



SM No. CERNH0003011081

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF
(NONEXEMPT)

1
Grading, Draining, Paving & Replacing traffic signals on US 90 between
Rodenburg Ave. and Biloxi Bay, known as Federal Aid Project Nos. ER-
NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308, in
the County of Harrison, State of Mississippi.
Project Completion: November 14, 2008

NOTICE

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

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

SECTION 900
OF THE CURRENT
(2004) STANDARD SPECIFICATIONS
FOR ROAD AND BRIDGE CONSTRUCTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
JACKSON, MISSISSIPPI

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

- _____ All unit prices and item totals have been entered in accordance with Subsection 102.06 of the Mississippi Standard Specifications for Road and Bridge Construction.
- _____ If the bid sheets were prepared using MDOT's Electronic Bid System, proposal sheets have been stapled and inserted into the proposal package.
- _____ First sheet of SECTION 905--PROPOSAL has been completed.
- _____ Second sheet of SECTION 905--PROPOSAL has been completed and signed.
- _____ Addenda, if any, have been acknowledged. Second sheet of Section 905 listing the addendum number has been substituted for the original second sheet of Section 905. Substituted second sheet of Section 905 has been properly completed, signed, and added to the proposal.
- _____ DBE/WBE percentage, when required by contract, has been entered on last sheet of the bid sheets of SECTION 905 - PROPOSAL.
- _____ Form OCR-485, when required by contract, has been completed and signed.
- _____ The last sheet of the bid sheets of SECTION 905--PROPOSAL has been signed.
- _____ Combination Bid Proposal of SECTION 905--PROPOSAL has been completed for each project which is to be considered in combination (See Subsection 102.11).
- _____ Equal Opportunity Clause Certification, when included in contract, has been completed and signed.
- _____ Subcontract Certificate, when included in contract, has been completed and signed.
- _____ The Certification regarding Non-Collusion, Debarment and Suspension, etc. has been executed in duplicate.
- _____ A certified check, cashier's check or bid bond payable to the State of Mississippi in the principal amount of 5% of the bid has been included with project number identified on same. Bid bond has been signed by the bidder and has also been signed or countersigned by a Mississippi Resident Agent for the Surety with Power of Attorney attached or on file with the Department's Contract Administration Engineer.
- _____ Non-resident Bidders: ON STATE FUNDED PROJECTS ONLY, a copy of the current laws regarding any preference for local Contractors from State wherein domiciled has been included. See Subsection 103.01, Mississippi Standard Specifications for Road and Bridge Construction, and Section 31-7-47, MCA, 1972 regarding this matter.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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PROGRESS SCHEDULE,
HAUL PERMIT FOR BRIDGES WITH POSTED WEIGHT LIMITS.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Sealed bids will be received by the Mississippi Transportation Commission in the Office of the Contract Administration Engineer, Room 1013, Mississippi Department of Transportation Administration Building, 401 North West Street, Jackson, Mississippi, until 9:30 o'clock A.M., Tuesday, June 26, 2007; thereafter, bids will be received in the First Floor Auditorium of the Mississippi Department of Transportation Administration Building, Jackson, Mississippi, until 10:00 o'clock A.M., Tuesday, June 26, 2007, and shortly thereafter publicly opened for

Grading, Draining, Paving, and replacing traffic signals on US Highway 90 between Rodenburg Avenue and Biloxi Bay, known as Federal Aid Project Nos. ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308, in the County of Harrison, State of Mississippi.

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

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

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

Bid proposals must be acquired from the MDOT Contract Administration Division. These proposals are available at a cost of Ten Dollars (\$10.00) per proposal. Specimen proposals are also available at the MDOT Contract Administration Division at a cost of Ten Dollars (\$10.00) per proposal, or can be viewed or downloaded at no cost at www.gomdot.com.

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

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

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

LARRY L. "BUTCH" BROWN
EXECUTIVE DIRECTOR

(FAP)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2

CODE: (IS)

DATE: 05/03/2004

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

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

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

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

STATUS OF RIGHT-OF-WAY

ER-NH-0003-01(108)

104569-306000

HARRISON COUNTY

May 11, 2007

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

NONE.

ASBESTOS CONTAMINATION STATUS OF BUILDINGS
TO BE REMOVED BY THE CONTRACTOR
ER-HN-0003-01(108)
104569-306000
HARRISON COUNTY
April 11, 2007

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

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

There is no Right of Way required for this project. There are no buildings to be removed by the contractor.

STATUS OF POTENTIALLY CONTAMINATED SITES

ER-NH-0003-01(108)

104569-306000

HARRISON COUNTY

April 10, 2007

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

UTILITY STATUS REPORT

**ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308**

Harrison County

May 10, 2007

The status of utility work on the above project is as follows:

Mississippi Power Company

Restoration service along Highway 90 as required by property owner.
Contractor's operations should not be adversely affected.

BellSouth Telecommunications Inc.

Restoration service along Highway 90 as required by property owner.
Contractor's operations should not be adversely affected.

Cable One Inc.

Restoration service along Highway 90 as required by property owner.
Contractor's operations should not be adversely affected.

City of Biloxi

City is preparing to replace the water, sewer, and drainage damaged by Hurricane Katrina, along the entire project. The city is awaiting approval by FEMA to begin work.
Contractor's operations could be adversely affected.

Centerpoint Energy Entex

Restoration service along Highway 90 as required by property owner.
Contractor's operations should not be adversely affected

This is to certify that all necessary arrangements have been made for all utility work involved to be undertaken and completed as required for proper coordination with the physical construction schedules.

As noted above, no serious conflicts with the contractor's operations are anticipated.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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 as 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 12

CODE: (IS)

DATE: 05/03/2004

SUBJECT: Federal Bridge Formula

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

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

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

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

or

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 13

CODE: (IS)

DATE: 05/03/2004

SUBJECT: Submission of Form OCR-485

Bidders are hereby advised that Form OCR-485 will be completed by **ALL BIDDERS** submitting a bid proposal and **must be included in the bid proposal package**. Failure to include Form OCR-485 in the bid proposal package will cause the Contractor's bid to be considered **irregular**.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 151

CODE: (IS)

DATE: 06/18/2004

SUBJECT: Gopher Tortoises

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 342

CODE: (SP)

DATE: 11/18/2004

SUBJECT: Open Burning - Restrictions On Ozone Action Days

In response to Mississippi Department of Environmental Quality (MDEQ) concern of the air quality (ground-level ozone) in Desoto, Hancock, Harrison and Jackson Counties, the Department of Transportation agreed to place certain restrictions on open burning of land-clearing debris.

The Contractor is advised that no open burning of land-clearing debris will be permitted to begin during ozone action days as designated by MDEQ. An ozone action day is defined as a 24-hour period when the ozone concentration reaches an unacceptable pre-determined level. Usually, an ozone action day has a duration of one (1) day. It is estimated that 3 to 15 ozone action days could occur from April through October.

During open burning operations, each day the Project Engineer will check the 1, 2, and 3-day ozone forecasts made available by MDEQ on their web site, www.deq.state.ms.us, and will e-mail or FAX the forecasts to the Contractor. The Contractor shall provide the Project Engineer sufficient time to monitor the ozone forecasts prior to commencing any open burning operation. The Contractor can not begin open burning until the forecast for the next three (3) days are non-ozone action days. However, when the Contractor is permitted to begin open burning, that day's burning shall continue regardless of the ozone forecasts when checked the following day. For example, if the Project Engineer on Monday A.M. checks the forecasts and finds that Monday, Tuesday and Wednesday are non-ozone action days, the Contractor may begin open burning. If the Project Engineer checks the forecasts on Tuesday and finds that Wednesday has been designated as an ozone action day, the open burning that was started on Monday may continue, but the Contractor can not begin any new burning until the next 3-day forecasts indicate non-ozone action days.

All the provisions of Subsection 107.22.2 of the Standard Specifications shall apply.

Restrictions as set forth herein will not be a basis for additional time units and/or compensation.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 586

CODE: (SP)

DATE: 07/22/2005

**SUBJECT: Storm Water Discharge Associated with Construction Activity
(≥ 5 Acres)**

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

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

The Department has acquired Certificate of Permit Coverage MSR-103902 under the Mississippi Department of Environmental Quality's (MDEQ) Storm Water Construction General Permit. Projects issued a certificate of permit coverage are granted permission to discharge treated storm water associated with construction activity into State waters. Copies of said permit, completed Large Construction Notice of Intent (LNOI), and Storm Water Pollution Prevention Plan (SWPPP) are on file with the Department.

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

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

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

The Contractor shall make inspections in accordance with condition No. S-4, page 14, and shall furnish the Project Engineer with the results of each weekly inspection as soon as possible following the date of inspection. A copy of the inspection form provided with the packet completed shall be sufficient. The weekly inspections must be documented monthly on the Inspection and Certification Form. The Contractor's representative and the Project Engineer shall jointly review and discuss the results of the inspections so that corrective action can be taken. The Project Engineer shall retain copies of the inspection reports.

An amount equal to 25 percent (25%) of the total estimated value of the work performed during each period in which the Contractor fails to submit monthly the completed Inspection and Certification Form to the Project Engineer will be withheld from the Contractor's earned work. Thereafter, on subsequent successive estimate periods, the percentage withheld will be increased at the rate of 25 percent per estimate period in which the non-conformance with this specification continues. Monies withheld for this non-conformance will be released for payment on the next monthly estimate for partial payment following the date the monthly submittal of the completed Inspection and Certification Form is brought back into compliance with this specification.

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SECTION 904 - NOTICE TO BIDDERS NO. 640

CODE: (IS)

| DATE: 09/26/2005

SUBJECT: Fiber Reinforced Concrete

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

SUPPLEMENT TO NOTICE TO BIDDERS NO. 696

DATE: 08/17/2006

The goal is 4 percent for the Disadvantaged Business Enterprise. The low bidder is required to submit Form OCR-481 for all DBEs. Bidders are advised to check the bid tabulation link for this project on the MDOT website (<http://www.gomdot.com/bidsystem/>) for results. Bid tabulations are usually posted by 3:00 pm on Letting Day.

Form OCR-481 is available at http://www.gomdot.com/business/dbe/pdf/OCR_481.pdf or by calling 601-359-7466.

All OCR-481s must be returned within 10 days following the bid letting to the MDOT Office of Civil Rights, P.O. Box 1850, Jackson, MS 39215-1850.

For answers to questions, contact the MDOT Office of Civil Rights at (601) 359-7466.

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

The bidder hereby gives assurance pursuant to the applicable requirements of "Safe, Accountable, Flexible, Efficient Transportation Equity Act, A Legacy For Users (SAFETEA-LU)" and "Part 26, Title 49, Code of Federal Regulation" that the bidder has made a good faith effort to meet the contract goal for DBE participation for which this proposal is submitted.

A pre-bid meeting will be held in Amphitheater 1 & 2 of the Hilton Jackson located at I-55 and County Line Road, Jackson, Mississippi at 2:00 P.M. on the day preceding the date of the bid opening.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 696

CODE: (IS)

DATE: 12/20/2005

SUBJECT: DISADVANTAGED BUSINESS ENTERPRISES IN FEDERAL-AID HIGHWAY CONSTRUCTION

This contract is subject to the [Safe, Accountable, Flexible, Efficient Transportation Equity Act, A Legacy For Users \(SAFETEA-LU\)](#) and applicable requirements of "Part 26, Title 49, Code of Federal Regulations." Portions of the Act are set forth in this Notice as applicable to compliance by the Contractor and all of the Act, and the MDOT DBE Program, is incorporated by reference herein.

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

Copies of the program may be obtained from:

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

POLICY

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

ASSURANCES THAT CONTRACTORS MUST TAKE:

MDOT will require that each contract which MDOT signs with a subrecipient or a Contractor, and each subcontract the Prime Contractor signs with a Subcontractor, includes the following assurances:

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

DEFINITIONS

For purposes of this provision the following definitions will apply:

"Disadvantaged Business" means a small business concern: (a) which is at least 51 percent owned by one or more socially and economically disadvantaged individual(s) or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individual(s); and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individual(s) who own it. It is important to note that the business owners themselves must control the operations of the business. Absentee ownership or title ownership by an individual who does not take an active role in controlling the business is not consistent with eligibility as a DBE under CFR 49 Part 26.71.

CONTRACTOR'S OBLIGATION

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

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

CONTRACT GOAL

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

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

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

FORMS ARE AVAILABLE FROM THE CONTRACT ADMINISTRATION DIVISION

The OCR-481 Form must contain the following information:

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

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

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

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

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

- (1) Whether the bidder attended the pre-bid meeting that was scheduled by the Department to inform DBEs of subcontracting opportunities;
- (2) whether the bidder advertised in general circulation, trade association, and minority-focus media concerning the subcontracting opportunities;
- (3) whether the bidder provided written notice to a reasonable number of specific DBEs that their interest in the contract is being solicited;
- (4) whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested;
- (5) whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goal;
- (6) whether the bidder provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;

- (7) whether the bidder negotiated in good faith with interested DBEs and did not reject them as unqualified without sound reasons based on a thorough investigation of their capabilities; and
- (8) whether the bidder made efforts to assist interested DBEs in obtaining any required bonding or insurance.

DIRECTORY

Included with this Bid Proposal is a list of "Certified DBE Contractors" which have been certified as such by the Mississippi Department of Transportation and other Unified Certification Partners (UCP).

The DBE firm must be on the Department's list of "Certified DBE Contractors" that is attached to this proposal and approved by MDOT to count towards meeting the DBE goal.

REPLACEMENT

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

Under no circumstances shall the Prime or any Subcontractor perform the DBE's work (as shown on the OCR-481) without prior written approval from the Department. See "Sanctions" at the end of this document for penalties for performing DBE's work.

When a Contractor proposes to substitute/replace/terminate a DBE that was originally named on the OCR-481, the Contractor must obtain a release, in writing, from the named DBE explaining why the DBE Subcontractor cannot perform the work. A copy of the original DBE's release must be attached to the Contractor's written request to substitute/replace/terminate along with appropriate Subcontract Forms for the substitute/replacement/terminated Subcontractor, all of which must be submitted to the DBE Coordinator and approved, in advance, by MDOT.

GOOD FAITH EFFORTS

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

- (a) Proof of written notification to certified DBE Contractors by certified mail that their interest is solicited in subcontracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.
- (b) Efforts to negotiate with certified DBE Contractors for specific items shall include as a minimum:
 - (1) The name, address, and telephone number of each DBE contacted;
 - (2) A description of the information provided about the plans and specifications for those portions of the work to be subcontracted; and
 - (3) A statement of why agreements were not reached.
- (c) For each DBE contacted that was rejected as unqualified, the reasons for such conclusion.
- (d) Efforts made to assist each DBE that needed assistance in obtaining bonding or insurance required by the Contractor.

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

PARTICIPATION / DBE CREDIT

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

- (1) If the Prime Contractor is a certified DBE firm, only the value of the work actually performed by the DBE Prime can be counted towards the project goal, along with any work subcontracted to a certified DBE firm.
- (2) If the Contractor is not a DBE, the work subcontracted to a certified DBE Contractor will be counted toward the goal.
- (3) The Contractor may count toward the goal a portion of the total dollar value of a contract with a joint venture eligible under the standards of this provision equal to the percentage of the DBE partner in the joint venture.
- (4) Expenditures to DBEs that perform a commercially useful function may be counted toward the goal. A business is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of the work and carries out its responsibilities by actually performing, managing, and supervising the work involved.

- (5) The Contractor may count 100% of the expenditures for materials and supplies obtained from certified DBE suppliers and manufacturers that produce goods from raw materials or substantially alters them for resale provided the suppliers and manufacturers assume the actual and contractual responsibility for the provision of the materials and supplies. The Contractor may count 60 percent of the expenditures to suppliers that are not manufacturers, provided the supplier performs a commercially useful function in the supply process. Within 30 days after receipt of the materials, the Contractor shall furnish to the DBE Coordinator invoices from the certified supplier to verify the DBE goal.
- (6) Any work that a certified DBE firm subcontracts or sub-subcontracts to a non-DBE firm will not count towards the DBE goal.
- (7) Only the dollars actually paid to the DBE firm may be counted towards the DBE goal.

AWARD

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

- (1) Concurrence from Federal Highway Administration, when applicable.
- (2) Bidder must submit to the Contract Administration Division for approval, Form OCR-481 (DBE Commitment) no later than the 10th day after opening of the bids, or submit information with the bid proposal to satisfy the Department and that adequate good faith efforts have been made to meet the contract goal.
- (3) Bidder must submit **with the bid proposal** a list of all firms that submitted quotes for material supplies or items to be subcontracted. This information must be submitted on form OCR-485 in the back of the contract proposal.

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

DEFAULT

The contract goal established by MDOT in this proposal must be met to fulfill the terms of the contract. The Contractor may list DBE Subcontractors and items that exceed MDOT's contract goal, but should unforeseen problems arise that would prevent a DBE from completing its total commitment percentage, the Contractor will meet the terms of the contract as long as it meets or exceeds MDOT's Contract Goal. For additional information, refer to "Replacement" section of this Notice.

DBE REPORTS

- (1) OCR-481: Refer to 'CONTRACT GOAL' section of this Notice to Bidders for information regarding this form.
- (2) OCR-482: At the conclusion of the project the Contractor will submit to the Project Engineer for verification of quantities and further handling Form OCR-482 whereby the Contractor certifies to the amounts of payments made to each Contractor / Supplier. The Project Engineer shall submit the completed Form OCR-482 to the DBE Coordinator (Office of Civil Rights). Final acceptance of the project is dependent upon Contract Administration Division's receipt of completed Form OCR-482 which they will receive from the Office of Civil Rights.
- (3) OCR-483: The Project Engineer/Inspector will complete Form OCR-483, the Commercially Useful Function (CUF) Performance Report, in accordance with MDOT S.O.P. No. OCR-03-09-01-483. Evaluations reported on this form are used to determine whether or not the DBE firm is performing a CUF. The Prime Contractor should take corrective action when the report contains any negative evaluations. DBE credit may be disallowed and/or other sanctions imposed if it is determined the DBE firm is not performing a CUF. This form should also be completed and returned to the DBE Coordinator (Office of Civil Rights).
- (4) OCR-484: Each month, the Contractor will submit to the Project Engineer OCR-484 certifying payments to all Subcontractors.
- (5) OCR-485: The bidder must submit **with the bid proposal** a list of all firms that submitted quotes for material supplies or items to be subcontracted.
- (6) OCR-487: Only used by Prime Contractors that are certified DBE firms. This form is used in determining the exact percentage of DBE credit for the specified project. It should be returned to MDOT with the OCR-481 form, or can also be returned with the Permission to Subcontract Forms (CAD-720 or CAD-725).

SANCTIONS

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

- (1) Disallow credit towards the DBE goal
- (2) Withhold progress estimate payments
- (3) Deduct from the final estimate an amount equal to the unmet portion of the DBE goal

- (4) Recover an amount equal to the unmet contract goal
- (5) Debar the Contractor involved from bidding on Mississippi Department of Transportation projects.
- (6) Deduct from the Contractor's final estimate all or any combination of the following.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SECTION 904 - NOTICE TO BIDDERS NO. [777](#)

CODE: (IS)

| DATE: [04/13/2006](#)

SUBJECT: On-The-Job Training Program

| Payment for training hours will be handled as outlined in Special Provision 906-6. A pay item for trainees will not be included in individual construction projects. Payment for training individuals will be processed in accordance with the conditions in MDOT's ON-THE-JOB TRAINING PROGRAM (Special Provision 906-6).

| On Federal-Aid projects, failure on the part of the Contractor to carryout the terms of the Alternate Training Special Provision (Special Provision 906-6) will be considered grounds to preclude the Contractor from participating in the Alternate On-The-Job Training Program. In the event the Department is required to preclude the Contractor from participating in the program, the Contractor will be required to adhere to the requirements of the Training Special Provision (Special Provision 906-3), for which purpose the special provision is also made a part of this proposal.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 882

CODE: (IS)

DATE: 04/06/2006

SUBJECT: DBE Participation and Payment

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

Form OCR-482 has been developed to comply with this requirement. Bidders are hereby advised that at the end of the job, the Prime Contractor will submit this form to the Project Engineer before the final estimate is paid and the project is closed out. This form certifies payments to all DBE Subcontractors over the life of the contract.

Form OCR-484 has also been developed to comply with this requirement. Bidders are hereby advised that each month, the Prime Contractors will submit this form to the Project Engineer no later than the 20th of each month. This form certifies payments to all Subcontractors and shows all firms even if the Prime Contractor has paid no monies to the firm during that estimate period (negative report). The Project Engineer will attach this form to the monthly estimate before forwarding the estimate to the Contract Administration Division for processing.

Forms OCR-482 and OCR-484 can be obtained from the Office of Civil Rights Division, MDOT Administration Building, 401 North West Street, Jackson, MS, or at www.gomdot.com under the *Business Section, DBE Information, Applications and Forms for the DBE Program, Monthly Certification Of Payment To Subcontractors (OCR-484)(MDOT)*.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 883

CODE: (IS)

DATE: 04/28/2006

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 V, page 6 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 and 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1140

CODE: (SP)

DATE: 05/01/2007

SUBJECT: Radio Interconnect

PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County

Bidders are hereby advised that the following Radio Interconnect Modifications specifications will be required on this project.

Radio Interconnect Modifications

Scope of Work: The Mississippi Department of Transportation desires to implement a high capacity, high speed wireless RF Data network capable of providing a minimum redundant 100 Mbps, full duplex, connection between fixed repeater (backbone) distribution sites and a minimum of 1.5 Mbps Non-Line-Of-Sight (NLOS) distribution system to all specified traffic intersection locations. The radio channel infrastructure must be designed to support the full requirements of these specifications. **The wireless RF Data network installed under this project (ER-NH-0003-01(108)) must be fully and completely compatible with the wireless network being installed in Hancock County under Project# ER-NH-0003-01(109).** MDOT would like to utilize license restricted frequencies for the fixed repeaters (backbone) and license free spectrum for the NLOS distribution system to the intersections. It is expected that the system will transmit data over standard conventional radio channels. The overall NLOS distribution system will be used to interconnect a minimum of 54 traffic signal locations and provide Ethernet capability at each intersection. MDOT is not specifying a specific technology or mix of technologies. A variety of frequency bands can be used. The RF infrastructure provided in this project must cover all intersections as listed in this Notice to Bidders and provide communications back to a central controller located at the MDOT Lyman Project Office, 16499 Highway 49, Saucier, MS 39574. The system must be expandable to cover future intersections which MDOT may choose to add at a future date.

Project Locations/Sites: Predictable and consistently reliable RF communications coverage shall be required for all MDOT intersections and tower (backbone) locations. A general map that illustrates the desired overall coverage area is included in this Notice to Bidders, Appendix A. Appendix B, illustrates the specific coverage area required for this phase of the overall Highway 90 project and this specific Notice to Bidders. The Mississippi Department of Transportation will supply limited information on the suggested sites but it will be the Contractor's responsibility to forecast coverage from these sites using their own methods. These forecasts must meet MDOT's requirements for the desired system coverage and future growth. Elements of consideration should include current tower heights as opposed to required and/or desired tower heights. MDOT strongly recommends using existing state radio towers and/or city owned water towers as

repeater backbone locations. The Contractor is not limited to the MDOT suggested tower locations in this Notice to Bidders. It is the responsibility of the Contractor to select the tower locations that will guarantee MDOT the desired system coverage outlined in these specifications. However, MDOT must approve all new tower site additions and/or required tower site replacements. MDOT will negotiate any necessary agreements and access permits with the local municipalities. It is also the Contractor's responsibility to determine the number of radio channels needed to meet the minimum system requirements. The Mississippi Department of Transportation will not be liable for any costs incurred by the Contractor in preparing a response to these specifications. The Contractor will submit a response at his own risk and expense.

The Contractor is responsible for the RF link performance. If the RF coverage performance of the installed system does not meet the requirements of these specifications, the Contractor will modify or otherwise cause the system to meet the minimum requirements at no cost, directly or indirectly, to the Mississippi Department of Transportation, and must state a time commitment for correcting such a condition.

Intersection Locations:

Harrison County Highway 90 intersection locations, in East Biloxi, that must support a minimum of 1.5 Mbps transfer rate.

- White Avenue
- Porter Avenue
- Beau Rivage Garage
- Caillavet Street
- Reynoir Street
- Lameuse Street
- Main Street
- Oak Street
- Maple Street
- Pine Street
- Cedar Avenue
- Myrtle Street

Suggested Tower Locations:

- Kuhn Street Water Tower City of Biloxi
- Stennis/Leslie Drive Tower City of Biloxi
- MDOT Lyman Project Office MDOT (Required Central Site)

Documentation: The Contractor must provide in their response to this bid a Conceptual Design, System Diagrams, Product Specification sheets, and list of any proposed Subcontractors for the proposed Radio Interconnect system. The Conceptual design should include, but is not limited to, a narrative outline of the hardware, software, technology, and

vendor alliances that will be needed to implement the proposed system. System Diagrams will be included in the package illustrating the following interconnections:

- General overview of the RF repeater (backbone) distribution hardware configuration and coverage area.
- General overview of the RF NLOS distribution hardware configuration and coverage area.

All documents and drawings must be professionally drafted, clear, and legible. Contractor must provide an electronic copy of all documents and drawings.

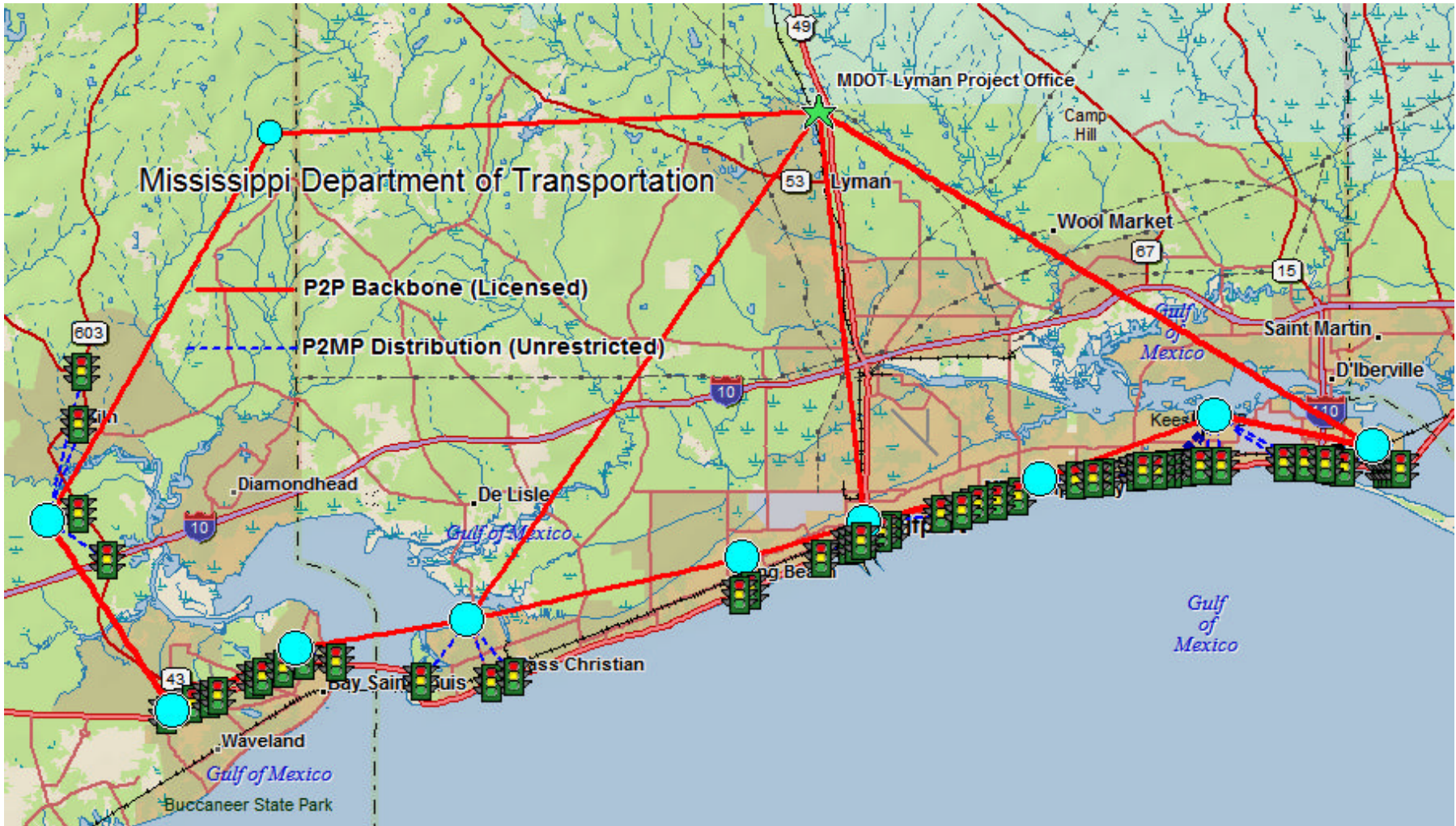
MDOT reserves the right to accept or reject the proposed Conceptual Design at its sole discretion.

References: The Contractor must be a reputable, established, and financially stable provider of wireless networks and must be a licensed Competitive Local Exchange Carrier (CLEC) and have held a CLEC license for at least the last three years with no interruption in licensure.

The Contractor must provide in their response to this bid a references from at least three (3) government entities that are currently utilizing a RF wireless solution based on the same technology as that proposed by the Contractor and which the Contractor has implemented in the last three (3) years.

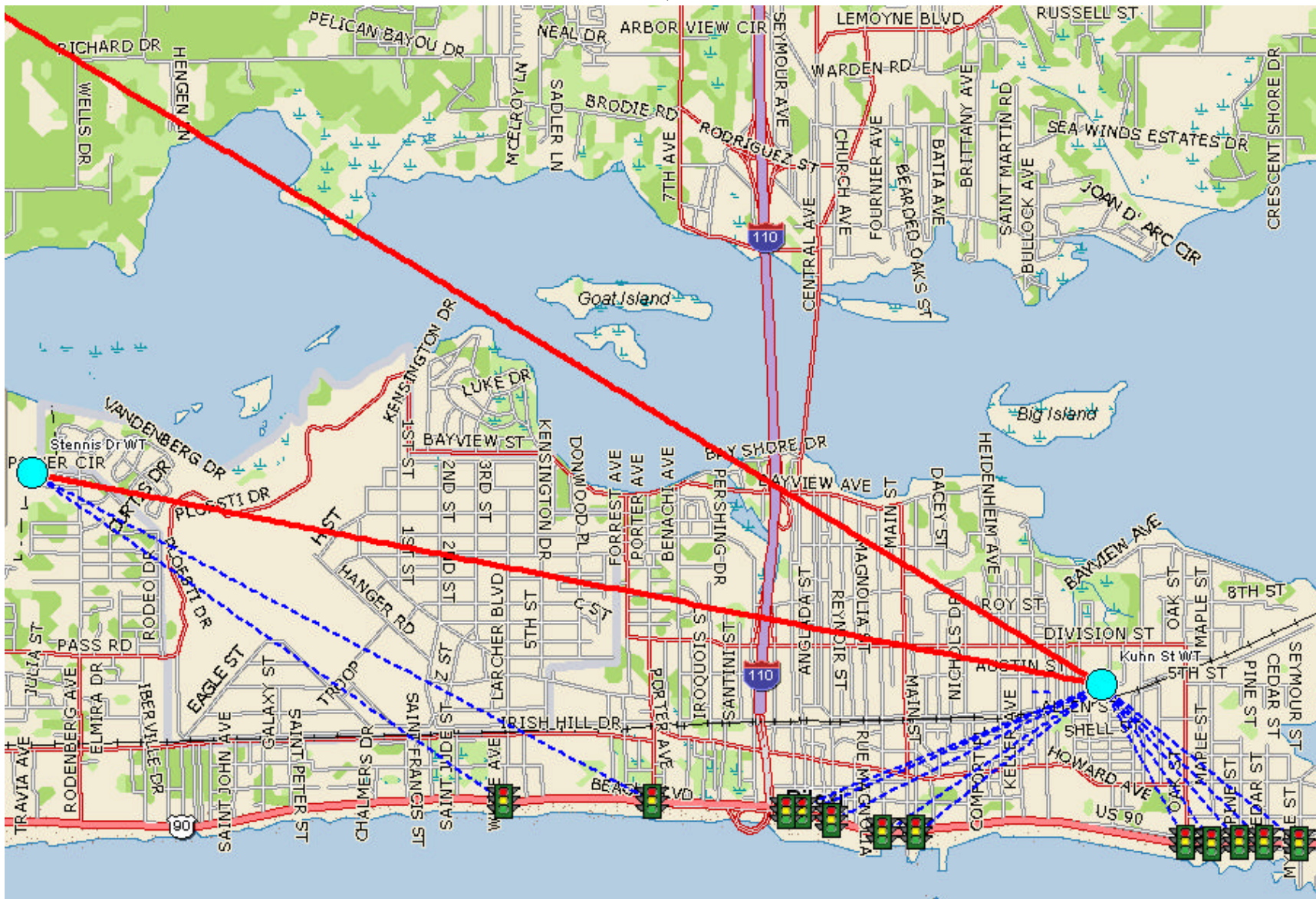
Training: 120 hours of training and assistance shall be provided for operations, testing, and maintenance of the Radio Interconnect Systems.

APPENDIX A



Traffic Signal Improvements
U.S. Hwy 90 – East Biloxi
ER—NH-0003-01(108) / 104569/306000 & 308000

APPENDIX B



**Traffic Signal Improvements
U.S. Hwy 90 – East Biloxi
ER-NH-0003-01(108)/104569/306000 & 308000**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1322

CODE: (SP)

DATE: 1/22/2007

SUBJECT: Non-Use of Precast Drainage Units

Bidders are hereby advised that the use of precast inlets and junction boxes will **NOT** be allowed on this project. Subsection 601.02.3 states that " the Contractor may request approval from the Engineer to furnish and install precast units in lieu of cast-in-place units". Should the Contractor make this request, the request will be denied.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1405

CODE: (IS)

DATE: 03/15/2007

SUBJECT: ERRATA AND MODIFICATIONS TO THE 2004 STANDARD SPECIFICATIONS

<u>Page</u>	<u>Subsection</u>	<u>Change</u>
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 “ ≤ ”.

- 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”.

- 618 703.13.1 In the first sentence of the first paragraph, change “703.09” to “703.06”.
- 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”.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1510

CODE: (SP)

DATE: 05/09/2007

SUBJECT: Contract Time

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable time units are assessed, or any extension thereto as provided in Subsection 108.06. It is anticipated that the Notice of Award will be issued by not later than **July 10, 2007** and the date for issuing the Notice to Proceed / Beginning of Contract Time will be **August 9, 2007**.

Should the Contractor request a Notice to Proceed earlier than **August 9, 2007**, the date the Notice to Proceed is issued will also be the Beginning of Contract Time date.

Allowable Time Units will be **222**.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1511

DATE: 05/09/2007

SUBJECT: Specialty Items

PROJECT: ER-NH-0003-01(108)/104569306 - Harrison County

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

CATEGORY: EROSION CONTROL

Line No	Pay Item	Description
0310	213-C001	Superphosphate
0320	216-B004	Solid Sodding, Bermuda
0330	219-A001	Watering
0340	220-A001	Insect Pest Control
0350	234-A001	Temporary Silt Fence
0360	235-A001	Temporary Erosion Checks
1300	907-213-A001	Agricultural Limestone
1310	907-227-A001	Hydroseeding

CATEGORY: PAVEMENT STRIPING AND MARKING

Line No	Pay Item	Description
0770	626-A002	6" Thermoplastic Traffic Stripe, Skip White
0780	626-B002	6" Thermoplastic Traffic Stripe, Continuous White
0790	626-D001	6" Thermoplastic Traffic Stripe, Skip Yellow
0800	626-E002	6" Thermoplastic Traffic Stripe, Continuous Yellow
0810	626-G001	Thermoplastic Detail Stripe, White
0820	626-G002	Thermoplastic Detail Stripe, Yellow
0830	626-H001	Thermoplastic Legend, White
0840	626-H002	Thermoplastic Legend, White
0850	627-K001	Red-Clear Reflective High Performance Raised Markers
0860	627-L001	Two-Way Yellow Reflective High Performance Raised Markers
1370	907-626-C003	6" Thermoplastic Double Drop Edge Stripe, Continuous White
1380	907-626-F003	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow
1390	907-626-G001	Thermoplastic Detail Stripe, Blue-ADA

CATEGORY: SURVEY AND STAKEING

Line No	Pay Item	Description
1290	699-A001	Roadway Construction Stakes

CATEGORY: TRAFFIC CONTROL - TEMPORARY

Line No	Pay Item	Description
0660	619-A1004	Temporary Traffic Stripe, Continuous White, Paint
0670	619-A2004	Temporary Traffic Stripe, Continuous Yellow, Paint
0680	619-A3007	Temporary Traffic Stripe, Skip White, Paint
0690	619-A4002	Temporary Traffic Stripe, Skip Yellow, Paint
0700	619-A5002	Temporary Traffic Stripe, Detail, Paint
0710	619-A6003	Temporary Traffic Stripe, Legend, Paint
0720	619-A6004	Temporary Traffic Stripe, Legend, Paint
0730	619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet
0740	619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More
0750	619-G4005	Barricades, Type III, Double Faced

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1512

CODE: (SP)

DATE: 05/09/2007

SUBJECT: Cooperation Between Contractors

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

The Bidder's Attention is hereby call to Subsection 105.07, Cooperation Between Contractors, of the 2004 Edition of the Mississippi Standard Specification for Road and Bridge Construction.

This project adjoins projects ER-BR-0003-01(099)/104556 / 301 & 302 & ER-0110-01(025) / 104619 in the county of Harrison, which will be in progress. The Contractors shall cooperate with each other and with the Department during construction of the adjoining projects.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1513

CODE: (SP)

DATE: 05/09/2007

SUBJECT: Performance Period

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

Bidders are hereby advised that the 30 day performance period for the traffic signals has been allowed for in the contract time.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1514

CODE: (SP)

DATE: 05/09/2007

SUBJECT: Roadway Construction Staking

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

Bidders are hereby advised that all grades shown on the roadway plans shall be field verified by the contractor.

Existing centerline and gutterline grades shall be collected at twenty five (25) foot intervals. The contractor shall develop new grades and cross slopes using a graphic method. The existing grades and cross slopes will serve as a guide in the development of the new finish grades.

Low points in the gutterline shall occur at inlets, in no case will ponding water on the surface pavement be acceptable.

Inlet castings grades and curb grades shall be based on the approved gutterline grades.

Breakover slopes will be reduced at intersections where practical for crossing traffic.

All grades shall be reviewed and approved by the Project Engineer prior to the work.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1515

CODE: (SP)

DATE: 05/09/2007

SUBJECT: Joint Sealing

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

Bidders are advised that the sealing of joints between median island pavement or sidewalk and the seawall as shown on TS-4 working sheet 8 of the plans is an absorbed item.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1516

CODE: (SP)

DATE: 05/09/2007

SUBJECT: Vibratory Roller

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

Bidders are advised that the use of vibratory rollers **will not** be allowed and the lot density required in sections 401.02.6.4.1 and 401.03.1.4 of the 2004 Edition of the Mississippi Standard Specification for Road and Bridge Construction shall be reduced by one percent.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 1517

CODE: (SP)

DATE: 5/10/2007

SUBJECT: Petroleum Products Base Prices For Contracts Let in June, 2007

REFERENCE: Subsection 109.07

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

FUELS

	<u>Per Gallon</u>	<u>Per Liter</u>
Gasoline	\$2.7658	\$0.7306
Diesel	\$2.5783	\$0.6811

MATERIALS OF CONSTRUCTION

<u>ASPHALT CEMENT</u>	<u>Per Gallon</u>	<u>Per Ton</u>	<u>Per Liter</u>	<u>Per Metric Ton</u>
Viscosity Grade AC-5	\$1.3614	\$323.00	\$0.3597	\$356.04
Viscosity Grade AC-10	\$1.3759	\$326.43	\$0.3635	\$359.82
Viscosity Grade AC-20	\$1.3669	\$324.29	\$0.3611	\$357.46
Viscosity Grade AC-30	\$1.3638	\$323.57	\$0.3603	\$356.67
Grade PG 64-22	\$1.3578	\$322.14	\$0.3587	\$355.09
Grade PG 67-22	\$1.3453	\$319.17	\$0.3554	\$351.82
Grade PG 76-22	\$1.7633	\$418.33	\$0.4658	\$461.12
Grade PG 82-22	\$1.9652	\$466.25	\$0.5192	\$513.94

EMULSIFIED ASPHALTS

Grade EA-4 (SS-1)	\$1.3453	\$0.3554
Grade RS-2C (CRS-2)	\$1.3180	\$0.3482
Grade CRS-2P	\$1.5632	\$0.4130

PRIMES

Grade EA-1 & MC-70	\$1.7511	\$0.4626
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MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1521

CODE: (SP)

DATE: 05/10/2007

SUBJECT: Maintenance of Traffic

PROJECT: ER-0003-01(108) / 104569306 & 308 ---- HARRISON COUNTY

In addition to the requirements of Section 618, the following shall be required:

1. Mainline paving and/or milling **will not be allowed** between the hours of 7:00 am and 6:00 pm. The Department will consider no exceptions. The Contractor will be assessed a lane rental fee of \$ 2,500 per closure for any part there of.
2. Continuous maintenance of one-lane traffic within the construction work zone as shown on the attached TCP – 3Mod of the proposal and Sheet No. 251 of the plans except that a maximum length work zone of two miles will be permitted.
3. Continuous maintenance of two-lane traffic except as shown in Item (2) above. Work zones in the same lane shall be spaced no closer than two miles, and adjacent lane work zones shall be no closer than three miles.
4. A Portable Changeable Message Sign shall be required for advance motorist warning of road work two miles ahead of a lane closure.
5. The criteria for the Portable Changeable Message Sign shall comply with Part VI of the Manual on Uniform Traffic Control Devices (MUTCD) and Special Provision No. 907-619 Changeable Message Signs, with exclusion of cellular programming capabilities.
6. The Changeable Message Signs will be paid for under 618-A Maintenance of Traffic pay item
7. At the project engineer' discretion, additional advanced warning signs shall be placed at 1 mile intervals prior to the designated work zone(s), as warranted by traffic conditions.
8. The contractor shall provide 2 portable R16-3 signs in addition to the signs required by the Standard Drawings for lane and shoulder closures. (The cost is to be included in the price bid for pay item No. 618-A, Maintenance of Traffic.)

SUPPLEMENT TO FORM FHWA-1273

The following MINIMUM HOURLY WAGE RATES have been predetermined by the Secretary of Labor in Wage Determination Decision No. MS20070027 dated February 9, 2007.

AREA 6A - COUNTIES

HANCOCK, HARRISON AND JACKSON

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

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

SUPPLEMENT TO FORM FHWA-1273

DATE: 6/15/94

SUBJECT: Final Certificate and Contract Provisions for Subcontracts

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

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

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

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

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

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ATTACHMENTS

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

I. GENERAL

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

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

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

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

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

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

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

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

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

II. NONDISCRIMINATION

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be

taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

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

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

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

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

6. Training and Promotion:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

III. NONSEGREGATED FACILITIES

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

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

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

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

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

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

1. General:

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

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

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

2. Classification:

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

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

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

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

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

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

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

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

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

3. Payment of Fringe Benefits:

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

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

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

a. Apprentices:

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

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

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

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

b. Trainees:

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

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

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

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

c. Helpers:

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

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

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

6. Withholding:

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

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

7. Overtime Requirements:

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

8. Violation:

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

9. Withholding for Unpaid Wages and Liquidated Damages:

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

V. STATEMENTS AND PAYROLLS

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

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

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

2. Payrolls and Payroll Records:

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

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

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

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

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

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

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

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

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

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

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

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

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

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

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

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

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

VII. SUBLETTING OR ASSIGNING THE CONTRACT

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

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

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

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

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

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

VIII. SAFETY: ACCIDENT PREVENTION

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

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

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

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

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

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

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

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

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

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

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

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

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

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

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

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

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

1. Instructions for Certification - Primary Covered Transactions:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2. Instructions for Certification - Lower Tier Covered Transactions:

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

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

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

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

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

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

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

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

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

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

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

* * * * *

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

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared

ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

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

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

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

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

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

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

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

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

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals for female participation in each trade (percent)
From April 1, 1978 until March 31, 1979	3.1
From April 1, 1979 until March 31, 1980	5.1
From April 1, 1980 until March 31, 1981	6.9
 Until further notice	 Goals for minority participation for each trade (percent)
 SHSA Cities:	
Pascagoula - Moss Point -----	16.9
Biloxi - Gulfport-----	19.2
Jackson-----	30.3
 SMSA Counties:	
Desoto-----	32.3
Hancock, Harrison, Stone-----	19.2
Hinds, Rankin-----	30.3
Jackson-----	16.9
 Non-SMSA Counties:	
George, Greene -----	26.4
Alcorn, Benton, Bolivar, Calhoun, Carroll, Chickasaw, Clay, Coahoma, Grenada, Itawamba, Lafayette, Lee, Leflore, Marshall, Monroe, Montgomery, Panola, Pontotoc, Prentiss, Quitman, Sunflower, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Union, Washington, Webster, Yalobusha-----	26.5
Attala, Choctaw, Claiborne, Clarke, Copiah, Covington, Franklin, Holmes, Humphreys, Issaquena, Jasper, Jefferson, Jefferson Davis, Jones Kemper, Lauderdale, Lawrence, Leake, Lincoln, Lowndes, Madison, Neshoba, Newton, Noxubee, Oktibbeha, Scott, Sharkey, Simpson, Smith, Warren, Wayne, Winston, Yazoo -----	32.0
Forrest, Lamar, Marion, Pearl River, Perry, Pike, Walthall -----	27.7
Adams, Amite, Wilkinson-----	30.4

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

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

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is to the county and city (if any), stated in the advertisement.
5. The notification required in Paragraph 3 shall be addressed to the following:

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-1

CODE: (IS)

DATE: 05/03/2004

SUBJECT: Partnering Process

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

907-104.01--Intent of Contract. At the end of Subsection 104.01 on Page 24, add the following:

907-104.01.1--Partnering Process.

COVENANT OF GOOD FAITH AND FAIR DEALING:

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

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

- A. Each will function within the laws and statutes applicable to their duties and responsibilities.
- B. Each will assist in the other's performance.
- C. Each will avoid hindering the other's performance.
- D. Each will proceed to fulfill its obligations diligently.
- E. Each will cooperate in the common endeavor of the contract.

VOLUNTARY PARTNERING:

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

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

To implement this partnering initiative prior to starting of work in accordance with the requirements of Subsection 108.02 Notice to Proceed and prior to the preconstruction conference, the contractor's management personnel and MDOT's District Engineer, will initiate a partnering development seminar/team building workshop. The Contractor working with the assistance of the District and the State Construction Engineer will make arrangements to determine attendees for the workshop, agenda of the workshop, duration, and location. Persons required to be in attendance will be the MDOT key project personnel, the contractor's on-site project manager and key project supervision personnel of both the prime and principal subcontractors and suppliers. The project design engineers, FHWA and key local government personnel will be also be invited to attend as necessary. The contractors and MDOT will also be required to have Regional/District and Corporate/State level managers on the project team.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-3

CODE: (IS)

DATE: 02/14/2006

SUBJECT: Cooperation By Contractor

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

907-105.05--Cooperation by Contractor. 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.

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-107-1

DATE: 03/21/2006

SUBJECT: Liability Insurance

In the first sentence of the first paragraph of Subsection 907-107.14.2.1 on page 1, change "\$300,000 each occurrence" to "\$500,000 each occurrence".

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-1

CODE: (IS)

DATE: 05/03/2004

SUBJECT: Liability Insurance

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:

907-107.14.2--Liability Insurance. Delete in toto Subsection 107.14.2 beginning on page 60 and substitute:

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

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

907-107.14.2.2--Railroad Protective. 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,
- (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) **Regular Contractor's Liability**, 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-2

CODE: (IS)

DATE: 08/12/2005

SUBJECT: Permits, Licenses and Taxes

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:

907-107.02--Permits, Licenses and Taxes. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-3

CODE: (IS)

DATE: 02/14/2006

SUBJECT: Contractor's Protection Plan

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:

907-107.22.1--Contractor's Protection Plan. After item number 3 in Subsection 107.22.1 on page 65, add the following:

4. A copy of the certification for the Contractor's Certified Erosion Control Person for monitoring and maintaining the effectiveness of the erosion control plan, including NPDES permit requirements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-11

CODE: (IS)

DATE: 04/21/2006

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.

907-108.01.1--General. 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.

907-108.02--Notice To Proceed. 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.

907-108.06.1.2--Contract Time Assessment. At the end of the eighth paragraph of Subsection 108.06.1.2 on page 81, add the following:

When the approved progress schedule indicates that a controlling phase(s) is to be completed prior to December 1 and the physical features of the phase(s) have not been satisfactorily completed, beginning on December 1 the miscellaneous phase will be shown as the only active phase during the months of December, January, and February. Under this condition, time units, monthly time units divided by monthly calendar days, will be assessed in accordance with the applicable column in the TABLE OF TIME UNITS. If the physical features of the phase(s) have not been completed by March 1, the phase will resume as a controlling phase and time assessment will be made accordingly.

Delete the fourth and fifth sentence of the thirteenth paragraph of Subsection 108.06.1.2 on page 82, 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 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-13

CODE: (SP)

DATE: 05/23/2007

SUBJECT: Liquidated Damages Table

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

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

907-108.07--Failure to Complete the Work on Time. Delete the table in Subsection 108.07 on page 85, and substitute the following:

Schedule of Deductions for Each Day of Overrun in Contract Time

Original Contract Amount		Daily Charge
From More Than	To and Including	Per Calendar Day
\$ 0	\$ 100,000	\$ 140
100,000	500,000	200
500,000	1,000,000	300
1,000,000	1,000,000	450
1,000,000	5,000,000	650
5,000,000	10,000,000	750
10,000,000	-----	9,400 *

* Price includes liquidated damages and road users cost.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-109-3

DATE: 11/21/2006

SUBJECT: Changes in Material Costs

After the last paragraph of Subsection 907-109.06.1 on page 1, add the following:

907-109.07--Changes in Material Costs. Delete the second sentence of the first paragraph of Subsection 109.07 on page 95, and substitute the following:

When a pay item on the bid sheets indicate that an adjustment is allowed and when a notice to bidders is included in the contract showing current monthly base prices, an adjustment will be provided as follows:

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-3

CODE: (IS)

DATE: 04/06/2006

SUBJECT: Partial 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:

907-109.04--Extra and Force Account Work. Delete the first sentence of the second paragraph of Subsection 109.04 under (d) 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.

907-109.06--Partial Payment.

907-109.06.1--General. In the fourth sentence of the third paragraph of Subsection 109.06.1 on page 94, change "15 calendar days" to "25 calendar Days".

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-213-1

CODE: (IS)

DATE: 09/23/2004

SUBJECT: Agricultural Limestone

Section 907-213, Fertilizing, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-213.05--Basis of Payment. Delete the first sentence of the first paragraph of Subsection 213.05 on page 136 and add the following as the first paragraph of this subsection.

Agricultural limestone will be paid for at the contract unit price per ton. Grade "A" agricultural limestone with an equivalent neutralizing value (ENV), determined in accordance with Subsection 907-715-02.2.1.3, of between 60.0% and 62.9% will be paid for at half (1/2) the contract unit price per ton. No payment will be made for Grade "A" agricultural limestone with an ENV less than 60.0%.

Delete the first pay item listed on page 137 and substitute the following:

907-213-A: Agricultural Limestone - per ton

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-227-4

CODE: (SP)

DATE: 05/08/2007

SUBJECT: Hydroseeding

PROJECT: ER-NH-0003-01(108) / 104569306 & 308 -- Harrison County

Section 907-227, Hydroseeding, is hereby added to the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-227 -- HYDROSEEDING

907-227.01--Description. This work consists of furnishing, transporting, placing, plant establishment and all work necessary to produce a satisfactory and acceptable growth of grass. The seeds, fertilizers, tackifier, and mulch shall be incorporated using the hydroseeding process. These items shall be combined into a mixture and force-applied to the areas to be grassed. Prior to placement of the hydroseeding, agricultural limestone shall be incorporated into the area in accordance with Section 213 of the Standard Specifications.

907-227.02--Materials. The Contractor shall, prior to application, furnish the Engineer with invoices of all materials used in the grassing operation.

907-227.02.1--Fertilizers. Fertilizers for purposes of these specifications shall be understood to include standard manufactured products consisting of single or combination ingredients.

All fertilizer shall comply with the State fertilizer laws and the requirements of these specifications.

Fertilizers shall meet the requirements of Subsection 715.02.

907-227.02.2--Seeds. Seeds shall meet the requirements of Subsection 715.03, subject to the provisions of this subsection. The Contractor shall acquire seed from persons registered with the Mississippi Department of Agriculture and Commerce.

Except for the germination requirements, bags of seeds properly labeled or tagged according to law and indicating characteristics meeting or exceeding the requirements of Subsection 715.03 will be acceptable.

The Contractor should provide adequate dry storage facilities for seeds, and shall furnish access to the storage for sampling stored seed.

907-227.02.3--Mulching. The rate of application of fiber mulch shall be as recommended by the manufacture of the fibers mulch.

907-227.02.3.1--Wood Fiber Mulch. Wood fiber mulch shall be made from wood chip particles manufactured particularly for discharging uniformly on the ground surface when dispersed by a hydraulic water sprayer. It shall remain in uniform suspension in water under agitation and blend with grass seed and fertilizer to form a homogeneous slurry. The fibers shall intertwine physically to form a strong moisture-holding mat on the ground surface and allow rainfall to percolate the underlying soil. The fiber material shall be heat processed so as to contain no germination or growth-inhibiting factors. The mulch shall be dyed an appropriate color to facilitate the application of material using non-toxic dye.

907-227.02.3.2--Cellulose Fiber Mulch. Cellulose fiber mulch consist of recycled magazine stock products which are shredded into small pieces particular for application by hydraulic seeding equipment. It shall mix readily and uniformly under agitation with water and blend with grass seed and fertilizer to form a homogeneous slurry. When applied to the ground surface, the material shall form a strong moisture-holding mat, allow rainfall to percolate the underlying soil and remain in place until the grass root system is established. The material shall contain no growth inhibiting characteristic or organisms. The mulch shall be dyed an appropriate color to facilitate the application of material using non-toxic dye.

907-227.02.3.3--Wood/Cellulose Fiber Mulch. Wood/cellulose fiber mix hydroseeding mulch shall consist of a combination of the above wood and cellulose fibers at a ratio recommended by the manufacturer of the products.

907-227.03--Construction Requirements.

907-227.03.1--Ground Preparation. Light ground preparation consists of plowing, loosening, and pulverizing the soil to form suitable beds for seeding items in reasonably close conformity with the established lines and grades without appreciable humps or depressions. Unless otherwise specified, the pulverized and prepared seedbed should be at least four inches deep and shall be reasonably free of large clods, earthballs, boulders, stumps, roots and other objectionable matter. The Engineer may eliminate or alter the requirements for ground preparation due to site conditions.

907-227.03.2--Fertilizing. The Contractor shall furnish all equipment necessary to properly handle, store, uniformly spread, and incorporate the specified application of fertilizer.

The Contractor shall incorporate bag fertilizer at a rate of 1000 pounds per acre of 13-13-13 commercial fertilizer. The equivalent rate of other type fertilizers will be allowed if the equivalent percentages of Nitrogen, Phosphorus and Potassium are obtained. Any changes in the type or rate of application of the fertilizers shall be approved by the Engineer prior to being incorporated.

907-227.03.3--Seeding.

907-227.03.3.1--General. The Contractor shall use the following types of seed and application rates, unless otherwise approved by the Engineer.

- Bermudagrass ----- 20 pounds per acre
- Bahiagrass ----- 25 pounds per acre
- Tall Fescue ----- 15 pounds per acre
- Crimson Clover ----- 20 pounds per acre

At the completion of the project, a satisfactory growth of grass will be required. Reference Subsection 210 for satisfactory growth and coverage of dormant seed.

907-227.03.3.2--Plant Establishment. The Contractor should provide plant establishment on all areas seeded until release of maintenance.

Plant establishment should be provided for a minimum period of 45 calendar days after completion of seeding. In the event satisfactory growth and coverage has not been attained by the end of the 45-day period, plant establishment should be continued until a satisfactory growth and coverage is provided for at least one kind of plant. See Section 210 for more information.

Plant establishment shall consist of preserving, protecting, watering, reseeding, mowing, and other work necessary to keep the seeded areas in satisfactory condition.

907-227.03.3.3--Growth and Coverage. It shall be the Contractor's responsibility to provide satisfactory growth and coverage of grasses, legumes, or combination produced from the specified seeding.

Growth and coverage on seeded areas will be considered to be in reasonably close conformity with the intent of the contract when the type of vegetation specified, exclusive of that from seeds not expected to have germinated and shows growth at that time, has reached a point of maturity where stems or runners overlap adjacent similar growth in each direction over the entire area.

Final acceptance of the project will not be made until a satisfactory growth of grass has been acknowledged by the Engineer.

907-227.03.4--Mulching. At the Contractor's option, mulch may be wood fiber, cellulose fiber, or a mixture of wood and cellulose fibers. The mulch shall be applied at the rate of 1,500 pounds per acre in a mixture of water, seed and fertilizer. Any changes in the rate of application of the mulch shall be approved by the Engineer prior to its use.

907-227.03.5--Equipment. Hydraulic equipment shall be used for the application of fertilizers, seeds and slurry of the prepared mulch. This equipment shall have a built-in agitation system with an operating capacity sufficient to agitate, suspend, and homogeneously mix slurry of the specified amount of fiber, fertilizer, seed and water. The slurry distribution lines shall be large

enough to prevent stoppage. The discharge line shall be equipped with a set of hydraulic spray nozzles, which will provide even distribution of the slurry on the various areas to be seeded.

The seed, fertilizer, mulch and water shall all be combined into the slurry tank for distribution of all ingredients in one operation as specified herein. The materials shall be combined in a manner recommended by the manufacturer. The slurry mixture shall be so regulated that the amounts and rates of application shall result in a uniform application of all materials at rates not less than the amounts specified. Using the color of the mulch as a guide, the equipment operator shall spray the prepared seedbed with a uniform visible coat. The slurry shall be applied in a sweeping motion, in an arched stream, so as to fall like rain, allowing the mulch to build upon each other until an even coat is achieved.

907-227.03.6--Protection and Maintenance. The Contractor should maintain and protect seeded areas until release of maintenance of the project. The Contractor should take every precaution to prevent unnecessary foot and vehicular traffic.

The Contractor should mow or otherwise remove or destroy any undesirable growth on all areas mulched to prevent competition with the desired plants and to prevent reseeding of undesirable growth.

907-227.04--Method of Measurement. Hydroseeding, complete and accepted, will be measured by the acre. No separate payment will be made for ground preparation, seeds, fertilizers, or mulch. Acceptance will be based on a satisfactory growth and coverage of seeds planted.

Agricultural limestone shall be measured and paid for under Section 213 of the Standard Specifications.

907-227.05--Basis of Payment. Hydroseeding, measured as prescribed above, will be paid for at the contract unit price per acre, which will be full compensation for all required materials, equipment, labor, testing and all work necessary to establish a satisfactory growth of grass.

Payment will be made under:

907-227-A: Hydroseeding - per acre

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-401-2

DATE: 03/30/2007

SUBJECT: Hot Mix Asphalt (HMA)

After Subsection 907-401-02.6.2 on page 2, add the following:

907-401.02.6.4.1--Roadway Density. Delete subparagraphs 1., 2., & 3. on page 251 and substitute the following:

1. For all leveling lifts, when full lane width and with a thickness as specified in the table in Subsection 401.02.4, the required lot density shall be 92.0 percent of maximum density.
2. For all single lift overlays, with or without leveling and/or milling, the required lot density shall be 92.0 percent of maximum density.
3. For all multiple lift overlays of two (2) or more lifts excluding leveling lifts, the required lot density of the bottom lift shall be 92.0 percent of maximum density. The required lot density for all subsequent lifts shall be 93.0 percent of maximum density.
4. For all pavements on new construction, the required lot density for all lifts shall be 93.0 percent of maximum density.

907-401.03.1.4--Density. Delete the first sentence of the first paragraph of Subsection 401.03.1.4 on page 259 and substitute the following:

The lot density for all dense graded pavement lifts, except as provided below for preleveling, wedging [less than fifty percent (50%) of width greater than minimum lift thickness], ramp pads, irregular shoulder areas, median crossovers, turnouts, or other areas where the established rolling pattern cannot be performed, shall not be less than the specified percent (92.0% or 93.0%) of the maximum density based on AASHTO Designation: T 209 for the day's production. For all leveling lifts, when full lane width and with a thickness as specified in the table in Subsection 401.02.4, the required lot density shall be 92.0 percent of maximum density.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-401-2

CODE: (IS)

DATE: 11/04/2005

SUBJECT: Hot Mix Asphalt (HMA)

Section 401, Hot Mix Asphalt (HMA) - General, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 401.02.6.2 on pages 248 and 249, and substitute:

907-401.02.6.2--Assurance Program for Mixture Quality. The Engineer will conduct a quality assurance program. The quality assurance program will be accomplished as follows:

- 1) Conducting verification tests.
- 2) Validate Contractor test results.
- 3) Periodically observing Contractor quality control sampling and testing.
- 4) Monitoring required quality control charts and test results.
- 5) Sampling and testing materials at any time and at any point in the production or laydown process.

The rounding of all test results will be in accordance with Subsection 700.04.

The Engineer will conduct verification tests on samples taken by the Contractor under the direct supervision of the Engineer at a time specified by the Engineer. The frequency will be equal to or greater than ten percent (10%) of the tests required for Contractor quality control and the data will be provided to the Contractor within two asphalt mixture production days after the sample has been obtained by the Engineer. At least one sample shall be tested from the first two days of production. All testing and data analysis shall be performed by a Certified Asphalt Technician-I (CAT-I) or by an assistant under the direct supervision of the CAT-I. Certification shall be in accordance with the *MDOT HMA Technician Certification Program* chapter in the Materials Division Inspection, Testing, and Certification Manual. The Department shall post a chart giving the names and telephone numbers for the personnel responsible for the assurance program.

The Engineer shall be allowed to inspect Contractor testing equipment and equipment calibration records to confirm both calibration and condition. The Contractor shall calibrate and correlate all testing equipment in accordance with the latest versions of the Department's Test Methods and AASHTO Designation: R 18.

Random differences between the Engineer's verification tests and the current running average of four quality control tests at the time of obtaining the verification sample will be considered acceptable if within the following limits:

Item	Allowable Differences
Sieve - % Passing	
3/8-inch and above	6.0
No. 4	5.0
No. 8	4.0
No. 16, for 4.75 mm mixtures ONLY	3.5
No. 30	3.5
No. 200	2.0
AC Content	0.4
Specimen Bulk SG, Gmb @ N_{Design}	0.030
Maximum SG, Gmm	0.020

If four quality control tests have not been tested prior to the time of the first verification test, the verification test results will be compared to the average of the preceding quality control tests. If the verification test is the first material tested on the project or if a significant process adjustment was made just prior to the verification test, the verification test results will be compared to the average of four subsequent quality control test results. For all other cases after a significant process adjustment, the verification test results will be compared to the average of the preceding quality control tests (taken after the adjustment) as in the case of a new project start-up when four quality control tests are not available.

In the event that; 1) the comparison of the Contractor’s running average quality control data and Engineer’s quality assurance verification test results are outside the allowable differences in the above table, or 2) if a bias exists between the results, such that one of the results is predominately higher or lower than the other, and the Engineer’s results fail to meet the JMF control limits, the Engineer will investigate the reason immediately. As soon as the need for an investigation becomes known, the Engineer will increase the quality assurance sampling rate to the same frequency required for Contractor testing. The additional samples obtained by the Engineer may be used as part of the investigation process or for routine quality assurance verification tests. The Engineer's investigation may include testing of the remaining quality control split samples, review and observation of the Contractor's testing procedures and equipment, and a comparison of split sample test results by the Contractor quality control laboratory, Department quality assurance laboratory and the Materials Division laboratory. The procedures outlined in the latest edition of MDOT’s Field Manual for HMA may be used as a guide for the investigation. In the event that the Contractor’s results are determined to be incorrect, the Engineer's results will be used for the quality control data and the appropriate payment for the mixture will be based on the procedures specified in Subsection 401.02.5.8(j).

The Engineer will periodically witness the sampling and testing being performed by the Contractor. The Engineer, both verbally and in writing, will promptly notify the Contractor of any observed deficiencies. When differences exist between the Contractor and the Engineer which cannot be resolved, a decision will be made by the State Materials Engineer, acting as the referee. The Contractor will be promptly notified in writing of the decision. If the deficiencies are not corrected, the Engineer will stop production until corrective action is taken.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-403-4

DATE: 03/30/2007

SUBJECT: Hot Mix Asphalt (HMA)

Before Subsection 907-403-05.2 on page 1, add the following:

Delete Subsection 403.03.5.5 on page 273 and substitute the following:

907-403.03.5.5--Preliminary Leveling. All irregularities of the existing pavement, such as ruts, cross-slope deficiencies, etc., shall be corrected by spot leveling, skin patching, feather edging or a wedge lift in advance of placing the first overall lift.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-403-4

CODE: (IS)

DATE: 11/04/2005

SUBJECT: Hot Mix Asphalt (HMA)

Section 403, Hot Bituminous Pavement, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-403.05.2--Pay Items. Add the "907" prefix to the pay items listed on page 275 & 276.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-603-5

CODE: (SP)

DATE: 10/07/2005

SUBJECT: Video Pipe Inspection

Section 603, Culverts and Storm Drains, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby modified as follows:

907-603.01--Description. After the last paragraph of Subsection 603.01 on page 355, add the following:

This work also includes the video inspection of drainage systems.

907-603.03.10--Video Pipe Inspection. All drainage pipe that is required to be cleaned of sand and debris will also be video inspected to assure that the pipe system is clean of obstructions. The drainage system shall be video inspected by the Contractor in the presence of the Engineer or the Engineer's representative. A video recording for each line inspected shall be furnished to the Engineer. The line location (station number) and distance traversed by the camera shall be recorded on a standard VHS video tape.

Video equipment used for inspecting the drainage system shall be capable of the following minimum requirements:

- (1) Providing color video inspection of the pipeline. The color camera must have a minimum 400-line horizontal resolution.
- (2) Video inspecting up to 300 linear feet of drainage pipe, by pushing, pull cabling, jetting or tractoring the camera through the line and recording the condition on video tape.
- (3) Equipped with a video monitor capable of allowing live viewing of the video inspection.
- (4) Displaying and recording on the video tape, the date, line identification, footage and type of pipe deficiency.
- (5) Recording the distance traversed by the camera to within 0.5 feet, allowing for overlapping of distances if a reversal is required to permit full-length inspection.

Any foreign materials that restricts the movement of the inspection equipment or impairs the quality of the video within the drainage system shall be flushed from the system. Flushing of the drainage system will be by water jetting or other methods approved by the Engineer. Costs associated with flushing the system will not be made under separate payment. The system shall

be re-inspected after flushing in the same manner as the initial inspection as described above. Re-inspection of the system shall be at no additional cost to the State.

907-603.04--Method of Measurement. After the last paragraph of Subsection 603.04 on page 363, add the following:

Video pipe inspection will be measured by the linear foot of drainage pipe inspected. The length to be paid will be the slope length of the pipe.

907-603.05--Basis of Payment. After the fourth paragraph of Subsection 603.05 on page 363, add the following:

Video pipe inspection, measured as prescribed above, will be paid for at the contract unit price per linear foot of drainage pipe inspected, which price shall be full compensation for furnishing all labor, equipment, VHS tapes, tools and incidentals necessary to complete the work.

After the last pay item listed on page 366, add the following:

VIDEO PIPE INSPECTION

907-603-V: Video Pipe Inspection, All Sizes - per linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-618-4

CODE: (SP)

DATE: 12/12/2006

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:

907-618.03.3--Safe Movement of Traffic. Delete subparagraphs (2) and (3) of Subsection 618.03.3 on pages 415 & 416, and substitute the following:

- (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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-1

CODE: (SP)

DATE: 06/02/2004

SUBJECT: Changeable Message Signs

Section 619, Traffic Control for Construction Zones, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-619.02--Material Requirements. After Subsection 619.02.13 on page 424, add the following:

907-619.02.12--Changeable Message Sign. The changeable message sign shall be trailer-mounted, full size, LED, full matrix, solar powered, portable changeable message sign. The sign shall be capable of on-site operation via onboard keyboard/keypad, and when specified, remote operation via software compatible with Windows 2000 / Windows XP operating system. The entire sign assembly shall be designed and constructed to withstand and operate during a minimum of 75 MPH wind gusts with all outriggers and/or leveling jacks in place. The entire sign assembly, including each component exposed to weather, shall be sealed and water-proofed to prevent water penetration when subjected to rain and gusting winds of 75 MPH. If more than one changeable message sign is specified, they shall all be of the same model and from the same manufacturer. All parts and materials used to construct the changeable message sign shall be new.

When specified, each sign shall be provided either with or without the necessary hardware to control the sign remotely. If provided without the hardware, the sign shall be constructed with wiring in place to provide the connections for the necessary onboard hardware to control the sign remotely. The manufacturer shall supply a serial and/or USB connection within the sign control cabinet so that a laptop computer using the remote software can communicate directly with the sign CPU.

When specified, the sign shall be capable of displaying dynamic, in-situ traffic speeds through the use of an optional traffic radar transducer. The sign shall also be capable of radar interrupt. This option shall interrupt the original user-specified sequence of messages to display the approaching vehicle speeds and/or an alternate sequence of messages as determined by the user. This option shall also have the functionality to display the speeds of the approaching vehicles as a stand-alone sequence.

When specified, each sign shall be NTCIP compliant/compatible.

When specified, each sign shall be provided either with or without the necessary hardware to operate a Highway Advisory Radio (HAR) system. If provided without the hardware, the sign shall be constructed to provide the required connections to easily add the necessary onboard hardware to operate the HAR.

General. The sign shall be mounted on a portable trailer containing the necessary solar panels, deep-cycle heavy-duty batteries, and battery charger. When specified, gel-type batteries shall be a replacement for deep-cycle heavy-duty batteries. In the event of prolonged lack of sufficient sunlight, the sign batteries shall be capable of being charged while the sign is operating by the use of a standard 120 Volt AC generator. The sign shall be equipped with a male plug-in and a 50-foot long extension cord constructed of a minimum 12-gauge wire for this purpose. This plug-in shall also be capable of charging the sign batteries using standard 120 Volt AC current when the sign is not in use.

When specified, the sign shall be supplied with either the necessary onboard hardware to control the sign remotely, or the required connections to easily add the necessary onboard hardware to control the sign remotely. This hardware shall consist of, but is not limited to, a cellular telephone capable of operating in digital mode, and/or analog mode when specified, the necessary external antenna, communications cables, and the necessary modem for communicating with the sign operating software. The sign shall also be supplied with the necessary software to control the sign from a remote location. This software shall be Windows 2000 / Windows XP operating system compatible for use on any desktop or laptop equipped with a Hayes Compatible Modem, and any necessary software which must be installed on the sign for communication with a remote computer. The cell phone and/or modem shall be capable of communication using the MDOT cell service provider and it shall be the responsibility of the manufacturer/contractor to demonstrate this service. The sign shall be capable of data communications at a minimum transmission speed of 40 kilobytes per second. The sign shall not be dependent on cellular digital packet data type technology for wireless communications.

The software for controlling the sign and sign messages shall be password protected to safeguard against unauthorized use. There shall be a minimum of three (3) levels of password protection. The most restrictive level shall allow an operator to select a preprogrammed sequence of messages for display while restricting access to the computer's sign and sequence programming. The next restrictive level shall allow the operator to access the sign's primary controls such as sign brightness, message and sequence editing, and establishing schedules. The least restrictive level shall allow full access to all controls, passwords, signs parameter display, and diagnostic display.

Sign diagnostics shall include, but not be limited to, LED brightness controls, internal operating temperature, sign status, communications status, radar status and solar status via onboard display and/or when specified, remote software. The sign status shall provide information on the sign operation that includes CPU inputs and outputs, battery voltage, 110 VAC service indicator, low voltage indicator, and photocell ambient light level. The solar status shall provide information on voltage level from the batteries, voltage level for the LED display, sign brightness level, percent of maximum brightness for LED's, and photocell ambient light level.

The sign software shall be capable of scheduling predetermined sequences of messages based on a programmed time and date.

There shall be a minimum of 180 pre-stored, standard signs and messages as detailed in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), all capable of being displayed. There shall also be storage space provided for an additional 150 user-programmed signs and/or messages. Each sign CPU shall have the capacity to store a minimum of 150 programmable sequences. Each sequence shall be capable of displaying up to six (6) programmed signs, symbols, or messages. There shall also be provided, as stored data, and capable of being displayed, all graphical symbols of regulatory and warning symbols detailed in the latest edition of the MUTCD.

The sign display shall be capable of displaying both static and dynamic graphics/messages. The sign display shall also be capable of displaying messages in full size to utilize the maximum area of display. It shall also be capable of displaying conventional one, two, or three-line messages for display with a choice of a minimum of nine (9) font sizes.

At least two copies of user manuals shall be provided with each sign. Each manual shall include all operational functions and software required to operate the sign on site and remotely. This manual shall include all wiring diagrams, parts lists, and sign specifications as well as component warranty information. Each copy shall be bound and shall contain laminated sheets.

Trailer Control Cabinet. The control cabinet shall be constructed of aluminum and shall receive an automotive grade protective coating as should the rest of the trailer. The sign cabinet shall be manufactured to withstand all types of adverse weather conditions and shall have screens or filters installed to keep insects out. This control cabinet shall be lockable, internally illuminated, and house the keyboard terminal and control panel. Lighted keys and terminal displays are acceptable. This control cabinet shall be manufactured in accordance with the latest NEMA 3R/4 standards. The control cabinet shall contain all controls and the necessary gauges for monitoring sign activity. All controls shall be labeled using engraved laminated plastic that is a minimum of 1/16-inch thick. These gauges shall include, but are not limited to, a voltmeter, which indicates current battery charge status, and an amp meter, which indicates current/charging status. The provision of this information via digital readout on a control console or panel is acceptable.

Sign Display. The sign display housing shall be constructed of aluminum and shall be composed of a full matrix of LED's. The sign display housing shall be manufactured in accordance with the latest NEMA 3R/4 standards. The sign shall be comprised of easily interchangeable modules that may be individually replaced in the event of failure or damage. The sign display shall have the minimum capability of displaying three lines of 18-inch nominal high text with eight characters per line. The sign display shall be capable of displaying preprogrammed Manual on Uniform Traffic Control Devices (MUTCD) symbolic messages and standard arrows. This sign shall be a full matrix type, not a fixed matrix type. The sign display shall also be capable of displaying user-defined custom messages and graphics. These messages shall be capable of saving for later recall and use. The sign shall be capable of displaying a preprogrammed default message, or no message at all, in the event of a power failure. When displaying text messages, the spacing between lines of text shall be a minimum of six (6) inches and the inter-character spacing shall be a minimum of three (3) inches. The sign shall be capable of shutting down its LED display if internal cabinet temperatures reach a level that is determined

unsafe by the manufacturer. The LED's shall be ITE amber wide angle for both daytime and nighttime viewing at an angle of 17 degrees, shall be rated for a service life of 100,000 hours, and shall have an operating temperature range of between -22°F to +165°F. The associated electronics for operation of display power supply shall be fully operational in the temperature range of -30°F to +165°F. The sign display shall be protected by a non-glaring polycarbonate material of at least ¼ inch thickness. The display shall provide easy access to all components contained within the display housing.

LED Brightness Control. The sign shall be equipped with both automatic and manual controls to adjust the brightness of the LEDs. The automatic control shall be capable of varying the LED brightness by sensing the ambient light level using photocells. The manual brightness control shall be password protected to safeguard against unauthorized use. LED brightness control shall also be contained within the remote operational software.

Sign Trailer. The trailer shall be equipped with a minimum of two wheels with heavy-duty radial tires. It shall be constructed using a minimum of ASTM A36, 3-inch by 3-inch and 3-inch by 5-inch steel tubing both with a minimum of 3/16-inch wall thickness. Each wheel shall be equipped with one locking lug nut. A minimum of four keys for the locking lug nuts shall be supplied for each trailer. The trailer spring leafs shall be rated for 3500 pounds. The wheels shall be 15-inch steel wheels with five lug bolts per wheel. The wheels shall each be fitted with new P 205-75-15B rated tires.

The trailer shall be provided with a minimum of four outriggers or leveling jacks. One outrigger or leveling jack shall be mounted near each corner of the trailer. The length of the leveling jacks shall be such that when the trailer is level, all four jacks and the tongue jack can be lowered into the vertical position. The trailer shall also be provided with a trailer stand mounted on the tongue of the trailer. The trailer stand shall be a corrosion resistant, screw type jack stand which provides up to a 25-inch lift with a pull-pin swivel release that enables the jack to swing up to a horizontal position for towing. The stand shall also include a 6-inch wheel that allows horizontal positioning of the trailer. The jack stand shall be welded, not bolted, to the tongue of the trailer. The trailer shall be provided with legal tail/brake lights, signals, and license plate mounting bracket. The trailer shall be provided with a 2-inch "hammer blow coupler" style hitch capable of being reversible with a 2½-inch Pintle ring. The trailer shall contain the batteries, solar panels, display lift, and control console.

The trailer shall be equipped with an electric or hydraulic lift, or combination thereof, for the sign display. The sign shall also be equipped with a manual backup lift. The display lift shall raise the sign to a minimum of seven feet above the roadway surface. The sign display shall be capable of rotating and locking at any selected angle up to 360 degrees. A positive brake assembly with lockable control arm shall be provided to position the sign display in the desired position. A mast safety pin shall be provided to prevent the sign display from falling in the event of an electric or hydraulic system failure.

All welding shall be performed by certified welders and in accordance to applicable American Welding Society standards. All metal surfaces shall receive a protective coating such as powder

coating, two coats of primer and two coats of finish/color. The finished coating shall be automotive grade.

All cabinets, display cases, battery cabinets and connections shall be NEMA 3R/4 compliant. All cabinets must be completely encased and lockable with a standard padlock. A lockable storage cabinet shall be provided to house various accessories.

The trailer shall have a 6,000-pound capacity hydraulic surge brake system along with a breakaway latch.

Radar. When specified, the sign shall be equipped with a traffic radar operating in the "K" band, in an "approach only" mode. In conjunction with the radar, the sign shall be capable of displaying dynamic, in-situ vehicle speeds. The radar shall be able to interface directly with the CPU and operational software for applications such as vehicle speeds. The unit shall be programmable to allow the interruption of user-defined messages to display vehicle speed and/or alternate messages whenever a settable speed threshold is exceeded. The radar unit shall be encased in an aluminum enclosure with a polycarbonate lens, and the metal portion shall receive the same protective coating, priming, and painting as the rest of the sign.

907-619.03--Construction Requirements. After Subsection 619.03.9 on page 427, add the following:

907-619.03.10--Changeable Message Sign. Each changeable message sign shall be installed and continuously operated at the location selected by the Engineer on State right-of-way. The Contractor is advised that selected locations may be outside the planned indicated limits of the project. The Contractor shall perform all work necessary for preparation of the site selected and approved by the Engineer, to insure maximum safety for and sign visibility of the traveling public; and may be required to remove any temporary work at a later date as directed by the Engineer. The Contractor will also place a minimum of two plastic drums in advance of the sign and one beside the sign as long as it is in use. The Contractor shall be required to move the sign to a new location if directed by the Engineer.

The Contractor may be permitted to bring electric power from outside the normal right-of-way for operation of the equipment if the Department determines that the installation operation will not be hazardous to the traveling public. The Contractor will be required to secure a permit from the Department prior to any work by the power company on the right-of-way. The entire cost of providing electrical service, power to operate the equipment, and removal of the power source from the right-of-way shall be borne by the Contractor.

The changeable message sign(s) will remain the property of the Contractor after the Engineer determines that there is no further need for the sign(s) on the project.

907-619.04--Method of Measurement. After the last paragraph of Subsection 428 on page 619-7, add the following:

Changeable message signs, as described above, will be measured by the unit. When directed, separate measurements will be made for items included in the contract and required for temporary site preparation for the sign as referenced in Subsection 907-619.03.10. Materials for which no pay items are included in the contract will not be measured for separate payment. Separate measurements will not be made for moving the changeable message sign to a new location, but materials used for which pay items are included in the contract and are necessary for repositioning the sign as directed by the Engineer will be measured for separate payment. Removal of materials used for site preparation for changeable message signs will not be measured for separate payment.

907-619.05--Basis of Payment. After the second paragraph of Subsection 619.05 on page 428, add the following:

Payment for items required by the Engineer for temporary location of the changeable message sign, and for which pay items are included in the contract, will be made by the individual pay item. No additional payment will be made for having to work outside the planned indicated project limits.

Payment for removal of materials used for site preparation at changeable message sign locations shall be included in the contract bid price for Maintenance of Traffic.

Between pay item nos. 619-E2 and 619-F1 on page 429, insert the following:

907-619-E3: Changeable Message Sign (____*____) - per each

* Indicate when the sign is "With Remote" and/or "With Radar"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-622-4

CODE: (SP)

DATE: 02/06/2007

SUBJECT: Field Office Building

**PROJECT: ER-NH-0003-01(108) / 104569306 &
ER-NH-0003-01(108) / 104569308 -- Harrison County**

Section 622, Engineer's Field Office Building, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

907-622.03.1.1--Type 1, Type 2 and Type 3 Field Office Buildings. At the end of the third paragraph of Subsection 622.03.1.1 on page 436, add the following:

In addition to the telephone service, the Contractor shall also provide a broadband connection to the internet. The service shall be capable of providing a downstream speed of 3 Mbps and an upstream speed of 384 kbps.

907-622.05--Basis of Payment. Add the "907" prefix to the first pay item listed on page 439.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-4

CODE: (SP)

DATE: 06/10/2004

SUBJECT: Thermoplastic Markings

Section 626, Thermoplastic Traffic Markings, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-626.02--Materials. After the first paragraph of Subsection 626.02.1 on page 443, add the following:

Blue-ADA thermoplastic marking material shall meet the requirements of Subsection 720.02 with the exception that the color shall be blue-ADA.

907-626.04--Method of Measurement. After the last paragraph of Subsection 626.04 on page 446, add the following:

Thermoplastic Legend, Handicap Symbol of the color specified will be measured per each as determined by actual count in place.

907-626.05--Basis of Payment. Delete the first sentence under Subsection 626.05 on page 446 and substitute the following:

Thermoplastic traffic markings will be paid for at the contract unit price per mile, linear foot, square foot or each, as applicable, which shall be full compensation for completing the work.

Add the following pay items after pay item 626-G on page 446.

907-626-G: Thermoplastic Detail Stripe, Blue-ADA	- per linear foot
907-626-H: Thermoplastic Legend, Blue-ADA	- per square foot
907-626-H: Thermoplastic Legend, Handicap Symbol, <u>Color</u>	- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-12

CODE: (SP)

DATE: 03/02/2007

SUBJECT: Double Drop Thermoplastic Markings

Section 626, Thermoplastic Traffic Markings, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-626.03.1.1--Equipment. After the second paragraph of Subsection 626.03.1.1 on page 444, add the following:

When edge lines are placed over rumble strips, the equipment must be able to apply the markings using the atomization method instead of extrusion / ribbon method.

907-626.03.1.2--Construction Details. After the second sentence of the first full paragraph of Subsection 626.03.1.2 on page 445 and add the following:

When edge lines are placed on rumble strips, the thickness of the edge line shall be 60 mils.

After the last sentence of the third full paragraph of Subsection 626.03.1.2 on page 445, add the following:

When double drop thermoplastic stripe is called for in the contract, additional beads by the drop-on method shall be applied as follows:

Class A glass beads at a rate of not less than three pounds of beads per 100 feet of six-inch stripe.
Class B glass beads at a rate of not less than three pounds of beads per 100 feet of six-inch stripe.

The Class B glass beads shall be applied to the newly placed stripe first, followed by the application of the Class A glass beads.

907-626.05--Basis of Payment. Add the following to the list of pay items on page 446.

907-626-C: 6" Thermoplastic Double Drop Edge Stripe,
Continuous White, ___* - per linear foot or mile

907-626-F: 6" Thermoplastic Double Drop Edge Stripe,
Continuous Yellow, ___* - per linear foot or mile

* Thickness may be specified

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-629-1

CODE: (SP)

DATE: 04/16/2007

SUBJECT: Retaining Wall Crash Cushion

PROJECT: ER-NH-0003-01(108) / 104569306 & 308 -- Harrison County

Section 629, Vehicular Impact Attenuators, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follow:

907-629.01--Description. After the last paragraph of Subsection 629.01 on page 452, add the following:

This work shall also include the installation of a wall crash cushion system to an existing wall or a new wall in accordance with the plans, specifications and manufacturer's recommendations. The crash cushion system shall consist of a crash cushion and a transition section. In most cases, the transition section will be cast in the bridge railing or retaining wall.

The crash cushion system shall have been tested and satisfactorily meets the requirements of National Cooperative Highway Research Program Report 350 (NCHRP350) for Test Level 2 Length Of Need (TL-2 LON). The crash cushion shall be constructed of a single row of multiple cylinders measuring 48" tall and 24" deep. The length of the cushion will depend on field conditions. The crash cushion shall be restrained from longitudinal movement by the anchoring hardware of the cylinders and the concrete wall, as well as the adjacent cylinders.

The Contractor shall submit to the Engineer for approval a set of Engineering Drawings prepared by the manufacture verifying that the crash cushion system will meet the loads based on design velocity, impact angle, vehicle weights, etc. Prior to ordering and install the crash cushion, the Contractor should have in writing a letter from the Engineer stating that the system is acceptable and can be install in accordance with the specifications.

907-629.02--Materials. After the last paragraph of Subsection 629.02 on page 452, add the following:

All structural steel and energy absorbing materials in the crash cushion shall be new and domestically manufactured. The cylinders shall be black in color and made from High Molecular Weight, High-Density Polyethylene (HMW/HDPE).

Metal work is fabricated from ASTM A-36 steel. After fabrication, metal work is galvanized in accordance with ASTM A-123. All welding is done by or under the direction of a certified welder.

The crash cushion shall be assembled with galvanized fasteners. All bolts, nuts and washers are

Commercial Quality "American National Standard" unless otherwise specified.

Concrete shall meet the requirements of Section 804 of the Standard Specifications.

907-629.03--Construction Requirements. After the last paragraph of Subsection 629.03 on page 453, add the following:

The plans and other contract documents will detail the layout of the crash cushion system. The system shall be fabricated and installed in accordance with the manufacturer's recommendation. The Contractor shall obtain the manufacturer's recommended installation instructions, including erection diagrams, and shall furnish the Engineer with a complete copy of such recommended installations and instructions.

Installation of crash cushion systems shall be accomplished by experienced workmen in accordance with the recommendations of the manufacturer. As a replacement supply, the Contractor shall furnish a spare parts package. The quantity and materials of this package will be that necessary to repair one hit for each unit installed. The Contractor shall use these parts to maintain the attenuator until release of maintenance. Upon completion of the work the replacement packages shall become the property of the Contractor.

Concrete Transition

A rigid concrete transition section with a minimum depth of 26" and height of 36" for vertical wall and 32" for safety shape barrier is required at the beginning of the system.

Installation of the crash cushion system is to be performed by experienced workers. Site work shall be performed in accordance with the approved drawings. Hardware and anchors needed to install the crash cushion shall be supplied by manufacturer.

907-629.04--Method of Measurement. After the last paragraph of Subsection 629.04 on page 453, add the following:

Crash Cushion System will be measured by the linear foot. Crash cushion transition sections will be measured as a unit per each. One replacement package shall be included in the bid price for each unit installed.

Foundations for attenuators and median barrier end sections are considered parts of the respective units and will not be measured for separate payment.

907-629.05--Basis of Payment. After the last paragraph of Subsection 629.03 on page 453, add the following:

Crash Cushion System will be paid for at the contract unit price per linear foot, which price shall be full compensation for the design and construction of the crash cushion system, equipment, labor, and all incidentals necessary to complete the work as directed by the Engineer.

Crash cushion transition sections will be paid for a the contract unit price per each, which price shall be full compensation for the design and construction of the crash cushion transition section, equipment, labor, and all incidentals necessary to complete the work as directed by the Engineer.

After the last pay item listed on page 453, add the following:

907-629-D: Crash Cushion System - per linear foot

907-619-E: Crash Cushion Transition Section - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-639-1

CODE: (SP)

DATE: 01/11/2007

SUBJECT: Traffic Signal Equipment Poles

Section 639, Traffic Signal Equipment Poles, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-639-02.3--Foundations. Delete the first sentence of the first paragraph of Subsection 639.02.3 on page 481 and substitute the following:

Cast-in-place foundations for concrete, steel, and/or aluminum shafts shall be as specified on plans, and shall be cast of reinforced Class “DS” Concrete conforming to the requirements of Sections 601 and 602.

907-639-03.1--Foundations. Before the first paragraph of Subsection 639.03.1 on page 481, add the following:

Pole foundations shall be constructed as per the details on the plans, these specifications, and Section 803 of the Standard Specifications. Casings, as required, will be in accordance with Section 803 of the Standard Specifications.

In the first sentence of the first paragraph of Subsection 639.03.1 on page 481, change “Section 206” to “Section 801”.

After the first paragraph of Subsection 639.03.1 on page 482, add the following:

Due to soil conditions in certain locations, as noted on the plans, concrete shall be placed with a tremie. When a tremie is used, it shall perform in accordance with the requirements in Subsection 804.03.9 of the Standard Specifications.

It may be necessary to use slip casing to keep the holes open. Casing will be required in portions of the holes that are not stable. Casings authorized by the Engineer shall be of suitable size and strength to accommodate the drilling equipment and to withstand ground-pressures and removal operations without deformation of the poured shaft. When removed, the casings shall revert to the Contractor for disposal.

907-639.04--Method of Measurement. Delete the second sentence of the first paragraph of Subsection 639.04 on page 482, and substitute the following:

Such measurement shall include the pole, mast arms and all other incidentals necessary to complete the equipment pole.

After the last paragraph of Subsection 639.04 on page 482, add the following:

Pole foundations of the size specified will be measured by the cubic yard, which measurement shall be the area bounded by the vertical planes of the neat lines of the foundation.

Slip casings of the size specified will be measured by the linear foot from the ground elevation to the bottom of the strata needing to be cased.

907-639.05--Basis of Payment. Delete the first paragraph of Subsection 639.05 on page 482, and substitute the following:

Traffic signal equipment pole and traffic signal equipment pole shaft extension of the type specified, measured as provided in above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, erecting, installing, connecting and testing poles, pole bases, mast arms, caps, covers, ground wire, ground rods, hardware and for all equipment, tools, labor and incidentals necessary to complete the equipment pole.

Pole foundations, measured as prescribed above, will be paid for at the contract unit price per cubic yard, which price shall include full compensation for structure excavation, reinforcing steel, anchor bolts; for placing, curing, and installing concrete; for replacing sod and final clean-up; and for all equipment, labor, tools and incidentals necessary to complete the foundation.

Slip casings, measured as prescribed above, will be paid for at the contract price per linear foot, which price shall be full compensation for all materials, tools, equipment, labor, and incidentals necessary to complete to work.

Delete the list of pay items on page 482, and substitute the following:.

- 907-639-A: Traffic Signal Equipment Pole, Type _____ - per each
- 907-639-B: Traffic Signal Equipment Pole Shaft Extension, Description - per each
- 907-639-C: Pole Foundations, _____ Diameter - per cubic yard
- 907-639-D: Slip Casing, _____ Diameter - per linear foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-648-1

CODE: (SP)

DATE: 04/05/2007

SUBJECT: Radio Interconnect

PROJECT: ER-NH-0003-01(108) / 104569306 & 308 -- Harrison County

Section 648, Radio Interconnect, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is deleted in toto and replaced as follows:

SECTION 907-648 -- RADIO INTERCONNECT

907-648.01--Description. These specifications set forth the minimum technical requirements for turnkey wireless radio interconnect capabilities to local and master signal controller locations in lieu of hard wire interconnects. The system shall provide a serial or Ethernet interface at designated signal intersections. Serial interfaces will only carry signal data. Ethernet interfaces must be designed to carry signal data and/or digital video. The system must be expandable as MDOT and/or local municipalities add future signal intersections to the wireless network.

907-648.02--Materials. The Contractor shall be responsible for providing reliable two-way RF communications coverage between all locations specified in the Project Plans or any related Notice to Bidders. The attempted data transmissions of the radio interconnect must be successful 95% of the time and use a maximum of three automatic re-transmissions. The radio equipment, as opposed to the software application, shall generate the re-transmissions.

The Contractor shall provide the following elements necessary to implement a wireless system: radios, software, base stations, power supply, UPS, antennas, coaxial cable and connectors, lightning suppressors, mounting and grounding hardware, receivers, transceivers, modems, switches and any other equipment, hardware, enclosures and cabling required to make a complete operational system.

Each wireless device (except serial radios) must be capable of local and remote configuration. Remote configuration by two or more of the following is required: Telnet, HTTP, HTTPS, Secure Shell (SSH), or SNMP, and local configuration by direct console port. All cables must be supplied.

The placement of equipment and/or use of infrastructure on MDOT property will be open to negotiation. MDOT reserves the right to determine final placement of all equipment on MDOT property.

907-648.02.1--RF Data Link for Controller Communication. Communications between the master and the local intersections shall be performed via wireless RF Data Link. All equipment

requiring FCC type approval, acceptance or certification shall have approval, acceptance, or certification at time of shipment. All electronic equipment shall be solid state, utilize silicon semiconductor technology (except as otherwise specified), and reflect the latest advances in state-of-the-art design. All equipment and materials shall be new and free of corrosion, scratches, and other defects. All equipment must be of current design and manufacture. All equipment shall meet or exceed the applicable standards of the IEEE Electronic Industries Association, the Federal Communications Commission, and shall conform to the specifications of the local telephone company with respect to audio levels, frequencies, and control voltages. Equipment design and construction shall be consistent with good engineering practice, and shall be executed in a neat and workman-like manner. Appropriate lightning/surge protection will be provided for all installation hardware.

The Contractor shall provide RF transceivers and other data communications technology for full transmission and reception of data communications messages over radio channels to specified locations. All wireless data equipment proposed by the Contractor must be modular in design. Modularity allows MDOT to take advantage of component upgrades without replacement of the remaining wireless data equipment. Modularity also allows MDOT to replace any failed component without replacement of the remaining wireless data equipment.

The over-the-air radio protocol shall be designed to operate in a harsh RF environment (including dense fog and thunderstorm conditions) and to minimize RF losses associated with diverse terrain environments between MDOT intersections. All RF network management functions shall be transparent to the application. Contention control is the technique used to prevent a random data service from sending a message on a specific radio channel while other computing devices are using that channel. The method by which multiple accesses on the radio channel is handled is critical in attaining high message throughput capacity. The vendor shall describe in detail the following characteristics of its radio protocol:

- 1) The radio modulation scheme, including emissions designators and occupied bandwidth.
- 2) Protocol overhead such as framing, addressing, Forward Error Correction, Error Detection, etc.
- 3) Protocol contention scheme, including random retry mechanisms, collision resolution, and overload protection.
- 4) Frequency synchronization allows multiple distribution radios to share the same frequency without causing intersystem interference allowing for maximum utilization of RF spectrum. Vendor must describe their systems ability to avoid intersystem interference.

Contractor must provide for centralized management and logging of all Ethernet, Distribution, and Backbone radio devices. The management software must meet the following system requirements:

- 1) Utilize Microsoft Windows Operating System (Server 2003 or XP)
- 2) Synchronize to the GPS time standard to optimize throughput and eliminate data loss due to message collisions and reporting overlaps
- 3) Provide auto-discovery of radio equipment

- 4) Allow group configuration
- 5) Provide performance monitoring for networks and devices
- 6) Allow Rogue detection
- 7) Display alarms
- 8) Allow alarm traps and remote notification

The Vendor of the wireless radio equipment must be a reputable company with a minimum of five (5) years of experience in wireless communications and 10 years in business.

907-648.02.1.1--Serial Radio for Local Intersection. The radio signal communication shall be done in the 900-MHz data frequency bands. All interconnections and interfaces must provide for a complete installation and provide a serial access at each intersection location. A special transceiver antenna shall be provided at the master location.

907-648.02.1.2--Ethernet Radio for Local Intersection. Each Local Intersection Ethernet Radio is required to have a minimum 1.5 Mbps connection to the nearest Distribution Repeater Radio. Local Intersection Ethernet Radios must have Non-Line-of-Sight (NLOS) capabilities. The Contractor must guarantee 95% sustainable Bandwidth.

All interconnections and interfaces must provide for a complete installation and provide Ethernet access at each intersection location. All local controller radios must utilize Frequency Hopping Radios with RC4 Authentication, IP Address Access List, Protocol Filtering, and Virtual LAN.

For intersections with multiple Ethernet devices, a rugged environmentally hardened, NEMA TS2 compliant eight (8) port, RJ-45, 10/100 Mb, manageable switch shall be provided by the Contractor to accommodate the local hardware.

907-648.02.1.3--Repeaters. Repeater stations along the backbone must include the following: redundant Fixed Backbone Repeater, Non-Line-of-Sight (NLOS) mobile distribution base station and antenna systems capable of delivering sustained mobile data connections at a speed up to 60 MPH. Installations shall include; all mounting hardware, equipment racks and cabinets, UPS system with 2-hour backup, electrical, grounding, weatherproofing, configuration and testing required for a complete turn-key installation of all supplied equipment and materials for primary backbone and NLOS mobile distribution system.

907-648.02.1.3.1--Fixed Backbone Repeater Radio Communications. Each Fixed Backbone Repeater Radio site is required to have a minimum of two (2) radios providing redundant connections to the Central Backbone Repeater location (MDOT Lyman Project Office) or to at least one other fixed backbone repeater radio site, in the network, to provide a completely redundant ring. This redundant ring is required to be a fully redundant Layer 3 network utilizing dynamic routing protocols that provide network load balancing for maximum uptime and throughput at all fixed Backbone Repeater sites.

Each connection will have a minimum of one 100 Mbps full duplex radio system that is capable of being field upgraded with minimal hardware and/or firmware upgrades that enable 150 Mbps

and 200 Mbps operation. Backbone Repeater Radio links will range from 1-25+ miles in distance dependant upon each locations connection requirements. These links must be designed and configured to eliminate interference due to collocated radio systems and to optimize signaling across each connection. The Contractor must guarantee 95% sustainable bandwidth with 99.99% annual uptime for each Fixed Backbone Repeater Radio link with a combined uptime between associated redundant radio links of 99.999% annual uptime across the MDOT Backbone Repeater Radio Network.

The Contractor guarantees that the equipment furnished under the contract meets all of the requirements of these specifications and meets or exceeds the manufacture's published performance specifications. In addition, all equipment furnished shall fully meet all applicable Federal Communications Commission (FCC) rules and Electronic Industries Association (EIA) specifications.

The fixed backbone data equipment must operate in a licensed frequency that provides protected RF transmissions for each link. The Contractor must provide Frequency Coordination required in obtaining proper licensing from the FCC for MDOT to operate each licensed radio system link or hop under this contract. Frequency coordination services as required to comply with FCC rules and licensing instructions must be followed at all times. This shall include services required by the FCC at the time the frequency coordination is requested. Contractor must provide all services and fees required in obtaining these licenses on a "per-hop" or link basis.

The following security features must be provided at a minimum for each point-to-point fixed backbone repeater connection;

- AES Encryption – Bulk encryption of all data traversing the wireless network shall utilize AES 256-bit key encryption. The encryption operation must be based on encryption/decryption processes using symmetric block cipher (AES algorithm) and asymmetric key establishment techniques (Diffie-Hellman Key Establishment). The system must provide FIPS-validated operator authentication, secure key storage and management, and perform secure authentication. Encryption must be implemented on Layer 2 of the OSI Transport Model and must comply with HIPAA and meet, at minimum, FIPS 140-2 Level 2 security standards.

Pseudo-Random Bit Stream – The backbone microwave radio is required to produce a pseudo-random bit stream in its transmitters requiring the receiving radio receiver to synchronize to that same pseudo-random bit sequence before a connection can be established. The bit stream is generated to ensure a full frame is transmitted or received, and the key must only be available on two radios that are locked to one another.

907-648.02.1.3.2--Distribution Repeater Radio Communications. Each Distribution Repeater Radio site is required to have a minimum of six (6) load balancing access radios with a total bandwidth of 18 Mbps per site. Each site must provide 360 degrees of coverage and have a minimum radius coverage area of three (3) miles Non-Line-of-Sight with five (5) miles Line-of-Sight. Where possible, distribution radio coverage areas should overlap in order to provide more

reliable service to the designated intersections. The Contractor must guarantee 95 % sustainable bandwidth.

The distribution system shall include at least twelve (12) non-overlapping channels that can be synchronized to share the same frequency channel spacing.

All distribution radios must utilize Hopping Frequencies and RC4 Authentication, IP Address Access List, Protocol Filtering, and Virtual LAN.

907-648.02.2--Antennas. The Contractor shall install all antenna hardware and cables. Two antennas are required for each redundant link at repeater stations, one for each radio. The Contractor shall minimize the chance of interference between these antennas by mounting one antenna at least four feet directly over the other or by mounting one antenna in the vertical plane and the other in the horizontal plane. If the latter method is used, corresponding stations must use the same antenna orientation.

Adjustable sector antennas with a broadband dipole array, enclosed in an aluminum base with an ASA UV stabilized raydom for superior performance and weather ability are required for each Distribution Repeater Radio.

All paths shall be surveyed to confirm antenna sizes and centerlines. Contractor shall submit a copy of all path surveys to the MDOT Project Engineer through the standard MDOT submittal process. To ensure frequency clearance and to minimize interference potential, the system must be supplied with High Performance carrier grade rated antennas for the primary transmit signal. Space diversity antennas are standard performance. All antenna equipment and cabling must be provided by the radio equipment supplier.

There shall be three grounding straps for each transmission line run. The transmission line will be grounded at the antenna, at the bottom of the tower and at the point of entry into the building or equipment cabinet.

907-648.02.3--Interface Wiring for Serial Radios. A null modem cable is required between the Data Interface connectors of the two radios forming a repeater station.

907-648.03--Training, Testing and Installation (Excluding Serial Radios).

907-648.03.1--Installation Services. Contractor must prepare a comprehensive Network Design and Installation Plan for the wireless network. All Federal Communications Commission (FCC) license applications, if necessary will be prepared by the Contractor on behalf of MDOT, including any modifications to existing MDOT licenses. Contractor shall submit a copy of the Network Design, Installation Plan, and copies of any FCC license applications to the MDOT Project Engineer. MDOT reserves the right to reject any network designs and installation plans submitted. If rejected, the Contractor will be responsible for submitting revised network design and/or installation plan.

The Contractor must provide a supply of radio interconnect spare parts, including but not limited to, one Fixed Backbone Radio and antenna, three Distribution Radios and antennas, and two Local Ethernet Radios and antennas. The Contractor will provide a detailed parts list, including component model and serial numbers, to the Project Engineer through the standard MDOT submittal process.

907-648.03.2--Test Requirements. The Contractor shall conduct a Project Testing Program as required below. All costs associated with the Project Testing Program shall be included in overall contract prices; no separate payment will be made for any testing.

907-648.03.2.1--General Requirements. The Contractor is responsible for planning, coordinating, conducting and documenting all aspects of the Project Testing Program. The Project Engineer and/or his representatives are only responsible for attending and observing each test, and reviewing and approving the Contractor's test results documentation. The Project Engineer and/or his representatives reserve the right to attend and observe all tests.

Each test shall fully demonstrate that the equipment being tested is clearly and definitely in full compliance with all project requirements.

Test procedures shall be submitted and approved for each test as part of the project submittals. Test procedures shall include every action necessary to fully demonstrate that the equipment being tested is clearly and definitely in full compliance with all project requirements. Test procedures shall cross-reference to these Technical Specifications or the Project Plans. Test procedures shall contain documentation regarding the equipment configurations and programming.

No testing shall be scheduled until approval of all project submittals and approval of the test procedures for the given test.

The Contractor shall provide all ancillary equipment and materials as required in the approved test procedures.

The Contractor shall request in writing the Project Engineer's approval for each test occurrence a minimum of 14 days prior to the requested test date. Test requests shall include the test to be performed and the equipment to be tested. The Project Engineer reserves the right to reschedule test request if needed.

All tests shall be documented in writing by the Contractor in accordance with the test procedure and submitted to the Project Engineer within seven (7) days of the test. Any given test session is considered incomplete until the Project Engineer has approved the documentation for that test session.

All tests deemed by the Project Engineer to be unsatisfactorily completed shall be repeated by the Contractor. When the Contractor requests a test occurrence that is a repeat of a previous test, the Contractor shall summarize the diagnosis and correction of each aspect of the previous test that

was deemed unsatisfactory. The test procedures for a repeated test occurrence shall meet all the requirements of the original test procedures, including review and approval by the Project Engineer and ITS Manager.

The satisfactory completion of any test shall not relieve the Contractor of responsibility to provide a completely acceptable and operating system that meets all requirements of this project.

907-648.03.2.2--Factory Acceptance Test (FAT). Factory Acceptance Tests shall be conducted at the Manufacturer or Contractor facility or at a facility acceptable to all parties. All equipment to be utilized for this project shall be subject to tests that demonstrate the suitability of the design and compliance with the contract requirements, unless an exception for an equipment item is granted by the Project Engineer. The tests shall be performed on production units identified to be delivered under this contract.

The FAT procedure shall demonstrate all requirements defined in these specifications are met, including, but not limited to: functional/system performance requirements, electrical requirements, data transmission/communication requirements, safety/password requirements, environmental requirements, and interface requirements with other components of the project system.

The Project Engineer reserves the right to witness all FATs. At a minimum, the Project Engineer and/or his representative, will be in attendance at the FAT for the first three (3) units tested. The FAT for the first three (3) units shall be conducted during the same period. The Project Engineer shall be notified a minimum of forty-five (45) calendar days in advance of such tests. Salary and travel expenses of the Project Engineer and his representatives will be the responsibility of MDOT. In case of equipment or other failures that make a retest necessary, travel expenses of the Project Engineer and his representatives shall be the responsibility of the Contractor. This shall include all costs including, but not limited to, airfare, automobile rental, lodging, and per diem. These costs, excluding airfare shall not exceed \$500.00, per representative, per day. These costs shall be deducted from payment due or charged to the withholding account of the Contractor when the project is terminated.

The vendor must complete the FAT on all remaining units on their own and submit documentation to the Project Engineer that the FATs were completed. The Project Engineer reserves the right to randomly attend those FAT tests.

No equipment for which a FAT is required shall be shipped to the project site without successful completion of factory acceptance testing as approved by the Project Engineer and the Engineer's approval to ship.

907-648.03.2.3--Standalone Acceptance Test (SAT). The Contractor shall perform a complete SAT on all equipment and materials associated with the field device site, including but not limited to electrical service, conduit, pull boxes, communication links (fiber, leased copper, wireless), control cables, poles, etc. An SAT shall be conducted at every field device site.

Where applicable, a SAT shall be conducted for a fully installed and completed connection to the designated Traffic Management Center (TMC) or central data/video collection site.

The SAT shall demonstrate that all equipment and materials are in full compliance with all project requirements and fully functional as installed and in final configuration. The SAT shall also demonstrate full compliance with all operational and performance requirements of the project. All SATs will include a visual inspection of the cabinet and all construction elements at the site to ensure they are compliant with the specifications.

After a thirty (30) day burn-in period, the contractor must demonstrate the bandwidth requirements specified in this special provision at selected intersections. The intersections to be tested will be randomly selected by the Project Engineer.

907-648.03.2.4--Serial Radio System Testing. The Contractor will be responsible for verifying the integrity of the communication links between the local intersections and the master.

907-648.03.2.5--Fixed Backbone, Distribution, and Local Ethernet System Testing. Successful communications are defined as the ability of a wireless transceiver to send an error-free message and decode an acknowledgment from the receiving station. A minimum of 30 test transmissions shall be attempted at each test site. If a failure occurs at the locations selected, it will be the responsibility of the Contractor to re-check the test area to determine if a problem exists. If there is a problem, it will be the Contractor's responsibility to run additional tests as required to define the cause of the problem. If areas of non-performance represent more than the Contractor's predicted link reliability, it will be the Contractor's responsibility to correct such problems as the sole expense of the Contractor. Any additional costs associated with further testing will be solely borne by the Contractor.

Contractor must prepare and execute a detailed system acceptance test plan, including detailed system acceptance test procedures. Contractor shall submit a copy of all System Acceptance plans to the MDOT Project Engineer through the standard MDOT submittal process. All test plans and procedures must be approved by MDOT and shall not be revised without prior written approval of MDOT. The plan should include but is not limited to the following:

- 1) A brief description of how the test will be conducted.
- 2) MDOT manpower requirements.
- 3) Approximate duration of the test.
- 4) A brief description of the methodology used for gathering test information.
- 5) A brief description of how the results will be tabulated and documented.
- 6) A brief explanation of how the system acceptance test plan proves that the RF link reliability requirements of these specifications will be met.

Throughout the test period, all equipment must meet the following standards:

- 1) No unit shall experience more than one failure during the test period.
- 2) System failure shall not occur more than one time. System failure is define as any

problem that prevents communication with the local intersections for more than 30 cumulative minutes. Failures of equipment due to scheduled maintenance, natural disasters, MDOT negligence, vandalism, or acts of God will not constitute test failure.

- 3) The wireless radio network shall operate for 30 consecutive days without a greater than 30 cumulative minute failure during the test period. The vendor shall have eight (8) hours from the time of the equipment failure notification to restore the equipment to operating condition.

907-648.03.3--Training. The Contractor shall submit to the Project Engineer for approval a detailed Training Plan including course agendas, detailed description of functions to be demonstrated, training location and a schedule. The Contractor must also submit the Trainer's qualifications to the Project Engineer for approval prior to scheduling any training. The training must include both classroom style training and hands-on training in the field of the maintenance and troubleshooting procedures required for each component. The training should also consist of a hands-on demonstration of all software configuration and functionality where applicable. Training must be performed on equipment and software that is identical to the equipment delivered to MDOT. This training should provide a working knowledge of the system operation and hands-on experience of system adjustment.

The supplier of the wireless radio interconnect system shall, at a minimum, provide a sixteen-hour operations and maintenance training class with suitable documentation for up to eight (8) persons selected by the Department. The operations and maintenance class shall be scheduled at a mutually acceptable time and location.

907-648.03.4--Warranty. The wireless radio interconnect system shall be warranted to be free of manufacturer defects in materials and workmanship for a period of one year from the date of Final Maintenance Release. Equipment covered by the manufacturer's warranties shall have the registration of that component placed in MDOT's name prior to Final Inspection. The Contractor is responsible for ensuring that the vendors and/or manufacturers supplying the components and providing the equipment warranties recognize MDOT as the original purchaser and owner/end user of the components from new. During the warranty period, the supplier shall repair or replace with new or refurbished material, at no additional cost to the State, any product containing a warranty defect, provided the product is returned postage-paid by the Department to the supplier's factory or authorized warranty site. Products repaired or replaced under warranty by the supplier shall be returned prepaid by the supplier.

During the warranty period, technical support shall be available from the supplier via telephone within four hours of the time a call is made by the Department, and this support shall be available from factory certified personnel. During the warranty period, updates and corrections to control unit software shall be made available to the Department by the supplier at no additional cost.

907-648.03.5--Maintenance and Technical Support. The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. The manufacturer of the wireless radio equipment must provide, and have a parts support system capable of providing parts for a period of five (5) years from the date of system acceptance.

Spare parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale of said spare parts.

The suppliers shall maintain an ongoing program of technical support for the wireless radio interconnect system. This technical support shall be available via telephone or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale of said technical support services.

907-648.04--Method of Measurement. Radio interconnect and repeater installation will be measured as a unit quantity per each, which measurement shall include radio, software, base stations, power supply, antennas, cables and connectors, lightning suppressors, mounting and grounding hardware, enclosures, receivers, transceivers, modems, UPS, switches and all other items necessary to complete the installation to provide appropriate RF Data Link. Measurement shall also include all system documentation including shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to document the operation of the Wireless Radio Interconnect System.

The radio interconnects and repeaters will be measured for payment on a per each basis as follows:

- 30% of the contract unit price upon delivery to the site. Delivery cannot be more than 60 days before anticipated installation.
- 70% of the contract unit price upon complete installation and Stand Alone testing of the wireless network
- 90% of the contract upon conditional system inspection.
- 100% of the contract unit price upon Final Maintenance Release.

Radio interconnect training, testing and spare parts will be measured per lump sum after satisfactorily completing all required training and delivery of all spare parts.

907-648.05--Basis of Payment. Radio interconnect and repeater installation, measured as prescribed above, will be paid for at the contract unit price per each for each type(s) specified in the contract which price shall be full compensation for furnishing all materials; for installing, connecting and testing; and for all equipment, labor, tools, and incidentals necessary to complete the work.

Radio interconnect training, testing and spare parts, measured as prescribed above, will be paid for at the contract lump sum price.

Payment will be made under:

907-648-A: Radio Serial Interconnect, Installed in New Controller Cabinet - per each

907-648-B: Radio Serial Interconnect, Installed in Existing Controller Cabinet - per each

907-648-C: Radio Ethernet Interconnect, Local Intersection	- per each
907-648-D: Radio Ethernet Distribution Repeater Installation	- per each
907-648-E: Radio Ethernet Fixed Backbone Repeater Installation	- per each
907-648-F: Radio Interconnect Training, Testing and Installation	- lump sum
907-648-G: Radio Interconnect Spare Parts	- lump sum

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-649-1

CODE: (IS)

DATE: 09/21/2006

SUBJECT: Video Vehicle Detection

Section 649, Video Vehicle Detection, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is deleted in toto and replaced as follows:

SECTION 907-649 -- VIDEO VEHICLE DETECTION

907-649.01--Description. This special provision specifies the minimum requirements for Video Detection Systems (VDS) furnished and installed in accordance with the design(s) for the location(s) designated on the project plans, in any related notice to bidders, or as directed. The work shall consist of providing all labor, materials, equipment, and incidentals necessary to furnish, install, test, and operate VDS that are capable of integrating with MDOT's Traffic Management/Operations Centers (TMC).

The Video Detection System will provide roadway monitoring capabilities via digitized video images transmitted over an Ethernet network and will provide traffic data collection of vehicle parameters including, but not limited to, speed, presence, occupancy, volume, video snapshots and MPEG-4 streaming video of the intersection. All of the real-time data shall be reported locally or remotely and be viewable from a customized, secure, user-friendly website hosted by the VDS vendor.

907-649.02--Materials.

907-649.02.1--General. The video detection system hardware will typically consist of two major components:

- 1) Video Camera Sensors (color) with zoom lens (one sensor in each direction)
- 2) Video Detection System Processor

907-649.02.2--Functional Requirements. The VDS shall be capable of monitoring vehicles on a roadway via processing of video images and providing discrete detection of vehicles and functional detection parameters on a per lane basis for each of the following:

- 1) Presence of moving or stopped vehicles (a vehicle that has not moved for a user-definable length of time)
- 2) Traffic volume (absolute number of discrete vehicles per time interval per lane)
- 3) Speed (average lane speed in mph)
- 4) Occupancy (individual lane occupancy measured in percent of time)
- 5) Density (average lane density = volume/speed)

- 6) Headway (average time interval between vehicles by lane in seconds)
- 7) Vehicle classification and volumes per lane by user-selectable vehicle lengths (minimum four (4) bins)
- 8) Wrong Way vehicle detection
- 9) Alarms for the following:
 - a. wrong-way vehicles
 - b. speed
 - c. vehicle classifications
- 10) Loop Emulation based on single or dual loops for a minimum of four (4) lanes.
- 11) Provide direct real-time iris and shutter speed control and be equipped with an integrated auto zoom/auto focus lens that can be changed using computer software.
- 12) Shall provide full motion color video through the means of a differential video port in NTSC format.

907-649.02.3--System Requirements. As a minimum, the system shall include the following features:

- 1) Shall be capable of detecting and storing discrete lane data for either approaching or receding vehicles in at least four (4) lanes and two (2) shoulders / emergency lanes.
- 2) Shall provide a contact closure interface to a traffic controller or other device, this interface shall accept eight (8) contact closure inputs (usually red and green control signals) and provide sixteen (16) contact closure outputs to a traffic signal controller. For a SDLC interface to a NEMA TS2 traffic controller, this interface shall display 32 phase colors and emulate up to four (4) bus interface units (BIU).
- 3) Shall include software with the capability to define detectors through interactive graphics by placing lines and/or boxes or polygons defined by a minimum of four points.
- 4) Shall be a tracking based system or a system of detection zones (lines and/or boxes) which may assign logical functions to one detector or a group of detectors to accomplish directionality or classification.
- 5) Shall be capable of programming the expected flow direction of traffic to facilitate alarm generation for vehicles traveling in the wrong direction.
- 6) Shall be capable of operating as a stand-alone unit when communication to the central system is lost, calculating traffic parameters in real-time and storing data in its own non-volatile memory.
- 7) Shall be capable of compensating for camera movement attributable to temperature effects, wind shifts, pole sway, pole expansion, or vibration of the mount when attached to bridges, sign structures or other structures.
- 8) Shall allow for detection zone calibration for accommodating perspective variations due to varying camera heights and angles.
- 9) Shall provide for day and night operation.
- 10) The communications interface panel shall be available in two (2) models: a four-sensor (4) model or a single-sensor model. Connection from the Video Detection Processor(s) to the communications interface panel shall be with manufacturers recommended cable. This will allow for a quick and easy installation and will allow the user to splice the cable if a single length run is not used.

907-649.02.4--Detector Types. The VDS shall be programmable for the following detector types, at a minimum:

- Count Detector
- Presence Detector
- Speed Detector
- Station Detector
- Speed Alarm
- Lane Detector
- Tunnel Detector

The Speed Detector shall report vehicle speed and vehicle classification based on five user-defined length categories, satisfying the four generalized category requirement recommended by FHWA: passenger vehicles, single unit trucks, single unit combination trucks and multi-trailer combination trucks.

907-649.02.5--VDS Software Requirements. The VDS sensor shall store cumulative traffic statistics, internally in non-volatile memory, for later retrieval and analysis. The VDS sensor shall have at least 5 Mbps of memory for data storage. Data collection shall not require additional modules or extra software.

The real-time traffic data and color video shall be viewable through a standard web browser using a data collection and reporting tool. The data collection and reporting tool license will be for a twenty-four month period and start from the date of acceptance of the Final Inspection. The manufacturer shall display the data and streaming video real-time on a custom web-site which can be linked to MDOT's internal web-sites, MSTraffic.com & GoMDOT.com. The VDS manufacturer must guarantee 95% uptime of the custom, web-site. All collected data (except video) shall be archived once a month and two electronic copies sent to MDOT. MDOT requires the ability to create and print custom data reports in Excel or HTML by accessing the manufacturer website and filtering data using reporting parameters. In addition, MDOT requires the capability of having all "raw" data sent directly to an MDOT owned data collection server. The VDS shall have the capability of polling any and all video detector sensors through communication interfaces, including but not limited to, fiber, wireless, leased broad-band, and leased point to point T1.

The data collection server shall be able to generate the following detail:

- Microsoft Excel, SQL, XML, Jscript database technology
- Microsoft .NET Framework, including support for ASP.NET
- Custom, automated reports, alarms, ftp, and e-mail services.
- Report Manager Graphic User interface (GUI) to customize data distribution and reporting.

907-649.02.6--Detection Requirements.

- 1) The Video Detection System shall detect vehicle passage and presence when the VDS camera assembly is mounted 40 feet or higher above the roadway, when the camera is located adjacent to or over the desired coverage area, and when the distance to the farthest detection zone locations are not greater than ten (10) times the mounting height of the camera.
- 2) Optimum accuracy shall be achieved when the length of the detection area or field of view is not greater than four (4) times the mounting height of the image sensor.
- 3) The camera shall not be required to be directly over the roadway to achieve minimum accuracy requirements.
- 4) The video detection system shall be able to use a single camera to view either approaching and/or receding traffic in the same field of view.

907-649.02.7--Accuracy Requirements and Measurement Methods.

- 1) The accuracy will be measured under normal weather conditions (i.e., not during rain, snow, fog etc.) when the VDS sensor camera is mounted 40 feet or higher above the travel lanes, when the image sensor is adjacent to desired coverage areas, and when the distance to the farthest detection zone is less than four (4) times the mounting height measured in a straight line along the center axis of the field of view.
- 2) The Video Detection System shall provide a level of accuracy of less than 5% error rate based on volume counts for the entire field of view compiled over multiple time intervals that contain a minimum of 300 vehicles.
- 3) Volume - The volume (count) of vehicles in each lane collected by the video detection system must be within five percent ($\pm 5\%$) of the manually counted volume for that lane. Provide these levels of accuracy during both day and night conditions. A minimum of three hundred (300) vehicles must be used as a sample size for the entire field of view for volume counting accuracy checking.
- 4) Vehicle Classification - The vehicle classification feature must classify at least eighty percent (80%) of the vehicles correctly by classifying vehicles into one of four bins by vehicle length. This feature will be tested by manually classifying vehicles into cars, light trucks or tractor trailer or larger trucks using an observer (who does the classification) and video tape using the same samples as collected for the volume test. The manually collected classification data will be compared to the data collected by the system for each lane and the percent error will be calculated for the entire field of view.
- 5) Stopped Vehicle Detection - The vehicle detection system shall be capable of detecting 95% of all vehicles stopped on the shoulders or in lanes and triggering an alarm. Because of the possible dangers to motorists and workers during this test, the test will be completed after operation has been enabled. A vehicle will be sent to the location and stopped on a shoulder in an active detection zone. An inspector or TMC operator will observe to verify the detection of the stopped vehicle. This test will be performed on a random sample of five of the video detection system installations. If all parameters are met for the five locations, all will be considered acceptable. If one or more locations fail, a second set of

five locations will be examined. If a failure in the second set is recorded, the Contractor will be required to take remedial action until a pass of five locations is achieved.

- 6) Speed - The system shall provide an average vehicle speed measurement within ten percent ($\pm 10\%$) of actual speeds. Provide these levels of accuracies for traffic traveling between 20 and 75 mph. Provide these levels of accuracy during both day and night conditions. Personnel participating in and observing these tests will use either radar detectors or probe vehicles to conduct this accuracy demonstration. This test will be performed after the system is in operation as described in the stopped vehicle tests. Failure to achieve accuracy will require remedial/corrective action by the Contractor and repeated testing until accuracy is achieved.
- 7) Other Parameters (Occupancy, Flow Rate, Headway, Density) - If the measurements of speed and volume as described above fall within acceptable specified limits of accuracy, and the system is demonstrated to be able to provide the calculated values for these parameters, no further testing will be required. The formulas/algorithms used for the calculations by the system will be provided to the MDOT State Traffic Engineer as part of the documentation of the system.

907-649.02.8--Video Camera Sensor. The video camera sensor shall be compatible with the Video Detection System processor and as a minimum meet the following requirements:

- 1) Lens: The video camera sensor will be equipped with a 16X to 22X motor driven variable focal length zoom lens.
- 2) Image Sensor: Minimum resolution of 470H X 350V TV lines.
- 3) The Sensor's picture element shall be 768H pixels X 494V pixels or greater.
- 4) Input power: 115 VAC $\pm 15\%$, 60 Hz $\pm 10\%$ single phase power. Any required power conversion shall be contained within the VDS, the chassis, or facilitated by a power adapter provided.
- 5) Camera cabling shall carry low voltage (24 V or less) only.
- 6) Electromagnetic interference (EMI): The video camera sensor and associated connected equipment will comply with FCC Part 15, Subpart J, Class A device requirements.
- 7) Video camera sensor enclosure: The video camera sensor shall be installed in a light colored enclosure to limit solar heating.
 - a. The enclosure shall meet NEMA 250 Type 4 enclosure standards and shall be available un-pressurized or optionally pressurized types.
 - b. If the enclosure is pressurized, it shall be pressurized to at least 5 psi ± 1 psi and a low pressure sensor with an alarm output to the Video Detection System processor and cabinet assembly will be provided.
 - c. Provide a sun shield visor on the front of the enclosure, which is sufficiently adjustable to divert water away from the video camera sensor lens and also to prevent direct sunlight from entering the iris when mounted in its installed position.
 - d. Install the sun shield so that it does not impede operation or performance accuracy of the video camera sensor or require removal of the video camera sensor enclosure for adjustment.
 - e. Use an enclosure that allows the video camera sensor horizon to be rotated in the field during installation.

- 8) Weight: The standard video camera sensor will not weigh more than 10 lbs., including the mount, shield and camera. If a pressurized video camera sensor and housing is used, the unit including a standard mount, shield and camera will not weigh more than 13 lbs.
- 9) Mounting: The video camera sensor assembly mounting and hardware shall be included as part of the system.
 - a. The video camera sensor horizon shall be adjustable without removing the camera, mounting bracket and enclosure, or sun shield.
 - b. The video camera sensor assembly shall be capable of sustained wind loading of 90 mph with a 30% gust factor.
- 10) The video camera sensor assembly shall include all cabling, fasteners, conduit, connectors, etc., to provide power and connectivity to the VDS cabinet equipment for a fully functional system.

907-649.02.9--Video Detection System Processor. The Video Detection System processor shall meet the following requirements:

- 1) Shall be contained in the VDS sensor enclosure or in the controller cabinet.
- 2) Shall process and make available for transmission (upload) to the TMC data stored in operator selectable time periods of 10, 20, or 30 seconds and 1, 5, 10, 15, 30, or 60 minutes (default setup by Contractor shall be 1 minute).
- 3) Shall be password protected to prohibit unauthorized changes, if enabled by user. A minimum of ten (10) different users may be authorized with different levels of authority.
- 4) Observation of detection operation only, without ability to edit configurations, may be allowed with no password. The VDS shall record time and date of each password usage.
- 5) Shall provide the data directly or through a communications interface device via an Ethernet version 2.0 IEEE 802.3 compliant 10/100 Base-T Auto Sensing port in real-time.
- 6) The processor shall be IP-addressable using the user datagram protocol/IP or UDP/IP message packet and routing standard.
- 7) A communications address shall be automatically assignable, or manually configured to the unit during setup.
- 8) Upon receiving a command with the appropriate address from the TMC central computer, the unit shall respond with the accumulated traffic parameter measurements from the period since the last request.
- 9) Shall operate reliably in a typical roadway aerial mounting and under the following conditions:
 - a. Shall have an operating ambient temperature range: -30°F to 140°F (-34° C to 60°C)
 - b. Shall have an operating humidity tolerance of: 5% – 95% humidity per NEMA TS1-1989 (R 1994).
 - c. Vibration: Provide a video camera sensor and enclosure that maintains its functional capability and physical integrity when subjected to a vibration of 5 to 30 Hz up to 0.5G applied to each of three mutually perpendicular axes (NEMA TS1- 1989 (R 1994)).
 - d. Shock: Ensure the video camera sensor and enclosure can withstand a minimum 9G shock. Neither permanent physical deformation nor inoperability of the video camera sensor and enclosure shall be sustained from this shock level.

- e. Acoustic Noise: Provide a video camera sensor and enclosure that can withstand a 150 dB for 30 minutes continuously, with no reduction in function or accuracy.
- 10) Shall be capable of storing data for an extended period of time.
 - a. All traffic parameter data shall be stored in non-volatile memory within the video detection system processor.
 - b. All traffic parameter data shall be capable of being retrieved using the central computer and by means of an automatic polling client application.
 - c. Upon loss of communications, the system shall automatically store no less than seven (7) days of data in 30 second increments based on the default set-up required. At a minimum, data storage requirements apply to volume, speed and occupancy requirements.
 - 11) Shall be powered by input power: 115 VAC \pm 15%, 60 Hz \pm 10% single phase power. Any required power conversion shall be contained within the VDS, the chassis, or facilitated by a power adapter provided Total power for a single video camera sensor and the processor shall not exceed 15 watts with the camera heater in operation.
 - 12) Shall have transient protection that meets the requirements of NEMA TS1-1989 (R 1994) and NEMA TS2-1992 standards.
 - 13) Shall recover from power interruptions. Momentary interruptions in power to the processor shall not result in loss of function upon restoration of power.
 - 14) In the event of an interruption of power, the equipment shall automatically recover when power is restored. All detection zones, stations, and parameters shall be returned to their last configurations.
 - 15) Each VDS location shall be capable of simultaneously processing data and images from four separate video camera sensor installations for detection and analysis.
 - 16) The system shall be capable of detecting objects in EIA-170 (monochrome) and NTSC (color), or CCIR (monochrome) and PAL (color) video signals.
 - 17) Shall be capable of transmitting digitized video, via Ethernet TCP/IP communications protocol.
 - 18) Shall allow still image capture (snapshot) from any of the video detection system processor's active video inputs and provide for downloading the image to the central computer for display or storage as a picture file; capture and transmit the still image to the central computer in one minute or less.
 - 19) Shall include a visual indication of the following in the video detection system cabinet;
 - a. Shall indicate the status of each video input.
 - b. Shall indicate the status of the video detection system processor communications.
 - c. Shall indicate the status of the video detection system processor.
 - d. Shall indicate whether or not each video camera sensor is actively detecting.
 - e. Shall be able to verify vehicle detection using CCTV monitor.

907-649.03--Construction Requirements.

907-649.03.1--General Requirements.

- 1) Install all video camera sensors, video detection system processors and associated enclosures and equipment at the locations specified in the plans, in any related notice to bidders, or as directed.
- 2) Install all cabinet-mounted equipment in the intersection equipment cabinet or as specified in the plans.
- 3) Cabling from video camera sensors shall be provided and installed in accordance with the video detection system manufacturer's recommendations.
- 4) Make all necessary adjustments and modifications to the total VDS prior to requesting inspection for system/device acceptance.
- 5) Mount the camera approximately two (2) feet below the top of the extension pole or separate pole or as shown in the plans.
- 6) The camera shall be mounted so as to view approaching traffic unless otherwise directed.
- 7) The camera location and zone of detection shall be optimized as directed by the MDOT State Traffic Engineer, or authorized designee.
- 8) Adjust the video camera sensor zoom lens to match the width of the road/detection area, and minimize lane vehicle occlusion.
- 9) Fasten all other cabinet components, with hex-head or Phillips-head machine screws insulated with nuts (with locking washer or insert) or into tapped and threaded holes. Do not use self-tapping or self-threading fasteners.
- 10) Provide electrical cables for video, communications signaling and power supply between the cabinet and the VDS image sensor cameras as recommended by the video detection system manufacturer, and as required for a fully functional VDS.

907-649.03.2--Contractor Training. Installation of the video detection system shall be as recommended by the supplier and performed by a Contractor trained and certified by the supplier. Where time does not reasonably permit training of the installing Contractor, a supplier factory representative shall supervise and assist a Contractor during installation of the video detection system.

907-649.03.3--Test Requirements. The Contractor shall conduct a Project Testing Program as required below. All costs associated with the Project Testing Program shall be included in overall contract prices; no separate payment will be made for any testing.

907-649.03.3.1--General Requirements. The Contractor is responsible for planning, coordinating, conducting and documenting all aspects of the Project Testing Program. The Project Engineer and/or authorized representatives are only responsible for attending and observing each test, and reviewing and approving the Contractor's test results documentation. The Project Engineer and/or authorized representatives reserve the right to attend and observe all tests.

Each test shall fully demonstrate that the equipment being tested is clearly and definitely in full compliance with all project requirements.

Test procedures shall be submitted and approved for each test as part of the project submittals. Test procedures shall include every action necessary to fully demonstrate that the equipment being tested is clearly and definitively in full compliance with all project requirements. Test procedures shall cross-reference to these Technical Specifications or the Project Plans. Test procedures shall contain documentation regarding the equipment configurations and programming.

No testing shall be scheduled until approval of all project submittals and approval of the test procedures for the given test.

The Contractor shall provide all ancillary equipment and materials as required in the approved test procedures.

The Contractor shall request in writing the Project Engineer's approval for each test occurrence a minimum of 14 days prior to the requested test date. Test requests shall include the test to be performed and the equipment to be tested. The Project Engineer reserves the right to reschedule test request if needed.

All tests shall be documented in writing by the Contractor in accordance with the test procedure and submitted to the Project Engineer within seven (7) days of the test. Any given test session is considered incomplete until the Project Engineer has approved the documentation for that test session.

All tests deemed by the Project Engineer to be unsatisfactorily completed shall be repeated by the Contractor. In the written request for each test occurrence that is a repeat of a previous test, the Contractor shall summarize the diagnosis and correction of each aspect of the previous test, the Contractor shall summarize the diagnosis and correction of each aspect of the previous test that was deemed unsatisfactory. The test procedures for a repeated test occurrence shall meet all the requirements of the original test procedures, including review and approval by the Project Engineer and ITS Manager.

The satisfactory completion of any test shall not relieve the Contractor of responsibility to provide a completely acceptable and operating system that meets all requirements of this project.

907-649.03.3.2--Factory Acceptance Test (FAT). Factory Acceptance Tests shall be conducted at the Manufacturer or Contractor facility or at a facility acceptable to all parties. All equipment to be utilized for this project shall be subject to tests that demonstrate the suitability of the design and compliance with the contract requirements, unless an exception for an equipment item is granted by the Project Engineer. The tests shall be performed on production units identified to be delivered under this contract.

The FAT procedure shall demonstrate all requirements defined in these specifications are met, including, but not limited to: functional/system performance requirements, electrical requirements, data transmission/communication requirements, safety/password requirements,

environmental requirements, and interface requirements with other components of the project system.

The Project Engineer reserves the right to waive FATs which are deemed to be unnecessary and reserves the right to witness all FATs that are determined to be critical to the project. At a minimum, the Project Engineer and/or authorized representative, will be in attendance at the FAT for the first three (3) units tested. The FAT for the first three (3) units shall be conducted during the same period. The Project Engineer shall be notified a minimum of forty-five (45) calendar days in advance of such tests. Salary and travel expenses of the Project Engineer and authorized representatives will be the responsibility of MDOT. In case of equipment or other failures that make a retest necessary, travel expenses of the Project Engineer and authorized representatives shall be the responsibility of the Contractor. This shall include all costs including, but not limited to, airfare, automobile rental, lodging, and per diem. These costs, excluding airfare, shall not exceed \$500.00 per representative per day. These costs shall be deducted from payment due or charged to the withholding account of the Contractor when the project is terminated.

The vendor must complete the FAT on all remaining units on their own and submit documentation to the Project Engineer that the FATs were completed. The Project Engineer reserves the right to randomly attend those FAT tests.

No equipment for which a FAT is required shall be shipped to the project site without successful completion of factory acceptance testing as approved by the Project Engineer and the Engineer's approval to ship.

907-649.03.3.3--Standalone Acceptance Test (SAT). The Contractor shall perform a complete SAT on all equipment and materials associated with the field device site, including but not limited to electrical service, conduit, pull boxes, communication links (fiber, leased copper, wireless), control cables, poles, etc. An SAT shall be conducted at every field device site. Where applicable, a SAT shall be conducted for a fully installed and completed connection to the designated Traffic Management Center (TMC) or central data/video collection site.

The SAT shall demonstrate that all equipment and materials are in full compliance with all project requirements and fully functional as installed and in final configuration. The SAT shall also demonstrate full compliance with all operational and performance requirements of the project. All SATs will include a visual inspection of the cabinet and all construction elements at the site to ensure they are compliant with the specifications.

After a sixty (60) day burn-in period, the Contractor must demonstrate the accuracy requirements specified in Subsection 907-649.02.7 at selected intersections. The intersections to be tested will be randomly selected by the Project Engineer.

907-649.03.4--Warranty. The video detection system shall be warranted to be free of manufacturer defects in materials and workmanship for a period of one year from the date of final acceptance. Equipment covered by the manufacturer's warranties shall have the registration

of that component placed in MDOT's name prior to final inspection. The Contractor is responsible for ensuring that the vendors and/or manufacturers supplying the components and providing the equipment warranties recognize MDOT as the original purchaser and owner/end user of the components from new. During the warranty period, the supplier shall repair or replace with new or refurbished material, at no additional cost to the State, any product containing a warranty defect, provided the product is returned postage-paid by the Department to the supplier's factory or authorized warranty site. Products repaired or replaced under warranty by the supplier shall be returned prepaid by the supplier.

During the warranty period, technical support shall be available from the supplier via telephone within four hours of the time a call is made by the Department, and this support shall be available from factory certified personnel. During the warranty period, updates and corrections to control unit software shall be made available to the Department by the supplier at no additional cost.

907-649.03.5--MDOT Employee Training. The Contractor shall submit to the Project Engineer for approval a detailed Training Plan including course agendas, detailed description of functions to be demonstrated and a schedule. The Contractor must also submit the Trainer's qualifications to the Project Engineer for approval prior to scheduling any training. The training must include both classroom style training and hands-on training in the field of the maintenance and troubleshooting procedures required for each component. The training should also consist of a hands-on demonstration of all software configuration and functionality where applicable.

The supplier of the video detection system shall, at a minimum, provide a sixteen-hour operations and maintenance training class with suitable documentation for up to eight (8) persons selected by the Department. The operations and maintenance class shall be scheduled at a mutually acceptable time and location.

907-649.03.6- Technical Support. The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. Spare parts shall be available for delivery within 30 days of placement of an acceptable order at the supplier's then current pricing and terms of sale of said spare parts.

The suppliers shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale of said technical support services.

907-649.04--Method of Measurement. Video Detection System will be measured in units of each. The price bid shall include installation, system integration, training, documentation, and testing of a complete video detection system site including video camera sensor/processor, the sensor environmental enclosure, all cables between cameras and the cabinet, attachment hardware and brackets, completion of all testing requirements and all work, equipment and appurtenances as required to provide and install a complete video detection system. The price bid shall also include all system documentation including: shop drawings, operations and maintenance manuals, wiring diagrams, block diagrams and other materials necessary to

document the operation of the video detection system. This price shall be full compensation for all labor, tools, materials, equipment and incidentals necessary to complete the work.

Video Detection System and Data Collection & Reporting Tool License will be measured per each as follows:

- 1) 30% of the contract unit price upon delivery to the site. Delivery cannot be more than 60 days before anticipated installations.
- 2) 60% of the contract unit price upon complete installation and stand alone testing of the Video Detection System (VDS).
- 3) Final 10% of the contract unit price upon Final System Acceptance.

Video Detection Training will be measured per lump sum after the completion of all training.

907-649.05--Basis of Payment. Video Detection System, measured as prescribed above, will be paid for at the contract price per each.

Video Detection System, Data Collection and Reporting Tool License, and Video Detection-Digitized Video Encoder/Decoder measured as prescribed above, will be paid for at the contract unit price per each

Video Detection Software/Setup and Video Detection Training, measured as prescribed above, will be paid for at the contract lump sum price.

The contract unit prices bid shall be full compensation for all work specified in this special provision.

Payment will be made under:

- 907-649-A: Video Detection System, 1 Sensor - per each
- 907-649-B: Video Detection-Data Collection and Reporting Tool License - per each
- 907-649-C: Video Detection Software and Setup - lump sum
- 907-649-D: Video Detection-Digitized Video Encoder/Decoder - per each
- 907-649-E: Video Detection Training - lump sum

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-687-4

CODE: (SP)

DATE: 06/01/2007

SUBJECT: Loop, Sensor, Loop Automatic Traffic Recorder (ATR) Station

PROJECT: ER-NH-0003-01(104) / 104569302 -- Harrison County

Section 907-687, Vehicle Inductive Loop And Axle Detector Systems, 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 907-687 - VEHICLE INDUCTIVE LOOP AND AXLE DETECTOR SYSTEMS

907-687.01--Description. This work consists of furnishing vehicle inductive loop and axle detector systems of the types specified and assembling, constructing, erecting, and installing same in conformity with these specifications to insure properly operating units in accordance with the designs and at the locations shown on the plans or as directed. This axle detector system should classify vehicles in all lanes of traffic. Submittals shall be submitted directly to the Engineering Analysis Section of the Planning Division and will be returned within a seven business day period they are received. The system should also be compatible for future upgrading to a Weigh-In-Motion system using a solid-state WIM card.

The Contractor shall include all hardware and software necessary to operate the field station for extended periods unattended.

- 1) The System shall utilize one (1) Class II Piezo strip as utilized by Tel System and two (2) loops, as recommended by the manufacturer in all lanes.
- 2) The vendor shall provide three (3) copies of all manuals on Installation, Operating, Schematics, and Maintenance for the entire System.

The Piezo sensors, equipment cabinet, inductive loops, cables, leads and electronic hardware and software will be furnished, installed, tested, calibrated and made operational by the Contractor. The Contractor shall provide all services required for construction, tests, the satisfactory performance period(s), and miscellaneous usage on this project until the final inspection of the project. Deposits, customer charges, connection cost, etc., associated with the System up to and including the date of the final inspection (Subsection 907-687.03.18.1--Final Inspection) of the System shall be the responsibility of the Contractor. At least 24 hours prior to starting work, the Contractor shall contact the MDOT Planning Division at 601-359-7685 so that a representative of the Planning Division can be on site while this work is being performed.

907-687.02--Materials. The materials used in this construction shall conform with the general requirements of these specifications and the specific requirements set out herein. Prior to the

scheduled start of work, the Contractor shall provide the Engineer with submittals on the following items and shall obtain the Engineer's approval before starting affected work.

907-687.02.1--Sensors. Vehicle axle detectors shall utilize piezoelectric cable in a sensor assembly and be of a type that has been shown to be successful for vehicle classification in both asphaltic and portland cement concrete pavements. Sensor length shall be eleven (11) feet minimum. Sensors as delivered from manufacturer shall include a shielded transmission cable of sufficient length for a continuous run to pull box without splicing.

907-687.02.1.1--Piezoelectric Cable/Sensors. Piezoelectric Cable/Sensors shall be as those utilized by Mikros System. Sensitivity dispersion shall be Class II, $\pm 5\%$.

907-687.02.2--Shielded Transmission Cable. Coaxial cable type RG58 C/U shall conform to IMSA 50-2 for polyethylene insulated, polyethylene jacketed cable, AWG #14. Cable shall meet the requirements of Section 636 for the Standard Specifications.

907-687.02.3--Conduit and Pull Boxes. Conduit and pull boxes shall meet the requirements of Section 668 of the Standard Specifications.

907-687.02.3.1--Under Roadways. Conduit shall be Schedule 80 PVC or coated rigid galvanized steel.

907-687.02.3.2--Other Conduit. Other conduit shall be Schedule 40 PVC direct buried conduit unless noted otherwise.

907-687.02.3.3--Pull Boxes. Size shall be Type 2, cover does not require words inscribed on top.

907-687.02.4--Loop Wire. Loop wire, IMSA 51-3, AWG #14, shall meet the requirements of Subsection 722.03 of the 2004 Standard Specifications..

907-687.02.5--Loop Sealant. Loop sealant shall be "Traffic Loop Sealant" as manufactured by 3M Corporation, or approved equal.

907-687.02.6--Sensor Cement. The sensor assembly shall be cemented into the pavement with an epoxy resin of a type recommended by the sensor manufacturer.

907-687.03--Construction Requirements. The general layout of the work shall conform to the detail shown on typical installation plans and shall be verified at each location with the Planning Engineer. The vendor shall have a representative on site during installations. Any safety hazards to the public, such as open holes on site during construction may require a lane closure overnight as directed by the Engineer.

907-687.03.1--Manufacturer's Recommendations. Sensors must be installed in accordance with the approved procedures and specifications provided by the sensor manufacturer. All

sensors and connecting cables shall be positioned and installed to assure compatibility with the inductive loops to provide electrical signals for vehicle classification.

907-687.03.2--Conflicts. Conflicts between any piece of equipment, which if installed as shown in relation to any previously installed equipment, may impair the proper operation of that equipment, shall be resolved by the Contractor as approved by the Engineer.

907-687.03.3--Conduit Runs. The number of conductors, conduits and fittings necessary to produce an operative system as specified herein shall be provided. It is the intent of these specifications to have all joints, connections, etc. completely water and moisture tight. Shielded transmission cable and wire leads shall be installed in conduit from paved shoulders to pull boxes.

907-687.03.4--Slots in Pavement. All slots required in pavement and paved shoulders shall be saw cut with diamond blade power saw. Edges shall be straight, smooth and true. Depth shall be uniform.

907-687.03.4.1--Loop Slots. Slots for loop wire shall be ¼-inch minimum width. Depth in asphalt shall be 2¼ inches and 1½ inches in concrete. Diagonal slots shall be cut at corners by overlapping cuts so that the entire slot intended for wire has full depth. There shall be no jagged edges or protrusions which may damage wire.

907-687.03.4.2--Cable Slots. Slots for cable shall be ¾-inch width ($\pm 1/16$) and 2 ¼-inch depth. Do not exceed 45 degree turns and overlap cuts so that slot has full depth. There shall be no jagged edges or protrusions which may damage cable. Cable leads from each sensor shall be run in individual saw cut slots at a minimum spacing of 12 inches.

907-687.03.4.3--Sensors Slots. Slots for sensors shall be of the width and depth specified by the sensor manufacturer. Cavity of sensor slots may be made with chisel between saw cut sides, but bottom shall be smooth and level, without protrusions. In overlay of four inches (4") or less, the slot shall extend to the top of the course below the overlay. Before placing sensor, the slot shall be cleaned with compressed air.

907-687.03.5--Loop Assemblies. Inductive loop assemblies shall meet the requirements of Section 635 of the Standard Specifications.

907-687.03.6--Inspection. Pavement slots shall be inspected at time of sensor and cable installation. Surfaces shall be clean and dry, free of all dust, grit, moisture and other contaminants that might affect sealant or cement bond.

907-687.03.6.1--Sensor Check. Prior to final installation, sensor assembly shall be placed in position in slot and inspected for compliance with manufacturer's requirements as to clearance, surface alignment, etc. Sensor output shall be checked using oscilloscope.

907-687.03.6.2--Cable Inspection. The cable shall not have any cuts, nicks, abrasions or breaks in the insulation at the time of filling slot with sealant. Any sensor having defects in the shielded transmission cable shall be replaced.

907-687.03.6.3--Loop Inspection. The loop wire shall not have any cuts, nicks, abrasions or breaks in the insulation before or after installation in the slot. Loop inductance shall be 124 microhenries.

907-687.03.7--Sensor Installation. Approved epoxy cement shall completely fill the cavity spaces and surround all four sides of the sensor assembly. All excess encapsulant shall be removed from pavement surface and sensor to conduit to prevent damage during installation. Sensor installation shall be protected from traffic until epoxy cement is sufficiently cured.

907-687.03.8--Sleeves. Flexible sleeve or other protection shall be provided for shielded cable at sensor ends to prevent damage. The Contractor shall take care to insure that the sleeve is not filled with epoxy cement. In addition, the Contractor shall provide flexible sleeve, approximately 12 inches long, at pavement construction joints including joints between lanes and between pavement and paved shoulder.

907-687.03.9--Cable and Wire Installation. The cable or lead wires shall be placed in the bottom of the slot so that there are no kinks, curls, straining or stretching of the insulation. Special care shall be taken in seating the cable and wire so that the insulation will not be broken or abraded. No sharp tools such as screwdriver or metal object shall be used for this operation.

907-687.03.9.1--Conditions. The Contractor shall install the sealant in strict adherence to the manufacturer's recommendation and these specifications. No sealant shall be installed during inclement weather or under any condition which might introduce moisture into the pavement slots.

907-687.03.9.2--Sealant. The viscosity of the sealant shall be such that it can be readily placed in the slot, completely surround the wires, displace all air and fill the slot so that the sealant is flush with the roadway surface. The finished installation shall be waterproof and present a neat workmanlike appearance. Minimum required clearance shall be maintained to cable and wire.

907-687.03.9.3--Protection. The sealant shall be sufficiently hardened before allowing traffic on it.

907-687.03.10--Cleaning. All excess encapsulate and sealant shall be removed from pavement surface and sensor after installation. A hand grinder shall be used, if necessary, to smooth out rough or high areas that might affect sensor operation.

907-687.03.11--Tags. Each shielded transmission cable and pair of lead wires shall be uniquely identified by an insulated, waterproof tag in every pull box.

907-687.03.12--Trenching and Backfilling. All trenching shall be done by mechanical means and all sides shall be straight and vertical. Width of trenches shall not exceed eight (8) inches on

either side of placed conduits. All backfill shall be made with a friable material, which has been approved by the Engineer. Place material in compacted lifts as approved by the Engineer. The site, including shoulders and grassing, shall be returned to its original condition

907-687.03.13--Jacking or Boring. Approved jacking or boring methods shall be used where a conduit must be placed under an existing roadway. Jacking/boring pits shall be kept a minimum of five (5) feet from the edge of shoulder, and care shall be taken not to disturb existing pavement. Excessive use of water or other methods which could undermine pavements shall not be permitted. The jacking/boring site must be returned to its undisturbed state upon completion of the operation. Only experienced labor shall be used for jacking/boring work. Conduit shall be not less than 36 inches below pavement surface.

907-687.03.14--Pull Boxes. Pull boxes shall be located at least 10 feet from shoulder. Pull boxes shall be set on 12 inches minimum thickness washed gravel. Holes for drainage shall be provided in bottom of pull box. Locate conduit entering pull box so as to leave the major portion of the box clear.

907-687.03.15--Conduit. Conduit shall be laid to a depth of not less than 36 inches below the finished grade, except at conduit ends. All conduits shall be run at least 10 feet outside shoulder unless otherwise approved. One size of conduit shall be used for each run; no reducing couplings will be permitted.

907-687.03.16--Conductor Installation. Before placing shielded cable or wire leads in conduit, the conduit shall be cleaned with compressed air and rigid metal conduit shall be cleaned with a mandrel. Only approved lubricants which will not injure conductor insulation while pulling cables shall be used.

907-687.03.16.1--Splices. Splices shall be made in pull boxes only, soldered, and sealed in an Inline Resin Splice Kit. An insulation equal in rating and thickness to the conductor insulation shall be provided.

907-687.03.17--System Acceptance. The Contractor shall be required to demonstrate to the Engineer the satisfactory operation of each device installed on this project.

907-687.03.18--Material Warranty. The following warranty stipulations are in addition to those covered by Subsection 106.01 of the Standard Specifications:

907-687.03.18.1--Final Inspection. Upon completion of each individual site, a site inspection shall be made. All vehicle inductive loop and axle detector systems shall have polled without any problems for at least 10 consecutive days prior to the site inspection. All sensors, loops and related components shall be fully operational at the final inspection of the project.

907-687.03.18.2--Guarantee. At each location, the Contractor shall warrant and guarantee all sensors, loops and related components for a period of twelve (12) months, beginning at the date of partial release from maintenance.

907-687.03.18.3--Responsibility. It is the intent of the preceding paragraph to provide for equipment that performs as intended by the manufacturer. It is the further intent to obtain from the Contractor a level of workmanship that will assure the Department of an operation system devoid of Contractor laxities. Failure to perform as indicated shall require the Contractor to replace in kind or repair, at his option, the equipment or workmanship in question. All material and labor cost resulting from the replacement or repair of equipment or correction of poor workmanship shall be borne by the Contractor.

907-687.03.18.4--Repairs. The Contractor shall not be responsible for outages occurring during the twelve-month warranty period due to vandalism, traffic accidents, or any problems not related to materials or workmanship. The Contractor will be required to make the necessary repairs for such outages but the cost of such repair will be borne by the Department.

907-687.03.18.5--Manufacturer's Guarantees. All manufacturer's standard warranties or guarantees for all electrical and mechanical equipment which are provided as customary trade practice shall be made over to the Department and shall begin simultaneously with the commencement of the twelve month warranty period.

907-687.04--Method of Measurement. Loop, Sensor, Loop ATR Station, of the type specified, complete in place and accepted, will be measured per each location. Such measurement shall include all materials, labor, equipment, operation, and other incidentals necessary to complete all the work.

907-687.05--Basis of Payment. Loop, Sensor, Loop ATR Station, measured as provided herein, will be paid for at the contract unit price for the locations, which price shall be full compensation for furnishing, installing, testing and guaranteeing all equipment and for all other labor, tools, and incidentals necessary to complete the work.

Payment will be made under:

907-687-A: Loop, Sensor, Loop ATR Station, * - per each

* Site No. or Location may be specified

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-701-2

CODE: (IS)

DATE: 01/12/2006

SUBJECT: Portland Cement

Section 701, Hydraulic Cement, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-701.02--Portland Cement. Delete the **third paragraph and** table in Subsection 701.02 on page 596, and substitute the following:

When Portland cement concrete or cement for soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash (FA), ground granulated blast furnace slag (GGBFS), or metakaolin shall be as follows:

Cementitious Materials for Soluble Sulfate Conditions

Sulfate Exposure	Water-soluble sulfate (SO ₄) in soil, % by mass	Sulfate (SO ₄) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1500	Type II ^{**} cement, or Type I cement with one of the following replacements of cement: 25% Class F, FA, or 50% GGBFS, or 10% metakaolin
Severe	0.20 - 2.00	1500 - 10,000	Type II [*] cement with one of the following replacements of cement: 25% Class F, FA, or 50% GGBFS, or 10% metakaolin

* Type I cement with a maximum 8% tricalcium aluminate may be used in lieu of Type II cement.

** Class F, FA or GGBFS may be added as a replacement for Portland cement in accordance the proportions as listed in this table.

Class C fly ash shall not be used as a replacement for Portland cement in any of the sulfate exposure conditions listed above.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-707-2

CODE: (IS)

DATE: 02/15/2006

SUBJECT: Joint Materials

Section 707, Joint Materials, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-707.02.1.3--Concrete Joint Sealer Compound - Hot-Poured Elastic Type. In the first paragraph of Subsection 707.02.1.3 on page 633, delete "AASHTO Designation: M 173" and replace with "AASHTO Designation: M 324 for Type I Joint and Crack Sealant".

Delete in toto Subsection 707.02.1.5 on pages 634 and 635 and substitute:

907-707.02.1.5--Backer Rod for Use with Hot and Cold Poured Joint Sealer. The backer rod shall be a closed-cell foam rod made from polyethylene, polyolefin or similar type material, and shall conform to ASTM Designation: D 5249. The backer rod shall either be a Type 1, for use with either hot or cold poured joint sealers, or a Type 3, for use with cold poured joint sealers only.

The Contractor shall furnish a three linear foot sample of each shipment, and three copies of the manufacturer's certification that the backer rod meets the requirements of this specifications.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-708-3

CODE: (IS)

DATE: 01/12/2006

SUBJECT: Non-Metal Drainage Structures

Section 708, Non-Metal Structures and Cattlepasses, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-708.02.1.2--Fly Ash In the first sentence of Subsection 708.02.1.2 on page 639, change “20 percent” to “25 %”.

907-708.02.3.2--Marking. Delete the second sentence of Subsection 708.02.3.2 on page 640, and substitute the following:

Machine made pipe shall be marked in accordance with one of the following methods: 1) the pipe shall be inscribed on the outside of the pipe and stenciled on the inside of the pipe, or 2) the pipe shall be inscribed on the inside of the pipe, only. All other pipe may be stenciled.

907-708.22.2--Exceptions to AASHTO. Delete the sixth paragraph of Subsection 708.22.2 on page 647.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-711-3

CODE: (IS)

DATE: 09/26/2005

SUBJECT: Synthetic Structural Fiber Reinforcement

Section 711, Reinforcement and Wire Rope, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After Subsection 711.03.4.3 on page 665, add the following:

907-711.04--Synthetic Structural Fiber. Synthetic structural fibers shall meet the requirements of ASTM Designation: C 1116, Section 4.1.3, Note 3. The fibers shall be monofilament made of polypropylene or polypropylene/polyethylene blend meeting the following conditions:

<u>Property</u>	<u>Results</u>
Length, minimum	1.5 inches
Aspect Ratio (length / equivalent diameter)	90
Breaking tenacity, minimum *	530 mN/tex
(Tensile Strength, minimum	70 ksi)
Chord modulus, minimum *	980 cN/tex
(Modulus of Elasticity, minimum	1,300 ksi)

* When tested in accordance with ASTM Designation: D 3822

The dosage rate for the fibers shall be a minimum of three pounds per cubic yard (3 lb / yd³). The dosage rate for the fibers when used in pile encasements shall be a minimum of four pounds per cubic yard (4 lb / yd³).

The manufacturer shall furnish the Engineer three copies of the certified test report(s) showing results of all required tests, and certification that the material meets the specifications.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-2

CODE: (IS)

DATE: 1/23/2006

SUBJECT: Miscellaneous Materials

Section 714, Miscellaneous Materials, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 714.07 on page 682 and substitute the following:

907-714.07--Other Cementitious Materials.

907-714.07.1--Metakaolin.

907-714.07.1.1--General. Metakaolin shall only be used to bring the cementitious materials in Portland cement concrete and cement for soil stabilization into compliance with the requirements for cementitious materials exposed to soluble sulfate conditions. The approval of each metakaolin source shall be on a case by case basis as determined by the State Materials Engineer. Source approval will be based on, but not limited to, review of the proposed source's quality control program, production history, certified test reports, certification of shipment from the supplier, and job control sampling and testing requirements.

The Contractor shall provide suitable means for storing and protecting the metakaolin against dampness and contamination. Metakaolin which has become partially set, caked, or contains lumps shall not be used.

The State Materials Engineer shall be notified in writing of the nature, amount and identity of any processing, or other additions made to the metakaolin during production.

Metakaolin from different sources shall not be mixed or used alternately in any one class of construction or structure without written permission from the Engineer. In addition to these requirements, metakaolin shall meet the following specific requirements.

907-714.07.1.2--Specific Requirements. Metakaolin shall meet the requirements of AASHTO Designation: M 295 Class N with the following modifications:

1. The sum of $\text{SiO}_2 + \text{Al}_2\text{O}_3 + \text{Fe}_2\text{O}_3$ shall be at least 85%. The Material Safety Data Sheet shall indicate that the amount of crystalline silica, as measured by National Institute of Occupation Safety and Health (NIOSH) 7500 method, after removal of the mica interference, is less than 1.0%.
2. The loss on ignition shall be less than 3.0%.
3. The available alkalis, as equivalent Na_2O , shall not exceed 1.0%.
4. The amount of material retained on a No. 325 mesh sieve shall not exceed 1.0%.
5. The strength activity index at seven (7) days shall be at least 85%.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-715-1

CODE: (IS)

DATE: 09/23/2004

SUBJECT: Agricultural Limestone

Section 715, Roadside Development Materials, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-715.02.2.1.1--Screening Requirements. Delete the first sentence of Subsection 715.02.2.1.1 on page 704 and substitute the following.

Grade "A" liming material, including ground shells, shall not have less than 90% of the material passing the No. 10 sieve, and not less than 47.5% passing the No. 60 sieve.

Delete Subsection 715.02.2.1.2 on page 704 and substitute the following:

907-715-02.2.1.2--Calcium Carbonate Equivalent. Grade "A" liming material shall not have less than 85.5% calcium and magnesium carbonate calculated as calcium carbonate equivalent when expressed on a dry weight basis.

Marl or chalk liming material shall not have less than 70% calcium and magnesium carbonate calculated as calcium carbonate equivalent when expressed on a dry weight basis.

907-715-02.2.1.3--Neutralizing Values. Grade "A" liming material shall have a minimum equivalent neutralizing value (ENV) of 63.0%, which is determined as follows:

$$\text{ENV} = \text{Fineness Value} \times \text{Assay}(\%)$$

Where: Fineness Value = $((\% \text{ Passing } \#10 - \% \text{ Passing } \#60) \times \frac{1}{2}) + \% \text{ Passing } \#60$,
expressed as a whole number

$$\text{Assay} = \% \text{ calcium carbonate equivalent}$$

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-804-2

DATE: 12/14/2006

SUBJECT: Maturity Meters

After the last paragraph of Subsection 907-804.02.10 on page 1, add the following:

907-804.03.15--Removal of Falsework, Forms, and Housing. After the third paragraph of Subsection 804.03.15 on page 871, add the following:

In lieu of using concrete strength cylinders or minimum curing time to determine when falsework, forms, and housing can be removed, an approved maturity meter may be used to determine concrete strengths by inserting probes into concrete placed in a structure. The minimum number of maturity meter probes required for each structural component shall be in accordance with Table 1. Falsework, forms, and housing may be removed when maturity meter readings indicate that the required concrete strength (Column B) is achieved. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO T 325 and ASTM C 1074 specifications. Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment.

Table 1

<u>Structure Component</u>	<u>Quantity of Concrete</u>	<u>No. of Probes</u>
Slabs, beams, walls, & miscellaneous items	0 - 30 yd ³	2
	> 30 to 60 yd ³	3
	> 60 to 90 yd ³	4
	> 90 yd ³	5
Footings, Columns & Caps	0 - 13 yd ³	2
	> 13 yd ³	3
Pavement, Pavement Overlays	1200 yd ²	2
Pavement Repairs	Per repair or 900 yd ² Whichever is smaller	2

907-804.03.16.1--Cold Weather Concreting. After the third paragraph of Subsection 804.03.16.1 on page 873, add the following:

In lieu of the placement, protection and curing of concrete in cold weather as described in the second and third paragraphs of Subsection 804.03.16.1, at the option of the Contractor with the approval of the Engineer, when concrete is placed during cold weather and there is a probability of ambient temperatures lower than 40°F, an approved maturity meter may be used to determine concrete strengths by inserting probes into concrete placed in a structure. The minimum number of maturity meter probes required for each structural component shall be in accordance with Table 1 of Subsection 907-804.03.15. An approved insulating blanketing material shall be used

to protect the work when ambient temperatures are less than 40°F and shall remain in place until the required concrete strength (Column B, Subsection 804.03.15) is achieved. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO T 325 and ASTM C 1074 specifications. Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment.

907-804.03.22.6--Handling, Storage, and Installation. After the fourth paragraph of Subsection 804.03.22.6 on page 895, add the following:

When using maturity meters, concrete piling shall not be shipped to the job site until maturity calculations and/or concrete strength/maturity graphs indicate that piling from a casting bed meets the required design strength. A thermocouple or maturity meter probe shall be inserted into the last concrete placed on the piling casting bed. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO T 325 and ASTM C 1074 specifications. Technicians using the Maturity Meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-804-2

CODE: (SP)

DATE: 01/20/2006

SUBJECT: Concrete Bridges And Structures

Section 804, Concrete Bridges And Structures, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-804.02.1--General. Add the following materials to the list of materials in Subsection 804.02.1 on page 847.

Ground Granulated Blast Furnace Slag (GGBFS).....	714.06
Metakaolin	714.07.01

907-804.02.10--Portland Cement Concrete Mix Design. Change Note ***** of Subsection 804.02.10 on page 851 as follows:

***** Class DS Concrete for drilled shafts shall have an 8±1-inch slump. In the event of free fall method of concrete placement is used, the slump shall be 6±1-inch.

Delete the last paragraph of Subsection 804.02.10 on page 851 and substitute the following:

Either Type A, D, F, G or mid-range chemical admixture, shall be used in all classes of concrete. Any combination of water reducing admixtures shall be approved by the Engineer before their use.

907-804.05--Basis of Payment. Add the "907" prefix to the pay items listed on page 898.

SPECIAL PROVISION NO. 906-3

Training Special Provisions

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under this special provision will be as indicated in the bid schedule of the contract.

In the event that a Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the State highway agency for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a

journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the State highway agency and the Federal Highway Administration. The State highway agency and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A

Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

SPECIAL PROVISION NO. 906-6

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ON-THE-JOB TRAINING PROGRAM

ALTERNATE TRAINING SPECIAL PROVISION

PURPOSE

The purpose of the On-The-Job Training (OJT) Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained.

INTRODUCTION

This voluntary OJT Program has been developed through the partnering efforts of the Road Builders of Mississippi, the Federal Highway Administration (FHWA) and the Mississippi Department of Transportation (MDOT).

The OJT Program has been designed for use by participating contractors and subcontractors in meeting their training needs. The objective of the OJT Program is to develop skilled workers in the skilled craft trade areas of highway construction who are sufficiently trained to be productive employees in the highway construction industry work force.

The success of the OJT Program will require that contractors and subcontractors **take part in the program and** follow uniform procedures in training **and in tracking trainee's progress.**

FUNDING

MDOT will establish an annual OJT Fund **from** which, contractors and subcontractors may **bill the** Department directly for hours worked by trainees. The funding source of this money will be state and federal funds for MDOT's OJT Program.

DISBURSEMENT OF FUNDS

MDOT will pay \$3.00 per hour toward the trainee's salary for each hour of training performed by **each** trainee in an approved training program. Program reimbursements will be made directly to the prime or sub contractor. Requests for payment will be submitted to the Office of Civil Rights for approval.

Contractors must **provide a signed invoice** providing the following information to be reimbursed.

- Contractor's Name
- Mailing Address
- Trainee Name
- **Social Security Number**

- Race
- Sex
- Project Number
- Job Classification
- Total Number of Hours Completed

TRAINING PROGRAM APPROVAL

A. To use the OJT Program on highway construction projects, the contractor will notify the Department Office of Civil Rights using the On-the-Job Trainee [Schedule Form](#). The notification must include the following information:

- Trainee Starting Date
- Project number (s) trainee starting on
- Training program (classification) to be used; and
- [Number of Training Hours Required](#)

B. If a contractor chooses to use a training program different from those listed in the OJT Program [Manual](#), or desires to train in a different classification, the training program must be submitted in its entirety for approval by the Department and FHWA. The training proposal must include the following:

1. The primary objective of the program: To provide training for minority, female and economically disadvantaged individuals for development to full journey status in the work classifications in which they are being trained.
2. The minimum number of hours and type of training the trainee will receive as it relates to each specific task required to achieve journey status.
3. [No less than](#) minimum wage.
4. Trainee certification of completion.
5. Records and reports submitted to the Office of Civil Rights on a [monthly](#) basis.

DEPARTMENT RESPONSIBILITY

1. Department project staff will monitor trainees on the project. They will monitor payrolls for payment of correct wage rates and fringe benefits. The Office of Civil Rights will maintain a master list by contractor name, project number, trainee name and trainee social security number to aid project staff in monitoring trainees who work on multiple projects.
2. The Office of Civil Rights may elect to interview trainees periodically during the training period to assess their performance and training program.

CONTRACTOR RESPONSIBILITY

1. Trainees must be identified on payrolls (i.e. dragline trainee).
2. When any trainee completes a program, or is terminated for a reason or reasons other than successful completion, the contractor must include the date of completion or an explanation for the termination and date of termination on the [OJT Termination Report](#).
3. The contractor will assign each trainee to a particular person--either a supervisor or a journeyman/woman who is proficient in the craft the trainee is being trained in, to ensure that timely instructional experience is received by the trainee. This person, cooperating with the appropriate company personnel, will see that proper records and the total intended training hours are completed during the allocated number of hours set up in the classification criteria.
4. The contractor has the prerogative of terminating the training period of the trainee and advancing the trainee to journey status. Approval requests must be submitted to the Office of Civil Rights with an explanation (*refer to 2 above*).
5. Upon notification from the contractor, the Department will issue a [skill verification card](#) and certificate of [training](#) to the trainee.
6. Trainees may be transferred to state-aid highway construction projects in order to complete the training program. If transfers are made the Office of Civil Rights must be notified on the [Monthly Trainee](#) Form. All of the training hours completed by trainees will count toward overall program completion.
7. Program reimbursements will be made directly to the prime or sub contractor.

WAGE RATE

The wage rate for all trainees is \$5.15, during their OJT training program. Trainees shall be paid full fringe benefit amounts, where applicable. At the completion of the training program, the trainee shall receive the wages of a skilled journey.

RECRUITMENT AND SELECTION PROCEDURES

A. Prerequisites for Trainees

To be qualified for enrollment in the OJT Program, trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn and ability to follow instructions.

B. Licenses

Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B and C trucks. However, when an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;
2. Has had at least one year of driving experience; and
3. Is occupying the seat next to the driver.

C. Recruitment

1. Notices and posters setting forth the contractor's Equal Employment Opportunity Policy and availability of training programs will be placed in areas readily accessible to employees, applicants for employment and potential employees.
2. The contractor must target minority, female or economically disadvantaged trainees.
3. The contractor will conduct systematic and direct recruitment through public and private employee referral sources. Contractors must submit the trainee's name and completed application form to the Office of Civil Rights for review and approval. Approval must be obtained before the trainee can begin work under the training program.
4. Present employees will be screened for upgrading.

D. Selection

1. The selection and employment of a person by participating contractor shall qualify the person for the OJT Program.
 2. Selection will be made without regard to race, color, religion, sex, age or national origin and shall be completely nondiscriminatory.
 3. Employment of trainees will be in accordance with the work force requirements of the contractor. Each contractor will hire and train the trainees for uses in their own organization.
 4. Written certification of individuals under the category of economically disadvantaged can be provided to the contractor at the time of the interview. This certification must then be provided to the Office of Civil Rights with the other required information as part of the approval process for trainees.
- **NOTE:** The OJT Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained. However, this program does not exclude trainees that are not members of the above groups.

SECTION 905 - PROPOSAL

Date _____

Mississippi Transportation Commission
Jackson, Mississippi

Sirs: The following proposal is made on behalf of _____
_____ of _____

for constructing the following designated project(s) within the time(s) hereinafter specified.

The plans are composed of drawings and blue prints on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

The Specifications are the current Standard Specifications of the Mississippi Department of Transportation approved by the Federal Highway Administration, except where superseded or amended by the plans, Special Provisions and Notice(s) to Bidders attached hereto and made a part thereof.

I (We) certify that I (we) possess a copy of said Standard and Supplemental Specifications.

Evidence of my (our) authority to submit the Proposal is hereby furnished. The proposal is made without collusion on the part of any person, firm or corporation. I (We) certify that I (we) have carefully examined the Plans, the Specifications, including the Special Provisions and Notice(s) to Bidders, herein, and have personally examined the site of the work. On the basis of the Specifications, Special Provisions, Notice(s) to Bidders, and Plans, I (we) propose to furnish all necessary machinery, tools, apparatus and other means of construction and do all the work and furnish all the materials in the manner specified. I (We) understand that the quantities mentioned herein are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid, in accordance with the above.

Attached hereto is a certified check, cashier's check or Proposal Guaranty Bond in the amount as required in the Advertisement (or, by law).

INSTRUCTION TO BIDDERS: Alternate and Optional Items on Bid Schedule.

1. Two or more items entered opposite a single unit quantity WITHOUT DEFINITE DESIGNATION AS "ALTERNATE ITEMS" are considered as "OPTIONAL ITEMS". Bidders may or may not indicate on bids the Optional Item proposed to be furnished or performed WITHOUT PREJUDICE IN REGARD TO IRREGULARITY OF BIDS.
2. Items classified on the bid schedule as "ALTERNATE ITEMS" and/or "ALTERNATE TYPES OF CONSTRUCTION" must be preselected and indicated on bids. However, "Alternate Types of Construction" may include Optional Items to be treated as set out in Paragraph 1, above.
3. Optional items not preselected and indicated on the bid schedule MUST be designated in accordance with Subsection 102.06 prior to or at the time of execution of the contract.
4. Optional and Alternate items designated must be used throughout the project.

I (We) further propose to perform all "force account or extra work" that may be required of me (us) on the basis provided in the Specifications and to give such work my (our) personal attention in order to see that it is economically performed.

SECTION 905 -- PROPOSAL (CONTINUED)

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

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

Respectfully Submitted,

DATE _____

Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President Address

Secretary Address

Treasurer Address

The following is my (our) itemized proposal.

Grading, Draining, Paving & Replacing traffic signals on US 90 between Rodenburg Ave. and Biloxi Bay, known as Federal Aid Project Nos. ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308, in the County of Harrison, State of Mississippi.

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

***** SPECIAL NOTICE TO BIDDERS *****

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

*****BID SCHEDULE*****

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Item Amount	
						Dollar	Ct	Dollar	Ct
Roadway Items									
0010	201-A001		1	Lump Sum	Clearing and Grubbing	XXXXXXXX	XXX		
0020	202-A001		1	Lump Sum	Removal of Obstructions	XXXXXXXX	XXX		
0030	202-B024		3,845	Square Yard	Removal of Concrete Median & Island Pavement, All Depths				
0040	202-B035		12,373	Square Yard	Removal of Concrete Sidewalk				
0050	202-B038		78,324	Linear Feet	Removal of Curb, All Types				
0060	202-B047		1	Each	Removal of Guard Rail Bridge End Section, Type H				
0070	202-B051		75	Linear Feet	Removal of Guard Rail, Double Faced Rail Including Hardware, Post & Rail				
0080	202-B057		2	Each	Removal of Inlets, All Sizes				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount	
0090	202-B078		2,840	Square Yard	Removal of Pavement, All Types and Depths			
0100	202-B094		93	Linear Feet	Removal of Curb &/or Curb and Gutter, All Types			
0110	202-B102		168	Linear Feet	Removal of Guard Rail			
0120	202-B106		4,268	Linear Feet	Removal of Pipe, All Sizes			
0130	202-B137		1	Each	Removal of Guard Rail Cable Anchor			
0140	202-B174		1,062	Linear Feet	Removal of Debris and Sand From Box Culvert, Less Than 6-foot Width			
0150	202-B175		267	Each	Removal of Debris and Sand From Inlet and Junction Box, AllTypes & Sizes			
0160	202-B176		16,098	Linear Feet	Removal of Debris and Sand From Pipe, 18" to Less Than 36" Diameter			
0170	202-B177		2,616	Linear Feet	Removal of Debris and Sand From Pipe, 36" to Less Than 54" Diamater			
0180	202-B179		150	Linear Feet	Removal of Debris and Sand From Pipe, 51" x 31" Arch Pipe			
0190	202-B181		736	Linear Feet	Removal of Debris and Sand From Pipe, 65" x 40" Arch Pipe			
0200	202-B182		2,201	Linear Feet	Removal of Debris and Sand From Pipe, Less Than 18" Diameter			

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount	
0210	202-B189		1	Each	Removal of Impact Attenuator			
0220	202-B218		7	Each	Removal of Inlet Tops			
0230	202-B219		279	Each	Removal of and Replacement of SS-2 Inlet Top			
0240	202-B220		326	Linear Feet	Removal of Debris and Sand From Pipe, 58" x 36" Arch Pipe			
0250	202-B221		106	Linear Feet	Removal of Debris and Sand From Pipe, 72" x 51" Arch Pipe			
0260	202-B222		6,917	Linear Feet	Removal of Debris and Sand From Pipe, 15" Slotted Metal Pipe			
0270	203-A002	(E)	417	Cubic Yard	Unclassified Excavation, LVM			
0280	203-EX006	(E)	2,478	Cubic Yard	Borrow Excavation, AH, LVM, Class B3			
0290	203-H004	(E)	100	Cubic Yard	Surplus Excavation, LVM, AH			
0300	206-A001	(S)	405	Cubic Yard	Structure Excavation			
0310	213-C001		17	Ton	Superphosphate			
0320	216-B004		5,000	Square Yard	Solid Sodding, Bermuda			

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0330	219-A001		100	Thousand Gallon	Watering	20.	00	2,000.	00
0340	220-A001		17	Acre	Insect Pest Control	30.	00	510.	00
0350	234-A001		49,300	Linear Feet	Temporary Silt Fence				
0360	235-A001		200	Bale	Temporary Erosion Checks				
0370	406-A001		226,661	Square Yard	Cold Milling of Bituminous Pavement, All Depths				
0380	413-E001		41,360	Linear Feet	Sawing and Sealing Transverse Joints in Asphalt Pavement				
0390	503-C007		1,000	Linear Feet	Saw Cut, Full Depth				
0400	601-B001	(S)	31	Cubic Yard	Class "B" Structural Concrete, Minor Structures				
0410	602-A001	(S)	2,297	Pounds	Reinforcing Steel				
0420	603-CA002	(S)	1,984	Linear Feet	18" Reinforced Concrete Pipe, Class III				
0430	603-CA003	(S)	1,064	Linear Feet	24" Reinforced Concrete Pipe, Class III				
0440	603-CA004	(S)	428	Linear Feet	30" Reinforced Concrete Pipe, Class III				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount	
0450	603-CA005	(S)	880	Linear Feet	36" Reinforced Concrete Pipe, Class III			
0460	603-CA006	(S)	232	Linear Feet	42" Reinforced Concrete Pipe, Class III			
0470	603-CE006	(S)	40	Linear Feet	58" x 36" Concrete Arch Pipe, Class A III			
0480	603-CE007	(S)	80	Linear Feet	65" x 40" Concrete Arch Pipe, Class A III			
0490	604-A001		4,373	Pounds	Castings			
0500	606-A002		63	Each	Guard Post, Type II Modified			
0510	606-B002		75	Linear Feet	Guard Rail, Class A, Type 1, Double Faced			
0520	606-B003		263	Linear Feet	Guard Rail, Class A, Type 1, Wood Post			
0530	606-C003		1	Each	Guard Rail, Cable Anchor, Type 1			
0540	606-D008		1	Each	Guard Rail, Bridge End Section, Type H			
0550	608-A001	(S)	17,013	Square Yard	Concrete Sidewalk, Without Reinforcement			
0560	609-B001	(S)	863	Linear Feet	Concrete Curb, Header			

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0570	609-B002	(S)	442	Linear Feet	Concrete Curb, Doweled				
0580	609-B008	(S)	59,888	Linear Feet	Concrete Curb, Special Design Header, Type 1				
0590	609-B009	(S)	17,969	Linear Feet	Concrete Curb, Special Design Header, Type 2				
0600	609-D002	(S)	685	Linear Feet	Combination Concrete Curb and Gutter Type 2				
0610	609-D016	(S)	93	Linear Feet	Combination Concrete Curb and Gutter Type 3 Modified				
0620	613-D007		2	Each	Adjustment of Utility Appurtenance				
0630	616-A001	(S)	4,885	Square Yard	Concrete Median and/or Island Pavement, 4-inch				
0640	616-A003	(S)	766	Square Yard	Concrete Median and/or Island Pavement, 10-inch				
0650	618-A001		1	Lump Sum	Maintenance of Traffic	XXXXXXXXX	XXX		
0660	619-A1004		3	Mile	Temporary Traffic Stripe, Continuous White, Paint				
0670	619-A2004		3	Mile	Temporary Traffic Stripe, Continuous Yellow, Paint				
0680	619-A3007		21	Mile	Temporary Traffic Stripe, Skip White, Paint				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0690	619-A4002		2,080	Linear Feet	Temporary Traffic Stripe, Skip Yellow, Paint				
0700	619-A5002		13,786	Linear Feet	Temporary Traffic Stripe, Detail, Paint				
0710	619-A6003		14,552	Linear Feet	Temporary Traffic Stripe, Legend, Paint				
0720	619-A6004		2,071	Square Feet	Temporary Traffic Stripe, Legend, Paint				
0730	619-D1001		32	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet				
0740	619-D2001		696	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More				
0750	619-G4005		48	Linear Feet	Barricades, Type III, Double Faced				
0760	620-A001		1	Lump Sum	Mobilization	XXXXXXXXXX	XXX		
0770	626-A002		11	Mile	6" Thermoplastic Traffic Stripe, Skip White				
0780	626-B002		2	Mile	6" Thermoplastic Traffic Stripe, Continuous White				
0790	626-D001		1,040	Linear Feet	6" Thermoplastic Traffic Stripe, Skip Yellow				
0800	626-E002		2	Mile	6" Thermoplastic Traffic Stripe, Continuous Yellow				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount	
0810	626-G001		33,426	Linear Feet	Thermoplastic Detail Stripe, White			
0820	626-G002		16,582	Linear Feet	Thermoplastic Detail Stripe, Yellow			
0830	626-H001		5,794	Square Feet	Thermoplastic Legend, White			
0840	626-H002		22,644	Linear Feet	Thermoplastic Legend, White			
0850	627-K001		2,114	Each	Red-Clear Reflective High Performance Raised Markers			
0860	627-L001		312	Each	Two-Way Yellow Reflective High Performance Raised Markers			
0870	629-A001		1	Each	Vehicular Impact Attenuator, 50 MPH			
0880	630-A001		1,121	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness			
0890	630-A002		706	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness			
0900	630-B001		803	Square Feet	Interstate Directional Signs, Bolted Extruded Aluminum Panels, Ground Mounted			
0910	630-C004		2,698	Linear Feet	Steel U-Section Posts, 3.0 to 3.5 lb/ft			
0920	630-D003		282	Linear Feet	Structural Steel Beams, W6 x 9			

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0930	630-E001		174	Pounds	Structural Steel Angles & Bars, 3" x 3" x 1/4" Angles				
0940	630-E002		58	Pounds	Structural Steel Angles & Bars, 3 1/2" x 3 1/2" x 1/4" Angles				
0950	630-E003		328	Pounds	Structural Steel Angles & Bars, 4" x 4" x 5/16" Angles				
0960	630-E004		180	Pounds	Structural Steel Angles & Bars, 7/16" x 2 1/2" Flat Bar				
0970	630-I006		1	Lump Sum	Metal Overhead Sign Supports, Assembly No. 1, Contractor Designed	XXXXXXXX	XXX		
0980	630-K001		103	Linear Feet	Welded & Seamless Steel Pipe Posts, 3"				
0990	630-K003		48	Linear Feet	Welded & Seamless Steel Pipe Posts, 4"				
1000	631-A001		1,942	Cubic Yard	Flowable Fill				
1010	635-A001		96	Linear Feet	Vehicle Loop Assemblies				
1020	636-A001		950	Linear Feet	Shielded Cable, AWG #18, 4 Conductor				
1030	638-A005		2	Each	Loop Detector Amplifier, Card Rack Mounted, 4 Channel				
1040	640-A016		67	Each	Traffic Signal Heads, Type 1 LED				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount	
1050	640-A018		6	Each	Traffic Signal Heads, Type 3 LED			
1060	640-A020		1	Each	Traffic Signal Heads, Type 5R LED			
1070	640-A022		28	Each	Traffic Signal Heads, Type 7 LED			
1080	640-A031		3	Each	Traffic Signal Heads, Type 1A LED			
1090	640-A034		76	Each	Traffic Signal Heads, Type 6 LED Countdown			
1100	640-A036		12	Each	Traffic Signal Heads, Type 5L, LED			
1110	640-A037		2	Each	Traffic Signal Heads, Type 5LA, LED			
1120	642-A008		12	Each	Solid State Traffic Actuated Controllers, Type 8A			
1130	643-A001		1	Each	Closed Loop On-Street Master System			
1140	644-A001		45	Each	Optical Detector			
1150	644-B001		8,010	Linear Feet	Optical Detector Cable			
1160	644-C002		12	Each	Phase Selector, 4 Channel			

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
1170	646-A001		1	Lump Sum	Removal of Existing Traffic Signal Equipment	XXXXXXXX	XXX		
1180	647-A005		63	Each	Pullbox, Type 2				
1190	650-A002		2	Each	On Street Video Equipment, Fixed Type				
1200	650-A003		1	Each	On Street Video Equipment, PTZ Type				
1210	666-B004		3,558	Linear Feet	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 10, 2 Conductor				
1220	666-B015		10,127	Linear Feet	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 5 Conductor				
1230	666-B016		8,160	Linear Feet	Electric Cable, Underground in Conduit, IMSA 20-1, AWG 14, 7 Conductor				
1240	668-A016		905	Linear Feet	Traffic Signal Conduit, Underground, Type 4, 1"				
1250	668-A018		840	Linear Feet	Traffic Signal Conduit, Underground, Type 4, 2"				
1260	668-A020		335	Linear Feet	Traffic Signal Conduit, Underground, Type 4, 3"				
1270	668-B024		1,955	Linear Feet	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 2"				
1280	668-B025		2,225	Linear Feet	Traffic Signal Conduit, Underground Drilled or Jacked, Rolled Pipe, 3"				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
1290	699-A001		1	Lump Sum	Roadway Construction Stakes	XXXXXXXX	XXX		
1300	907-213-A001		68	Ton	Agricultural Limestone				
1310	907-227-A001		34	Acre	Hydroseeding				
1320	907-403-B002	(BA1)	3,474	Ton	Hot Mix Asphalt, HT, 19-mm mixture, Leveling				
1330	907-403-D004	(BA1)	17,196	Ton	Hot Mix Asphalt, HT, 9.5-mm mixture, Polymer Modified				
1340	907-403-E004	(BA1)	18,441	Ton	Hot Mix Asphalt, HT, 9.5-mm mixture, Polymer Modified, Leveling				
1350	907-603-V001		43,148	Linear Feet	Video Pipe Inspection, All Sizes				
1360	907-622-A001		1	Each	Engineer's Field Office Building, Type 2				
1370	907-626-C003		7	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White				
1380	907-626-F003		6	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow				
1390	907-626-G001		784	Linear Feet	Thermoplastic Detail Stripe, Blue-ADA				
1400	907-629-D001		64	Linear Feet	Crash Cushion System				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount	
1410	907-639-A002		2	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 50' Arm			
1420	907-639-A006		3	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 30' Arm			
1430	907-639-A007		4	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 40' Arm			
1440	907-639-A011		4	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 35' Arm			
1450	907-639-A015		6	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 50' Arm			
1460	907-639-A016		2	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 55' Arm			
1470	907-639-A017		6	Each	Traffic Signal Equipment Pole, Type II, 17' Shaft, 25' Arm			
1480	907-639-A020		5	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 60' Arm			
1490	907-639-A021		3	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 40' Arm			
1500	907-639-A028		1	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 30' Arm			
1510	907-639-A029		2	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 45' Arm			
1520	907-639-A030		1	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 65' Arm			

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
1530	907-639-A031		2	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 70' Arm				
1540	907-639-A032		1	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 25' & 60' Arms				
1550	907-639-A033		1	Each	Traffic Signal Equipment Pole, Type IV, 30' Shaft, 35' & 35' Arms				
1560	907-639-A034		12	Each	Traffic Signal Equipment Pole, Type VI, 8' Shaft				
1570	907-639-C002		152	Cubic Yard	Pole Foundations, 36" Diameter				
1580	907-639-C003		7	Cubic Yard	Pole Foundations, 24" Diameter				
1590	907-639-D001		581	Linear Feet	Slip Casing, 36" Diameter				
1600	907-648-C001		12	Each	Radio Ethernet Interconnect, Local Intersection				
1610	907-648-D001		6	Each	Radio Ethernet Distribution Repeater Installation				
1620	907-648-E001		5	Each	Radio Ethernet Fixed Backbone Repeater Installation				
1630	907-648-F001		1	Lump Sum	Radio Interconnect Training, Testing and Installation	XXXXXXXX	XXX		
1640	907-649-A001		43	Each	Video Detection System, 1 Sensor				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
1650	907-649-B001		14	Each	Video Detection-Data Collection and Reporting Tool License				
1660	907-649-D001		14	Each	Video Detection-Digitized Video Encoder/Decoded				
1670	907-649-E001		1	Lump Sum	Video Detection Training	XXXXXXXX	XXX		
1680	907-687-A014		1	Each	Loop, Sensor, Loop ATR Station				

*** BID CERTIFICATION ***

TOTAL BID.....\$_____

*** DBE/WBE SECTION ***

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

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

*** SIGNATURE STATEMENT ***

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

BIDDER'S SIGNATURE

BIDDER'S COMPANY

BIDDER'S FEDERAL TAX ID NUMBER

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).

<u>Project No.</u>	<u>County</u>	<u>Project No.</u>	<u>County</u>
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 _____

**Certification with regard to the Performance of Previous
Contracts or Subcontracts subject to the Equal Opportunity
Clause and the filing of Required Reports**

The Bidder _____, proposed Subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10925, 11114, or 11246, and that he has _____, has not _____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

(COMPANY)

BY _____

(TITLE)

DATE: _____

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the Equal Opportunity Clause. Contracts and Subcontracts which are exempt from the Equal Opportunity Clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime Contractors and Subcontractors who have participated in a previous contract or subcontract subject to the Executive orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such Contractors submit a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION (Execute in duplicate)

State of Mississippi

County of _____

I, _____,
(Name of person signing certification)

individually, and in my capacity as _____ of
(Title)

_____ do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____
_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308**,

in **Harrison** County(ies), Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and
- d) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently \$25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000. The bidder shall include the language of the certification in all subcontracts exceeding \$100,000 and all subcontractors shall certify and disclose accordingly.

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

Executed on _____
Signature

(11/23/92F)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION (Execute in duplicate)

State of Mississippi

County of _____

I, _____,
(Name of person signing certification)

individually, and in my capacity as _____ of
(Title)

_____ do hereby certify under
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that _____

_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308**,

in **Harrison** County(ies), Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

- e) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- f) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- g) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and
- h) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Initial here "_____" if exceptions are attached and made a part thereof. Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently \$25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

- 3) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- 4) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000. The bidder shall include the language of the certification in all subcontracts exceeding \$100,000 and all subcontractors shall certify and disclose accordingly.

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

Executed on _____
Signature

(11/23/92F)

S E C T I O N 9 0 2

CONTRACT FOR ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308

LOCATED IN THE COUNTY(IES) OF Harrison

STATE OF MISSISSIPPI,
COUNTY OF HINDS

This contract entered into by and between the Mississippi Transportation Commission on one hand, and the undersigned contractor, on the other witnesseth;

That, in consideration of the payment by the Mississippi Transportation Commission of the prices set out in the proposal hereto attached, to the undersigned contractor, such payment to be made in the manner and at the time of times specified in the specifications and the special provisions, if any, the undersigned contractor hereby agrees to accept the prices stated in the proposal in full compensation for the furnishing of all materials and equipment and the executing of all the work contemplated in this contract.

It is understood and agreed that the advertising according to law, the Advertisement, the instructions to bidders, the proposal for the contract, the specifications, the revisions of the specifications, the special provisions, and also the plans for the work herein contemplated, said plans showing more particularly the details of the work to be done, shall be held to be, and are hereby made a part of this contract by specific reference thereto and with like effect as if each and all of said instruments had been set out fully herein in words and figures.

It is further agreed that for the same consideration the undersigned contractor shall be responsible for all loss or damage arising out of the nature of the work aforesaid; or from the action of the elements and unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work, exceptions being those specifically set out in the contract; and for faithfully completing the whole work in good and workmanlike manner according to the approved Plans, Specifications, Special Provisions, Notice(s) to Bidders and requirements of the Mississippi Department of Transportation.

It is further agreed that the work shall be done under the direct supervision and to the complete satisfaction of the Executive Director of the Mississippi Department of Transportation, or his authorized representatives, and when Federal Funds are involved subject to inspection at all times and approval by the Federal Highway Administration, or its agents as the case may be, or the agents of any other Agency whose funds are involved in accordance with those Acts of the Legislature of the State of Mississippi approved by the Governor and such rules and regulations issued pursuant thereto by the Mississippi Transportation Commission and the authorized Federal Agencies.

The Contractor agrees that all labor as outlined in the Special Provisions may be secured from list furnished by

It is agreed and understood that each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and this contract shall be read and enforced as though it were included herein, and, if through mere mistake or otherwise any such provision is not inserted, then upon the application of either party hereto, the contract shall forthwith be physically amended to make such insertion.

The Contractor agrees that he has read each and every clause of this Contract, and fully understands the meaning of same and that he will comply with all the terms, covenants and agreements therein set forth.

Witness our signatures this the _____ day of _____, _____.

Contractor (s)

By _____

MISSISSIPPI TRANSPORTATION COMMISSION

Title _____

By _____

Signed and sealed in the presence of:
(names and addresses of witnesses)

Executive Director

Secretary to the Commission

Award authorized by the Mississippi Transportation Commission in session on the ____ day of _____, _____, Minute Book No. _____, Page No. _____.

S E C T I O N 9 0 3

CONTRACT BOND FOR: ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308

LOCATED IN THE COUNTY(IES) OF: Harrison

STATE OF MISSISSIPPI,

COUNTY OF HINDS

Know all men by these presents: that we, _____

_____ Principal, a _____

residing at _____ in the State of _____

and _____

residing at _____ in the State of _____,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, are held and firmly bound unto the State of Mississippi in the sum of _____

_____ (\$ _____) Dollars, lawful money of the United States of America, to be paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or assigns jointly and severally by these presents.

Signed and sealed this the _____ day of _____ A.D. _____.

The conditions of this bond are such, that whereas the said _____

_____ principal, has (have) entered into a contract with the Mississippi Transportation Commission, bearing the date of _____ day of _____ A.D. _____ hereto annexed, for the construction of certain projects(s) in the State of Mississippi as mentioned in said contract in accordance with the Contract Documents therefor, on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

Now therefore, if the above bounden _____

_____ in all things shall stand to and abide by and well and truly observe, do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract, contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the manner and form and furnish all of the material and equipment specified in said contract in strict accordance with the terms of said contract which said plans, specifications and special provisions are included in and form a part of said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in Subsection 109.11 of the approved specifications, and save harmless said Mississippi Transportation Commission from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud, or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employees in the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by the State at the instance of the Mississippi Transportation Commission or any officer of the State

SECTION 903 - CONTINUED

authorized in such cases, for double any amount in money or property, the State may lose or be overcharged or otherwise defrauded of, by reason of wrongful or criminal act, if any, of the Contractor(s), his (their) agents or employees, and shall promptly pay the said agents, servants and employees and all persons furnishing labor, material, equipment or supplies therefor, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; with the additional obligation that such Contractor shall promptly make payment of all taxes, licenses, assessments, contributions, damages, any liquidated damages which may arise prior to any termination of said principal's contract, any liquidated damages which may arise after termination of the said principal's contract due to default on the part of said principal, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision: in the course of the performance of said work and in accordance with Sections 31-5-51 et seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of the Executive Director of the Mississippi Department of Transportation, all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with the terms thereof and all of the expense and cost and attorney's fee that may be incurred in the enforcement of the performance of said contract, or in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

Witness our signatures and seals this the _____ day of _____ A.D. _____.

_____	_____
(Contractors) Principal	Surety
By _____	By _____
	(Signature) Attorney in Fact

Title _____	_____
(Contractor's Seal)	(Name and Address of Local (Mississippi) Representative) (Surety Seal)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
OFFICE OF CIVIL RIGHTS
JACKSON, MISSISSIPPI
LIST OF FIRMS SUBMITTING QUOTES

I/we received quotes from the following firms on Project No: **ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308**

County: **Harrison**

Disadvantaged Business Enterprise (DBE) Regulations as stated in 49 CFR 26.11 require the Mississippi Department of Transportation (MDOT) to create and maintain a comprehensive list of all firms quoting/bidding subcontracts on prime contracts and quoting/bidding subcontracts on federally-funded transportation projects. For every firm, we require the following information:

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

Firm Name: _____
Contact Name/Title: _____
Firm Mailing Address _____
Phone Number: _____
_____ DBE Firm _____ Non-DBE Firm

SUBMITTED BY (Signature)

FIRM NAME

Submit this form to Contract Administration as a part of your bid package. If this form is not included as part of the bid packet, your bid will be deemed irregular. For further information about this form, call Mississippi DOT's Office of Civil Rights at (601) 359-7466; FAX (601) 576-4504. Please make copies of this form when needed and also add those copies to the bid package.

YEAR **2007** PROGRESS SCHEDULE
FOR USE WITH COLUMN "D" IN THE TABLE OF TIME UNITS

YEAR **2008** PROJECT NUMBER **ER-NH-0003-01(108)/104569 / 306&308**
COUNTY **Harrison County**

WORK PHASE			PHASE VALUE	2007												2008												NO.	AVTU	
NO.	DESCRIPTION	REFERENCE NUMBERS		JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC			
1	Miscellaneous	10-260,310-360,390,500-540, 650-700, 1290-1310, 1350, 1360&1400								0																	222			
2	Excavation & Drainage	270-300, 400-490, 550-640 & 1000								5													185							
3	Mill, Pave & Granular Material	370-380 & 1320-1340															110							192						
4	Signal, Signs & Stripe	770-990 1010-1280, 1370-1390 & 1410-1670													80												222			
		LET: June 26, 2007 NOA: July 10, 2007 NTP & BCT: August 09, 2007 TI: ???																												
		GCG																												
MONTH				JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC			
TIME UNITS PER MONTH				7	9	13	17	19	19	18	17	15	12	6	7	9	13	17	19	19	18	18	17	15	12	6				
CUMULATIVE TIME UNITS																														170
																														TIME UNITS PER YEAR

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

HAUL PERMIT FOR BRIDGES

WITH

POSTED WEIGHT LIMITS

DATE: _____

PROJECT: ER-NH-0003-01(108) / 104569306 & ER-NH-0003-01(108) / 104569308

COUNTIES: Harrison

LOCATION: US Highway 90 between Rodenburg Avenue and Biloxi Bay.

A permit is issued to _____ for transporting loads exceeding the posted limit for any such bridge located on State designated routes within the project termini provided that such transport vehicles comply with all other governing statutory weight limits.

This permit is valid on all State designated routes from the point of origin to the point of delivery for materials and equipment utilized in construction of said project and also valid for sub-contractors and vendors upon written permission of the Contractor. The permit is non-transferable and no other haul permit for posted bridges will be issued to other individuals, vendors, or companies for construction of this project.

A copy of this signed permit shall be carried in all vehicles operating under the authority of this permit and also a copy of the Contractor's written permission when the vehicle is other than Contractor owned.

In accordance with State law, the above named Contractor will be liable for damages directly attributable to vehicles operating under this permit.

EXECUTIVE DIRECTOR