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SM No. CMP300000961

# PROPOSAL AND CONTRACT DOCUMENTS

## FOR THE CONSTRUCTION OF

8

Level and Seal on Various Routes throughout the District, known as State Project No. MP-3000-00(096) / 305215301 in District 3. Project Completion: October 3, 2014

## STATE DELEGATED

## NOTICE

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

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

## **SECTION 900**

OF THE CURRENT 2004 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION JACKSON, MISSISSIPPI

#### **BIDDER CHECK LIST** (FOR INFORMATION ONLY)

- All unit prices have been entered into Expedite Bid in accordance with Subsection 102.06 of the Mississippi Standard Specifications for Road and Bridge Construction.
- **Expedite bid** 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 <u>signed</u>.
- \_\_\_\_\_ The last sheet of the Expedite bid sheets of SECTION 905--PROPOSAL has been <u>signed</u>.
- 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 <u>signed</u>.
- \_\_\_\_\_ The Certification regarding Non-Collusion, Debarment and Suspension, etc. has been <u>executed in duplicate</u>.
- 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. A bid bond has been <u>signed by the bidder</u> and has also been <u>signed or countersigned by a Mississippi Agent or Qualified</u> <u>Nonresident Agent for the Surety</u> with Power of Attorney attached.
- ON FEDERAL FUNDED PROJECTS, the Notice To Bidders regarding DUNS Requirements has been completed and included in the contract documents.
- 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 MDOT flash drive with completed EBS file, proposal and contract documents in its entirety in a sealed envelope. <u>DO NOT</u> 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.

#### **TABLE OF CONTENTS**

#### **PROJECT:** MP-3000-00(096) / 305215301 – District Wide (3)

901--Advertisement

- 904--Notice to Bidders: Governing Specifications - #1 Final Cleanup - #3 Errata & Modifications to 2004 Standard Specifications - # 1405 Federal Bridge Formula - # 1928 Reduced Speed Limit Signs - # 2937 Temporary Traffic Paint - # 3131 Type III Barricade Rails - # 3655 Petroleum Products Base Price - # 3893 Standard Drawings - # 4100 Safety Apparel - # 4214 Electronic Addendum Process - # 4526 Manual on Uniform Traffic Control Devices (MUTCD) - # 4565 Adjustments For Bituminous Materials - # 4612 Payroll Requirements - # 4661 Questions Regarding Bidding - # 4987 Contract Time - # 4988 Scope of Work - # 4989
- 907-101-4: Definitions
- 907-102-10: Bidding Requirements and Conditions
- 907-103-8: Award and Execution of Contract
- 907-104-5: Scope of Work
- 907-105-7: Control of Work, <u>W/ Supplement</u>
- 907-107-13: Legal Relations & Responsibility to Public
- 907-108-30: Prosecution and Progress
- 907-109-6: Measurement and Payment, <u>W/ Supplement</u>
- 907-304-13: Granular Courses
- 907-405-8: Polymer Modified Asphalt Rejuvenating Scrub Seal
- 907-410-7: Bituminous Surface Treatment
- 907-411-4: Ultra-Thin Asphalt Pavement (UTAP)
- 907-618-9: Placement of Temporary Traffic Stripe
- 907-702-4: Polymer Modified Cationic Emulsified Asphalt
- 907-703-11: Aggregates
- 907-710-1: Fast Dry Solvent Traffic Paint

SECTION 905 - PROPOSAL, PROPOSAL BID ITEMS,

COMBINATION BID PROPOSAL,

STATE BOARD OF CONTRACTORS REQUIREMENTS,

STATE CERTIFICATION REGARDING NON-COLLUSION, DEBARMENT AND SUSPENSION, SECTION 902- CONTRACT FORM, AND SECTION 903 - CONTRACT BOND FORMS,

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

#### **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 <u>10:00 o'clock A.M.</u>, <u>Wednesday, May 28, 2014</u>, and shortly thereafter publicly opened on the Sixth Floor for:

Level and Seal on Various Routes throughout the District, known as State Project No. MP-3000-00(096) / 305215301 in District 3.

The attention of bidders is directed to the predetermined minimum wage rate set by the U. S. Department of Labor under the Fair Labor Standards Act.

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, age, disability, religion or national origin in consideration for an award.

The specifications are on file in the offices of the Mississippi Department of Transportation.

Bid proposals must be purchased online at <u>https://shopmdot.ms.gov</u>. Specimen proposals may be viewed and downloaded online at no cost at <u>http://mdot.ms.gov</u> or purchased online. Proposals are available at a cost of Ten Dollars (\$10.00) per proposal plus a small convenience fee. <u>Cash or checks will not be accepted as payment</u>.

Bid bond, signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent, with Power of Attorney attached, 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.

MELINDA L. MCGRATH EXECUTIVE DIRECTOR

#### **SECTION 904 - NOTICE TO BIDDERS NO. 1**

CODE: (IS)

#### DATE: 05/03/2004

#### **SUBJECT:** Governing Specifications

The current (2004) Edition of the 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 MDOT 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.

In the event the plans or proposal contain references to the 1990 Edition of the Standard Specifications for Road and Bridge Construction, it is to be understood that such references shall mean the comparable provisions of the 2004 Edition of the Standard Specifications.

#### SECTION 904 - NOTICE TO BIDDERS NO. 3

CODE: (SP)

DATE: 05/03/2004

#### SUBJECT: Final Clean-Up

Immediately prior to final inspection for release of maintenance, the Contractor shall pick up, load, transport and properly dispose of all litter from the entire highway right-of-way that is within the termini of the project.

Litter shall include, but not be limited to, solid wastes such a glass, paper products, tires, wood products, metal, synthetic materials and other miscellaneous debris.

Litter removal is considered incidental to other items of work and will not be measured for separate payment.

### SECTION 904 - NOTICE TO BIDDERS NO. 1405

CODE: (IS)

DATE: 03/15/2007

# SUBJECT: ERRATA AND MODIFICATIONS TO THE 2004 STANDARD SPECIFICATIONS

Page 1	Subsection	Change
101	201.01	In the second sentence of the first paragraph, change "salvable" to "salvageable".
107	202.04	In the fourth sentence of the fourth paragraph, change "yard" to "feet".
107	202.05	In the list of units measurements for 202-B, add "square foot".
132	211.03.4	In the second sentence of the second paragraph, change "planted" to "plated".
192	306.02.4	In the first line of the first paragraph, delete the word "be".
200	307.03.7	In the fourth sentence of the second paragraph, change "lime-fly ash" to "treated".
236	401.01	Change the header from "Section 403" to "Section 401".
242	401.02.3.2	In the first sentence of the third full paragraph, add "1/8" in the blank before the inch mark.
250	401.02.6.3	In the second sentence of the first paragraph on page 250, change "rutting over "" to "rutting over 1/8"".
253	401.02.6.4.2	In the paragraph preceding the table, change "91.0" to "89.0".
259	401.03.1.4	In the first paragraph, change "92.0 percent" to "the specified percentage (92.0 or 93.0)".
269	403.03.2	In the table at the top of page 269, change the PI requirement from "=" to " $\leq$ ".

278	404.04	In the second sentence, change the subsection from "401.04" to "403.04".
283	409.02.2	Change "PG 64-22" to "PG 67-22".
294	413.02	In the first sentence of the second paragraph, change "707.02.1.3" to "Subsection 707.02.1.3".
340	511.04	In the second sentence of the second paragraph, change "412" to "512".
349	601.03.3	In the first sentence, change "804.03.2" to "804.03.5".
355	603.02	Change the subsection reference for Joint mortar from "707.03" to "714.11".
369	604.04	In the first sentence, change "601.04" to "Subsection 601.04".
427	619.04	Delete the second paragraph.
442	625.04	In the third paragraph, change "626.04" to "Subsection 626.04".
444	626.03.1.2	Delete the third sentence of the first paragraph.
464	631.02	Change the subsection reference for Water from "714.01.0" to "714.01.1".
570	682.03	Change the subsection number from "682-03" to "682.03".
575	683.10.4	Change the subsection number from "683.10.4" to "683.04".
575	683.10.5	Change the subsection number from "683.10.5" to "683.05".
596	701.02	In the table under the column titled "Cementations material required", change "Class F, FA" to "Class F FA,".
603	702.11	In the first sentence, change "702.12" to "Subsection 702.12".
612	703.04.2	In the fifth paragraph, delete "Subsection 703.11 and".
616	703.07.2	In the Percentage By Weight Passing Square Mesh Sieves table, change the No. 10 requirement for Class 7 material from "30 - 10" to "30 - 100".

- 2 -

618 703.13.1 In the first sentence of the first paragraph, change "703.09" to "703.06".

- 3 -

- 618 703.13.2 In the first sentence, change "703.09" to "703.06".
- 671 712.06.2.2 In the first sentence, change "712.05.1" to "Subsection 712.05.1".
- 689 714.11.2 In the first sentence, change "412" to "512".
- 709 715.09.5 In the first sentence of the first paragraph, change "guage" to "gauge".
- 717 717.02.3.4 In the top line of the tension table, change "1 1/2" to "1 1/8" and change "1 1/8" to "1 1/2".
- 741 720.05.2.2 In the last sentence of this subsection, change "720.05.2.1" to "Subsection 720.05.2.1".
- 827 803.03.2.3.7.5.2 In the first sentence of the second paragraph, change "803.03.5.4" to "803.03.2.3.4".
- 833 803.03.2.6 In the first sentence, change "803.03.7" to "803.03.2.5".
- 854 804.02.11 In the last sentence of the first paragraph, change "automatically" to "automatic".
- 859 804.02.13.1.3 In the last sentence, change Subsection "804.02.12.1" to "804.02.12".
- 879 804.03.19.3.2 In the first sentence of the third paragraph, change "listed on of Approved" to "listed on the Approved".
- 879 804.03.19.3.2 In the last sentence of the last paragraph, change "804.03.19.3.1" to "Subsection 804.03.19.3.1".
- 962 814.02.3 In the first sentence, change "710.03" to "Subsection 710.03".
- 976 820.03.2.1 In the first sentence, change "803.02.6" to "803.03.1.7".
- 976 820.03.2.2 In the first sentence, change "803.03.9.6" to "803.03.1.9.2".
- 985 Index Change the subsection reference for Petroleum Asphalt Cement from "702.5" to "702.05".

985	Index	Change the subsection reference for the Definition of Asphaltic Cement or Petroleum Asphalt from "700.2" to "700.02".
985	Index	Change the subsection reference for Automatic Batchers from "501.03.2.4" to "804.02.10.4".
986	Index	Delete "501.03.2" as a subsection reference for Batching Plant & Equipment.
988	Index	Change the subsection reference for the Central Mixed Concrete from "501.03.3.2" to "804.02.11".
988	Index	Change the subsection reference for the Concrete Batching Plant & Equipment from "501.03.2" to "804.02.11".
999	Index	Delete "501.03.3.3" as a subsection reference for Truck Mixers.
1001	Index	Change the subsection reference for Edge Drain Pipes from "605.3.5" to "605.03.5".
1002	Index	Change the subsection reference for Metal Posts from "713.05.2" to "712.05.2".
1007	Index	Change the subsection reference for Coarse Aggregate of Cement Concrete Table from "703.3" to "703.03".
1007	Index	Change the subsection reference for Composite Gradation for Mechanically Stabilized Courses Table from "703.8" to "703.08".
1009	Index	Delete "501.03.3.3" as a subsection reference for Truck Mixers and Truck Agitators.
1010	Index	Delete reference to "Working Day, Definition of".

- 4 -

#### SECTION 904 - NOTICE TO BIDDERS NO. 1928

CODE: (IS)

DATE: 04/14/2008

#### 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 7<sup>th</sup> Street, SW Washington, DC 20590 (202) 366-2212

or

http://ops.fhwa.dot.gov/freight/sw/brdgcalc/calc\_page.htm

#### SECTION 904 - NOTICE TO BIDDERS NO. 2937

CODE: (SP)

DATE: 01/11/2010

#### SUBJECT: Reduced Speed Limit Signs

Bidders are advised that all black and white speed limits signs that are used to reduce the speed limit through construction zones shall be covered or removed during times when the Contractor is not performing work. If the Contractor has a routine daytime operation and is not working at night, the signs shall be covered or removed during the nighttime when there is no work activity.

#### SECTION 904 - NOTICE TO BIDDERS NO. 3131

CODE: (SP)

DATE: 06/24/2010

#### SUBJECT: Temporary Traffic Paint

Bidders are hereby advised that the temporary traffic paint for this project can be waterborne paint as specified in the 2004 Mississippi Standard Specifications For Road and Bridge Construction or fast dry solvent traffic paint meeting the requirements set out in 907-710-1 (Fast Dry Solvent Traffic Paint).

Payment for all temporary traffic paint shall be paid under the appropriate 619 pay items.

When using fast dry solvent traffic stripe, no paint can be sprayed or placed on the ground during set-up or clean-up.

#### SECTION 904 - NOTICE TO BIDDERS NO. 3655

CODE: (SP)

DATE: 10/04/2011

#### **SUBJECT:** Type III Barricade Rails

Bidders are advised that the use of 2-inch nominal thickness timber for rails on Type III barricades has not been approved by NCHRP as a crashworthy device. Therefore, the use of 2-inch nominal thickness timbers <u>will not be allowed</u> for rails on Type III Barricades. Timber rails for Type III Barricades shall be as follows.

- For barricades up to four feet (4') wide, the maximum thickness of timber rails shall be one inch (1") and the material shall be pine timber or <sup>3</sup>/<sub>4</sub>-inch ACX plywood.
- For barricades more than four feet (4') wide, timber rails shall be constructed of <sup>3</sup>/<sub>4</sub>-inch ACX plywood.

A list of crashworthy Type III Barricades can be found at the below FHWA website.

http://safety.fhwa.dot.gov/roadway\_dept/policy\_guide/road\_hardware/wzd/

#### SECTION 904 - NOTICE TO BIDDERS NO. 3893

CODE: (SP)

#### DATE: 04/10/2012

#### **SUBJECT:** Petroleum Products Base Prices

Bidders are advised that monthly petroleum products base prices will be available at the web site listed below. Current monthly prices will be posted to this web site on or before the 15<sup>th</sup> of each month. Bidders are advised to use the petroleum base prices on this web site when preparing their bids. The current monthly petroleum products base prices will be acknowledged by the Bidder and become part of the contract during the execution process.

Monthly Petroleum Products Base Prices can be viewed at:

http://sp.gomdot.com/Contract%20Administration/BidSystems/Pages/letting%20calendar.aspx

#### **SECTION 904 – NOTICE TO BIDDERS NO. 4100**

CODE: (SP)

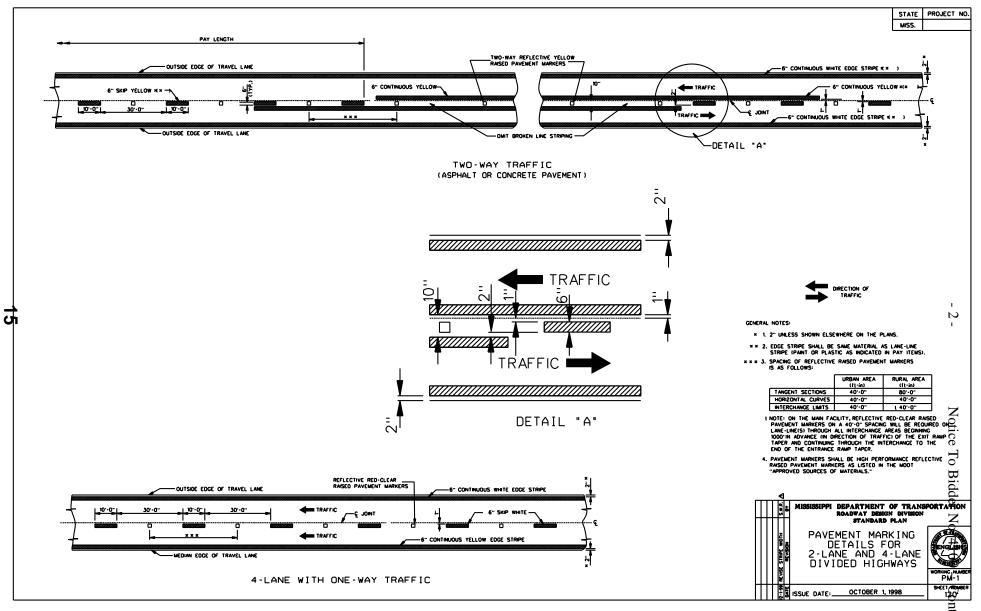
DATE: 09/05/2012

#### **SUBJECT:** Standard Drawings

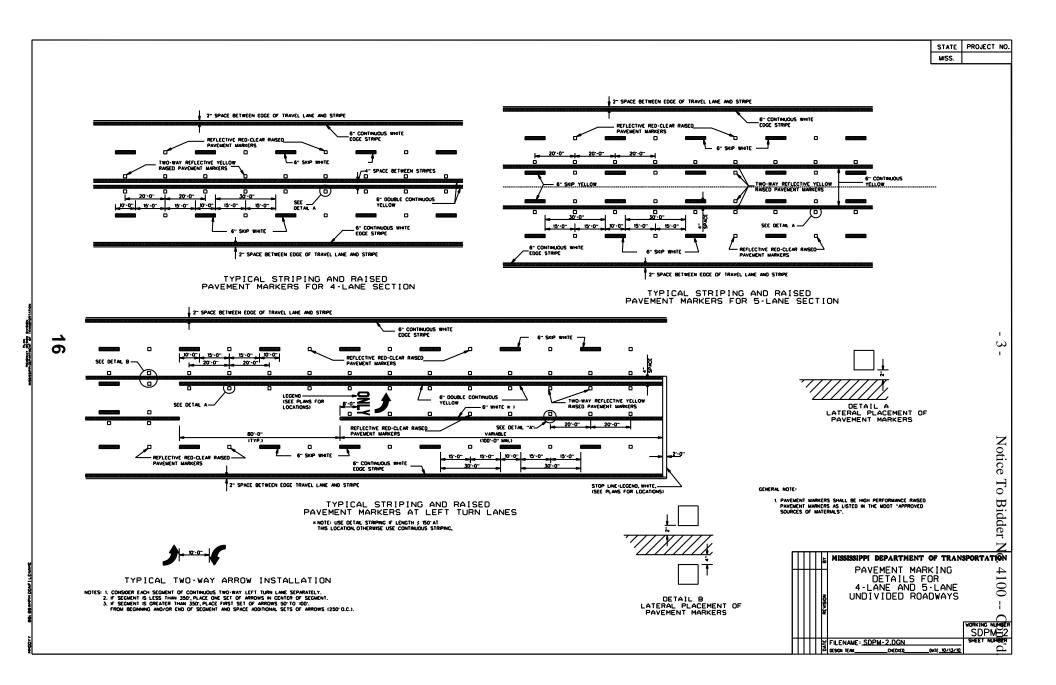
Standard Drawings attached hereto shall govern appropriate items of required work.

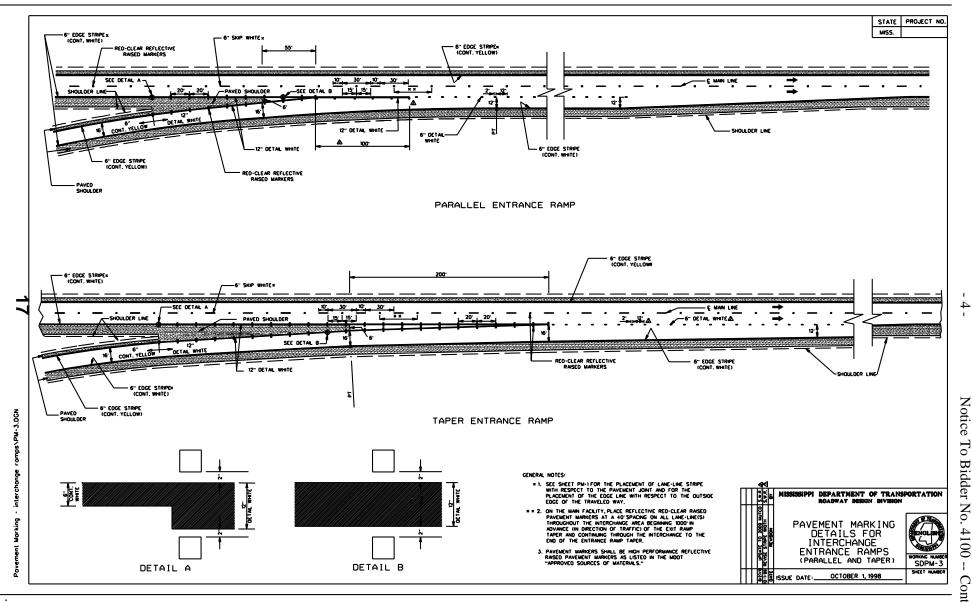
Larger copies of Standard Drawings may be purchased from:

MDOT Plans Print Shop MDOT Shop Complex, Building C, Room 114 2567 North West Street P.O. Box 1850 Jackson, MS 39215-1850 Telephone: (601) 359-7460 or FAX: (601) 359-7461 or e-mail: <u>plans@mdot.state.ms.us</u>



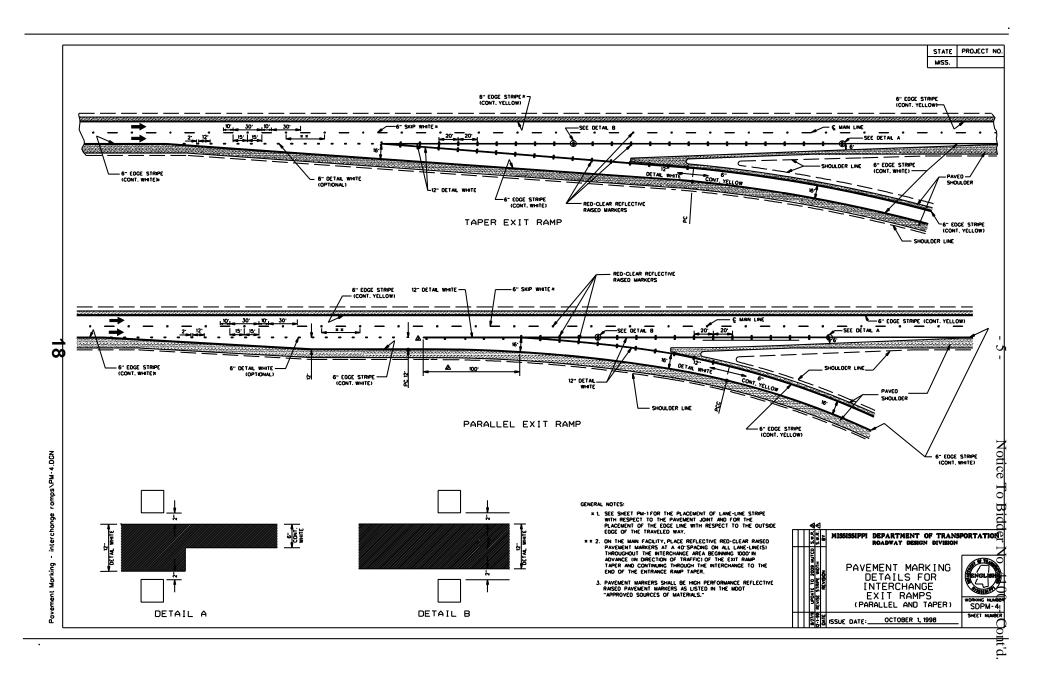
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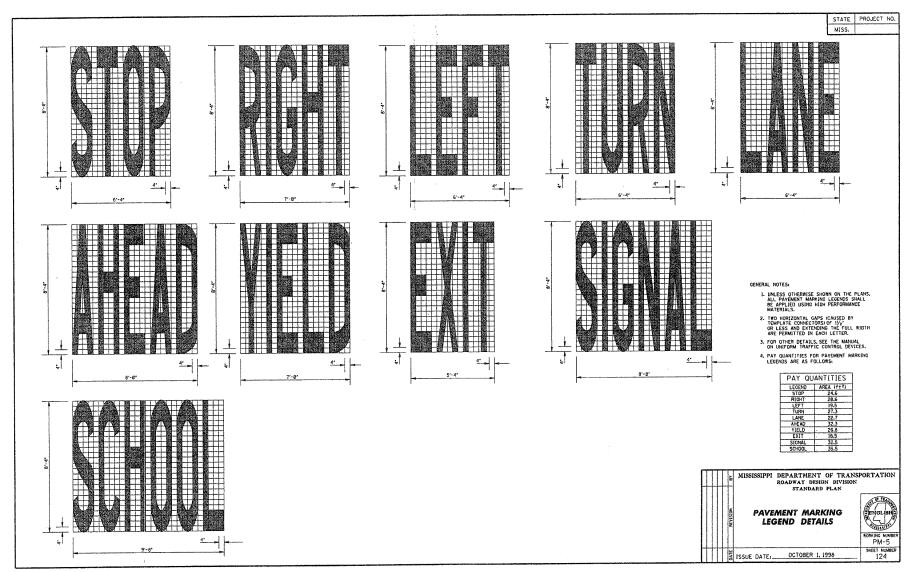




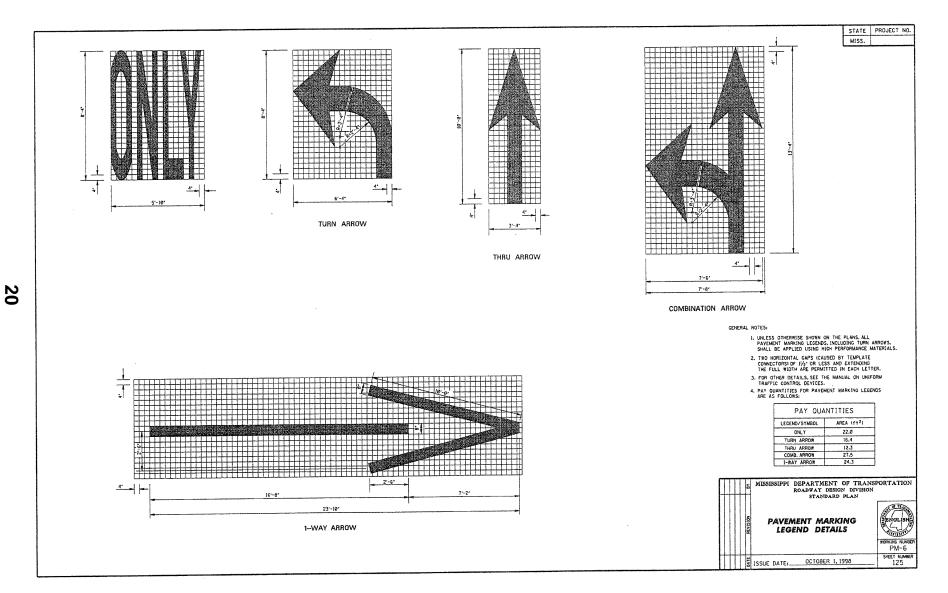
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To Bidder No. 4100 ł Cont'd.

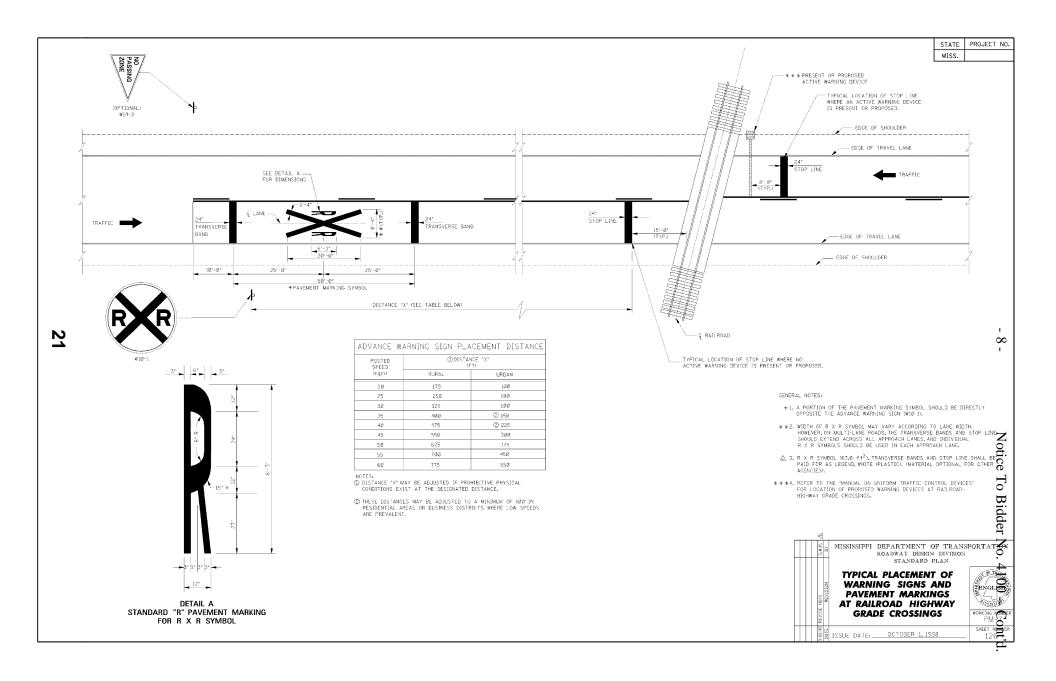


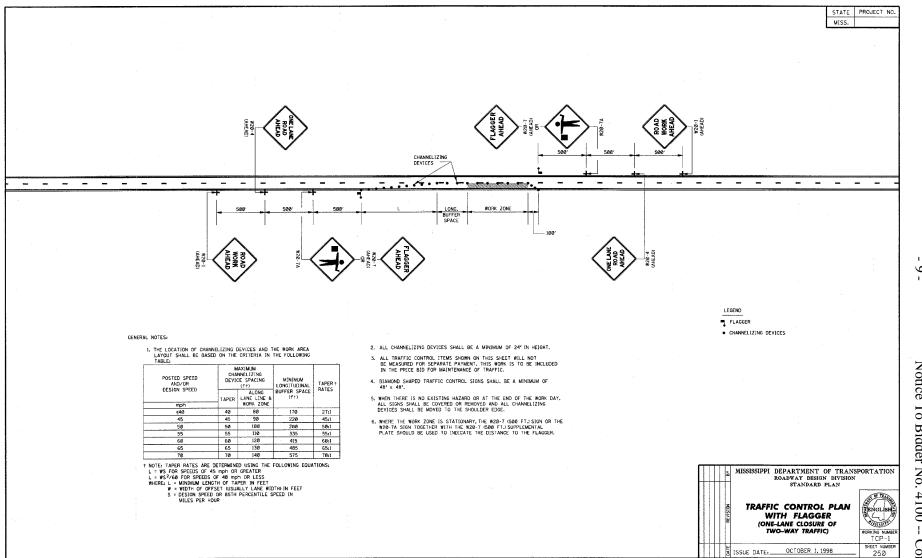


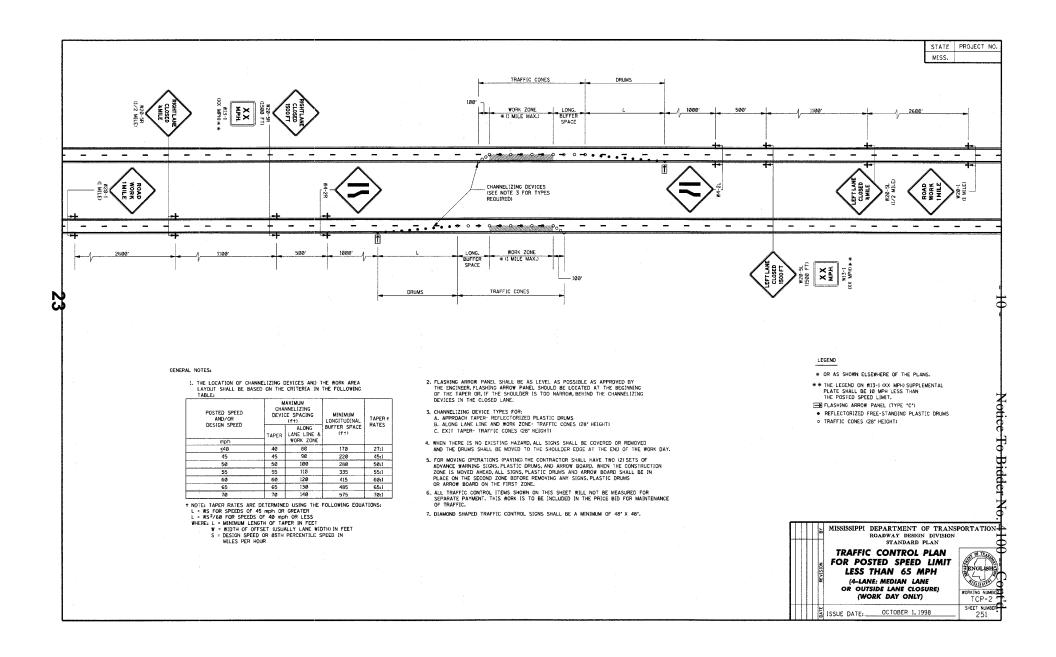
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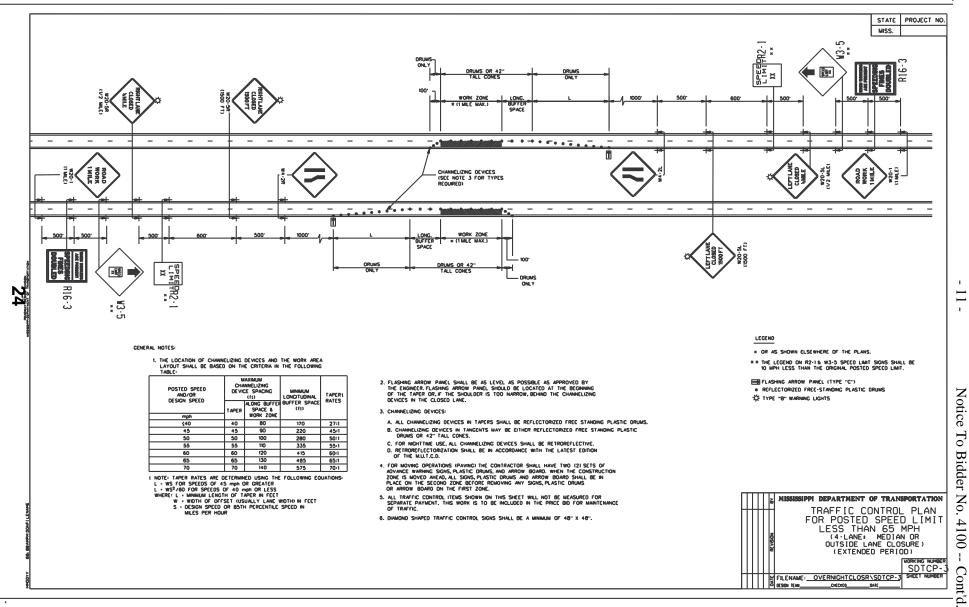


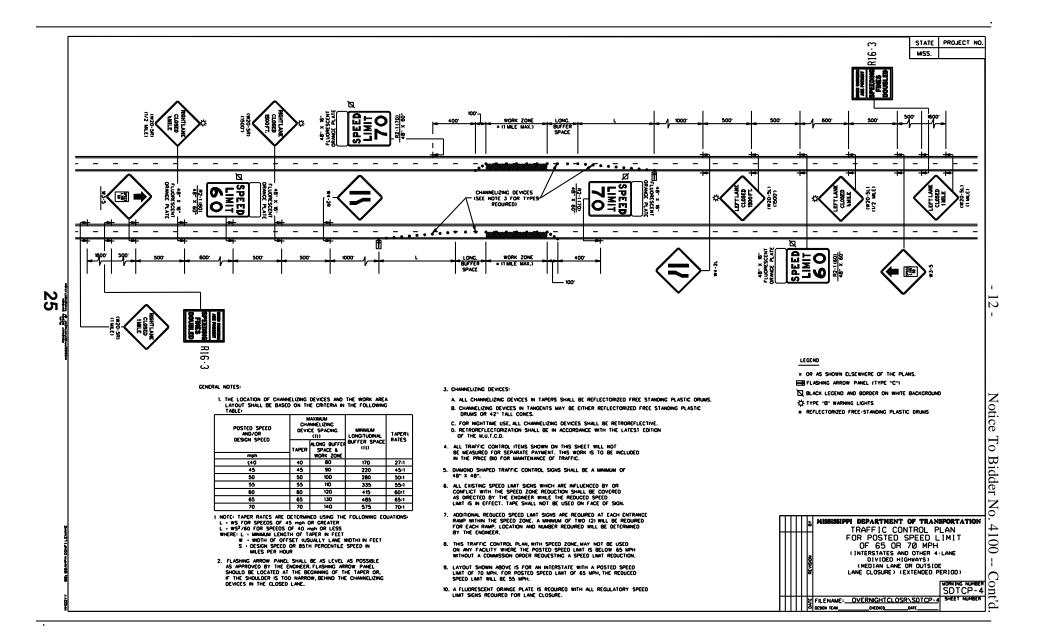
- 7 -

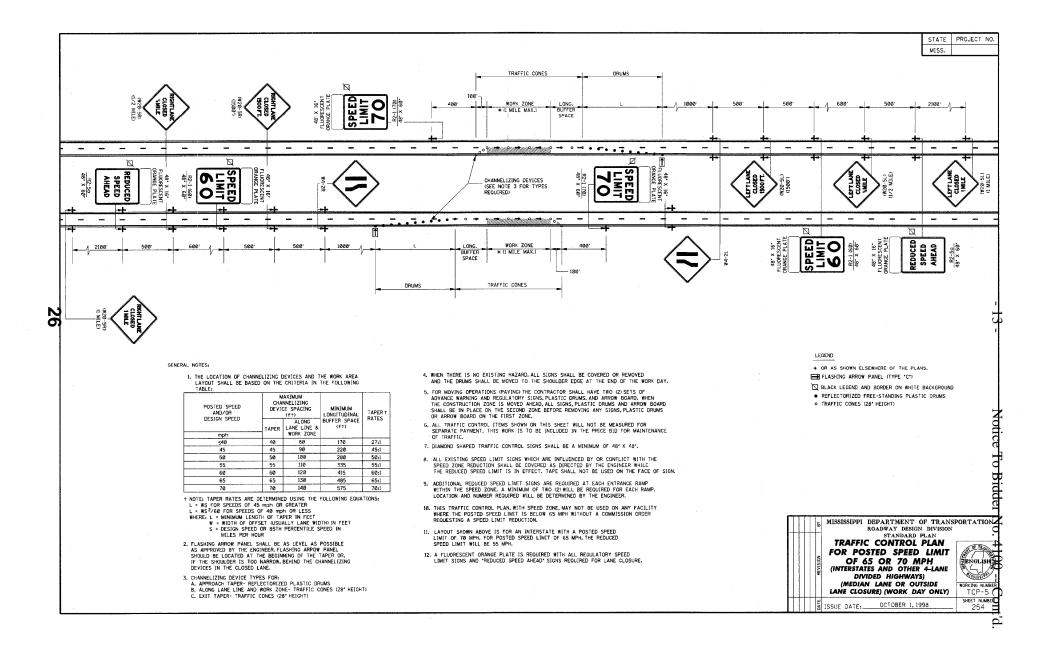


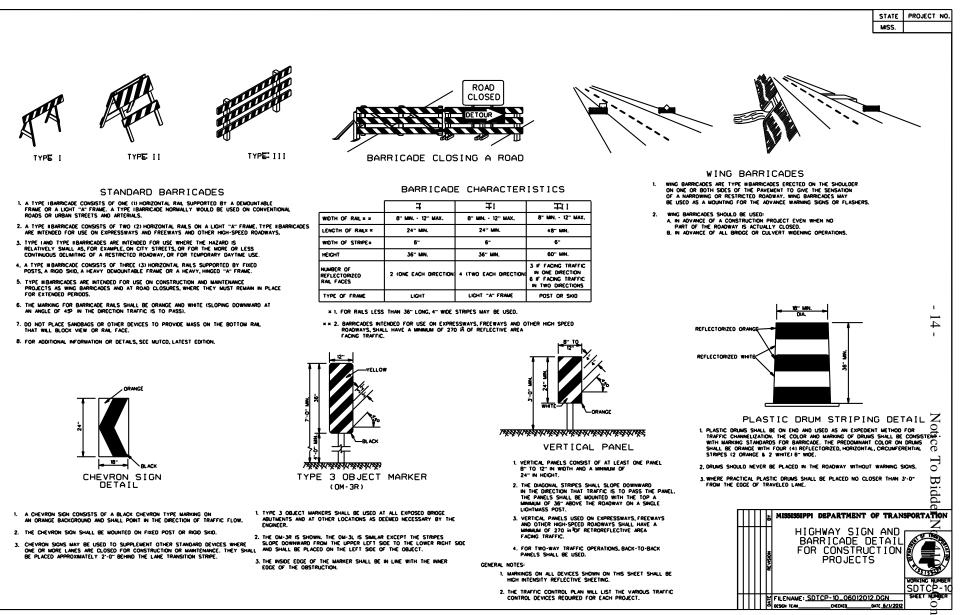




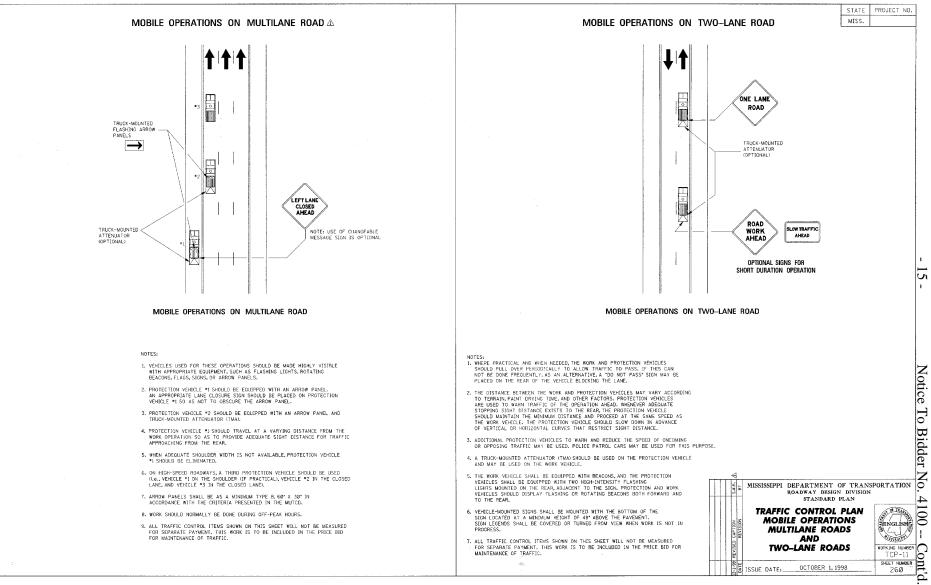


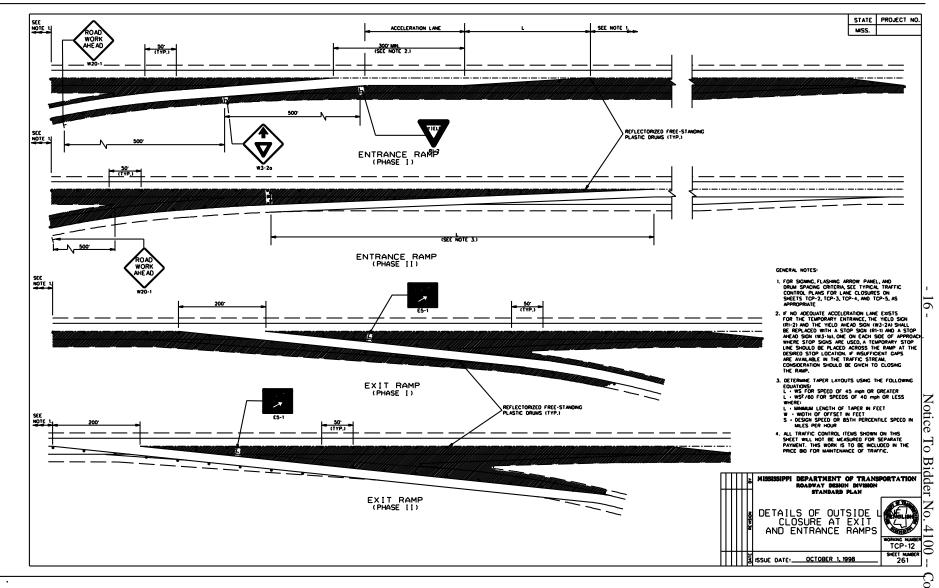




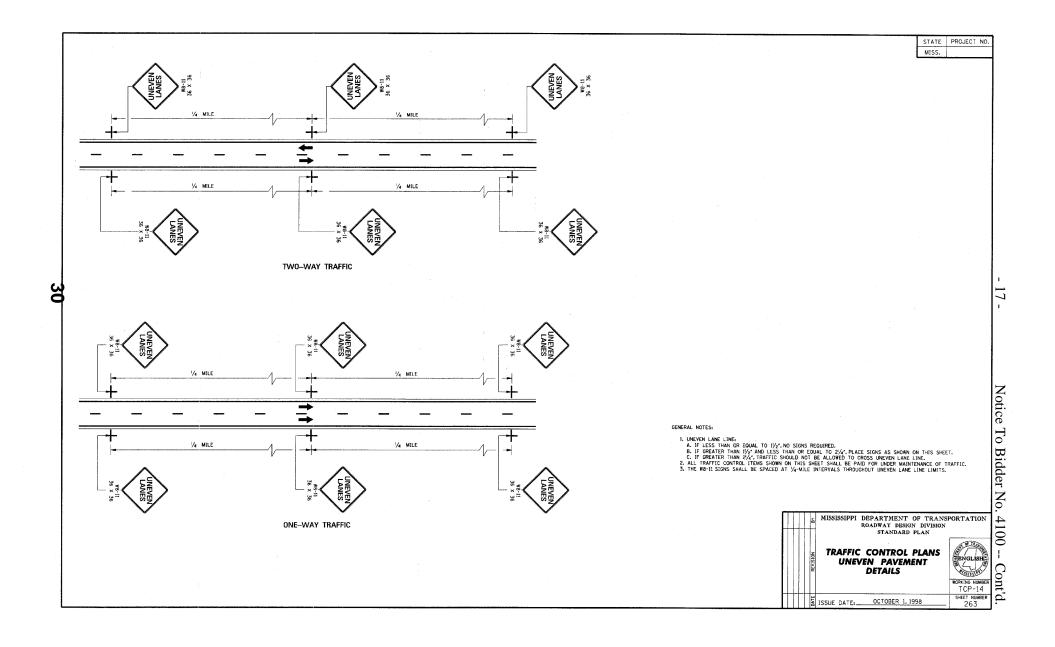


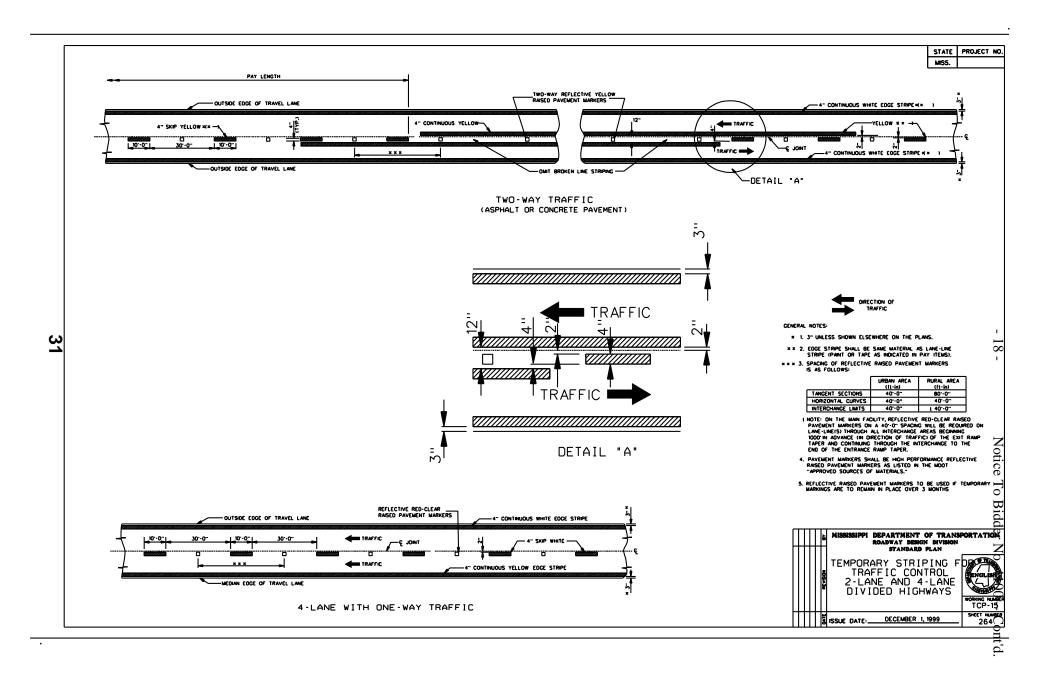
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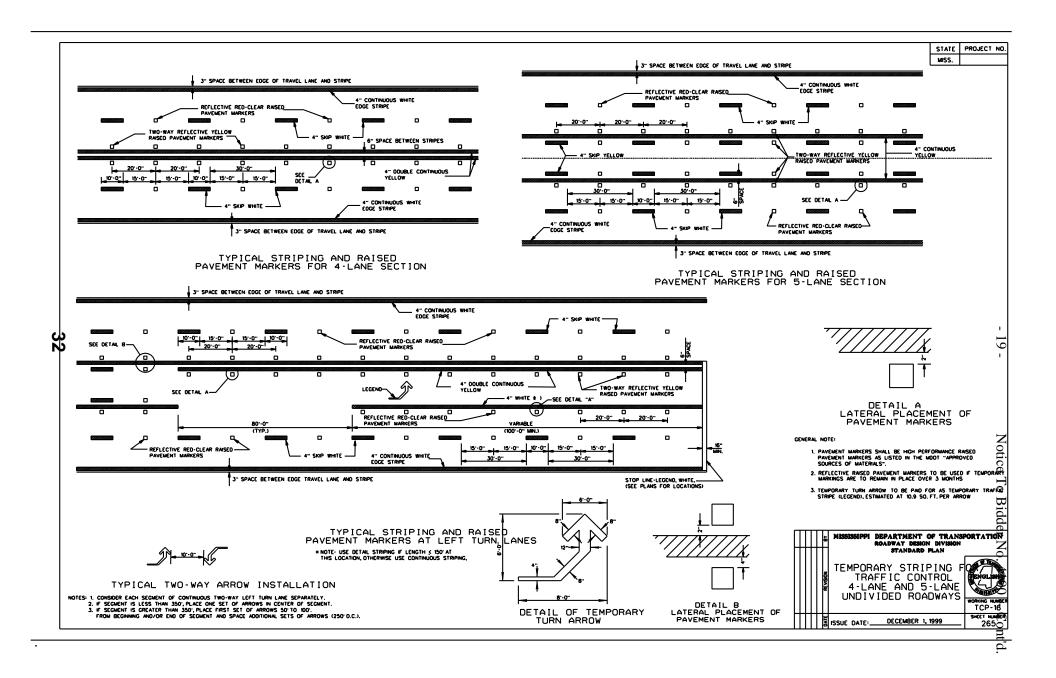




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#### SECTION 904 - NOTICE TO BIDDERS NO. 4214

CODE: (IS)

#### DATE: 11/29/2012

#### **SUBJECT:** Safety Apparel

Bidders are advised that the Code of Federal Regulations CFR 23 Part 634 final rule was adopted November 24, 2006 with an effective date of November 24, 2008. This rule requires that "All workers within the right-of-way of a Federal-Aid Highway who are exposed either to traffic (vehicles using the highway for the purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel". High-visibility safety apparel is defined in the CFR as "personnel protective safety clothing that is intended to provide conspicuity during both daytime and nighttime usage, and that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107-2004 publication entitled American National Standard for High-Visibility Safety Apparel and Headwear". All workers on Mississippi State Highway right-of-way shall comply with this Federal Regulation. Workers are defined by the CFR as "people on foot whose duties place them within the right-of way of a Federal-Aid Highway, such as highway construction and maintenance forces, survey crews, utility crews, responders to incidents within the highway right-of-way, and law enforcement personnel when directing traffic, investigating crashes, and handling lane closures, obstructed roadways, and disasters within the right-of-way".

More information regarding high visibility safety apparel can be found at the following sites.

http://www.gpo.gov/fdsys/pkg/CFR-2008-title23-vol1/pdf/CFR-2008-title23-vol1-sec634-1.pdf

http://ops.fhwa.dot.gov/wz/resources/policy.htm#hv

#### SECTION 904 - NOTICE TO BIDDERS NO. 4526

CODE: (SP)

#### DATE: 06/11/2013

#### SUBJECT: Electronic Addendum Process

Bidders are advised that hard copies of any addenda for this project will no longer be mailed to prospective bidders. All addenda for this project will be posted to the <u>mdot.ms.gov</u> webpage under the Proposal Addenda column for the current letting and appropriate call number. Bidders will have to download addenda from the webpage and process the addenda in the same manner as previous lettings. Addenda will be posted by 10:00 a.m. on Friday prior to the letting. It will be the Bidder's responsibility to check and see if any addenda have been posted for this project. Any questions regarding the downloading process of the addenda shall be directed to the Contract Administration Division at 601-359-7700. Any questions regarding the content of the addenda shall be submitted as a question in accordance with the Notice To Bidders entitled "Questions Regarding Bidding".

### SECTION 904 - NOTICE TO BIDDERS NO. 4565

CODE: (SP)

DATE: 06/27/2013

### SUBJECT: Manual on Uniform Traffic Control Devices

Any reference in the Standard Specifications or contract documents to a particular Section of the Manual on Uniform Traffic Control Devices (MUTCD) it shall mean that Section of the latest version of the Manual on Uniform Traffic Control Devices.

### **SECTION 904 - NOTICE TO BIDDERS NO. 4612**

CODE: (SP)

#### DATE: 08/13/2013

#### **SUBJECT:** Adjustments for Bituminous Materials

Bidders are advised that Subsection 907-402.03.1.2, Tack Coat, in Special Provision 907-402, allows the Contractor several options for OGFC tack coat. Regardless of the tack coat used, the monthly material adjustment, as referenced in Section 109 of the Standard Specifications, will be made using the base and current prices of tack coat Grade PG 76-22.

Bidders are also advised that the specifications allow the use of RC-70, RC-250, RC- 800, RS-1, RS-2, MC-30, MC-250, MS-2h, and CMS-2h in various other construction operations. If the Contractor uses one of these bituminous materials, the monthly material adjustment will be made using the base and current prices of the materials shown below.

Materials Used	Material Adjustment Made Based on Prices For
RC-70, 250, 800	MC-70
RS-1, 2	CRS-2
MC-30, 250	MC-70
MS-2h	SS-1
CMS-2h	SS-1

### SECTION 904 - NOTICE TO BIDDERS NO. 4661

CODE: (IS)

### DATE: 10/16/2013

### **SUBJECT:** Payroll Requirements

Bidders are hereby advised that the Contractor and Subcontractor(s) are required to submit payroll information to the Project Engineers on a weekly basis.

On Federal-Aid Projects, CAD-880, CAD-881 and certified payroll submissions are required each week the Contractor or a Subcontractor performs work on the project. This is addressed in Section IV of Form FHWA-1273.

On State-Funded Projects, CAD-880 is required each week the Contractor or a Subcontractor performs work on the project.

When no work is performed on either Federal-Aid or State-Funded Projects, the Contractor should only submit CAD-880 showing no work activities.

The Contractor shall make all efforts necessary to submit this information to the Project Engineer in a timely manner. The Engineer will have the authority to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to submit the required information. Submission of forms and payrolls shall be current through the first full week of the month for the estimate period in order for the Project Engineer to process an estimate.

Bidders are advised to review the requirements regarding payroll submissions in Section 110 of the Standard Specifications.

### SECTION 904 - NOTICE TO BIDDERS NO. 4987

CODE: (SP)

### DATE: 04/02/2014

### **SUBJECT:** Questions Regarding Bidding

Bidders are advised that all questions that arise regarding the contract documents (proposal) or plans on this project shall be directed to the <u>www.gomdot.com</u> current letting webpage. Click on the call number for this project to open an email form to submit your question. Questions must be submitted by 8:00 a.m. on Monday prior to the letting on Tuesday. Answers to questions will be posted by 6:00 p.m. on Monday prior to the letting on Tuesday. Answers can be viewed by clicking on Q&A link under the Proposal Addenda column.

It shall be the Bidders responsibility to familiarize themselves with the questions and answers that have been submitted on this project. Bidders are advised that by signing the contract documents for this project, they agree that the on-line Questions and Answers submitted on this project shall be added to and made part of the official contract.

### **SECTION 904 - NOTICE TO BIDDERS NO. 4988**

CODE: (SP)

DATE: 04/01/2014

**SUBJECT:** Contract Time

#### **PROJECT:** MP-3000-00(096) / 305215301 – District Wide (3)

The calendar date for completion of work to be performed by the Contractor for this project shall be <u>October 3, 2014</u> which date or extended date as provided in Subsection 907-108.06 shall be the end of contract time. It is anticipated that the Notice of Award will be issued no later than be <u>June 10, 2014</u> and the effective date of the Notice to Proceed / Beginning of Contract Time will be <u>July 10, 2014</u>.

Should the Contractor request a Notice to Proceed earlier than <u>July 10, 2014</u> and it is agreeable with the Department for an early Notice to Proceed, the requested date will become the new Notice to Proceed / Beginning of Contract Time date.

The available productive days for this project are 57.

## **SECTION 904 – NOTICE TO BIDDERS NO. 4989**

CODE: (SP)

DATE: 4/10/2014

### **SUBJECT:** Scope of Work

#### PROJECT: MP-3000-00(096) / 305215301 -- Districtwide

The Contract Documents do not include an official set of construction plans but may, by reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings". All other references to plans in the Contract Documents and Standard Specification for Road and Bridge Construction are to be disregarded.

Work on the project shall consist of the following:

### LEVEL AND SEAL APPROXIMATELY 65.5 MILES OF HIGHWAYS ON VARIOUS ROUTES IN SUNFLOWER, BOLIVAR, WASHINGTON, AND HUMPHREYS COUNTIES.

The Contractor shall erect and maintain construction signing, and provide all signs and traffic handling devices in accordance with the Traffic Control Plan. The cost shall be included in the price bid for pay item No. 618-A, Maintenance of Traffic. All traffic control devices on this project should comply with the MUTCD (Latest Edition). Fluorescent orange sheeting shall be used on all construction and traffic control signs except for those designated in plans to be black legend and border on white background. Channelizer Cones shall be narrow profile with a minimum height of 42 inches with 6-inch orange/white reflective tape and Channelizer Cone Bases with a minimum weight of ten (10) pounds.

Below is an approximate quantity of signs required:

52 - R4-2 "Pass With Care"

- 64 W14-3 "No Passing Zone"
- 141 R4-1 "Do Not Pass"

The Contractor shall complete all activities pertaining to Granular Material before any Asphalt or chip seal work may be pursued. The Contractor will grade all of the existing shoulders to a 4% cross-slope. In the process of grading the shoulders, the Contractor will place 1<sup>1</sup>/<sub>2</sub>" and variable granular material where needed to bring the shoulders up to the existing pavement edge. Any work in locations other than that of the granular material may be pursued by the Contractor, but in no instance shall any seal operations be performed before any granular material is placed.

Overlay locations within the project limits with <sup>3</sup>/<sub>4</sub>" and variable Ultra-Thin Asphalt. The areas to be overlaid will be listed on a table with GPS coordinates or descriptions. The widths of the

roadway will vary from 20 feet to 24 feet. The overlay will be paid for under the 907-411-A pay item. The Contractor will be responsible for pre-leveling the mainline of Highways 436, 448, 442, 438, 3, and 7. The pre-leveling course will not require density test, but MDOT will require the Contractor to run nuclear gauge readings to assure the Asphalt is being rolled to refusal. Standard density numbers, as well as a rolling pattern, will be supplied to MDOT by the Contractor. The Contractor will use at least two rollers in this operation, one of which shall be a pneumatic rubber tire. Where applicable, publicly maintained roads or streets shall be paved to the existing right of way. Any necessary site grading, or removal of existing Asphalt at the drives, will not be measured for separate payment but will be considered an absorbed item.

Temporary striping shall conform to finished stripe specifications for alignment, reflectivity, straightness, and neatness. Temporary stripe shall be placed daily as needed for safe movement of traffic. <u>All permanent pavement markings shall be done by the District</u>. Any removal of existing raised pavement markers or rumble bars shall be done before the overlay and shall be considered an absorbed item of work.

Chip Sealing or Scrub Sealing shall be as per the specifications. Aggregates for chip sealing and scrub sealing shall be <u>Size Number 7 Limestone</u>. When a lane closure is in place for sealing operations, a pilot car shall be used as part of the Contractor's traffic control plan. The areas to be sealed will be listed on a table with descriptions.

## **Additional Information:**

**State Route 32:** The Contractor will perform a scrub seal as per the applicable specifications from Highway 61 going east for approximately 2.75 miles to the Tallahatchie County Line on Highway 32.

**State Route 448:** The Contractor will place <sup>3</sup>/<sub>4</sub>" Ultra-Thin Asphalt from the intersection of Highway 82/448 for approximately 1 mile north. The Contractor will also place <sup>3</sup>/<sub>4</sub>" Ultra-Thin Asphalt from the Sunflower/Bolivar County Line to Highway 61. All applicable specifications are to be followed. Also, shoulder gravel will be placed in any areas with more than a 1-inch drop off after the Ultra-Thin Asphalt has been placed.

**State Route 442:** The Contractor will place the Ultra-Thin Asphalt as directed by the Engineer, then proceed with placing shoulder material, and then chip seal the entire route. The chip seal cannot start until the other work has been accomplished on this section of roadway. All applicable specifications will be followed.

**State Route 438:** The Contractor will perform a scrub seal from Highway 61 back east to the Sunflower River Road. Next, the Contractor will place a <sup>3</sup>/<sub>4</sub>" Ultra-Thin leveling course on the entire length of roadway. Then the Contractor will bring all of the shoulders completely up to grade on a 4% cross slope.

**State Route 436:** The Contractor will level with Ultra-Thin Asphalt at the locations shown in the contract. Then the Contractor will place shoulder gravel where needed to eliminate any shoulder

drop off of more than one inch (1"). The Contractor will chip seal state route 436 from Glen Allen east to Highway 1 and then continue on from Highway 1 to Highway 61.

**State Route 3:** The Contractor will chip seal the route from the south end of Highway 3/49W intersection to the south side of Moorhead. The Contractor will place Ultra-Thin Asphalt through Moorhead continuing up to the intersection of Highway 3 and Highway 82. The Contractor will chip seal from Highway 82 north on Highway 3 until it intersects with 49W again on the north end. Any leveling to be done on Highway 3 will be done prior to the chip seal. **NOTE:** All shoulder gravel place on Highway 3 to eliminate low shoulder areas will be done prior to overlay and chip seal.

**State Route 7:** The Contractor will begin at the change of pavement on Highway 7 just east of Highway 49W. This intersection is at a concrete driveway pad and is consider the city limits of Belzoni. The Contractor will continue to place Ultra-Thin Asphalt east to the first traffic signal and then turn north on Highway 7 and continue placing Ultra-Thin Asphalt. The Contractor will place Ultra-Thin Asphalt to Solomon Drive. The Contractor will place Ultra-Thin Asphalt for the rest of Highway 7 as needed to the County Line. The Contractor will then bring any low shoulder area up to grade on the entire section of Highway 7 as needed. The Contractor will then chip seal Highway 7 from Solomon Road to the Leflore County line.

## Summary of Locations to be Sealed

Route	County	Location	Length (Miles)	Scope	Note
SR 32	Sunflower	US 49W to the Tallahatchie County Line	2.75	Scrub Seal	
SR 442	Sunflower	SR 448/SR 442 intersection heading east to the Leflore County Line	21.5	Chip Seal	1
SR 3	Sunflower	SR 3/US 49W intersection heading north to the SR 3/US 49W intersection	13.8	Chip Seal	2
SR 436	Washington	Glen Allen (Beginning of State Maintenance) east to US 61	11	Chip Seal	
SR 438	Washington	SR 1 east to End of Maintenance at US 61	8.2	Scrub Seal	
SR 7	Humphreys	North city limits of Belzoni to the Leflore County Line	7.4	Chip Seal	
1	Omit the US 401	TOT	<b>AL</b> 64.65		

1 Omit the US 49W intersection

43

2 Omit the RR ROW and the US 82 intersection

-4-

Route	County	Lat./Long. (Begin Overlay)	Length (feet)	Estimated Tonnage
436	Washington	N 33.031148 W91.030210	5280	495
436	Washington	N 33.056020 W90.3975998	200	19
448	Sunflower	N33.458126 W90.645324	4225	495
448	Bolivar	N33.601019 W90.765299	550	65
442	Sunflower	N33.603411 W90.718051	200	19
442	Sunflower	N33.651883 W90.537632	200	19
442	Sunflower	N33.658011 W90.523638	23760	2228
3	Sunflower	N33.460587 W90.508091	7920	965
3	Sunflower	N33.413260 W90.547858	300	28
3	Sunflower	N33.378437 W90.590245	300	28
7	Humphreys	N33.183726 W90.495180	7920	1150
7	Humphreys	N33.233869 W90.485636	300	35
7	Humphreys	N33.244221 W90.484792	300	35
438	Washington	Start at 61 , go East 8.2 miles	43296	5685

# Summary of Locations to be Overlayed Using Ultra-Thin Asphalt

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### **SPECIAL PROVISION NO. 907-101-4**

CODE: (IS)

DATE: 11/05/2008

### **SUBJECT:** Definitions

Section 101, Definitions and Terms, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-101.02--Definitions.</u> Replace the following definitions in Subsection 101.02 on pages 3 through 13.

**Contract** - The written agreement between the Mississippi Transportation Commission and the Contractor setting forth the obligations of the parties thereunder, including but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The contract includes the invitation for bids, proposal, contract form and contract bonds, specifications, supplemental specifications, interim specifications, general and detailed plans, special provisions, notices to bidders, notice to proceed, and also any agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.

**Contract Bonds** - The approved form of security, executed by the Contractor and the Contractor's Surety(ies), guaranteeing complete execution of the contract and all supplemental agreements pertaining thereto and the payment of all legal debts pertaining to the construction of the project. This term includes Performance and Payment Bond(s).

**Surety** - A corporate body, qualified under the laws of Mississippi, which is bound with and for the successful bidder by "contract bond(s)" to guarantee acceptable performance of the contract and payment of all legal taxes and debts pertaining to the construction of the project, including payment of State Sales Tax as prescribed by law, and any overpayment made to the Contractor.

Add the following to the list of definitions in Subsection 101.02 on pages 3 through 13.

**Performance Bond** - The approved form of security, executed by the Contractor and issued by the Contractor's Surety(ies), guaranteeing satisfactory completion of the contract and all supplemental agreements pertaining thereto.

**Payment Bond** - The approved form of security, executed by the Contractor and issued by the Contractor's Surety(ies), guaranteeing the payment of all legal debts pertaining to the construction of the project including, but not limited to, the labor and materials of subcontractors and suppliers to the prime contractor.

### SPECIAL PROVISION NO. 907-102-10

CODE: (IS)

### DATE: 05/01/2013

### **SUBJECT:** Bidding Requirements and Conditions

Section 102, Bidding Requirements and Conditions, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

**<u>907-102.06--Preparation of Proposal.</u>** Delete the first paragraph of Subsection 102.06 on page 17, and substitute the following.

The bidder's complete original proposal shall be submitted upon the forms (Certification of Performance, Certification Regarding Non-Collusion, etc.) furnished by the Department and shall include Expedite Bid printed bid sheets along with the bid data on the MDOT-supplied USB Flash Drive. Expedite Bid System (EBS) files shall be downloaded from the Department's website <u>http://mdot.ms.gov</u>. In case of discrepancy between a unit price and the extension, the unit price will govern and the extension along with the total amount of the proposal will be corrected.

Delete the fifth, sixth, and seventh paragraphs of Subsection 102.06 on page 18, and substitute the following.

Bid sheets generated by the Department's Electronic Bid System (Trns•port Expedite Bid) along with a completed proposal package (with all forms completed and signed) will constitute the official bid and shall be signed on the last sheet of the Expedite Bid generated bid sheets and delivered to the Department in accordance with the provisions of Subsection 102.09. Bids submitted using any other form, format or means will result in an irregular bid. The bidder's bid data shall be saved on the MDOT-supplied USB Flash Drive and submitted with the bid. Failure to return the USB Flash Drive with bid data will result in an irregular bid. If a Bidder is submitting bids on multiple proposals, the bid data for all proposals can be included on one flash drive and submitted with any of the bid envelopes.

Bidders are cautioned that using other versions of the Expedite Bid may result in improperly printed bid sheets. The correct version of Expedite Bid can be obtained at no cost from the MDOT Contract Administration Division or at the MDOT website, <u>http://mdot.ms.gov</u>. The current version of Expedite Bid is also included on the MDOT-supplied USB Flash Drive.

The Expedite Bid generated bid sheets should be stapled together in order beginning with page 1, signed and included in the bid proposal package in the sealed envelope. Only the Expedite Bid generated sheets will be recognized as the official bid. The MDOT-provided USB Flash Drive containing the information printed on the Expedite Bid generated bid sheets should be placed in the padded envelope included with the bid proposal package and enclosed in the sealed envelope. Bid sheets printed from Expedite Bid should be a representation of the data returned on the flash

drive. To have a true representation of the bid sheets, the Bidder must copy the EBS and EBS amendment files used to prepare the bid sheets to the flash drive. Otherwise, the unit prices bid will not be recorded to the flash drive. Bidders are cautioned that failure to follow proper flash drive handling procedures could result in the Department being unable to process the flash drive. Any modification or manipulation of the data contained on the flash drive, other than entering unit bid prices and completing all required Expedite Bid sections, will not be allowed and will cause the Contractor's bid to be considered irregular.

- 2 -

<u>907-102.08--Proposal Guaranty</u>. Delete the first and second paragraphs in Subsection 102.08 on page 20 and substitute the following.

No proposal will be considered unless accompanied by certified check, cashier's check or bid bond, made payable to the State of Mississippi, in an amount of not less than five percent (5%) of the total amount of the proposal offered. The guaranty shall be evidence of good faith that, if awarded the contract, the bidder will execute the contract and give performance and payment contract bond(s) as stipulated in Subsection 907-103.05.1, 907-103.05.2, and as required by law.

If a bid bond is offered as guaranty, the bond must be on a form approved by the Executive Director, made by a Surety acceptable to the Executive Director and signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent and the Bidder. Such bid bond shall also conform to the requirements and conditions stipulated in Subsection 907-103.05.2 as applicable.

## SPECIAL PROVISION NO. 907-103-8

CODE: (SP)

## DATE: 12/15/2009

### **SUBJECT:** Award and Execution of Contract

Section 103, Award and Execution of Contract, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>**907-103.04--Return of Proposal Guaranty</u></u>. Delete the second paragraph of Subsection 103.04 on page 23 and substitute the following:</u>** 

Certified checks or cashier's checks submitted as proposal guaranties, except those of the two lowest bidders, will be returned within 10 days of contract award. The retained proposal guaranty of the unsuccessful of the two lowest bidders will be returned within ten days following the execution of a contract with the successful low bidder. The retained proposal guaranty of the successful bidder will be returned after satisfactory performance and payment bonds have been furnished and the contract has been executed.

In the event all bids are rejected by the Commission, certified checks or cashier's checks submitted as proposal guaranty by all bidders will be returned within 10 days of rejection.

Delete Subsection 103.05 on page 23 and substitute the following:

### 907-103.05--Contract Bonds.

<u>907-103.05.1--Requirement of Contract Bonds</u>. Prior to the execution of the contract, the successful bidder shall execute and deliver to the Executive Director a performance and payment bond(s), in a sum equal to the full amount of the contract as a guaranty for complete and full performance of the contract and the protection of the claimants and the Department for materials and equipment and full payment of wages in accordance with Section 65-1-85 Miss. Code Ann. (1972 as amended). In the event of award of a joint bid, each individual, partnership, firm or corporation shall assume jointly the full obligations under the contract and the contract bond(s).

**<u>907-103.05.2--Form of Bonds</u>**. The form of bond(s) shall be that provided by or acceptable to the Department. These bonds shall be executed by a Mississippi agent or qualified nonresident agent and shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the Surety company. A power of attorney exhibiting the Surety's original seal supporting the Mississippi agent or the qualified nonresident agent's signature shall be furnished with each bond. The Surety company shall be currently authorized and licensed in good standing to conduct business in the State of Mississippi with a minimum rating by A.M. Best of (A-) in the latest printing "Best's Key Rating Guide" to write individual bonds up to ten percent of the policy holders' surplus or listed on the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as

published by the United States Department of the Treasury, Financial Management Service, Circular 570 (latest revision as published and supplemented on the Financial Management Service Web site and in the Federal Register) within the underwriting limits listed for that Surety. All required signatures on the bond(s) and certifications shall be original signatures, in ink, and not mechanical reproductions or facsimiles. The Mississippi agent or qualified nonresident agent shall be in good standing and currently licensed by the Insurance Commissioner of the State of Mississippi to represent the Surety company(ies) executing the bonds.

- 2 -

Surety bonds shall continue to be acceptable to the Commission throughout the life of the Contract and shall not be canceled by the Surety without the consent of the Department. In the event the Surety fails or becomes financially insolvent, the Contractor shall file a new Bond in the amount designated by the Executive Director within thirty (30) days of such failure, insolvency, or bankruptcy. Subsequent to award of Contract, the Commission or the Department may require additional security for any supplemental agreements executed under the contract or replacement security in the event of the surety(ies) loss of the ratings required above. Suits concerning bonds shall be filed in the State of Mississippi and adjudicated under its laws without reference to conflict of laws principles.

<u>907-103.08--Failure to Execute Contract.</u>. In the first sentence of Subsection 103.08 on page 24, change "bond" to "performance and payment bonds".

### **SPECIAL PROVISION NO. 907-104-5**

CODE: (IS)

DATE: 05/01/2013

#### **SUBJECT:** Scope of Work

Section 104, Scope of Work, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-104.05--Removal and Disposal of All Materials From the Project.</u> Delete the second sentence of the first full paragraph of Subsection 104.05 on page 30 and substitute the following:

The Contractor shall also furnish the Engineer a certified letter stating that the area of disposal is not in a wetland or in Waters of the U.S.

## SUPPLEMENT TO SPECIAL PROVISION NO. 907-105-7

DATE: 04/02/2014

### **SUBJECT:** Control of Work

Before Subsection 907-105.05 on page 1, add the following.

<u>907-105.04--Coordination of Plans, Specifications, Interim Specifications, Special</u> <u>Provisions and Notice to Bidders.</u> Delete the second full paragraph of Subsection 105.04 on page 35, and substitute the following.

In case of a conflict between plan quantities, advertisement quantities, and/or bid sheet quantities, the bid sheet quantities shall prevail.

## SPECIAL PROVISION NO. 907-105-7

CODE: (IS)

DATE: 05/01/2013

### SUBJECT: Control of Work

Section 105, Control of Work, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is modified as follows.

<u>907-105.05--Cooperation by Contractor.</u> In the third sentence of the second paragraph of Subsection 105.05 on page 35, change "Notice to Proceed" to "Notice of Award".

Delete the fourth paragraph of Subsection 105.05 on page 35, and substitute the following.

On projects that include erosion control pay items, 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. This responsible person must be a Certified Erosion Control Person certified by an organization approved by the Department. Prior to or at the pre-construction conference, the Contractor shall designate in writing the Certified Erosion Control Person to the Project Engineer. The designated Certified Erosion Control Person shall be assigned to only one (1) project. When special conditions exist, such as two (2) adjoining projects or two (2) projects in close proximity, the Contractor may request in writing that the State Construction Engineer approve the use of one (1) Certified Erosion Control Person for both projects. The Contractor may request in writing that the Engineer authorize a substitute Certified Erosion Control Person to act in the absence of the Certified Erosion Control Person. The substitute Certified Erosion Control Person must also be certified by an organization approved by the Department. A copy of the Certified Erosion Control Person's certification must be included in the Contractor's Protection Plan as outlined in Subsection 907-107.22.1. This in no way modifies the requirements regarding the assignment and availability of the superintendent.

<u>907-105.14--Maintenance During Construction</u>. Before the first sentence Subsection 105.14 on page 39, add the following.

The Contractor will be responsible for the maintenance of existing roadways within the limits of this project starting on the date of the Notice To Proceed / Beginning of Contract Time. Anytime work is performed in a travel lane, the Contractor shall install portable lane closure signs meeting the requirement of the MDOT Standard Drawing or MUTCD.

## SPECIAL PROVISION NO. 907-107-13

CODE: (IS)

## DATE: 05/01/2013

### SUBJECT: Legal Relations and Responsibility to Public

Section 107, Legal Relations and Responsibility to Public, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-107.02--Permits, Licenses and Taxes</u>. Delete in toto Subsection 107.02 on page 49 and substitute the following.

The Contractor or any Subcontractor shall have the duty to determine any and all permits and licenses required and to procure all permits and licenses, pay all charges, fees and taxes and issue all notices necessary and incidental to the due and lawful prosecution of the work. At any time during the life of this contract, the Department may audit the Contractor's or Subcontractor's compliance with the requirements of this section.

The Contractor or any Subcontractor is advised that the "Mississippi Special Fuel Tax Law", Section 27-55-501, et seq. and the Mississippi Use Tax Law, Section 27-67-1, et seq., and their requirements and penalties, apply to any contract or subcontract for construction, reconstruction, maintenance or repairs, for contracts or subcontracts 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 Contractor or any Subcontractor will be subject to one or more audits by the Department during the life of this contract to make certain that all applicable fuel taxes, as outlined in Section 27-55-501, et seq., and any sales and/or use taxes, as outlined in Section 27-67-1, et seq. are being paid in compliance with the law. The Department will notify the Mississippi State Tax Commission of the names and addresses of any Contractors or Subcontractors.

### 907-107.14--Damage Claims and Insurance.

<u>907-107.14.2--Liability Insurance</u>. Delete Subsection 107.14.2 beginning on page 60 and substitute the following.

<u>907-107.14.2.1--General</u>. The Contractor shall carry Contractor's liability, including subcontractors and contractual, with limits not less than: \$500,000 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 Agent or Qualified Nonresident 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.

- 2 -

<u>907-107.14.2.2--Railroad Protective.</u> The following provisions are applicable to all work performed under a contract on, over or under the rights-of-way of each railroad shown on the plans.

The Contractor shall assume all liability for any and all damages to work, employees, servants, equipment and materials caused by railroad traffic.

Prior to starting any work on railroad property, the Contractor shall furnish satisfactory evidence to the Department that insurance of the forms and amounts set out herein in paragraphs (a) and (b) has been obtained. Also, the Contractor shall furnish similar evidence to the Railroad Company that insurance has been obtained in accordance with the Standard Provisions for General Liability Policies and the Railroad Protective Liability Form as published in the Code of Federal Regulations, 23 CFR 646, Subpart A. Evidence to the Railroad Company shall be in the form of a Certificate of Insurance for coverages required in paragraph (b), and the original policy of the Railroad Protective Liability Insurance for coverage required in paragraph (a).

All insurance herein specified shall be carried until the contract is satisfactorily complete as evidenced by a release of maintenance from the Department.

The Railroad Company shall be given at least 30 days notice prior to cancellation of the Railroad Protective Liability Insurance policy.

For work within the limits set out in Subsection 107.18 and this subsection, the Contractor shall provide insurance for bodily injury liability, property damage liability and physical damage to property with coverages and limits no less than shown in paragraphs (a) and (b). Bodily injury shall mean bodily injury, sickness, or disease, including death at anytime resulting therefrom. Property damage shall mean damages because of physical injury to or destruction of property, including loss of use of any property due to such injury or destruction. Physical damage shall mean direct and accidental loss of or damage to rolling stock and their contents, mechanical construction equipment or motive power equipment.

(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.

Coverage shall be limited to damage suffered by the railroad on account of occurrences arising out of the work of the Contractor on or about the railroad right-of-way, independent of the railroad's general supervision or control, except as noted in paragraph 4 below.

Coverage shall include:

(1) death of or bodily injury to passengers of the railroad and employees of the railroad not covered by State workmen's compensation laws,

- 3 -

- (2) personal property owned by or in the care, custody or control of the railroads,
- (3) the Contractor, or any of the Contractor's agents or employees who suffer bodily injury or death as a result of acts of the railroad or its agents, regardless of the negligence of the railroads, and
- (4) negligence of only the following classes of railroad employees:
  - (i) any supervisory employee of the railroad at the job site
  - (ii) any employee of the railroad while operating, attached to, or engaged on, work trains or other railroad equipment at the job site which are assigned exclusively to the Contractor, or
  - (iii) any employee of the railroad not within (i) or (ii) above who is specifically loaned or assigned to the work of the Contractor for prevention of accidents or protection or property, the cost of whose services is borne specifically by the Contractor or Governmental authority.

(b) **Contractor's Liability - Railroad**, including subcontractors, XCU and railroad contractual with limits of \$1,000,000 each occurrence; \$2,000,000 aggregate. Automobile with limits of \$1,000,000 combined single limit any one accident; **Workers' Compensation and Employer's Liability** - statutory and \$100,000 each accident; \$100,000 each employee; \$500,000 policy limit. **Excess/Umbrella Liability** \$5,000,000 each occurrence; \$5,000,000 aggregate. All coverage to be issued in the name of the Contractor shall be so written as to furnish protection to the Contractor respecting the Contractor's operations in performing work covered by the contract. Coverage shall include protection from damages arising out of bodily injury or death and damage or destruction of property which may be suffered by persons other than the Contractor's own employees.

In addition, the Contractor shall provide for and on behalf of each subcontractor by means of a separate and individual liability and property damage policy to cover like liability imposed upon the subcontractor as a result of the subcontractor's operations in the same amounts as contained above; or, in the alternative each subcontractor shall provide same.

<u>**907-107.15--Third Party Beneficiary Clause.</u>** In the first sentence of the first paragraph of Subsection 107.15 on page 61, change "create the public" to "create in the public".</u>

<u>907-107.17--Contractor's Responsibility for Work.</u> Delete the fifth sentence of the fifth paragraph of Subsection 107.17 on page 63 and substitute the following.

The eligible permanent items shall be limited to traffic signal systems, changeable message signs, roadway signs and sign supports, lighting items, guard rail items, delineators, impact

attenuators, median barriers, bridge railing or pavement markings. The eligible temporary items shall be limited to changeable message signs, guard rail items, or median barriers.

- 4 -

**<u>907-107.18--Contractor's Responsibility for Utility Property and Services</u>**. After the first sentence of Subsection 107.18 on page 63, add the following:

Prior to any excavation on the project, the Contractor shall contact MS 811 and advise them to mark all known utilities in the area of the excavation.

## SPECIAL PROVISION NO. 907-108-30

CODE: (IS)

### DATE: 05/22/2013

### **SUBJECT: Prosecution and Progress**

Section 108, Prosecution and Progress, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

#### 907-108.01--Subletting of Contract.

<u>907-108.01.1--General</u>. At the end of the last paragraph of Subsection 108.01.1 on page 73, add the following.

The Engineer will have the authority to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to make prompt payment within 15 calendar days as required above, or failure to submit the required OCR-484 Form, Certification of Payments to Subcontractors, which is also designed to comply with prompt payment requirements.

<u>**907-108.02--Notice To Proceed.</u>** Delete the second paragraph of Subsection 108.02 on page 75 and substitute the following.</u>

The anticipated date of the Notice to Proceed (NTP) / Beginning of Contract Time (BCT) will be specified in the proposal.

Delete the fourth paragraph of Subsection 108.02 on page 75 and substitute the following.

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.

<u>907-108.03--Prosecution and Progress.</u> Delete Subsection 108.03.1 on pages 75 & 76, and substitute the following.

**<u>907-108.03.1--Progress Schedule.</u>** Prior to or at the Pre-Construction Conference, the Contractor shall furnish a progress schedule and be prepared to discuss both its proposed methodologies for fulfilling the scheduling requirements and its sequence of operations. The Engineer will review the schedule and approve the schedule as it relates to compliance with the specifications and logic. The progress schedule must be approved by the Engineer prior to commencing work. The schedule shall be a bar-chart type schedule submitted on 11"x17" paper meeting the below minimum requirements. These activities shall be significantly detailed enough to communicate the Contractor's understanding of the construction sequencing and phasing of the project.

When preparing the progress schedule, the Contractor shall include the following:

- Show a time scale to graphically show the completion of the work within contract time.
- Define and relate activities to the contract pay items.
- Show all activities in the order the work is to be performed including submittals, submittal reviews, fabrication and delivery.
- Show all activities that are controlling factors in the completion of the work. •
- Show the time needed to perform each activity and its relationship in time to other activities.

Should the schedule not include the above requirements or becomes unrealistic during construction, the Contractor should immediately submit a revised, more realistic schedule for approval.

907-108.03.2--Preconstruction Conference. Delete the first paragraph of Subsection 108.03.2 on page 76 and substitute the following.

Prior to commencement of the work, a preconstruction conference shall be held for the purpose of discussing with the Contractor essential matters pertaining to the prosecution and satisfactory completion of the work. The Contractor will be responsible for scheduling the preconstruction conference. The Contractor will advise the Project Engineer in writing 14 days prior to the requested date that a conference is requested. When the contract requires the Contractor to have a certified erosion control person, the Contractor's certified erosion control person shall be at the preconstruction conference. The Department will arrange for utility representatives and other affected parties to be present.

Delete the third paragraph of Subsection 108.03.2 on page 76.

907-108.06--Determination and Extension of Contract Time. Delete Subsections 108.06.1 and 108.06.2 on pages 79 thru 85 and substitute the following.

#### 907-108.06.1--Blank.

#### 907-108.06.2--Based on Calendar Date Completion.

907-108.06.2.1--General. Contract Time will be established on the basis of a Completion Date, as indicated in the contract. The span of time allowed for the completion of the work included in the contract will be indicated in the contract documents and will be known as "Contract Time".

The span of time allowed in the contract as awarded 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 shall be increased in Calendar Days in the same ratio that the cost of such 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

- 2 -

than is indicated by the money value.

The Contractor shall provide sufficient materials, equipment and labor to guarantee the completion of the work in the contract in accordance with the plans and specifications within the Contract Time.

<u>907-108.06.2.2--Contract Time.</u> The following TABLE OF ANTICIPATED PRODUCTIVE DAYS indicates an average/anticipated number of productive days per month.

Month	Available Productive Days
January	6
February	7
March	11
April	15
May	19
June	20
July	21
August	21
September	20
October	16
November	11
December	5
Calendar Year	172

#### TABLE OF ANTICIPATED PRODUCTIVE DAYS

Allocation of anticipated productive days for a fractional part of the month will be computed as a proportion of the listed anticipated productive days for the applicable month.

Available productive days will start being assessed at the original Notice to Proceed/Beginning of Contract Time date shown in the contract documents, regardless of whether or not the Contractor has been issued an early Notice to Proceed.

Available productive days 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 to which work in progress could have been productive, regardless of whether the Contractor actually worked.

An available productive day will be assessed as follows:

(a) any day of the week, Monday through Friday, exclusive of legal holidays recognized by the Department in Subsection 108.04.1, in which the Contractor works or could have worked for more than six (6) consecutive hours on the controlling item(s) of work, as determined by the

- 3 -

Engineer from the Contractor's approved progress schedule. When the Contractor works or could work more than four but less than six consecutive hours, one-half (0.5) of an available work day will be charged for that day. When the Contractor works or could work six or more consecutive hours during the day, one (1.0) available work day will be charged for that day, or

- 4 -

(b) any Saturday, exclusive of legal holidays recognized by the Department in Subsection 108.04.1, in which the Contractor works for more than six (6) consecutive hours on the controlling item(s) of work, as determined by the Engineer from the Contractor's approved progress schedule. When the Contractor works less than four consecutive hours during the day, no time will be charged for that day. When the Contractor works more than four but less than six consecutive hours, one-half (0.5) of an available work day will be charged for that day. When the Contractor works are used for that day. When the Contractor works during the day, one (1.0) available work day will be charged for that day.

Should the weather or other conditions be such that four (4) consecutive satisfactory hours are not available prior to noon (for daytime operations) or midnight (for nighttime operations), no time will be assessed for that day regardless of the above conditions. However, if the Contractor elects to work, time will be assessed in accordance with the previous paragraph.

Weather delays will not be considered for Saturdays, Sundays or legal holidays recognized by the Department in Subsection 108.04.1.

Each month the Engineer will complete, and furnish to the Contractor, an "Assessment Report for Available Productive Days" (CSD-765). This report shows the number of available productive days during the estimate period and the cumulative available productive days 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 Contractor's progress will be determined monthly at the time of each progress estimate and will be based on the percentage of money earned by the Contractor compared to the percentage of elapsed time.

The percentage of money earned will be determined by comparing the total money earned todate by the Contractor, minus any payment for advancement of materials, to the total dollar amount of the contract. The percentage of time elapsed will be determined by comparing the available productive days assessed to-date on Form CSD-765 to the total available productive days for the contract.

When the "percent complete" lags more than 20 percent behind the "percentage of elapsed time", the Contractor shall immediately submit a written statement and revised progress schedule

indicating any additional equipment, labor, materials, etc. to be assigned to the work to ensure completion within the specified contract time. When the "percent complete" lags more than 40 percent behind the "percentage of elapsed time", the contract may be terminated.

- 5 -

<u>907-108.06.2.3--Extension of Time</u>. The Contractor may, prior to the expiration of the Contract Time, make a written request to the Engineer for an extension of time with a valid justification for the request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time.

No extension of the specified completion date will be granted except as provided herein. An extension of contract time may be granted for unusually severe weather, abnormal delays caused solely by the State or other governmental authorities, or unforeseeable disastrous phenomena of nature of the magnitude of earthquakes, hurricanes, tornadoes, or flooded essential work areas which are deemed to unavoidably prevent prosecuting the work.

Unusually severe weather is defined as when the actual available productive days for the contract time are less than the number of available productive days shown in the Table of Anticipated Productive Days. Any extension of contract time will be based on a calendar days basis, excluding Saturdays, Sundays or legal holidays recognized by the Department in Subsection 108.04.1. Any extension of contract time will be made on or after the specified completion date. No extension of contract time will be made on a monthly basis.

If the specified completion date of the project is extended into a season of the year in which completion of certain items of work 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 a reduction in quality. When determined that the completion of the out-of-season items 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.

Liquidated damages as set forth in Subsection 108.07 under the heading "Daily Charge Per Calendar Day" in the Table titled "Schedule of Deductions for Each Day of Overrun in Contract Time", shall be applicable to each calendar day after the specified completion date, or authorized extension thereof, and until all work under the contract is completed.

**<u>907-108.06.2.4--Cessation of Contract Time.</u>** 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 the specified completion date had not been reached at the time the Contractor called for a final inspection, the calendar day difference between the specified completion date and the date the Contractor called for a final inspection will be added after the 14-day period before starting liquidation damages. 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.

- 6 -

**<u>907-108.07--Failure to Complete the Work on Time.</u>** Delete the Schedule of Deductions table in Subsection 108.07 on page 85, and substitute the following.

#### **Schedule of Deductions for Each Day of Overrun in Contract Time**

<b>Original Contract Amount</b>		<b>Daily Charge</b>
From More Than	To and Including	Per Calendar Day
<b>\$</b> 0	100,000	\$ 150
100,000	500,000	360
500,000	1,000,000	540
1,000,000	5,000,000	830
5,000,000	10,000,000	1,200
10,000,000	20,000,000	1,800
20,000,000		3,500

**<u>907-108.10--Termination of Contractor's Responsibility</u>**. In the last sentence of Subsection 108.10 on page 88, change "bond" to "performance and payment bond(s)".

## SUPPLEMENT TO SPECIAL PROVISION NO. 907-109-6

## DATE: 12/17/2013

## SUBJECT: Measurement and Payment

Before the first sentence of Subsection 907-109.04 on page 1, add the following.

Delete the first paragraph under Subsection 109.04 on page 91, and substitute the following.

When extra work results for any reason and is not handled as prescribed elsewhere herein, the Engineer and the Contractor will attempt to agree on equitable prices. When such prices are agreed upon, a Supplemental Agreement will be issued by the Engineer.

When the Supplemental Agreement process is initiated, the Contractor will be required to submit to the Engineer a detailed breakdown for Material, Labor, Equipment, Profit and Overhead. The total allowable markup (which includes Prime Contractor and Subcontractor work, if applicable) for Supplemental Agreement work shall not exceed 20%.

The requirement for detailed cost breakdowns may be waived when a Department's Bid Item History exists for the proposed item(s), and the Contractor's requested price is within 20% of the Department's Bid History cost for that item(s). In any case, the Department reserves the right to request detailed cost breakdowns from the Contractor on any Supplemental Agreement request.

When equitable prices cannot be agreed upon mutually by the Engineer and the Contractor, the Engineer will issue a written order that work will be completed on a force account basis to be compensated in the following manner:

After the last paragraph of Subsection 907-109.07 on page 2, add the following.

Delete the last paragraph of Subsection 109.07 on pages 97 & 98, and substitute the following.

Adjustments herein provided shall not apply to fuels consumed or materials incorporated into the work during any monthly estimate period falling wholly after the expiration of contract time as defined in Subsection 101.02 of the applicable Mississippi Standard Specifications for Road and Bridge Construction, and as determined by checked final quantities..

## SPECIAL PROVISION NO. 907-109-6

CODE: (IS)

### DATE: 05/01/2013

### **SUBJECT:** Measurement and Payment

Section 109, Measurement and Payment, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-109.01--Measurement of Quantities.</u> Delete the third full paragraph of Subsection 109.01 on page 90 and substitute the following.

When requested by the Contractor, material specified to be measured by the cubic yard or ton may be converted to the other measure as appropriate. Factors for this conversion will be determined by the District Materials Engineer and agreed to by the Contractor. The conversion of the materials along with the conversion factor will be incorporated into the contract by supplemental agreement. The supplemental agreement must be executed before such method of measurement is used.

After the second sentence of the fourth full paragraph of Subsection 109.01 on page 90, add the following.

Where loose vehicle measurement (LVM) is used, the capacity will be computed to the nearest one-tenth cubic yard and paid to the whole cubic yard. Measurements greater than or equal to nine-tenths of a cubic yard will be rounded to the next highest number. Measurements less than nine-tenths of a cubic yard will not be rounded to the next highest number. Example: A vehicle measurement of 9.9 cubic yards will be classified as a 10-cubic yard vehicle. A vehicle measurement of 9.8 cubic yards will be classified as a 9-cubic yard vehicle.

<u>**907-109.04--Extra and Force Account Work.</u>** In the last sentence of subparagraph (b) in Subsection 109.04 on page 91, change "bond" to "bond(s)".</u>

Delete the first sentence of the second paragraph of subparagraph (d) in Subsection 109.04 on page 92 and substitute the following.

In the event an agreement cannot be reached for a particular piece of equipment, the book entitled "Rental Rate Blue Book For Construction Equipment" as published by EquipmentWatch® and is current at the time the force account work is authorized will be used to determine equipment ownership and operating expense rates.

#### <u>907-109.06--Partial Payment</u>.

<u>907-109.06.1--General</u>. Delete the fourth and fifth sentences of the third paragraph of Subsection 109.06.1 on page 94, and substitute the following.

In the event mutual agreement cannot be reached, the Contractor will be allowed a maximum of

25 calendar days following the Contractor's receipt 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.

- 2 -

<u>**907-109.07--Changes in Material Costs.</u>** Delete the third full paragraph of Subsection 109.07 on page 96 and substitute the following.</u>

A link to 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."

### SPECIAL PROVISION NO. 907-304-13

#### CODE: (SP)

#### DATE: 06/06/2012

## **SUBJECT:** Granular Courses

Section 907-304, Granular Courses, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-304.02--Materials.</u> After the first paragraph of Subsection 304.02.1 on page 183, add the following.

Crushed concrete meeting the requirements of Subsection 907-703.04.3 may be used in lieu of granular courses or crushed stone courses specified in the contract. This applies to base courses, shoulders, or other required construction on a prepared foundation.

#### 907-304.03--Construction Requirements.

**<u>907-304.03.5--Shaping, Compacting and Finishing.</u>** Delete the sixth paragraph of Subsection 304.03.5 on page 185.

Delete the first table in Subsection 304.03.5 on page 186 and substitute the following.

Granular Material	Lot	Individual
<u>Class</u>	Average	Test
7,8,9 or 10	97.0	93.0
5 or 6	99.0	95.0
3 or 4	100.0	96.0
1 or 2	102.0	98.0
Crushed Courses*	99.0	95.0

\* When placed on filter fabric on untreated subgrade, the individual tests and the average of the five (5) tests shall equal or exceed the following values.

Lot Average	Individual Test
96.0	92.0

**<u>907-304.05--Basis of Payment</u>**. Add the "907" prefix to the pay items listed on page 187.

## SPECIAL PROVISION NO. 907-405-8

CODE: (SP)

DATE: 05/14/2013

## SUBJECT: Polymer Modified Asphalt Rejuvenating Scrub Seal

Section 907-405, Scrub Seal, is hereby added to and made a part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

## SECTION 907-405 -- POLYMER MODIFIED ASPHALT REJUVENATING SCRUB SEAL

<u>907-405.01--Description</u>. This work shall consist of, but not be limited to, furnishing all labor, materials, equipment and transportation for the application of a polymer modified asphalt rejuvenating scrub seal. All ingredients shall be properly proportioned, mixed, and spread on the paved surface in accordance with this Specification and as directed by the Engineer.

#### <u>907-405.02--Materials.</u>

<u>907-405.02.1--Aggregate</u>. Unless otherwise noted, the aggregate material shall be one of the seal aggregate cover materials listed in and meeting the requirements of Subsection 703.14 of the Standard Specifications.

<u>907-405.02.2--Asphalt Emulsion for Scrub Seal.</u> The asphalt emulsion for scrub seal shall meet the requirements of the following table and shall be composed of a polymer modifier, a petroleum based rejuvenating agent, and asphalt.

Test on Emulsion	Method	Specification	
		(min)	(max)
Viscosity @77 (SFS)	AASHTO T 59	50	350
Residue, w% <sup>(1)</sup>	AASHTO T 59	60	-
Storage Stability, 24 h, %	AASHTO T 59	-	1.0
Sieve, w%	AASHTO T 59		0.1
Oil distillate, w%	AASHTO T 59		0.5
Test on Residue <sup>(1)</sup>			
Viscosity @ 140°F, P	AASHTO T 202	-	3000
Penetration @ 4°C (39.2°F), 200 g, 60 sec	AASHTO T 59	30	-
Test on Polymer Modifier			
Swelling in rejuvenating agent, %; 48 hours exposure @ 104°F	ASTM D 471 <sup>(2)</sup> Modified	-	40% intact film
Test on Rejuvenating Agent			
Flash point, COC, °F	AASHTO T 48	380	-
Viscosity @ 140°F, CST	AASHTO T 201	50	175
Saturate, % by weight	ASTM D 2007	-	30
Asphaltenes	ASTM D 2007	-	1.0
Test on Residue			
Weight Change, %			6.5
Viscosity Ratio			3

- Exception to AASHTO T59: Bring the temperature on the lower thermometer slowly to 350°F plus or minus 10°F. Maintain at this temperature for 20 minutes. Complete total distillation in 60 plus or minus 5 minutes from first application of heat.
- (2) Polymer Modifier Testing: Suitable substrate for film formation shall be polyethylene boards, silicone rubber sheeting, glass, or any substrate which produces a cured film of uniform cross-section. Polymer film shall be prepared from latex as follows:

Resistance to Swelling: Polymer films shall be formed by using a 50 mil drawdown bar and drawing down 50 mils of the latex on polyethylene boards. Films shall be cured for 14 days at 75°F and 50% humidity. Samples for resistance to swelling in rejuvenating agent shall be 1" by 2" rectangles cut from the cured film. Cut at least 3 specimens for each sample to be tested for swelling. Fill 3- 8 oz ointment tins with at least a  $\frac{1}{2}$ " deep of rejuvenating agent. Swelling samples shall be weighed and then placed in the ointment tins on top of the rejuvenating agent. Then, add at least another  $\frac{1}{2}$ " deep of rejuvenating agent over each of the latex samples. The ointment tins shall be covered and placed in an oven at 104°F for the specified 48 hours +/- 15 minutes. The ointment tins are allowed to cool to 75°F and then the latex films are removed from the tins. Unabsorbed rejuvenating agent is removed from the intact latex film by scraping with a rubber policeman and blotting with paper towels. If the latex film does not remain intact during removal from the tins or while removing the unabsorbed rejuvenating agent the sample shall be rejected. After the rejuvenating agent is removed from the sample shall be rejected as weight increase of the polymer film; report mass increase as a percent by weight of the original latex film mass upon exposure of films to the rejuvenating agent.

<u>907-405.02.2.1--Certification and Acceptance.</u> The Emulsion supplier shall submit a certification that the polymer modified rejuvenating emulsion meets the requirements of the specification. The certification shall be submitted to the Engineer prior to starting the work. The Engineer will sample the polymer modified rejuvenating emulsion according to Department procedures. Final acceptance of the emulsion for scrub seal will be based on the Manufacturer's Certification and testing conducted by the Department.

- 3 -

<u>907-405.03--Construction Requirements.</u> The attached sign drawings shall be used during scrub seal operations. Prior to any sealing operation, the rectangular "Loose Rock" signs shall be installed and remain in place until all sealing operations are complete. Prior to any daily sealing operation, the portable "Loose Rock" signs shall be installed in accordance with the attached drawings. Portable signs shall be installed and remain in place on a daily basis in the active sealing area. Payment for signs shown on the sign detail drawings shall be made under pay item no. 618-A, Maintenance of Traffic.

<u>907-405.03.1--Preparation.</u> The work shall be done in the following order: Prepare the pavement surface; apply the asphalt emulsion for scrub seal and scrub the applied emulsion with a scrub broom as specified herein; apply the aggregate, roll the aggregate, broom the aggregate with a secondary broom when specified; and sweep up and dispose of excess aggregate. Excess aggregate shall be removed from the project unless otherwise approved by the Engineer.

Prior to the scrub seal operation, the Contractor shall remove any and all vegetation within the limits of the scrub seal installation. The use of herbicides will be allowed at the discretion of the Engineer.

If used, the herbicide shall be applied at least 10 days prior to the scrub seal operation, or as directed by the manufacturer of the approved herbicide. The application of the herbicide shall be performed in accordance with all applicable regulations. Any and all fines or clean-up costs for unlawful misuse or discarding of herbicides shall be the sole responsibility of the Contractor. Mixtures and spread rates for the herbicides shall be determined by the manufacturer's specifications. Wash down of equipment or discarding of herbicides shall not enter catch basins or positive drainage facilities.

Prior to the scrub seal operation, the Contractor shall remove all existing thermoplastic striping, thermoplastic legends and raised pavement markers within the scrub seal limits. Removal shall be performed to the satisfaction of the Engineer.

Prior to the scrub seal operation, all drain inlet covers, monument covers, and all other utility covers shall be protected from the Contractor's scrub seal operations by applying a sheet of plastic over the exposed facilities, or other methods approved by the Engineer. All traces of plastic, residual emulsion and aggregate shall be removed from covered objects after the application of the scrub seal and/or prior to final inspection of the project.

Immediately prior to the scrub sealing operations, the Contractor shall sweep the entire pavement surface.

<u>907-405.03.2--Application</u>. The scrub seal shall be applied from edge of pavement to edge of pavement. The edges of the scrub seal application shall be maintained in a neat and uniform line. Scrub seal shall not be applied on concrete gutters or pads unless directed by the Engineer.

- 4 -

The application of the asphalt emulsion for scrub seal shall be applied only when the ambient and pavement temperatures are above 70°F.

The asphalt emulsion for scrub seal shall be applied with a distributor truck at the following target rates. The actual emulsion application rate shall be determined from the surface demands and aggregate used. Any adjustments of the application rate shall be approved by the Engineer, and manufacturer's representative if necessary.

The optimum application rate of bituminous material is dependent on the chosen seal aggregate gradation as well as the condition of the pavement in which the bituminous surface treatment is to be applied. The application rate of the bituminous material may be adjusted by the Engineer based on field conditions at the time of construction. Following are target application rates for bituminous material.

Seal Aggregate Gradation	Bituminous Material	Target Application Rate (gal/yd <sup>2</sup> )	Tolerance
Size No. 7	Emulsified Asphalt	0.33	<u>+</u> 0.03
Size No. 8 or 89	Emulsified Asphalt	0.30	<u>+</u> 0.03

Note: Emulsified Asphalt shall not be diluted. A sample of emulsified asphalt should be obtained from the Contractor's distributor on the first day of production and thereafter at a frequency not to exceed 1 sample per 50,000 gallons. Because the time between sampling of the emulsified asphalt and the testing of the material can affect the test results, samples should be sent to the MDOT Central Lab for testing as soon as possible.

The asphalt emulsion for scrub seal temperature when applied shall be a minimum of 140° to 180°F. For smaller areas, the emulsion may be applied with a wand. The emulsion shall be immediately broomed to fill cracks and voids. The emulsion scrub broom shall be as described below.

Immediately following the application of the emulsion to the road surface, the material shall be scrubbed with a scrub broom for the purpose of forcing the emulsion into the existing surface and distributing the emulsion evenly over variable road surface contours.

The application of the asphalt emulsion for scrub seal and scrub broom operation shall cease 40 feet prior to the end of the application. The remaining asphalt emulsion for scrub seal shall be dragged out by the scrub broom, and the remaining emulsified material required to complete the pass shall be applied only by the distributor truck, at the specified rate.

Immediately following the scrubbing of emulsion, aggregate shall be applied at the following application rates.

Size 7 Slag, Stone, Gravel or Expanded Clay	$= 0.30 \pm 0.02 \text{ ft}^3 / \text{yd}^2$ = 0.25 \pm 0.02 \text{ ft}^3 / \text{yd}^2 = 0.25 \pm 0.02 \text{ ft}^3 / \text{yd}^2
Size 8 Expanded Clay	$= 0.25 \pm 0.02 \text{ ft}^3 / \text{yd}^2$
Size 89 Slag, Stone, or Gravel	$= 0.25 \pm 0.02 \text{ ft}^3 / \text{yd}^2$

The actual aggregate application rate shall be as required by the surface demands and the emulsion used. The rate shall be adjusted, within the specified limit, up or down so that no "bleed through" occurs during rolling.

- 5 -

During the first day of production and at least once a week thereafter, the application rate of the aggregate shall be verified by the Department to assure that the appropriate application rate of the aggregate is applied. The rate can be verified by placing a tarp of at least  $1.0 \text{ yd}^2$  area on the roadway surface. After allowing the aggregate spreader to pass over the tarp, the aggregate on the tarp should be collected and weighed to determine the weight of aggregate. The measured weight should then be compared to the target weight calculated using the following formula.

 $W = 0.85(G_{sb})(U_w)(R)(A)(e)$ 

Where:

W = target weight of aggregate in lbs.

 $G_{sb}$  = bulk specific gravity of aggregate

 $U_w$  = Unit weight of water at 70°F = 62.3 lbs./ft<sup>3</sup>

 $R = target application rate in ft^3/yd^2$ 

A = area of tarp in  $yd^2$ 

e = air voids in loose aggregate = 0.4

 $G_{sb}$  for gravel = 2.650  $G_{sb}$  for limestone = 2.700

Note: Bulk specific gravities of expanded clay and steel slag should be obtained from the seal aggregate supplier.

Upon determining the target weight, it should be compared to the actual measured weight. If the difference in the target weight and the actual measured weight is over 2.5 pounds, the aggregate distributor should be adjusted such that the spread rate is within the above tolerance. The above procedure shall be repeated until the spread rate is within the allowable tolerance.

If at any point during production, excessive aggregate is noted, the aggregate application rate should be verified and the spread rate adjusted. The intent is to minimize the amount of excess aggregate. Excess aggregate removed from the roadway surface after brooming shall be removed from the job site and should not be reused in the aggregate operation.

The dry aggregate shall be spread uniformly to cover the bituminous material with the quantity of mineral aggregate specified by the Engineer. All deficient areas shall be covered by additional material. All excess cover material shall be removed from the surface and stockpiled or used as directed.

A minimum of two self-propelled pneumatic-tired rollers shall be used for the required rolling of the aggregate. The pneumatic-tired rollers shall be in good working condition and actively rolling at all times during the scrub seal operation. The pneumatic-tired rollers shall be minimum 5-ton rollers. The pneumatic-tired rollers shall be operated in such a manner to prevent the dislodging of newly applied aggregate.

<u>907-405.03.3--Stockpile Sites.</u> Sites for stockpiles of materials shall be grubbed and cleaned prior to storing the aggregates, and the ground shall be firm, smooth, and well drained.

<u>907-405.03.4--Equipment.</u> The following equipment shall be used for the scrub-seal operations.

- A. <u>Asphalt Distributor</u>. The asphalt distributor for application of the emulsion shall have a full circulation spray bar that is adjustable to at least sixteen feet (16') wide in two (2) feet increments and capable of heating and circulating the emulsion simultaneously. It must have computerized rate control for adjusting and controlling the application from the cab within 0.01 gallons per square yard increments. The distributor shall also be equipped with a volume measuring device and a thermometer for measuring the emulsion temperature in the tank.
- B. <u>Scrub Broom</u>. A scrub broom as described herein shall be used to scrub the emulsion after application. The scrub broom frame shall be constructed of metal. The scrub broom shall be attached to and pulled by the distributor truck. The scrub broom must be equipped with a means of raising and lowering the scrub broom at desired points. It shall be towable in the elevated position to the next area of construction. The weight of the broom assembly shall be such that it does not squeegee the emulsion off the roadway surface.

The main body of the scrub broom shall have a frame size as shown in the drawing at the end of this special provision. The nearest and furthest members, paralleling the back of the distributor truck, and diagonal members shall be equipped with street brooms. The leading member and the trailing member shall have broom heads angled at 10 to 15 degrees off the centerline of the supporting member. The diagonal members shall have broom heads attached in line with the centerline of the supporting member. Each individual street broom attached to the scrub broom assembly shall be 3.5 inches wide x 6.5 inches high x 16 inches long and have stiff nylon bristles. Bristle height is to be maintained at a minimum of five inches (5"). The scrub broom shall be equipped with hinged wing assemblies attached to the main body not to exceed 4.5 feet per side, with diagonals and equipped with street brooms. The purpose of the maximum rigid frame width and the hinged wing extensions is not only for maximum width of 16 feet but to maintain the scrubbing process evenly as contours and cross-sections change across the existing road surface.

- C. <u>Aggregate Spreader</u>. A self-propelled aggregate spreader with front discharge that can evenly distribute aggregate.
- D. <u>Roller.</u> A minimum of two (2) pneumatic rollers weighing at least five (5) tons each.
- E. <u>Power Broom.</u> Two (2) mechanically powered kick-brooms or vacuum type brooms.

- 6 -

After the scrub seal has been rolled and the bituminous material has cured a minimum of one (1) hour, or longer if necessary to sufficiently hold the aggregate in place, the Contractor shall perform an initial brooming operation consisting of lightly sweeping excess aggregate material from the surface. After the initial brooming has been completed, public traffic will be allowed on the roadway.

Immediately the next morning, a final brooming shall be performed to remove any remaining excess aggregate material from the previous day's seal operation.

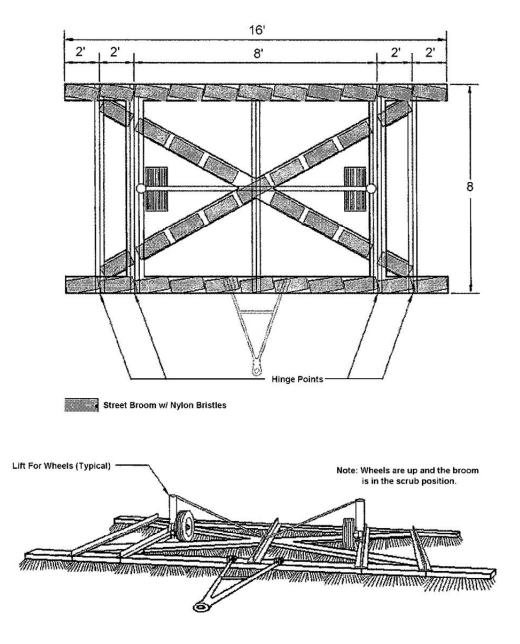
<u>907-405.04--Method of Measurement.</u> Scrub seal shall be measured by the square yard.

<u>907-405.05--Basis of Payment.</u> Scrub seal, measured as prescribed above, will be paid for at the contract bid price per square yard, which shall be full compensation for furnishing all labor, materials, equipment, temporary markers, vegetation removal, cleaning of the surface, presweeping, post-sweeping, doing all the work involved in mixing, applying and protecting the polymer modified asphaltic rejuvenating scrub seal, and all incidentals necessary to complete the work.

Payment will be made under:

907-405-D: Scrub Seal

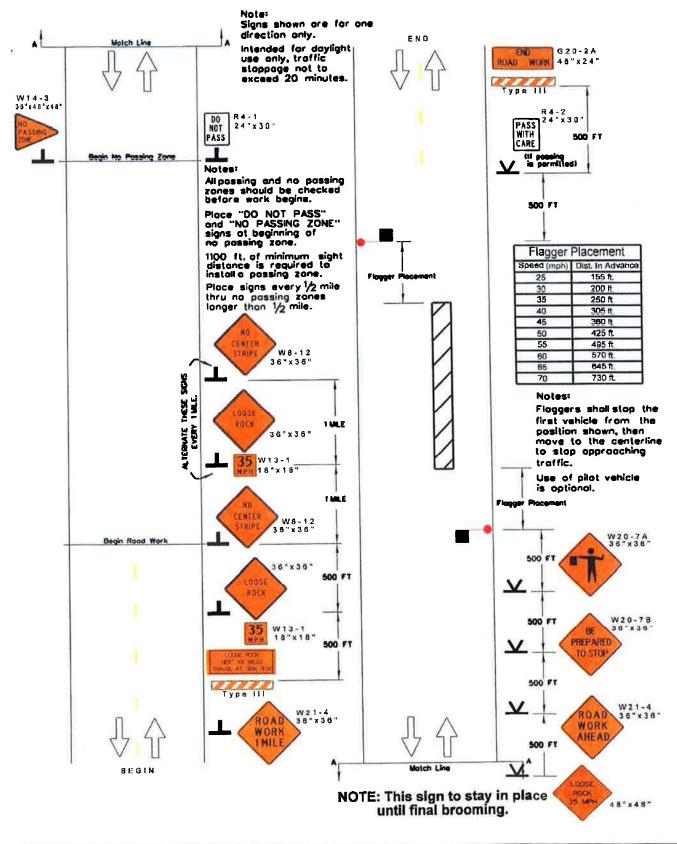
- per square yard



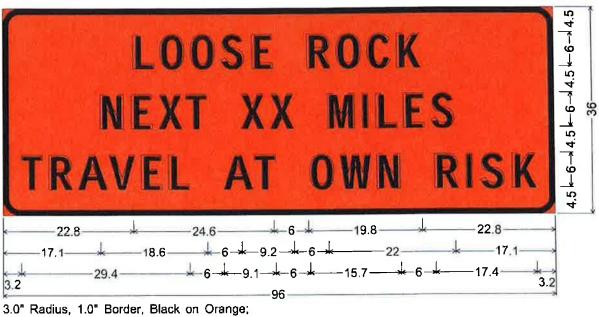
- 8 -

l

Scrub Broom



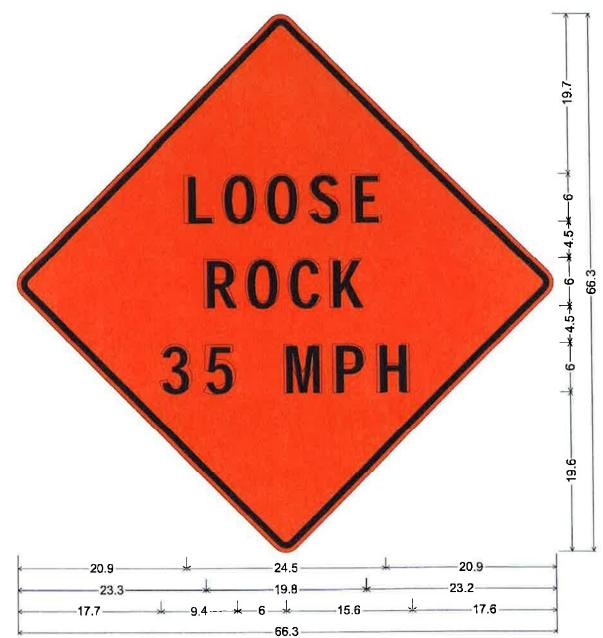
75



"LOOSE ROCK" D; "NEXT XX MILES" D; "TRAVEL AT OWN RISK" D; Table of letter and object lefts.

L 22.8	0	6	0 33.0	53	38.3	<b>E</b> 43.7	<b>R</b> 53	5.4 £	<b>)</b> 58.5	<b>C</b> 63	.9	<b>K</b> 69.	0							
N 17.1	<b>E</b> 22,	5	X 27.3	Т 3	2.1	<b>X</b> 41.7	<b>X</b> 46	.9 5	l 6.9	l 63.	0	L 65.3	3	<b>E</b> 70.	1	<b>S</b> 74.	9			
T 3.2	R 8.0	A 13	3.2 <b>1</b>	, 8.6	6 <b>E</b> 24	4.2 L	9.0	▲ 38.0	6 <b>T</b> 44	4.0	<b>0</b> 53	3.7	<b>W</b> 59	9.0	N 6	5.4	<b>R</b> 75.4	l 80.9	<b>S</b> 83.2	<b>K</b> 88.6

- 10 -



48.0" across sides 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange; "LOOSE" D; "ROCK" D; "35 MPH" D;

Table of letter and object lefts.

L	<b>0</b>	<b>0</b>	<b>S</b>	<b>E</b>
20.9	25.7	31.0	36.4	41.8
<b>R</b>	<b>0</b>	<b>C</b>	<b>K</b>	
23.3	28.4	33.8	38.9	
<b>3</b>	<b>5</b>	M	<b>P</b>	<b>H</b>
17.7	23.1	33.1	39.2	44.6

## SPECIAL PROVISION NO. 907-410-7

CODE: (SP)

## DATE: 04/09/2013

## **SUBJECT:** Bituminous Surface Treatments

Section 410, Bituminous Surface Treatment, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-410.03-Construction Requirements.</u> Add the following before Subsection 410.03.1 on Page 286.

The attached sign drawings shall be used during sealing operations. Prior to any sealing operation, the rectangular "Loose Rock" signs shall be installed and remain in place until all sealing operations are complete. Prior to any daily sealing operation, the portable "Loose Rock" signs shall be installed in accordance with the attached drawings. Portable signs shall be installed and remain in place on a daily basis in the active sealing area. Payment for signs shown on the sign detail drawings shall be made under pay item no. 618-A, Maintenance of Traffic.

<u>**907-410.03.2--Seasonal and Weather Limitations.</u> Delete the first sentence of the first paragraph of Subsection 410.03.2 on page 287, and substitute the following.</u>** 

Emulsified asphalt and cut-back asphalt shall be applied only when both the air and pavement temperatures are above 70°F.

Delete subparagraph (a) of Subsection 410.03.2 on page 287, and substitute the following.

(a) The air and pavement temperature is  $70^{\circ}$ F or higher

<u>907-410.03.3.4-Power Rollers</u>. Delete the first paragraph of Subsection 410.03.3.4 on page 288 and substitute the following.

Steel-wheel rollers will not be allowed.

<u>907-410.03.5--Application of Bituminous Material.</u> Delete the third paragraph of Subsection 410.03.5 on page 289, add the following.

Emulsified asphalt material shall be applied with a pressure distributor at the specified rate, and at a temperature of 140° to 180°F. All other bituminous material shall be applied with a pressure distributor at the temperature range set out in Subsection 702.11. It shall be uniformly applied full width in one operation unless the Engineer permits it to be applied in narrower widths.

The application rate of the bituminous material shall result in complete and uniform coverage of

the pavement receiving the bituminous surface treatment. If the application of the bituminous material does not result in complete coverage, the Contractor shall cease operations and adjust the distributor bar height and/or nozzle(s) such that complete coverage is attained. At a minimum, the application rate of the Bituminous Material should be verified daily by the Department.

The optimum application rate of bituminous material is dependent on the chosen seal aggregate gradation as well as the condition of the pavement in which the bituminous surface treatment is to be applied. The application rate of the bituminous material may be adjusted by the Engineer based on field conditions at the time of construction. Following are target application rates for bituminous material.

Seal Aggregate Gradation	Bituminous Material		
Size No. 7	AC	0.28	<u>+</u> 0.03
Size No. 8 or 89	AC	0.23	<u>+0</u> .03
Size No. 7	Emulsified Asphalt	0.38	<u>+</u> 0.03
Size No. 8 or 89	Emulsified Asphalt	0.35	<u>+</u> 0.03

Note: Emulsified Asphalt shall not be diluted. A sample of emulsified asphalt should be obtained from the Contractor's distributor on the first day of production and thereafter at a frequency not to exceed 1 sample per 50,000 gallons. Because the time between sampling of the emulsified asphalt and the testing of the material can affect the test results, samples should be sent to the MDOT Central Lab for testing as soon as possible.

## 907-410.03.6--Application of Cover Coat Material.

<u>907-410.03.6.1--General.</u> Delete the third paragraph of Subsection 410.03.6.1 on page 290 and substitute the following.

The application rate of cover aggregate shall be within the following range.

Size 7 Slag, Stone, Gravel or Expanded Clay	$= 0.30 \pm 0.02 \text{ ft}^3 / \text{yd}^2$
Size 8 Expanded Clay	$= 0.25 \pm 0.02 \text{ ft}^3 / \text{yd}^2$
Size 89 Slag, Stone, or Gravel	$= 0.25 \pm 0.02 \text{ ft}^3 / \text{yd}^2$

During the first day of production and at least once a week thereafter, the application rate of the seal aggregate shall be verified by the Department to assure that the appropriate application rate of the seal aggregate is applied. The rate can be verified by placing a tarp of at least  $1.0 \text{ yd}^2$  area on the roadway surface. After allowing the seal aggregate spreader to pass over the tarp, the aggregate on the tarp should be collected and weighed to determine the weight of aggregate. The measured weight should then be compared to the target weight calculated using the following formula.

 $W = 0.85(G_{sb})(U_w)(R)(A)(e)$ 

Where:

W = target weight of aggregate in lbs.  $G_{sb} = \text{bulk specific gravity of aggregate}$   $U_w = \text{Unit weight of water at 70°F = 62.3 lbs./ft^3}$   $R = \text{target application rate in ft}^3/yd^2$   $A = \text{area of tarp in yd}^2$  e = air voids in loose aggregate = 0.4 $G_{sb} \text{ for gravel} = 2.650$ 

- $G_{sb}$  for limestone = 2.700
- Note: Bulk specific gravities of expanded clay and steel slag should be obtained from the seal aggregate supplier.

Upon determining the target weight, it should be compared to the actual measured weight. If the difference in the target weight and the actual measured weight is over 2.5 pounds, the seal aggregate distributor should be adjusted such that the spread rate is within the above tolerance. The above procedure shall be repeated until the spread rate is within the allowable tolerance.

- 3 -

If at any point during production, excessive seal aggregate is noted, the seal aggregate application rate should be verified and the spread rate adjusted. The intent is to minimize the amount of excess seal aggregate. Excess seal aggregate removed from the roadway surface after brooming shall be removed from the job site and should not be reused in the seal aggregate operation.

The dry aggregate shall be spread uniformly to cover the bituminous material with the quantity of mineral aggregate specified by the Engineer. All deficient areas shall be covered by additional material. All excess cover material shall be removed from the surface and stockpiled or used as directed.

Delete Subsection 410.03.7 on page 291 and substitute the following.

<u>907-410.03.7--Opening to Traffic.</u> Unless otherwise advised, the Contractor's operations shall be schedule such that all lanes of traffic are open to the traveling public at the end of each day. Considering time needed for curing and preparation prior to opening traffic, the Contractor should not apply bituminous material two (2) hours before dusk, or longer, to allow sufficient time for bonding of the aggregates.

After the surface treatment has been rolled and the bituminous material has cured a minimum of one (1) hour, or longer if necessary to sufficiently hold the aggregate in place, the Contractor shall perform an initial brooming operation consisting of lightly sweeping excess aggregate material from the surface. After the initial brooming has been completed, public traffic will be allowed on the roadway.

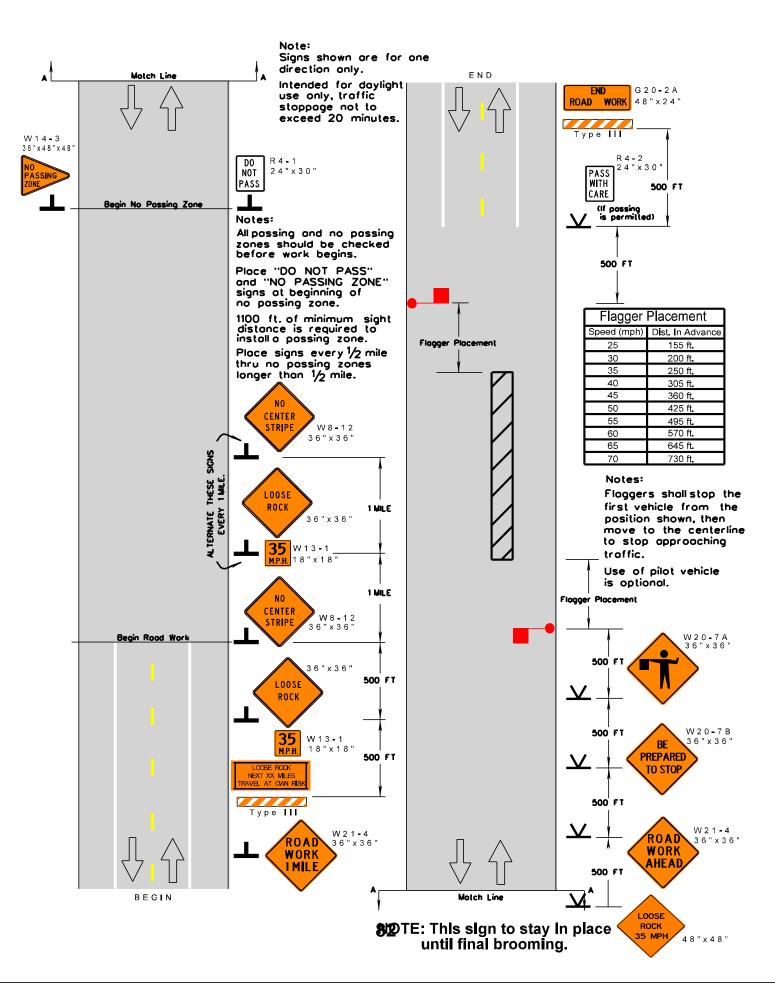
Immediately the next morning, a final brooming shall be performed to remove any remaining excess aggregate material from the previous day's seal operation.

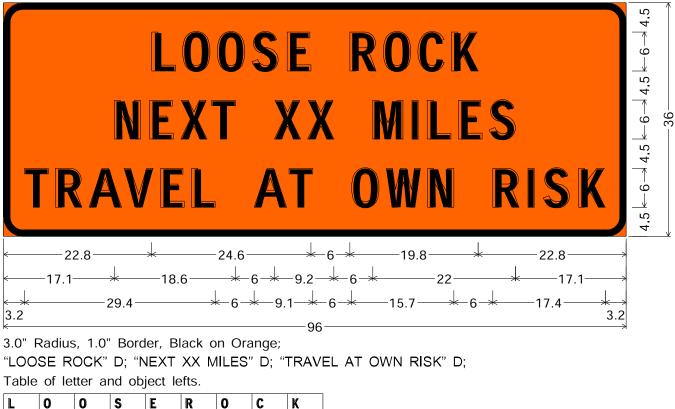
- 4 -

907-410.05--Basis of Payment. Add the "907" prefix to the pay items listed on page 292.

In Table 410-A at the end of Section 410 on page 293, delete the bituminous material application rates for Single Surface Treatments using Size 7, 8, or 89 seal aggregates.

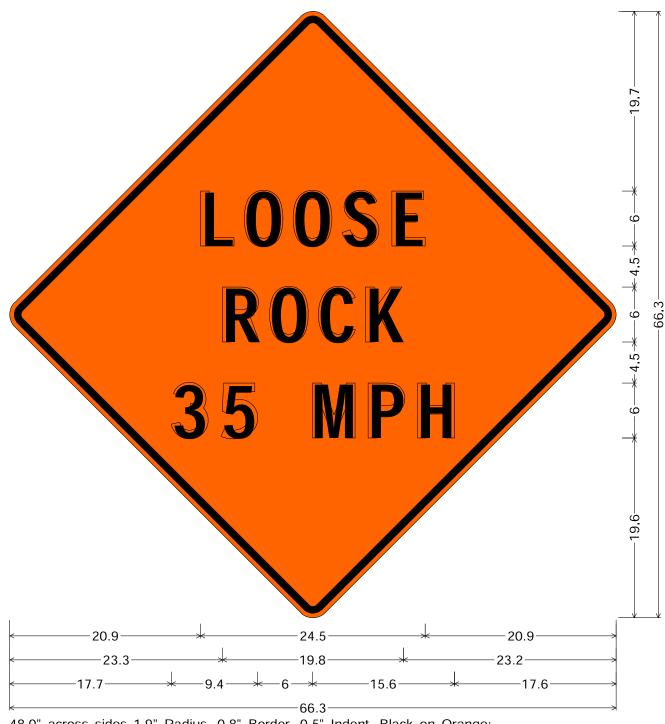
Also in Table 410-A at the end of Section 410 on page 293, delete the seal aggregate application rate for Single Surface Treatment using Size 7, 8, or 89 seal aggregates.





- 6 -

	0	0	S		E.	R	0	C	K							
22.8	27.	5 33	.0 38	8.3	43.7	53.4	58.5	5 63	.9 69	9.0						
N	E	X	Т	X	<u> </u>	Х	М	1	L	E		S				
17.1	22.5	5 27.	.3 32	2.1 4	1.7	46.9	56.9	63.	0 65	.3 7	0.1	74.	9			
Т	R /	A	۷	E	L	A	T	•	0	W	N		R	I	S	K
3.2	8.0	13.2	18.6	24.	2 29	9.0 3	8.6 4	4.0	53.7	59.	0 6	5.4	75.4	80.9	83.2	88.6



- 7 -

48.0" across sides 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange; "LOOSE" D; "ROCK" D; "35 MPH" D;

Table of letter and object lefts.

	L	0	0	S	E
	20.9	25.7	31.0	36.4	41.8
[	R	0	C	K	
	23.3	28.4	33.8	38.9	
	3	5	M	P	Н
	17.7	23.1	33.1	39.2	44.6

## SPECIAL PROVISION NO. 907-411-4

CODE: (SP)

## DATE: 07/25/2013

## **SUBJECT:** Ultra-Thin Asphalt Pavement (UTAP)

Section 907-411, Ultra-Thin Asphalt Pavement, is hereby added to and made part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

## SECTION 907-411 - ULTRA-THIN ASPHALT PAVEMENT

<u>907-411.01--Description.</u> These specifications include general requirements that are applicable to Ultra-Thin Hot Mix Asphalt (UHMA) and Ultra-Thin Warm Mix Asphalt (UWMA).

This work consists of the construction of one lift of UTAP in accordance with these specifications and the specific requirements for the mixture to be produced and placed in reasonable close conformity with the lines, grades, thicknesses and typical sections shown on the plans or established by the Engineer.

The asphalt mixture (UHMA or UWMA) used on this project will be bid as an alternate pay item. The Contractor must use the selected asphalt mixture, UHMA or UWMA, throughout the entire project.

## 907-411.01.1--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.

## 907-411.02--Materials.

## 907-411.02.1--Component Materials.

<u>907-411.02.1.1--Aggregates.</u> The source of aggregates shall meet the applicable requirements of Section 703.

The total amount of crushed limestone shall not exceed fifty percent (50%) of the total aggregate by weight.

<u>907-411.02.1.1.1--Coarse Aggregate Blend.</u> Mechanically fractured faces by weight of the combined mineral aggregate coarser than the No. 4 sieve shall be 90 percent, two faces.

**<u>907-411.02.1.1.2--Fine Aggregate Blend.</u>** Uncrushed natural sand shall pass the 3/8" sieve and can be used, excluding the content in RAP, as no greater than 30 percent of the total mineral aggregate by weight.

<u>907-411.02.1.1.3--Combined Aggregate Blend</u>. The gradation requirements for Ultra-thin asphalt pavements are provided in the following table:

Sieve Size	Percent Passing
1/2 inch	100
3/8 inch	95-100
No. 4	75 min
No. 8	22-70
No.16	
No. 200	4-12

The ultra-thin mixtures shall have a minimum fine aggregate angularity of 40.0 when tested on combined aggregate in accordance with ASTM Designation: C1252 Method A.

The minus No. 40 fraction of the combined aggregate shall be non-plastic when tested according to AASHTO T 90. The clay content shall not exceed 0.5 percent by weight of the total mineral aggregate when tested according to AASHTO T 88.

<u>907-411.02.1.2--Reclaimed Asphalt Pavement.</u> Reclaimed asphalt pavement may be used in ultra-thin asphalt pavement and shall be no greater than 25 percent of the total mix weight.

Reclaimed asphalt pavement shall be separated into coarse and fine aggregate stockpiles using a  $\frac{1}{2}$ " sieve as the break point.

<u>907-411.02.1.3--Bituminous Materials.</u> Bituminous materials shall meet the applicable requirements of Section 702 for the grade specified.

<u>907-411.02.1.4--Hydrated Lime.</u> Hydrated lime shall meet the requirements of Subsection 714.03.2 for lime used in soil stabilization.

<u>907-411.02.1.5--Mineral Filler.</u> Mineral filler shall meet the requirements of Subsection 703.16.

## 907-411.02.2--Composition of Mixtures.

<u>907-411.02.2.1--General.</u> Unless otherwise specified or permitted, the UTAP shall consist of a uniform mixture of asphalt, aggregate, mineral filler, hydrated lime and, when required or necessary to obtain desired properties, antistripping agent and/or other materials.

- 3 -

Hydrated lime shall be used in all UTAP at the rate of one percent (1%) by weight of the total dry aggregate. The aggregate, prior to the addition of the hydrated lime, shall contain sufficient surface moisture.

The Contractor shall obtain a shipping ticket for each shipment of hydrated lime. The Contractor shall provide the District Materials Engineer with a copy of each shipping ticket from the supplier, including the date, time and weight of hydrated lime shipped.

Mixtures will require the addition of an antistripping agent when the Tensile Strength Ratio (MT-63) and/or the Boiling Water Test (MT-59) fail to meet the following criteria.

Tensile Strength Ratio (TSR - MT-63)	
Wet Strength / Dry Strength	85 percent minimum
Interior Face Coating	95 percent minimum
Boiling Water Test (MT-59)	
Particle Coating	95 percent minimum

<u>907-411.02.2.2--Mixture Properties.</u> Ultra-thin asphalt pavement shall be designed at  $N_{design}$  of 50 revolutions of the gyratory compactor.

Mixtures shall be designed such that the percent of maximum specific gravity  $(G_{mm})$  shall be between 94.0 and 96.0.

There will not be voids in mineral aggregate (VMA) requirement for ultra-thin hot mix asphalt. However, the specified volume of effective binder (the difference between total air voids and VMA) shall be a minimum of 12 percent.

Dust/Binder Ratio (Percent Passing No. 200 / Effective Binder Content) for ultra-thin asphalt pavement shall be between 1.0 and 2.0.

<u>907-411.02.2.3--Job Mix Formula.</u> 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. 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.

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 UTAP 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 1/8 inch, 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.

<u>907-411.02.2.4--Single Lift Laying Thickness.</u> The minimum lift thickness for ultra-thin asphalt pavement shall be 1/2 inch and the maximum lift thickness shall not exceed one inch  $(1^{"})$ .

<u>907-411.02.2.5--UWMA Products and Processes.</u> The Department will maintain a list of qualified UWMA products and processes. No product or process shall be used unless it appears on this list.

The Contractor may propose other products or processes for approval by the Product Evaluation Committee. Documentation shall be provided to demonstrate laboratory performance, field performance, and construction experience.

## 907-411.02.3--Contractor's Quality Management Program.

**<u>907-411.02.3.1--General.</u>** 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.

<u>907-411.02.3.2--Personnel Requirements.</u> The Contractor shall provide at least one Certified Asphalt Technician-I (CAT-I) full-time during UTAP 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. 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 UTAP paving work is in progress

- 5 -

<u>907-411.02.3.3--Testing Requirements.</u> As a minimum, the Contractor's quality management program shall include the following:

- (a) Bituminous Material. Provide Engineer with samples in a sealed one-quart metal container at the frequency given in MDOT SOP TMD-20-04-00-000.
- (b) Mechanically Fractured Face. Determine mechanically fractured face content of aggregates retained on the No. 4 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-31.
- (d) Total Voids and  $V_{be}$ . Determine total voids and volume of effective binder ( $V_{be}$ ), at  $N_{Design}$ , from the results of bulk specific gravity tests on laboratory compacted specimens. Sample according to the sampling frequency in paragraph (h) 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), and determine the asphalt content using one of the following procedures.
  - (1) Nuclear gauge. (Mississippi Test Method MT-6)
  - (2) Incinerator oven. (AASHTO T 308, Method A)
- (f) Stripping Tests. Conduct a minimum of one stripping test at the beginning of each jobmix production and thereafter, at least once per each two weeks of production according to Mississippi Test Method: MT-63 and one stripping test per day of production according to Mississippi Test Method: MT-59. Should either the TSR (MT-63) or the boiling water (MT-59) 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) 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: 1/2-in, 3/8-in, No. 4, No. 8, No. 30, and No. 200. Asphalt Content, Percent Maximum Specific Gravity Total Voids @ N<sub>Design</sub>, Percent V<sub>be</sub> @ N<sub>Design</sub>, Percent 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.

(h) 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, tons	Number of Tests
0-500	1
501-1000	2
1001-1500	3
1501-2000	4
2001+	5

(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.

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 Subsection 907-411.02.3.3 paragraph (h).

In addition to the above program, aggregate stockpile gradation tests (AASHTO T-11 and T-27) shall be conducted every other production day. Fine aggregate angularity tests (ASTM C 1252, Method A) 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.

<u>907-411.02.3.4--Documentation.</u> 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 Subsection 907-411.02.3.3 (g) shall be included in the running average calculations. If single tests are performed as a check on individual UTAP properties, between regular samples, without performing all tests required in Subsection 907-411.02.3.3 (g), 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 UTAP is produced. Fourteen days after the completion of the placement of the UTAP, the Contractor shall provide the Engineer with the original testing records and control charts in a neat and orderly manner

907-411.02.3.5--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.

Sieve - % Passing	JMF Limits	Warning Limits
1/2-in	$\pm 5.5$	$\pm 4.0$
3/8-in	$\pm 5.5$	$\pm 4.0$
No. 4	$\pm 4.0$	$\pm 3.0$
No. 8	$\pm 4.0$	$\pm 3.0$
No. 30	$\pm 4.0$	$\pm 3.0$
No. 200	$\pm 2.0$	± 1.5
Asphalt Content, %	-0.3 to +0.5	-0.2 to +0.4
Design Total Voids	± 1.3	$\pm 1.0$
@N <sub>Design</sub> , %		
V <sub>be</sub> @ N <sub>Design</sub> , %	- 1.5	- 1.0

907-411.02.3.6--Warning Bands. Warning bands are defined as the area between the JMF limits and the warning limits.

907-411.02.3.7--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 range given in Subsection 907-411.02.1.1.3 for the mixture specified. The JMF asphalt content may only be reduced if the production V<sub>be</sub> meets or exceeds the minimum design V<sub>be</sub> requirements for the mixture being produced.

907-411.02.3.8--Actions and Adjustments. Actions and adjustments shall be in accordance with Subsection 401.02.5.8.

## 907-411.02.4--Standards of Acceptance.

907-411.02.4.1--General. Acceptance for mixture quality (V<sub>be</sub> and total voids @ N<sub>Design</sub>, gradation, and asphalt content) will be based on random samples tested in accordance with the latest edition of MDOT's Field Manual for HMA. Smoothness will be accepted by lots as set out in Subsection 907-411.02.4.3.

- 7 -

<u>907-411.02.4.2--Assurance Program for Mixture Quality.</u> The Engineer will conduct a quality assurance program in accordance with Subsection 401.02.6.2.

- 8 -

<u>907-411.02.4.3--Acceptance Procedure for Mixture Quality.</u> 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  $V_{be}$  @  $N_{Design}$ , 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 1/8 inch, 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  $V_{be}$  and total voids @  $N_{Design}$ , gradation, or asphalt content, as required in Subsection 907-411.02.3.8 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 ton.

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 <sub>Design</sub>	0.70	0.50
V <sub>be</sub> @ N <sub>Design</sub>	0.90	0.75

## **Pay Factor for Mixture Quality \***

\* The minimum single payment will apply.

**907-411.02.4.4--Acceptance Procedure for Density.** The density requirement for UTAP shall be roll to refusal. Refusal is defined as the number of roller passes to maximize the in-place unit weight of the mixture. On the first day of production and every three production days thereafter, a 500-foot test strip shall be evaluated to determine the required number of roller passes. Three random sites within the test strip shall be selected and monitored with the nuclear density gauge to determine refusal.

<u>907-411.02.4.5--Acceptance Procedure for Pavement Smoothness.</u> Prior to placement of UTAP, the Contractor shall determine the existing surface Mean Roughness Index at no additional cost to the State. The finished UTAP lift shall have a mean roughness index no greater than that of the existing surface.

<u>907-411.02.5--High Speed Inertial Profiling System.</u> The high speed inertial profiling system shall meet the applicable requirements of Subsection 907-401.02.6.9.

-9-

<u>907-411.02.6--Surface Correction</u>. In the event surface correction is needed it shall be accomplished by removal and replacement in accordance with Subsection 403.03.4. All such corrections shall be at no additional cost to the State.

The finished pavement surface will be measured for riding quality.

<u>907-411.02.7--Nuclear Gauges</u>. Nuclear gauges shall meet the requirements of Subsection 401.02.7.

<u>**907-411.03--**Construction Requirements.</u> Mississippi DOT has adopted the "Hot-Mix Asphalt Paving Handbook" as the guideline for acceptable UTAP construction practices.

<u>907-411.03.1--Weather Limitations.</u> 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 55°F for UHMA and 40°F for UWMA, regardless of the compacted lift thickness.

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.

907-411.03.2--Tack Coat. Tack coat shall meet the requirements of Subsection 401.03.1.2.

<u>**907-411.03.3--Bituminous Mixing Plants.</u>** Bituminous mixing plants shall meet the applicable requirements of Subsection 410.03.2.</u>

<u>907-411.03.4--Hauling Equipment</u>. Hauling equipment shall meet the requirements of Subsection 401.03.3.

<u>907-411.03.5--Bituminous Pavers.</u> Bituminous pavers shall meet the requirements of Subsection 401.03.4.

907-411.03.6--Rollers. All rollers shall meet the requirements of Subsection 401.03.5.

<u>907-411.03.7--Preparation of Grade.</u> The foundation upon which UTAP pavement is to be placed shall be prepared in accordance with Subsection 401.03.6.

<u>907-411.03.8--Preparation of Mixture</u>. The temperature of the mixture, when discharged from the mixer, shall not exceed 340°F for UHMA and 280°F for UWMA.

<u>**907-411.03.9--Spreading and Finishing.</u>** Spreading and finishing of UTAP shall be in accordance with Subsection 401.03.10.</u>

907-411.03.10--Joints. Joints shall be constructed in accordance with Subsection 401.03.12.

- 10 -

<u>**907-411.04--Method of Measurement.</u>** Ultra-thin asphalt pavement, of the type specified, will be measured by the ton.</u>

Bituminous Tack Coat for the ultra-thin asphalt pavement shall be measured by the gallon as in accordance with the provisions of Subsections 109.01 and 410.04.

<u>907-411-05-Basis of Payment.</u> Ultra-thin asphalt pavement, measured as prescribed above, will be paid for at the contract unit price per ton, which price shall be full compensation for completing the work.

Bituminous Tack Coat, measured as prescribed above, will be paid for at the contract unit price per gallon, which price shall be full compensation for completing the work.

Payment will be made under the following items:

907-411-A: Ultra Thin Asphalt Pavement, Type

907-411-B: Bituminous Tack Coat

- per gallon

-per ton

94

## **SPECIAL PROVISION NO. 907-618-9**

CODE: (IS)

DATE: 11/08/2012

#### **SUBJECT:** Placement of Temporary Traffic Stripe

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>**907-618.03.3--Safe Movement of Traffic.</u>** Delete subparagraphs (2) and (3) of Subsection 618.03.3 on page 416, and substitute the following.</u>

(2) Temporary edge lines on projects requiring shoulders constructed of granular material may be delayed for a period not to exceed three (3) days.

Temporary edge lines placed on the final pavement course of projects requiring paved shoulders with surface treatment may be placed on the adjacent shoulder in as near the permanent location as possible until the surface treatment is placed. When the edge lines are obliterated by the placement of the surface treatment, the edge lines shall be placed in the permanent stripe location. The replacement of edge lines may be delayed for a period not to exceed three (3) days for a two or three-lane roads.

Delete the first sentence of next to last paragraph of Subsection 618.03.3 on page 416 and substitute the following.

Permanent pavement markings are to be applied no sooner than 10 days nor later than 45 days after placement of the final lift of pavement.

## **SPECIAL PROVISION NO. 907-702-4**

CODE: (SP)

DATE: 05/14/1012

## SUBJECT: Polymer Modified Cationic Emulsified Asphalt (CRS-2P)

Section 702, Bituminous Materials, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>**907-702.07.3-Polymer Modified Cationic Emulsified Asphalt (CRS-2P).</u> Delete the paragraph in Subsection 702.07.3 on page 600, and substitute the following.</u>** 

Polymer Modified Cationic Emulsified Asphalt shall conform to the requirements of AASHTO Designation: M 316, with the following exception:

In Table 1, the Ductility, 25°C, 5 cm/min, shall be a minimum of 100 cm.

## SPECIAL PROVISION NO. 907-703-11

CODE: (IS)

## DATE: 05/22/2013

## **SUBJECT:** Aggregates

Section 703, Aggregates, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-703.03.2.4--Gradation</u>. Delete the last sentence of the last paragraph of Subsection 703.03.2.4 on page 611.

## 907-703.04--Aggregate for Crushed Stone Courses.

<u>907-703.04.1--Coarse Aggregate.</u> Delete the first paragraph of Subsection 703.04.1 on page 611, and substitute the following.

Coarse aggregate, defined as material retained on No. 8 sieve, shall be either crushed limestone, steel slag, granite, concrete, or combination thereof. Crushed concrete is defined as recycled concrete pavement, structural concrete, or other concrete sources that can be crushed to meet the gradation requirements for Size No. 825B as modified below. In no case shall waste from concrete production (wash-out) be used as a crushed stone base.

<u>**907-703.04.2--Fine Aggregate.**</u> Delete the first sentence of the first paragraph of Subsection 703.04.2 on page 612, and substitute the following.

Fine aggregate, defined as material passing the No. 8 sieve, shall be material resulting from the crushing of limestone, steel slag, granite, concrete, or combination thereof.

Delete the third paragraph of Subsection 703.04.2 on page 612.

<u>907-703.04.3--Gradation.</u> In the table of Subsection 703.04.3 on page 613, change the requirement for the 1-inch sieve under Size No. 825 B from "75 - 98" to "75 - 100".

After the table in Subsection 703.04.3 on page 613, add the following.

If crushed concrete is used, the crushed material shall meet the gradation requirements of Size No. 825 B with the exception that the percent passing by weight of the No. 200 sieve shall be 2 - 18.

## 907-703.06--Aggregates for Hot Mix Asphalt.

<u>907-703.06.1--Coarse Aggregates</u>. Delete the third paragraph of Subsection 703.06.1 on page 613, and substitute the following.

When tested in accordance with AASHTO Designation: T 19, the dry rodded unit weight of all aggregates except expanded clay and shale shall not be less than 70 pounds per cubic foot.

<u>907-703.06.1.2--Fine Aggregates</u>. Delete the last sentence of Subsection 703.06.1.2 on page 614.

- 2 -

## 907-703.14--Aggregates for Bituminous Surface Treatments.

## 907-703.14.2--Detail Requirements.

<u>907-703.14.2.1--Gradation.</u> In the table entitled "Gradation Requirements For Cover Aggregate" in Subsection 703.14.2.1 on page 622, delete the requirement for the No. 16 sieve for Size No. 7 under the column "Slag or Expanded Clay".

<u>907-703.20.3--Gradation</u>. Delete the table and notes in Subsection 703.20.3 at the top of page 626, and substitute the following.

	Shell		Coarse			Fine
Square Mesh		Size I	Size II	Size III		
Sieves			Note $(1)$	Note $(3)$		
3 inch				100		
2 1/2 inch	90-100			90-100		
2 inch		100				
1 1/2 inch		90-100	100	25-60		
1 inch		80-100	97-100			
3/4 inch		55-100	55-100	0-10		
1/2 inch		35-85	35-85	0-5	100	
3/8 inch		12-65	12-65		97-100	
No. 4, Note (2)		0-30	0-30		92-100	
No. 10		0-8	0-8		80-100	100
No. 40					10-40	80-100
No. 60					0-20	30-100
No. 100						15-80
No. 200	0-5	0-4	0-4		0-5	0-30
PI Material						
Passing No. 40					6 or less	0

## PERCENT PASSING BY WEIGHT

Note (1): Size II is intended for use in bases in which portland cement is used.

Note (2): Ground shell shall contain at least 97% passing the No. 4 sieve.

Note (3): Size III is intended for use in stabilized construction entrances.

## **SPECIAL PROVISION NO. 907-710-1**

CODE: (SP)

## DATE: 06/24/10

## SUBJECT: Fast Dry Solvent Traffic Paint

Section 710, Paint, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is amended as follows:

After Subsection 710.05 on Page 661, add the following:

<u>907-710.06--Fast Dry Solvent Traffic Paint.</u> Fast dry solvent traffic paints intended for use under this specification shall include products that are single packaged and ready mixed. Upon curing, these materials shall produce an adherent, reflective pavement marking capable of resisting deformation by traffic. The manufacturer shall have the option of formulating the material according to their own specifications. However, the requirements delineated in this specification, Section 619 and Section 710 shall apply regardless of the formulation used. The material shall be free from all skins, dirt and foreign objects.

#### 907-710.06.1--Composition.

<u>907-710.06.1.1--Percent Pigment.</u> The percent pigment by weight shall be not less than 51% nor more than 58% when tested in accordance with ASTM D 3723.

<u>907-710.06.1.2--Viscosity.</u> The consistency of the paint shall be not less than 75 nor more than 95 Krebs Units (KU) when tested in accordance with ASTM D 562.

<u>907-710.06.1.3--Weight per Gallon.</u> The paint shall weigh a minimum 11.8 pounds per gallon and the weight of the production batches shall not vary more than +/- 0.5 pounds per gallon from the weight of the qualification samples when tested in accordance with ASTM D 1475.

<u>907-710.06.1.4--Total Solids.</u> The percent of total solids shall not be less than 70% by weight when tested in accordance with ASTM D 2369.

<u>907-710.06.1.5--Dry Time (No pick-up).</u> The paint shall dry to a no tracking condition in a maximum of 10 minutes.

<u>907-710.06.1.6--Volatile Organic Content.</u> The volatile organic content (VOC) shall contain a maximum of 1.25 pounds of volatile organic matter per gallon of total non-volatile paint material when tested in accordance with ASTM D 3960.

<u>907-710.06.1.7--Bleeding.</u> The paint shall have a minimum bleeding ratio of 0.95 when tested in accordance with Federal Specification TT-P-115D.

<u>907-710.06.1.8--Color.</u> The initial daytime chromaticity for yellow materials shall fall within the box created by the following coordinates:

- 2 -

Initial Daytime enromaticity coordinates (corner romes)									
	1	2	3	4					
Х	0.53	0.51	0.455	0.472					
у	0.456	0.485	0.444	0.4					

## **Initial Daytime Chromaticity Coordinates (Corner Points)**

The initial daytime chromaticity of white materials shall fall within the box created by the following coordinates:

_	1	2	3	4
X	0.355	0.305	0.285	0.355
у	0.355	0.305	0.325	0.375

## **Initial Daytime Chromaticity Coordinates (Corner Points)**

<u>907-710.06.2--Environmental Requirements.</u> All yellow materials using lead chromate pigments shall meet the criteria of non-hazardous waste as defined by 40 CFR 261.24 when tested in accordance with EPA Test Method 1311, Toxicity Characteristics Leaching Procedures (TCLP). The striping and marking material, upon preparation and installation, shall not exude fumes which are toxic, or detrimental to persons or property. All material using lead free pigments shall NOT contain either lead or other Resource Conservation and Recovery Act (RCCA) materials in excess of the standard defined by EPA Method 3050 and 6010.

<u>907-710.06.3--Acceptance Procedures.</u> Acceptance of all fast dry solvent based traffics paint will be based on the Manufacturer's Certification and Certified Test Results. The Contractor shall furnish the Engineer with three copies of the manufacturer's certification stating that each lot of material in a shipment complies with the requirements of this contract. In addition, the Contractor shall provide Certified Test Reports for all tests required by this specification. The test results shall be representative of the material contained with the shipment.

## SECTION 905 - PROPOSAL

Mississippi Transportation Commission	
Jackson, Mississippi	
Sirs: The following proposal is made on behalf of	
of	

Date

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 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 any 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 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.

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

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

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

	Respectfully Submitted,				
	DATE				
		Contractor			
	BY	Signature			
	TITLE				
	ADDRESS				
	CITY, STATE, ZIP				
	PHONE				
	FAX				
	E-MAIL				
(To be filled in if a corporation)					
Our corporation is chartered under the Laws titles and business addresses of the executives are as			and	the	names
President		Address			
Secretary		Address			
Treasurer		Address			
The following is my (our) itemized proposal.					

Level and Seal on Various Routes throughout the District, known as State Project No. MP-3000-00(096) / 305215301 in District 3.

Line	Item Code	Adj	Quantity	Units	Description [Fixed Unit Price]			
No.		Code			Roadway Items			
0010	618-A001		1	Lump Sum	Maintenance of Traffic			
0020	618-B001		1	Square Feet	Additional Construction Signs [\$10.00]			
0030	619-A2002		21	Mile	Temporary Traffic Stripe, Continuous Yellow			
0040	619-A4006		60	Mile	Temporary Traffic Stripe, Skip Yellow			
0050	619-A5001		342	Linear Feet	Temporary Traffic Stripe, Detail			
0060	619-A6001		2,148	Linear Feet	Temporary Traffic Stripe, Legend			
0070	627-H001		8,670	Each	Chip Seal Reflective Raised Markers. Two-Way Yellow			
0080	907-304-B002	(GT	) 15,348	Ton	Granular Material, Class 5, Group D			
0090	907-405-D001		173,747	Square Yard	Scrub Seal			
0100	907-410-A001	(A2	) 206,250	Gallon	Asphalt for Surface Treatment, Grade CRS-2P			
0110	907-410-C002	(GY	) 7,645	Cubic Yard	Seal Aggregate Cover Material, Size 7, Limestone			
0120	907-411-B001	(A2	) 13,758	Gallon	Bituminous Tack Coat			
				ALTERNAT	TE GROUP AA NUMBER 1			
0130	907-411-A001	(BA1	) 11,029	Ton	Ultra Thin Asphalt Pavement, UHMA			
				ALTERNAT	TE GROUP AA NUMBER 2			
0140	907-411-A002	(BA1	) 11,029	Ton	Ultra Thin Asphalt Pavement, UWMA			

#### SECTION 905 - COMBINATION BID PROPOSAL (Continued)

## **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.	<u>County</u>	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.

## SECTION 905 - COMBINATION BID PROPOSAL (Continued)

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

#### SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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 \_\_\_\_\_

## JACKSON, MISSISSIPPI <u>CERTIFICATE</u>

If awarded this contract, I (we) contemplate that portions of the contract will be sublet. I (we) certify that those subcontracts which are equal to or in excess of fifty thousand dollars (\$50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on January 13, 1999.

TO: EXECUTIVE DIRECTOR, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

I (we) agree that this notification of intent DOES NOT constitute APPROVAL of the subcontracts.

NOTE: Insert name and address of subcontractors. (Subcontracts equal to or in excess of fifty thousand dollars (\$50,000.00) <u>ONLY</u>.)

(Individual or Firm)

(Individual or Firm)

(Individual or Firm)

(Individual or Firm)

NOTE: Failure to complete the above <u>DOES</u> <u>NOT</u> preclude subsequent subcontracts. Subsequent subcontracts, if any, equal to or in excess of fifty thousand dollars (\$50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on January 13, 1999.

Contractor \_\_\_\_\_\_By \_\_\_\_\_

Title \_\_\_\_\_

#### CERTIFICATE MUST BE EXECUTED

(Address)

(Address)

(Address)

(Address)

**T1** 

## CERTIFICATION

(Execute in duplicate)

(Name of person sig	gning 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 Uni	ited States and the State of Mississippi that
	, Bidder
(Name of Firm, Partnership, or Corp	poration)
on Project No. MP-3000-00(096) / 305215301	

in <u>District Wide (3)</u> 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 are not currently under suspension, debarment, voluntary exclusion or determination of ineligibility; nor have a debarment pending; nor been suspended, debarred, voluntarily excluded or determined ineligible within the past three years by the Mississippi Transportation Commission, the State of Mississippi, any other State or a federal agency; nor been indicted, convicted or had a civil judgment rendered by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

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.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on \_\_\_\_\_\_

Signature

(5/29/2008S)

## CERTIFICATION

(Execute in duplicate)

(Name of person sig	gning 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 Uni	ited States and the State of Mississippi that
	, Bidder
(Name of Firm, Partnership, or Corp	poration)
on Project No. MP-3000-00(096) / 305215301	

in <u>District Wide (3)</u> 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 are not currently under suspension, debarment, voluntary exclusion or determination of ineligibility; nor have a debarment pending; nor been suspended, debarred, voluntarily excluded or determined ineligible within the past three years by the Mississippi Transportation Commission, the State of Mississippi, any other State or a federal agency; nor been indicted, convicted or had a civil judgment rendered by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

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.

All of the foregoing and attachments (when indicated) is true and correct.

Executed on \_\_\_\_\_\_

Signature

(5/29/2008S)

#### SECTION 902

#### CONTRACT FOR **MP-3000-00(096) / 305215301**

#### LOCATED IN THE COUNTY(IES) OF **District Wide (3)**

#### 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					this the	day of		,				
Contractor (s) By					MISSISSIPPI TRANSPORTATION COMMISSION							
Title Signed and sealed in the presence of:					Ву	Executive Director						
0	and addresses						Execut	Ive Director				
								the Commi				
Award	authorized	by	the	Mississippi	Transportat	ion Commission	in s	session on	the		day	of
			,	, Minu	te Book No	, Page	e No	•				
Revised	8/06/2003											

## SECTION 903 PERFORMANCE AND PAYMENT BOND

CONTRACT BOND FOR:	MP-3000-00(096) / 305215301	
LOCATED IN THE COUNTY	IES) OF: District Wide (3)	
STATE OF MISSISSIPPI,		
COUNTY OF HINDS		
Know all men by these present	that we,	
	( Contractor )	
	Principal, a	
	in the State of	
and	(Surety)	
residing at	in the State of	
	e State of Mississippi, under the laws thereof, as surety, are held and firmly b	
unto the State of Mississippi in	he sum of	
(\$	) Dollars, lawful money of the United States of America, to be	naid
	, bonars, rawrut money of the onned states of America, to be and truly to be made, we bind ourselves, our heirs, administrators, successor	-
assigns jointly and severally by		3, 01
assigns jointry and severally 0	nese presents.	
Signed and so	led this the day of A.D	
The conditions of this bond are	such, that whereas the said	
	· · · · · · · · · · · · · · · · · · ·	
	to a contract with the Mississippi Transportation Commission, bearing the da	
	A.Dhereto annexed, for the construction of certain projection	
	nentioned in said contract in accordance with the Contract Documents therefore	or, on
file in the offices of the Missis	ppi Department of Transportation, Jackson, Mississippi.	
Now therefore, if the above bo	nden	
	in all things shall stand to and abide by and well and truly obs	
contained on his (their) part t	gular the terms, covenants, conditions, guarantees and agreements in said con be observed, done, kept and performed and each of them, at the time and i l of the material and equipment specified in said contract in strict accordance	n the

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

## **SECTION 903 - CONTINUED**

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		
Зу	By (Signature) Attorney in Fact		
	Address		
Title			
(Contractor's Seal)	(Printed) MS Agent		
	(Signature) MS Agent		
	Address		
	(Surety Seal)		
	Mississippi Insurance ID Number		



# **BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we				
		Contractor		
		Address		
		City, State ZIP		
as Principal, hereinafter called the Principal, and		Surety		
a corporation duly organized under the laws of the state of				
as Surety, hereinafter called the Surety, are held and firmly	bound unto	State of Mississippi, Jac	kson, Mississippi	
As Obligee, hereinafter called Obligee, in the sum of Five	Per Cent (5%	6) of Amount Bid		
	Dollars (\$)			
for the payment of which sum will and truly to be mad executors, administrators, successors and assigns, jointly ar			bind ourselves, our heirs,	
WHEREAS, the Principal has submitted a bid for Level a State Project No. MP-3000-00(096) / 305215301 in Distriction		various Routes throughou	ıt the District, known as	
NOW THEREFORE, the condition of this obligation is such said Principal will, within the time required, enter into a fi- performance of the terms and conditions of the contract, t will pay unto the Obligee the difference in money between which the Obligee legally contracts with another party to per in no event shall liability hereunder exceed the penal sum h	formal contract hen this oblight the amount erform the wo	ct and give a good and suf ation to be void; otherwise of the bid of the said Prin	fficient bond to secure the e the Principal and Surety ncipal and the amount for	
Signed and sealed this day of	, 20			
		(Principal)	) (Seal)	
	By:			
(Witness)		(Name)	(Title)	
		(Surety)	(Seal)	
(Witness)	By:	(Attorney-in-F	ract)	
		· · ·		
		MS Agent		

Mississippi Insurance ID Number