Keyed

15 -



SM No. CMP5145380011

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

15

Mill & Overlay approximately 10 miles of SR 145 from the Clarke County Line to I-59, known as State Project No. MP-5145-38(001) / 308841301 in Lauderdale County.

Project Completion: 185 Working Days

(STATE DELEGATED)

NOTICE

BIDDERS MUST COMPLETE AN ONLINE REQUEST FOR PERMISSION TO BID THIS PROJECT.

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

SECTION 900

OF THE CURRENT 2017 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

JACKSON, MISSISSIPPI

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PROJECT: MP-5145-38(001)/308841301 - Lauderdale

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Progress Schedule

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

05/02/2024 04:48 PM

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Wednesday, May 29, 2024, from the Bid Express Service and shortly thereafter publicly read on the Sixth Floor for:

Mill & Overlay approximately 10 miles of SR 145 from the Clarke County Line to I-59, known as State Project No. MP-5145-38(001) / 308841301 in Lauderdale County.

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

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

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

Contractors may request permission to bid online at http://shop.mdot.ms.gov at no cost. Upon approval, Contractors shall be eligible to submit a bid using Bid Express at http://bidx.com. Specimen proposals may be viewed and downloaded online at no cost at http://mdot.ms.gov or purchased online at http://shop.mdot.ms.gov at a cost of Ten Dollars (\$10.00) per proposal plus a small convenience fee. Cash or checks will not be accepted as payment.

Bid bond, signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent, with Power of Attorney attached, a Cashier's check or Certified Check for five (5%) percent of bid, payable to STATE OF MISSISSIPPI, must accompany each proposal.

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

BRAD WHITE EXECUTIVE DIRECTOR

SUPPLEMENT TO NOTICE TO BIDDERS NO. 1

DATE: 06/08/2021

SUBJECT: Governing Specifications

Change the web address at the end of the first paragraph to the following.

 $\underline{https://shop.mdot.ms.gov/default.aspx?StoreIndex{=}1}$

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

DATE: 03/01/2017

SUBJECT: Governing Specifications

The current (2017) 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 within this proposal. Copies of the specification book may be purchased from the MDOT Construction Division, or online at shopmdot/default.aspx?StoreIndex=1.

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 2004 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 2017 Edition of the Standard Specifications.

CODE: (SP)

SECTION 904 - NOTICE TO BIDDERS NO. 3

DATE: 01/17/2017

SUBJECT: Final Clean-Up

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

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

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

CODE: (SP)

SECTION 904 - NOTICE TO BIDDERS NO. 113

DATE: 04/18/2017

SUBJECT: Tack Coat

Bidders are advised that in addition to the products listed on the Department's APL as referenced in Subsection 401.03.1.2 on page 256, the Contractor may use one of the following as a tack coat.

- CSS-1
- CSS-1h
- SS-1
- SS-1h

SECTION 904 - NOTICE TO BIDDERS NO. 296 CODE: (SP)

DATE: 07/25/2017

SUBJECT: Reduced Speed Limit Signs

Bidders are advised that when the plans or contract documents require the speed limit on a project to be reduced, the Contractor shall begin work within 48 hours of installing the reduced speed limit signs. Should the Contractor not start work or have no plans to start work within 48 hours of installing the signs, the reduced speed limit signs shall be covered and existing speed limit signs uncovered.

SECTION 904 - NOTICE TO BIDDERS NO. 445 CODE: (SP)

DATE: 10/10/2017

SUBJECT: Mississippi Agent or Qualified Nonresident Agent

Bidders are hereby advised of the requirements of Subsections 102.08, 103.05.2, and 107.14.2.1 of the 2017 Standard Specifications for Road and Bridge Construction as it refers to bonding agents. Proposal guaranties, bonds, and liability insurance policies must be signed by a **Mississippi Agent or Qualified Nonresident Agent.**

SECTION 904 - NOTICE TO BIDDERS NO. 516 CODE: (IS)

DATE: 11/28/2017

SUBJECT: Errata and Modifications to the 2017 Standard Specifications

<u>Page</u>	Subsection	<u>Change</u>
16	102.06	In the seventh full paragraph, change "Engineer" to "Director."
33	105.05.1	In the sixth sentence, change "Contract Administration Engineer" to "Contract Administration Director."
34	105.05.2.1	In subparagraph 2, change "SWPPP, ECP" to "SWPPP and the ECP"
35	105.05.2.2	In subparagraphs 2, add "and" to the end of the sentence. In subparagraph 3, remove ", and" and add ".".
90	109.04.2	In the last paragraph of subparagraph (a), place a period "." at the end of the sentence.
93	109.04.2	In the last paragraph of subparagraph (g), place a period "." at the end of the sentence. Also, in the first paragraph of subparagraph (h), place a period "." at the end of the sentence.
97	109.07	Under ADJUSTMENT CODE, subparagraph (A1), change "HMA mixture" to "Asphalt mixtures."
98	109.11	In the third sentence, change "Engineer" to "Director."
219	308.04	In the last sentence of the last paragraph, change "Contractor's decision" to "Engineer's decision."
300	405.02.5.9	In the first sentence of the second paragraph, change "Hot Mix Asphalt" to "Asphalt Mixtures."
502	630.01.1	In the first paragraph, change "AASHTO" to "AASHTO's LRFD".
636	646.05	Change "each" to "per each" for the pay item units of payment.
640	656.02.6.2	In item 7), change "down stream" to "downstream".
688	630.03.2	Change the subsection number from "630.03.2" to "680.03.2."

725	702.08.3	In the second sentence of the first paragraph, change "hot-mix" to "asphalt."
954	804.02.13.1.6	In the definition for "M" in the % Reduction formulas, change "paragraph 7.3" to "paragraph 5.3."

SECTION 904 - NOTICE TO BIDDERS NO. 1225 CODE: (SP)

DATE: 11/13/2018

SUBJECT: Early Notice to Proceed

Bidders are advised that if an early notice to proceed is allowed by the Department and the Contractor experiences problems or delays between the early notice to proceed date and the original notice to proceed date, this shall not be justification for any monetary compensation or an extension of contract time.

SECTION 904 - NOTICE TO BIDDERS NO. 1226

CODE: (IS)

DATE: 11/16/2018

SUBJECT: Material Storage Under Bridges

Bidders are advised that Subsection 106.08 of the Standard Specifications allows the Contractor to store materials and equipment on portions of the right-of-way. However, the Contractor will not be allowed to store or stockpile materials under bridges without written permission from the Project Engineer. The Contractor shall submit a detailed request of all proposed materials to be stored under bridges to the Engineer a minimum of 14 calendar days prior to anticipated storage. This detail shall include, but not limited to, bridge location, material type, material quantity, and duration of storage. The Project Engineer and any other needed Division will review this information and determine whether to grant approval. The Contractor shall not store any material under any bridge without written approval from the Project Engineer.

SECTION 904 - NOTICE TO BIDDERS NO. 1241 CODE: (IS)

DATE: 11/27/2018

SUBJECT: Fuel and Material Adjustments

Bidder's attention is brought to the last paragraph of Subsection 109.07 of the Standard Specifications which states that no fuel or material adjustment will be made after the completion of contract time. Any fuels consumed or materials incorporated into the work during the monthly estimate period falling wholly after the expiration of contract time will not be subject a fuel or material adjustment.

SECTION 904 - NOTICE TO BIDDERS NO. 1963 CODE: (SP)

DATE: 9/23/2019

SUBJECT: Guardrail Pads

Bidders are hereby advised that prior to construction of the guardrail pads, the Contractor shall coordinate with the guardrail Subcontractor to determine the guardrail pad dimensions necessary to meet MASH compliance.

CODE: (IS)

SECTION 904 - NOTICE TO BIDDERS NO. 2206

DATE: 01/14/2020

SUBJECT: MASH Compliant Devices

Bidders are hereby advised that compliance associated with the requirements of meeting either the National Cooperative Highway Research Program (NCHRP) Report 350 or the Manual for Assessing Safety Hardware (MASH) for installations of certain traffic control devices and permanent safety hardware devices (guardrails, guardrail terminals, permanent portable barriers, cast-in-place barriers, all other permanent longitudinal barriers, crash cushions, cable barriers, cable barrier terminals, bridge rails, bridge rail transitions, all other terminals, sign supports, and all other breakaway hardware) as listed throughout the Standard Specifications and/or the Standard Drawings, or both, is now replaced with the requirements of meeting the 2016 version of MASH after December 31, 2019. This change applies to new permanent installations and to full replacements of existing installations.

At the preconstruction conference or prior to starting any work on the project, the Contractor shall submit a letter stating that the traffic control devices and permanent safety hardware devices as outlined within the paragraph above that are to be used on the project are certified to meet MASH 2016.

When a MASH 2016-compliant device does not exist for the new permanent installations and/or full replacement installations of permanent safety hardware devices, as listed above, a MASH 2009-compliant or a NCHRP 350-compliant device may be proposed by the Contractor for the project. A written request for such instances must be submitted by the Contractor either at the preconstruction conference or prior to starting any work on the project. The Contractor shall submit the following items to the Project Engineer: (1) a detailed list of the proposed devices and locations thereof; and (2) certification letters indicating that the proposed devices are compliant with either MASH 2009 or NCHRP 350.

When a MASH 2016-compliant device does not exist for the temporary work zone traffic control devices (Category 1, Category 2, and Category 3 devices), a MASH 2009-compliant or a NCHRP 350-compliant device may be proposed by the Contractor for the project. Temporary work zone traffic control devices (Category 1, Category 2, and Category 3 devices) that are MASH 2009-compliant or NCHRP 350-compliant that have been in use prior to December 31, 2019, and that have a remaining service life may be proposed for use throughout their normal service life on the project by the Contractor. For either of these scenarios for temporary work zone traffic control devices, a written request must be submitted by the Contractor either at the preconstruction conference or prior to starting any work on the project. The Contractor shall submit the following items to the Project Engineer: (1) a detailed list of the proposed devices and locations thereof; and (2) certification letters indicating that the proposed devices are compliant with either MASH 2009 or NCHRP 350.

Work will only be allowed to proceed after the Department has granted written concurrence(s) with the proposed request(s) as listed above.

CODE: (SP)

SECTION 904 - NOTICE TO BIDDERS NO. 2273

DATE: 02/12/2020

SUBJECT: Mississippi Special Fuel Tax Law

Bidder's attention is brought to the second paragraph of Subsection 107.02 of the Standard Specifications which states that all Contractors and Subcontractors must comply with all requirements contained in the Mississippi Special Fuel Tax Law, Section 27-55-501, et seq. Attached are two Fact Sheets provided by the Mississippi Department of Revenue (MDOR) with additional information.



Gasoline and Dyed Diesel Used for Non-Highway Purposes

Mississippi provides a reduced rate for gasoline and dyed diesel used for non-highway purposes. The reduced rates are 6.44 cents per gallon and 5.75 cents per gallon of gasoline or dyed diesel. These fuels are generally taxed at 18 cents per gallon if for on road use.

Gasoline Used for Non-Highway Purposes

You may be entitled to a refund of 11.56 cents per gallon (making this an equivalent to a tax rate of 6.44 cents per gallon) if you desire to purchase gasoline to be used off road. The gasoline must be used for agricultural, maritime, industrial, manufacturing, domestic or non-highway purposes only.

Examples of non-highway include gasoline used in boats, golf carts, machinery used for manufacturing or farm equipment used exclusively in plowing, planting or harvesting farm products.

Refund Gasoline User

The refund is based on the amount of gallons used. Before a refund is issued, you are required to...

- 1. Obtain a refund gasoline user's permit and a certificate for refund booklet from the Department of Revenue;
- 2. Have a storage tank marked "REFUND GASOLINE"; and,
- 3. Purchase the gasoline from someone who holds a refund gasoline dealer's permit.

No refund will be allowed for gasoline used in motor vehicles owned or operated by a government entity or used in Mississippi government contracts.

Refund Gasoline Dealer

You must obtain a refund gasoline dealer's permit from the Department of Revenue before selling refund gasoline. At no time should the gasoline be delivered to a tank that is not properly marked. The gasoline must be dyed a distinctive mahogany color at the time of delivery.

The Department of Revenue may waive the dye requirement if the dye may cause damage to the equipment. The refund gasoline user is required to obtain the waiver from the Department of Revenue.

Dyed Diesel Used for Non-Highway Purposes

Unlike gasoline, you are not required to apply for a refund if you desire to purchase dyed diesel to be used off road. Mississippi provides a reduced rate of 5.75 cents per gallon on dyed diesel used off road. Diesel used on road is subjected to 18 cents per gallon. Dyed diesel used in motor vehicles owned or operated by a government entity or used in Mississippi government contracts will be subjected to 18 cents per gallon.

Dyed Diesel Used on the Highway

Any person who purchases, receives, acquires or uses dyed diesel for highway use will be liable to pay 18 cents per gallon <u>and</u> subject to a penalty in the amount of \$1000.

Identifying Dyed Diesel

Storage facilities for dyed diesel must be plainly marked "NONHIGHWAY DIESEL FUEL" or "NONHIGHWAY KEROSENE". Retailers are also required to mark all pumps or dispensing equipment.



Page 1 of 1



Special Fuel Used on Government Contracts

State and Local Government Contracts

Special fuel purchased, acquired or used in performing contracts with the State of Mississippi, counties, municipalities or any political subdivision is taxed at a rate of 18 cents per gallon. Special fuel includes but is not limited to the following:

- Dyed diesel fuel;
- Kerosene;
- Undyed diesel fuel; and,
- Fuel oil.

State and local government contracts include construction, reconstruction and maintenance or repairs of projects such as roads, bridges, water systems, sewer systems, buildings, drainage canals and recreational facilities. The Department of Revenue may require contractors to remit the excise tax directly to the state in lieu of paying the tax to a distributor.

Special Fuel Direct Pay Permit

Contractors that remit the excise tax to the state will be issued a Special Fuel Direct Pay Permit. This permit relieves the distributor from collecting the tax and requires the contractor to file a monthly special fuel return. The distributor should include the contractor's permit number on all invoices that are related to tax-free sales.

The contractor is required to furnish a surety or cash bond guaranteeing the payment of the excise tax prior to receiving the Special Fuel Direct Pay Permit. The Department of Revenue may accept a contractors tax bond if the bond covers the excise tax levied on special fuel.

Special Fuel Distributors

If the contractor does not have a Special Fuel Direct Pay Permit, distributors are required to collect the 18 cents excise tax and remit the tax to the Department of Revenue. The additional 12.25 cents levied on special fuel (excluding undyed diesel) should be reported on schedules 5F and 5G of the special fuel return.

Environmental Protection Fee

Special fuel distributors are required to collect the environmental protection fee even if the contractor has a Special Fuel Direct Pay Permit. The fee is levied at 4/10^{ths} of a cent per gallon. The fee is suspended or reinstated when the trust fund has exceeded or fallen below the obligatory balance.

Penalties

Any person who knowingly and willfully purchases untaxed fuel for use in equipment utilized on a road or highway construction site in this state is guilty of a misdemeanor and, upon conviction, shall be fined not less than \$1,000 or more than \$100,000, or imprisoned in the county jail for not more than one year, or both.

SECTION 904 - NOTICE TO BIDDERS NO. 2895 CODE: (SP)

DATE: 10/14/2020

SUBJECT: Exploratory Joint Cleanout

Bidders are hereby advised that work on this project shall consist of exploratory investigation of bridge joints to determine the appropriate level of repair and will include removal of any trash and debris (including, but not limited to, compacted dirt, vegetation and trash) located at any depth within the joint. Costs of this work will be absorbed in the cost of other items of work if further joint repair work is not required.

SECTION 904 - NOTICE TO BIDDERS NO. 2954

CODE: (IS)

DATE: 12/01/2020

SUBJECT: Reflective Sheeting for Signs

Bidders are hereby advised that the retroreflective sign sheeting used for signs on this project shall be as listed below and shall meet the requirements of Subsection 721.06.

Temporary Construction Signs

Temporary traffic control (orange) sign sheeting shall be a minimum Type IX Fluorescent Orange sheeting as shown in Special Provision 907-721.

Permanent Signs

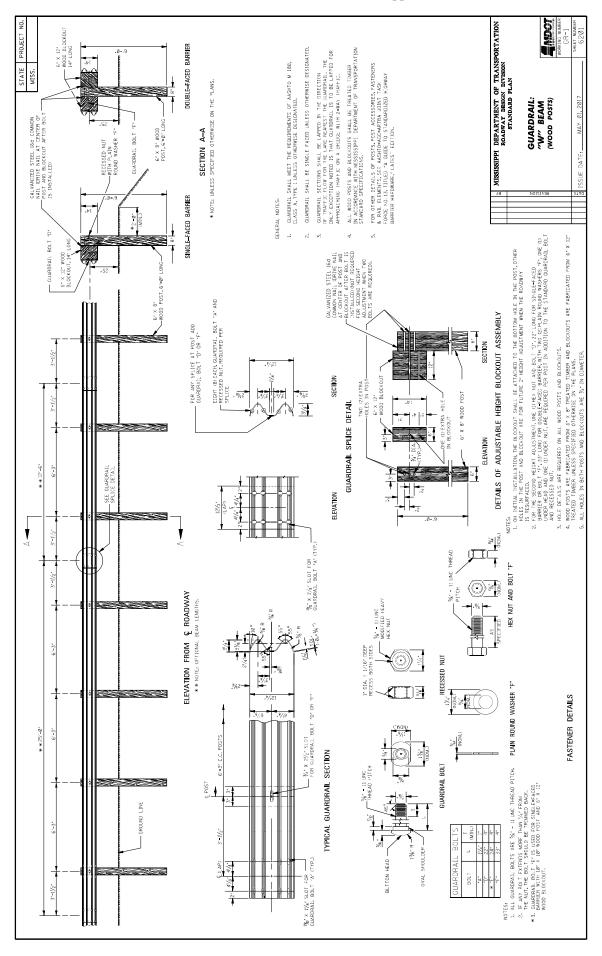
Permanent signs, except signs on traffic signal poles/mast arms, shall be as follows:

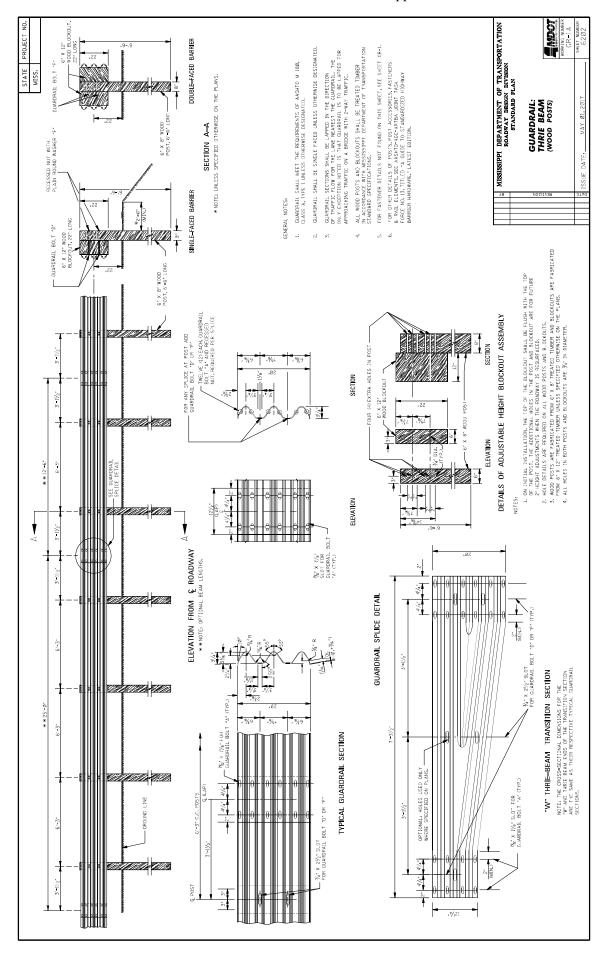
- Brown background sheeting on guide signs shall be a minimum Type VIII sheeting,
- Green and blue background sheeting on guide signs shall be a minimum Type IX sheeting, and
- All white, yellow, red, fluorescent yellow, and fluorescent yellow/green sheeting shall be Type XI sheeting.

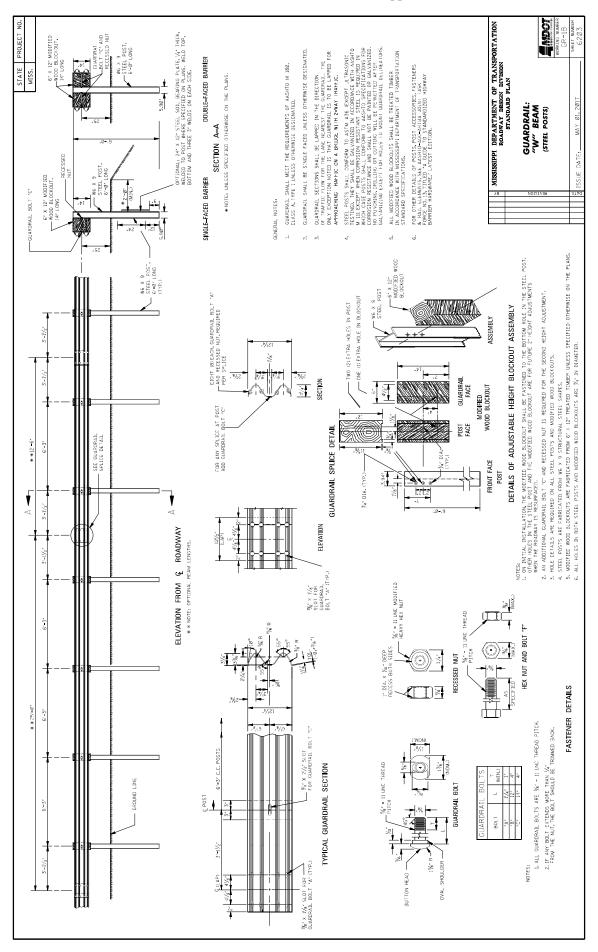
SUPPLEMENT TO NOTICE TO BIDDERS NO. 3599

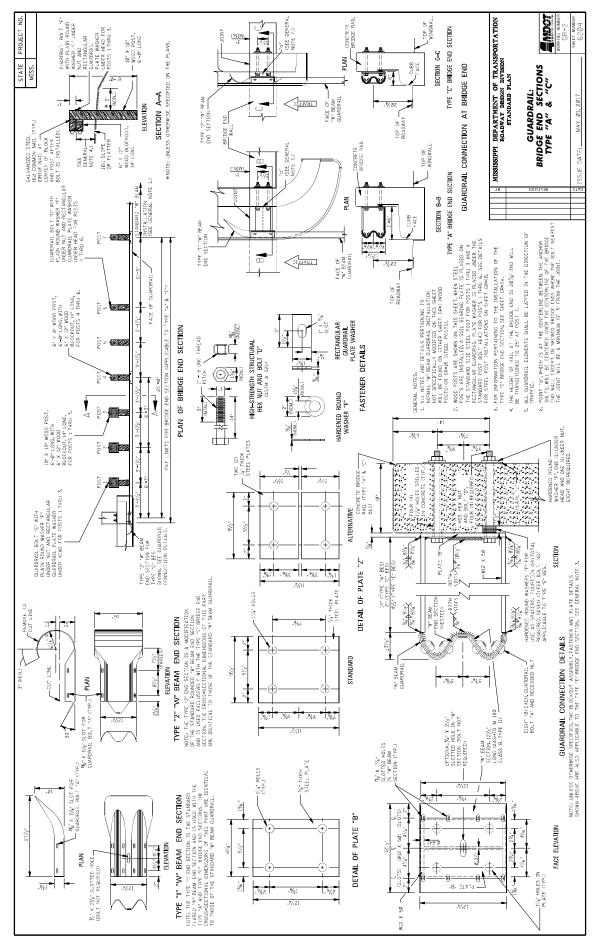
DATE: 08/11/2021

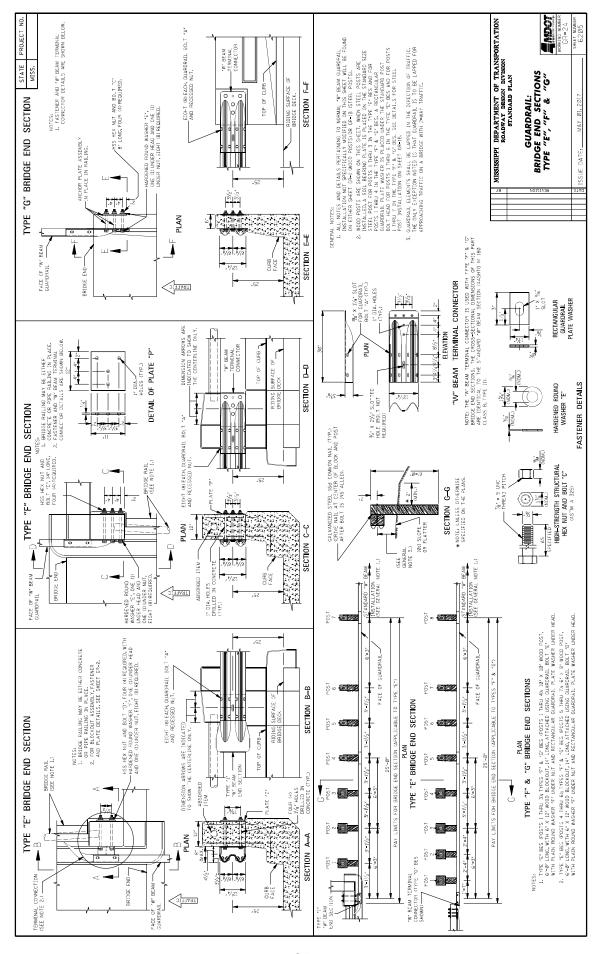
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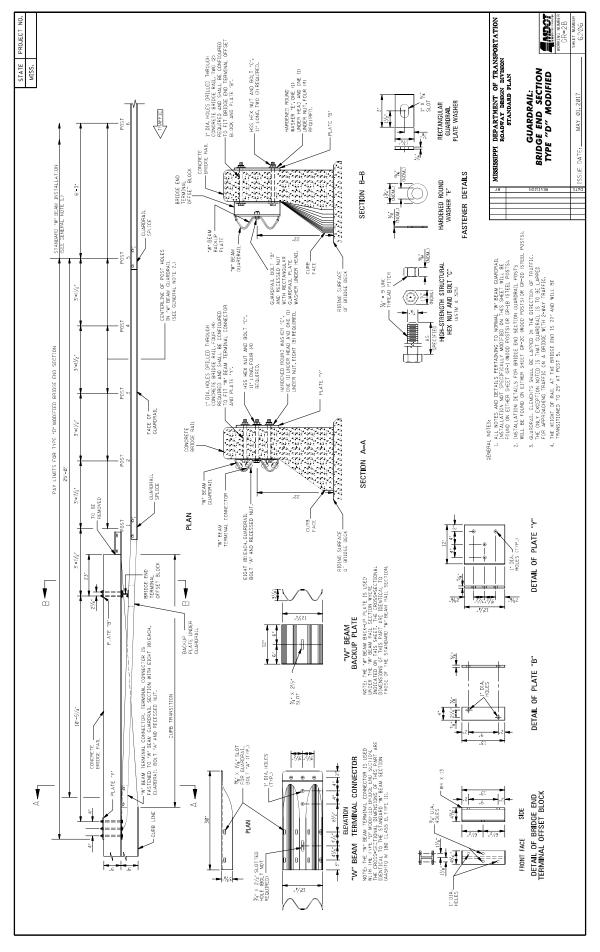


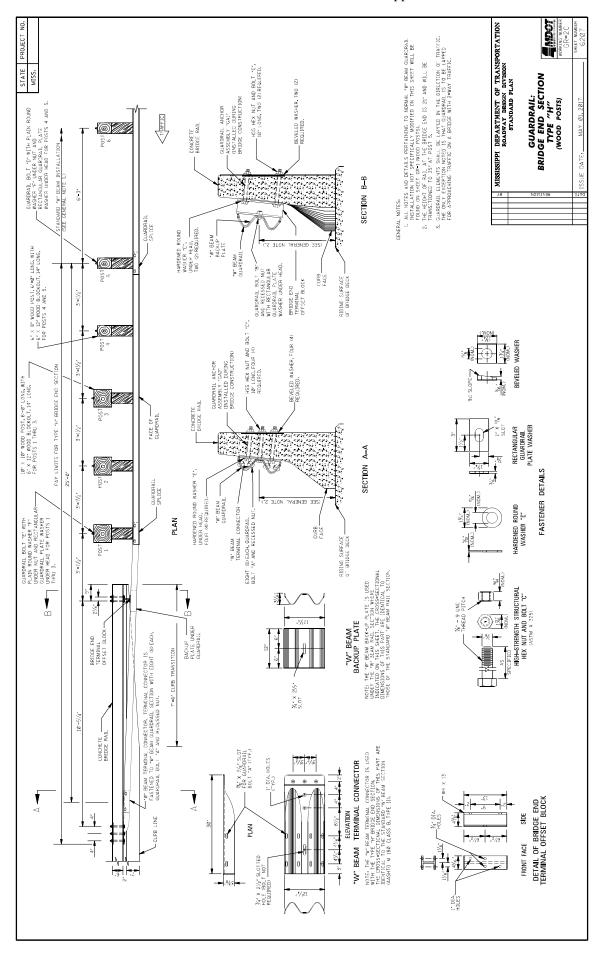


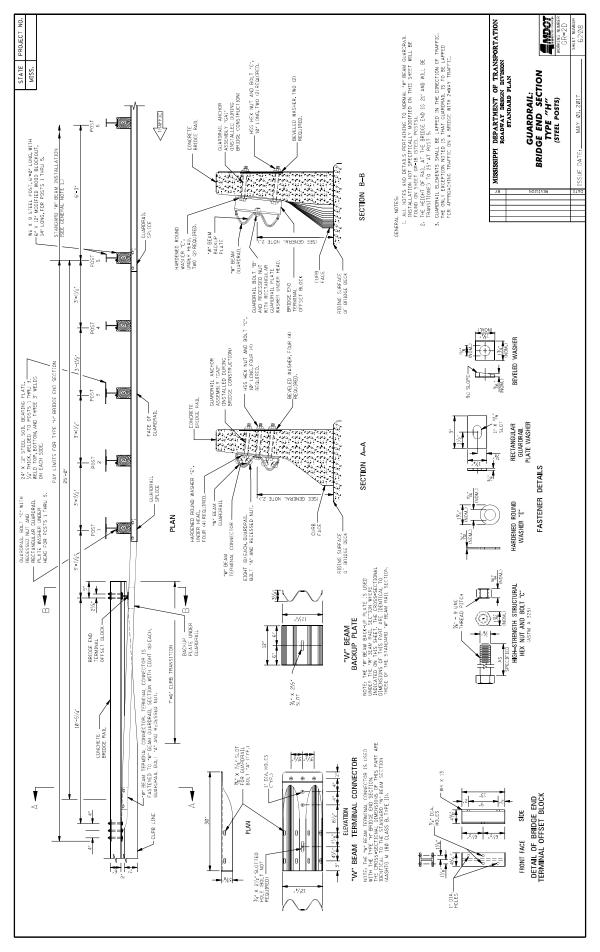


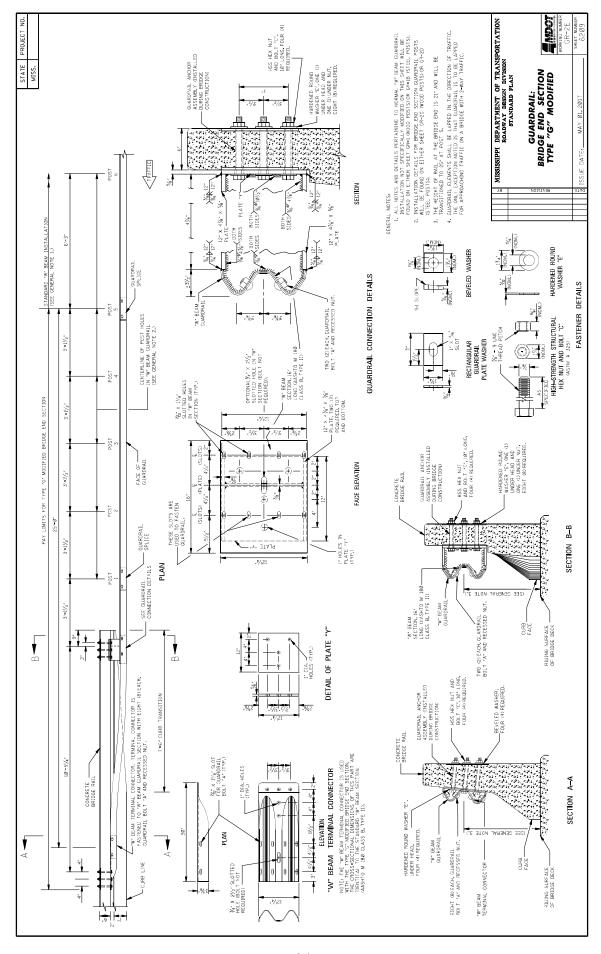


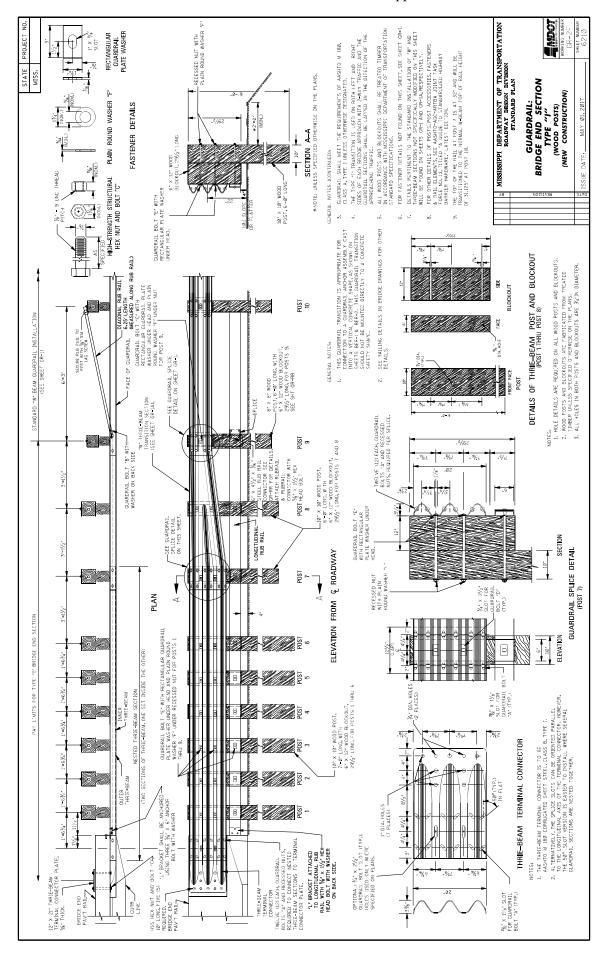


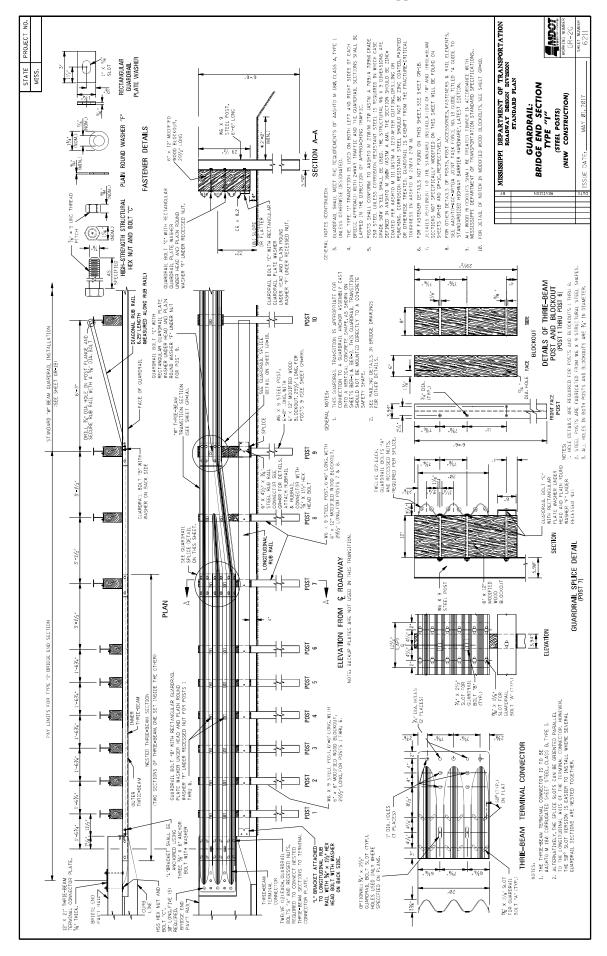


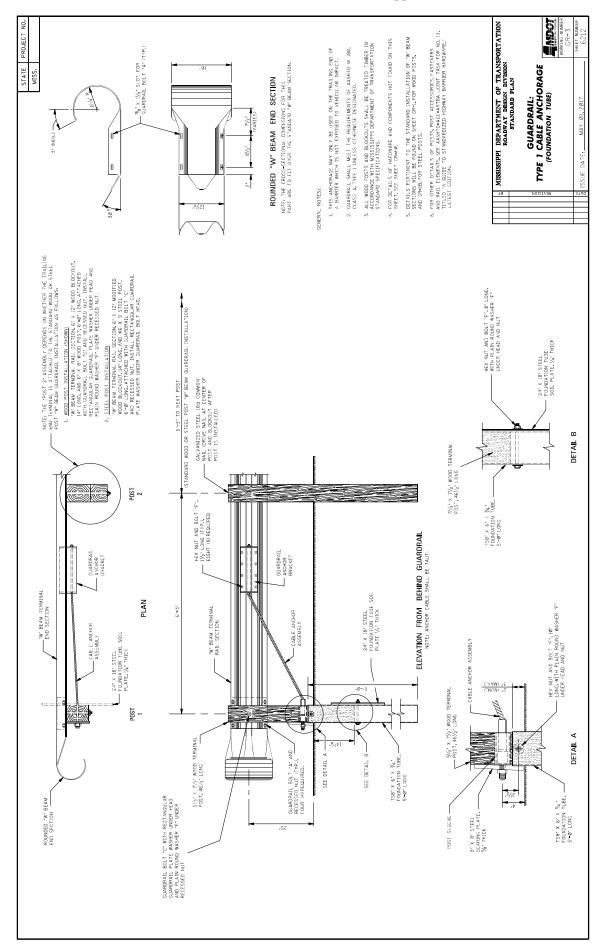


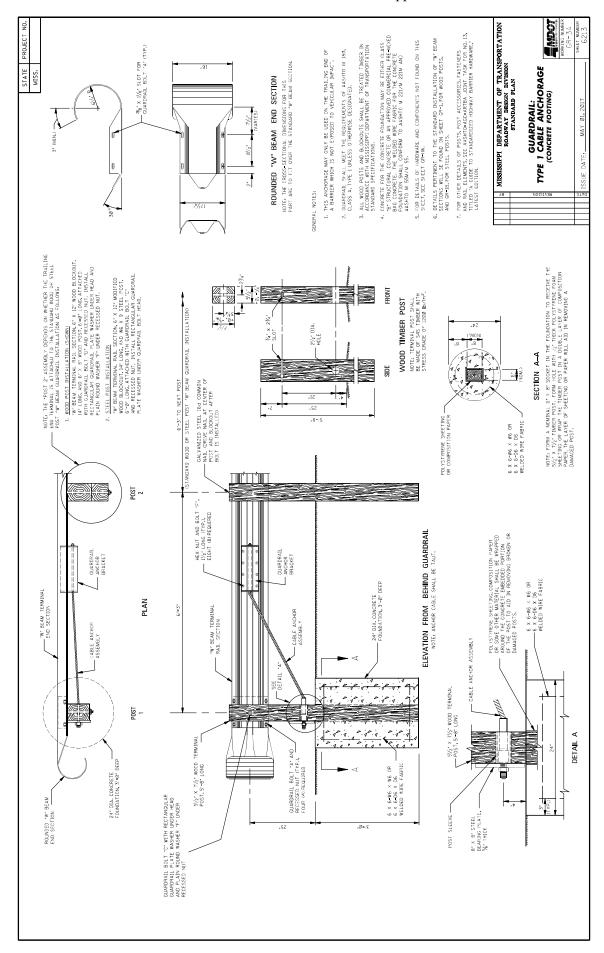


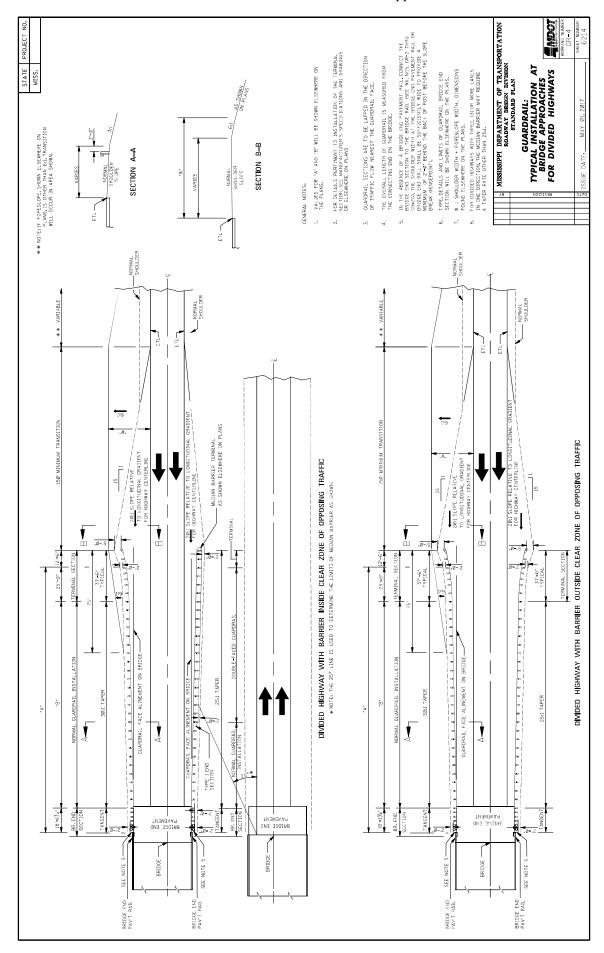


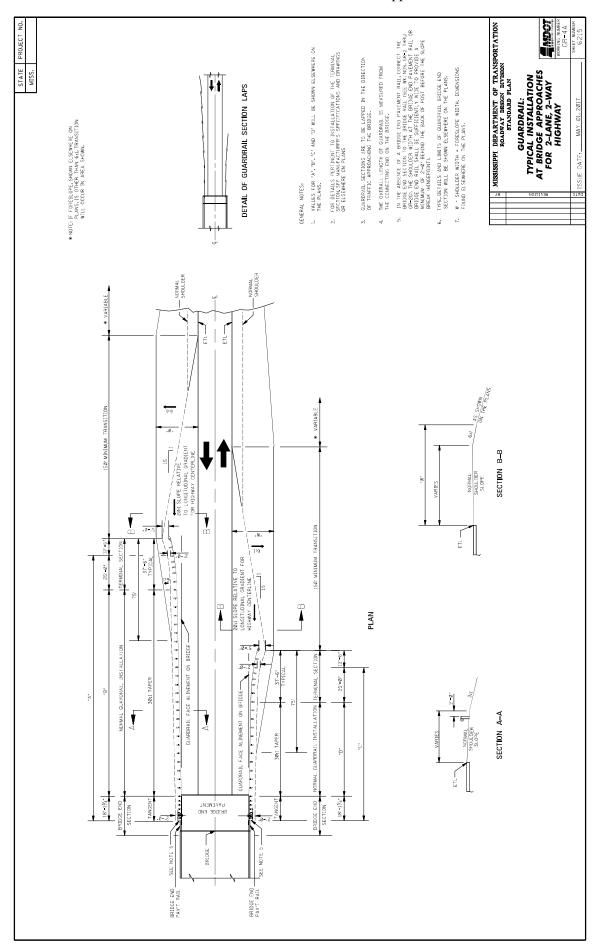


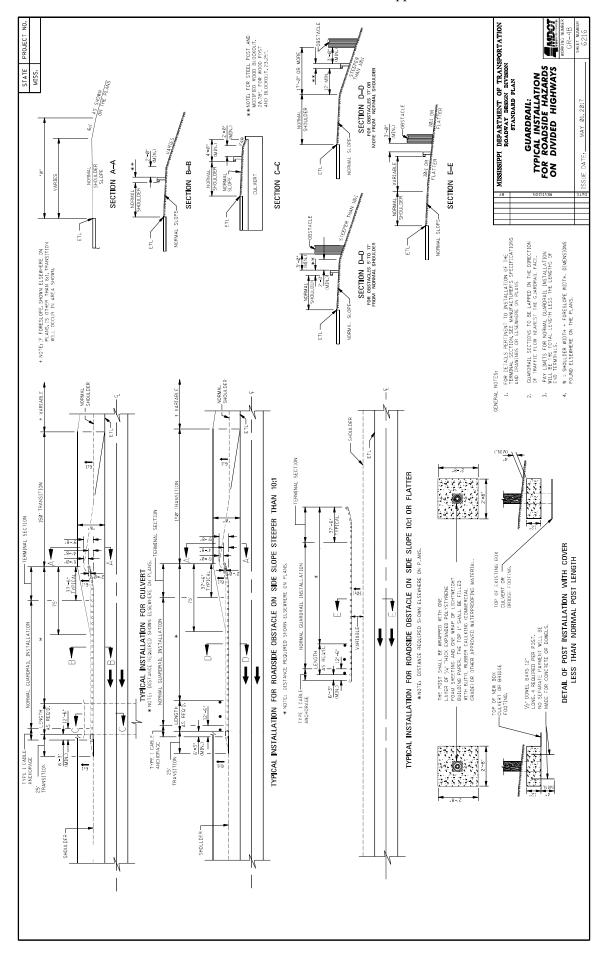


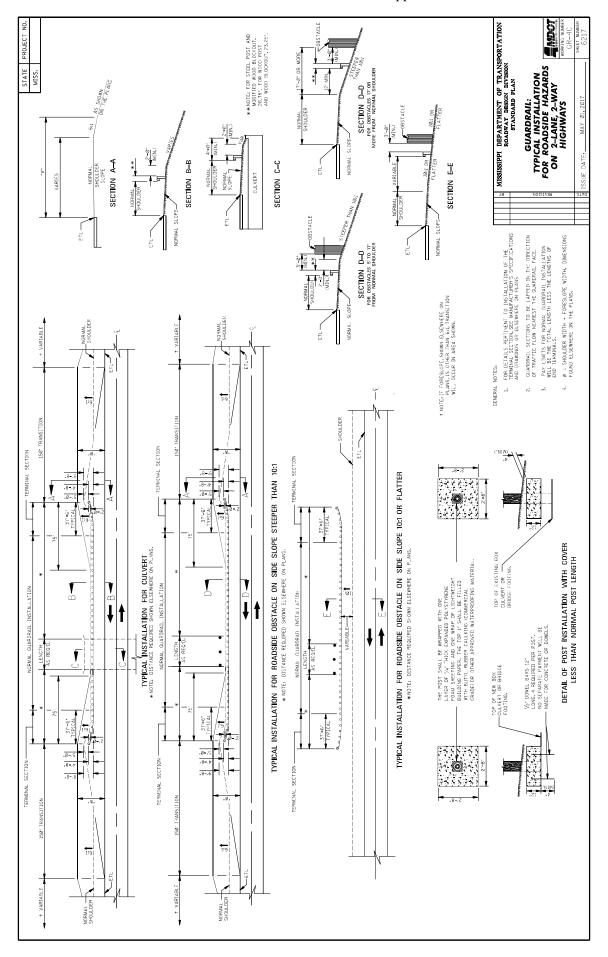


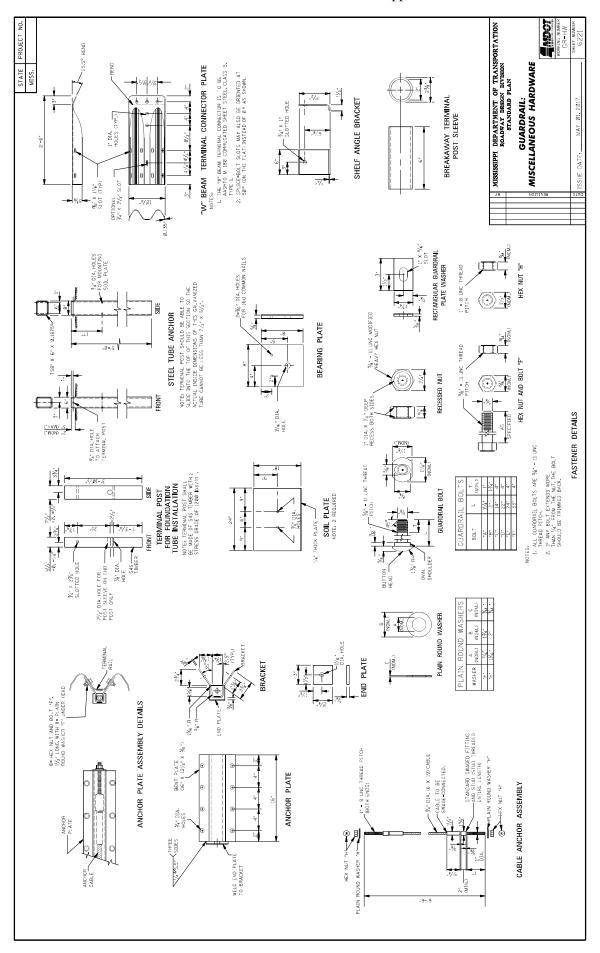


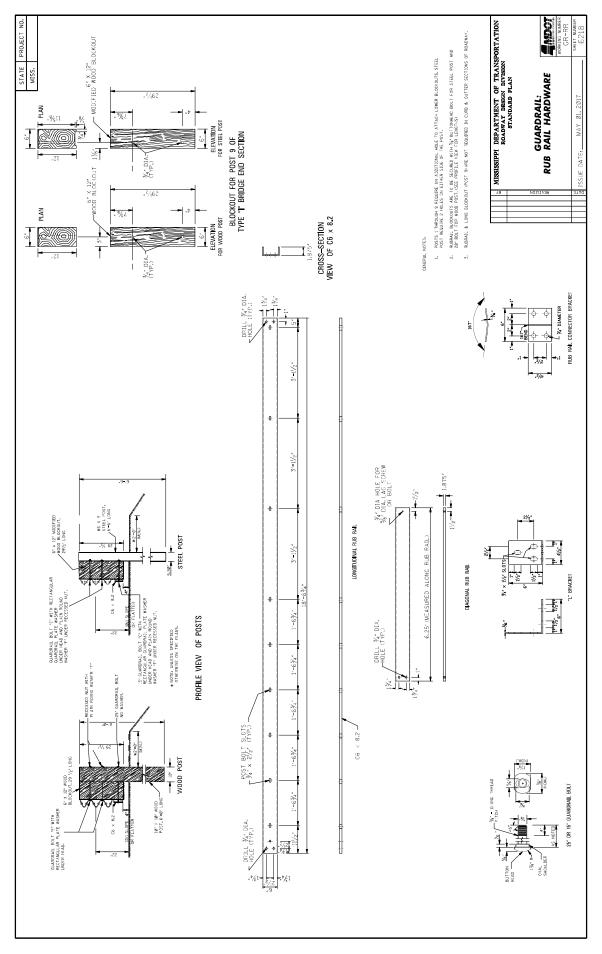


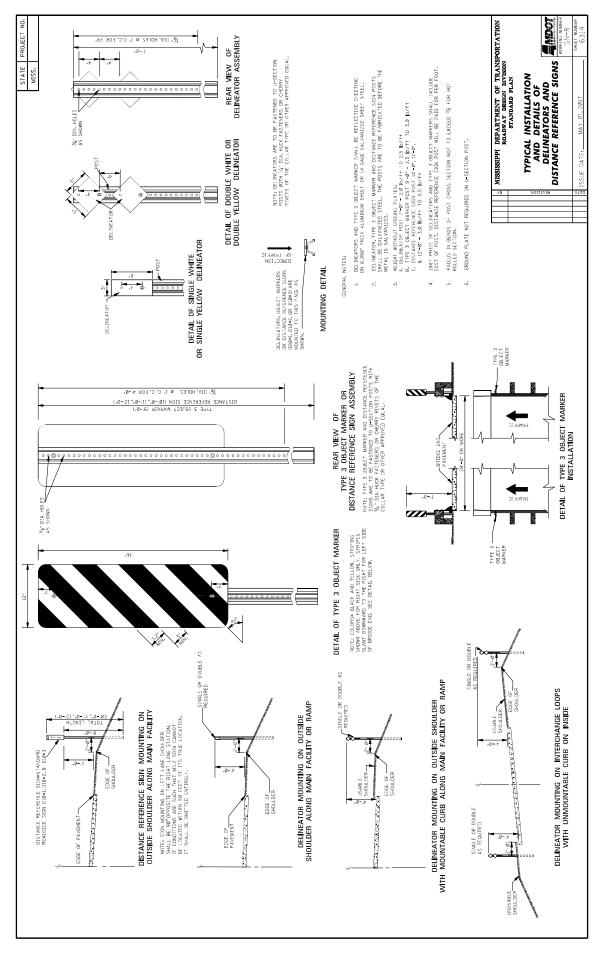












MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 3599 CODE: (SP)

DATE: 08/11/2021

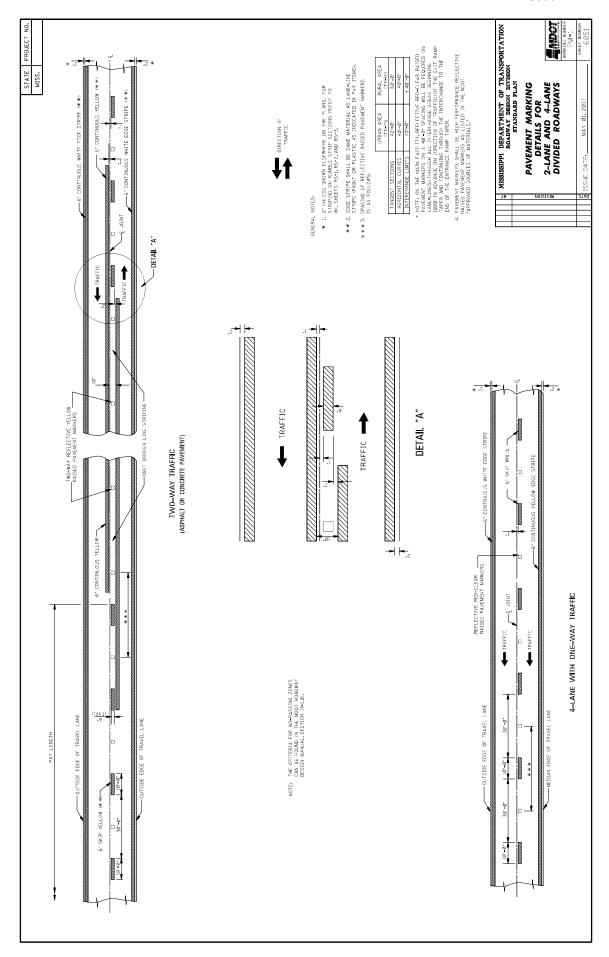
SUBJECT: Standard Drawings

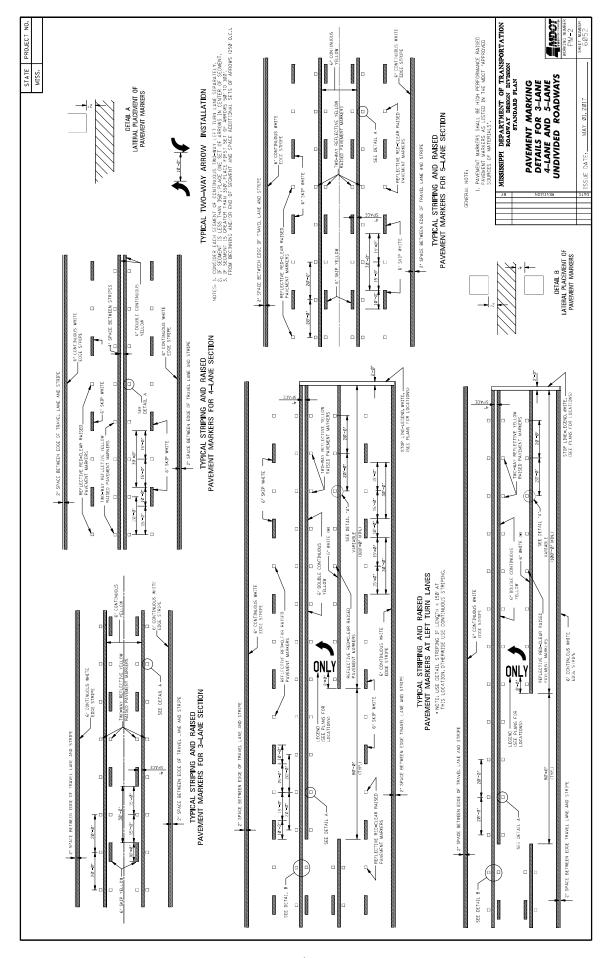
Standard Drawings attached hereto shall govern appropriate items of required work.

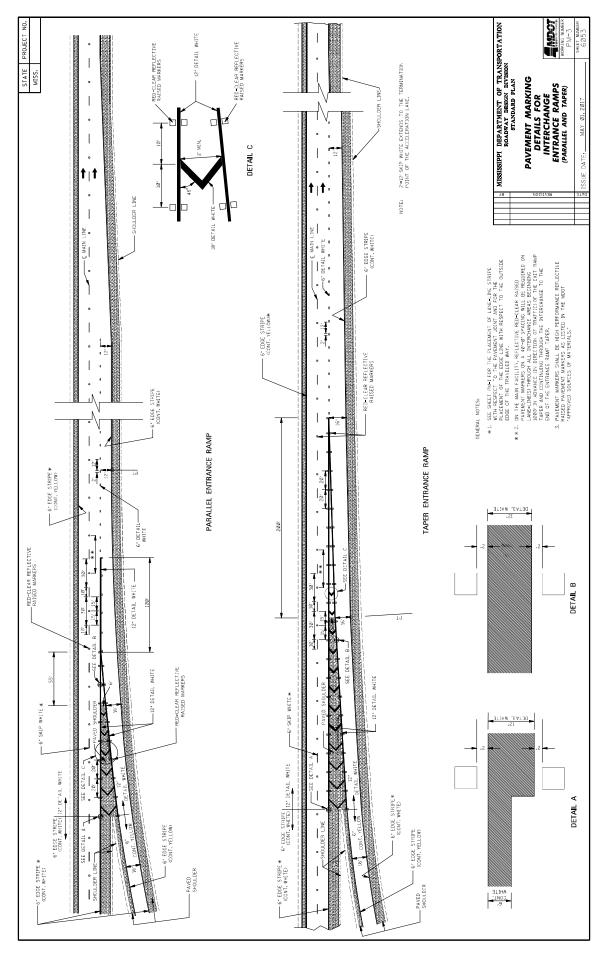
Larger copies of Standard Drawings may be purchased from:

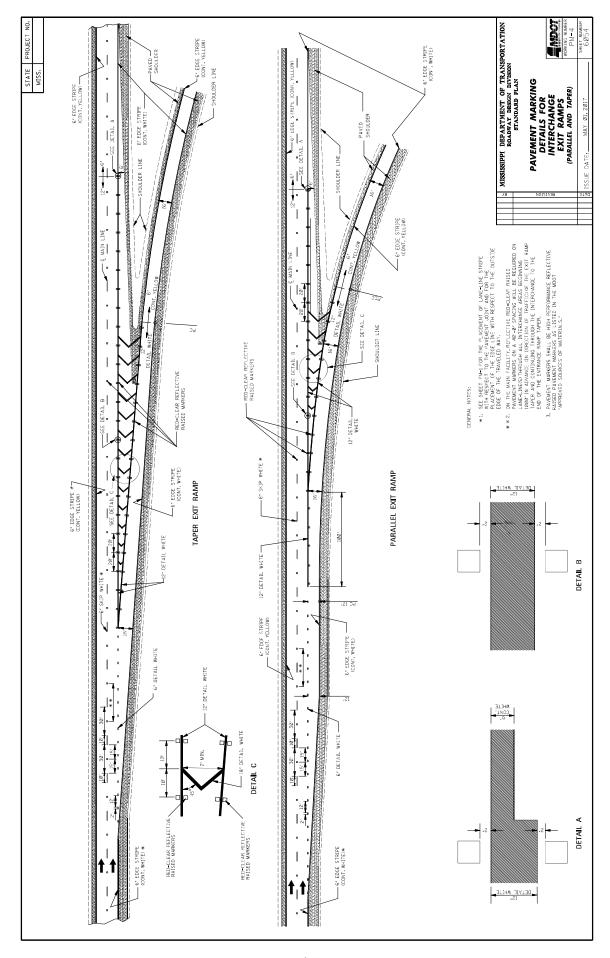
MDOT Plans Print Shop MDOT Shop Complex, Building C, Room 114 2567 North West Street P.O. Box 1850 Jackson, MS 39215-1850 Telephone: (601) 359-7460 or FAX: (601) 359-7461

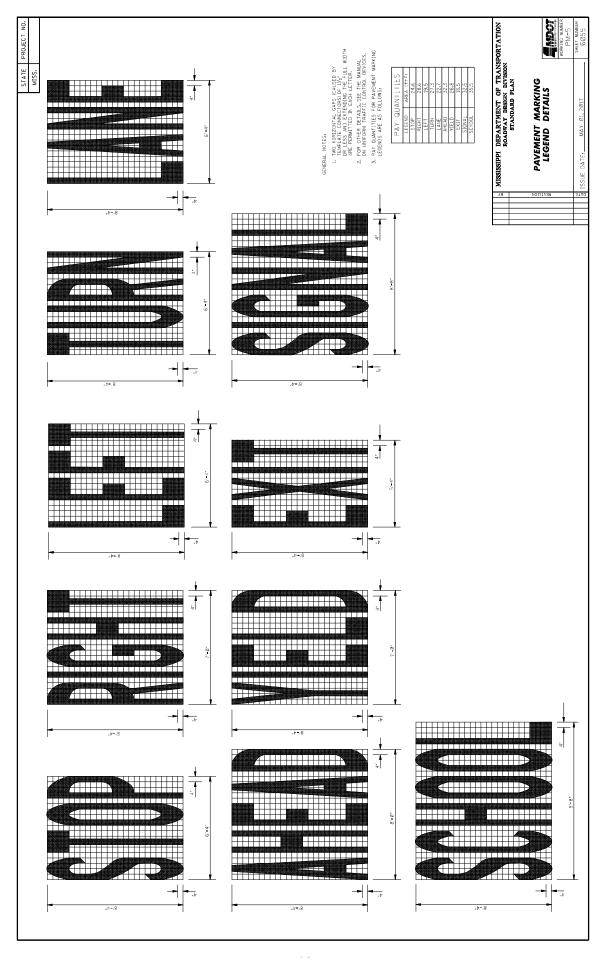
or e-mail: plans@mdot.state.ms.us

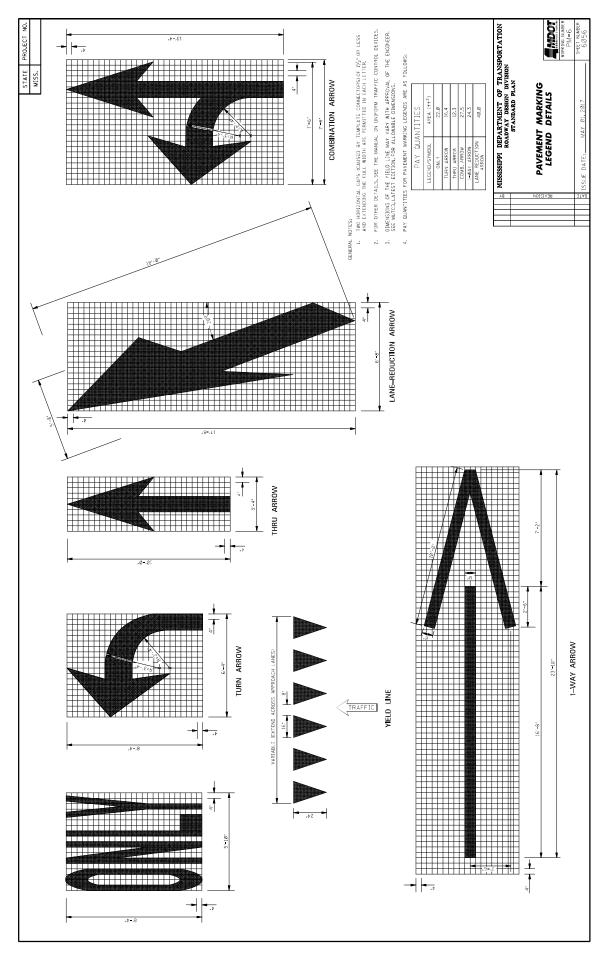


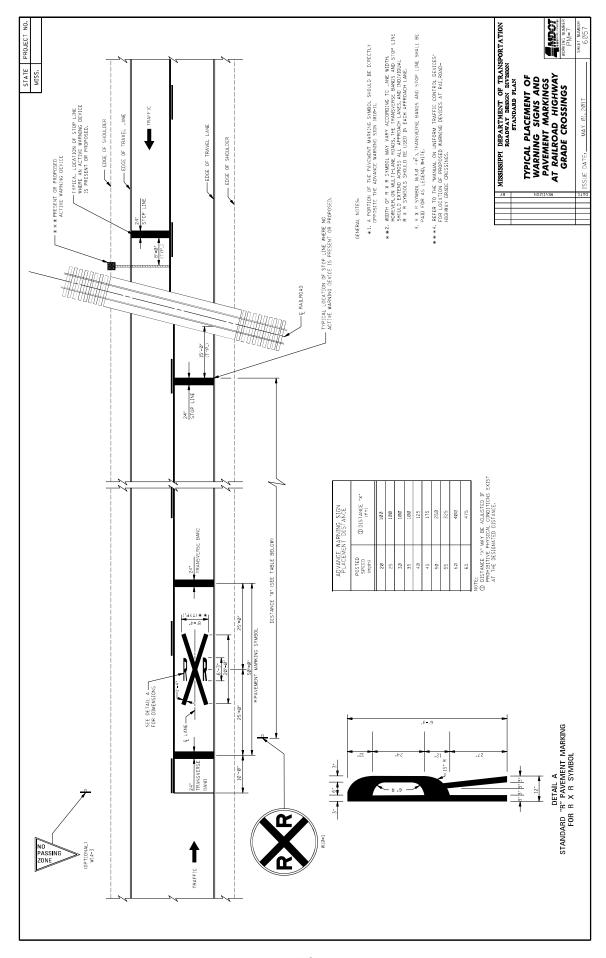


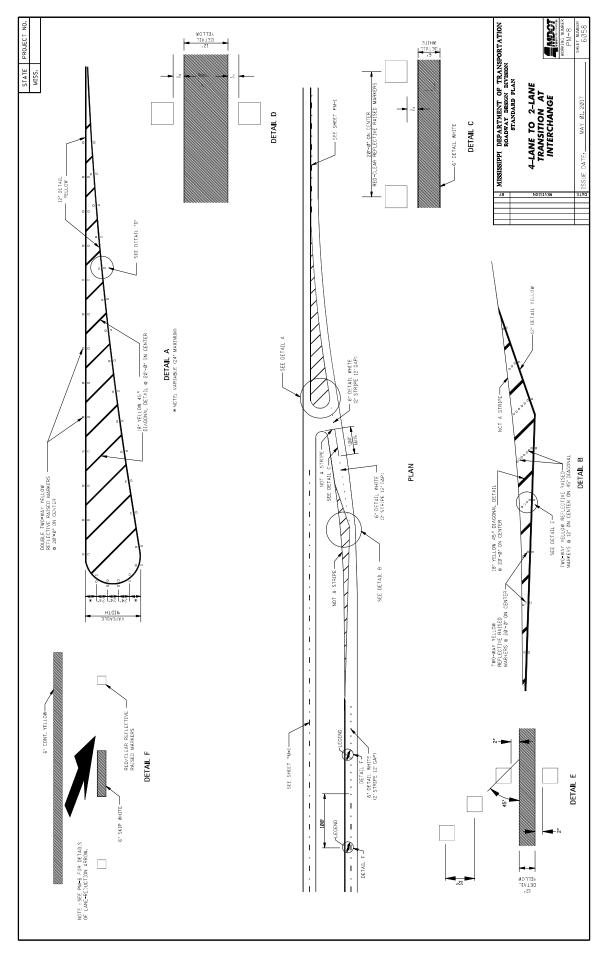


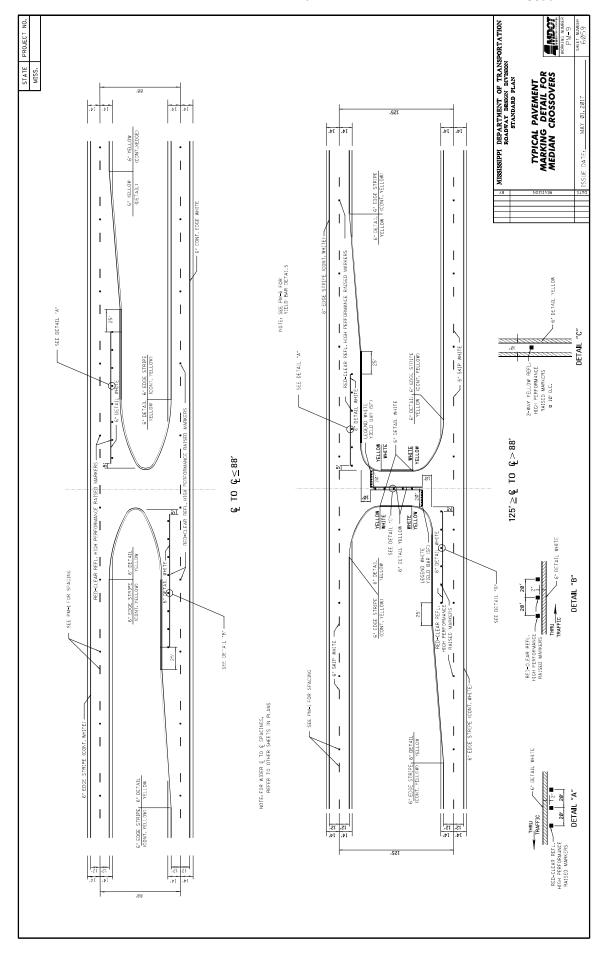


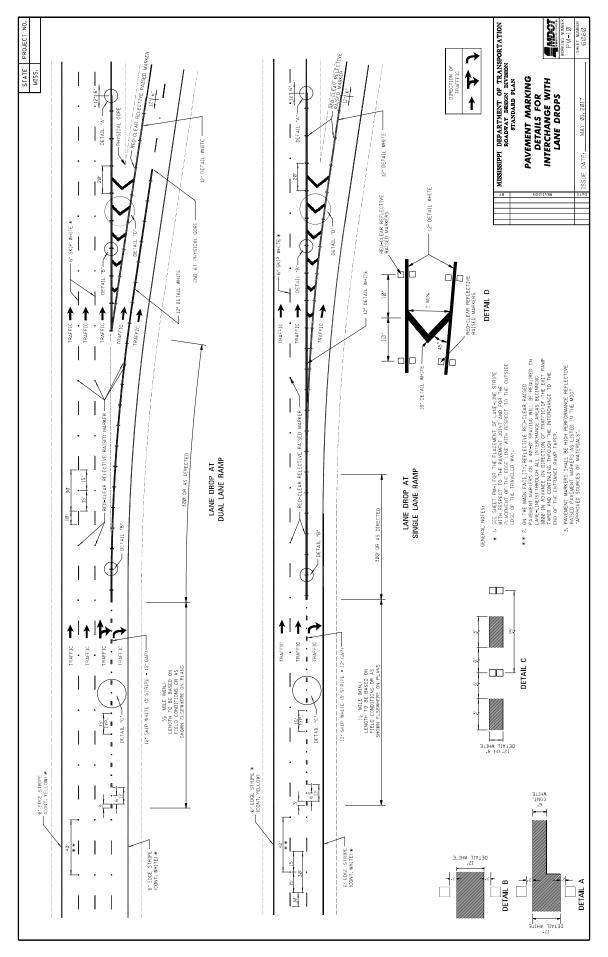


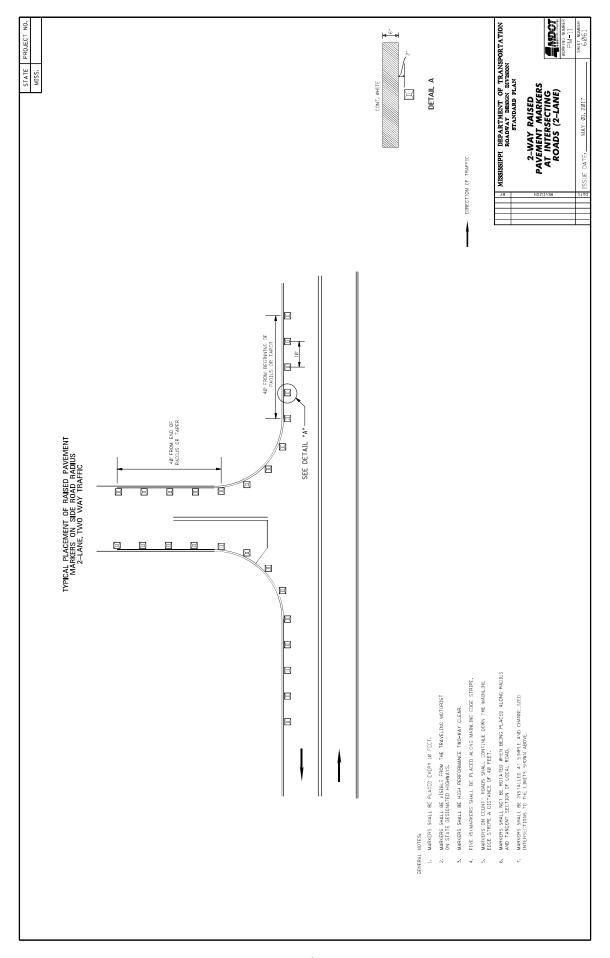


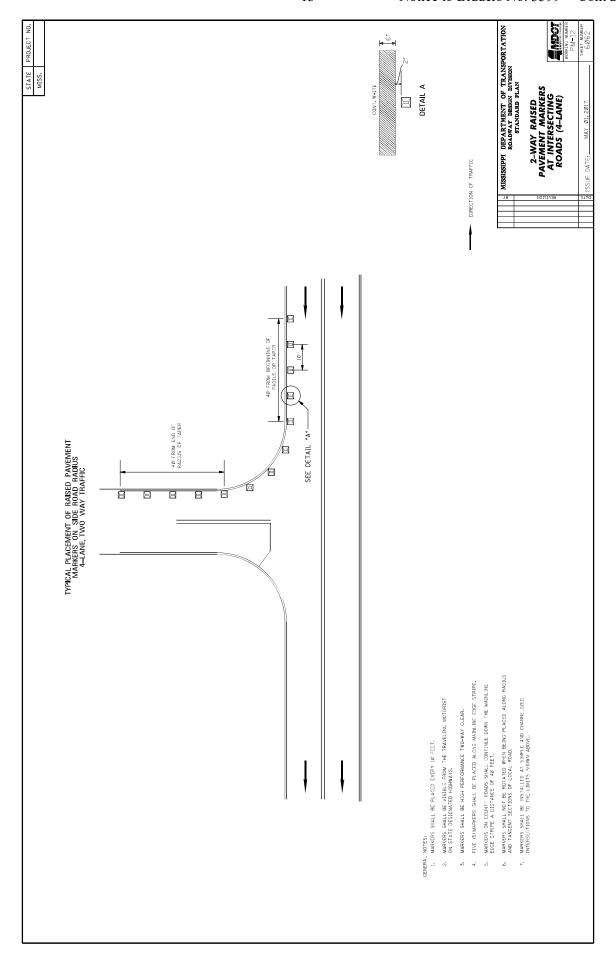


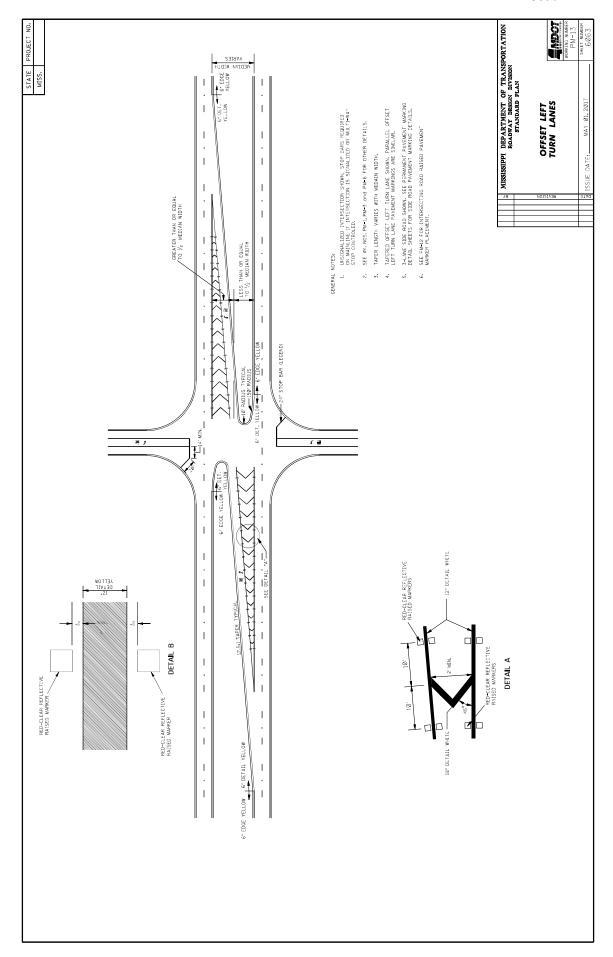


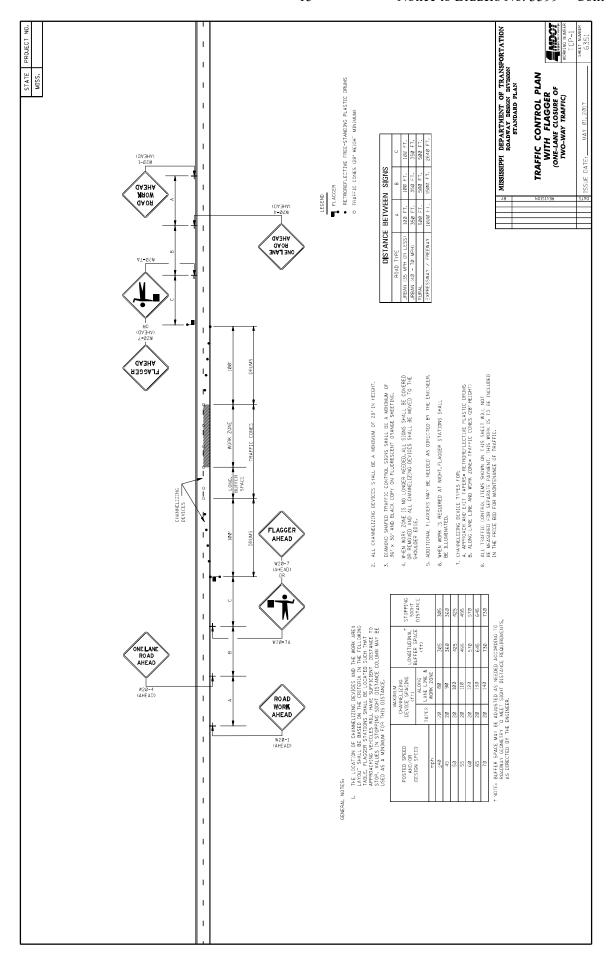


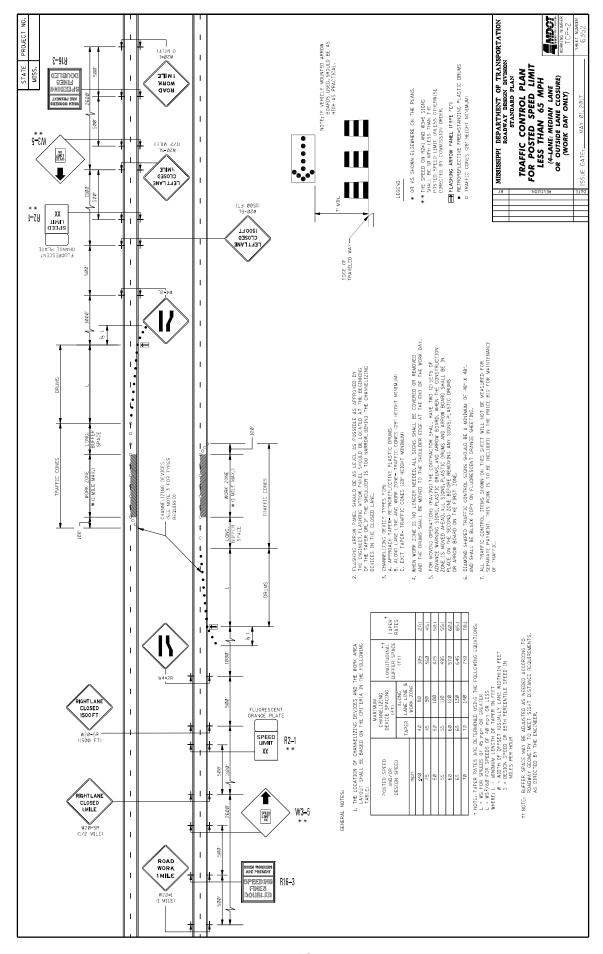


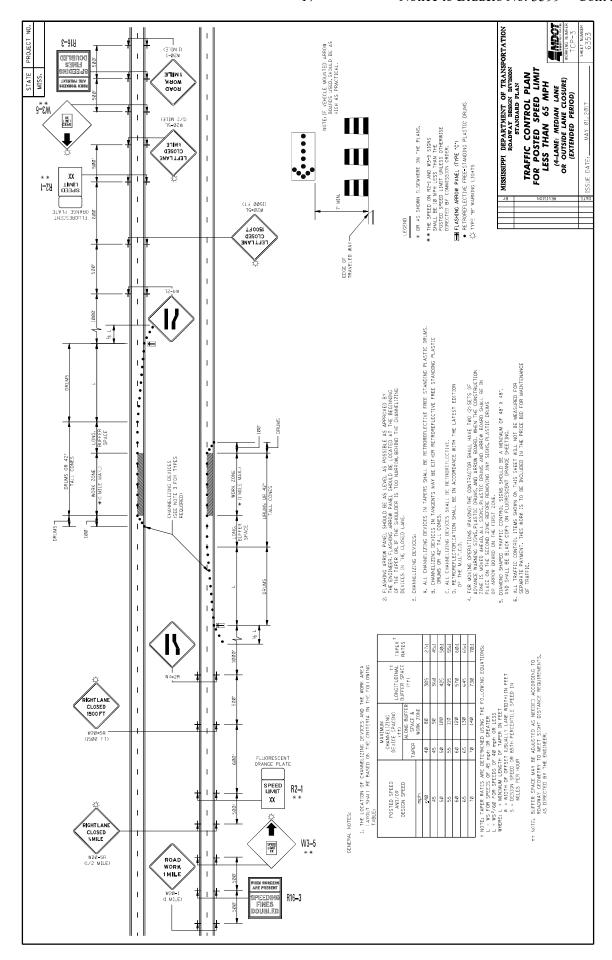


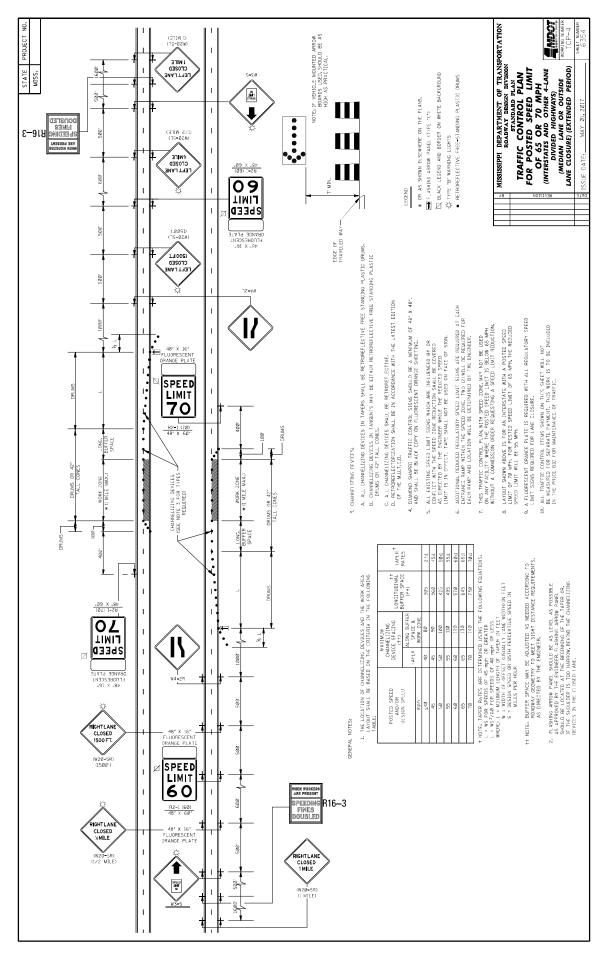


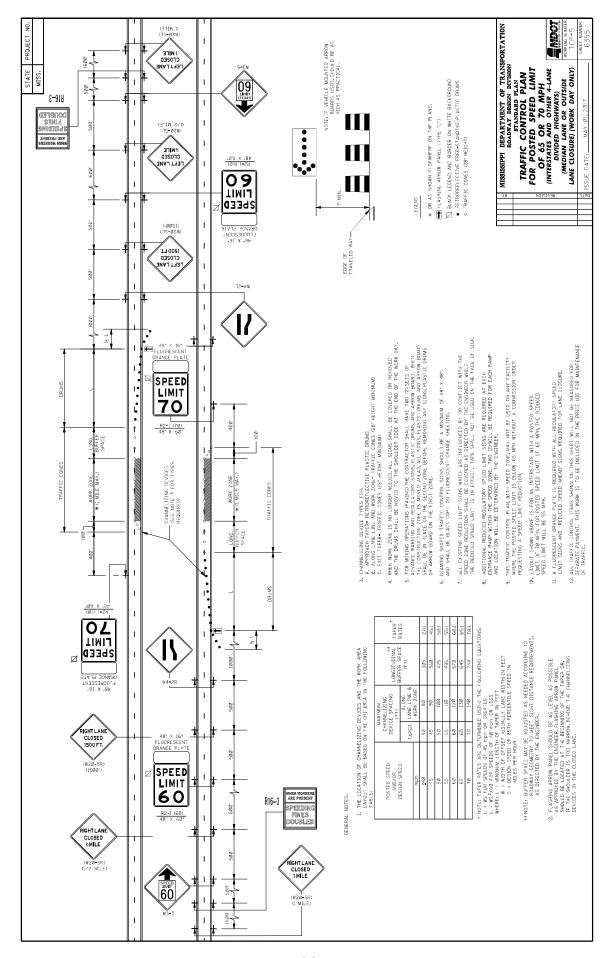


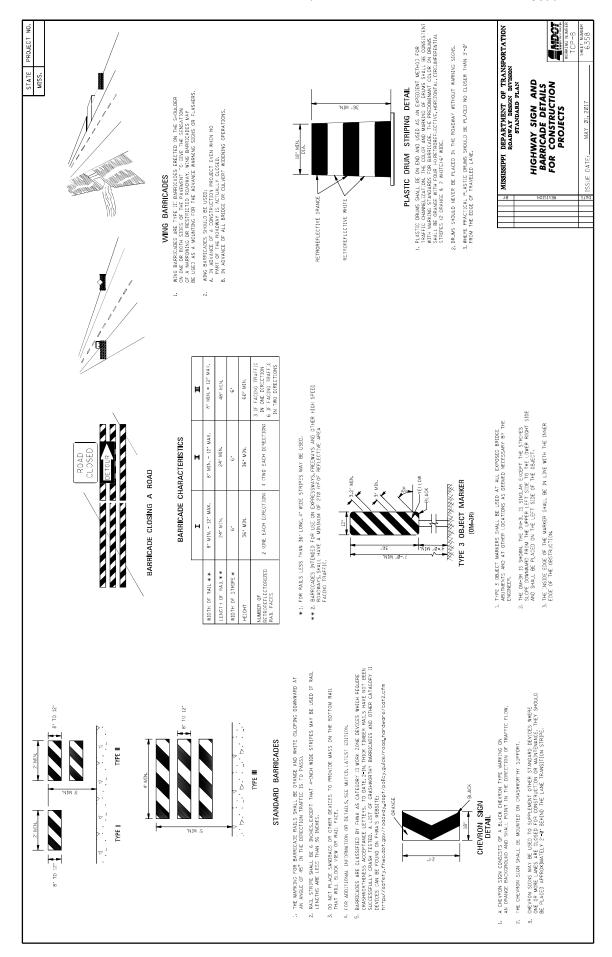


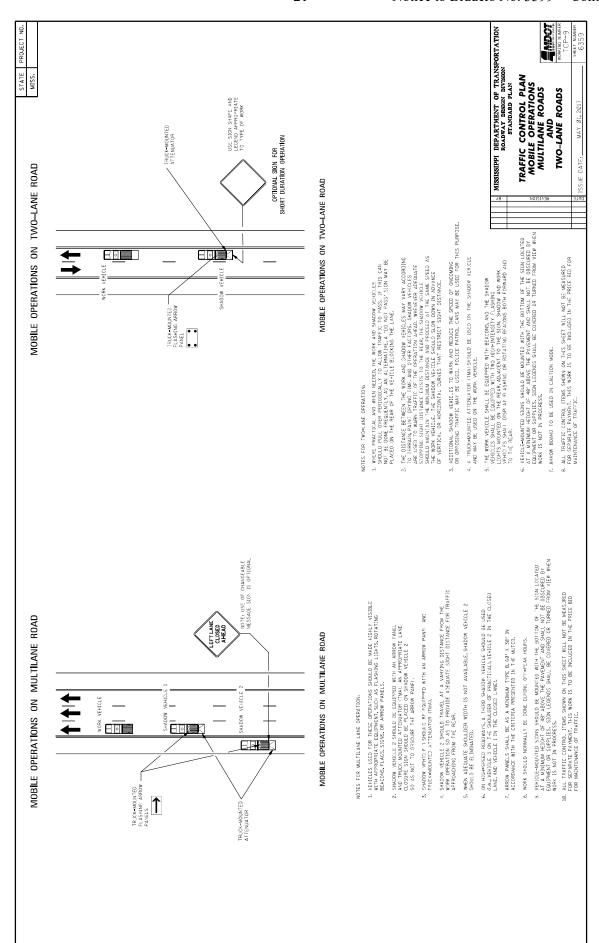


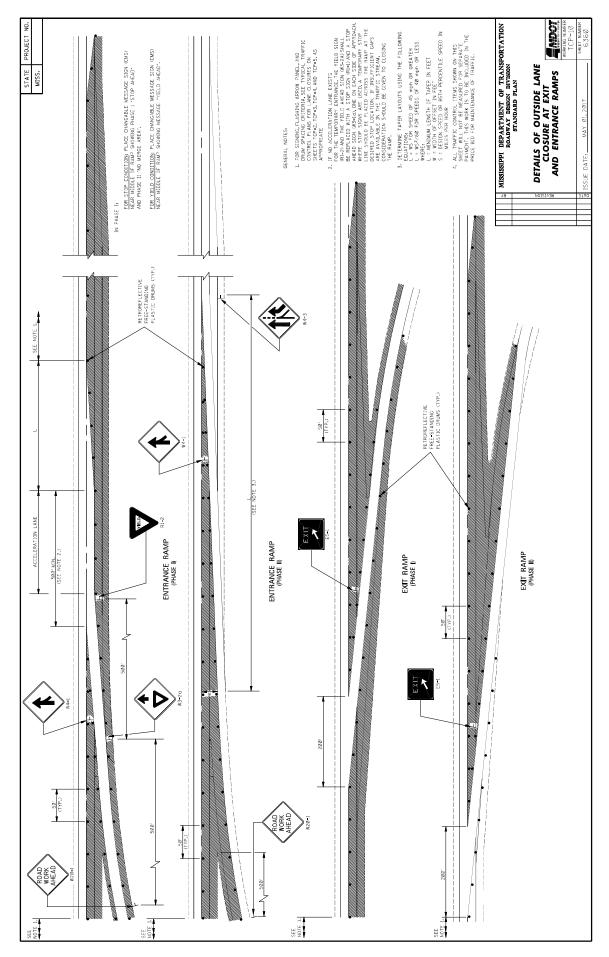


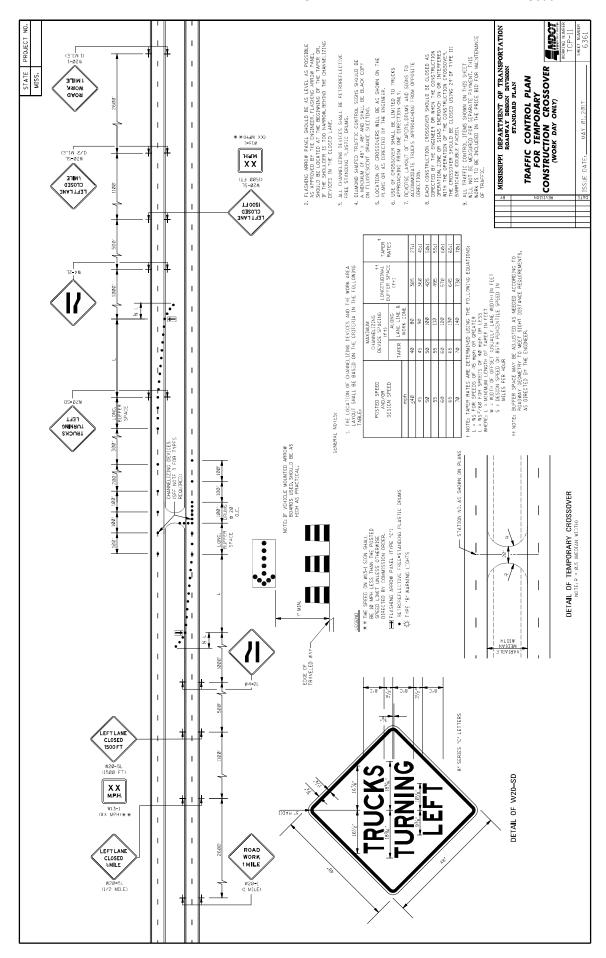


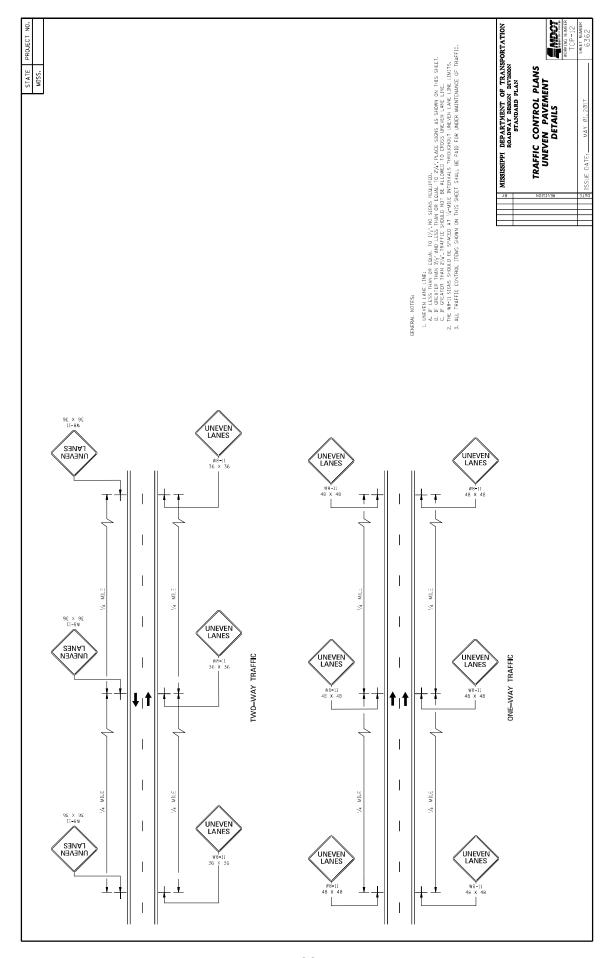


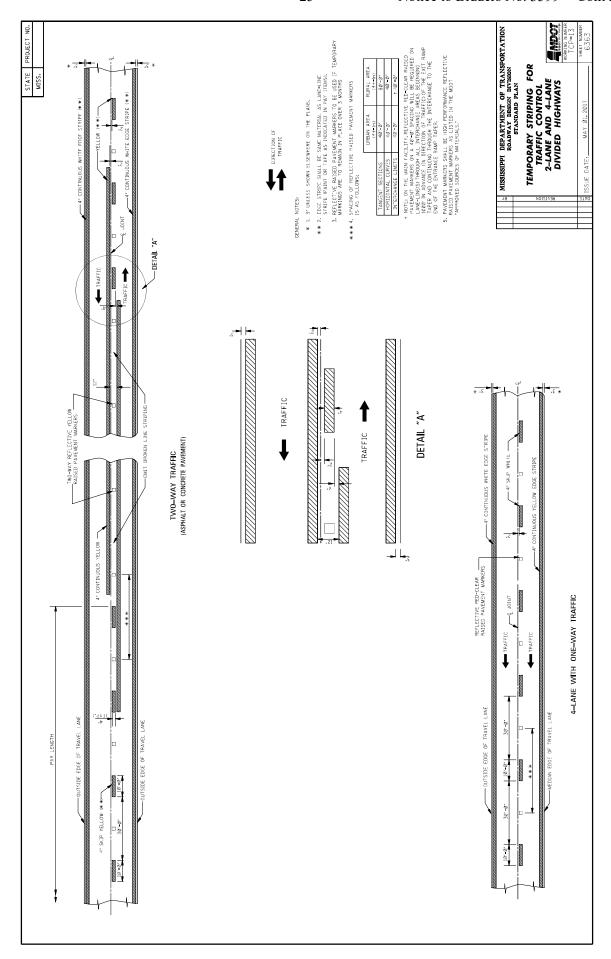


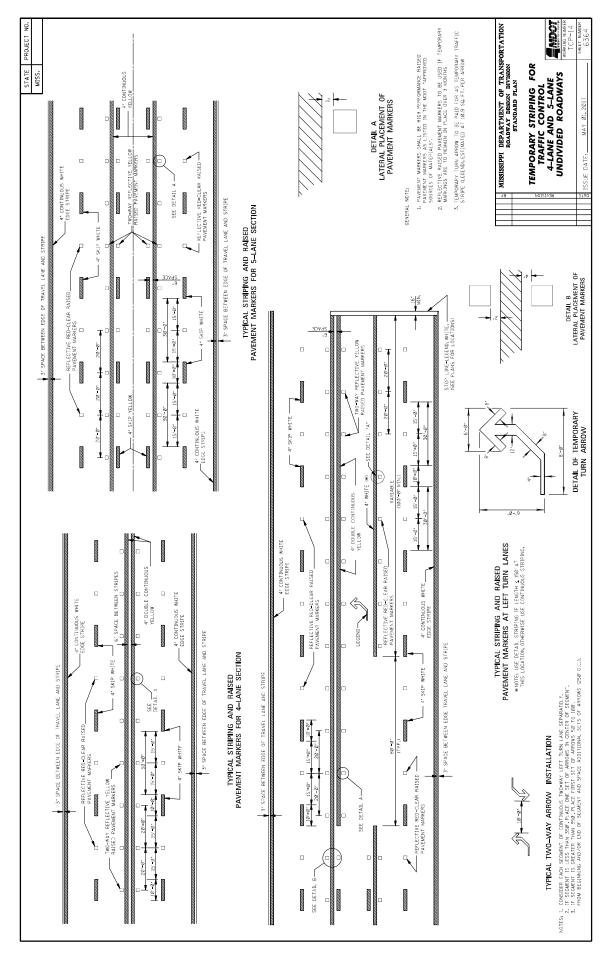


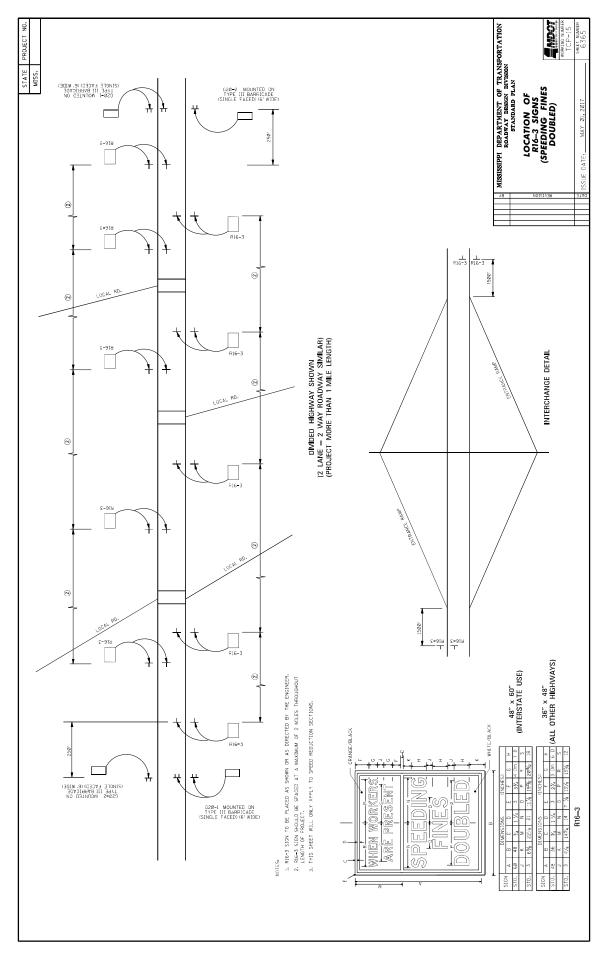


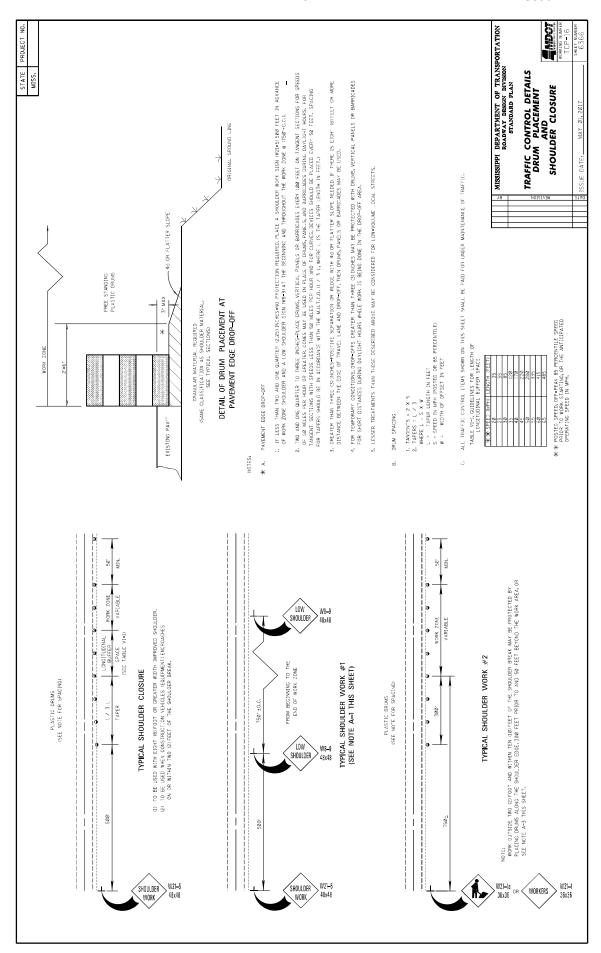


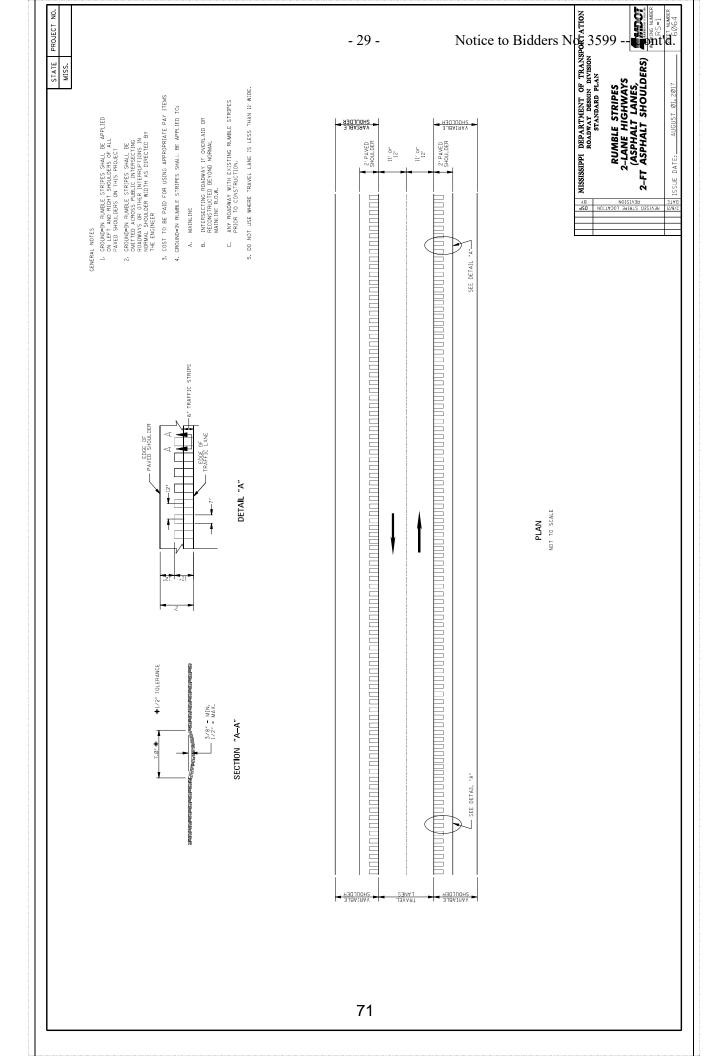


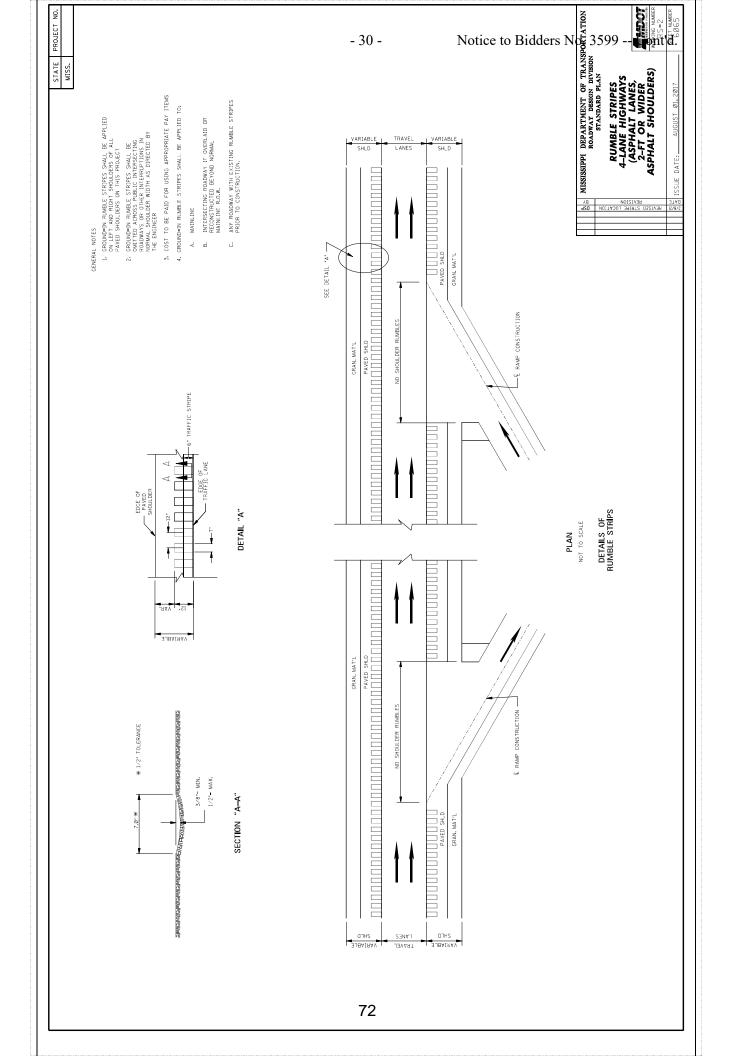


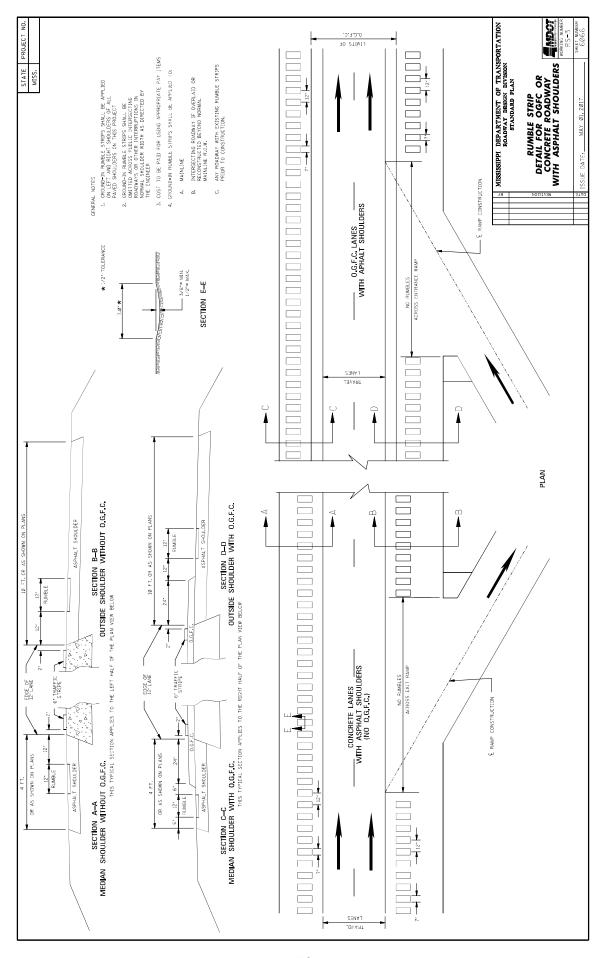












SECTION 904 - NOTICE TO BIDDERS NO. 3676 CODE: (SP)

DATE: 09/21/2021

SUBJECT: Asphalt Gyratory Compactor Internal Angle Calibration

Bidders are advised that by March 1, 2022, all asphalt gyratory compactors shall be calibrated to an internal angle of $1.16^{\circ} \pm 0.02^{\circ}$. This requirement will be reflected in updates made to MT-78, MT-80, and MT-83. This calibration requirement also extends to all QC/QA testing.

SECTION 904 - NOTICE TO BIDDERS NO. 4702 CODE: (SP)

DATE: 11/22/2022

SUBJECT: App for Traffic Control Reports

Bidders are advised that the Department has created a smart phone App for completing and submitting traffic control reports (Form CSD-762) required on this project. The Contractor who monitors traffic control activities and completes traffic control reports will be required to download and use this App when completing and submitting traffic control reports. The reports will then be readily available to all persons who need access to the forms. The App is free and is available for downloading at the following location.

https://extacctmgmt.mdot.state.ms.us/

SECTION 904 - NOTICE TO BIDDERS NO. 5551

CODE: (IS)

DATE: 12/06/2023

SUBJECT: Federal Bridge Formula

Bidders are hereby advised that the latest revision of Federal Highway Administration Publication No. FHWA-HOP-06-105, **BRIDGE FORMULA WEIGHTS**, dated August 2006, 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

https://ops.fhwa.dot.gov/freight/publications/brdg frm wghts/

SECTION 904 - NOTICE TO BIDDERS NO. 5750 CODE: (SP)

DATE: 03/19/2024

SUBJECT: Manual on Uniform Traffic Control Devices (MUTCD)

Bidders are advised that any reference to the current edition of the MUTCD or the latest edition of the MUTCD within plans, proposal, or standard specifications means the <u>2009 Edition and the 3 Revisions thereto</u>.

SECTION 904 - NOTICE TO BIDDERS NO. 5838 CODE: (SP)

DATE: 04/16/2024

SUBJECT: Contract Time

PROJECT: MP-5145-38(001) / 308841301 – Lauderdale 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 working days are assessed, or any extension thereto as provided in Subsection 108.06. It is anticipated that the Notice of Award, will be issued no later than <u>June 11</u>, <u>2024</u> and the date for Notice to Proceed / Beginning of Contract Time will be <u>July 11</u>, <u>2024</u>

Should the Contractor request a Notice to Proceed earlier than <u>July 11, 2024</u> and it is agreeable with the Department for an early Notice to Proceed, the requested date will become the new Notice to Proceed date. Regardless of whether or not an early Notice to Proceed is granted, contract time will start at the original Notice to Proceed date.

All requests for an early Notice to Proceed shall be sent to the Project Engineer who will forward it to the Contract Administration Division.

185 Working Days have been allowed for the completion of work on this project.

SECTION 904 – NOTICE TO BIDDERS NO. 5839 CODE: (SP)

DATE: 04/16/2024

SUBJECT: Scope of Work

PROJECT: MP-5145-38(001) / 308841301 -- Lauderdale County

The contract documents do not include an official set of construction plans, but may, by reference, include some Standard Drawings or Special Design Drawings.

Work on the project shall consist of spot milling/inlaying, scrub sealing, and fog sealing approximately 5.2 miles of SR 145 from the Clarke/Lauderdale County Line (BOP Station 0+00) to just South of the US 45 interchange at Station (274+00), and milling and overlaying approximately 4.4 miles of SR 145 beginning just South of US 45 at Station (274+00) to Station 506+68.

From the BOP at Station 0+00 to South of US 45 interchange at Station 274+00

The existing asphalt roadway shall be rehabilitated using the following sequence of operations. Failed areas shall be repaired full depth using 12.5-mm, ST, Leveling asphalt. The deteriorated sections of roadway shall be spot milled/inlayed by fine milling 1½" and inlaying using 12.5-mm, ST, asphalt. A scrub seal shall then be placed on the mainline pavement. After the scrub sealing, the roadway shall be overlaid with a fog seal. The fog seal placement shall be in accordance with Special Provision No. 907-414.

The failed area locations and the spot milled/inlayed locations shall have a fog seal applied to prevent the absorption of emulsions applied during the scrub seal. The fog seal placement shall be in accordance with Special Provision No. 907-414. The fog seal shall contain no rejuvenators. Tables showing these locations are shown below.

The polymer modified asphalt rejuvenating scrub seal shall be placed from pavement edge to pavement edge from BOP (0+00) to (274+00), as per Special Provision No. 907-414 and the attached typical section. Prior to placing the scrub seal, the cracks in the roadway shall be cleaned using compressed air, or a comparable method, to remove any excess material. The existing thermoplastic pavement markings shall be removed prior to the scrub seal and the method of removal shall be approved by the Engineer and shall be absorbed in other items. The thermoplastic pavement markings shall only be removed in the areas of the daily anticipated run for the scrub seal. If the Contractor elects to remove the entirety of the thermoplastic pavement markings contained in the project limits, then temporary pavement markings shall be required, and the cost shall be absorbed in other items. The scrub seal will not be applied to county roads, or driveway pads. Scrub seal will be paid by the square yard of pavement surface to which it is applied under pay item No. 907-414-A001 and the bid price shall include all labor, materials, equipment, temporary markers, vegetation removal, thermoplastic removal, cleaning of the pavement surface, pre-sweeping, post-sweeping, removing excess aggregate, doing all the work involved in mixing,

applying, and protecting the polymer modified asphalt rejuvenating scrub seal, and all incidentals necessary to complete the work. Prior to any sealing operation, the rectangular "Loose Rock" signs addressed in Special Provision No. 907-414 shall be installed and remain in place until all sealing operations are complete, or until directed by the Engineer. The "Loose Rock" signs shall be installed throughout the project limits in both directions at one (1) mile spacing beginning at the BOP and EOP as required. Pay for signs shown in the sign detail drawings shall be made under pay item 618-A: Maintenance of Traffic. The scrub seal shall stop 150 feet from bridge ends.

Prior to the scrub seal, intersecting streets/county roads shall be milled 2" and inlayed with 2" of 12.5-mm, ST, asphalt (see attached table of locations/quantities).

From south of US 45 interchange at station 274+00 to north of US 45 at station 333+00

The existing asphalt pavement shall be milled a depth of 2" and inlaid with 2" of 12.5-mm, ST, Asphalt. Any drop-offs or drainage issues caused during milling and paving operations shall be corrected by the Contractor. Traffic will be allowed to run on mainline milled surfaces no more than five (5) consecutive days.

Prior to placement of the asphalt, the shoulders are to be bladed to provide a suitable area for paving, the cost of which is to be included in the price bid for other items. Any material bladed from the existing shoulder shall be used to raise the existing shoulder to match the new pavement elevation, and any surplus material shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas daily as directed by the Engineer and will be an absorbed item.

Intersecting streets and driveway pads shall be milled 2" and inlaid with 2" of 12.5-mm, ST, asphalt (see attached table for locations/quantities).

From north of US 45 interchange at station 333+00 to end of pavement at station 506+68

The existing asphalt pavement shall be milled a depth of 2" and inlaid with 2" of 12.5-mm, MT, asphalt. Any drop-offs or drainage issues caused during milling and paving operations shall be corrected by the Contractor. Traffic will be allowed to run on mainline milled surfaces no more than five (5) consecutive days.

Prior to placement of the asphalt, the shoulders are to be bladed to provide a suitable area for paving, the cost of which is to be included in the price bid for other items. Any material bladed from the existing shoulder shall be used to raise the existing shoulder to match the new pavement elevation, and any surplus material shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas daily as directed by the Engineer and will be an absorbed item.

Intersecting streets and driveway pads shall be milled 2" and inlaid with 2" of 12.5-mm, MT, asphalt (see attached table for locations/quantities).

Prior to placement of the asphalt, repair any failed areas encountered full depth with 12.5-mm, ST, Leveling asphalt (see attached table for locations/quantities).

- 3 -

At Station 513+10 in the right lane, a concrete pavement repair is required per attached table and detail drawing. Concrete pavement replacement shall be in accordance with Section 503 of the Standard Specifications.

Milling

Milling will not begin until an <u>approved</u> asphalt mix design has been received, nor until such time that, in the opinion of the Engineer, weather conditions have been consistently suitable enough to allow placement of the asphalt pavement after the milling operations.

The reclaimed asphalt pavement (RAP) material removed by the milling operation shall become the property of the Contractor.

Where milling is required, the Contractor shall provide outlets in the existing shoulders at sufficient intervals to prevent pooling or standing water on the milled surface; the cost of which shall be absorbed in other items bid.

Milling and paving operations shall be performed such that a -2% slope from centerline is provided in normal crown roadway sections. Superelevation through curves shall be maintained as it currently exists or improved as directed. Where slope correction is required, correction will be made by milling, paving, or combination thereof as directed by the Engineer. Milling correction: Mill outside edge of pavement to a depth of 1½" on a 2% slope towards the centerline. Paving Correction: Mill to depth of 1½" on existing slope and 2¼" and variable on centerline and 1½" on outside edge. Combination Method: Combination of both methods as directed by the Engineer to achieve the desired slope. In super elevated areas where correct SE exist milling will transition to thickness through curves. Where correct SE does not exist milling will transition at curves to correct SE as directed by the Engineer.

Milling operations shall be performed in accordance with the Contract documents and the Standard Specifications. Variable width and length transitions may be required for ties at ramps, local roads, project limits.

Milling of driveway pads shall be conducted in a manner to prevent gouging or otherwise affecting the roadway pavement structure and slope. Milling of driveway pads shall not be done in simultaneous path with main line milling.

Traffic will be allowed to travel on the mainline milled surface for five (5) days, and the Contractor will be assessed a penalty of \$5,000 per calendar day afterwards until the mainline milled surface is covered with the next lift of asphalt. Additionally, traffic will be allowed to run on all milled surfaces other than the mainline for 30 days unless otherwise stated, and the Contractor will be assessed a penalty of \$1,000 per calendar day afterwards until the non-mainline milled surface is covered with the next lift of asphalt. The additional allowance for the non-mainline milled surface is for the Contractor's convenience, and thus, the Contractor is responsible for any pavement failures or damage sustained during this period. Milling and paving of paved shoulders shall conform to Subsection 406.03.2 of the Standard Specifications.

Paving

Per Subsection 401.02.3.2, the asphalt mix design shall be submitted to the Engineer at least 10 working days <u>prior</u> to its proposed use.

Prior to mainline milling and paving operations, failed areas in the existing pavement shall be removed and backfilled with 12.5-mm, ST, Leveling asphalt as per the attached typical sections and details. Asphalt shall be placed in multiple lifts with a maximum lift thickness of 3". Any base or subgrade material deemed unsuitable by the Engineer shall be removed as directed and backfilled with 12.5-mm, ST, Leveling asphalt. Payment for the excavation of the granular base and subgrade will be made using pay item 203-G: Excess Excavation, LVM, AH. A list of the failed areas is shown in the attached tables. Pavement repairs shall be completed as a continuous operation to minimize traffic impacts. Lane closures shall remain in place until the failed area has been completely repaired. Lane closures may not be left unattended except as allowed by the Engineer.

Work shall be conducted and coordinated in a manner to prevent a longitudinal joint of more than 2½" where traffic is expected to cross. Adjacent lanes and shoulders shall be brought up to grade as required to prevent drop-offs and as specified in Subsection 618.03.3. Uneven Lanes signs shall be used as required and as shown on the Standard Drawings.

Prior to mainline paving operations and after the repair of failed areas, spot milling shall be performed in the areas listed in the attached tables and at other areas as directed by the Engineer. Spot milling at a depth of $1\frac{1}{2}$ " and overlaying of $1\frac{1}{2}$ " shall be performed in the areas to remove cracked/oxidized asphalt. Payment for milling and paving will be made using the appropriate pay items. "Uneven Lanes" signs shall be used as required and as shown on the Standard Drawings.

The surface lift for failed area repair or concrete punchout repair shall have a maximum deviation of 3/8" as determined by a 10-foot straight edge. Any location that deviates more than this tolerance, as determined by the Engineer, shall be corrected at no additional cost to the State.

Publicly maintained roads and streets shall be paved to the existing right-of-way and in accordance with the attached drawings.

Privately owned entrances shall be paved to the shoulder line per the included typical drawing unless otherwise directed. Pad dimensions shall match the existing lengths and widths unless otherwise directed. Pads shall be shaped horizontally and vertically to prevent excessive dropoffs. Any new driveway pads deemed necessary by the Engineer shall be placed according to specifications.

If traditional excavation methods are used, the removal area shall first be saw cut full depth including concrete, where applicable, to create a neat line and prevent damage to the adjacent pavement structure. Payment for saw cuts will be made using the appropriate items. If milling techniques are used, the area will not require saw cuts, but care should be exercised to create a neat removal line and to prevent damage to the adjacent pavement structure. If saw cuts are used in conjunction with milling, payment will be made using the appropriate pay items. Payment will not be made for saw cuts that are not performed.

Granular Shoulder Material

Where applicable, the existing shoulders shall be raised to match the new pavement elevation by placing variable depth granular, crushed stone material. The shoulders shall be graded and pulled up daily to eliminate drop-offs more than $2\frac{1}{4}$ ". Placement of the granular material on the finished asphalt course shall not be permitted. The existing shoulder shall be scarified to allow incorporation of the new shoulder material. The material shall be bladed, rolled, and compacted to a finished slope of four percent (4%) in normal crown sections. Placement of this material shall be performed to provide a uniform and compacted shoulder with a minimum depth and width of material placed. Shoulders with adequate shoulder material in place shall be bladed to a slope of four percent (4%) in normal crown sections. The cost of blading will be an absorbed item and is to be included in the price of other items bid. Crushed concrete will not be allowed.

Granular material, crushed stone shall be provided around driveway pads as directed to prevent shoulder drop-offs and shall be placed in a timely manner. Drop-offs exceeding 21/4" shall be corrected within two (2) calendar days of the placement of the pad.

Any material excavated from the existing shoulder as a result of shoulder blading shall be used on the existing shoulder to match the new pavement elevation and any surplus material shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas as directed by the Engineer and will be an absorbed item. Material which cannot be suitably placed in adjacent areas and deemed to be excess excavation by the Engineer shall be removed from the project site. Payment for removal of excess material will be made using pay item 203-G: Excess Excavation.

Temporary and Permanent Pavement Markings

Temporary traffic stripes will be required immediately after the milling and/or required overlay and prior to opening the area to traffic. Temporary stripe shall be placed in the same location and configuration as the permanent stripe except that it may be offset as required for milling and paving operations. If the temporary stripe is offset, the Contractor shall conduct operations in a manner to ensure the final temporary stripe is placed at the required location of the permanent stripe. If removal of temporary offset stripe is required to achieve the correct location and alignment of permanent stripe, the cost of removal will be absorbed in other items bid. Placing double temporary centerline will not be allowed.

Temporary striping shall conform to finished stripe specifications for alignment, neatness, and straightness.

The use of short strips of traffic tape will not be allowed unless approved by the Engineer.

All permanent striping will be double drop thermoplastic, 90-mil thickness unless otherwise specified in Subsection 626.03.1.2. Edge lines will be placed to accommodate the lane widths shown on the attached applicable typical sections unless prevented by field conditions.

Per Subsection 626.03.1.2, a binder-sealer shall be applied to the concrete pavement or bridge surface prior to the placement of the thermoplastic material and shall be absorbed under the

- 6 -

thermoplastic pay items. The type and amount of binder-sealer used shall adhere to the thermoplastic manufacturer's recommendations.

Rumble strip will be placed throughout the project limits in accordance with the attached details and Standard Drawings.

Permanent raised pavement markers shall be installed on mainline and local public roads after completion of all paving operations. Edge line RPM's shall be installed as per Drawing RPM-1. If the usable space outside of the traffic stripe is insufficient to install the RPM's as per Drawing RPM-1, then the Contractor shall be allowed to install the outside edge of the RPM flush with the inside edge of the traffic stripe.

Payment for edge stripe on local roads shall be made under pay item 626-G: Thermoplastic Double Drop Detail Stripe, White when the length of said stripe is less than 150 feet when measured from the end of the radius. If the measured length is greater than 150 feet, then payment shall be made under pay item 626-B: 6" Thermoplastic Double Drop Traffic Stripe, Continuous White.

Payment for centerline stripe on local roads shall be made under pay item 626-G: Thermoplastic Double Drop Detail Stripe, Yellow when the length of said stripe is less than 150 feet when measured from the stop bar. If the measured length is greater than 150 feet, then payment shall be made under pay item 626-E: thermoplastic Double Drop Traffic Stripe, Continuous Yellow. Centerline Stripe shall be omitted on local roads whose width is less than 20 feet.

Pavement section marking tape on this project shall be located prior to overlaying and placed back in the same location after paving operations have ceased. The section marking shall be 8-inch high performance cold plastic detail stripe and shall be four feet (4') in length. The marking shall be centered across the centerline stripe. The cost of this item shall be absorbed in other items bid.

<u>Guardrail</u>

Guardrails shall be placed at the locations shown on the attached table. Guardrails shall consist of w-beam, terminal end section, posts, and all other appurtenances. All guardrails removed is to be replaced the same day and prior to reopening the adjacent lane of traffic. Voids created by the removal of posts, concrete anchors, footings, etc. shall be backfilled and compacted in accordance with Section 203 of the Standard Specifications.

The asphalt guardrail pad shall be milled and paved up to the face of the guardrail. The remaining asphalt guardrail pad behind the face of the guardrail shall be removed and shall be paid for using the milling pay item. The guardrail pad shall be reconstructed using crushed stone granular material and shall be a minimum of 4" in depth. If blading is required in order to meet the minimum depth, then said blading shall be an absorbed item and the excavated material shall be retained and used to raise the existing shoulder to match the new pavement elevation. Material which cannot be placed and blended in adjacent areas and deemed to be excess excavation by the Engineer shall be removed under pay item 203-G: Excess Excavation. Prior to the placement of the crushed stone, a soil sterilant shall be applied as per Subsection 616.03.2 and Geotextile Stabilization, Type V, Non-Woven installed underneath the limits of the crushed stone. The installed guardrail shall meet all requirements in order to be MASH compliant.

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Guardrail lengths are based flared terminal end lengths of 37.5 feet. If terminal of length other than this is used, an adjustment in w-beam length is required.

All dimensions and spacings shall be verified in the field by the Contractor prior to fabrication.

Traffic Control

The Contractor shall erect and maintain construction signing and provide all signs and traffic control devices necessary to safely maintain traffic around and through the work areas in accordance with the Traffic Control Plan and the MUTCD. The cost shall be included in the price bid for pay item 618-A: Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except those designated in the plans to be black legend and border on white background.

Standard roadside construction signs, barricades, etc. shall be placed in accordance with the attached tables, drawings, and as directed by the Engineer. W20-1 signs shall be placed on all public road approaches as shown or as directed. Payment for standard roadside construction signs, barricades, etc. will be made using the appropriate pay items.

The Contractor shall daily, remove all debris from within the roadway and a 30-foot clear zone which, in the opinion of the Engineer, is a hazard to the traveling public. This activity shall begin with the beginning of work or the beginning of the contract time, whichever comes first. No direct payment will be made for the debris removal; the cost shall be included in the prices of items bid on. Failure of the Contractor to remove the debris as prescribed herein shall be just cause for withholding the monthly progress estimate payment or suspending active operations until the debris is satisfactorily removed by the Contractor.

Temporary asphalt joints (aka paper joints) shall be employed at all locations requiring traffic to traverse an uneven, transverse, pavement joint. Paper joints shall be a minimum of nine feet (9') in length and for the full width of the milled/paved surface. Paper joints shall be adequately maintained.

Potholes that may exist or occur on the existing pavement are to be patched in a timely manner as required. Patching of potholes shall be considered an absorbed item.

Temporary portable rumble strips, as described in Special Provision No. 907-619, shall be used in advance of each lane closure. Direct payment will not be made for this item and shall be considered absorbed under pay item 618-A: Maintenance of Traffic.

Miscellaneous Notes

It shall be the responsibility of the Contractor to protect existing structures such as pipes, inlets, aprons, bridges, etc. from damage which might occur during construction. The Contractor shall replace or repair, as directed by the Engineer, any structures damaged by the Contractor during the life of the contract. No payment will be made for replacement or repair of damaged items.

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Any signs that conflict with construction of this project shall be removed and relocated by the Contractor as directed by the Engineer; the cost of which is to be absorbed in other items bid.

Removal of existing raised pavement markers shall be included in the prices for other items bid.

Incidental work such as removing vegetation, shaping, and compacting shoulders, removing, and resetting signs and/or mailboxes, removing excess asphalt material, project clean-up, and other items of incidental work necessary to complete the project will not be measured for separate payment and will be considered included in the prices of items bid.

Prior to the final inspection, bridges, islands, and areas with curbs shall be swept/cleaned. Care should be taken to prevent milled asphalt, asphalt debris, vegetative/granular debris, etc. from entering drainage structures or clogging other drainage ways. Disposal of material will not be measured for separate payments.

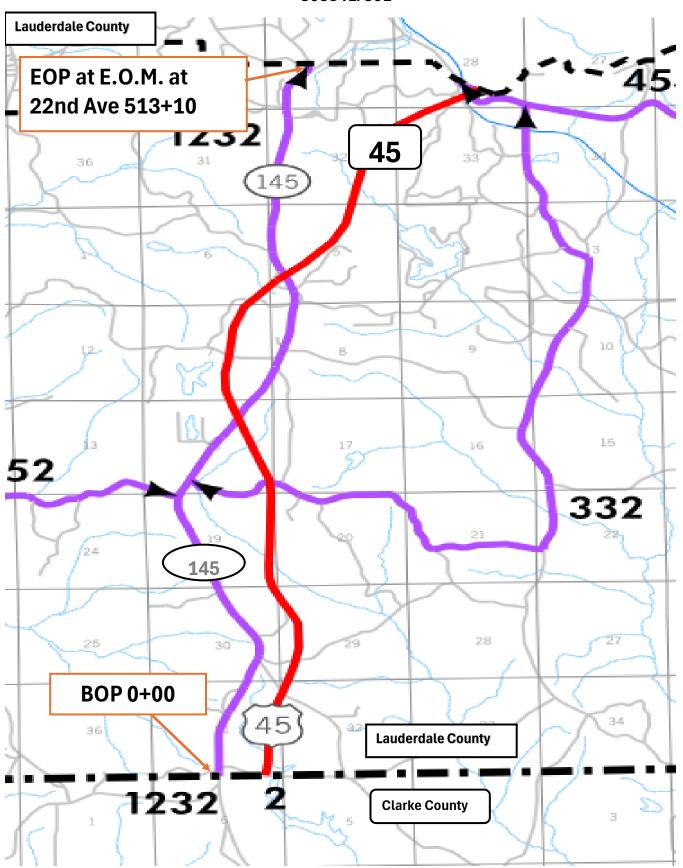
Following the overlaying operation, the transverse joints in the asphalt pavement shall be sawed and sealed within seven (7) days. The details for sawing and sealing transverse joints for this section are in the Standard Specifications. The width of the sawing and sealing operation will be 14' on each side of centerline, unless otherwise directed by the Engineer, to prevent "sympathy cracking." It is the responsibility of the Contractor to locate and mark all existing joints that are to be sawed and sealed prior to the milling operation. The Contractor shall notify the Department when this is to take place so that they can oversee the work and determine the width that each joint will be sawed and sealed.

The cost for removal of all headwalls and wingwalls for drainage structures shall be absorbed in other items bid.

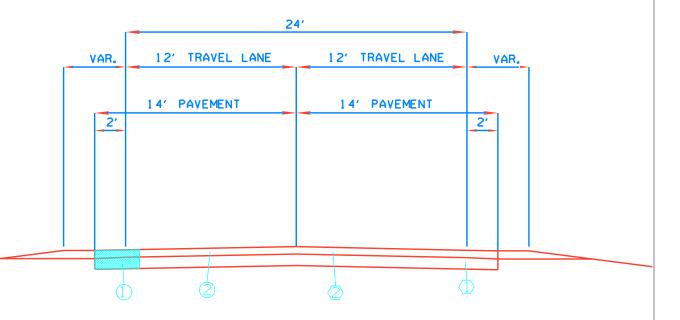
At bridges listed in the "Bridge Locations and Estimated Quantities Table", repair joints shall be performed per Special Provisions 907-823, general epoxy repair per Special Provision 907-824 and repairs needed by Flowable Fill per Section 612-Flowable Fill. All bridges shall be swept and maintained during construction to remove any existing debris plus any debris accumulated from construction activities. The sweeping and cleaning of bridges shall be absorbed in other items bid.

LAUDERDALE COUNTY

SR 145 FROM LAUDERDALE/CLARKE COUNTY LINE TO E.O.M AT 22ND AVENUE 308841/301



30884-10301 Potice to Bridders No. 5839-- Cont'd. LAUDERDALE COUNTY TYPICAL SECTION SR145 OVERLAY 0+00 TO 274+00



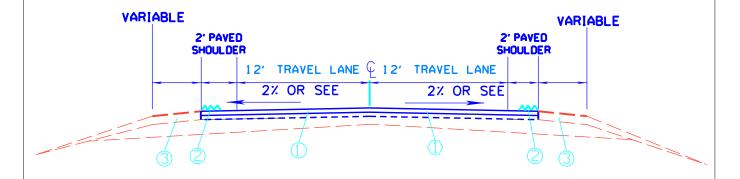
PROPOSED

- 1 REPAIR ANY FAILED JRCP JOINT. SEE TABLE
- (2) SCRUB SEAL ROADWAY WIDTH

EXISTING

- ⟨1⟩ 5" JRCP
- (2) 5"-7" HMA

308841301000 LAUDERDALE COUNTY TYPICAL SECTION SR145 OVERLAY 274+00 TO 333+00 RT AND LT LANES

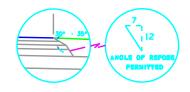


PROPOSED

- ① MILL/OVERLAY TOP 2" OF HMA, WITH 12.5mm ST, 1@2"
- 2 RUMBLE STRIP WHERE REQUIRED
- 3 VARIABLE DEPTH GRANULAR MATERIAL, CRUSHED STONE

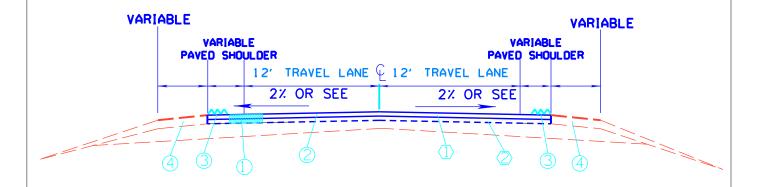
EXISTING

(1) 8.5" HMA AND VARIABLE



SAFETY EDGE REO'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

308841301 Notice to Bidders No. 5839-- Cont'd.
LAUDERDALE COUNTY
TYPICAL SECTION
SR145 OVERLAY
333+00 TO 392+00
ALSO
442+00 TO 474+55

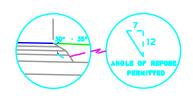


PROPOSED

- (1) REPAIR FAILED AREAS/ FAILED JRCP JOINTS FULL DEPTH W/ 12.5mm ST LEVELING
- 2 MILL/OVERLAY TOP 2" OF HMA, WITH 12.5mm MT, 1@2"
- 3 RUMBLE STRIP WHERE REQUIRED
- (4) GRANULAR MATERIAL, CRUSHED STONE

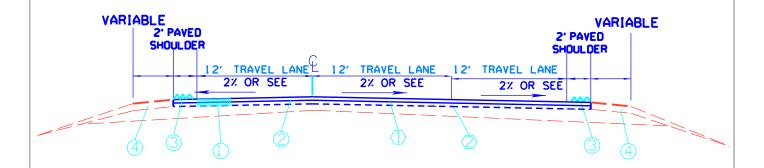
EXISTING

- (1) 5" HMA AND VARIABLE
- (2) 5" JRCP



SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

308841301000 LAUDERDALE COUNTY TYPICAL SECTION SR145 OVERLAY 392+00 TO 442+00

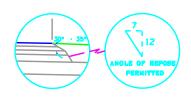


PROPOSED

- (1) REPAIR FAILED AREAS/ FAILED JRCP JOINTS FULL DEPTH W/ 12.5mm ST LEVELING
- 2 MILL/OVERLAY TOP 2" OF HMA, WITH 12.5mm MT, 1@2"
- 3 RUMBLE STRIP WHERE REQUIRED
- (4) GRANULAR MATERIAL, CRUSHED STONE

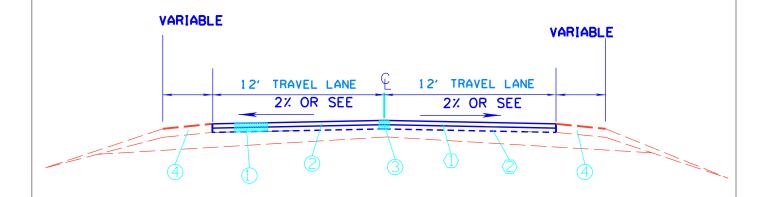
EXISTING

- (T) 5"-8.5" HMA AND VARIABLE
- (2) 5" JRCP



SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

3088413010000 LAUDERDALE COUNTY TYPICAL SECTION SR145 OVERLAY 492+00 TO 506+44 RT AND LT LANES

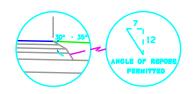


PROPOSED

- ① REPAIR FAILED AREAS/ FAILED JRCP JOINTS FULL DEPTH W/ 12.5mm ST LEVELING
- 2 MILL/OVERLAY TOP 2" OF HMA, WITH 12.5mm MT, 1@2"
- ③ CLEAN AND FILL OPEN/SEPARTED JRCF JOINTS AS PER SCOPE OF WORK
- 4 GRANULAR MATERIAL, CRUSHED STONE

EXISTING

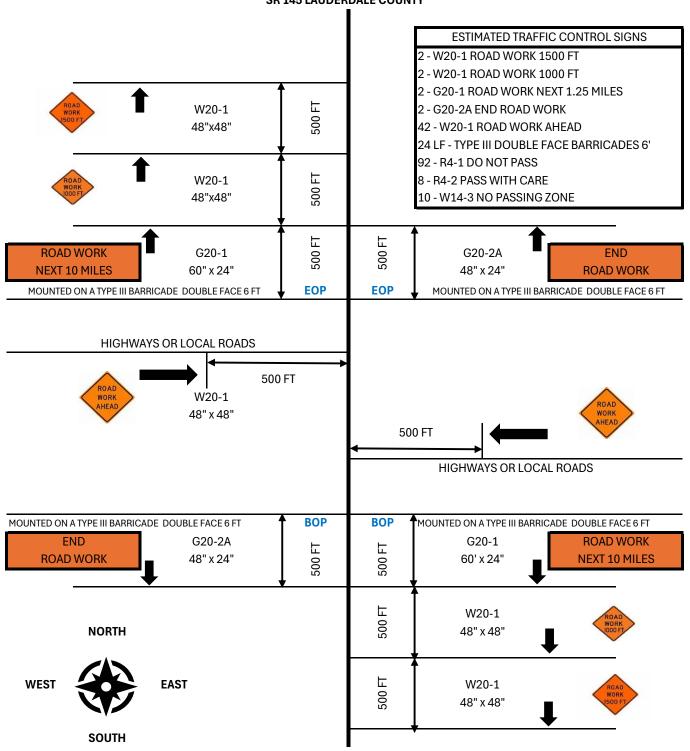
- ⟨1⟩ 4" HMA
- ② 8" JRCP



SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

308841-301

CONSTRUCTION SIGNAGE DETAIL SR 145 LAUDERDALE COUNTY



	NOTES
1.	One W20-1 "Road Work Ahead" sign is required at each Local Road, Street or Highway entering the project.
2.	G20-1 & G20-2A signs are mounted on Type III Double Faced Barricade.
3.	R4-1 "Do Not Pass", R4-2 "Pass With Care", and W14-3 "No Passing Zone" signs are required in accordance with Subsection 618.03.3 and as specified in the MUTCD. If No Passing Zones are 1000 ft or more install additional "Do Not Pass" signs on maximum spacing of 750 ft.
4.	Placement of W20-1 signs on intersecting roads may vary from typical shown as conditions warrant.

Bridge Locations and Estimated Quantities

				Joint Repair	Joint Repair Without Epoxy		Saw Cut		Pre	Preformed Joint Seal	int Seal
County	Route	Mile	Existing Joint Type	41	I.F	Type I (LF)	Type II (LF)	Type II >2.5" to (LF) 3.5" (LF)	Type I (LF)	Tpe II (LF)	> 2.5" to 3.5" (LF)
Lauderdale	SR 145	66.3	SILICONE	C	ü	0	110	0	0	22	0
Lauderdale	SR 145	6.3	OPEN	Þ	n n	0	0	0	0	0	0
		Total =		0	25	0	110	0	0	55	0
					NOTES/REMARKS						
* Joint type	s represe	ent measu	* Joint types represent measurements made before letting of project.	letting of proj	ect.						
* Bridge 66	.3 Flowal	ble Fill for	voids on NW and SE s	lope paving (61	* Bridge 66.3 Flowable Fill for voids on NW and SE slope paving (612-A001 Flowable Fill CY) = 6 cy	γ,					

Bridge 68.0A&B Has 2' void between bridges along south abutment (612-A001 Flowable Fill CY) = 2 cy

* Bridge 66.3 replace pourable joint seal at Bent-1 using (907-808-003 Joint Repair Without Epoxy), (907-823-A002 Preformed Joint Seal, Type II) and

* General Epoxy Repair at bridge rail on east side of span 2 using (907-824-A003 General Epoxy Repair SF) = 2 SF (907-823-B002 Saw Cut, Type II)

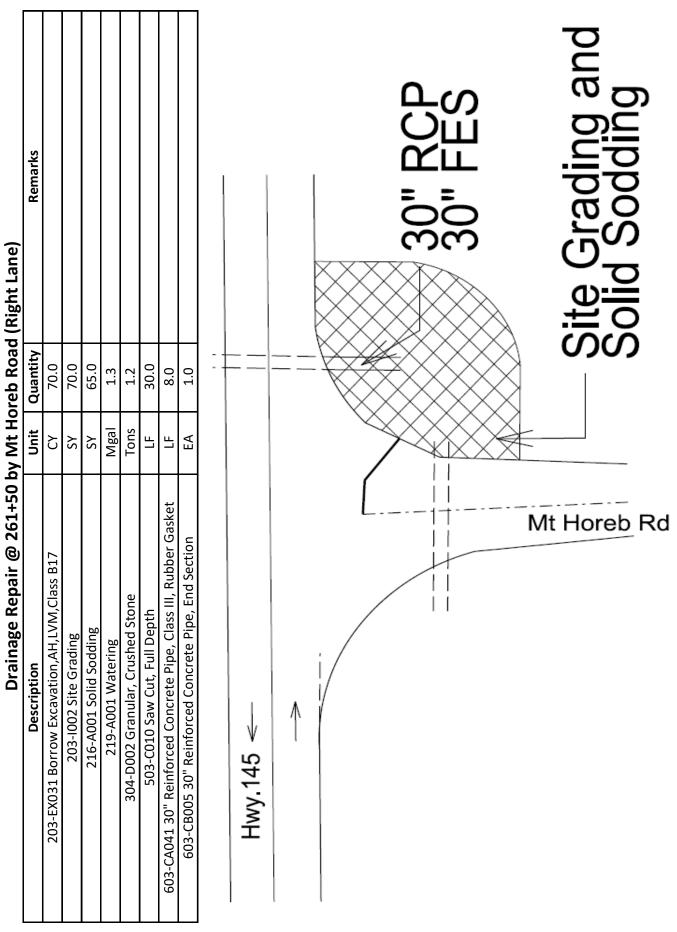
	CLEAN ANI	D FILL JOINTS 413-D002		01
	CLEARTAIN	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	311 143 30004173	
67.4 7.64.7			TRANSVERSE OR	
STATION # 336+65	RT/LT	CLEAN AND FILL (LF)	T	COMMENTS
336+95	RT/LT	28	T	
336+80	RT/LT	24	T	
430+70	LT	24	Т	
433+00	LT/LT	12	T	
444+80	RT/LT	24	Т	
449+00	RT/LT	24	Т	
450+80	RT/LT	24	T	
451+80	RT/LT	24	T	
452+00 454+10	RT/LT RT/LT	24	T T	
455+90	RT/LT	24	T	
456+80	RT/LT	24	T	
457+15	RT/LT	24	T	
457+80	RT/LT	24	Т	
458+15	RT/LT	24	T	
458+70	RT/LT	24	Т	
459+00	RT/LT	24	T	
462+30	RT/LT	24	T	
463+60	RT/LT	24	T T	
463+80 464+00	RT/LT RT	24 12	T	
469+60	RT/LT	24	T	
469+80	RT/LT	24	T	
472+10	RT/LT	24	T	
472+30	RT/LT	24	Т	
472+60	RT/LT	24	T	
473+00	RT/LT	24	Т	
473+30	RT/LT	24	T	
473+70	RT/LT	24	T T	
474+00 474+30	RT/LT RT/LT	24	T	
474+60	RT/LT	24	T	
474+90	RT/LT	24	T	
475+70	RT/LT	24	Т	
479+00	RT/LT	24	T	
479+30	RT/LT	24	Т	
479+60	RT/LT	24	Т	
479+40 - 480+75	CL	135	L	
481+80	LT	24	T	
482+20 484+90	LT LT	24 24	T T	
490+10	RT	24	T	
491+10	LT/LT	12	T	
491+10	RT	24	T	
491+40	RT	24	Т	
491+70	RT	24	Т	
491+40 - 492+10	RT IN CL	70	L	
496+40	RT	35	T	
496+70	RT/LT	75	T	
497+00 498+60	LT LT	40 34	T T	
498+00 - 499+80	RT IN CL	180	L	
503+00	LT/LT	12	T	
503+50 - 505+00	LT IN CL	150	L	
504+20	LT/LT	12	T	
504+50	LT/LT	12	Т	
504+65	LT/LT	12	Т	
504+80	LT	24	T	
504+90	LT	24	Т	
TOTALS		1891		

	CONCI	CONCRETE DRIVEWAY REMOVAL/ASPHALT/TACK COAT CALCULATION WORKSHEET SECTION 3 WITH HMA 12.5-MM MT ASPHALT	MOVAL/ASP	HALT/TACK	COAT CALCL	JLATION WO	DRKSHEET S	ECTION 3 WITH	1 HMA 12.5-M	IM MT ASPHALT		
					MEASUEME	MEASUEMENTS OF AREA	ΕA		SAW CUT	REMOVAL	ASPHALT	TACK
DESCRIPTION	LANE	LOCATION	ГСТН	W1	W2	EW	W4	AVG WIDTH	LF	λS	SNOL	GALS
DRIVEWAY PAD	RT	467+47	6	38	22			30.0	22.0	30.0	6.74	0.1
DRIVEWAY PAD	RT	469+59	7	34	76			30.0	26.0	23.3	5.24	0.1
DRIVEWAY PAD	RT	471+59	11	32	22			27.0	22.0	33.0	7.42	0.1
DRIVEWAY PAD	RT	473+86	2	32	25			28.5	25.0	15.8	3.56	0.1
TOTAL C	ONCRETE R	TOTAL CONCRETE REMOVAL, ASPHALT AND TACK NEEDED FOR HMA 12.5-MM MT MIX SECTIONS	AND TACK I	VEEDED FOR	R HMA 12.5-F	MM MT MIX	(SECTIONS		95.0	102.2	23.0	0.5
								503-	503-C010 Saw Cut, Full Depth	. Full Depth		
							7	202-B052 Removal of Concrete Driveways, All Depths	/al of Concret€	Driveways, All	Depths	
								403-A002 1	2.5-mm, MT,	403-A002 12.5-mm, MT, Asphalt Pavement	ent	
								407-A	407-A001 Asphalt for Tack Coat	or Tack Coat		

			Proje	Project 308841/301 SR 145				
			Standard R	Standard Roadside Construction Signs	SL			
		619-D100	1 Less Than	619-D1001 Less Than 10 SF and 619-D2001 10 SF or more	SF or	more		
Barricade	Sign	Deminsions	S.F.	Description	QTY.	< 10S.F.	QTY. < 105.F. 10 S.F. or >	L.F.
Type III		.9		Double Faced	4			24
	W20-1	48"x48"	16	Road Work Ahead 1500'	2		35	
	W20-1	48"x48"	16	Road Work Ahead 1000'	2		35	
	W20-1	48"x48"	16	Roadwork Ahead	42		672	
	G20-1	60"x24"	10	Road Work Next 1.25 Miles	2		20	
	G20-2	48"x24"	8	End Road Work	2	16		
	R4-1	18"x24"	3	DO NOT PASS	65	276		
	R4-2	18"x24"	3	PASS WITH CARE	8	24		
	W14-3	40"x40"X30"	3.8	NO PASSING ZONE	10	38		
			Totals			354	756	24

	W20-1 ROAD WORK AHEAD LOCATIONS	
CLARKE COUNTY RD 350	SANDRIDGE ROAD	SKYLAND DRIVE
CLARKDALE ROAD	PINE ROAD S	CRESENT CIRCLE
LUTHER WALKER ROAD	PINE ROAD N	HILLCREST DRIVE
SAM GRAY ROAD	SPRINGHILL LOOP	GRAND AVENUE
SOUTH ANDERSON ROAD	ATWOOD ROAD	PENN LANE
DUBOSE ROAD	STINSON CEMETERY ROAD	MYRTLE DRIVE
H.W. WHITE ROAD	MT HOREB ROAD	HAMILTON AVENUE
WESLEY CHAPEL ROAD S	SHARON DRIVE	RAMP 120E TO SR 145
WESLEY CHAPEL ROAD N	BYNUM ROAD	22ND AVE HEIGHTS
DRY CREEK ROAD	CRESENT LAKE ROAD	SOUTH FRT RD TO 22ND AVE HTS
T.M. JONES ROAD	SKYVIEW DRIVE	SOUTH FRT RD TO SR 145
SPRIGHILL ROAD	RAMP US45 N TO SR 145	RAMP 120W TO SR 145

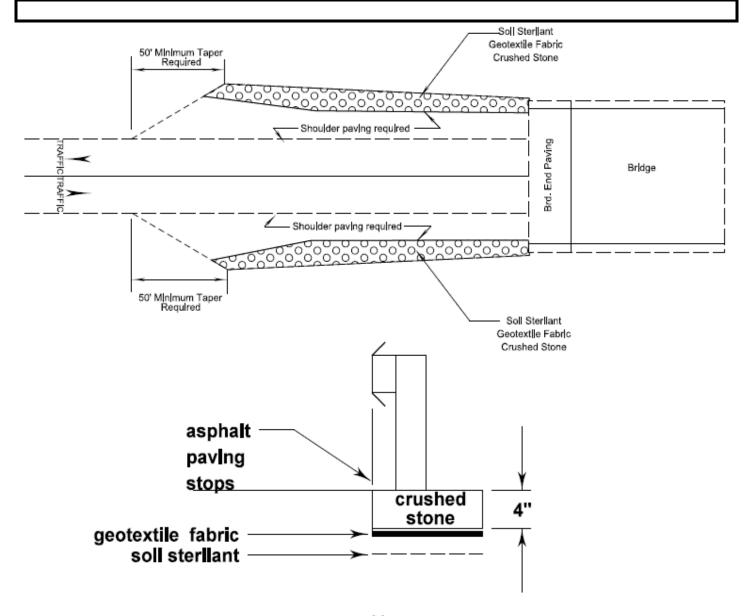
308841-301 Lauderdale County



308841/301 SR 145 Guardrail Pads

Loca	ition					Geotextile	
Station #	Lane				Saw Cut	Stabilization, Type V, Non Woven	Granular Crushed
	20.10	Length	Width	Depth	(LF)	(SY)	Stone (Tons)
216+05	RT	218.00	4.00	0.3333	215.0	113.0	18.17
216+05	LT	118.00	4.00	0.3333	63.0	61.2	9.83
220+96	RT	218.00	4.00	0.3333	215.0	113.0	18.17
220+96	LT	116.00	4.00	0.3333	116.0	60.1	9.67
301+66	RT/RT	220.00	4.00	0.3333	180.0	114.1	18.33
301+66	LT/RT	215.00	4.00	0.3333	172.0	111.5	17.92
305+24	LT/LT	220.00	4.00	0.3333	180.0	114.1	18.33
305+24	RT/LT	215.00	4.00	0.3333	172.0	111.5	17.92
		TOTAL			1313.0	798.5	128.33

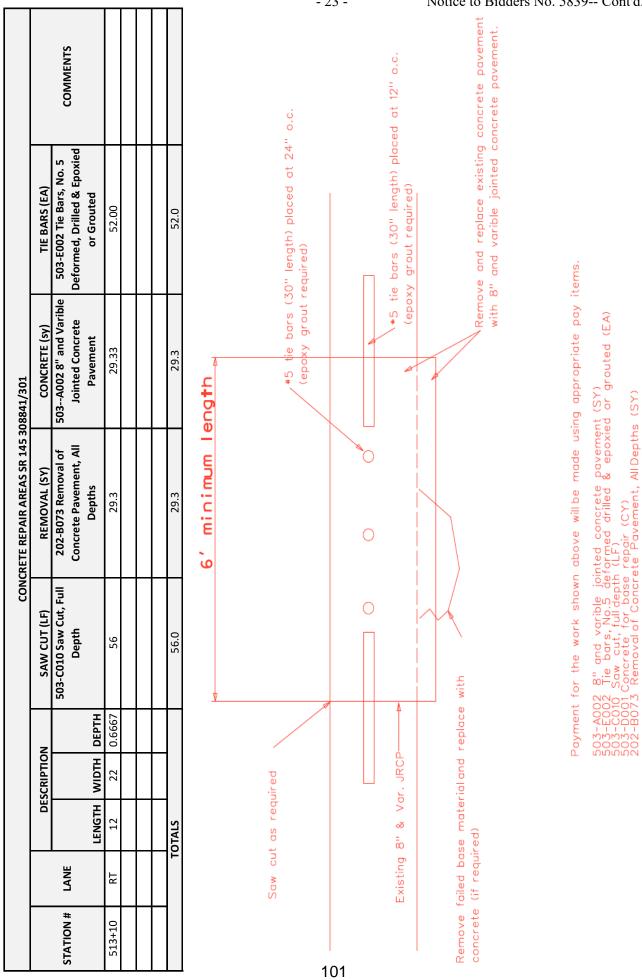
The soil sterilant needed for guardrail pads is absorbed in other items bid.



$^{\mathbf{\gamma}}$	$^{\circ}$	
L	4	-

	1																					
		REMARKS																	DBL FACE			
	Dbl Face	GUARDRAIL	REMOVAL	(LF)						137.5		137.5								275	L.F.	
		GUARDRAIL	REMOVAL	(LF)	212.5	112.5	212.5	112.5	212.5	75	212.5	75	850	920	250	275	62.5	62.5		3675	LF.	
		Type 3	Object Markers	(EA)	1	1	1	1	1	1	1	1					1	1	2	12	EA.	
	ATORS		WHITE YELLOW	(EA)						9		9								12	EA.	
	DELINEATORS		WHITE	(EA)	9	4	9	4	9		9		20	22	11	12	3	3		103	EA.	
	Bridge End Section	TYPE "H"		(EA)	1	1	1	1	1	1	1	1					1	1		10	EA.	
antities	W-Beam	End Section	TYPEI	(EA)						1		1								2	EA.	
Guardrail Quantities	MEDIAN	TERMINAL	END SECT.	(EA)						1		1								2	EA.	
Gual	FLARED	TERMINAL	END SECT.	(EA)	1	1	1	1	1		1		2	2	2	2	1	1		16	EA.	
		EAM	THRIE BEAM	(LF)									762.5	862.5	162.5	187.5				1975	LF.	
	GUARDRAIL	THRIE BEAM	TRANS. SECT.	(LF)									12.5	12.5	12.5	12.5				20	L.F.	
	GUAF	W-BEAM	DOUBLE FACE	(LF)						100		100								200	L.F.	
		W-BEAM	TYPE 1	(LF)	150	20	150	20	150	20	150	20								800	L.F.	
			LOCATION	(LT/RT)	RT	LT	RT	LT	RT/RT	LT/RT	LT/LT	RT/LT	RT	RT	LT	LT	RT/RT	LT/LT	RT & LT	- 1	-	
			STATION		216+05	216+05	220+96	220+96	301+66	301+66	305+24	305+24	395+00	412+00	421+00	426+00	207+00	510+00	261+50	TOTAL	2	

PREMOVAL OF ALL GUARDRAIL (BRIDGE END SECTIONS, W-BEAM, TYPE-I CABLE ANCHORAGE, TERMINAL END SECTIONS, ETC.) WILL BE PAID UNDER PAY ITEM 202-B REMOVAL OF GUARDRAIL DELINEATORS ARE CONSIDERED INCIDENTAL TO THE REMOVAL OF GUARDRAIL NOT BE MEASURED AS A SEPARATE PAY ITEM.
ALL GUARDRAIL (METAL RAIL AND METAL POSTS ONLY) WILL BE RETAINED BY MDOT. WOODEN POSTS, ALL BLOCKOUTS, CONCRETE ANCHORS, ETC. WILL BE THE PROPERTY OF THE CONTRACTOR.
TOTAL GUARDRAIL LENGTH IS BASED ON A TERMINAL END SECTION 37.5' LONG. IF A TERMINAL END SECTION 05 A DIFFERENT LENGTH IS USED, THE LENGTH OF THE W-BEAM MAY HAVE TO BE ADJUSTED.



Description Lame LOCATION CALCULATION LIGHH AVM WIDTH SY TONS GALS		LOCAL ROAD	S/DRIVEWAY PADS/N	- 24 - AISC AREAS (HMA		T. ASPHALT PAV			
DESCRIPTION		_0 0, 110715			,		,	ЛСПЦЛІТ	TVCK
DINIVEWAY PAD									
DRIVEWAY PAD				CALCULATION			_		
DRIVEWAY PAD									
BINEWAYPAD									
DRIVEWAY PAD									
DRIVEWAY PAD									
DRIVEWAY PAD									
BRIVEWAY PAD									
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DRIVEWAY PAD									
DRIVEWAY PAD									
DRIVEWAY PAD									
DRIVEWAY PAD RT 364-86 5 34-5 19.2 2.16 1.9 DRIVEWAY PAD LT 367-90 5 49.0 27.2 3.07 2.7 DRIVEWAY PAD RT 370-00 5 23.0 12.8 1.44 1.3 DRIVEWAY PAD RT 379-60 5 23.0 12.8 1.44 1.3 DRIVEWAY PAD RT 379-64 384-64 8 50.0 444.4 DRIVEWAY PAD RT 383-80 21 46.7 108.9 12.27 10.9 DRIVEWAY PAD RT 383-80 21 46.7 108.9 12.27 10.9 DRIVEWAY PAD RT 383-80 21 46.7 108.9 12.27 10.9 DRIVEWAY PAD RT 383-80 21 46.7 108.9 12.27 10.9 DRIVEWAY PAD RT 383-80 21 46.7 108.9 12.27 10.9 4.5 DRIVEWAY PAD RT 383-80 36 39.0 156.0 17.59 15.0 SKYLAND DRIVE RT 393-60 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393-60 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393-60 B 74 41.8 343.3 38.70 34.3 CRESENT CIRCLE LT 394-60 A 10 116.0 128.9 145.3 CRESENT CIRCLE LT 394-60 B 20 34.8 77.2 8.70 7.7 HILLCREST DRIVE RT 424-40 A 11 159.5 194.9 219.8 19.5 HILLCREST DRIVE RT 424-40 A 11 159.5 194.9 219.8 19.5 GRAND AVENUE LT 429-70 A 111 GRAND AVENUE LT 429-70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 433-84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433-84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 434-80 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 43									
DRIVEWAY PAD RT 370+00 S 23.0 12.8 1.44 1.3 DRIVEWAY PAD RT 370+00 S 23.0 12.8 1.44 1.3 DRIVEWAY PAD RT 370+00 S 23.0 12.8 1.44 1.3 DRIVEWAY PAD RT 375+80 S S 27.0 15.0 1.69 1.5 WIDE SHOULDER RT 379+64-1384+64 RE S S S S S S S S S S S S S									
DRIVEWAY PAD RT 370+00 5 23.0 12.8 1.44 1.3 DRIVEWAY PAD LT 375+80 5 27.0 15.0 1.69 1.5 WIDE SHOULDER RT 379+64 38+64 8 500.0 444.4 50.10 44.4 DRIVEWAY PAD RT 383+80 21 46.7 108.9 12.27 10.9 DRIVEWAY PAD RT 383+80 21 46.7 108.9 12.27 10.9 DRIVEWAY PAD RT 385+50 9 4 45.0 45.0 5.07 4.5 DRIVEWAY PAD RT 388+83 36 39.0 156.0 17.59 15.6 DRIVEWAY PAD RT 388+83 36 39.0 156.0 17.59 15.6 DRIVEWAY PAD RT 389+80 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393+60 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393+60 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393+60 A 10 116.0 12.89 14.53 12.9 CRESENT CIRCLE LT 394+60 A 10 116.0 128.9 14.53 12.9 CRESENT CIRCLE LT 394+60 A 11 159.5 24.8 27.7 22.0 GRAND AVENUE RT 424+40 B 46 43.0 21.9.8 19.5 HILLCREST DRIVE RT 424+40 B 46 43.0 21.9.8 24.77 22.0 GRAND AVENUE LT 429+70 A 11 99.3 121.3 13.67 12.1 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 434+60 6 6 44.0 29.3 3.31 2.9 DRIVEWAY PAD RT 433+60 6 6 56.5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433+60 6 6 56.5 30.3 3.3 3.76 3.3 WIDE SHOULDER RT 434+60 7 7 20.4 158.7 17.89 15.9 DRIVEWAY PAD RT 433+60 6 6 56.5 30.3 3.3 3.76 3.3 WIDE SHOULDER RT 444+00 7 7 57.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433+60 6 6 50.5 30.3 3.3 3.76 3.3 WIDE SHOULDER RT 434+60 7 7 20.4 158.7 17.89 15.9 DRIVEWAY PAD RT 434+60 7 7 20.4 158.7 17.89 15.9 DRIVEWAY PAD RT 444+00 7 7 57.5 20.8 2.25 DRIVEWAY PAD RT 444+50 7 20.4 158.7 17.89 15.9 DRIVEWAY PAD RT 444+50 7 20.4 2.5 2.5 2.5 2.2 2.5 2.5 2.2 2.5 2.5 2.5									
DRIVEWAY PAD									
DRIVEWAY PAD RT 383+80 PRIVEWAY PAD RT 385+50 PRIVEWAY PAD RT 385+50 PRIVEWAY PAD RT 385+50 PRIVEWAY PAD RT 388+83 RE 36 RE 39.0 RE 39.0 RE 36.0 RE 39.0 RE 39									
DRIVEWAY PAD RT 385+90 P 45.0 DRIVEWAY PAD RT 388+83 RT 388-83 RT 388-83 RT 388-83 RT 388-83 RT 388-83 RT 388-80 RT 393-60 RT 41.16 RT 42.89 RT 42.80 RT 43.80 RT 44.80 R	WIDE SHOULDER	RT	379+64 - 384+64		8	500.0	444.4	50.10	44.4
DRIVEWAY PAD RT 388+83 36 39.0 156.0 17.59 15.6 DRIVEWAY PAD LT 389+00 5 270.0 150.0 16.91 15.0 SKYLAND DRIVE RT 393+60 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393+60 B 74 41.8 343.3 38.70 34.3 CRESENT CIRCLE LT 394+60 A 10 116.0 128.9 14.53 12.9 CRESENT CIRCLE LT 394+60 B 20 34.8 77.2 8.70 7.7 HILLCREST DRIVE RT 424+40 A 11 159.5 194.9 21.98 19.5 HILLCREST DRIVE RT 424+40 B 46 43.0 219.8 24.77 22.0 GRAND AVENUE LT 429+70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 438+60 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 438+60 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 438+60 B 60 44.0 29.3 3.31 2.9 DRIVEWAY PAD RT 438+60 B 60 44.0 29.3 3.31 2.9 DRIVEWAY PAD RT 438+60 B 6 44.0 29.3 3.31 2.9 DRIVEWAY PAD LT 441+00 B 8 37.5 33.3 3.76 33 WIDE SHOULDER RT 444+50 443+54 7 204.0 158.7 17.89 15.9 DRIVEWAY PAD LT 444+50 B 6 6 59.0 39.3 4.43 39.9 PENN LANE DRIVEWAY PAD LT 450+38 B 6 59.0 39.3 4.43 39.9 PENN LANE LT 450+38 B 6 59.0 39.3 54.5 55.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.82 2.5 50.0 2.	DRIVEWAY PAD	RT			21	46.7	108.9	12.27	10.9
DRIVEWAY PAD LT 389+00 S 270.0 150.0 16.91 15.0 SKYLAND DRIVE RT 393+60 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393+60 B 74 41.8 343.3 38.70 34.3 CRESENT CIRCLE LT 394+60 A 10 116.0 128.9 14.53 12.9 CRESENT CIRCLE LT 394+60 B 20 34.8 77.2 8.70 7.7 HILLCREST DRIVE RT 424+40 A 11 159.5 194.9 21.98 19.5 HILLCREST DRIVE RT 424+40 B 46 43.0 219.8 24.77 22.0 GRAND AVENUE LT 429+70 A 11 99.3 121.3 13.67 12.1 GRAND AVENUE LT 429+70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 434+60 6 6 44.0 29.3 33.1 2.9 DRIVEWAY PAD RT 434+60 6 6 44.0 29.3 33.1 2.9 DRIVEWAY PAD RT 434+60 7 7 204.0 158.7 17.89 15.9 DRIVEWAY PAD RT 441+00 8 37.5 33.3 3.76 3.3 WIDE SHOULDER RT 441+50 441+50 7 7 204.0 158.7 17.89 15.9 DRIVEWAY PAD RT 444+00 7 7 57.5 44.7 5.04 4.5 DRIVEWAY PAD RT 444+60 7 7 57.5 44.7 5.04 4.5 DRIVEWAY PAD RT 454+50 5 6 59.0 39.3 4.43 3.9 PENN LANE LT 459+38 6 59.0 39.3 4.43 3.9 PENN LANE LT 459+38 6 59.0 39.3 4.43 3.9 PENN LANE LT 459+38 6 59.0 39.3 4.43 3.9 PENN LANE LT 459+38 6 59.0 39.3 4.43 3.9 PENN LANE LT 455+55 6 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+50 5 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+60 5 6 50.0 35.3 5.5 5.0 3.3 5.7 3.3 5.1 4.6 DRIVEWAY PAD RT 458+60 5 6 50.0 35.3 5.5 5.0 3.3 5.7 3.3 5.1 4.6 DRIVEWAY PAD RT 458+60 5 6 68.0 45.3 5.1 5.6 6.0 6.0 GRIVEWAY PAD RT 458+60 5 6 68.0 45	DRIVEWAY PAD	RT	385+50		9	45.0	45.0	5.07	4.5
SKYLAND DRIVE RT 393+60 A 11 208.5 254.8 28.73 25.5 SKYLAND DRIVE RT 393+60 B 74 41.8 343.3 38.70 34.3 CRESENT CIRCLE LT 394+60 A 10 116.0 128.9 14.53 12.9 CRESENT CIRCLE LT 394+60 B 20 34.8 77.2 8.70 7.7 HILLCREST DRIVE RT 424+40 A 11 1595 194.9 21.98 19.5 GRAND AVENUE LT 429+70 A 11 99.3 121.3 13.67 12.1 GRAND AVENUE LT 429+70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 434+60	DRIVEWAY PAD	RT	388+83		36	39.0	156.0	17.59	15.6
SKYLAND DRIVE RT 393+60 B 74 41.8 343.3 38.70 34.3	DRIVEWAY PAD	LT	389+00		5	270.0	150.0	16.91	15.0
CRESENT CIRCLE LT 394+60 R 20 34.8 77.2 8.70 7.7 HILLCREST DRIVE RT 424+40 RT 424-40 RA 11 159.5 114.9 121.8 121.9 24.77 22.0 GRAND AVENUE LT 429+70 RT 429+70 RT 424-80 RT 433+84 ST 37.5 DRIVEWAY PAD RT 433+84 ST DRIVEWAY PAD RT 433+84 ST DRIVEWAY PAD RT 441+50 RT 441+50 RT 441+50 RT 444+50 RT 444+50 RT 444-50 RT 459-75 RT RT 443-70 RT 459-83 RT 459-83 RT 444-80 RT 459-83 RT 444-85 RT 444-86 RT 444-86 RT 444-86 RT 444-86 RT 448-86 RT 448-86 RT 448-86 RT 448-70 RT 448-70 RT 448-70 RT 448-86 RAMP 120 T145 RAMP 120 T145 RAMP 120 T145 RAMP 120 T145 RAMP 145 T10 120 RT 449-80 RT 458-80 RT 49-80 RT 49-80 RT 49-80 RT 49-80 RT 49-80 RT 480-50 RT 480-60 RT 480-60 RT 480-60 RT 480-60 RT 480-60 RT 480-60 RT 49-	SKYLAND DRIVE	RT	393+60	Α	11	208.5	254.8	28.73	25.5
CRESENT CIRCLE LT 394+60 B 20 34.8 77.2 8.70 7.7 HILLCREST DRIVE RT 424+40 A 11 159.5 194.9 21.98 195.9 194.9 21.98 195.9 194.9 21.98 195.0 196.9 21.98 195.0 194.9 21.98 195.0 194.9 21.98 195.0 194.9 21.98 195.0 194.9 21.98 195.0 196.0 219.8 24.77 22.0 GRAND AVENUE LT 429+70 A 11 99.3 121.3 13.67 12.1 GRAND AVENUE LT 429+70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 433+84 S 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433+60 6 44.0 29.3 3.31 2.9 DRIVEWAY PAD RT 441+00 8 37.5 33.3 3.76 3.3 WIDE SHOULDER RT 444+400 7 7 57.5 44.7 5.04 4.5 DRIVEWAY PAD RT 444+50 6 37.5 DRIVEWAY PAD LT 444+50 6 37.5 DRIVEWAY PAD LT 444+50 6 37.5 DRIVEWAY PAD LT 4450+38 6 59.0 39.3 4.43 3.9 PENN LANE LT 450+38 6 6 59.0 39.3 4.43 3.9 PENN LANE LT 453+55 6 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 473+11 13.5 DRIVEWAY PAD RT 473+11 13.5 56.5 50.8 315.8 35.60 31.6 HAMILTON AVENUE LT 480+50 85 63.5 59.7 67.60 60.0 WIDE SHOULDER RT 480+50 85 63.5 59.7 67.60 60.0 WIDE SHOULDER RT 480+50 85 63.5 59.7 67.60 60.0 WIDE SHOULDER RT 480+50 85 63.5 59.7 67.60 60.0 RT 480+30 494-40 415 11.1 50.9 50.0 30.3 50.7 50.0 50.0 30.0 30.3 50.7 50.0 50.0 80.0	SKYLAND DRIVE	RT	393+60	В	74	41.8	343.3	38.70	34.3
HILLCREST DRIVE RT 424+40 B 46 43.0 219.8 21.98 19.5 HILLCREST DRIVE RT 424+40 B 46 43.0 219.8 24.77 22.0 GRAND AVENUE LT 429+70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 438+60 6 6 44.0 29.3 3.31 2.9 DRIVEWAY PAD LT 441+00 B 37.5 33.3 3.76 3.3 WIDE SHOULDER RT 441+50 - 443+54 7 204.0 158.7 17.89 15.9 DRIVEWAY PAD LT 444+00 7 7 57.5 44.7 5.04 4.5 DRIVEWAY PAD LT 444+50 6 37.5 25.0 2.82 2.5 DRIVEWAY PAD LT 444+50 6 37.5 25.0 2.82 2.5 DRIVEWAY PAD LT 444+50 6 6 37.5 25.0 2.82 2.5 DRIVEWAY PAD LT 450+38 6 5 59.0 39.3 4.43 3.9 PENN LANE LT 450+38 6 5 59.0 39.3 4.43 3.9 PENN LANE LT 453+55 6 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 453+55 6 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 473+11 13.5 30.5 45.8 5.16 4.6 DRIVEWAY PAD RT 473+11 13.5 30.5 45.8 5.16 HAMILTON AVENUE LT 480+50 85 63.5 599.7 67.60 60.0 WIDE SHOULDER RT 480+63 6 324.5 216.3 24.39 21.6 WIDE SHOULDER RT 480+50 85 63.5 599.7 67.60 60.0 WIDE SHOULDER RT 480+63 6 324.5 216.3 24.39 21.6 RAMP 120 RT 480+60 51.0 415.1 530.3 59.78 53.0 RYRTE DRIVE RT 480+50 85 63.5 599.7 67.60 60.0 WIDE SHOULDER RT 480+60 51.5 50.8 315.8 35.60 31.6 HAMILTON AVENUE LT 480+63 6 324.5 216.3 24.39 21.6 RAMP 120 RT 473+10 513.5 50.5 50.2	CRESENT CIRCLE	LT	394+60	А	10	116.0	128.9	14.53	12.9
HILLCREST DRIVE	CRESENT CIRCLE	LT	394+60	В	20	34.8	77.2	8.70	7.7
GRAND AVENUE LT 429+70 A 11 99.3 121.3 13.67 12.1 GRAND AVENUE LT 429+70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 438+60 6 44.0 29.3 3.31 2.9 DRIVEWAY PAD LT 441+00 8 37.5 33.3 3.76 3.3 WIDE SHOULDER RT 441+50 - 443+54 7 204.0 158.7 17.89 15.9 DRIVEWAY PAD RT 444+00 7 57.5 44.7 5.04 4.5 DRIVEWAY PAD LT 444+50 6 37.5 25.0 2.82 2.5 DRIVEWAY PAD LT 450+38 6 59.0 39.3 4.43 3.9 PENN LANE LT 453+35 1 4.5 19.4 42.7 194.4	HILLCREST DRIVE	RT	424+40	А	11	159.5	194.9	21.98	19.5
GRAND AVENUE LT 429+70 B 60 56.5 376.7 42.46 37.7 DRIVEWAY PAD RT 433+84 5 37.5 20.8 2.35 2.1 DRIVEWAY PAD RT 438+60 6 44.0 29.3 3.31 2.9 DRIVEWAY PAD LT 441+00 8 37.5 33.3 3.76 3.3 WIDE SHOULDER RT 441+50 - 443+54 7 204.0 158.7 17.89 15.9 DRIVEWAY PAD RT 444+90 7 57.5 44.7 5.04 4.5 DRIVEWAY PAD LT 444+90 7 57.5 44.7 5.04 4.5 DRIVEWAY PAD LT 450+38 6 59.0 39.3 4.43 3.9 PENN LANE LT 452+15 41 42.7 194.4 21.91 19.4 DRIVEWAY PAD RT 453+55 6 68.0 45.3 5.11 4.5	HILLCREST DRIVE	RT	424+40	В	46	43.0	219.8	24.77	22.0
DRIVEWAY PAD	GRAND AVENUE	LT	429+70	Α	11	99.3	121.3	13.67	12.1
DRIVEWAY PAD	GRAND AVENUE	LT		В	60		376.7	42.46	37.7
DRIVEWAY PAD									
WIDE SHOULDER									
DRIVEWAY PAD									
DRIVEWAY PAD					-				
DRIVEWAY PAD									
PENN LANE LT 452+15 41 42.7 194.4 21.91 19.4 DRIVEWAY PAD LT 453+55 6 68.0 45.3 5.11 4.5 DRIVEWAY PAD RT 458+00 5 40.0 22.2 2.51 2.2 DRIVEWAY PAD RT 473+11 13.5 30.5 45.8 5.16 4.6 DRIVEWAY PAD LT 479+00 12 67.0 89.3 10.07 8.9 MYRTLE DRIVE RT 480+50 56 50.8 315.8 35.60 31.6 HAMILTON AVENUE LT 480+50 85 63.5 599.7 67.60 60.0 WIDE SHOULDER LT 485+48 - 489+63 6 324.5 216.3 24.39 21.6 WIDE SHOULDER RT 487+70 - 492+88 10 462.5 513.9 57.93 51.4 RAMP 125 N TO 22 AVE HTS RT 494+00 513 9.5 541.5 61.04 54.2									
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RAMP 22ND AVE S TO I20W LT 506+44 172 26.3 501.7 56.55 50.2		RT							
	RAMP I20W TO 22ND AVE N	RT	506+00		44	21.3	104.3	11.76	10.4
TOTAL MISC. AREAS 10553.3 1189.6 1055.3	RAMP 22ND AVE S TO I20W	LT	506+44		172	26.3	501.7	56.55	50.2
			TOTAL MISC. AREAS				10553.3	1189.6	1055.3

		/=====================================	- 25 -		Notice to Bidd		39 Cont	u.
LO	CAL ROADS,	DRIVEWAY PADS/MI	SC. AREAS FOR HI	VIA 12.5-mm	n, ST, ASPHALT PA	VEMENT		
				MEASUE	MENTS OF AREA	MILLING	ASPHALT	TACK
DESCRIPTION	LANE	LOCATION	CALCULATION	LGTH	AVG WIDTH	SY	TONS	GALS
CLARKDALE RD	LT	3+50	A	5	90.5	50.3	5.67	5.0
CLARKDALE RD	LT	3+50	В	21	33.0	77.0	8.68	7.7
LUTHER WALKER RD	RT	6+00	А	11	155.0	189.4	21.36	18.9
LUTHER WALKER RD	RT	6+00	В	46	50.8	259.4	29.24	25.9
SAM GRAY RD	LT	35+60		28	36.8	114.3	12.89	11.4
SOUTH ANDERSON RD	RT	69+25	Α	15	185.5	309.2	34.85	30.9
SOUTH ANDERSON RD	RT	69+25	В	42	49.5	231.0	26.04	23.1
DUBOSE RD	RT	86+00	А	9	109.0	109.0	12.29	10.9
DUBOSE RD	RT	86+00	В	34	26.8	101.1	11.39	10.1
H.W. WHITE RD	LT	111+00	A B	13	63.0	91.0 88.0	10.26 9.92	9.1
H.W. WHITE RD WESLEY CHAPEL RD S	LT RT	111+00 112+50	A	32 7	24.8 159.0	123.7	13.94	8.8 12.4
WESLEY CHAPEL RD S	RT	112+50	В	27	31.0	93.0	10.48	9.3
WESLEY CHAPEL RD N	RT	129+00	A	15	118.0	196.7	22.17	19.7
WESLEY CHAPEL RD N	RT	129+00	В	27	42.3	126.8	14.29	12.7
DRY CREEK RD	RT	138+50	A	10	59.0	65.6	7.39	6.6
DRY CREEK RD	RT	138+50	В	28	29.5	91.8	10.35	9.2
T.M. JONES RD	LT	167+50	А	13	122.5	176.9	19.95	17.7
T.M. JONES RD	LT	167+50	В	47	52.0	271.6	30.61	27.2
SPRINGHILL RD	RT	178+50	А	10	94.5	105.0	11.84	10.5
SPRINGHILL RD	RT	178+50	В	40	29.0	128.9	14.53	12.9
ARROW LAKE RD	LT	198+50	Α	11	76.0	92.9	10.47	9.3
ARROW LAKE RD	LT	198+50	В	49	28.0	152.4	17.18	15.2
TYLER RD	LT	214+00	A	7	69.5	54.1	6.09	5.4
TYLER RD	LT	214+00	В	53	40.0	235.6	26.55	23.6
GUARDRAIL PAD	RT LT	215+00		215 77	14.7	350.4	39.50	35.0
GUARDRAIL PAD GUARDRAIL PAD	RT	215+00 221+00	 	77	12.5 12.5	106.9 106.9	12.06 12.06	10.7 10.7
GUARDRAIL PAD	LT	221+00		215	14.7	350.4	39.50	35.0
SANDRIDGE RD	LT	230+15	Α	7	47.0	36.6	4.12	33.0
SANDRIDGE RD	LT	230+15	В	30	22.8	75.8	8.55	7.6
PINE RD SOUTH	LT	235+80	A	11	52.0	63.6	7.16	6.4
PINE RD SOUTH	LT	235+80	В	28	30.0	93.3	10.52	9.3
PINE RD NORTH	LT	244+50	А	28	39.8	123.7	13.94	12.4
SPRINGHILL LOOP	RT	251+00	А	11	76.5	93.5	10.54	9.4
SPRINGHILL LOOP	RT	251+00	В	43	35.0	167.2	18.85	16.7
ATWOOD RD	LT	257+00	Α	7	80.0	62.2	7.01	6.2
ATWOOD RD	LT	257+00	В	59	38.8	254.0	28.64	25.4
STINSON CEMETERY RD	LT	259+00		37	38.8	159.3	17.96	15.9
MT HOREB RD	RT	261+00	A	5	109.5	60.8	6.86	6.1
MT HOREB RD SHARON DRIVE	RT LT	261+00 263+50	В	52 42	52.0 34.5	300.4 161.0	33.87 18.15	30.0 16.1
BYNUM RD	LT	288+50	A	11	262.5	320.8	36.17	32.1
BYNUM RD	LT	288+50	В	49	59.8	320.8	36.67	32.1
CRESENT LAKE RD	RT	288+50	A	11	230.5	281.7	31.76	28.2
CRESENT LAKE RD	RT	288+50	В	174	56.0	1082.7	122.04	108.3
SKYVIEW DR	RT	288+50		58	59.8	385.1	43.41	38.5
45N TO 145S RAMP	LT	295+84		233	12.0	310.7	35.02	31.1
45N TO 145N RAMP	LT	298+04		12	16.0	21.3	2.40	2.1
CROSS OVER 45N TO 145N	MEDIAN	298+04		45	39.5	197.5	22.26	19.8
145N TO 45N RAMP	RT	297+00		211	12.5	293.1	33.03	29.3
145S TO 45N RAMP	RT	299+00		12	20.0	26.7	3.01	2.7
CROSS OVER 145S TO 45N	MEDIAN	299+00		211	17.8	416.1	46.91	41.6
GUARDRAIL PAD	LT/RT	301+00		185	9.0	185.0	20.85	18.5
GUARDRAIL PAD	RT/RT	301+00		197	14.0	306.4	34.54	30.6
GUARDRAIL PAD	LT/LT	306+00		290	14.3	459.2	51.76	45.9
GUARDRAIL PAD	RT/LT	306+00		235	10.5	274.2	30.91	27.4
WIDE SHOULDER	RT/RT	305+57		196	8.8	190.6	21.48	19.1

			- 26 -		Notice to Bigg	CIS INO. 30	39 Cont	d.
LO	CAL ROADS/	DRIVEWAY PADS/MI	SC. AREAS FOR HI	ИА 12.5-mn	n, ST, ASPHALT PA	VEMENT		
				MEASUEI	MENTS OF AREA	MILLING	ASPHALT	TACK
DESCRIPTION	LANE	LOCATION	CALCULATION	LGTH	AVG WIDTH	SY	TONS	GALS
CROSSOVER 145N TO 45S	MEDIAN	308+00		280	12.3	381.1	42.96	38.1
145N TO 45S RAMP	LT/LT	308+33		12	20.0	26.7	3.01	2.7
CROSSOVER 45S TO 145S	MEDIAN	309+26		51	29.5	167.2	18.84	16.7
45S TO 145S RAMP	RT/RT	309+26		12	22.0	29.3	3.31	2.9
145S TO 45S RAMP	LT/LT	311+00		237	15.8	414.8	46.75	41.5
45S TO 145N RAMP	RT/RT	311+00		205	13.3	301.8	34.02	30.2
TURN LANE	LT/RT	317+40		343	9.5	362.1	40.81	36.2
TURN LANE	RT/LT	317+40		400	9.5	422.2	47.60	42.2
CROSSOVER	MEDIAN	317+40		48	14.0	74.7	8.42	7.5
DR BROCK RD	LT/LT	317+40	Α	11	201.5	246.3	27.76	24.6
DR BROCK RD	LT/LT	317+40	В	172	47.3	903.0	101.79	90.3
DRIVEWAY PAD	RT	274+58		8	44.0	39.1	4.41	3.9
DRIVEWAY PAD	LT	274+85		9	47.0	47.0	5.30	4.7
DRIVEWAY PAD	LT	278+35		10	45.0	50.0	5.64	5.0
DRIVEWAY PAD	LT	281+00		8	35.5	31.6	3.56	3.2
DRIVEWAY PAD	RT	283+14		7	29.0	22.6	2.54	2.3
DRIVEWAY PAD	LT	283+42		5	30.0	16.7	1.88	1.7
DRIVEWAY PAD	LT	285+21		9	27.5	27.5	3.10	2.8
DRIVEWAY PAD	LT	285+64		8	36.5	32.4	3.66	3.2
DRIVEWAY PAD	LT	286+20		8	29.5	26.2	2.96	2.6
DRIVEWAY PAD	RT	327+38		5	34.5	19.2	2.16	1.9
DRIVEWAY PAD	LT	330+00		7	32.0	24.9	2.81	2.5
DRIVEWAY PAD	LT	330+73		7	41.5	32.3	3.64	3.2
DRIVEWAY PAD	LT	331+25		7	41.5	32.3	3.64	3.2
DRIVEWAY PAD	LT	332+75		9	75.0	75.0	8.45	7.5
		TOTALS			_	14982.5	1688.91	1498.3

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		COMMENTS																																									
	TACK (GALS)	407-A001 Asphalt for Tack	COAL	0.62	0.62	0.62	0.34	0.62	0.34	0.34	0.34	0.67	0.34	0.62	0.54	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.62	0.62	0.34	0.34	0.62	0.34	0.34	0.34	0.34	0.34	0.62	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
/301	ASPHALT (TONS)	403-B003 12.5-mm, ST,	Aspnair Favement, Leveling	11.25	11.25	11.25	5.63	11.25	5.63	5.63	5.63	18.75	5.63	11.25	5.03	5.03	5.63	5.63	5.63	5.63	5.63	5.63	5.63	11.25	11.25	2.63	2.63	11.25	5.63	5.63	5.63	5.63	5.63	11.25	5.63	5.63	2.63	2.63	5.63	5.63	5.63	5.63	5.63
REPAIR AREAS SR 145 308841/301	REMOVAL (SY)	202-B069 Removal of	w/Variable Depth Overlay	16.7	16.7	16.7	8.3	16.7	8.3	8.3	8.3	27.8	8.3	16./ 6.3	6.5	0.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	16.7	16.7	8.3	8.3	16.7	8.3	8.3	8.3	8.3	8.3	16.7	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
	SAW CUT (LF)	503-C010 Saw Cut, Full	Depui	26	26	26	31	56	31	31	31	99	31	56	31	31	31	31	31	31	31	31	31	26	56	31	31	26	31	31	31	31	31	56	31	31	31	31	31	31	31	31	31
ŀ	1		DEPTH	1	1	1	1	1	1	1	П	1,	1		٦ ,	٦,	. ,	Τ,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	DESCRIPTION		WIDTH	25	25	25	12.5	25	12.5	12.5	12.5	25	12.5	72.	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	25	25	12.5	12.5	25	12.5	12.5	12.5	12.5	12.5	25	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
	DE		LENGTH	9	9	9	9	9	9	9	9	10	9 (ه ر	0	٥	٥	۰ و	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
-		LANE		RT/LT	RT/LT	RT/LT	ΓŢ	RT/LT	П	RT	RT	RT/LT	RI F	KI/LI	<u>-</u>		- L	¥ !	ᆸ	RT	П	RT	LT	RT/LT	RT/LT	RT	ΙΊ	RT/LT	LT	LT	RT	RT	LT	RT/LT	LT	ΓŢ	RT	ΙΊ	RT	RT	RT	RT	니
		STATION #		0+20	0+95	1+80	2+00	5+70	00+6	9+20	14+50	16+00	16+50	19+50	22,50	23+30	24+50	79+50		40+00		55+50	62+50	82+00	91+00	00+26	00+86	00+66	103+50	113+00	113+50	117+00	122+00	125+00	136+00	151+50	155+50	161+00	173+50	174+90	177+00	178+00	186+00

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		COMMENTS																																									
	TACK (GALS)	407-A001 Asphalt for Tack Coat		0.34	0.34	0.34	0.34	0.34	0.72	0.79	0.48	0.76	0.69	88.0	0.80	0.84	69'0	69.0	92'0	69'0	69'0	69.0	69'0	0.41	0.42	0.38	69.0	0.71	69.0	69.0	0.84	0.69	0.69	0.84	0.69	0.71	09.0	0.70	09.0	09.0	1.37	0.70	0.33
/301	ASPHALT (TONS)	403-B003 12.5-mm, ST, Asphalt Pavement,	Leveling	5.63	5.63	5.63	2.63	2.63	18.90	31.50	15.75	25.20	12.60	08'9	33.60	42.00	12.60	12.60	25.20	12.60	12.60	12.60	12.60	9.45	10.50	6.30	12.60	16.80	12.60	12.60	42.00	12.60	12.60	42.00	12.60	16.80	10.80	27.00	10.80	10.80	135.00	27.00	5.40
REPAIR AREAS SR 145 308841/301	REMOVAL (SY)	202-B069 Removal of Concrete Pavement	w/Variable Depth Overlay	8.3	8.3	8.3	8.3	8.3	28.0	46.7	23.3	37.3	18.7	9.3	49.8	62.2	18.7	18.7	37.3	18.7	18.7	18.7	18.7	14.0	15.6	9.3	18.7	24.9	18.7	18.7	62.2	18.7	18.7	62.2	18.7	24.9	16.0	40.0	16.0	16.0	200.0	40.0	8.0
4	SAW CUT (LF)	503-C010 Saw Cut, Full Depth		31	31	31	31	31	92	71	43	89	62	34	72	92	62	62	89	62	62	62	62	37	38	34	62	64	62	62	92	62	62	92	62	64	54	63	54	54	123	63	30
			DEPTH	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	DESCRIPTION		WIDTH	12.5	12.5	12.5	12.5	12.5	28	28	14	28	28	14	28	28	28	28	28	28	28	28	28	14	14	14	28	28	28	28	28	28	28	28	28	28	24	24	24	24	24	24	12
	DES		LENGTH	9	9	9	9	9	6	15	15	12	9	9	16	20	9	9	12	9	9	9	9	6	10	9	9	8	9	9	20	9	9	20	9	8	9	15	9	9	75	15	9
		LANE		RT	RT	RT	LT	RT	RT/LT	RT/LT	RT	RT/LT	RT/LT	RT	RT/LT	RT	П	RT	RT/LT	LT	LT	LT	RT	LT	LT/LT																		
		STATION #		186+50	186+75	188+00	190+00	190+50	230+45	239+40	241+00	242+10	242+70	753+00	265+94	332+50	336+65	336+92	344+10	345+00	346+50	347+10	347+40	347+70	348+00	348+20	348+70	349+05	350+20	352+30	353+10	354+30	358+00	365+50	366+10	375+20	381+50	401+70	404+20	405+05	417+50	431+00	431+90

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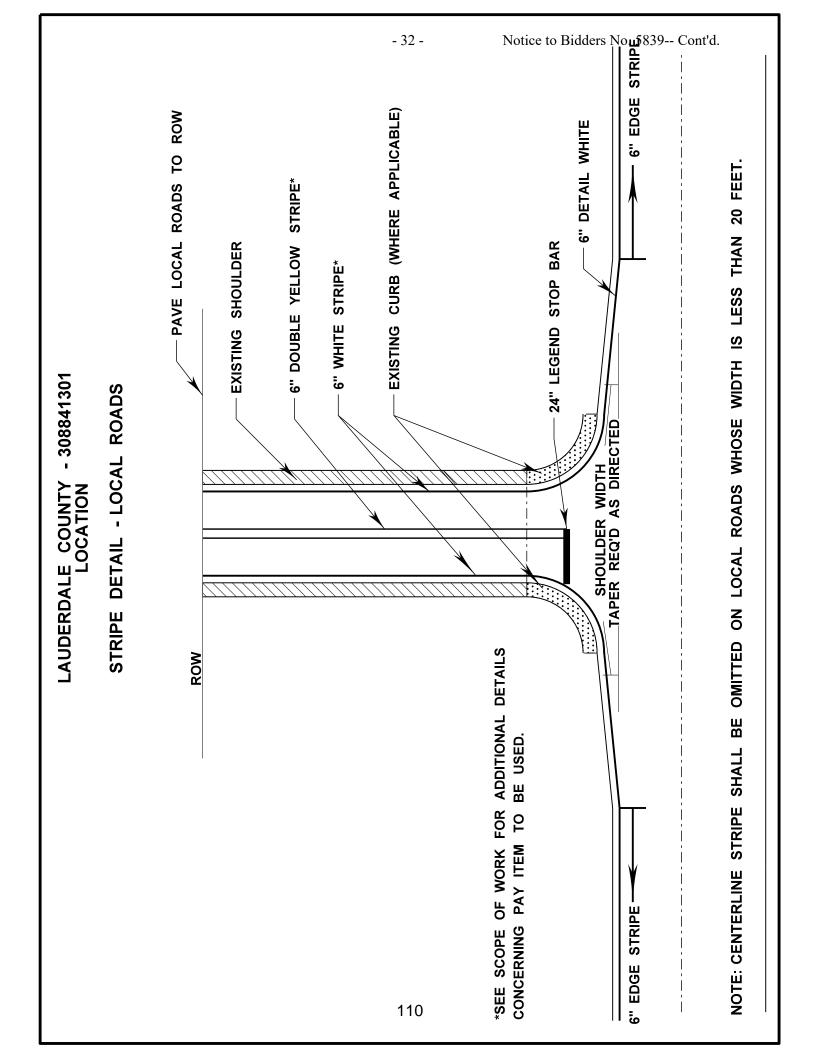
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		COMMENTS																																				
-	TACK (GALS)	407-A001 Asphalt for Tack Coat	090	00.0	0.60	09:0	09.0	09.0	0.36	0.67	0.33	09'0	0.33	0.33	0.33	0.70	0.77	09:0	09:0	0.42	0.40	09:0	09:0	09:0	0.64	0.73	0.40	09:0	09:0	09:0	09:0	0.93	0.40	0.40	0.33	0.40		59.9
301	ASPHALT (TONS)	403-B003 12.5-mm, ST, Asphalt Pavement, Leveling	1000	10.00	10.80	10.80	10.80	10.80	7.20	21.60	5.40	10.80	5.40	5.40	5.40	27.00	37.80	10.80	10.80	9.00	10.80	10.80	10.80	10.80	18.00	13.50	6.75	10.80	10.80	10.80	10.80	17.55	10.80	10.80	5.40	10.80		1440.4
REPAIR AREAS SR 145 308841/301	REMOVAL (SY)	202-8069 Removal of Concrete Pavement W/Variable Depth Overlay	16.0	10.0	16.0	16.0	16.0	16.0	10.7	32.0	8.0	16.0	8.0	8.0	8.0	40.0	56.0	16.0	16.0	13.3	16.0	16.0	16.0	16.0	26.7	20.0	10.0	16.0	16.0	16.0	16.0	26.0	16.0	16.0	8.0	16.0		2133.9
~ <u> </u>	SAW CUT (LF)	503-C010 Saw Cut, Full Depth	L I	t .	54	54	54	54	32	09	30	54	30	30	30	63	69	54	54	38	36	54	54	54	58	99	36	54	54	54	54	84	36	36	30	36		5392.0
	_	į	БЕРТН	٠,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	DESCRIPTION		WIDTH	47	74	24	24	24	12	24	12	24	12	12	12	24	24	24	24	15	12	24	24	24	24	30	15	24	24	24	24	39	12	12	12	12		
	DE		LENGTH	5	9	9	9	9	8	12	9	9	9	9	9	15	21	9	9	8	12	9	9	9	10	9	9	9	9	9	9	9	12	12	9	12		
		LANE	<u>+</u>	: :	_	LT	LT	П	LT/LT	RT/LT	ΙΊ	RT/LT	П	占	占	RT/LT	RT/LT	RT/LT	RT/LT	占	占	CL	CL	CL	CL/LT	CL/LT	RT	RT	RT	RT	RT	RT	LT of LT	RT of LT	LT of RT	LT of LT		ΓS
		STATION #	007707	432.50	433+80	436+30	441+10	441+20	443+50	449+20	452+90	453+50	456+50	458+30	462+60	463+20	475+20	479+90	480+20		482+80	485+18	485+48	486+00	486+70	487+85	488+75	491+10	492+00	492+30	493+00	497+00	498+00	498+20	498+20	503+50		TOTALS

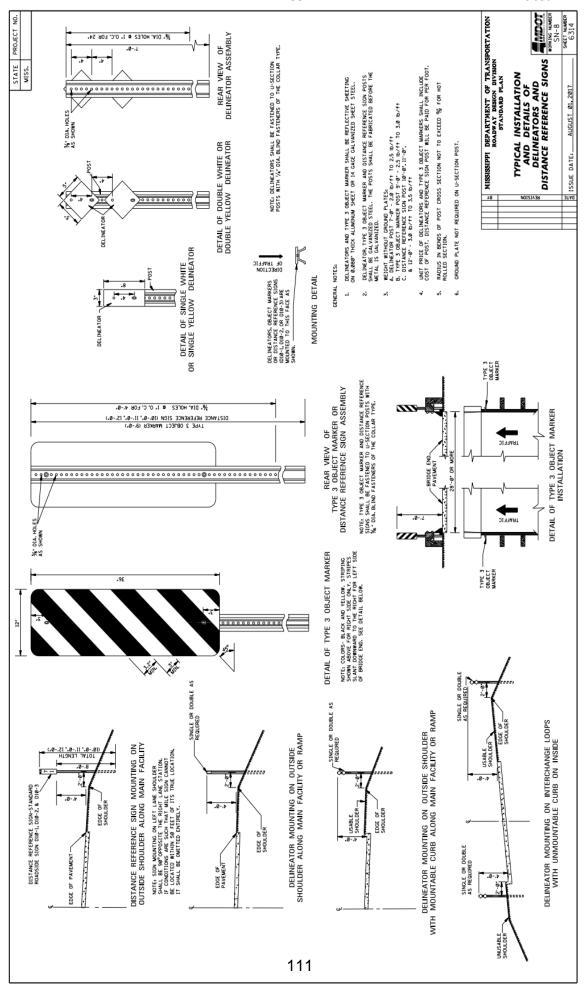
	308841/301 LAUDERDALE COUNTY 423-A001 RUMBLE STRIPS, GROUND IN (MI)								
	LEFT LANE				RIGHT LANE				
START	STOP	MILES		START	STOP	MILES			
274+00	286+50	0.2367		274+00	286+58	0.2383			
290+86	294+47	0.0684		290+30	296+05	0.1089			
298+20	301+32	0.0591		299+12	301+66	0.0481			
305+24	308+31	0.0581		305+59	309+19	0.0682			
312+89	317+08	0.0794		312+89	392+00	1.4983			
319+34	376+75	1.0873		395+51	422+90	0.5188			
391+00	393+63	0.0498		425+51	480+09	1.0337			
395+64	428+77	0.6275							
431+15	451+76	0.3903							
452+55	480+71	0.5333							
T	OTAL MILES RU	IMBLE STRIPS			6.7042				

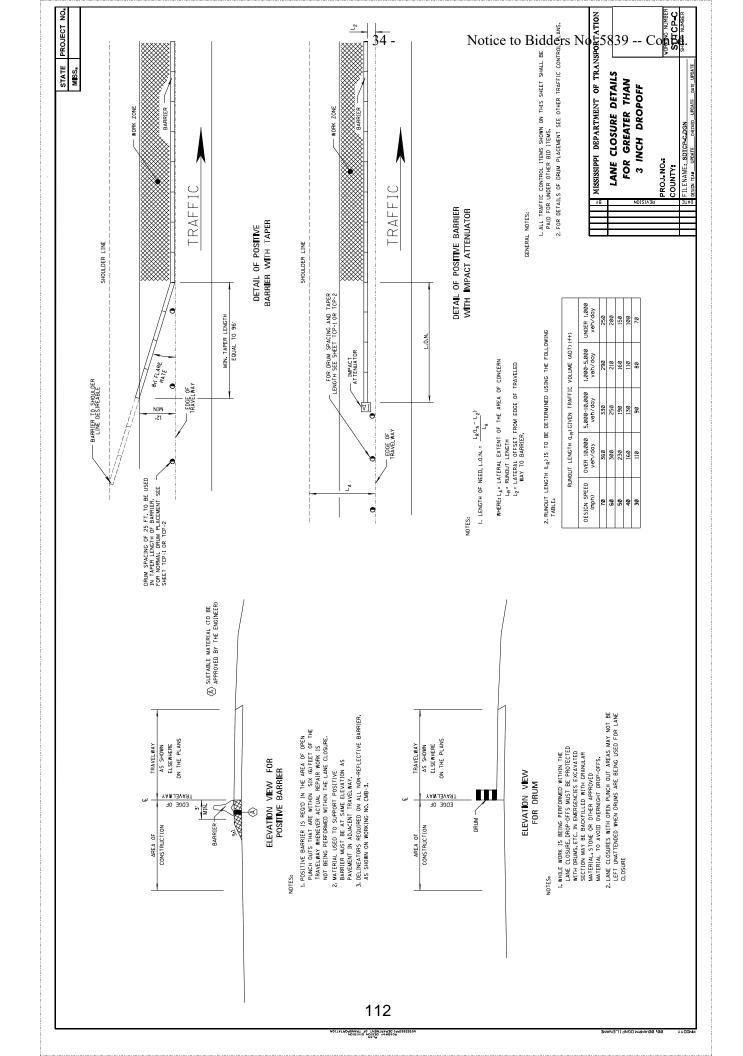
to Bidders	Nο	5839	Cont'd

						gn _o	Guardrail Quantities	ıantities							
			GUA	GUARDRAIL		FLARED	MEDIAN	W-Beam	Bridge End Section	DELINEATORS	ATORS			Dbl Face	
		W-BEAM	W-BEAM	THRIE BEAM	3EAM	TERMINAL	TERMINAL	End Section	TYPE "H"			Type 3	GUARDRAIL	GUARDRAIL	REMARKS
STATION	LOCATION	TYPE 1	DOUBLE FACE	TRANS. SECT.	THRIE BEAM	END SECT.	END SECT.	TYPEI		WHITE	WHITE YELLOW	Object Markers	REMOVAL	REMOVAL	
	(LT/RT)	(LF)	(LF)	(LF)	(LF)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(EA)	(LF)	(LF)	
216+05	RT	150				_			1	9		-	212.5		
216+05	LI	20				٢				4		-	112.5		
220+96	RT	150				1			_	9		1	212.5		
220+96	LT	20				1				4		1	112.5		
301+66	RT/RT	150				7			1	9		_	212.5		
301+66	LT/RT	90	100				-	-			9	-	75	137.5	
305+24	LT/LT	150				7			1	9		_	212.5		
305+24	RT/LT	20	100				-	-			9	-	75	137.5	-
39 2‡ 00	RT			12.5	762.5	2				20			850		3
4. X 000	RT			12.5	862.5	2				22			950		1 -
421+00	LT			12.5	162.5	2				11			250		-
426+00	П			12.5	187.5	2				12			275		
207+00	RT/RT					1			1	3		-	62.5		
510+00	LT/LT					1			1	3		1	62.5		
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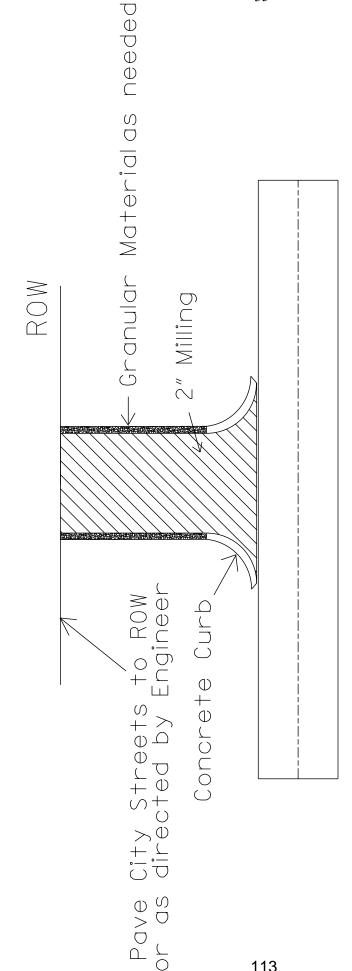
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* ALL GUARDRAIL (METAL RAIL AND METAL POSTS ONLY) WILL BE RETAINED BY MDOT. WOODEN POSTS, ALL BLOCKOUTS, CONCRETE ANCHORS, ETC. WILL BE THE PROPERTY OF THE CONTRACTOR.
* TOTAL GUARDRAIL LENGTH IS BASED ON A TERMINAL END SECTION 37.5' LONG. IF A TERMINAL END SECTION OF A DIFFERENT LENGTH IS USED, THE LENGTH OF THE W-BEAM MAY HAVE TO BE ADJUSTED.







Milling and Paving Detail City Streets/LocalRoads



-Millimits of City Streets at a depth of 2",

Notes:

113

-Place 2" of 12.5mm, ST/MT, Mixture to tie to mainline overlay.

-Milling/Paving area = 🖾

-See typical sections for asphalt mix.

SECTION 904 - NOTICE TO BIDDERS NO. 5840

CODE: (SP)

DATE: 04/25/2024

SUBJECT: Lane Closure Restrictions

PROJECT: MP-5145-38(001) / 308841301 -- Lauderdale County

Bidders are hereby advised of the following restrictions on the above captioned project.

SR 145 Four Lane Section just north of Myrtle Drive to 22nd Ave.

Lane closures shall not be allowed during the following hours:

• Monday – Saturday: 7:00 AM to 7:00 PM

No lane closures will be permitted on Sunday. Sunday is defined as 7:00 PM Saturday to 7:00 PM Sunday.

The Contractor will be charged a fee of <u>\$500.00</u> for each full or partial 5-minute period until the roadway is back in compliance with the requirements stated above.

Official time can be obtained by calling the following Jackson area phone number: 601-355-9311.

SECTION 904 - NOTICE TO BIDDERS NO. 5841 CODE: (SP)

DATE: 4/23/2024

SUBJECT: Temporary Construction Signs

PROJECT: MP-5145-38(001) / 308841301 – Lauderdale County

Bidders are hereby advised of the following regarding the Temporary Construction Signs required:

Should the Bidders elect to install Temporary Construction Signs by first driving short u-channel sections and then bolting the longer, correct height u-channel sections to them, the Bidders are advised that these short sections shall be a minimum of five (5) feet from the ground level when driven and the splice must consist of a minimum of eighteen (18) inches of overlap with a total of four (4) bolts. Bidders are also advised that it is mandatory that these short sections be removed at the completion of the project.

SECTION 904 - NOTICE TO BIDDERS NO. 5842

CODE: (SP)

DATE: 10/17/2023

SUBJECT: Underground Utilities

PROJECT: MP-5145-38(001) / 308841301 – Lauderdale County

Bidders are hereby advised that utility lines owned and maintained by MDOT may be present within the project limits. These utilities are not located by Mississippi 811. It shall be the Contractor's responsibility to coordinate with MDOT to have the utility lines located and marked prior to beginning work. The Contractor shall give a minimum of three (3) working days of advance notice for locate requests. Also, the Contractor shall be responsible for contacting local public agencies that are not members of Mississippi 811.

Additionally, it shall be the Contractor's responsibility to maintain the utility markings and have the ability to survey the marked utilities and re-establish said utility markings as needed. The Department shall only be responsible for locating and marking the utilities once per Contract.

The contacts for MDOT utility lines are as follows:

Underground Power Lines:

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Michael Lee – 601-683-3341 – mlee@mdot.ms.gov
Billy Coward – 601-683-3341 – bcoward@mdot.ms.gov
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Underground Communication Lines:

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Kerby McFarland – 601-359-7450 – <a href="mailto:kmcfarland@mdot.ms.gov">kmcfarland@mdot.ms.gov</a> Steven Newell – 601-359-7450 – <a href="mailto:snewell@mdot.ms.gov">snewell@mdot.ms.gov</a> Henry Lewis – 601-359-1454 – <a href="mailto:hlewis@mdot.ms.gov">hlewis@mdot.ms.gov</a>
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Underground Signal Lines:

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Amrik Singh – 601-359-1454 – <u>asingh@mdot.ms.gov</u>
Kenneth Welch – 601-359-1454 – <u>kwelch@mdot.ms.gov</u>
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CODE: (IS)

SPECIAL PROVISION NO. 907-101-1

DATE: 07/20/2023

SUBJECT: Definitions and Terms

Section 101, Definitions and Terms, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-101.01--Abbreviations</u>. After the abbreviation API on page 1, add the following.

APL Approved Products List

Replace the abbreviation for AWPA on page 1 with the following.

AWPA American Wood Protection Association

<u>907-101.02--Definitions</u>. Delete the sentence after the list of holidays in Subsection 101.02 on page 6 under **holidays**, **legal**, and substitute the following.

When a legal holiday falls on a Saturday or Sunday, the succeeding Monday, or as proclaimed by the Governor, will be observed as a legal holiday.

Delete the definition for Notice to Proceed in Subsection 101.02 on page 8, and substitute the following.

Notice to Proceed - Written notice to the Contractor to proceed with the contract work.

Delete the definition for "Plans" in Subsection 101.02 on page 8, and substitute the following.

plans - The approved plans, profiles, typical cross-sections, working drawings and supplemental drawings, or exact reproduction thereof, that show the location, character, dimensions, and details of the work to be done. The plans may also include electronic files, referred to on the plans as Electronic Files Identified as Plans, which may include engineering models, spreadsheets, CADD files or other electronic files used to convey design intent. When the contract does not have an official set of plans, reference to the plans shall mean the contract documents.

CODE: (IS)

SPECIAL PROVISION NO. 907-102-2

DATE: 11/22/2017

SUBJECT: Bidding Requirements and Conditions

Section 102, Bidding Requirements and Conditions, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-102.01--Prequalification of Bidders.</u> Delete the last sentence of the third paragraph of Subsection 102.01 on page 13, and substitute the following.

The Bidder's Certificate of Responsibility number must be on file with the Department's Contract Administration Division prior to request for permission to bid.

<u>907-102.02--Contents of Proposal Forms</u>. Delete the fourth paragraph in Subsection 102.02 on page 13, and substitute the following.

Prospective bidders must complete an online request for permission to be eligible to bid a project. Upon approval, the bidder will be authorized to submit a bid electronically using Bid Express at http://bidx.com.

CODE: (SP)

SPECIAL PROVISION NO. 907-103-2

DATE: 06/22/2017

SUBJECT: Award and Execution of Contract

Section 103, Award and Execution of Contract, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-103.01--Consideration of Proposal.</u> Delete the second and third paragraphs of Subsection 103.01 on page 19, and substitute the following.

<u>907-103.01.1--For Projects Constructed Without Federal Funds.</u> Resident Contractors actually domiciled in Mississippi are to be granted preference over nonresidents in awarding of Contracts financed 100% with State funds.

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

CODE: (IS)

SPECIAL PROVISION NO. 907-105-2

DATE: 07/20/2023

SUBJECT: Control of Work

Section 105, Control of Work, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-105.01--Authority of the Engineer.</u> Delete the first sentence of the second paragraph of Subsection 105.01 on page 31, and substitute the following.

The Engineer has the right to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to correct conditions unsafe for workmen or the general public, for failure to carry out provisions of the Contract, or for failure to carry out orders.

<u>907-105.02--Plans and Working Drawings</u>. Delete the first paragraph of Subsection 105.02 on page 31, and substitute the following.

After the contract is executed by the Executive Director, the Contractor will receive, free of charge, two bound copies of the proposal and contract documents (one executed and one blank) two full scale copies of the plans, five half-scale copies of the Plans, and Electronic Files Identified as Plans. The Contractor shall have one copy of the proposal and contract documents and one half-scale copy of the plans available at all times during work activity on the project.

CODE: (SP)

SPECIAL PROVISION NO. 907-108-4

DATE: 10/07/2020

SUBJECT: Subletting of Contract

Section 108, Prosecution and Progress, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-108.01--Subletting of Contract.

<u>907-108.01.1--General.</u> Delete the third sentence of the tenth paragraph of Subsection 108.01.1 on the bottom of page 72.

CODE: (IS)

SPECIAL PROVISION NO. 907-109-5

DATE: 11/14/2023

SUBJECT: Measurement and Payment

Section 109, Measurement and Payment, of the 2017 Edition of the Mississippi StandardSpecifications for Road and Bridge Construction is hereby amended as follows.

<u>907-109.01--Measurement of Quantities</u>. Delete the sixth full paragraph of Subsection 109.01on page 88, and substitute the following.

If appropriate based on the specific circumstances of the project, the Contractor may request that material specified to be measured by the cubic yard or ton be converted to the other measure. The Contractor must submit this request to the Engineer. The Engineer will provide an approval or denial in writing. The decision is in the sole discretion of the Engineer. If approved, factors for this conversion will be determined by the District Materials Engineer and agreed to by the Contractor. The conversion of the materials along with the conversion factor will be incorporated into the Contract by supplemental agreement. The supplemental agreement must be executed before such method of measurement is used.

907-109.04--Extra Work.

<u>907-109.04.1--Supplemental Agreement</u>. Delete the second paragraph of Subsection 109.04.1 on page 90.

<u>907-109.04.2--Force Account Agreement.</u> Delete the last sentence of subparagraph (c) in Subsection 109.04.2 on page 91, and substitute the following.

An amount will be added equal to fifteen percent (15%) of the sum thereof, excluding sales tax.

Delete subparagraph (d) in Subsection 109.04.2 on pages 91 & 92, and substitute the following.

(d) **Equipment.** Equipment used for force account work shall be of sufficient size and type necessary to perform the required work in an economic and expeditious manner. The Contractor must provide the manufacturer, make, model, year, type of fuel and other necessary information to determine proper hourly payment rates. Subject to advance approval of the Engineer, actual transportation cost for a distance of not more than 200 miles will be reimbursed for equipment not already on the project.

For equipment authorized by the Engineer for use on the force account work, the Engineer will use the equipment rental rates from the "Rental Rate Blue Book" as published on the Equipment Watch website www.equipmentwatch.com for the time period the force account work is authorized to determine payment to the Contractor. The maximum allowable rates

are determined as follows:

- 1. The hourly equipment rate will equal the FHWA total hourly rate. This rate takes into account adjustment factors for age and region.
- 2. The hourly estimated operating costs have been included in the FHWA total hourly rate.
- 3. The idle and standby rates shall be as listed in the "*Rental Rate Blue Book*" as reported by *Equipment Watch*.
- 4. These rates include the basic machine plus any necessary attachments.

Standby rates shall apply when equipment is not in operation and is approved by the Engineer to standby for later use to complete the work. Idle rates shall apply to equipment located on the project and the engine is burning fuel but no ground engaging or other components are actively engaged in meaningful work. In general, idle or standby rates shall apply when equipment is not in use, but will be needed again to complete the work and the cost of moving the equipment will exceed the accumulated standby cost. If the idle standby cost should exceed the equipment moving cost to or from the work site, the Contractor will be entitled to the moving cost only. Idle or standby rates will be used under the following conditions:

- 1. The equipment is totally dedicated to the force account work and not used intermittently on other work.
- 2. Idle or standby cost will be considered only after equipment has been operated on force account work.
- 3. The sum of idle or standby time and operating time shall not exceed eight (8) hours per day or 40 hours in a week.
- 4. Idle or standby payment will not apply to days not normally considered to be work days such as holidays, weekends, or days of inclement weather when no other work is taking place.

The Department will not pay for idle or standby time when equipment is inoperable, for time spent repairing equipment, or for the time elapsed after the Engineer has advised the Contractor that the equipment is no longer needed. The Department will determine if it will be more cost effective to pay standby time on approved equipment on site or for multiple mobilizations.

If equipment is needed, which is not included in the *Rental Rate Blue Book* as reported by *Equipment Watch*, the Department and Contractor will agree upon reasonable rental rates in writing before the equipment is used.

All equipment shall be subject to approval from day to day in accordance with the requirements of Subsection 108.05.

907-109.06--Partial Payment.

907-109.06.2--Advancement on Materials.

Delete the next to last paragraph of Subsection 109.06.2 on page 95, and substitute the following.

Materials for which an advanced payment has been allowed must be paid for by the Contractor within 30 days of the estimate on which the advanced payment was first allowed and proof of said payment must be verified by the supplier. If proof of payment is not furnished within the allowable 30 days, the advanced payment will be deducted on subsequent current estimates until such time that proof of payment is furnished.

<u>907-109.07--Changes in Material Costs.</u> After the fifth paragraph of Subsection 109.07 on page 96, change the web address to the following.

https://mdot.ms.gov/portal/current_letting

CODE: (SP)

SPECIAL PROVISION NO. 907-413-2

DATE: 05/09/2023

SUBJECT: Cleaning and Sealing Joints and Cracks

Section 413, Cleaning and Sealing Joints and Cracks, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-413.03--Construction Requirements.

907-413.03.3--Sawing and Sealing Transverse Joints in Asphalt Pavement.

<u>907-413.03.3.4--Sealing.</u> Delete the last sentence of the last paragraph of Subsection 413.03.3.4 on page 333, and substitute the following.

Poured joint sealing material shall only be placed when the air temperature is within the limits specified by the manufacturer.

<u>907-413.05--Basis of Payment</u>. Delete the last pay item listed on page 336, and substitute the following.

907-413-E: Sawing and Sealing Transverse Joints in Asphalt Pavement - per linear foot

CODE: (SP)

SPECIAL PROVISION NO. 907-414-1

DATE: 05/02/2017

SUBJECT: Polymer Modified Asphalt Rejuvenating Scrub Seal

Section 907-414, Scrub Seal, is hereby added to and made a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-414 -- POLYMER MODIFIED ASPHALT REJUVENATING SCRUB SEAL

<u>907-414.01--Description.</u> This work shall consist of, but not be limited to, furnishing all labor, materials, equipment and transportation for the application of a polymer modified asphalt rejuvenating scrub seal. All ingredients shall be properly proportioned, mixed, and spread on the paved surface in accordance with this Specification and as directed by the Engineer.

907-414.02--Materials.

<u>907-414.02.1--Aggregate</u>. Unless otherwise noted, the aggregate material shall be one of the seal aggregate cover materials listed in and meeting the requirements of Subsection 703.14 of the Standard Specifications.

<u>907-414.02.2--Asphalt Emulsion for Scrub Seal.</u> The asphalt emulsion for scrub seal shall meet the requirements of the following table and shall be composed of a polymer modifier, a petroleum based rejuvenating agent, and asphalt.

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

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

Resistance to Swelling: Polymer films shall be formed by using a 50 mil drawdown bar and drawing down 50 mils of the latex on polyethylene boards. Films shall be cured for 14 days at 75°F and 50% humidity. Samples for resistance to swelling in rejuvenating agent shall be 1" by 2" rectangles cut from the cured film. Cut at least 3 specimens for each sample to be tested for swelling. Fill 3- 8 oz ointment tins with at least a ½" deep of rejuvenating agent. Swelling samples shall be weighed and then placed in the ointment tins on top of the rejuvenating agent. Then, add at least another ½" deep of rejuvenating agent over each of the latex samples. The ointment tins shall be covered and placed in an oven at 104°F for the specified 48 hours +/- 15 minutes. The ointment tins are allowed to cool to 75°F and then the latex films are removed from the tins. Unabsorbed rejuvenating agent is removed from the intact latex film by scraping with a rubber policeman and blotting with paper towels. If the latex film does not remain intact during removal from the tins or while removing the unabsorbed rejuvenating agent the sample shall be rejected. After the rejuvenating agent is removed from the samples they are then weighed. Percent swelling is reported as weight increase of the polymer film; report mass increase as a percent by weight of the original latex film mass upon exposure of films to the rejuvenating agent.

When a fog seal is required, the asphalt emulsion shall meet the requirements of Subsection 702.07.

907-414.02.2.1--Certification and Acceptance. The Emulsion supplier shall submit a certification that the polymer modified rejuvenating emulsion meets the requirements of the specification. The certification shall be submitted to the Engineer prior to starting the work. The Engineer will sample the polymer modified rejuvenating emulsion according to Department procedures. Final acceptance of the emulsion for scrub seal will be based on the Manufacturer's Certification and testing conducted by the Department.

907-414.03--Construction Requirements. The attached sign drawings shall be used during scrub seal operations. Prior to any sealing operation, the rectangular "Loose Rock" signs shall be installed and remain in place until all sealing operations are complete. Prior to any daily sealing operation, the portable "Loose Rock" signs shall be installed in accordance with the attached drawings. Portable signs shall be installed and remain in place on a daily basis in the active sealing area. Payment for signs shown on the sign detail drawings shall be made under pay item no. 618-A, Maintenance of Traffic.

<u>907-414.03.1--Preparation.</u> The work shall be done in the following order: Prepare the pavement surface; apply the asphalt emulsion for scrub seal and scrub the applied emulsion with a scrub broom as specified herein; apply the aggregate, roll the aggregate, broom the aggregate with a secondary broom when specified; and sweep up and dispose of excess aggregate. Excess aggregate shall be removed from the project unless otherwise approved by the Engineer.

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

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

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

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

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

<u>907-414.03.2--Application.</u> The scrub seal shall be applied from edge of pavement to edge of pavement. The edges of the scrub seal application shall be maintained in a neat and uniform line. Scrub seal shall not be applied on concrete gutters or pads unless directed by the Engineer.

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

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

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

Seal Aggregate Gradation	Bituminous Material	Target Application Rate (gal/yd²)	Tolerance
Size No. 7	Emulsified Asphalt	0.33	<u>+</u> 0.03
Size No. 8 or 89	Emulsified Asphalt	0.30	<u>+</u> 0.03

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

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

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

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

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

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

During the first day of production and at least once a week thereafter, the application rate of the aggregate shall be verified by the Department to assure that the appropriate application rate of the aggregate is applied. The rate can be verified by placing a tarp of at least 1.0 yd² area on the roadway surface. After allowing the aggregate spreader to pass over the tarp, the aggregate on the tarp should be collected and weighed to determine the weight of aggregate. The measured weight should then be compared to the target weight calculated using the following formula.

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

Where:

W = target weight of aggregate in lbs.

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

 U_w = Unit weight of water at $70^{\circ}F = 62.3$ lbs./ft³

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

 $A = area of tarp in yd^2$

e = air voids in loose aggregate = 0.4

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

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

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

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

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

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

If specified, a fog seal will be placed at a rate of 0.11 gallons per square yard, or as directed by the Project Engineer. The fog seal shall not be placed until after final brooming.

<u>907-414.03.3--Stockpile Sites.</u> Sites for stockpiles of materials shall be grubbed and cleaned prior to storing the aggregates, and the ground shall be firm, smooth, and well drained.

907-414.03.4--Equipment. The following equipment shall be used for the scrub-seal operations.

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

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

C. <u>Aggregate Spreader</u>. A self-propelled aggregate spreader with front discharge that can evenly distribute aggregate.

- D. Roller. A minimum of two (2) pneumatic rollers weighing at least five (5) tons each.
- E. Power Broom. Two (2) mechanically powered kick-brooms or vacuum type brooms.

<u>907-414.03.5--Opening to Traffic.</u> Unless otherwise advised, the Contractor's operations shall be schedule such that all lanes of traffic are open to the traveling public at the end of each day. Considering time needed for curing and preparation prior to opening traffic, the Contractor should not apply bituminous material two (2) hours before dusk, or longer, to allow sufficient time for bonding of the aggregates.

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

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

907-414.04--Method of Measurement. Scrub seal shall be measured by the square yard.

Accepted quantities for asphalt for fog seal will be measured by the gallon as prescribed in Subsection 109.01. Unless otherwise specified, distributor tank measurement will be used. The volume of material over five percent (5%) above the quantity ordered for each shot will be deducted from measured quantities, except that 15 percent will be allowed for irregular areas where hand spraying is necessary.

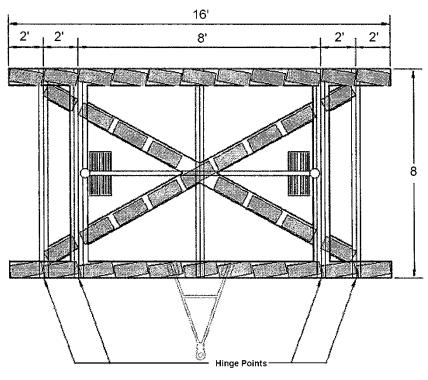
<u>907-414.05--Basis of Payment.</u> Scrub seal, measured as prescribed above, will be paid for at the contract bid price per square yard, which shall be full compensation for furnishing all labor, materials, equipment, temporary markers, vegetation removal, cleaning of the surface, presweeping, post-sweeping, doing all the work involved in mixing, applying and protecting the polymer modified asphaltic rejuvenating scrub seal, and all incidentals necessary to complete the work.

Asphalt for fog seal will be paid for at the contract unit price per gallon, which shall be full compensation for furnishing all labor, materials, equipment, applying and protecting the fog seal, and all incidentals necessary to complete the work.

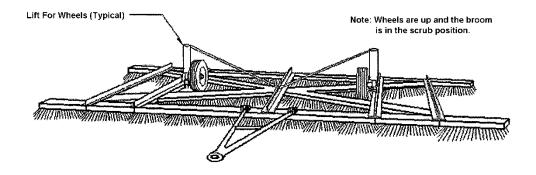
Payment will be made under:

907-414-A: Scrub Seal - per square yard

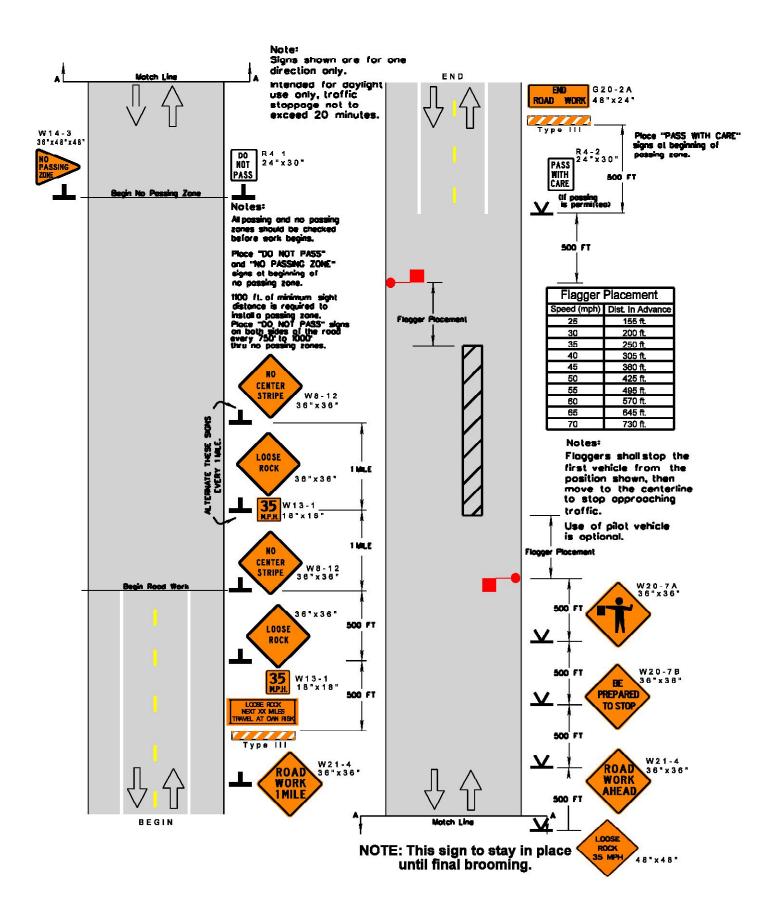
907-414-B: Asphalt for Fog Seal - per gallon

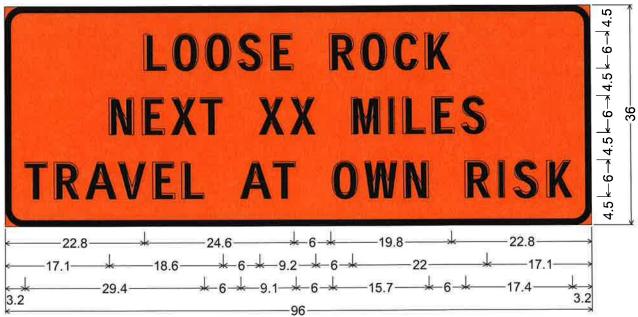


Street Broom w/ Nylon Bristles



Scrub Broom



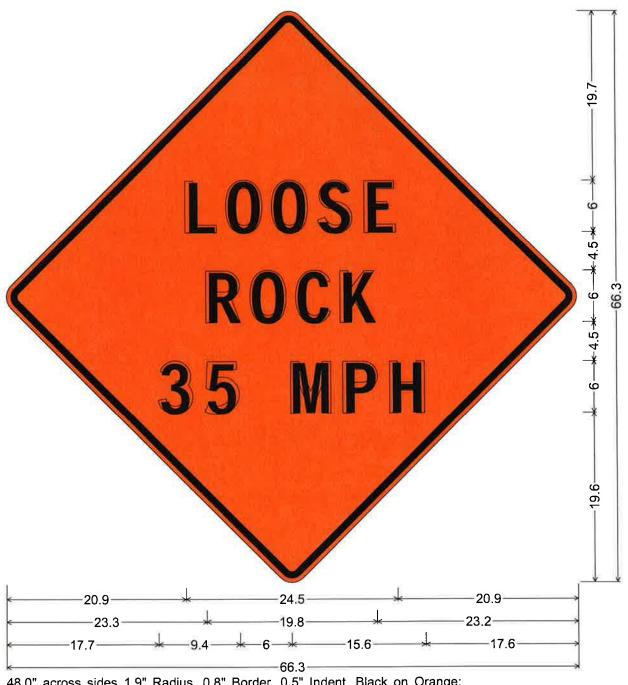


3.0" Radius, 1.0" Border, Black on Orange;

"LOOSE ROCK" D; "NEXT XX MILES" D; "TRAVEL AT OWN RISK" D;

Table of letter and object lefts.

L 22.8	0 27.	6	0 33.0	\$ 38.3	E 43	.7 R	3.4	0 58.	C 63	3.9	K 69.	0						
N 17.1	E 22.	5 2	(27.3	T 32.1	X 41.	7 X	5.9	M 56.9	I 63	.0	L 65.3	E 70	0.1	S 74.	9			
T 3.2	R 8.0	A 13.	.2 18	3.6 2	4.2	L 29.0	A 38	3.6	Γ 14.0	0 53	3.7	N 59.0	0 6	l 5.4	R 75.4	I 80.9	S 83.2	K 88.6



48.0" across sides 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange;

"LOOSE" D; "ROCK" D; "35 MPH" D;

Table of letter and object lefts.

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

CODE: (SP)

SPECIAL PROVISION NO. 907-618-11

DATE: 03/30/2022

SUBJECT: Work Zone Law Enforcement

Pursuant to House Bill No. 580, Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-618.01--Description. After Subsection 618.01.4 on page 443, add the following.

<u>907-618.01.6--Work Zone Law Enforcement</u>. On projects that the Commission determines are on high-volume roadways or are otherwise high risk projects, the Commission may include a pay item to provide for reimbursement to the Contractor for enhanced law enforcement safety operations in the work zone.

According to House Bill No. 580, the work zone safety operations, when required by the Commission, shall consist of utilizing a uniformed law enforcement officer equipped with a patrol vehicle with blue flashing lights to enforce traffic laws and provide for an enhanced law enforcement presence in order to facilitate the safe movement of traffic through the work zone and to protect workers within the work zone.

<u>907-618.03--Construction Requirements</u>. After Subsection 618.03.5 on page 447, add the following.

<u>907-618.03.7--Work Zone Law Enforcement</u>. The utilization of work zone law enforcement shall be done at such locations and time periods deemed necessary and appropriate by the Engineer, after discussion with the Contractor. The Contractor shall be responsible for the coordination with the work zone law enforcement agency.

The Contractor shall provide a daily work record of the actual hours of work performed by the law enforcement agency and shall be accompanied by signed invoices from the law enforcement agency, which must be verified by the Engineer.

<u>907-618.04--Method of Measurement</u>. After the last paragraph of Subsection 618.04 on page 449, add the following.

Work zone law enforcement will be measured per hour for every hour verified by the Engineer using an invoice or other acceptable record. Measurement for payment will not be made for work zone law enforcement after expiration of contract time.

<u>907-618.05--Basis of Payment</u>. After the third paragraph of Subsection 618.05 on page 449, add the following.

- 2 -

Work zone law enforcement, measured as prescribed above, will be paid for at the fixed contract unit price per hour, which price shall be full compensation for furnishing and reimbursing work zone law enforcement.

After the last pay item listed on page 450, add the following.

907-618-M2: Work Zone Law Enforcement

- per hour

CODE: (SP)

SPECIAL PROVISION NO. 907-619-6

DATE: 03/21/2018

SUBJECT: Temporary Portable Rumble Strips

Section 619, Traffic Control for Construction Zones, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-619.02--Materials. After Subsection 619.02.15 on page 472, add the following.

<u>907-619.02.16--Temporary Portable Rumble Strips.</u> Temporary portable rumble strips shall be RoadQuake manufactured by PSS and meet the following requirements:

- capable of being installed without adhesives or bolts,
- have a minimum weight of 100 pounds,
- have a minimum overall length of 11 feet,
- have a minimum width of 12 inches, and
- have a maximum height of 3/4 inch.

Temporary portable rumble strips shall be installed in accordance with the attached details, or as directed by the Engineer.

<u>907-619.03--Construction Requirements.</u> After Subsection 619.03.11 on page 476, add the following.

<u>907-619.03.16--Temporary Portable Rumble Strips.</u> Temporary portable rumble strips shall be placed at locations shown on the traffic control plans, attached drawing, or as directed by the Engineer. The rumble strips shall be removed when lane closures are removed, relocated when lane closures are relocated, or as directed by the Engineer.

Prior to placement of the rumble strips, the roadway shall be cleaned to be free of dust, sand, and other materials that may cause slippage. The minimum roadway temperature at the time of installation shall be in accordance with manufacturer recommendations.

A minimum of three (3) temporary portable rumble strips shall be arranged in an array. The spacing of temporary portable rumble strips in each array shall be on 15-foot centers. One array of three (3) strips shall be used in each lane. The rumble strips shall be regularly monitored and maintained to ensure they stay in place under traffic.

<u>907-619.04--Method of Measurement.</u> At the end of Subsection 619.04 on page 478, add the following.

Temporary Portable Rumble Strips will be measured for payment by the linear foot only when a pay item for temporary portable rumble strips is included in the contract. Otherwise, temporary portable rumble strips will be included in the cost of pay item 618-A, Maintenance of Traffic. The quantity of temporary portable rumble strips will be the length of rumble strips approved by the Engineer to be in-place on the project at any one time.

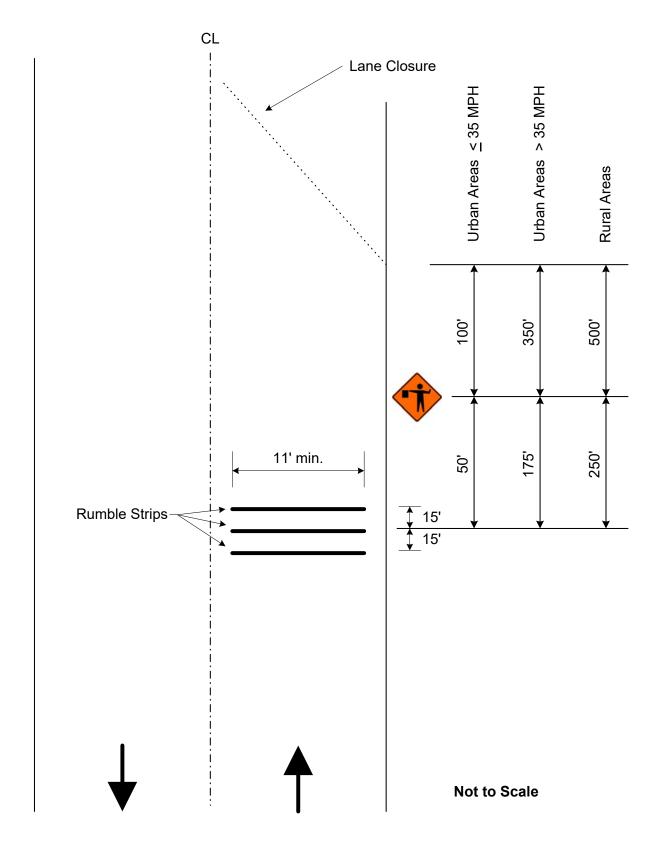
<u>907-619.05--Basis of Payment.</u> After the fifth paragraph of Subsection 619.05 on page 478, add the following.

Temporary Portable Rumble Strips measured as prescribed above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for cleaning the roadway surface, installing the rumble strips, maintenance and repair of the strips, cleaning and resetting of the strips, removal and replacement, and for all labor, equipment, tools, and incidentals necessary to complete the work.

After the last pay item listed on page 480, add the following.

907-619-B: Temporary Portable Rumble Strips

- per linear foot



Detail of Temporary Portable Rumble Strips

SPECIAL PROVISION NO. 907-701-3

CODE: (IS)

DATE: 05/04/2021

SUBJECT: Hydraulic Cement

Section 701, Hydraulic Cement, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-701.01--General</u>. In the first sentence of the second paragraph of Subsection 701.01 on page 718, change "mills" to "plants."

In the second sentence of the sixth paragraph of Subsection 701.01 on pages 718 and 719, change "shall" to "will."

<u>907-701.02--Portland Cement.</u>

907-701.02.1-General.

<u>907-701.02.1.2--Alkali Content</u>. Delete the sentence in Subsection 701.02.1.2 on page 719, and substitute the following.

When used in portland cement concrete, the total alkali contribution from all cement types in this Subsection shall not exceed 4.0 lb. per cubic yard of concrete calculated as follows:

lb alkali per cu Yd =
$$\frac{\text{(lb cement per cu Yd)x(\%Na}_2\text{O equivalent in cement)}}{100}$$

In the above calculation, the maximum cement alkali content reported on the cement mill certificate shall be used. An example calculation can be found in the Department's *Concrete Field Manual*.

<u>907-701.02.2--Replacement by Other Cementitious Materials.</u> Delete the paragraph in Subsection 701.02.2 on page 719, and substitute the following.

The maximum replacement of cement by weight is 25% for fly ash or 50% for ground granulated blast furnace slag (GGBFS). Replacement contents below 20% for fly ash or 45% for GGBFS may be used, but will not be given any special considerations, such as the maximum acceptance temperature for portland cement concrete containing pozzolans in Subsection 804.02.13.1.5. Special considerations shall only apply for replacement of cement by fly ash or GGBFS.

Delete Subsection 701.02.2.1 on pages 719 and 720, and substitute the following.

907-701.02.2.1--Portland Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater.

When portland cement concrete is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall be as follows in Table 1. Class C fly ash shall not be used as a replacement for cement in any of the sulfate exposure conditions listed in Table 1.

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 - 1,500	Type I cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS or Type II**** cement
Severe	0.20 - 2.00	1,500 - 10,000	Type I cement with a replacement by weight of 49.5 - 50.0% GGBFS, or Type II* cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS

Table 1- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Delete Subsection 701.02.2.2 on page 720, and substitute the following.

<u>907-701.02.2.2--Portland Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions or Seawater.</u> When portland cement for use in 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 or GGBFS shall meet the requirements of Subsection 701.02.2.1.

907-701.04--Blended Hydraulic Cement.

907-701.04.1--General. Delete Subsection 701.04.1.1 on page 720, and substitute the following.

<u>907-701.04.1.1--Types of Blended Hydraulic Cement</u>. Blended hydraulic cements (blended cements) shall be of the following types and conform to AASHTO M 240:

^{*} Type III cement conforming to AASHTO M85 with a maximum 8% tricalcium aluminate (C₃A) may be used in lieu of Type II cement as allowed in Subsection 701.02.1; this cement is given the designation "Type III(MS)."

^{**} Class F fly ash or GGBFS may be added as a replacement for cement as allowed in Subsection 907-701.02.2.

Type IL – Portland-limestone cement

Type IP - Portland-pozzolan cement

Type IS – Portland blast-furnace slag cement

Blended cement Types IL, IP, and IS meeting the "MS" sulfate resistance requirement listed in AASHTO M 240, Table 3 shall have the "(MS)" suffix added to the type designation.

<u>907-701.04.1.2--Alkali Content.</u> Delete the sentence in Subsection 701.04.1.2 on page 720, and substitute the following.

All blended cement types shall be made with clinker that would result in cement meeting the requirements of Subsection 701.02.1.2 when used in the production of AASHTO M 85, Type I or Type II cement.

The blended cement manufacturer shall include the percent equivalent alkalis as Na₂O on their cement mill reports.

When calculating the total alkali contribution with blended cements, use the equivalent alkali content of the base portland cement. An example calculation for cases where blended cements are used can be found in the Department's *Concrete Field Manual*.

<u>907-701.04.2--Replacement by Other Cementitious Materials.</u> Delete the paragraph in Subsection 701.04.2 on page 720, and substitute the following.

The maximum replacement of blended cement Type IL by weight is 35% for fly ash or 50% for GGBFS. Replacement contents below 20% for fly ash or 45% for GGBFS may be used, but will not be given any special considerations, such as the maximum acceptance temperature for blended cement concrete containing pozzolans in Subsection 804.02.13.1.5. Special considerations shall only apply for replacement of blended cement by fly ash or GGBFS.

No additional cementitious materials, such as portland cement, blended cement, fly ash, GGBFS, or others, shall be added to or as a replacement for blended cement Types IP and IS.

Delete Subsection 701.04.2.1 on pages 720 and 721, and substitute the following.

<u>907-701.04.2.1--Blended Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater</u>. When blended cement concrete is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall be as follows in Table 2. Class C fly ash shall not be used as a replacement for cement in any of the sulfate exposure conditions listed in Table 2.

Table 2- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Sulfate	Water-soluble	Sulfate (SO ₄)	Cementitious material required
Exposure	sulfate (SO ₄) in	in water, ppm	
	soil, % by mass		
Moderate	0.10 - 0.20	150 - 1,500	Type IL (MS)* cement,
and			Type IL cement with one of the following
Seawater			replacements of cement by weight:
			24.5 - 35.0% Class F fly ash, or
			49.5 - 50.0% GGBFS,
			Type IP (MS) cement,
			or
			Type IS (MS) cement
Severe	0.20 - 2.00	1,500 - 10,000	Type IL cement with a replacement of
			cement by weight of 49.5 - 50.0% GGBFS,
			or
			Type IL (MS) cement with one of following
			replacements of cement by weight:
			24.5 - 35.0% Class F fly ash, or
			49.5 - 50.0% GGBFS

^{*} Class F fly ash or GGBFS may be added as a replacement for cement as allowed in Subsection 907-701.04.2.

Delete Subsection 701.04.2.2 on page 721, and substitute the following.

<u>or Seawater</u>. When blended cement for use in 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 or GGBFS shall meet the requirements of Subsection 701.04.2.1.

Delete Subsection 701.04.3 on page 721.

CODE: (IS)

SPECIAL PROVISION NO. 907-702-4

DATE: 09/11/2018

SUBJECT: Bituminous Materials

Section 702, Bituminous Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-702.04--Sampling.</u> Delete the sentence in Subsection 702.04 on page 722, and substitute the following.

Sampling of bituminous materials shall be as set out in AASHTO R 66.

<u>907-702.07--Emulsified Asphalt.</u> Delete the last sentence in Subsection 702.07 on page 724, and substitute the following.

Asphalt for fog seal shall conform to the requirements of Subsection 907-702.12, Table V.

<u>907-702.12--Tables.</u> Delete Table V in Subsection 702.12 on page 729, and substitute the following.

TABLE V SPECIFICATION FOR FOG SEAL

	Ll	D-7	CH	PF-1	
Test Requirements	Min.	Max.	Min.	Max.	Test Method
Viscosity, Saybolt Furol, @ 25°C, Sec.	10	100	-	100	AASHTO T 72
Storage Stability Test, 24 hr, %	-	1	-	1	AASHTO T 59
Settlement, 5 day, %	-	5	-	-	AASHTO T 59
Oil Distillate, %	-	1	-	-	AASHTO T 59
Sieve Test, % *	-	0.3	-	0.1	AASHTO T 59
Residue by Distillation, %	40	-	40	-	AASHTO T 59
Test on Residue from Distillation					
Penetration @ 25°C, 100g, 5 sec	-	20	40	90	AASHTO T 49
Softening Point, °C	65	-	-	-	ASTM D 36
Solubility in trichloroethylene, %	97.5	-	-	-	AASHTO T 44
Elastic Recovery @ 25°C, %	-	-	40	-	AASHTO T 301
Original DSR @ 82° (G*/Sinδ, 10 rad/sec)	1	-	-	-	AASHTO T 111

^{*} The Sieve Test result is tested for reporting purposes only and may be waived if no application problems are present in the field.

SPECIAL PROVISION NO. 907-703-2

CODE: (SP)

DATE: 11/29/2022

SUBJECT: Gradation

Section 703, Aggregates, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-703.03--Coarse Aggregates for Hydraulic Cement Concrete.

907-703.03.2--Detail Requirements.

<u>907-703.03.2.4--Gradation.</u> In the table in Subsection 703.03.2.4 on page 734, add 100 for the percent passing by weight on the 1½-inch sieve for Size No. 67 aggregates.

Delete Note 2 under the table in Subsection 703.03.2.4 on page 734, and substitute the following.

Note ² – 100 percent shall pass the 1-inch sieve for Size 67 used in Class F and Class FX concrete.

CODE: (IS)

SPECIAL PROVISION NO. 907-705-1

DATE: 06/13/2018

SUBJECT: Stone Riprap

Section 705, Stone Blanket Protection and Filter Blanket Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-705.04--Stone Riprap</u>. Delete the last sentence of the first paragraph of Subsection 705.04 on page 750, and substitute the following.

Quality requirements for rock to be furnished under these specifications will come from a preapproved source and be visually approved prior to use.

SPECIAL PROVISION NO. 907-707-3

CODE: (IS)

DATE: 10/27/2021

SUBJECT: Joint Materials

Section 707, Joint Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-707.02--Joint Filler.

907-707.02.2--Preformed Sponge, Rubber, Cork and Closed-Cell Polypropylene Foam Joint Fillers for concrete Paving and Structural Constructions. Delete the two paragraphs of Subsection 707.02.2 on page 755, and substitute the following.

Preformed joint filler shall conform to AASHTO M 153 for sponge, rubber, and cork and tested according to ASTM D545. The type required will be indicated on the plans.

Closed-cell polypropylene foam shall conform to the requirements in ASTM D8139 and tested in accordance with ASTM D545.

907-707.02.3--Wood. Delete paragraph (b) of Subsection 707.02.3 on page 755, and substitute the following:

(b) Dimensions shall be as shown on the plans Dimensions shown on the plans are "dressed" sizes in accordance with Table 3 of the American Softwood Lumber Standard, SP-20. At the discretion of the Engineer, a 3/4-inch dressed board may be used in lieu of a 1-inch dressed board. A tolerance of plus or minus 1/16 inch thickness and plus or minus 1/8 inch width will be permitted. For slip-form paving a tolerance of minus 1/4 inch on each end in length will be permitted.

907-707.06--Flexible Plastic Gasket for Joining Conduit. Delete the third paragraph of Subsection 707.06 on page 756, and substitute the following.

The Department may require the performance test described in ASTM C 990.

SPECIAL PROVISION NO. 907-711-2

CODE: (IS)

DATE: 09/11/2018

SUBJECT: Plain Steel Wire

Section 711, Reinforcement and Wire Rope, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-711.02--Deformed and Plain Carbon-Steel Bars for Concrete Reinforcing.

907-711.02.3--Steel Welded and Non-Welded Wire Reinforcement, Plain and Deformed, for Concrete.

907-711.02.3.1--Plain Steel Wire. Delete the sentence in Subsection 711.02.3.1 on pages 780 and 781, and substitute the following.

Plain steel wire and plain steel welded wire shall conform to the requirements of AASHTO M 336.

CODE: (SP)

SPECIAL PROVISION NO. 907-712-1

DATE: 12/07/2021

SUBJECT: Fence and Guardrail

Section 712, Fence and Guardrail, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-712.01--General</u>. After the sentence in Subsection 712.01 on page 785, add the following.

All materials' inspection, testing, and certification will be performed in accordance with the requirements of the current version of the Department's *Materials Division Inspection, Testing, and Certification Manual*.

Delete Subsections 712.02 and 712.03 on page 785, and substitute the following.

<u>907-712.02--Barbed Wire.</u> Barbed wire shall conform to the requirements of AASHTO M 280. In the coastal counties of Hancock, Harrison, and Jackson, either Coating Type Z Class 3 or Coating Type A shall be furnished. In all other areas of the State, either Coating Type Z Class 1, Coating Type Z Class 3, Coating Type ZA Class 60, or Coating Type A shall be furnished.

<u>907-712.03--Metallic-Coated, Steel Woven Wire Fence Fabric</u>. Woven wire fencing (i.e., "hog wire") shall conform to the requirements of AASHTO M 279. In the coastal counties of Hancock, Harrison, and Jackson, either Coating Type Z Class 3 or Coating Type A shall be furnished. In all other areas of the State, either Coating Type Z Class 1, Coating Type Z Class 3, Coating Type ZA Class 60, or Coating Type A shall be furnished.

<u>907-712.04--Chain Link Fence.</u> Delete Subsections 712.04.1 thru 712.04.7 on pages 785 & 786, and substitute the following.

<u>907-712.04.1--Fabric.</u> In the coastal counties of Hancock, Harrison, and Jackson, either Type I Class D, Type II, Type III, or Type IV fabrics shall be furnished. In all other areas of the State, either Type I Class C, Type I Class D, Type II, Type III, or Type IV fabrics shall be furnished.

<u>907-712.04.2--Tie Wire</u>. Tie wire shall be of the same material as the fencing wire being used, shall be of good commercial quality, and shall meet the requirements of AASHTO M 181. Either Type I, Type II, Type III, or Type IV tie wire shall be furnished.

<u>907-712.04.3--Tension Wire.</u> Tension wire shall be of the same material as the fencing wire being used, shall be of good commercial quality, and shall meet the requirements of AASHTO M 181. In the coastal counties of Hancock, Harrison, and Jackson, either Type I Class 3, Type II, Type III, or Type IV tension shall be furnished. In all other areas of the State, either Type II, Type IV, or Type I Classes 1, 2, or 3 tension wires shall be furnished.

<u>907-712.04.4--Posts Rails, Gate Frames, and Expansion Sleeves.</u> Posts, rails, gate frames, and expansion sleeves shall conform to the requirements for posts in Subsection 712.05.2, unless otherwise designated in the contract.

<u>907-712.04.5--Miscellaneous Fittings and Hardware.</u> Miscellaneous fittings and hardware shall conform to the requirements of Subsection 712.16.

907-712.05--Fence Posts and Braces.

907-712.05.1--Treated Timber Posts and Braces.

<u>907-712.05.1.1--General.</u> Delete the third, fourth, fifth, and sixth paragraphs of Subsection 712.05.1.1 on page 787, and substitute the following.

All wood posts and braces shall be treated in accordance with Subsections 718.03 and 718.04.

<u>907-712.05.1.2--Round Posts.</u> Delete the last sentence of the last paragraph of Subsection 712.05.1.2 on page 788.

<u>907-712.05.1.3--Sawed Posts.</u> Delete the last sentence of the paragraph of Subsection 712.05.1.3 on page 788.

<u>907-712.05.1.4--Sawed Braces.</u> Delete the last sentence of the paragraph of Subsection 712.05.1.4 on page 788.

Delete Subsection 712.05.2 on page 788, and substitute the following.

907-712.05.2--Metal Posts.

<u>907-712.05.2.1--Round Steel Pipe.</u> Round steel pipe shall meet the requirements of AASHTO M 181, either Grade 1 (i.e., meeting the requirements in ASTM F 1083) or Grade 2 (i.e., meeting the requirements of ASTM F 1043).

Round steel pipe shall be sized in accordance with NPS (nominal pipe size) designations as shown on Plans, and not according to the outer or inner pipe diameter.

<u>907-712.05.2.2--Steel Fence Post and Assemblies, Hot-Wrought</u>. Steel posts with the following section shapes, Tee, channel or U, and Y-Bar shall meet the requirements of AASHTO M 281, galvanized in accordance with the requirements of AASHTO M 111, unless otherwise specified in the contract. Acceptance of these steel posts shall be by certification from the manufacturer, producer, supplier, or fabricator, as applicable.

907-712.05.2.3--Blank.

907-712.05.2.4--Steel H-Beam Posts. Steel H-Beam posts shall be produced from structural quality weldable steel having a minimum yield strength of 45,000 psi and shall be galvanized in accordance with ASTM A 123. Steel H-Beam line posts shall be 2.250 inches by 1.625 inches and shall weigh 3.43 pounds per foot. A tolerance of plus or minus 5.0 percent is allowed for

weight per foot. A tolerance of plus or minus 1.0 percent is allowed for dimensions.

<u>907-712.05.2.5--Aluminum-Alloy Posts and Assemblies.</u> Round aluminum-alloy posts shall meet the requirements of ASTM B 241, Alloy 6061, T6. Aluminum-Alloy H-Beam posts shall meet the requirements of ASTM B 221, Alloy 6061, T6.

<u>907-712.05.2.6--Formed Steel Section Posts.</u> Formed steel section posts, "C" sections, shall be formed from sheet steel conforming to ASTM A 1011, Grade 45, and shall be galvanized in accordance with ASTM A 123.

907-712.06--Guard and Guardrail Posts.

907-712.06.2--Treated Wood Posts.

<u>907-712.06.2.1--Square Posts.</u> Delete the paragraph in Subsection 712.06.2.1 on page 789, and substitute the following.

All square posts shall be inspected for conformance with Section 712.05, except that the posts may be rough and shall be within $\pm 3/8$ " of the dimensions shown on the plans.

<u>907-712.06.2.2--Round Posts.</u> Delete the paragraph in Subsection 712.06.2.2 on page 789, and substitute the following.

All round posts shall be inspected for conformance with Section 712.05, except that the posts shall be of the shape and dimensions shown on the plans.

<u>907-712.06.5--Treated Wood Blocks for Use with Metal Guardrail Posts.</u> Delete the paragraphs of Subsection 712.06.5 on pages 789 & 790, and substitute the following.

Treated wood blocks for use with metal guardrail posts shall be within $\pm 3/8$ " of the size and dimensions shown on the plans, except that a minus tolerance shall not be allowed for the slotted width in which the metal post must fit.

Delete Subsection 712.16 on page 791, and substitute the following.

<u>907-712.16--Hardware.</u> All ferrous metal hardware for fencing such as bolts, nuts, washers, and metal straps shall be as specified on the plans and galvanizing shall not be less than 1.0 ounce per square foot of uncoated area. Aluminum coated hardware shall be coated with aluminum meeting the requirements of AASHTO M 181 for aluminum coating and at the rate of not less than 0.4 ounces per square foot of uncoated area.

Aluminum alloy hardware shall conform to the requirements of ASTM B 221 for extruded aluminum alloy 6063, T6. The finished members shall be of uniform quality.

Aluminum-zinc coated hardware shall be coated with an aluminum-zinc alloy meeting the chemical requirements and weight of coating specified for aluminum-zinc alloy coated metal gates.

CODE: (SP)

SPECIAL PROVISION NO. 907-714-3

DATE: 08/31/2021

SUBJECT: Miscellaneous Materials

Section 714, Miscellaneous Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-714.01--Water.

907-714.01.1--General. Delete the last sentence of the second paragraph in Subsection 714.01.1 on page 794.

<u>907-714.01.2--Water for Use in Concrete.</u> Delete Subsection 714.01.2 on page 794, and substitute the following:

Water from municipal sources is permitted be used as mixing water in concrete, mortar, and grout without Department testing. Water from non-municipal water sources used in mixing of concrete, mortar, and grout which does not meet the requirements in Subsection 714.01.1 shall be tested for conformance as required in AASHTO M157, Table 1 and Table 2.

<u>907-714.01.3--Water for Use in Chemically Stabilized Based.</u> Delete the first sentence of first paragraph in Subsection 714.01.3 on page 794, and substitute the following:

Water used in the construction of bases that contain cement, lime, or other chemical additive shall be as set out in Subsection 714.01.1. Water from municipal sources is permitted to be used without testing for conformance to the requirements below. If water is not from a municipal source, it shall not contain impurities in excess of the following limits:

Delete Subsection 714.01.6 on page 795, and substitute the following.

907-714.01.6--Blank.

907-714.05--Fly Ash.

<u>907-714.05.1--General.</u> Delete the first sentence of the fifth paragraph in Subsection 714.05.1 on page 797.

907-714.13--Geotextiles.

<u>907-714.13.11--Tables.</u> Delete Table 1 in Subsection 714.13.11 on page 813, and substitute the following.

Type Designation	Γ	П	Ħ	Ta I∆	Table 1 - Geotextiles V		_	IIA	ш	VIII	X	
	Sedime	Sediment Control	Drainage	Paving	Separation & Drainage	Sej	paration, Stabiliza Reinforcement	Separation, Stabilization & Reinforcement	ઝ	High Strength	rength	
Physical Property ²						Woven	Non- Woven	Woven	Non- Woven			Test Method
Grab Strength (lb)	50	06	110	06	200	280	180	450	280	1		ASTM D 4632
Elongation (%)		50% max @ 45 lb	20% min	50% min @ break	50% min	50% max	50% Min	50% max	50% Min			ASTM D 4632
Seam Strength (lb)			70	-	180	240	160	400	240	-		ASTM D 4632
Puncture Strength (1b)			40		80	110	75	180	115	1		ASTM D 6241
Trapezoidal Tear (lb)		1	40	-	80	100	70	150	100			ASTM D 4533
Asphalt Retention (gal/yd²)	-	l		0.2		-	-	-	-	-		ASTM D 6140
vity (sec ⁻¹) nin	0.05	0.05	0.5	!	0.2	0.2	0.2	0.2	0.2			ASTM D 4491
oven (mm)	09:0	09.0	9.0	-	9.0	0.43		0.43				ASTM D 4751
AOS Non-Woven (mm) max	0.84	0.84	0.43		0.43		0.43	ł	0.43	-	ł	
Censile Strength after UV (% Retained)	70% @ 500 hr	70% @ 500 hr	50% @ 500 hr		50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr			ASTM D 4355
Melting Point °(F)				325								ASTM D 276
Minimum Ultimate Tensile Strength ³ (lb/in)										099	2000	ASTM D 4595

Values for AOS represent the maximum average roll values, 2 - Values not identified in this table should meet manufacturer certification for the use and application, 3- Machine direction Notes: 1 - All property values, with the exception of apparent opening size (AOS), represent minimum average roll values in the weakest principal direction.

Delete Subsection 714.15 on pages 816 and 817 and substitute the following.

907-714.15--Geogrids.

<u>907-714.15.1–General</u>. A geogrid is defined as a geosynthetic formed by a regular network of connected elements with apertures greater than 0.25 inch to allow interlocking with surrounding soil, rock, and other surrounding materials to function primarily as reinforcement.

Geogrid shall be manufactured from an expanded strain hardened monolithic polymer sheet composed of one or more synthetic polymers and shall be mildew resistant and inert to biological degradation and naturally encountered chemicals, alkalis and acids. The geogrid shall contain stabilizers and/or inhibitors, or a resistance finish or covering to make it resistant to deterioration from direct sunlight, ultraviolet rays, and heat.

Geogrid manufacturers shall participate in and be in compliance with the American Association of State Highway Transportation Officials (AASHTO) National Transportation Product Evaluation Program's (NTPEP) Geosynthetics audit program. Geogrid shall meet the requirements of Table II for the application and type shown on the plans and shall be selected from the Department's Approved Lists.

907-714.15.1.1--Geogrid for Retaining Walls and Reinforced Soil Slopes. Geogrid for retaining walls and reinforced soil slopes shall be creep tested in accordance with AASHTO R69 and meet Long Term Design Load, Minimum Ultimate Tensile Strength, and open area criteria listed in Table II. Manufacturers shall perform at least one long-term creep test for no less than 10,000 hours in accordance to ASTM D 5262 for each polymer or composition of polymers from which the geogrid is produced. The long-term design load that shall be reported for design use, shall be that load at which no more than 10% strain occurs over a 100-year design life of the geogrid, as calculated in accordance with AASHTO R69. Long-term design loads shall be reported unfactored, and the AASHTO strength reduction factors (Durability and Installation, and safety factors) will be considered by the Department's Geotechnical Branch on a site specific design basis.

<u>907-714.15.1.2--Geogrid for Subgrade Stabilization</u>. Geogrid for subgrade stabilization shall meet Minimum Ultimate Tensile Strength and open area criteria listed in Table II.

907-714.15.2--Marking, Shipment, and Storage. Each roll or container of geogrid shall be visibly labeled with the name of the manufacturer, trade name of the product, lot number, and quantity of material. In addition, each roll or container shall be clearly tagged to show the type designation that corresponds to that required by the plans. During shipment and storage the geogrid shall be protected from direct sunlight, and temperatures above 120°F or below 0°F. The geogrid shall either be wrapped and maintained in a heavy duty protective covering or stored in a safe enclosed area to protect from damage during prolonged storage.

<u>907-714.15.3--Manufacturer Certification</u>. The Contractor shall furnish the Engineer three copies of the manufacturer's certified test reports indicating that the geogrid furnished conforms to the requirements of the specifications and is of the same composition as the originally approved

by the Department.

<u>907-714.15.4--Acceptance Sampling and Testing</u>. Final acceptance of each shipment will be based upon results of tests performed by the Department on verification samples submitted from the project, as compared to the manufacturer's certified test reports. The Engineer will select one roll or container at random from each shipment for sampling. As sample extending full width of the randomly selected roll or container and being at least five (5) square yards in area will be obtained and submitted by the Engineer. All material samples shall be provided at no cost to the State.

TABLE II GEOGRIDS

Physical Properties			Type De	signation			Test Method
	I	II	III	IV	V	VI	
Long Term Design Load ¹ , pounds per foot, Machine Direction	250	500	750	1500	2500	3500	AASHTO R69, ASTM D5262
Minimum Ultimate Tensile Strength ² , pounds per foot, Machine Direction	500	1000	1500	3000	5000	7000	ASTM D6637
Open Area, percent	70	70	50	50	50	50	Direct Measurement

¹ Minimum design criteria requirement.

² Minimum Average Roll Value (MARV).

CODE: (SP)

SPECIAL PROVISION NO. 907-718-1

DATE: 12/07/2021

SUBJECT: Timber and Dimension Lumber

Section 718, Timber and Dimension Lumber, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete the Subsections in Section 718 on pages 836 thru 838, and substitute the following.

<u>907-718.01--General.</u> All timber and dimension lumber shall be Southern pine and shall conform in all respects to applicable requirements of AASHTO M 168. The Department reserves the right to sample and to test all materials at any time; all inspection, testing, and certification of materials will be performed in accordance with the requirements of the current version of the Department's *Materials Division Inspection, Testing, and Certification Manual*.

Timber and dimension lumber shall be furnished in the sizes shown on the plans or as specified. Unless otherwise specified, timber and dimension lumber shall be No. 1, or better, graded according to the latest American Lumber Standards.

Only one type of preservative shall be used for the treatment of materials for any one class of construction on a project, unless otherwise specified.

Where treated timber and dimensional lumber is to be used in non-highway construction or use, such as decking, handrails in walking trails, or in any manner where general public exposure by touch is possible, the treatment requirements will be as per project plans and/or approved by the State Materials Engineer.

<u>907-718.02--Untreated Timber and Dimension Lumber</u>. Untreated timber and dimension lumber shall conform to the requirements of AASHTO M 168.

<u>907-718.03--Treated Timber and Dimension Lumber</u>. Timber and dimension lumber to be treated shall meet the requirements herein specified and shall be treated as specified. Treated timber or dimensional lumber will not be accepted for use unless it has been inspected by an authorized representative of the Department and found to be satisfactory after treatment.

907-718.03.1--Blank.

907-718.03.2--Treatment.

<u>907-718.03.2.1--General.</u> All materials shall be treated in accordance with AASHTO M 133 unless otherwise directed by the Environmental Protection Agency (EPA).

907-718.03.2.2--Blank.

<u>907-718.03.2.3--Inspection</u>. Treated timber and dimension lumber shall be inspected by an authorized representative of the Department before being incorporated into the work. Treatment reports shall be provided to the Department for each lot of material supplied.

907-718.03.3--Blank.

<u>907-718.03.4--Storage of Treated Material</u>. All material treated for stock shall be stacked as compactly as possible on a well-drained surface. Material shall be supported on sills spaced as necessary, not to exceed 10 foot intervals and shall have at least one foot of air space beneath the stacks.

All materials treated with preservatives for use in buildings and applications where painting is required shall be dried after treatment. The treated wood shall be dried in accordance with American Lumber Standards.

<u>907-718.04--Preservative</u>. Preservatives shall be as specified in AASHTO M 133 unless otherwise directed by the Environmental Protection Agency (EPA).

CODE: (IS)

SPECIAL PROVISION NO. 907-720-2

DATE: 09/11/2018

SUBJECT: Acceptance Procedure for Glass Beads

Section 720, Pavement Marking Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-720.01--Glass Beads.

<u>907-720.01.4--Acceptance Procedures.</u> Delete the last sentence of the paragraph in Subsection 720.01.4 on page 841, and substitute the following.

Acceptance sampling and testing of glass beads will be in accordance with the Department's Materials Division Inspection, Testing, and Certification Manual, Section 2.9.2 -- Glass Beads.

CODE: (IS)

SPECIAL PROVISION NO. 907-721-4

DATE: 04/19/2022

SUBJECT: Materials for Signing

Section 721, Materials for Signing, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-721.06--Reflective Sheeting.

<u>907-721.06.2--Performance Requirements.</u> Delete Table 4 and Table 5 in Subsection 721.06.2 on pages 860 & 861, and substitute the following.

MINIMUM COEFFICIENTS OF RETROREFLECTION Candela per foot candle per square foot (cd/fc/ft²) Per ASTM Designation D4956

TABLE 4
Type IX Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Fluorescent Yellow/Green	Fluorescent Yellow	Fluorescent Orange
0.2°	-4.0°	380	285	38	76	17	300	230	115
0.2°	+30.0°	215	162	22	43	10	170	130	65
0.5°	-4.0°	240	180	24	48	11	190	145	72
0.5°	+30.0°	135	100	14	27	6.0	110	81	41
1.0°	-4.0°	80	60	8.0	16	3.6	64	48	24
1.0°	+30.0°	45	34	4.5	9.0	2.0	36	27	14

TABLE 5
Type XI Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Brown	Fluorescent Yellow/Green	Fluorescent Yellow	Fluorescent Orange
0.2°	-4.0°	580	435	58	87	26	17	460	350	175
0.2°	+30.0°	220	165	22	33	10	7.0	180	130	66
0.5°	-4.0°	420	315	42	63	19	13	340	250	125
0.5°	+30.0°	150	110	15	23	7.0	5.0	120	90	45
1.0°	-4.0°	120	90	12	18	5.0	4.0	96	72	36
1.0°	+30.0°	45	34	5.0	7.0	2.0	1.0	36	27	14

After Subsection 721.10 on page 864, add the following.

<u>907-721.11--Digital Applied Printing</u>. The following addresses the requirements for digitally printed finished retroreflective traffic control signs on flat sheet aluminum and digitally printed traffic sign faces intended to be applied to a sign substrate.

<u>907-721.11.1--Digitally Printed Ink Systems</u>. Traffic signs must be produced using components, and processes that comply with the retroreflective sheeting manufacturer's recommendations.

Digital printed ink systems used to print traffic signs must meet and comply with daytime and nighttime chromaticity (color standards) as recognized in ASTM D4956 "Standard Specification for Retroreflective Sheeting for Traffic Control."

Digital printed ink systems must meet 70% of the initial retroreflectivity specifications of each respective reflective film color as found in ASTM D4956 "Standard Specification for Retroreflective Sheeting for Traffic Control."

Prior to fabrication and preferably at the preconstruction meeting, the Contractor shall advise the Project Engineer in writing as to which signs on the project will be digitally printed and which ones will be screen printed. The Contractor shall submit to the Project Engineer certifications for all digitally printed signs, which will be forwarded to the State Traffic Engineer for review.

<u>907-721.11.2--Protective Overlay Film.</u> Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlaminate shall comply with the retroreflective sheeting manufacturer's recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

Table 1
Retroreflective Film Minimum Durability Requirements

ASTM D4956 Type	Full Sign Replacement Term (years)	Sheeting Replacement Term (years)
IV	7	10
VIII	7	10
IX	7	12
XI	7	12

Temporary signs used in work zones printed with black ink only will not require a protective overlay film as long as the finished sign is warranted for a minimum outdoor durability of three years by the sheeting manufacturer.

<u>907-721.11.3--Inspection</u>. During fabrication, the Contractor shall provide sufficient testing and quality control throughout fabrication to insure good workmanship. Once the material has been received, it may be subject to random testing to ensure compliance with all requirements. If any test samples do not conform to the requirements, the entire order may be returned at the vendor's expense.

<u>907-721.11.4--Traffic Sign Performance Warranty Provisions</u>. Based on the ASTM Type of sheeting specified, traffic control signs shall be warranted for the duration shown in Table 1. The Contractor shall supply a copy of the warranty document with complete details of terms and conditions upon request of the Department.

<u>907-721.11.5--Certified Digital Sign Fabricator</u>. Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

Certified sign fabricators must undergo an audit process by the sheeting manufacturer to ensure they have the proper equipment, manufacturing capabilities, manufacturing application processes and the materials required to fulfill the sheeting manufacturer's warranty obligations. Sign fabricators must recertify annually with reflective sheeting manufacturers or utilize a 3rd party certifier approved by the reflective sheeting manufacturer.

The Contractor shall submit proof of Sign Fabricator Certification as issued by the retroreflective sign sheeting manufacturer to the Project Engineer upon delivery of the signs, or with the Shop Drawings.

CODE: (IS)

SPECIAL PROVISION NO. 907-808-1

DATE: 11/01/2018

SUBJECT: Joint Repair

Section 808, Joint Repair, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-808.04--Method of Measurement.</u> Delete the paragraph in Subsection 808.04 on page 1009, and substitute the following.

When a pay item is included in the plans, joint repair will be measured by the linear foot and mortar mix will be measured by the gallon. The volume of measurement for the epoxy/sand mortar mix will be determined from the summation of the volumes of the epoxy components and the volume of sand will not be measured for payment.

<u>907-808.05--Basis of Payment.</u> Delete the paragraph in Subsection 808.05 on page 1009, and substitute the following.

When a pay item is included in the plans, joint repair, measured as prescribed above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for furnishing and placing all materials, labor, tools, equipment, and all incidentals necessary to complete the work.

When a pay item is included in the plans, mortar mix, measured as prescribed above, will be paid for at the contract unit price per gallon, which price shall be full compensation for furnishing all materials including sand and forming materials, and all incidentals necessary to complete the work. No payment will be made for the sand used in the epoxy mortar mix.

The price bid for each item of work shall include the cost of continuous maintenance of traffic and protective services as required by the Department's Traffic Control Plan. This shall include all required individual traffic control devices.

Payment will be made under:

907-808-A: Joint Repair - per linear foot

907-808-B: Mortar Mix - per gallon

CODE: (SP)

SPECIAL PROVISIONS NO. 907-823-7

DATE: 10/13/2020

SUBJECT: Preformed Joint Seal

Section 907-823, Preformed Joint Seal, is hereby added to and becomes a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-823--PREFORMED JOINT SEAL

<u>907-823.01--Description</u>. This work consists of furnishing and installing preformed joint seals in accordance with these specifications and the details shown in the Plans or drawings provided.

<u>907-823.02--Materials</u>. The Contractor shall furnish a manufacturer's certification stating that the material used meets the requirements of this specification.

The preformed joint seal shall be one of the following, or an approved equal. The size of the seal, Type I or Type II, shall be determined based on the size of the joint opening, as detailed in the Plans or drawings provided. It is the Contractor's responsibility to ensure that the size selected is appropriate for the width of the joint. Type I shall be used for joint openings less than two inches (2"). Type II shall be used for joint openings greater than two inches (2"), with the maximum joint opening being two and one-half inches $(2\frac{1}{2})$. In cases where the joint opening is greater than two and one-half inches $(2\frac{1}{2})$, another type of expansion material shall be required as directed by the Director of Structures, State Bridge Engineer.

- Silicoflex Joint Sealing System
 Manufactured by R.J. Watson, Inc. in Alden, NY www.rjwatson.com
- 2. Wabo®SPS Joint System
 Manufactured by Watson Bowman Acme Corporation in Amherst, NY
 www.wbacorp.com
- Silspec SSS Silicone Strip Seal Manufactured by SSI Commercial & Highway Construction Materials in Tulsa, OK www.ssicm.com

<u>907-823.03--Construction Methods</u>. Preformed joint seals shall be installed in accordance with the manufacturer's recommendations. The material shall seal the deck surface, gutters, and curbs to prevent moisture or other contaminants from leaking through the joints. The joint seal shall be installed in such a manner that the top surface of the material is within the minimum and maximum depths below the roadway or bridge surface recommended by the manufacturer.

Saw cutting for the joint repair shall be accomplished by sawing at the locations and depth shown

on the joint repair detail sheets in the plans or in the contract documents. Saw cuts shall be as near vertical as possible at the saw line of the repair area. The saw cut depth shall be equivalent to the installation depth required by the manufacturer's specifications, and the type specified shall be the same as the type specified for preformed joint seal.

<u>907-823.04--Method of Measurement</u>. Preformed joint seal of the type specified will be measured in linear feet along the length of the centerline joint.

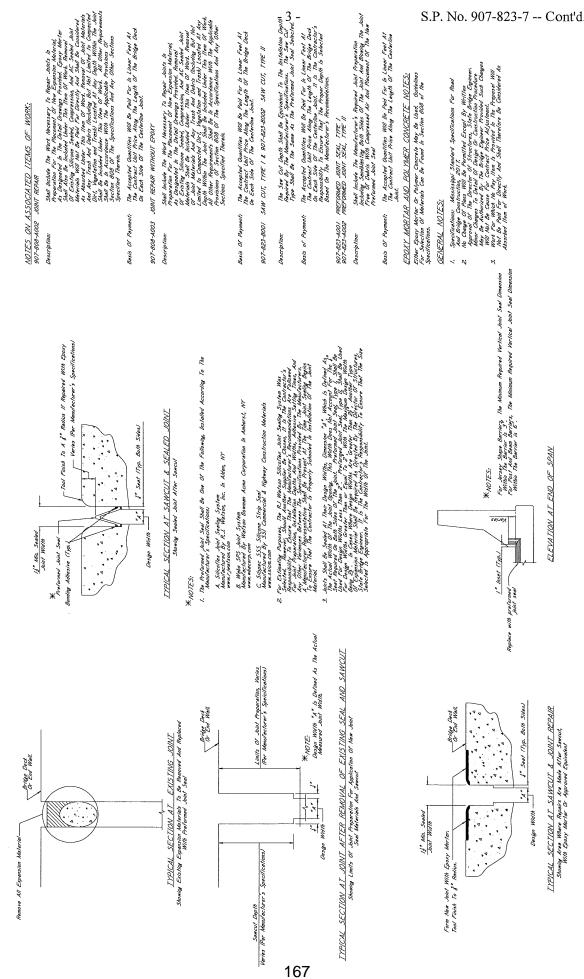
Saw cuts of the type specified will be measured by the linear foot along the length of the bridge deck on each side of the centerline joint.

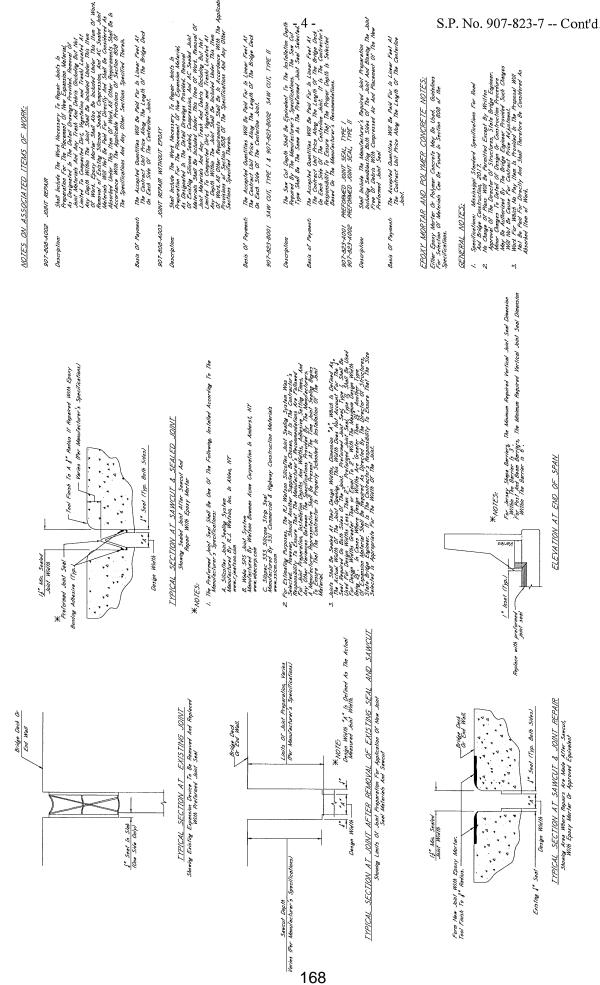
<u>907-823.05--Basis of Payment</u>. Preformed joint seal, measured as prescribed above, will be paid for at the contract unit price per linear foot, which shall be full compensation for furnishing all labor, equipment, tools, materials, and incidentals necessary to complete the work.

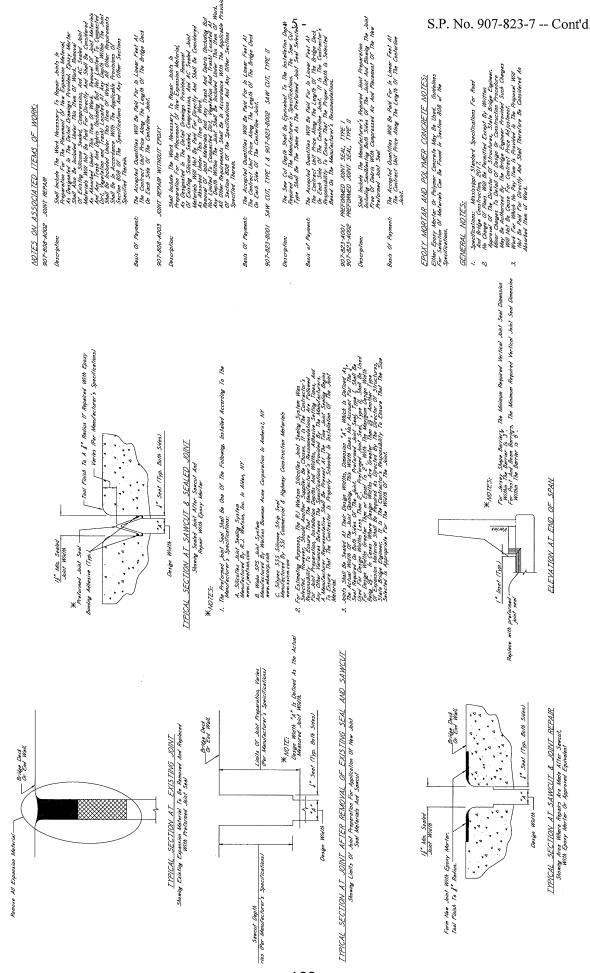
Saw cuts, measured as prescribed above, will be paid for at the contract unit price per linear foot, which shall be full compensation for furnishing all labor, equipment, tools, materials, and incidentals necessary to complete the work.

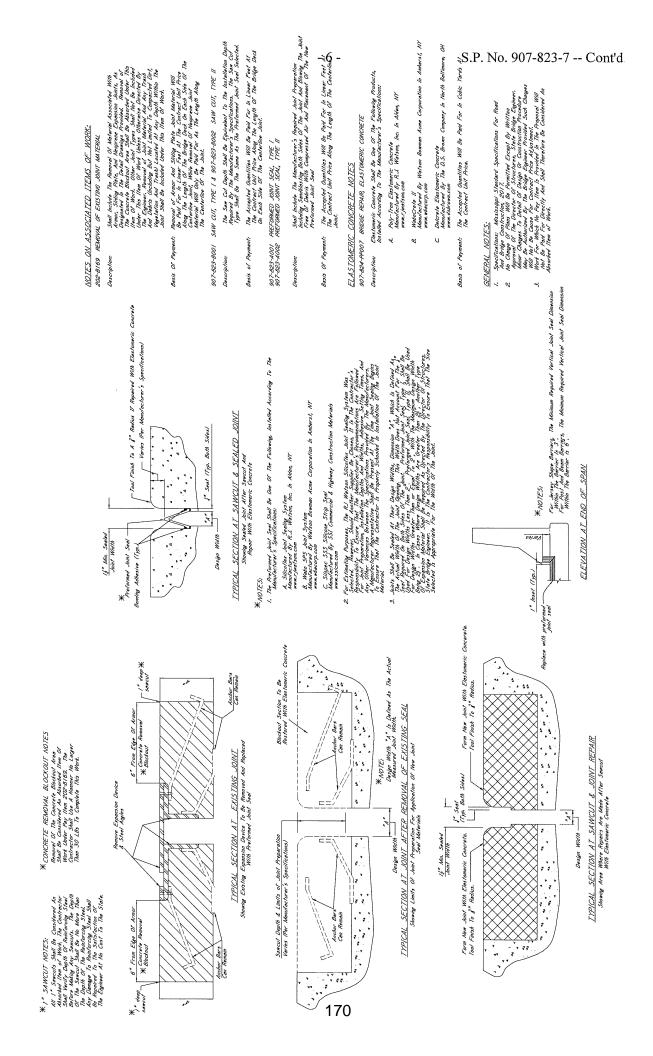
,	
907-823-A: Preformed Joint Seal, Type	- per linear foot
907-823-B: Saw Cut, Type	- per linear foot

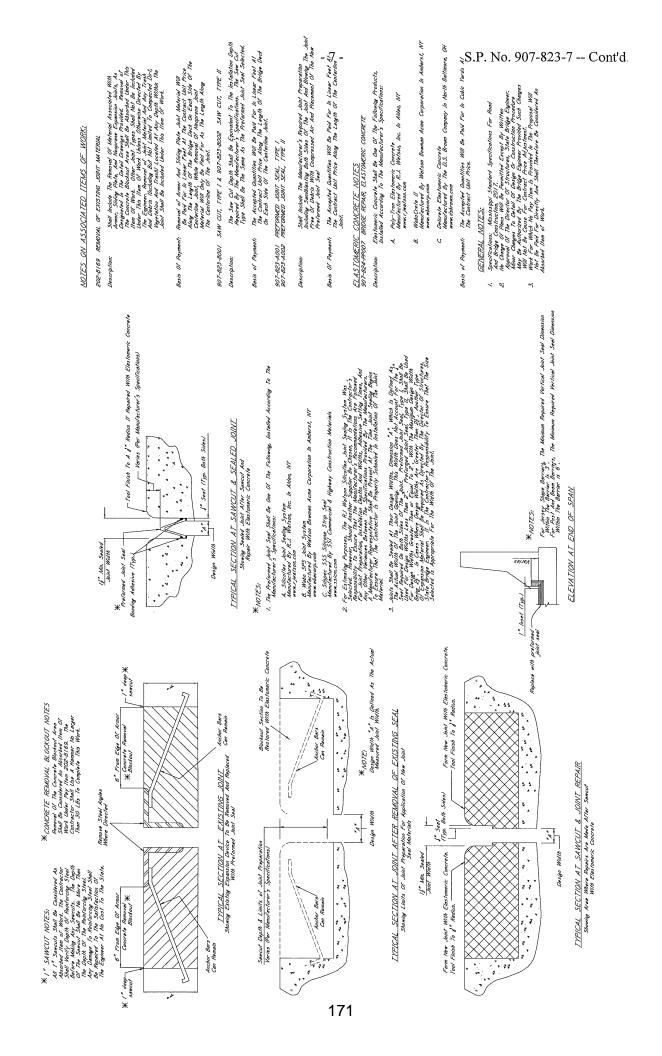
Payment will be made under:

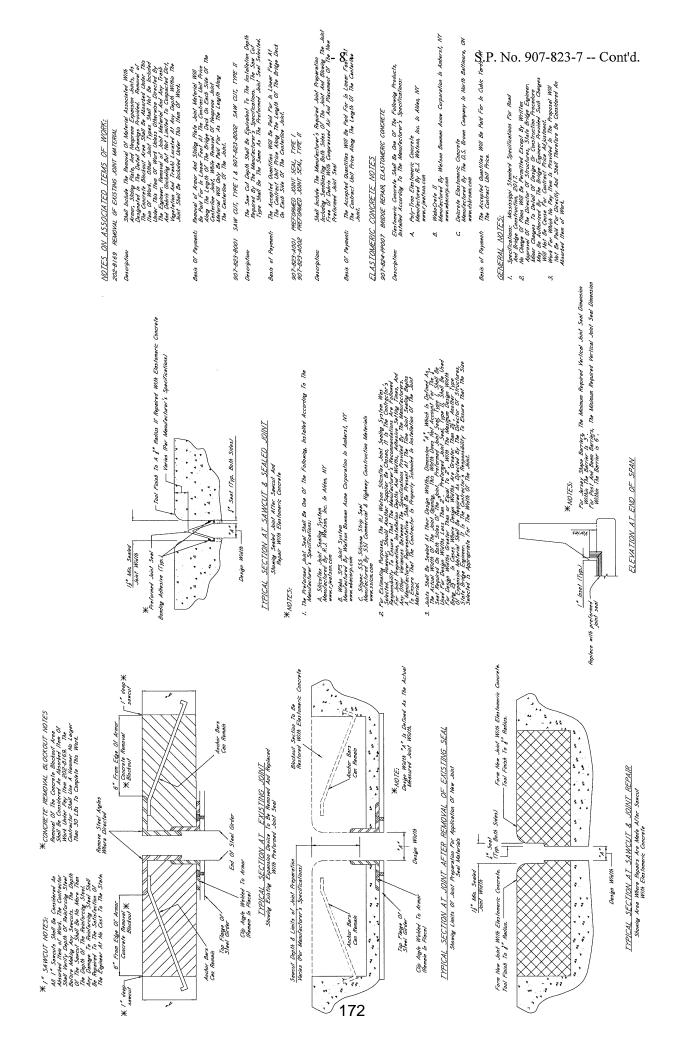


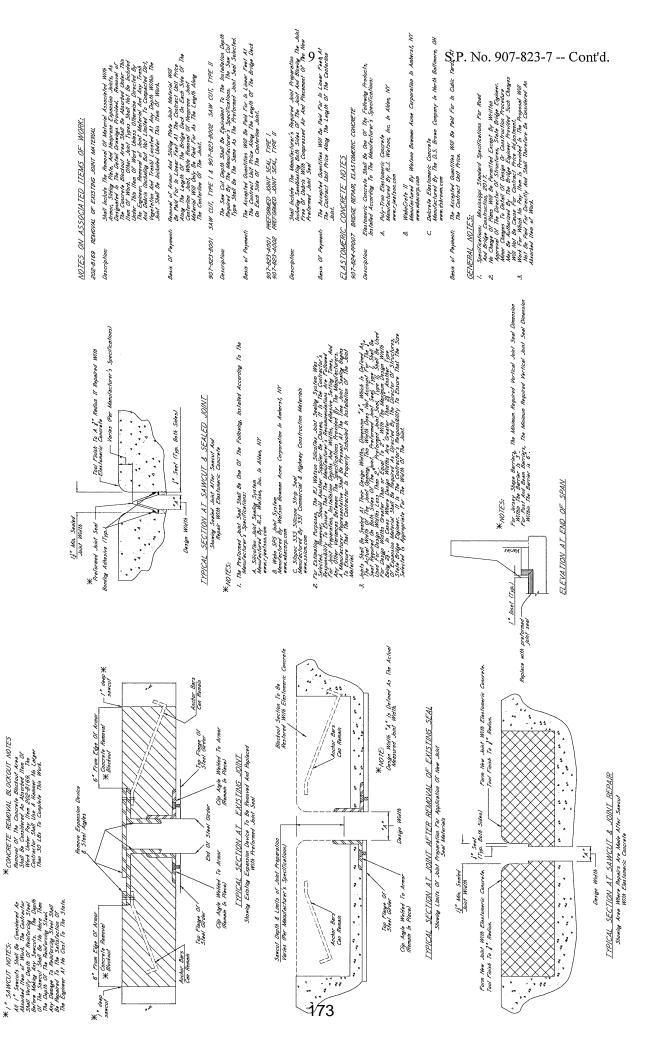


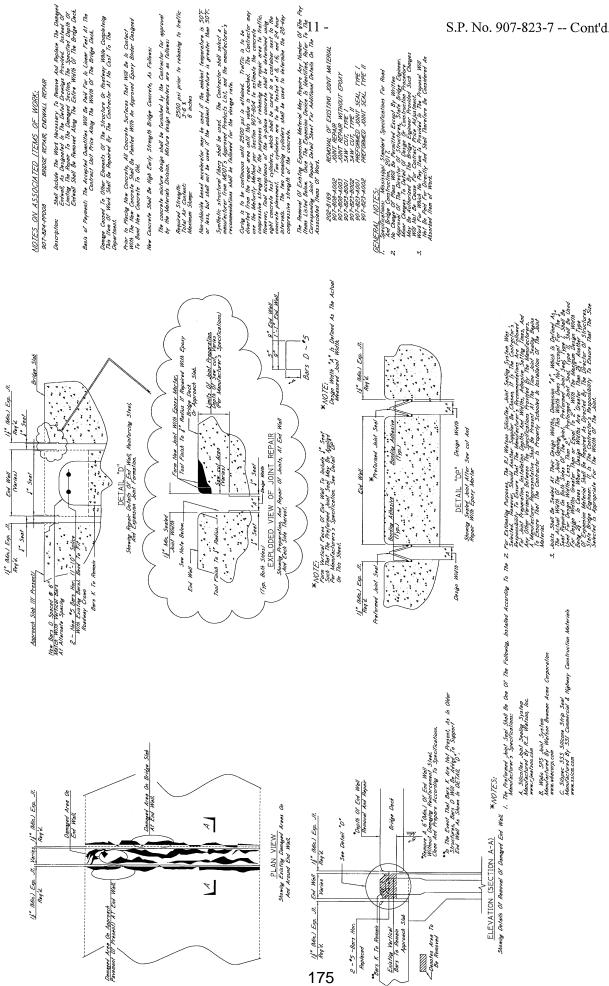












CODE: (SP)

SPECIAL PROVISION NO. 907-824-2

DATE: 07/12/2022

SUBJECT: Routine Bridge Repair

Section 907-824, Routine Bridge Repair, is hereby added to and made a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-824 – ROUTINE BRIDGE REPAIR

<u>907-824.01--Description.</u> This work shall consist of constructing and installing routine bridge repair items including General Epoxy Repair, Bi-directional or Uni-directional Fiber Reinforced Polymer (FRP) Wrap, Cap Cleaning, Bearing Replacements, Epoxy Injection, and Encapsulated Field Painting in accordance with the details on the plans, and the requirements set out herein.

Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment.

It shall be the responsibility of the Contractor to protect the existing structure from damage which might occur during construction. The Contractor shall replace or repair, as directed by the Engineer, any structures damaged by the Contractor during the life of the contract. No payment will be made for replacement or repair of damaged items.

All details are based on the dimensions shown on the original plans for the existing structure. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure. The Contractor shall verify all dimensions of the existing structure prior to beginning work.

During construction, care shall be exercised to ensure that no debris falls into the crossing below the structure. All debris, including any material that has accumulated on the bridge deck or caps, shall become the property of the Contractor and shall be removed from the construction site and disposed of properly.

For additional information and details, see work related items below and on the standard drawings. At the Contractor's request, Bridge Division will provide a complete set of As-Built plans for the existing bridge.

907-824.02--Materials.

907-824.02.1--General Epoxy Repair. Materials for general epoxy repair shall be as follows.

<u>Epoxy Resin</u>. Resin shall be selected from the MDOT Approved Products List and meet the requirements of ASTM C881, Type I, Grade 2, Class C.

<u>Silica Sand</u>. The materials shall be bagged general purpose cleaning sand.

<u>Epoxy Mortar Mix</u>. The epoxy mortar mix shall consist of part liquid epoxy and part clean dry sand mixed in the ratio recommended by the Manufacturer.

<u>907-824.02.2--FRP Wrap.</u> FRP wrap shall be one of the following products, or an approved equal, and shall be applied according to the Manufacturer's recommendations:

- "FRP Wrap" as manufactured by Fyfe Co. LLC, <u>www.aegion.com/about/our-brands/fyfe</u>
- "FRP Wrap" as manufactured by BASF Building Systems LLC, <u>www.master-builders-solutions.basf.us</u>
- "FRP Wrap" as manufactured by Sikawrap Inc. www.usa.sika.com
- "FRP Wrap" as manufactured by MAPEI Corp., www.mapei.com/us/en-us/

907-824.03--Construction Requirements.

<u>907-824.03.1--General Epoxy Repair.</u> Epoxy repair under this pay item is for general concrete spall repairs, and shall be bid such that the item may be increased, decreased or eliminated as directed by the Project Engineer. All epoxy repairs shall be performed in accordance with the details shown on the Drawings and in accordance with the notes herein. Repair concrete spalled areas on the bridge as directed by the Project Engineer and the locations listed in the plans using epoxy mortar. The Contractor shall determine the depth of reinforcement prior to any saw cutting. Spalled areas where pack rust has developed around or on reinforcement shall be blasted clean prior to repairing the spalled location. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions as shown in the information plans, unless noted otherwise.

A Representative of the epoxy manufacturer must be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material.

Prior to placement of the mortar mix, the prepared surface shall be lightly primed with neat epoxy.

Acetone alcohol may be used to clean and lubricate trowels.

Curing time shall be in accordance with the Manufacturer's recommendations.

<u>907-824.03.2--FRP Wrap.</u> After all spalled locations on the bent caps, beams or piling are repaired, the repair locations on all bent caps shall be wrapped with FRP wrap in accordance with the notes below and the drawings.

FRP wrap shall be applied to bent caps, beams or piling as designated in the plans. FRP wrap shall be either bi-directional or uni-directional.

The Contractor shall furnish all submittals indicating the materials, tools, equipment, transportation, necessary storage, labor, installation plan and supervision required for the application of the composite or polymer system to the Director of Structures, State Bridge Engineer through the Project Engineer prior to construction. Products shall be stored according the manufacturer's requirements and shall avoid contact with moisture, dust and chemical exposure. All FRP composite systems shall be proprietary systems consisting of all associated fiber reinforcement and polymer adhesives/resins. FRP composites consisting of fiber reinforcement and polymers provided by more than one manufacturer are not allowed. The FRP composite system shall utilize carbon fiber reinforcement as the primary fiber material (primary structural component). The FRP system shall be top coated with a coating approved by the FRP system supplier. The coating color shall be selected by the Project Engineer.

FRP wraps shall not be installed when the ambient temperature is below 40°F or above 130°F. In cold conditions, auxiliary heat may be applied to raise the ambient temperature to a suitable level. Clean heat sources shall be utilized for this purpose (e.g., electric or propane) that do not contaminate the substrate with carbonation.

FRP wraps shall not be installed when surface moisture is present on the substrate or when rainfall or condensation is anticipated in the work areas. If water leakage exists through cracks or concrete joints, water flow shall be stopped prior to FRP installation. Resins (including primers and fillers) shall be mixed according to the FRP system manufacturer's installation instructions. All resin components shall be at a proper temperature and mixed in the manufacturer's prescribed mix ratio until there is a uniform and complete mixing of components.

Resin components are often contrasting colors, so full mixing is achieved when color streaks are eliminated. Resins should be mixed for the Manufacturer's prescribed mixing time and visually inspected for uniformity of color. A representative of the FRP wrap manufacturer must be present for sufficient time to assure that the Contractor is properly schooled in the installation of FRP wrap. Prior to installation of FRP wraps, the Contractor shall repair concrete spall areas in accordance with general epoxy repair notes herein and the details in the plans. The fibrous reinforcement system shall have a minimum tensile force as shown in the plan details. The direction of the fiber wrap shall be in the direction shown on the Contract Plans.

In addition to the Manufacturer's requirements, the Contractor shall ensure the structural and durability of the reinforced fiber wrap system by meeting the following acceptance guidelines:

Small delaminations, less than two inches (2") each, are permissible as long as the delaminated area is less than 5% of the total laminate area and there are no more than 10 such delamination per 10 feet.

Large delaminations, greater than 25 inches, can affect the performance of the installed system and shall be repaired by selectively cutting away the affected sheet and applying an overlapping sheet patch of equivalent piles. Delaminations less than 25 inches may be repaired by ply replacement.

The Contractor shall submit an FRP repair procedure to the Project Engineer for review and approval by the Director of Structures, State Bridge Engineer. This must be performed prior to repairing and delaminated areas.

<u>907-824.03.3--Cap Cleaning.</u> The caps at every bent shall be cleaned to the satisfaction of the Project Engineer after all other work has been done. All large debris shall be removed by hand while other debris, including but not limited to dirt and rust, shall be removed by pressure washing the bent caps. The pressure washer shall be able to maintain 3,500 psi of pressure. Prior to construction, the Contractor shall submit a proposed containment plan to the Project Engineer for approval by the Director of Structures, State Bridge Engineer.

<u>907-824.03.4--Bearing Replacements.</u> All bearings should be removed and replaced according to Bearing Assembly Details. All structural steel shall conform to ASTM A709, Grade 50. All steel shall be new. Extreme care shall be exercised in removing the existing bearing plates that are welded to the anchor plates embedded in the prestressed beams. Existing anchor bolts shall be ground to ½" below the concrete surface and grouted with epoxy mortar.

The bottom of the existing anchor plates shall be finished smooth to accommodate the new steel plates and painted with approved encapsulating paint. All pack rust and scale within the designated areas shall be removed by using small hand tools, mechanical process, or needle gun. All areas required to be painted containing grease films after the initial cleaning shall be cleaned with a biodegradable solvent. All debris removed from the existing structure shall become property of the Contractor and shall be disposed of properly. The Contractor shall provide technical data for the proposed encapsulating paint to be used on this project to the Project Engineer for approval by the Director of Structures, State Bridge Engineer. New paint shall be applied by hand, with either a brush or roller.

After the pads are vulcanized to the new steel plates, the new steel plates shall be cleaned and then painted with one shop coat of inorganic zinc, one field intermediate coat of acrylic latex, and one field top coat of acrylic latex per Section 814 of the Standard Specifications. Painting of new steel plates and existing anchor plates shall not be measured for separate pay and all costs shall be included in the price bid for Bearing Replacement.

Prior to any construction or fabrication, the Contractor shall comply with the submittal requirements listed in the bearing replacement details. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure.

The Contractor shall provide adequate bracing and jacking arrangements as required to replace the existing bearings. The beam end shall only be raised to ½" from its original position. Traffic shall be maintained on the bridge during the duration of the repair.

The Contractor shall employ the service of a Mississippi Registered Professional Engineer who is knowledgeable in the field of Bridge Design. A complete set of bracing and jacking arrangement plans along with design calculations shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the design Engineer's seal.

Jacks shall be coupled to a common manifold. Jacking point shall be under the bottom flange of the beam at the bent and no jacking points will be allowed under any diaphragm or bay. After the beam is raised into position, temporary blocking shall be provided to secure the beam in this position while work is being performed. Temporary blocking points shall be under the bottom flange of the beam at the bent and no temporary blocking will be allowed under any diaphragm or bay.

Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

<u>907-824.03.5--Epoxy Injection.</u> All cracks greater than 1/32" shall be injected with an approved epoxy resin adhesive of the gel type. Prior to injecting any cracks, the crack shall be cleaned with a high velocity filtered air jet.

A representative of the epoxy manufacturer shall be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material. Epoxy resin adhesive shall be installed in strict accordance with the manufacturer recommendations. Curing time shall be in accordance with manufacturer's recommendations. After epoxy injection is complete, all injection ports shall be removed.

<u>907-824.03.6--Encapsulating Field Painting.</u> The Contractor should be aware that the existing paint on the steel structure may contain lead.

Prior to construction, the Contractor shall submit a Temporary Containment Plan for the removal of the existing paint and rust from the designated repair areas to the Project Engineer for approval by the Director of Structures, State Bridge Engineer. Also, the Contractor shall submit a Temporary Containment Plan for painting the designated repair areas.

All pack rust and scale within the designated areas shall be removed by using small hand tools, mechanical process, or needle gun. All areas required to be painted containing grease films after the initial cleaning shall be cleaned with a biodegradable solvent. Existing paint shall be roughened to ensure the new paint will adhere to the existing painted surface. All debris and paint removed from the existing structure shall become the property of the Contractor and shall be disposed of properly.

All exposed steel surfaces in the repair areas shall be painted with an encapsulating paint designed to encapsulate lead-based paints, and applied according to the manufacturer's recommendations. This will include but is not limited to: existing bearings, beams, and diaphragm assemblies, etc.

The Contractor shall provide technical data for the proposed encapsulating paint to be used on this project to the Project Engineer for approval by the Director of Structures, State Bridge Engineer.

New paint shall be applied by hand with brush or roller.

<u>907-824.04--Method of Measurement.</u> Epoxy Repair, completed in accordance with the plans and specifications, will be measured per square foot. All items of work related to epoxy repair shall be included in the square foot unit price.

FRP Wrap, Bi-directional and Uni-directional, completed in accordance with the plans and specifications, will be measured per linear foot or square foot.

Cap Cleaning, completed in accordance with the plans and specifications, will be measured per each.

Bearing Replacements, completed in accordance with the plans and specifications, will be measured per each.

Epoxy injection, complete in accordance with the plans and specifications, will be measured by the linear foot.

Encapsulating Field Painting, complete in accordance with the plans and specifications, will be measured by the square foot.

<u>907-824.05--Basis of Payment.</u> Epoxy Repair, measured as prescribed above, will be paid for at the contract unit price per square foot, which price shall be full compensation for materials, labor, equipment, and incidentals necessary to complete the work.

FRP Wrap, Bi-directional and Uni-directional, measured as prescribed above, will be paid for at the contract unit price per linear foot or square foot, which price shall be full compensation for all labor, materials, surface preparation, and incidentals associated with the installation of FRP wraps, including epoxy mortar repairs, necessary to complete the work.

Cap Cleaning, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for all materials, labor, equipment and incidentals necessary to complete the work.

Bearing Replacements, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for all materials, labor, equipment and incidentals necessary to complete the work.

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

Encapsulating Field Painting, measured as prescribed above, will be paid for at the contract unit price per square foot, which price shall be full compensation for all materials, labor, equipment, cleaning, and incidentals necessary to complete the work.

Payment will made under:

907-824-A: General Epoxy Repair - per square foot

907-824-B: FRP Wrap, * - per linear foot or square foot

907-824-C: Cap Cleaning - per each

907-824-D: Bearing Replacements - per each

907-824-E: Epoxy Injection - per linear foot

907-824-F: Encapsulating Field Painting - per square foot

^{*} Indicate Bi-directional, Uni-directional, etc.

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 any Supplemental Specifications.

Evidence of my (our) authority to submit the Proposal is hereby furnished. The proposal is made without collusion on the part of any person, firm or corporation. I (We) certify that I (we) have carefully examined the Plans, the Specifications, including the Special Provisions and Notice(s) to Bidders, herein, and have personally examined the site of the work. On the basis of the Specifications, Special Provisions, Notice(s) to Bidders, and Plans, I (we) propose to furnish all necessary machinery, tools, apparatus and other means of construction and do all the work and furnish all the materials in the manner specified. I (We) understand that the quantities mentioned herein are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid, in accordance with the above.

I (We) acknowledge that this proposal will be found irregular and/or non-responsive unless a certified check, cashier's check, or Proposal Guaranty Bond in the amount as required in the Advertisement (or, by law) is submitted electronically with the proposal or is delivered to the Contract Administration Engineer prior to the bid opening time specified in the advertisement.

INSTRUCTION TO BIDDERS: Alternate and Optional Items on Bid Schedule.

- 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.

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

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

	Respectfully Submitted,
	DATE
	Contractor
	BYSignature
	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 names, titles and business addresses of the executives are as	State of and the s follows:
President	Address
Secretary	Address
Treasurer	Address

Revised 1/2016

The following is my (our) itemized proposal.

 $\label{eq:milk} \begin{tabular}{ll} Milk & Overlay approximately 10 miles of SR 145 from the Clarke County Line to I-59, known as State Project No. MP-5145-38(001) / 308841301 in Lauderdale County. \end{tabular}$

Line no.	Item Code	Adj Code	Quantity	Units Roadway It	Description[Fixed Unit Price]
0010	202-B052		102	Square Yard	Removal of Concrete Driveways, All Depths
0020	202-B069		2,134	Square Yard	Removal of Concrete Pavement w/ Variable Depth Overlay
0030	202-B073		30	Square Yard	Removal of Concrete Pavement, All Depths
0040	202-B153		275	Linear Feet	Removal of Guard Rail, Double Faced Rail Including Hardware, Post & Rail
0050	202-B158		3,675	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends
0060	202-B171		776	Linear Feet	Removal of Legend, All Types
0070	202-B172		492	Square Feet	Removal of Legend, All Types
0080	202-B240		8,829	Linear Feet	Removal of Traffic Stripe
0090	203-EX031	(E)	70	Cubic Yard	Borrow Excavation, AH, LVM, Class B17
0100	203-G002	(E)	200	Cubic Yard	Excess Excavation, LVM, AH
0110	203-I002		70	Square Yard	Site Grading
0120	209-A005		799	Square Yard	Geotextile Stabilization, Type V, Non-Woven
0130	216-A001		65	Square Yard	Solid Sodding
0140	219-A001		1	Thousand Gallon	Watering (\$20.00)
0150	304-D002	(GT)	836	Ton	Granular Material, Crushed Stone
0160	403-A002	(BA1)	9,306	Ton	12.5-mm, MT, Asphalt Pavement
0170	403-A003	(BA1)	5,558	Ton	12.5-mm, ST, Asphalt Pavement
0180	403-B003	(BA1)	1,441	Ton	12.5-mm, ST, Asphalt Pavement, Leveling
0190	406-D001		132,650	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0200	407-A001	(A2)	13,326	Gallon	Asphalt for Tack Coat
0210	413-D002		1,891	Linear Feet	Cleaning and Filling Joints
0220	423-A001		7	Mile	Rumble Strips, Ground In
0230	503-A002	(C)	30	Square Yard	8" and Variable Jointed Concrete Pavement
0240	503-C010		6,886	Linear Feet	Saw Cut, Full Depth
0250	503-D001		7	Cubic Yard	Concrete for Base Repair
0260	503-E002		52	Each	Tie Bars, No. 5 Deformed Drilled and Epoxied or Grouted
0270	603-CA041	(S)	8	Linear Feet	30" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets
0280	603-CB005	(S)	1	Each	30" Reinforced Concrete End Section
0290	606-B003		800	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post
0300	606-B006		200	Linear Feet	Guard Rail, Class A, Type 1, Double Faced
0310	606-B011		1,975	Linear Feet	Guard Rail, Class A, Type 1, Thrie Beam, Metal Post
0320	606-B013		50	Linear Feet	Guard Rail, Class A, Type 1, Thrie Beam, Transition Section
0330	606-D019		10	Each	Guard Rail, Bridge End Section, Type H
0340	606-E003		2	Each	Guard Rail, Terminal End Section, Double Faced
0350	606-E005		16	Each	Guard Rail, Terminal End Section, Flared

Line no. 0360	Item Code 606-E007	Adj Code	Quantity 2	Units Each	Description[Fixed Unit Price] Guard Rail, Terminal End Section, Non-Flared
0370	612-A001		8	Cubic Yard	Flowable Fill, Excavatable
0380	618-A001		1	Lump Sum	Maintenance of Traffic
0390	619-A1001		35	Mile	Temporary Traffic Stripe, Continuous White
0400	619-A2001		45	Mile	Temporary Traffic Stripe, Continuous Yellow
0410	619-A3001		9	Mile	Temporary Traffic Stripe, Skip White
0420	619-A4002		5	Mile	Temporary Traffic Stripe, Skip Yellow
0430	619-A5001		47,031	Linear Feet	Temporary Traffic Stripe, Detail
0440	619-A6001		1,807	Square Feet	Temporary Traffic Stripe, Legend
0450	619-A6002		8,856	Linear Feet	Temporary Traffic Stripe, Legend
0460	619-D1001		354	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0470	619-D2001		756	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0480	619-F4001		10	Each	Snap-Back Delineator
0490	619-G4001		24	Linear Feet	Barricades, Type III, Double Faced
0500	620-A001		1	Lump Sum	Mobilization
0510	626-A001		3	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip White
0520	626-B002		18	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous White
0530	626-D001		2	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0540	626-E001		15	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0550	626-G004		22,167	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0560	626-G005		24,864	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
0570	626-H001		903	Square Feet	Thermoplastic Double Drop Legend, White
0580	626-H002		4,428	Linear Feet	Thermoplastic Double Drop Legend, White
0590	627-J001		2,259	Each	Two-Way Clear Reflective High Performance Raised Markers
0600	627-K001		677	Each	Red-Clear Reflective High Performance Raised Markers
0610	627-L001		1,656	Each	Two-Way Yellow Reflective High Performance Raised Markers
0620	630-F006		103	Each	Delineators, Guard Rail, White
0630	630-F007		12	Each	Delineators, Guard Rail, Yellow
0640	630-G005		14	Each	Type 3 Object Markers, OM-3R or OM-3L, Post Mounted
0650	630-G006		2	Each	Type 3 Object Markers, OM-3R or OM-3L, 2 Markers Per Post, Post Mounted
0660	907-413-E001		22,649	Linear Feet	Sawing and Sealing Transverse Joints in Asphalt Pavement
0670	907-414-A001		79,827	Square Yard	Scrub Seal
0680	907-414-B001	(A2)	9,632	Gallon	Asphalt for Fog Seal
0690	907-618-M2001		1,000	Hours	Work Zone Law Enforcement (\$60.00)
0700	907-808-A003	(S)	55	Linear Feet	Joint Repair Without Epoxy
0710	907-823-A002		55	Linear Feet	Preformed Joint Seal, Type II
0720	907-823-B002		110	Linear Feet	Saw Cut, Type II
0730	907-824-A003		2	Square Feet	General Epoxy Repair

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

CONDITIONS FOR COMBINATION BID

If a bidder elects to submit a combined bid for two or more of the contracts listed for this month's letting, the bidder must complete and execute these sheets of the proposal in each of the individual proposals to constitute a combination bid. In addition to this requirement, each individual contract shall be completed, executed and submitted in the usual specified manner. Failure to execute this Combination Bid Proposal in each of the contracts combined will be just cause for each proposal to be received and evaluated as a separate bid. 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) agree to complete each contract on or before its specified completion date.

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COMBINATION BID PROPOSAL

* of Subsection 102.11 on the following contracts: This proposal is tendered as one part of a Combination Bid Proposal utilizing option * Option to be shown as either (a), (b), or (c).

County					
Project No.	6.	7.	8.	9.	10.
County					
Project No.	1.	2.	3.	4.	5.

- (a) If Combination A has been selected, your Combination Bid is complete.
- (b) If Combination B has been selected, then complete the following page.

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

(c) If Combination C has been selected, then initial and complete ONE of the following.

I (We) desire to be awarded work not to exceed a total monetary value of \$_

number of contracts. _ I (We) desire to be awarded work not to exceed ___

TO: EXECUTIVE DIRECTOR, MISSISSIPPI DEPARTMENT OF TRANSPORTATION JACKSON, MISSISSIPPI

CERTIFICATE

If awarded this contract, I (we) contemplate that portions of the contract will be sublet. I (we) certify that those subcontracts which are equal to or in excess of fifty thousand dollars (\$50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on September 8, 2011.

I (we) agree that this notification of intent <u>DOES NOT</u> co	onstitute <u>APPROVAL</u> of the subcontracts.
(Individual or Firm)	(Address)
NOTE: Failure to complete the above <u>DOES NOT</u> prosubcontracts, if any, equal to or in excess of accordance with regulations promulgated and Contractors on September 8, 2011.	fifty thousand dollars (\$50,000.00) will be in
Contractor	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION

I,
(Name of person signing bid)
individually, and in my capacity as of
(Title of person signing bid)
(Name of Firm, partnership, or Corporation)
do hereby certify under 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. MP-5145-38(001)/ 308841301000
in Lauderdale County(ies), Mississippi, has not either directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners. Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds are not currently under suspension, debarment, voluntary exclusion or determination of ineligibility; nor have a debarment pending; nor been suspended, debarred, voluntarily excluded or determined ineligible within the past three years by the Mississippi Transportation Commission, the State of Mississippi, any other State or a federal agency; not been indicted, convicted or had a civil judgment rendered by a court of competent jurisdiction in any matter
involving fraud or official misconduct within the past three years.
Do exceptions exist and are made a part thereof? Yes / No
Any exceptions shall address to whom it applies, initiating agency and dates of such action.
Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.
All of the foregoing is true and correct.
(1/2016 S)

SECTION 902

CONTRACT FOR	
LOCATED IN THE COUNTY(IES) OF	

STATE OF MISSISSIPPI COUNTY OF HINDS

This Contract is entered into by and between the Mississippi Transportation Commission (the "Commission") and the undersigned contractor (the "Contractor"), as follows:

As consideration for this Contract, the Commission agrees to pay the Contractor the amount(s) set out in the Proposal attached hereto. Said payment will be made in the manner and at the time(s) specified in the Specifications and/or Special Provisions, if any. In exchange for said consideration, the Contractor hereby agrees to accept the prices stated in the Proposal as full compensation for the furnishing of all labor, materials and equipment, and the execution of the scope of work identified for this referenced Project as contemplated in this Contract, and as more fully outlined in the Contract Documents (the "Work"). The Contract Documents consist of the Advertisement, the Notice to Bidders, the Proposal, the Specifications, the Special Provisions, and the approved Plans, all of which are hereby made a part of this Contract and incorporated herein by reference.

The Contractor shall be responsible for all loss or damage arising out of, or in any way in connection with the Work, or from any unforeseen obstructions or difficulties that may be encountered in the prosecution of the Work, and for all risks of every description connected with the Work, with the exception of any items specifically excluded in the Contract Documents. The Contractor shall fully and faithfully complete the Work in a good and workmanlike manner, according to the Contract Documents and any Supplemental Agreements thereto.

The Contractor further agrees that the Work shall be done under the direct supervision of, and to the complete satisfaction of, the Executive Director of the Mississippi Department of Transportation, or his authorized representative(s), and, when federal funds are involved, subject to the inspection and approval of the Federal Highway Administration, or its agents, and/or the agents of any other state or federal agency whose funds are involved. Further, the Work shall be done in accordance with any applicable state and federal laws, and any such rules and regulations issued by the Commission and/or any relevant Federal Agency.

The Contractor agrees that all labor as outlined in the Contract Documents may be secured from a list furnished by the Manager of the Win Job Center nearest the project location, or any successor thereto.

It is agreed and understood that each and every provision of law and clause required by law to be inserted into this Contract shall be deemed to be inserted herein, and this Contract shall be read and enforced as though it were included herein. If through mere mistake or otherwise, any such provision is not inserted, then upon the application of either party hereto, the Contract shall be physically amended to make such insertion.

Witness our signatures, this the	1 C	20	
Timess our signatures, this the	day of	, 20	
Contractor			
By:	_		
Title:			
_			
Signed and sealed in the presence of: (nam	e and address of w	vitness)	
MISSISSIPPI TRANSPORTATION COM			
MISSISSIPPI TRANSPORTATION COM			

SECTION 903 PERFORMANCE BOND

	R THE FOLLOWING CONTRACT:
For the construction of:	
Contract date:	Contract amount:
FOR OWNER: MISSISSIPPI MISSISSIPPI 39201.	TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON,
CONTRACTOR (full legal nan	ne, contact person, phone number and address):
	nmber, principal place of business and address <i>for notice purposes</i>):
Second Surety (if applicable):	

The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns, to the Owner for the performance of the Contract, which is incorporated herein by reference, and subject to the following terms:

- 1. If the Contractor fully and faithfully performs the Contract, the Surety and the Contractor shall have no obligation under this Bond.
- 2. The Surety's obligation under this Bond shall arise after:
 - (a) the Owner first provides notice to the Contractor and the Surety that termination is imminent, pursuant to the current edition of the Mississippi Standard Specifications for Road and Bridge Construction, which is a part of the Contract; and
 - (b) the Owner declares a Contractor Default, terminates the Contract, and notifies the Surety.
- 3. The Surety shall promptly and at the Surety's expense, take one of the following actions:
 - (a) Arrange for the Contractor, with the consent of the Owner, to perform and complete the Contract; or
 - (b) Undertake to perform and complete the Contract itself, through its agents or independent contractors.
- 4. If the Surety does not proceed as provided in Paragraph 3, within 20 calendar days as set forth in Section 108.08 of the current edition of the Mississippi Standard Specifications for Road and Bridge Construction, then the Surety shall be deemed to be in default on this Bond, and the Owner shall be entitled to enforce any remedy available to it under the Contract and applicable law.
- 5. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- (a) the responsibilities of the Contractor for correction of defective work and completion of the Contract;
- (b) additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 3; and
- (c) liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 6. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
- 7. The penal sum of the Bond shall be subject to increase or decrease based on any subsequent Supplemental Agreements and/or final contract quantities.
- 8. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address listed for notice purposes on the first page of this Bond.

Company:	
Signature:	
SURETY Company:	
Signature:	MS Insurance ID #
Name:	
Title:Address:	
SURETY (if applicable) Company:	
Signature:	MS Insurance ID #
Name:	
Title:	
Address:	

CONTRACTOR AS PRINCIPAL

SECTION 903 PAYMENT BOND

PAYMENT BOND FOR THE FOLLOWING CONTRACT:

Project No.:	
For the construction of:	
Contract date:	Contract amount:
FOR OWNER: MISSISSIPPI TRANSPORMISSISSIPPI 39201.	RTATION COMMISSION, 401 N. WEST STREET, JACKSON,
CONTRACTOR (full legal name, contact pe	erson, phone number and address):
SURETY (legal name, phone number, princip	pal place of business and address <i>for notice purposes</i>):
Second Surety (if applicable):	

The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns, to the Owner for payment of labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference, subject to the following terms:

- 1. If the Contractor promptly makes payment of all sums due to any and all subcontractors, suppliers and/or laborers, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Contract, then the Surety and the Contractor shall have no obligation under this Bond.
- 2. The Owner shall provide notice to the Surety of any claims, demands, liens or suits against the Owner or the Owner's property that it receives from any person or entity ("Claimants") seeking payment for labor, materials or equipment furnished for use in the performance of the Contract.
- 3. Upon notice of any claims, demands, liens or suits provided by the Owner or Contractor or given to the Surety by a Claimant, the Surety shall promptly and at the Surety's expense, defend, indemnify and hold harmless the Owner against said claim, demand, lien or suit and shall take the following additional actions:
 - (a) Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - (b) Pay or arrange for payment of any undisputed amounts.
- 4. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have no obligation under this Bond to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

- 5. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
- 6. The penal sum of the Bond shall be subject to increase or decrease based on any subsequent Supplemental Agreements and/or final contract quantities.

Company:	
Signature:Name:	
Title:	_
Address:	
SURETY	
Company:	-
Signature:	MS Insurance ID #
Name:	_
Title:	_
Address:	
SURETY (if applicable) Company:	-
Signature:	MS Insurance ID #
Name:	
Title:	
Address:	_



BID BOND

KNOW ALL MEN BY THESE PRE	SENTS, that we		
	, <u> </u>	Contractor	
		Address	
		City, State ZIP	
As principal, hereinafter called the Pr	rincipal, and	Surety	
a corporation duly organized under the	ne laws of the state of		
as Surety, hereinafter called the Sure	ty, are held and firmly	bound unto State of Mississipp	i, Jackson, Mississippi
As Obligee, hereinafter called Oblige	ee, in the sum of Five	Per Cent (5%) of Amount Bid	
	Dollars(\$)	
for the payment of which sum will executors, administrators, successors			
Clarke County Line to I-59, known NOW THEREFORE, the condition of said Principal will, within the time reperformance of the terms and condition will pay unto the Obligee the different which the Obligee legally contracts which the Obligee legally contracts which the Obligee legally contracts which the Obligee legally contracts which in no event shall liability hereunder.	f this obligation is such quired, enter into a for ons of the contract, the nee in money between with another party to poer er exceed the penal sur	that if the aforesaid Principal shall rmal contract and give a good and seen this obligation to be void; otherw the amount of the bid of the said Ferform the work if the latter amount in hereof.	be awarded the contract, the sufficient bond to secure the vise the Principal and Surety Principal and the amount for
organica and scarca and	day 01	, 20	
	(Principal)		(Seal)
	B	y:(Title)	
(Witness)	(Name)	(Title)	
	(Surety)	(Seal)	
(Witness)	(Attorney-in-Fa	By:	
	(MS Agent)		
	Mississ	sippi Insurance ID Number	

WORK PHASE	LINE NUMBERS	JAN FEB M.	MAR APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER 00	OCTOBER NOV	OV DEC JAN FEB	B MAR APRIL	il. MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER NOV	DEC
Miscellaneous	10-90,110-150,210-220,260-500, 620-660,690-730					0									185			
Full Depth Repairs	100,180, 240-250					S				82 100	0	136						
Milling and Pavement	160-170,190-200, 230, 670-680											136			781			
Pavement Markings	510-610													182 185	185			
LET:	5/29/2024																	
NOA:	6/11/2024																	
NTP/BCT:	7/11/2024																	
W.D.:	185																	
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NOTE: THE ANTICIPATED WORKING DAYS SHOWN ON THIS SCHEDULE ARE FOR INFORMATIONAL PURPOSES ONLY. THE ACTUAL WORKING DAY TOTAL AS ASSESSED BY THE PROJECT ENGINEER ON FORM CSD-765 SHALL GOVERN.