) or portions thereof for which an adjustment is warranted.

907-403.03.3--Thickness Requirements. Hot mix asphalt overlay lifts shall be constructed as nearly in accordance with the thickness shown on the plans as the underlying pavement and foundation will permit. Periodic and cumulative yield tests will be made to determine practicable conformity to the thickness of each lift. The Engineer may order modifications in placement thicknesses to prevent unwarranted variations in plan quantities.

When the paver is operating off an established grade line, no thickness determination will be required for the various lifts of pavement. It is understood that the tolerances from design grade will control the thickness requirements.

When grade stakes are eliminated by Notice To Bidders or as outlined in 907-403.03.2(d) and where resulting in the placement of two (2) or more lifts, acceptance and payment will be determined on a lot to lot basis by cores taken from the completed pavement. Lots will be coincidental with acceptance lots for the surface lift as provided in 907-401.02.6.4, except that only lots resulting from the placement of mainline surface lift will be used for thickness assessment. One core will be obtained at random from each lot. Irregular areas will not be cored.

When the average thickness of all the cores from the lots representing a day's production (excluding any discarded by the Engineer for justifiable reason) is within 10 millimeters of the total pavement thickness shown on the plans, excluding lift(s) placed using an established grade line, corrective action will not be required and a price adjustment will not be made for non-conformity to specified thickness.

When the average thickness of all cores from the lots representing a day's production is deficient in thickness by more 10 millimeters of the total pavement thickness shown on the plans, excluding lift(s) placed using an established grade line, the deficiency shall be corrected by overlaying the entire length of the day's production. The thickness of the overlay shall be equal to the thickness deficiency but no less than the minimum single lift laying thickness for the specified mixture.

When the thickness of any core from the lots representing a day's production is more than 10 millimeters thicker than the total thickness shown on the plans, excluding lift(s) placed using an established grade line, a price adjustment will be made in accordance with 907-403.05.1.

The cores shall be cut and removed by the Contractor in the presence of the Engineer's representative and turned over to the Engineer's representative for further handling. The Contractor shall fill each core hole with surface lift mixture and compact to the satisfaction of the Engineer within 24 hours after coring.

907-403.03.4--Lift Corrections. Pavement exceeding the allowable surface tolerances shall be corrected at the Contractor's expense by the following methods:

Lower, Leveling and Lower Intermediate Lifts:

(a) Removal or addition of mixture by skin patching, feather edging, wedge lift construction or full depth patching where appropriate and can be completed in a satisfactory manner.

(b) Superimposing an additional layer which shall be an approved grade raise for the full roadway width and length of the area to be corrected.

Top Intermediate Lift:

(a) Removal and the addition of sufficient mixture to provide the specified thickness. Corrections by this method shall be square or rectangular in shape and shall completely cover the area to be corrected.

(b) Superimposing an additional layer (minimum lift thickness for mixture being used) which shall be an approved grade raise for full roadway width of the area to be corrected. Transverse joints shall be perpendicular to the centerline of the pavement.

Surface Lift:

(a) Removal and the addition of sufficient mixture to provide new material of at least minimum single lift laying thickness for full lane width of the area to be corrected. Transverse joints shall be perpendicular to the centerline of the lane.

(b) Superimposing an additional layer (minimum lift thickness for mixture being used) which shall be an approved grade raise for full roadway width of the area to be corrected. Transverse joints shall be perpendicular to the centerline of the pavement.

All mixtures used in the correction of unacceptable pavement shall be approved by the Engineer prior to use.

907-403.03.5--Overlays or Widening and Overlays. In addition to the requirements of 907-403.03.1 through 907-403.03.4 the following requirements will be applicable when an existing pavement is to be overlaid or widened and overlaid.

907-403.03.5.1--Blank.

907-403.03.5.2--Sequence of Operations. In order to expedite the safe movement of traffic and to protect each phase of the work as it is performed, a firm sequence of operations is essential. Unless otherwise provided in the traffic control plan and/or the contract, the following appropriate items of work shall be begun and continually prosecuted in the order listed:

(a) In sections designated by the Engineer, trim the shoulders along the pavement edges to provide drainage from the pavement.

(b) Perform prerolling to locate areas of pavement with excessive movement (Section 411).

(c) Perform selective undercutting and patching as directed (Subsection 907-403.03.5.4).

(d) Perform pressure grouting as specified (Section 412).

(e) Clean and seal joints (Section 413).

(f) Complete preparation on one side of roadway to be widened and place widening materials.

(g) Reconstruct shoulders to elevation necessary to assure traffic safety.

(h) Open the widened section to traffic.

(i) Complete above work for other side of roadway.

(j) Perform preliminary leveling as directed.

(k) Apply interlayer as specified.

(l) Place the first overall leveling lift.

(m) After the first overall leveling lift, reconstruct shoulders as necessary to eliminate vertical differentials which may be hazardous to traffic.

(n) Place first intermediate lift.

(o) Construct shoulders to the contiguous elevation of the first intermediate lift.

(p) Place remaining intermediate lift (if required).

(q) Place surface lift.

(r) Complete construction of shoulders.

(s) Apply permanent traffic marking.

(t) Final cleanup.

The above operations shall be performed in such a manner that traffic will be maintained on a paved surface at all times. Two-lane, two-way highways should not be restricted to a single lane in excess of a 1000-meter section.

907-403.03.5.3--Widening of Pavement. The foundation for widening shall be formed by trenching or excavating to the required depth and constructing a smooth, firm and compacted foundation. It shall have sufficient density and stability to withstand the placement and compaction of subsequent lifts. Soft, yielding and other unsuitable material which the Engineer determines will not compact readily shall be removed and backfilled with granular material or hot mix asphalt as directed.

Except as provided herein, excavation for widening, undercutting or other required excavation shall be spread along the edge of the shoulders, foreslopes or other adjacent areas as directed and will be an absorbed item. When the quantity is in excess of what may be used satisfactorily on adjacent areas, the Engineer may direct that the material be loaded, hauled and spread uniformly on other designated areas. In this case, compensation for handling surplus material will be in accordance with the appropriate pay items as provided in the contract or as extra work.

If the plans require widening of the shoulders or embankment with contractor furnished material, all suitable material obtained from widening excavation may be used and will be measured and paid for as Contractor furnished materials. No measurement for payment of haul will be made.

Removal and disposal of old stakes, forms and other debris encountered in excavating shall be in accordance with Section 201 and shall be considered as incidental to and included in the unit prices bid for other items. No separate measurement will be made therefor. Pavement edges and surfaces shall be cleaned prior to final shaping and compaction of adjacent trenching or undercut areas.

Granular material for widening shall be placed on a previously prepared, smooth, firm and unyielding foundation in accordance with the typical section. Density of the granular material shall be as specified.

Hot mix asphalt for widening, including trench widening, shall meet the applicable requirements of this section and Section 401 and shall be placed in one or more layers as shown on the plans or directed. The surface of the mixture shall be finished as a continuation of the adjacent pavement slope.

Trench rollers or other compaction equipment shall be used to compact the foundation, granular material and bituminous mixtures for widening when standard width rolling equipment cannot be used.

907-403.03.5.4--Patching. Existing pavement which has failed or unsatisfactorily stabilized shall be removed as directed. Removal of pavement will be measured and paid for under the appropriate pay items as provided in the contract.

Backfill shall consist of hot mix asphalt or a combination of compacted layers of granular material and hot mix asphalt. Unless otherwise specified, the Engineer will make this determination based on depth and field conditions.

Hot mix asphalt used for backfilling will be measured and paid for at the contract unit price for the mixture designated on the plans as the lowest lift. Granular material will be measured and paid for under the appropriate pay item as provided in the contract or as extra work.

907-403.03.5.5--Preliminary Leveling. All irregularities of the existing pavement that result in a thickness greater than approximately 65 millimeters for the first overall leveling lift shall be corrected by skin patching, feather edging or a wedge lift and shall be approved by the Engineer in advance of placing the first overall lift.

907-403.03.5.6--Placement of Lifts. The leveling lift shall be placed in a layer (or layers) not exceeding approximately 65 millimeters compacted thickness.

When single lane construction is required, placement of a lift on the adjacent lane may be performed by an approved profile averaging device provided the lane previously placed is within the allowable tolerances for all surface requirements. When any of the tolerances are exceeded, the contractor shall reestablish the control stringline for laying the adjacent lane should he elect to perform this work prior to correcting the deficiencies of the lane previously placed. In no case shall a "matching shoe" be used to control the grade of an adjacent lane.

In instances where there are only minor deviations from the allowable tolerances in the first overall lift, the Engineer may permit the Contractor to place the next higher lift by graded stringline in lieu of making the corrections.

Single lane placement of leveling, intermediate and surface lifts shall be limited to the distance covered in one and one-half days in advance of that placed in the adjacent lane.

907-403.03.5.7--Protection of Pavement. The pavement shall be protected and properly maintained until it has been compacted and cooled sufficiently for use by traffic.

907-403.04--Method of Measurement. HMA pavement, complete in place and accepted, will be measured by the metric ton. The mass of the composite mixture shall be determined in accordance with the provisions of 907-401.03.2.1.11.

Unless shown as a separate pay item, the furnishing and application of the tack coat will not be measured for payment. When payment is provided, tack coat will be measured as set out in Subsection 407.04.

The quantity of bituminous mixture required to correct the work, when made at the expense of the Contractor, will not be measured for payment.

Any trenching required for widening will not be measured for payment; the cost thereof shall be included in other items of work.

Undercut required by the Engineer will be measured for payment under the appropriate excavation item as provided in the contract or as extra work. Pavement removal and any required trenching will not be included in the measurement for undercut.

907-403.05--Basis of Payment. Subject to the adjustments set out in 907-401.02.6.3, 907-401.02.6.4, 907-401.02.6.5 & 907-403.03.2, hot mix asphalt pavement, complete-in-place, accepted, and measured as prescribed above, will be paid for at the contract unit price per metric ton for each lift of pavement specified in the bid schedule and shall be full compensation for completing the work.

907-403.05.1--Price Adjustment for Thickness Requirement. When grade stakes are eliminated as provided in 907-403.03.3 and the average thickness of all cores from lots representing a day's production is more than 10 millimeters thicker than the total specified thickness of the pavement, excluding lift(s) placed using an established grade line, a lump sum reduction in payment for the surface lift of lots representing a day's production will be made as follows:

$$\text{Individual Day's L.S. Reduction} = (\text{Monetary Value of the Day's Surface Lift Production}) \times \frac{(D - 10)}{ST}$$

Where:

D = The day's average deviation from total pavement thickness shown on the plans, excluding lift(s) placed using an established grade line.

ST = Specified thickness for surface lift.

The total L.S. reduction for the project is the summation of the individual day's reductions in payment.

907-403.05.2--Pay Items.

Payment will be made under:

907-403-A: Hot Mix Asphalt, (1) Type, (2) Mixture - per metric ton

907-403-B: Hot Mix Asphalt, (1) Type, (3) Mixture, Leveling - per metric ton

907-403-C: Hot Mix Asphalt, (1) Type, (4) Mixture, Trench Widening - per metric ton

907-403-D: Hot Mix Asphalt, HT, (3) Mixture, Polymer Modified - per metric ton

907-403-E: Hot Mix Asphalt, HT, (3) Mixture, Polymer Modified, Leveling - per metric ton

(1) ST, MT or HT
(2) 4.75 mm mixture, 9.5 mm mixture, 12.5 mm mixture, 19 mm mixture or 25 mm mixture
(3) 4.75 mm mixture, 9.5 mm mixture, 12.5 mm mixture or 19 mm mixture
(4) 19 mm mixture or 25 mm mixture

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-410-3M **CODE: (IS)**

DATE: 3/21/2002

SUBJECT: Bituminous Surface Treatments

Section 410, Bituminous Surface Treatment, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

In Table 410-A at the end of Section 410 on page 410-8, add AE-P to the list of bituminous materials for Prime Coat, and add CSS-1and CSS-1h to the list of bituminous materials for Tack Coat.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-423-2M **CODE: (SP)**

DATE: 12/08/2003

SUBJECT: Ground-In Rumble Strips

Section 907-423, Ground-In Rumble Strips, is hereby added to the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-423 -- GROUND-IN RUMBLE STRIPS

907-423.01--Description. This work consists of grinding rumble strips into finished roadway shoulders at required locations and in accordance with the details on the plans and the requirements set out herein.

907-423.02--Blank.

907-423.03--Construction Requirements.

907-423.03.1--Equipment. The equipment shall consist of a rotary type cutting head capable of cutting rumble strips to the dimensions shown on the plans. The cutting head shall have the cutting tips arranged in such pattern as to provide a relatively smooth cut of approximately two millimeters between peaks and valleys. The cutting head(s) shall be on its own independent suspension from that of the power unit to allow the tool to self align with the slope of the shoulder and/or any irregularities in the shoulder surface.

The finished rumble strips shall be cut to the dimensions as shown on the plans within the allowable tolerance and be perpendicular to the direction of travel. The rumble strips shall be placed in relation to the roadway according to the patterns shown on the plans.

Adequate back-up equipment such as mechanical sweeper/vacuum, water truck, etc. and personnel shall be provided to remove all grindings from the shoulder.

907-423.03.2--Construction Details. The cutting tool shall be equipped with guides to provide a consistent alignment of each cut in relation to the edge line and to provide uniformity and consistency throughout the project. The alignment of the cuts shall not deviate from the path of the edge line.

When the contract requires shoulder paving, the rumble strips shall be cut into the finished shoulder after the final course has been placed, otherwise, rumble strips shall be cut into the existing shoulder material. The debris (grindings) generated from the cutting shall be picked up and removed on a daily basis by use of a sweeper/vacuum or other method approved by the Engineer. The debris shall be picked up prior to opening the adjacent lane to traffic. Any other

method of cleaning debris from the shoulder or roadway other than picking up shall be approved by the Engineer prior to beginning construction. The use of the material from the rumble strips as RAP in the composition of hot mix asphalt mixtures shall require approval by the State Materials Engineer.

The Contractor shall demonstrate to the Project Engineer the ability to achieve the desired surface inside each depression without tearing or snagging the asphalt prior to beginning the work. Areas damaged by the Contractor's operations shall be corrected and/or repaired as directed by the Engineer at no cost to the State.

When placed on concrete shoulders, the Contractor shall adjust the spacing of the rumble strips to ensure that the depressions are not cut across a concrete shoulder joint.

This construction operation will encroach on the lane adjacent to the shoulder receiving the rumble strips. Therefore, construction on roadways under traffic will either require a lane closure or be considered as a moving operation. Traffic control shall be handled in accordance with the appropriate standard drawings shown in the plans or contract documents.

907-423.04--Method of Measurement. Rumble strips, ground in, completed in accordance with the plans and specifications, will be measured by the kilometer, which price shall be full compensation for all materials, equipment, tools, disposal of grinding debris, any associated traffic control, and all incidentals necessary to complete the work Length of measurement will start at the beginning of a continuous series of rumble strips and will terminate at the end of the continuous series. The length used to measure rumble strips will be the horizontal length computed along the stationed control line. Each shoulder on which rumble strips have been ground will be measured separately with the measurements from each shoulder combined to obtain the pay length for rumble strips.

907-423.05--Basis of Payment. Rumble strips, measured as prescribed above, will be paid for at the contract unit price per kilometer, which price shall be full compensation for completing the work.

The price for rumble strips shall include the cost of any required maintenance of traffic and protective services.

Payment will be made under:

907-423-A: Rumble Strips, Ground-In	- per kilometer
907-423-B: Rumble Strips, Ground-In, Concrete	- per kilometer

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-501-6M

DATE: 7/17/2003

SUBJECT: Transverse Grooving

Delete the last sentence of Subsection 907-501.04 on page 2 and substitute the following:

For bridge decks, the quantity will be computed by measuring the area between the face of barrier rail and the length of the span, or by the limits of transverse grooving shown in the plan. For concrete and bridge end pavements, the quantity will be computed by measuring the area between the edge of pavement and the length of the pavement, or by the limits of transverse grooving shown in the plan.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-501-6M **CODE: (IS)**

DATE: 12/15/99

SUBJECT: Diamond Grinding and Grooving

Section 501, Portland Cement Concrete Pavement, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-501.03--Construction Requirements.

907-501.03.18--Final Finish.

At the end of Subsection 501.03.18.5 on page 501-21, add the following:

907-501.03.18.6--Transverse Grooving. After the concrete has cured for a minimum of seven (7) days, the bridge deck and bridge end slabs shall be grooved with a self-propelled mechanical sawing device using diamond blades. Grooves shall be perpendicular to the centerline of the roadway and extend as close as possible to the gutter line but in no case more that 600 millimeters from the gutter line. The grooves shall be 3 millimeters wide and 5 millimeters deep and shall be spaced in such a manner to produce the following sequence: 20-mm, 28-mm, 15-mm, 25-mm, 15-mm, 28-mm, 20-mm in 150-mm repetitions across the width of one pass of the mechanical sawing device. The tolerance for the width of the groove is +2 to -0 millimeters and the tolerance for the depth and spacing of the grooves is ± 2 millimeters.

907-501.03.19--Surface Tests.

At the end of Subsection 501.03.19 on page 501-23, add the following:

907-501.03.19.1--Diamond Grinding. Grinding of concrete surfaces shall consist of diamond grinding the existing portland cement concrete surface to remove surface distortions to achieve the specified surface smoothness requirements.

907-501.03.19.1.1--Equipment. The grinding equipment shall be a power driven, self-propelled machine that is specifically designed to smooth and texture portland cement concrete surfaces with diamond blades. The effective wheel base of the machine shall not be less than 3.6 meters. It shall have a set of pivoting tandem bogey wheels at the front of the machine and the rear wheels shall be arranged to travel in the track of the fresh cut pavement. The center of the grinding head shall be no further than 0.9 meters forward from the center of the back wheels.

The equipment shall be of a size that will cut or plane at least 0.9 meter wide. It shall also be of a shape and dimension that does not encroach on traffic movement outside of the work area. The equipment shall be capable of grinding the surface without causing spalls at cracks, joints, or other locations.

907-501.03.19.1.2--Construction. The construction operation shall be scheduled and proceed in a manner that produces a uniform finish surface. Grinding will be accomplished in a manner to provide positive lateral drainage by maintaining a constant cross-slope between grinding extremities in each lane.

The operation shall result in pavement that conforms to the typical cross-section and the requirements specified in 907-501.03.19.1.3. It is the intent of this specification that the surface smoothness characteristics be within the limits specified.

The Contractor shall establish positive means for removal of grinding residue. Solid residue shall be removed from pavement surfaces before it is blown by traffic action or wind. Residue shall not be permitted to flow across lanes used by public traffic or into gutters or drainage facilities, but may be allowed to flow into adjacent ditches.

907-501.03.19.1.3--Finished Concrete Surface. The grinding process shall produce a pavement surface that is smooth and uniform in appearance with a longitudinal line type texture. The line type texture shall contain parallel longitudinal corrugations that present a narrow ridge corduroy type appearance. The peaks of the ridges shall not be more than 2 millimeters higher than the bottoms of the grooves.

The finished pavement surface will be measured for riding quality. The grinding shall produce a mainline riding surface which does not exceed either the specified profile index or the specified bump and dip limit.

The contract unit prices shall be full compensation for furnishing, loading, hauling, mixing, placing, rolling, and applying all materials; for all cleaning and sweeping; and for all labor, equipment, tools and incidentals necessary to complete the work.

907-501.04-Method of Measurement. After the last paragraph of Subsection 501.04 on page 501-28, add the following:

Transverse grooving will be measured by the square meter, complete in place and accepted. The quantity will be computed by measuring the bound area between the face of barrier rail, (edge of pavement, etc.) and the length of the span (pavement, etc.).

907-501.05--Basis of Payment.

907-501.05.1--General. After the third paragraph of Subsection 501.05.1 on page 501-28, add the following:

Transverse grooving will be paid for at the contract unit price per square meter, which price shall be full compensation for all grinding, cleaning and sweeping; and for all labor, equipment, tools and incidentals necessary to complete the work.

After the last pay item listed in Subsection 501.05.1 on page 501-29, add the following:

907-501-K: Transverse Grooving - per square meter

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-503-3M **CODE: (IS)**

DATE: 9/14/99

SUBJECT: Replacement of Concrete Pavement

Section 907-503, Replacement of Concrete Pavement, is added to the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

907-503 - REPLACEMENT OF CONCRETE PAVEMENT

907-503.01--Description. This work consists of replacing continuously reinforced and/or reinforced (jointed) concrete pavement and the removal and replacement of base materials at locations designated on the plans or as determined by the Engineer, all in accordance with the plans and specifications.

907-503.02--Materials. Materials shall meet the requirements of Subsection 700.01 and the following Subsections of Division 700, Materials and Tests.

Portland Cement	701.01 and 701.02
Fine Aggregate	703.01 and 703.02
Coarse Aggregate	703.01 and 703.03
Concrete Admixtures	713.02
Water	714.01
Concrete Reinforcement Bars	711.02
Longitudinal Joint Filler	707.02
Curing Materials	713.01

907-503.03--Construction Requirements.

907-503.03.1--Equipment. Equipment shall meet the requirements set out in Section 501 for hand placement and finishing Portland cement concrete pavement. Batching and mixing equipment shall meet the applicable requirements of Section 804. On-site mixers or truck mixers will be permitted.

907-503.03.2--Removal of Existing Pavement.

907-503.03.2.1--General. Existing pavement shall be removed in accordance with details shown on the plans and as specifically set out herein. Removal will be measured for payment as set forth in Section 202. The Contractor shall dispose of the concrete in accordance with Section 201.

Equipment and methods used in all of the work shall not damage any of the underlying base and materials that are to remain in place. All materials which are removed from the roadway shall be disposed of daily.

907-503.03.2.2--Reinforced Concrete Pavement. The removal of existing reinforced concrete pavement shall be accomplished by sawing the full thickness of the pavement along the edge of the repaired areas as shown on the plans and/or as directed by the Engineer.

907-503.03.2.3--Continuously Reinforced Concrete Pavement. The pavement within the lap area shall not be disturbed, damaged, or removed until the continuity of the concrete and steel has been severed between the failed area and the lap area. This shall be accomplished by sawing the full thickness of the pavement along the edge of the lap area. Jack hammers used for cutting and removal of the concrete in the lap area shall not exceed 10 kilograms.

The concrete in the lap area shall be removed in such a manner to result in a near vertical face at the saw line of the repair area. A chipping type removal is required to prevent spalling the bottom of the pavement to remain. Any spalling in excess of 40 millimeters shall be corrected by enlarging the repair area at no additional cost to the State. All shattered and damaged concrete shall be removed and the exposed faces cleaned.

The reinforcing steel in the lap area shall not be bent more than 100 millimeters in 500 millimeters from its original position. Where more than 10 percent of the steel is damaged in the lap area along any one edge of a removed area, the patch shall be enlarged at no additional cost to the State to provide the specified lap. Where less than 10 percent of the steel is damaged, the bars may be repaired by welding.

The steel shall be inspected for excessive rusting and evidence of distress during the removal process. The Engineer may enlarge the patch to remove deteriorated steel from the lap area. When the patch is enlarged by the Engineer, payment will be made for such removal.

907-503.03.3--Removal of Base Material. Base material referred to herein and on the plans shall be all types of material below the pavement that requires removal and backfill. The material shall be removed to the dimensions and depths designated by the Engineer. Removal of all undercut materials shall be in accordance with Section 202 and measured for payment by the square meter of base. The Contractor shall dispose of the material in accordance with Section 201.

907-503.03.4--Installation of Smooth Dowel Bars. Smooth dowel bars shall be installed in accordance with details shown on the plans and as specifically set out herein.

The commercial grout system used shall be one of the systems specified in 714.11.7. Installation and acceptance procedures are also included therein.

After the dowel bars are installed, the placement of reinforcing steel and any other work that may disturb the setting of the grout will not be permitted.

907-503.03.5--Installation of Tie Bars. The tie bars, except when directed otherwise on the plans, shall be No. 15 deformed bars, 750 millimeters long, placed on 600-millimeter centers and grouted using a commercial grout. The drilled holes shall be partially filled with an epoxy grout and the tie bars inserted to ensure that the holes are completely filled.

The commercial grout system used shall be one of the systems specified in 714.11.7. Installation and acceptance procedures are also included therein.

After the tie bars are installed, the placement of reinforcing steel and any other work that may disturb the setting of the grout will not be permitted.

907-503.03.6--Base and Pavement Replacement. Repair of the base and pavement shall conform to the requirements set forth herein and details shown on the plans. The exposed faces of the concrete pavement, the soil cement base and/or polyethylene covering the base repair shall be sprayed with water just prior to pouring the new slab.

The applicable provisions of Section 501 shall be adhered to with the following exceptions:

(a) Concrete. Structural concrete for pavement repair shall be made of Portland cement or Portland cement with additives and/or admixtures. The use of additives or admixtures shall be in accordance with the manufacturer's instructions. The structural concrete shall have a minimum compressive strength of 17 MPa in 12 hours or less, as determined by concrete cylinder compression tests. The Contractor shall submit a proposed concrete mix design to the Mississippi Department of Transportation Materials Division for approval at least two weeks prior to use on the project.

This concrete shall also meet the requirement for a compressive strength of 25 MPa within 72 hours. To meet these requirements, a Type F or G high range water reducing admixture shall be used. If the ambient temperature is less than 10° C, the addition of a Type C or E acceleration admixture shall be used. The usage of admixtures shall be in accordance with manufacturer's instructions.

Air Content	3 to 6%
Slump	200-mm maximum*

* No requirement for an initial slump before the addition of the high range water reducer.

Field verification trial mix results must be provided to the Engineer prior to placement if there is no previous data to verify strength.

(b) Forms. The forms may be metal or wood. Where at all possible, the forms shall be metal. Metal form shall meet the requirements of 501.03.6.2 and the wood forms shall be made of 50-mm x 200-mm lumber. Forms shall be graded to a specified elevation as directed by the Engineer.

(c) Longitudinal Joints. Where a repair area is required to extend across a longitudinal joint, a preformed or sawed longitudinal joint shall be constructed and sealed as shown on the plans or as directed by the Engineer.

(d) Consolidating and Finishing. All concrete shall be thoroughly consolidated by internal vibration. Finishing may be performed by either machine or hand methods. All patches less than six meters in length shall be screeded longitudinally unless otherwise permitted by the Engineer.

The surface of the pavement shall be finished as designated elsewhere in the contract and in accordance with the applicable portions of Section 501.

The screed shall be metal of a type used on bridges for finishing short patches and may be a mechanical or bridge type on long patches exceeding six meters. All replacement concrete shall be checked longitudinal with a 3-meter straightedge in accordance with 501.03.19 for concrete pavement other than main-line pavement.

(e) Curing and Protection. Concrete cylinders used to represent the minimum compressive strength shall be field cured and cured by the same methods used on that portion of the roadway it represents. If the ambient temperature is less than 10ºC, the field cured cylinders shall be placed in an insulated box.

The concrete repair area shall be cured up until the time of opening to traffic. All exposed surfaces, including vertical surfaces, shall be cured immediately after finishing operations have been completed.

Curing and protection shall be in accordance with 501.03.20. White pigmented curing compound shall be used and the sprayer shall be equipped with a container having a capacity of not less than 18 liters and maintain a constant pressure by mechanical means. Curing time shall be continued until the concrete has attained the required compressive strength as evidenced by test specimens.

(f) Concrete Saw Cuts. The saw cut shall be at the locations and depth shown on the plans.

(g) Contraction Joint Assembly. Contraction joint assemblies shall be installed as per the details shown in the plans.

(h) Concrete Placement. Limitations on placing continuously reinforced concrete pavement are set forth in the following schedule:

CONCRETE PAVING SCHEDULE
DURING DAYTIME HOURS

Predicted High Temperature	Hours of Daytime Placement
Below 20°C	Daylight hours
20° - 29°C	12:00 Noon to Sundown
30° - 32°C	1:30 PM to Sundown
33°C & Above	3:00 PM to Sundown

Note: The National Weather Service's predicted high temperature for the day shall govern. Unless lighting provisions have been made for nighttime work, sufficient time must be allowed for the finishing operation prior to sundown but no less than 30 minutes will be permitted.

CONCRETE PAVING SCHEDULE
DURING NIGHTTIME HOURS

During nighttime operations, concrete pours may be made anytime between sundown and sunrise without regard to predicted high temperatures.

907-503.03.7--Opening to Traffic. Upon approval of the Engineer, the traffic lane shall be opened within 72 hours and may be opened when a 17-MPa compressive strength is obtained as verified by cylinder break. Side forms shall be removed and the shoulder repaired with hot mix asphalt pavement, and the area cleared of equipment and waste materials prior to opening to traffic.

The sampling and testing frequency for concrete test cylinders shall be at least two cylinders per day per section of lane for which an individual lane closure is effected and concrete pavement is replaced.

The Contractor must make arrangements to have the concrete compressive cylinders tested by an acceptable commercial laboratory. Results from laboratory tests may be accepted verbally to expedite the opening of traffic to a section of closed roadway, but the Contractor must furnish the Engineer with certified test reports within three days. Any misrepresentation of test cylinders which allows traffic to be opened in areas that did not meet minimum requirements will result in the Contractor removing and replacing the repair(s) represented by the cylinder at no additional cost to the State.

907-503.04--Method of Measurement. Replacement of the concrete pavement will be measured for payment by the square meter complete in place. Saw cuts will be measured for payment by the meter when a pay item is included in the contract proposal. Concrete for base repair will be measured by the cubic meter complete in place. Smooth dowel bars and tie bars will be measured per each complete in place.

No separate measurement will be made for reinforcing steel, wire mesh, longitudinal joints, polyethylene sheeting and hot bituminous pavement for repair of shoulders and maintenance of traffic items required.

The plans may also provide for welding of the reinforcing steel as an optional method available to the Contractor. This method reduces the width of the lap area from 500 millimeters to 200 millimeters which will reduce the size of the repair areas. If the Contractor elects to use the optional method, the subsequent reduction in plan quantities will not be justification for adjustment of contract unit prices as provided in 104.02.

907-503.05--Basis of Payment. The accepted quantities of saw cuts, concrete for base repairs, smooth dowel bars, tie bars, and concrete pavement will be paid for at the contract unit prices which shall be full compensation for completing the work, furnishing all labor, equipment, tools, materials, and bituminous plant mix required for shoulder repair. Removal and disposal of pavement and base materials shall be made under appropriate items under Section 202.

The price for each item of work shall include the cost of continuous maintenance of traffic and protective services as required by the Department's Traffic Control Plan. This shall include all required individual traffic control devices.

Payment will be made under:

907-503-A:	___-mm and Variable _____ Concrete Pavement Type (____ Finish) Type	- per square meter
907-503-B:	Saw Cut (Longitudinal Joints)	- per meter
907-503-C:	Saw Cut (_____ -mm)	- per meter
907-503-D:	Concrete for Base Repair	- per cubic meter

907-503-E: Tie Bars (No. _____ Deformed) (Drilled and Epoxied or Grouted) - per each

907-503-F: _____ Smooth Dowel Bars (Drilled and Epoxied or Grouted) (Size) - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-603-3M **CODE: (IS)**

DATE: 5/02/2001

SUBJECT: Culverts and Storm Drains

Section 603, Culverts and Storm Drains, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-603.01--Description. At the end of Subsection 603.01 on page 603-1, add the following:

When alternate pipe is shown in the contract, the Contractor may select an alternate pipe from the alternate pipe group (type) shown in the plans or contract documents. The type of pipe used for alternate pipe shall meet the material requirements of Subsection 603.02 for the type of pipe selected.

907-603.02--Materials. Delete the entry for "Corrugated Polyethylene Pipe" and add the following material to the list contained in Subsection 603.02, pages 603-1 and 603-2:

Corrugated Polyethylene Pipe,	907-708.17
Corrugated Poly (Vinyl Chloride) (PVC) Pipe	907-708.17

907-603.03--Construction Requirements.

907-603.03.4--Joining Conduit.

907-603.03.4.1--Storm Drainage. Delete the last paragraph of Subsection 603.03.4.1 on page 603-5, add the following:

In lieu of the preceding requirements and in addition to being supplied or recommended by the pipe manufacturer, coupling bands for joining corrugated polyethylene pipe shall be in accordance with AASHTO Designation: M 294 and shall meet or exceed the soil-tightness requirements of the AASHTO Standard Specifications for Highway Bridges, Section 26, paragraph 26.4.2.4 (e).

Corrugated polyethylene pipe may also be furnished with bell & spigot type joints with O-ring rubber gasket meeting ASTM Designation: F477 placed on the spigot end. At least two (2) corrugations of the spigot end must insert into the bell end.

Joints and fittings for poly (vinyl chloride) (PVC) pipe shall meet the requirements of ASTM Designation: F 949.

907-603.05--Basis of Payment. Delete the heading, pay item number description and unit for Corrugated Polyethylene Pipe on page 603-13, and add the following headings, pay item numbers, descriptions and units to the list contained in Subsection 603.05, pages 603-9 thru 603-13:

CORRUGATED POLYETHYLENE

907-603-PE: ___-mm Corrugated Polyethylene Pipe - per meter

CORRUGATED POLY (VINYL CHLORIDE)

907-603-PVC: ___-mm Corrugated Poly (Vinyl Chloride) Pipe - per meter

ALTERNATE PIPE

907-603-ALT: ___-mm Type ___ Alternate Pipe - per meter

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-605-5M **CODE: (SP)**

DATE: 02/22/2002

SUBJECT: Geotextile Fabric

Section 605, Underdrains, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

907-605.05--Basis of Payment. Add the "907" prefix to pay item 605-AA on page 605-7.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-605-7M **CODE: (IS)**

DATE: **05/14/2004**

SUBJECT: Edge Drains

Section 605, Underdrains, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction, as amended by this special provision, is applicable for edge drains only:

907-605.01--Description. This work consists of furnishing and installing plastic pipe edge drains and edge drain outlets, vents and miscellaneous appurtenances as shown on the drawings in the plans (or contract documents) and as specified in the standard specifications and this special provision. This work also includes the video inspection and reporting of edge drain system installation.

907-605.02--Materials.

907-605.02.1--Pipe and Pipe Fittings. Pipe for edge drains and fittings shall be size DN 100, and shall be either Schedule 40 or Schedule 80 polyvinyl chloride (PVC) plastic pipe conforming to the requirements of ASTM Designation: D 1785.

Fittings, except for "Y" fittings, shall be socket-type fittings conforming to the requirements of ASTM Designation: D 2467 for Schedule 80 pipe and ASTM Designation: D 2466 for Schedule 40 pipe.

The Contractor may elect to furnish one of the following perforated pipe in lieu of the pipe mentioned above. Regardless of the pipe used, it shall be DN 100 nominal size.

a) Pipe conforming to Subsection 708.18 of the Standard Specifications with SDR number ranging from 23.5 to 35 and shall have a minimum pipe stiffness value of 345 kPa.

b) Corrugated polyethylene drainage tubing or corrugated high density polyethylene (HDPE) pipe conforming to the requirements of AASHTO Designation: M 252, Type SP with the stipulation that the minimum pipe stiffness value shall be 345 kPa. The pipe and fittings shall be made of virgin polyethylene compounds which conform with the requirements of cell class 324420C as defined and described in ASTM Designation: D 3350, except that the carbon black content shall not exceed 5%. Compounds that have higher cell classifications in one or more properties are acceptable provided product requirements are met.

Pipe used for the edge drain outlet/vents shall be either PVC or corrugated high density polyethylene (HDPE) pipe. PVC pipe shall meet the requirements of ASTM Designation: D 1785 as stated above, and HDPE pipe shall meet the requirements of AASHTO Designation: M 252 as stated above.

All "Y" fittings shall be smooth interior wall fittings fabricated from pipe conforming to the requirements for edge drain outlet pipe. The fitting shall provide an unobstructed passageway through both legs of the "Y".

Edge drain outlet and vent covers shall consist of commercial quality 75-mm x 75-mm galvanized hardware cloth, 1.6-millimeter wire or equal. The outlet and vent covers shall be installed at the end of each outlet pipe and vent pipe.

The Contractor shall furnish to the Engineer three copies of the manufacturer's certified test reports and certification covering each shipment of pipe stating the amount furnished and that the pipe, fittings, couplings, etc. comply with the requirements of the specifications.

907-605.02.2--Untreated Permeable Material. The untreated permeable material used to backfill the edge drain pipe and outlet/vent trench shall be Type 57 filter material and shall conform to the requirements of Subsection 703.03, Coarse Aggregate for Portland Cement Concrete, for Size 57 coarse aggregate. The type of aggregate may also be slag or granite. Mixing of different types of aggregate will not be permitted.

907-605.02.3--Geotextile. The geotextile used with edge drains and edge drain outlets shall be Type V geotextile meeting the requirements of Subsection 714.13.

907-605.02.4--Miscellaneous. Concrete for aprons shall be Class "C" concrete meeting the requirements of Subsection 804.02.7.2.

Mortar placed where edge drain outlets and vents connect to drainage pipes and existing drainage inlets shall conform to the provisions of Subsection 714.11.5, Masonry Mortar, except that the sand and cement shall be commercial quality.

907-605.03--Construction Requirements.

907-605.03.1--Installation. Edge drains, edge drain outlets, vents, untreated permeable material, and geotextile shall be installed in accordance with the details shown on the plans or in the contract documents, as specified herein and applicable Special Provisions. The vertical tolerance (height) for the trench shall be plus or minus 13 millimeters. The horizontal tolerance (width) shall be plus 25 millimeters.

Immediately prior to placement, surfaces to receive geotextile shall be free of loose or extraneous material and sharp objects that may damage the geotextile during installation.

The geotextile shall be stretched, aligned and placed in a wrinkle-free manner.

Adjacent rolls of the geotextile shall be overlapped from 300 to 450 millimeters. The preceding roll shall overlap the following roll in the direction the material is being spread.

Should the geotextile be damaged during placing, the torn or punctured section shall be either completely replaced or shall be repaired by placing a piece of geotextile that is large enough to cover the damaged area and to meet the overlap requirement.

Damage to the geotextile resulting from the Contractor's vehicles, equipment or operations shall be replaced or repaired by the Contractor at no additional cost to the State.

Pipe and fittings shall be joined by solvent cementing with commercial quality solvent cement and primer specifically manufactured for use with rigid PVC plastic pipe and fittings. The solvent cement and primer used shall be made by the same manufacturer. The color of the primer shall contrast with the color of the pipe and fittings. The solvent cement and primer shall be used in accordance with the manufacturer's printed instructions.

When corrugated polyethylene drainage tubing is used, joints shall be made with split couplings, corrugated to engage the pipe corrugations, and shall engage a minimum of four corrugations, two on each side of the pipe joint.

When poly (vinyl chloride) corrugated sewer pipe is used, joints shall be made in accordance with the pipe manufacturer's recommendations and ASTM Designation: F 949.

The backfill of the trench along the pavement edge, across the shoulder and outside the shoulder shall be as shown in the details of the drawings.

The Contractor may dispose of the trenched materials on the slopes provided all material passes a 75-millimeter ring and blends into the existing or reconstructed roadway slopes. Otherwise, the material must be disposed of outside the right-of-way.

The edge drain and edge drain outlets and vents shall be clean at the time of installation and shall be free of obstructions after installation.

907-605.03.2--Inspection. The edge drain system shall be inspected by the Contractor after all roadway construction items are completed within a given section of roadway. A video record and written report for each line inspected shall be furnished to the Engineer. The line location (station number), distance traversed by the camera, and pipe deficiency shall be recorded on a standard VHS video tape and in a written report. As a minimum, fifty percent (50%) of the entire edge drain system shall be video inspected. Video inspection shall be performed in the presence of the Engineer or the Engineer's representative.

Video equipment used for inspecting the edge drain system shall be capable of the following minimum requirements:

(1) Providing color video inspection of pipelines for 100-mm inside diameter pipe in a wet, corrosive environment and negotiating a 90° bend in a smooth bore or corrugated pipe. The color camera must have a minimum 400-line horizontal resolution.

(2) Video inspecting up to 100 meters of edge drain pipe, by pushing, pull cabling, jetting or tractoring the camera through the line and recording the condition on video tape.

(3) Equipped with a video monitor capable of allowing live viewing of the video inspection.

(4) Displaying and recording on the video tape, the date, line identification, footage and type of pipe deficiency.

(5) Recording the distance traversed by the camera to within 150 millimeters, allowing for overlapping of distances if a reversal is required to permit full-length inspection.

A written report of the drain system inspection shall be completed on the attached form.

Any foreign materials that restricts the movement of the inspection equipment or impairs the quality of the video within the drain system shall be flushed from the system. Flushing of the drain system will be by water jetting or other methods approved by the Engineer. Costs associated with flushing the system will not be made under separate payment. The system shall be re-inspected after flushing in the same manner as the initial inspection as described above. Re-inspection of the system shall be at no additional cost to the State.

Any drain system pipe that can not be cleared from obstructions, damaged or does not conform to the lines and grades shown on the plans shall be replaced at no additional cost to the State.

907-605.04--Method of Measurement. Edge drains and edge drain outlets/vents, complete in place, will be measured by the meter along the line of the trench. On slopes, the length to be paid for will be the slope length of the trench.

Edge drain inspection will be measured by the meter of edge drain and edge drain outlet/vent inspected. The length to be paid for will be the slope length of the trench.

The Class "C" Concrete for concrete aprons shall be measured by the cubic meter.

Wire mesh covers, pipe and pipe fittings, couplings, untreated permeable material, geotextile, granular material, bituminous pavement mixture, trenching, disposal of trenched materials and other miscellaneous appurtenances will not be measured separately for payment.

907-605.05--Basis of Payment. The contract unit prices paid for edge drain and edge drain outlets/vents shall be full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in constructing edge drains and edge drain outlets/vents complete in place, including wire mesh covers, pipe and pipe fittings, couplings, untreated permeable material, geotextile, granular material, bituminous pavement mixture,

trenching, disposal of trenched materials and other miscellaneous appurtenances as shown on the plans and as specified in the standard specifications and in this special provision.

Edge drain inspection, completed and accepted, will be paid for at the contract unit price per meter of edge drain and edge drain outlet/vent inspected, which price shall be full compensation for furnishing all labor, equipment, VHS tapes, tools and incidentals necessary to complete the work.

Class "C" concrete for aprons, as shown on the plans and as specified herein, shall be paid for under Pay Item No. 221-A, Portland Cement Concrete Paved Ditch.

Payment will be made under:

907-605-FF:	Edge Drain, Complete-in-Place	- per meter
907-605-GG:	Edge Drain Outlets/Vents, Complete-in-Place	- per meter
907-605-HH:	Edge Drain & Edge Drain Outlet/Vent Inspection	- per meter

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-606-1M **CODE: (IS)**

DATE: 4/24/98

SUBJECT: Terminal End Sections

Section 606, Guard Rail, of the 1996 Metric Edition of Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-606.02--Materials. After the second paragraph of Subsection 606.02 on page 606-1 add the following:

Terminal end sections, installed as per manufacturer's recommendations, shall be National Cooperative Highway Research Program (NCHRP) Report 350 Test Level 3 (TL-3) approved. The following is a list of the current devices that have met NCHRP Report 350.

1. BEST
2. ET-2000
3. FLEAT-350
4. SKT-350
5. SRT-350

Terminal end sections shall be one of the above listed devices or an approved equal.

The Contractor shall furnish the Project Engineer two (2) copies of the manufacturer's installation instructions prior to beginning guard rail operations.

907-606.05--Basis of Payment. Add the following pay item to the list on page 606-4:

907-606-E: Guard Rail (Terminal End Section) - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-618-7M **CODE: (IS)**

DATE: 11/10/98

SUBJECT: Placement of Temporary Traffic Stripe

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-618.03 -- Construction Requirements.

907-618.03.3 -- Safe Movement of Traffic. Delete the third paragraph of Subsection 618.03.3 on page 618-3 and substitute the following:

A longitudinal pavement edge that traffic is expected to move across should have an elevation difference of not more than 55 millimeters. If the pavement edge is more than 40 millimeters and less than or equal to 55 millimeters, uneven pavement signs will be required as shown in the plans or contract documents. If the pavement edge is less than or equal to 40 millimeters, no uneven pavement signs will be required. Transverse pavement joints shall be sufficiently tapered to allow for the safe movement of traffic.

When a paving operation produces a longitudinal pavement edge that traffic is expected to move across, the adjacent lane shall be constructed to eliminate any uneven pavement edge within 48 hours, unless prohibited by weather conditions or an emergency arises.

Delete the sixth paragraph of Subsection 618.03.3 on page nos. 618-3 and 618-4 and substitute:

All centerline, lane lines, edge lines and no-passing stripes that have been covered or removed during the day's operations shall be replaced with temporary stripe before work is discontinued for the day or as soon thereafter as weather conditions will permit, except that:

(1) Replacement of no-passing stripes may be delayed for a period not to exceed three (3) days for a two or three lane road.
(2) Temporary edge lines may be eliminated on projects requiring shoulders constructed of granular material.
(3) Temporary edge lines placed on the final pavement course of projects requiring paved shoulders without surface treatment shall be placed in the permanent stripe location, otherwise temporary edge lines on projects requiring paved shoulders may be placed on the adjacent shoulder in as near the permanent location as possible.

Temporary no-passing stripe is not considered a major item of work and such stripe which is eliminated because of placing the next course prior to expiration of the 3-day period shall not result in a monetary adjustment to the Contractor as provided in 104.02. All temporary stripe shall be placed in accordance with the plans and Subsection 907-619.03.2.

Delete the first sentence of the first full paragraph on page 618-4 under Subsection 618.03.3 and substitute the following:

In addition to the temporary no-passing stripe, the Contractor shall erect standard "DO NOT PASS," "NO-PASSING ZONE," and "PASS WITH CARE" signs in accordance with plan details or as specified in the MUTCD.

Delete the last sentence of the third full paragraph on page 618-4 under Subsection 618.03.3 and substitute the following:

All temporary stripe shall be maintained in good order until placement of the permanent pavement markings or placement of the next pavement course or until removed. Maintenance of temporary stripe may require more than one application over the life of the project. Payment will be made for one application only.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-11M **CODE: (IS)**

DATE: 06/18/2003

SUBJECT: Traffic Control for Construction Zones

Section 619, Traffic Control for Construction Zones, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-619.02.4--Construction Signs. Delete the fourth sentence of the second paragraph of Subsection 619.02.4 on page 619-1 and substitute:

Standards for height of construction signs shall be those shown for roadside signs in Chapter 6F of the Manual of Uniform Traffic Control Devices (MUTCD).

Delete the third paragraph of Subsection 619.02.4 on page 619-1 and substitute the following:

Unless specified otherwise, fluorescent orange reflective sheeting, meeting the requirements of Subsection 721.06, shall be used on all construction signs regardless of whether used during daytime or nighttime hours.

Delete the fourth paragraph of Subsection 619.02.4 on page 619-1 and substitute the following:

Unless otherwise specified on the plans, the material on which the reflective sheeting is to be applied shall be 1.52-millimeter (minimum) steel, 2.03-millimeter (minimum) aluminum, or 15-millimeter (minimum) high density overlaid plywood. Ungalvanized steel, exterior grade plywood and lumber shall have a minimum of two coats of paint on front, back, and edges. High density overlaid plywood shall have the edges painted. The material to which reflective sheeting is to be applied shall be prepared in accordance with the recommendations of the sheeting manufacturer.

Delete the third sentence of the first paragraph of Subsection 619.02.4 on page 619-2 and substitute the following:

If tested by the Central Laboratory, the reflective sheeting shall have at least 50 percent of the reflectivity specified for new sheeting.

907-619.02.5--Advance Warning Flashing Arrow Panels. Delete in toto Subsection 619.02.5 on page 619-2 and substitute:

907-619.02.5--Advance Warning Flashing Arrow Panels. Flashing arrow panels shall meet the requirements of Section 6F.53 of the MUTCD.

907-619.02.6--Concrete Median Barrier and Delineators. Delete in toto Subsection 619.02.6 on pages 619-2 & 619-3, and substitute:

907-619.02.6--Concrete Median Barrier and Delineators. Precast concrete median barrier shall meet the requirements of the plans, contract documents, and Section 615 except the surface may be a Class 1 ordinary surface finish unless designated otherwise. When precast concrete median barriers are no longer needed at one location, as determined by the Engineer, the barriers shall be removed and reset at other designated locations. When barriers have to be stored until needed at another location, payment for removing and resetting will not be made until they are reset at their designated location. The Contractor shall furnish the storage area.

The Engineer may allow the installation of used barriers for temporary traffic control upon an inspection and determination that the barrier units are structurally adequate for their intended purpose. Barriers with small chips or fractures not affecting their integrity may be accepted.

Precast concrete barriers used on this project which were purchased or manufactured after October 1, 2002 must meet the requirements of NCHRP Report 350. Precast median barriers purchased or manufactured prior to October 1, 2002 may be used until they complete their normal service life.

Certification of precast concrete barriers shall be as required in the Notice to Bidders titled "Certification of Traffic Control Devices".

Delineators shall be listed on the Department's "Approved Sources of Materials" and meet the requirements of the plans and Section 6F.68 of the MUTCD.

Delete in toto Subsection 619.02.7 on page 619-3 and substitute:

907-619.02.7--Channelization Devices, Barricades, and Warning Lights. Channelization devices, vertical panels, tubular markers, cones, drums, barricades and temporary raised islands shall meet the requirements of the plans and Sections 6F.55 through 6F.64 of the MUTCD. Drums shall be constructed of lightweight, deformable material capable of retaining reflective sheeting. Reflective sheeting for drums shall be Type III meeting the requirements of 721.06. Warning lights shall meet the requirements of Section 6F.72 of the MUTCD.

907-619.02.8--Traffic Signals and Flashers. Delete in toto Subsection 619.02.8 on page 619-3 and substitute:

907-619.02.8--Traffic Signals and Flashers. Traffic signals and flashers shall meet the requirements of the plans and Sections 6F.71 & 6F.74 of the MUTCD.

907-619.02.9--Impact Attenuators. Delete in toto Subsection 619.02.9 on page 619-3 and substitute:

907-619.02.9--Impact Attenuators. Impact attenuators must be listed on the Department's "Approved Sources of Materials".

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-12M **CODE: (SP)**

DATE: 09/22/2003

SUBJECT: Changeable Message Signs

Section 619, Traffic Control for Construction Zones, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-619.02--Material Requirements.

After Subsection 619.02.11 on page 619-3, add the following:

907-619.02.12--Changeable Message Sign. The changeable message sign shall be trailer-mounted, full size, LED, full matrix, solar powered, portable changeable message sign. The sign shall be capable of on-site operation via onboard keyboard/keypad, and when specified, remote operation via software running under the Windows 2000 Operating System. The entire sign assembly shall be designed and constructed to withstand and operate during a minimum of 120 kph wind gusts with all outriggers and/or leveling jacks in place. The entire sign assembly, including each component exposed to weather, shall be sealed and water-proofed to prevent water penetration when subjected to rain and gusting winds of 120 kph. If more than one changeable message sign is specified, they shall all be of the same model and from the same manufacturer. All parts and materials used to construct the changeable message sign shall be new.

When specified, each sign shall be provided either with or without the necessary hardware to control the sign remotely. If provided without the hardware, the sign shall be constructed with wiring in place to provide the connections for the necessary onboard hardware to control the sign remotely. The manufacturer shall supply a serial and/or USB connection within the sign control cabinet so that a laptop computer using the remote software can communicate directly with the sign CPU.

When specified, the sign shall be capable of displaying dynamic, in-situ traffic speeds through the use of an optional traffic radar transducer. The sign shall also be capable of radar interrupt. This option shall interrupt the original user-specified sequence of messages to display the approaching vehicle speeds and/or an alternate sequence of messages as determined by the user. This option shall also have the functionality to display the speeds of the approaching vehicles as a stand-alone sequence.

When specified, each sign shall be NTCIP compliant/compatible.

When specified, each sign shall be provided either with or without the necessary hardware to operate a Highway Advisory Radio (HAR) system. If provided without the hardware, the sign

shall be constructed to provide the required connections to easily add the necessary onboard hardware to operate the HAR.

General. The sign shall be mounted on a portable trailer containing the necessary solar panels, deep-cycle heavy-duty batteries, and battery charger. When specified, gel-type batteries shall be a replacement for deep-cycle heavy-duty batteries. In the event of prolonged lack of sufficient sunlight, the sign batteries shall be capable of being charged while the sign is operating by the use of a standard 120 Volt AC generator. The sign shall be equipped with a male plug-in and a 15-meter long extension cord constructed of a minimum 12-guage wire for this purpose. This plug-in shall also be capable of charging the sign batteries using standard 120 Volt AC current when the sign is not in use.

When specified, the sign shall be supplied with either the necessary onboard hardware to control the sign remotely, or the required connections to easily add the necessary onboard hardware to control the sign remotely. This hardware shall consist of, but is not limited to, a cellular telephone capable of operating in digital mode, and/or analog mode when specified, the necessary external antenna, communications cables, and the necessary modem for communicating with the sign operating software. The sign shall also be supplied with the necessary software to control the sign from a remote location. This software shall be Windows 2000 compatible for use on any desktop or laptop equipped with a Hayes Compatible Modem, and any necessary software which must be installed on the sign for communication with a remote computer. The cell phone and/or modem shall be capable of communication using the MDOT cell service provider and it shall be the responsibility of the manufacturer/contractor to demonstrate this service. The sign shall be capable of data communications at a minimum transmission speed of 40 kilobytes per second. The sign shall not be dependent on cellular digital packet data type technology for wireless communications.

The software for controlling the sign and sign messages shall be password protected to safeguard against unauthorized use. There shall be a minimum of three (3) levels of password protection. The most restrictive level shall allow an operator to select a preprogrammed sequence of messages for display while restricting access to the computer's sign and sequence programming. The next restrictive level shall allow the operator to access the sign's primary controls such as sign brightness, message and sequence editing, and establishing schedules. The least restrictive level shall allow full access to all controls, passwords, signs parameter display, and diagnostic display.

Sign diagnostics shall include, but not be limited to, LED brightness controls, internal operating temperature, sign status, communications status, radar status and solar status via onboard display and/or when specified, remote software. The sign status shall provide information on the sign operation that includes CPU inputs and outputs, battery voltage, 110 VAC service indicator, low voltage indicator, and photocell ambient light level. The solar status shall provide information on voltage level from the batteries, voltage level for the LED display, sign brightness level, percent of maximum brightness for LED's, and photocell ambient light level.

The sign software shall be capable of scheduling predetermined sequences of messages based on a programmed time and date.

There shall be a minimum of 180 pre-stored, standard signs and messages as detailed in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), all capable of being displayed. There shall also be storage space provided for an additional 150 user-programmed signs and/or messages. Each sign CPU shall have the capacity to store a minimum of 150 programmable sequences. Each sequence shall be capable of displaying up to six (6) programmed signs, symbols, or messages. There shall also be provided, as stored data, and capable of being displayed, all graphical symbols of regulatory and warning symbols detailed in the latest edition of the MUTCD.

The sign display shall be capable of displaying both static and dynamic graphics/messages. The sign display shall also be capable of displaying messages in full size to utilize the maximum area of display. It shall also be capable of displaying conventional one, two, or three-line messages for display with a choice of a minimum of nine (9) font sizes.

At least two copies of user manuals shall be provided with each sign. Each manual shall include all operational functions and software required to operate the sign on site and remotely. This manual shall include all wiring diagrams, parts lists, and sign specifications as well as component warranty information. Each copy shall be bound and shall contain laminated sheets.

Trailer Control Cabinet. The control cabinet shall be constructed of aluminum and shall receive an automotive grade protective coating as should the rest of the trailer. The sign cabinet shall be manufactured to withstand all types of adverse weather conditions and shall have screens or filters installed to keep insects out. This control cabinet shall be lockable, internally illuminated, and house the keyboard terminal and control panel. Lighted keys and terminal displays are acceptable. This control cabinet shall be manufactured in accordance with the latest NEMA 3R/4 standards. The control cabinet shall contain all controls and the necessary gauges for monitoring sign activity. All controls shall be labeled using engraved laminated plastic that is a minimum of two millimeters thick. These gauges shall include, but are not limited to, a voltmeter, which indicates current battery charge status, and an amp meter, which indicates current/charging status. The provision of this information via digital readout on a control console or panel is acceptable.

Sign Display. The sign display housing shall be constructed of aluminum and shall be composed of a full matrix of LED's. The sign display housing shall be manufactured in accordance with the latest NEMA 3R/4 standards. The sign shall be comprised of easily interchangeable modules that may be individually replaced in the event of failure or damage. The sign display shall have the minimum capability of displaying three lines of 450-mm nominal high text with eight characters per line. The sign display shall be capable of displaying preprogrammed Manual on Uniform Traffic Control Devices (MUTCD) symbolic messages and standard arrows. This sign shall be a full matrix type, not a fixed matrix type. The sign display shall also be capable of displaying user-defined custom messages and graphics. These messages shall be capable of saving for later recall and use. The sign shall be capable of displaying a preprogrammed default message, or no message at all, in the event of a power failure. When displaying text messages, the spacing between lines of text shall be a minimum of 150 millimeters and the inter-character spacing shall be a minimum of 75 millimeters. The sign shall

be capable of shutting down its LED display if internal cabinet temperatures reach a level that is determined unsafe by the manufacturer. The LED's shall be ITE amber wide angle for both daytime and nighttime viewing at an angle of 17 degrees, shall be rated for a service life of 100 000 hours, and shall have an operating temperature range of between -30°C to +74°. The associated electronics for operation of display power supply shall be fully operational in the temperature range of -34° to +74°C. The sign display shall be protected by a non-glaring polycarbonite material of at least 6-mm thickness. The display shall provide easy access to all components contained within the display housing.

LED Brightness Control. The sign shall be equipped with both automatic and manual controls to adjust the brightness of the LEDs. The automatic control shall be capable of varying the LED brightness by sensing the ambient light level using photocells. The manual brightness control shall be password protected to safeguard against unauthorized use. LED brightness control shall also be contained within the remote operational software.

Sign Trailer. The trailer shall be equipped with a minimum of two wheels with heavy-duty radial tires. It shall be constructed using a minimum of ASTM A36, 75-mm by 75-mm and 75-mm by 125-mm steel tubing both with a minimum of 5-mm wall thickness. Each wheel shall be equipped with one locking lug nut. A minimum of four keys for the locking lug nuts shall be supplied for each trailer. The trailer spring leafs shall be rated for 1580 kilogram. The wheels shall be 380-mm steel wheels with five lug bolts per wheel. The wheels shall each be fitted with new P 205-75-15B rated tires.

The trailer shall be provided with a minimum of four outriggers or leveling jacks. One outrigger or leveling jack shall be mounted near each corner of the trailer. The length of the leveling jacks shall be such that when the trailer is level, all four jacks and the tongue jack can be lowered into the vertical position. The trailer shall also be provided with a trailer stand mounted on the tongue of the trailer. The trailer stand shall be a corrosion resistant, screw type jack stand which provides up to a 635-mm lift with a pull-pin swivel release that enables the jack to swing up to a horizontal position for towing. The stand shall also include a 150-mm wheel that allows horizontal positioning of the trailer. The jack stand shall be welded, not bolted, to the tongue of the trailer. The trailer shall be provided with legal tail/brake lights, signals, and license plate mounting bracket. The trailer shall be provided with a 50-mm "hammer blow coupler" style hitch capable of being reversible with a 62-mm Pintle ring. The trailer shall contain the batteries, solar panels, display lift, and control console.

The trailer shall be equipped with an electric or hydraulic lift, or combination thereof, for the sign display. The sign shall also be equipped with a manual backup lift. The display lift shall raise the sign to a minimum of two meters above the roadway surface. The sign display shall be capable of rotating and locking at any selected angle up to 360 degrees. A positive brake assembly with lockable control arm shall be provided to position the sign display in the desired position. A mast safety pin shall be provided to prevent the sign display from falling in the event of an electric or hydraulic system failure.

All welding shall be performed by certified welders and in accordance to applicable American Welding Society standards. All metal surfaces shall receive a protective coating such as powder

coating, two coats of primer and two coats of finish/color. The finished coating shall be automotive grade.

All cabinets, display cases, battery cabinets and connections shall be NEMA 3R/4 compliant. All cabinets must be completely encased and lockable with a standard padlock. A lockable storage cabinet shall be provided to house various accessories.

The trailer shall have a 2720 kilogram capacity hydraulic surge brake system along with a breakaway latch.

Radar. When specified, the sign shall be equipped with a traffic radar operating in the "K" band, in an "approach only" mode. In conjunction with the radar, the sign shall be capable of displaying dynamic, in-situ vehicle speeds. The radar shall be able to interface directly with the CPU and operational software for applications such as vehicle speeds. The unit shall be programmable to allow the interruption of user-defined messages to display vehicle speed and/or alternate messages whenever a settable speed threshold is exceeded. The radar unit shall be encased in an aluminum enclosure with a polycarbonate lens, and the metal portion shall receive the same protective coating, priming, and painting as the rest of the sign.

Warranty. In general, the manufacturer's warranties and/or guarantees shall be delivered to the Engineer prior to final acceptance of the project. All warranties and guarantees shall be made out to the Mississippi Department of Transportation. At a minimum, a one-year on-site warranty shall be required for the trailer, sign, electronics, software, and all other installed and/or attached appurtenances. The warranty begins on the date of the projects final acceptance.

907-619.03--Construction Requirements.

After Subsection 619.03.8 on page 619-6, add the following:

907-619.03.9--Changeable Message Sign. Each changeable message sign shall be installed and continuously operated at the location selected by the Engineer on State right-of-way. The Contractor is advised that selected locations may be outside the planned indicated limits of the project. The Contractor shall perform all work necessary for preparation of the site selected and approved by the Engineer, to insure maximum safety for and sign visibility of the traveling public; and may be required to remove any temporary work at a later date as directed by the Engineer. The Contractor will also place a minimum of two plastic drums in advance of the sign and one beside the sign as long as it is in use. The Contractor shall be required to move the sign to a new location if directed by the Engineer.

The Contractor may be permitted to bring electric power from outside the normal right-of-way for operation of the equipment if the Department determines that the installation operation will not be hazardous to the traveling public. The Contractor will be required to secure a permit from the Department prior to any work by the power company on the right-of-way. The entire cost of providing electrical service, power to operate the equipment, and removal of the power source from the right-of-way shall be borne by the Contractor.

The changeable message sign(s) will remain the property of the Contractor after the Engineer determines that there is no further need for the sign(s) on the project.

907-619.04--Method of Measurement. After the sixth paragraph of Subsection 619.04 on page 619-7, add the following:

Changeable message signs, as described above, will be measured by the unit. When directed, separate measurements will be made for items included in the contract and required for temporary site preparation for the sign as referenced in Subsection 907-619.03.9. Materials for which no pay items are included in the contract will not be measured for separate payment. Separate measurements will not be made for moving the changeable message sign to a new location, but materials used for which pay items are included in the contract and are necessary for repositioning the sign as directed by the Engineer will be measured for separate payment. Removal of materials used for site preparation for changeable message signs will not be measured for separate payment.

907-619.05--Basis of Payment. After the second paragraph of Subsection 619.05 on page 619-7, add the following:

Payment for items required by the Engineer for temporary location of the changeable message sign, and for which pay items are included in the contract, will be made by the individual pay item. No additional payment will be made for having to work outside the planned indicated project limits.

Payment for removal of materials used for site preparation at changeable message sign locations shall be included in the contract bid price for Maintenance of Traffic.

Between pay item nos. 619-E2 and 619-F1 on page 619-9, insert the following:

907-619-E3: Changeable Message Sign (___*____) - per each

* Indicate when the sign is "With Remote" and/or "With Radar"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-13M **CODE: (IS)**

DATE: **04/27/2004**

SUBJECT: Temporary Pavement Markings

Section 619, Traffic Control for Construction Zones, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-619.03--Construction Requirements.

907-619.03.2--Temporary Stripe. Delete in toto Subsection 619.03.2 on page 619-4 and substitute the following:

Temporary stripes are pavement markings, temporary in nature, such as those used to direct traffic from it's customary path or those to be removed from the pavement course under use for further temporary traffic control or those to be covered by the next pavement course and/or those to be replaced by permanent stripes. Temporary stripes shall be paint or preformed tape as designated on the plans or when not designated, the use of paint or tape will be at the Contractor's option. Temporary stripes on surface treatments shall be paint.

All temporary stripe shall be placed in accordance with the plans and the requirements set out in Section 625, except that alignment of temporary stripe placed on underlying courses shall have a tolerance of 100 millimeters in 15 meters from true alignment for skip stripes and edge lines and 25 millimeters in 15 meters from true alignment for no-passing stripes and lane lines. When preformed tape is used on the final pavement course for temporary traffic markings, it shall be removed at no additional cost to the State.

Temporary paint stripe requiring removal shall be removed by carefully controlled blast cleaning, approved grinding or other approved methods in such a manner that the surface to which the stripe was applied will not be unnecessarily marred or damaged. Preformed tape is to be removed in accordance with the manufacturer's recommendations.

Temporary paint stripe which has been placed on the final pavement course may be left in place and covered with permanent stripe of the same color provided the temporary stripe has been satisfactorily placed in the proper location. Under this condition, any remaining temporary paint stripe not covered by the permanent stripe shall be removed at no additional cost to the State.

Painted traffic stripe which has been removed from the final asphalt pavement surface shall be sealed with an approved sealant. The Engineer may wave the sealant requirement when the area to be sealed is insignificant. This sealing operation shall be performed at no additional costs to the State.

All temporary pavement markings placed and measured for payment under this section shall include any required removal. Removal of all temporary stripe will not be measured for separate payment.

Existing pavement markings conflicting with temporary markings shall be removed. Removal of such materials (paint, tape, marker, etc.) will be measured and payment made under Section 202. When measuring removal of pavement markings for payment, the skips will not be included in the measurement.

907-619.03.3--Short-term Stripe. Delete in toto Subsection 619.03.3 on pages 619-4 and 619-5.

907-619.04--Method of Measurement. Delete the third paragraph on page 619-7 and substitute the following:

Temporary stripe, completed and removed in accordance with the requirements of this Section, will be measured as provided for painted traffic markings in 625.04, except as follows: Detail traffic stripe will be measured by the meter from end-to-end of individual stripes. Measurement will be made along the surface of each stripe and will exclude nominal skip intervals where specified. Stripes more than 100 millimeters in width will be converted to equivalent lengths of 100-mm widths. Legend, which is to include railroad markings, pedestrian crosswalks and stop lines, will be measured by the square meter or meter. Pay areas of individual letters and symbols will usually be shown on the plans and measured by the square meter. Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the meter, in which case, stripes more than 100 millimeters in width will be converted to equivalent lengths of 100-mm widths.

907-619.05--Basis of Payment. Add the "907" prefix to pay item numbers 619-A1, 619-A2, 619-A5 and 619-A6 in Subsection 619.05 on page numbers 619-7 and 619-8.

Delete pay item numbers 619-A3 and 619-A4 on page 619-8 and substitute the following:

619-A3: Temporary Traffic Stripe (Skip White) (____*____) - per meter or kilometer
Description

619-A4: Temporary Traffic Stripe (Skip Yellow) (____*____) - per meter or kilometer
Description

Delete in toto the pay item numbers, descriptions and units for pay item numbers 619-B1, 619-B2, 619-B3, 619-B4, 619-B5 and 619-B6 from Subsection 619.05 on pages 619-8 and 619-9.

After pay item number 619-C5 on page 619-9 add the following:

907-619-C6: Red-Clear Reflective High Performance Raised Marker

- per each

907-619-C7: Two-Way Yellow Reflective High Performance Raised Marker
- per each

907-619-C8: One-Way Clear Reflective High Performance Raised Marker
- per each

907-619-C9: One-Way Yellow Reflective High Performance Raised Marker
- per each

907-619-C10: Yellow Clear Reflective High Performance Raised Marker
- per each

Delete the last paragraph of Subsection 619.05 on page 619-10 and substitute the following:

* The description for temporary traffic stripe will be shown as "paint" or "tape". In the case of "tape" the type will also be designated. When the description is not designated, the use of "paint" or "tape" will be at the Contractor's option.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-622-3M **CODE: (SP)**

DATE: 03/19/2003

SUBJECT: Engineer's Field Office Building

Section 907-622, Engineer's Field Office Building, is added to and made a part of the 1996 Metric Edition of Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-622 -- ENGINEER'S FIELD OFFICE BUILDING

907-622.01--Description. When required in the contract, this work shall consist of furnishing and maintaining a field office building for the exclusive use by the Engineer. The field office shall consist of a building, house, mobile office or trailer, approved by the Engineer, and in reasonably close conformity with these specifications.

When so indicated in the contract by pay item designation: LO (Laboratory and Office Building) this work shall also consist of the furnishing and maintaining of a combination field laboratory and field office building in reasonably close conformity with the requirements of these specifications.

In all cases where not specifically provided otherwise, this work shall also consist of furnishing appliances and utilities as herein provided, and the removal of the facilities after the work has been completed; it being understood that the building or trailer remains the property of the Contractor furnishing such facility.

907-622.02--Materials. All materials and appurtenances required shall be of good commercial quality, approved by the Engineer; however, sampling and testing will not be required.

907-622.03--Construction Requirements.

907-622.03.1--Types of Field Office Buildings. Field office buildings shall be designated as Type 1, Type 2 or Type 3.Combination field laboratory and field office buildings shall be designated as Type 2 LO, or Type 3 LO.

907-622.03.1.1--Type 1, Type 2 and Type 3 Field Office Buildings. Type 1, Type 2 or Type 3 Field Office Buildings shall meet the following minimum requirements:

A. Dimensions. All measurements shown are clear inside dimensions as follows:

Building	Constructed on or for Project Linear Feet - Min.			Commercially Produced Linear Feet - Min.		
	Width	Length	Head-Room	Width	Length	Head-Room
Type 1	2.4 m	3.0 m	2.4 m	2.3 m	2.9 m	2.1 m
Type 2	3.0 m	9.1 m	2.4 m	2.9 m	9.0 m	2.1 m
Type 3	3.7 m	15.2 m	2.4 m	3.5 m	15.1 m	2.1 m

B. Doors and Windows.

1. Each building shall be provided with at least one standard height solid entrance door complete with lock and at least two keys. The opening shall also be provided with a self closing screen door. Type 3 Building shall have at least two such doors and screens.

2. Each wall, unless predominately occupied by a door shall be provided with at least one hinged, jalousied, or sliding window; glazed, screened and fitted with venetian blinds. Each window shall have an area of at least 0.6 square meter of opening, except toilet area which may be 0.3 square meter.

   Type 1 Building shall have at least three windows.

   Type 2 Building, at least six windows.

   Type 3 Building, at least 10 windows.

C. Walls and Roof. If constructed on or for the project, walls and roof of all types shall be constructed with 50-mm x 100-mm studs and rafters.

1. Both sides of walls shall be covered with 15-mm thick plywood, exterior grade on the outside. No open cracks or knotholes will be permitted. If commercially produced, standard wall construction will be accepted.

2. Roof: The roof shall be water tight and shall slope at least 25 millimeters1 in 300 millimeters in one direction away from the door if practicable. It shall have at least 300-mm eaves. If commercially produced, an arched roof without eaves will be accepted.

3. At least 31-mm thick rock wool, fiber glass or other non-flammable insulating material shall be placed in the walls and ceiling. This material shall be in all wall and ceiling cavities not occupied by a door or window.

D. Ceiling. The ceiling on all types shall be covered on the inside of the roof rafters with 10-mm minimum thickness plywood if constructed on the project. Standard ceiling will be accepted if commercially produced.

E. Floor. The floor may be timber, a minimum of 300 millimeters above the ground on 50-mm x 150-mm joists. Open cracks, open knotholes, etc. will not be permitted.

F. Heater. The heater may be oil fired, gas or electric. Oil and gas units shall be properly vented to the outside, provided with adequate outside fuel storage and shall be connected thereto with suitable feed lines. Gas units may be connected to a commercial gas main, if available. The heater shall be capable of furnishing sufficient heat to maintain an inside temperature of 22°, + 2°C.

G. Work Table, Desk, Chairs, Filing Cabinet, Plan Rack and Locker. Work tables shall be provided, with the tops measuring at least 0.9 m x 2.3 m; shall be stable and constructed with 20-mm plywood covered on top with smooth masonite. The height shall be approximately 1.0 meter above the floor. One such table shall be provided for a Type 1 Building, 2 or more for a Type 2 Building and 3 or more for a Type 3 Building. At the option of the Contractor, portable Engineers' drafting tables of comparable size may be provided in lieu of the tables indicated hereinabove.

For Type 3 Buildings the Contractor shall also furnish one 750-mm x 1500-mm minimum size office desk and swivel chair plus two straight chairs and shall also furnish a metal four-drawer vertical filing cabinet, one plan holder rack, one approved locker with separate lock and key for storing Engineer's instruments, two clothes lockers or closets, and one fire extinguisher.

H. Stools. Two stools of the proper height shall be furnished for each work site.

I. Miscellaneous Storage Shelves. Except for Type 3 building, two meters of storage shelves for books, etc., shall be furnished. If two 1-meter shelves are furnished, they shall be no less than 300 millimeters apart vertically. Type 3 Building shall have two meters of shelves in each end.

J. Toilet Facilities. Each unit, except Type 1, shall have satisfactory indoor enclosed toilet facilities meeting the sanitary code of the local governmental agency having jurisdiction in the area where the unit is to be used. For Type 1 Buildings, the Contractor shall provide at the site of the building outdoor toilet facilities meeting the applicable sanitary code.

K. Utilities. All utilities, including water, sewage, gas and electricity, shall be connected to their service source ready for use prior to the Engineer's occupancy.

Water service shall be potable quality or a separate drinking water supply shall be furnished. Lighting shall be adequate to provide not less than 70 lux of light on all working surfaces. Not less than one electrical convenience outlet shall be provided for each desk and table plus two additional outlets each in the office space and laboratory space. Heating and cooling shall be thermostatically controlled. The Contractor shall have one telephone installed in the name of the Engineer.

The telephone service shall be capable of providing service to the Project Office, District Office, Contractor's Field or Main Office, and the Central Offices in Jackson.

The Contractor shall provide an all weather access road to the field office and laboratory and parking for not less than six full-sized automobiles.

For the duration of the contract, the Contractor shall maintain the field office and laboratory, shall provide janitor service at least once each week, and shall supply all heating fuel, electricity, water, and telephone service.

L. Air Conditioner. Except for Type 1, an air conditioning unit shall be furnished and shall be capable of furnishing sufficient cooling to adequately maintain an inside temperature that is at least 12° cooler than the outside temperature.

907-622.03.1.2--Type 2 LO and Type 3 LO Field Office Buildings. Type 2 LO or Type 3 LO (combination field laboratory and field office) buildings shall meet the requirements specified hereinabove for Type 2 or Type 3, respectively, and in addition shall meet the following minimum requirements:

A. Dimensions. Type 2 LO buildings shall have dimensions not less than those specified for Type 2 above and, in addition, shall be partitioned into two rooms. One room for laboratory space shall consist of not less than 11.6 square meters of floor space, shall consist of not less than 13.9 square meters of floor space, including toilet, with the combined total floor space of not less than that specified for Type 2 above. Each Type 2 LO building shall have two entrance doors as described in Subsection 907-622.03.1.1, B, 1.

Type 3 LO Buildings shall have dimensions not less than those specified for Type 3 above, and, in addition, shall be partitioned into two rooms. One room for laboratory space shall consist of not less than 13.9 square meters of floor space and other room for office space shall consist of not less than 37.2 square meters of floor space, including toilet, with the combined total floor space of not less than that specified for Type 3 above.

Each LO building shall have a swinging or sliding door between the specified two rooms.

B. Construction and Facilities. Type 2 LO or Type 3 LO buildings shall be constructed, equipped and utilities provided as set out in Subsection 907-622.03.1.1, B through L, except that the portion indicated to be used as a field laboratory shall be modified to provide minimum laboratory facilities as specified in Subsection 621.03.

Heating and cooling facilities shall be such as to provide the temperatures specified in Subsection 907-622.03.1.1, F and L, in each room.

The Contractor may furnish larger buildings than the type specified, provided all inside arrangements meet minimum requirements and are approved by the Engineer.

When a Type 2 LO or Type 3 LO building is specified, the Contractor may furnish either a single building partitioned as indicated to provide the required space, or separate units - one in accordance with the construction details of Section 621 and the other in accordance with this Section 907-622 for Type 2 or Type 3, depending upon whether Type 2 LO or Type 3 LO is specified.

In case separate units are furnished, each shall be equipped, located and services provided as if each were specified.

907-622.03.2--Location. Engineer's field office building Type 1 shall be located within or near the project limits as directed by the Engineer. As the work progresses the offices shall be moved to other locations at the direction of the Engineer.

Types 2 and 3 office buildings and Types 2 and 3 LO buildings may be located within the project limits or near the project as directed by the Engineer. Whenever possible the building shall be located within 300 meters of a source of electric power provided by the Contractor and the Contractor shall provide such electric power to the building as indicated hereinabove. When the Engineer determines it is necessary to so locate the building that electric power must be transmitted for exclusive use by the Engineer for a distance in excess of 300 meters, the cost for that part of the distance in excess of 300 meters shall be considered Extra Work.

907-622.03.3--Ownership and Use. Whether owned, leased or rented by the Contractor, possession of each building will remain with the Contractor who provides the building. The building(s) and all appurtenances shall be furnished, located and made ready for use by the Engineer as a first item of work. The building(s) shall be reserved for the exclusive use of the Engineering Personnel for such time as considered necessary, but no longer than the date of final release from maintenance on the project. The use, location, relocation and removal shall be under the direction and control of the Engineer and no portion of the building shall be occupied, or otherwise used by the Contractor, unless permitted by the Engineer in writing and subject to any provisions or limitations set forth in such written permission. When no longer needed each building shall be removed from the project upon specific instructions of the Engineer and thereby only will he relinquish his control as stated above.

907-622.04--Method of Measurement. Each specified field office building conforming to the requirements of the contract and including all facilities and utilities as specified will be measured as a unit lump sum quantity.

When a Type 2 LO or Type 3 LO building is specified and the Contractor furnishes separate units as provided in Subsection 907-622.03.1.2, B, no additional measurement will be made because of the separate units but will be made as if the specified single unit had been furnished.

907-622.05--Basis of Payment. The use of field office buildings or combination field laboratory and office building furnished as specified and measured as provided in Subsection 907-622.04 will be paid for at the contract unit price bid per each, which price shall be full compensation for all materials, design, construction, furnishing, maintaining; for all fuel, water, sewage disposal, telephone service, electricity, including transformer if necessary, moving to and from the project and movements on the project, all as specified or directed by the Engineer as provided in the contract, and for all costs incidental thereto; except when the Engineer determines that the necessary location of the building is such that electrical current must be carried for the exclusive use of the Engineer for a distance in excess of 300 meters from its source, the cost of furnishing service lines in excess of 300 meters will be paid for as Extra Work.

Payment for each Engineer's field office building or LO building provided in accordance with the contract will be made in two installments. Sixty-five (65) percent of the contract price bid will be paid on the first monthly estimate after occupancy by the Engineer and the remaining thirty-five (35) percent will be paid when the use of the building has been concluded by the Engineer as provided herein.

Payment will be made under:

907-622-A: Engineer's Field Office Building (Type _____) - per each

907-622-B: Engineer's Field Office Building (Type _____ LO) - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-625-2M **CODE: (IS)**

DATE: **04/27/2004**

SUBJECT: **Painted Traffic Markings**

Section 625, Painted Traffic Markings, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-625.03.3--Application. Delete the second paragraph of Subsection 625.03.3 on page 625-2 and substitute the following:

For temporary traffic stripe, paint and Class A (Standard) glass beads shall be uniformly applied at the rate of not less than one liter of paint and 720 grams of beads per 21.2 meters of 100-mm stripe. For permanent traffic stripe, paint and Class B (High-Visibility) glass beads shall be uniformly applied at the rate of not less than one liter of paint and 1440 grams of beads per 14.1 meters of 150-mm stripe.

907-625.04--Method of Measurement. Delete the last sentence of the second paragraph of Subsection 625.04 on page 625-3 and substitute the following:

Stripes more than 150 millimeters in width will be converted to equivalent lengths of 150-mm stripe.

907-625.05--Basis of Payment. Add the "907" prefix to pay item numbers 625-C, 625-D, 625-E, 625-F, 625-G, 625-H & 625-I listed in Subsection 625.05 on page 625-3 and 625-4.

Delete pay item numbers 625-A and 625-B on page 625-3 and substitute the following:

619-A3: Temporary Traffic Stripe (Skip White) (____*____) - per meter or kilometer
Description

619-A4: Temporary Traffic Stripe (Skip Yellow) (____*____) - per meter or kilometer
Description

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-12M **CODE: (IS)**

DATE: **04/27/2004**

SUBJECT: Thermoplastic Markings

Section 626, Thermoplastic Traffic Markings, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-626.03--Construction Requirements.

907-626.03.2--Construction Details. Delete the first paragraph on page 626-2 under Subsection 626.03.2 and substitute the following:

Unless otherwise directed by the Engineer, traffic stripes that are coincidental with the thermoplastic stripe shall be removed prior to placement of the thermoplastic material, except that temporary paint stripe may be left in place when satisfactorily placed in the proper location. Any temporary stripe not covered shall be removed. Payment for removal of stripe, except temporary stripe, will be made under Section 202.

907-626.04--Method of Measurement. Delete the last sentence of the second paragraph of Subsection 626.04 on page 626-3 and substitute the following:

Stripes more than 150 millimeters in width will be converted to equivalent lengths of 150-mm stripe.

Delete the last sentence of Subsection 626.04 on Page 626-3 and substitute the following:

Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the meter, in which case, stripes more than 150 millimeters in width will be converted to equivalent lengths of 150-mm widths.

907-626.05--Basis of Payment. After the last pay item listed on page 626-3, add the following:

907-626-AA: 150-mm Thermoplastic Traffic Stripe (Skip White)
(_____) - per meter or kilometer
Thickness

907-626-BB: 150-mm Thermoplastic Traffic Stripe (Continuous White)
(_____) - per meter or kilometer
Thickness

907-626-CC: 150-mm Thermoplastic Edge Stripe (Continuous White)
(_____) - per meter or kilometer
Thickness

907-626-DD: 150-mm Thermoplastic Traffic Stripe (Skip Yellow)
(_____) - per meter or kilometer
Thickness

907-626-EE: 150-mm Thermoplastic Traffic Stripe (Continuous Yellow)
(_____) - per meter or kilometer
Thickness

907-626-FF: 150-mm Thermoplastic Edge Stripe (Continuous Yellow)
(_____) - per meter or kilometer
Thickness

907-626-GG: Thermoplastic Detail Stripe
(150-mm Equivalent Length) (_____) (_____) - per meter
Color Thickness

907-626-HH: Thermoplastic Legend (White)
(_____) - per meter or square meter
Thickness

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-627-1M **CODE: (IS)**

DATE: 4/25/2000

SUBJECT: Raised Pavement Markers

Section 627, Raised Pavement Markers, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-627.02--Materials. Delete the second paragraph of Subsection 627.02 on page 627-1 and substitute:

Type B through G High Performance reflective markers shall be listed on the Department's "Approved Sources of Materials" for high performance raised pavement markers.

907-627.05--Basis of Payment. Add the “907” prefix to pay items 627-J, 627-K, 627-L, 627-M, 627-N, and 627-O at the end of Subsection 627.05 on page 627-3.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-628-9M **CODE: (IS)**

DATE: **04/27/2004**

SUBJECT: Cold Plastic Pavement Markings

Section 628, Cold Plastic Pavement Markings, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

Delete in toto Subsection 628.01 on page 628-1 and substitute the following:

907-628.01--Description. This work consists of furnishing materials and installing cold plastic pavement markings of the type specified in reasonably close conformity with the plans and these specifications.

907-628.02--Materials. After the first sentence of Subsection 628.02 on page 628-1, add the following:

High performance cold plastic marking material shall meet the requirements of 907-720.07.

907-628.03--Construction Requirements.

907-628.03.1--Equipment. After the first sentence of Subsection 628.03.1 on page 628-1, insert the following:

When high performance cold plastic pavement markings for lane lines are used, the manufacturer shall provide application equipment, manual or automatic as necessary for the job requirements. These applicators shall be capable of applying markings to the required alignment and dimensions shown on the plans or in the contract documents.

907-628.05--Basis of Payment. After the last pay item listed in Subsection 628.05 on page 628-2, substitute the following:

907-628-AA: 150-mm Cold Plastic Traffic Stripe (Skip White) - per meter or kilometer

907-628-BB: 150-mm Cold Plastic Traffic Stripe (Continuous White) - per meter or kilometer

907-628-CC: 150-mm Cold Plastic Edge Stripe (Continuous White) - per meter or kilometer

907-628-DD: 150-mm Cold Plastic Traffic Stripe (Skip Yellow) - per meter or kilometer

907-628-EE: 150-mm Cold Plastic Traffic Stripe (Continuous Yellow) - per meter or kilometer

907-628-FF:	150-mm Cold Plastic Edge Stripe (Continuous Yellow)	- per meter or kilometer
907-628-GG:	Cold Plastic Detail Stripe (150-mm Equivalent Length) (Color)	- per meter
907-628-HH:	Cold Plastic Legend (White)	- per meter or square meter
907-628-II:	150-mm High Performance Cold Plastic Traffic Stripe (Skip White)	- per meter or kilometer
907-628-JJ:	150-mm High Performance Cold Plastic Traffic Stripe (Continuous White)	- per kilometer or meter
907-628-KK:	150-mm High Performance Cold Plastic Edge Stripe (Continuous White)	- per meter or kilometer
907-628-LL:	150-mm High Performance Cold Plastic Traffic Stripe (Skip Yellow)	- per meter or kilometer
907-628-MM:	150-mm High Performance Cold Plastic Traffic Stripe (Continuous Yellow)	- per meter or kilometer
907-628-NN:	150-mm High Performance Cold Plastic Edge Stripe (Continuous Yellow)	- per meter or kilometer
907-628-OO:	High Performance Cold Plastic Detail Stripe (150-mm Equivalent Length) (Color)	- per meter
907-628-PP:	High Performance Cold Plastic Legend (White)	- per meter or square meter

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-636-1M **CODE: (SP)**

DATE: 3/19/2001

SUBJECT: Shielded Cable

Section 908-636, Shielded Cable, of the 1996 Metric Edition of the Supplemental Specifications to the 1990 Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-636.02--Materials.

907-636.02.1--Shielded Cable. Delete the first sentence of Subsection 908-636.02.1 on page 636-1 and substitute the following:

Shielded cable shall conform to IMSA Specification No. 50-2, 1984, for polyethylene insulated, polyethelene jacketed loop detector lead-in cable of the size specified.

907-636.05--Basis of Payment. Delete the last line of Subsection 908-636.05 on page 636-2 and substitute the following:

907-636-A: Shielded Cable, (AWG), (No. of Conductors) - per linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-639-1M **CODE: (SP)**

DATE: 01/04/2005

SUBJECT: Traffic Signal Equipment Poles

Section 908-639, Traffic Signal Equipment Poles, of the Supplemental Specifications to the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-639.02 --Materials.

907-639.02.1-Poles. At the end of Subsection 908-639.02.1 on page 639-1, add the following.

Timber (wood) poles shall be Southern Yellow Pine meeting the requirements of the latest edition of ANSI-05.1, "American National Standard for Wood Poles - Specifications and Dimensions", for Southern Pine poles having a fiber stress of 55 MPa. The poles shall be free of all defects such as holes, splits, sap rot, etc. Maximum deviation from straight poles shall be seven (7) millimeters for each meter of length from surface of ground to top of pole when a string is stretched along its bow.

All poles shall be inspected and treated in accordance with applicable requirements of the American Wood-Preservers' Association (AWPA) and shall conform to Subsection 718.03 of the Standard Specifications.

907-639.05--Basis of Payment. After the last pay item listed on page 639-2, add the following.

907-639-A: Traffic Signal Equipment Pole (Type _____) - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-640-1M **CODE: (SP)**

DATE: 5/18/2001

SUBJECT: Traffic Signal and Pedestrian Heads

PROJECT:

Section 908-640, Traffic Signal Heads, of the Supplemental Specifications to the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-640.02--Materials. At the end of Subsection 908-640.02.8 on page 640-6, add the following:

907-640.02.9--LED Traffic Signal Heads. LED signal module shall be a sealed unit comprised of an outer lens, an optical lens, a printed circuit board for LEDs, and entirely enclosed power supply, a back cover and a gasket.

The assembly and manufacturing process for the LED signal modules shall be designed to assure all internal Led and electronic components are adequately supported to withstand mechanical shock and vibration from high winds and other sources as per MIL-STD-883.

The LED signal module shall be rated for use in the ambient operating temperature range of -40°C to + 74°C.

The LED signal module lens shall be UV stabilized.

The light distribution of each LED shall be maximized by an internal beam controlling optical faceted lens designed and patented to meet the 44 points measurement of the VTCSH standard (Part-2). The outer cover made of ultraviolet stabilized polycarbonate shall be convex with a smooth outer surface and be and integral part of the module.

The chip in the ultra-bright 5-mm LEDs shall be made using AlInBaP for red and InGaN technology for the green, and be rated for 100,000 hours of continuous operation by the LED manufacturer.

Enclosures containing either the power supply or electronic components of the signal module shall be made of UL94VO flame retardant materials.

The measured chromaticity coordinates of LED signal modules shall conform to the chromaticity requirements of Section 8.04 and Figure 1 of the VTCSH standard. The LED manufacturers indicate the following X-Y coordinates for their respective LEDs. The X value for red LEDs varies from 0.690 to 0.708 and the Y value varies from 0.292 to 0.306. The value X for amber LEDs varies from 0.554 to 0.575 and the Y value varies from 0.424 to 0.445. The X value for the green LEDs varies from 0.1090 to 0.1138 and the Y value varies

from 0.5673 to 0.5830.

All wiring and terminal blocks shall meet the requirements of Section 13.02 of the VTCSH standard. Two secured, color coded, three feet long 600 V, 20 AWG minimum, jacketed wires, conforming to the National Electrical Code, rated for service at +105°C, are to be provided for electrical connection.

The module shall operate on a 60 Hz AC line voltage ranging from 80 volts rms to 135 volts rms with less than 10% light intensity variation. Nominal rated voltage for all measurements shall be 120 ±3 volts rms. The circuitry shall prevent flickering over this voltage range.

The individual LEDs be wired so that a catastrophic failure of one LED will result in the loss of only that one LED, and not the entire string of LEDs or the entire module.

The power supply must permit the regulation of the current supplied to the LEDs to maintain a constant current.

The LED signal and associated on-board circuitry must meet Federal Communications Commission (FCC) Title 47, Sub-Part B, Section 15 regulations concerning the emission of electronic noise.

The LED signal module shall provide a power factor of 0.90 or greater at 25°C and at the nominal operating voltage.

Total harmonic distortion (THD), (current and voltage), induced into an ac power line by a signal module shall not exceed 20 percent, over the operating voltage range specified in Section 14 and within the ambient temperature range specified in Section 4.

The signal module on-board circuitry shall include voltage surge protection to withstand high-repetition noise transients and low-repetition high-energy transients as stated in Section 2.1.6, NEMA Standard TS-2, 1992.

The LED signal module shall operate from a 60 ±3 HZ ac line power over a voltage range from 80 Vac rms to 135 Vac rms. The current draw shall be sufficient to ensure compatibility and proper triggering and operation of load current switches and conflict monitors in signal controller units the procuring traffic authority customer has in use. Load switches shall be compatible with NEMA (TS-1 or later) or Model 170 (1989 or later).

All LED signal modules shall be energized for a minimum of 24 hours, at 100 percent on-time duty cycle, in an ambient temperature of 60°C.

Each socket shall be provided with one black lead from the socket and one white lead from the shell. Terminal blocks shall be a six position, twelve block, terminal barrier strip placed in the top (red) section of all traffic signal heads. Terminal blocks shall be secured on both ends.

907-640.05--Basis of Payment. After the last pay item listed on page 640-7, add the following.

907-640-B: LED Traffic Signal Heads (Type _____) - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-648-1M **CODE: (SP)**

DATE: 5/8/96

SUBJECT: Radio Interconnect

Section 907-648, Radio interconnect, is added to and made a part of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-648 - RADIO INTERCONNECT

907-648.01--Description. This work consists of adding radio interconnect capabilities to local and master controller locations in lieu of hard wire interconnect.

907-648.02--Materials. Each local intersection shall have a local transceiver, power supply and an antenna. A special transceiver antenna shall be provided at the master location.

907-648.02.1--RF Data Link for Local Controller Communication. Communications between the master and the local intersections shall be performed via RF Data Link. The radio signal communication shall be done in the 900-MHz data frequency bands.

907-648.03--Construction. The Contractor will be responsible for verifying the integrity of the communication links between the local intersections and the master.

907-648.04--Method of Measurement. Radio Interconnect, complete in place and accepted, will be measured as unit quantities per each. Measurement shall include controller modifications, transceiver, power supply, antenna and all other items necessary to complete the installation to provide appropriate RF Data Link.

907-648.05--Basis of Payment. Radio Interconnect, measured as prescribed in 907-648.04, will be paid for at the contract unit price per each for each type(s) specified in the contract; which price shall be full compensation for furnishing all materials; for installing, connecting and testing; and for all equipment, labor, tools and incidentals necessary to complete the work.

Payment will be made under:

907-648-A: Radio Interconnect (Installed in New Controller Cabinet) - per each

907-648-B: Radio Interconnect (Installed in Existing Controller Cabinet) - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-668-1M **CODE (SP)**

DATE: 05/18/2001

SUBJECT: Traffic Signal Conduit (Underground), Roll Pipe

PROJECT: STP-SDP-9371-00(002) / 101214 - Harrison County

Section 908-668, Traffic Signal Conduit, of the Supplemental Specifications to the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable for Roll Pipe Conduit Only:

907-668.01--Description. This work consists of furnishing conduit of specified materials and dimensions and installing them in accordance with these specifications and the details shown on the plans, or directed. It shall include the furnishing and installing related hardware to be used in the construction of traffic signals.

907-668.02--Materials.

907-668.02.1--General. The Roll Pipe Conduit (duct) shall be manufactured from virgin high density polyethylene. The addition of clean rework material is permissible if generated in the manufacturer's own plant. The ducts shall be supplied with either smooth, ribbed or corrugated walls and available in a multitude of colors. The duct shall be capable of being coiled (reeled) in continuous lengths, transported, stored outdoors and subsequently uncoiled for installation without affecting its properties or performance.

907-668.02.2--Environmental Performance. The duct shall perform in underground and above-ground installations in an ambient temperature range of minus 0°C to 55°C without degradation of material properties. The duct specified for aerial installation shall be ultraviolet light-resistant. The duct shall be capable of being bent to a minimum (supported) radius of 10 diameters.

907-668.02.3--Workmanship. The duct shall be free of visible cracks, holes or other physical defects that would degrade its performance. It shall be as uniform as practicable in respect to overall dimensions, color, density, thickness, etc.

907-668.02.4--Color. The duct for exposed areas (black) shall have a minimum of carbon black. All other colors shall have a UV light stabilizer which will protect the duct for a minimum of 12 months in direct sunlight.

907-668.02.5--Markings. The duct shall have a durable identification showing the name or trademark of the manufacturer, duct size (i.e., 50-mm IPS SCH-80), date and reference code. Duct for electrical cable should have "CAUTION – HIGH VOLTAGE" printed at regular intervals.

907-668.02.6--Capping. The open ends of each length of reeled duct shall be sealed by plastic caps to prevent the entrance of dirt and/or moisture.

907-668.02.7--Dimensions. The dimensions of the duct shall be as per ASTM Designation: D 3035. Wall thickness to be identified by either SDR, SIDR or SCH ratings. The manufacturer should advise the wall thickness required for a particular installation and/or conditions.

907-668.02.8--Pull Rope and Lubricant. The duct should be equipped with a factory installed rope or tape and prelubed to aid in the installation of cable. The rope can be provided with varying strengths as needed for a particular installation.

907-668.02.9--Couplings. Couplings should be available to quickly connect the duct and should be air and water-tight (i.e., Duct-Lok type couplings in either plastic or aluminum, depending on type of installation).

907-668.02.10--Packaging. The duct should be provided on lightweight metal reels in maximum lengths possible with no joints or splices. This will keep coupling requirements to a minimum. Special reel sizes and/or dimensions should be available for special installations.

907-668.02.11--Corrosion. The duct shall be resistant to most harsh chemicals and/or protected against degradation due to oxidation or general corrosion.

907-668.02.12--Installation. The duct shall be capable of being direct buried by plowing or trenching with no special consideration to using selective backfill. The duct shall also be capable of being encased in concrete pulled through a drilled hole.

907-668.02.13--Tests on Resins and Finished Duct. Lab tests on resins and finished products shall include, but are not limited to, the following:

ASTM-D3035	Polyethylene Plastic Pipe Based on Controlled Outside Diameter
ASTM-D1238	Flow Rates of Thermoplastics by Extrusion Plastometer
ASTM-D1505	Density of Plastics by the Density Gradient Technique
ASTM-D1693	Environmental Stress Crack Resistance (ESCR) of Polyethylene Pipe
ASTM-D1599	Short-Time Hydraulic Failure Pressure of Plastic Pipe
ASTM-D638	Tensile Properties of Plastics
ASTM-D2444	Impact Resistance of Plastic Pipe by Means of Tup.
ASTM-D2412	External Loading of Plastic Pipe

907-668.03--Construction Requirements. The duct shall be installed in accordance with the plans and the requirements of Subsection 908-668.03.

907-668.04--Method of Measurement. Signal conduit of the type specified will be measured by the meter computed horizontally along the signal conduit, complete in place; the measurement being made from the point of beginning to the point of termination of all

sections of conduit, in trench, under roadways, or supported on structures. No extra length will be allowed for risers to controller cabinets, pole handholes, or pull boxes.

907-668.05--Basis of Payment. This item will be paid for at the contract unit price per meter for the various types and sizes of conduit, completed and accepted; which price shall be full compensation for furnishing, laying, placing, boring, connecting, cleaning and testing all conduit, and incidental materials; for all excavating, backfilling necessary for installations; final cleaning up; and for all labor, equipment, tools and incidentals necessary to complete the work.

Payment will be made under:

907-668-E: Traffic Signal Conduit (Type) (Roll Pipe) (Size) - per meter

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-699-2M **CODE: (IS)**

DATE: 7/03/2003

SUBJECT: Construction Layout and Staking

Section 699, Construction Stakes, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Section 699 on page nos. 699-1 thru 699-3 and substitute the following:

SECTION 907-699--CONSTRUCTION STAKES

907-699.01--Description. This work consists of performing all calculations and other work necessary to establish and/or verify all horizontal and vertical control data; and furnishing, placing and maintaining roadway construction stakes or bridge construction stakes, or both, necessary for the proper prosecution of all features and items of the work under contract. This shall include, but not be limited to, grades and drainage structure locations, lengths, elevations and skews. When the contract includes a pay item for roadway construction stakes as provided herein, any references in other sections of the Standard Specifications to establishment of control points or construction staking "by the Department" shall be construed to mean "by the Contractor".

907-699.02--Materials. The Contractor shall furnish all personnel, materials, equipment and devices necessary for determining, establishing, setting, checking and maintaining points, lines, grades and layout of the work. All surveying equipment shall be properly adjusted and suited for performing the work required. Traffic control necessary for the proper execution of the work shall be furnished by the Contractor without separate measurement for payment. Stakes shall be of sufficient length, thickness and quality to serve the purpose for which they are being used.

907-699.03--Construction Requirements. The Department will establish, one time only, reference points and bench marks at distances not to exceed 300 meters for roadway work. For bridge work, the Engineer's field control will consist of a stationed baseline reference point near each end of the bridge(s) and one accessible bench mark near each bridge site. For the purpose of determining responsibility for construction stakes, lines and grades, a box bridge will not be considered as a bridge. The Contractor shall verify the accuracy of the control points before proceeding with the layout for construction.

When errors are discovered and control points do not agree with the plans, the Contractor shall promptly notify the Engineer in writing, and explain the problem in detail. The Engineer will advise the Contractor within five (5) working days of any corrective actions which may be deemed necessary.

The Contractor will be responsible for verifying and modifying, as necessary to best fit existing field conditions, lengths, locations, elevations and skew angles of all drainage structures shown on the construction plans. All junction box and inlet locations and heights shall also be verified and modified as necessary to fit existing field conditions. Modifications to the plans shall not be made without the consent of the Project Engineer. The Contractor will not be responsible for determining the size of drainage structures, but should immediately report any suspected error to the Engineer. Heights of fill over drainage structures shall be checked to verify class of pipe, bedding and the appropriate standard and/or modified standard drawing(s) required in the construction with any differences from the plans being reported to the Engineer.

The Contractor shall perform work necessary to verify alignment and plan grades on all roadway intersections and tie-ins. Any discrepancies in grades, alignment, location and or dimension detected by the Contractor shall immediately be brought to the attention of the Project Engineer.

The Contractor shall employ sufficient qualified personnel experienced in highway surveying and layout to complete the work accurately. The Contractor shall also determine and provide all additional grade controls and staking operations necessary to secure a correct layout and construction of the work. All minor variations in layout and grades required to meet field conditions shall be resolved with the Engineer and shall not be considered justification for adjusting contract price or time.

Examples of minor variations in layout and grades are:

(a) Adjustment of drainage or other structure length, alignment, and flow line elevation.

(b) The adjustment of grades and alignment at roadway intersections, cross-overs, railroad crossings, interchanges, existing bridges and roadways.

(c) Adjustment of curve data.

The Contractor will be responsible for calculating and laying out all additional lines, grades, elevations and dimensions necessary to construct the work required in the plans. All grades and other layout data computed by the Contractor shall be recorded and a copy of this data shall be furnished, with sufficient time for checking, to the Engineer before field work is started. The originals of all data shall be furnished to the Engineer on or before final inspection for the Department's permanent file. The Contractor shall also furnish personnel to assist the Engineer in taking stringline or other notes to determine whether specified tolerances are met. Any inspection or checking of the Contractor's layout by the Engineer and the approval of all or any part of it will not relieve the Contractor of the responsibility to secure proper dimensions, grades, and elevations of the several parts of the work.

Prior to beginning construction on any structure which is referenced to an existing structure or topographical feature, the Contractor shall check the pertinent location and grades of the existing structures or topographical features to determine whether the location and grade shown on the plans are correct.

The Contractor shall stake centerline control at each station, BOP, EOP, PC, PT, SC, CS, TS, ST, and equations just before field cross sectioning by the Department for both original and final cross sections.

The Contractor shall furnish "as built" finish centerline elevations to the Project Engineer prior to final inspection of the project.

The Contractor shall set stakes and/or flags on the right-of-way line at each station and right-of-way break or as directed by the Engineer before clearing operations are started on any section of roadway.

On grading projects, the Contractor shall set slope stakes at each station and at the beginning and end of spirals and curves. Closer intervals will be required for sharp changes in grades or alignment, widening and certain other geometric details.

The Contractor shall set subgrade blue tops on centerline, break points and at the left and right subgrade shoulder lines at intervals of not more than 30 meters on tangents and intervals of not

more than 15 meters in curves. Closer intervals will be required for sharp changes in grades or alignment, widening, or super elevation.

On paving contracts, the Contractor shall set subgrade, base and paving blue tops. The base and pavement blue tops shall be set on intervals in accordance with the appropriate applicable requirements of Sections 321, 403 and 501.

The Contractor shall exercise care in the preservation of stakes and bench marks and shall reset them when they are damaged, lost, displaced or removed. The Contractor shall use competent personnel and suitable equipment for the layout work required and shall provide that it be performed under the supervision of, or directed by, a Registered Professional Engineer or Registered Land Surveyor who is duly registered and entitled to practice as a Professional Engineer or Professional Land Surveyor in the State of Mississippi. The duties performed by said Registrant shall conform to the definitions under the "practice of engineering" and practice of "land surveying" in Mississippi Law. The Contractor shall not engage the services of any person in the employ of the Department for the performance of any of the work covered by this Section or any person who has been employed by the Department within the past six months except those who have legitimately retired from service with the Department during this period.

All cross sections, measurements, and tickets required for determining pay quantities will be the responsibility of the Department.

The Department reserves the right to check for accuracy any or all of the Contractor's layout work and shall be assisted by the Contractor's personnel in such checking. When errors or discrepancies are found, the Contractor will take measures necessary to correct, at no expense to the State, any construction that has been performed using the improper layout. Any inspection, checking and approval thereof by the Engineer of work for which the Contractor is responsible will not relieve the Contractor of responsibility to secure correct dimensions, grades, elevations, alignments and locations of the work for satisfactory completion of the project and as a condition for final acceptance by the Department.

907-699.04--Method of Measurement. Construction stakes will be measured as a lump sum quantity. When Pay Item No. 907-699-A, Roadway Construction Stakes, is provided in the contract, measurement shall include the staking of all bridges, including detour bridges, which are a part of the contract.

907-699.04.1--Roadway Construction Stakes. Measurement for payment will be in accordance with the following schedule:

(a) When one percent of the original contract amount is earned from all direct pay items, 10 percent of the amount bid for Roadway Construction Stakes will be paid.

(b) When five percent of the original contract amount is earned from all direct pay items, 25 percent of the amount bid for Roadway Construction Stakes will be paid.

(c) When 20 percent of the original contract amount is earned from all direct pay items, 50 percent of the amount bid for Roadway Construction Stakes will be paid.

(d) After the Contractor has earned 50 percent of the original value of all direct pay items, the amount paid will be based on the contract percent complete.

907-699.04.2--Bridge Construction Stakes. Measurement for payment will be in accordance with the following schedule:

(a) When one percent of the original contract value of all bridge items is earned, 10 percent of the amount bid for Bridge Construction Stakes will be paid.

(b) When five percent of the original contract value of all bridge items is earned, 25 percent of the amount bid for Bridge Construction Stakes will be paid.

(c) When 20 percent of the original contract value of all bridge items is earned, 50 percent of the amount bid for Bridge Construction Stakes will be paid.

(d) After the Contractor has earned 50 percent of original contract value of all bridge items, the amount paid will be based on the percentage of work completed on all bridge items.

907-699.05--Basis of Payment. Construction stakes, measured as prescribed in Subsection 907-699.04, will be paid for at the contract lump sum price, which shall be full compensation for completing the work.

Payment will be made under:

907-699-A:	Roadway Construction Stakes	- lump sum
907-699-B:	Bridge Construction Stakes	- lump sum

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-700-2M **CODE: (IS)**

DATE: 4/1/99

SUBJECT: Use of Crushed Reclaimed Concrete Pavement as an Aggregate Component of All Hot Mix Asphalt Pavements

Division 700, Materials and Tests, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-700.01--General.

Remove the period at the end of the second paragraph of Subsection 700.01 on page 700-1 and add the following:

> , except that crushed reclaimed concrete pavement meeting the requirements of Section 703, as amended, may be used to produce aggregate for all hot mix asphalt pavements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-702-7M **CODE: (IS)**

DATE: **2/17/98**

SUBJECT: **Petroleum Asphalt Cement and Polymer Modified Petroleum Asphalt Cement**

Section 702, Bituminous Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 702.05, Petroleum Asphalt Cement, on page 702-2 and substitute the following:

907-702.05--Petroleum Asphalt Cement. Asphalt cement shall be homogeneous, free of water and shall not foam when heated to a temperature of 175°C.

Except for use in hot mix asphalt, asphalt cement of the grade specified shall conform to the requirements of 702.12, Table I or II.

Bituminous material conforming to AASHTO Designation: MP 1, Grade PG 58-28 may be used in lieu of petroleum asphalt cement, Grade AC-10.

The bituminous material used in all types of hot mix asphalt shall conform to AASHTO Designation: MP 1, Grade PG 67-22 as modified in the table below, except when otherwise specified or when polymer modified hot mix asphalt are specified.

SPECIFICATIONS FOR PERFORMANCE GRADED ASPHALT BINDERS NOT ADDRESSED BY AASHTO MP 1		
	Grade	
Property	PG 67-22	
	Specifications	Test Method
Original Binder		
Flash Point Temperature	minimum 230°C	AASHTO T 48
Rotational Viscosity	maximum 3 Pa•s @ 135°C	AASHTO TP 48
Dynamic Shear, G*/sin d	minimum 1.00 kPa @ 67°C	AASHTO TP 5
Rolling Thin Film Oven Residue (AASHTO T 240)		
Mass Loss (RTFO)	maximum 1.00 %	AASHTO T 240
Dynamic Shear, G*/sin d	minimum 2.20 kPa @ 67°C	AASHTO TP 5
Pressure Aging Vessel Residue (AASHTO PP1)		
Dynamic Shear, G*/sin d	maximum 5000 kPa @ 25°C	AASHTO TP 5
Creep Stiffness, S	maximum 300 MPa @ -12°C	AASHTO TP 1
m-value	minimum 0.300 @ -12°C	AASHTO TP 1

The bituminous material used in polymer modified hot mix asphalt shall conform to AASHTO Designation: MP 1, Grade PG 76-22.

Asphalt cement Grade PG 76-22 shall be the product resulting from the addition of a polymer modifier to a PG 67-22 or lower grade asphalt cement and not by some other refining technique. The polymer shall meet the requirements of Subsection 907-702.08.3.

907-702.08--Asphalt Additives.

At the end of Subsection 702.08.2 on page 702-4, add the following:

907-702.08.3--Polymers. The polymer shall be a Styrene Butadiene Styrene (SBS), a Styrene Butadiene Rubber (SBR) or an equal approved by the Engineer. The polymer shall be thoroughly blended with the asphalt cement at the refinery or terminal prior to shipment to the hot-mix plant. Producers of polymer modified asphalt cement must be listed on MDOT's Approved List of Suppliers of Polymer Modified Asphalt Cement. The producer of the polymer modified asphalt cement shall perform or have performed by an approved laboratory all tests contained in AASHTO Designation: MP 1 on a lot basis. A lot shall consist of one (1) refinery or terminal storage tank not to exceed 852 000 liters. The Producer shall furnish two copies of a certified test report (one copy for the Contractor and one copy for the Department Representative) with each shipment. A third copy of the certified test report shall be mailed to the State Materials Engineer. The certified test report shall contain the following:

(1) Test results showing complete conformance to AASHTO Designation: MP 1
(2) Type and percentage of polymer added
(3) A statement certifying that the transport vehicle was inspected prior to loading and was found to be empty
(4) A statement certifying that the shipment conforms to Mississippi Department of Transportation specifications for the grade of polymer modified asphalt cement specified
(5) A copy of the temperature-viscosity curve attached to the certified test report.

Crumb rubber used as a polymer modifier shall meet the following additional requirements:

Crumb rubber shall be produced by ambient grinding methods. The rubber shall be sufficiently dry so as to be free flowing and to prevent foaming when mixed with asphalt cement. The rubber shall be free of contaminants including fabric, metal, minerals and other non-rubber substances. Up to four percent (by mass of rubber) of talc (such as magnesium silicate or calcium carbonate) may be added to prevent sticking and caking of the particles.

The crumb rubber shall be tested in accordance with AASHTO Designation: T 27 with the following exceptions: a 100-gram sample size and up to 25% dusting agent (talc). Rubber balls may also be used to aid in the sieving of finely ground rubber. The resulting rubber gradation shall meet the gradation limits shown herein.

Gradations of Crumb Rubber

Type A

Sieve Size	% Passing
2.00 mm	--
850 µm	--
600 µm	--
425 µm	100
250 µm	98-100
180 µm	90-100
150 µm	70-90
75 µm	35-60

The specific gravity of the rubber shall be 1.15 ±0.05 when tested in accordance with ASTM Designation: D 297, pycnometer method.

The moisture content shall be determined in accordance with AASHTO Designation: T 255, with the exception that the oven temperature shall be 60 ±3°C and the mass of the sample shall be 50 grams. The moisture content shall not exceed 0.75% by mass.

No more than 0.01% metal particles shall be detected when thoroughly passing a magnet through a 50-gram sample.

The chemical composition of the crumb rubber shall be determined in accordance with ASTM Designation: D 297 and shall meet the following requirements:

Acetone Extract	- Maximum 25 percent
Rubber Hydrocarbon Content	- 40 to 55 percent
Ash Content	- Maximum 10 percent
Carbon Black Content	- 20 to 40 percent
Natural Rubber	- 16 to 34 percent

Crumb rubber meeting these specifications shall be supplied in moisture resistant packaging such as either disposal bags or other appropriate bulk containers. Each container or bag of crumb rubber shall be labeled with the manufacturer's designation for the rubber and the specific type, maximum nominal size, mass and manufacturer's batch or lot designation.

The producer of the polymer modified asphalt cement shall furnish the State Materials Engineer one copy of the manufacturer's certified test results covering each shipment of crumb rubber. These reports shall indicate the results of tests required by this specification. The reports shall also include a certification that the material conforms with the specifications, and shall be identified by manufacturer's batch or lot number.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-702-8M **CODE: (IS)**

DATE: 05/06/2002

SUBJECT: Specifications for Bituminous Materials

Section 702, Bituminous Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

970-702.07--Emulsified Asphalt. Delete Subsection 702.07.1 on page 702-3 and substitute the following:

907-702.07.1--Emulsified Primes. Emulsified Primes shall conform to the requirements of 907-702.12, Table III.

At the end of Subsection 702.07.2 on page 702-3, add the following:

907-702.07.3--Polymer Modified Cationic Emulsified Asphalt (CRS-2P). Polymer Modified Cationic Emulsified Asphalt shall conform to the requirements of AASHTO Designation: M 316 with the following exceptions:

At the end of Table 1, delete footnote [a] and substitute the following:

[a] If the solubility of the residue is less than 97.5%, the base asphalt cement for the emulsion shall be tested. The solubility of the base asphalt cement shall be greater than 99%.

907-702.12--Tables. Revise Table I, Specifications for Asphalt Cement (Petroleum), on page 702-5 by removing the ductility test for AC-13 from the list of tests to be performed on residue from the thin-film oven test and by changing the minimum ductility requirement for AC-13 from 75 cm to 25 cm.

The specification for ductility of AC-13 shall be inserted at the bottom of Table I as follows:

	Min.	Max.
Ductility, (25°C), 5 cm per min., cm.	25	--

Revise Table III on page 702-7 by adding the following specification after the "Specification For EA-1 Prime".

SPECIFICATION FOR AE-P PRIME

Test Requirements	Min.	Max.	AASHTO Method
25°C SFS Viscosity, Sec.	10	50	T-59
5-Day Settlement, %	--	5	T-59
Total Distillate, % Wt.	--	55	T-59
Oil Distillate, % Vol.	--	12	T-59
Tests on Residue from Distillation: Distillation to 500°F (AASHTO T-59)			
60°C Float Test, Sec.	20	--	T-50
Solubility in TCE, %	97.5	--	T-44

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-703-1M **CODE: (SP)**

DATE: 1/2/96

SUBJECT: Coarse Aggregate for Cement Concrete

Section 703, Aggregates, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is amended as follows:

907-703.03.2.4--Gradation.

At the bottom of the table, on Page 703-4, of this subsection insert the following footnote:

A maximum tolerance of three percent retained on the 25.0 mm sieve will be allowed for Aggregate Size No. 67, provided all of the material passes a 31.5 mm sieve. This tolerance is not applicable for Class F and Class FX Concrete.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-703-4M **CODE: (IS)**

DATE: 06/10/97

SUBJECT: Aggregates for Hot Mix Asphalt (HMA)

Section 703, Aggregates, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsections 703.04, 703.05,703.09, 703.10, 703.11, and 703.12 in toto, and substitute -

907-703.06--Aggregates for Hot Mix Asphalt.

907-703.06.1--General.

907-703.06.1.1--Coarse Aggregates.

Coarse aggregate, material retained on the 2.36 mm sieve, shall be either crushed stone, slag, or granite; shell; expanded clay; expanded shale; crushed gravel or combination thereof. Crushed reclaimed concrete pavement shall also be allowed as a coarse aggregate provided it meets the quality requirements below and the final product produced therefrom meets all other specification requirements.

The percentage of wear shall not exceed 45 when tested in accordance with AASHTO Designation: T 96.

When tested in accordance with AASHTO Designation: T 19, the dry rodded unit mass of all aggregates except expanded clay and shale shall not be less than 1120 kilograms per cubic meter, and crushed slag used in the surface course shall have a dry rodded unit mass of not more than 1440 kilograms per cubic meter except the maximum unit mass is waived for chromium slag.

The coarse aggregate shall be free of any injurious coating which will prohibit the adherence of asphalt to the aggregate particles.

The percentage of loss shall not exceed 20 when tested for soundness using magnesium sulfate in accordance with AASHTO T 104.

Shell shall consist of durable, washed particles of dead clam or dead reef oyster shell, or combination thereof. The shell shall be free of objectionable matter such as sticks, mud, clay lumps, cannery or live shell, or other deleterious matter. Not more than five percent by mass of the dredged material shall pass the 75 µm sieve; any such material shall be dispersed throughout the mass.

907-703.06.1.2--Fine Aggregates.

Fine aggregate, material passing the 2.36 mm sieve, shall consist of hard, durable particles of naturally disintegrated rock, or material obtained by crushing stone, slag, gravel, reclaimed concrete pavement, or combinations thereof. Fine aggregate produce from crushing reclaimed concrete pavement shall be manufactured from material meeting the quality requirements for coarse aggregate.

Fine aggregate shall be free of lumps of clay and friable particles, loam, organic or foreign matter.

Fine aggregate produced by crushing stone, slag or gravel shall be manufactured from aggregate meeting the quality requirements of coarse aggregate.

Individual sources of fine aggregate shall be non-plastic when tested in accordance with AASHTO Designation: T 90.

Natural deposits of fine aggregate shall contain no more than 10 percent by mass passing the 75 µm sieve when tested in accordance with AASHTO Designation: T 11.

Individual fine aggregate components shall be of such consistency and dryness that a uniform and even flow from the cold feed will be provided.

Fly ash shall not be used in hot mix asphalt pavements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-708-2M **CODE: (IS)**

DATE: 03/15/2002

SUBJECT: Corrugated Plastic Pipe Culverts and Drainage Tubing

Section 708, Non-Metal Structures and Cattlepasses, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 708.17 on page no. 708-7 and substitute the following:

907-708.17--Corrugated Plastic Pipe Culverts.

907-708.17.1--Corrugated Polyethylene Pipe Culverts. Corrugated polyethylene pipe shall conform to the requirements of AASHTO Designation: M 294, Type S. The pipe and fittings shall be made of virgin polyethylene compounds which conform with the requirements of cell class 335400C as defined and described in ASTM D 3350, except that the carbon black content shall not exceed 5%. Compounds that have higher cell classifications in one or more properties are acceptable provided product requirements are met.

For Type S pipe, the inner liner shall be fused to the outer corrugated shell at all internal corrugation crests.

The Contractor shall furnish to the Engineer three copies of the manufacturer's certified test reports and certification covering each shipment of pipe stating the amount furnished and that the pipe, fittings, couplings, etc. comply with the requirements of the specifications. Certifications and certified test reports for compliance with this specification shall be performed by an approved third-party testing source.

907-708.17.2--Corrugated Poly (Vinyl Chloride) (PVC) Pipe Culverts. Corrugated poly (vinyl chloride) (PVC) pipe shall conform to the requirements of ASTM Designation: F 949.

The Contractor shall furnish to the Engineer three copies of the manufacturer's certified test reports and certification covering each shipment of pipe stating the amount furnished and that the pipe, fittings, etc. comply with the requirements of the specifications.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-710-1M **CODE: (IS)**

DATE: 5/7/96

SUBJECT: Fast Drying Acrylic Waterborne Traffic Paint

Section 710, Paint, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Construction is hereby amended as follows:

907-710.02.2.1--Composition of Formulation. Delete the first paragraph of Subsection 710.02.2.1 on pages 710-2 and insert the following:

The composition of the paint shall be left to the discretion of the manufacturer as long as the finished product is composed of 100% acrylic emulsion, Rohm and Haas Emulsion E-2706 or Dow Chemical Emulsion DT 211NA, and meets the requirements of this specification and of any applicable Federal, State or Local regulations for products of this type.

907-710.02.2.1.3--Non-Volatile Vehicle. Delete the first sentence of Subsection 710.02.2.1.3 on pages 710-2 and substitute the following:

The non-volatile portion of the vehicle shall be composed of a 100% acrylic polymer (Rohm and Haas Emulsion E-2706 or Dow Chemical Emulsion DT 211NA) and shall not be less than 44% by mass.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-7l1-1M **CODE: (IS)**

DATE: 5/8/96

SUBJECT: Reinforcing Steel

Section 7l1, Reinforcement and Wire Rope, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is amended as follows:

907-7ll.02--Reinforcing Steel.

Delete the first paragraph of Subsection 711.02.1 on page 711-1 and substitute:

907-711.02.1--Bar Reinforcement. Bar reinforcement shall conform to the requirements of AASHTO Designation: M 31M, as herein amended, (Grade 420) for billet steel bars.

AASHTO Designation: M 31M is hereby amended as follows:

1. ***Sections 1.2 and 1.3, and Note 2 shall be replaced in their entirety with:***

   1.2 Bars are of three minimum yield levels: namely, 300, 420, and 520 MPa, designated as Grades 300, 420, and 520, respectively.

   1.3 Hot-rolled plain rounds, in sizes up to and including 50.8 mm in diameter in coils or cut lengths, when specified for dowels, spirals, and structural ties or supports, shall be furnished under the specification in Grades 300, 420, and 520 (Note 2). For bending properties, test provisions of the nearest nominal diameter deformed bar size shall apply. Those requirements providing for deformations and marking shall not be applicable.

   NOTE 2 - The mass for plain rounds smaller than 9.5 mm in diameter shall be computed on the basis of the size in ASTM A 510M.

2. ***Note 4 shall be replaced in its entirety with:***

   NOTE 4 - A typical ordering description is as follows: 19 metric tons, deformed and plain billet-steel bars for concrete reinforcement, No. 25, 18.3 m long, deformed, Grade 420 in secured lifts, to AASHTO M 31M as herein amended. Certified mill test reports are required.

3. ***Section 11.1 shall be replaced in its entirety by:***

   11.1 The permissible variation in mass shall not exceed 6 percent under nominal mass, except for bars smaller than 9.5 mm plain round, the permissible variation in mass shall be computed on the basis of the permissible variation in diameter in Specification ASTM A 510M. Reinforcing bars are evaluated on the basis of nominal mass. In no case shall the overmass of any bar be the cause for rejection.

4. Section 14 shall be replaced in its entirety with:

14. NUMBER OF TESTS

14.1 For bar sizes No. 10 to 36, inclusive, one tension test and one bend test shall be made of the largest size rolled from each heat. If, however, material from one heat differs by three or more designation numbers, one tension and one bend test shall be made from both the highest and lowest designation number of the deformed bars rolled.

14.2 In the case of No. 43 and 57 bars, one tension test and one bend test shall be made of each size from each heat.

5. Replace Section 20.3.4 in its entirety with:

20.3.4 *Minimum Yield Designation* - For Grade 420 bars, either the number 4 or a single continuous longitudinal line through at least 5 spaces offset from the center of the bar side. For Grade 520 bars, either the number 5 or two continuous longitudinal lines through at least 5 spaces offset each direction from the center of the bar. (No marking designation for Grade 300 bars.)

6. Table 1 shall be replaced in its entirety by:

TABLE 1 Deformed Bar Designation Numbers, Nominal Masses, Nominal Dimensions, and Deformation Requirements

Bar Designation No.[B]	Nominal Mass, kg/m	Nominal Dimensions[A]			Deformation Requirements, mm		
		Diameter, mm	Cross-Sectional Area, mm²	Perimeter, mm	Maximum Average Spacing	Minimum Average Height	Maximum Gap (Chord of 12.5% of Nominal Perimeter)
10	0.560	9.5	71	29.9	6.7	0.38	3.6
13	0.994	12.7	129	39.9	8.9	0.51	4.9
16	1.552	15.9	199	49.9	11.1	0.71	6.1
19	2.235	19.1	284	59.8	13.3	0.97	7.3
22	3.042	22.2	387	69.8	15.5	1.12	8.5
25	3.973	25.4	510	79.8	17.8	1.27	9.7
29	5.060	28.7	645	90.0	20.1	1.42	10.9
32	6.404	32.3	819	101.3	22.6	1.63	12.4
36	7.907	35.8	1006	112.5	25.1	1.80	13.7
43	11.38	43.0	1452	135.1	30.1	2.16	16.5
57	20.24	57.3	2581	180.1	40.1	2.59	21.9

[A] The nominal dimensions of a deformed bar are equivalent to those of a plain round bar having the same mass per meter as the deformed bar.

[B] Bar designation numbers approximate the number of millimeters of the nominal diameter of the bar.

7. Table 2 shall be replaced in its entirety with:

TABLE 2 Tensile Requirements

	Grade 300[A]	Grade 420	Grade 520[B]
Tensile strength, min, MPa	500	620	690
Yield strength, min, MPa	300	420	520
Elongation in 203.2 mm, min, %:			
Bar Designation No.			
10	11	9	-
13, 16	12	9	-
19	12	9	7
22, 25	-	8	7
29, 32, 36	-	7	6
43, 57	-	7	6

[A] Grade 300 bars are furnished only in sizes 10 through 19.
[B] Grade 520 bars are furnished only in sizes 19 through 57.

8. Table 3 shall be replaced in its entirety with:

TABLE 3 Bend Test Requirements

	Pin Diameter for Bend Tests [A]		
Bar Designation No.	Grade 300	Grade 420	Grade 520
10,13,16	3½*d* [B]	3½*d*	-
19	5*d*	5*d*	5*d*
22, 25	-	5*d*	5*d*
29, 32, 36	-	7*d*	7*d*
43, 57 (90°)	-	9*d*	9*d*

[A] Test bends 180° unless noted otherwise.
[B] *d* = nominal diameter of specimen.

Delete the Standard Reinforcing Bars table on page 711-1 and substitute:

STANDARD REINFORCING BARS

Bar Designation No.(2)	Nominal Mass, kg/m	Nominal Dimensions (1)		
		Diameter, mm	Cross-Sectional Area, mm^2	Perimeter, mm
10	0.560	9.5	71	29.9
13	0.994	12.7	129	39.9
16	1.552	15.9	199	49.9
19	2.235	19.1	284	59.8
22	3.042	22.2	387	69.8
25	3.973	25.4	510	79.8
29	5.060	28.7	645	90.0
32	6.404	32.3	819	101.3
36	7.907	35.8	1006	112.5
43	11.38	43.0	1452	135.1
57	20.24	57.3	2581	180.1

Delete in toto Subsection 711.02.2 on page 711-2 and substitute:

907-711.02.2--Bar Mats. Bar mats for concrete pavement reinforcement shall be Grade 420 billet steel, AASHTO Designation: M 31M, as amended by special provision, and shall conform to the requirements of AASHTO Designation: M 54.

Delete the first paragraph of Subsection 711.02.4 on page 711-2 and substitute:

907-711.02.4--Dowel Bars and Marginal Bars. Unless otherwise indicated, dowel bars used to span transverse joints and marginal bars shall be plain round bars. They shall be Grade 420 billet steel, AASHTO Designation: M 31M, as amended by special provision.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-7l1-2M **CODE: (SP)**

DATE: 4/24/96

SUBJECT: Reinforcing Steel

Section 7l1, Reinforcement and Wire Rope, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is amended as follows and the contents of which are applicable ONLY when using non-metric size reinforcement.

Delete in toto Subsection 711.02 beginning on page 711-1, and substitute the following:

907-711.02--Reinforcing Steel.

907-711.02.1--Bar Reinforcement. Bar reinforcement shall conform to the requirements of AASHTO Designation: M 31 (Grade 60) for billet steel bars.

Bars shall be fabricated as indicated on the plans; shall be cold-bent, unless otherwise permitted, to the shapes shown on the plans or as directed; and shall be bent prior to being wholly or partially embedded in concrete.

Unless otherwise authorized or provided on the plans, bends or hooks shall not be fabricated to a smaller diameter than that indicated for the bend test.

Rail steel bars shall be bent to the specified shapes at the mill or fabricating plant.

The areas and weights to be used in calculations for the various size reinforcing bars shall be as follows:

STANDARD REINFORCING BAR

Numbers*	Weight Lbs.per Foot	Nominal Dimension ---------- Round Sections		
		Diameter (Inches)	Cross-Sectional Area (Sq. In.)	Perimeter (Inches)
2 (1)	.167	.250	.05	.786
3	.376	.375	.11	1.178
4	.668	.500	.20	1.571
5	1.043	.625	.31	1.963
6	1.502	.750	.44	2.356
7	2.044	.875	.60	2.749
8	2.670	1.000	.79	3.142
9 (2)	3.400	1.128	1.00	3.544
10 (2)	4.303	1.270	1.27	3.990
11 (2)	5.313	1.410	1.56	4.430
14	7.65	1.693	2.25	5.32
18	13.60	2.257	4.00	7.09

* The bar numbers are based on the number of 1/8 inch increments in the nominal diameter of the bar, except as noted in (2) below.

(1) No. 2 bars in plain rounds only.
(2) Nos. 9, 10, and 11 are round bars and equivalent in weight and nominal cross-sectional area to the old type 1 inch, 1 1/8 inch, and 1 1/4 inch square bars, respectively.

907-711.02.2--Bar Mats. Bar mats for concrete pavement reinforcement shall be Grade 60 billet steel, AASHTO Designation: M 31, and shall conform to the requirements of AASHTO Designation: M 54.

907-711.02.3--Steel Wire Fabric. Steel wire fabric shall conform to the requirements of AASHTO Designation: M 55 or AASHTO Designation: M 221.

907-711.02.4--Dowel Bars and Marginal Bars. Unless otherwise indicated, dowel bars used to span transverse joints and marginal bars shall be plain round bars. They shall be Grade 60 billet steel, AASHTO Designation: M 31.

Before installation, each dowel bar shall be painted with one coat of industrial grade zinc base primer, epoxy or other approved rust inhibitive primers.

One half of each dowel bar shall be greased with a heavy grease equivalent to 600W or cup grease to prevent bonding with concrete. The greased end is to be inserted into the dowel bar sleeve described in the following paragraph.

Sleeves for dowel bars shall be metal or plastic of an approved design, mortar-tight, of sufficient strength to prevent collapse, and at least two inches in length. A suitable stop shall be provided in the sleeve to permit movement of the dowel bar within the sleeve of not less than the thickness of the expansion filler used.

Dowel bars shall be free from burring or other deformations restricting slippage in the concrete.

907-711.02.5--Tie Bars. Unless otherwise indicated, tie bars used to span longitudinal joints shall be deformed bars, billet steel, meeting the requirements set forth in 907-711.02.1.

907-711.02.6--Cold-Drawn Steel Wire. Cold-drawn steel wire shall conform to the requirements of AASHTO Designation: M 32.

907-711.02.7--Supports for Bar Reinforcement. Metal bar supports shall be fabricated from stainless steel wire conforming to ASTM Designation: A 493 (16% chromium minimum) or cold-drawn wire with a minimum of 1/2 inch of the height of the leg above the form surface protected by one of the following:

Plastic coating conforming to CRSI Standards.
Galvanized, conforming to ASTM Designation: A 153, Class D.
Stainless steel conforming to ASTM Designation: A 493. (16% chromium minimum)
Other protective coating as approved by the Engineer.
Other supports as approved by the Engineer may be used.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-711-4M **CODE: (IS)**

DATE: 11/03/2004

SUBJECT: Synthetic Structural Fiber Reinforcement

Section 711, Reinforcement and Wire Rope, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After Subsection 711.03.4.3 on page 711-5, add the following:

907-711.04--Synthetic Structural Fiber. Synthetic structural fibers shall meet the requirements of ASTM Designation: C 1116, Section 4.1.3, Note 3. The fibers shall be monofilament made of polypropylene or polypropylene/polyethylene blend meeting the following conditions:

Property	Results
Length, minimum	38 millimeters
Aspect Ratio (length / equivalent diameter)	90
Breaking tenacity, minimum *	530 mN/tex
(Tensile Strength, minimum	482 MPa)
Chord modulus, minimum *	980 cN/tex
(Modulus of Elasticity, minimum	8963 MPa)

* When tested in accordance with ASTM Designation: D 3822

The dosage rate for the fibers shall be a minimum of 1.78 kilograms per cubic meter (1.78 kg / m^3).

The manufacturer shall furnish the Engineer three copies of the certified test report(s) showing results of all required tests, and certification that the material meets the specifications.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-712-4M **CODE: (IS)**

DATE: 05/01/2002

SUBJECT: Materials for Guardrail Posts

Section 712, Fence and Guardrail, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

907-712.06--Guard and Guardrail Posts.

Delete Subsection 712.06.4 on Page 712-6 and substitute the following:

907-712.06.4--Steel Posts. Steel posts shall be of the section and length as shown on the plans and shall conform to the requirements of ASTM Designation: A 36.

907-712.06.5--Treated Wood Blocks For Use With Metal Guardrail Posts. Treated wood blocks for use with metal guardrail posts shall be within ±10-mm of the size and dimensions shown on the plans, except that a minus tolerance shall not be allowed for the slotted width in which the metal post must fit. Preservative treatment shall be in accordance with AWPA Standard C14.

The blocks must be obtained from approved manufacturers listed on MDOT's "List of Approved Suppliers of Treated Wood Products". The manufacturer's approval will be based on their Quality Control Program for material certification. The manufacturer shall employ a certified material grader and treatment inspector who will be responsible for grading and inspecting the treated material. The inspector's certification shall be from an approved industrial organization such as AWPA, SPIB or American Lumber Standard. The manufacturer's certification shall be based on satisfactory grading, dimensional measurements, and treatment results. The manufacturer shall provide the Contractor two copies of their material certification and treatment report for each charge of material delivered. Also, a copy of these documents shall be mailed to the State Materials Engineer for all blocks shipped for use on MDOT projects.

The manufacturer shall brand each block with the following information:

(1) manufacturer's logo or initials (XYZ)
(2) manufacturer's plant location
(3) species of wood (SYP)
(4) treatment type (CCA-C)
(5) minimum preservative retention by assay (10)

The Contractor, prior to installation of the blocks, shall furnish a copy of the manufacturer's certification and treatment report covering the blocks to be installed to the Department's representative.

The Project Engineer, or the Project Engineer's designated representative, will inspect each block prior to installation for proper dimensions, identification and damage or other deficiency prior to

permitting installation of the blocks. The Project Engineer will notify the State Materials Engineer when blocks are delivered to the project and report any deficiencies found. The State Materials Engineer will, at the State Materials Engineer's discretion, dispatch an inspector to the project for inspecting and boring the blocks for an assay test. Final acceptance of the blocks will be based on satisfactory field inspection and satisfactory test results when field sampling is performed.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-5M **CODE: (IS)**

DATE: 10/31/97

SUBJECT: Miscellaneous Materials

Section 714, Miscellaneous Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After the fifth line of Subsection 714.05.2 on page 714-4, add the following:

The available alkalis, as Na_2O, not to exceed 1.5 percent

Delete in toto Subsection 714.06 on page no. 714-4 and substitute:

907-714.06--Ground Granulated Blast Furnace Slag (GGBFS).

907-714.06.1--General. GGBFS shall be obtained from an approved source. The acceptance of GGBFS shall be based on certified test reports, certification of shipment from the supplier and tests performed on samples obtained after delivery in accordance with the Department's Standard Operating Procedures.

The Contractor shall provide suitable means for storing and protecting the GGBFS against dampness and contamination. Separate storage silos, bins or containers shall be provided for GGBFS. GGBFS which has become partially set, caked or contains lumps shall not be used.

The Engineer shall be notified in writing of the nature, amount and identity of any processing or other additions made to the GGBFS during production.

GGBFS from different mills shall not be mixed or used alternately in any one class of construction or structure without written permission from the Engineer; except that this requirement will not be applicable to cement treatment of design soils, subbases or bases.

In addition to these requirements, GGBFS shall meet the following specific requirements.

907-714.06.2--Specific Requirements. GGBFS shall meet the requirements of AASHTO Designation: M 302, Grade 120. GGBFS shall contain no chlorides.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-9M **CODE: (IS)**

DATE: 12/11/2003

SUBJECT: Geotextiles

Section 714, Miscellaneous Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 714.13 beginning on page 714-15 and substitute the following:

907-714.13--Geotextiles.

907-714.13.1--General. Unless specified otherwise, the geotextile may be woven or non-woven. The fibers used in the manufacture of the geotextiles and the threads used in joining geotextiles by sewing, shall consist of long-chain synthetic polymers, composed of at least 95% by mass polyolefins, polyesters, or polyamides. They shall be formed into a network such that the filaments or yarns retain dimensional stability relative to each other, including selvages. The geotextile shall be mildew resistant and inert to biological degradation and naturally encountered chemicals, alkalines and acids. Geotextile which is not protected from sunlight after installation shall contain stabilizers and/or inhibitors to make it resistant to deterioration from direct sunlight, ultraviolet rays, and heat.

The edges of the geotextile shall be selvaged or finished in such a manner to prevent the outer yarn of filaments from raveling. The geotextile shall be free of defects or flaws, which affect the required physical properties.

Geotextile for silt fence shall be manufactured in widths of not less than 900 millimeters, and geotextile for other applications shall be manufactured in widths of not less than 1800 millimeters. Sheets of geotextile may be sewn or bonded together at the factory or other approved locations, but deviation from the physical requirements will not be permitted.

Acceptance testing, except geotextile for silt fence, will be conducted with geotextile samples from each lot shipped to the project, as per Subsection 907-714.13.10.

907-714.13.2--Geotextile for Silt Fence. The geotextile shall conform to the physical requirements of Type I or II as shown in Table I. Unless a specific type is specified in the plans or contract documents, the Contractor may select Type I or II.

907-714.13.2.1--Woven Wire Backing. Except as provided herein, silt fence shall be reinforced with a woven wire backing. The wire backing shall be at least 800 millimeters high and have no less than six horizontal wires. Vertical wires shall be spaced no more than 300 millimeters apart. The top and bottom wire shall be 3.43-mm diameter or larger. All other wire shall be no smaller than 2.51-mm diameter.

907-714.13.2.2--Posts. Wood or steel posts may be used. Wood posts shall have a minimum diameter of 75 millimeters and length of 1.5 meters and shall be straight enough to provide a fence without noticeable misalignment. Steel tee posts shall be 1.5 meters long, approximately 35 millimeters wide, 35 millimeters deep, and three millimeters thick with a nominal mass of 1.98 kilograms per meter prior to fabrication. The posts shall have projections, notches or holes for fastening the wire backing or geotextile to the posts.

907-714.13.2.3--Staples. Staples shall be made of 3.76-mm wire with a minimum length of 25 millimeters after bending.

907-714.13.3--Geotextile for Subsurface Drainage. For normal drainage applications, the geotextile shall conform to the physical requirements of Type III as shown in Table I.

907-714.13.3.1--Geotextile for Edge Drains. The geotextile shall conform to the physical requirements of Type V as shown in Table I, except the AOS for the woven geotextile shall have a range of 0.15 mm to 0.43 mm.

907-714.13.4--Geotextile Underseal. The geotextile shall be non-woven polyester or polypropylene, which is satisfactory for use with asphalt cements. Unless otherwise specified, the geotextile shall conform to the physical requirements of Type IV in Table I.

907-714.13.5--Geotextile for Use Under Riprap. Unless otherwise specified, the geotextile shall conform to the physical requirements of Type V in Table I. The requirements for grab tensile, puncture, and trapezoidal tear strengths may be reduced 50 percent when the geotextile is cushioned from rock placement by a 150-mm minimum layer of sand.

907-714.13.6--Geotextile Stabilization. The geotextile shall meet the physical requirements as shown in Table I for the Type specified in the plans or contract documents.

907-714.13.7--Securing Pins. Steel pins used for anchoring the geotextile shall be five millimeters in diameter, minimum length of 375 millimeters, pointed at one end and fabricated with a head for retaining a steel washer. A minimum 38-mm diameter washer shall be installed on each pin.

907-714.13.8--Identification. Each roll of geotextile or container shall be visibly labeled with the name of the manufacturer, type of geotextile or trade name, lot number, and quantity of material.

907-714.13.9--Shipment and Storage. During shipment and storage, the geotextile shall be protected from direct sunlight, ultraviolet rays, temperatures greater than 60°C, mud, dirt, dust, and debris. The geotextile shall be wrapped and maintained in a heavy-duty protective covering, including ends of roll.

907-714.13.10--Certification, Acceptance Sampling and Testing. The Contractor shall furnish to the Engineer three copies of the manufacturer's certification that each lot in a shipment

complies with the requirements of the contract. Certification of geotextile for silt fence shall include a material conformance statement, as per Subsection 700.05.1, that the geotextile meets or exceeds the minimum average roll values specified in Table 1. All fabric, steel pins, washers, fence posts, woven wire and wire staples are subject to approval by the Engineer upon delivery to the work site.

Acceptance testing shall be completed prior to incorporating in the work. Acceptance of geotextile to be used in the work, except geotextile for silt fence, will be based on the results of tests performed by the Department on verification samples submitted from the project. The Engineer will select one roll at random, from each lot in a shipment, for sampling. A sample extending full width of the randomly selected roll and containing at least five square meters of geotextile will be obtained and submitted by the Engineer. The sample shall be provided at no additional cost to the State.

907-714.13.11—Table.

TABLE I
GEOTEXTILES

Type Designation	I[a]	II[a]	III	IV	V	VI		VII		
Application	**Sediment Control**		**Drainage**	**Paving**	**Separation & Drainage**	**Separation, Stabilization & Reinforcement**				
Physical Properties										**Test Method**
Grab Strength (N)	225	400	490	400	900	W 1250	NW 800	W 2000	NW 1250	ASTM D 4632
Elongation %	----	50% max @ 200 N	20% min	50% min @ break	50% min	50% max	50% min	50% max	50% min	ASTM D 4632
Seam Strength (N)	----	----	310	----	800	1070	710	1780	1070	ASTM D 4632
Puncture Strength (N)	----	----	175	----	360	490	330	800	510	ASTM D 4883
Trapezoidal Tear (N)	----	----	175	----	360	445	310	665	445	ASTM D 4533
Asphalt Retention (L/m^2)	----	----	----	0.9	----	----	----	----	----	ASTM D 6140
Permittivity (Sec^{-1})	0.05	0.05	0.5	----	0.15	0.2	0.2	0.2	0.2	ASTM D 4491
AOS Woven (mm)	0.15 - 0.84	0.15 - 0.84	0.15 - 0.43	----	0.21 - 0.43	0.15 - 0.21	----	0.15 - 0.21	----	ASTM D 4751
AOS Non-Woven (mm)	<0.84	<0.84	<0.43	----	<0.43	----	<0.43	----	<0.43	ASTM D 4751
Tensile Strength after UV (% Retained)	70@500 Hr.	70 @ 500 Hr.	70 @ 150 Hr.	----	70 @ 150 Hr.	70 @ 150 Hr.		70 @ 150 Hr.		ASTM D 4355
Melting Point (°C)	----	----	----	165°F	----	----		----		ASTM D 276

a. All property values, with the exception of apparent opening size (AOS), represent minimum average roll values in the weakest principal direction. Values for AOS represent the maximum average roll values.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-715-2M **CODE: (IS)**

DATE: 12/10/99

SUBJECT: Erosion Control Blanket

Section 715, Roadside Development Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-715.09.3--Erosion Control Blanket. Delete the third line of the first paragraph of Subsection 715.09.3 and substitute:

The top side of the blanket shall be covered with a photodegradable plastic mesh having 20-mm x 20-mm maximum openings which shall be substantially adhered to the straw by a knitting process using degradable thread.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-715-4M **CODE: (IS)**

DATE: 09/23/2004

SUBJECT: Agricultural Limestone

Section 715, Roadside Development Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete the first sentence of Subsection 715.02.2 on page 715-1 and substitute the following:

Combination or manufactured fertilizer shall be "standard commercial products" and shall contain not less than the percentages by mass of the ingredients set out in Table A, except for agricultural limestone which shall meet the requirements of Subsection 907-715-.02.2.1.

In Table A of Subsection 715.02.2 on page 715-2, delete the column titled “Agricultural Limestone” and the row titled “Calcium and Magnesium Carbonate**”.

Delete the third paragraph on page 715-3.

At the end of Subsection 715.02.2 on page 715-3, add the following:

907-715-02.2.1--Agricultural Limestone. Agricultural limestone shall be either a Grade “A” liming material, or a marl or chalk agricultural liming material as addressed in the latest Mississippi Agricultural Liming Material Act of 1993, published by the Mississippi Department of Agriculture and Commerce.

907-715-02.2.1.1--Screening Requirements. Grade “A” liming material, including ground shells, shall not have less than 90% of the material passing the 2.00 mm sieve, and not less than 47.5% passing the 250µm sieve. Marl or chalk lining material shall not have less than 90% of the material passing the 2.00 mm sieve.

907-715-02.2.1.2--Calcium Carbonate Equivalent. Grade “A” liming material shall not have less than 85.5% calcium and magnesium carbonate calculated as calcium carbonate equivalent when expressed on a dry mass basis.

Marl or chalk liming material shall not have less than 70% calcium and magnesium carbonate calculated as calcium carbonate equivalent when expressed on a dry mass basis.

907-715-02.2.1.3--Neutralizing Values. Grade "A" liming material shall have a minimum equivalent neutralizing value (ENV) of 63.0%, which is determined as follows:

ENV = Fineness Value x Assay(%)

Where: Fineness Value = ((% Passing 2.00 mm - % Passing 250µm) x ½) + % Passing 250µm, expressed as a whole number

Assay = % calcium carbonate equivalent

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-716-1M **CODE: (IS)**

DATE: 05/16/2002

SUBJECT: Miscellaneous Materials

Section 716, Miscellaneous Metals, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 716.04 on page 716-1 and substitute the following:

907-716.04--Gray Iron Casings. Gray iron castings shall conform to AASHTO Designation: M 105. Class 30B shall be furnished unless otherwise specified. For testing purposes a lot size shall be defined as the lesser of either a total of 15 875 kilograms or one week's production for the Department. The test bars shall be made from a melt of iron used in production of units for the Department. The test bar length shall be a minimum of 400 millimeters.

907-716.07--Copper Bearings and Sheet Copper.

Delete Subsection 716.07.1 on page 716-1 and substitute the following:

907-716.07.1--Rolled Copper-Alloy Bearings and Expansion Plates. Rolled copper-alloy bearings and expansion plates shall conform to ASTM Designation: B 100. Alloy UNS No. C51000 shall be furnished unless otherwise specified.

Delete Subsections 716.10 on page 716-2 and substitute the following:

907-716.10--Lead Plates, Pipes, Etc. Lead used for plates, pipes, etc. shall conform to ASTM Designation: B 29, Grade: Pure Lead.

907-716.14--Bar Grates.

Delete Subsection 716.14.1 starting on page 716-2 and substitute the following:

907-716.14.1--Material Requirements. Plain round steel bars and strap bars shall conform to the following requirements:

B-9 Grates and Bar Grates:	AASHTO Designation M 270M, Grade 250.
MI, GI, & SS-3 Grates:	AASHTO Designation: M270M, Grade 345W, or as specified in the plans.

Delete the last paragraph of Subsection 716.14.2 on page 716-3 and substitute the following:

After fabrication, the bar grate shall be coated with an approved commercial quality coating designed for coating steel castings and fabricated units. The State Materials Engineer shall approve the coating material prior to application.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-3M **CODE: (IS)**

DATE: 10/7/97

SUBJECT: High Performance Cold Plastic Pavement Markings

Section 720, Pavement Marking Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

At the end of Section 720 on page 720-15, add the following:

907-720.07--High Performance Cold Plastic Pavement Markings.

907-720.07.1--General. The preformed high performance pavement markings shall consist of white or yellow films with ceramic beads incorporated to provide immediate and continuing retroreflection.

Preformed high performance cold plastic pavement markings shall be listed on the Department's list of "Approved Sources of Materials" for Preformed High Performance Profile Cold Plastic Pavement Marking Tape. Prior to use, the Contractor shall furnish the Engineer three copies of the manufacturer's certification for each shipment stating that the material furnished is of the same composition as that originally approved by the Department and that the material has not been changed or altered in any way.

The preformed pavement markings shall be capable of being adhered to the pavement by a pre-coated pressure sensitive adhesive. A primer may be used to precondition the pavement surface. When a primer is specified by the manufacturer, it shall be installed as recommended by the manufacturer at no additional cost to the State. The preformed pavement markings shall conform to pavement contours by the action of traffic. After application, the markings shall be immediately ready for traffic. A representative of the manufacturer shall be present to identify proper solvents and/or primers (where necessary) to be applied at the time of application, to identify all equipment necessary for proper application, and to make recommendations for application that will assure effective product performance.

907-720.07.2--Classification. The preformed pavement markings shall be highly durable retroreflective pliant polymer materials designed for longitudinal markings subjected to high traffic volumes.

907-720.07.3--Requirements.

907-720.07.3.1--Composition. The retroreflective pliant polymer pavement marking film shall consist of a mixture of high quality polymeric materials, pigments and glass beads distributed throughout its base cross-sectional area, with a reflective layer of ceramic beads bonded to a durable polyurethane top surface. The surface shall have approximately 50% (±15%) of the surface area raised and presenting a near vertical face (angle of 0° to 60°) to traffic from any direction. The channels between the raised areas shall be substantially free of exposed beads or particles.

907-720.07.3.2--Retroreflectance. The white and yellow markings shall have the following initial minimum retroreflectance values as measured in accordance with the testing procedures of

ASTM Designation: D 4061. The photometric quantity to be measured shall be coefficient of retroreflected luminance (R_L), and shall be expressed as millicandelas per square meter per lux (mcd/m²/lx).

INITIAL MINIMUM RETROREFLECTANCE VALUES

	White		Yellow	
Entrance Angle	86.0°	86.5°*	86.0°	86.5°*
Observation Angle	0.2°	1.0°	0.2°	1.0°
Retroreflected Luminance R_L (mcd/m²/lx)	1100	700	800	500

* These retroreflectance values are based on dark room photometric readings per ASTM D 4061. The Ecolux™ Retroreflectometer measurement geometry is an 86.5° entrance angle and a 1.0° observation angle.

907-720.07.3.3--Glass Beads. The size and quality of the beads shall be such that the performance requirements for the retroreflective pliant polymer shall be met.

907-720.07.3.3.1--Index of Refraction. All ceramic beads bonded to the polyurethane coated patterned surface of the material shall have a minimum index of refraction of 1.70 when tested using the liquid oil immersion method. The glass beads mixed into the pliant polymer shall have a minimum index of refraction of 1.5 when tested by the liquid oil immersion method.

TESTING PROCEDURE FOR
REFRACTIVE INDEX OF BEADS BY LIQUID IMMERSION

EQUIPMENT REQUIRED:

A. Microscope (minimum 100X magnification).

B. Light Source - preferably sodium light or other monochromatic source, but not absolutely essential.

C. Refractive Index Liquids.*

D. Microscope Slide and Slide Cover.

E. Mortar and Pestle.

* Available from R.P. Cargille Laboratories, Inc., Cedar Grove, NJ.

PROCEDURE:

A. Using the mortar and pestle, crush a few representative beads and place a few of these crushed particles on a microscope slide.

B. Place a drop of a refractive index liquid, with an index as close to that of the glass as can be estimated, on the crushed bead particles.

C. Cover the slide with a microscope slide cover and view the crushed particles by transmitted light normal to the slide surface (illuminated from the bottom).

D. Adjust the microscope mirror to allow a minimum light intensity for viewing. This is important when sodium light is not used.

E. Bring a relatively flat and transparent particle into focus.

F. By slightly raising and lowering the microscope tube, look for one or both of the following:

1. Becke Line - This light line will appear to move either into the particle or away from it. In general, when the microscope tube is raised, the line will move toward the material of higher refractive index; when the microscope tube is lowered, the line will move toward the material of lower index.

2. Variation in Particle Brightness - When raising the microscope tube from sharp focus, the particle will appear to get brighter or darker than the surrounding field. If it becomes brighter, the glass has a higher refractive index than the liquid. If it becomes darker, the glass has a lower refractive index than the liquid. In both cases, the opposite will be true when the microscope tube is lowered.

G. This test can be used to confirm that the beads are above or below a specified index. It can also be used to give an accurate determination of the index (±0.001). This is done by using several refractive index liquids until a match or near match of indices occurs. The index of the glass will equal that of the liquid when no Becke line and no variation in bead brightness can be observed.

907-720.07.3.3.2--Acid Resistance. The beads shall show resistance to corrosion of their surface after exposure to a 1% solution (by mass) of sulfuric acid. The 1% acid solution shall be made by adding 5.7 mL of concentrated acid into 1000 mL of distilled water. **CAUTION:** Always add the concentrated acid into the water, not the reverse. The test shall be performed as follows:

Take a 25-mm x 50-mm sample, adhere it to the bottom of a glass tray and place just enough acid solution to completely immerse the sample. Cover the tray with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. Then decant the acid solution (do not rinse, touch, or otherwise disturb the bead surfaces) and dry the sample while adhered to the glass tray in a 66°C oven for approximately 15 minutes.

Microscopic examination (20X) shall show no more than 15% of the beads having a formation of a very distinct opaque white (corroded) layer on their entire surface.

907-720.07.3.4--Color. The preformed pavement markings shall consist of white and yellow films with pigments selected and blended to conform to standard highway colors.

907-720.07.3.5--Skid Resistance. The patterned surface of the retroreflective pliant polymer shall provide an initial average skid resistance value of 45 BPN when tested according to ASTM Designation: E 303, except values will be taken at downweb and at a 45 degree angle from downweb. These two values will then be averaged to find the skid resistance of the patterned surface.

907-720.07.3.6--Patchability. The pavement marking material shall be capable of use for patching worn areas of the same type in accordance with manufacturer's instructions.

907-720.07.3.7--Thickness. The patterned material, without adhesive, shall have a minimum caliper of 1.651 mm at the thickest portion of the patterned cross-section and a minimum caliper of 0.508 mm at the thinnest portion of the cross-section.

907-720.07.4--Effective Performance Life. The film, when applied according to the recommendations of the manufacturer, shall provide a neat, durable marking that will not flow or distort due to temperature if the pavement surface remains stable. The film shall be weather resistant and, through normal traffic wear, shall show no appreciable fading, lifting or shrinkage throughout the useful life of the marking, and shall show no significant tearing, roll back, or other signs of poor adhesion.

907-720.07.5--Manufacture's Certification. The Contractor shall furnish the Engineer three copies of the manufacturer's certification stating that each lot in a shipment complies with the requirements of the contract.

907-720.07.6--Acceptance Sampling and Testing. Final acceptance of each lot will be based on results of tests performed by the Department on verification samples submitted from each lot shipped to the project. The Engineer will select one sample at random from each lot in the shipment for testing. A sample extending full width of the randomly selected sample and 1.5 meters in length will be obtained and submitted by the Engineer. The sample from each shipment shall be provided at no cost to the State.

907-720.07.7--Warranty. All manufacturer's standard warranties and guarantees on high performance cold plastic pavement marking material, which are provided as customary trade practice, shall be delivered to the Engineer at the final inspection. All warranties and guarantees shall be made out to the Mississippi Department of Transportation.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-5M **CODE: (IS)**

DATE: 9/21/99

SUBJECT: Glass Beads

Section 720, Pavement Marking Materials, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-720.01.3--Packaging and Marking. Delete the first sentence of Subsection 720.01.3 on page 720-1 and substitute the following:

The beads shall be packaged in 22.7-kilogram or 25-kilogram moisture proofed bags.

907-720.02--Thermoplastic Pavement Markings. Delete the second paragraph of Subsection 720.02 on page 720-2 and substitute the following:

Additional beads by the drop-on method shall be applied at a rate of not less than 45 grams of beads per meter of 150-mm stripe.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-8M **CODE: (IS)**

DATE: 7/07/2000

SUBJECT: Reflective Pavement Markers and Adhesive for Pavement Markers

Section 720, Pavement Marking Materials, of the 1990 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 720.03.3.1.1 on page 720-3 and substitute:

907-720.03.3.2--Marker Type B through G. The Contractor shall furnish the Engineer three copies of the manufacturer's certification covering all pavement markers shipped to the project. The certification shall state that the raised pavement markers meet the applicable requirements of ASTM Designation: D 4280.

The pavement markers will be tentatively accepted on the basis of the manufacturer's certification. The Department reserves the right to obtain check samples as deemed necessary for determining compliance with this specification.

Change the number of Subsection 720.03.3.2 on page 720-3 to "**907-720.03.3.3**".

Delete Subsection 720.03.4.2 on page 720-4 and substitute the following:

907-720.03.4.2--Tolerances.

907-720.03.4.2.1--Tolerances For Marker Type A, H & I. At least 90% of the original sampling of each lot of markers shall pass all tests with the following exceptions:

> When less than 90% but more than 70% pass all tests, a resample of that lot will be allowed at the request of the Contractor. When less than 70% of the markers from the original sample comply with the requirements, the lot represented by the samples will be rejected and no resample will be allowed. Tolerances for resamples shall be in the same ratio as specified above.
>
> At least two of three specimens, randomly selected for strength, water absorption, and autoclave, and also the averages of the three, must pass the stated requirements; otherwise, three additional markers selected at random shall be tested, and if the same conditions for passing are not met for these latter three markers, the lot will be rejected.

907-720.03.4.2.2--Tolerances For Marker Type B through G. At least 90% of the check sampling of each lot of markers shall pass the strength test required in the Physical Properties Section of ASTM Designation: D 4280 with the following exceptions:

> When less than 90% but more than 70% pass the test, a resample of that lot will be allowed at the request of the Contractor. When less than 70% of the markers from the check sample comply with the requirements, the lot represented by the samples will be rejected and no resample will be allowed. Tolerances for resamples shall be in the same ratio as specified above.

Delete in toto Subsection 720.03.6 on pages 720-6 & 720-7 and substitute the following:

907-720.03.6--Reflective Pavement Markers. Reflective pavement markers shall be listed on the Department's "Approved Sources of Materials" and shall meet the applicable requirements of ASTM Designation: D 4280.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-5M **CODE: (SP)**

DATE: 1/09/2001

SUBJECT: Flexible Delineators

Section 721, Materials for Signing, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 721.07.1 beginning on page 721-12 and substitute the following:

907-721.07.1--Flexible Posts. Flexible posts for delineators shall be composed of high impact fiberglass reinforced composite, engineering blended plastic or thermosetting polymers which is reasonably unaffected by long term U.V. exposure.

Flexible posts for delineators must be one from the Department's "Approved Sources of Materials". Prior to use, the Contractor shall furnish the Engineer three copies of the manufacturer's certification for each shipment stating that the material furnished is of the same composition as that originally approved by the Department and that the material has not been changed or altered in any way.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-7M **CODE: (IS)**

DATE: 05/01/2002

SUBJECT: Materials for Signing

Section 721, Materials for Signing, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete the sixth paragraph of Subsection 721.02.2.1 on page 721-1 and substitute the following:

> Structural steel shapes, bars, and plates used for bracing, framing and other accessories, including base plates for steel posts, per ASTM Designation: A 36.

Delete the fourth paragraph of Subsection 721.02.2.2 on page 721-2 and substitute the following:

> Structural shapes, plates, and bars per ASTM Designation: A 36.

Delete the first paragraph of Subsection 721.02.5 beginning on page 721-2 and substitute the following:

907-721.02.5--Bolts, Nuts, Washers, Screws, and other Hardware. Except as otherwise specified, all bolts, nuts, washers, sheet metal screws, and machine screws shall be coated by the zinc chromate process. The zinc chromate process shall be in accordance with the requirements of ASTM Designation: B633. Bolts shall have a 13 millimeter head and shall meet the requirements of ASTM Designation: A307, Grade A. Nuts shall be self-locking and shall meet the requirements of ASTM Designation: A563. Flat washers shall be installed between the sign support and the self-locking nut and shall meet the requirements of ANSI Designation: B27.2. Sheet metal screws shall meet the requirements of ANSI Designation: B18.6.4. Machine screws shall meet the requirements of ANSI Designation: B18.6.3. Vinyl spacers shall be installed between the bolt head and the sign face and shall meet the following maximum dimensions: 22 mm outside diameter by 10 mm inside diameter by 1.5 mm thickness.

At the end of Subsection 721 on page 721-13, add the following:

907-721.10--Direct Applied Copy. Direct applied copy which is to be provided on guide directional signs, ground mounted or overhead , shall be directly applied to the sign face. Direct applied copy shall include letters, numerals, symbols and borders. The designs for capital and lower case shall be as required by the plans. All type of copy other than caps and lower case shall be as required by the plans. All type faces (fonts) shall conform to the recommendations contained in standards published by the Federal Highway Administration. All direct applied copy shall be attached to the sign face by means of pressure sensitive adhesive meeting the requirements of Subsection 721.06.5--Adhesive. Direct applied copy shall consist of encapsulated lens silver retroreflective sheeting meeting the requirements of Subsection 721.06--Reflective Sheeting.

All signs shall be delivered to the site of their erection in one piece with all bolts, rivets, moldings, extrusions, copy, and other required appurtenances thereto attached, complete and ready to be mounted to the sign support structure. Any required supplemental (temporary) supports required for stability during transport shall be firmly attached but easily removed prior to erection.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-8M **CODE: (IS)**

DATE: **01/18/2002**

SUBJECT: **Reflective Sheeting**

Section 721, Materials for Signing, of the 1996 Metric Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 721.06 beginning on page 721-4 and ending on page 721-12, and substitute the following:

907-721.06--Reflective Sheeting.

907-721.06.1--General. Retroreflective sheeting materials shall comply with all applicable requirements of ASTM Designation: D 4956, except as specifically modified herein, and be listed on the Department's "Approved Sources of Materials".

Reflective sheeting shall be one of the following types.

Type III — A high-intensity retroreflective sheeting. This shall be an encapsulated glass-bead or unmetallized microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure-sensitive adhesive backing.

Type VII — A super high-intensity retroreflective sheeting. This shall be an unmetallized microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure sensitive adhesive backing.

Type VIII — A super high-intensity retroreflective sheeting. This shall be an unmetallized microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure sensitive adhesive backing.

Type IX — A very-high intensity retroreflective sheeting. This shall be an unmetallized, microprismatic retroreflective material. This sheeting shall have a protected, pre-coated, pressure sensitive, adhesive backing.

All other retroreflective sheeting shall be as shown in the plans.

907-721.06.2--Performance Requirements. The retroreflective sheeting shall have the following minimum brightness values at 0.2° and 0.5° observation angle (in addition 1.0° for Type IX sheeting) expressed as average candelas per lux per square meter of material.

Sheetings and inks processed and applied in accordance with the manufacturer's recommendations, shall perform effectively for the number of years stated below. The sheeting will be considered unsatisfactory if it has deteriorated due to natural causes to the extent that: (1) the sign is ineffective for its intended purpose when viewed from a moving vehicle under normal day and night driving conditions or (2) the coefficient of retroreflection

is less than the minimum specified for that sheeting during the periods listed below. For screen printed transparent colored areas on white sheeting, the coefficients of retroreflection shall not be less than 70% of the values for the corresponding color in the table.

Type III Sheeting
Retain 85% of initial values listed in Table 1 through 7 years
Retain 80% of initial values listed in Table 1 between 7 & 10 years

Type VII Sheeting
Retain 85% of initial values listed in Table 2 through 7 years
Retain 80% of initial values listed in Table 2 between 7 & 10 years
Retain 50% of initial values listed in Table 2 through 3 years (Fluorescent Orange)

Type VIII Sheeting
Retain 85% of initial values listed in Table3 through 7 years
Retain 80% of initial values listed in Table 3 between 7 & 10 years
Retain 50% of initial values listed in Table 3 through 3 years (Fluorescent Orange)
Retain 80% of initial values listed in Table 3 through 7 years (Fluorescent Yellow/Green) (Fluorescent Yellow)

Type IX Sheeting
Retain 85% of initial values listed in Table 4 through 7 years
Retain 80% of initial values listed in Table 4 between 7 & 10 years
Retain 80% of initial values listed in Table 4 for 7 years (Fluorescent Yellow/Green)(Fluorescent Yellow)

MINIMUM COEFFICIENTS OF RETROREFLECTION
(Candela per lux per square meter) - cd/lx/m²
(Per ASTM E 810)

TABLE 1
Type III Sheeting

Observation Angle	Entrance Angle	White	Orange	Yellow	Green	Red	Blue	Brown
0.2°	-4°	250	10	170	45	45	20	12
0.2°	+30°	150	60	100	25	25	11	8.5
0.5°	-4°	95	30	62	15	15	7.5	5.0
0.5°	+30°	65	25	45	10	10	5.0	3.5

TABLE 2
Type VII Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Brown	Fluorescent Orange
0.2°	-4°	750	560	75	150	34	23	200
0.2°	+30°	430	320	43	86	20	10	85
0.5°	-4°	240	180	24	48	11	8	90
0.5°	+30°	135	100	14	27	6.0	4	50

TABLE 3
Type VIII Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Brown	Fluorescent Orange	Fluorescent Yellow/ Green	Fluorescent Yellow
0.2°	-4°	700	525	70	105	42	21	200	480	375
0.2°	+30°	325	245	33	49	20	10	85	240	170
0.5°	-4°	250	190	25	38	15	7.5	90	235	165
0.5°	+30°	115	86	12	17	7	3.5	50	110	85

TABLE 4
Type IX Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Fluorescent Yellow/ Green	Fluorescent Yellow
0.2°	-4.0°	380	285	38	76	17	325	240
0.2°	+30.0°	215	162	22	43	10	205	150
0.5°	-4.0°	240	180	24	48	11	240	165
0.5°	+30.0°	135	100	14	27	6.0	110	75
1.0°	-4.0°	80	60	8	16	3.6	65	45
1.0°	+30.0°	45	34	4.5	9	2.0	35	25

907-721.06.3--Certification. The Contractor shall require the supplier to furnish certified evidence and/or samples to the Engineer showing conformance to these requirements. Manufacturer's warranties or guarantees provided as customary trade practice shall be furnished the Department.

907-721.06.4--Color. Reflective sheeting shall meet the color requirements of ASTM Designation: D 4956. See Table 5 below for color specifications for fluorescent yellow green, fluorescent orange, and fluorescent yellow sheeting.

TABLE 5
Color Specification Limits for New Sheeting (Daytime)

Color	Chromaticity Coordinate 1 x	Chromaticity Coordinate 1 y	Chromaticity Coordinate 2 x	Chromaticity Coordinate 2 y	Chromaticity Coordinate 3 x	Chromaticity Coordinate 3 y	Chromaticity Coordinate 4 x	Chromaticity Coordinate 4 y	Total Luminance Factor Limit Y? Min.
Fluorescent Yellow Green	0.387	0.610	0.460	0.540	0.438	0.508	0.376	0.568	60%
Fluorescent Orange	0.562	0.350	0.645	0.355	0.570	0.429	0.506	0.404	30%
Fluorescent Yellow	0.521	0.424	0.557	0.442	0.479	0.520	0.454	0.491	40%

907-721.06.5--Adhesive. The retroreflective sheeting shall include a pre-coated pressure sensitive adhesive (ASTM Designation: D 4956, Class I) applied without the necessity of additional adhesive coats on the retroreflective sheeting or application surface.

The Class I adhesive shall be a pressure sensitive adhesive of the aggressive tack type requiring no heat solvent or other preparation for adhesion to smooth clean surfaces.

The protective liner attached to the adhesive shall be removed by peeling without soaking in water or other solutions and shall be easily removed after accelerated storage for four hours at 70ºC under a mass of 1750 kilograms per square meter.

907-721.06.6--Additional Contract Requirements. In addition to the above requirements, the following requirements are applicable only when the sheeting material is being purchased for use in the MDOT Sign Shop.

907-721.06.6.1--Sheeting Manufacturer's Replacement Obligation. Where it can be shown that retroreflective traffic signs with Type III, Type VII, Type VIII, or Type IX sheeting supplied and used according to the sheeting manufacturer's recommendations have not met the performance requirements, the sheeting manufacturer shall replace the sheeting required to restore the sign surface to its original effectiveness during the entire 10 years. In addition, during the first seven (7) years the manufacturer of Type III, Type VII, Type VIII, or Type IX sheeting shall cover the cost of restoring the sign surface to its original effectiveness at no cost to the Department for materials and labor for both sign manufacture and installation.

907-721.06.6.2--Technical Assistance Requirements.

Instruction and Training. The manufacturer supplying the retroreflective sheeting shall provide at no additional cost the services of a qualified technician for instruction and training at the sign manufacturing facility. This instruction shall be provided bi-annually or when requested, and shall include but not be limited to training films, material application, equipment operation, silk screening techniques, packaging, storage, and other proven sign shop practices as they apply to the retroreflective sheeting supplied by the manufacturer, and to assure that the resulting signs can comply with the applicable specifications.

Technical Service. The sheeting manufacturer shall, without additional cost to the Department, provide the sign shop with competent technical service and product information including service on screen printing problems with the inks furnished by the manufacturer.

Equipment. The manufacturer supplying the retroreflective sheeting shall provide technical assistance for the recommended sheeting application equipment and certify that trained personnel shall be available on 72 hours notice to render such service necessary to adjust ink consistency or otherwise modify the application of silk screen equipment to accommodate use of manufacturer's sheeting. "Service" is understood to mean the capability of calibration and trouble shooting, as well as the training and retaining of personnel as required.

907-721.06.6.3--Warranty. Any warranties prepared by the manufacturer shall be included with the bid documents.

SPECIAL PROVISION NO. 906-3

Training Special Provisions

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program training shall be provided as follows:

> The Contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under this special provision will be as indicated in the bid schedule of the contract.

In the event that a Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the State highway agency for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a

journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the State highway agency and the Federal Highway Administration. The State highway agency and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A

Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

SPECIAL PROVISION NO. 906-5

2005 MISSISSIPPI DEPARTMENT OF TRANSPORTATION ON-THE-JOB TRAINING PROGRAM

ALTERNATE TRAINING SPECIAL PROVISION

PURPOSE

The purpose of the On-The-Job Training (OJT) Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained.

INTRODUCTION

The Year 2005 OJT Program has been developed through the partnering efforts of the Road Builders of Mississippi, the Federal Highway Administration (FHWA) and the Mississippi Department of Transportation (MDOT).

The OJT Program has been designed for use by participating contractors and subcontractors in meeting their training needs. The objective of the OJT Program is to develop skilled workers in the skilled craft trade areas of highway construction who are sufficiently trained to be productive employees in the highway construction industry work force.

The success of the OJT Program will require that contractors and subcontractors follow uniform and basic procedures in training in keeping records of trainees' progress toward journey status, and in reporting trainees' successful completion or termination from the program.

FUNDING

MDOT will establish an annual OJT Fund in which, contractors and subcontractors may bill the Department directly for hours worked by trainees. The funding source of this money will be state and federal funds for MDOT's OJT Program.

PROCEDURE

Trainee positions will be selected by prime and sub contractors and will not be project specific. Provided below are some of the factors that will be used to establish the number of trainee positions each contracting year, they are:

- number of contracts let during a contracting year
- dollar volume
- type of project
- location
- available trainees
- training program(s) submitted by contractor

Each contractor will submit a yearly certification with regard to their participation in the OJT Program. This certification will also identify the number of trainees each prime or sub contractor intends to train on either federal or state funded highway projects.

DISBURSEMENT OF FUNDS

Contractors will be paid $3.00 rate for each hour of training performed by all trainees in an approved training program. Program reimbursements will be made directly to the prime or sub contractor. Request for payment will be submitted to the Office of Civil Rights for approval.

Contractors must complete the form providing the following information to be reimbursed.

Contractor's Name
Mailing Address

Trainee Name _____

Social Security Number _____

Type of Program _____

Total Number of Training Hours Required _____

Training Hours Completed for Reimbursement _____

Type of Statement: Monthly _____ Quarterly _____ Annual _____

Work Period or Time Frame	Project Number	Total Hours Worked By Project	Cumulative Hours in Program	Number of Hours to be paid on this Voucher

I hereby certify that this information is true... (Must have customary certification of information).

Signed by: _____ Date: _____

TRAINING PROGRAM APPROVAL

A. To use the OJT Program on highway construction projects, the contractor will notify the Department Office of Civil Rights using the Request for On-the-Job Training Program Approval. The notification must include the following information:

- Trainee Starting Date
- Project number (s) trainee starting on
- Training program (classification) to be used; and
- Anticipated date of trainee employment
- Number of classroom training hours by subject

B. If a contractor chooses to use a training program different from those listed in the OJT Program, or desires to train in a different classification, the training program must be submitted in its entirety for approval by the Department and FHWA. The training proposal must include the following:

1. The primary objective of the program: To provide training for minority, female and economically disadvantaged individuals for development to full journey status in the work classifications in which they are being trained.

2. The minimum number of hours and type of training the trainee will receive as it relates to each specific task required to achieve journey status.

3. Minimum wage.

4. Trainee certification of completion.

5. Records and reports submitted to the Office of Civil Rights on a quarterly basis.

DEPARTMENT RESPONSIBILITY

1. Department project staff will monitor trainees on the project. They will monitor payrolls for payment of correct wage rates and fringe benefits. The Office of Civil Rights will maintain a master list by contractor name, project number, trainee name and trainee social security number to aid project staff in monitoring trainees who work on multiple projects.

2. The Office of Civil Rights may elect to interview trainees periodically during the training period to assess their performance and training program. To facilitate the interviews, the Office of Civil Rights will contact contractors for the location of the trainees.

CONTRACTOR RESPONSIBILITY

1. Trainees must be identified on payrolls (i.e. dragline trainee).

2. When any trainee completes a program, or is terminated for a reason or reasons other than successful completion, the contractor must include the date of completion or an explanation for the termination and date of termination on the quarterly training report.

3. The contractor will assign each trainee to a particular person--either a supervisor or a journeyman/woman who is proficient in the craft the trainee is being trained in, to ensure that timely instructional experience is received by the trainee. This person, cooperating with the appropriate company personnel, will see that proper records and the total intended training hours are completed during the allocated number of hours set up in the classification criteria.

4. The contractor has the prerogative of terminating the training period of the trainee and advancing the trainee to journey status. Approval requests must be submitted to the Office of Civil Rights with an explanation (***refer to 2 above***).

5. Upon notification from the contractor, the Department will issue a certificate of completion to the trainee.

6. Trainees may be transferred to state-aid highway construction projects in order to complete the training program. If transfers are made the Office of Civil Rights must be notified on the Quarterly Reporting Form. All of the training hours completed by trainees will count toward overall program completion.

7. Program reimbursements will be made directly to the prime or sub contractor.

CLASSROOM TRAINING

1. Classroom training programs must be pre-approved by the Department, if the contractor wishes to count the hours toward the trainee's training program.

2. Contractors will be reimbursed for classroom training hours after the trainee has completed 20 hours of work on a highway construction project.

3. Reimbursement for classroom training will be limited to 40 hours per trainee per construction season.

- ***NOTE:*** All proposed classroom training must be submitted as part of the trainee's OJT training program.

WAGE RATE

1. The wage rate for all trainees is $5.15, during their OJT training program. Trainees shall be paid full fringe benefit amounts, where applicable. At the completion of the training program, the trainee shall receive the wages of a skilled journey.

2. For the purpose of this training program, a quarter does not represent three months. The first two quarters of a 500-hour training program would end after 250 hours. On a 750-hour training program, the first two quarters would end after 375 hours, the third quarter after 560 or an additional 186 hours or work and the fourth after 750 hours.

JOURNEY WORKER RATIO

The ratio of trainee to journey will be less than 1:4 and not more than 1:10.

RECRUITMENT AND SELECTION PROCEDURES

A. Prerequisites for Trainees

To be qualified for enrollment in the OJT Program, trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn and ability to follow instructions.

B. Licenses

Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B and C trucks. However, when an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;

2. Has had at least one year of driving experience; and

3. Is occupying the seat next to the driver.

C. Recruitment

1. Notices and posters setting forth the contractor's Equal Employment Opportunity Policy and availability of training programs will be placed in areas readily accessible to employees, applicants for employment and potential employees.

2. The contractor must target minority, female or economically disadvantaged trainees.

3. The contractor will conduct systematic and direct recruitment through public and private employee referral sources. Contractors must submit the trainee's name and completed application form to the Office of Civil Rights for review and approval. Approval must be obtained before the trainee can begin work under the training program.

4. Present employees will be screened for upgrading.

D. Selection

1. The selection and employment of a person by participating contractor shall qualify the person for the OJT Program.

2. Selection will be made without regard to race, color, religion, sex, age or national origin and shall be completely nondiscriminatory.

3. Employment of trainees will be in accordance with the work force requirements of the contractor. Each contractor will hire and train the trainees for uses in their own organization.

4. Written certification of individuals under the category of economically disadvantaged can be provided to the contractor at the time of the interview. This certification must then be provided to the Office of Civil Rights with the other required information as part of the approval process for trainees.

- ***NOTE:*** The OJT Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained. However, this program does not exclude trainees that are not members of the above groups.

S E C T I O N 9 0 5 - P R O P O S A L

Date _____

Mississippi Transportation Commission
Jackson, Mississippi

Sirs: The following proposal is made on behalf of _____
_____ of _____
_____
for constructing the following designated project(s) within the time(s) hereinafter specified.

The plans are composed of drawings and blue prints on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

The Specifications are the current Standard Specifications and Supplemental Specifications of the Mississippi Department of Transportation approved by the Federal Highway Administration, except where superseded or amended by the plans, Special Provisions and Notice(s) to Bidders attached hereto and made a part thereof.

I (We) certify that I (we) possess a copy of said Standard and Supplemental Specifications.

Evidence of my (our) authority to submit the Proposal is hereby furnished. The proposal is made without collusion on the part of any person, firm or corporation. I (We) certify that I (we) have carefully examined the Plans, the Specifications, including the Special Provisions and Notice(s) to Bidders, herein, and have personally examined the site of the work. On the basis of the Specifications, Special Provisions, Notice(s) to Bidders, and Plans, I (we) propose to furnish all necessary machinery, tools, apparatus and other means of construction and do all the work and furnish all the materials in the manner specified. I (We) understand that the quantities mentioned herein are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid, in accordance with the above.

Attached hereto is a certified check, cashier's check or Proposal Guaranty Bond in the amount as required in the Advertisement (or, by law).

INSTRUCTION TO BIDDERS: Alternate and Optional Items on Bid Schedule.

1. Two or more items entered opposite a single unit quantity WITHOUT DEFINITE DESIGNATION AS "ALTERNATE ITEMS" are considered as "OPTIONAL ITEMS". Bidders may or may not indicate on bids the Optional Item proposed to be furnished or performed WITHOUT PREJUDICE IN REGARD TO IRREGULARITY OF BIDS.

2. Items classified on the bid schedule as "ALTERNATE ITEMS" and/or "ALTERNATE TYPES OF CONSTRUCTION" must be preselected and indicated on bids. However, "Alternate Types of Construction" may include Optional Items to be treated as set out in Paragraph 1, above.

3. Optional items not preselected and indicated on the bid schedule MUST be designated in accordance with Subsection 907-102.06 prior to or at the time of execution of the contract.

4. Optional and Alternate items designated must be used throughout the project.

I (We) further propose to perform all "force account or extra work" that may be required of me (us) on the basis provided in the Specifications and to give such work my (our) personal attention in order to see that it is economically performed.

SECTION 905 -- PROPOSAL (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 **five percent (5%) of total bid** 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.

Respectfully Submitted,

DATE _____

_____
Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President	Address
Secretary	Address
Treasurer	Address

The following is my (our) itemized proposal.

SECTION 905

PROPOSAL (Sheet No. 2- 1)

PAVING MS HIGHWAY 605 FROM INTERSTATE 10 TO MS HIGHWAY 67, KNOWN AS FEDERAL AID PROJECT STP-SDP-9371-00(002) / 101214, IN THE COUNTY OF HARRISON, 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 CERTIFICATE LOCATED AT THE END OF THE BID SHEETS IS SIGNED

BID SCHEDULE

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
					DIRECT PAY ITEMS				
(10)	201-A			lump sum	Clearing and Grubbing	XXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXX	XXXX XXXX XXXX XXXX		
(20)	202-B		183	meter	Removal of Pipe (All Sizes)				
(30)	202-B		25 235	square meter	Removal of Asphalt Pavement (All Depths)				
(40)	202-B		4	each	Removal of Inlet and Junction Box (All Types & Sizes)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(50)	202-B		784	meter	Removal of Curb & Gutter (All Types)				
(60)	202-B		470	square meter	Removal of Concrete Driveways (All Depths)				
(70)	202-B		324	each	Removal of Raised Reflective Pavement Marker				
(71)	202-B		3890	meter	Removal of Traffic Stripe				
(80)	907-203-A	(E)	15 761	cubic meter	Unclassified Excavation (FM) (AH)				
(90)	907-203-EX	(E)	2550	cubic meter	Borrow Excavation (AH)(FME) (Class B7)				
(100)	203-G	(E)	9671	cubic meter	Excess Excavation (FM) (AH)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(110)	203-H	(E)	8999	cubic meter	Surplus Excavation (FM) (AH)				
(120)	206-A	(S)	980	cubic meter	Structure Excavation				
(130)	907-209-A		230 266	square meter	Geotextile Fabric Stabilization (Type V)				
(140)	212-B		266 507	square meter	Standard Ground Preparation				
(150)	907-213-A		120	metric ton	Agricultural Limestone				
(160)	213-B		27	metric ton	Combination Fertilizer (13-13-13)				
(170)	213-C		27	metric ton	Superphosphate				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(180)	214-A		613	kilogram	Seeding (Bermudagrass)				
(190)	214-A		453	kilogram	Seeding (Tall Fescue)				
(200)	214-A		613	kilogram	Seeding (Crimson Clover)				
(210)	214-A		746	kilogram	Seeding (Bahiagrass)				
(220)	215-A		120	metric ton	Vegetative Materials for Mulch				
(230)	216-A		2522	square meter	Solid Sodding				
(240)	907-217-A		181	square meter	Ditch Liner				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(250)	219-A		159	1000 liters	Watering	6	.0000	954	.00
(260)	221-A	(S)	295	cubic meter	Portland Cement Concrete Paved Ditch				
(270)	907-223-A		271	hectare	Mowing	75	.0000	20,325	.00
(271)	230-B		34	each	Tree Planting (Bald Cypress)				
(272)	230-B		22	each	Tree Planting, Live Oak				
(273)	230-B		18	each	Tree Planting (Southern Magnolia)				
(274)	230-B		24	each	Tree Planting, Swamp Red Maple				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(275)	230-B		13	each	Tree Planting (Tulip Tree)				
(276)	230-B		25	each	Tree Planting (White Oak)				
(280)	907-234-A		1366	meter	Temporary Silt Fence				
(290)	235-A		132	each	Temporary Erosion Checks				
(310)	304-C	(GM)	94 443	cubic meter	Granular Material (AEA) (Class 9, Group C)				
(311)	907-304-I	(GT)	86 431	metric ton	Crushed Stone Base (Size 825)				
(330)	907-306-A	(D) (A6)	208 487	square meter	Asphalt Drainage Course				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(340)	907-321-A		29	kilometer	150-mm In-Grade Preparation				
(350)	907-403-A	(B) (A1)	12 658	metric ton	Hot Mix Asphalt, HT, 9.5-mm mixture				
(360)	907-403-A	(B) (A1)	15 237	metric ton	Hot Mix Asphalt, HT, 12.5-mm mixture				
(370)	907-403-A	(B) (A1)	74 503	metric ton	Hot Mix Asphalt, HT, 19-mm mixture				
(380)	907-403-C	(B) (A1)	504	metric ton	Hot Mix Asphalt, HT, 19-mm mixture, Trench Widening				
(390)	907-403-D	(B) (A1)	24 387	metric ton	Hot Mix Asphalt, HT, 9.5-mm mixture, Polymer Modified				
(400)	907-403-D	(B) (A1)	28 677	metric ton	Hot Mix Asphalt, HT, 12.5-mm mixture, Polymer Modified				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(410)	406-A		722	square meter	Cold Milling of Bituminous Pavement (All Depths)				
(420)	408-A	(A3)	207 660	liter	Asphalt for Prime Coat, Cut-Back MC-70 or Emulsified EA-1				
(430)	413-D		100	meter	Sawing Cleaning and Sealing Joints				
(440)	907-423-A		44	kilometer	Rumble Strips (Ground In)				
(450)	501-E		167	meter	Expansion Joints (Without Dowels)				
(460)	907-501-K		978	square meter	Transverse Grooving				
(470)	502-A	(C)	978	square meter	Reinforced Cement Concrete Bridge End Pavement				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(471)	907-503-C		61	meter	Saw Cut (Full Depth)				
(480)	601-B	(S)	44	cubic meter	Class "B" Structural Concrete, Minor Structures				
(490)	602-A	(S)	1836	kilogram	Reinforcing Steel				
(500)	907-603-ALT	(S)	108	meter	450-mm Type A Alternate Pipe				
(510)	603-C-A	(S)	112	meter	450-mm Reinforced Concrete Pipe, Class III				
(520)	603-C-A	(S)	114	meter	600-mm Reinforced Concrete Pipe, Class III				
(530)	603-C-A	(S)	210	meter	750-mm Reinforced Concrete Pipe, Class III				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(531)	603-C-A	(S)	28	meter	900-mm Reinforced Concrete Pipe, Class III				
(540)	603-C-A	(S)	34	meter	1200-mm Reinforced Concrete Pipe, Class III				
(550)	603-C-B	(S)	3	each	450-mm Reinforced Concrete End Section				
(560)	603-C-B	(S)	2	each	600-mm Reinforced Concrete End Section				
(570)	603-C-B	(S)	1	each	900-mm Reinforced Concrete End Section				
(580)	603-C-B	(S)	4	each	1200-mm Reinforced Concrete End Section				
(590)	603-C-E	(S)	23	meter	1300-mm x 795-mm Concrete Arch Pipe, Class A III				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(600)	603-C-F	(S)	2	each	1300-mm x 795-mm Concrete Arch Pipe End Section				
(610)	603-R-A	(S)	22	meter	600-mm Pipe Removed and Relaid				
(620)	603-R-A	(S)	6	meter	1200-mm Pipe Removed and Relaid				
(630)	604-A		920	kilogram	Castings				
(640)	604-B		630	kilogram	Gratings				
(650)	907-605-FF	(S)	52 960	meter	Edge Drain, Complete-in-Place				
(660)	907-605-GG	(S)	5485	meter	Edge Drain Outlets/Vents, Complete-in-Place				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(670)	907-605-HH	(S)	26 480	meter	Edge Drain & Edge Drain Outlet/Vent Inspection				
(680)	606-B		732	meter	Guard Rail (Class A, Type 1), Metal Post				
(690)	606-D		12	each	Guard Rail, Bridge End Section, Type I, Metal Post				
(700)	907-606-E		12	each	Guard Rail, Terminal End Section				
(710)	609-D	(S)	3084	meter	Combination Concrete Curb and Gutter Type 2				
(720)	609-D	(S)	335	meter	Combination Concrete Curb and Gutter Type 3A				
(730)	614-A	(S)	324	square meter	Concrete Driveway (Without Reinforcement)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(740)	616-A	(S)	1443	square meter	Concrete Median and/or Island Pavement (100-mm)				
(750)	616-A	(S)	334	square meter	Concrete Median and/or Island Pavement (250-mm)				
(760)	617-A		9	each	Right-of-Way Markers (Type II)				
(770)	907-619-A1		973	meter	Temporary Traffic Stripe (Continuous White)				
(780)	907-619-A1		32	meter	Temporary Traffic Stripe (Continuous White) (Type 1 Tape)				
(790)	907-619-A2		7693	meter	Temporary Traffic Stripe (Continuous Yellow)				
(800)	907-619-A2		904	meter	Temporary Traffic Stripe (Continuous Yellow) (Type 1 Tape)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(810)	907-619-A3		340	meter	Temporary Traffic Stripe, Skip White				
(820)	907-619-A4		284	meter	Temporary Traffic Stripe, Skip Yellow, Type 1 Tape				
(830)	907-619-A5		21 369	meter	Temporary Traffic Stripe (Detail)				
(840)	907-619-A5		842	meter	Temporary Traffic Stripe (Detail) (Type 1 Tape)				
(850)	907-619-A6		28	square meter	Temporary Traffic Stripe (Legend)				
(860)	907-619-A6		27	meter	Temporary Traffic Stripe (Legend) (Type 1 Tape)				
(870)	907-619-A6		6	square meter	Temporary Traffic Stripe (Legend) (Type 1 Tape)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(880)	907-619-C6		33	each	Red-Clear Reflective High Performance Raised Marker				
(890)	907-619-C7		3842	each	Two-Way Yellow Reflective High Performance Raised Marker				
(900)	619-D1		131	square meter	Standard Roadside Construction Signs (less than 0.9 square meter)				
(910)	619-D2		262	square meter	Standard Roadside Construction Signs (0.9 square meter or more)				
(920)	907-619-E3		2	each	Changeable Message Sign				
(930)	619-G4		616	meter	Barricades (Type III) (Single Faced)				
(940)	619-G4		2	meter	Barricades (Type III) (Double Faced)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(950)	619-G4		7	meter	Barricades (Type III) (Single Faced) (Permanent)				
(960)	619-G5		483	each	Free Standing Plastic Drums				
(970)	619-G7		8	each	Warning Lights (Type "B")				
(980)	907-622-A		1	each	Engineer's Field Office Building (Type 2)				
(990)	907-626-AA		31	kilometer	150-mm Thermoplastic Traffic Stripe (Skip White)(2.25-mm min.)				
(1000)	907-626-BB		1	kilometer	150-mm Thermoplastic Traffic Stripe (Continuous White)(2.25-mm min.)				
(1010)	907-626-CC		35	kilometer	150-mm Thermoplastic Edge Stripe (Continuous White)(1.50-mm min.)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1020)	907-626-EE		6	kilometer	150-mm Thermoplastic Traffic Stripe (Continuous Yellow)(2.25-mm min.)				
(1030)	907-626-FF		26	kilometer	150-mm Thermoplastic Edge Stripe (Continuous Yellow)(1.50-mm min.)				
(1040)	907-626-GG		11 737	meter	Thermoplastic Detail Stripe (150-mm Equivalent Length)(White)(2.25-mm min.)				
(1050)	907-626-GG		7703	meter	Thermoplastic Detail Stripe (150-mm Equivalent Length)(Yellow)(2.25-mm min.)				
(1060)	907-626-HH		1178	meter	Thermoplastic Legend (White)(3.00-mm min.)				
(1070)	907-626-HH		89	square meter	Thermoplastic Legend (White)(3.00-mm min.)				
(1080)	907-627-K		2965	each	Red-Clear Reflective High Performance Raised Markers				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1090)	907-627-L		868	each	Two-Way Yellow Reflective High Performance Raised Markers				
(1100)	907-628-A		2355	meter	150-mm Cold Plastic Traffic Stripe, Skip White				
(1110)	907-628-BB		2355	meter	150-mm Cold Plastic Traffic Stripe, Continuous White				
(1120)	907-628-EE		2355	meter	150-mm Cold Plastic Traffic Stripe (Continuous Yellow)				
(1130)	907-628-H		2	square meter	Cold Plastic Legend (White)				
(1140)	630-A		34	square meter	Standard Roadside Signs (Sheet Aluminum, 2.03-mm Thickness)				
(1150)	630-A		142	square meter	Standard Roadside Signs (Sheet Aluminum, 3.18-mm Thickness)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1160)	630-B		113	square meter	Interstate Directional Signs (Bolted Extruded Aluminum Panels, Ground Mounted)				
(1170)	630-C		1035	meter	Steel U-Section Posts (4.46 kg/m)				
(1180)	630-D		174	meter	Structural Steel Beams (W150 x 14)				
(1190)	630-E		136	kilogram	Structural Steel Angles & Bars (12 mm x 63 mm Flat Bars)				
(1200)	630-E		19	kilogram	Structural Steel Angles & Bars (90 mm x 90 mm x 6 mm Angles)				
(1210)	630-E		65	kilogram	Structural Steel Angles & Bars (100 mm x 100 mm x 8 mm Angles)				
(1220)	630-F		34	each	Delineators (Flexible Post Mounted)(Crossover)(Type I)(Green)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1230)	630-F		34	each	Delineators (Flexible Post Mounted)(Crossover)(Type I)(Yellow)				
(1240)	630-F		48	each	Delineators (Guard Rail)(White)				
(1250)	630-F		48	each	Delineators (Guard Rail)(Yellow)				
(1260)	630-F		105	each	Delineators (Post Mounted)(Single Yellow)				
(1270)	630-F		6	each	Delineators (Post Mounted)(Double Yellow)				
(1280)	630-F		116	each	Delineators (Post Mounted)(Single White)				
(1290)	630-F		135	each	Delineators (Post Mounted)(Double White)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1300)	630-K		231	meter	Welded & Seamless Steel Pipe Posts (DN 100)				
(1310)	908-635-A		750	meter	Vehicle Loop Assemblies				
(1320)	907-636-A		1026	meter	Shielded Cable, AWG #18, 4 Conductor				
(1330)	908-638-A		1	each	Loop Detector Amplifier, (Single Channel)				
(1340)	908-638-A		6	each	Loop Detector Amplifier, Card Rack Mounted (4 Channel)				
(1350)	907-639-A		4	each	Traffic Signal Equipment Pole (Type 1) (Wood)				
(1360)	908-639-A		1	each	Traffic Signal Equipment Pole (Type II) (5.2-m Shaft) (18.3-m Arm)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1370)	908-639-A		1	each	Traffic Signal Equipment Pole (Type II) (5.2-m Shaft) (13.7-m Arm)				
(1380)	908-639-A		1	each	Traffic Signal Equipment Pole (Type II) (5.2-m Shaft) (12.2-m Arm)				
(1390)	908-639-A		1	each	Traffic Signal Equipment Pole (Type II) (5.2-m Shaft) (16.8-m Arm)				
(1400)	908-639-A		2	each	Traffic Signal Equipment Pole (Type II) (5.2-m Shaft) (15.2-m Arm)				
(1410)	908-639-A		2	each	Traffic Signal Equipment Pole (Type II) (5.2-m Shaft) (10.7-m Arm)				
(1420)	907-640-B		16	each	Traffic Signal Heads (Type 1) LED				
(1430)	907-640-B		6	each	Traffic Signal Heads (Type 3) LED				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1440)	907-640-B		3	each	Traffic Signal Heads (Type 5) LED				
(1450)	907-640-B		3	each	Traffic Signal Heads (Type 7) LED				
(1460)	908-642-A		1	each	Solid State Traffic Actuated Controllers (Type 5A)				
(1470)	908-642-A		2	each	Solid State Traffic Actuated Controllers (Type 8A)				
(1480)	908-644-A		8	each	Optical Detector				
(1490)	908-644-B		490	meter	Optical Detector Cable				
(1500)	908-644-C		2	each	Phase Selector (4 Channel)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1510)	908-646-A		lump sum		Removal of Existing Traffic Signals, Controller & Hardware	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX	XXXX XXXX XXXX XXXX		
(1520)	908-647-A		8	each	Pullbox (Type 1)				
(1530)	908-647-A		10	each	Pullboxes (Type 2)				
(1540)	907-648-A		2	each	Radio Interconnect (Installed in New Controller Cabinet)				
(1550)	908-666-B		426	meter	Electric Cable (Underground in Conduit)(IMSA 20-1)(AWG 14), 7 Conductor				
(1560)	908-666-C		305	meter	Electric Cable (Aerial Supported)(IMSA 20-1)(AWG 14), 7 Conductor				
(1570)	908-668-A		427	meter	Traffic Signal Conduit (Underground) (Type IV) (DN 25)				

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
(1580)	907-668-E		235	meter	Traffic Signal Conduit (Underground Drilled or Jacked), Rolled Pipe, (50 mm)				
(1590)	907-668-E		88	meter	Traffic Signal Conduit (Underground Drilled or Jacked), Rolled Pipe, (75 mm)				

SUBTOTAL - DIRECT PAY ITEMS.....$_____

REF. NO.	PAY ITEM NO.	ADJ. CODE	APPROX. QUANTITY	UNIT	DESCRIPTION	UNIT PRICE DOLLAR	UNIT PRICE CENT	ITEM TOTAL DOLLAR	ITEM TOTAL CENT
					DEPENDENT PAY ITEMS				
(1600)	618-A			lump sum	Maintenance of Traffic	XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
(1610)	620-A			lump sum	Mobilization	XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
(1620)	907-699-A			lump sum	Roadway Construction Stakes	XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		
						XXXXXXXXXXX	XXXX		

SUBTOTAL - DEPENDENT ITEMS.....$_____

TOTAL BID - DIRECT AND DEPENDENT ITEMS.....$_____

COMPLETE ITEM NOS. 1, 2, AND/OR 3 AS APPROPRIATE. SEE NOTICE TO BIDDERS NO.724M AND SUPPLEMENT.

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): YES _____

*** 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

CONDITIONS FOR COMBINATION BID

If a bidder elects to submit a combined bid for two or more of the contracts listed for this month's letting, the bidder must complete and execute these sheets of the proposal in each of the individual proposals to constitute a combination bid. In addition to this requirement, each individual contract shall be completed, executed and submitted in the usual specified manner.

Failure to execute this Combination Bid Proposal in each of the contracts combined will be just cause for each proposal to be received and evaluated as a separate bid.

* *

COMBINATION BID PROPOSAL

I. This proposal is tendered as one part of a Combination Bid Proposal utilizing option ___* of Subsection 102.11 on the following contracts:

* Option to be shown as either (a), (b), or (c).

	Project No.	County		Project No.	County
1.	____________	____________	6.	____________	____________
2.	____________	____________	7.	____________	____________
3.	____________	____________	8.	____________	____________
4.	____________	____________	9.	____________	____________
5.	____________	____________	10.	____________	____________

A. If option (a) has been selected, then go to II, and sign Combination Bid Proposal.

B. If option (b) has been selected, then complete the following, go to II, and sign Combination Bid Proposal.

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
1. _____	_____ _____	_____ _____	_____ _____	_____ _____	
2. _____	_____ _____	_____ _____	_____ _____	_____ _____	
3. _____	_____ _____	_____ _____	_____ _____	_____ _____	
4. _____	_____ _____	_____ _____	_____ _____	_____ _____	
5. _____	_____ _____	_____ _____	_____ _____	_____ _____	
6. _____	_____ _____	_____ _____	_____ _____	_____ _____	
7. _____	_____ _____	_____ _____	_____ _____	_____ _____	
8. _____	_____ _____	_____ _____	_____ _____	_____ _____	

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
9. _____	_____ _____	_____ _____	_____ _____	_____ _____	
10. _____	_____ _____	_____ _____	_____ _____	_____ _____	

C. If option (c) has been selected, then initial and complete one of the following, go to II. and sign Combination Bid Proposal.

_____ I (We) desire to be awarded work not to exceed a total monetary value of $ _____.

_____ I (We) desire to be awarded work not to exceed _____ number of contracts.

II. It is understood that the Mississippi Transportation Commission not only reserves the right to reject any and all proposals, but also the right to award contracts upon the basis of lowest separate bids or combination bids most advantageous to the State.

It is further understood and agreed that the Combination Bid Proposal is for comparison of bids only and that each contract shall operate in every respect as a separate contract in accordance with its proposal and contract documents.

I (We), the undersigned, agree to complete each contract on or before its specified completion date.

SIGNED _____

_____

_____

Certification with regard to the Performance of Previous Contracts or Subcontracts subject to the Equal Opportunity Clause and the filing of Required Reports

The Bidder ____, proposed Subcontractor ____, hereby certifies that he has ____, has not ____, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10925, 11114, or 11246, and that he has ____, has not ____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

_____
(COMPANY)

BY _____

_____
(TITLE)

DATE: _____

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the Equal Opportunity Clause. Contracts and Subcontracts which are exempt from the Equal Opportunity Clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime Contractors and Subcontractors who have participated in a previous contract or subcontract subject to the Executive orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such Contractors submit a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION
(Execute in duplicate)

State of Mississippi

County of _____

I, _____,
(Name of person signing certification)

individually, and in my capacity as _____ of
(Title)

_____ do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____

_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **STP-SDP-9371-00(002) / 101214**,

in **Harrison** County(ies), Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and

d) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently $25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than $10,000 and not more than $100,000. The bidder shall include the language of the certification in all subcontracts exceeding $100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on _____ _____

Signature

(11/23/92F)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION
(Execute in duplicate)

State of Mississippi

County of _____

I, _____,
(Name of person signing certification)

individually, and in my capacity as _____ of
(Title)

_____ do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____

_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **STP-SDP-9371-00(002) / 101214**,

in **Harrison** County(ies), Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

e) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

f) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

g) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and

h) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently $25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

3) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

4) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than $10,000 and not more than $100,000. The bidder shall include the language of the certification in all subcontracts exceeding $100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on _____ _____

Signature

(11/23/92F)

S E C T I O N 9 0 2

CONTRACT FOR **STP-SDP-9371-00(002) / 101214**

LOCATED IN THE COUNTY(IES) OF **Harrison**

STATE OF MISSISSIPPI,

COUNTY OF HINDS

This contract entered into by and between the Mississippi Transportation Commission on one hand, and the undersigned contractor, on the other witnesseth;

That, in consideration of the payment by the Mississippi Transportation Commission of the prices set out in the proposal hereto attached, to the undersigned contractor, such payment to be made in the manner and at the time of times specified in the specifications and the special provisions, if any, the undersigned contractor hereby agrees to accept the prices stated in the proposal in full compensation for the furnishing of all materials and equipment and the executing of all the work contemplated in this contract.

It is understood and agreed that the advertising according to law, the Advertisement, the instructions to bidders, the proposal for the contract, the specifications, the revisions of the specifications, the special provisions, and also the plans for the work herein contemplated, said plans showing more particularly the details of the work to be done, shall be held to be, and are hereby made a part of this contract by specific reference thereto and with like effect as if each and all of said instruments had been set out fully herein in words and figures.

It is further agreed that for the same consideration the undersigned contractor shall be responsible for all loss or damage arising out of the nature of the work aforesaid; or from the action of the elements and unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work, exceptions being those specifically set out in the contract; and for faithfully completing the whole work in good and workmanlike manner according to the approved Plans, Specifications, Special Provisions, Notice(s) to Bidders and requirements of the Mississippi Department of Transportation.

It is further agreed that the work shall be done under the direct supervision and to the complete satisfaction of the Executive Director of the Mississippi Department of Transportation, or his authorized representatives, and when Federal Funds are involved subject to inspection at all times and approval by the Federal Highway Administration, or its agents as the case may be, or the agents of any other Agency whose funds are involved in accordance with those Acts of the Legislature of the State of Mississippi approved by the Governor and such rules and regulations issued pursuant thereto by the Mississippi Transportation Commission and the authorized Federal Agencies.

The Contractor agrees that all labor as outlined in the Special Provisions may be secured from list furnished by

It is agreed and understood that each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and this contract shall be read and enforced as though it were included herein, and, if through mere mistake or otherwise any such provision is not inserted, then upon the application of either party hereto, the contract shall forthwith be physically amended to make such insertion.

The Contractor agrees that he has read each and every clause of this Contract, and fully understands the meaning of same and that he will comply with all the terms, covenants and agreements therein set forth.

Witness our signatures this the _____ day of _____, _____.

_____
Contractor (s)

By _____ MISSISSIPPI TRANSPORTATION COMMISSION

Title _____ By _____
Signed and sealed in the presence of: Executive Director
(names and addresses of witnesses)

_____ _____
Secretary to the Commission

Award authorized by the Mississippi Transportation Commission in session on the ____ day of _____, _____, Minute Book No. _____, Page No. _____.

Revised 8/06/2003

S E C T I O N 9 0 3

CONTRACT BOND FOR: **STP-SDP-9371-00(002) / 101214**

LOCATED IN THE COUNTY(IES) OF: **Harrison**

STATE OF MISSISSIPPI,

COUNTY OF HINDS

Know all men by these presents: that we, _____

_____ Principal, a _____

residing at _____ in the State of _____

and _____

residing at _____ in the State of _____,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, are held and firmly bound unto the State of Mississippi in the sum of _____

_____

($_____) Dollars, lawful money of the United States of America, to be paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or assigns jointly and severally by these presents.

Signed and sealed this the _____ day of _____ A.D. _____.

The conditions of this bond are such, that whereas the said _____

_____

principal, has (have) entered into a contract with the Mississippi Transportation Commission, bearing the date of _____ day of _____ A.D. _____ hereto annexed, for the construction of certain projects(s) in the State of Mississippi as mentioned in said contract in accordance with the Contract Documents therefor, on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

Now therefore, if the above bounden _____

_____ in all things shall stand to and abide by and well and truly observe, do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract, contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the manner and form and furnish all of the material and equipment specified in said contract in strict accordance with the terms of said contract which said plans, specifications and special provisions are included in and form a part of said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in Subsection 109.11 of the approved specifications, and save harmless said Mississippi Transportation Commission from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud, or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employees in the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by the State at the instance of the Mississippi Transportation Commission or any officer of the State authorized in such cases, for double any amount in money or property, the State may lose or be overcharged or otherwise defrauded of, by reason of wrongful or criminal act, if any, of the Contractor(s), his (their) agents or

employees, and shall promptly pay the said agents, servants and employees and all persons furnishing labor, material, equipment or supplies therefor, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; with the additional obligation that such Contractor shall promptly make payment of all taxes, licenses, assessments, contributions, damages, any liquidated damages which may arise prior to any termination of said principal's contract, any liquidated damages which may arise after termination of the said principal's contract due to default on the part of said principal, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision: in the course of the performance of said work and in accordance with Sections 31-5-51 et seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of the Executive Director of the Mississippi Department of Transportation, all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with the terms thereof and all of the expense and cost and attorney's fee that may be incurred in the enforcement of the performance of said contract, or in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

Witness our signatures and seals this the _____ day of _____ A.D. _____.

_____	_____
(Contractors) Principal	Surety
By _____	By _____
	(Signature) Attorney in Fact
	_____
Title _____	_____
(Contractor's Seal)	(Name and Address of Local (Mississippi) Representative)
	(Surety Seal)

OCR-485
REV. 10/02

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
OFFICE OF CIVIL RIGHTS
JACKSON, MISSISSIPPI

LIST OF FIRMS SUBMITTING QUOTES

I/we received quotes from the following firms on Project No: **STP-SDP-9371-00(002) / 101214**
County: **Harrison**

Disadvantaged Business Enterprise (DBE) Regulations as stated in 49 CFR 26.11 require the Mississippi Department of Transportation (MDOT) to create and maintain a comprehensive list of all firms quoting/bidding subcontracts on prime contracts and quoting/bidding subcontracts on federally-funded transportation projects. For every firm, we require the following information:

Firm Name: ____________________
Contact Name/Title: ____________________
Firm Mailing Address ____________________
Phone Number: ____________________
_____ DBE Firm _____ Non-DBE Firm

Firm Name: ____________________
Contact Name/Title: ____________________
Firm Mailing Address ____________________
Phone Number: ____________________
_____ DBE Firm _____ Non-DBE Firm

Firm Name: ____________________
Contact Name/Title: ____________________
Firm Mailing Address ____________________
Phone Number: ____________________
_____ DBE Firm _____ Non-DBE Firm

Firm Name: ____________________
Contact Name/Title: ____________________
Firm Mailing Address ____________________
Phone Number: ____________________
_____ DBE Firm _____ Non-DBE Firm

Firm Name: ____________________
Contact Name/Title: ____________________
Firm Mailing Address ____________________
Phone Number: ____________________
_____ DBE Firm _____ Non-DBE Firm

____
SUBMITTED BY (Signature)

____
FIRM NAME

Submit this form to Contract Administration as a part of your bid package. If this form is not included as part of the bid packet, your bid will be deemed irregular. For further information about this form, call Mississippi DOT's Office of Civil Rights at (601) 359-7466; FAX (601) 576-4504. Please make copies of this form when needed and also add those copies to the bid package.

FORM CSD-606
Rev. 05 / 2004

YEAR 2005 PROGRESS SCHEDULE
FOR USE WITH COLUMN "B" IN THE TABLE OF TIME UNITS

YEAR 2006

PROJECT NUMBER STP-SDP-9371-00(002) / 101214
COUNTY Harrison County

WORK PHASE NO.	WORK PHASE DESCRIPTION	REFERENCE NUMBERS	PHASE VALUE	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	NO.	AVTU
1	Miscellaneous	10-120,140-290,410-640, 670-980,1220-1290 & 1600-1620		0																									
2	In-Grade Prep. & Base	130,311-340 & 650-660				5									142														
3	HMA & Gran. Mat'l	310,350-400						25		55							158												
4	Traffic Signals, Signs & Stripe	990-1210 & 1300-1590																											
						YEAR 2007																							
con't 1	Miscellaneous							362																					
con't 2	In-Grade Prep. & Base																												
con't 3	HMA & Gran. Mat'l						352																						
con't 4	Traffic Signals, Signs, & Stripe						337	362																					
		LET: February 22, 2005 NOA: March 9, 2005																											
		NTP& BCT: April 7,2005 TU: 362																											
		GCG																											

MONTH	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	170 TIME UNITS PER YEAR
TIME UNITS PER MONTH	5	7	9	14	19	20	22	22	20	17	11	4	5	7	9	14	19	20	22	22	20	17	11	4	
CUMULATIVE TIME UNITS																									

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

HAUL PERMIT FOR BRIDGES

WITH

POSTED WEIGHT LIMITS

DATE: _____

PROJECT: STP-SDP-9371-00(002) / 101214

COUNTIES: Harrison

LOCATION: MS HWY. 605 FROM I-10 TO MS HWY. 67.

A permit is issued to _____ for transporting loads exceeding the posted limit for any such bridge located on State designated routes within the project termini provided that such transport vehicles comply with all other governing statutory weight limits.

This permit is valid on all State designated routes from the point of origin to the point of delivery for materials and equipment utilized in construction of said project and also valid for sub-contractors and vendors upon written permission of the Contractor. The permit is non-transferable and no other haul permit for posted bridges will be issued to other individuals, vendors, or companies for construction of this project.

A copy of this signed permit shall be carried in all vehicles operating under the authority of this permit and also a copy of the Contractor's written permission when the vehicle is other than Contractor owned.

In accordance with State law, the above named Contractor will be liable for damages directly attributable to vehicles operating under this permit.

_____

EXECUTIVE DIRECTOR