MDOT Use Only
Checked _____
Loaded _____
Keyed _____

04 -

SM No. CIM0055041241

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

04
Remove OGFC & Replace with Micro-Surface on I-55 for approximately 14.1 miles from approximately 2.2 miles north of the Desoto/Tate County Line to the Tate/Panola County Line, known as Federal Aid Project Nos. IM-0055-04(124) / 110064301, IM-0055-04(125) / 110065301 & IM-0055-04(126) / 110066301 in Desoto & Tate Counties.

Project Completion: 146 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

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

08/28/2026 03:05 PM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Tuesday, September 22, 2026, from the Bid Express Service and shorty thereafter publicly read on the Sixth Floor For:

Remove OGFC & Replace with Micro-Surface on I-55 for approximately 14.1 miles from approximately 2.2 miles north of the Desoto/Tate County Line to the Tate/Panola County Line, known as Federal Aid Project Nos. IM-0055-04(124) / 110064301, IM-0055-04(125) / 110065301 & IM-0055-04(126) / 110066301 in Desoto & Tate Counties.

The attention of bidders is directed to the Contract Provisions governing selection and employment of labor. Minimum wage rates have been predetermined by the Secretary of Labor and are subject to Public Law 87-581, Work Hours Act of 1962, as set forth in the Contract Provisions.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

https://shop.mdot.ms.gov/default.aspx?StoreIndex=1

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2 **CODE: (IS)**

DATE: 03/01/2017

SUBJECT: Status of Right-of-Way

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

The status of right-of-way acquisition, utility adjustments, encroachments, potentially contaminated sites, railroad facilities, improvements, and asbestos contamination are set forth in the following attachments.

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

STATUS OF RIGHT-OF-WAY
IM-0055-04(124) 110064/301000
IM-0055-04(125) 110065/301000
IM-0055-04(126) 110066/301000
Desoto and Tate Counties

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

None.

MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Inter-Departmental Memorandum

TO: ROW DIVISION
Don Drake

FROM: James Cobbs
District 2 Construction Engineer

INFORMATION COPY TO: File
Shows (84-01)
Vance (73-01)
West (73-01)

DATE: December 8, 2025

SUBJECT OR PROJECT NO: IM-0055-04(124)110064/301000
IM-0055-04(125)110065/301000
IM-0055-04(126)110066/301000

COUNTY: Desoto and Tate

District Status Report

1. STATUS OF Right of Way: All work to be done within existing ROW.

2. RIGHT OF WAY CLEARANCE: There are no encroachments.

3. STATUS OF AFFFECTED RAILROAD OPERATING FACILITIES: None affected.

4. STATUS OF REQUIRED UTILITY RELOCATIONS: None affected.

5. STATUS OF CONSTRUCTION AGREEMENT: None required.

ASBESTOS ABATEMENT STATUS REPORT

IM-0055-04(124) 110064-301000
IM-0055-04(125) 110065-301000
IM-0055-04(126) 110066-301000

Desoto and Tate Counties

December 8, 2025

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

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

There is no right-of-way required for this project, and the contractor will not need to remove any buildings.

STATUS OF POTENTIALLY CONTAMINATED SITES REPORT

IM-0055-04(124) 110064-301000
IM-0055-04(125) 110065-301000
IM-0055-04(126) 110066-301000

Desoto and Tate Counties

December 8, 2025

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

IMPROVEMENTS STATUS REPORT

Improvements to be included in the Notice to Bidders to be removed by the Construction Contractor

FMS Construction Project No: 110064-301000
110065-301000
110066-301000

FMS ROW Project No:

External ROW No: IM-0055-04(124)
IM-0055-04(125)
IM-0055-04(126)

Parcel No:
Station No:
Property Owner:
Description/Pictures:

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 447 **CODE: (SP)**

DATE: 10/18/2017

SUBJECT: Traffic on Milled Surface in Rural Areas

Bidders are hereby advised that when the main lanes of a roadway are fine milled, traffic will be allowed to run on a milled surfaces for up to seven (7) calendar days. The Contractor will be assessed a penalty of **$5,000 per calendar day** afterwards until the milled surfaces are covered with the next lift of asphalt. It shall be the Contractor's responsibility to ensure that the milling operations do not commence until such time as forecasted weather conditions are suitable enough to allow the placement of the asphalt pavement after the milling operations.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

DATE: 11/28/2017

SUBJECT: Errata and Modifications to the 2017 Standard Specifications

Page	Subsection	Change
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."

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2206 **CODE: (IS)**

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2273 **CODE: (SP)**

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.

DEPARTMENT OF REVENUE
STATE OF MISSISSIPPI

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 and 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.

This fact sheet is intended to help you become more familiar with Mississippi tax laws and your rights and responsibilities under the laws. Nothing in this fact sheet supersedes, alters, or otherwise changes any provisions of the tax law, regulations, court decisions, or notices.

Petroleum Tax Bureau
P. O. Box 1033
Jackson, MS 39215-1033
Phone: (601) 923-7150

DEPARTMENT OF REVENUE
STATE OF MISSISSIPPI

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.

This fact sheet is intended to help you become more familiar with Mississippi tax laws and your rights and responsibilities under the laws. Nothing in this fact sheet supersedes, alters, or otherwise changes any provisions of the tax law, regulations, court decisions, or notices.

Petroleum Tax Bureau
P. O. Box 1033
Jackson, MS 39215-1033
Phone: (601) 923-7150

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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° ±0.02°. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4113 **CODE: (SP)**

DATE: **03/23/2022**

SUBJECT: **Unique Entity ID (SAM) Requirement for Federal Funded Projects**

Bidders are advised that the Prime Contractor must register and maintain a current registration in the System for Award Management (http://sam.gov) at all times during this project. Upon registration, the Contractor will be assigned a SAM Unique Entity ID.

Bidders are also advised that prior to the award of this contract, they MUST be registered, active, and have no active exclusions in the System for Award Management.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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/

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 5086 **CODE: (SP)**

DATE: 05/02/2023

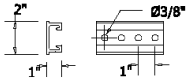
SUBJECT: Detail of Square Tube Sign Posts

Bidders are advised that the following drawings shall be used in the manufacture and installation of square tube sign posts, unless otherwise directed by the Engineer.

FMS CON:

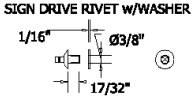
STATE	PROJECT NO.
MISS.	

FLAT PANEL SIGN BRACE



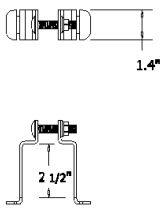
6061-T6 ALUMINUM ALLOY; 2" MOUNTING SURFACE x 7/8" DEPTH x 1/8" NOMINAL WALL THICKNESS. 3/8" HOLES ON 1" CENTERS, CENTERED ALONG ENTIRE LENGTH OF THE BRACE. A MINIMUM OF TWO HORIZONTAL BRACES MUST BE USED.

SIGN DRIVE RIVET w/WASHER



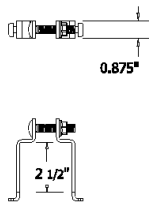
3/8" ALUMINUM SHELL / STEEL CORE RIVET WITH NYLON WASHER. MAXIMUM DISTANCE BETWEEN RIVETS SHOULD BE 12". WASHER MUST BE PRE-INSTALLED AND FIT INTO SIGN BRACE TO SECURE ALUMINUM SIGN PANEL. ALL EXTRUDED PANEL SIGNS SHALL USE 3/16"x3/8" GRIP RANGE ALUMINUM POP RIVITS (#66).

FLAT PANEL SIGN CLAMP



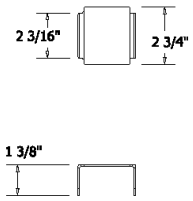
MATERIALS: 1.4" WIDE x 11ga. TYPE 304, #2B FINISHED STAINLESS STEEL BRACKET. INCLUDES STAINLESS STEEL 3/8"-16 x 2" CARRIAGE BOLT AND SERRATED FLANGED NUT. ONE CLAMP REQUIRED FOR EACH BRACE TO POST JUNCTION.

EXTRUDED PANEL SIGN CLAMP



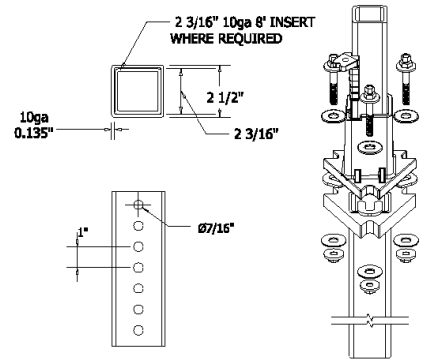
MATERIALS: 1.4" WIDE x 11ga. TYPE 304, #2B FINISHED STAINLESS STEEL BRACKET. INCLUDES STAINLESS STEEL 3/8"-16 x 2" CARRIAGE BOLT AND SERRATED FLANGED NUT. ONE CLAMP REQUIRED FOR EACH BRACE TO POST JUNCTION.

POST CAP



MADE OF 16GA PREGALVANIZED STEEL WITH AN ID CAPABLE OF FITTING INTO THE INSIDE OF A 2-1/2" SQUARE STEEL POST WITHOUT ANY FASTENERS. A CAST ALUMINUM FRICTION FIT CAP MAY ALSO BE USED.

SIGN POSTS

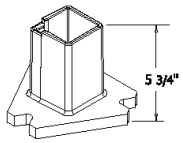


example slip base assembly (detailed below)

NOTES:

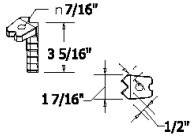
A. CONCRETE FOOTING MUST BE 12" DIAMETER x 36" DEEP.
B. BRASS SHIMS MAY BE USED BETWEEN SLIP PLATES TO LEVEL THE UPPER SLIP PLANE.
C. SLIP BASE IS FHWA ACCEPTED, MEETING CURRENT AASHTO & NCHRP 350 REQUIREMENTS.
D. SIGN BRACE CLAMPS ALLOW SIGN BRACE TO BE ADUSTED UP, DOWN, LEFT OR RIGHT IN ORDER TO ACHIEVE PERFECT POSITION OF SIGN PANEL.
E. USE INSTALLATION INSTRUCTION RT280U-SQ1.
F. PRODUCT MUST MEET FHWA's MADE IN AMERICA CLAUSE.
G. PAID BY LENGTH OF POST, 36" STUB TO BE ABSORBED.

2-1/2" SQUARE POST RECEIVER



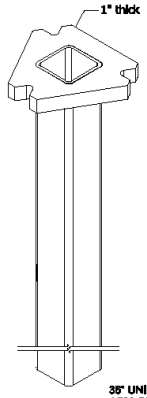
RECEIVER TO BE CAST FROM DUCTILE IRON ASTM A536 CLASS 65-45-12, GALVANIZED PER ASTM A153.

POST LOCKING WEDGE



LOCKING WEDGE FORGED FROM SAE 1035 STEEL AND GALVANIZED PER ASTM A153.

UNIBASE ANCHOR STUB



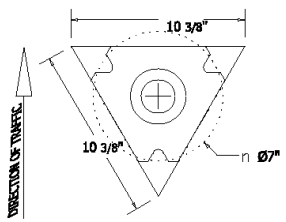
35" UNIBASE ANCHOR A500 GRADE B TUBE WELDED TO A572 SLIP PLATE. GALVANIZED PER ASTM A153.

SIGN CENTROID	2-1/2" x 10ga PSST	2-1/2" x 10ga & 2-3/16" x 10ga Inserted PSST	Sign Bracing**
16'	24.82	43.46	18" maximum distance between braces
15'	26.48	46.36	18" maximum distance between braces
14'	28.38	49.66	18" maximum distance between braces
13'	30.56	53.48	18" maximum distance between braces
12'	33.10	57.94	18" maximum distance between braces
11'	36.12	63.20	18" maximum distance between braces

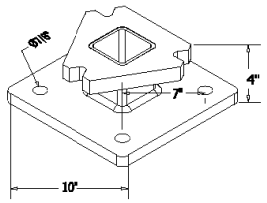
* based on two legs per sign
** Minimum of two braces per flat panel sign

NOTE: Sign area is in square feet.

SLIP PLATE DIMENSION



SURFACE MOUNT BASE



A572 SLIP PLATE WELDED TO A500 GRADE B TUBE WELDED TO A572 MOUNTING PLATE. GALVANIZED PER ASTM A153.

	1/2"-13 x 3" GRADE 8, DOUBLE HEX BOLT, GALVANIZE PER ASTM B695 (3 EACH PER KIT)
	5/8" U.S.S. FLAT WASHER ANSI B 18.22.1, TYPE A WIDE, GALVANIZE PER ASTM B695 (6 EACH PER KIT)
	1-3/4" SQUARE x 3/16" THICK TEFLON COATED, HARDENED SLIP WASHER (3 EACH PER KIT)
	1/2"-13 GRADE 8 LARGE FLANGE NUT GALVANIZE PER ASTM B695 (3 EACH PER KIT)
SLIP BASE MATCH PLATE HARDWARE KIT	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

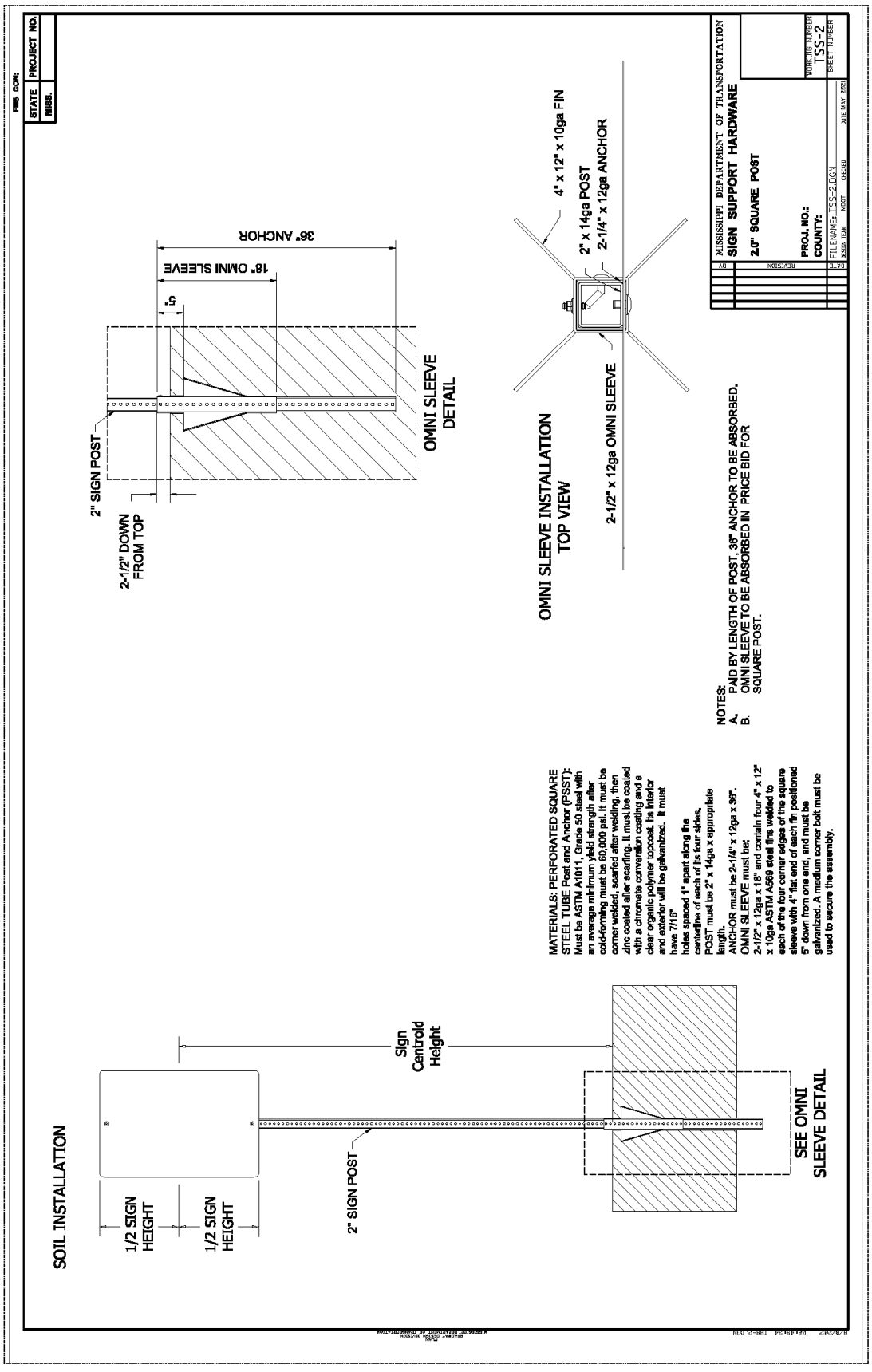
SIGN SUPPORT HARDWARE

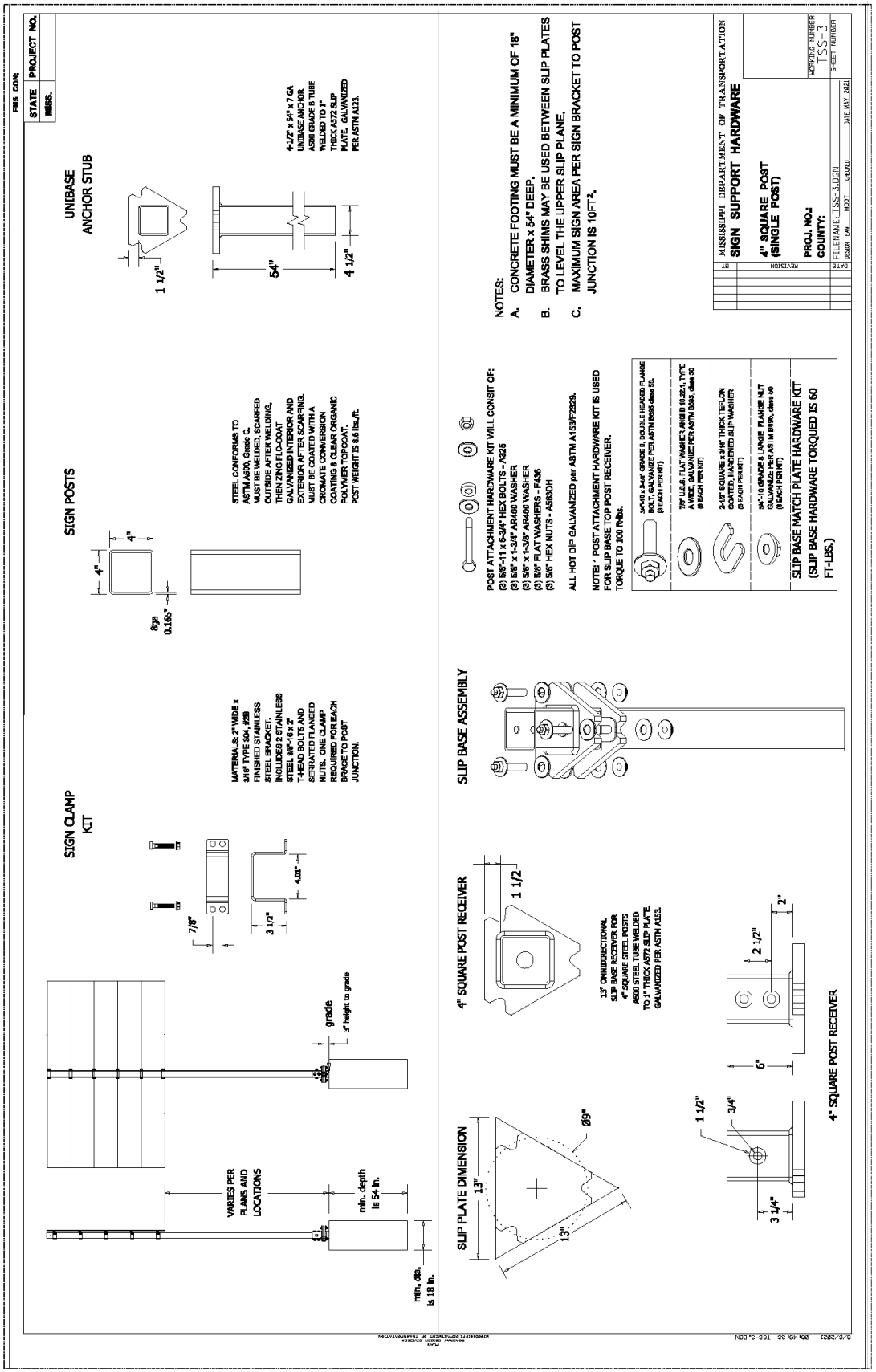
2.5" SQUARE POST

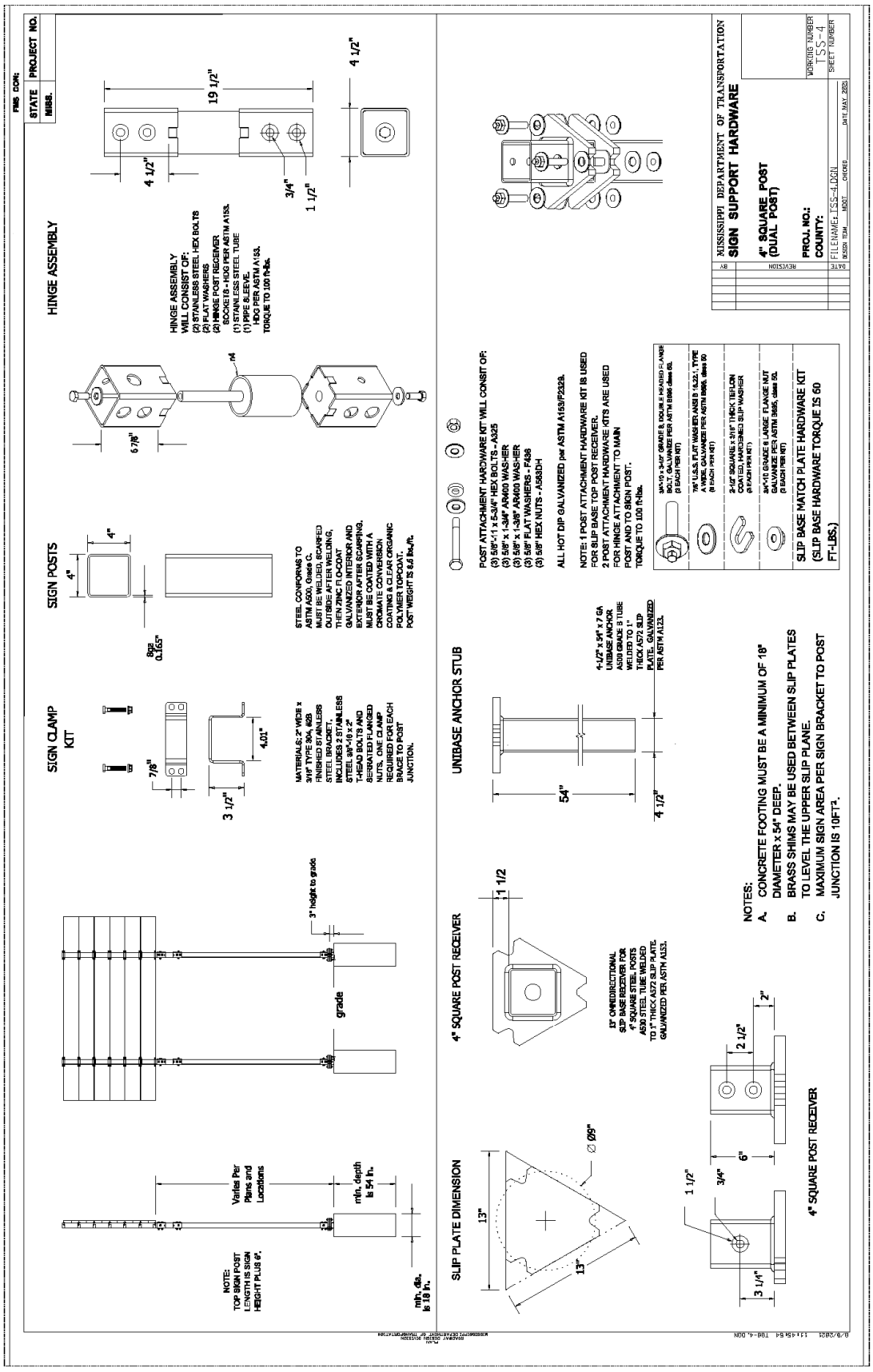
PROJ. NO.:
COUNTY:

WORKING NUMBER: TSS-1
SHEET NUMBER

DATE: FILENAME: TSS-1.DGN
DESIGN TEAM: MDOT CHECKED: DATE: MAY, 2021


FHWA CON:
STATE
MISS.
PROJECT NO.
SOIL INSTALLATION
1/2 SIGN HEIGHT
1/2 SIGN HEIGHT
Sign Centroid Height
2" SIGN POST
SEE OMNI SLEEVE DETAIL
MATERIALS: PERFORATED SQUARE STEEL TUBE Post and Anchor (PSST): Must be ASTM A1011, Grade 50 steel with an average minimum yield strength after cold-forming must be 60,000 psi. It must be corner welded, scarfed after welding, then zinc coated after scarfing. It must be coated with a chromate conversion coating and a clear organic polymer topcoat. Its interior and exterior will be galvanized. It must have 7/16" holes spaced 1" apart along the centerline of each of its four sides. POST must be 2" x 14ga x appropriate length. ANCHOR must be 2-1/4" x 12ga x 36". OMNI SLEEVE must be: 2-1/2" x 12ga x 18" and contain four 4" x 12" x 10ga ASTM A569 steel fins welded to each of the four corner edges of the square sleeve with 4" flat end of each fin positioned 5" down from one end, and must be galvanized. A medium corner bolt must be used to secure the assembly.
NOTES:
A. PAID BY LENGTH OF POST. 36" ANCHOR TO BE ABSORBED.
B. OMNI SLEEVE TO BE ABSORBED IN PRICE BID FOR SQUARE POST.
OMNI SLEEVE INSTALLATION TOP VIEW
4" x 12" x 10ga FIN
2" x 14ga POST
2-1/4" x 12ga ANCHOR
2-1/2" x 12ga OMNI SLEEVE
OMNI SLEEVE DETAIL
2" SIGN POST
2-1/2" DOWN FROM TOP
5"
18" OMNI SLEEVE
36" ANCHOR
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SIGN SUPPORT HARDWARE
2.0" SQUARE POST
REVISION
BY
DATE
PROJ. NO.:
COUNTY:
FILENAME: TSS-2.DGN
DESIGN ITEM
MDOT
CHECKED
DATE: MAY 2005
WORKING NUMBER
TSS-2
SHEET NUMBER


FHWA CON:
STATE
MISS.
PROJECT NO.
UNIBASE
ANCHOR STUB
1 1/2"
54"
4 1/2"
4-1/2" x 5/8" x 7 GA UNIBASE ANCHOR, A500 GRADE B TUBE WELDED TO 1" THICK A572 SLIP PLATE, GALVANIZED PER ASTM A123.
SIGN POSTS
4"
4"
8ga 0.165"
STEEL CONFORMS TO ASTM A500, Grade C. MUST BE WELDED, SCARFED OUTSIDE AFTER WELDING, THEN ZINC FLO-COAT GALVANIZED INTERIOR AND EXTERIOR AFTER SCARFING. MUST BE COATED WITH A CROMATE CONVERSION COATING & CLEAR ORGANIC POLYMER TOPCOAT. POST WEIGHT IS 8.6 lbs./ft.
SIGN CLAMP
KIT
7/8"
3 1/2"
4.01"
MATERIAL-S- 2" WIDE x 3/16" TYPE 304 #2B FINISHED STAINLESS STEEL BRACKET. INCLUDES 2 STAINLESS STEEL 3/8"-16 x 2" T-HEAD BOLTS AND SERRATED FLANGED NUTS. ONE CLAMP REQUIRED FOR EACH BRACE TO POST JUNCTION.
SLIP BASE ASSEMBLY
POST ATTACHMENT HARDWARE KIT WILL CONSIST OF:
(3) 5/8"-11 x 5-3/4" HEX BOLTS - A325
(3) 5/8" x 1-3/4" AR400 WASHER
(3) 5/8" x 1-3/8" AR400 WASHER
(3) 5/8" FLAT WASHERS - F436
(3) 5/8" HEX NUTS - A563DH
ALL HOT DIP GALVANIZED per ASTM A153/F2329.
NOTE: 1 POST ATTACHMENT HARDWARE KIT IS USED FOR SLIP BASE TOP POST RECEIVER. TORQUE TO 100 ft/lbs.
3/4"-10 x 3-1/2" GRADE B, DOUBLE HEXAGED FLANGE BOLT, GALVANIZED PER ASTM B695 class 55. (8 EACH PER KIT)
7/8" U.S.S. FLAT WASHER ANSI B 18.22.1, TYPE A WIDE, GALVANIZED PER ASTM B695 class 55 (8 EACH PER KIT)
3-1/8" SQUARE x 3/16" THICK TEFLON COATED, HARDENED SLIP WASHER (8 EACH PER KIT)
3/4"-10 GRADE B LARGE FLANGE NUT GALVANIZED PER ASTM B695, class 55 (8 EACH PER KIT)
SLIP BASE MATCH PLATE HARDWARE KIT
(SLIP BASE HARDWARE TORQUED IS 60 FT-LBS.)
NOTES:
A. CONCRETE FOOTING MUST BE A MINIMUM OF 18" DIAMETER x 54" DEEP.
B. BRASS SHIMS MAY BE USED BETWEEN SLIP PLATES TO LEVEL THE UPPER SLIP PLANE.
C. MAXIMUM SIGN AREA PER SIGN BRACKET TO POST JUNCTION IS 10FT².
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SIGN SUPPORT HARDWARE
4" SQUARE POST (SINGLE POST)
PROJ. NO.:
COUNTY:
FILENAME: TSS-3.DGN
DESIGN TEAM
MOOT
CHECKED
DATE MAY 2021
WORKTAB NUMBER TSS-3
SHEET NUMBER
BY
REVISION
DATE
SLIP PLATE DIMENSION
13"
13"
13"
69°
4" SQUARE POST RECEIVER
1 1/2
13" OMNIDIRECTIONAL SLIP BASE RECEIVER FOR 4" SQUARE STEEL POSTS A500 STEEL TUBE WELDED TO 1" THICK A572 SLIP PLATE, GALVANIZED PER ASTM A123.
2 1/2"
2"
6"
1 1/2"
3/4"
3 1/4"
4" SQUARE POST RECEIVER
grade
3" height to grade
VARIES PER PLANS AND LOCATIONS
mtn. depth is 54 in.
mtn. dia. is 18 in.


HINGE ASSEMBLY
SIGN POSTS
SIGN CLAMP KIT
UNIBASE ANCHOR STUB
4" SQUARE POST RECEIVER
SLIP PLATE DIMENSION
4" SQUARE POST RECEIVER
NOTES:
A. CONCRETE FOOTING MUST BE A MINIMUM OF 18" DIAMETER x 54" DEEP.
B. BRASS SHIMS MAY BE USED BETWEEN SLIP PLATES TO LEVEL THE UPPER SLIP PLANE.
C. MAXIMUM SIGN AREA PER SIGN BRACKET TO POST JUNCTION IS 10FT².
SLIP BASE MATCH PLATE HARDWARE KIT (SLIP BASE HARDWARE TORQUE IS 60 FT-LBS.)
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SIGN SUPPORT HARDWARE
4" SQUARE POST (DUAL POST)
PROJ. NO.:
COUNTY:
WORKING NUMBER TSS-4
SHEET NUMBER
FILENAME: TSS-4.DGN
DATE MAY, 2021

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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/

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7592 **CODE: (SP)**

DATE: 08/10/2026

SUBJECT: Contract Time

PROJECT: IM-0055-04(124) / 110064301 – Desoto County
IM-0055-04(125) / 110065301 – Tate County
IM-0055-04(126) / 110066301 – Tate 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 **October 13, 2026** and the date for Notice to Proceed / Beginning of Contract Time will be **November 12, 2026**.

Should the Contractor request a Notice to Proceed earlier than **November 12, 2026** 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.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7593

DATE: 08/06/2026

SUBJECT: Specialty Items

PROJECT: IM-0055-04(124)/110064301 & IM-0055-04(125)/110065301 & IM-0055-04(126)/110066301 - DESOTO & TATE

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

CATEGORY: DISPOSAL OF BUILDINGS, RIGHT OF WAY CLEARING & GRUBBING

Line No	Pay Item	Description
0060	202-B240	Removal of Traffic Stripe

CATEGORY: GUARDRAIL, GUIDERAIL

Line No	Pay Item	Description
0130	606-B002	Guard Rail, Class A, Type 1, 'W' Beam
0140	606-C003	Guard Rail, Cable Anchor, Type 1
0150	606-D005	Guard Rail, Bridge End Section, Type A
0160	606-D022	Guard Rail, Bridge End Section, Type I
0170	606-E005	Guard Rail, Terminal End Section, Flared
0180	606-E007	Guard Rail, Terminal End Section, Non-Flared

CATEGORY: MISCELLANEOUS/ SPECIALTY WORK ITEMS

Line No	Pay Item	Description
0460	907-688-A001	Traffic Recorder WIM Kistler System

CATEGORY: PAVEMENT STRIPING AND MARKING

Line No	Pay Item	Description
0390	907-626-A010	6" Thermoplastic Traffic Stripe, Skip White
0400	907-626-C014	6" Thermoplastic Edge Stripe, Continuous White
0410	907-626-F005	6" Thermoplastic Edge Stripe, Continuous Yellow
0420	907-626-G004	Thermoplastic Detail Stripe, White
0430	907-627-K001	Red-Clear Reflective High Performance Raised Markers
0440	907-627-L001	Two-Way Yellow Reflective High Performance Raised Markers

CATEGORY: TRAFFIC CONTROL - PERMANENT

Line No	Pay Item	Description
0240	630-A001	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0250	630-A003	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0260	630-A005	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness
0270	630-C001	Square Tube Posts, 4.0 lb/ft

0280	630-C005	Square Tube Posts, 2.0 lb/ft
0290	630-F002	Delineators, Flexible Post Mounted, Crossover, Type I, Yellow
0300	630-F006	Delineators, Guard Rail, White
0310	630-F007	Delineators, Guard Rail, Yellow
0320	630-G004	Type 3 Object Markers, OM-3R or OM-3L
0450	907-640-A001	Vehicle Loop Assemblies

CATEGORY: TRAFFIC CONTROL - TEMPORARY

Line No	Pay Item	Description
0200	619-A1001	Temporary Traffic Stripe, Continuous White
0210	619-A2001	Temporary Traffic Stripe, Continuous Yellow
0220	619-A3001	Temporary Traffic Stripe, Skip White
0380	907-619-E3001	Changeable Message Sign

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7594 **CODE: (SP)**

DATE: 08/13/2026

SUBJECT: SCOPE OF WORK

PROJECT: IM-0055-04(124) / 110064301 – Desoto County
IM-0055-04(125) / 110065301 – Tate County
IM-0055-04(126) / 110066301 – Tate County

The contract documents do not include an official set of construction plans but may, by reference; include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings".

IM-0055-04(124)/110064-301000
This project location is approximately 2.2 miles on Interstate 55 from the Desoto/Tate County Line (Sta. 630+00) going northerly 2.2 miles (Sta. 750+90). The project consists of removing the Open Graded Friction Course (OGFC) on I-55, fog sealing the shoulders, placing two micro surface lifts, replacing guardrail, replacing signs, and random clearing of trees.

IM-0055-04(125)/110065-301000
This project location is approximately 9.7 miles on Interstate 55 from the Tate/Panola County Line (Sta. 0+00) going northerly to 5.18 miles north of Panola County (Sta. 273+50) and starting 4.5 miles south of the Tate/Desoto County Line (Sta. 391+44) and going northerly to the Tate/Desoto County Line (Sta. 630+00). The project consists of removing the Open Graded Friction Course (OGFC) on I-55, fog sealing the shoulders, placing two micro surface lifts, replacing guardrail, replacing signs, and random clearing of trees.

IM-0055-04(126)/110066-301000
This project location is approximately 2.2 miles on Interstate 55 from 0.6 miles north of SR 4 (Sta. 273+50) going northerly to South of Rifle Range Road (Sta. 391+44). The project consists of removing the Open Graded Friction Course (OGFC) on I-55, fog sealing the shoulders, and placing two micro surface lifts.

General Notes:

It shall be the responsibility of the contractor to protect the roadway and all existing structures, such as bridges and curbs, from damage occurring as a result of the contractor's operations. Damages to existing features caused by the contractor's operations shall be repaired or replaced at no cost to the Mississippi Department of Transportation.

Existing cross slopes of 2% in tangent sections or proper superelevation rates in curves shall be maintained. If water stands when the project is complete, the contractor shall correct at no additional cost to the State.

At bridge ends and at the end of workday, a taper of one (1) vertical inch for each three (3) horizontal foot shall be provided.

The contractor shall make a utility location request to 811 prior to any excavation, except for trench widening or pavement removal/repair.

In order to expedite the safe movement of traffic and to protect each phase of the work as it is performed, a firm sequence of operations is essential. The work shall begin and continually prosecuted.

The Contractor will be required to pay for "Just in Time" training for Contractor and MDOT personnel no more than 14 calendar days prior to starting the mainline work. The cost of the Training will be absorbed in other pay items. The training shall be provided by Rex Eberly of Eberly Unlimited.

- Rex.eberly@gmail.com
- 785-819-1403

The work shall consist of the following:

1. Random clearing shall be performed from the beginning of the project to the end of the project limits and median of the mainline as directed by the Engineer. Following the MDOT Tree Management Policy, right-of-way shall be cleared to a minimum distance of seventy feet (70') from the edge of pavement or to the right-of-way line, whichever distance is less. Overhanging vegetation shall be trimmed to a minimum height of thirty feet (30') above the ground elevation at the edge of the clearing limits. It is the intent of this Contract for vegetation, except for any merchantable timber that the Contractor desires, to be mulched onsite and left in place. Mulched material shall be spread such that no more than four inches (4") in depth of material is placed in any one location. This work shall be paid for under Pay Item 201-D: Random Clearing, per station. Each side of the roadway will be measured separately. Clearing within two feet (2') of fences, utilities, and other obstructions as directed by the Project Engineer within the ROW is to be omitted in order to avoid damages.

   Where the above clearing limits would leave a stand of trees in the median less than 20 feet wide, those may also be removed at the discretion of the District Engineer. If roadside foreslopes are steeper than 3:1 or include other roadway features that would make tree removal infeasible, risk assessment should be conducted by the Project Engineer and Highway Safety Division.

   NOTE: No magnolia trees within the ROW limits are to be removed without prior approval from the Project Engineer.

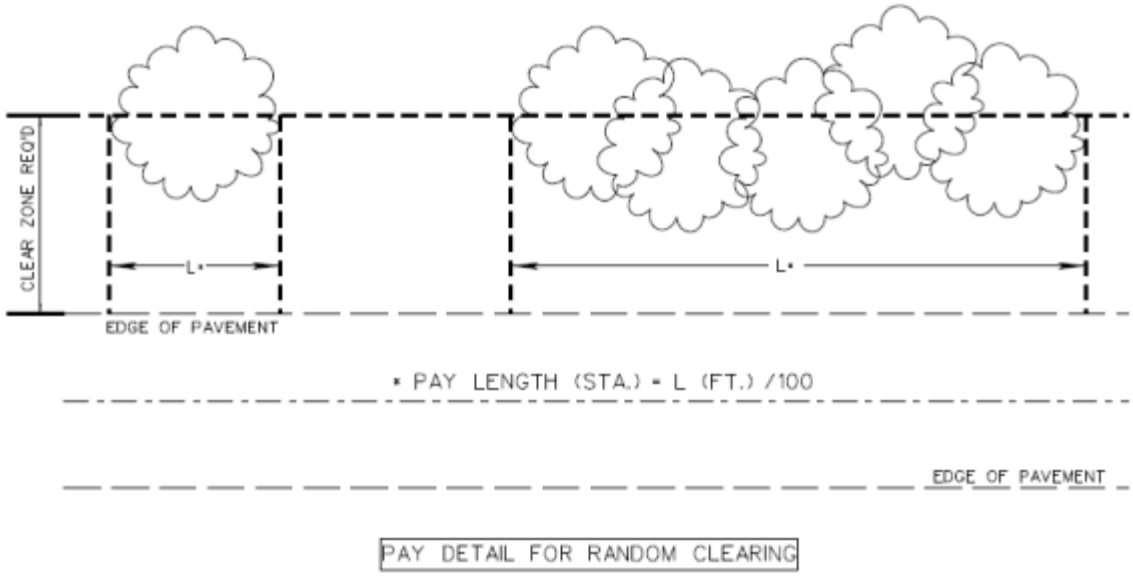
   NOTE: Due care should be taken to prevent damage in areas within the ROW that are outside the clearing limits as shown in the table. Any disturbed areas not shown above will not be

measured for separate payment and shall be reestablished at no additional cost to the Department.

NOTE: Herbicide shall be used for sprout control of cut stumps. Paint or spray freshly cut stump surface thoroughly covering cambium area next to bark until the herbicide runs down around the root collar. Treat stump as soon as practical after cutting for more effective control but no later than day of cutting except when spraying must be postponed due to inclement weather. Pine stumps and all other stumps larger than 15 inches in diameter do not require spraying for control of sprouting. Permissible herbicides are 2,4-D (amine); picloram +2,4-D; ammonium sulfamate; and dicamba. Specific requirements such as mixing, diluting, rate, application, use restrictions, safety precautions, etc. will be in accordance with the manufacturer's printed container label.

NOTE: Re-spraying will be required when the herbicide is washed off by rain within eight hours of application or diluted to such an extent that it is rendered ineffective.

NOTE: Grinding of all stumps will be required to be flush with the ground.



PAY DETAIL FOR RANDOM CLEARING

2. Fine milling of the existing OGFC pavement to a depth of one (1) inch. Milling operations shall include the milling of all OGFC asphalt pavement (mainline and ramps). A butt joint shall be milled at the tie-in points on the ramps. The milling will become the property of the Contractor. The Contractor shall ensure that all OGFC has been removed.

   NOTE: Payment for Fine Milling of Pavement will be made under Pay Item No. 406-D, per square yard, and payment for Cold Milling of Pavement will be made under Pay Item No. 406-A and shall include all costs associated with the milling operation.

   NOTE: Milled surfaces are to be left open for a minimum of three (3) calendar days and covered with micro-surfacing within ten (10) calendar days. The Contractor will be assessed

$5,000 (five-thousand dollars) per calendar day afterwards until the milled surfaces are covered with the next lift of micro-surface. It shall be the Contractor's responsibility to ensure that the milling operations do not commence until such time as forecasted weather conditions are suitable enough to allow the placement of the asphalt pavement after the milling operations.

NOTE: During this operation and prior to placement of the micro-surface, due care shall be required to keep surface water from ponding on the roadway surface; continuous monitoring of the project may be required.

NOTE: During this operation and prior to placement of the asphalt, the contractor shall repair and maintain all potholes.

NOTE: Prior to the placement of the micro-surface, the milled surface shall be thoroughly cleaned of all debris.

NOTE: Prior to placement of the micro-surface, the Contractor shall determine both the existing surface and milled surface Mean Roughness Index at no additional cost to the State. The milled surface shall have a Mean Roughness Index no greater than that of the existing surface for each travel lane.

3. The Contractor shall fine mill ½" and variable in depth starting 100 feet from the bridge end to the bridge end.

   NOTE: Payment for Fine Milling of Pavement will be made under Pay Item No. 406-D, per square yard.

4. On the previously milled surface the Contractor shall place 1.5" and variable of 9.5mm, HT to allow for a smooth transition off the bridge end and to allow for the micro surfacing lifts to tie in smoothly.

   NOTE: Placement of the 9.5mm, HT will only be placed from 100 feet from the bridge end to the bridge end.

5. The Contractor shall place a micro-surfacing course, using a Type III aggregate, on the mainline. As per Special Provision 907-418, a mix design shall be supplied by the Contractor and at least 10 days prior to construction, the Contractor shall submit to the Central Lab representative samples of each ingredient to be used in the micro-surfacing mixture for design verification.

   NOTE: As determined by ASTM D7428, the aggregate will be allowed to have a maximum abrasion loss of 15% on the Micro Deval. Aggregates not meeting these criteria will be rejected from use. A certified test report can be submitted with the mix design for evaluation.

   NOTE: The micro-surfacing shall go to the edge of the rumble strip.

NOTE: 907-418.03.1 shall be changed to the following:
No micro-surfacing shall be performed from November 1 to March 1. The micro-surfacing mixture shall be spread only when both the pavement surface and the ambient temperature is at least 60°F and rising and the weather is not foggy or rainy and there is no forecast of temperatures below 32°F within 48 hours from the time of placement. The Contractor shall supply a surface temperature thermometer.

6. On the previously micro-surfaced layer, the Contractor shall place a micro-surfacing course, using a Type II aggregate, on the mainline. As per Special Provision 907-418, a mix design shall be supplied by the Contractor and at least 10 days prior to construction, the Contractor shall submit to the Central Lab representative samples of each ingredient to be used in the micro-surfacing mixture for design verification. The application spread rate design shall be between 18 pounds per square yard and 22 pounds per square yard for Type II.

   NOTE: As determined by ASTM D7428, the aggregate will be allowed to have a maximum abrasion loss of 15% on the Micro Deval. Aggregates not meeting these criteria will be rejected from use. A certified test report can be submitted with the mix design for evaluation.

   NOTE: The micro-surfacing shall go to the edge of the rumble strip.

   NOTE: 907-418.03.1 shall be changed to the following:
   No micro-surfacing shall be performed from November 1 to March 1. The micro-surfacing mixture shall be spread only when both the pavement surface and the ambient temperature is at least 60°F and rising and the weather is not foggy or rainy and there is no forecast of temperatures below 32°F within 48 hours from the time of placement. The Contractor shall supply a surface temperature thermometer.

   NOTE: There shall be a minimum of 48 hours between placement of first and second micro-surface layers.

7. A bituminous based rejuvenating fog seal to be sprayed at a rate of 0.11 gal/SY, as per 907-428.

   NOTE: Only the paved shoulders will receive the fog seal treatment.

8. Placement of Granular Material Class 5, Group D on the shoulders as directed by the Project Engineer to raise the existing shoulders to the new surface course grade.

   NOTE: Shoulders shall be bladed, shaped and compacted throughout the length of the project regardless of whether granular material is required.

   NOTE: Granular material not required for the final shape of the shoulders may require removal under the pay item for excess excavation and may include small amounts of asphalt.

NOTE: Due care shall be taken during this operation to blade material to the roadway and away from the ditch line. Material inadvertently bladed to the roadway vegetation shall be removed at no cost to the Mississippi Department of Transportation.

9. Placement of Temporary Traffic Stripe daily as per Special Provisions Nos. 907-618.

10. Remove and replace guardrails as per the attached table. Existing guardrail that are currently driven in concrete or asphalt will be replaced with the new Roadway Design, Sheet ID SDGR-PI, using the crushed stone option. This work shall be paid for under Pay Items 202-B: Removal of Asphalt Paved Shoulders, All Depths, 304-D: Granular Material, Class 5, Group D, and 503-C: Saw Cuts, Full Depth.

    NOTE: The Contractor shall match the length, taper rate, and offset of the existing guardrail. The Contractor will be required to lay out the proposed rail for approval by the Project Engineer prior to installation.

    NOTE: The Contractor shall be responsible for verifying the bridge end sections prior to installation.

11. An MDOT Weigh-in-Motion site is in place in the northbound and southbound lanes around Sta. 52+00, and a DPS camera is in place in the southbound outside lane around Sta. 53+00. Both systems shall be disconnected prior to milling the OGFC.

    NOTE: For the MDOT Weigh-in Motion site, the Contractor is to notify the Project Engineer one day before milling these areas so that Planning Division can schedule to verify if the loops are in working order as soon as the milling operations have been completed. If the loops are damaged, the Contractor will replace the loops in the SMA 9.5mm prior to placement of the microsurfacing lifts. Locations of loops are to be marked so the quartz sensors can be installed in the correct locations. All work associated with the WIM site will be paid for under Pay Item 907-688-A001, Traffic Recorder WIM Kistler System.

    NOTE: For the DPS camera system, the Contractor is to replace the loops after the two lifts of micro-surface has been laid. All work associated with replacing the loops for the DPS camera system will be paid for under Pay Item 907-640-A: Vehicle Loop Assemblies. Contractor must seal over the new loops to prevent water from filtering into the micro-surface. Payment for the sealant will be absorbed in other items of work.

12. Traffic stripe shall be removed from bridge decks and concrete pavement. The Contractor shall remove the existing stripe by an approved non-destructive method. Length of bridges is 5080 LF.

13. Place permanent pavement markings as required (Thermoplastic Striping, Reflective High Performance Raised Markers).

14. All existing post-mounted standard roadside signs estimated in the attached table shall be replaced. The Contractor shall deliver the removed signs to the Tate County Maintenance Lot located at 1060 Shands Bottom Road, Senatobia. All signs and hardware shall be removed

from post prior to delivery. The Contractor is required to verify the sign quantity prior to ordering materials. All hardware and footings required for the erection of new signs and posts shall be absorbed in other items of work.

Sign Quantity			
Pay Item	Description	Unit	Quantity
202-B	Removal of Sign, Including Post and Footing	EA	76
630-A	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	SF	63
630-A	Standard Roadside Signs, Sheet Aluminum, .1" Thickness	SF	228
630-A	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness	SF	439
630-C	Square Tube Post, 4.0 lb/ft	LF	180
630-C	Square Tube Post, 2.0 lb/ft	LF	778

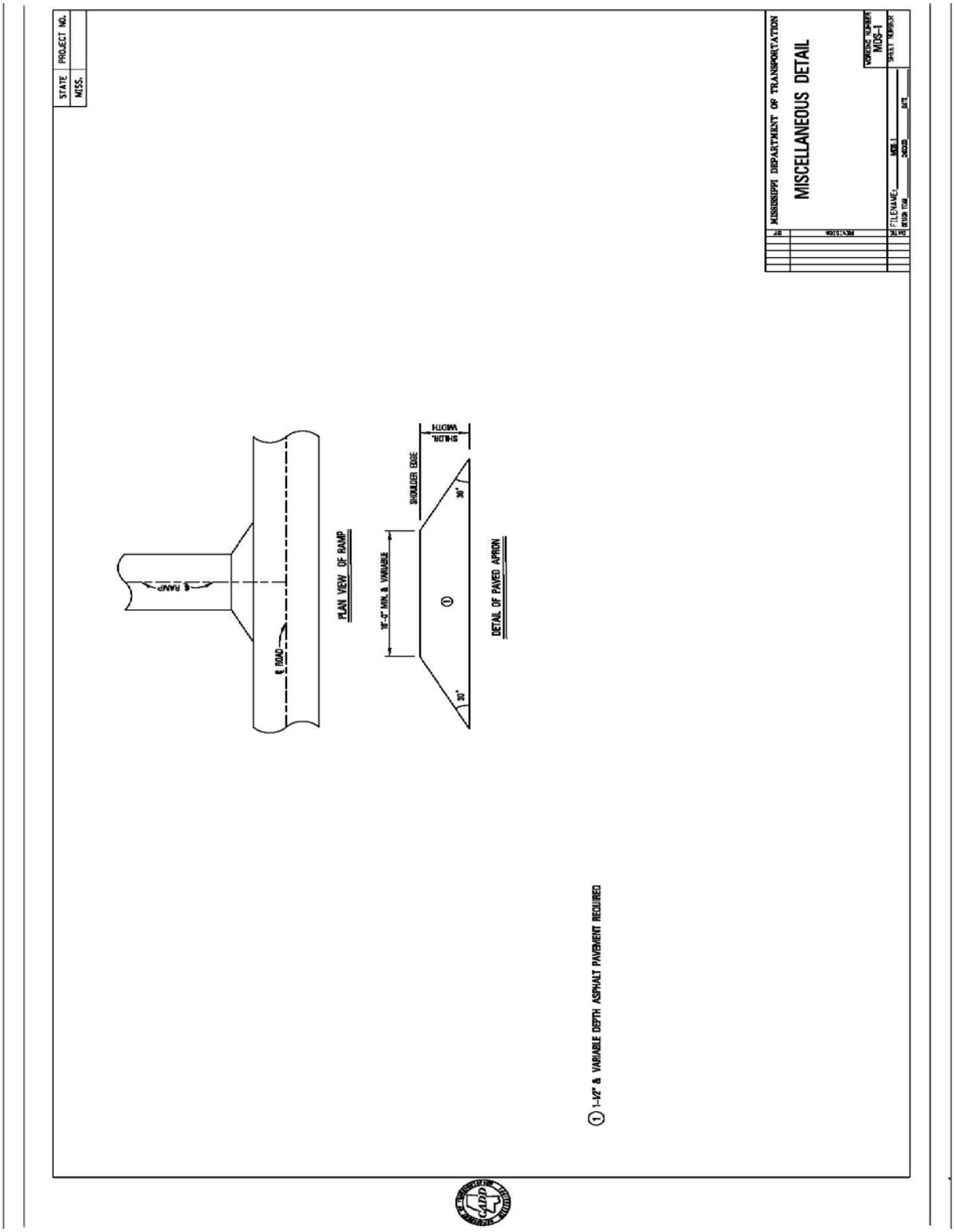
NOTE: The Existing Pipe Post will remain in place for the new signs to be attached as shown in the Sign Table attached to the Scope of Work.

NOTE: The Contractor will not be allowed to use rivets for attaching signs to posts as shown on Working Number TSS-1. Contractor shall utilize a bolt, washer, and nut for connections as approved by the Project Engineer.

The contractor shall provide all signs and traffic handling devices necessary to safely maintain traffic around or through the work areas.

The Engineer may direct the use of additional cones at County roads or intersections within lane closures and will be absorbed in Maintenance of Traffic.

Incidental work such as removing vegetation, shaping and compaction of shoulder, necessary and incidental grading of roadway ditches, and other incidental work that is necessary to complete the work will not be measured for separate payment and the cost will be included in the bid items provided.


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAIL
WORKING NUMBER
MDS-1
SHEET NUMBER
PLAN VIEW OF RAMP
RAMP
ROAD
DETAIL OF PAVED APRON
SHOULDER EDGE
SHLDR. WIDTH
30°
30°
VARIABLE
① 1-½" & VARIABLE DEPTH ASPHALT PAVEMENT REQUIRED

	110064-301000 Desoto County													
	Location (Sta. #)	**Lane Location**	**Sign Code**	**Sign Description**	**630-G004 Type 3 Object Markers**	**Size**	**630-A001 0.08" (SF)**	**630-A005 0.1" (SF)**	**630-A003 0.125" (SF)**	**630-C005 2lb Post (LF)**	**630-C001 4lb Post (LF)**	**202-B215 Removal Pipe Post & Footing**	**202-B215 Removal U-Channel**	**Notes**
110064	642+30	LT	OM3-L	Object Marker	1							1		SB at Coldwater River bridge
	642+30	RT	OM3-R	Object Marker	1							1		SB at Coldwater River bridge
	657+50	LT LT	W8-13	Bridge Ices Before Road		36x36		9		15		1		SB before Coldwater River bridge
	691+10	Median	R5-11	Authorized Vehicles Only		30x24		10		15		1		Quantity doubled: sign on both sides of post. Note: current sign reads " Official and Emergency Vehicles Only"
	727+60	RT RT	OM3-L	Object Marker	1									NB at Love Rd. GR connects to concrete barrier under bridge
	728+30	LT LT	OM3-L	Object Marker	1									SB at Love Rd. GR connects to concrete barrier under bridge
	728+40	RT RT	D10-3	MM 275		12x48		4		7			1	
	728+40	LT LT	D10-3	MM 275		12x48		4		7			1	
	110064 TOTALS				**4**		**0**	**27**	**0**	**44**	**0**	**4**	**2**	

	110065-301000 Tate County													
	Location (Sta. #)	**Lane Location**	**Sign Code**	**Sign Description**	**630-G004 Type 3 Object Markers**	**Size**	**630-A001 0.08" (SF)**	**630-A005 0.1" (SF)**	**630-A003 0.125" (SF)**	**630-C005 2lb Post (LF)**	**630-C001 4lb Post (LF)**	**202-B215 Removal Pipe Post & Footing**	**202-B215 Removal U-Channel**	**Notes**
	49+00	LT LT	D10-3	MM 262		12x48		4		7			1	
	49+00	RT RT	D10-3	MM 262		12x48		4		7			1	
	55+00	Median	R5-11	Authorized Vehicles Only		30x24		10		15		1		Quantity double: sign is on both sides of post. Note: current sign reads " Official and Emergency Vehicles Only"
	88+50	LT LT	R2-4a	SL 70 / Min 40		48x96			32	15		1		
	101+00	LT LT	M1-1	Interstate 55 (blue/red)		24x24	4			15			1	
		LT LT	M3-3	South (blue)		24x12	2							w/ I55
	101+00	RT RT	D10-3	MM 263		12x48		4		7			1	
	101+00	LT LT	D10-3	MM 263		12x48		4		7			1	
	116+00	RT RT	W13-2	Exit 35 MPH		24x30	5.00			15			1	at NB 740 exit
	115+50	RT LT	R6-2R	One way (w/arrow right)		30x36		7.5		15			1	median SB south of 740
	118+25	RT RT	E5-1a	Exit 263 (w/slant arrow)		72x60			35		30	2		gore area at NB 740 ramp
	123+00	LT LT	W4-1	Merge		36x36			9	15		1		SB south of 740
	135+80	RT RT	W4-1	Merge		36x36			9	15		1		NB north of 740

140+60	LT LT	W13-2	Exit 35 MPH		24x30	5.00			15			1	at SB 740 exit
142+50	LT RT	R6-2R	One way (w/arrow right)		30x36		7.5		15			1	median NB north of 740
140+20	LT LT	E5-1a	Exit 263 (w/slant arrow)		72x60			35		30	2		gore area at SB 740 ramp
153+50	RT RT	D10-3	MM 264		12x48		4		7			1	
153+50	LT LT	D10-3	MM 264		12x48		4		7			1	
155+30	RT RT	M1-1	Interstate 55 (blue/red)		24x24	4			15			1	
	RT RT	M3-1	North (blue)		24x12	2							w/ I55
158+80	RT RT	W8-13	Bridge Ices B4 Road		36x36		9		15		1		Sign knocked down NB before Shands Bottom bridge
162+50	RT RT	R2-4a	SL 70 / Min 40		48x96			32	15		1		pole laying in ditch - sign gone
167+60	RT	OM3	Object Marker	2									NB Shands Bottom bridge
169+60	LT	OM3	Object Marker	2									SB Shands Bottom bridge
174+60	LT LT	W8-13	Bridge Ices B4 Road		36x36		9		15		1		SB before Shands Bottom bridge
187+50	Median	R5-11	Authorized Vehicles Only		30x24		10		15		1		Quantity double: sign is on both sides of post. Note: current sign reads " Official and Emergency Vehicles Only"
205+30	Median	R11-1	Keep Off Median		24x30			5	15		1		SB
206+00	RT RT	D10-3	MM 265		12x48		4		7			1	
206+00	LT LT	D10-3	MM 265		12x48		4		7			1	
213+00	LT LT	R2-4a	SL 70 / Min 40		48x96			32	15		1		
223+25	LT LT	M1-1	Interstate 55 (blue/red)		24x24	4			15			1	
	LT LT	M3-3	South (blue)		24x12	2							w/ I55
233+50	RT RT	W13-3	Ramp 30 MPH		24x30	5.00						1	at NB Hwy 4 exit
234+50	RT RT	E5-1a	Exit 265 (w/slant arrow)		72x60			35		30	2		gore area at NB Hwy 4 ramp
234+50	RT LT	R6-2R	One way (w/arrow right)		30x36		7.5		15			1	median SB south of Hwy 4
237+50	RT RT	W8-13	Bridge Ices B4 Road		36x36		9		15		1		NB before Hwy 4 bridge
239+80	LT LT	W4-1	Merge		36x36			9	15		1		SB south of Hwy 4
242+50	RT	OM3	Object Marker	2									NB Hwy 4 Bridge
244+60	LT	OM3	Object Marker	2									SB Hwy 4 Bridge
248+50	RT RT	W4-1	Merge		36x36			9	15		1		NB north of Hwy 4
251+00	LT LT	W8-13	Bridge Ices B4 Road		36x36		9		15		1		SB before Hwy 4 bridge

110065

253+00	LT LT	E5-1a	Exit 265 (w/slant arrow)		72x60			35		30	2		gore area at SB Hwy 4 ramp
254+80	LT RT	R6-1R	One way arrow		36x12	3.00			15			1	NB north of Hwy 4 on ramp ("one way" within arrow)
256+00	LT LT	W3-13	Ramp 30 MPH		24x30	5.00			15			1	at SB Hwy 4 exit
394+50	RT RT	OM3	Object Marker	1									NB at Rifle Range Rd overpass
394+90	LT LT	OM3	Object Marker	1									SB at Rifle Range Rd overpass
414+80	RT RT	D10-3	MM 269		12x48		4		7			1	
414+80	LT LT	D10-3	MM 269		12x48		4		7			1	
427+00	Median	R5-11	Authorized Vehicles Only		30x24		10		15		1		Quantity double: sign is on both sides of post. Note: current sign reads " Official and Emergency Vehicles Only"
467+50	RT RT	D10-3	MM 270		12x48		4		7			1	
467+50	LT LT	D10-3	MM 270		12x48		4		7			1	
488+00	RT RT	OM3	Object Marker	1									NB at Peyton Rd overpass
488+30	LT LT	OM3	Object Marker	1									SB at Peyton Rd overpass
507+00	RT LT	R11-1	Keep Off Median		24x30			5	15		1		
511+00	LT LT	R2-4a	SL 70 / Min 40		48x96			32	15		1		
519+80	RT RT	D10-3	MM 271		12x48		4		7			1	
519+80	LT LT	D10-3	MM 271		12x48		4		7			1	
530+25	LT LT	M1-1	Interstate 55 (blue/red)		24x24	4			15			1	
	LT LT	M3-3	South (blue)		24x12	2			15				w/ I55
532+00	RT RT	W13-2	Exit 30 MPH		24x30	5.00			15			1	at NB Coldwater exit
534+40	RT RT	E5-1a	Exit 271 (w/slant arrow)		72x60			35		30	2		gore area at NB 306 ramp
536+50	RT RT	W8-13	Bridge Ices B4 Road		36x36		9		15		1		NB before 306 bridge
536+50	LT LT	W4-1	Merge		36x36			9	15		1		SB south of Hwy 306
542+00	RT	OM3	Object Marker	2									NB at 306 bridge
543+10	LT	OM3	Object Marker	2									SB at 306 bridge
548+00	LT LT	W8-13	Bridge Ices B4 Road		36x36		9		15		1		SB before 306 bridge
548+00	RT RT	W4-1	Merge		36x36			9	15		1		NB south of Hwy 306
550+50	LT LT	E5-1a	Exit 271 (w/slant arrow)		72x60			35		30	2		gore area at SB 306 ramp
551+50	LT RT	R6-2R	One way (w/arrow right)		30x36		7.5		15			1	median SB south of Hwy 4
552+00	LT LT	W13-2	Exit 30 MPH		24x30	5.00			15			1	at SB Coldwater exit
563+00	RT RT	M1-1	Interstate 55 (blue/red)		24x24	4			15			1	

	RT RT	M3-1	North (blue)		24x12	2							w/ I55
572+00	RT RT	D10-3	MM 272		12x48		4		7			1	
572+00	LT LT	D10-3	MM 272		12x48		4		7			1	
573+00	RT RT	R2-4a	SL 70 / Min 40		48x96			32	15		1		
578+00	Median	R11-1	Keep Off Median		24x30			5	15		1		
597+70	Median	R5-11	Authorized Vehicles Only		30x24		10		15		1		Quantity double: sign is on both sides of post. Note: current sign reads " Official and Emergency Vehicles Only"
607+50	RT RT	W8-13	Bridge Ices B4 Road		36x36		9		15		1		NB before Coldwater River bridge
622+00	RT RT	D10-3	MM 273		12x48		4		7			1	
622+00	LT LT	D10-3	MM 273		12x48		4		7			1	
622+10	RT RT	OM3	Object Marker	1									NB at Coldwater River bridge
622+10	LT RT	OM3	Object Marker	1									NB at Coldwater River bridge
	110065 TOTALS			**18**		**63**	**201**	**439**	**734**	**180**	**37**	**33**	

PROJECT TOTALS	**22**	**63**	**228**	**439**	**778**	**180**	**41**	**35**

Guardrail Replacement

	Location	Starting Station	Ending Station	Guardrail Removal (LF)	W-beam (LF)	Terminal End Section, Non-Flared (EA)	Terminal End Section, Flared (EA)	Cable Anchor (EA)	Bridge End Section (Type A)	Bridge End Section (Type I)	Delineators White (EA)	Delineators Yellow (EA)	Sawcuts (LF)	Removal of Asphalt (SY)	304-B004 Granular Material, Class 5, Group D (TON)	
110064	NB at Love Rd west side	726+25	728+50	225	187.5		1	1				7				
	NB at Love Rd east side	725+70	727+60	190	137.5		1			1	7					
	SB at Love Rd west side	728+35	730+25	190	137.5		1			1		7				
	SB at Love Rd east side	727+35	729+60	225	187.5		1	1			7					
	SB at Coldwater Bridge west side	642+30	644+15	185	150.0		1		1			6				*in gravel
	SB at Coldwater Bridge east side	642+30	644+15	185	150.0		1		1		6					*in gravel
	110064 TOTALS			**1200**	**950**	**0**	**6**	**2**	**2**	**2**	**20**	**20**	**0**	**0**	**0**	
110065	NB at Box Culvert (east side)	10+00	12+15	215	187.5		1	1			6					
	NB at Box Culvert (west side)	10+00	12+15	215	187.5		1	1				6				
	NB at Box Culvert (east side)	40+40	42+55	215	187.5		1	1			6					
	NB at Box Culvert (east side)	64+40	66+60	220	187.5		1	1			6					
	NB (east side)	105+60	107+80	220	187.5		1	1			6					
	NB at 740 (east side)	127+40	130+25	285	250.0	1		1			8					
	NB at Shands Bottom (east side)	165+20	167+60	240	212.5		1		1		7		240	520.00	80	**in asphalt
	NB at Shands Bottom (west side)	165+10	167+60	250	212.5		1		1			7	250	138.89	30	**in asphalt
	NB at Box Culvert (east side)	185+75	187+95	220	187.5		1	1			7					
	NB at Box Culvert (east side)	216+40	218+60	220	187.5		1	1			7					
	NB at Hwy 4 (east side)	240+10	242+50	240	212.5		1		1		8		240	396.67	60	**in asphalt
	NB at Hwy 4 (west side)	240+00	242+50	250	212.5		1		1			8	250	166.67	30	**in asphalt
	SB at Hwy 4 (east side)	245+00	247+50	250	212.5		1		1			8	250	166.67	30	**in asphalt
	SB at Hwy 4 (west side)	245+00	247+40	240	212.5		1		1		8		240	396.67	60	**in asphalt
	SB at Box Culvert (west side)	217+20	219+40	220	187.5		1	1			6					
	SB at Box Culvert (west side)	186+80	189+00	220	187.5		1	1			6					
	SB at Shands Bottom (east side)	169+60	172+00	240	212.5		1		1			7	240	160.00	30	**in asphalt
	SB at Shands Bottom (west side)	169+60	172+10	250	212.5		1		1		7		250	520.00	80	**in asphalt
	SB at 740 (west side)	128+40	131+25	285	250.0	1		1			8					
	SB at Box Culvert (west side)	65+20	67+40	220	187.5		1	1			7					
	SB at Box Culvert (west side)	41+30	43+45	215	187.5	1		1			5					
	SB at Box Culvert (west side)	52+00	53+70	170	137.5		1	1			7					
	SB at Box Culvert (east side)	10+85	13+00	215	187.5		1	1			7					
	SB at Box Culvert (west side)	10+85	13+00	215	187.5		1	1			7					
	NB at Rifle Range Rd (east side)	392+50	394+50	200	150.0		1			1		6				*connects to concrete barrier
	NB at Rifle Range Rd (west side)	393+50	395+80	230	200.0		1	1			6					
	NB at box culvert (east side)	422+40	424+50	210	175.0		1	1				6				
	NB at box culvert (east side)	471+15	473+30	215	187.5		1	1				6				
	NB at Box culvert (west side)	471+15	473+30	215	187.5		1	1			7					
	NB at Peyton Rd (east side)	485+80	487+80	200	150.0		1			1		7				*connects to concrete barrier
	NB at Peyton Rd (west side)	486+65	488+90	225	187.5		1	1			7					
	NB at box culvert (east side)	520+00	522+15	215	187.5		1	1				6				
	NB at Coldwater River Bridge (east side	620+35	622+20	185	150.0		1		1			6				*in gravel
	SB at Coldwater River Bridge (west side	620+35	622+20	185	150.0		1		1		6					*in gravel
	SB between cable barrier (west side)	607+50	609+35	185	150.0		1	1			6					
	SB at Box Culvert (west side)	528+50	530+80	230	200.0		1	1			7					
	SB at Box Culvert (west side)	521+00	523+15	215	187.5		1	1			6					
	SB at Peyton Rd (east side)	487+25	489+50	225	175.0		1			1		7				*connects to concrete barrier
	SB at Peyton Rd (west side)	488+30	490+30	200	162.5		1	1			6					
	SB at Box Culvert (west side)	472+10	474+25	215	187.5		1	1			6					
	SB at Box Culvert (east side)	472+20	474+35	215	187.5		1	1				6				
	SB at Box Culvert (west side)	423+35	425+60	225	187.5		1	1			6					
	SB at Rifle Range Rd (east side)	393+70	396+00	230	175.0		1			1		7				*connects to concrete barrier
	SB at Rifle Range Rd (west side)	395+00	397+00	200	162.5		1	1			6					
	110065 TOTALS			**9750**	**8275**	**3**	**41**	**30**	**10**	**4**	**198**	**93**	**1960**	**2466**	**400**	
	PROJECT TOTALS			**10950**	**9225**	**3**	**47**	**32**	**12**	**6**	**218**	**113**	**1960**	**2466**	**400**	

Random Clearing

110064-301000

	Starting Station	Ending Station	Length (ft)	No. of Stations	Location
110064	696+00	718+00	2200	22.0	NB Outside
	726+60	727+60	100	1.0	NB Outside
	728+00	729+00	100	1.0	SB Outside
	707+00	720+00	1300	13.0	SB Outside
	675+00	703+50	2850	28.5	SB Outside
		110064 TOTAL		**65.5**	

110065-301000

	Starting Station	Ending Station	Length (ft)	No. of Stations	Location
110065	+	19+00	1900	19.0	NB Median
	10+00	12+00	200	2.0	NB Median
	10+50	11+50	100	1.0	NB Outside
	18+00	23+00	500	5.0	NB Outside
	27+00	27+50	50	0.5	NB Median
	38+00	40+00	200	2.0	NB Outside
	43+00	44+00	100	1.0	NB Outside
	46+00	47+00	100	1.0	NB Outside
	54+00	57+00	300	3.0	NB Outside
	58+50	64+00	550	5.5	NB Outside
	65+00	66+00	100	1.0	NB Outside
	69+00	76+50	750	7.5	NB Outside
	87+00	93+00	600	6.0	NB Outside
	94+00	96+00	200	2.0	NB Outside
	104+25	104+75	50	0.5	NB Outside
	106+50	107+00	50	0.5	NB Outside
	152+00	152+50	50	0.5	NB Outside
	186+50	187+00	50	0.5	NB Outside
	188+50	201+00	1250	12.5	NB Outside
	217+00	217+50	50	0.5	NB Outside
	226+00	227+50	150	1.5	NB Outside
	226+00	233+00	700	7.0	SB Outside
	218+50	219+00	50	0.5	SB Outside
	187+00	189+00	200	2.0	SB Outside
	107+50	108+00	50	0.5	SB Outside
	95+00	106+00	1100	11.0	SB Outside
	71+00	92+00	2100	21.0	SB Outside
	50+00	66+50	1650	16.5	SB Outside
	44+00	46+00	200	2.0	SB Outside
	34+00	34+50	50	0.5	SB Outside
	11+00	19+00	800	8.0	SB Median
	9+00	10+50	150	1.5	SB Outside
	1+50	2+00	50	0.5	SB Outside

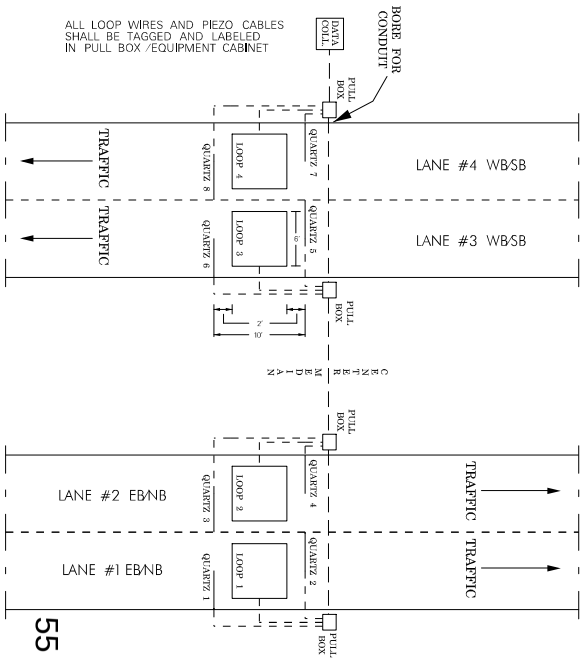
+	10+50	1050	10.5	SB Median
393+00	394+00	100	1.0	NB Outside
406+00	407+50	150	1.5	NB Outside
409+00	412+00	300	3.0	NB Outside
426+50	427+50	100	1.0	NB Outside
423+25	424+25	100	1.0	NB Outside
445+00	448+00	300	3.0	NB Outside
467+00	467+50	50	0.5	NB Median
471+00	472+00	100	1.0	NB Median
477+00	487+00	1000	10.0	NB Outside
489+00	495+00	600	6.0	NB Outside
498+00	498+50	50	0.5	NB RT at Box
512+00	519+00	700	7.0	NB RT (buffer to houses)
528+00	528+50	50	0.5	NB Outside
551+00	563+00	1200	12.0	NB RT along 306 accel ln
552+00	568+00	1600	16.0	SB LT along 306 decel ln
523+00	528+00	500	5.0	SB LT between GR
518+00	521+00	300	3.0	SB Outside
513+00	514+00	100	1.0	SB LT in ditchline
485+00	488+00	300	3.0	SB Outside
475+00	481+00	600	6.0	SB Outside
472+20	474+20	200	2.0	SB Median
467+50	471+00	350	3.5	SB Outside
456+00	465+00	900	9.0	SB Outside
448+50	449+50	100	1.0	SB Outside
442+00	445+00	300	3.0	SB Outside
411+00	414+00	300	3.0	SB Outside
403+00	409+00	600	6.0	SB Outside
	110065 TOTAL		**263.0**	

PROJECT TOTAL	**328.5**	**Stations**

Guardrail Replacement

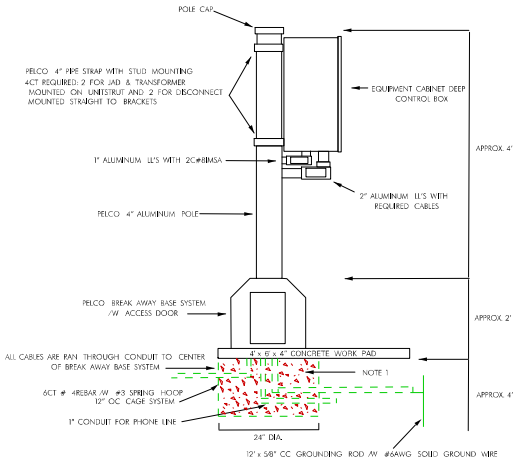
	Location	Starting Station	Ending Station	Guardrail Removal (LF)	W-beam (LF)	Terminal End Section, Non-Flared (EA)	Terminal End Section, Flared (EA)	Cable Anchor (EA)	Bridge End Section (Type A)	Bridge End Section (Type I)	Delineators White (EA)	Delineators Yellow (EA)	Sawcuts (LF)	Removal of Asphalt (SY)	304-B004 Granular Material, Class 5, Group D (TON)	
110064	NB at Love Rd west side	726+25	728+50	225	187.5		1	1				7				
	NB at Love Rd east side	725+70	727+60	190	137.5		1			1	7					
	SB at Love Rd west side	728+35	730+25	190	137.5		1			1		7				
	SB at Love Rd east side	727+35	729+60	225	187.5		1	1			7					
	SB at Coldwater Bridge west side	642+30	644+15	185	150.0		1		1			6				*in gravel
	SB at Coldwater Bridge east side	642+30	644+15	185	150.0		1		1		6					*in gravel
	110064 TOTALS			**1200**	**950**	**0**	**6**	**2**	**2**	**2**	**20**	**20**	**0**	**0**	**0**	
110065	NB at Box Culvert (east side)	10+00	12+15	215	187.5		1	1			6					
	NB at Box Culvert (west side)	10+00	12+15	215	187.5		1	1				6				
	NB at Box Culvert (east side)	40+40	42+55	215	187.5		1	1			6					
	NB at Box Culvert (east side)	64+40	66+60	220	187.5		1	1			6					
	NB (east side)	105+60	107+80	220	187.5		1	1			6					
	NB at 740 (east side)	127+40	130+25	285	250.0	1		1			8					
	NB at Shands Bottom (east side)	165+20	167+60	240	212.5		1		1		7		240	520.00	80	**in asphalt
	NB at Shands Bottom (west side)	165+10	167+60	250	212.5		1		1			7	250	138.89	30	**in asphalt
	NB at Box Culvert (east side)	185+75	187+95	220	187.5		1	1			7					
	NB at Box Culvert (east side)	216+40	218+60	220	187.5		1	1			7					
	NB at Hwy 4 (east side)	240+10	242+50	240	212.5		1		1		8		240	396.67	60	**in asphalt
	NB at Hwy 4 (west side)	240+00	242+50	250	212.5		1		1			8	250	166.67	30	**in asphalt
	SB at Hwy 4 (east side)	245+00	247+50	250	212.5		1		1			8	250	166.67	30	**in asphalt
	SB at Hwy 4 (west side)	245+00	247+40	240	212.5		1		1		8		240	396.67	60	**in asphalt
	SB at Box Culvert (west side)	217+20	219+40	220	187.5		1	1			6					
	SB at Box Culvert (west side)	186+80	189+00	220	187.5		1	1			6					
	SB at Shands Bottom (east side)	169+60	172+00	240	212.5		1		1			7	240	160.00	30	**in asphalt
	SB at Shands Bottom (west side)	169+60	172+10	250	212.5		1		1		7		250	520.00	80	**in asphalt
	SB at 740 (west side)	128+40	131+25	285	250.0	1		1			8					
	SB at Box Culvert (west side)	65+20	67+40	220	187.5		1	1			7					
	SB at Box Culvert (west side)	41+30	43+45	215	187.5	1		1			5					
	SB at Box Culvert (west side)	52+00	53+70	170	137.5		1	1			7					
	SB at Box Culvert (east side)	10+85	13+00	215	187.5		1	1			7					
	SB at Box Culvert (west side)	10+85	13+00	215	187.5		1	1			7					
	NB at Rifle Range Rd (east side)	392+50	394+50	200	150.0		1			1		6				*connects to concrete barrier
	NB at Rifle Range Rd (west side)	393+50	395+80	230	200.0		1	1			6					
	NB at box culvert (east side)	422+40	424+50	210	175.0		1	1				6				
	NB at box culvert (east side)	471+15	473+30	215	187.5		1	1				6				
	NB at Box culvert (west side)	471+15	473+30	215	187.5		1	1			7					
	NB at Peyton Rd (east side)	485+80	487+80	200	150.0		1			1		7				*connects to concrete barrier
	NB at Peyton Rd (west side)	486+65	488+90	225	187.5		1	1			7					
	NB at box culvert (east side)	520+00	522+15	215	187.5		1	1				6				
	NB at Coldwater River Bridge (east side	620+35	622+20	185	150.0		1		1			6				*in gravel
	SB at Coldwater River Bridge (west side	620+35	622+20	185	150.0		1		1		6					*in gravel
	SB between cable barrier (west side)	607+50	609+35	185	150.0		1	1			6					
	SB at Box Culvert (west side)	528+50	530+80	230	200.0		1	1			7					
	SB at Box Culvert (west side)	521+00	523+15	215	187.5		1	1			6					
	SB at Peyton Rd (east side)	487+25	489+50	225	175.0		1			1		7				*connects to concrete barrier
	SB at Peyton Rd (west side)	488+30	490+30	200	162.5		1	1			6					
	SB at Box Culvert (west side)	472+10	474+25	215	187.5		1	1			6					
	SB at Box Culvert (east side)	472+20	474+35	215	187.5		1	1				6				
	SB at Box Culvert (west side)	423+35	425+60	225	187.5		1	1			6					
	SB at Rifle Range Rd (east side)	393+70	396+00	230	175.0		1			1		7				*connects to concrete barrier
	SB at Rifle Range Rd (west side)	395+00	397+00	200	162.5		1	1			6					
	110065 TOTALS			**9750**	**8275**	**3**	**41**	**30**	**10**	**4**	**198**	**93**	**1960**	**2466**	**400**	
	PROJECT TOTALS			**10950**	**9225**	**3**	**47**	**32**	**12**	**6**	**218**	**113**	**1960**	**2466**	**400**	

STATE	PROJECT NO.
MISS.	*



SCHEMATIC 4 LANE DIVIDED ROADWAY LAYOUT PLAN

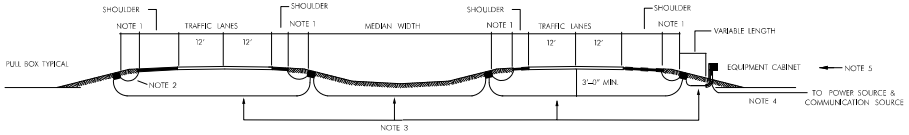
NOT TO SCALE



DETAIL OF POST & EQUIPMENT CABINET

NOT TO SCALE

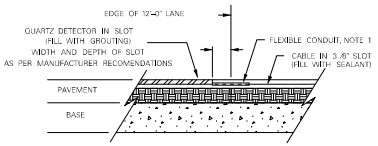
1. BACKFILL WITH CONCRETE AS APPROVED BY PROJECT ENGINEER.



TYPICAL SECTION FOR CONDUIT PLACEMENT

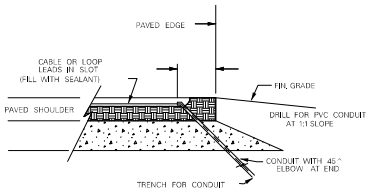
NOT TO SCALE

1. LOCATE PULL BOXES 15'–0" MIN. FROM SHOULDER UNLESS UNUSUAL SITE CONDITIONS EXIST. THE PULL BOX LOCATION & EQUIPMENT CABINET LOCATION MUST BE APPROVED BY PROJECT ENGINEER.
2. 3/4" DIA. SCH 40 PVC CONDUIT FOR EACH LOOP OR SENSOR TO PULL BOX CONDUIT BURIED AT 3'0" AT THE SHOULDER.
3. 2" DIA. SCH 80 PVC.
4. BURIED CABLE TO POWER SOURCE AND COMMUNICATION SOURCE.
5. LOCATION OF EQUIPMENT CABINET AND LANE WIDTH WILL VARY DEPENDING ON SITE.
6. ALL SENSOR WIRE AND LOOP WIRE MUST BE PLACED IN CONDUIT FROM PAVEMENT TO EQUIPMENT CABINET. SENSOR WIRE SHALL BE A CONTINUOUS RUN WITH OUT ANY SPLICING FROM THE SENSOR TO THE EQUIPMENT CABINET..



DETAIL AT QUARTZ DETECTOR

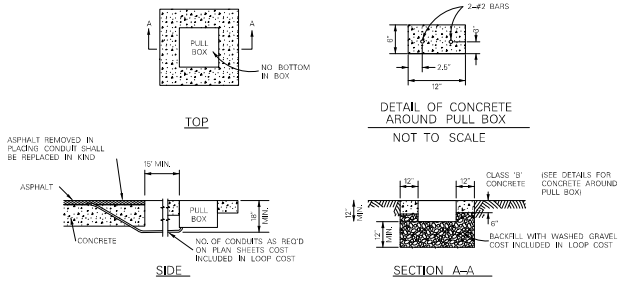
NOT TO SCALE



DETAIL AT CONDUIT END

NOT TO SCALE

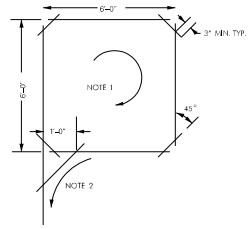
1. PROVIDE 3/4" DIA. X 1'-0" FLEXIBLE PVC CONDUIT SLEEVE AT DETECTOR ENDS. PROVIDE SIMILAR DETAIL FOR DETECTOR CABLE AND LOOP LEADS AT PAVEMENT JOINTS BETWEEN LANES AND JOINTS BETWEEN PAVEMENT AND SHOULDER.



PULL BOX DETAILS

NOT TO SCALE

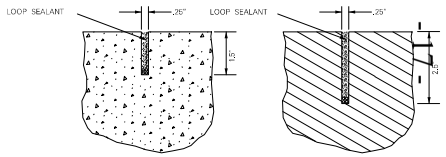
PULL BOXES SHALL CONFORM TO 722.06 (e) TYPE 2 OF THE STANDARD SPECIFICATIONS



DETAIL PLAN OF LOOP SLOTS

NOT TO SCALE

1. INSTALL WIRE TURNS THE SAME (CLOCKWISE) DIRECTION.
2. LOOP LEAD WIRE EXIT FROM LAST TURN.
3. ALL LOOPS TO INCLUDE 4 TURNS OF #14AWG WIRE.
4. DIMENSIONAL TOLERANCE FOR LOOP LENGTH, SPACING AND DETECTOR LOCATION: 1/2".



DETAIL OF CABLE SLOT

NOT TO SCALE

SPECIFICATIONS

ALL WORK SHALL CONFORM TO S.P. 907–688–A.

INSTALLATION NOTES

1. EXACT LOCATION TO BE VERIFIED IN FIELD BY STATE PLANNING ENGINEER.
2. SATISFACTORY OPERATION OF ALL COMPONENTS SHALL BE VERIFIED BY STATE PLANNING ENGINEER.

Notice to Bidders No. 7594 - Cont'd.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC RECORDER WIM KISTLER SYSTEM

4 LANE DIVIDED ROADWAY LAYOUT PLAN

WORKING NUMBER

SHEET NUMBER

FILENAME: .dgn

DESIGN TEAM CHECKED DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
MKED'YY 225, 000 AMPM DDGFILENAME

STATE	PROJECT NO.
MISS	IM-0055-04(124)/IM-0055-04(125)/IM-0055-04 (126)

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	DESOTO : 110064-301000	
			Prelim	Final
201-D001	Random Clearing	STA	66	
202-B158	Removal of Guard Rail, Including Rails, Posts and Terminal Ends	LF	1,200	
202-B215	Removal of Sign Including Post & Footing	EA	6	
202-B240	Removal of Traffic Stripe	LF	7,380	
304-B004	Granular Material, Class 5, Group D	TON	250	
907-403-A013	9.5-mm, HT, Asphalt Pavement	TON	75	
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	68,196	
907-407-A001	Asphalt for Tack Coat	GAL	69	
907-418-A001	Emulsified Asphalt for Micro-Surfacing Type II	GAL	18,890	
907-418-A001	Emulsified Asphalt for Micro-Surfacing Type III	GAL	26,235	
907-418-B001	Aggregate for Micro-Surfacing Type III	TON	900	
907-418-B001	Aggregate for Micro-Surfacing Type II	TON	650	
907-428-C001	Bituminous-Based Fog Seal with Rejuvenator	GAL	2,788	
606-B002	Guard Rail, Class A, Type 1, 'W' Beam	LF	950	
606-C003	Guard Rail, Cable Anchor, Type 1	EA	2	
606-D005	Guard Rail, Bridge End Section, Type A	EA	2	
606-D022	Guard Rail, Bridge End Section, Type I	EA	2	
606-E005	Guard Rail, Terminal End Section, Flared	EA	6	
907-618-A001	Maintenance of Traffic	LS	1	
618-B001	Additional Construction Signs	SF	1	
619-A1001	Temporary Traffic Stripe, Continuous White	MI	14	
619-A2001	Temporary Traffic Stripe, Continuous Yellow	MI	14	
619-A3001	Temporary Traffic Stripe, Skip White	MI	14	
907-619-E3001	Changeable Message Sign	EA	2	
620-A001	Mobilization	LS	1	
907-626-A010	6" Thermoplastic Traffic Stripe, Skip White	MI	5	
907-626-C014	6" Thermoplastic Edge Stripe, Continuous White	MI	5	
907-626-F005	6" Thermoplastic Edge Stripe, Continuous Yellow	MI	5	
907-627-K001	Red-Clear Reflective High Performance Raised Markers	EA	544	
630-A005	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	SF	27	
630-C005	Square Tube Posts, 2.0 lb/ft	LF	44	
630-F002	Delineators, Flexible Post Mounted, Crossover, Type I, Yellow	EA	4	
630-F006	Delineators, Guard Rail, White	EA	20	
630-F007	Delineators, Guard Rail, Yellow	EA	20	
630-G004	Type 3 Object Markers, OM-3R or OM-3L	EA	4	

By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES	
Revision	PROJ NO: IM-0055-04(124) COUNTY: DESOTO	Working Number SQ-1
Date	FILENAME: 110064/110065/110066 - S Design Team Checked Date 5/12/26	Sheet Number 1

STATE	PROJECT NO.
MISS	IM-0055-04(124)/IM-0055-04(125)/IM-0055-04(126)

SUMMARY OF QUANTITIES (SHEET 2)

PAY ITEM NO.	PAY ITEM	UNIT	TATE : 110065-301000	
			Prelim	Final
201-D001	Random Clearing	STA	263	
202-B006	Removal of Asphalt Paved Shoulders, All Depths	SY	2,466	
202-B158	Removal of Guard Rail, Including Rails, Posts and Terminal Ends	LF	9,750	
202-B215	Removal of Sign Including Post & Footing	EA	70	
202-B240	Removal of Traffic Stripe	LF	7,860	
304-B004	Granular Material, Class 5, Group D for shoulders	TON	400	
304-B004	Granular Material, Class 5, Group D for guardrail	TON	400	
907-403-A013	9.5-mm, HT, Asphalt Pavement	TON	400	
406-A002	Cold Milling of Bituminous Pavement, All Depths	SY	400	
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	328,048	
907-407-A001	Asphalt for Tack Coat	GAL	458	
907-418-A001	Emulsified Asphalt for Micro-Surfacing TYPE III	GAL	125,673	
907-418-A001	Emulsified Asphalt for Micro-Surfacing TYPE II	GAL	90,485	
907-418-B001	Aggregate for Micro-Surfacing TYPE II	TON	3,075	
907-418-B001	Aggregate for Micro-Surfacing TYPE III	TON	4,250	
907-428-C001	Bituminous-Based Fog Seal with Rejuvenator	GAL	10,433	
503-C010	Saw Cut, Full Depth	LF	1,960	
606-B002	Guard Rail, Class A, Type 1, 'W' Beam	LF	8,275	
606-C003	Guard Rail, Cable Anchor, Type 1	EA	30	
606-D005	Guard Rail, Bridge End Section, Type A	EA	10	
606-D022	Guard Rail, Bridge End Section, Type I	EA	4	
606-E005	Guard Rail, Terminal End Section, Flared	EA	41	
606-E007	Guard Rail, Terminal End Section, Non-Flared	EA	3	
907-618-A001	Maintenance of Traffic	LS	1	
618-B001	Additional Construction Signs	SF	1	
619-A1001	Temporary Traffic Stripe, Continuous White	MI	59	
619-A2001	Temporary Traffic Stripe, Continuous Yellow	MI	59	
619-A3001	Temporary Traffic Stripe, Skip White	MI	59	
907-619-E3001	Changeable Message Sign	EA	4	
620-A001	Mobilization	LS	1	
907-626-A010	6" Thermoplastic Traffic Stripe, Skip White	MI	20	
907-626-C014	6" Thermoplastic Edge Stripe, Continuous White	MI	20	
907-626-F005	6" Thermoplastic Edge Stripe, Continuous Yellow	MI	20	
907-626-G004	Thermoplastic Detail Stripe, White	LF	10,104	
907-627-K001	Red-Clear Reflective High Performance Raised Markers	EA	2,560	
630-A001	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	SF	63	
630-A003	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness	SF	439	
630-A005	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	SF	201	
630-C001	Square Tube Posts, 4.0 lb/ft	LF	180	
630-C005	Square Tube Posts, 2.0 lb/ft	LF	734	
630-F002	Delineators, Flexible Post Mounted, Crossover, Type I, Yellow	EA	16	
630-F006	Delineators, Guard Rail, White	EA	211	
630-F007	Delineators, Guard Rail, Yellow	EA	106	
630-G004	Type 3 Object Markers, OM-3R or OM-3L	EA	18	

By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES	
Revision	PROJ NO: IM-0055-04(125) COUNTY: TATE	Working Number SQ-2
Date	FILENAME: 110064/110065/110066 - S Design Team Checked Date 5/12/26	Sheet Number 2

STATE	PROJECT NO.
MISS	IM-0055-04(124)/IM-0055-04(125)/IM-0055-04(126)

SUMMARY OF QUANTITIES (SHEET 3)

PAY ITEM NO.	PAY ITEM	UNIT	TATE : 110065-301000	
			Prelim	Final
907-640-A001	Vehicle Loop Assemblies	LF	140	
907-688-A001	Traffic Recorder WIM Kistler System	EA	1	

By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES	
Revision	PROJ NO: IM-0055-04(125) COUNTY: TATE	Working Number SQ-3
Date	FILENAME: 110064/110065/110066 - S Design Team Checked Date 5/12/26	Sheet Number 3

STATE	PROJECT NO.
MISS	IM-0055-04(124)/IM-0055-04(125)/IM-0055-04(126)

SUMMARY OF QUANTITIES (SHEET 4)

PAY ITEM NO.	PAY ITEM	UNIT	TATE : 110066-301000	
			Prelim	Final
202-B199	Removal of Raised Reflective Pavement Marker	EA	581	
907-403-A013	9.5-mm, HT, Asphalt Pavement	TON	225	
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	65,470	
907-407-A001	Asphalt for Tack Coat	GAL	262	
907-418-A001	Emulsified Asphalt for Micro-Surfacing TYPE II	GAL	17,606	
907-418-A001	Emulsified Asphalt for Micro-Surfacing TYPE III	GAL	24,453	
907-418-B001	Aggregate for Micro-Surfacing TYPE III	TON	850	
907-418-B001	Aggregate for Micro-Surfacing TYPE II	TON	600	
907-428-C001	Bituminous-Based Fog Seal with Rejuvenator	GAL	2,598	
907-618-A001	Maintenance of Traffic	LS	1	
618-B001	Additional Construction Signs	SF	1	
619-A1001	Temporary Traffic Stripe, Continuous White	MI	14	
619-A2001	Temporary Traffic Stripe, Continuous Yellow	MI	14	
619-A3001	Temporary Traffic Stripe, Skip White	MI	14	
620-A001	Mobilization	LS	1	
907-626-A010	6" Thermoplastic Traffic Stripe, Skip White	MI	5	
907-626-C014	6" Thermoplastic Edge Stripe, Continuous White	MI	5	
907-626-F005	6" Thermoplastic Edge Stripe, Continuous Yellow	MI	5	
907-627-K001	Red-Clear Reflective High Performance Raised Markers	EA	581	

By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES	
Revision	PROJ NO: IM-0055-04(126) COUNTY: TATE	Working Number SQ-4
Date	FILENAME: 110064/110065/110066 - S Design Team Checked Date 5/12/26	Sheet Number 4

STATE	PROJECT NO.
MISS	IM-0055-04(124)/IM-0055-04(125)/IM-0055-04 (126)

SUMMARY OF QUANTITIES (SHEET 5)

PAY ITEM NO.	PAY ITEM	UNIT	Total Amount	
			Prelim	Final
201-D001	Random Clearing	STA	329	
202-B006	Removal of Asphalt Paved Shoulders, All Depths	SY	2,466	
202-B158	Removal of Guard Rail, Including Rails, Posts and Terminal Ends	LF	10,950	
202-B199	Removal of Raised Reflective Pavement Marker	EA	581	
202-B215	Removal of Sign Including Post & Footing	EA	76	
202-B240	Removal of Traffic Stripe	LF	15,240	
304-B004	Granular Material, Class 5, Group D	TON	250	
304-B004	Granular Material, Class 5, Group D for guardrail	TON	400	
304-B004	Granular Material, Class 5, Group D for shoulders	TON	400	
907-403-A013	9.5-mm, HT, Asphalt Pavement	TON	700	
406-A002	Cold Milling of Bituminous Pavement, All Depths	SY	400	
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	461,714	
907-407-A001	Asphalt for Tack Coat	GAL	789	
907-418-A001	Emulsified Asphalt for Micro-Surfacing Type II	GAL	126,981	
907-418-A001	Emulsified Asphalt for Micro-Surfacing TYPE III	GAL	176,361	
907-418-B001	Aggregate for Micro-Surfacing Type II	TON	4,325	
907-418-B001	Aggregate for Micro-Surfacing TYPE III	TON	6,000	
907-428-C001	Bituminous-Based Fog Seal with Rejuvenator	GAL	15,819	
503-C010	Saw Cut, Full Depth	LF	1,960	
606-B002	Guard Rail, Class A, Type 1, 'W' Beam	LF	9,225	
606-C003	Guard Rail, Cable Anchor, Type 1	EA	32	
606-D005	Guard Rail, Bridge End Section, Type A	EA	12	
606-D022	Guard Rail, Bridge End Section, Type I	EA	6	
606-E005	Guard Rail, Terminal End Section, Flared	EA	47	
606-E007	Guard Rail, Terminal End Section, Non-Flared	EA	3	
907-618-A001	Maintenance of Traffic	LS	1	
618-B001	Additional Construction Signs	SF	3	
619-A1001	Temporary Traffic Stripe, Continuous White	MI	87	
619-A2001	Temporary Traffic Stripe, Continuous Yellow	MI	87	
619-A3001	Temporary Traffic Stripe, Skip White	MI	87	
907-619-E3001	Changeable Message Sign	EA	6	
620-A001	Mobilization	LS	1	
907-626-A010	6" Thermoplastic Traffic Stripe, Skip White	MI	30	
907-626-C014	6" Thermoplastic Edge Stripe, Continuous White	MI	30	
907-626-F005	6" Thermoplastic Edge Stripe, Continuous Yellow	MI	30	
907-626-G004	Thermoplastic Detail Stripe, White	LF	10,104	
907-627-K001	Red-Clear Reflective High Performance Raised Markers	EA	3,685	
630-A001	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness	SF	63	
630-A003	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness	SF	439	
630-A005	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	SF	228	
630-C001	Square Tube Posts, 4.0 lb/ft	LF	180	
630-C005	Square Tube Posts, 2.0 lb/ft	LF	778	
630-F002	Delineators, Flexible Post Mounted, Crossover, Type I, Yellow	EA	20	
630-F006	Delineators, Guard Rail, White	EA	231	

By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES - PROJECT TOTALS	
Revision	PROJ NO: IM-0055-04(124)/IM-0055-04(125)/IM-005 FMS: 110064-301000/110065-301000/110066-301000	Working Number SQ-5
Date	FILENAME: 110064/110065/110066 - S Design Team Checked Date 5/12/26	Sheet Number 5

STATE	PROJECT NO.
MISS	IM-0055-04(124)/IM-0055-04(125)/IM-0055-04 (126)

SUMMARY OF QUANTITIES (SHEET 6)

PAY ITEM NO.	PAY ITEM	UNIT	Total Amount	
			Prelim	Final
630-F007	Delineators, Guard Rail, Yellow	EA	126	
630-G004	Type 3 Object Markers, OM-3R or OM-3L	EA	22	
907-640-A001	Vehicle Loop Assemblies	LF	140	
907-688-A001	Traffic Recorder WIM Kistler System	EA	1	

By	**MISSISSIPPI DEPARTMENT OF TRANSPORTATION** **SUMMARY OF QUANTITIES - PROJECT TOTALS**	
Revision	PROJ NO: IM-0055-04(124)/IM-0055-04(125)/IM-005 FMS: 110064-301000/110065-301000/110066-301000	Working Number SQ-6
Date	FILENAME: 110064/110065/110066 - S Design Team Checked Date 5/12/26	Sheet Number 6

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 8191 **CODE: (SP)**

DATE: 07/01/2026

SUBJECT: Obligation Date

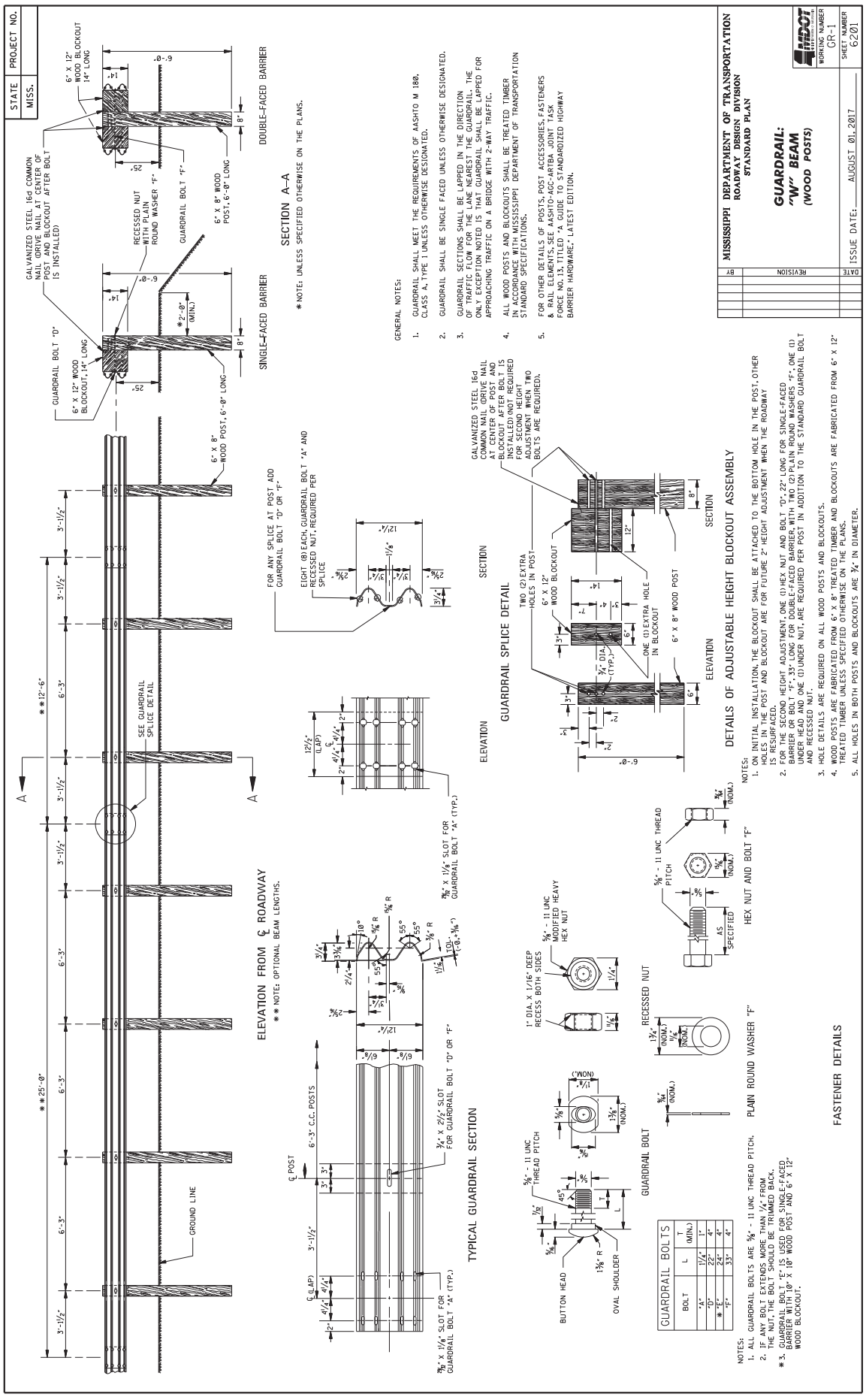
With respect to the obligation date referenced in Special Provision No. 907-700-3 entitled "Materials and Tests", bidders are advised that this project will be obligated on or after October 1, 2025 and before October 1, 2026.

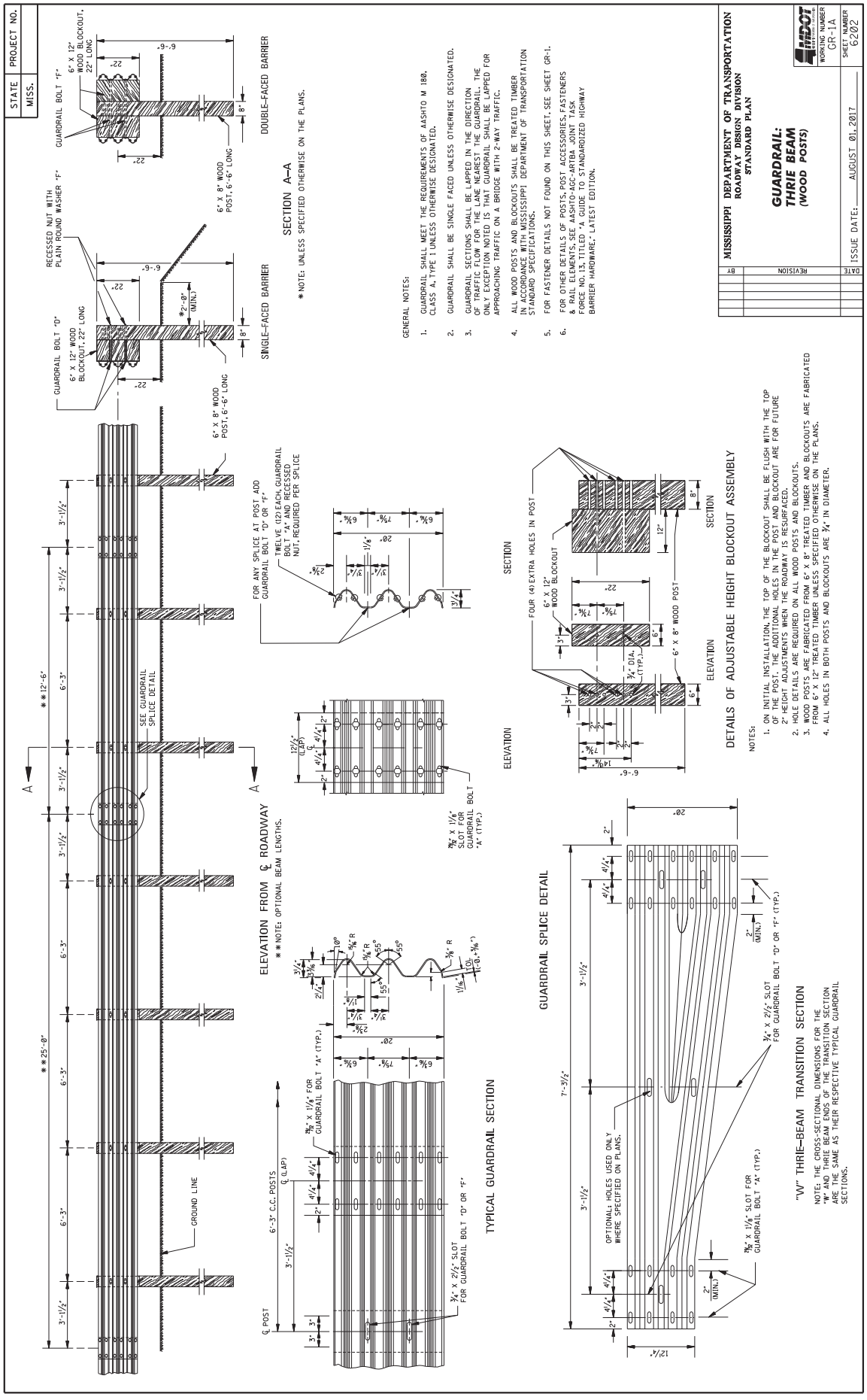
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

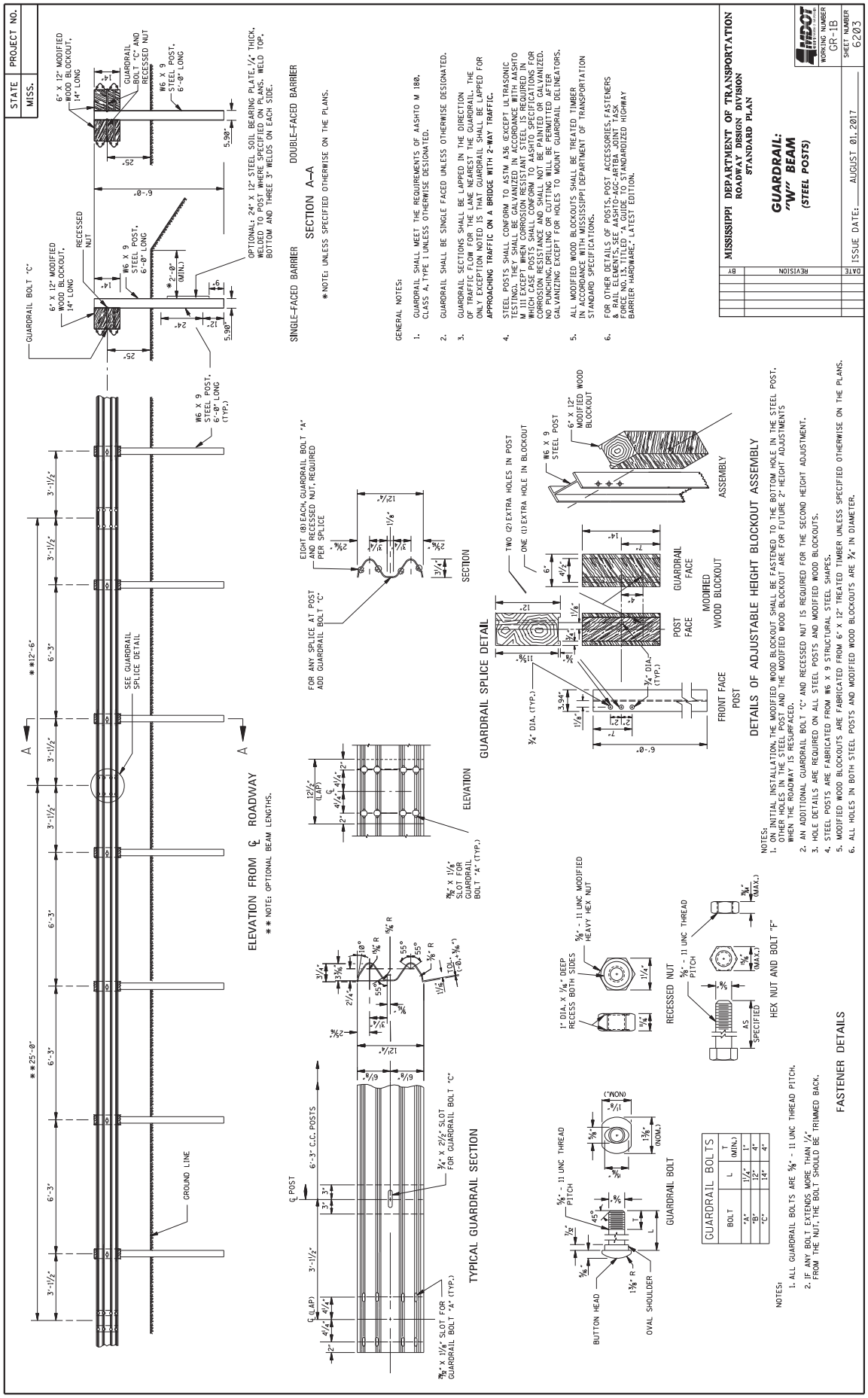
SUPPLEMENT TO NOTICE TO BIDDERS NO. 8341

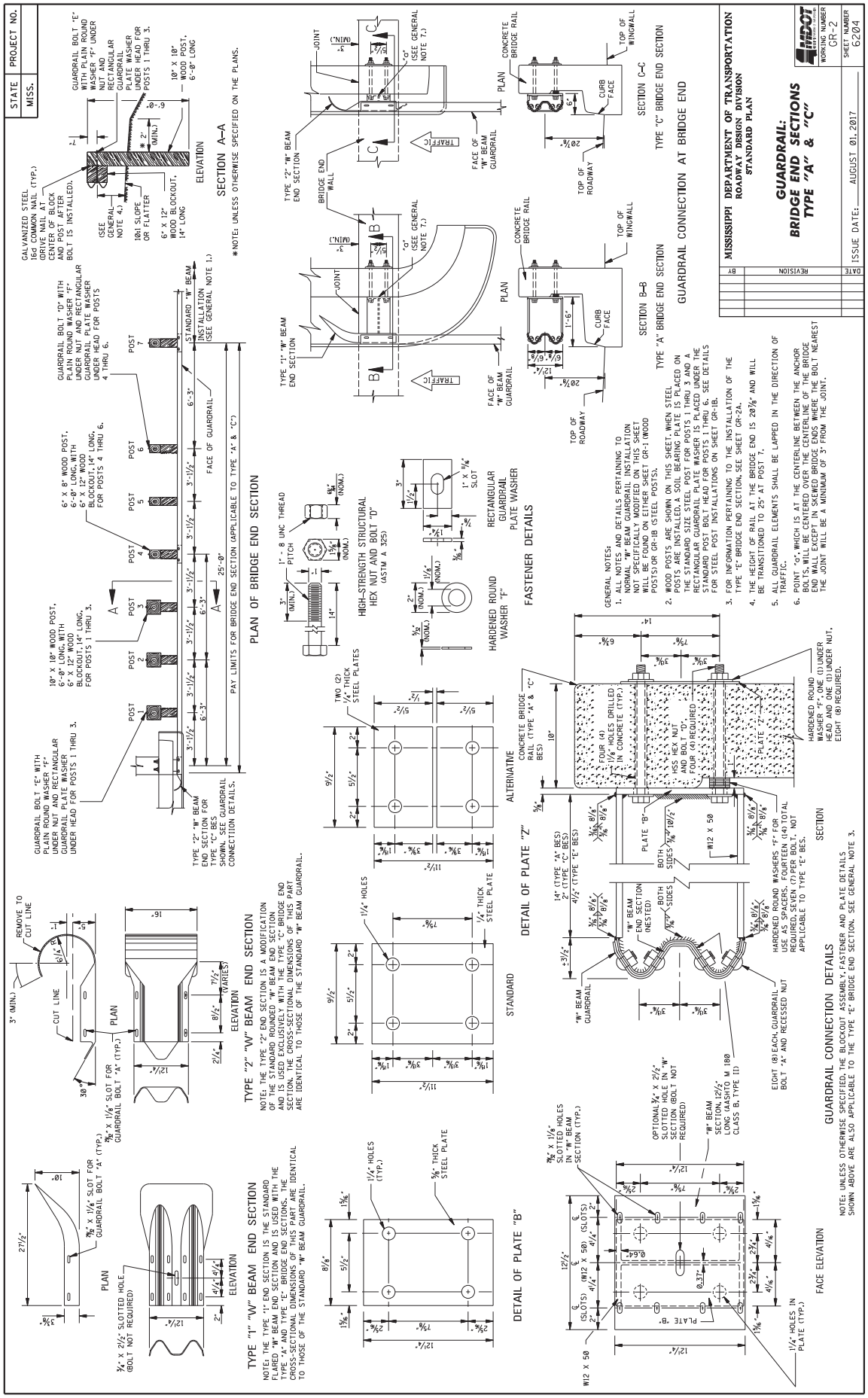
DATE: **08/27/2026**

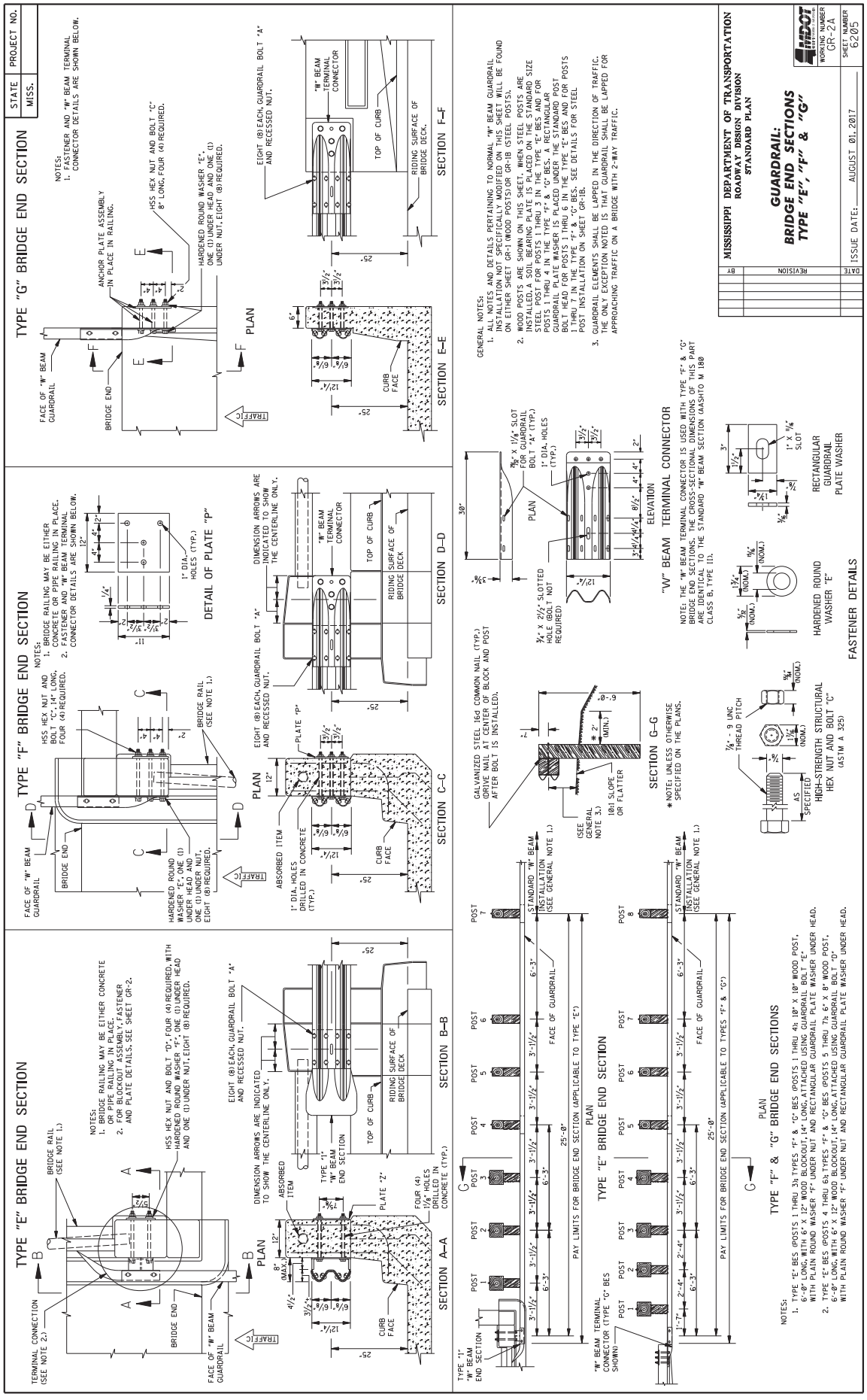
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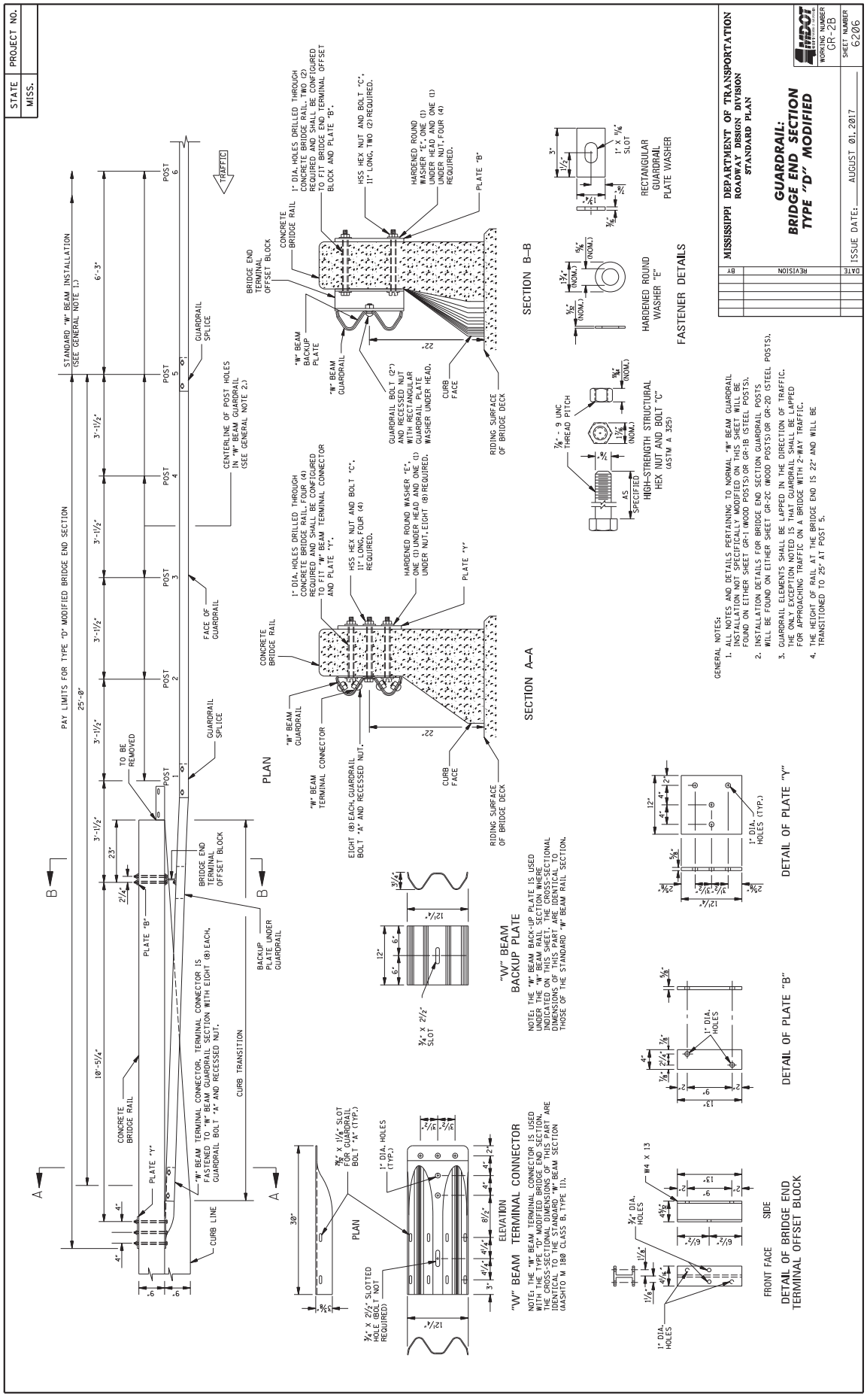

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: "W" BEAM (WOOD POSTS)
WORKING NUMBER GR-1
SHEET NUMBER 6201
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
5. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
SINGLE-FACED BARRIER
SECTION A-A
*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
DOUBLE-FACED BARRIER
GALVANIZED STEEL 16d COMMON NAIL DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER BOLT IS INSTALLED)
6" X 12" WOOD BLOCKOUT 14" LONG
RECESSED NUT WITH PLAIN ROUND WASHER "F"
GUARDRAIL BOLT "F"
6" X 8" WOOD POST, 6'-0" LONG
GUARDRAIL BOLT "D"
6" X 12" WOOD BLOCKOUT, 14" LONG
*2'-0" (MIN.)
6" X 8" WOOD POST, 6'-0" LONG
ELEVATION FROM ℄ ROADWAY
** NOTE: OPTIONAL BEAM LENGTHS.
SEE GUARDRAIL SPLICE DETAIL
GROUND LINE
TYPICAL GUARDRAIL SECTION
℄ POST
6'-3" C.C. POSTS
3/4" X 2 1/2" SLOT FOR GUARDRAIL BOLT "D" OR "F"
13/16" X 1 1/16" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
FOR ANY SPLICE AT POST ADD GUARDRAIL BOLT "D" OR "F"
EIGHT (8) EACH GUARDRAIL BOLT "A" AND RECESSED NUT, REQUIRED PER SPLICE
ELEVATION
SECTION
13/16" X 1 1/16" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
GUARDRAIL SPLICE DETAIL
GALVANIZED STEEL 16d COMMON NAIL DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER BOLT IS INSTALLED) (NOT REQUIRED FOR SECOND HEIGHT ADJUSTMENT WHEN TWO BOLTS ARE REQUIRED.
TWO (2) EXTRA HOLES IN POST
6" X 12" WOOD BLOCKOUT
ONE (1) EXTRA HOLE IN BLOCKOUT
6" X 8" WOOD POST
ELEVATION
SECTION
DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY
NOTES:
1. ON INITIAL INSTALLATION, THE BLOCKOUT SHALL BE ATTACHED TO THE BOTTOM HOLE IN THE POST. OTHER HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENT WHEN THE ROADWAY IS RESURFACED.
2. FOR THE SECOND HEIGHT ADJUSTMENT, ONE (1) HEX NUT AND BOLT "D", 22" LONG FOR SINGLE-FACED BARRIER OR BOLT "F", 33" LONG FOR DOUBLE-FACED BARRIER, WITH TWO (2) PLAIN ROUND WASHERS "F", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, ARE REQUIRED PER POST IN ADDITION TO THE STANDARD GUARDRAIL BOLT AND RECESSED NUT.
3. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
4. WOOD POSTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER AND BLOCKOUTS ARE FABRICATED FROM 6" X 12" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
5. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE 3/4" IN DIAMETER.
FASTENER DETAILS
1" DIA. X 1/16" DEEP RECESS BOTH SIDES
5/8" - 11 UNC MODIFIED HEAVY HEX NUT
5/8" - 11 UNC THREAD PITCH
BUTTON HEAD
OVAL SHOULDER
GUARDRAIL BOLT
RECESSED NUT
PLAIN ROUND WASHER "F"
HEX NUT AND BOLT "F"
GUARDRAIL BOLTS
BOLT | L | T (MIN.)
"A" | 11 1/2" | 1"
"D" | 22" | 4"
* "E" | 24" | 4"
"F" | 33" | 4"
NOTES:
1. ALL GUARDRAIL BOLTS ARE 5/8" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.
* 3. GUARDRAIL BOLT "E" IS USED FOR SINGLE-FACED BARRIER WITH 10" X 10" WOOD POST AND 6" X 12" WOOD BLOCKOUT.

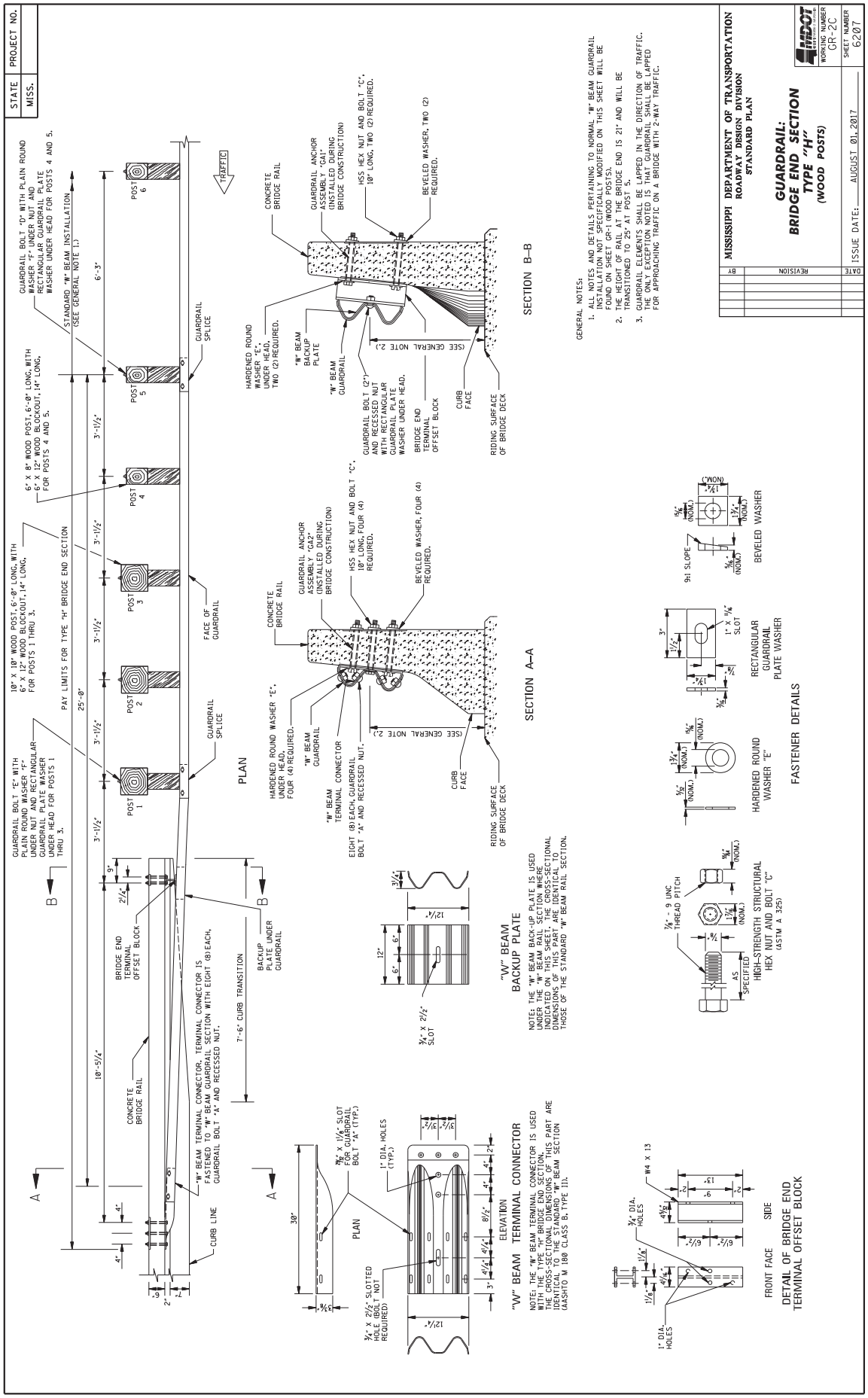

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: THRIE BEAM (WOOD POSTS)
WORKING NUMBER GR-1A
SHEET NUMBER 6202
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
5. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
SECTION A–A
* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
SINGLE-FACED BARRIER
DOUBLE-FACED BARRIER
GUARDRAIL BOLT "D"
6" X 12" WOOD BLOCKOUT, 22" LONG
RECESSED NUT WITH PLAIN ROUND WASHER "F"
GUARDRAIL BOLT "F"
6" X 8" WOOD POST, 6'-6" LONG
8"
22"
6'-9"
2'-0" (MIN.)
ELEVATION FROM ℄ ROADWAY
** NOTE: OPTIONAL BEAM LENGTHS.
SEE GUARDRAIL SPLICE DETAIL
GROUND LINE
** 25'-0"
** 12'-6"
6'-3"
3'-1½"
TYPICAL GUARDRAIL SECTION
℄ POST
6'-3" C.C. POSTS
℄ (LAP)
¾" X 1¼" FOR GUARDRAIL BOLT "A" (TYP.)
¾" X 2½" SLOT FOR GUARDRAIL BOLT "D" OR "F"
¾" R
10°
55°
20"
ELEVATION
SECTION
FOR ANY SPLICE AT POST ADD GUARDRAIL BOLT "D" OR "F"
TWELVE (12) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT, REQUIRED PER SPLICE
12½" (LAP)
¾" X 1½" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
GUARDRAIL SPLICE DETAIL
7'-3½"
OPTIONAL HOLES USED ONLY WHERE SPECIFIED ON PLANS.
¾" X 2½" SLOT FOR GUARDRAIL BOLT "D" OR "F" (TYP.)
¾" X 1⅛" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
12¼"
"W" THRIE-BEAM TRANSITION SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THE "W" AND THRIE BEAM ENDS OF THE TRANSITION SECTION ARE THE SAME AS THEIR RESPECTIVE TYPICAL GUARDRAIL SECTIONS.
DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY
FOUR (4) EXTRA HOLES IN POST
6" X 12" WOOD BLOCKOUT
6" X 8" WOOD POST
¾" DIA. (TYP.)
14½"
NOTES:
1. ON INITIAL INSTALLATION, THE TOP OF THE BLOCKOUT SHALL BE FLUSH WITH THE TOP OF THE POST. THE ADDITIONAL HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
3. WOOD POSTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER AND BLOCKOUTS ARE FABRICATED FROM 6" X 12" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
4. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE ¾" IN DIAMETER.

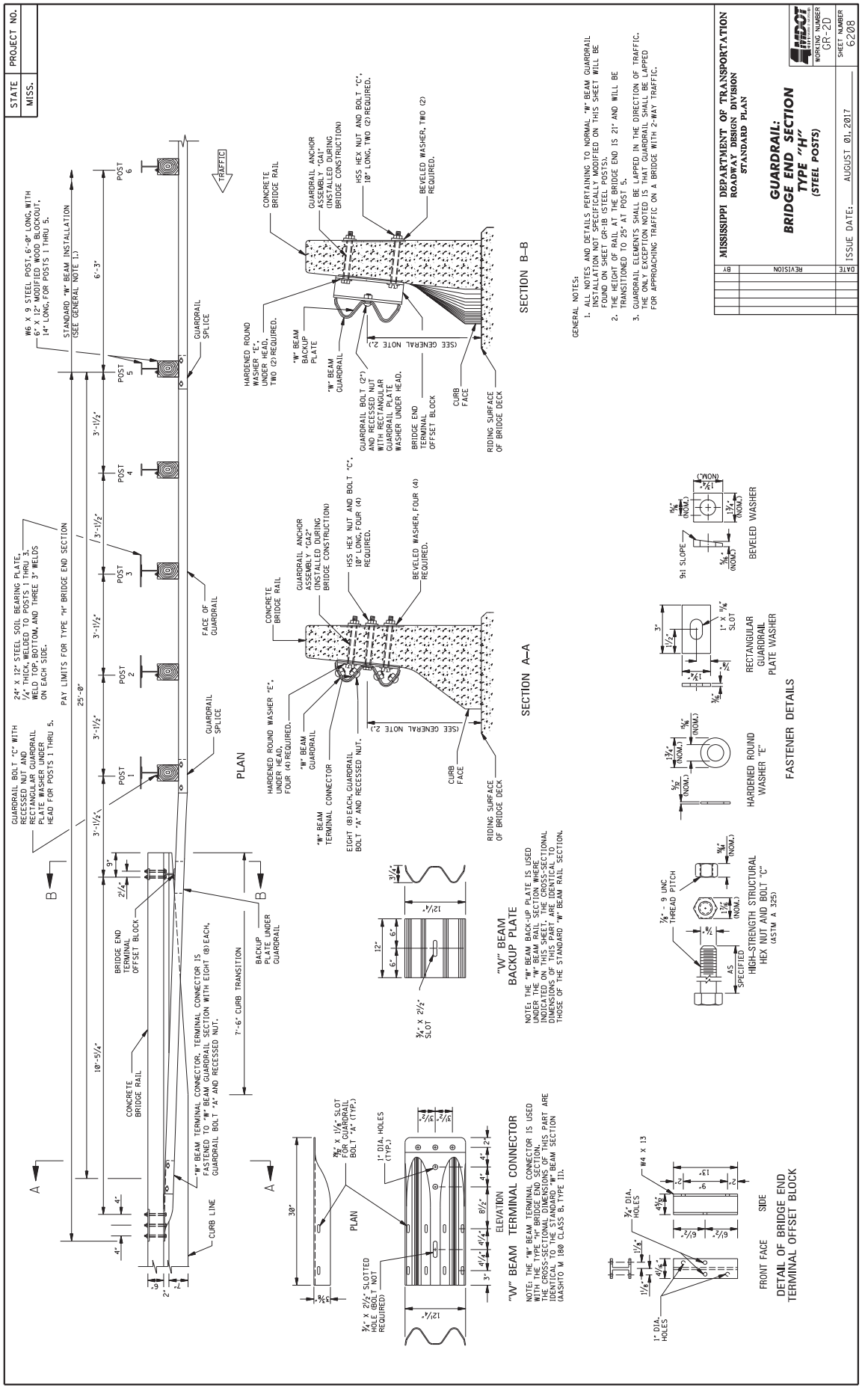

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: "W" BEAM (STEEL POSTS)
WORKING NUMBER GR-1B
SHEET NUMBER 6203
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
ELEVATION FROM ℄ ROADWAY
** NOTE: OPTIONAL BEAM LENGTHS.
SINGLE-FACED BARRIER
SECTION A–A
DOUBLE-FACED BARRIER
* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. STEEL POSTS SHALL CONFORM TO ASTM A36 (EXCEPT ULTRASONIC TESTING) AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 EXCEPT WHEN CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE POSTS SHALL CONFORM TO AASHTO SPECIFICATIONS FOR CORROSION RESISTANCE AND SHALL NOT BE PAINTED OR GALVANIZED. NO PUNCHING, DRILLING OR CUTTING WILL BE PERMITTED AFTER GALVANIZING EXCEPT FOR HOLES TO MOUNT GUARDRAIL DELINEATORS.
5. ALL MODIFIED WOOD BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
GUARDRAIL BOLTS
BOLT L T
"A" 1½" (MIN.) 1"
"B" 12" 4"
"C" 14" 4"
FASTENER DETAILS
NOTES:
1. ALL GUARDRAIL BOLTS ARE ⅝" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN ¼" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.
TYPICAL GUARDRAIL SECTION
GUARDRAIL SPLICE DETAIL
ELEVATION
SECTION
DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY
NOTES:
1. ON INITIAL INSTALLATION, THE MODIFIED WOOD BLOCKOUT SHALL BE FASTENED TO THE BOTTOM HOLE IN THE STEEL POST. OTHER HOLES IN THE STEEL POST AND THE MODIFIED WOOD BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. AN ADDITIONAL GUARDRAIL BOLT "C" AND RECESSED NUT IS REQUIRED FOR THE SECOND HEIGHT ADJUSTMENT.
3. HOLE DETAILS ARE REQUIRED ON ALL STEEL POSTS AND MODIFIED WOOD BLOCKOUTS.
4. STEEL POSTS ARE FABRICATED FROM W6 X 9 STRUCTURAL STEEL SHAPES.
5. MODIFIED WOOD BLOCKOUTS ARE FABRICATED FROM 6" X 12" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
6. ALL HOLES IN BOTH STEEL POSTS AND MODIFIED WOOD BLOCKOUTS ARE ¾" IN DIAMETER.

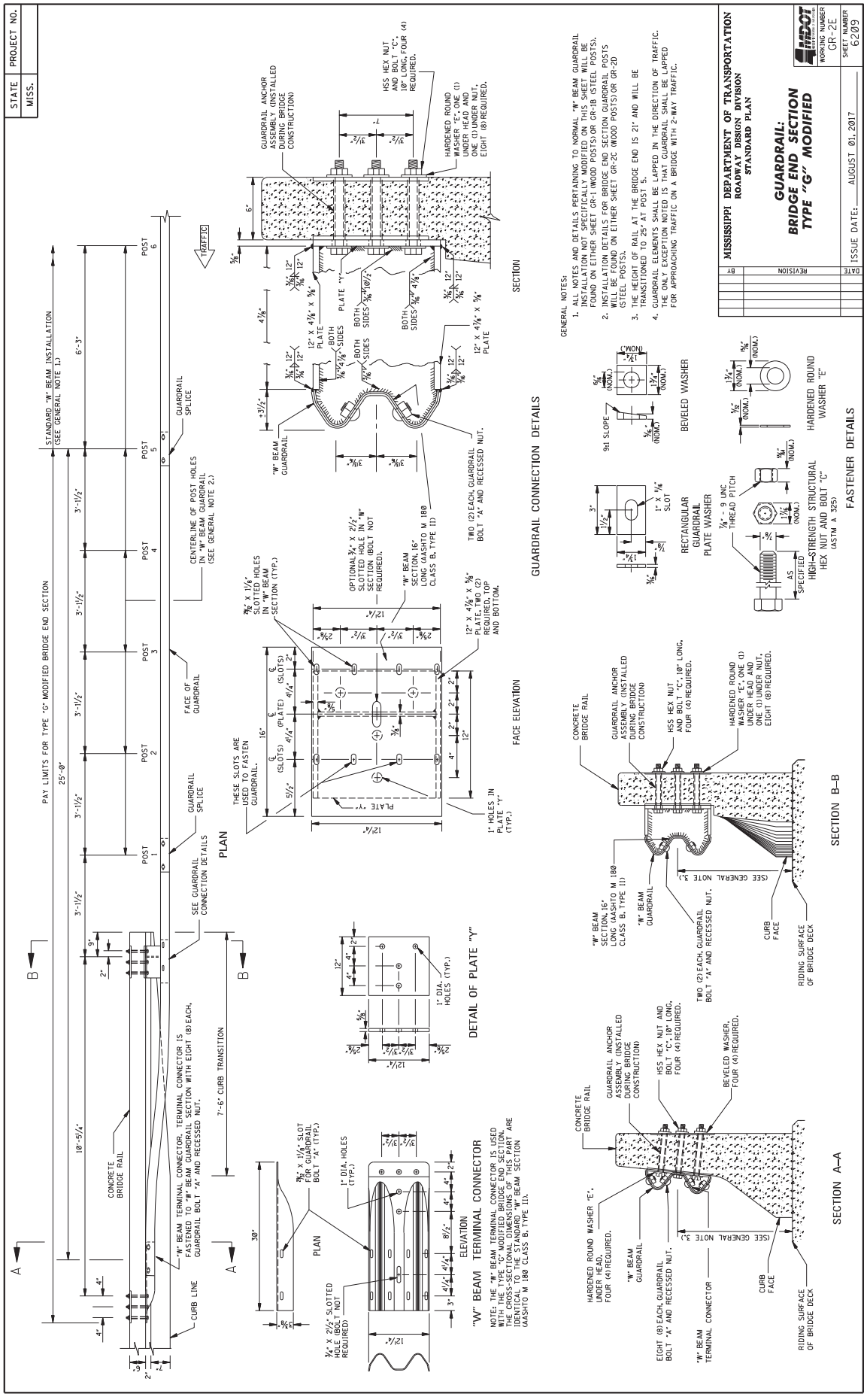

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTIONS
TYPE "A" & "C"
WORKING NUMBER GR-2
SHEET NUMBER 6204
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GUARDRAIL CONNECTION AT BRIDGE END
TYPE "A" BRIDGE END SECTION
TYPE "C" BRIDGE END SECTION
SECTION A–A
SECTION B–B
SECTION C–C
ELEVATION
PLAN OF BRIDGE END SECTION
TYPE "2" "W" BEAM END SECTION
TYPE "1" "W" BEAM END SECTION
DETAIL OF PLATE "B"
DETAIL OF PLATE "Z"
FASTENER DETAILS
GUARDRAIL CONNECTION DETAILS
GENERAL NOTES:
*NOTE: UNLESS OTHERWISE SPECIFIED ON THE PLANS.

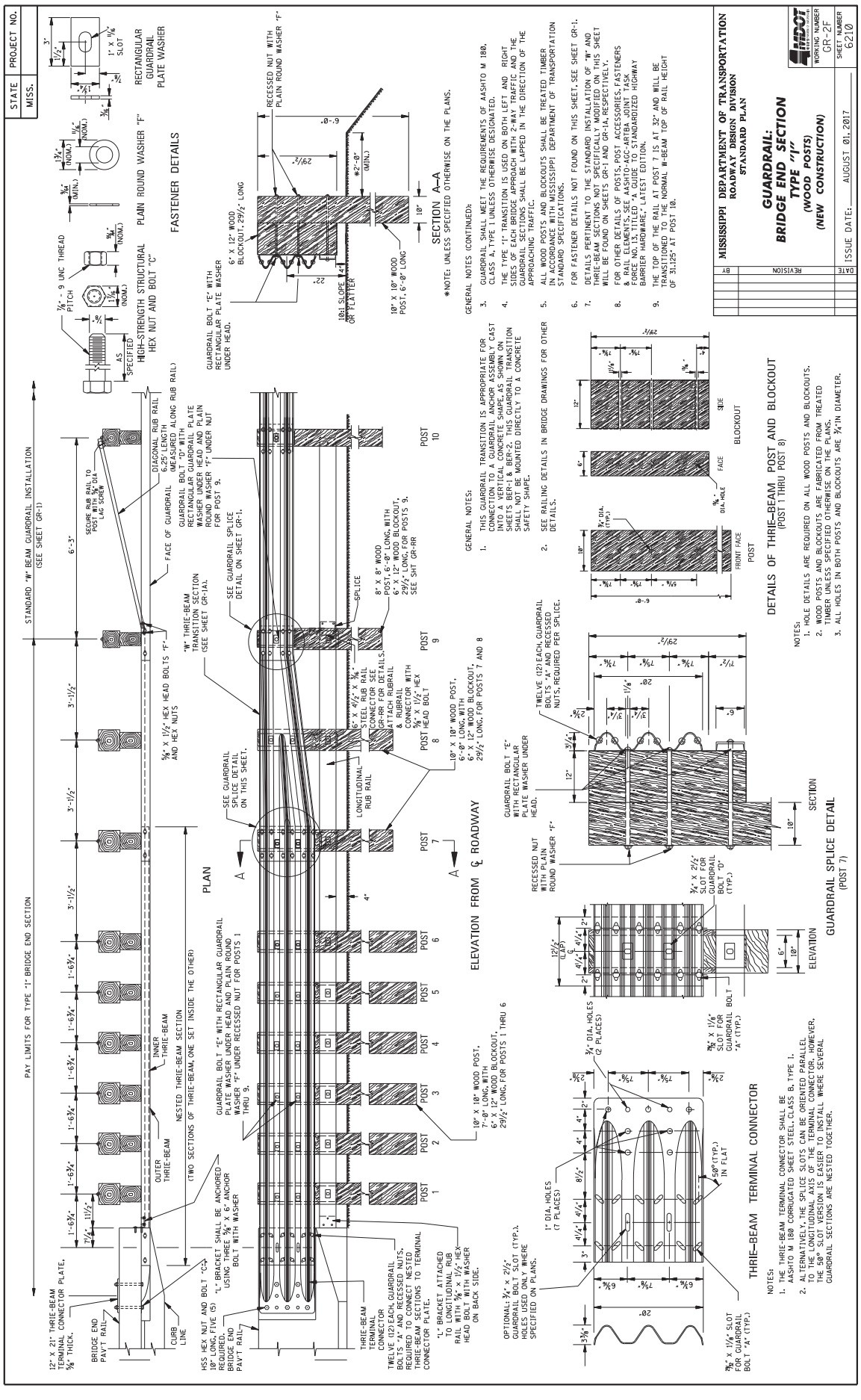

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTIONS
TYPE "E", "F" & "G"
WORKING NUMBER GR-2A
SHEET NUMBER 6205
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
TYPE "E" BRIDGE END SECTION
TYPE "F" BRIDGE END SECTION
TYPE "G" BRIDGE END SECTION
DETAIL OF PLATE "P"
"W" BEAM TERMINAL CONNECTOR
FASTENER DETAILS
TYPE "F" & "G" BRIDGE END SECTIONS
SECTION A–A
SECTION B–B
SECTION C–C
SECTION D–D
SECTION E–E
SECTION F–F
SECTION G–G
PLAN
ELEVATION
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-1B (STEEL POSTS).
2. WOOD POSTS ARE SHOWN ON THIS SHEET. WHEN STEEL POSTS ARE INSTALLED, A SOIL BEARING PLATE IS PLACED ON THE STANDARD SIZE STEEL POST FOR POSTS 1 THRU 3 IN THE TYPE "E" BES AND FOR POSTS 1 THRU 5 IN THE TYPE "F" BES. A RECTANGULAR GUARDRAIL PLATE WASHER IS PLACED UNDER THE STANDARD POST BOLT HEAD FOR POSTS 1 THRU 6 IN THE TYPE "E" BES AND FOR POSTS 1 THRU 7 IN THE TYPE "F" & "G" BES. SEE DETAILS FOR STEEL POST INSTALLATION ON SHEET GR-1B.
3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
NOTES:
1. TYPE "E" BES (POSTS 1 THRU 3½ TYPES "F" & "G" BES (POSTS 1 THRU 4½ 10' X 10" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, ATTACHED USING GUARDRAIL BOLT "E" WITH PLAIN ROUND WASHER "F" UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.
2. TYPE "E" BES (POSTS 4 THRU 6½ TYPES "F" & "G" BES (POSTS 5 THRU 7½ 6" X 8" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, ATTACHED USING GUARDRAIL BOLT "D" WITH PLAIN ROUND WASHER "F" UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.

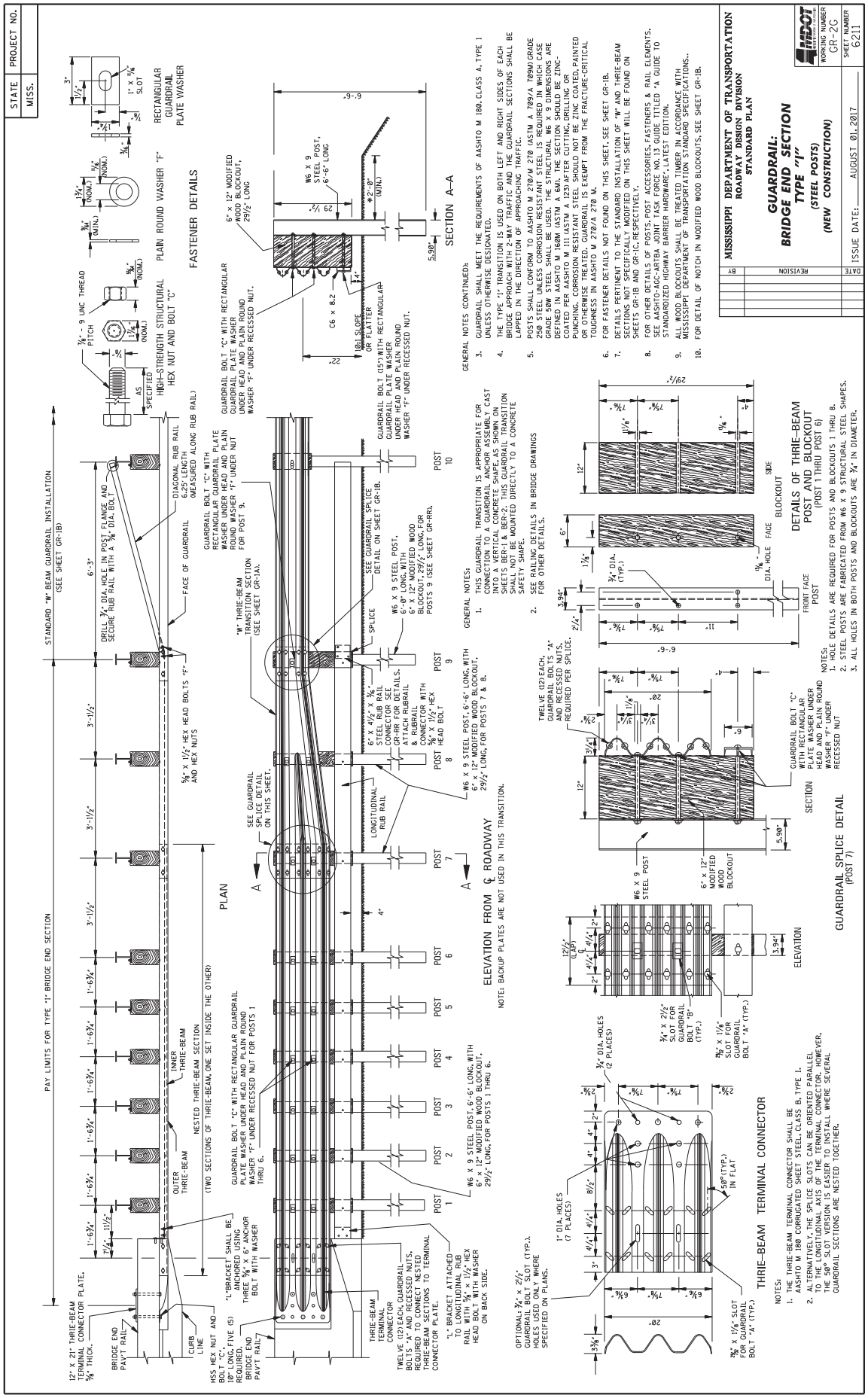

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "D" MODIFIED
WORKING NUMBER GR-2B
SHEET NUMBER 6206
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
PLAN
SECTION A–A
SECTION B–B
FASTENER DETAILS
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1C (WOOD POSTS) OR GR-1D (STEEL POSTS).
2. INSTALLATION DETAILS FOR BRIDGE END SECTION GUARDRAIL POSTS WILL BE FOUND ON EITHER SHEET GR-2C (WOOD POSTS) OR GR-2D (STEEL POSTS).
3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. THE HEIGHT OF RAIL AT THE BRIDGE END IS 22" AND WILL BE TRANSITIONED TO 25" AT POST 5.
"W" BEAM TERMINAL CONNECTOR
"W" BEAM BACKUP PLATE
DETAIL OF PLATE "B"
DETAIL OF PLATE "Y"
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK

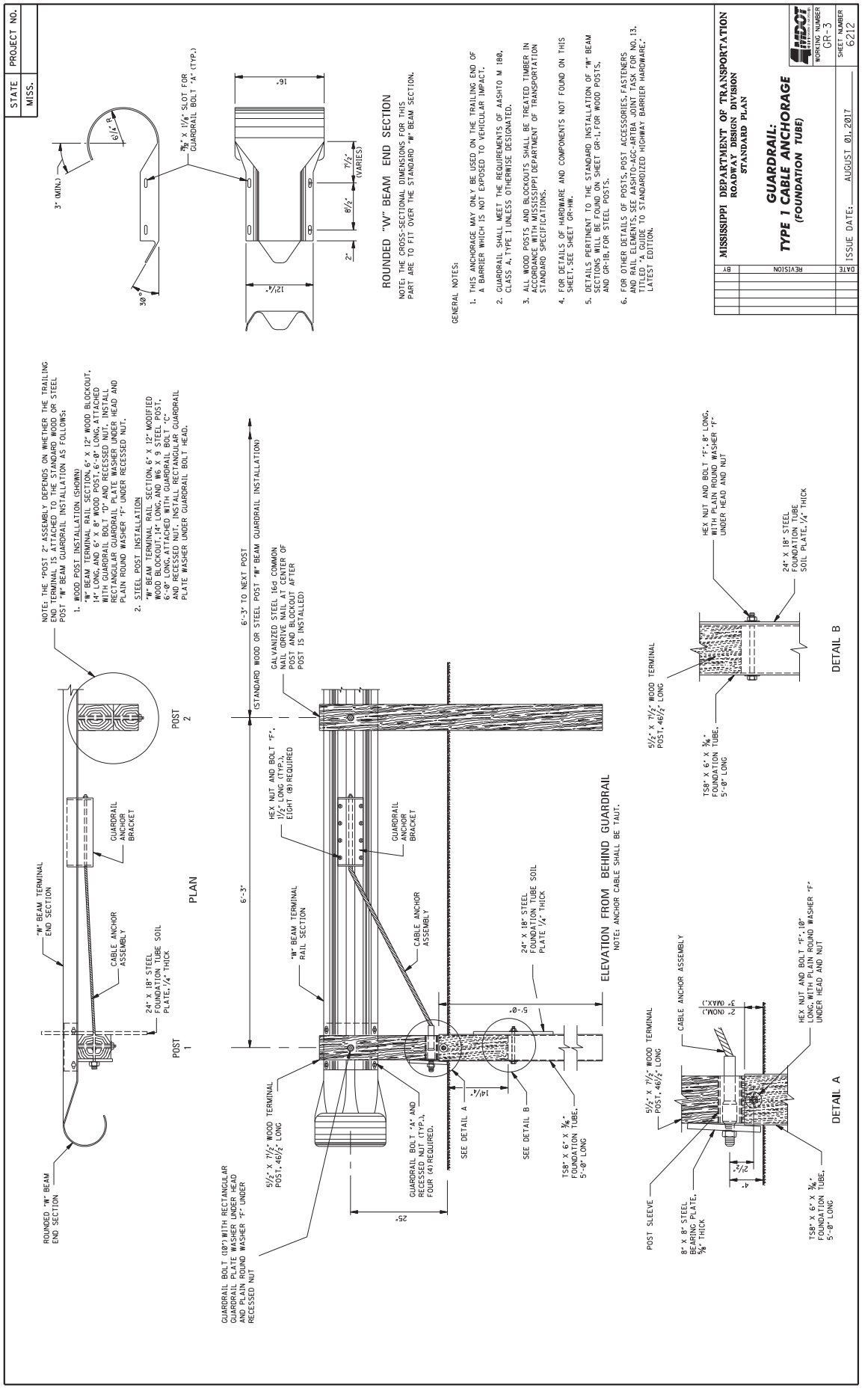

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "H"
(WOOD POSTS)
WORKING NUMBER GR-2C
SHEET NUMBER 6207
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEET GR-1 (WOOD POSTS).
2. THE HEIGHT OF RAIL AT THE BRIDGE END IS 21" AND WILL BE TRANSITIONED TO 25" AT POST 5.
3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
PLAN
SECTION A–A
SECTION B–B
FASTENER DETAILS
"W" BEAM TERMINAL CONNECTOR
"W" BEAM BACKUP PLATE
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
PAY LIMITS FOR TYPE "H" BRIDGE END SECTION
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
TRAFFIC
CONCRETE BRIDGE RAIL
BRIDGE END TERMINAL OFFSET BLOCK
BACKUP PLATE UNDER GUARDRAIL
FACE OF GUARDRAIL
GUARDRAIL SPLICE
CURB LINE
7'-6" CURB TRANSITION
"W" BEAM GUARDRAIL
"W" BEAM BACKUP PLATE
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
BEVELED WASHER
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
GUARDRAIL ANCHOR ASSEMBLY "GA2" (INSTALLED DURING BRIDGE CONSTRUCTION)
GUARDRAIL ANCHOR ASSEMBLY "GA1" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
HSS HEX NUT AND BOLT "C", 10" LONG, TWO (2) REQUIRED.
BEVELED WASHER, FOUR (4) REQUIRED.
BEVELED WASHER, TWO (2) REQUIRED.
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
HARDENED ROUND WASHER "E", UNDER HEAD, TWO (2) REQUIRED.
"W" BEAM BACKUP PLATE
"W" BEAM GUARDRAIL
"W" BEAM TERMINAL CONNECTOR
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
GUARDRAIL BOLT (2") AND RECESSED NUT WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.
BRIDGE END TERMINAL OFFSET BLOCK
CURB FACE
RIDING SURFACE OF BRIDGE DECK
(SEE GENERAL NOTE 2.)
CONCRETE BRIDGE RAIL
6" X 8" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, FOR POSTS 4 AND 5.
10" X 10" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, FOR POSTS 1 THRU 3.
GUARDRAIL BOLT "D" WITH PLAIN ROUND WASHER UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 4 AND 5.
GUARDRAIL BOLT "E" WITH PLAIN ROUND WASHER "F" UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 1 THRU 3.
POST 1
POST 2
POST 3
POST 4
POST 5
POST 6
25'-0"
10'-5¼"
3'-1½"
4'
9"
2¼"
"W" BEAM TERMINAL CONNECTOR, TERMINAL CONNECTOR IS FASTENED TO "W" BEAM GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "H" BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE II).
NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.
FRONT FACE
SIDE
W4 x 13
30"
12'-0"
12½"
6'
3"
1" DIA. HOLES (TYP.)
¾" X 2½" SLOTTED HOLE (BOLT NOT REQUIRED)
¾" X 1¼" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
¾" X 2½" SLOT
⅞" - 9 UNC THREAD PITCH
AS SPECIFIED
9:1 SLOPE
1" X ¾" SLOT
RECTANGULAR GUARDRAIL PLATE WASHER
BEVELED WASHER
HARDENED ROUND WASHER "E"

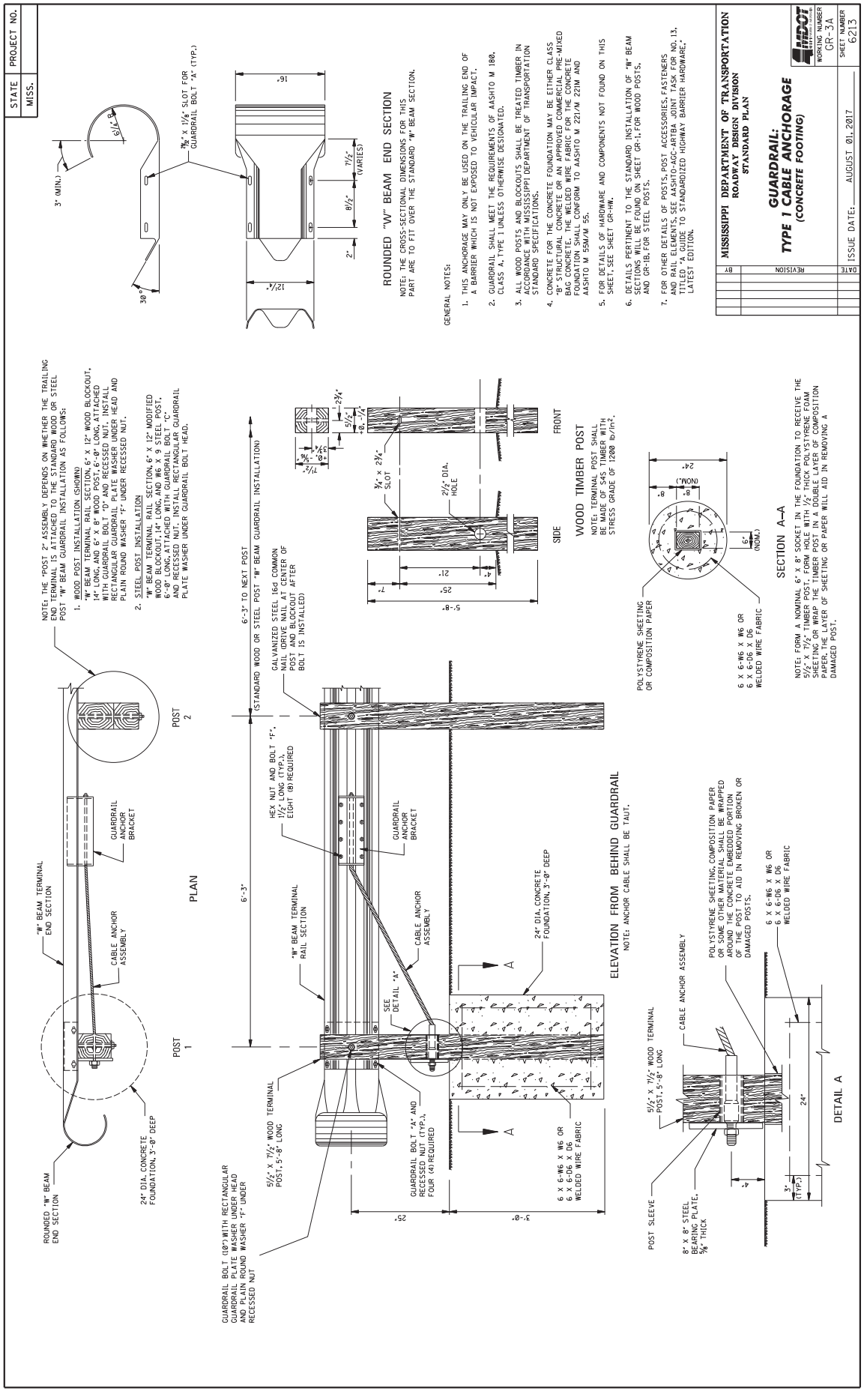

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "H"
(STEEL POSTS)
WORKING NUMBER GR-2D
SHEET NUMBER 6208
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEET GR-1B (STEEL POSTS).
2. THE HEIGHT OF RAIL AT THE BRIDGE END IS 21" AND WILL BE TRANSITIONED TO 25" AT POST 5.
3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
PLAN
SECTION A–A
SECTION B–B
"W" BEAM BACKUP PLATE
"W" BEAM TERMINAL CONNECTOR
FASTENER DETAILS
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
FRONT FACE
SIDE
ELEVATION
PLAN
TRAFFIC
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
PAY LIMITS FOR TYPE "H" BRIDGE END SECTION
CONCRETE BRIDGE RAIL
BRIDGE END TERMINAL OFFSET BLOCK
BACKUP PLATE UNDER GUARDRAIL
GUARDRAIL SPLICE
FACE OF GUARDRAIL
CURB LINE
7'-6" CURB TRANSITION
"W" BEAM TERMINAL CONNECTOR, TERMINAL CONNECTOR IS FASTENED TO "W" BEAM GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
GUARDRAIL BOLT "C" WITH RECESSED NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 1 THRU 5.
24" X 12" STEEL SOIL BEARING PLATE, 1/4" THICK, WELDED TO POSTS 1 THRU 3, WELD TOP, BOTTOM, AND THREE 3" WELDS ON EACH SIDE.
W6 X 9 STEEL POST, 6'-0" LONG, WITH 6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, FOR POSTS 1 THRU 5.
POST 1
POST 2
POST 3
POST 4
POST 5
POST 6
25'-0"
10'-5 1/4"
3'-1 1/2"
6'-3"
4'
30"
9"
2 1/4"
CONCRETE BRIDGE RAIL
GUARDRAIL ANCHOR ASSEMBLY "GA1" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, TWO (2) REQUIRED.
BEVELED WASHER, TWO (2) REQUIRED.
HARDENED ROUND WASHER "E", UNDER HEAD, TWO (2) REQUIRED.
"W" BEAM BACKUP PLATE
"W" BEAM GUARDRAIL
GUARDRAIL BOLT (2") AND RECESSED NUT WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.
BRIDGE END TERMINAL OFFSET BLOCK
CURB FACE
RIDING SURFACE OF BRIDGE DECK
(SEE GENERAL NOTE 2.)
GUARDRAIL ANCHOR ASSEMBLY "GA2" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
BEVELED WASHER, FOUR (4) REQUIRED.
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
"W" BEAM TERMINAL CONNECTOR
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
3/4" X 2 1/2" SLOT
12 7/8"
12"
6"
6"
3 1/4"
NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "H" BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE II).
7/8" X 1 1/4" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
1" DIA. HOLES (TYP.)
3/4" X 2 1/2" SLOTTED HOLE (BOLT NOT REQUIRED)
W4 X 13
3/4" DIA. HOLES
1" DIA. HOLES
3" X 1 1/4" SLOT
RECTANGULAR GUARDRAIL PLATE WASHER
BEVELED WASHER
HARDENED ROUND WASHER "E"
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
7/8" - 9 UNC THREAD PITCH
AS SPECIFIED
9:1 SLOPE

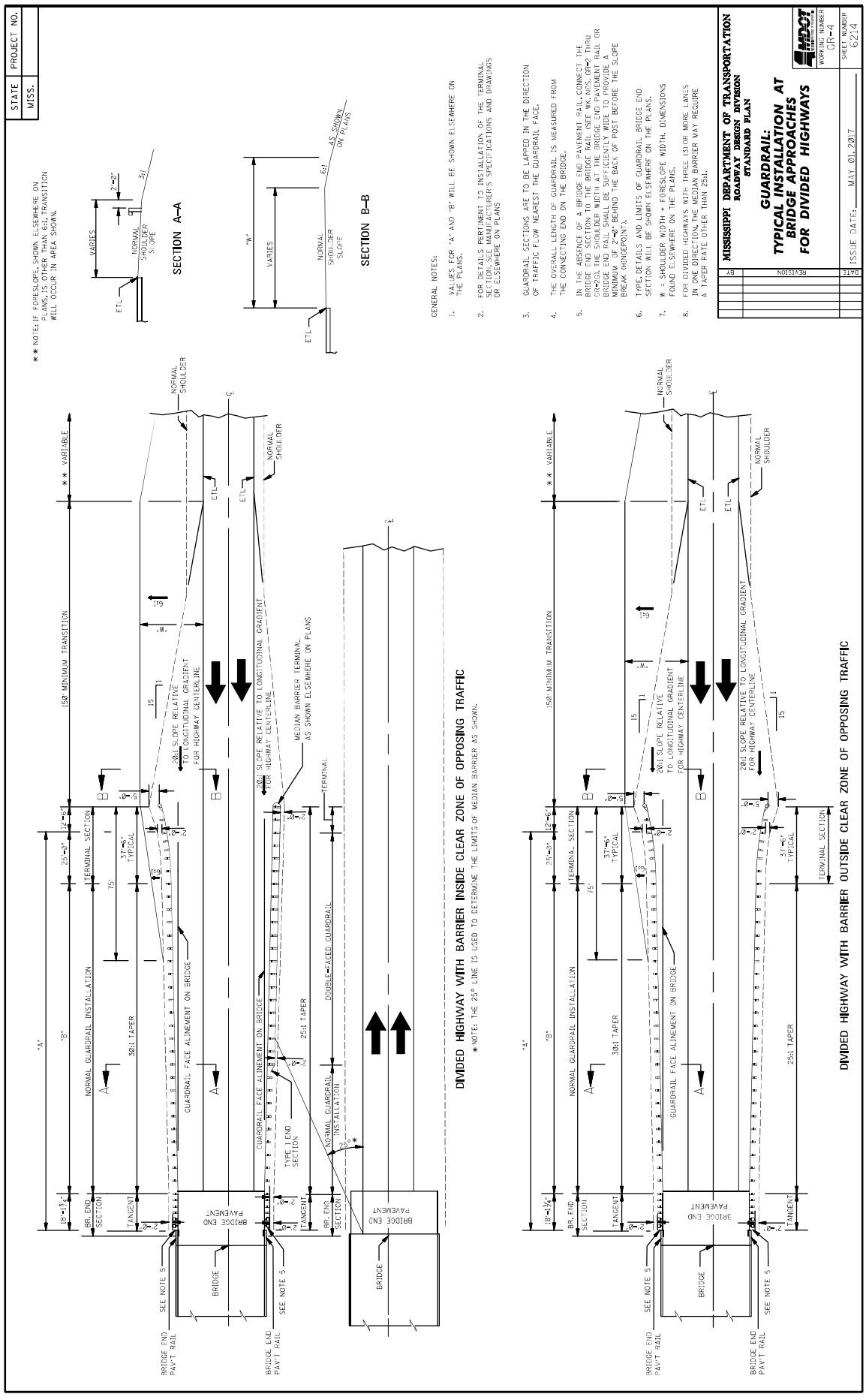

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "G" MODIFIED
WORKING NUMBER GR-2E
SHEET NUMBER 6209
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-1B (STEEL POSTS).
2. INSTALLATION DETAILS FOR BRIDGE END SECTION GUARDRAIL POSTS WILL BE FOUND ON EITHER SHEET GR-2C (WOOD POSTS) OR GR-2D (STEEL POSTS).
3. THE HEIGHT OF RAIL AT THE BRIDGE END IS 21" AND WILL BE TRANSITIONED TO 25" AT POST 5.
4. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
PAY LIMITS FOR TYPE "G" MODIFIED BRIDGE END SECTION
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
25'-0"
10'-5¼"
6'-3"
3'-1½"
POST 1
POST 2
POST 3
POST 4
POST 5
POST 6
GUARDRAIL SPLICE
CENTERLINE OF POST HOLES IN "W" BEAM GUARDRAIL (SEE GENERAL NOTE 2.)
FACE OF GUARDRAIL
SEE GUARDRAIL CONNECTION DETAILS
7'-6" CURB TRANSITION
CONCRETE BRIDGE RAIL
CURB LINE
"W" BEAM TERMINAL CONNECTOR, TERMINAL CONNECTOR IS FASTENED TO THE GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
PLAN
TRAFFIC
SECTION
GUARDRAIL ANCHOR ASSEMBLY (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
HARDENED ROUND WASHER "E", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, EIGHT (8) REQUIRED.
PLATE "Y"
12" X 4⅛" X ⅜" PLATE
BOTH SIDES
"W" BEAM GUARDRAIL
TWO (2) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
GUARDRAIL CONNECTION DETAILS
THESE SLOTS ARE USED TO FASTEN GUARDRAIL.
⅞" X 1¼" SLOTTED HOLES IN "W" BEAM SECTION (TYP.)
OPTIONAL ¾" X 2½" SLOTTED HOLE IN "W" SECTION (BOLT NOT REQUIRED).
"W" BEAM SECTION, 16' LONG (AASHTO M 180 CLASS B, TYPE II)
12" X 4⅛" X ⅜" PLATE, TWO (2) REQUIRED, TOP AND BOTTOM.
1" HOLES IN PLATE "Y" (TYP.)
FACE ELEVATION
9:1 SLOPE
BEVELED WASHER
RECTANGULAR GUARDRAIL PLATE WASHER
¾" - 9 UNC THREAD PITCH
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
HARDENED ROUND WASHER "E"
FASTENER DETAILS
DETAIL OF PLATE "Y"
"W" BEAM TERMINAL CONNECTOR
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "G" MODIFIED BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE II).
¾" X 2½" SLOTTED HOLE (BOLT NOT REQUIRED)
⅞" X 1⅛" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
1" DIA. HOLES (TYP.)
ELEVATION
SECTION A–A
SECTION B–B
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
"W" BEAM GUARDRAIL
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
"W" BEAM TERMINAL CONNECTOR
BEVELED WASHER, FOUR (4) REQUIRED.
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
TWO (2) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
"W" BEAM SECTION, 16' LONG (AASHTO M 180 CLASS B, TYPE II)
(SEE GENERAL NOTE 3.)
CURB FACE
RIDING SURFACE OF BRIDGE DECK

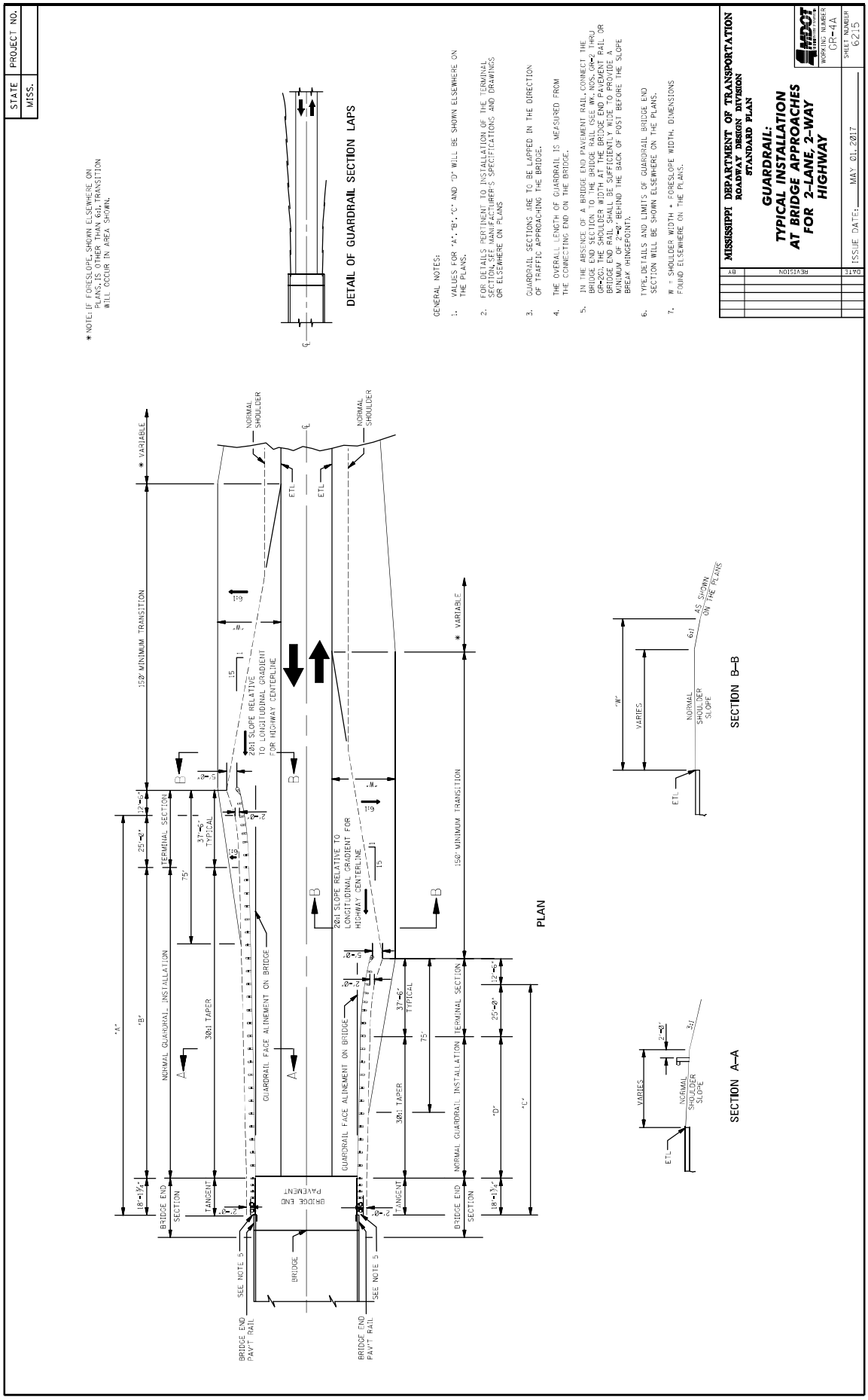

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "I"
(WOOD POSTS)
(NEW CONSTRUCTION)
WORKING NUMBER GR-2F
SHEET NUMBER 6210
ISSUE DATE: AUGUST 01, 2017
REVISION
BY
DATE
STANDARD "W" BEAM GUARDRAIL INSTALLATION (SEE SHEET GR-1)
PAY LIMITS FOR TYPE "I" BRIDGE END SECTION
PLAN
ELEVATION FROM ℄ ROADWAY
SECTION A–A
*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
FASTENER DETAILS
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C"
PLAIN ROUND WASHER "F"
RECTANGULAR GUARDRAIL PLATE WASHER
GENERAL NOTES (CONTINUED):
3. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
4. THE TYPE "I" TRANSITION IS USED ON BOTH LEFT AND RIGHT SIDES OF EACH BRIDGE APPROACH WITH 2-WAY TRAFFIC AND THE APPROACHING TRAFFIC SHALL BE LAPPED IN THE DIRECTION OF THE APPROACHING TRAFFIC.
5. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
6. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1.
7. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" AND THRIE-BEAM SECTIONS NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEETS GR-1 AND GR-1A, RESPECTIVELY.
8. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & ALL GUARDRAIL COMPONENTS, SEE AASHTO-AGC-ARTBA TASK FORCE NO.13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
9. THE TOP OF THE RAIL AT POST 7 IS AT 32" AND WILL BE TRANSITIONED TO THE NORMAL W-BEAM TOP OF RAIL HEIGHT OF 31.125" AT POST 10.
GENERAL NOTES:
1. THIS GUARDRAIL TRANSITION IS APPROPRIATE FOR CONNECTION TO A GUARDRAIL ANCHOR ASSEMBLY CAST INTO A VERTICAL CONCRETE SHAPE AS SHOWN ON SHEETS BER-1 & BER-2. THIS GUARDRAIL TRANSITION SHALL NOT BE MOUNTED DIRECTLY TO A CONCRETE SAFETY SHAPE.
2. SEE RAILING DETAILS IN BRIDGE DRAWINGS FOR OTHER DETAILS.
DETAILS OF THRIE-BEAM POST AND BLOCKOUT
(POST 1 THRU POST 8)
NOTES:
1. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
2. WOOD POSTS AND BLOCKOUTS ARE FABRICATED FROM TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
3. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE ¾"IN DIAMETER.
THRIE-BEAM TERMINAL CONNECTOR
NOTES:
1. THE THRIE-BEAM TERMINAL CONNECTOR SHALL BE AASHTO M 180 CORRUGATED SHEET STEEL, CLASS B, TYPE I.
2. ALTERNATIVELY, THE SPLICE SLOTS CAN BE ORIENTED PARALLEL TO THE LONGITUDINAL AXIS OF THE TERMINAL CONNECTOR, HOWEVER, THE 50° SLOT VERSION IS EASIER TO INSTALL WHERE SEVERAL GUARDRAIL SECTIONS ARE NESTED TOGETHER.
GUARDRAIL SPLICE DETAIL
(POST 7)

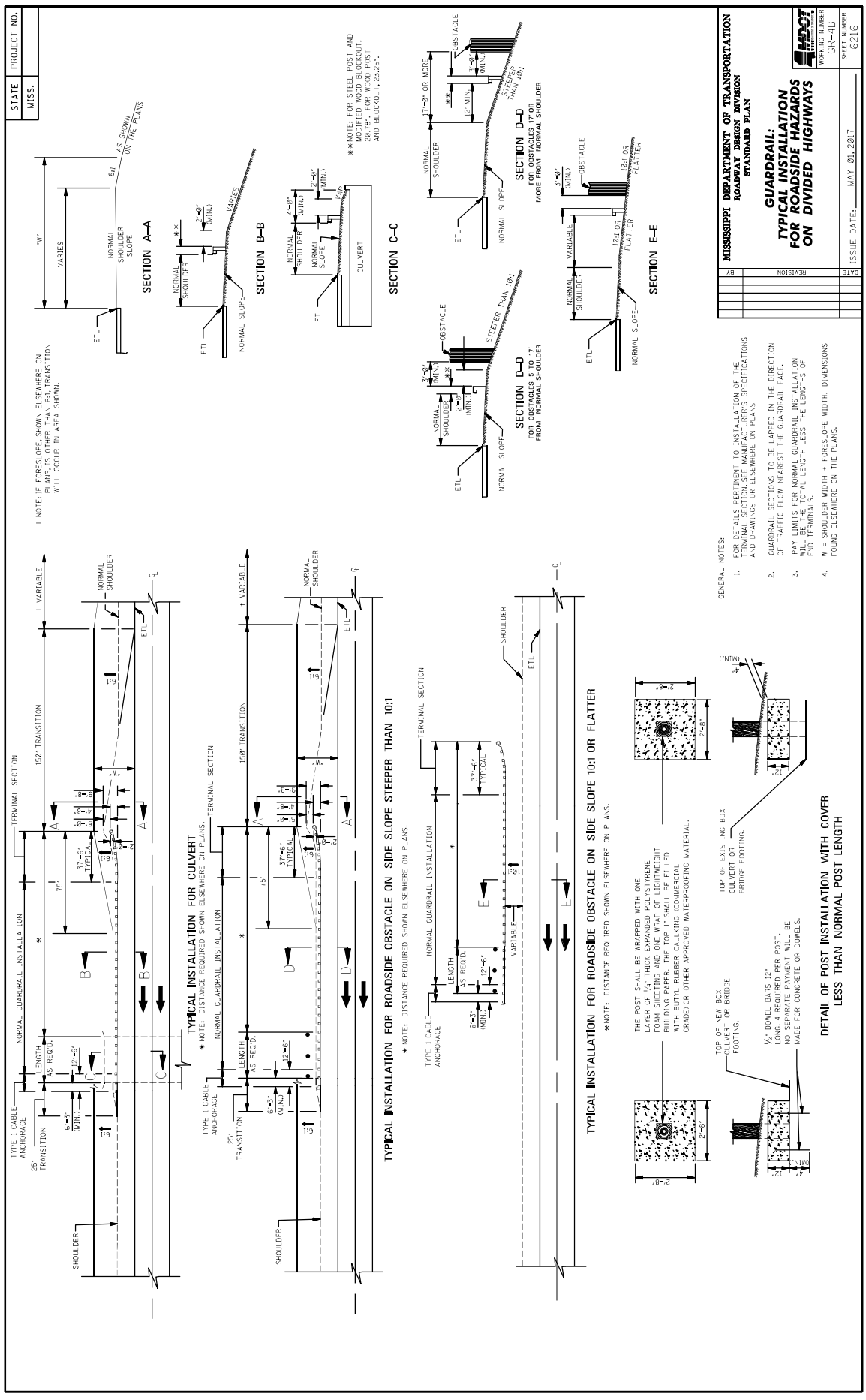

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "1"
(STEEL POSTS)
(NEW CONSTRUCTION)
WORKING NUMBER GR-2C
SHEET NUMBER 6211
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
PLAN
ELEVATION FROM ℄ ROADWAY
NOTE: BACKUP PLATES ARE NOT USED IN THIS TRANSITION.
SECTION A–A
FASTENER DETAILS
THRIE–BEAM TERMINAL CONNECTOR
GUARDRAIL SPLICE DETAIL (POST 7)
DETAILS OF THRIE–BEAM POST AND BLOCKOUT (POST 1 THRU POST 6)
STANDARD "W" BEAM GUARDRAIL INSTALLATION (SEE SHEET GR-1B)
PAY LIMITS FOR TYPE "1" BRIDGE END SECTION
GENERAL NOTES (CONTINUED):
3. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
4. THE TYPE "1" TRANSITION IS USED ON BOTH LEFT AND RIGHT SIDES OF EACH BRIDGE APPROACH WITH 2-WAY TRAFFIC AND THE GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF APPROACHING TRAFFIC.
5. POSTS SHALL CONFORM TO AASHTO M 270/M 270 (ASTM A 709/A 709M) GRADE 250 STEEL UNLESS CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE GRADE 50W STEEL SHALL BE USED. THE STRUCTURAL W 6 X 9 DIMENSIONS ARE DESCRIBED IN ASTM A 6/A 6M. ALL STEEL SHALL BE HOT-DIP GALVANIZED AND ZINC-COATED PER AASHTO M 111/ASTM A 123 AFTER CUTTING, DRILLING OR PUNCHING. CORROSION RESISTANT STEEL SHOULD NOT BE ZINC COATED, PAINTED OR OTHERWISE TREATED. GUARDRAIL IS EXEMPT FROM THE FRACTURE-CRITICAL TOUGHNESS IN AASHTO M 270/A 270 W.
6. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1B.
7. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" AND THRIE-BEAM SECTIONS NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEETS GR-1B AND GR-1C, RESPECTIVELY.
8. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO.13 GUIDE TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE", LATEST EDITION.
9. ALL WOOD BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS..
10. FOR DETAIL OF NOTCH IN MODIFIED WOOD BLOCKOUTS, SEE SHEET GR-1B.
NOTES:
1. THE THRIE-BEAM TERMINAL CONNECTOR SHALL BE AASHTO M 180 CORRUGATED SHEET STEEL, CLASS B, TYPE I.
2. ALTERNATIVELY, THE SPLICE SLOTS CAN BE ORIENTED PARALLEL TO THE LONGITUDINAL AXIS OF THE TERMINAL CONNECTOR. HOWEVER, THE 50° SLOT VERSION IS EASIER TO INSTALL WHERE SEVERAL GUARDRAIL SECTIONS ARE NESTED TOGETHER.
NOTES:
1. HOLE DETAILS ARE REQUIRED FOR POSTS AND BLOCKOUTS 1 THRU 8.
2. STEEL POSTS ARE FABRICATED FROM W6 X 9 STRUCTURAL STEEL SHAPES.
3. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE ¾" IN DIAMETER.
GENERAL NOTES:
1. THIS GUARDRAIL TRANSITION IS APPROPRIATE FOR CONNECTION TO A GUARDRAIL ANCHOR ASSEMBLY CAST INTO A VERTICAL CONCRETE SHAPE, AS SHOWN ON SHEET GR-1B. THIS GUARDRAIL TRANSITION SHALL NOT BE MOUNTED DIRECTLY TO A CONCRETE SAFETY SHAPE.
2. SEE RAILING DETAILS IN BRIDGE DRAWINGS FOR OTHER DETAILS.

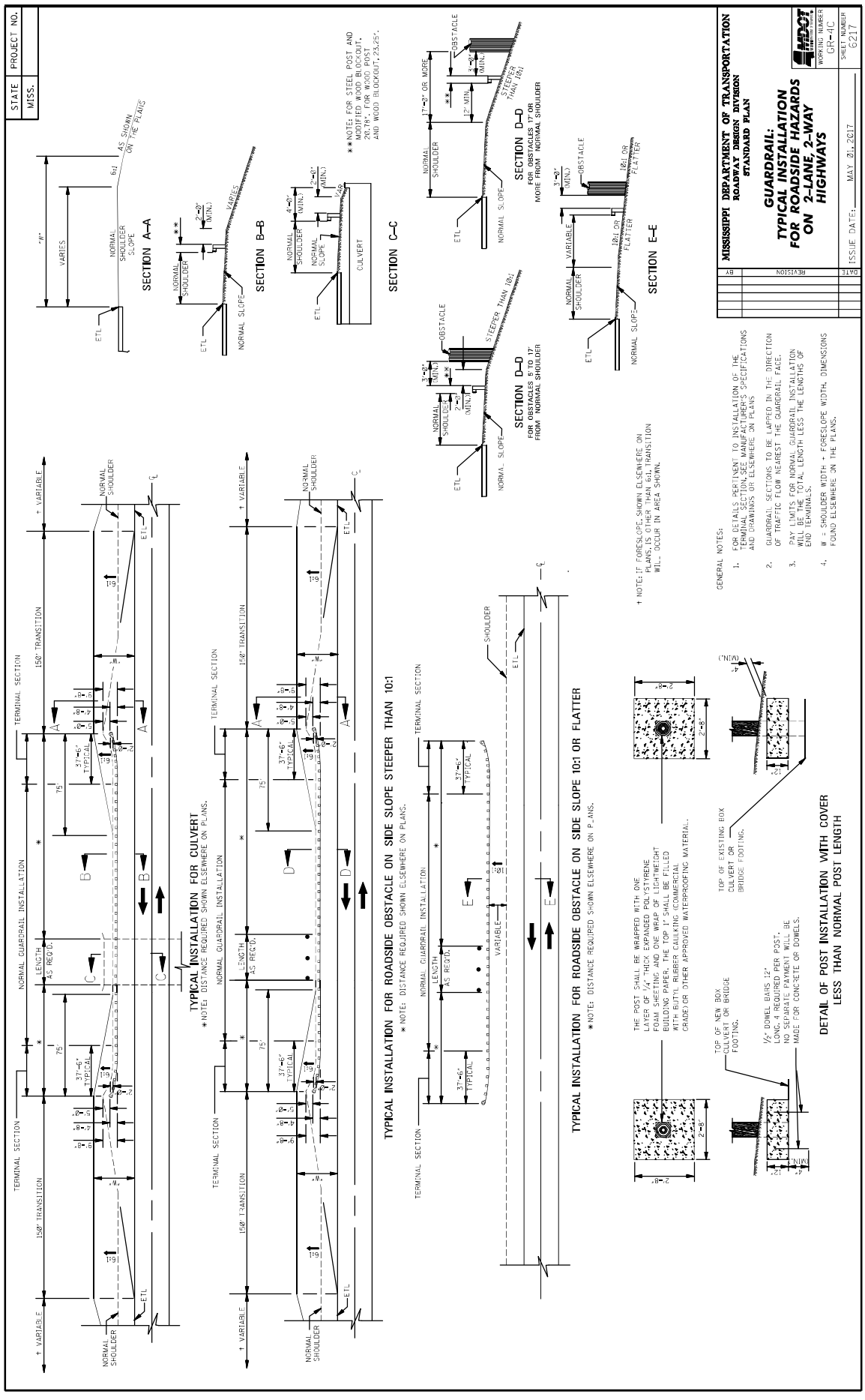

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPE 1 CABLE ANCHORAGE
(FOUNDATION TUBE)
WORKING NUMBER GR-3
SHEET NUMBER 6212
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
ROUNDED "W" BEAM END SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.
GENERAL NOTES:
1. THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
2. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
3. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
4. FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
5. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
3" (MIN.)
6¼" R
30°
⅞" X 1¼" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
.91
12¼"
8½"
7½" (VARIES)
2"
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:
1. WOOD POST INSTALLATION (SHOWN)
"W" BEAM TERMINAL RAIL SECTION, 6" X 12" WOOD BLOCKOUT, 14" LONG, AND 6' X 8" WOOD POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECESSED NUT UNDER GUARDRAIL AS ASSEMBLED. INSTALL PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
2. STEEL POST INSTALLATION
"W" BEAM TERMINAL RAIL SECTION, 6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, AND WS 4 x 9 STEEL POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.
"W" BEAM TERMINAL END SECTION
CABLE ANCHOR ASSEMBLY
GUARDRAIL ANCHOR BRACKET
24" X 18" STEEL FOUNDATION TUBE SOIL PLATE, ¼" THICK
POST 1
POST 2
PLAN
6'-3"
6'-3" TO NEXT POST
(STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION)
GALVANIZED STEEL 16d COMMON NAIL (DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER POST IS INSTALLED)
HEX NUT AND BOLT "F", 1½" LONG (TYP.) EIGHT (8) REQUIRED
"W" BEAM TERMINAL RAIL SECTION
CABLE ANCHOR ASSEMBLY
5½" X 7½" WOOD TERMINAL POST, 46½" LONG
GUARDRAIL BOLT (10") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT
GUARDRAIL BOLT "A" AND RECESSED NUT (TYP.), FOUR (4) REQUIRED.
25"
14¼"
SEE DETAIL A
SEE DETAIL B
5'-0"
24" X 18" STEEL FOUNDATION TUBE SOIL PLATE, ¼" THICK
TS8" X 6' X ⅜" FOUNDATION TUBE, 5'-0" LONG
ELEVATION FROM BEHIND GUARDRAIL
NOTE: ANCHOR CABLE SHALL BE TAUT.
HEX NUT AND BOLT "F", 8" LONG, WITH PLAIN ROUND WASHER "F" UNDER HEAD AND NUT
5½" X 7½" WOOD TERMINAL POST, 46½" LONG
TS8" X 6' X ⅜" FOUNDATION TUBE, 5'-0" LONG
DETAIL B
POST SLEEVE
8" X 8" STEEL BEARING PLATE, ⅜" THICK
TS8" X 6" X ⅜" FOUNDATION TUBE, 5'-0" LONG
CABLE ANCHOR ASSEMBLY
2" (NOM.) 3" (MAX.)
HEX NUT AND BOLT "F", 10" LONG, WITH PLAIN ROUND WASHER "F" UNDER HEAD AND NUT
2½"
4"
DETAIL A

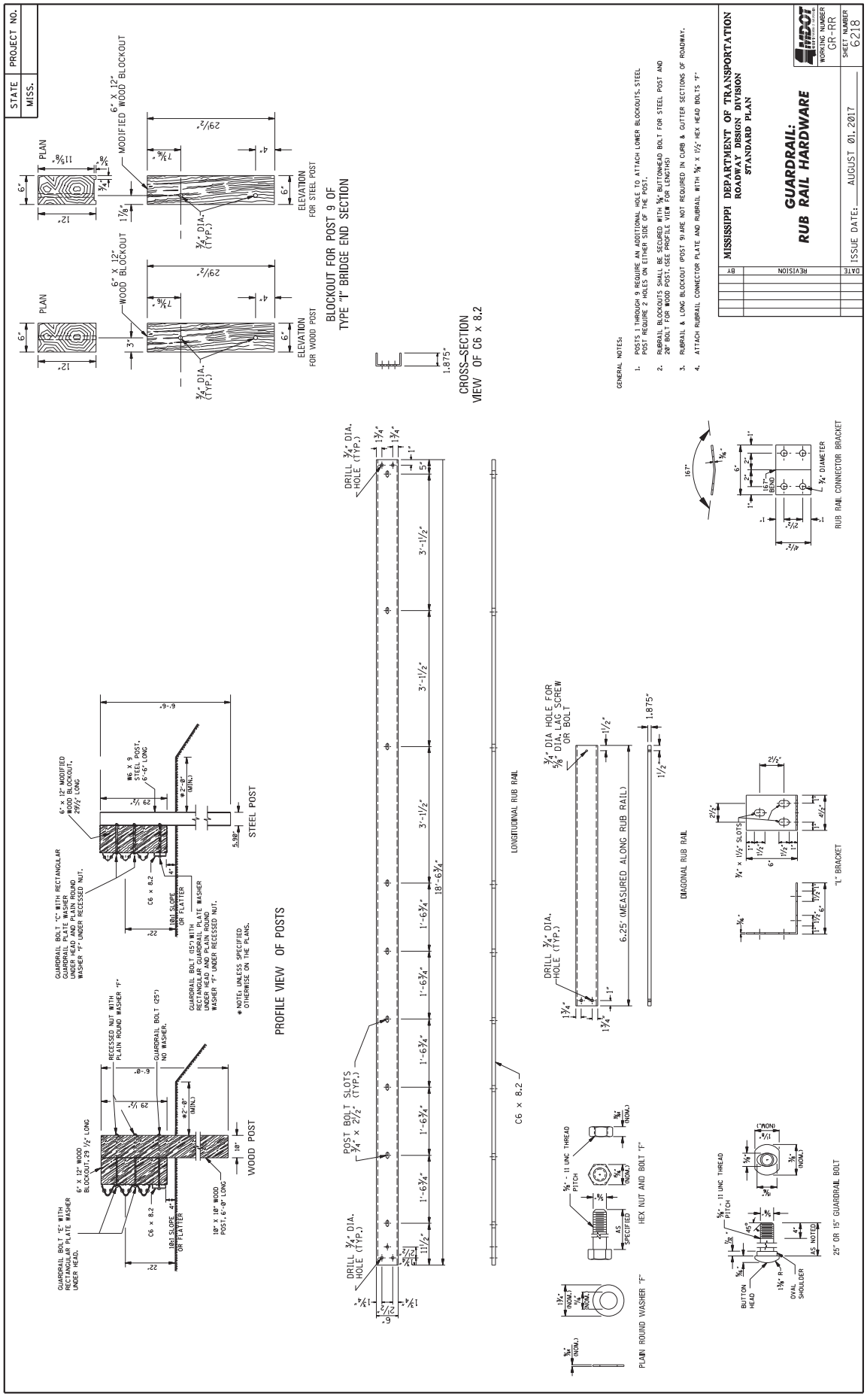

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPE 1 CABLE ANCHORAGE
(CONCRETE FOOTING)
WORKING NUMBER GR-3A
SHEET NUMBER 6213
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
ROUNDED "W" BEAM END SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.
GENERAL NOTES:
1. THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
2. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
3. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
4. CONCRETE FOR THE CONCRETE FOUNDATION MAY BE EITHER CLASS "B" STRUCTURAL CONCRETE OR AN APPROVED COMMERCIAL PRE-MIXED BAG CONCRETE. THE WELDED WIRE FABRIC FOR THE CONCRETE FOUNDATION SHALL CONFORM TO AASHTO M 221/M 221M AND AASHTO M 55M/M 55.
5. FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
6. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
7. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:
1. WOOD POST INSTALLATION (SHOWN)
"W" BEAM TERMINAL RAIL SECTION, 6' X 12" WOOD BLOCKOUT, 14" LONG, AND 6' X 8" WOOD POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
2. STEEL POST INSTALLATION
"W" BEAM TERMINAL RAIL SECTION, 6' X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-6" LONG ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.
3" (MIN.)
30°
13/16"
7/8" X 1 1/8" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
16"
12 1/4"
8 1/2"
7 1/2" (VARIES)
2"
"W" BEAM END SECTION
ROUNDED "W" BEAM END SECTION
GUARDRAIL ANCHOR BRACKET
CABLE ANCHOR ASSEMBLY
24" DIA. CONCRETE FOUNDATION, 3'-0" DEEP
POST 1
POST 2
PLAN
6'-3"
6'-3" TO NEXT POST
(STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION)
GALVANIZED STEEL 16d COMMON NAIL (DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER BOLT IS INSTALLED)
HEX NUT AND BOLT "F", 1½" LONG (TYP.), EIGHT (8) REQUIRED
"W" BEAM TERMINAL RAIL SECTION
SEE DETAIL "A"
CABLE ANCHOR ASSEMBLY
24" DIA. CONCRETE FOUNDATION, 3'-0" DEEP
5½" X 7½" WOOD TERMINAL POST, 5'-8" LONG
GUARDRAIL BOLT (10") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT
GUARDRAIL BOLT "A" AND RECESSED NUT (TYP.), FOUR (4) REQUIRED
6 X 6-W6 X W6 OR 6 X 6-D6 X D6 WELDED WIRE FABRIC
25"
3'-0"
ELEVATION FROM BEHIND GUARDRAIL
NOTE: ANCHOR CABLE SHALL BE TAUT.
¾" X 2¾" SLOT
2½" DIA. HOLE
2¾"
5½"
1¾"
7"
25"
21"
4"
5'-8"
SIDE
FRONT
WOOD TIMBER POST
NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 lb/in².
POLYSTYRENE SHEETING OR COMPOSITION PAPER
24" (NOM.)
8" (NOM.)
6 X 6-W6 X W6 OR 6 X 6-D6 X D6 WELDED WIRE FABRIC
SECTION A–A
NOTE: FORM A NOMINAL 6" X 8" SOCKET IN THE FOUNDATION TO RECEIVE THE 5½" X 7½" TIMBER POST. FORM AROUND THE TIMBER POST WITH ½" THICK POLYSTYRENE FOAM SHEETING OR WRAP THE TIMBER POST IN A DOUBLE LAYER OF COMPOSITION PAPER. THE LAYER OF SHEETING OR PAPER WILL AID IN REMOVING A DAMAGED POST.
5½" X 7½" WOOD TERMINAL POST, 5'-8" LONG
CABLE ANCHOR ASSEMBLY
POLYSTYRENE SHEETING, COMPOSITION PAPER OR SOME OTHER MATERIAL SHALL BE WRAPPED AROUND THE CONCRETE EMBEDDED PORTION OF THE POST TO AID IN REMOVING BROKEN OR DAMAGED POSTS.
6 X 6-W6 X W6 OR 6 X 6-D6 X D6 WELDED WIRE FABRIC
POST SLEEVE
8" X 8" STEEL BEARING PLATE, ⅝" THICK
24"
4"
3" (TYP.)
DETAIL A

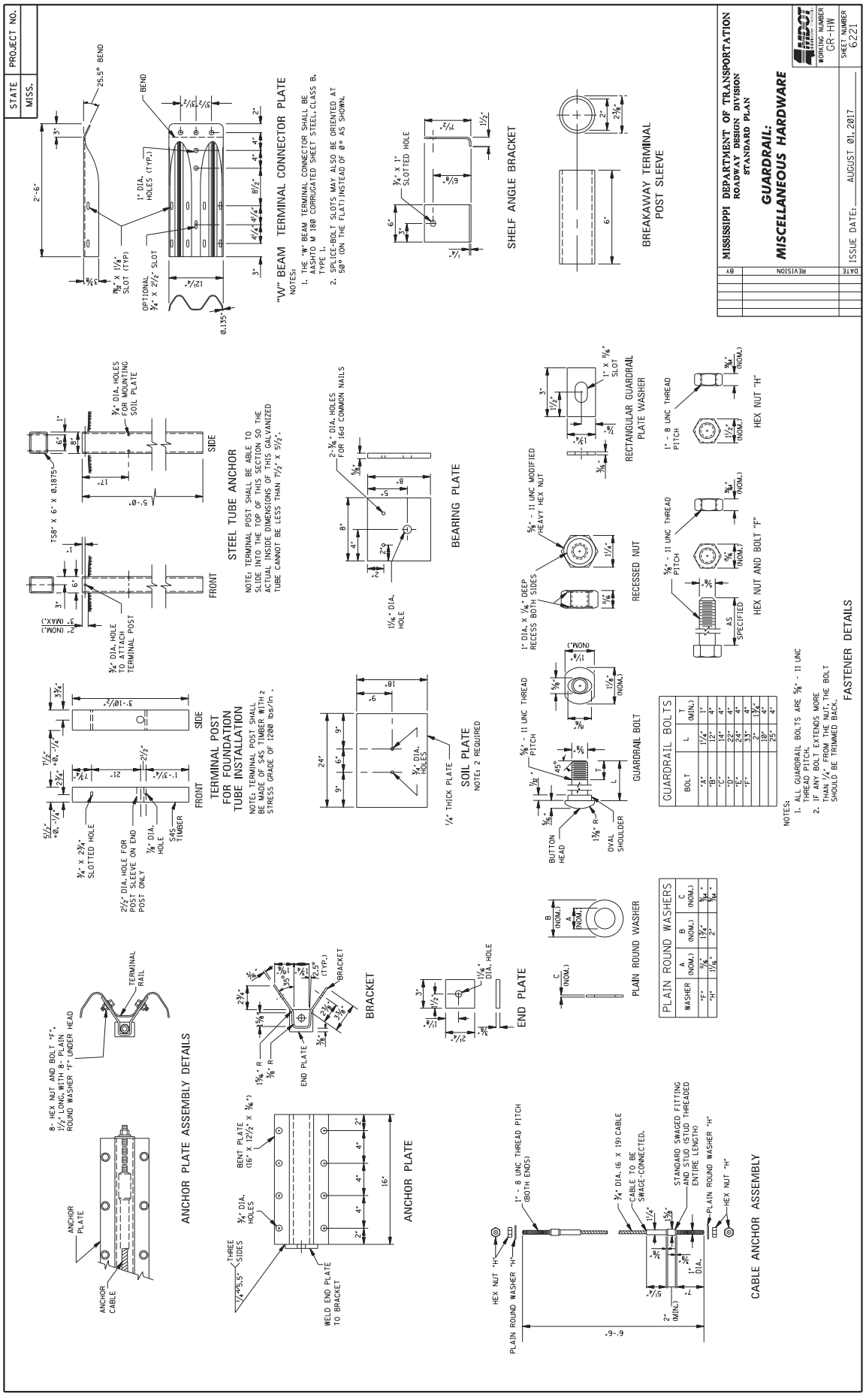

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION AT BRIDGE APPROACHES FOR DIVIDED HIGHWAYS
WORKING NUMBER GR-4
SHEET NUMBER 6214
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
** NOTE: IF FORESLOPE, SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
SECTION A-A
SECTION B-B
GENERAL NOTES:
1. VALUES FOR "A" AND "B" WILL BE SHOWN ELSEWHERE ON THE PLANS.
2. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
3. GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
4. THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
5. IN THE ABSENCE OF A BRIDGE END PAVEMENT RAIL CONNECT THE BRIDGE END SECTION TO THE BRIDGE RAIL SECTION AS GR-2 THRU GR-9S). THE SHOULDER WIDTH AT THE BRIDGE END PAVEMENT RAIL OR BRIDGE END RAIL SHALL BE SUFFICIENTLY WIDE TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
6. TYPE DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.
7. "W" = SHOULDER WIDTH + FORESLOPE WIDTH. DIMENSIONS FOUND ELSEWHERE ON THE PLANS.
8. FOR DIVIDED HIGHWAYS WITH THREE (3) OR MORE LANES IN ONE DIRECTION, THE MEDIAN BARRIER MAY REQUIRE A TAPER RATE OTHER THAN 25:1.
DIVIDED HIGHWAY WITH BARRIER INSIDE CLEAR ZONE OF OPPOSING TRAFFIC
* NOTE: THE 25° LINE IS USED TO DETERMINE THE LIMITS OF MEDIAN BARRIER AS SHOWN.
DIVIDED HIGHWAY WITH BARRIER OUTSIDE CLEAR ZONE OF OPPOSING TRAFFIC
150' MINIMUM TRANSITION
** VARIABLE
NORMAL GUARDRAIL INSTALLATION
TERMINAL SECTION
30:1 TAPER
25:1 TAPER
GUARDRAIL FACE ALINEMENT ON BRIDGE
DOUBLE-FACED GUARDRAIL
TYPE 1 END SECTION
BRIDGE END SECTION
TANGENT
BRIDGE END PAVEMENT
BRIDGE
SEE NOTE 5
BRIDGE END PAVT RAIL
NORMAL SHOULDER
20:1 SLOPE RELATIVE TO LONGITUDINAL GRADIENT FOR HIGHWAY CENTERLINE
MEDIAN BARRIER TERMINAL AS SHOWN ELSEWHERE ON PLANS
ETL
37'-6" TYPICAL
25'-0"
12'-6"
18'-3"
75'
"A"
"B"
"W"
VARIES
NORMAL SHOULDER SLOPE
6:1
4S SHOWN ON PLANS
2'-0"
3:1

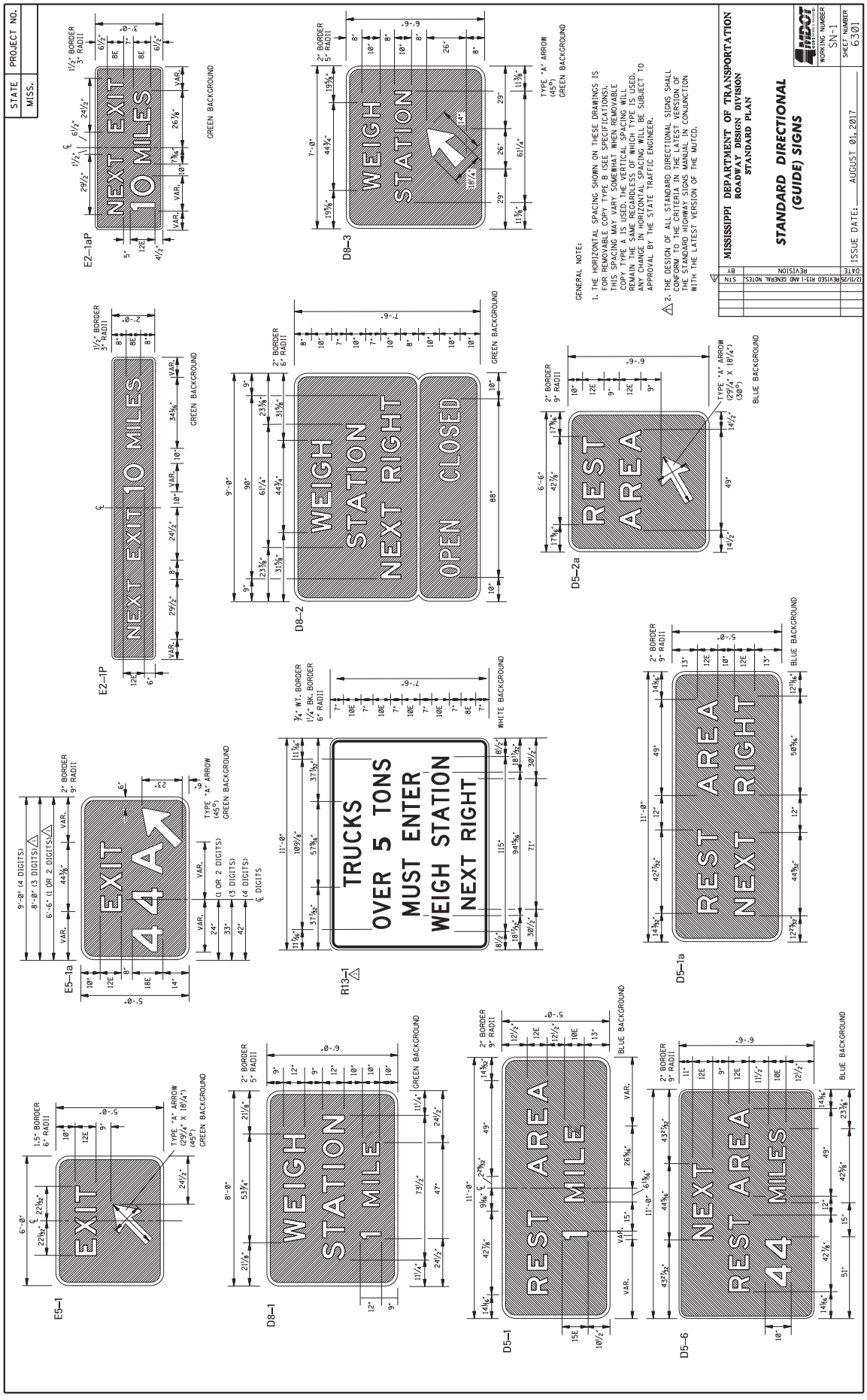

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION
AT BRIDGE APPROACHES
FOR 2-LANE 2-WAY
HIGHWAY
WORKING NUMBER GR-4A
SHEET NUMBER 6215
ISSUE DATE: MAY 01, 2017
BY REVISION DATE
* NOTE: IF FORESLOPE SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
DETAIL OF GUARDRAIL SECTION LAPS
GENERAL NOTES:
1. VALUES FOR "A", "B", "C" AND "D" WILL BE SHOWN ELSEWHERE ON THE PLANS.
2. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
3. GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC APPROACHING THE BRIDGE.
4. THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
5. IN THE ABSENCE OF A BRIDGE END PAVEMENT RAIL, CONNECT THE BRIDGE END SECTION TO THE BRIDGE RAIL (SEE MS-GR-2 THRU GR-2C). THE SHOULDER WIDTH AT THE BRIDGE END PROVIDED BY BRIDGE END RAIL SHALL BE SUFFICIENT TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
6. TYPE DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.
7. W = SHOULDER WIDTH + FORESLOPE WIDTH. DIMENSIONS FOUND ELSEWHERE ON THE PLANS.
PLAN
SECTION A-A
SECTION B-B
* VARIABLE
150' MINIMUM TRANSITION
NORMAL SHOULDER
NORMAL GUARDRAIL INSTALLATION
TERMINAL SECTION
BRIDGE END SECTION
TANGENT
30:1 TAPER
37'-6" TYPICAL
75'
25'-0"
12'-6"
18'-3"
20:1 SLOPE RELATIVE TO LONGITUDINAL GRADIENT FOR HIGHWAY CENTERLINE
GUARDRAIL FACE ALINEMENT ON BRIDGE
BRIDGE END PAVEMENT
BRIDGE
SEE NOTE 5
BRIDGE END PAVT' RAIL
ETL
VARIES
NORMAL SHOULDER SLOPE
AS SHOWN ON THE PLANS
2'-0"
3:1
6:1

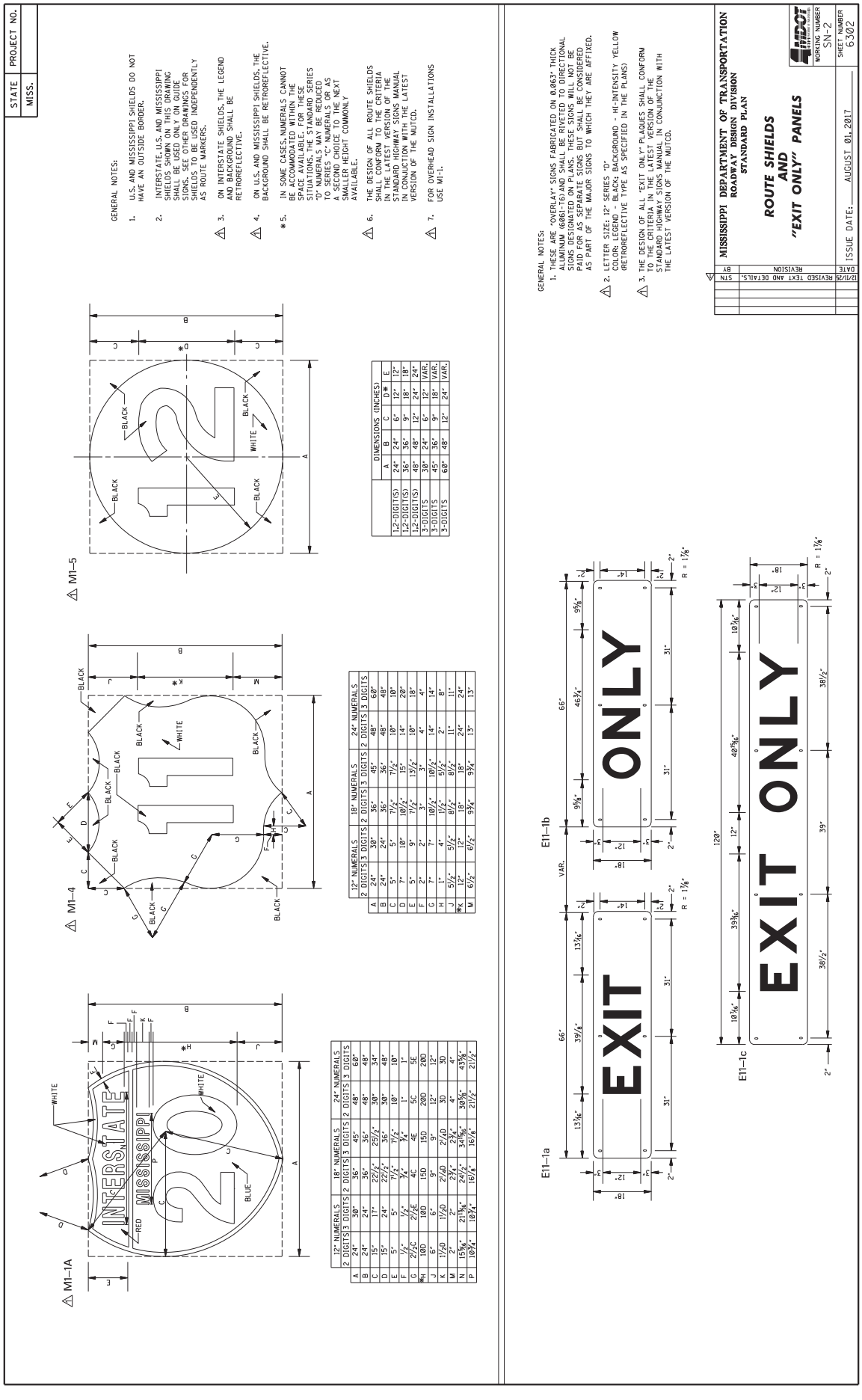

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION
FOR ROADSIDE HAZARDS
ON DIVIDED HIGHWAYS
WORKING NUMBER GR-4B
SHEET NUMBER 6216
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
† NOTE: IF FORESLOPE, SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
SECTION A–A
SECTION B–B
SECTION C–C
SECTION D–D
FOR OBSTACLES 5' TO 17' FROM NORMAL SHOULDER
SECTION D–D
FOR OBSTACLES 17' OR MORE FROM NORMAL SHOULDER
SECTION E–E
**NOTE: FOR STEEL POST AND MODIFIED WOOD BLOCKOUT, USE 6" x 8" WOOD POST AND BLOCKOUT, 23.25".
TYPICAL INSTALLATION FOR CULVERT
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE STEEPER THAN 10:1
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE 10:1 OR FLATTER
*NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
DETAIL OF POST INSTALLATION WITH COVER
LESS THAN NORMAL POST LENGTH
GENERAL NOTES:
1. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
2. GUARDRAIL SECTIONS TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
3. PAY LIMITS FOR NORMAL GUARDRAIL INSTALLATION WILL BE THE TOTAL LENGTH LESS THE LENGTHS OF END TERMINALS.
4. W = SHOULDER WIDTH + FORESLOPE WIDTH. DIMENSIONS FOUND ELSEWHERE ON THE PLANS.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON 2-LANE, 2-WAY HIGHWAYS
WORKING NUMBER GR-4C
SHEET NUMBER 6217
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
SECTION A-A
SECTION B-B
SECTION C-C
SECTION D-D FOR OBSTACLES 5' TO 17' FROM NORMAL SHOULDER
SECTION D-D FOR OBSTACLES 17' OR MORE FROM NORMAL SHOULDER
SECTION E-E
** NOTE: FOR STEEL POST AND MODIFIED WOOD BLOCKOUT, USE 12" POWER POST FOR STEEL POST AND WOOD BLOCKOUT, 23.25".
† NOTE: IF FORESLOPE SHOWN ELSEWHERE ON PLANS IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
TYPICAL INSTALLATION FOR CULVERT
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE STEEPER THAN 10:1
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE 10:1 OR FLATTER
DETAIL OF POST INSTALLATION WITH COVER
LESS THAN NORMAL POST LENGTH
GENERAL NOTES:
1. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
2. GUARDRAIL SECTIONS TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
3. PAY LIMITS FOR NORMAL GUARDRAIL INSTALLATION WILL BE THE TOTAL LENGTH LESS THE LENGTHS OF END TERMINALS.
4. W = SHOULDER WIDTH + FORESLOPE WIDTH, DIMENSIONS FOUND ELSEWHERE ON THE PLANS.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
RUB RAIL HARDWARE
WORKING NUMBER GR-RR
SHEET NUMBER 6218
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
BLOCKOUT FOR POST 9 OF TYPE "1" BRIDGE END SECTION
6" X 12" WOOD BLOCKOUT
6" X 12" MODIFIED WOOD BLOCKOUT
PLAN
ELEVATION FOR WOOD POST
ELEVATION FOR STEEL POST
CROSS-SECTION VIEW OF C6 x 8.2
GENERAL NOTES:
1. POSTS 1 THROUGH 9 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKOUTS. STEEL POST REQUIRE 2 HOLES ON EITHER SIDE OF THE POST.
2. RUBRAIL BLOCKOUTS SHALL BE SECURED WITH ⅝" BUTTONHEAD BOLT FOR STEEL POST AND 20" BOLT FOR WOOD POST. (SEE PROFILE VIEW FOR LENGTHS)
3. RUBRAIL & LONG BLOCKOUT (POST 9) ARE NOT REQUIRED IN CURB & GUTTER SECTIONS OF ROADWAY.
4. ATTACH RUBRAIL CONNECTOR PLATE AND RUBRAIL WITH ⅝" X 1½" HEX HEAD BOLTS "F"
PROFILE VIEW OF POSTS
WOOD POST
STEEL POST
LONGITUDINAL RUB RAIL
DIAGONAL RUB RAIL
RUB RAIL CONNECTOR BRACKET
"L" BRACKET
HEX NUT AND BOLT "F"
PLAIN ROUND WASHER "F"
25" OR 15" GUARDRAIL BOLT

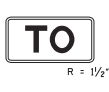
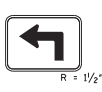
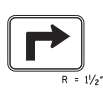
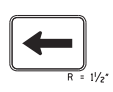
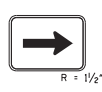
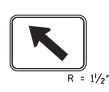
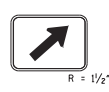
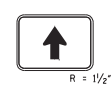

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
MISCELLANEOUS HARDWARE
WORKING NUMBER GR-HW
SHEET NUMBER 6221
ISSUE DATE: AUGUST 01, 2017
REVISION
DATE
BY
"W" BEAM TERMINAL CONNECTOR PLATE
NOTES:
1. THE "W" BEAM TERMINAL CONNECTOR SHALL BE AASHTO M 180 CORRUGATED SHEET STEEL, CLASS B, TYPE 1.
2. SPLICE-BOLT SLOTS MAY ALSO BE ORIENTED AT 50° (ON THE FLAT) INSTEAD OF 0° AS SHOWN.
SHELF ANGLE BRACKET
BREAKAWAY TERMINAL POST SLEEVE
STEEL TUBE ANCHOR
NOTE: TERMINAL POST SHALL BE ABLE TO SLIDE INTO THE TOP OF THIS SECTION SO THE ACTUAL INSIDE DIMENSIONS OF THIS GALVANIZED TUBE CANNOT BE LESS THAN 7½" X 5½".
BEARING PLATE
TERMINAL POST FOR FOUNDATION TUBE INSTALLATION
NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH a STRESS GRADE OF 1200 lbs/in.².
SOIL PLATE
NOTE: 2 REQUIRED
RECESSED NUT
RECTANGULAR GUARDRAIL PLATE WASHER
HEX NUT "H"
HEX NUT AND BOLT "F"
GUARDRAIL BOLT
GUARDRAIL BOLTS
BOLT | L | T (MIN.)
"A" | 1¼" | 1"
"B" | 12" | 4"
"C" | 14" | 4"
"D" | 22" | 4"
"E" | 24" | 4"
"F" | 3½" | 4"
"G" | 5" | 1¾"
"H" | 10" | 4"
"I" | 25" | 4"
PLAIN ROUND WASHER
PLAIN ROUND WASHERS
WASHER | A (NOM.) | B (NOM.) | C (NOM.)
"F" | ¾" | 1¾" | ⅝"
"H" | 1⅛" | 2" | ⅝"
NOTES:
1. ALL GUARDRAIL BOLTS ARE ⅝" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN ¼" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.
FASTENER DETAILS
ANCHOR PLATE ASSEMBLY DETAILS
8- HEX NUT AND BOLT "F", 1½" LONG, WITH 8- PLAIN ROUND WASHER "F" UNDER HEAD
TERMINAL RAIL
ANCHOR PLATE
ANCHOR CABLE
BRACKET
END PLATE
BENT PLATE (16" X 12½" X ⅜")
WELD END PLATE TO BRACKET
ANCHOR PLATE
CABLE ANCHOR ASSEMBLY
1" - 8 UNC THREAD PITCH (BOTH ENDS)
¾" DIA. (6 X 19) CABLE
CABLE TO BE SWAGE-CONNECTED.
STANDARD SWAGED FITTING AND STUD (STUD THREADED ENTIRE LENGTH)
PLAIN ROUND WASHER "H"
HEX NUT "H"


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
STANDARD DIRECTIONAL (GUIDE) SIGNS
WORKING NUMBER SN-1
SHEET NUMBER 6301
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISED R13-1 AND GENERAL NOTES STN
GENERAL NOTE:
1. THE HORIZONTAL SPACING SHOWN ON THESE DRAWINGS IS FOR REMOVABLE COPY TYPE B (SEE SPECIFICATIONS). THIS SPACING MAY VARY SOMEWHAT WHEN REMOVABLE COPY TYPE A IS USED, THE VERTICAL SPACING WILL REMAIN THE SAME REGARDLESS OF WHICH TYPE IS USED. ANY CHANGE IN HORIZONTAL SPACING WILL BE SUBJECT TO APPROVAL BY THE STATE TRAFFIC ENGINEER.
2. THE DESIGN OF ALL STANDARD DIRECTIONAL SIGNS SHALL CONFORM TO THE CRITERIA IN THE LATEST VERSION OF THE STANDARD HIGHWAY SIGNS MANUAL IN CONJUNCTION WITH THE LATEST VERSION OF THE MUTCD.
E2-1aP
NEXT EXIT
10 MILES
GREEN BACKGROUND
D8-3
WEIGH
STATION
TYPE "A" ARROW (45°)
GREEN BACKGROUND
E2-1P
NEXT EXIT 10 MILES
GREEN BACKGROUND
D8-2
WEIGH
STATION
NEXT RIGHT
OPEN
CLOSED
GREEN BACKGROUND
D5-2a
REST
AREA
TYPE "A" ARROW (29¼" X 18¼") (30°)
BLUE BACKGROUND
E5-1a
EXIT
44
TYPE "A" ARROW (45°)
GREEN BACKGROUND
R13-1
TRUCKS
OVER 5 TONS
MUST ENTER
WEIGH STATION
NEXT RIGHT
¾" WT. BORDER
1/4" BK. BORDER
6" RADII
WHITE BACKGROUND
D5-1a
REST AREA
NEXT RIGHT
BLUE BACKGROUND
E5-1
EXIT
TYPE "A" ARROW (29¼" X 18¼") (45°)
GREEN BACKGROUND
D8-1
WEIGH
STATION
1 MILE
GREEN BACKGROUND
D5-1
REST AREA
1 MILE
BLUE BACKGROUND
D5-6
NEXT
REST AREA
44
MILES
BLUE BACKGROUND


STATE MISS.
PROJECT NO.
GENERAL NOTES:
1. U.S. AND MISSISSIPPI SHIELDS DO NOT HAVE AN OUTSIDE BORDER.
2. INTERSTATE, U.S. AND MISSISSIPPI SHIELDS SHOWN ON THIS DRAWING SHALL BE USED ONLY ON GUIDE SIGNS. SEE OTHER DRAWINGS FOR SHIELDS TO BE USED INDEPENDENTLY AS ROUTE MARKERS.
△ 3. ON INTERSTATE SHIELDS, THE LEGEND AND BACKGROUND SHALL BE RETROREFLECTIVE.
△ 4. ON U.S. AND MISSISSIPPI SHIELDS, THE BACKGROUND SHALL BE RETROREFLECTIVE.
* 5. IN SOME CASES, NUMERALS CANNOT BE COMBINED WITHIN THE SPACE AVAILABLE. FOR THESE SITUATIONS, THE STANDARD SERIES "D" NUMERALS MAY BE REDUCED TO SERIES "C" NUMERALS OR AS A SECOND CHOICE TO THE NEXT SMALLER HEIGHT COMMONLY AVAILABLE.
△ 6. THE DESIGN OF ALL ROUTE SHIELDS SHALL CONFORM TO THE CRITERIA IN THE LATEST VERSION OF THE STANDARD HIGHWAY SIGNS MANUAL IN CONJUCTION WITH THE LATEST VERSION OF THE MUTCD.
△ 7. FOR OVERHEAD SIGN INSTALLATIONS USE M1-1.
△ M1-1A
INTERSTATE
MISSISSIPPI
20
WHITE
RED
BLUE
△ M1-4
BLACK
WHITE
11
△ M1-5
BLACK
WHITE
12
DIMENSIONS (INCHES)
A B C D E
1,2-DIGIT(S) 24" 24" 6" 12" 12"
1,2-DIGIT(S) 36" 36" 9" 18" 18"
1,2-DIGIT(S) 48" 48" 12" 24" 24"
3-DIGITS 30" 24" 6" 12" VAR.
3-DIGITS 45" 36" 9" 18" VAR.
3-DIGITS 60" 48" 12" 24" VAR.
12" NUMERALS
2 DIGITS 3 DIGITS
A 24" 30"
B 24" 24"
C 5" 5"
D 7" 10"
E 5" 5"
F 2" 2"
G 7" 7"
H 1" 4"
J 5/16" 5/16"
*K 12" 12"
M 6 1/2" 6 1/2"
18" NUMERALS
2 DIGITS 3 DIGITS
A 36" 45"
B 36" 36"
C 7 1/2" 7 1/2"
D 10" 10 1/2"
E 7 1/2" 7 1/2"
F 3" 3"
G 10 1/2" 10 1/2"
H 1 1/2" 1 1/2"
J 8 1/2" 8 1/2"
*K 18" 18"
M 9 1/4" 9 1/4"
24" NUMERALS
2 DIGITS 3 DIGITS
A 48" 60"
B 48" 48"
C 10" 10"
D 14" 20"
E 10" 18"
F 4" 4"
G 14" 14"
H 2" 8"
J 11" 11"
*K 24" 24"
M 13" 13"
12" NUMERALS
2 DIGITS 3 DIGITS
A 36" 48"
B 24" 36"
C 22 1/2" 30"
D 22 1/2" 30"
E 16" 10"
F 1" 1"
G 4E 5C
H 15D 20D
J 9" 12"
K 2D 3D
M 4" 4"
N 34 5/8" 45 5/8"
P 16 1/8" 21 1/2"
18" NUMERALS
2 DIGITS 3 DIGITS
A 36" 45"
B 24" 36"
C 22 1/2" 29 1/2"
D 22 1/2" 36"
E 16" 10"
F 1" 1"
G 4E 5C
H 15D 20D
J 9" 12"
K 2D 3D
M 4" 4"
N 34 5/8" 45 5/8"
P 16 1/8" 21 1/2"
24" NUMERALS
2 DIGITS 3 DIGITS
A 48" 60"
B 48" 48"
C 34" 34"
D 30" 48"
E 10" 10"
F 1" 1"
G 5E 5E
H 20D 20D
J 12" 12"
K 3D 3D
M 4" 4"
N 45 5/8" 45 5/8"
P 21 1/2" 21 1/2"
GENERAL NOTES:
1. THESE ARE "OVERLAY" SIGNS FABRICATED ON 0.063" THICK ALUMINUM (6061-T6) AND SHALL BE RIVETED TO DIRECTIONAL SIGNS DESIGNATED ON PLANS. THESE SIGNS WILL NOT BE PAID FOR AS SEPARATE SIGNS BUT SHALL BE CONSIDERED AS PART OF THE MAJOR SIGNS TO WHICH THEY ARE AFFIXED.
△ 2. LETTER SIZE: 12" SERIES "D"
COLOR, LEGEND - BLACK; BACKGROUND - HI-INTENSITY YELLOW (RETROREFLECTIVE TYPE AS SPECIFIED IN THE PLANS)
△ 3. THE DESIGN OF ALL "EXIT ONLY" PLAQUES SHALL CONFORM TO THE CRITERIA IN THE LATEST VERSION OF THE STANDARD HIGHWAY SIGNS MANUAL IN CONJUNCTION WITH THE LATEST VERSION OF THE MUTCD.
△ E11-1a
EXIT
ONLY
66"
VAR.
E11-1b
E11-1c
EXIT ONLY
120"
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
ROUTE SHIELDS AND "EXIT ONLY" PANELS
MDOT
WORKING NUMBER SN-2
SHEET NUMBER 6302
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/20 REVISED TEXT AND DETAILS. STM

STATE	PROJECT NO.
MISS.	

SIGN NUMBER	D9-2		D10-1	D10-2	D10-3	D10-1a	D10-2a	D10-3a	D10-4	D10-5	⚠ M1-1A	⚠ M1-1A	M1-4	⚠ M1-5
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"		0.080"	0.080"	0.100"	0.080"	0.100"	0.100"	0.100"	0.100"	0.080"	0.100"	0.080"	0.080"
LEGEND	 R = 1½"	 R = 1⅞"	R = 1½"	 R = 1½"	 R = 1½"	 R = 1½"	 R = 1½"	 R = 1½"	 R = 1½"	 R = 1½"			 R = 1½"	 R = 1½" e = 11" (24" X 24") e = VAR. (30" X 24")
LETTER & NUMERAL SERIES	20" SERIES "E MOD."	30" SERIES "E MOD."	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	4" SERIES "B" 10" SERIES "D"	6.6", 6" SERIES "B" 6" SERIES "B" 8"	6.6", 6" SERIES "B" 6" SERIES "B" 8" 8" SERIES "B"	(SEE NOTES 1 & 2 BELOW)		(SEE NOTES 1 & 2 BELOW)	12" SERIES "D" (SEE NOTE BELOW)
WIDTH OF BORDER INSIDE OUTSIDE	½" WHITE	¾" WHITE	½" WHITE	½" WHITE	½" WHITE	½" WHITE	½" WHITE	½" WHITE	½" WHITE	½" WHITE	½" WHITE	¾" WHITE	BLACK OUTSIDE BORDER	BLACK OUTSIDE BORDER
SIZE (WIDTH X HEIGHT)	24" X 24"	⚠ 30" X 30"	12" X 24"	12" X 36"	12" X 48"	12" X 36"	12" X 48"	12" X 60"	18" X 54"	18" X 60"	24" X 24" (1 OR 2 DIGITS) 30" X 24" (3 DIGITS)	36" X 36" (1 OR 2 DIGITS) 45" X 36" (3 DIGITS)	24" X 24" (1 OR 2 DIGITS) 30" X 24" (3 DIGITS)	24" X 24" (1 OR 2 DIGITS) 30" X 24" (3 DIGITS)
COLORS COPY / BACKGROUND	WHITE / BLUE	WHITE / BLUE	WHITE / GREEN	WHITE / GREEN	WHITE / GREEN	WHITE / GREEN	WHITE / GREEN	WHITE / GREEN	WHITE, RED, BLUE / GREEN	WHITE, RED, BLUE / GREEN	WHITE / TOP-RED; BOTTOM-BLUE		BLACK / WHITE	BLACK / WHITE
REFLECTORIZATION	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL	ALL		BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	1	1	1		1	1
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2	2	2	2	2	2	2	2	2	2	2	4	2 (VERT. PUNCHING)	2 (HORIZ. PUNCHING)	2 (VERT. PUNCHING)	2 (HORIZ. PUNCHING)
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	12" (VERT. CENTER)	18" (VERT. CENTER)	6" (VERT. CENTER)	6" (VERT. CENTER)	6" (VERT. CENTER)	6" (VERT. CENTER)	6" (VERT. CENTER)	6" (VERT. CENTER)	9" (VERT. CENTER)	9" (VERT. CENTER)	VERT. CENTER	5" FROM VERT. CENTER	VERT. CENTER	12" FROM VERT. CENTER	VERT. CENTER	12" FROM VERT. CENTER
PUNCHING DISTANCE FROM TOP EDGE	3"; 21"	6"; 30"	3"; 21"	3"; 33"	6"; 42"	3"; 33"	6"; 42"	6"; 54"	6"; 48"	6"; 54"	3"; 21"	6";30"	3"; 21"	3"; 21"	3"; 21"	3"; 21"

SIGN NUMBER	⚠M2-1P	⚠M2-1PA ⚠(INTER)	⚠ *	⚠ *	⚠ M3-103PA*	⚠M4-5P	⚠M4-5PA ⚠(INTER)	⚠M5-1P(L)	⚠M5-1PLA	⚠M5-1PR	⚠M5-1PRA	⚠M5-2PL	⚠M5-2PLA	⚠M5-2PR	⚠M5-2PRA	⚠M6-1PL	⚠M6-1PLA	⚠M6-1PR	⚠M6-1PRA	⚠M6-2PL	⚠M6-2PLA	⚠ M6-2PR	⚠M6-2PRA	⚠M6-3P	⚠M6-3PA
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"		0.080"		0.080"	0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"	
LEGEND	 R = 1½"		 R = 1½"		 R = 1½"	 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"	
LETTER & NUMERAL SERIES	9" SERIES "C"		7" SERIES "C" 6" SERIES "C"		10" SERIES "C" 8" SERIES "C"	6" SERIES "E"																			
WIDTH OF BORDER INSIDE OUTSIDE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE
SIZE (WIDTH X HEIGHT)	21" X 15"		24" X 12"		⚠ 36" X 18"	24" X 12"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"	
COLORS COPY / BACKGROUND	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE
REFLECTORIZATION	B'GROUND	ALL	B'GROUND	ALL	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL
NUMBER OF POSTS FOR MOUNTING	1		1		1	1		1		1		1		1		1		1		1		1		1	
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2		2		2	2		2		2		2		2		2		2		2		2		2	
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	VERT. CENTER		12" (V. PUNCH) 7" (H.PUNCH)	12"	VERT. CENTER	12" (VERT. CENTER)		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER	
PUNCHING DISTANCE FROM TOP EDGE	1½"; 13½"		1½"; 10½" (V.) 6" (H.)	1½"; 10½"	1½"; 13½"	1½"; 10½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"	

GENERAL NOTES:

⚠ 1. THE DIMENSIONS FOR ALL STANDARD ROADSIDE SIGNS SHALL CONFORM WITH THOSE SHOWN IN THE STANDARD HIGHWAY SIGNS IN CONJUNCTION WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LASTEST EDITIONS.

2. ROUTE MARKERS AND SHIELDS SHOWN ON THIS SHEET ARE FOR USE INDEPENDENTLY OF INTERSTATE DIRECTIONAL (GUIDE) SIGNS. SEE OTHER DRAWINGS FOR SHIELDS TO BE USED ON INTERSTATE DIRECTIONAL (GUIDE) SIGNS.

3. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.

⚠ 4. M1-5: IN SOME CASES NUMERALS CANNOT BE ACCOMMODATED WITHIN THE SPACE AVAILABLE. FOR THESE SITUATIONS, THE STANDARD SERIES "D" NUMERAL SHALL BE REDUCED TO SERIES "C".

*

NORTH	EAST	SOUTH	WEST
M3-1	M3-2	M3-3	M3-4
M3-1A	M3-2A	M3-3A	M3-4A
M3-101A	M3-102A	M3-103A	M3-104A

SYM	BY	REVISED TEXT. REVISION	DATE
			12/1/25

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

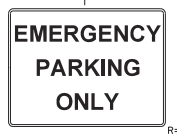
WORKING NUMBER SN-3

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER 6303

STATE	PROJECT NO.
MISS.	

SIGN NUMBER	R1-1		R1-2			R2-1			R2-4a	R3-1		R3-2		R3-4		R3-5	R4-3	
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.100"	0.125"	0.080"	0.100"	0.125"	0.080"	0.100"	0.125"	0.125"	0.080"	0.100"	0.080"	0.100"	0.080"	0.100"	0.080"	0.100"	0.125"
LEGEND			 R=2" R=3" R=4"			 R=1½" R=2¼" R=3"			 R=3"	 R=1½" R=2¼"		 R=1½" R=2¼"		 R=1½" R=2¼"		 R=1⅞"	 R=2¼" R=3"
LETTER & NUMERAL SERIES	12" SERIES "C"	16" SERIES "C"	3" SERIES "C"		5" SERIES "C"	4" SERIES "E" 4" SERIES "E" 10" SERIES "E"	6" SERIES "E" 6" SERIES "E" 14" SERIES "E"	8" SERIES "E" 8" SERIES "E" 16" SERIES "E"	8" SERIES "E" 16" SERIES "E" 8" SERIES "C" 14" SERIES "D"							6" SERIES "D"	6" SERIES "D"	8" SERIES "D"
WIDTH OF BORDER INSIDE / OUTSIDE	⅞" WHITE	1¼" WHITE	5" RED ¾" WHITE	6" RED 1" WHITE	8" RED 1½" WHITE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	1¼" BLACK ¾" WHITE	⅞" BLACK ¾" WHITE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	¾" BLACK ½" WHITE	⅞" BLACK ⅝" WHITE	1¼" BLACK ¾" WHITE
SIZE (WIDTH X HEIGHT)	36" OCTAGON	48" OCTAGON	36" EQUIL. TRIANGLE	48" EQUIL. TRIANGLE	60" EQUIL. TRIANGLE	24" X 30"	36" X 48"	48" X 60"	48" X 96"	24" X 24"	36" X 36"	24" X 24"	36" X 36"	24" X 24"	36" X 36"	30" X 36"	36" X 48"	48" X 60"
COLORS COPY / BACKGROUND	WHITE / RED	WHITE / RED	RED / WHITE	RED / WHITE	RED / WHITE	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE	BLACK & RED / WHITE	BLACK & RED / WHITE	BLACK & RED / WHITE	BLACK & RED / WHITE	BLACK & RED / WHITE	BLACK & RED / WHITE	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE
REFLECTORIZATION	ALL	ALL	ALL	ALL	ALL	B'GROUND	B'GROUND	B'GROUND	BACKGROUND	BACKGROUND, CIRCLE, & DIAG.	BACKGROUND, CIRCLE, & DIAG.	BACKGROUND, CIRCLE, & DIAG.	BACKGROUND, CIRCLE, & DIAG.	BACKGROUND, CIRCLE, & DIAG.	BACKGROUND, CIRCLE, & DIAG.	BACKGROUND	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2	4	2	4	4	2	4	6	10	2	2	2	2	2	2	2	4	6
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	18" (VERT. CENTER)	9"	18" (VERT. CENTER)	12" (FROM CENTER)	15" (FROM CENTER)	12" (VERT. CENTER)	3"	9"	9"	12" (VERT. CENTER)	18" (VERT. CENTER)	12" (VERT. CENTER)	18" (VERT. CENTER)	12" (VERT. CENTER)	18" (VERT. CENTER)	15" (VERT. CENTER)	3"	9"
PUNCHING DISTANCE FROM TOP EDGE	3"; 33"	9"; 39"	3"; 27"	3"; 15"	3"; 21"	3"; 27"	9"; 39"	4"; 30"; 56"	4"; 28"; 52"; 60"; 92"	3"; 21"	6"; 30"	3"; 21"	6"; 30"	3"; 21"	6"; 30"	6"; 30"	9"; 39"	4"; 30"; 56"

SIGN NUMBER	R4-7			R6-3	R5-1		R5-1a	R6-1L, R6-1R	R6-2L, R6-2R	R8-4		R11-1	
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"		0.125"	0.080"	0.100"	0.125"	0.100"	0.080"	0.080"	0.080"	0.100"	0.125"	0.125"
LEGEND	 R=1½" R=2¼" R=3"				 R=1⅛" R=3"		 R=2¼"	 R=1½"	 R=1½"	 R=2¼"		 R=3"	
LETTER & NUMERAL SERIES	4" SERIES "D"	6" SERIES "D"	8" SERIES "D"		4" SERIES "D"	6" SERIES "D"	8" SERIES "D"	4" SERIES "D"	6" SERIES "D"	4" SERIES "D"	6" SERIES "D"	8" SERIES "C"	10" SERIES "C"
WIDTH OF BORDER INSIDE / OUTSIDE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	1¼" BLACK ¾" WHITE	⅝" BLACK ¾" WHITE	WHITE OUT-SIDE BORDER	WHITE OUT-SIDE BORDER	1" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	⅞" BLACK ⅝" WHITE	1¼" BLACK ¾" WHITE
SIZE (WIDTH X HEIGHT)	24" X 30"	36" X 48"	48" X 60"	30" X 24"	36" X 36"	48" X 48"	42" X 30"	36" X 12"	24" X 30"	30" X 24"	48" X 36"	36" X 48"	48" X 60"
COLORS COPY / BACKGROUND	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE	WHITE / RED	WHITE / RED	WHITE / RED	BLACK (WHITE ARROW) / BLACK	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE	BLACK / WHITE
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	ALL	ALL	ALL	ARROW & BORDER	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	1	1	2	1	1
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2	4	6	2	2	4	4	2	2	2	4	4	6
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	12" (VERT. CENTER)	3"	9"	15" (VERT. CENTER)	18" (VERT. CENTER)	9"	9"	18" (VERT. CENTER)	12" (VERT. CENTER)	15" (VERT. CENTER)	9"	3"	9"
PUNCHING DISTANCE FROM TOP EDGE	3"; 27"	9"; 39"	4"; 30"; 56"	3"; 21"	6"; 30"	4"; 44"	3"; 27"	1½"; 10½"	3"; 27"	3"; 21"	3"; 33"	9"; 39"	4"; 30"; 56"

GENERAL NOTES:

1. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT. EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.

2. THE SPEED LIMITS REQUIRED ON SIGNS R2-1 AND R2-4a WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.

⚠ 3. THE DESIGN OF ALL STANDARD ROADSIDE SIGNS SHALL CONFORM TO THE CRITERIA IN THE LATEST VERSION OF THE STANDARD HIGHWAY SIGNS MANUAL IN CONJUNCTION WITH THE LATEST VERSION OF THE MUTCD.

REVISION	DATE	BY
REVISED TEXT	12/17/26	STN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

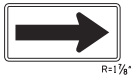
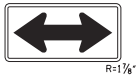
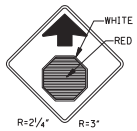
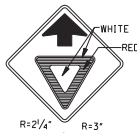
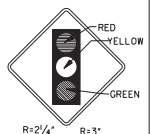
STANDARD ROADSIDE SIGNS

MDOT

WORKING NUMBER SN-3A

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER 6304

																			STATE MISS.	PROJECT NO.
SIGN NUMBER	W1-1L W1-1R		W1-2L W1-2R		W1-3L W1-3R		W1-4L W1-4R		W1-6L W1-6R	W1-7	W3-1 ⚠		W3-2 ⚠		W3-3		W4-1L W4-1R	W4-101L W4-101R
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"		0.125"		0.125"		0.125"		0.100"	0.100"	0.125"		0.125"		0.125"		0.125"	0.125"
LEGEND																		
LETTER & NUMERAL SERIES																		
WIDTH OF BORDER INSIDE / OUTSIDE	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	¾" BLACK ½" YELLOW	¾" BLACK ½" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW
SIZE (WIDTH X HEIGHT)	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	48" X 24"	48" X 24"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"
COLORS COPY / BACKGROUND	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & "LIGHTS"	BACKGROUND & "LIGHTS"	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (⅝" DIA.)	2	4	2	4	2	4	2	4	4	4	2	4	2	4	2	4	2	4
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	9"	9"	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER
PUNCHING DISTANCE FROM TOP EDGE	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3"; 21"	3"; 21"	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER
SIGN NUMBER	W4-2		W6-1		W6-2		W6-3		W13-1	W13-2	W13-3		W10-1					
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"		0.125"		0.125"		0.125"		0.080"	0.125"	0.125"		0.100"					
LEGEND	NOTE: SEE PLAN SHEETS FOR IDEOGRAM REQUIRED ON INDIVIDUAL SIGNS. 																
LETTER & NUMERAL SERIES									10" SERIES "E" 4" SERIES "E"	8" SERIES "E" 16" SERIES "E" 6" SERIES "E" (SEE NOTE)	8" SERIES "E" 16" SERIES "E" 6" SERIES "E" (SEE NOTE)		8" SERIES "E"					
WIDTH OF BORDER INSIDE / OUTSIDE	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅞" BLACK ⅝" YELLOW	1¼" BLACK ¾" YELLOW	⅝" BLACK ⅜" YELLOW	1¼" BLACK ¾" YELLOW	1¼" BLACK ¾" YELLOW		¾" BLACK ½" YELLOW					
SIZE (WIDTH X HEIGHT)	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	24" X 24"	48" X 60"	48" X 60"		36" DIAMETER					
COLORS COPY / BACKGROUND	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW		BLACK YELLOW					
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND		BACKGROUND					
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	1	1	1		1					
NUMBER OF HOLES TO BE PUNCHED (⅝" DIA.)	2	4	2	4	2	4	2	4	2	6	6		2					
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	12" (VERT. CENTER)	9"	9"		15"					
PUNCHING DISTANCE FROM TOP EDGE	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3"; 21"	4"; 30"; 56"	4"; 30"; 56"		15" FROM HORIZ. CENTER					

GENERAL NOTES:

1. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.

2. SIGNS W13-2 AND W13-3- THE STROKE WIDTH OF THE LETTER AND NUMERALS SHALL BE WIDENED TO 20% OF THE LETTER OR NUMERAL HEIGHT.

3. THE SPEEDS REQUIRED ON SIGNS W13-1, W13-2 AND W13-3 WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.

⚠ 4. THE DESIGN OF ALL STANDARD ROADWAY SIGNS SHALL CONFORM TO THE CRITERIA IN THE LATEST VERSION OF THE STANDARD HIGHWAY SIGNS MANUAL IN CONJUNCTION WITH THE LATEST VERSION OF THE MUTCD.

			⚠	SYN
				BY
		REVISED TEXT		
		REVISION		
		12/17/25		
		DATE		

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

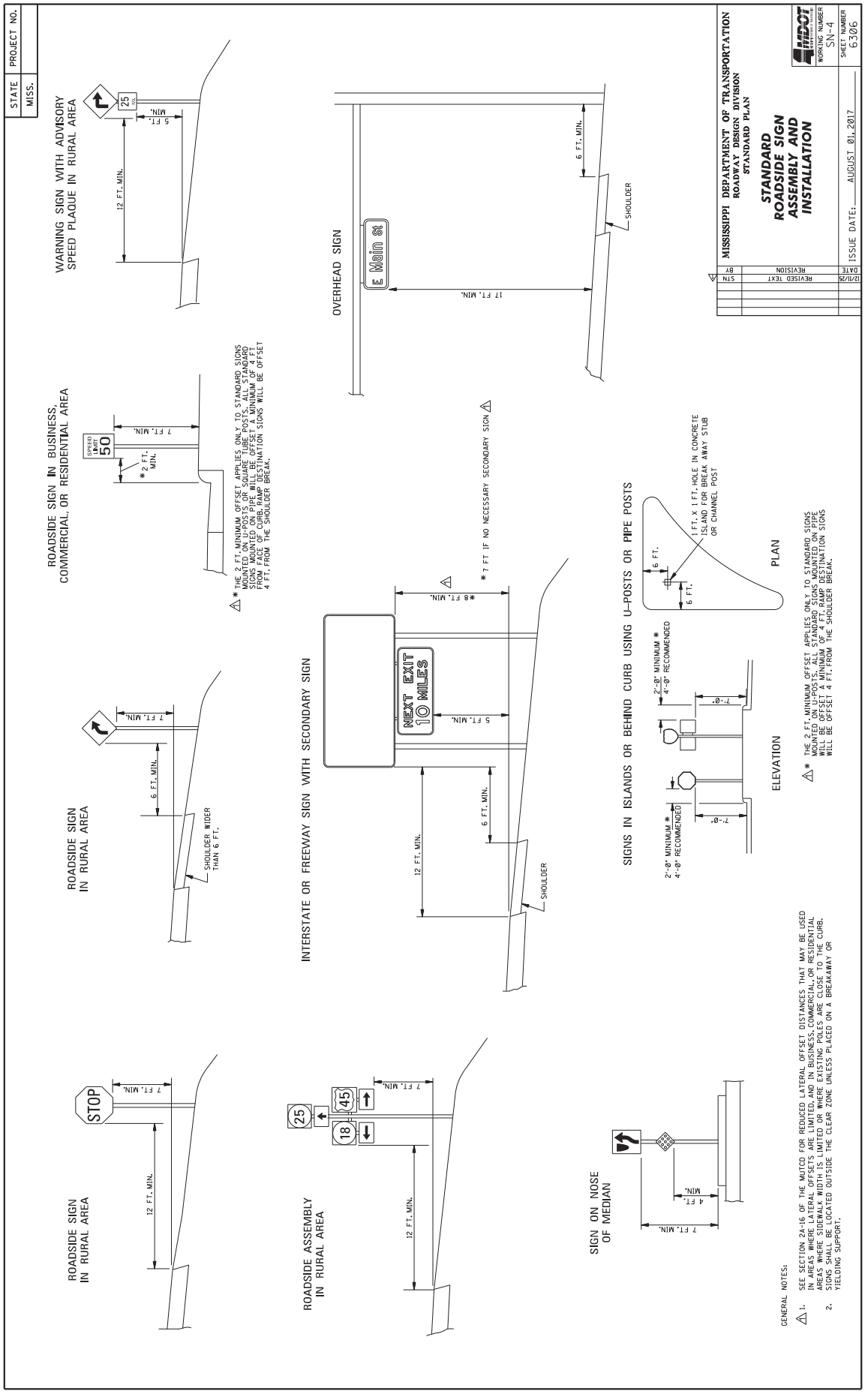
STANDARD ROADSIDE SIGNS

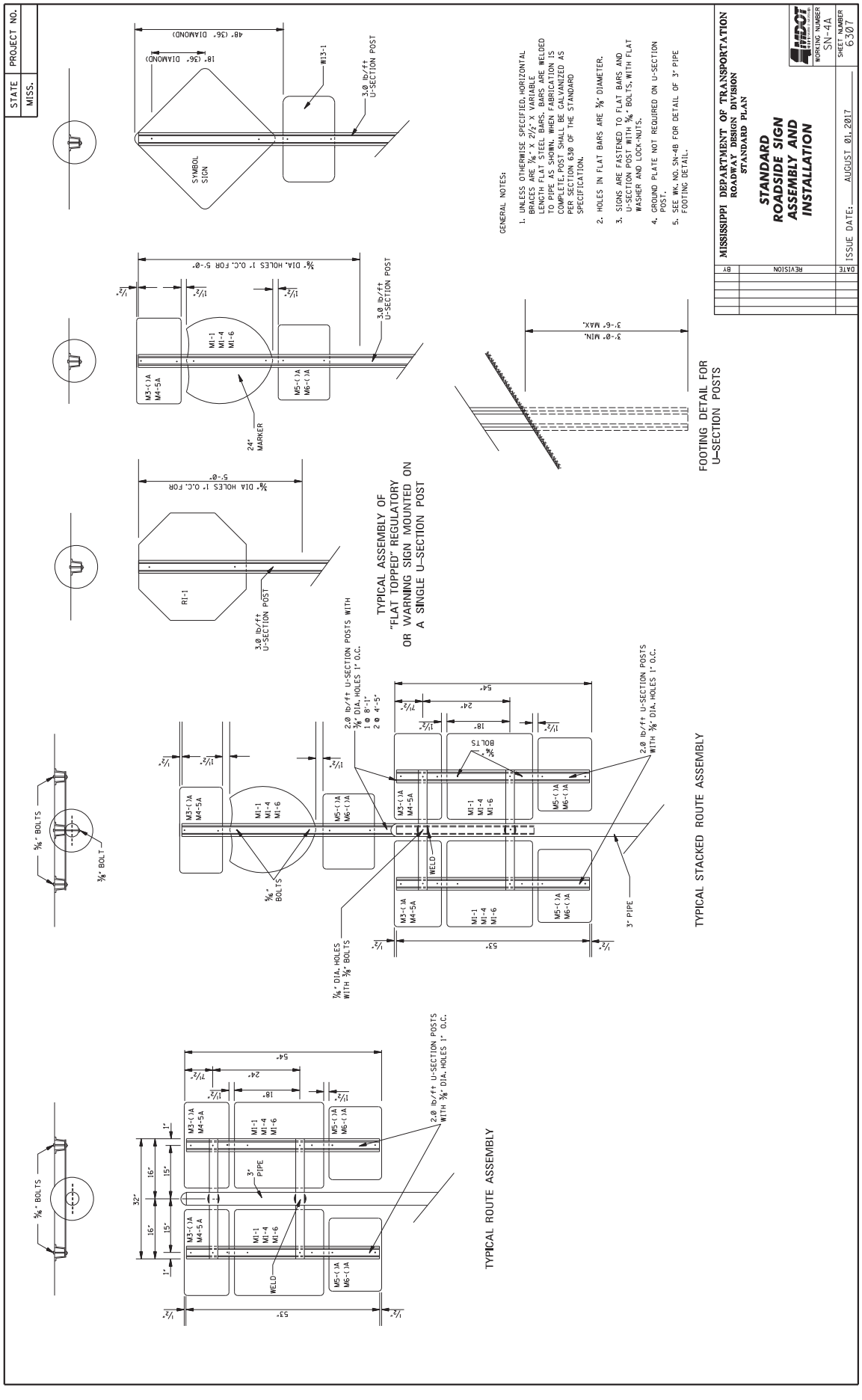
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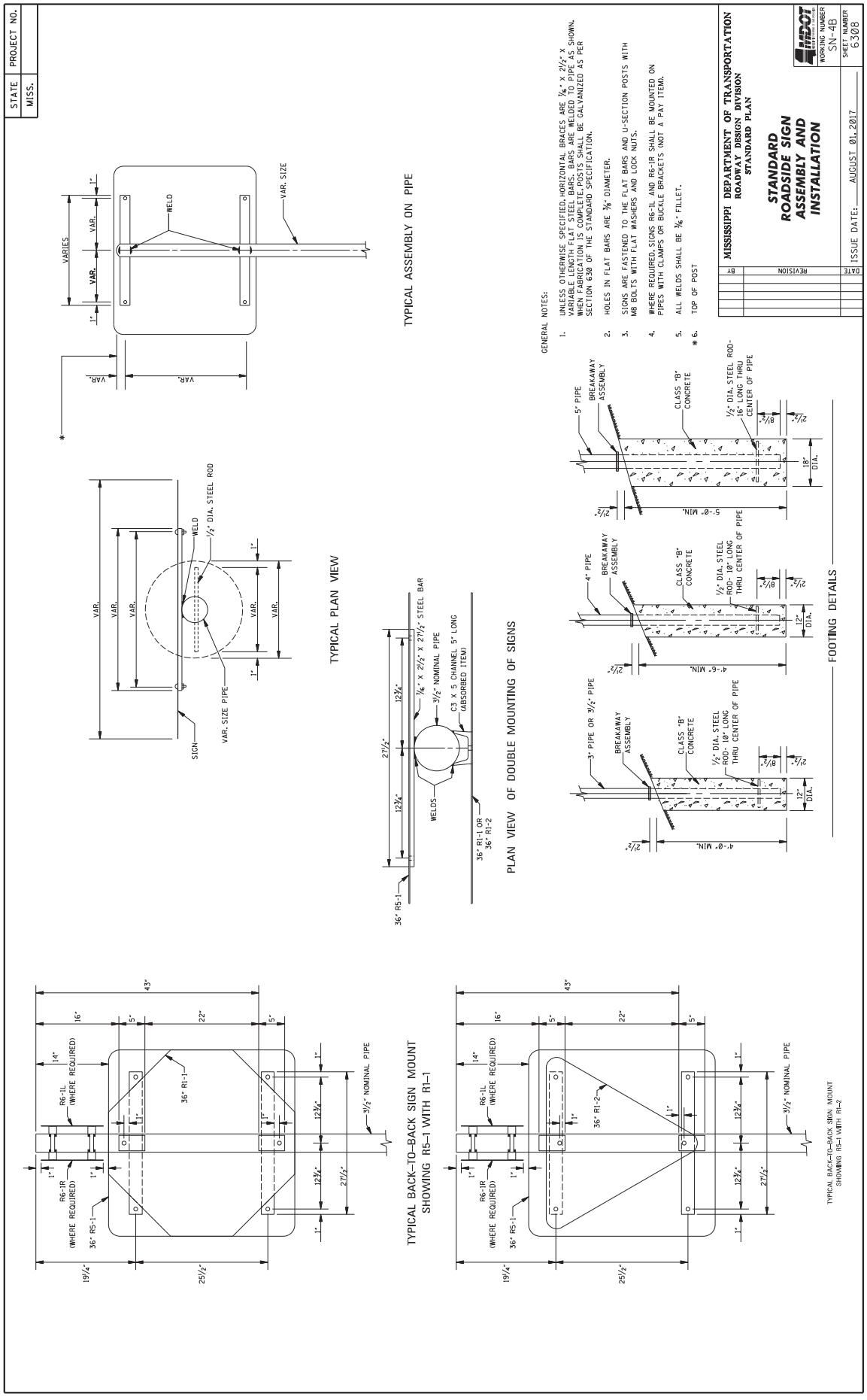
WORKING NUMBER
SN-3B

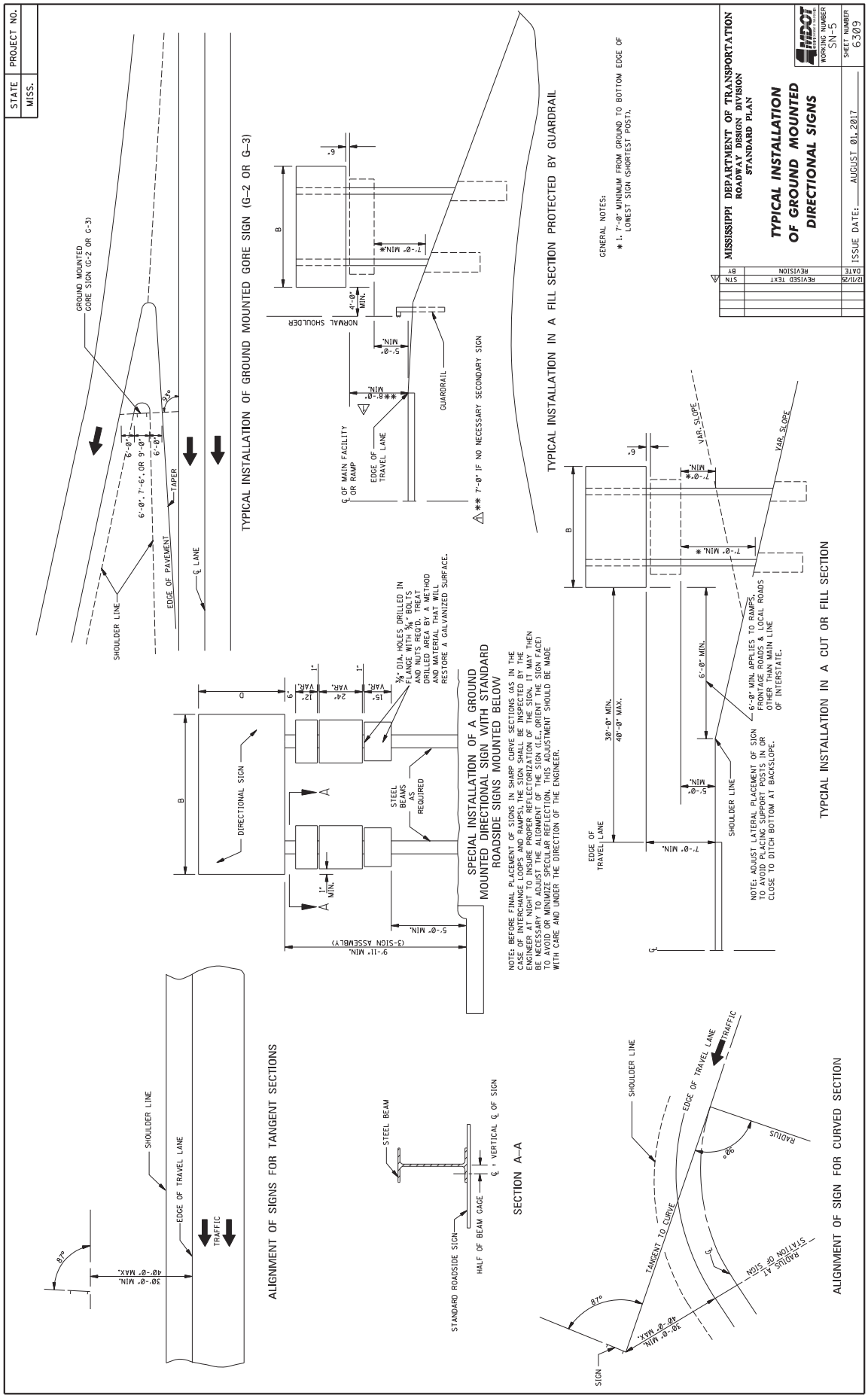
ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6305

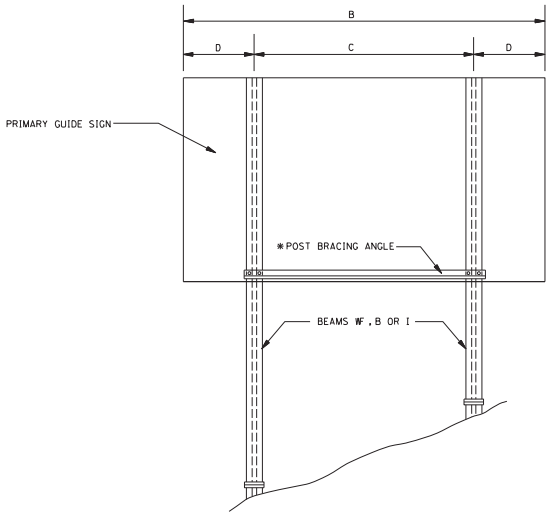

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION
WORKING NUMBER SN-4
SHEET NUMBER 6306
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISED TEXT STN
WARNING SIGN WITH ADVISORY SPEED PLAQUE IN RURAL AREA
12 FT. MIN.
5 FT. MIN.
OVERHEAD SIGN
E Main St
17 FT. MIN.
6 FT. MIN.
SHOULDER
ROADSIDE SIGN IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA
SPEED LIMIT 50
7 FT. MIN.
* 2 FT. MIN.
* THE 2 FT. MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-POSTS OR SQUARE TUBE POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET A MINIMUM OF 4 FT. FROM FACE OF CURB. RAMP DESTINATION SIGNS WILL BE OFFSET 4 FT. FROM THE SHOULDER BREAK.
ROADSIDE SIGN IN RURAL AREA
7 FT. MIN.
6 FT. MIN.
SHOULDER WIDER THAN 6 FT.
INTERSTATE OR FREEWAY SIGN WITH SECONDARY SIGN
NEXT EXIT 10 MILES
* 8 FT. MIN.
5 FT. MIN.
6 FT. MIN.
12 FT. MIN.
SHOULDER
* 7 FT IF NO NECESSARY SECONDARY SIGN
SIGNS IN ISLANDS OR BEHIND CURB USING U-POSTS OR PIPE POSTS
6 FT.
6 FT.
1 FT. X 1 FT. HOLE IN CONCRETE ISLAND FOR BREAK AWAY STUB OR CHANNEL POST
PLAN
2'-0" MINIMUM * 4'-0" RECOMMENDED
2'-0" MINIMUM * 4'-0" RECOMMENDED
7'-0"
7'-0"
ELEVATION
* THE 2 FT. MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET A MINIMUM OF 4 FT. RAMP DESTINATION SIGNS WILL BE OFFSET 4 FT. FROM THE SHOULDER BREAK.
ROADSIDE ASSEMBLY IN RURAL AREA
25
45
18
7 FT. MIN.
12 FT. MIN.
SIGN ON NOSE OF MEDIAN
7 FT. MIN.
4 FT. MIN.
ROADSIDE SIGN IN RURAL AREA
STOP
7 FT. MIN.
12 FT. MIN.
GENERAL NOTES:
1. SEE SECTION 2A-16 OF THE MUTCD FOR REDUCED LATERAL OFFSET DISTANCES THAT MAY BE USED IN AREAS WHERE LATERAL OFFSETS ARE LIMITED, AND IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREAS WHERE SIDEWALK WIDTH IS LIMITED OR WHERE EXISTING POLES ARE CLOSE TO THE CURB.
2. SIGNS SHALL BE LOCATED OUTSIDE THE CLEAR ZONE UNLESS PLACED ON A BREAKAWAY OR YIELDING SUPPORT.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION
WORKING NUMBER SN-4A
SHEET NUMBER 6307
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE ⅜" X 2½" X VARIABLE LENGTH FLAT STEEL BARS. BARS ARE WELDED TO PIPE AS SHOWN. WHEN FABRICATION IS COMPLETE, POST SHALL BE GALVANIZED AS PER SECTION 630 OF THE STANDARD SPECIFICATION.
2. HOLES IN FLAT BARS ARE ⅜" DIAMETER.
3. SIGNS ARE FASTENED TO FLAT BARS AND U-SECTION POST WITH ⅜" BOLTS, WITH FLAT WASHER AND LOCK-NUTS.
4. GROUND PLATE NOT REQUIRED ON U-SECTION POST.
5. SEE WK. NO. SN-4B FOR DETAIL OF 3" PIPE FOOTING DETAIL.
FOOTING DETAIL FOR U-SECTION POSTS
TYPICAL ASSEMBLY OF "FLAT TOPPED" REGULATORY OR WARNING SIGN MOUNTED ON A SINGLE U-SECTION POST
TYPICAL STACKED ROUTE ASSEMBLY
TYPICAL ROUTE ASSEMBLY
SYMBOL SIGN
48" (36" DIAMOND)
18" (36" DIAMOND)
W13-1
3.0 lb/ft U-SECTION POST
⅜" DIA. HOLES 1' O.C. FOR 5'-0"
5'-0"
R1-1
24" MARKER
3'-0" MIN.
3'-6" MAX.
2.0 lb/ft U-SECTION POSTS WITH ⅜" DIA. HOLES 1" O.C.
1 @ 8-1"
2 @ 4-5"
⅜" BOLTS
⅜" BOLT
⅜" DIA. HOLES WITH ⅜" BOLTS
WELD
3" PIPE
54"
53"
24"
18"
7½"
1½"
32"
16"
15"
1"
M3-( )A M4-5A
M1-1 M1-4 M1-6
M5-( )A M6-( )A

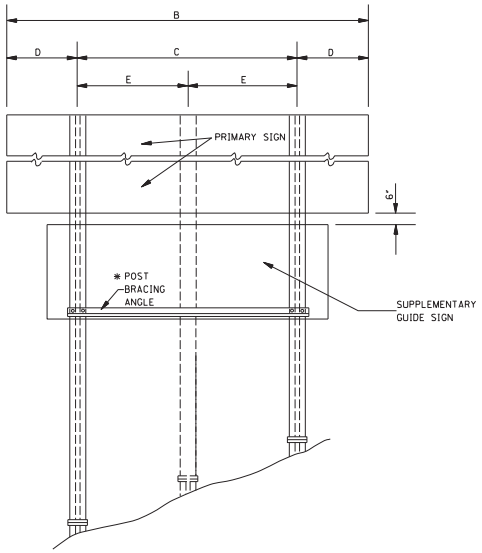

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION
WORKING NUMBER SN-4B
SHEET NUMBER 6308
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE 1/8" X 2 1/2" X VARIABLE LENGTH FLAT STEEL BARS. BARS ARE WELDED TO PIPE AS SHOWN. WHEN FABRICATION IS COMPLETE, POSTS SHALL BE GALVANIZED AS PER SECTION 630 OF THE STANDARD SPECIFICATION.
2. HOLES IN FLAT BARS ARE 3/8" DIAMETER.
3. SIGNS ARE FASTENED TO THE FLAT BARS AND U-SECTION POSTS WITH M8 BOLTS WITH FLAT WASHERS AND LOCK NUTS.
4. WHERE REQUIRED, SIGNS R6-1L AND R6-1R SHALL BE MOUNTED ON PIPES WITH CLAMPS OR BUCKLE BRACKETS (NOT A PAY ITEM).
5. ALL WELDS SHALL BE 3/16" FILLET.
* 6. TOP OF POST
TYPICAL ASSEMBLY ON PIPE
TYPICAL PLAN VIEW
PLAN VIEW OF DOUBLE MOUNTING OF SIGNS
FOOTING DETAILS
TYPICAL BACK-TO-BACK SIGN MOUNT SHOWING R5-1 WITH R1-1
TYPICAL BACK-TO-BACK SIGN MOUNT SHOWING R5-1 WITH R1-2


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL INSTALLATION OF GROUND MOUNTED DIRECTIONAL SIGNS
WORKING NUMBER SN-5
SHEET NUMBER 6309
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT
TYPICAL INSTALLATION OF GROUND MOUNTED GORE SIGN (G-2 OR G-3)
GROUND MOUNTED GORE SIGN (G-2 OR G-3)
SHOULDER LINE
EDGE OF PAVEMENT
℄ LANE
TAPER
6'-0", 7'-6", OR 9'-0"
6'-0"
8%
TYPICAL INSTALLATION IN A FILL SECTION PROTECTED BY GUARDRAIL
NORMAL SHOULDER
℄ OF MAIN FACILITY OR RAMP
EDGE OF TRAVEL LANE
GUARDRAIL
7'-0" MIN.*
4'-0" MIN.
5'-0" MIN.
8'-0" MIN.**
** 7'-0" IF NO NECESSARY SECONDARY SIGN
GENERAL NOTES:
* 1. 7'-0" MINIMUM FROM GROUND TO BOTTOM EDGE OF LOWEST SIGN (SHORTEST POST).
SPECIAL INSTALLATION OF A GROUND MOUNTED DIRECTIONAL SIGN WITH STANDARD ROADSIDE SIGNS MOUNTED BELOW
DIRECTIONAL SIGN
STEEL BEAMS AS REQUIRED
¾" DIA HOLES DRILLED IN FLANGE WITH ⅝" BOLTS AND NUTS REQ'D. TREAT DRILLED AREA BY A METHOD AND MATERIAL THAT WILL RESTORE A GALVANIZED SURFACE.
VAR. 15"
VAR. 24"
VAR. 12"
1" MIN.
5'-0" MIN.
9'-11" MIN. (3-SIGN ASSEMBLY)
NOTE: BEFORE FINAL PLACEMENT OF SIGNS IN SHARP CURVE SECTIONS (AS IN THE CASE OF INTERCHANGE LOOPS AND RAMPS), THE SIGN SHALL BE INSPECTED BY THE ENGINEER AT NIGHT TO INSURE PROPER REFLECTORIZATION OF THE SIGN. IT MAY THEN BE NECESSARY TO ADJUST THE ALIGNMENT OF THE SIGN (I.E., ORIENT THE SIGN FACE) TO AVOID ANY MINOR SPECULAR REFLECTION. THIS ADJUSTMENT SHOULD BE MADE WITH CARE AND UNDER THE DIRECTION OF THE ENGINEER.
TYPICAL INSTALLATION IN A CUT OR FILL SECTION
VAR. SLOPE
6'-0" MIN.
5'-0" MIN.
7'-0" MIN.
30'-0" MIN.
40'-0" MAX.
EDGE OF TRAVEL LANE
SHOULDER LINE
6'-0" MIN. APPLIES TO RAMPS, FRONTAGE ROADS & LOCAL ROADS OTHER THAN MAIN LINE OF INTERSTATE.
NOTE: ADJUST LATERAL PLACEMENT OF SIGN TO AVOID PLACING SUPPORT POSTS IN OR CLOSE TO DITCH BOTTOM AT BACKSLOPE.
ALIGNMENT OF SIGNS FOR TANGENT SECTIONS
SHOULDER LINE
EDGE OF TRAVEL LANE
TRAFFIC
8°
30'-0" MIN.
40'-0" MAX.
STEEL BEAM
STANDARD ROADSIDE SIGN
HALF OF BEAM GAGE
℄ = VERTICAL ℄ OF SIGN
SECTION A–A
ALIGNMENT OF SIGN FOR CURVED SECTION
SHOULDER LINE
EDGE OF TRAVEL LANE
TRAFFIC
RADIUS
90°
TANGENT TO CURVE
RADIUS AT STATION OF SIGN
SIGN
87°
30'-0" MIN.
40'-0" MAX.

STATE	PROJECT NO.
MISS.	



TYPICAL 2–POST INSTALLATION
WITHOUT EXIT SIGN



TYPICAL 2 OR 3 POST INSTALLATION
WITH SUPPLEMENTARY GUIDE SIGN
AND POST BRACING ANGLE LOCATION

* NOTE: PLACE POST BRACING ANGLE AT BOTTOM OF PRIMARY OR SUPPLEMENTARY SIGN WHICHEVER IS LOWER.
(SEE "END ELEVATION OF POST AND FOOTING" ON SN-6A.)

SIGN POST SPACING TABLE

2 POST			2 POST (CONT'D)			3 POST			
"B"	"C"	"D"	"B"	"C"	"D"	"B"	"C"	"D"	"E"
4'-0"	2'-0"	1'-0"	14'-6"	8'-9"	2'-10½"	20'-0"	14'-0"	3'-0"	7'-0"
4'-6"	2'-6"	1'-0"	15'-0"	9'-0"	3'-0"	20'-6"	14'-3"	3'-1½"	7'-1½"
5'-0"	3'-0"	1'-0"	15'-6"	9'-3"	3'-1½"	21'-0"	14'-9"	3'-1½"	7'-4½"
5'-6"	3'-6"	1'-0"	16'-0"	9'-6"	3'-3"	21'-6"	15'-0"	3'-3"	7'-6"
6'-0"	4'-0"	1'-0"	16'-6"	10'-0"	3'-3"	22'-0"	15'-6"	3'-3"	7'-9"
6'-6"	4'-6"	1'-0"	17'-0"	10'-3"	3'-4½"	22'-6"	15'-9"	3'-4½"	7'-10½"
7'-0"	5'-0"	1'-0"	17'-6"	10'-6"	3'-6"	23'-0"	16'-0"	3'-6"	8'-0"
7'-6"	5'-6"	1'-0"	18'-0"	10'-9"	3'-7½"	23'-6"	16'-6"	3'-6"	8'-3"
8'-0"	6'-0"	1'-0"	18'-6"	11'-0"	3'-9"	24'-0"	16'-9"	3'-7½"	8'-4½"
8'-6"	6'-6"	1'-0"	19'-0"	11'-6"	3'-9"	24'-6"	17'-3"	3'-7½"	8'- 7½"
9'-0"	7'-0"	1'-0"	19'-6"	11'-9"	3'-10½"	25'-0"	17'-6"	3'-9"	8'-9"
9'-6"	7'-0"	1'-3"	20'-0"	12'-0"	4'-0"	25'-6"	17'-9"	3'-10½"	8'-10½"
10'-0"	7'-0"	1'-6"	20'-6"	12'-3"	4'-1½"	26'-0"	18'-3"	3'-10½"	9'-1½"
10'-6"	7'-0"	1'-9"	21'-0"	12'-6"	4'-3"	26'-6"	18'-6"	4'-0"	9'-3"
11'-0"	7'-0"	2'-0"	21'-6"	13'-0"	4'-3"	27'-0"	19'-0"	4'-0"	9'-6"
11'-6"	7'-0"	2'-3"	22'-0"	13'-3"	4'-4½"	27'-6"	19'-3"	4'-1½"	9'-7½"
12'-0"	7'-3"	2'-4½"	22'-6"	13'-6"	4'-6"	28'-0"	19'-6"	4'-3"	9'-9"
12'-6"	7'-6"	2'-6"	23'-0"	13'-9"	4'-7½"	28'-6"	20'-0"	4'-3"	10'-0"
13'-0"	7'-9"	2'-7½"	23'-6"	14'-0"	4'-9"	29'-0"	20'-3"	4'-4½"	10'-1½"
13'-6"	8'-0"	2'-9"	24'-0"	14'-6"	4'-9"	29'-6"	20'-6"	4'-6"	10'-3"
14'-0"	8'-6"	2'-9"				30'-0"	21'-0"	4'-6"	10'-6"

GENERAL NOTES FOR WORKING SHEETS SN-6, SN-6A AND SN-6B:

1. FOOTING
ALL FOOTINGS SHALL BE CLASS "B" CONCRETE. POST STUBS SHALL BE SET IN CONCRETE FOOTING AT REQUIRED GRADE AND ALIGNMENT WITH CARE SO THAT MINIMUM SHIMMING WILL BE REQUIRED.

2. BASE CONNECTION PROCEDURE
ASSEMBLE POST TO STUB WITH BOLTS AND WITH A FLAT WASHER ON EACH BOLT BETWEEN PLATES. SHIM AS REQUIRED TO PLUMB POST. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS AND SHIMS AND TO CLEAN BOLT THREADS. THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE AS SHOWN BY TABLE. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH. HIGH STRENGTH BOLTS IN BASE CONNECTIONS SHALL BE TIGHTENED TO TORQUE AS SHOWN BY TABLE ON SN-6A. DO NOT OVER TIGHTEN!

3. POST LENGTH
ALL POST LENGTHS SHALL BE VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION. WHERE FIELD CONDITIONS REQUIRE THE POST LENGTH TO VARY MORE THAN 12", IT MAY BE NECESSARY TO CHANGE THE SIZE OR NUMBER OF POSTS. SUCH DETERMINATION WILL BE MADE BY THE STATE TRAFFIC ENGINEER. ANY CHANGE OF SIZE OR NUMBER OF POSTS SHALL NOT BE JUSTIFICATION FOR ANY CONTRACT PRICE ADJUSTMENTS.

4. FABRICATOR NOTE
IMPORTANT- ALL FRICTION FUSE BOLTS SHALL BE TIGHTENED IN SHOP BY A METHOD APPROVED BY THE BRIDGE DESIGN ENGINEER. TIGHTENING SHALL BE TO SUCH A DEGREE AS TO PROVIDE THE MINIMUM TENSION IN EACH BOLT WHEN ALL BOLTS ARE TIGHT, AS SHOWN BY TABLE SN-6A.

5. ALL HOLES IN FUSE PLATES AND HINGE PLATES SHALL BE DRILLED.

6. ALL PLATE CUTS SHOULD BE SAW CUTS. FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE ACCEPTABLE.

7. WELDING FOR STEEL SIGN SUPPORTS
WELDING SHALL BE PERFORMED IN SHOP BY ELECTRIC ARC PROCESS.

8. MATERIAL SPECIFICATIONS
THE MATERIALS USED IN THE CONSTRUCTION OF THE GROUND MOUNTED SIGN SUPPORT STRUCTURES, AS LISTED BELOW, SHALL CONFORM WITH THE REQUIREMENTS OF THE DESIGNATED ASTM SPECIFICATION. ALL OTHER MATERIALS, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS, EXCEPT AS OTHERWISE NOTED ON THE PLANS.

DESCRIPTION	MATERIALS PER ASTM DESIGNATION	GALVANIZE (1) PER ASTM DESIGNATION
POSTS OF STEEL PIPE	A 53 (GRADE "B")(2)	A 53
BASE CONNECTION PLATES FOR PIPES	A 36	A 123
POSTS OF STEEL WF, B, AND I BEAMS INCLUDING BASE CONNECTION, FUSE AND HINGE PLATES	A 588 OR A 572 GRADE 50	A 123
POST BRACING ANGLES AND FLAT BARS USED IN FABRICATION AND ERECTION OF SIGN SUPPORTS	A 36	A 123
HIGH STRENGTH BOLTS, NUTS AND WASHERS	A 325	A 153
BOLTS OTHER THAN HIGH STRENGTH (3)	A 307 (GRADE "A")	A 153

(1) ALL STEEL SHALL BE GALVANIZED AFTER FABRICATION EXCEPT AS NOTED ON THE PLANS.
(2) PIPES MAY BE WELDED OR SEAMLESS.
(3) BOLTS, WASHERS, AND NUTS USED FOR FASTENING ALUMINUM SIGN SHEETS AND PANELS SHALL BE ALUMINUM AS PER FOLLOWING TABLE.

DESCRIPTION	ASTM DESIGNATION	ALLOY
BOLTS AND WASHERS	B 209	2024-T4
PANEL BOLT NUTS	B 211	6061-T6
STOP NUTS	B 211	2017-T4

BY	REVISION	DATE

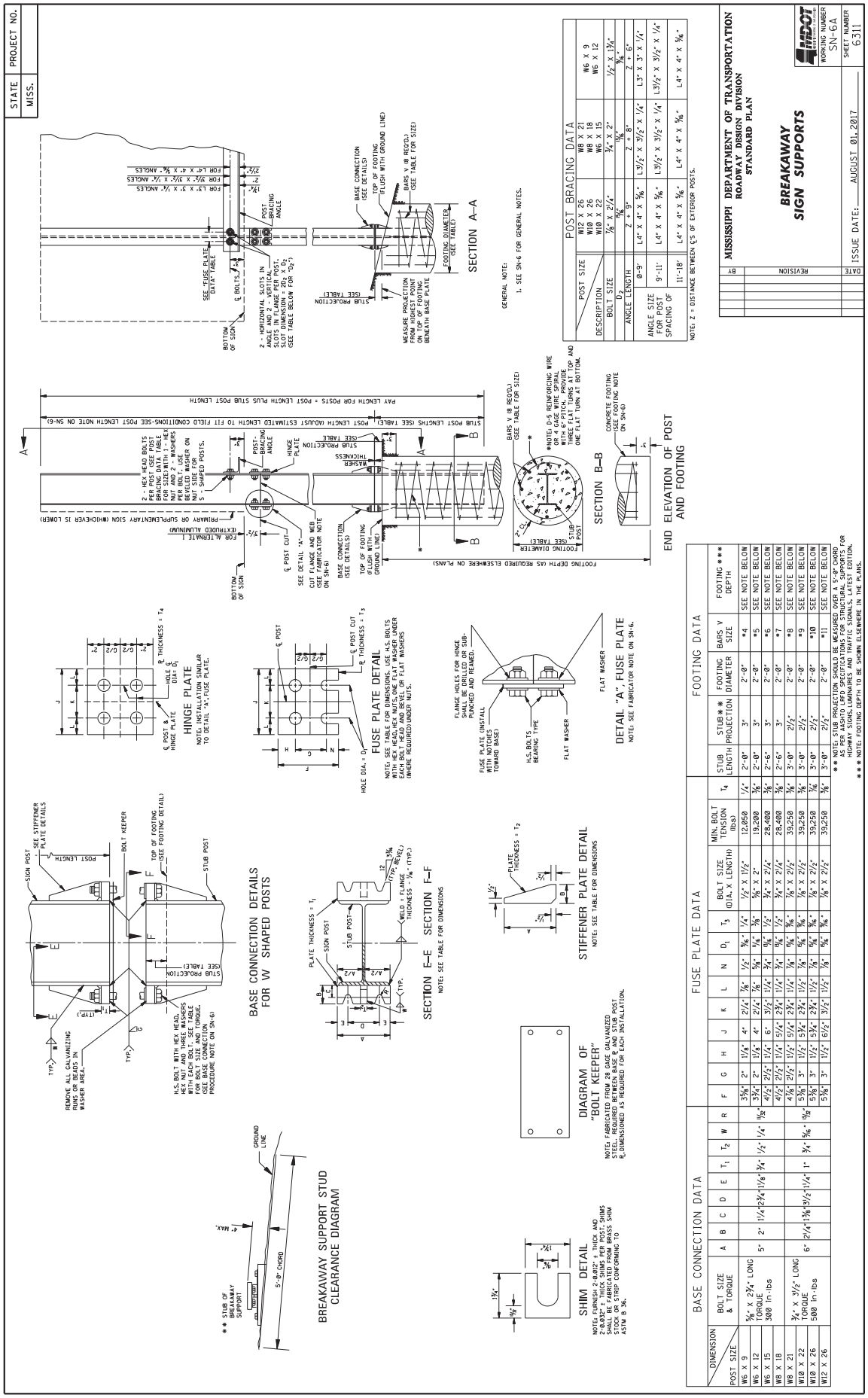
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

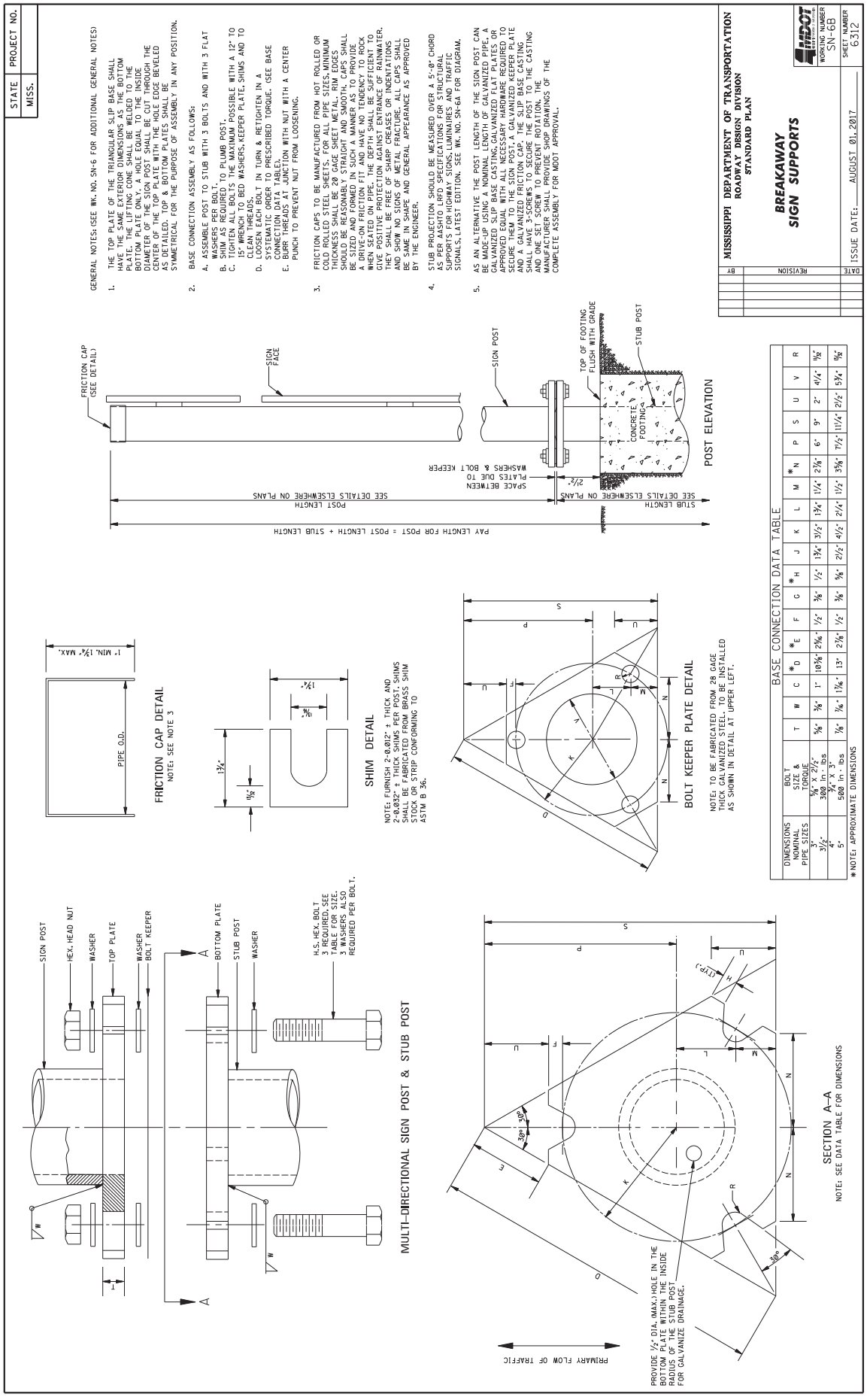
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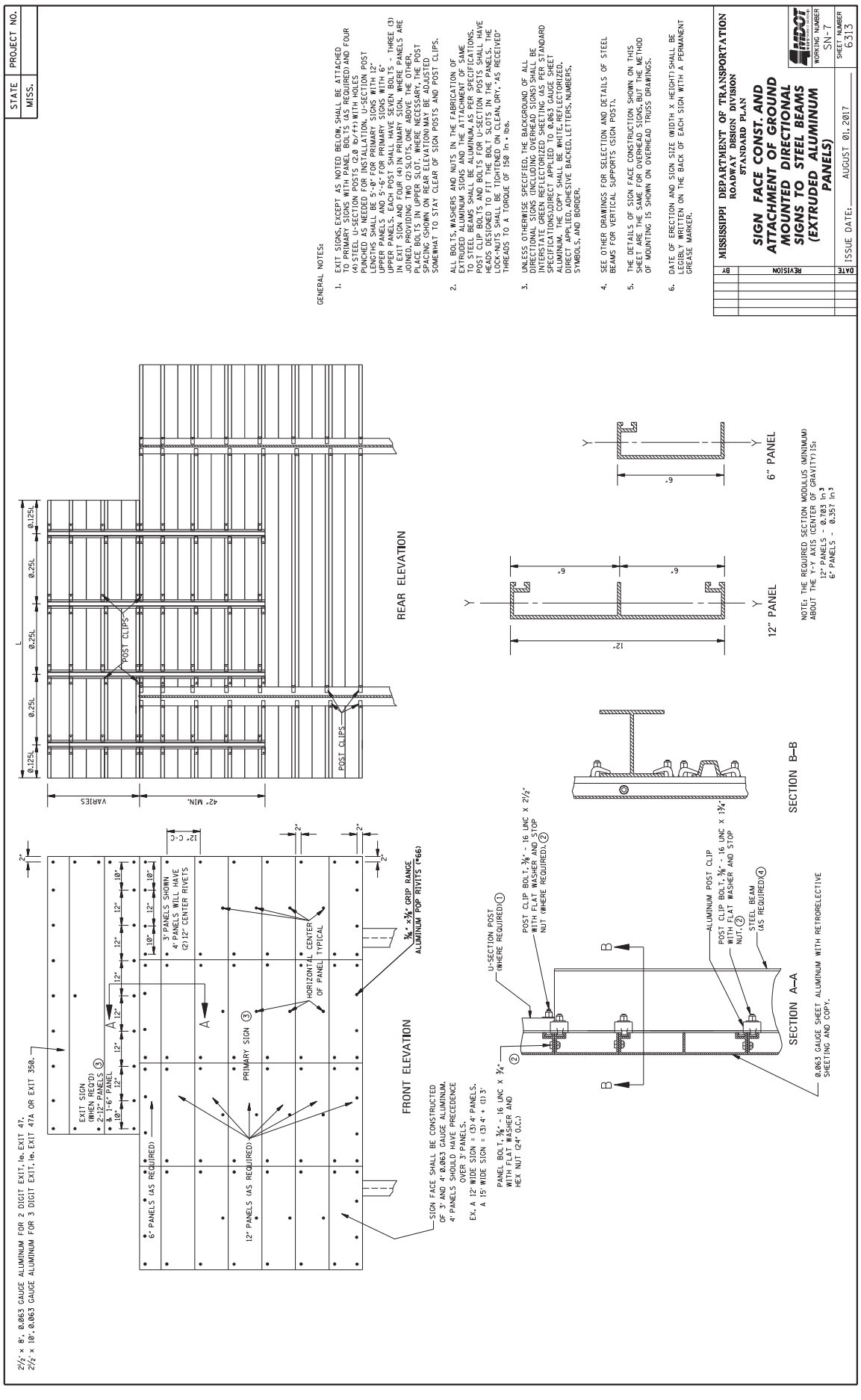
ISSUE DATE: AUGUST 01, 2017

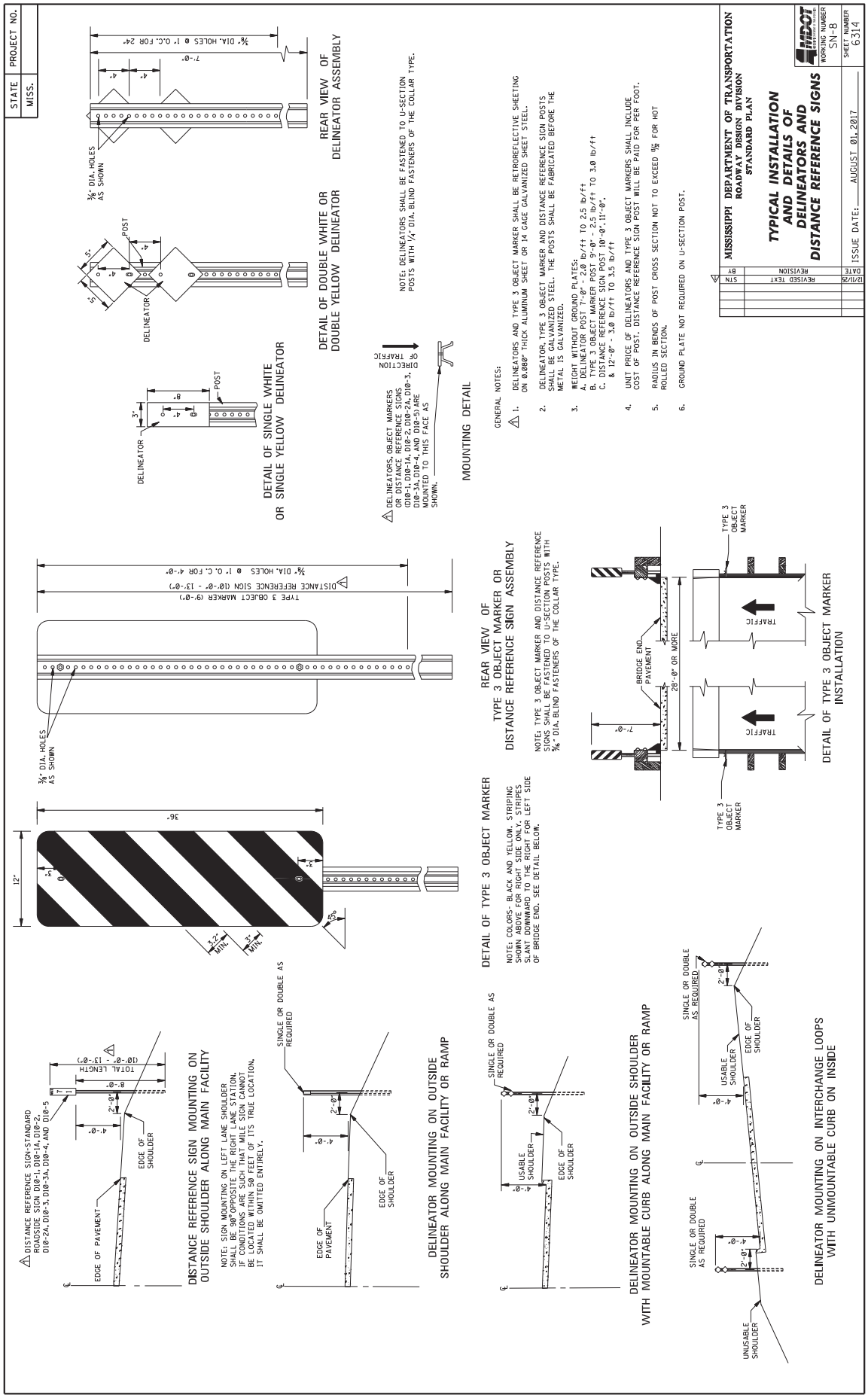
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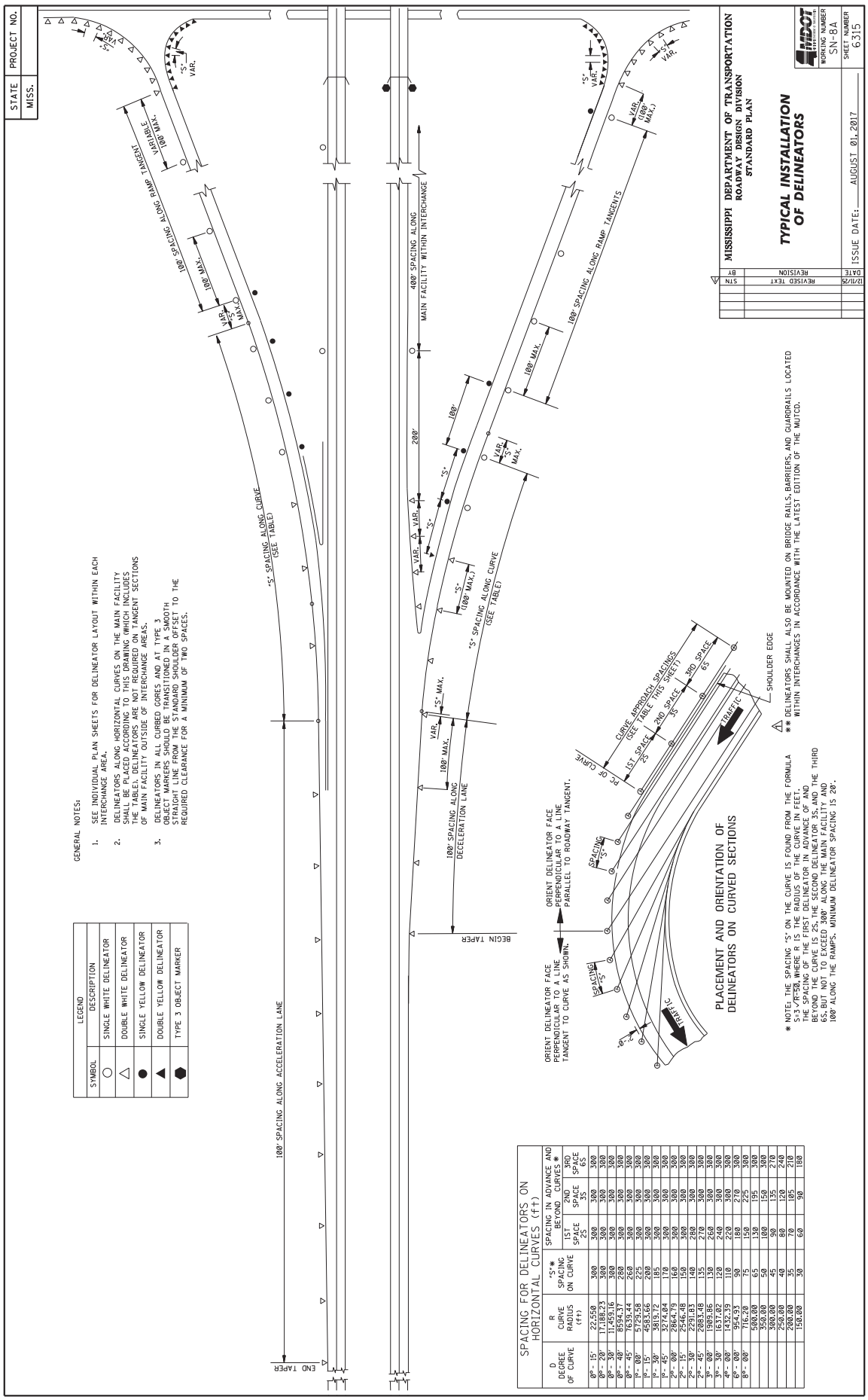
SHEET NUMBER 6310


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
BREAKAWAY SIGN SUPPORTS
WORKING NUMBER SN-6A
SHEET NUMBER 6311
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
POST BRACING DATA
POST SIZE
DESCRIPTION
BOLT SIZE
D2
ANGLE LENGTH
ANGLE SIZE FOR POST SPACING OF
0'-9'
9'-11'
11'-18'
W12 X 26
W10 X 22
W8 X 21
W8 X 18
W6 X 15
W6 X 12
GENERAL NOTE:
1. SEE SN-6 FOR GENERAL NOTES.
SECTION A–A
SECTION B–B
END ELEVATION OF POST AND FOOTING
BASE CONNECTION DETAILS FOR W SHAPED POSTS
HINGE PLATE
FUSE PLATE DETAIL
DETAIL "A" FUSE PLATE
SECTION E–E SECTION F–F
STIFFENER PLATE DETAIL
DIAGRAM OF "BOLT KEEPER"
SHIM DETAIL
BREAKAWAY SUPPORT STUD CLEARANCE DIAGRAM
BASE CONNECTION DATA
FUSE PLATE DATA
FOOTING DATA
DIMENSION
POST SIZE
BOLT SIZE & TORQUE
W6 X 9
W6 X 12
W6 X 15
W8 X 18
W8 X 21
W10 X 22
W10 X 26
W12 X 26
5/8" X 2 3/4" LONG
TORQUE 300 ft-lbs
3/4" X 3 1/2" LONG
TORQUE 500 ft-lbs
MIN. BOLT TENSION (lbs)
STUB LENGTH
STUB** PROJECTION
FOOTING DIAMETER
BARS Y
FOOTING *** DEPTH
12,050
19,200
28,400
39,250
SEE NOTE BELOW
** NOTE: STUB PROJECTION SHOULD BE MEASURED OVER A 5'-0" CHORD AS MEASURED ALONG THE CURVATURE OF THE STUB. FOR ADDITIONAL GUIDANCE ON HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, LATEST EDITION.
*** NOTE: FOOTING DEPTH TO BE SHOWN ELSEWHERE IN THE PLANS.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
BREAKAWAY SIGN SUPPORTS
WORKING NUMBER SN-6B
SHEET NUMBER 6312
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
GENERAL NOTES: (SEE WK. NO. SN-6 FOR ADDITIONAL GENERAL NOTES)
1. THE TOP PLATE OF THE TRIANGULAR SLIP BASE SHALL HAVE THE SAME EXTERIOR DIMENSIONS AS THE BOTTOM PLATE. THE LIFTING CONE SHALL BE WELDED TO THE BOTTOM PLATE ONLY. A HOLE EQUAL TO THE INSIDE DIAMETER OF THE STUB POST SHALL BE CUT THROUGH THE CENTER OF THE TOP PLATE WITH THE HOLE EDGE BEVELED AS DETAILED. TOP & BOTTOM PLATES SHALL BE SYMMETRICAL FOR THE PURPOSE OF ASSEMBLY IN ANY POSITION.
2. BASE CONNECTION ASSEMBLY AS FOLLOWS:
A. ASSEMBLE POST TO STUB WITH 3 BOLTS AND WITH 3 FLAT WASHERS PER BOLT.
B. SHIM AS REQUIRED TO PLUMB POST.
C. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS, KEEPER PLATE, SHIMS AND TO CLEAN THREADS.
D. LOOSEN EACH BOLT IN TURN & RETIGHTEN IN A SYSTEMATIC ORDER TO PRESCRIBED TORQUE. (SEE BASE CONNECTION DATA TABLE).
E. BURR THREADS AT JUNCTION WITH NUT WITH A CENTER PUNCH TO PREVENT NUT FROM LOOSENING.
3. FRICTION CAPS TO BE MANUFACTURED FROM HOT ROLLED OR COLD ROLLED STEEL SHEETS, FOR A MINIMUM SIZE & MINIMUM THICKNESS SHALL BE 3/16" STEEL PLATE. ALL EDGES SHOULD BE REASONABLY STRAIGHT AND SMOOTH. CAPS SHALL BE SIZED AND FORMED IN SUCH A MANNER AS TO PROVIDE A DRIVE-ON FRICTION FIT AND HAVE NO TENDENCY TO ROCK WHEN SEATED ON PIPE. THE DEPTH SHALL BE SUFFICIENT TO GIVE POSITIVE PROTECTION AGAINST ENTRANCE OF RAINWATER. TWO SHALL BE USED ON SHARP CREST OR INVERTED TYPE POSTS AND SHOWN NO SIGNS OF METAL FRACTURE. ALL CAPS SHALL BE SAME IN SHAPE AND GENERAL APPEARANCE AS APPROVED BY THE ENGINEER.
4. STUB PROJECTION SHOULD BE MEASURED OVER A 5'-9" CHORD AS PER AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, LATEST EDITION. SEE WK. NO. SN-6A FOR DIAGRAM.
5. AS AN ALTERNATIVE THE POST LENGTH OF THE SIGN POST CAN BE MADE-UP USING A NOMINAL LENGTH OF GALVANIZED PIPE, A GALVANIZED COUPLING AND GALVANIZED FLAT PLATES OR APPROVED EQUAL WITH ALL NECESSARY HARDWARE REQUIRED TO SECURE THEM TO THE SIGN POST. A GALVANIZED KEEPER PLATE AND A GALVANIZED FRICTION CAP. THE SLIP BASE CASTING SHALL HAVE 3-SCREWS TO SECURE THE POST TO THE CASTING AND ONE SET SCREW TO PREVENT ROTATION. THE MANUFACTURER SHALL PROVIDE SHOP DRAWINGS OF THE COMPLETE ASSEMBLY FOR NDOT APPROVAL.
FRICTION CAP (SEE DETAIL)
SIGN FACE
SIGN POST
TOP OF FOOTING FLUSH WITH GRADE
STUB POST
CONCRETE FOOTING
SPACE BETWEEN PLATES DUE TO WASHERS & BOLT KEEPER
2 1/2"
SEE DETAILS ELSEWHERE ON PLANS
POST LENGTH
STUB LENGTH
PAY LENGTH FOR POST = POST LENGTH + STUB LENGTH
POST ELEVATION
BASE CONNECTION DATA TABLE
DIMENSIONS NOMINAL PIPE SIZES | BOLT SIZE & TORQUE | T | W | C | *D | *E | F | G | *H | J | K | L | M | *N | P | S | U | V | R
3" | 5/8" X 2 1/2" 300 ln - lbs | 5/8" | 3/8" | 1" | 10 3/8" | 2 5/8" | 1/2" | 3/8" | 1/2" | 1 3/4" | 3 1/2" | 1 3/4" | 1 1/4" | 2 1/8" | 6" | 9" | 2" | 4 1/4" | 1/8"
3 1/2" | 3/4" X 3" 500 ln - lbs | 7/8" | 1/8" | 1 1/8" | 13" | 2 7/8" | 1/2" | 3/8" | 5/8" | 2 1/2" | 4 1/2" | 2 1/4" | 1 1/2" | 3 5/8" | 7 1/2" | 11 1/4" | 2 1/2" | 5 3/4" | 5/8"
4" | | | | | | | | | | | | | | | | | | | | |
5" | | | | | | | | | | | | | | | | | | | | |
*NOTE: APPROXIMATE DIMENSIONS
FRICTION CAP DETAIL
NOTE: SEE NOTE 3
PIPE O.D.
1" MIN. 1 3/4" MAX.
SHIM DETAIL
1 3/4"
3/8"
NOTE: FURNISH 2-0.012" ± THICK AND 2-0.032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B 36.
BOLT KEEPER PLATE DETAIL
NOTE: TO BE FABRICATED FROM 28 GAGE THICK GALVANIZED STEEL. TO BE INSTALLED AS SHOWN IN DETAIL AT UPPER LEFT.
MULTI-DIRECTIONAL SIGN POST & STUB POST
SIGN POST
HEX. HEAD NUT
WASHER
TOP PLATE
WASHER
BOLT KEEPER
BOTTOM PLATE
STUB POST
WASHER
H.S. HEX. BOLT 3 REQUIRED SEE TABLE FOR SIZE. 3 WASHERS ALSO REQUIRED PER BOLT.
SECTION A-A
NOTE: SEE DATA TABLE FOR DIMENSIONS
PROVIDE 1/2" DIA. (MAX.) HOLE IN THE BOTTOM PLATE WITHIN THE RADIUS OF THE STUB POST FOR GALVANIZE DRAINAGE.
PRIMARY FLOW OF TRAFFIC

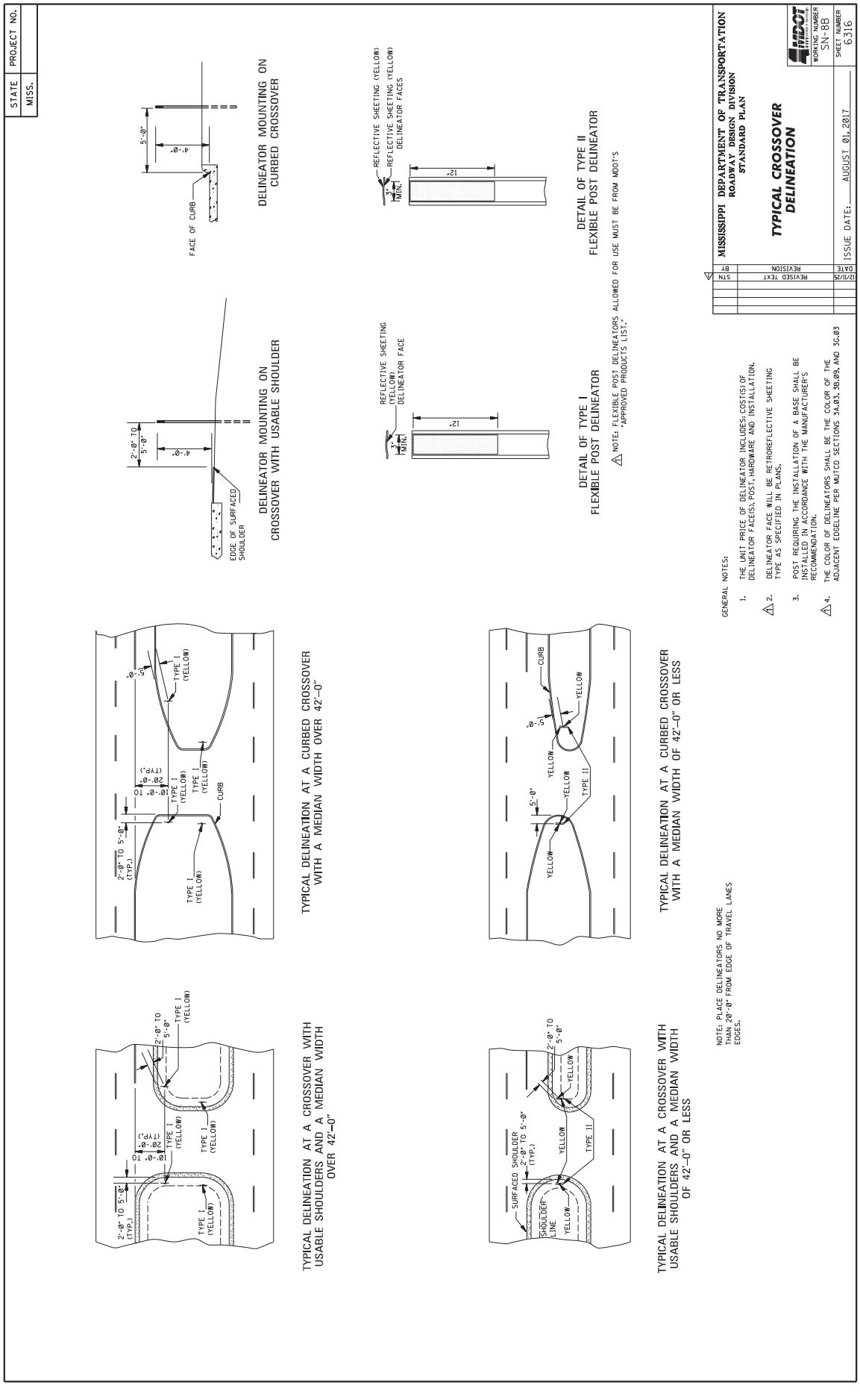

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
SIGN FACE CONST. AND ATTACHMENT OF GROUND MOUNTED DIRECTIONAL SIGNS TO STEEL BEAMS (EXTRUDED ALUMINUM PANELS)
WORKING NUMBER SN-7
SHEET NUMBER 6313
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
GENERAL NOTES:
1. EXIT SIGNS, EXCEPT AS NOTED BELOW, SHALL BE ATTACHED TO PRIMARY SIGNS WITH PANEL BOLTS (AS REQUIRED) AND FOUR (4) CLIPS (TWO PER SIDE) AS SHOWN. ALUMINUM U-SECTION POST PUNCHED AS NEEDED FOR INSTALLATION U-SECTION POST LENGTHS SHALL BE 5'-0" FOR PRIMARY SIGNS WITH 12" UPPER PANELS AND 5'-6" FOR PRIMARY SIGNS WITH 6" UPPER PANELS. EACH POST SHALL HAVE SEVEN BOLTS - THREE (3) IN EXIT SIGN AND FOUR (4) IN PRIMARY SIGN, WHERE PANELS ARE JOINED, PROVIDING TWO (2) SLOTS, ONE ABOVE THE OTHER. PLACING SIGN IN HIGHER SLOT WHERE NEEDED. THE POST SPACING SHOWN ON REAR ELEVATION MAY BE ADJUSTED SOMEWHAT TO STAY CLEAR OF SIGN POSTS AND POST CLIPS.
2. ALL BOLTS, WASHERS AND NUTS IN THE FABRICATION OF EXTRUDED ALUMINUM SIGNS AND THE ATTACHMENT OF SAME TO STEEL BEAMS SHALL BE ALUMINUM, AS PER SPECIFICATIONS. POST CLIP BOLTS AND BOLTS FOR U-SECTION POSTS SHALL HAVE HEADS DESIGNED TO FIT THE BOLT SLOTS IN THE PANELS. THE LOCK-NUTS SHALL BE TIGHTENED ON CLEAN, DRY, "AS RECEIVED" THREADS TO A TORQUE OF 150 in.* lbs.
3. UNLESS OTHERWISE SPECIFIED, THE BACKGROUND OF ALL DIRECTIONAL SIGNS AND NUMBERS SHALL BE INTERSTATE GREEN REFLECTORIZED SHEETING AS PER STANDARD SPECIFICATIONS, DIRECT APPLIED TO 0.063 GAUGE SHEET ALUMINUM. THE COPY SHALL BE WHITE, REFLECTORIZED, DIRECT APPLIED, ADHESIVE BACKED, LETTERS, NUMBERS, SYMBOLS, AND BORDER.
4. SEE OTHER DRAWINGS FOR SELECTION AND DETAILS OF STEEL BEAMS FOR VERTICAL SUPPORTS (SIGN POST).
5. THE DETAILS OF SIGN FACE CONSTRUCTION SHOWN ON THIS SHEET ARE THE SAME FOR OVERHEAD SIGNS, BUT THE METHOD OF MOUNTING IS SHOWN ON OVERHEAD TRUSS DRAWINGS.
6. DATE OF ERECTION AND SIGN SIZE (WIDTH X HEIGHT) SHALL BE LEGIBLY WRITTEN ON THE BACK OF EACH SIGN WITH A PERMANENT GREASE MARKER.
2½ x 8', 0.063 GAUGE ALUMINUM FOR 2 DIGIT EXIT, ie EXIT 47.
2½ x 10', 0.063 GAUGE ALUMINUM FOR 3 DIGIT EXIT, ie. EXIT 47A OR EXIT 350.
EXIT SIGN (WHEN REQ'D) 2-12" PANELS ③ & 1-6" PANEL
6" PANELS (AS REQUIRED)
3'-PANELS SHOWN 4'-PANELS WILL HAVE (2) 12" CENTER RIVETS
12" PANELS (AS REQUIRED)
PRIMARY SIGN ③
HORIZONTAL CENTER OF PANEL TYPICAL
SIGN FACE SHALL BE CONSTRUCTED OF 3' AND 4' 0.063 GAUGE ALUMINUM. 4' PANELS SHOULD HAVE PRECEDENCE OVER 3' PANELS. EX. A 12' WIDE SIGN = (3) 4' PANELS, A 15' WIDE SIGN = (3) 4' + (1) 3'
PANEL BOLT, ⅜" - 16 UNC X ¾" WITH FLAT WASHER AND HEX NUT (24" O.C.)
⅜" x ⅜" GRIP RANGE ALUMINUM POP RIVETS (*66)
FRONT ELEVATION
VARIES
42" MIN.
POST CLIPS
REAR ELEVATION
U-SECTION POST (WHERE REQUIRED) ①
POST CLIP BOLT, ⅜" - 16 UNC X 2½" WITH FLAT WASHER AND STOP NUT (WHERE REQUIRED) ②
ALUMINUM POST CLIP
POST CLIP BOLT, ⅜" - 16 UNC X 1¾" WITH FLAT WASHER AND STOP NUT ②
STEEL BEAM (AS REQUIRED) ④
0.063 GAUGE SHEET ALUMINUM WITH RETROREFLECTIVE SHEETING AND COPY.
SECTION A–A
SECTION B–B
12" PANEL
6" PANEL
NOTE: THE REQUIRED SECTION MODULUS (MINIMUM) ABOUT THE Y-Y AXIS (CENTER OF GRAVITY) IS:
12" PANELS - 0.703 in³
6" PANELS - 0.357 in³

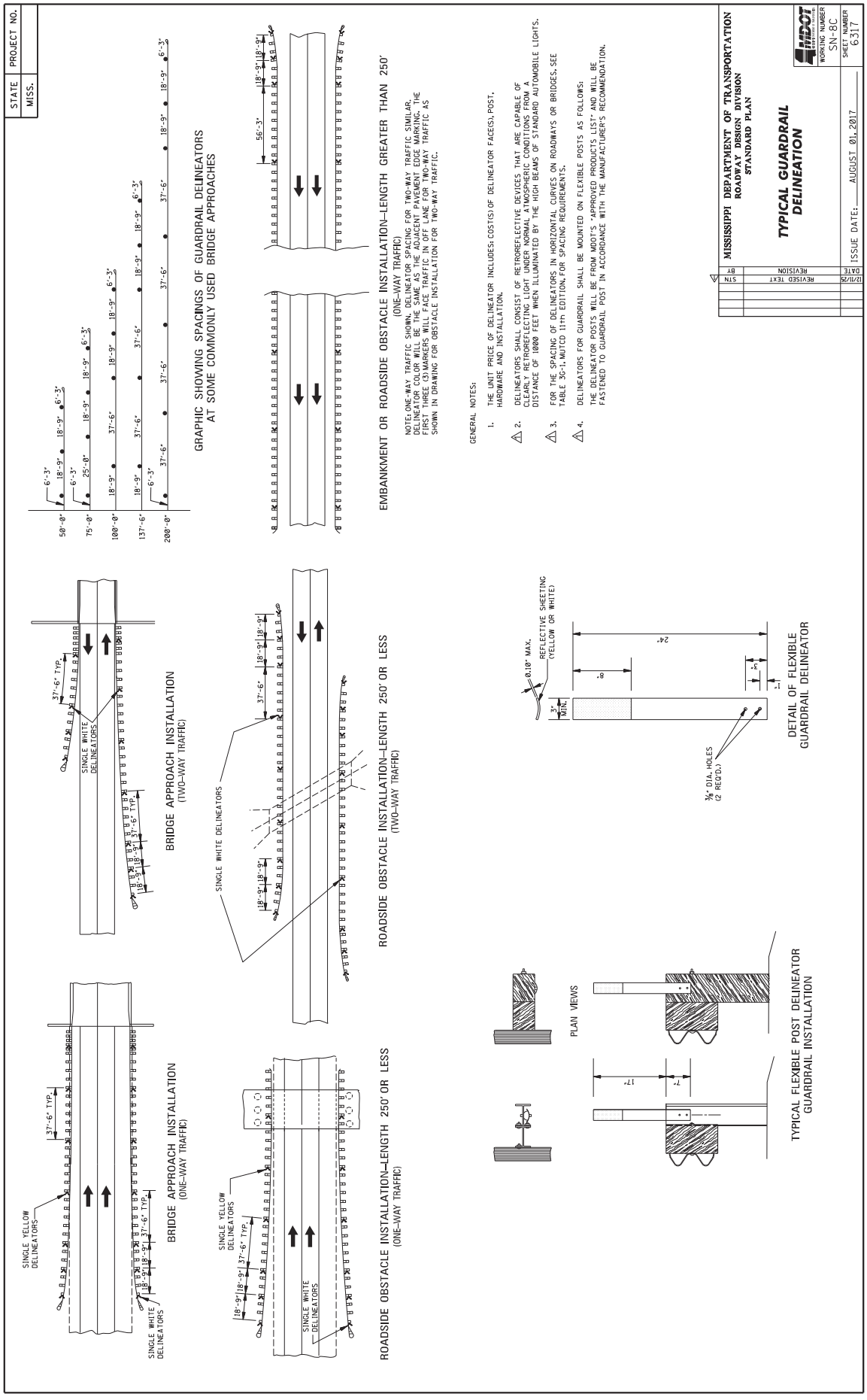

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS
WORKING NUMBER SN-8
SHEET NUMBER 6314
ISSUE DATE: AUGUST 01, 2017
REVISION DATE BY
REVISED TEXT 12/1/25 STN
DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR
REAR VIEW OF DELINEATOR ASSEMBLY
DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR
MOUNTING DETAIL
GENERAL NOTES:
DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP
DETAIL OF TYPE 3 OBJECT MARKER
REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY
DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION
DELINEATOR MOUNTING ON OUTSIDE SHOULDER WITH MOUNTABLE CURB ALONG MAIN FACILITY OR RAMP
DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE

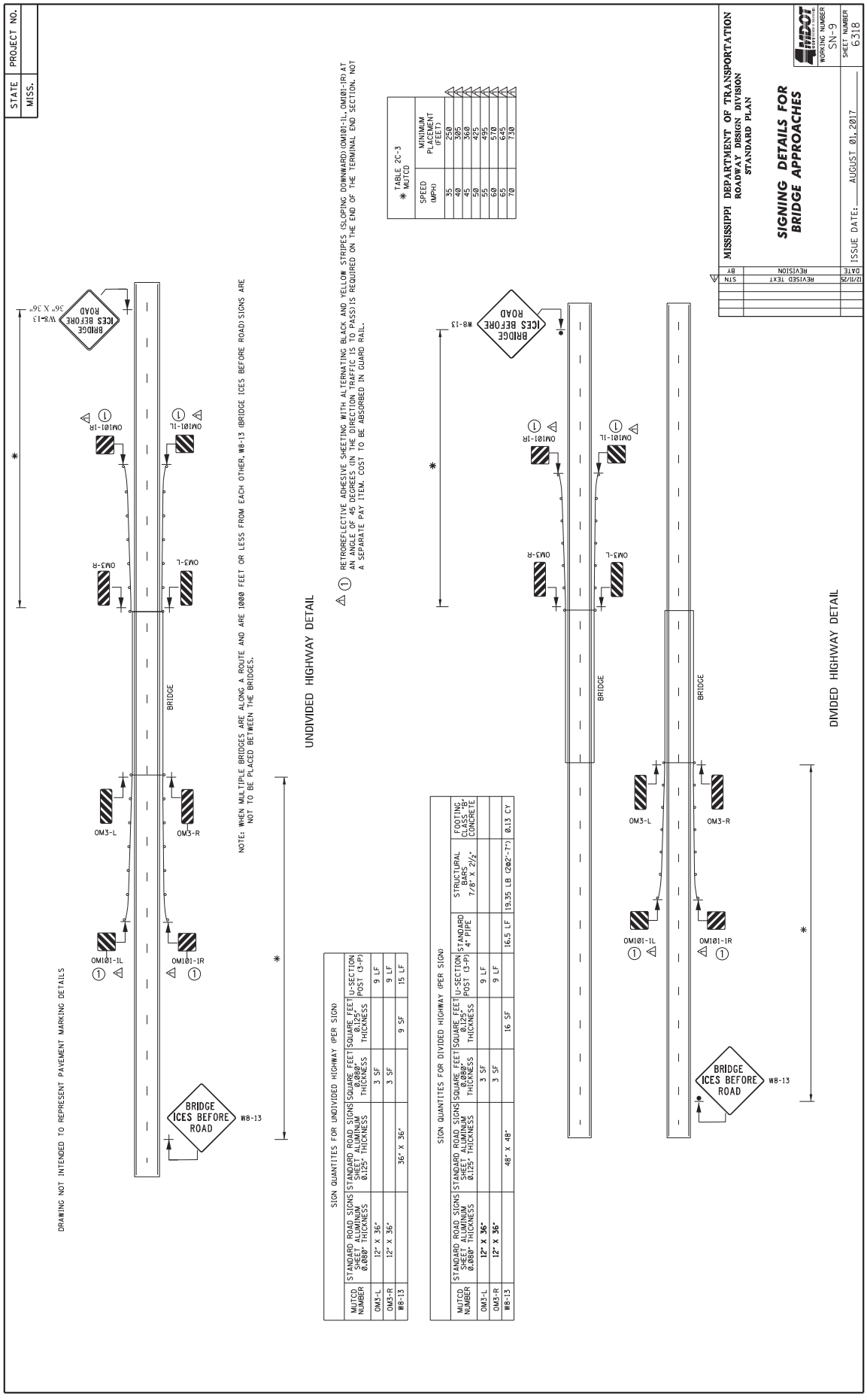


SPACING FOR DELINEATORS ON HORIZONTAL CURVES (ft)

D DEGREE OF CURVE	R CURVE RADIUS (ft)	"S"* SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVES ** 1ST SPACE 2S	2ND SPACE 3S	3RD SPACE 6S
0° - 15'	22,550	300	300	300	300
0° - 20'	17,188.73	300	300	300	300
0° - 30'	11,459.16	300	300	300	300
0° - 40'	8594.37	290	300	300	300
0° - 45'	7639.44	280	300	300	300
1° - 00'	5729.58	225	300	300	300
1° - 15'	4583.66	200	300	300	300
1° - 30'	3819.72	185	300	300	300
1° - 45'	3274.04	170	300	300	300
2° - 00'	2864.79	160	300	300	300
2° - 15'	2546.48	150	300	300	300
2° - 30'	2291.83	140	300	300	300
2° - 45'	2083.48	135	270	300	300
3° - 00'	1909.86	130	260	300	300
3° - 30'	1637.02	120	240	300	300
4° - 00'	1432.39	110	220	300	300
4° - 30'	1273.57	100	200	300	300
8° - 00'	716.20	75	150	225	300
	500.00	65	130	195	300
	350.00	50	100	150	300
	300.00	45	90	135	270
	250.00	40	80	120	240
	200.00	35	70	105	210
	150.00	30	60	90	180


STATE MISS.
PROJECT NO.
DELINEATOR MOUNTING ON CURBED CROSSOVER
FACE OF CURB
5'-0"
4'-0"
DELINEATOR MOUNTING ON CROSSOVER WITH USABLE SHOULDER
EDGE OF SURFACED SHOULDER
2'-0" TO 5'-0"
4'-0"
DETAIL OF TYPE II FLEXIBLE POST DELINEATOR
REFLECTIVE SHEETING (YELLOW)
REFLECTIVE SHEETING (YELLOW) DELINEATOR FACES
3" MIN.
12"
DETAIL OF TYPE I FLEXIBLE POST DELINEATOR
REFLECTIVE SHEETING (YELLOW) DELINEATOR FACE
3" MIN.
12"
NOTE: FLEXIBLE POST DELINEATORS ALLOWED FOR USE MUST BE FROM MDOT'S "APPROVED PRODUCTS LIST."
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OVER 42'-0"
2'-0" TO 5'-0" (TYP.)
TYPE I (YELLOW)
CURB
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OF 42'-0" OR LESS
CURB
YELLOW
TYPE II
5'-0"
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OVER 42'-0"
2'-0" TO 5'-0" (TYP.)
TYPE I (YELLOW)
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OF 42'-0" OR LESS
SURFACED SHOULDER 2'-0" TO 5'-0" (TYP.)
SHOULDER LINE
YELLOW
TYPE II
NOTE: PLACE DELINEATORS NO MORE THAN 20'-0" FROM EDGE OF TRAVEL LANES EDGES.
GENERAL NOTES:
1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACES(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE RETROREFLECTIVE SHEETING TYPE AS SPECIFIED IN PLANS.
3. POST REQUIRING THE INSTALLATION OF A BASE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
4. THE COLOR OF DELINEATORS SHALL BE THE COLOR OF THE ADJACENT EDGELINE PER MUTCD SECTIONS 3A.03, 3B.09, AND 3G.03
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL CROSSOVER DELINEATION
MDOT
WORKING NUMBER SN-88
SHEET NUMBER 6316
ISSUE DATE: AUGUST 01, 2017
DATE 12/11/25 REVISED TEXT STN
BY REVISION


STATE MISS.
PROJECT NO.
GRAPHIC SHOWING SPACINGS OF GUARDRAIL DELINEATORS AT SOME COMMONLY USED BRIDGE APPROACHES
50'-0" 6'-3" 18'-9" 18'-9" 6'-3"
75'-0" 6'-3" 25'-0" 18'-9" 18'-9" 6'-3"
100'-0" 18'-9" 37'-6" 18'-9" 18'-9" 6'-3"
137'-6" 18'-9" 37'-6" 37'-6" 18'-9" 18'-9" 6'-3"
200'-0" 6'-3" 37'-6" 37'-6" 37'-6" 37'-6" 18'-9" 18'-9" 6'-3"
EMBANKMENT OR ROADSIDE OBSTACLE INSTALLATION–LENGTH GREATER THAN 250'
(ONE–WAY TRAFFIC)
NOTE: ONE-WAY TRAFFIC SHOWN. DELINEATOR SPACING FOR TWO-WAY TRAFFIC SIMILAR. DELINEATOR COLOR WILL BE THE SAME AS THE ADJACENT PAVEMENT EDGE MARKING. THE FIRST THREE (3) MARKERS WILL FACE TRAFFIC IN OFF LANE FOR TWO-WAY TRAFFIC AS SHOWN IN DRAWING FOR OBSTACLE INSTALLATION FOR TWO-WAY TRAFFIC.
GENERAL NOTES:
1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATORS SHALL CONSIST OF RETROREFLECTIVE DEVICES THAT ARE CAPABLE OF CLEARLY RETROREFLECTING LIGHT UNDER NORMAL ATMOSPHERIC CONDITIONS FROM A DISTANCE OF 1000 FEET WHEN ILLUMINATED BY THE HIGH BEAMS OF STANDARD AUTOMOBILE LIGHTS.
3. FOR THE SPACING OF DELINEATORS IN HORIZONTAL CURVES ON ROADWAYS OR BRIDGES, SEE TABLE 3G-1, MUTCD 11TH EDITION, FOR SPACING REQUIREMENTS.
4. DELINEATORS FOR GUARDRAIL SHALL BE MOUNTED ON FLEXIBLE POSTS AS FOLLOWS: THE DELINEATOR POSTS WILL BE FROM MDOT'S "APPROVED PRODUCTS LIST" AND WILL BE FASTENED TO GUARDRAIL POST IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
REVISED TEXT
DATE 12/11/25 BY STM
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL GUARDRAIL DELINEATION
WORKING NUMBER SN-8C
ISSUE DATE: AUGUST 01, 2017
SHEET NUMBER 6317
BRIDGE APPROACH INSTALLATION (TWO–WAY TRAFFIC)
BRIDGE APPROACH INSTALLATION (ONE–WAY TRAFFIC)
ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS (TWO–WAY TRAFFIC)
ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS (ONE–WAY TRAFFIC)
SINGLE YELLOW DELINEATORS
SINGLE WHITE DELINEATORS
37'-6" TYP.
18'-9"
0.10" MAX.
REFLECTIVE SHEETING (YELLOW OR WHITE)
3" MIN.
24"
8"
3/8" DIA. HOLES (2 REQ'D.)
PLAN VIEWS
17"
7"
DETAIL OF FLEXIBLE GUARDRAIL DELINEATOR
TYPICAL FLEXIBLE POST DELINEATOR GUARDRAIL INSTALLATION



SIGN QUANTITIES FOR UNDIVIDED HIGHWAY (PER SIGN)

MUTCD NUMBER	STANDARD ROAD SIGNS SHEET ALUMINUM 0.080" THICKNESS	STANDARD ROAD SIGNS SHEET ALUMINUM 0.125" THICKNESS	SQUARE FEET BACKING THICKNESS	SQUARE FEET ALUMINUM HONEYCOMB THICKNESS	U-SECTION POST (3-P)
OM3-L	12" X 36"			3 SF	9 LF
OM3-R	12" X 36"			3 SF	9 LF
W8-13		36" X 36"		9 SF	15 LF

SIGN QUANTITIES FOR DIVIDED HIGHWAY (PER SIGN)

MUTCD NUMBER	STANDARD ROAD SIGNS SHEET ALUMINUM 0.080" THICKNESS	STANDARD ROAD SIGNS SHEET ALUMINUM 0.125" THICKNESS	SQUARE FEET BACKING THICKNESS	SQUARE FEET ALUMINUM HONEYCOMB THICKNESS	U-SECTION POST (3-P)	STANDARD 4" PIPE	STRUCTURAL BARS 7/8" X 2½"	FOOTING CLASS "B" CONCRETE
OM3-L	12" X 36"			3 SF	9 LF			
OM3-R	12" X 36"			3 SF	9 LF			
W8-13		48" X 48"		16 SF		16.5 LF	19.35 LB (2@2'-7")	0.13 CY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 8341 **CODE: (SP)**

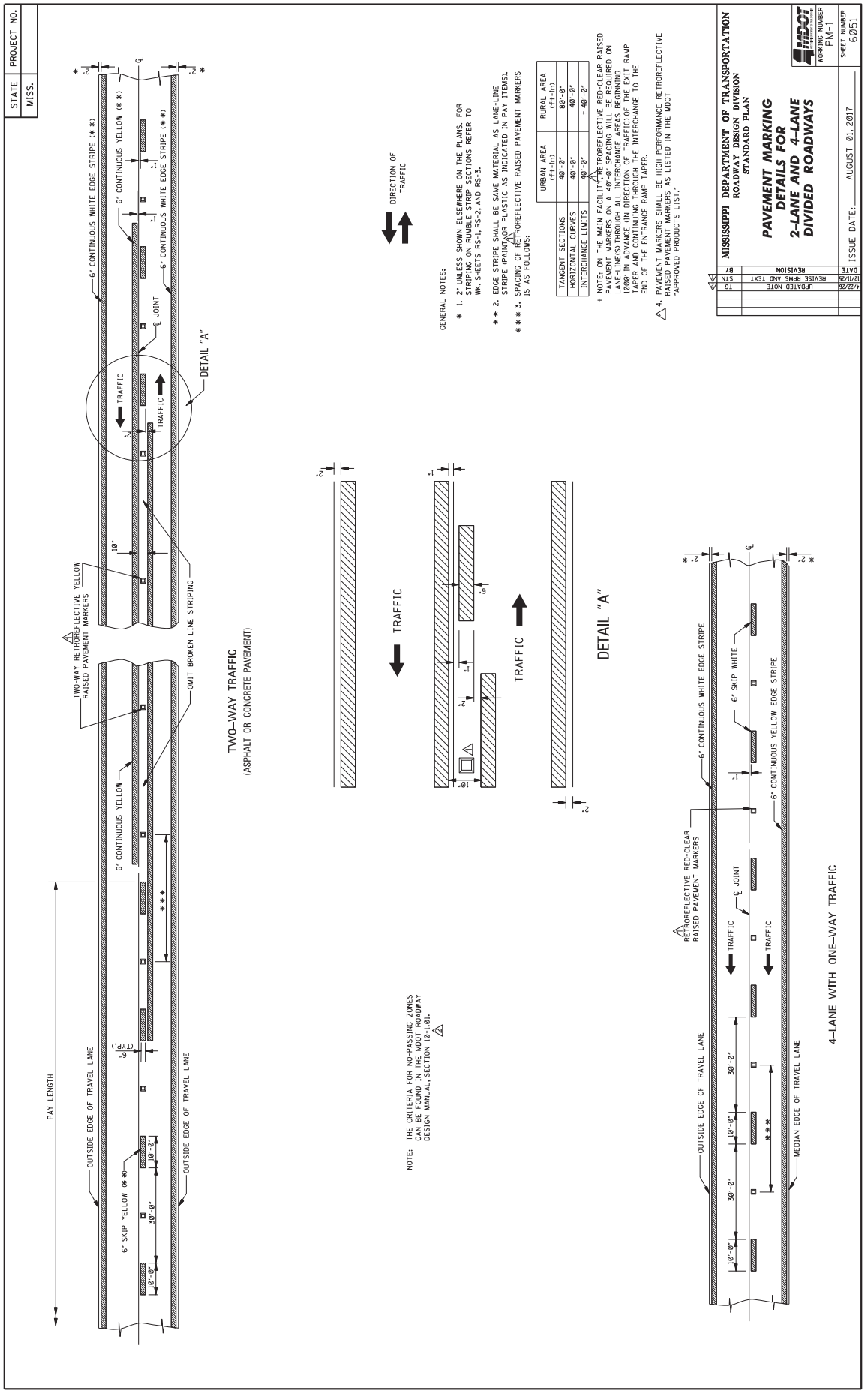
DATE: 08/27/2026

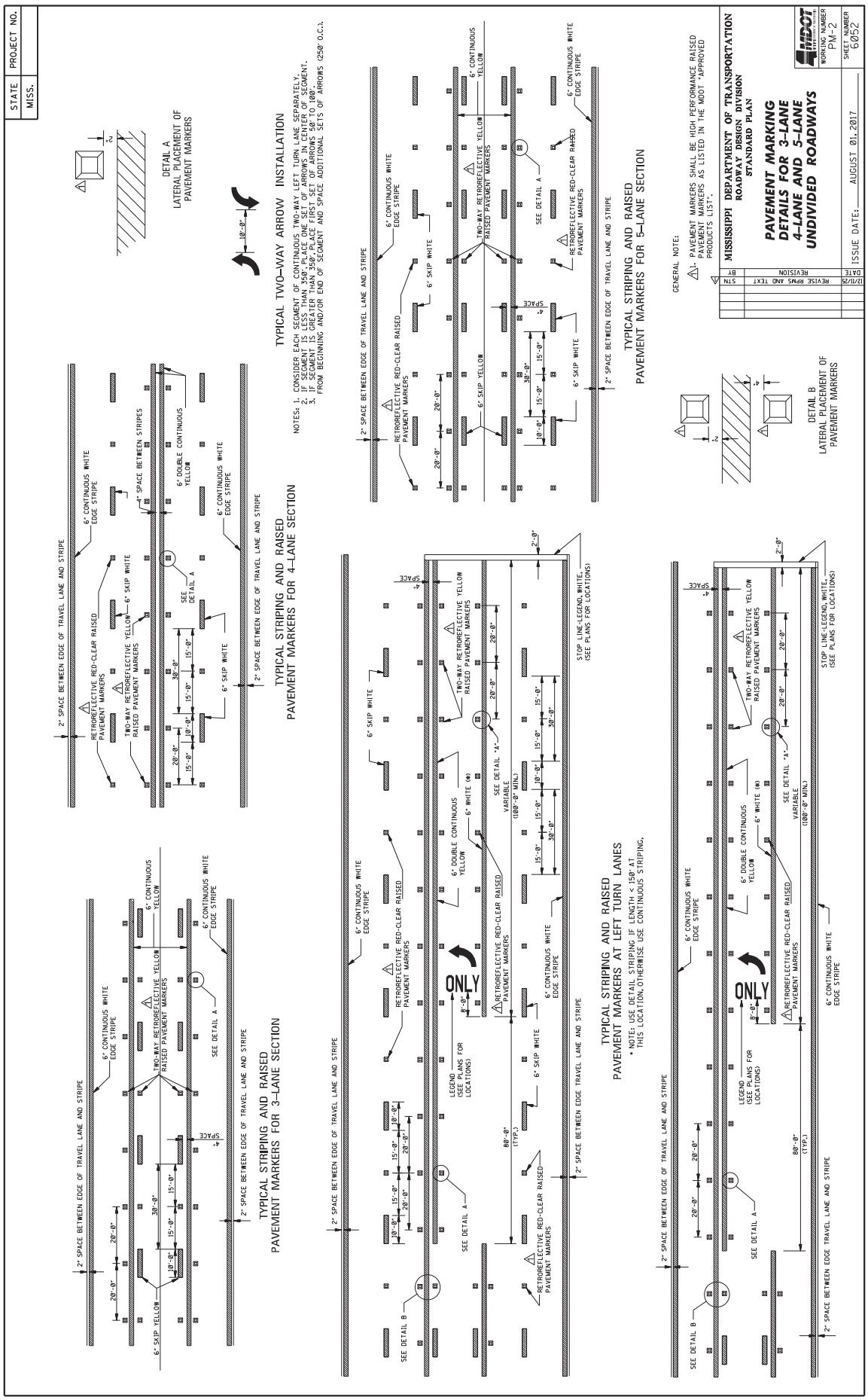
SUBJECT: Standard Drawings

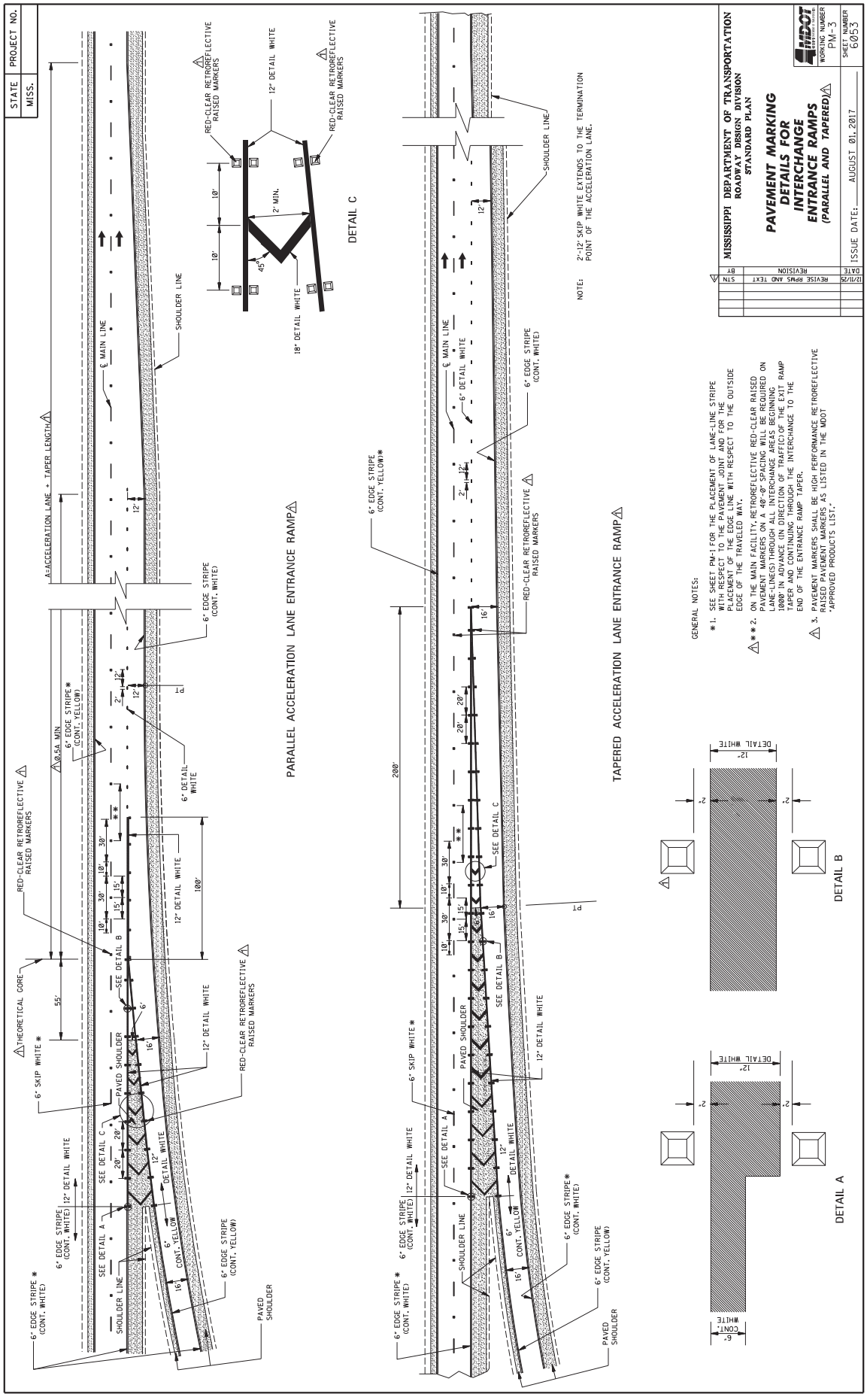
Standard Drawings attached hereto shall govern appropriate items of required work.

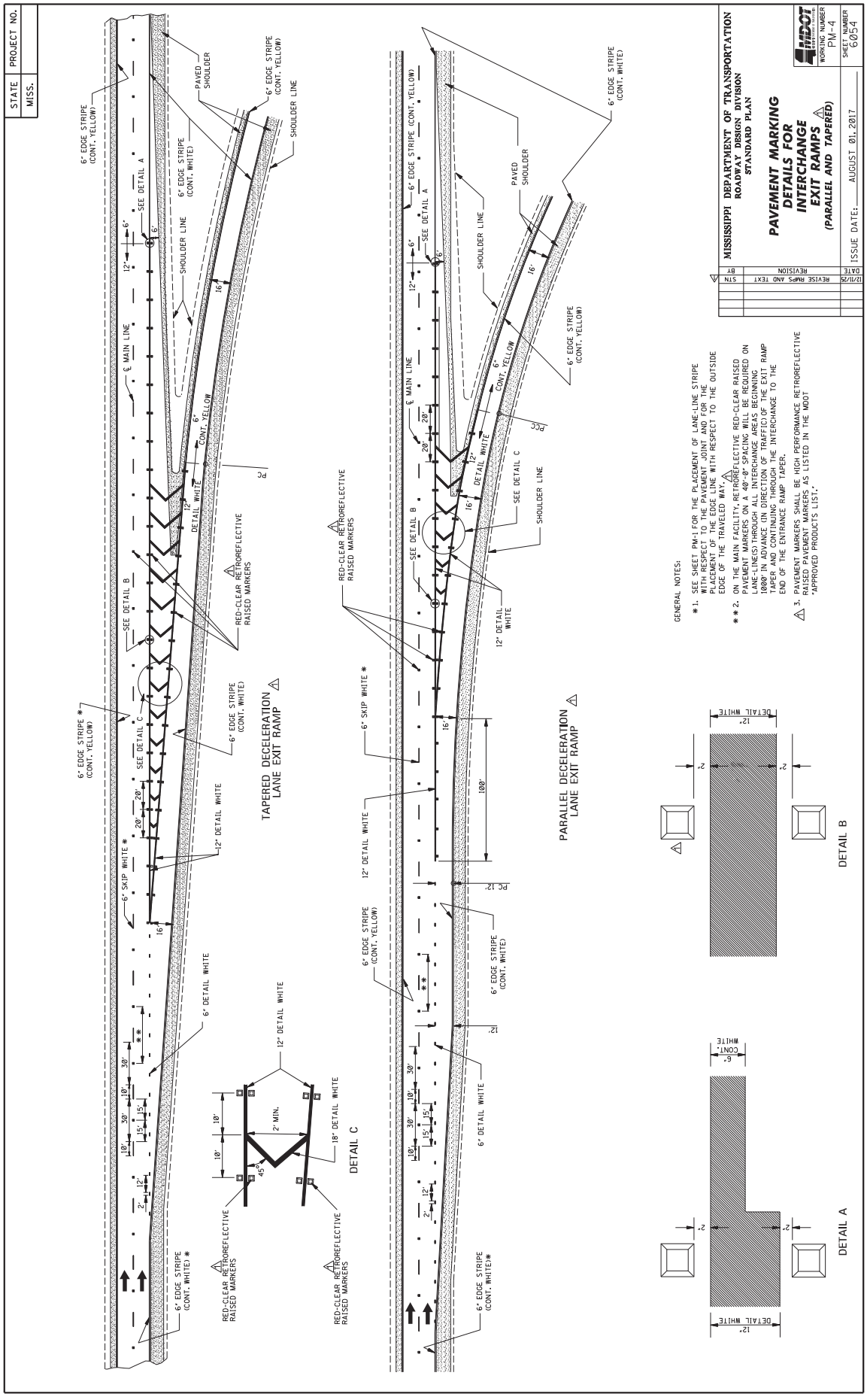
Larger copies of Standard Drawings may be purchased from:

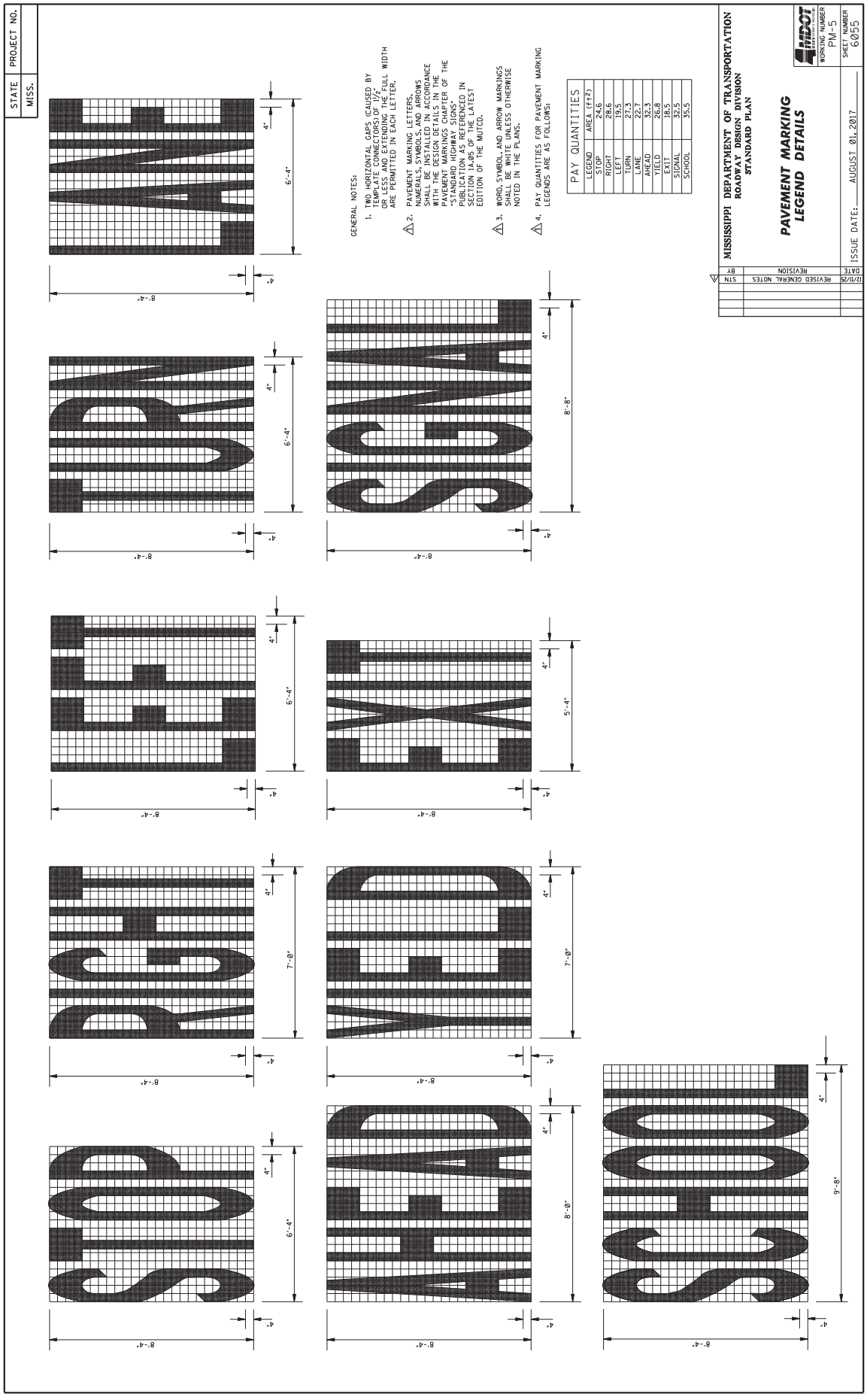
MDOT Plans Print Shop
MDOT Shop Complex, Building C, Room 114
2567 North West Street
P.O. Box 1850
Jackson, MS 39215-1850
Telephone: (601) 359-7460
or FAX: (601) 359-7461
or e-mail: plans@mdot.state.ms.us

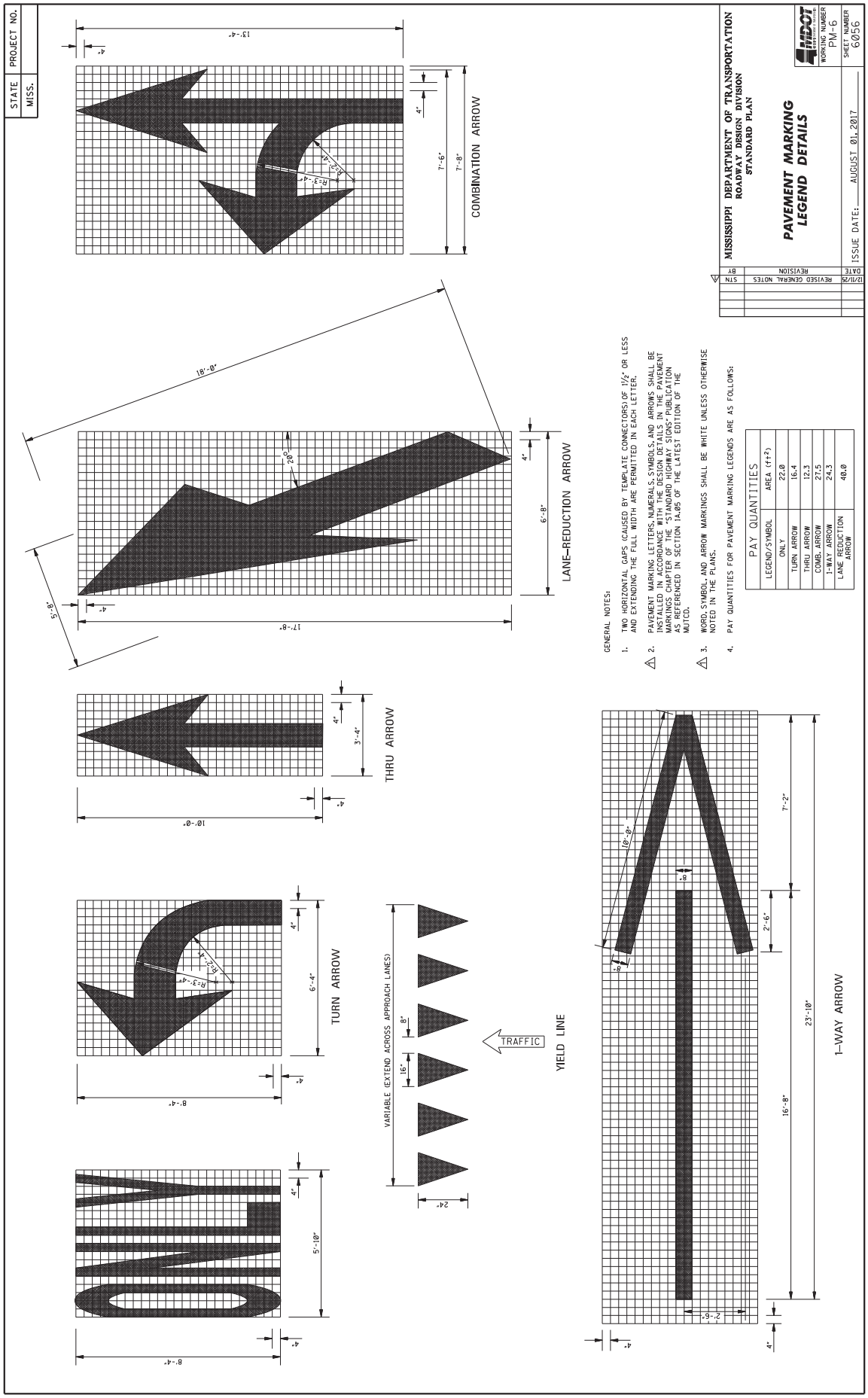

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS
WORKING NUMBER FM-1
SHEET NUMBER 6051
ISSUE DATE: AUGUST 01, 2017
REVISION
DATE
BY
UPDATED NOTE
4/22/26
TO
REVISE RPMS AND TEXT
12/11/25
STN
GENERAL NOTES:
* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO MK. SHEETS RS-1, RS-2, AND RS-3.
** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).
*** 3. SPACING OF RETROREFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:
URBAN AREA (ft-in)
RURAL AREA (ft-in)
TANGENT SECTIONS
HORIZONTAL CURVES
INTERCHANGE LIMITS
† NOTE: ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS SHALL BE REQUIRED ON LANE LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
△4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST."
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
TWO-WAY RETROREFLECTIVE YELLOW RAISED PAVEMENT MARKERS
6" CONTINUOUS YELLOW
6" CONTINUOUS WHITE EDGE STRIPE (**)
6" CONTINUOUS YELLOW (**)
6" CONTINUOUS WHITE EDGE STRIPE (**)
℄ JOINT
TRAFFIC
DETAIL "A"
OMIT BROKEN LINE STRIPING
6" SKIP YELLOW (**)
OUTSIDE EDGE OF TRAVEL LANE
PAY LENGTH
NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDOT ROADWAY DESIGN MANUAL, SECTION 10-1.01.
DIRECTION OF TRAFFIC
4-LANE WITH ONE-WAY TRAFFIC
RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
6" SKIP WHITE
MEDIAN EDGE OF TRAVEL LANE

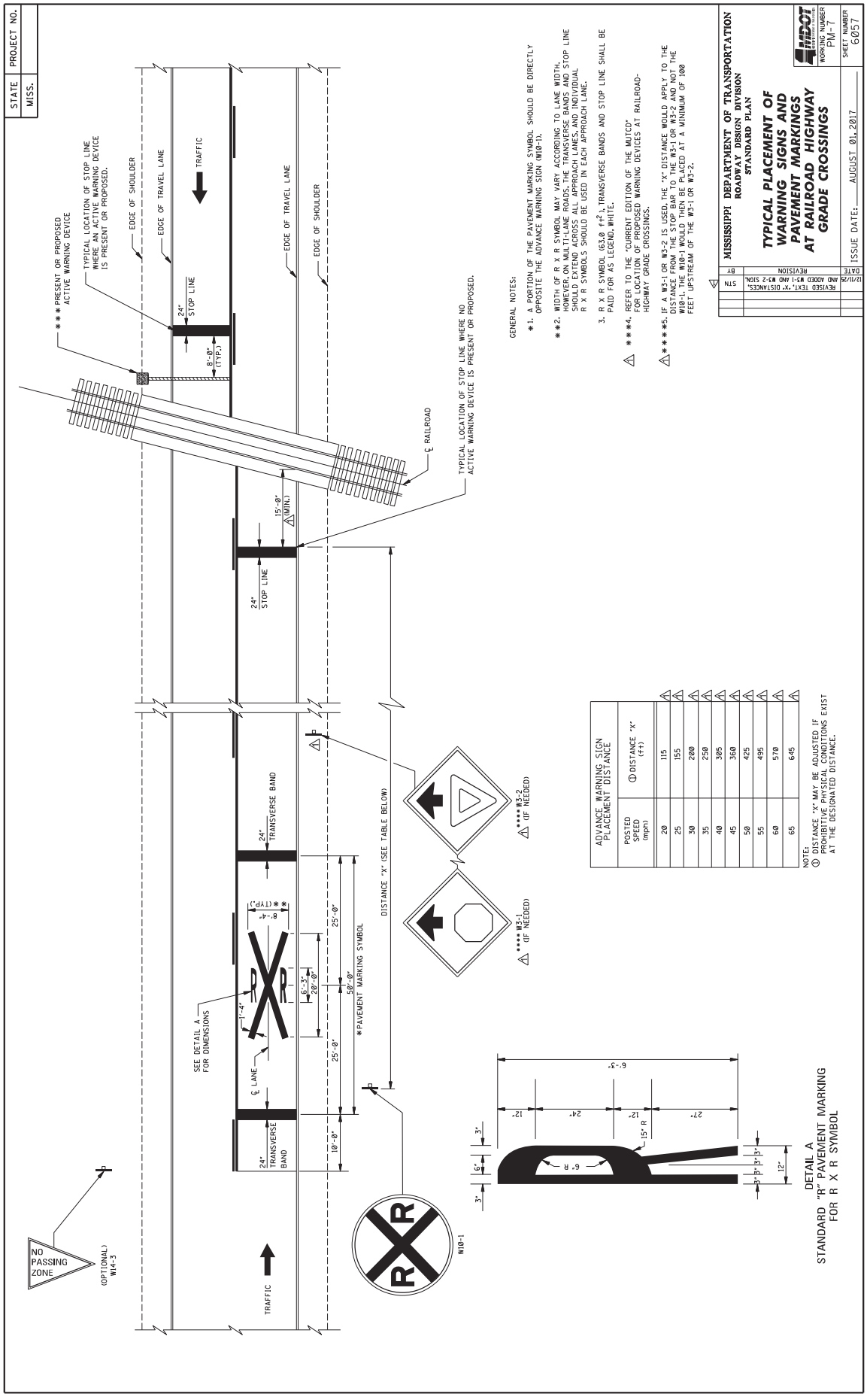

STATE
MISS.
PROJECT NO.
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 3-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION
NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS NEAR CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).
TYPICAL TWO-WAY ARROW INSTALLATION
DETAIL A
LATERAL PLACEMENT OF PAVEMENT MARKERS
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES
* NOTE: USE DETAIL STRIPING IF LENGTH < 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.
DETAIL B
LATERAL PLACEMENT OF PAVEMENT MARKERS
GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST".
STN
DATE
REVISION
BY
12/1/25
REVISE RPMS AND TEXT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR 3-LANE 4-LANE AND 5-LANE UNDIVIDED ROADWAYS
ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER PM-2
SHEET NUMBER 6052

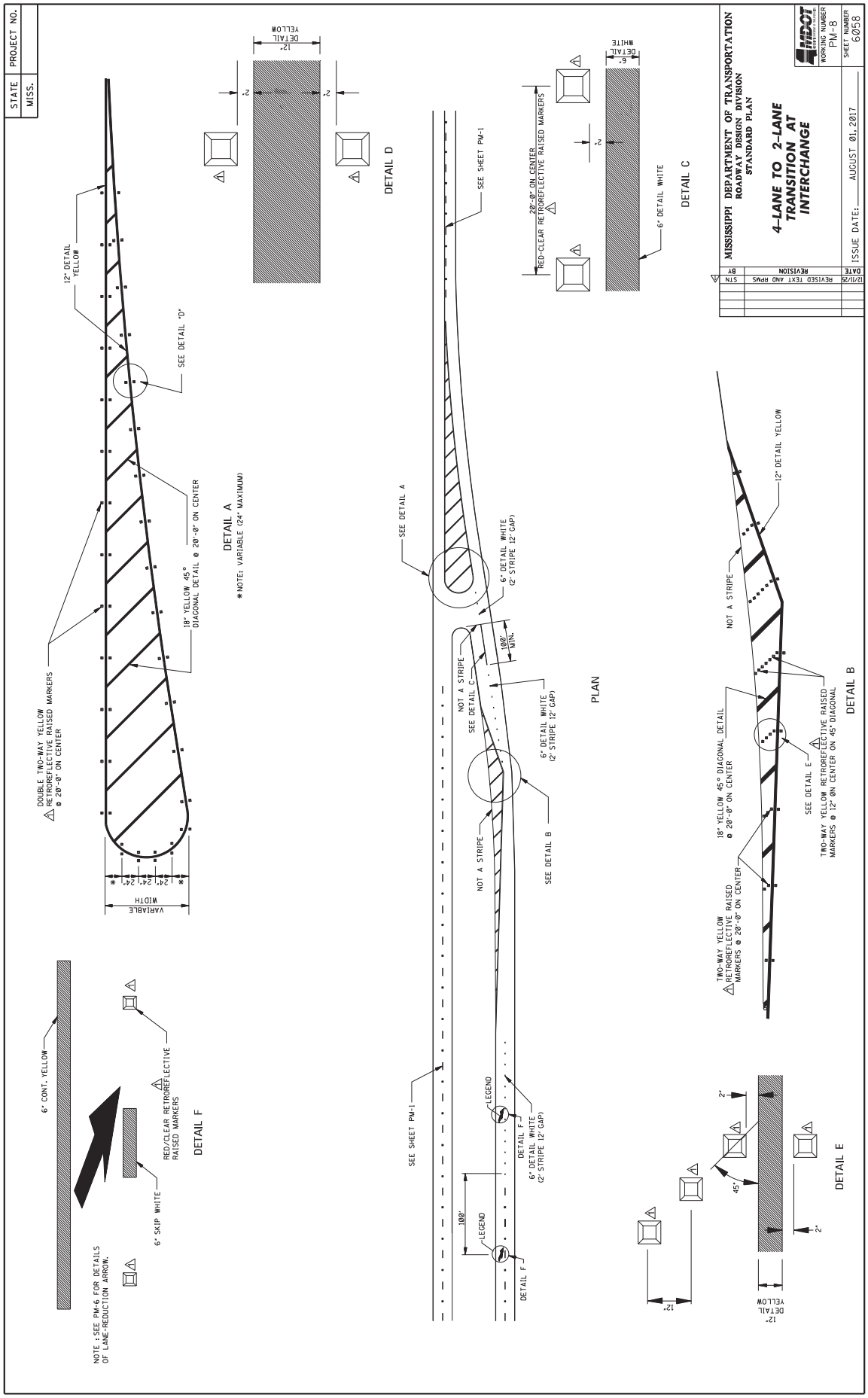

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPERED)
WORKING NUMBER PM-3
SHEET NUMBER 6053
ISSUE DATE: AUGUST 01, 2017
REVISE RPMS AND TEXT STN 12/11/25
PARALLEL ACCELERATION LANE ENTRANCE RAMP
TAPERED ACCELERATION LANE ENTRANCE RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
*1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
**2. ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST."
NOTE: 2'-12' SKIP WHITE EXTENDS TO THE TERMINATION POINT OF THE ACCELERATION LANE.

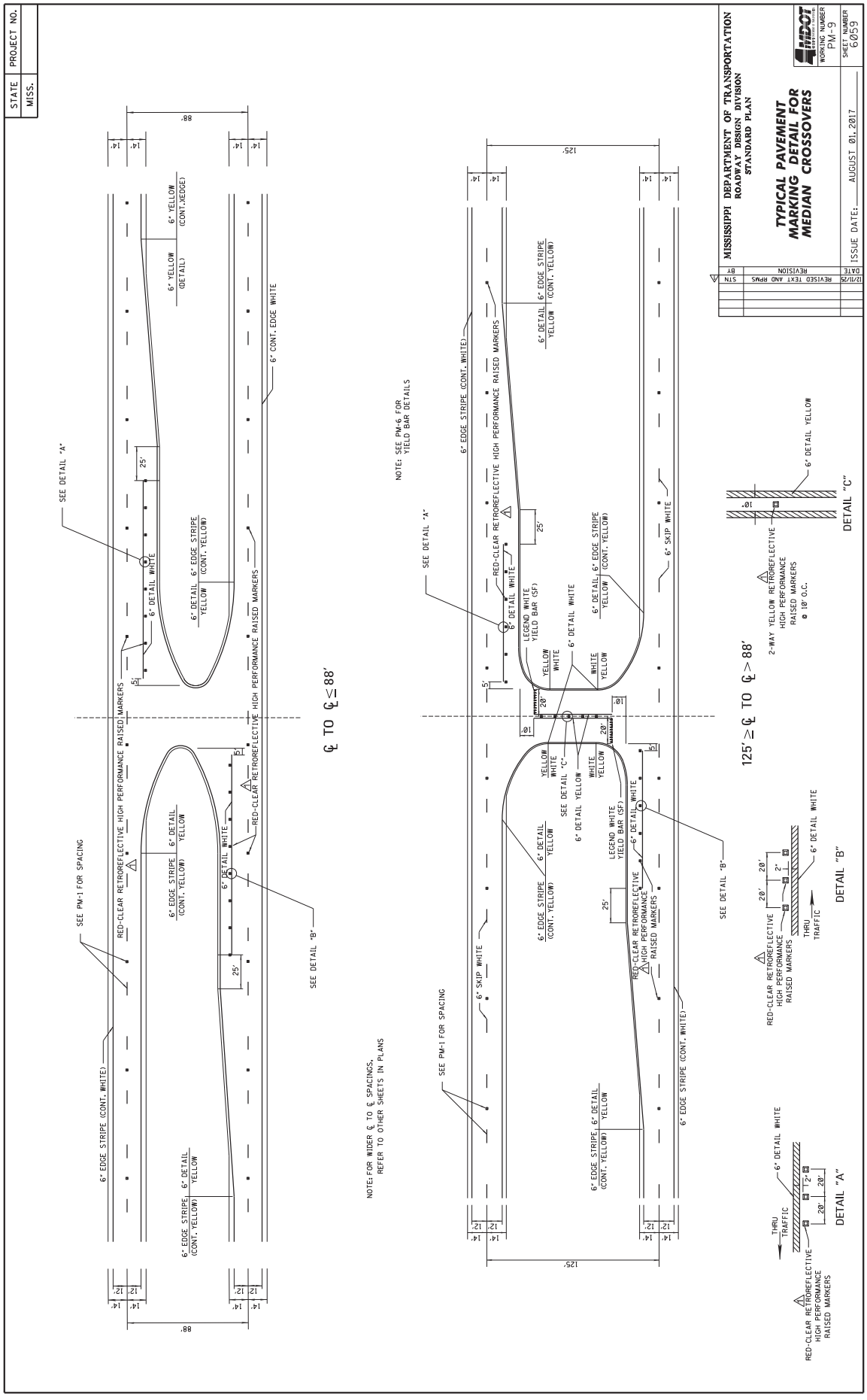

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMPS (PARALLEL AND TAPERED)
WORKING NUMBER PM-4
SHEET NUMBER 6054
ISSUE DATE: AUGUST 01, 2017
DATE BY REVISION
12/1/23 STN REVISE RAMPS AND TEXT
TAPERED DECELERATION LANE EXIT RAMP
PARALLEL DECELERATION LANE EXIT RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
* 1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINTS AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
* * 2. ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST."

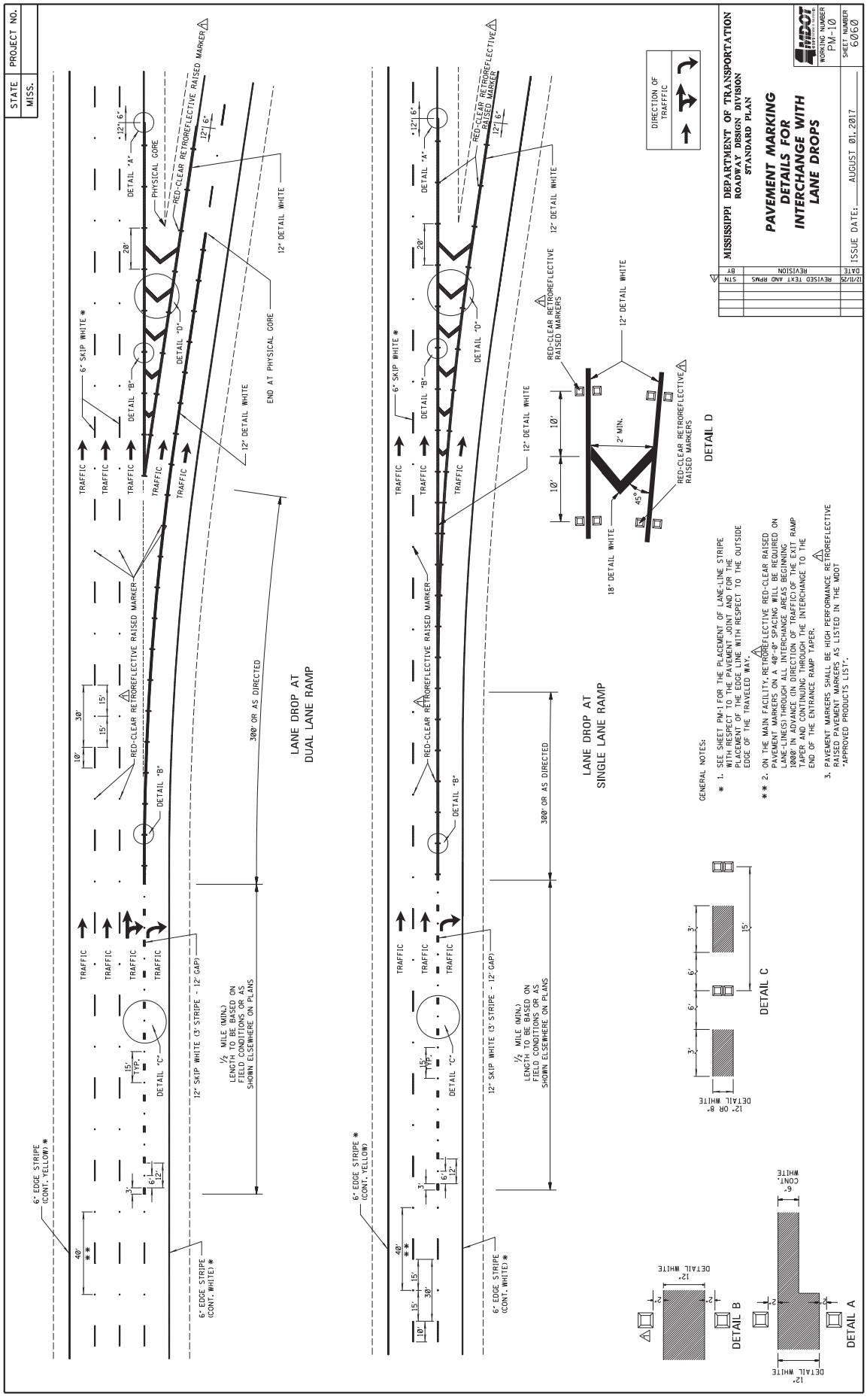

STATE
MISS.
PROJECT NO.
GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. PAVEMENT MARKING LETTERS, NUMERALS, SYMBOLS, AND ARROWS SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN DETAILS IN THE PAVEMENT MARKINGS CHAPTER OF THE STANDARD HIGHWAY SIGNS PUBLICATION REFERENCED IN SECTION 1A.05 OF THE LATEST EDITION OF THE MUTCD.
3. WORD, SYMBOL, AND ARROW MARKINGS SHALL BE WHITE UNLESS OTHERWISE NOTED IN THE PLANS.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:
PAY QUANTITIES
LEGEND AREA (FT²)
STOP 24.6
RIGHT 28.6
LEFT 19.5
TURN 27.3
LANE 22.7
AHEAD 32.3
YIELD 26.8
EXIT 18.5
SIGNAL 32.5
SCHOOL 35.5
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING LEGEND DETAILS
WORKING NUMBER PM-5
SHEET NUMBER 6055
ISSUE DATE: AUGUST 01, 2017
DATE BY REVISION
12/11/25 STN REVISED GENERAL NOTES

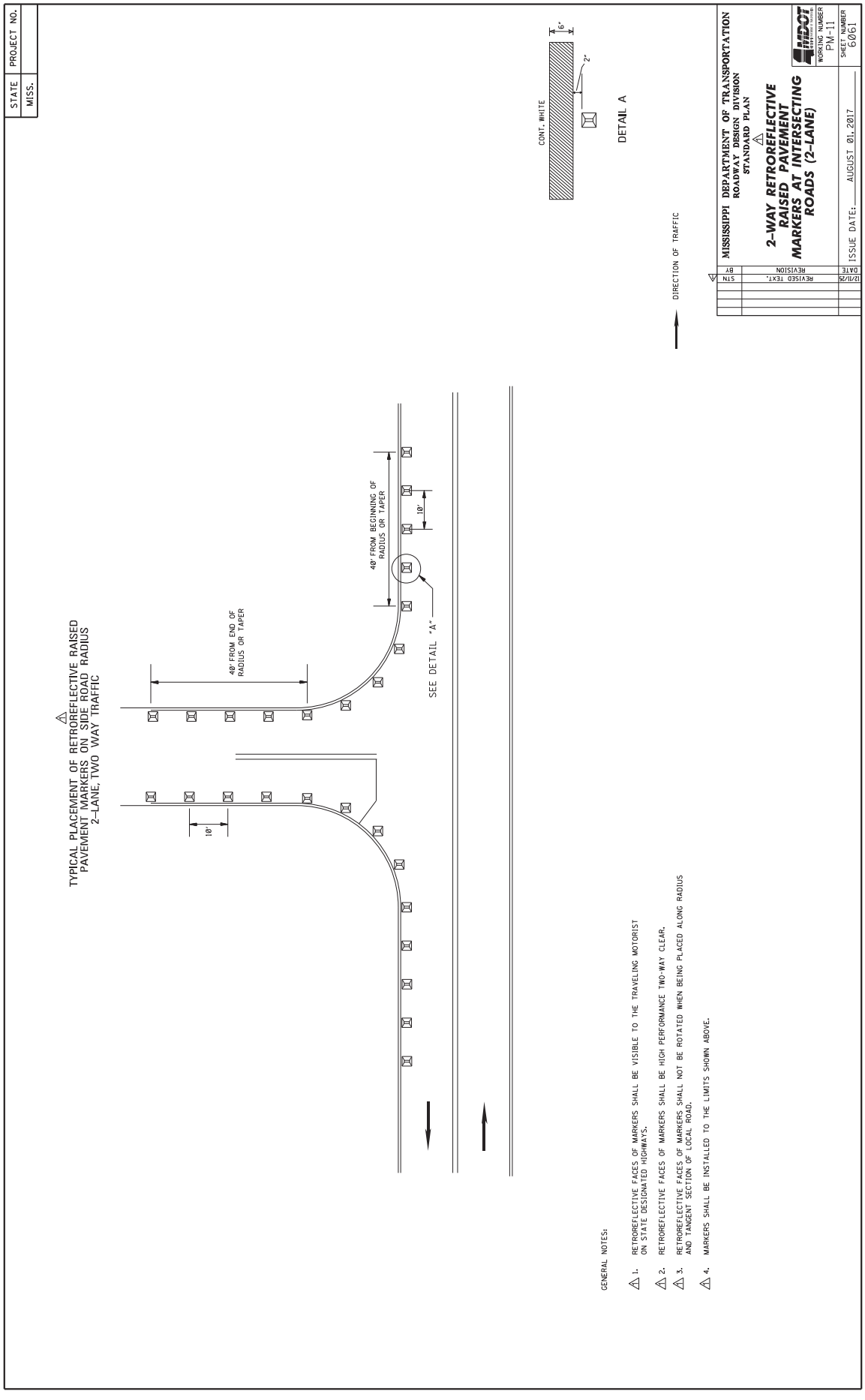

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING LEGEND DETAILS
WORKING NUMBER PM-6
SHEET NUMBER 6056
ISSUE DATE: AUGUST 01, 2017
DATE BY REVISION
12/1/23 STN REVISED GENERAL NOTES
GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. PAVEMENT MARKING LETTERS, NUMERALS, SYMBOLS, AND ARROWS SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN DETAILS IN THE PAVEMENT MARKINGS CHAPTER OF THE "STANDARD HIGHWAY SIGNS" PUBLICATION AS REFERENCED IN SECTION 1A.05 OF THE LATEST EDITION OF THE MUTCD.
3. WORD, SYMBOL AND ARROW MARKINGS SHALL BE WHITE UNLESS OTHERWISE NOTED IN THE PLANS.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:
PAY QUANTITIES
LEGEND/SYMBOL | AREA (ft²)
ONLY | 22.0
TURN ARROW | 16.4
THRU ARROW | 12.3
COMB. ARROW | 27.5
1-WAY ARROW | 24.3
LANE REDUCTION ARROW | 40.0
COMBINATION ARROW
LANE-REDUCTION ARROW
THRU ARROW
TURN ARROW
YIELD LINE
TRAFFIC
VARIABLE (EXTEND ACROSS APPROACH LANES)
1-WAY ARROW

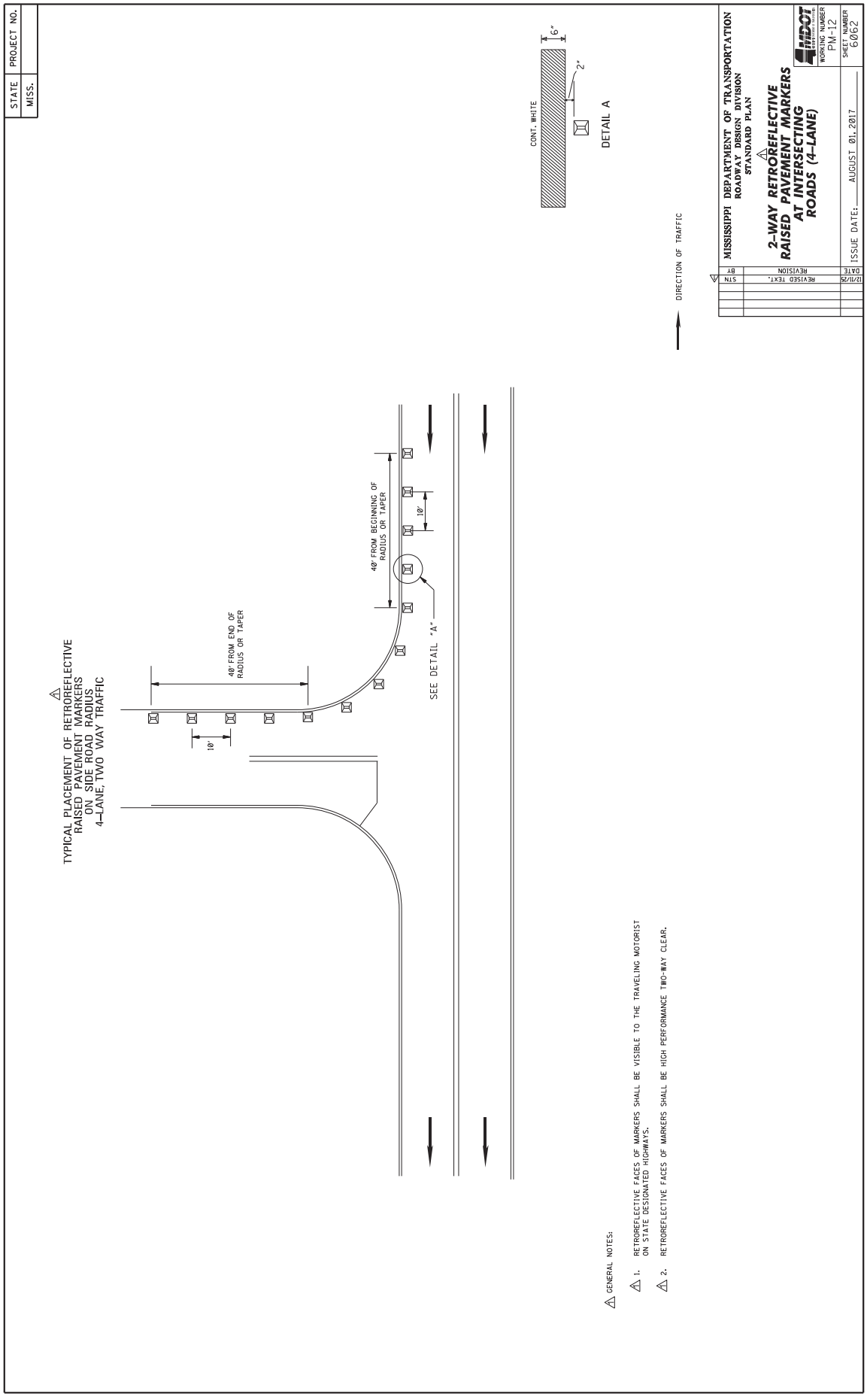

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PLACEMENT OF WARNING SIGNS AND PAVEMENT MARKINGS AT RAILROAD HIGHWAY GRADE CROSSINGS
WORKING NUMBER FM-1
SHEET NUMBER 6057
ISSUE DATE: AUGUST 01, 2017
REVISION
DATE
BY
12/11/25 REVISED TEXT, 'X' DISTANCES, AND ADDED M3-1 AND M3-2 SIGN. STN
GENERAL NOTES:
*1. A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
**2. WIDTH OF R X R SYMBOL MAY VARY ACCORDING TO LANE WIDTH. HOWEVER, ON MULTI-LANE ROADS, THE TRANSVERSE BANDS AND STOP LINE SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.
3. R X R SYMBOL (63.0 ft²), TRANSVERSE BANDS AND STOP LINE SHALL BE PAID FOR AS LEGEND, WHITE.
***4. REFER TO THE "CURRENT EDITION OF THE MUTCD" FOR LOCATION OF PROPOSED WARNING DEVICES AT RAILROAD-HIGHWAY GRADE CROSSINGS.
****5. IF A W3-1 OR W3-2 IS USED, THE 'X' DISTANCE WOULD APPLY TO THE DISTANCE FROM THE STOP BAR TO THE W10-1 SIGN AND TO THE W10-1, THE W10-1 WOULD THEN BE PLACED AT A MINIMUM OF 100 FEET UPSTREAM OF THE W3-1 OR W3-2.
ADVANCE WARNING SIGN PLACEMENT DISTANCE
POSTED SPEED (mph)
① DISTANCE "X" (ft)
20 115
25 155
30 200
35 250
40 305
45 360
50 425
55 495
60 570
65 645
NOTE:
① DISTANCE "X" MAY BE ADJUSTED IF PROHIBITIVE PHYSICAL CONDITIONS EXIST AT THE DESIGNATED DISTANCE.
*** PRESENT OR PROPOSED ACTIVE WARNING DEVICE
TYPICAL LOCATION OF STOP LINE WHERE AN ACTIVE WARNING DEVICE IS PRESENT OR PROPOSED.
EDGE OF SHOULDER
EDGE OF TRAVEL LANE
TRAFFIC
24" STOP LINE
8'-0" (TYP.)
℄ RAILROAD
TYPICAL LOCATION OF STOP LINE WHERE NO ACTIVE WARNING DEVICE IS PRESENT OR PROPOSED.
15'-0" (MIN.)
24" TRANSVERSE BAND
1'-4" (TYP.)
SEE DETAIL A FOR DIMENSIONS
℄ LANE
*PAVEMENT MARKING SYMBOL
DISTANCE "X" (SEE TABLE BELOW)
25'-0"
50'-0"
10'-0"
2'-3"
20'-0"
**** W3-2 (IF NEEDED)
**** W3-1 (IF NEEDED)
W10-1
NO PASSING ZONE
(OPTIONAL) W14-3
DETAIL A
STANDARD "R" PAVEMENT MARKING FOR R X R SYMBOL
6'-3"
12"
24"
27"
15° R
6" R
3"
6"

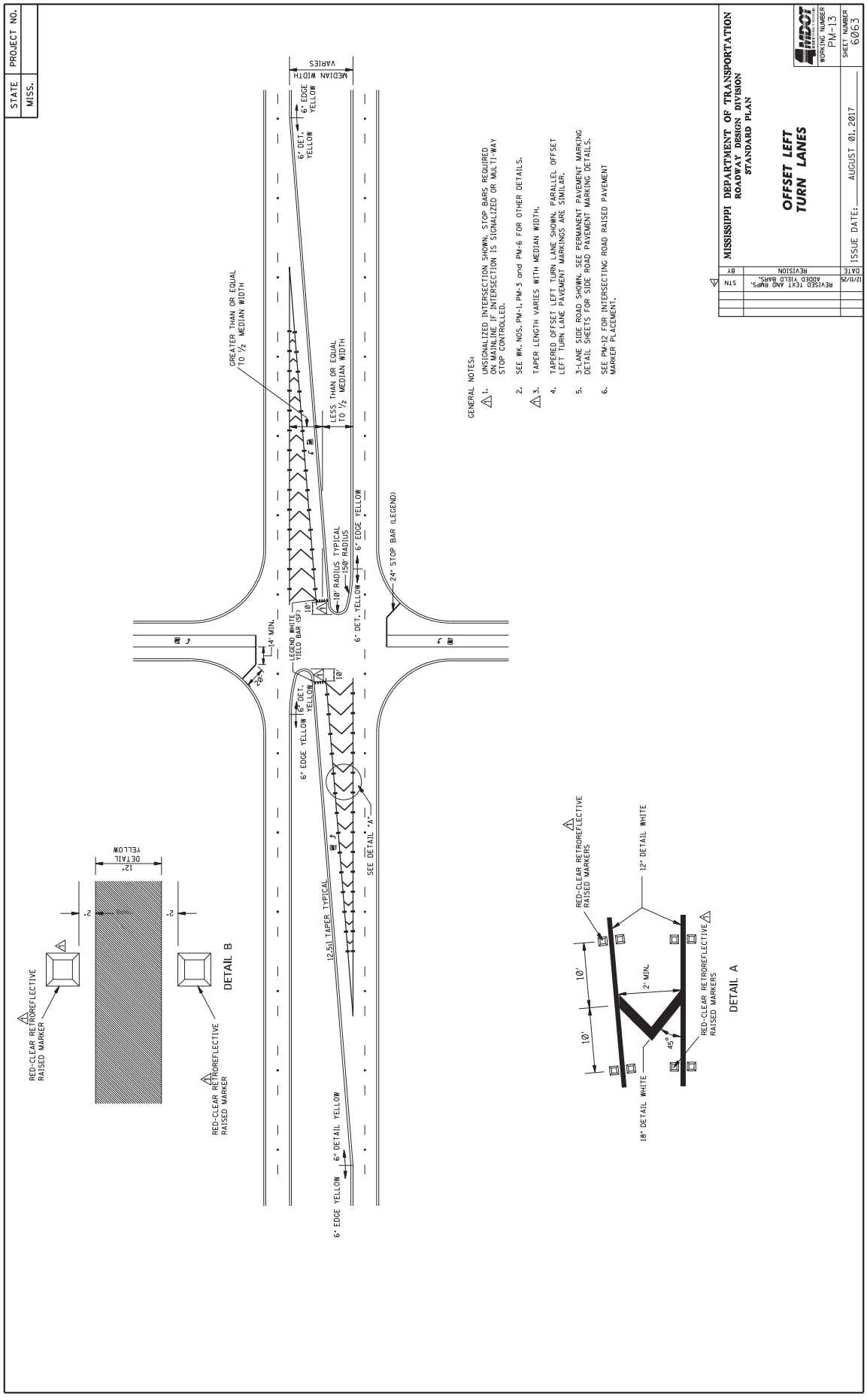

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
4-LANE TO 2-LANE TRANSITION AT INTERCHANGE
WORKING NUMBER PM-8
SHEET NUMBER 6058
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/1/25 REVISED TEXT AND RPMS STN
DOUBLE TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 20'-0" ON CENTER
12" DETAIL YELLOW
SEE DETAIL "D"
18" YELLOW 45° DIAGONAL DETAIL @ 20'-0" ON CENTER
VARIABLE WIDTH
24" 24" 24" 24"
DETAIL A
*NOTE: VARIABLE (24" MAXIMUM)
12" DETAIL YELLOW
2"
DETAIL D
20'-0" ON CENTER
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
6" DETAIL WHITE
DETAIL C
SEE SHEET PM-1
SEE DETAIL A
6" DETAIL WHITE (2" STRIPE 12' GAP)
100' MIN.
NOT A STRIPE
SEE DETAIL C
6" DETAIL WHITE (2" STRIPE 12' GAP)
SEE DETAIL B
PLAN
SEE SHEET PM-1
LEGEND
DETAIL F
6" DETAIL WHITE (2" STRIPE 12' GAP)
100'
LEGEND
DETAIL F
12" DETAIL YELLOW
NOT A STRIPE
18" YELLOW 45° DIAGONAL DETAIL @ 20'-0" ON CENTER
SEE DETAIL E
TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 20'-0" ON CENTER
TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 12' ON CENTER ON 45° DIAGONAL
DETAIL B
6" CONT. YELLOW
RED/CLEAR RETROREFLECTIVE RAISED MARKERS
6" SKIP WHITE
NOTE : SEE PM-6 FOR DETAILS OF LANE-REDUCTION ARROW.
DETAIL F
2"
45°
2"
12"
12" DETAIL YELLOW
DETAIL E

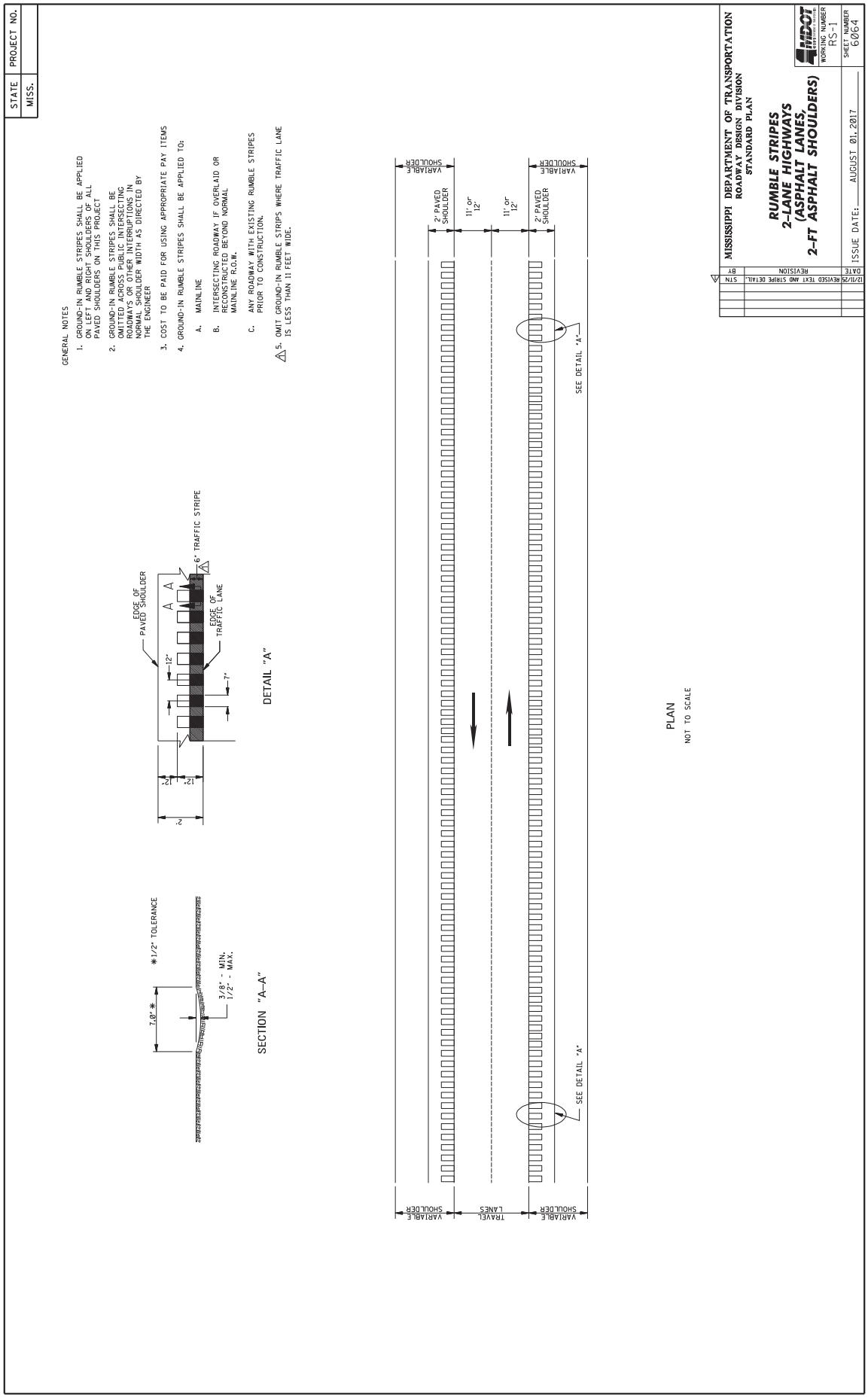

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PAVEMENT MARKING DETAIL FOR MEDIAN CROSSOVERS
WORKING NUMBER PM-9
SHEET NUMBER 6059
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISED TEXT AND RPMS STN
SEE DETAIL "A"
SEE DETAIL "B"
SEE PM-1 FOR SPACING
RED-CLEAR RETROREFLECTIVE HIGH PERFORMANCE RAISED MARKERS
6" EDGE STRIPE (CONT. WHITE)
6" DETAIL WHITE
6" DETAIL YELLOW
6" EDGE STRIPE (CONT. YELLOW)
6" YELLOW (DETAIL)
6" YELLOW (CONT.XEDGE)
6" CONT. EDGE WHITE
℄ TO ℄≤88'
NOTE: FOR WIDER ℄ TO ℄ SPACINGS, REFER TO OTHER SHEETS IN PLANS
NOTE: SEE PM-6 FOR YIELD BAR DETAILS
SEE DETAIL "C"
6" SKIP WHITE
LEGEND WHITE YIELD BAR (SF)
125'≥℄ TO ℄>88'
2-WAY YELLOW RETROREFLECTIVE HIGH PERFORMANCE RAISED MARKERS @ 10' O.C.
DETAIL "C"
DETAIL "A"
DETAIL "B"
THRU TRAFFIC
88'
125'

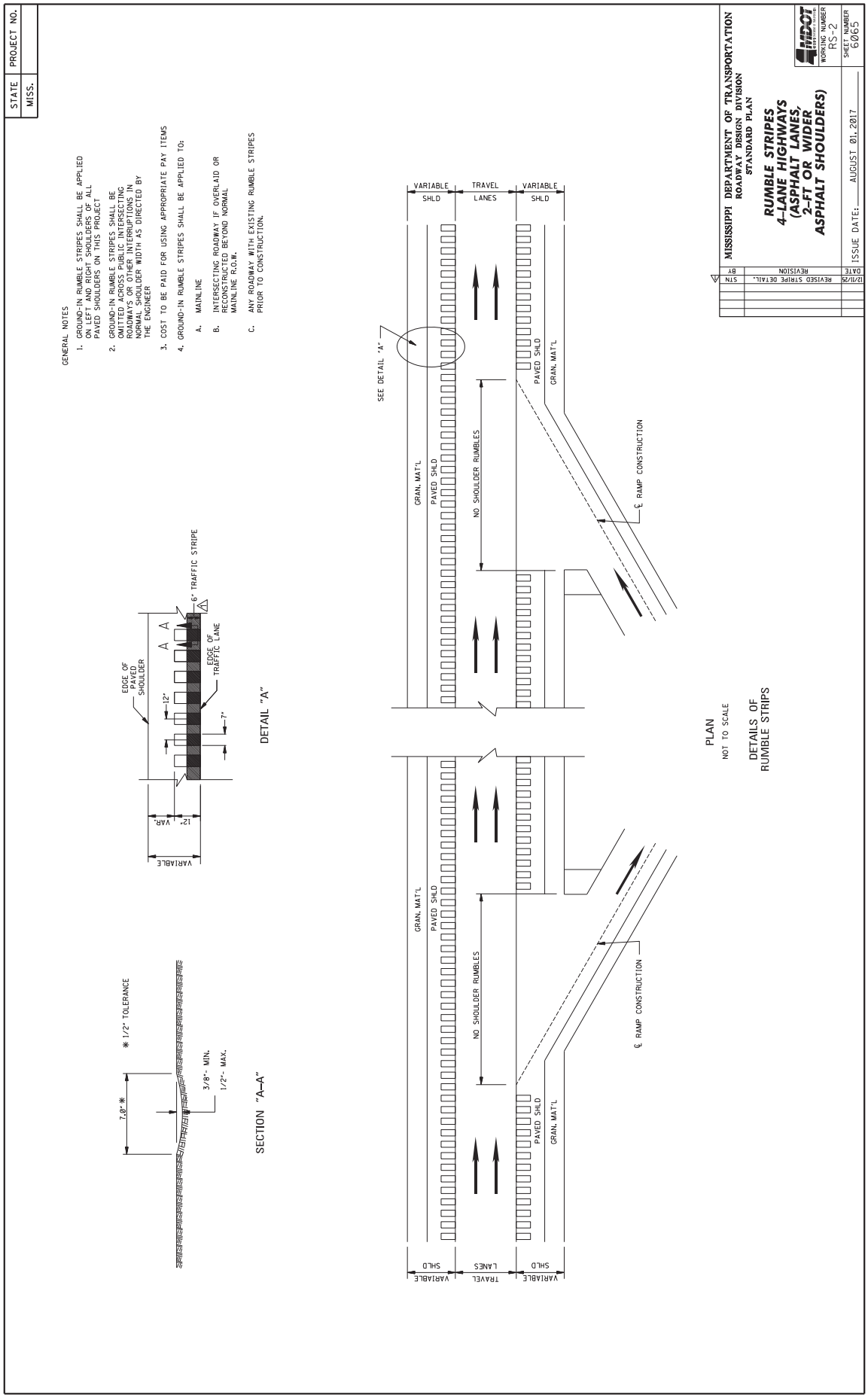

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE WITH LANE DROPS
WORKING NUMBER PM-10
SHEET NUMBER 6060
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT AND RPMS
DIRECTION OF TRAFFIC
LANE DROP AT DUAL LANE RAMP
LANE DROP AT SINGLE LANE RAMP
DETAIL A
DETAIL B
DETAIL C
DETAIL D
GENERAL NOTES:
* 1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
** 2. ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST".

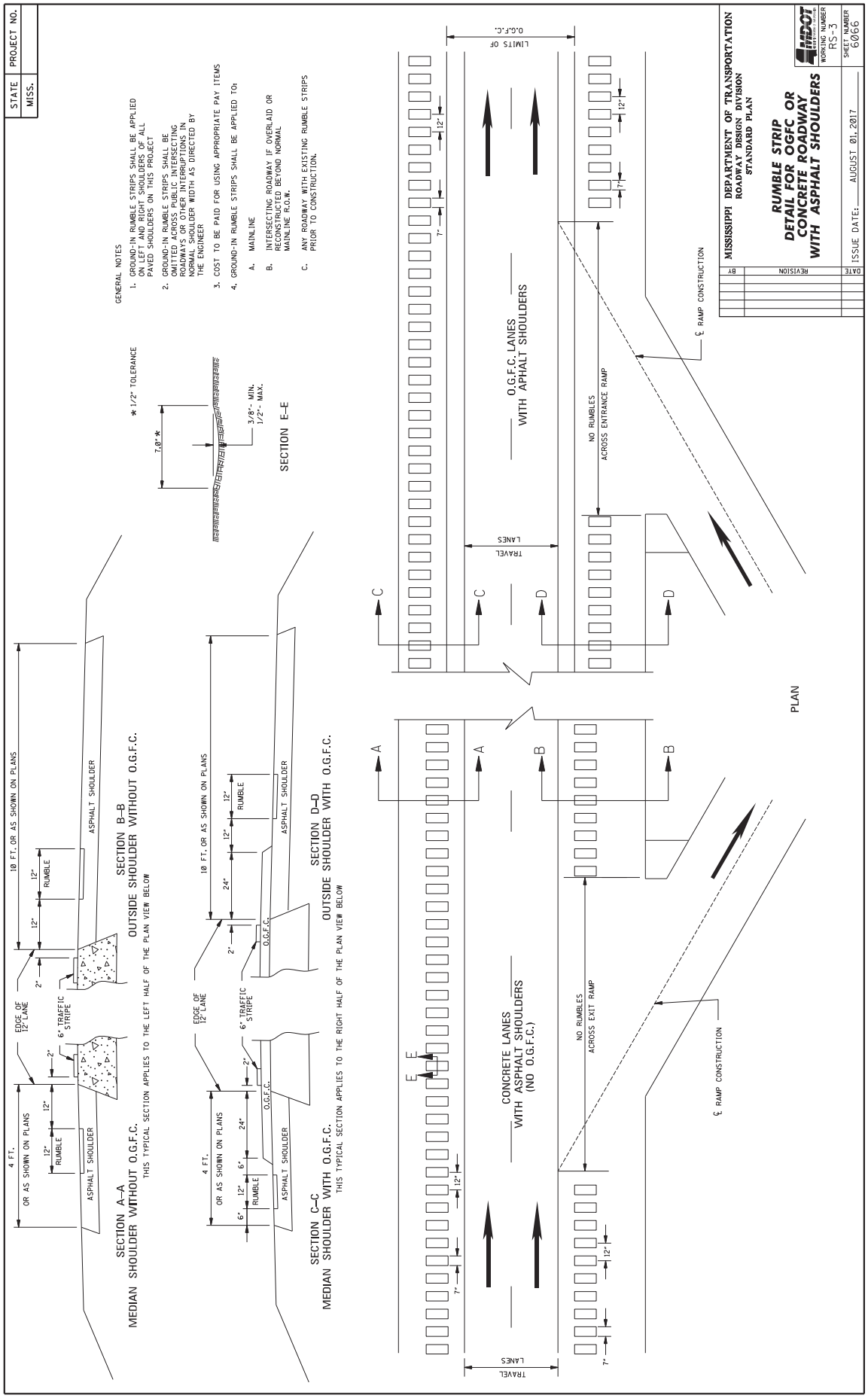

STATE
MISS.
PROJECT NO.
TYPICAL PLACEMENT OF RETROREFLECTIVE RAISED PAVEMENT MARKERS ON SIDE ROAD RADIUS
2-LANE, TWO WAY TRAFFIC
40' FROM END OF RADIUS OR TAPER
40' FROM BEGINNING OF RADIUS OR TAPER
10'
10'
SEE DETAIL "A"
DIRECTION OF TRAFFIC
CONT. WHITE
6"
2"
DETAIL A
GENERAL NOTES:
1. RETROREFLECTIVE FACES OF MARKERS SHALL BE VISIBLE TO THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
2. RETROREFLECTIVE FACES OF MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.
3. RETROREFLECTIVE FACES OF MARKERS SHALL NOT BE ROTATED WHEN BEING PLACED ALONG RADIUS AND TANGENT SECTION OF LOCAL ROAD.
4. MARKERS SHALL BE INSTALLED TO THE LIMITS SHOWN ABOVE.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RETROREFLECTIVE RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2-LANE)
WORKING NUMBER PM-11
SHEET NUMBER 6061
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
12/11/20
REVISED TEXT.
STM

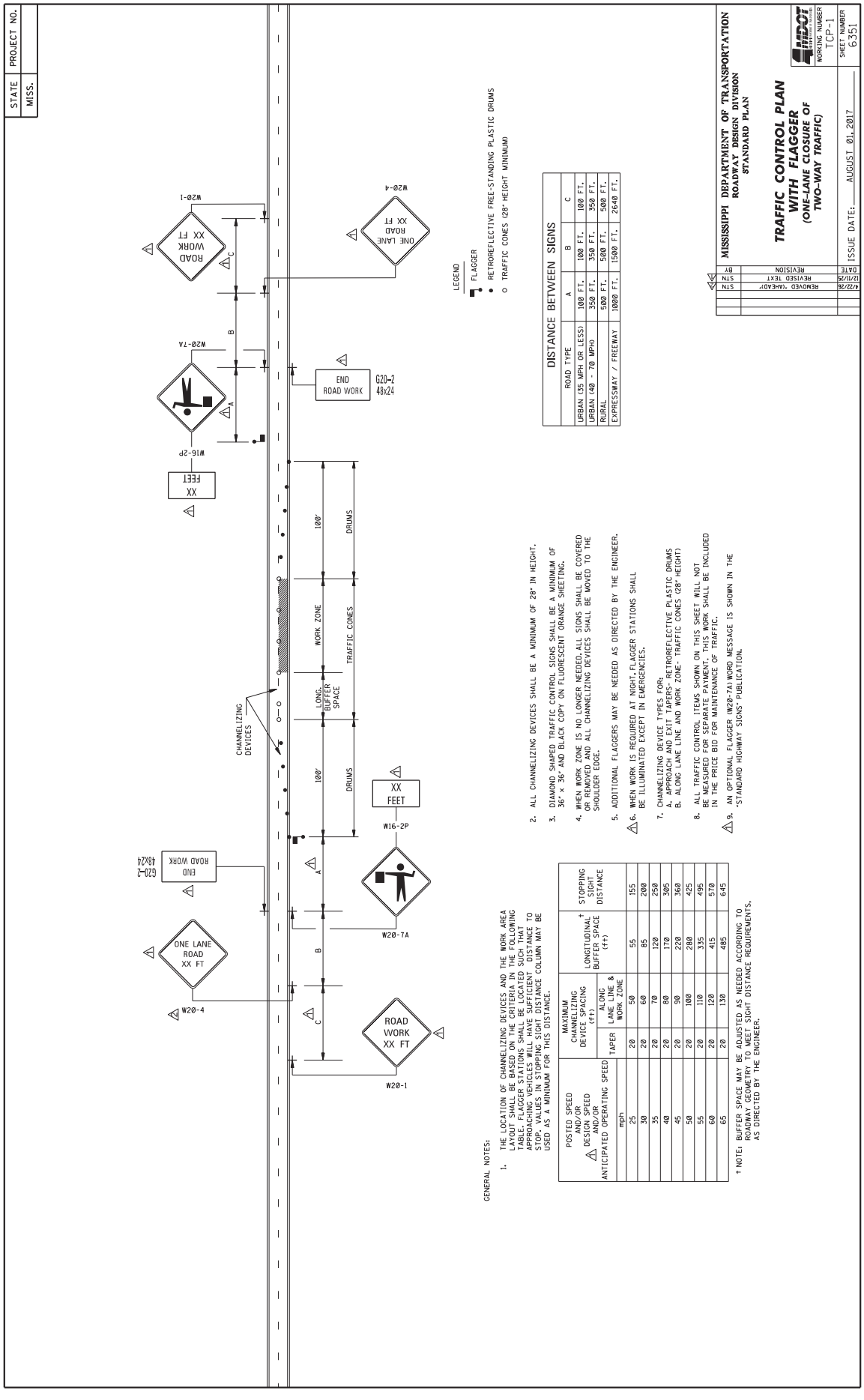

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RETROREFLECTIVE RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (4-LANE)
WORKING NUMBER PM-12
SHEET NUMBER 6062
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT.
DIRECTION OF TRAFFIC
CONT. WHITE
6"
2"
DETAIL A
TYPICAL PLACEMENT OF RETROREFLECTIVE RAISED PAVEMENT MARKERS ON SIDE ROAD RADIUS 4-LANE, TWO WAY TRAFFIC
40' FROM END OF RADIUS OR TAPER
40' FROM BEGINNING OF RADIUS OR TAPER
10'
SEE DETAIL "A"
GENERAL NOTES:
1. RETROREFLECTIVE FACES OF MARKERS SHALL BE VISIBLE TO THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
2. RETROREFLECTIVE FACES OF MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.

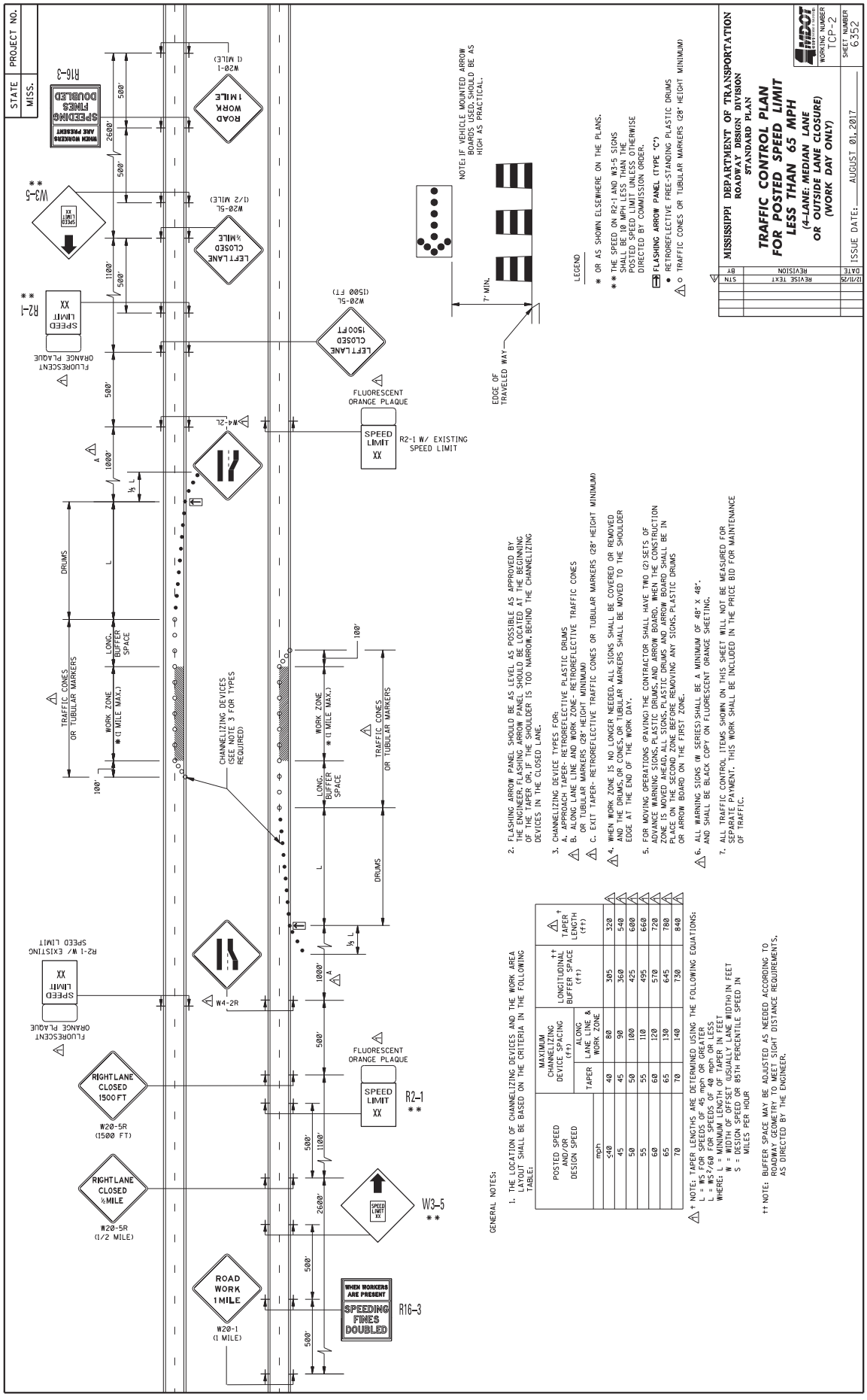

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
OFFSET LEFT TURN LANES
WORKING NUMBER PM-13
SHEET NUMBER 6063
ISSUE DATE: AUGUST 01, 2017
REVISION
ADDED TEXT AND DWGS, ADDED YIELD BARS.
DATE 12/11/25
BY STN
GENERAL NOTES:
1. UNSIGNALIZED INTERSECTION SHOWN. STOP BARS REQUIRED ONLY WHERE INTERSECTION IS SIGNALIZED OR MULTI-WAY STOP CONTROLLED.
2. SEE MK. NOS. PM-1, PM-3 and PM-6 FOR OTHER DETAILS.
3. TAPER LENGTH VARIES WITH MEDIAN WIDTH.
4. TAPERED OFFSET LEFT TURN LANE SHOWN. PARALLEL OFFSET LEFT TURN LANE PAVEMENT MARKINGS ARE SIMILAR.
5. 3-LANE SIDE ROAD SHOWN. SEE PERMANENT PAVEMENT MARKING DETAIL SHEETS FOR SIDE ROAD PAVEMENT MARKING DETAILS.
6. SEE PM-12 FOR INTERSECTING ROAD RAISED PAVEMENT MARKER PLACEMENT.
MEDIAN WIDTH VARIES
6" EDGE YELLOW
6" DET. YELLOW
GREATER THAN OR EQUAL TO ½ MEDIAN WIDTH
LESS THAN OR EQUAL TO ½ MEDIAN WIDTH
10' RADIUS TYPICAL
150' RADIUS
6" DET. YELLOW
6" EDGE YELLOW
24" STOP BAR (LEGEND)
14' MIN.
LEGEND WHITE YIELD BAR (SP)
6" EDGE YELLOW
6" DET. YELLOW
12:1 TAPER TYPICAL
SEE DETAIL "A"
6" EDGE YELLOW
6" DETAIL YELLOW
RED-CLEAR RETROREFLECTIVE RAISED MARKER
DETAIL B
12" DETAIL YELLOW
2"
2"
RED-CLEAR RETROREFLECTIVE RAISED MARKER
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
12" DETAIL WHITE
10'
10'
2' MIN.
45°
18" DETAIL WHITE
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
DETAIL A

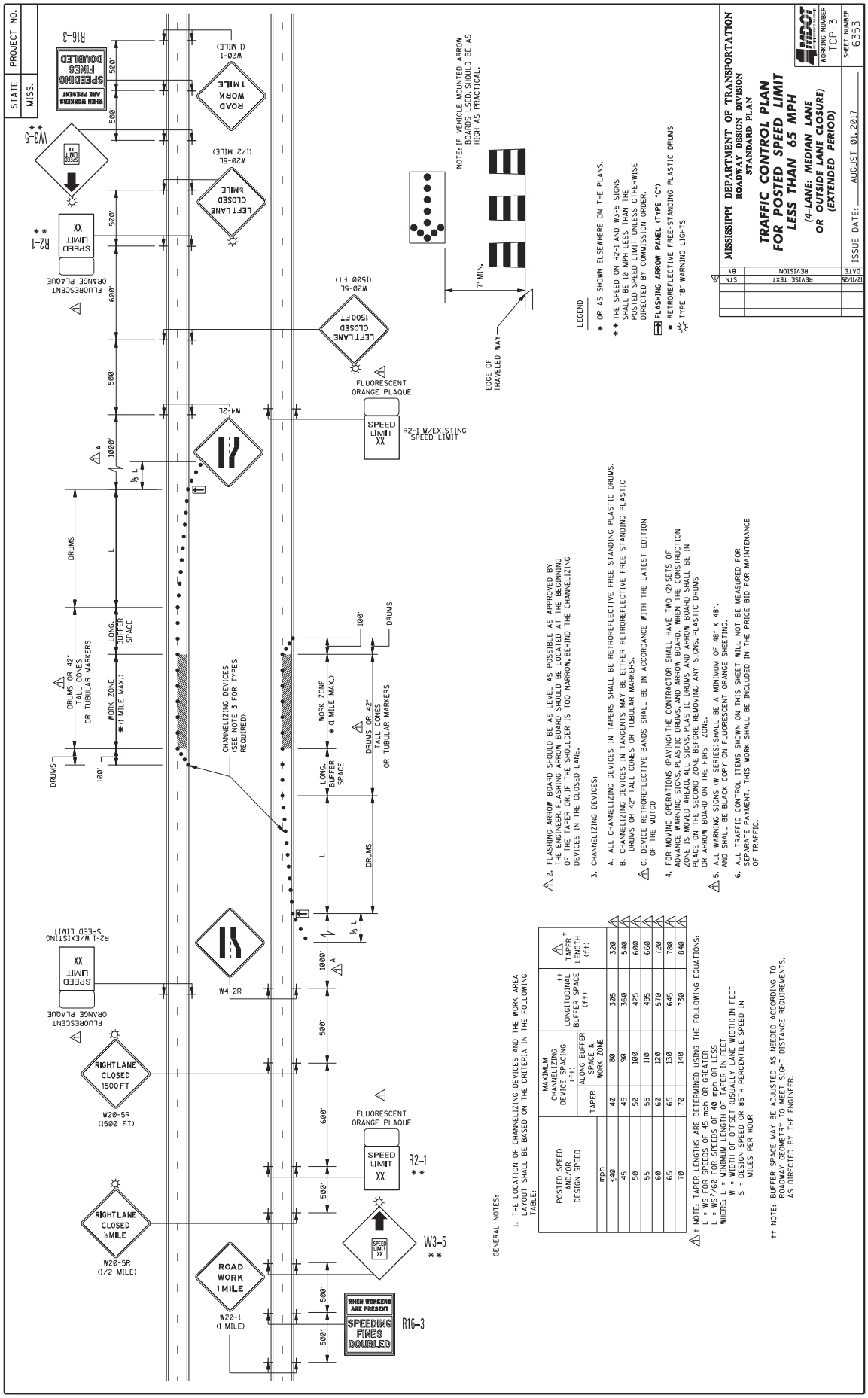

STATE
MISS.
PROJECT NO.
GENERAL NOTES
1. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPES SHALL BE OMITTED ACROSS PUBLIC INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS
4. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED TO:
A. MAINLINE
B. INTERSECTING ROADWAY IF OVERLAID OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
C. ANY ROADWAY WITH EXISTING RUMBLE STRIPES PRIOR TO CONSTRUCTION.
5. OMIT GROUND-IN RUMBLE STRIPS WHERE TRAFFIC LANE IS LESS THAN 11 FEET WIDE.
EDGE OF PAVED SHOULDER
6" TRAFFIC STRIPE
EDGE OF TRAFFIC LANE
12"
7"
DETAIL "A"
7.0" *
*1/2" TOLERANCE
3/8" - MIN.
1/2" - MAX.
SECTION "A-A"
VARIABLE SHOULDER
2' PAVED SHOULDER
11' or 12'
TRAVEL LANES
SEE DETAIL "A"
PLAN
NOT TO SCALE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIPES
2-LANE HIGHWAYS
(ASPHALT LANES,
2-FT ASPHALT SHOULDERS)
WORKING NUMBER
RS-1
SHEET NUMBER
6064
ISSUE DATE: AUGUST 01, 2017
STN
BY
REVISION
DATE
12/11/25 REVISED TEXT AND STRIPE DETAIL.

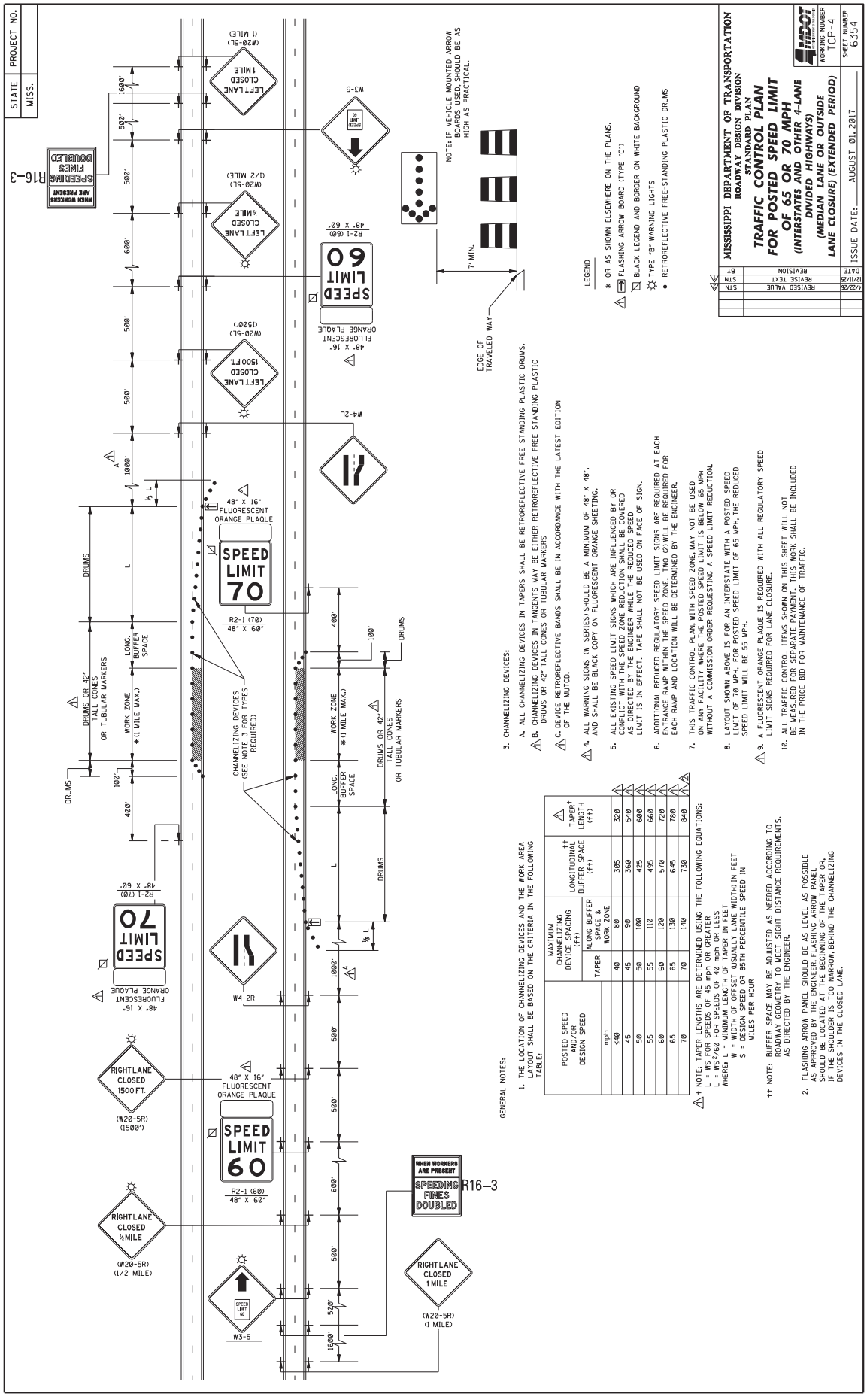

STATE
MISS.
PROJECT NO.
GENERAL NOTES
1. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPES SHALL BE OMITTED ACROSS PUBLIC INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS
4. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED TO:
A. MAINLINE
B. INTERSECTING ROADWAY IF OVERLAID OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
C. ANY ROADWAY WITH EXISTING RUMBLE STRIPES PRIOR TO CONSTRUCTION.
6" TRAFFIC STRIPE
EDGE OF PAVED SHOULDER
EDGE OF TRAFFIC LANE
12"
7"
12" VAR.
VARIABLE
DETAIL "A"
7.0" *
* 1/2" TOLERANCE
3/8"- MIN.
1/2"- MAX.
SECTION "A–A"
VARIABLE SHLD
TRAVEL LANES
VARIABLE SHLD
SEE DETAIL "A"
GRAN. MAT'L
PAVED SHLD
NO SHOULDER RUMBLES
℄ RAMP CONSTRUCTION
PLAN
NOT TO SCALE
DETAILS OF RUMBLE STRIPS
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIPES
4-LANE HIGHWAYS
(ASPHALT LANES,
2-FT OR WIDER
ASPHALT SHOULDERS)
WORKING NUMBER
RS-2
SHEET NUMBER
6065
ISSUE DATE: AUGUST 01, 2017
STN
REVISION
BY
DATE
REVISED STRIPE DETAIL.
12/1/23

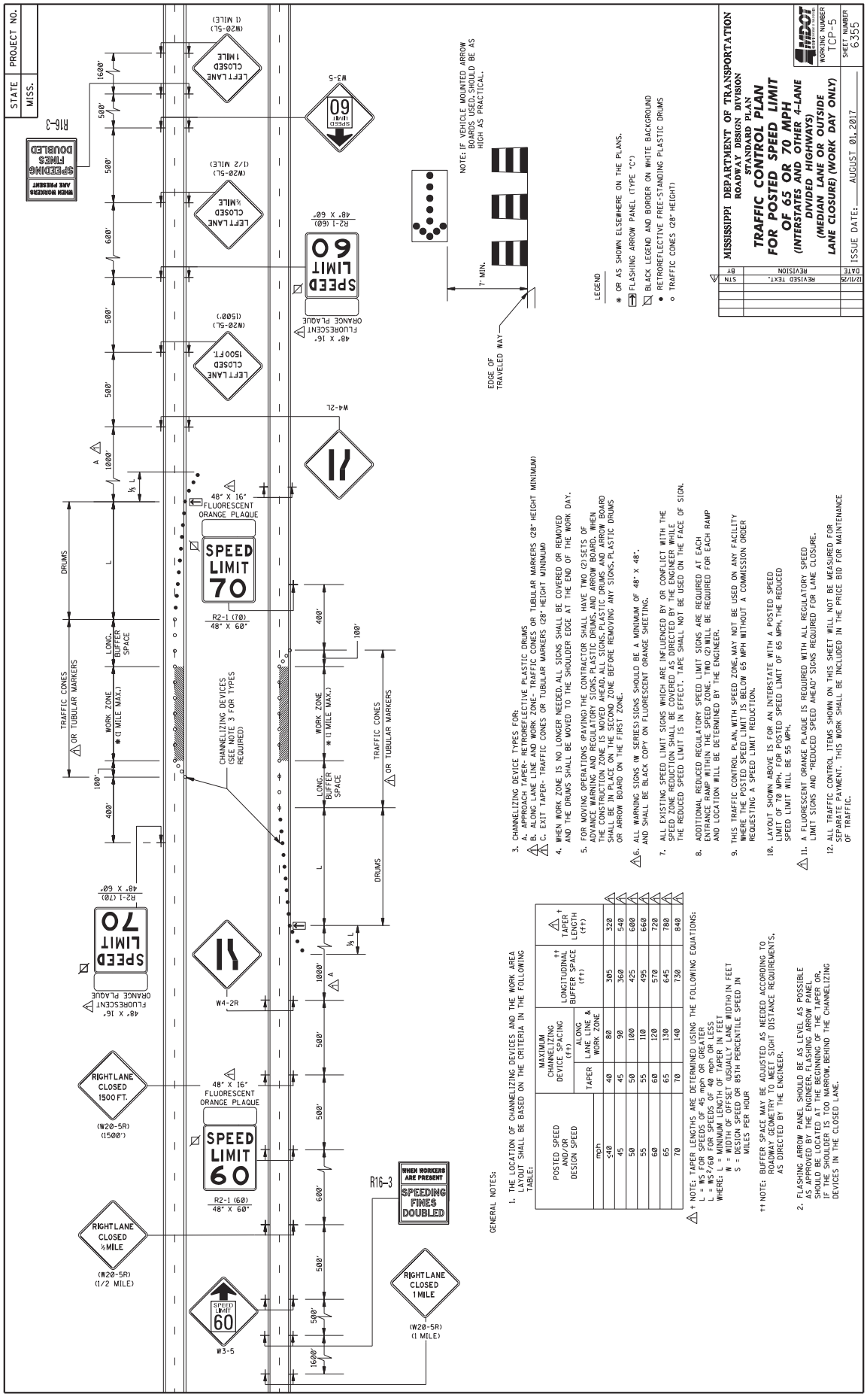

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIP
DETAIL FOR OGFC OR
CONCRETE ROADWAY
WITH ASPHALT SHOULDERS
WORKING NUMBER RS-3
SHEET NUMBER 6066
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
GENERAL NOTES
1. GROUND-IN RUMBLE STRIPS SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPS SHALL BE OMITTED ACROSS PUBLIC INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS
4. GROUND-IN RUMBLE STRIPS SHALL BE APPLIED TO:
A. MAINLINE
B. INTERSECTING ROADWAY IF OVERLAID OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
C. ANY ROADWAY WITH EXISTING RUMBLE STRIPS PRIOR TO CONSTRUCTION.
* 1/2" TOLERANCE
7.0"*
3/8"- MIN.
1/2"- MAX.
SECTION E–E
SECTION A–A
MEDIAN SHOULDER WITHOUT O.G.F.C.
THIS TYPICAL SECTION APPLIES TO THE LEFT HALF OF THE PLAN VIEW BELOW
4 FT.
OR AS SHOWN ON PLANS
EDGE OF 12" LANE
6" TRAFFIC STRIPE
2"
12" RUMBLE
12"
ASPHALT SHOULDER
SECTION B–B
OUTSIDE SHOULDER WITHOUT O.G.F.C.
10 FT. OR AS SHOWN ON PLANS
12" RUMBLE
12"
ASPHALT SHOULDER
SECTION C–C
MEDIAN SHOULDER WITH O.G.F.C.
THIS TYPICAL SECTION APPLIES TO THE RIGHT HALF OF THE PLAN VIEW BELOW
6" 12" 6"
24"
O.G.F.C.
SECTION D–D
OUTSIDE SHOULDER WITH O.G.F.C.
PLAN
CONCRETE LANES
WITH ASPHALT SHOULDERS
(NO O.G.F.C.)
O.G.F.C. LANES
WITH APHALT SHOULDERS
NO RUMBLES
ACROSS EXIT RAMP
NO RUMBLES
ACROSS ENTRANCE RAMP
℄ RAMP CONSTRUCTION
TRAVEL LANES
LIMITS OF O.G.F.C.
7"
12"
A
B
C
D
E

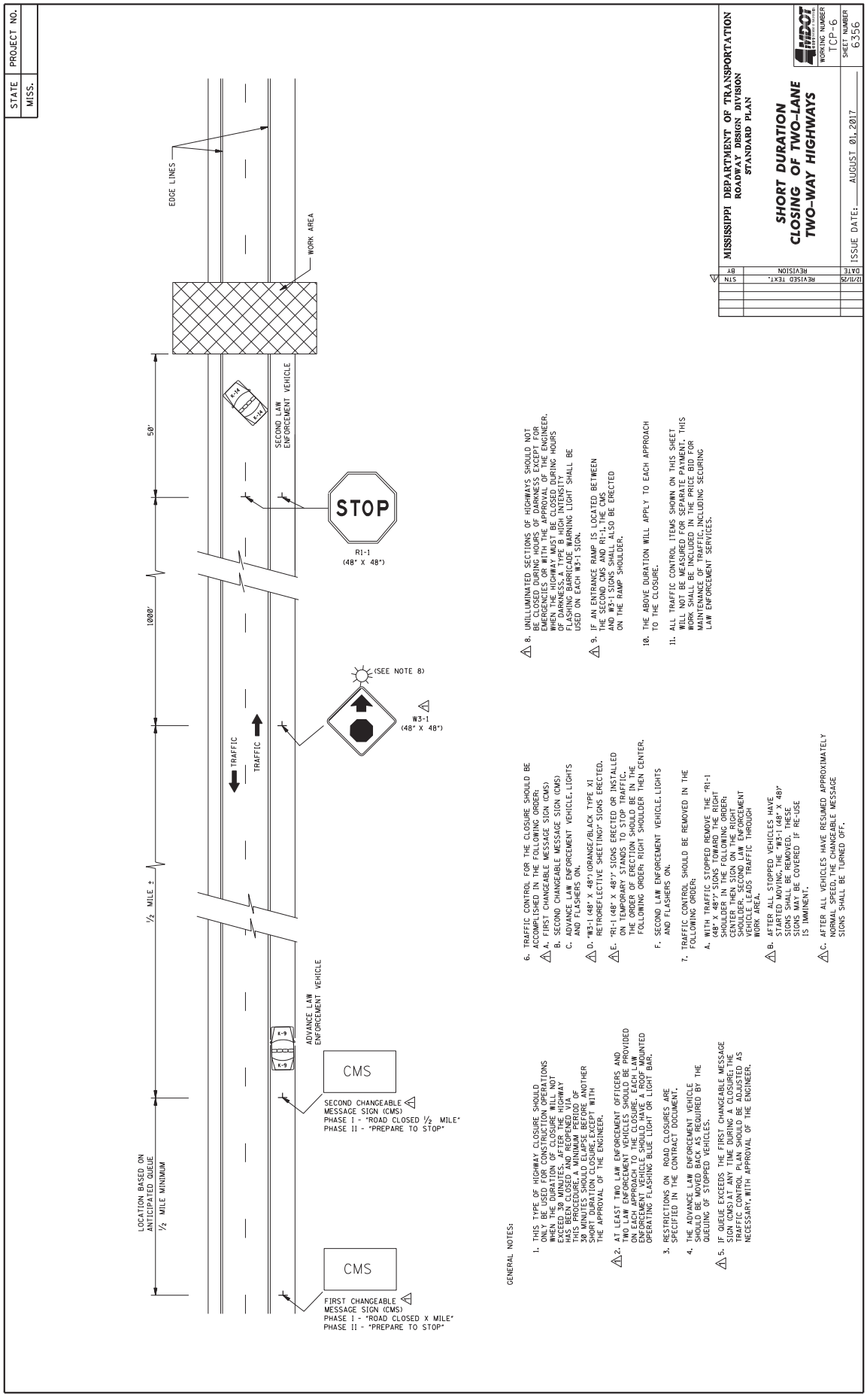

STATE
MISS.
PROJECT NO.
W20-1
ROAD XX FT WORK
W20-4
ONE LANE ROAD XX FT
W20-7A
W16-2P
XX FEET
W20-1
ROAD WORK XX FT
W20-4
ONE LANE ROAD XX FT
W20-7A
END ROAD WORK G20-2 48x24
W16-2P
XX FEET
CHANNELIZING DEVICES
A
B
C
100'
LONG. BUFFER SPACE
WORK ZONE
TRAFFIC CONES
DRUMS
LEGEND
FLAGGER
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TRAFFIC CONES (28" HEIGHT MINIMUM)
DISTANCE BETWEEN SIGNS
ROAD TYPE | A | B | C
URBAN (35 MPH OR LESS) | 100 FT. | 100 FT. | 100 FT.
URBAN (40 - 70 MPH) | 350 FT. | 350 FT. | 350 FT.
RURAL | 500 FT. | 500 FT. | 500 FT.
EXPRESSWAY / FREEWAY | 1000 FT. | 1500 FT. | 2640 FT.
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE. FLAGGER STATIONS SHALL BE LOCATED SUCH THAT APPROACHING VEHICLES WILL HAVE SUFFICIENT DISTANCE TO STOP. VALUES IN STOPPING SIGHT DISTANCE COLUMN MAY BE USED AS A MINIMUM FOR THIS DISTANCE.
2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
5. ADDITIONAL FLAGGERS MAY BE NEEDED AS DIRECTED BY THE ENGINEER.
6. WHEN WORK IS REQUIRED AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED EXCEPT IN EMERGENCIES.
7. CHANNELIZING DEVICE TYPES FOR:
A. APPROACH AND EXIT TAPERS- RETROREFLECTIVE PLASTIC DRUMS
B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)
8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
9. AN OPTIONAL FLAGGER (W20-7A) WORD MESSAGE IS SHOWN IN THE "STANDARD HIGHWAY SIGNS" PUBLICATION.
POSTED SPEED AND/OR DESIGN SPEED AND/OR ANTICIPATED OPERATING SPEED (mph)
MAXIMUM CHANNELIZING DEVICE SPACING (ft)
TAPER
ALONG LANE LINE & WORK ZONE
LONGITUDINAL† BUFFER SPACE (ft)
STOPPING SIGHT DISTANCE
25 | 20 | 50 | 55 | 155
30 | 20 | 60 | 85 | 200
35 | 20 | 70 | 120 | 250
40 | 20 | 80 | 170 | 305
45 | 20 | 90 | 220 | 360
50 | 20 | 100 | 280 | 425
55 | 20 | 110 | 335 | 495
60 | 20 | 120 | 415 | 570
65 | 20 | 130 | 485 | 645
† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
WITH FLAGGER
(ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)
WORKING NUMBER TCP-1
SHEET NUMBER 6351
ISSUE DATE: AUGUST 01, 2017
DATE | REVISION | BY
4/22/26 | REMOVED "(AHEAD)" | STN
12/1/25 | REVISED TEXT | STN

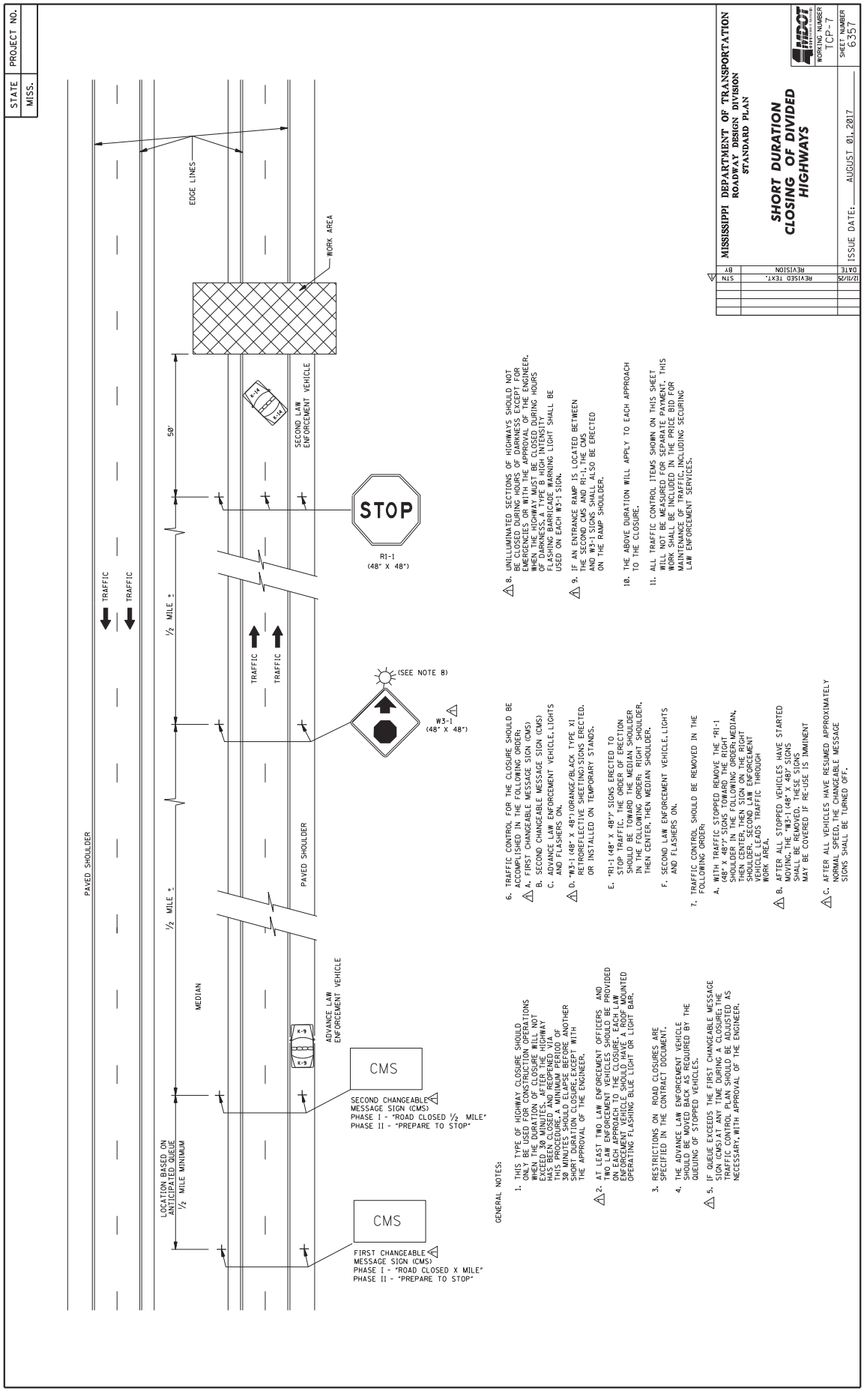

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR POSTED SPEED LIMIT
LESS THAN 65 MPH
(4-LANE: MEDIAN LANE
OR OUTSIDE LANE CLOSURE)
(WORK DAY ONLY)
WORKING NUMBER TCP-2
SHEET NUMBER 6352
ISSUE DATE: AUGUST 01, 2017
REVISION BY DATE
REVISE TEXT STN 12/1/25
LEGEND
* OR AS SHOWN ELSEWHERE ON THE PLANS.
** THE SPEED ON R2-1 AND W3-5 SIGNS SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.
FLASHING ARROW PANEL (TYPE "C")
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
ROAD WORK 1 MILE
W20-1 (1 MILE)
LEFT LANE CLOSED ½ MILE
W20-5L (1/2 MILE)
LEFT LANE CLOSED 1500 FT
W20-5L (1500 FT)
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
R16-3
W3-5 **
SPEED LIMIT XX
R2-1 **
FLUORESCENT ORANGE PLAQUE
R2-1 W/ EXISTING SPEED LIMIT
W4-2L
W4-2R
RIGHT LANE CLOSED 1500 FT
W20-5R (1500 FT)
RIGHT LANE CLOSED ½MILE
W20-5R (1/2 MILE)
TRAFFIC CONES OR TUBULAR MARKERS
DRUMS
LONG. BUFFER SPACE
WORK ZONE * (1 MILE MAX.)
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
100'
500'
1000'
1100'
2600'
A
½ L
L
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
POSTED SPEED AND/OR DESIGN SPEED | MAXIMUM CHANNELIZING DEVICE SPACING (ft) TAPER | ALONG LANE LINE & WORK ZONE | LONGITUDINAL BUFFER SPACE (ft) | TAPER† LENGTH (ft)
mph | 40 | 80 | 305 | 320
≤40 | 40 | 90 | 360 | 540
45 | 45 | 100 | 425 | 600
50 | 50 | 110 | 495 | 660
55 | 55 | 120 | 570 | 720
60 | 60 | 130 | 645 | 780
65 | 65 | 140 | 730 | 840
70 | 70
† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICE TYPES FOR:
A. APPROACH TAPER- RETROREFLECTIVE PLASTIC DRUMS
B. ALONG LANE LINE AND WORK ZONE- RETROREFLECTIVE TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
C. EXIT TAPER- RETROREFLECTIVE TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND VEHICLE DRUMS OR CONES OR TUBULAR MARKERS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.
5. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND SET BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.
6. ALL WARNING SIGNS (W SERIES) SHALL BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
7. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

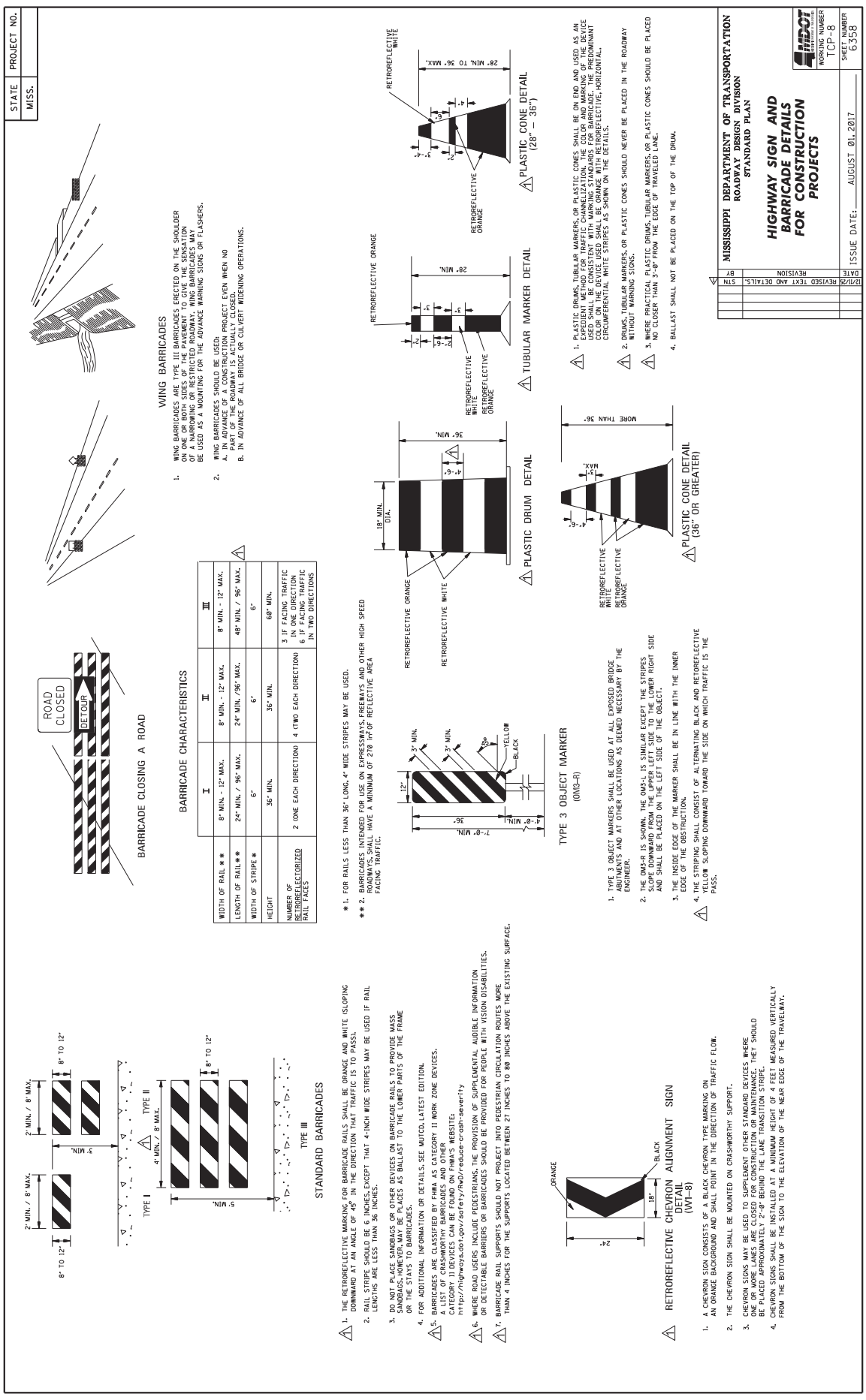

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR POSTED SPEED LIMIT
LESS THAN 65 MPH
(4-LANE: MEDIAN LANE OR OUTSIDE LANE CLOSURE)
(EXTENDED PERIOD)
WORKING NUMBER TCP-3
SHEET NUMBER 6353
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISE TEXT STN
LEGEND
* OR AS SHOWN ELSEWHERE ON THE PLANS.
** THE SPEED ON R2-1 AND W3-5 SIGNS SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.
FLASHING ARROW PANEL (TYPE "C")
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TYPE "B" WARNING LIGHTS
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
ROAD WORK 1 MILE
W20-1 (1 MILE)
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
R16-3
W3-5 **
SPEED LIMIT XX
R2-1 **
RIGHT LANE CLOSED ½ MILE
W20-5R (1/2 MILE)
RIGHT LANE CLOSED 1500 FT
W20-5R (1500 FT)
FLUORESCENT ORANGE PLAQUE
SPEED LIMIT XX
R2-1 W/EXISTING SPEED LIMIT
W4-2R
W4-2L
LEFT LANE CLOSED ½ MILE
W20-5L (1/2 MILE)
LEFT LANE CLOSED 1500 FT
W20-5L (1500 FT)
DRUMS
DRUMS OR 42" TALL CONES OR TUBULAR MARKERS
LONG. BUFFER SPACE
WORK ZONE * (1 MILE MAX.)
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
100'
500'
600'
1000'
A
L
½ L
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
POSTED SPEED / DESIGN SPEED | MAXIMUM CHANNELIZING DEVICE SPACING (ft) | LONGITUDINAL †† BUFFER SPACE (ft) | TAPER LENGTH † (ft)
TAPER | ALONG BUFFER SPACE & WORK ZONE
mph
≤40 40 80 305 320
45 45 90 360 540
50 50 100 425 600
55 55 110 495 660
60 60 120 570 720
65 65 130 645 780
70 70 140 730 840
† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS²/60 FOR SPEEDS OF 45 mph OR LESS
L = WS/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
2. FLASHING ARROW BOARD SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW BOARD SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER ON THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICES:
A. ALL CHANNELIZING DEVICES IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
B. CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES OR TUBULAR MARKERS.
C. DEVICE RETROREFLECTIVE BANDS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD
4. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND ZONE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.
5. ALL WARNING SIGNS (W SERIES) SHALL BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
6. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR POSTED SPEED LIMIT
OF 65 OR 70 MPH
(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS)
(MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)
WORKING NUMBER TCP-4
SHEET NUMBER 6354
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
4/22/26 REVISED VALUE STN
12/11/25 REVISE TEXT STN
LEGEND
* OR AS SHOWN ELSEWHERE ON THE PLANS.
FLASHING ARROW BOARD (TYPE "C")
BLACK LEGEND AND BORDER ON WHITE BACKGROUND
TYPE "B" WARNING LIGHTS
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
POSTED SPEED AND/OR DESIGN SPEED
MAXIMUM CHANNELIZING DEVICE SPACING (FEET)
TAPER
ALONG BUFFER SPACE & WORK ZONE
LONGITUDINAL BUFFER SPACE (ft)
TAPER† LENGTH (ft)
mph
<40 40 80 305 320
45 45 90 360 540
50 50 100 425 600
55 55 110 495 660
60 60 120 570 720
65 65 130 645 780
70 70 140 730 840
† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER, IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO ALLOW SIGHT DISTANCE REQUIREMENTS AS DIRECTED BY THE ENGINEER.
2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF NO SHOULDER IS TO BE NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICES:
A. ALL CHANNELIZING DEVICES IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
B. CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES OR TUBULAR MARKERS
C. DEVICE RETROREFLECTIVE BANDS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD.
4. ALL WARNING SIGNS (W SERIES) SHOULD BE A MINIMUM OF 48" X 48". AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
5. ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR CONFLICT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED AS DIRECTED BY THE ENGINEER WHILE THE REDUCED SPEED LIMIT IS IN EFFECT. TAPE SHALL NOT BE USED ON FACE OF SIGN.
6. ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
7. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.
8. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH. FOR A POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.
9. A FLUORESCENT ORANGE PLAQUE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS REQUIRED FOR LANE CLOSURE.
10. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
R16-3
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
LEFT LANE CLOSED 1 MILE
(W20-5L) (1 MILE)
LEFT LANE CLOSED ½MILE
(W20-5L) (1/2 MILE)
LEFT LANE CLOSED 1500FT
(W20-5L) (1500')
W3-5
SPEED LIMIT 60
R2-1 (60) 48" X 60"
48" X 16" FLUORESCENT ORANGE PLAQUE
W4-2L
W4-2R
SPEED LIMIT 70
R2-1 (70) 48" X 60"
RIGHT LANE CLOSED 1500 FT.
(W20-5R) (1500')
RIGHT LANE CLOSED ½MILE
(W20-5R) (1/2 MILE)
RIGHT LANE CLOSED 1 MILE
(W20-5R) (1 MILE)
DRUMS OR 42" TALL CONES OR TUBULAR MARKERS
LONG. BUFFER SPACE
WORK ZONE * (1 MILE MAX.)
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
DRUMS
100'
400'
500'
600'
1000'
1500'
½ L
L
A


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR POSTED SPEED LIMIT
OF 65 OR 70 MPH
(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS)
(MEDIAN LANE OR OUTSIDE LANE CLOSURE) (WORK DAY ONLY)
ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER TCP-5
SHEET NUMBER 6355
REVISED TEXT.
DATE 12/11/25
BY STN
LEGEND
* OR AS SHOWN ELSEWHERE ON THE PLANS.
FLASHING ARROW PANEL (TYPE "C")
BLACK LEGEND AND BORDER ON WHITE BACKGROUND
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TRAFFIC CONES (28" HEIGHT)
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
POSTED SPEED AND/OR DESIGN SPEED
MAXIMUM CHANNELIZING DEVICE SPACING (††)
TAPER
ALONG LANE LINE & WORK ZONE
LONGITUDINAL BUFFER SPACE (††)
TAPER † (††)
mph
40 80 305 320
45 90 360 540
50 100 425 600
55 110 495 660
60 120 570 720
65 130 645 780
70 140 730 840
† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICE TYPES FOR:
A. APPROACH TAPER- RETROREFLECTIVE PLASTIC DRUMS
B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
C. EXIT TAPER- TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND THE DRUMS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.
5. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING AND REGULATORY SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND ZONE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.
6. ALL WARNING SIGNS (W SERIES) SIGNS SHOULD BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
7. ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR CONFLICT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED AS DIRECTED BY THE ENGINEER WHILE THE REDUCED SPEED LIMIT IS IN EFFECT. TAPE SHALL NOT BE USED ON THE FACE OF SIGN.
8. ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
9. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.
10. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH. FOR POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.
11. A FLUORESCENT ORANGE PLAQUE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS AND "REDUCED SPEED AHEAD" SIGNS REQUIRED FOR LANE CLOSURE.
12. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
TRAFFIC CONES OR TUBULAR MARKERS
DRUMS
LONG. BUFFER SPACE
WORK ZONE * (1 MILE MAX.)
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
48" X 16" FLUORESCENT ORANGE PLAQUE
SPEED LIMIT 70
R2-1 (70) 48" X 60"
SPEED LIMIT 60
R2-1 (60) 48" X 60"
48" X 16" FLUORESCENT ORANGE PLAQUE
48" X 16" ORANGE FLUORESCENT PLAQUE
W4-2R
W4-2L
W3-5
R16-3
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
RIGHT LANE CLOSED 1500 FT.
(W20-5R) (1500')
RIGHT LANE CLOSED ½ MILE
(W20-5R) (1/2 MILE)
RIGHT LANE CLOSED 1 MILE
(W20-5R) (1 MILE)
LEFT LANE CLOSED 1500 FT.
(W20-5L) (1500')
LEFT LANE CLOSED ½ MILE
(W20-5L) (1/2 MILE)
LEFT LANE CLOSED 1 MILE
(W20-5L) (1 MILE)
SPEED LIMIT 60
W3-5
400' 100' 400' 500' 500' 500' 600' 500' 500' 500' 500' 1000' 1600'
A
½ L
L

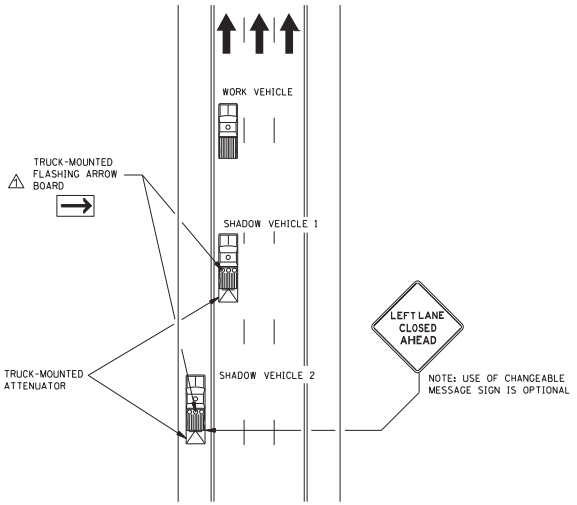

STATE
MISS.
PROJECT NO.
EDGE LINES
WORK AREA
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1
(48" X 48")
50'
1000'
½ MILE ±
TRAFFIC
TRAFFIC
(SEE NOTE 8)
W3-1
(48" X 48")
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
ADVANCE LAW ENFORCEMENT VEHICLE
CMS
SECOND CHANGEABLE MESSAGE SIGN (CMS)
PHASE I - "ROAD CLOSED ½ MILE"
PHASE II - "PREPARE TO STOP"
CMS
FIRST CHANGEABLE MESSAGE SIGN (CMS)
PHASE I - "ROAD CLOSED X MILE"
PHASE II - "PREPARE TO STOP"
GENERAL NOTES:
1. THIS TYPE OF HIGHWAY CLOSURE SHOULD ONLY BE USED FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 30 MINUTES. AFTER THE HIGHWAY HAS BEEN CLOSED AND ESCORTED VIA THIS PROCEDURE, A MINIMUM PERIOD OF 30 MINUTES SHOULD ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
2. AT LEAST TWO LAW ENFORCEMENT OFFICERS AND TWO LAW ENFORCEMENT VEHICLES SHOULD BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH LAW ENFORCEMENT VEHICLE SHOULD HAVE A ROOF-MOUNTED OPERATING FLASHING BLUE LIGHT OR LIGHT BAR.
3. RESTRICTIONS ON ROAD CLOSURES ARE SPECIFIED IN THE CONTRACT DOCUMENT.
4. THE ADVANCE LAW ENFORCEMENT VEHICLE SHOULD BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.
5. IF QUEUE EXCEEDS THE FIRST CHANGEABLE MESSAGE SIGN (CMS) AT ANY TIME DURING A CLOSURE, THE TRAFFIC CONTROL PLAN SHOULD BE ADJUSTED AS NECESSARY, WITH APPROVAL OF THE ENGINEER.
6. TRAFFIC CONTROL FOR THE CLOSURE SHOULD BE ACCOMPLISHED IN THE FOLLOWING ORDER:
A. FIRST CHANGEABLE MESSAGE SIGN (CMS)
B. SECOND CHANGEABLE MESSAGE SIGN (CMS)
C. ADVANCE LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
D. W3-1 (48" X 48") ORANGE/BLACK TYPE XI RETROREFLECTIVE SHEETING" SIGNS ERECTED.
E. "R1-1 (48" X 48")" SIGNS ERECTED OR INSTALLED ON TEMPORARY STANDS TO STOP TRAFFIC, THE ORDER OF ERECTION SHOULD BE IN THE FOLLOWING ORDER: RIGHT SHOULDER THEN CENTER.
F. SECOND LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
7. TRAFFIC CONTROL SHOULD BE REMOVED IN THE FOLLOWING ORDER:
A. WITH TRAFFIC STOPPED REMOVE THE "R1-1 (48" X 48")" SIGNS IN THE FOLLOWING ORDER: SHOULDER IN THE FOLLOWING ORDER; CENTER THEN SIGN ON THE RIGHT SHOULDER. SECOND LAW ENFORCEMENT VEHICLE LEADS TRAFFIC THROUGH WORK AREA.
B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING W3-1 (48" X 48" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGEABLE MESSAGE SIGNS SHALL BE TURNED OFF.
8. UNILLUMINATED SECTIONS OF HIGHWAYS SHOULD NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN THE HIGHWAY MUST BE CLOSED DURING HOURS OF DARKNESS, A TYPE B HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W3-1 SIGN.
9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND R1-1, THE CMS AND W3-1 SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.
10. THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.
11. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT; THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING LAW ENFORCEMENT SERVICES.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
SHORT DURATION
CLOSING OF TWO-LANE
TWO-WAY HIGHWAYS
WORKING NUMBER
TCP-6
SHEET NUMBER
6356
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
12/11/25
REVISED TEXT.
STM


STATE
MISS.
PROJECT NO.
PAVED SHOULDER
TRAFFIC
TRAFFIC
½ MILE *
MEDIAN
½ MILE *
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
EDGE LINES
WORK AREA
50'
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1
(48" X 48")
TRAFFIC
TRAFFIC
PAVED SHOULDER
(SEE NOTE 8)
W3-1
(48" X 48")
ADVANCE LAW ENFORCEMENT VEHICLE
CMS
SECOND CHANGEABLE MESSAGE SIGN (CMS)
PHASE I - "ROAD CLOSED ½ MILE"
PHASE II - "PREPARE TO STOP"
CMS
FIRST CHANGEABLE MESSAGE SIGN (CMS)
PHASE I - "ROAD CLOSED X MILE"
PHASE II - "PREPARE TO STOP"
GENERAL NOTES:
1. THIS TYPE OF HIGHWAY CLOSURE SHOULD ONLY BE USED FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 30 MINUTES, AFTER THE HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE, A MINIMUM PERIOD OF 30 MINUTES SHOULD ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
2. AT LEAST TWO LAW ENFORCEMENT OFFICERS AND TWO LAW ENFORCEMENT VEHICLES SHOULD BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH LAW ENFORCEMENT VEHICLE SHOULD HAVE A ROOF MOUNTED OPERATING FLASHING BLUE LIGHT OR LIGHT BAR.
3. RESTRICTIONS ON ROAD CLOSURES ARE SPECIFIED IN THE CONTRACT DOCUMENT.
4. THE ADVANCE LAW ENFORCEMENT VEHICLE SHOULD BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.
5. IF QUEUE EXCEEDS THE FIRST CHANGEABLE MESSAGE SIGN (CMS) AT ANY TIME DURING A CLOSURE, THE TRAFFIC CONTROL PLAN SHOULD BE ADJUSTED AS NECESSARY, WITH APPROVAL OF THE ENGINEER.
6. TRAFFIC CONTROL FOR THE CLOSURE SHOULD BE ACCOMPLISHED IN THE FOLLOWING ORDER:
A. FIRST CHANGEABLE MESSAGE SIGN (CMS)
B. SECOND CHANGEABLE MESSAGE SIGN (CMS)
C. ADVANCE LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
D. "W3-1 (48" X 48") (ORANGE/BLACK TYPE XI RETROREFLECTIVE SHEETING) SIGNS ERECTED. OR INSTALLED ON TEMPORARY STANDS.
E. "R1-1 (48" X 48") " SIGNS ERECTED TO STOP TRAFFIC. THE ORDER OF ERECTION SHOULD BE TOWARD THE MEDIAN SHOULDER ON THE FOLLOWING ORDER: RIGHT SHOULDER, THEN CENTER, THEN MEDIAN SHOULDER.
F. SECOND LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
7. TRAFFIC CONTROL SHOULD BE REMOVED IN THE FOLLOWING ORDER:
A. WITH TRAFFIC STOPPED REMOVE THE "R1-1 (48" X 48") SIGNS TOWARD THE RIGHT SHOULDER, THEN THE FOLLOWING ORDER: MEDIAN, THEN CENTER, THEN SIGN ON THE RIGHT SHOULDER, SECOND LAW ENFORCEMENT VEHICLE LEADS TRAFFIC THROUGH WORK AREA.
B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1 (48" X 48" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT
C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGEABLE MESSAGE SIGNS SHALL BE TURNED OFF.
8. UNILLUMINATED SECTIONS OF HIGHWAYS SHOULD NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN SUCH HIGHWAYS ARE CLOSED DURING HOURS OF DARKNESS, A TYPE 'B' HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W3-1 SIGN.
9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND R1-1, THE CMS AND W3-1 SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.
10. THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.
11. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC INCLUDING SECURING LAW ENFORCEMENT SERVICES.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
SHORT DURATION CLOSING OF DIVIDED HIGHWAYS
WORKING NUMBER TCP-7
SHEET NUMBER 6357
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT. STM 12/11/25


STATE
MISS.
PROJECT NO.
STANDARD BARRICADES
TYPE I
TYPE II
TYPE III
BARRICADE CLOSING A ROAD
ROAD CLOSED
DETOUR
WING BARRICADES
BARRICADE CHARACTERISTICS
TYPE 3 OBJECT MARKER (OM3-R)
PLASTIC DRUM DETAIL
TUBULAR MARKER DETAIL
PLASTIC CONE DETAIL (28" – 36")
PLASTIC CONE DETAIL (36" OR GREATER)
RETROREFLECTIVE CHEVRON ALIGNMENT SIGN DETAIL (W1-8)
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS
WORKING NUMBER TCP-8
SHEET NUMBER 6358
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT AND DETAILS.
12/11/20

STATE	PROJECT NO.
MISS.	

MOBILE OPERATIONS ON MULTILANE ROAD

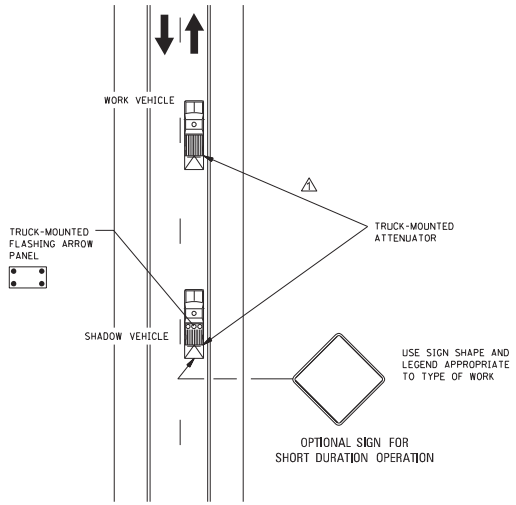


MOBILE OPERATIONS ON MULTILANE ROAD

NOTES FOR MULTILANE LANE OPERATION:

1. SHADOW AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS. AN ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE FREEWAY LANE IS CLOSED, A SEPARATE ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.
2. SHADOW VEHICLE 2 SHOULD BE EQUIPPED WITH AN ARROW BOARD AND TRUCK MOUNTED ATTENUATOR (TMA), AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON SHADOW VEHICLE 2 SO AS NOT TO OBSCURE THE ARROW BOARD.
3. SHADOW VEHICLE 1 SHOULD BE EQUIPPED WITH AN ARROW BOARD AND TRUCK-MOUNTED ATTENUATOR (TMA).
4. SHADOW VEHICLE 2 SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR TRAFFIC APPROACHING FROM THE REAR.
5. THE SPACING BETWEEN THE WORK VEHICLES AND THE SHADOW VEHICLES, AND BETWEEN EACH SHADOW VEHICLE, SHOULD BE MINIMIZED TO DETER ROAD USERS FROM DRIVING IN BETWEEN.
6. ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE (NOT SHOWN) MAY BE USED WITH SHADOW VEHICLE 1 IN THE CLOSED LANE, SHADOW VEHICLE 2 STRADDLING THE EDGE LINE, AND SHADOW VEHICLE 3 ON THE SHOULDER.
7. ARROW BOARD SHALL BE AS A MINIMUM TYPE B, 60" X 30" IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCD.
8. WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.
9. VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
10. WHEN THE WORK VEHICLE OCCUPIES AN INTERIOR LANE (A LANE OTHER THAN THE FAR RIGHT OR FAR LEFT) OF A DIRECTIONAL ROADWAY HAVING A RIGHT-HAND SHOULDER 10 FEET OR MORE IN WIDTH, SHADOW VEHICLE 2 SHOULD DRIVE ON THE RIGHT-HAND SHOULDER WITH A SIGN INDICATING THAT WORK IS TAKING PLACE IN THE INTERIOR LANE.
11. ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE (NOT SHOWN) MAY BE USED WITH SHADOW VEHICLE 1 IN THE CLOSED LANE, SHADOW VEHICLE 2 STRADDLING THE EDGE LINE, AND SHADOW VEHICLE 3 ON THE SHOULDER.
12. WHERE ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, SHADOW VEHICLE 3 MAY ALSO STRADDLE THE EDGE LINE.
13. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

MOBILE OPERATIONS ON TWO–LANE ROAD



MOBILE OPERATIONS ON TWO–LANE ROAD

NOTES FOR TWO-LANE OPERATION:

1. WHERE PRACTICAL AND WHEN NEEDED, THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS. IF THIS CAN NOT BE DONE FREQUENTLY, AS AN ALTERNATIVE, A "DO NOT PASS" SIGN MAY BE PLACED ON THE REAR OF THE VEHICLE BLOCKING THE LANE.
2. THE DISTANCE BETWEEN THE WORK AND SHADOW VEHICLES MAY VARY ACCORDING TO TERRAIN, PAINT DRYING TIME, AND OTHER FACTORS. SHADOW VEHICLES ARE USED TO WARN TRAFFIC OF THE OPERATION AHEAD. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE SHADOW VEHICLE SHOULD MAINTAIN THE MINIMUM DISTANCE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. THE SHADOW VEHICLE SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
3. ADDITIONAL SHADOW VEHICLES TO WARN AND REDUCE THE SPEED OF ONCOMING OR OPPOSING TRAFFIC MAY BE USED. POLICE PATROL CARS MAY BE USED FOR THIS PURPOSE.
4. A TRUCK-MOUNTED ATTENUATOR (TMA) SHOULD BE USED ON THE SHADOW VEHICLE AND MAY BE USED ON THE WORK VEHICLE.
5. THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE SHADOW VEHICLES SHALL BE EQUIPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, ADJACENT TO THE SIGN. SHADOW AND WORK VEHICLES SHALL DISPLAY FLASHING OR ROTATING BEACONS BOTH FORWARD AND TO THE REAR.
6. VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
7. ARROW BOARD TO BE USED IN CAUTION MODE.
8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

DATE	REVISION	BY
12/17/24	REVISED TEXT AND DETAILS.	STN

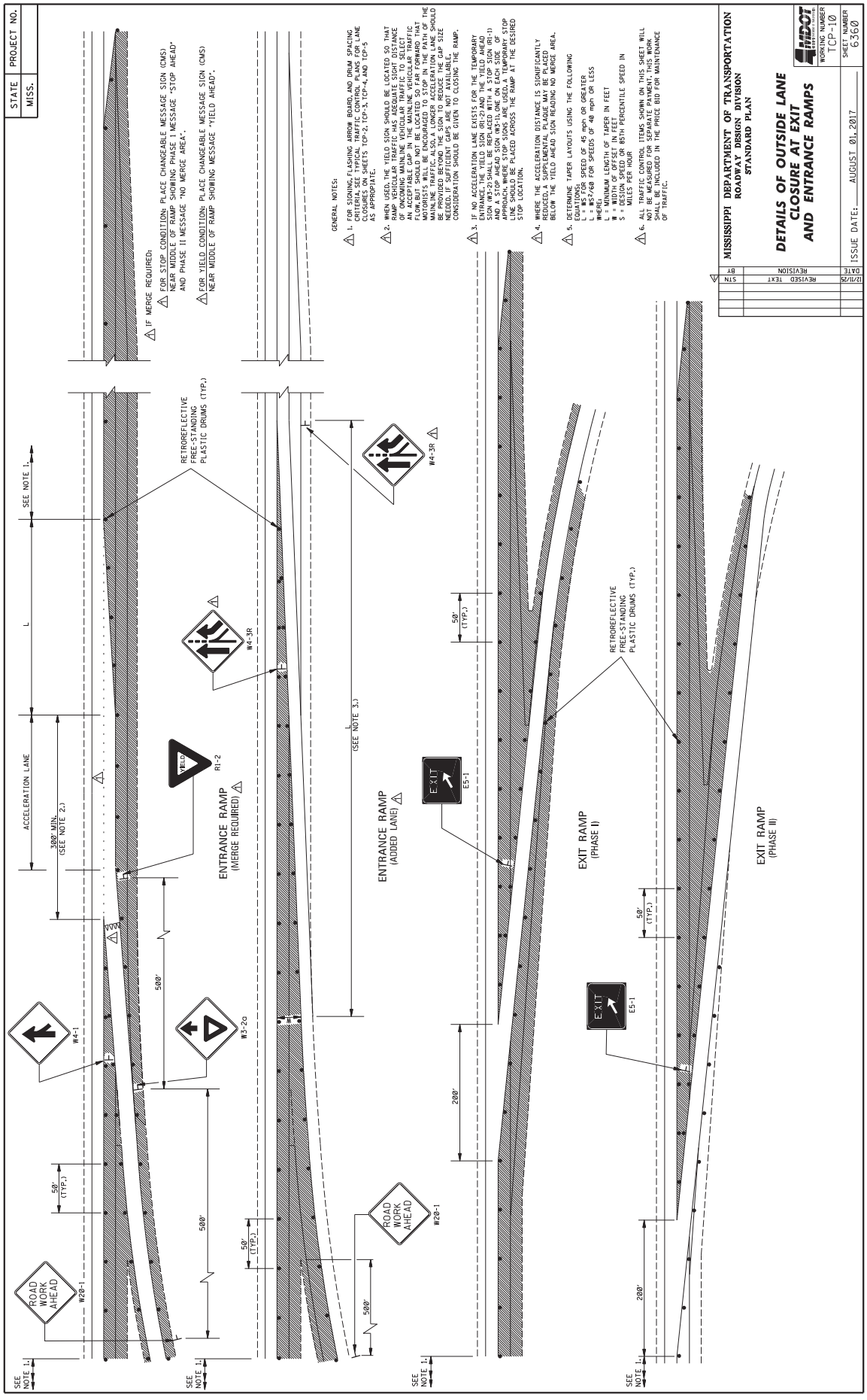
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

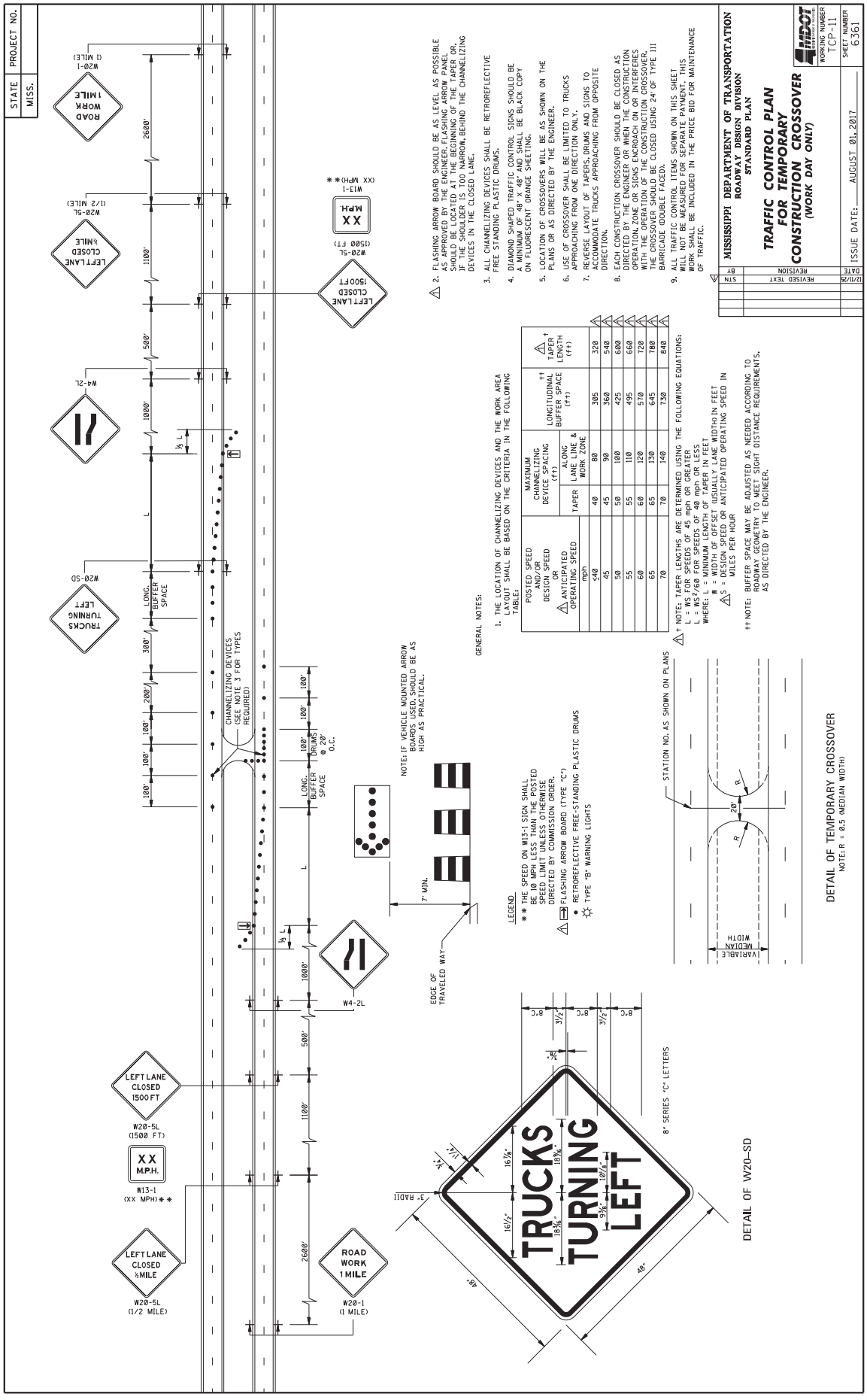
TRAFFIC CONTROL PLAN
MOBILE OPERATIONS
MULTILANE ROADS
AND
TWO–LANE ROADS

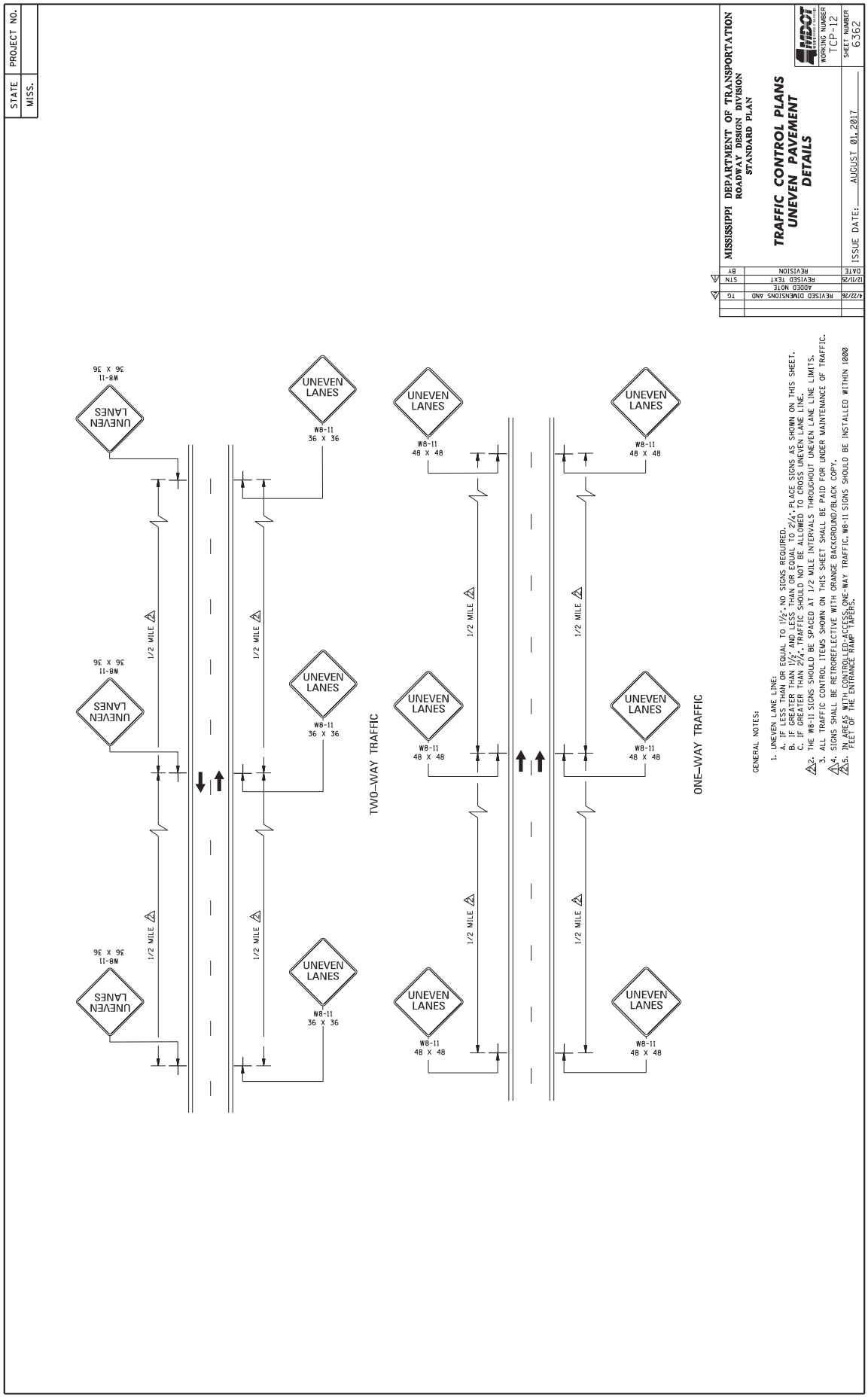
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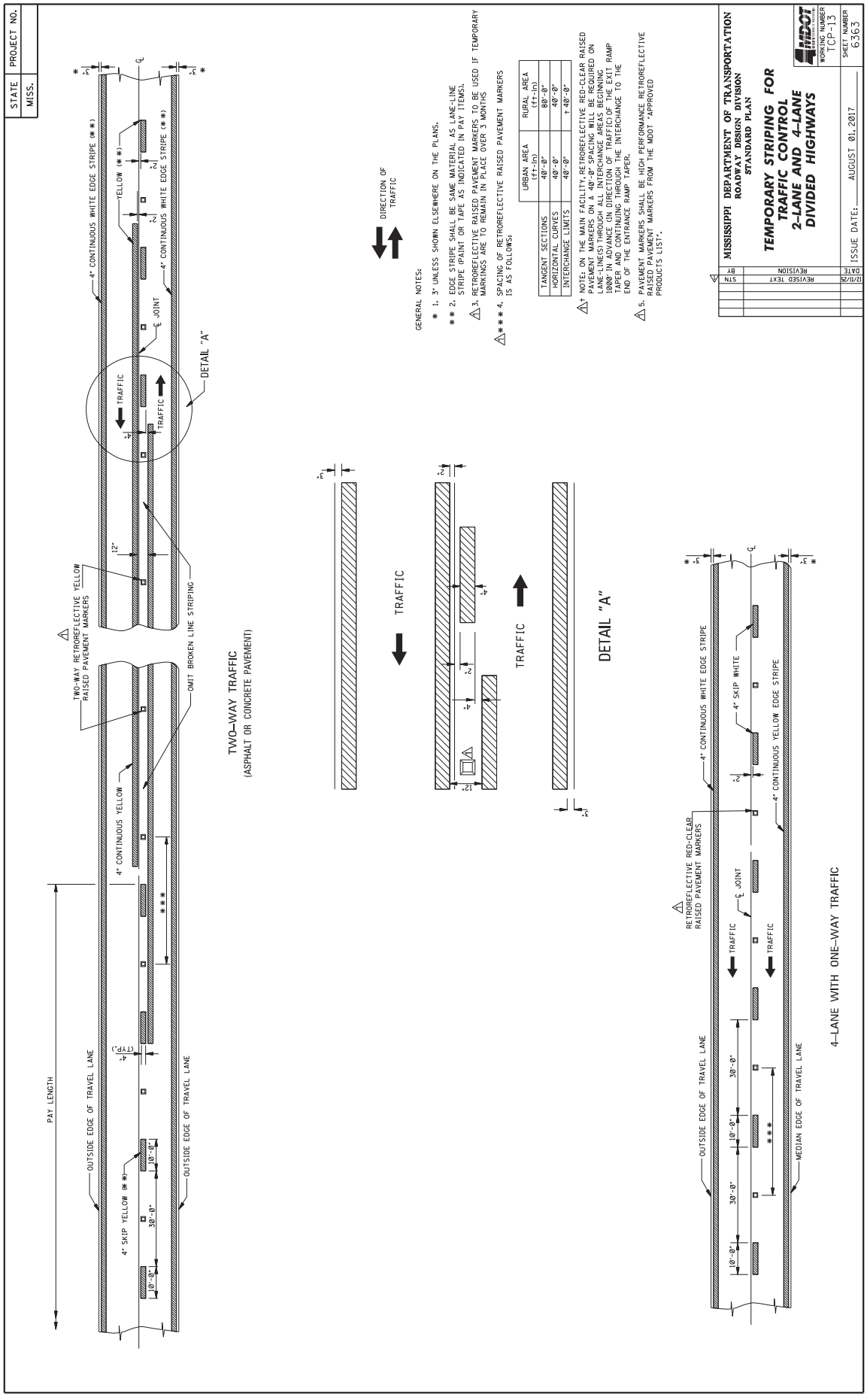
ISSUE DATE: AUGUST 01, 2017

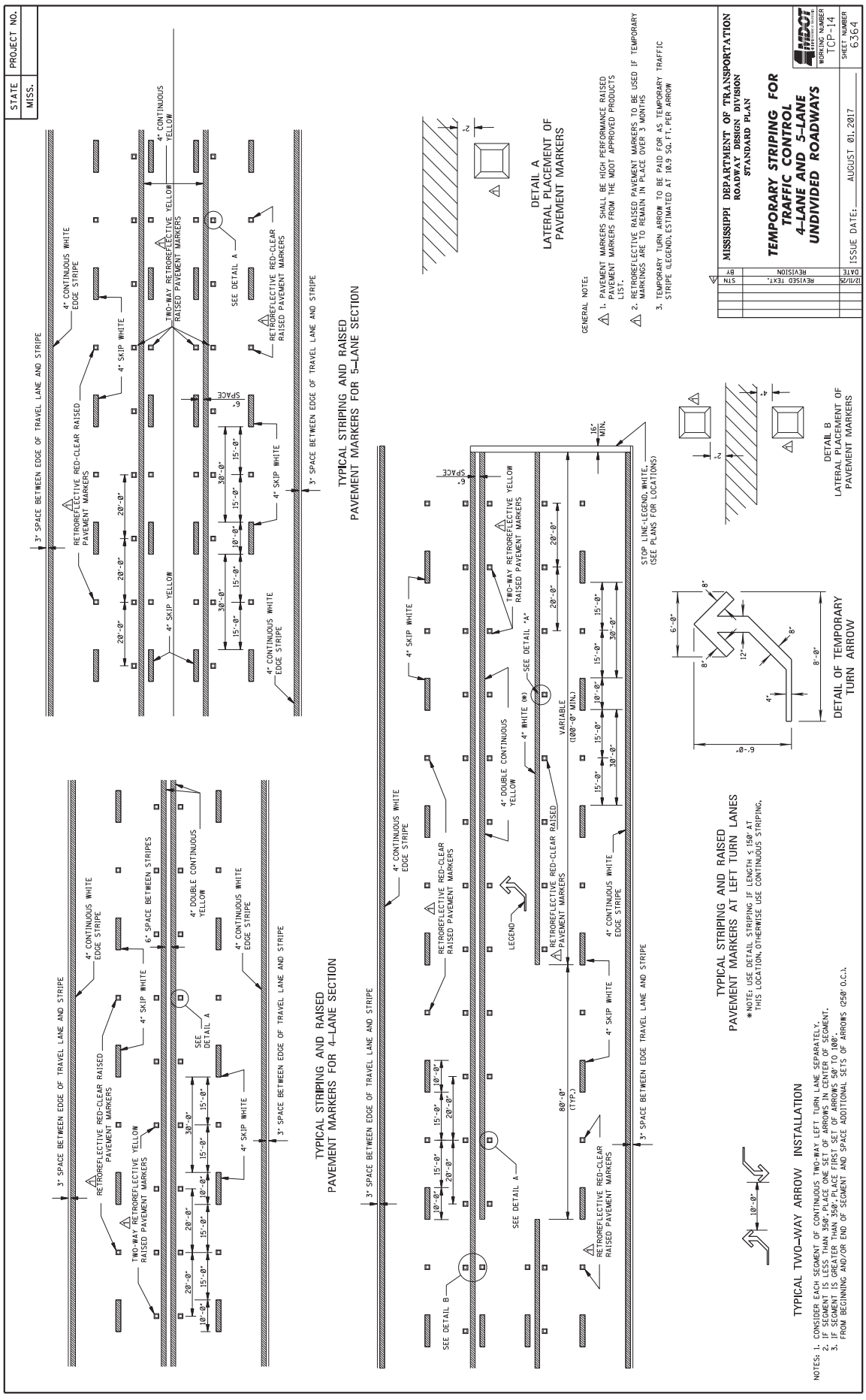
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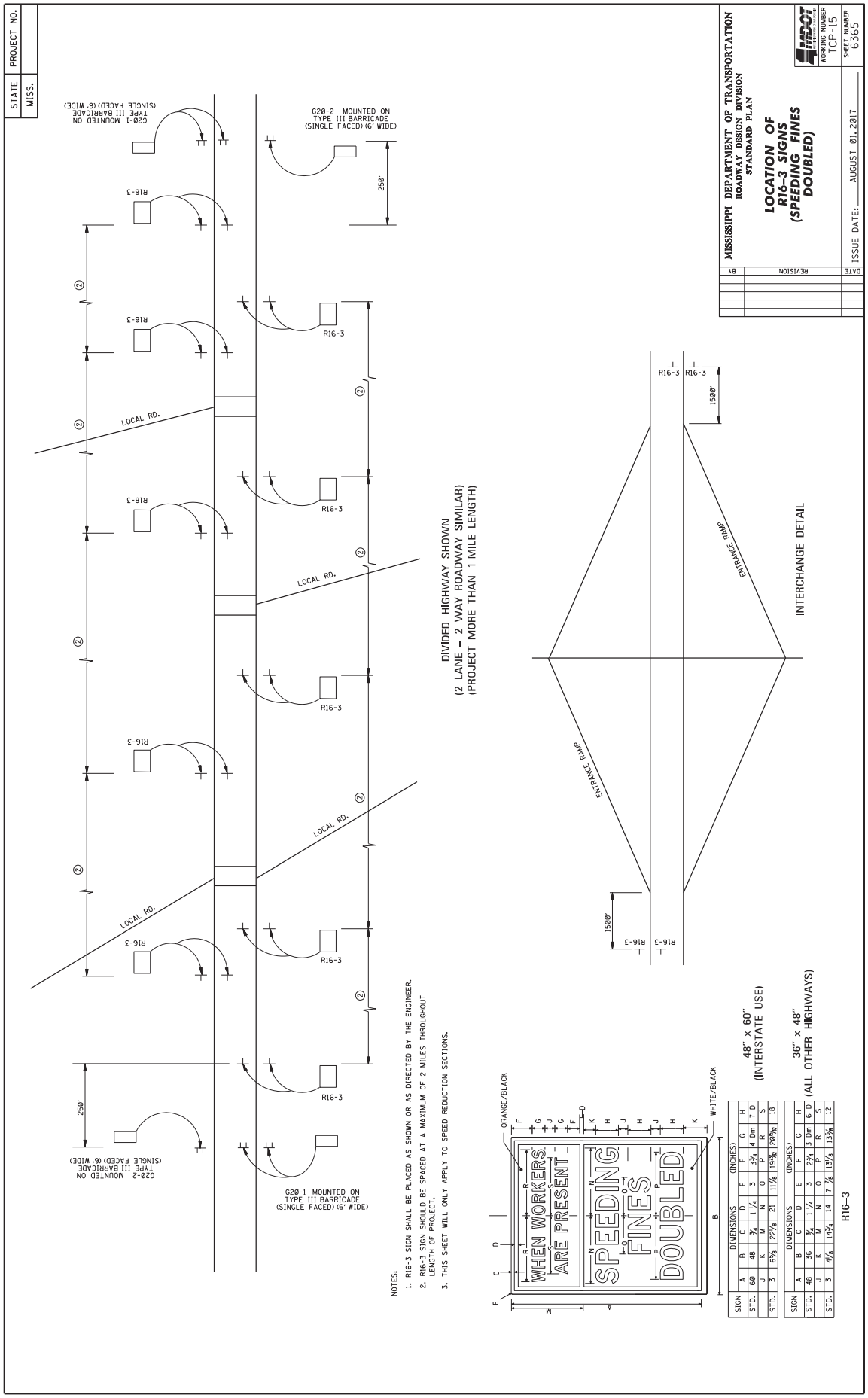

STATE MISS.
PROJECT NO.
GENERAL NOTES:
1. FOR SIGNING, FLASHING ARROW BOARD, AND DRUM SPACING CRITERIA SEE TYPICAL TRAFFIC CONTROL PLANS FOR LANE CLOSURES ON SHEETS TCP-2, TCP-3, TCP-4, AND TCP-5 AS APPROPRIATE.
2. WHEN USED, THE YIELD SIGN SHOULD BE LOCATED SO THAT RAMP VEHICULAR TRAFFIC HAS ADEQUATE SIGHT DISTANCE OF ONCOMING MAINLINE VEHICULAR TRAFFIC TO SELECT AN ACCEPTABLE GAP. THE MAINLINE VEHICULAR TRAFFIC FLOW, BUT SHOULD NOT BE LOCATED SO FAR FORWARD THAT MOTORISTS WILL BE ENCOURAGED TO STOP IN THE PATH OF THE MAINLINE TRAFFIC. ALSO, A LONGER ACCELERATION LANE SHOULD BE PROVIDED BECAUSE THE DRIVER'S ACCEPTABLE GAP SIZE NEEDED, IF SUFFICIENT GAPS ARE NOT AVAILABLE, SHOULD BE GIVEN TO CLOSING THE RAMP.
3. IF NO ACCELERATION LANE EXISTS FOR THE TEMPORARY ENTRANCE, THE YIELD SIGN (R1-2) AND THE YIELD AHEAD SIGN (W3-2) SHALL BE REPLACED WITH A STOP SIGN (R1-1) AND A STOP AHEAD SIGN (W3-1), ONE ON EACH SIDE OF APPROACH. WHERE TWO LANES ARE PROVIDED A SINGLE STOP LINE SHOULD BE PLACED ACROSS THE RAMP AT THE DESIRED STOP LOCATION.
4. WHERE THE ACCELERATION DISTANCE IS SIGNIFICANTLY REDUCED, A SUPPLEMENTAL PLAQUE MAY BE PLACED BELOW THE YIELD AHEAD SIGN READING NO MERGE AREA.
5. DETERMINE TAPER LAYOUTS USING THE FOLLOWING GUIDELINES:
L = WS FOR SPEED OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE:
L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MPH, IF KNOWN
6. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT, THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
IF MERGE REQUIRED:
FOR STOP CONDITION: PLACE CHANGEABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING PHASE I MESSAGE "STOP AHEAD" AND PHASE II MESSAGE "NO MERGE AREA".
FOR YIELD CONDITION: PLACE CHANGEABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING MESSAGE "YIELD AHEAD".
ACCELERATION LANE
L
300' MIN. (SEE NOTE 2.)
SEE NOTE 1.
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS (TYP.)
ENTRANCE RAMP (MERGE REQUIRED)
ENTRANCE RAMP (ADDED LANE)
EXIT RAMP (PHASE I)
EXIT RAMP (PHASE II)
W4-3R
R1-2
E5-1
W4-1
W3-2a
W20-1
ROAD WORK AHEAD
500'
200'
50' (TYP.)
(SEE NOTE 3.)
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
DETAILS OF OUTSIDE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS
WORKING NUMBER TCP-10
SHEET NUMBER 6360
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/1/25 REVISED TEXT STN


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR TEMPORARY
CONSTRUCTION CROSSOVER
(WORK DAY ONLY)
WORKING NUMBER TCP-11
SHEET NUMBER 6361
ISSUE DATE: AUGUST 01, 2017
REVISION
REVISED TEXT
DETAIL OF TEMPORARY CROSSOVER
DETAIL OF W20-5D
GENERAL NOTES:
LEGEND
TRUCKS TURNING LEFT
ROAD WORK 1 MILE
LEFT LANE CLOSED 1500 FT
LEFT LANE CLOSED ½ MILE
XX M.P.H.
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
LONG. BUFFER SPACE
EDGE OF TRAVELED WAY
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
STATION NO. AS SHOWN ON PLANS
VARIABLE MEDIAN WIDTH
8" SERIES "C" LETTERS


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLANS
UNEVEN PAVEMENT
DETAILS
WORKING NUMBER
TCP-12
SHEET NUMBER
6362
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
4/22/26
REVISED DIMENSIONS AND
TG
12/11/25
REVISED TEXT
STN
ADDED NOTE
TG
UNEVEN LANES
W8-11
36 X 36
1/2 MILE
TWO-WAY TRAFFIC
ONE-WAY TRAFFIC
W8-11
48 X 48
GENERAL NOTES:
1. UNEVEN LANE LINE:
A. IF LESS THAN OR EQUAL TO 1½", NO SIGNS REQUIRED.
B. IF GREATER THAN 1½" AND LESS THAN OR EQUAL TO 2¼", PLACE SIGNS AS SHOWN ON THIS SHEET.
C. IF GREATER THAN 2¼", TRAFFIC SHOULD NOT BE ALLOWED TO CROSS UNEVEN LANE LINE.
2. THE W8-11 SIGNS SHOULD BE SPACED AT 1/2 MILE INTERVALS THROUGHOUT UNEVEN LANE LINE LIMITS.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
4. SIGNS SHALL BE RETROREFLECTIVE WITH ORANGE BACKGROUND/BLACK COPY.
5. IN AREAS WITH CONTROLLED ACCESS, ONE-WAY TRAFFIC, W8-11 SIGNS SHOULD BE INSTALLED WITHIN 1000 FEET OF THE ENTRANCE RAMP TAPERS.

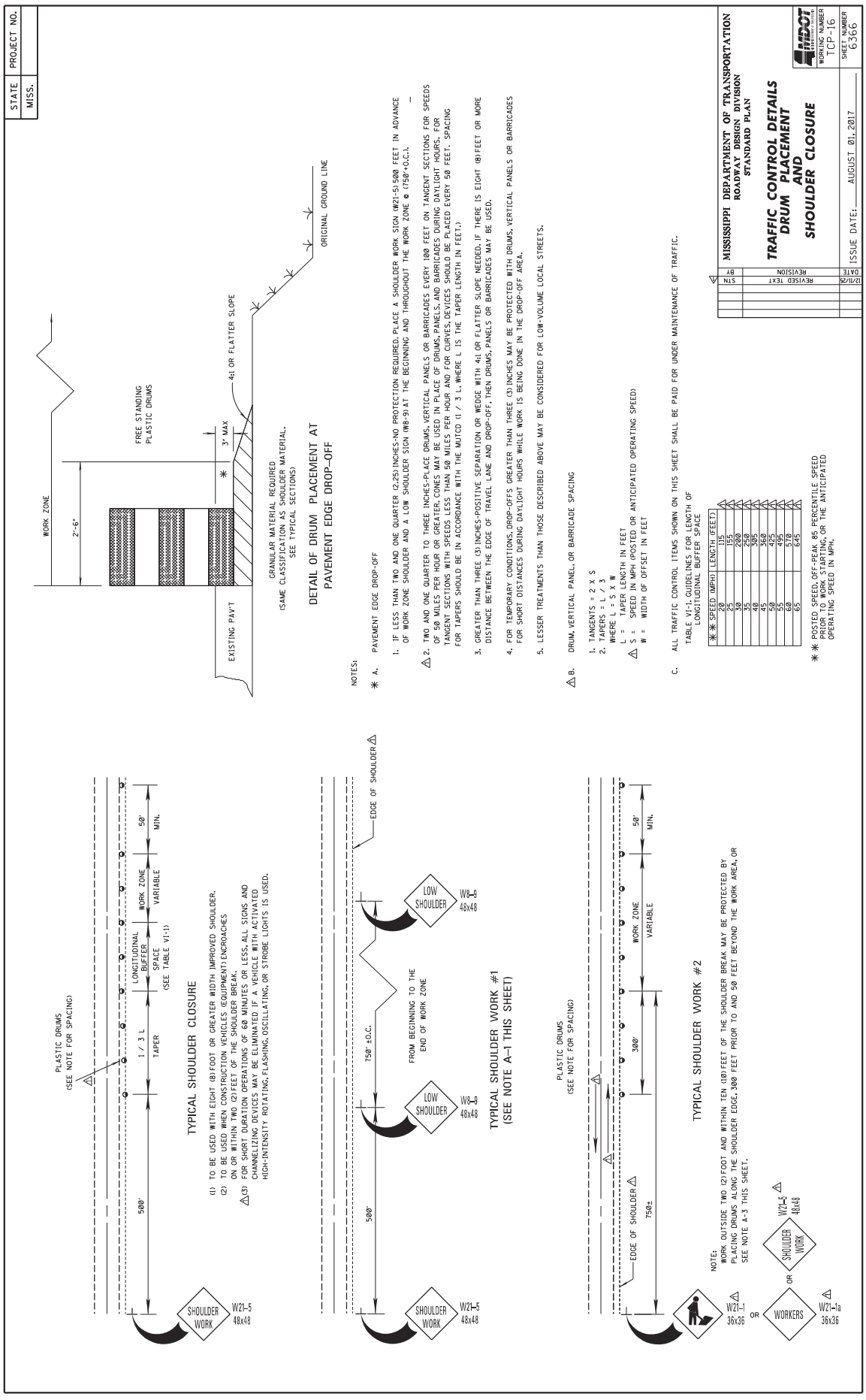

STATE MISS.
PROJECT NO.
PAY LENGTH
OUTSIDE EDGE OF TRAVEL LANE
4" SKIP YELLOW (**)
4" CONTINUOUS YELLOW
TWO-WAY RETROREFLECTIVE YELLOW RAISED PAVEMENT MARKERS
OMIT BROKEN LINE STRIPING
OUTSIDE EDGE OF TRAVEL LANE
4" CONTINUOUS WHITE EDGE STRIPE (**)
YELLOW (**)
4" CONTINUOUS WHITE EDGE STRIPE (**)
℄ JOINT
TRAFFIC
DETAIL "A"
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
DIRECTION OF TRAFFIC
GENERAL NOTES:
* 1. 3" UNLESS SHOWN ELSEWHERE ON THE PLANS.
** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR TAPE AS INDICATED IN PAY ITEMS).
△3. RETROREFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
△*** 4. SPACING OF RETROREFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:
URBAN AREA (ft-in) / RURAL AREA (ft-in)
TANGENT SECTIONS 40'-0" 80'-0"
HORIZONTAL CURVES 40'-0" 40'-0"
INTERCHANGE LIMITS 40'-0" † 40'-0"
△+ NOTE: ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINES) THROUGH ALL INTERCHANGE AREAS BEGINNING (ADVANCE) IN ADVANCE (IN DIRECTION OF TRAFFIC) OF EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
△5. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS FROM THE MDOT "APPROVED PRODUCTS LIST".
TRAFFIC
DETAIL "A"
4" CONTINUOUS WHITE EDGE STRIPE
4" SKIP WHITE
4" CONTINUOUS YELLOW EDGE STRIPE
RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
OUTSIDE EDGE OF TRAVEL LANE
MEDIAN EDGE OF TRAVEL LANE
4-LANE WITH ONE-WAY TRAFFIC
STN BY REVISION DATE
12/1/25 REVISED TEXT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS
WORKING NUMBER TCP-13
ISSUE DATE: AUGUST 01, 2017
SHEET NUMBER 6363


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TEMPORARY STRIPING FOR TRAFFIC CONTROL 4-LANE AND 5-LANE UNDIVIDED ROADWAYS
WORKING NUMBER TCP-14
SHEET NUMBER 6364
ISSUE DATE: AUGUST 01, 2017
STN BY REVISION DATE
REVISED TEXT. 12/11/25
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES
* NOTE: USE DETAIL STRIPING IF LENGTH ≤ 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.
TYPICAL TWO-WAY ARROW INSTALLATION
NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS @250 O.C.).
DETAIL A LATERAL PLACEMENT OF PAVEMENT MARKERS
DETAIL B LATERAL PLACEMENT OF PAVEMENT MARKERS
DETAIL OF TEMPORARY TURN ARROW
GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS FROM THE MDOT APPROVED PRODUCTS LIST.
2. RETROREFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
3. TEMPORARY TURN ARROW TO BE PAID FOR AS TEMPORARY TRAFFIC STRIPE (LEGEND), ESTIMATED AT 10.9 SQ. FT. PER ARROW



SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H
STD.	60	48	¾	1 ¼	3	3¾	4 Dm	7 D
	J	K	M	N	O	P	R	S
STD.	3	6⅝	22⅛	21	11⅞	19⅜	20⅜	18

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H
STD.	48	36	¾	1 ¼	3	2¾	3 Dm	6 D
	J	K	M	N	O	P	R	S
STD.	3	4⅛	14¾	14	7 ⅛	13⅛	13⅜	12


STATE MISS.
PROJECT NO.
WORK ZONE
2'-6"
FREE STANDING PLASTIC DRUMS
3" MAX
4:1 OR FLATTER SLOPE
EXISTING PAVT
GRANULAR MATERIAL REQUIRED (SAME CLASSIFICATION AS SHOULDER MATERIAL, SEE TYPICAL SECTIONS)
ORIGINAL GROUND LINE
DETAIL OF DRUM PLACEMENT AT PAVEMENT EDGE DROP-OFF
NOTES:
* A. PAVEMENT EDGE DROP-OFF
1. IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (750'+O.C.).
△2. TWO AND ONE QUARTER TO THREE INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE MUTCD (1 / 3 L, WHERE L IS THE TAPER LENGTH IN FEET.)
3. GREATER THAN THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED.
4. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
5. LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.
△B. DRUM, VERTICAL PANEL, OR BARRICADE SPACING
1. TANGENTS = 2 X S
2. TAPERS = L / 3
WHERE L = S X W
L = TAPER LENGTH IN FEET
△S = SPEED IN MPH (POSTED OR ANTICIPATED OPERATING SPEED)
W = WIDTH OF OFFSET IN FEET
C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
TABLE VI-1, GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE
** SPEED (MPH) | LENGTH (FEET)
20 | 115
25 | 155
30 | 200
35 | 245
40 | 305
45 | 360
50 | 425
55 | 495
60 | 570
65 | 645
** POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.
PLASTIC DRUMS (SEE NOTE FOR SPACING)
1 / 3 L
TAPER
LONGITUDINAL BUFFER SPACE (SEE TABLE VI-1)
WORK ZONE VARIABLE
50' MIN.
500'
SHOULDER WORK
W21-5 48x48
TYPICAL SHOULDER CLOSURE
(1) TO BE USED WITH EIGHT (8) FOOT OR GREATER WIDTH IMPROVED SHOULDER.
(2) TO BE USED WHEN CONSTRUCTION VEHICLES (EQUIPMENT) ENCROACHES ON OR WITHIN TWO (2) FEET OF THE SHOULDER BREAK.
△(3) FOR SHORT DURATION OPERATIONS OF 60 MINUTES OR LESS, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH ACTIVATED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS IS USED.
EDGE OF SHOULDER △
750' ±O.C.
500'
FROM BEGINNING TO THE END OF WORK ZONE
LOW SHOULDER
W8-9 48x48
SHOULDER WORK
W21-5 48x48
TYPICAL SHOULDER WORK #1
(SEE NOTE A-1 THIS SHEET)
PLASTIC DRUMS (SEE NOTE FOR SPACING)
EDGE OF SHOULDER △
750±
300'
WORK ZONE VARIABLE
50' MIN.
W21-1 △ 36x36
OR
WORKERS
W21-1a △ 36x36
OR
SHOULDER WORK
W21-5 △ 48x48
NOTE:
WORK OUTSIDE TWO (2) FOOT AND WITHIN TEN (10) FEET OF THE SHOULDER BREAK MAY BE PROTECTED BY PLACING DRUMS ALONG THE SHOULDER EDGE. 300 FEET PRIOR TO AND 50 FEET BEYOND THE WORK AREA, OR SEE NOTE A-3 THIS SHEET.
TYPICAL SHOULDER WORK #2
▽ STN | REVISED TEXT | 12/11/25 | BY
REVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL DETAILS
DRUM PLACEMENT AND
SHOULDER CLOSURE
MDOT
WORKING NUMBER TCP-16
ISSUE DATE: AUGUST 01, 2017
SHEET NUMBER 6366

General Decision Number: MS20260130 05/18/2026

State: Mississippi

Construction Types: Highway

Counties: Mississippi Counties of
De Soto

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

SUMS2010-053 08/04/2014

	Rates	Fringes
TRUCK DRIVER: SEMI/TRAILER TRUCK	$ 15.22	0.00
TRUCK DRIVER: DUMP TRUCK (ALL TYPES)	$ 13.66	0.00
TRUCK DRIVER: WATER TRUCK	$ 14.49	0.00
TRUCK DRIVER: MECHANIC	$ 13.00	0.00
TRUCK DRIVER: LOWBOY TRUCK	$ 12.43	0.00
TRUCK DRIVER: FLATBED TRUCK	$ 13.50	0.00
PILEDRIVERMAN	$ 12.50	1.23
OPERATOR: TRACTOR	$ 11.72	0.00
OPERATOR: SCRAPER	$ 12.25	0.00
OPERATOR: ROLLER (ALL TYPES)	$ 14.21	0.00
OPERATOR: PAVER (ASPHALT, AGGREGATE, AND CONCRETE)	$ 11.78	0.00
OPERATOR: OILER	$ 9.50	0.00
OPERATOR: MILLING MACHINE	$ 16.20	0.00
OPERATOR: MECHANIC	$ 21.57	0.00
OPERATOR: LOADER	$ 13.54	0.00
OPERATOR: GRADER/BLADE	$ 15.37	0.00
OPERATOR: CRANE	$ 19.97	0.00
OPERATOR: BULLDOZER	$ 14.46	0.00
OPERATOR: BROOM/SWEEPER	$ 12.83	0.00
OPERATOR: BOBCAT/SKID STEER/SKID LOADER	$ 11.64	0.00
OPERATOR: BACKHOE/EXCAVATOR/TRACKHOE	$ 15.01	0.00
OPERATOR: ASPHALT SPREADER	$ 14.71	0.00
LABORER: LABORER-CONES/ BARRICADES/BARRELS - SETTER/MOVER/SWEEPER	$ 10.25	0.00
LABORER: PIPELAYER	$ 12.93	0.00
LABORER: LUTEMAN	$ 12.88	0.00
LABORER: LANDSCAPE	$ 9.04	0.90
LABORER: FLAGGER	$ 9.59	0.00
LABORER: COMMON OR GENERAL, INCLUDING ASPHALT RAKING, SHOVELING, SPREADING; CONCRETE WORK; GRADE CHECKING; AND MASON TENDING - CEMENT/CONCRETE	$ 11.52	0.00
IRONWORKER, REINFORCING	$ 15.57	0.00
INSTALLER - GUARDRAIL	$ 12.00	0.00

HIGHWAY/PARKING LOT STRIPING: TRUCK DRIVER (LINE
STRIPING TRUCK).....$ 16.87 0.00
FENCE ERECTOR (BARBED WIRE, WOOD, SILT).....$ 9.04 0.90
ELECTRICIAN.....$ 23.78 7.38
CEMENT MASON/CONCRETE FINISHER.....$ 12.85 0.39
CARPENTER (FORM WORK ONLY).....$ 13.75 0.39

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
==========
Note: Executive Order (EO) 13706, Establishing Paid Sick Leave
for Federal Contractors applies to all contracts subject to the
Davis-Bacon Act for which the contract is awarded (and any
solicitation was issued) on or after January 1, 2017. If this
contract is covered by the EO, the contractor must provide
employees with 1 hour of paid sick leave for every 30 hours
they work, up to 56 hours of paid sick leave each year.
Employees must be permitted to use paid sick leave for their
own illness, injury or other health-related needs, including
preventive care; to assist a family member (or person who is
like family to the employee) who is ill, injured, or has other
health-related needs, including preventive care; or for reasons
resulting from, or to assist a family member (or person who is
like family to the employee) who is a victim of, domestic
violence, sexual assault, or stalking. Additional information
on contractor requirements and worker protections under the EO
is available at
https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject
to the Davis-Bacon Act that were awarded on or between January 1,
2015 and January 29, 2022, and that have not been renewed or
extended on or after January 30, 2022. Executive Order 13658 does
not apply to contracts subject only to the Davis-Bacon Related Acts
regardless of when they were awarded. If a contract is subject to
Executive Order 13658, the contractor must pay all covered workers
at least $13.65 per hour (or the applicable wage rate listed on this
wage determination, if it is higher) for all hours spent performing on
the contract from May 11, 2026, through December 31, 2026. The
applicable Executive Order minimum wage rate will be adjusted annually.
Additional information on contractor requirements and worker
protections under Executive Order 13658 is available at
www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications
and wage rates that have been found to be prevailing for the
type(s) of construction and geographic area covered by the wage
determination. The classifications are listed in alphabetical
order under rate identifiers indicating whether the particular
rate is a union rate (current union negotiated rate), a survey

rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ◆SU◆, ◆UAVG◆, ◆SA◆, or ◆SC◆ denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ◆SU◆ identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

◆SU◆ wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the

discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ◆SA◆ identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ◆SA◆ identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

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U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

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2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

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The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that

the requestor considers relevant to the issue.

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Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

General Decision Number: MS20260142 05/18/2026

State: Mississippi

Construction Types: Highway

Counties: Mississippi Counties of
Tate

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

SUMS2010-065 08/04/2014

	Rates	Fringes
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OPERATOR: OILER	$ 9.50	0.00
OPERATOR: MILLING MACHINE	$ 16.20	0.00
OPERATOR: MECHANIC	$ 20.92	0.00
OPERATOR: LOADER	$ 13.54	0.00
OPERATOR: GRADER/BLADE	$ 13.39	0.00
OPERATOR: CRANE	$ 19.97	0.00
OPERATOR: BULLDOZER	$ 13.35	0.00
OPERATOR: BROOM/SWEEPER	$ 12.82	0.00
OPERATOR: BOBCAT/SKID STEER/SKID LOADER	$ 11.64	0.00
OPERATOR: BACKHOE/EXCAVATOR/TRACKHOE	$ 13.86	0.00
OPERATOR: ASPHALT SPREADER	$ 14.71	0.00
LABORER: LABORER-CONES/ BARRICADES/BARRELS - SETTER/MOVER/SWEEPER	$ 10.25	0.00
LABORER: PIPELAYER	$ 12.93	0.00
LABORER: LUTEMAN	$ 12.88	0.00
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LABORER: FLAGGER	$ 9.59	0.00
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3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

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200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION

SUPPLEMENT TO FORM FHWA-1273

DATE: 07/25/2026

SUBJECT: Federal Contract Provisions for Subcontracts

Federal Contract Provisions for Subcontracts

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

Each "Request for Permission to Subcontract" (Mississippi Department of Transportation Form CAD-720) shall include a copy of the subcontract. The federal contract provisions (FHWA-1273, SUPPLEMENT TO FORM FHWA-1273, NOTICE OF NON-DISCRIMINATION AND DAVIS-BACON AND RELATED ACT PROVISIONS (WAGE RATES)) must be physically incorporated as part of the subcontract. A completed Mississippi Department of Transportation Form CAD-725 must be attached to the CAD-720.

CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Davis-Bacon and Related Act Provisions
IV. Contract Work Hours and Safety Standards Act Provisions
V. Subletting or Assigning the Contract
VI. Safety: Accident Prevention
VII. False Statements Concerning Highway Projects
VIII. Implementation of Clean Air Act and Federal Water Pollution Control Act
IX. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
X. Certification Regarding Use of Contract Funds for Lobbying
XI. Use of United States-Flag Vessels

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only).

I. GENERAL

1. Historically, contracting agencies using Federal-aid highway funds were required to ensure Form FHWA-1273 was physically incorporated into all contracts and subcontracts. Effective June 10, 2026, this requirement was eliminated [91 FR 25492]. Future use of Form FHWA-1273 is now optional on the part of the contracting agency using Federal-aid highway funds. FHWA continues to make Form FHWA-1273 available as a convenience to contracting agencies. Contracting agencies must continue to ensure compliance with the provisions cited in Form FHWA-1273 in accordance with the provisions regardless of the use of Form FHWA-1273. Accordingly, the contracting agency retains the authority to determine whether the contractor must use Form FHWA-1273 to physically incorporate required contract provisions in each subcontract and in lower tier contracts. Where permitted by the contracting agency, the contractor may choose other ways to include required contract provisions in each subcontract, besides incorporating Form FHWA-1273. Contract provisions in Form FHWA-1273 are not required to be physically included in subcontracts for design services on Federal-aid design-build contracts, or in purchase orders, rental agreements and other agreements for supplies or services.

The applicable provisions of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor or design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION

The contractor and all subcontractors must comply with the following policies: 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract.

1. Assurances Required:

a. The requirements of 49 CFR Part 26, including any amendments thereto, and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26, including any amendments thereto, in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E, including any amendments thereto, are incorporated by reference. 49 CFR Part 21.

III. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the

classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section IV, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number

of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with 29 CFR part 30, including any amendments thereto.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section III. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs (1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the

contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

IV. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $33 as of January 15, 2025 (See 90 FR 1859) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section III paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

V. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1. of this section refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph 1. of this section is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however,

contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VI. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

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

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

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

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

VIII. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

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

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1**. Instructions for Certification – First Tier Participants:**

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

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

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

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

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

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

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

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

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

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

* * * * *

X. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

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

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

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

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

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

XI. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (40 U.S.C. sections 14501(d) and 14701 and the Appalachian Regional Commission Code as authorized under 40 U.S.C. section 14302)
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 40 U.S.C. 14501 allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-101-1 **CODE: (IS)**

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.

907-101.01--Abbreviations. 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

907-101.02--Definitions. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-102-2 **CODE: (IS)**

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.

907-102.01--Prequalification of Bidders. 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.

907-102.02--Contents of Proposal Forms. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-2 **CODE: (SP)**

DATE: 06/17/2025

SUBJECT: Minor Alteration to the Contract

Section 104, Scope of Work, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-104.02--Alterations of Plans or Character of Work.

907-104.02.3--Minor Alteration to the Contract. In the first paragraph of Subsection 104.02.3 on page 25, change $10,000.00 to $25,000.00.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

DATE: 07/21/2026

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.

907-105.01--Authority of the Engineer. 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.

907-105.02--Plans and Working Drawings. 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) and 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-106-5 **CODE: (IS)**

DATE: 4/20/2026

SUBJECT: Control of Materials

Section 106, Control of Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

After Subsection 106.13 on page 47, add the following:

907-106.14--Buy America/Build America. Buy America (BABA) Materials Sourcing Requirements for Federal-Aid Projects.

The "Infrastructure Investment and Jobs Act" (the "Act"), or Bipartisan Infrastructure Law (BIL), was enacted on November 15, 2021 (See Public Law No. 117-58, Sections 70901-70953). The Build America, Buy America (BABA) provisions of the Act expand the previous Buy America requirements beyond what was currently required for steel and iron products.

Articles, materials, or supplies will only be classified under one of the following categories: iron or steel products, construction materials, manufactured products, or excluded materials (as further described in subsection 907-700.01.1). An article, material, or supply shall not be considered to fall under multiple categories. The applicable classification of the article, material, or supply being permanently incorporated into a construction project will be based on the status at the time the article, material, or supply is brought to the project work site.

Any iron or steel products, construction materials, and manufactured products that are permanently incorporated into a construction project, shall be domestically manufactured and compliant with current requirements of the Act, including 2 CFR 184, 2 CFR 200.322, 0MB 24-02 Memo and related requirements therein, and with the current requirements within 23 CFR 635.410.

It is the prime Contractor's responsibility to ensure all submittals and/or certifications required by the above listed Buy America/BABA provisions are submitted to the Project Engineer prior to the article, material, or supply being incorporated into the work.

Buy America/BABA provisions do not apply to temporarily used articles, materials, or supplies that:
(1) are specified to be removed at the end of the project per the contract provisions, or (2) are specified to remain in place per the contract provisions and are also documented by the Department in the contract provisions to be removed in a subsequent imminent, near-term phased project.

The following categories, as described above, require Domestic Materials Self-Certification Form (as described within Subsection 907-700.01.2) on construction projects:

Iron or Steel Products
Construction Materials
Manufactured Products.

Buy America/BABA provisions do not apply to excluded materials.

A non-exclusive list of items that must comply with the above listed Buy America/BABA requirements and require the submittal of the Buy America Domestic Materials Self- Certification Form may be viewed at www.goMDOT.com under Business Center ➔ Engineering Standards/Guides/Manuals ➔ Construction Materials.

The list of items referenced above is not all-inclusive. All iron or steel products, construction material, and manufactured products permanently incorporated into the project shall comply with the applicable Buy America/Build America (BABA) requirements, regardless of whether such items are specifically Identified.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-4 **CODE: (SP)**

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.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-6 **CODE: (SP)**

DATE: 03/11/2025

SUBJECT: Default and Termination 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.

907-108.08--Default and Termination of Contract. At the end of the Subsection 108.08 on page 85, add the following.

907-108.08.1--Debarment of Contractor. If the Contractor is declared to be in default under this Subsection and the Contract terminated for the reason(s) indicated in Subsections 108.08 (d), (f), or (g) above, the Commission may, in its discretion and in addition to default and termination, declare the Contractor to be debarred from bidding on any other projects for a period of one (1) year from the date of the termination letter. If the debarred Contractor has multiple on-going Contracts with the Commission and receives a one (1) year debarment, the on-going Contract(s) may continue; however, the Contractor will not be allowed to bid another project until one (1) year has passed from date of the termination letter.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-5 **CODE: (IS)**

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.

907-109.01--Measurement of Quantities. 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.

907-109.04.1--Supplemental Agreement. Delete the second paragraph of Subsection 109.04.1 on page 90.

907-109.04.2--Force Account Agreement. 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.

907-109.07--Changes in Material Costs. 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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-401-4 **CODE: (IS)**

DATE: 03/02/2026

SUBJECT: Asphalt Pavement - General

Section 401, Asphalt Pavement - General, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows..

907-401.02--Materials.

907-401.02.6--Standards of Acceptance.

907-401.02.6.4—Acceptance Procedure for Density.

Delete the paragraph and Lot Determination table of Subsection 401.02.6.4 and substitute the following:

Each completed lift will be accepted with respect to compaction on a lot to lot basis from density tests performed by the Department. For normal production days, every 350 tons will be considered a lot. When cores are being used for the compaction evaluation, randomly obtain one core from each lot. When the nuclear density gauge is being used for compaction evaluation, obtain two random readings from each lot and average the results. See Chapter 7 of the latest edition of MDOT's Field Manual for Asphalt Mixtures for more details. Additional tests may be required by the Engineer to determine acceptance of work appearing deficient. The Contractor shall furnish and maintain traffic control for all compaction evaluations, including coring, required in satisfying specified density requirements.

907-401.02.6.4.1 –Roadway Density.

Delete the last sentence in section 1 of Subsection 401.02.6.4.1 on page 250 and substitute the following:

For all other leveling, no density shall be required but the pavement shall be rolled to refusal densification as defined in Subsection 907-401.02.6.4.3.

907-401.02.6.4.3—Roll to Refusal Densification.

Roll to refusal densification is defined as the number of roller passes to maximize the in-place unit weight of the mixture. A density gauge shall be used to determine the number of passes to achieve the maximum in-place unit weight.

907-401.02.6.4.4—Irregular Areas.

Irregular areas are defined as a mat where an established rolling pattern cannot be obtained. Irregular areas include areas with a width of less than 8 feet or shorter than 300 feet in length, pre-leveling, wedging [less than fifty percent (50%) of width greater than minimum lift thickness], ramp pads, median crossovers, turnouts, and other areas where an established rolling pattern cannot be obtained.

907-401.02.6.8--Acceptance Procedure for Pavement Smoothness Using Mean Roughness Index (MRI). Delete the third sentence of the second paragraph of Subsection 401.02.6.8 on page 253, and substitute the following.

The surface shall be tested and corrected to a smoothness index as described herein except those locations or specific projects that are excluded from smoothness testing with an IPS.

Delete the third, fourth and fifth paragraphs of Subsection 401.02.6.8 on pages 253 & 254, and substitute the following.

The smoothness of the surface lift will be determined for traffic lanes, auxiliary lanes, climbing lane and two-way turn lanes. Areas excluded from a smoothness test with the IPS are acceleration and deceleration lanes, tapered sections, transition sections for width, shoulders, crossovers, ramps, side street returns, etc. The roadway pavement on bridge replacement projects having 1,000 feet or less of pavement on each side of the structure will be excluded from a smoothness test. Smoothness testing shall exclude 264 feet from each transverse joint that separates the pavement from a bridge deck, bridge approach slab or existing pavement not constructed under the contract. This can apply to any other exceptions including, but not limited to, railroad crossings and manholes. Segments containing a considerable number of encroachments such as intersections, manholes, curb and gutter sections, etc. may be excluded at the Engineer's discretion.

Once paving has concluded, one final smoothness measurement shall be performed for both pay adjustments and corrective action. Multiple smoothness measurements for pay adjustments and correction can still be performed at the Engineer's discretion. These measurements must be performed at the posted speed limit or 50 miles per hour (±5 miles per hour), whichever is lower. Measurements will be made in both wheel paths of exterior and interior lanes. The wheel paths shall be designated as being located three feet (3') and nine feet (9') from centerline or longitudinal joint, respectively. Testing will also be required on sections that have been surface corrected. No smoothness testing shall be performed when there is any residual moisture on the pavement surface. Any additional testing shall meet the requirements of Subsection 907-403.03.2.

The surface lift will be accepted on a continuous interval basis for pavement smoothness. Continuous reporting is based upon all MRI values for a specified running interval. These values are averaged and presented at the midpoint of the specified running interval.

Delete the last sentence of the last paragraph of Subsection 401.02.6.8 on page 254, and substitute the following.

All tests and corrections shall be in accordance with AASHTO R 54, Accepting Pavement Ride Quality When Measured Using Inertial Profiling Systems.

Delete Subsection 401.02.6.9 on pages 254 & 255, and substitute the following.

907-401.02.6.9--Inertial Profiling System.

907-401.02.6.9.1--General. The Inertial Profiling System (IPS), furnished and operated by the Contractor under the supervision of the Engineer or the Engineer's representative, shall be a dual-line laser on a high speed vehicle meeting the requirements of AASHTO M 328, Standard Specification for Inertial Profiler. Additionally, each IPS should be equipped with a GPS to ensure distance measurement accuracy. The profiler system and operator shall be certified at an MDOT approved regional calibration facility in accordance with AASHTO R 56, Standard Practice for Certification of Inertial Profiler Systems and AASHTO R 57, Operating Inertial Profiler Systems.

907-401.02.6.9.2--Computer Requirements. The computer measurement program must be menu driven, Windows compatible, and able to produce unfiltered profiler runs in the Pavement Profile (*.ppf) file format. The computer shall have the ability to display and print data on site for verification and shall have the ability to save and transfer data via Universal Serial Bus (USB) flash drive, which shall be provided by the Contractor.

All runs must be stored in a directory named in the following format for acceptance by the Project Engineer:

Project_County_Route

All profiler runs must be named in the following format for acceptance by the Project Engineer:

Direction_Lane_BeginStation_EndStation

In addition to manufacturers' software; the latest version of FHWA's ProVAL software shall be installed on the IPS computer.

907-401.03--Construction Requirements.

907-401.03.1--Specific Requirements.

907-401.03.1.2--Tack Coat. Delete the fourth sentence of Subsection 401.03.1.2 and substitute the following:

A hand wand will only be allowed for applying tack coat on irregular areas as defined in Subsection 907-401.02.6.4.4 if the distributor bar is not a feasible option.

907-401.03.1.4--Density. Delete the first sentence of the first paragraph of Subsection 401.03.1.4 and substitute the following.

The lot density for all dense graded pavement lifts, except for irregular areas as defined in Subsection 907-401.02.6.4.4, shall not be less than the specified percent (92% or 93%) of the maximum density based upon AASHTO T 209 for the day's production..

Delete the third paragraph of Subsection 401.03.1.4 and substitute the following.

Irregular areas as defined in Subsection 907-401.02.6.4.4 shall be compacted to roll to refusal densification as defined in Subsection 907-401.02.6.4.3.

907-401.03.9--Material Transfer Equipment. In the third sentence of Subsection 401.03.9 on page 261, change "include:" to "include".

907-401.03.14--Shoulder Wedge. In the second sentence of the first paragraph of Subsection 401.03.14 on page 263, change "cross roads" to "crossroads".

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-403-4 **CODE: (SP)**

DATE: **03/19/2025**

SUBJECT: **Asphalt Pavements**

Section 403, Asphalt Pavements, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-403.03--Construction Requirements.

907-403.03.2--Smoothness Tolerances. In the tenth paragraph of Subsection 403.03.2 on page 283, change "Sections(s)" to "Segment(s)".

907-403.03.2.1--Smoothness Tolerances for Mean Roughness Index (MRI). After the second paragraph of Subsection 403.03.2.1 on page 283, add the following.

For all projects, smoothness data shall be reported by two MRI methods:

1. A continuous long interval MRI report
2. A continuous 25-foot short interval MRI report

At the bottom of page 283 and top of 284 in Subsection 403.03.2.1, delete the paragraphs for Category, A, Category B, and Category C, and substitute the following.

Category A projects shall have a long interval surface MRI of not more than 60 inches per mile.

Category B projects shall have a long interval surface MRI of not more than 70 inches per mile.

Category C projects shall have the existing surface profiled at no additional cost to the State. These projects shall be measured by a long fixed interval (528-foot) surface MRI and meet the following requirements:

A 50% improvement in MRI from the existing surface
or
80 inches per mile (whichever value is higher)

Delete the first, second, and third full paragraphs on page 284, and substitute the following.

For all projects, areas of the surface lift with localized roughness greater than 160 inches per mile as determined by the continuous short interval (25') report will be identified for correction by the Contractor.

When a project has multiple lifts, the intermediate lift shall meet the short interval requirement of 200 inches per mile. Corrective action must be taken on those segments that do not meet this requirement. No unit price adjustment will be applied on the underlying lift.

Delete the table at the bottom of page 284, and substitute the following.

Mean Roughness Index (inches / mile)	Contract Price Adjustment Percent of Asphalt Unit Bid Price
Above 20.0 Over	REMOVE AND REPLACE *
15.1 to 20.0 Over	80
10.1 to 15.0 Over	85
5.1 to 10.0 Over	90
0.1 to 5.0 Over	95
Required Surface MRI	100

* In lieu of removal and replacement, segments may be brought into compliance through corrective action at the discretion of the Project Engineer.

Delete the table and footnote at the top of page 285, and substitute the following.

Mean Roughness Index (inches/mile) Percent Improvement	Contract Price Adjustment Percent of Asphalt Unit Bid Price
Below 30.1 Percent	80 **
30.1 to 35.0 Percent	80
35.1 to 40.0 Percent	85
40.1 to 45.0 Percent	90
45.1 to 50.0 Percent	95
Above 50%	100

** Segments that show less than 30 percent improvement as well as a final surface MRI greater than 100 inches/mile will be subject to removal.

Before the last paragraph on Subsection 403.03.2.1 on page 285, add the following.

Corrective action for all categories must be taken on those segments that exceed the localized roughness or the 'Remove and Replace' threshold. All locations must be located and marked by the Contractor and approved by the Project Engineer before corrective action shall take place. The minimum remove and replace length will be 528 feet (0.1 mile). Additional smoothness testing shall be required on segments following corrective action and/or replacement and will be required to meet *at least* the maximum surface MRI short of 'Remove and Replace' tolerance.

907-403.05--Basis of Payment.

907-403.05.2--Pay Items. Add the "907" prefix to the list of pay items on page 291.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-407-1 **CODE: (SP)**

DATE: **01/16/2026**

SUBJECT: **Tack Coat**

Section 407, Tack Coat, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-407.03—Construction Requirements.

907-407.03.3—Application of Bituminous Material.

Delete the second sentence of the first paragraph of Subsection 407.03.3 and substitute the following.

A hand wand will only be allowed for applying tack coat on irregular areas as defined in Subsection 907-401.02.6.4.4.

907-407-05-- Basis of Payment.

Add the "907" prefix to the pay item listed on page 309.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-418-3 **CODE: (SP)**

DATE: 02/18/2025

SUBJECT: Micro-Surfacing

Section 907-418, Micro-Surfacing, 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 907-418 -- MICRO-SURFACING

907-418.01--Description. This section covers the materials, equipment, construction, and application procedures for placing micro-surfacing material for filling ruts and for surfacing existing paved surfaces. The micro-surfacing shall be a mixture of a polymer-modified asphalt emulsion, 100 percent crushed mineral aggregate, mineral filler, water and other additives for control of set time in the field. All ingredients shall be properly proportioned, mixed and spread on the paved surface in accordance with this Specification and as directed by the Engineer.

907-418.02--Materials. The materials to be used and the specifications for them are as listed below.

907-418.02.1--Aggregate. Mineral aggregate used in the micro-surfacing material shall meet the quality requirements of Table 1 and grading requirements of Table 2.

Table 1
Aggregate Quality Requirements

Test	Test Method	Requirement
Sand Equivalent, min	T 176	65
Los Angeles Abrasion, %, max[a]	T 96	30
Magnesium Sulfate Soundness, max loss, %, 4 cycles[a]	T 104	25

[a] The abrasion and soundness test is to be run on the parent aggregate.

Table 2
Aggregate Grading Requirements

Stockpile Tolerance %	Sieve Size	Type II Percent Passing	Type III Percent Passing
±0	3/8"	100	100
±5	No. 4	90 – 100	70 – 90
±5	No. 8	65 – 90	45 – 70
±5	No. 16	45 – 70	28 – 50
±5	No. 30	30 – 50	19 - 34
±4	No. 50	18 – 30	12 - 25
±3	No. 100	10 – 21	7 - 18
±2	No. 200	5 – 15	5 - 15

The gradation of the aggregate stockpile shall not vary by more than the stockpile tolerance, as indicated in Table 2, from the mix design gradation.

The specification gradation band for the No. 4, No. 8, No. 16 and No. 30 sieve screens shall be divided into thirds, no result shall move from the top third range to the bottom third range, or vice versa, on successive sieves to avoid any gap grading in the aggregate.

For example:

Sieve Size	Type II Spec	Type II Lower Range	Type II Middle Range	Type II Upper Range	Type III Spec	Type III Lower Range	Type III Middle Range	Type III Upper Range
No. 4 Sieve	90 – 100	90-93	93-97	97-100	70 – 90	70-77	77-83	83-90
No. 8 Sieve	65 – 90	65-73	73-82	82-90	45 – 70	45-53	53-62	62-70
No. 16 Sieve	45 – 70	45-53	53-62	62-70	28 – 50	28-35	35-43	43-50
No. 30 Sieve	30 – 50	30-37	37-43	43-50	19 - 34	19-24	24-29	29-34

A Type II aggregate with a result of 98% passing the No. 4 screen shall not be lower than 73% on the No. 8 screen.

The two successive sieve requirement can be waived with proof of the aggregate being successfully used in prior projects and at the discretion of the Engineer.

Aggregates shipped to the project shall be uniform and shall not require blending or pre-mixing at the storage area before use. Additionally, the aggregate shall remain within the master gradation band. Mineral filler shall not be used to satisfy the requirements as set forth in Table 2.

907-418.02.2--Mineral Filler. The mineral filler shall be Portland Cement or Hydrated Lime meeting the following requirements.

Portland Cement ..... Section 701
Hydrated Lime ..... Subsection 714.03

907-418.02.3--Cationic Asphalt Emulsion. The emulsified asphalt shall be a cationic type CQS-1P meeting AASHTO M316 or CSS-EP meeting the following requirements in Table 3.

Table 3
Emulsion Requirements

Property	Test Procedure (AASHTO)	Specification	
		Min	Max
Emulsion Properties			
Viscosity, Saybolt-Furol, @ 122°F, SFS	T59	15	150
Sieve Test, %	T59		0.1
Residue by Evaporation, %	T59	62	
Residue Properties From Low Temperature Evaporation	**AASHTO R-78[1]**		
MSCR @ 70°C, Recovery @ 3.2 kPa, %	T350	80	
MSCR @ 70°C, J_{nr} @ 3.2, 1/kPa	T350		0.50

[1] After recovering the residue from AASHTO R-78, the sample may be annealed prior to testing to remove any excess moisture and provide for a consistent sample. The annealing can be accomplished by placing 20 grams of residue in a 6 oz. metal container (approx. 3-inch diameter) and heating to 163°C for no more than 15 minutes. The sample should be stirred with a spatula every 5 minutes. The sample can then be poured directly into a 25mm DSR silicone mold for evaluation.

907-418.02.5--Tack Coat. Normally, tack coat is not required unless the surface to be covered is concrete or is extremely dry and raveled. The emulsified asphalt should be the same grade and type as used for the micro-surfacing. The tack coat shall be placed using a standard distributor capable of evenly applying the emulsion. The tack coat shall be allowed to cure sufficiently before the application of micro-surfacing. If the tack coat is required, it will be noted on the plans or in the contract documents.

907-418.02.6--Water. The water for the micro-surfacing mixture shall be potable and free from any contaminants detrimental to the mixture.

907-418.02.7--Approved Additives. The emulsion manufacturer shall provide approved additives as required to control the set time of the mixture in the field. Approved additives shall be on the Department's APL.

907-418.02.8--Composition of Mixture. The Mix Design shall be prepared by an AASHTO-accredited laboratory and must be submitted to the engineer prior to beginning the work. The Mix Design shall be supplied by the Contractor. As a minimum, the design shall include the following: aggregate test properties, aggregate target gradation, results of Table 4 design requirements, design asphalt residue and mineral filler percentages based on dry weight of the aggregate. At least 10 days prior to construction, the Contractor shall submit to the Central Laboratory representative samples of each ingredient to be used in the micro-surfacing mixture for design verification. The samples shall include information relative to sources, type of materials and project number. No micro-surfacing work shall begin nor shall any mixture be accepted until the Laboratory has approved the micro-surfacing design. Acceptance of the design by the Engineer is solely for the purpose of quality control and in no way releases the Contractor from the responsibility to perform acceptable work under this specification.

The micro-surfacing material shall be a uniform mixture of aggregate, emulsified asphalt, mineral filler, water and other additives as required to control the set time in the field. The emulsion and aggregate shall be compatible so that a complete, uniform coating of the aggregate shall be obtained in the mixing unit. The mixture shall have sufficient working life to allow for proper placement at the existing ambient temperature and humidity. The Engineer shall require the mixture to be redesigned if replacement of a constituent, or change in gradation, is needed to produce an acceptable mixture. The constituents shall be proportioned to produce a uniform mixture meeting the requirements of Table 4. Reference to ISSA TB means International Slurry Surfacing Association Technical Bulletin.

Table 4
Mix Design Specifications

	Mixture Control Tolerance	Type II	Type III
Range for Residual Asphalt, %[a]	+/- 0.50	6.5 – 9.5	6.0 – 9.0
Range for Mineral Filler, %[a]	+/- 0.50	0.5 – 3.0	0.5 – 3.0
Test	Test Method	Value	
Wet Track Abrasion Loss, Maximum 1 Hour Soak	TB 100	38 g/ft^2	
Wet Track Abrasion Loss, Maximum 6 Day Soak	TB 100	75 g/ft^2	
Lateral Displacement, Maximum %	TB 147	5	
Excess Asphalt by LWT, Maximum	TB 109	50 g/ft^2	
System Compatibility, Minimum	TB 144	11 grade points	
Mixing Time, Seconds @ 77°F, Minimum	TB 113	180	
Set Time, 30 Minutes, Minimum	TB 139	12 kg-cm	
Early Rolling Traffic Time, 60 Minutes, Minimum	TB 139	20 kg-cm	
Water Resistance, 30 Minutes	TB 102	No Discoloration	
Wet Stripping Test, % Coating, Minimum	TB 114	90	
System Compatibility	TB 115	Pass	
Cantabro Mass Loss[b], %, Maximum	TX 245-F	2.0	
Ideal CT, peak load, lb-force, Minimum	ASTM D 8225	2000	
Ideal CT, Index, minimum	ASTM D 8225	100	
Bulk Specific Gravity[b]	AASHTO T-166	2.100 – 2.400	

[a] Percent residual asphalt and percent mineral filler shall be based on weight of dry aggregate. Should these tolerances fail to be met, immediate adjustments will be made to bring the gradation and percent residual asphalt back within tolerances or the work will not be allowed to continue.

[b] Samples to be prepared by ISSA TB 148 Marshall Compaction only (30 blows/side) and tested in dry condition at 25°C.

907-418.02.9--Equipment. The Engineer shall approve all equipment, tools, and machines used in the performance of this work. No work shall be attempted with equipment that is malfunctioning. The Engineer may order that the work be discontinued if sufficient equipment and tools are not in use to place the materials satisfactorily.

907-418.02.9.1--Mixing Equipment. The paving mixture shall be blended by a self-propelled, positive, non-slipping aggregate delivery system (belt over chain) micro-surfacing mixing machine which shall be a continuous flow mixing unit able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, field control additives and water to a revolving multi-blade, twin shafted mixer and discharge the mixed product on a continuous flow basis. The mixture shall be thoroughly blended so that no uncoated aggregate is visible upon discharge from the mixing unit. The machine shall be equipped with self-loading devices which provide for the loading of all materials while continuing to lay micro-surfacing, thereby minimizing construction joints. The machine shall be equipped with opposite side driving stations to optimize longitudinal alignment. The machine shall be equipped to allow the operator to have full hydrostatic control of the forward and reverse speed during the application of the micro-surfacing material. Continuous-run equipment will be required to ensure continuity of mix and reduction of start-up joints.

In some cases and with the Engineer's approval, truck mounted units may be used for short narrow roadways, crossovers and irregular areas. If truck mounted units are allowed, they shall be equipped with a positive, non-slipping aggregate delivery system (belt over chain) and have the capability of applying a minimum of 10 tons of aggregate without recharging the aggregate bin.

1. Water Pressure System. The mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray ahead of and outside the spreader box when required.

2. Calibration & Proportioning Devices. The machine shall be equipped with individual volume or mass controls or other gauging devices for measuring and proportioning each material added to the mix. Each material control device shall be calibrated, properly marked, and positively interlocked. The aggregate feed to the mixer shall be equipped with a revolution counter or similar device so that the amount of asphalt emulsion, aggregate and mineral filler used may be determined at any time. Each mixing unit shall be calibrated prior to commencement of the work. The calibrations shall be performed and verified in the presence of the Engineer or the Engineer's representative. Once calibrated, the aggregate and emulsion flows shall not be changed without the approval of the Engineer. The water and additive may be adjusted in the field to control the mix properties to produce an acceptable mix. With the Engineers approval, previous calibration documentation covering the exact materials to be used may be acceptable provided they were made within the last three (3) months.

3. Emulsion Pump. The emulsion pump shall be a heated, positive displacement type pump.

Attached to the machine shall be a hydraulically adjustable (adjustable while applying mixture) type spreader box with a positive screed adjustment for yield control. The box shall be attached to the mixer, equipped with ribbon flights mounted on an adjustable shaft to continually agitate and distribute the material throughout the box. The box will be equipped with curb bumpers and replaceable runners with a minimum of 5-foot long end runners. The box shall be equipped with a sufficient walkway to provide access to either side of the spreader box without walking through the freshly applied material. The box must be capable of laying mix to a width of 14 feet. The equipment shall provide sufficient turbulence to prevent the mix from setting in the box or causing excessive build-up or lumps. To prevent the loss of mixture from the box, the Contractor shall attach flexible seals, front and rear, in contact with the road. The full width application box shall be equipped with a secondary strike-off located approximately 2 to 3 feet behind the primary strike-off to minimize transverse corrugations. The secondary strike-off shall have elevation and width adjustments similar to the primary strike-off. It shall have a pivot point where it can be tilted for texturing or raised completely off of the surface. The use of burlap drags or other drags necessary to obtain the desired surface texture, shall require approval by the Engineer. Drags having excessive build-up shall be replaced. Drags shall be kept in a completely flexible condition at all times.

907-418.02.9.2--Auxiliary Equipment. Suitable surface cleaning equipment, barricading equipment, hand tools and other support equipment shall be provided by the Contractor as necessary to perform the work.

907-418.02.10--Stockpiling and Storage.

907-418.02.10.1--Aggregate Storage. The mineral aggregate shall be handled in such a manner as to prevent segregation, mixing of the various materials or sizes, and contamination with foreign materials. The grading of aggregates proposed for use and as supplied to the project shall be uniform. Suitable equipment of acceptable size shall be furnished by the Contractor to maintain the stockpiles and prevent segregation of aggregates. The aggregate shall be passed over a scalping screen immediately prior to transfer to the micro-surfacing mixing machine to remove oversized material. In addition, the scalping screen unit, when payment for micro-surfacing is to be by the ton of aggregate and gallon of asphalt emulsion, shall be equipped with certified scales capable of providing an automated ticket printout for each truck load of material delivered to the micro-surfacing machine. Each ticket shall include the project number, ticket number, truck number, date and batch weight of material loaded.

907-418.02.10.2--Storage of Bituminous Material. The bituminous storage shall be adequate to meet the requirements of the production rate. All equipment used in the storage and handling of bituminous material shall be kept in a clean condition at all times and shall be operated in such a manner that there will be no contamination with foreign matter.

907-418.02.11--Preconstruction Meeting. Coordinate a preconstruction meeting prior to construction between the Department and the Contractor to discuss the following topics.

- The construction process
- The quality control plan
- Mix design
- Materials control
- Materials measurement
- Equipment calibration
- Traffic control plan
- Equipment/process overview
- Inspection
- Test strip
- Unique project conditions
- Project documentation
- Expectations
- Schedule

907-418.03--Construction Requirements. It shall be the responsibility of the Contractor to produce, transport and place the specified materials in accordance with these specifications and as approved by the Engineer. The finished micro-surfacing shall have a uniform texture free from excessive scratch marks, tears or other surface irregularities. The cured mixture shall adhere fully to the underlying surface. Based upon a visual examination or test results the Engineer may reject any work due to poor workmanship, loss of texture, raveling or apparent instability.

907-418.03.1--Seasonal and Weather Limitations. No micro-surfacing shall be performed from December 1 and March 1.

The micro-surfacing mixture shall be spread only when both the pavement surface and the ambient temperature is at least 50°F and rising and the weather is not foggy or rainy and there is no forecast of temperatures below 32°F within 48 hours from the time of placement. The Contractor shall supply a surface temperature thermometer.

907-418.03.2--Surface Preparation. The area to be surfaced shall be thoroughly cleaned of vegetation, loose aggregate, lane striping, thermoplastic pavement markings, raised pavement markers and soil. Manholes, valve boxes and other service entrances shall be protected from the surfacing material. Crack sealant material shall be allowed to cure for a minimum of 30 days on pavement surfaces that have been crack sealed before application of the micro-surfacing. Unless otherwise directed by the Engineer, pre-wetting of the surface will be required. Water shall be sprayed ahead of and outside of the spreader box at an acceptable rate to dampen the surface without any free flowing water ahead of the spreader box.

907-418.03.3--Tack Coat. The tack coat, when required, shall be diluted at the rate of one part emulsion and three parts water and shall be applied with an asphalt distributor. The application rate shall be 0.05 to 0.15 gallons of diluted emulsion per square yard. When required, tack coat will not be measured for separate payment; costs shall be included in other items bid.

907-418.03.4--Application. The paving mixture shall be spread on the prepared surface in such a way to leave a uniform finished surface. Care shall be taken when filling ruts to restore the designed profile of the pavement cross section. Excess crowning or overfilling of the rut area will

not be permitted. The Contractor shall use squeegees and lutes to spread the mixture in areas inaccessible to the spreader box and areas requiring hand spreading. A sufficient amount of material shall be carried at all times in all parts of the spreader box to ensure complete coverage.

Adjustments to the additive will be permitted if necessary to provide a slower setting time when hand spreading is needed. If hand spreading is necessary, the mixture shall be poured in a small windrow along one edge of the surface to be covered and then spread uniformly by a hand squeegee or lute. A smooth, neat seam shall be provided where two passes meet. Excess material shall immediately be removed from ends of each run.

907-418.03.5--Traffic Control. The emulsified asphalt shall be formulated in such a way to allow the paving mixture to cure at a rate which will permit straight rolling traffic on the pavement within one hour after application without damaging the pavement surface. The Contractor shall maintain traffic control as necessary to prevent damage to the mixture. Any such damage done by traffic to the mixture shall be repaired by the Contractor at the Contractor's expense.

907-418.03.6--Rut Filling and Leveling Course. When required, before the final surface course is placed, preliminary micro-surfacing materials shall be required to fill ruts, utility cuts, depressions in the existing surface, etc. Ruts greater than 1/2" in depth shall be filled independently with a rut filling spreader box either 5-foot or 6-foot in width. For irregular or shallow rutting 1/2" or less in depth, a leveling course may be used as directed by the Engineer. The spreader box used for the leveling course shall be the same as used for the surface course; however, a steel or high density strike-off shall be used in lieu of a flexible rubber. Using a rut fill spreader box, each individual rut fill shall be crowned to compensate for traffic compaction at a rate of 1/8" per 1" of rut depth. Rut filling shall be placed and opened to traffic a minimum of 24 hours prior to surfacing. All materials, mixture composition, equipment, and construction procedures and requirements shall be as specified above.

907-418.03.7--Workmanship. Excessive buildup, uncovered areas, or unsightly appearance shall not be permitted on longitudinal or transverse joints. Longitudinal joints shall be placed on lane lines and excessive overlap shall not be permitted. Care shall be taken to insure straight lines along the roadway centerline, lane lines, shoulders or edge lines. Longitudinal edge lines shall not vary by more than ±2" in 100 linear feet. If the Contractor is unable to meet this requirement, they shall be required to establish a pilot line. Lines at intersections shall be kept straight to provide a neat and uniform appearance.

1. Finished Surface. The finished micro-surfacing shall have a uniform texture free from excessive scratch marks, tears, or other surface irregularities. Excessive tear marks are considered as four (4) drag marks within 100 linear feet in a single pass or drag marks that are ≥1/2" in width and ≥6" in length per 100 square yards, or any marks ≥1" in width or ≥4" in length. The edges of the micro-surfacing shall be neat in appearance and longitudinal alignment shall be parallel to the roadway centerline.

2. Joints and Seams. The longitudinal and transverse joints shall be neat in appearance and uniform. Transverse joints shall be constructed as butt-type joints. No excessive buildup, uncovered areas or unsightly appearance will be permitted on longitudinal or transverse joints. Longitudinal joints shall be placed on lane lines when possible. Gaps between applications shall not be permitted. Joints will be considered acceptable if no more than a

½-inch vertical space exists between the pavement surface and a 4-foot straight edge placed perpendicular on the longitudinal joint, and no more than 1/4" for a transverse joint.

3. Irregular Areas. Areas which cannot be reached with the mixing machine shall be surfaced using hand tools to provide complete and uniform coverage. The area to be hand worked shall be cleaned and lightly dampened prior to mix placement. Care shall be exercised in areas that require handwork so that the finished surface is uniform in texture, dense and of overall neat appearance comparable to that produced by the spreader box. Micro-surfacing material required to repair deficiencies due to unsatisfactory workmanship shall not be paid for but shall be entirely at the Contractor's expense. When transitions are included as part of the work, then these areas are to be surfaced prior to application of the main line. This shall include intersections, turnouts, radii, ramps etc.

907-418.03.8--Aggregate Application Rate. The target spread rate for all full width micro-surfacing not intended as a leveling course shall be controlled to within plus or minus two (±2) pounds per square yard of spread rate and shall be based on the weight of dry aggregate. Unless otherwise approved by the Engineer, the full width spread rate shall be 18 pounds per square yard for Type II and 25 pounds per square yard for Type III. For rut filling/leveling courses, the spread rate shall be 25 lbs/sy of Type III. A five-percent (5%) reduction in unit price will be applied for each pound of aggregate per square yard outside the spread rate tolerances established above for each day's placement of material. In lieu of pay reduction, the Contractor may elect to overlay the deficient area at no additional costs to the Department. Continued operation and placement of materials outside the spread rate tolerances shall not be allowed. The Contractor shall make adjustments as necessary in the placement operation to maintain production within the tolerances given.

907-418.03.9--Quality Control.
The Contractor is responsible for quality control (QC) sampling and testing and shall submit a written Quality Control Plan (QCP) acceptable to the Engineer. If calibration factors are used as a method of measurement, the QCP shall include calibration procedures used to determine calibration factors.

907-418.03.9.1--Personnel. The Contractor is responsible for staffing their project with qualified personnel.

907-418.03.9.2--Testing Facilities and Equipment. The Contractor shall supply any testing and equipment needed to comply with their approved QCP.

907-418.03.9.3--Materials Testing. The Contractor shall test the materials utilized in a manner to comply with their approved QCP and as required by the Engineer.

907-418.03.9.4--Compliance with Specifications. The Contractor shall attest in writing to the Department that the micro surfacing has been constructed in accordance with and meets the requirements of the specifications and their approved QCP at the conclusion of the project.

907-418.03.9.5--Department Acceptance. The Department will conduct acceptance sampling, testing, and inspection activities to ensure material quality, correct application rates, and traffic

control are within specification requirements. These activities along with the frequencies will be done at the discretion of the Department.

907-418.03.9.5.1--Materials Testing.

907-418.03.9.5.1.1--Aggregate. A sample of aggregate should be obtained and tested from the Contractor's project stockpile(s) at the discretion of the Engineer.

907-418.03.9.5.1.2--Emulsified Asphalt. A sample of emulsified asphalt should be obtained from the Contractor's distributor on the first day of production and thereafter at a frequency not to exceed 1 sample per 50,000 gallons. Because the time between sampling of the emulsified asphalt and the testing of the material can affect the test results, samples should be sent to the MDOT Central Lab for testing as soon as possible.

907-418.03.9.5.2--Equipment. All equipment to be used on the project shall be evaluated by the Engineer.

907-418.03.9.5.3--Final Inspection. A final inspection will be done with the Contractor to assure that the project has been constructed and complies with the project specifications.

907-418.04--Method of Measurement. Emulsified asphalt for micro-surfacing shall be measured by the gallon. The Contractor will be required to submit certified bill of ladings from the emulsion manufacturer indicating total gallons delivered. The Contractor may elect to use a calibration factor to measure gallons of emulsion using a calibrated metering system incorporated into the application equipment. The Contractor shall determine the calibration factor according to the equipment manufacturer's recommendations. The calibration procedures shall be conducted at the beginning of the project in the presence of the Engineer or designated Department representative. At the conclusion of each workday, the Contractor shall report the amount of emulsified asphalt for micro-surfacing applied to the Engineer. In addition, the Contractor will be responsible for submitting a way-back ticket representing un-used material at the conclusion of each project.

Aggregate for micro-surfacing shall be measured by the ton of dry aggregate used. The aggregate shall be weighed on certified scales. In lieu of certified scales, the Contractor may elect to use a calibration factor to measure tonnage of dry aggregate using a calibrated metering system incorporated into the application equipment. The Contractor shall determine the calibration factor according to the equipment manufacturer's recommendations. The calibration procedures shall be conducted at the beginning of the project in the presence of the Engineer or designated Department representative. Aggregate calibration factors shall be rechecked if there is a significant change in aggregate moisture content. At the conclusion of each workday, the Contractor shall report the amount of aggregate for micro-surfacing applied to the Engineer. The weight will be based on a 2000-pound ton and the aggregate will be corrected for moisture. The mineral filler will be counted by the 94-pound sack and will be included in the payment for aggregate.

907-418.05--Basis of Payment. Emulsified asphalt for micro-surfacing, measured as prescribed above, will be paid for at the contract bid price per gallon, which shall be full compensation for furnishing all materials including emulsified asphalt and mineral filler, and for all equipment, work and labor to complete the work.

Aggregate for micro-surfacing, measured as prescribed above, will be paid for at the contract bid price per ton, which shall be full compensation for furnishing all equipment, work and labor to complete the work.

These prices shall be full compensation for furnishing all materials, for preparation, mixing and applying these materials and for all labor, equipment, tools, test design, clean up and incidentals necessary to complete the work as specified herein.

Payment will be made under:

907-418-A: Emulsified Asphalt for Micro-Surfacing - per gallon

907-418-B: Aggregate for Micro-Surfacing - per ton

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-428-1 **CODE: (SP)**

DATE: **07/06/2026**

SUBJECT: **Fog Seals**

Section 907-428, Fog Seals, is hereby added and made part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-428 – FOG SEALS

907-428.01—Description. This work may require the placement of a fog seal on an existing or newly placed surface as specified on the plans or in the contract documents. The fog seal shall be placed at locations shown on the plans or as directed by the Engineer.

907-428.02 – Materials. Emulsions shall not be diluted more than 1:1 by weight without approval from the Engineer. Emulsions shall be diluted at the manufacturer's plant site. Specialty fog seal products may be diluted according to the manufacturer's recommendation.

907-428.02.1 – Bituminous Fog Seal. These types of fog seals shall be an emulsified material where the type of bituminous emulsion shall conform to the applicable requirements of AASHTO M 3428.

907-428.02.2 – Less Tracking Bituminous Fog Seal. These types of fog seals shall be one from the Department's APL under the category "Less Tracking Bituminous Fog Seal".

907-428.02.3 – Bituminous-Based Fog Seal with Rejuvenator. These types of fog seals shall be one from the Department's APL under the category "Bituminous-Based Fog Seal with Rejuvenator".

907-428.02.4 – Bio-Based Fog Seal with Rejuvenator. These types of fog seals shall be one from the Department's APL under the category "Bio-Based Fog Seal with Rejuvenator". The rejuvenating agent shall be eighty-five percent bio based and contain no petroleum-derived rejuvenating oils or solvents.

907-428.03 – Construction Requirements. The placement of these fog seals shall be in accordance with the requirements set forth in Subsections 410.03.2, 410.03.3, 410.03.5, and 410.03.7, as applicable. Fog seal shall not be placed until after final brooming. Bituminous fog seals are typically placed at a rate of 0.11 gallons per square yard. At the Engineer's discretion, the application rate may be varied according to the following table depending on field conditions. Application rates other than 0.11 gallons per square yard must be approved by the Engineer prior to application.

Surface Type	Range of Application Rate (gal/sy)
Asphalt Mixture – tight texture	0.06 to 0.11
Asphalt Mixture – open texture	0.10 to 0.22
Surface Treatment	0.10 to 0.15

For fog seal products classified under 907-428.02.2, 907-428.02.3, and 907-428.02.4, application rates shall follow manufacturer recommendations.

907-428.04 – Method of Measurement. Accepted quantities for fog seals 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 (15%) will be allowed for irregular areas (as defined in Subsection 907-401.02.6.4.4) where hand spraying is necessary.

907-428.05 – Basis of Payment. These fog seals, measured as prescribed above, 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.

907-428-A:	Bituminous Fog Seal	-per gallon
907-428-B:	Less Tracking Bituminous Fog Seal	-per gallon
907-428-C:	Bituminous-Based Fog Seal with Rejuvenator	-per gallon
907-428-D:	Bio-Based Fog Seal with Rejuvenator	-per gallon

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-618-4

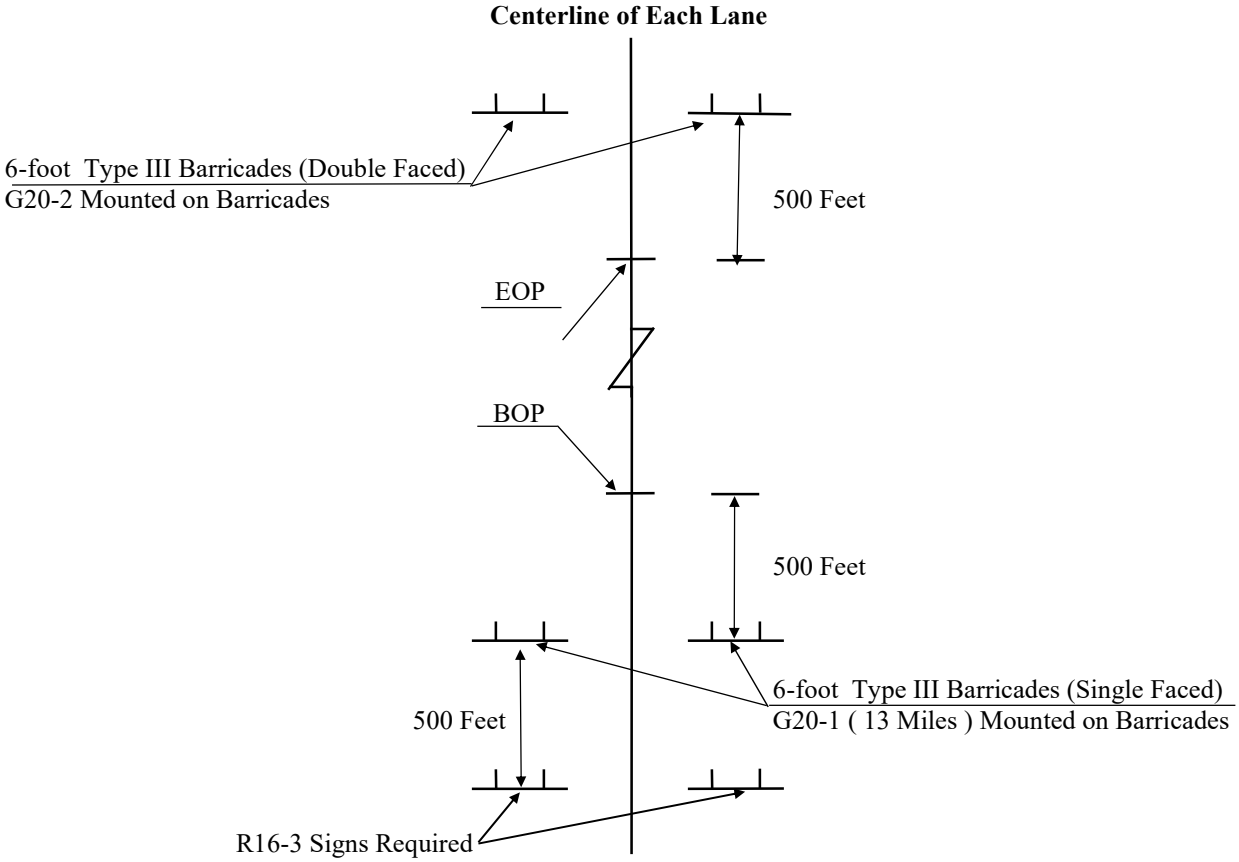
DATE: 08/04/2026

PROJECT: IM-0055-04(124) – 110064301 – Desoto County
IM-0055-04(125) – 110065301 – Tate County
IM-0055-04(126) – 110066301 – Tate County

Delete the paragraph in Subsection 907-618.01.2 on page 1, and substitute the following.

For compliance with the traffic control plan, the Contractor will be required to install and maintain traffic control devices at various locations throughout the project. Payment for these devices will be included in the price bid for pay item no. 907-618-A: Maintenance of Traffic per lump sum.

Additional traffic control devices will be required as follows.

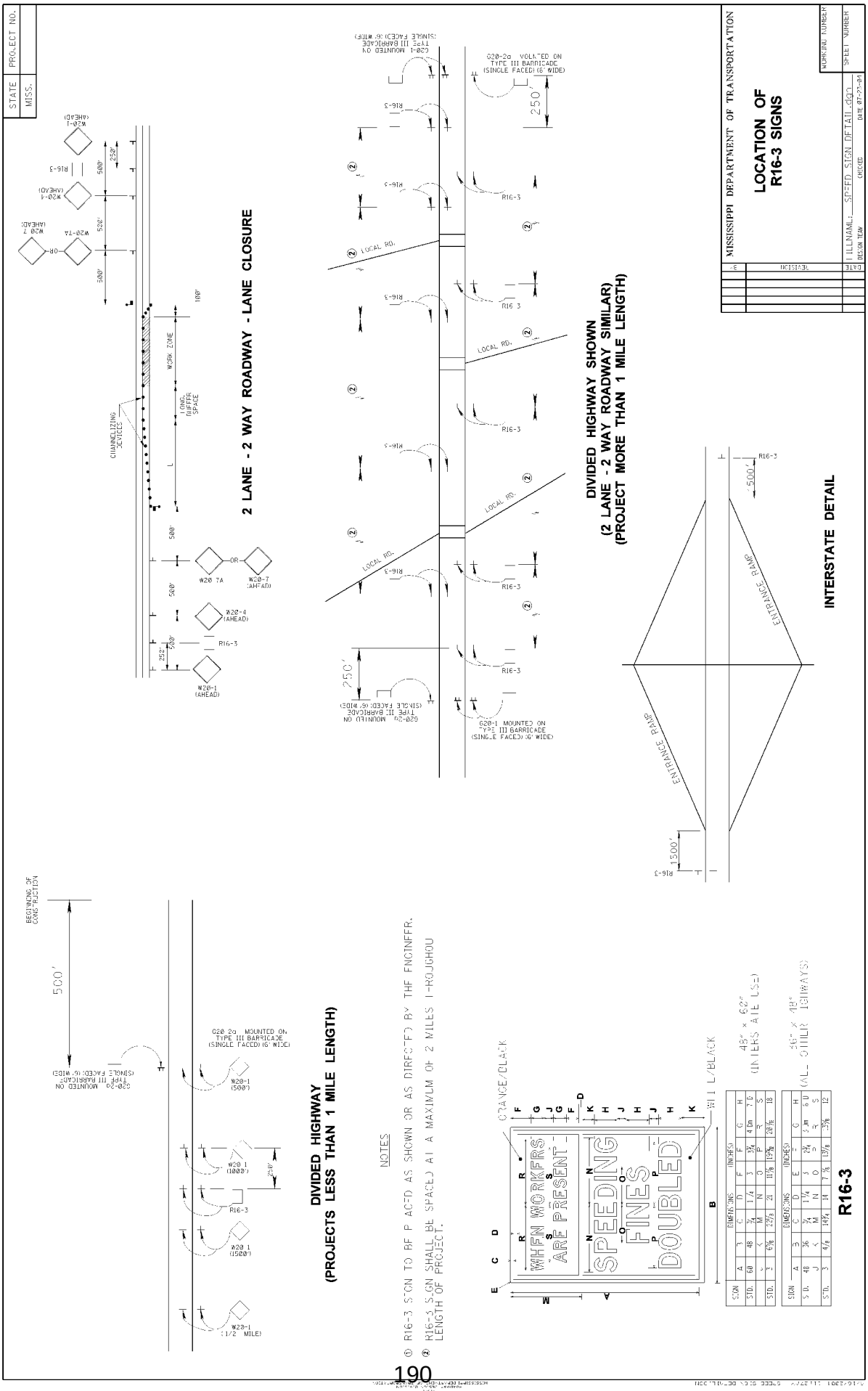


ADDITIONAL TRAFFIC CONTROL SIGNS REQUIRED:

4 - W20-1 "AHEAD" signs required. One (1) sign is required at each local road or street entering the project.
16 - R16-3 "SPEEDING FINES DOUBLED" signs required.

R16-3 signs shall be spaced in accordance with sheet titled "Location of R16-3 Signs".

All construction signs and barricades shown on this page shall be included in the bid price for pay item 907-618-A, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except for R16-3 which shall be black legend and border on white background.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
LOCATION OF R16-3 SIGNS
WORKZONE NUMBER
SHEET NUMBER
DESIGN TEAM
CHECKED
DATE 07-29-21
2 LANE - 2 WAY ROADWAY - LANE CLOSURE
DIVIDED HIGHWAY SHOWN (2 LANE - 2 WAY ROADWAY SIMILAR) (PROJECT MORE THAN 1 MILE LENGTH)
INTERSTATE DETAIL
DIVIDED HIGHWAY (PROJECTS LESS THAN 1 MILE LENGTH)
NOTES
① R16-3 SIGN TO BE PLACED AT A MAXIMUM OF 2 MILES FROM THE BEGINNING OF PROJECT.
② R16-3 SIGN SHALL BE SPACED AT A MAXIMUM OF 2 MILES THROUGHOUT LENGTH OF PROJECT.
ORANGE/BLACK
WHITE/BLACK
SPEEDING FINES DOUBLED WHEN WORKERS ARE PRESENT
48" x 60" (INTERSTATE USE)
36" x 48" (ALL OTHER HIGHWAYS)
R16-3

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-618-4 **CODE: (SP)**

DATE: 02/01/2018

SUBJECT: Additional Signing Requirements

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.

907-618.01.2--Traffic Control Plan. At the end of Subsection 618.01.2 on page 441, add the following:

For compliance with the traffic control plan, the Contractor will be required to install and maintain traffic control devices at various locations throughout the project. Payment for these devices will be included in the price bid for pay item no. 618-A, Maintenance of Traffic per lump sum.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-618-12 **CODE: (SP)**

DATE: 05/03/2024

SUBJECT: Traffic Control Management

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.

907-618.01.2--Traffic Control Management. Delete subparagraph (g) of Subsection 618.01.2 on page 441, and substitute the following.

g) Perform a minimum of once-a-week inspections from the Notice to Proceed until a Partial or Final Maintenance Release is obtained. Once work begins, daily daytime inspections and weekly nighttime inspections are required on projects with predominantly daytime work, and daily nighttime inspections and weekly daytime inspections are required on projects with predominantly nighttime work. Weekly inspections will be allowed for periods outside of active construction. When lane closures are present or any non-fixed signs or traffic handling devices such as cones or barrels are in place, inspections shall be performed daily whether work is being performed or not.

907-618.05--Basis of Payment. Delete pay item 618-A on page 449 and substitute the following.

907-618-A: Maintenance of Traffic - lump sum

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-5 **CODE: (IS)**

DATE: 01/17/2018

SUBJECT: Traffic Control for Construction Zones

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.

907-619.02.8--Traffic Signals and Flashers. Delete Subsection 619.02.8.1 on pages 452 thru 455, and substitute the following.

907-619.02.8.1-Portable Traffic Signals. Portable traffic signals shall be trailer or pedestal mounted units that provide for easy, legal transportation and quick setup and deployment. Each unit shall be self-contained. The types of portable traffic signals are as follows.

- Type 1 portable traffic signal shall include two signal heads per trailer with one signal head mounted on an overhead mast arm that can be extended over the travel lane, and the other signal head shall be mounted on the vertical upright of the trailer.

- Type 2 portable traffic signal shall include one signal head that is mounted on the vertical upright of the pedestal/cart or trailer. Pedestal/Cart mounted shall be designated as Type 2A and Trailer mounted shall be designated as Type 2B. Type 2 portable traffic signals shall be tested to MASH Standards or NCHRP Test Level 3 crash testing requirements by an accredited independent test facility, with supporting documentation available upon request.

- Type 3 portable traffic signal shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned in each applicable section below.

The portable traffic signals shall be MUTCD Compliant and utilize standard ITE signal heads, and adhere to the ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement. The units shall be battery powered with a solar charging system, and be equipped with an onboard battery charger capable of being used with a 120V AC power source. Portable traffic signals shall be able to communicate with other portable signals via 900 MHz or other accepted wireless communications. If wireless connectivity is not feasible, hardwired connectivity shall be an acceptable alternative, as approved by the Engineer. Portable Traffic Signals shall include all the major components listed below or be able to perform the functions of these components. The major components of the unit shall include, but are not limited to, the trailer or pedestal/cart, telescoping mast arm (on Type 1 and 3), signal head(s) and back plates, traffic signal controller with operating software, solar charging system with batteries, input and output devices, vehicle detection, flasher units, conflict monitor, relays,

communications system and other equipment required for the safe operation and installation of the unit.

907-619.02.8.1.1--Signal Heads. The signal heads and all applicable components of the portable traffic signal shall meet the physical display and operational requirements of conventional traffic signals as specific in the Manual on Uniform Traffic Control Devices (MUTCD). The signal heads shall be cast aluminum or polycarbonate and shall meet the requirements laid out in the Mississippi Standard Specification for traffic signal heads and associated MDOT material specifications for traffic signal heads. The signal heads shall accommodate standard 12-inch LED indications meeting the ITE Specification "Vehicle Traffic Control Signal Heads" and ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement.

For Type 1, Type 2 and Type 3 portable traffic signals, the signal heads shall have the ability to be rotated 180 degrees to face in the opposite direction and shall have the ability to rotate and lock in approximately 10 degree increments to position the signal head for the optimum visibility to motorists.

For Type 1 portable traffic signals, each unit shall contain two signal heads with one signal head mounted on an overhead mast arm that can be extended over the travel lane with a minimum clearance of 17 feet measured from the bottom of the signal head unit to the road surface. The lower signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 2 portable traffic signals, the signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 3 portable traffic signals, each unit shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned below.

907-619.02.8.1.2--Controller and Operating Requirements. The portable traffic signal (Types 1, 2, and 3) shall include a solid state Controller Unit (CU) that is in compliance with NEMA TS 5 Performance Standard. The CU shall have an easy to read front panel backlit display for viewing and programming the configuration settings and CU status. The CU shall be capable of operating the portable traffic signal system in a fixed time, traffic actuated or manual control mode. Multiple portable traffic signals shall have the capability to be interconnected to form a portable traffic signal system. Each portable traffic signal within a connected system shall have the capability to serve as either the master or remote signal. Each portable traffic signal shall include a Conflict Monitor Unit (CMU), or Malfunction Management Unit (MMU) to ensure phase conflicts do not exist during operation.

For Type 1 and Type 2 portable traffic signals, a minimum of five (5) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of four (4) traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have

the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

For Type 3 portable traffic signals, a minimum of ten (10) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of 16 traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

The system shall also have the ability to operate in vehicle actuation mode when vehicle detection components are used. The operating system shall have the capability to allow the Portable Traffic Signal to be connected to and controlled by a standard NEMA controller.

The system shall have the capability to be controlled remotely using a hardwired or wireless remote. The wireless radio remote shall be capable of communicating at a clear line of site distance up to ¼ mile from the master.

The CU shall have the capability of interfacing with a Remote Monitoring System (RMS) capable of reporting signal location, battery voltage, and system faults. The RMS shall include a password-protected web site, viewable via an internet connection. In the event of a system fault, the RMS shall provide specific information concerning the cause of the system fault (example: "red lamp on signal number 1 out"). The RMS shall immediately contact previously designated individuals via SMS text messaging or email, upon a fault event.

The active timing program operating the PTS system shall be available and viewable through the RMS website at all times. The RMS shall maintain a history of the operating system in each signal including total operating hours, alerts, and the location of the PTS trailer.

907-619.02.8.1.3--Wireless Communications. The portable traffic signals shall communicate with other portable traffic signals within the signal system via license-free wireless 900 MHZ radio link communications as specified in Subsection 662.02.2 of the radio Interconnect System specification. The radio units shall maintain communications at a minimum distance of one (1) mile. The radio system shall conform to the applicable Federal Communications Commission requirements and all applicable state and local requirements.

The portable traffic signals shall be in direct communication at all times either by wireless or hardwire connection to provide for the required conflict monitoring / malfunction management system.

907-619.02.8.1.4--Power Requirements. Each Portable Traffic Signal shall be equipped with a power source consisting of a solar collection array, solar controller and/or charging unit and batteries sufficient to operate the signal system. The number and size of batteries shall be sufficient to operate the Type 1 and Type 3 signals for a minimum of 30 days and Type 2A signals for

minimum of five (5) days, and Type 2B signals for minimum of 15 days without additional charging or assist from the solar array. An on-board battery charger shall be compatible with both the solar array and with a 120V AC power source.

For Type 1 signals, the solar panel array shall provide for a minimum of 440 watts of solar collection capability.

For Type 2A signals, the solar panel array shall provide for a minimum of 90 watts of solar collection capability.

For Type 2B signals, the solar panel array shall provide for a minimum of 110 watts of solar collection capability.

For Type 3 signals, the solar panel array shall provide for a minimum of 480 watts of solar collection capability and shall include a tilt and rotate system to optimally position the panels.

All instrumentation for the electrical system and battery compartment shall be contained in a lockable weatherproof enclosure. Solar panels shall be secured to the mounting brackets for theft prevention.

907-619.02.8.1.5--Trailer and Lift System. The trailer or pedestal/cart and all mounted components shall conform to the wind loading requirements as follows: 100 mph minimum for Type 1 portable traffic signals, 55 mph minimum for Type 2A portable traffic signals, 75 mph minimum for Type 2B portable traffic signals, and 90 mph minimum for Type 3 portable traffic signals as described in the AASHTO *Standard Specifications for Highway Signs, Luminaries and Traffic Signals*, as specified in the plans including all interims and updates. At the request of the Engineer, proof of conformance to these wind load ratings shall be verified by a third-party. No additional loose ballast shall be used to meet these wind load requirements. The trailer shall be made of structural steel and shall include four (4) leveling/stabilizer jacks capable of lifting the trailer a minimum of six inches (6").

The trailer or pedestal shall be equipped with a mechanical, hydraulic or electric lift system sufficient for one person to be able to raise and lower the vertical upright and/or horizontal mast arm to and from the operating position.

For Type 1, 2B, and Type 3 signals, the trailer shall be equipped to provide legal and safe transport on the public highway system at speeds up to 55 mph.

All exterior metal surfaces, except signal heads and back plates, shall be powder-coat painted highway safety orange.

907-619.02.9--Impact Attenuators. Delete the sentence in the first paragraph of Subsection 619.02.9 on page 455, and substitute the following.

Impact attenuators must be listed on the Department's APL.

907-619.02.11--Snap-Back Delineators. Delete the sentence in the paragraph of Subsection 619.02.11 on page 456, and substitute the following.

Snap-back delineators shall be selected from the list of surface mounted flexible delineator posts as shown on the Department's APL.

907-619.02.14--Changeable Message Sign.

907-619.02.14.5--PCMS Controller and Storage Cabinets. Delete the fifth sentence in the first paragraph of Subsection 619.02.14.5 on pages 462 and 463, and substitute the following.

The controller cabinet shall be illuminated.

907-619.05--Basis of Payment. Add the following to the list of pay items ending on page 480.

907-619-E3: Changeable Message Sign ***** - per each

907-619-H2: Traffic Signal, Portable, Type ___ - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-12 **CODE: (IS)**

DATE: 06/17/2025

SUBJECT: Thermoplastic Traffic Markings

Section 626, Thermoplastic Traffic Markings, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 626 on pages 492 thru 496, and substitute the following.

SECTION 626 - THERMOPLASTIC TRAFFIC MARKINGS

907-626.01--Description. This work consists of furnishing materials and placing thermoplastic pavement markings of the type specified in conformity with these specifications and the details shown on the plans or established. All hot-applied thermoplastic pavement markings shall be coated with a double-drop combination of optics.

This work may also consist of placing an audible bump or puck style marking system on the edge line that provides an audible and vibratory warning when driven over. The marking system shall be a road marking system of the dimensions indicated at regular and predetermined intervals.

This work may also consist of placing a profile or raised shape marking system on centerline or edge line that provides audible and vibratory warning when driven over. The marking system shall be a road marking system of the dimensions indicated and at regular and predetermined intervals. When placed on centerline, the markings system shall consist of an extruded black transverse thermoplastic bar of the dimensions indicated at regular and predetermined intervals.

This work may also consist of placing high contrast thermoplastic markings. High contrast thermoplastic markings shall consist of placing thermoplastic pavement markings over a black thermoplastic pavement marking to enhance the marking's visibility.

All pavement marking material, excluding lines over rumble strips, shall be applied using the extrusion/ribbon method. Lines placed over rumble strips shall be applied using the atomization/spray method, unless the extrusion/ribbon method can be demonstrated to perform adequately and is approved by the Engineer.

Permanent pavement marking tape (permanent cold plastic tape) may be used in lieu of hot applied thermoplastic markings. Substitution will only be allowed for pay items 907-626-A through H. Substituted pavement marking tape shall be of the same color and width as that required for the hot applied thermoplastic. Unless otherwise specified, the markings, whether hot applied or pavement marking tape, shall be of the same type of material for the entire project. Stop bars and crosswalks shall not be substituted with pavement marking tape and shall be alkyd hot-applied thermoplastic markings or heat-fused preformed pavement markings. Material and construction

requirements for substituted pavement marking tape shall meet the requirements of Special Provision 907-628. The layout and spacing for substituted pavement markings will remain as shown in the plans, or in the contract documents, for hot applied thermoplastic markings. Measurement of adhesive substituted pavement markings shall be made in accordance with Special Provision 907-628. Payment for adhesive substituted pavement markings shall be made at the unit price for the appropriate hot applied thermoplastic marking.

When thermoplastic pavement markings are used on bridge decks or concrete surfaces, the surface shall be sealed with an epoxy sealer prior to the application of thermoplastic.

907-626.02--Materials. All pavement marking materials shall meet the requirements of Special Provision 907-720.

907-626.02.1--Audible Bumps. Audible bumps shall have a profile such that the leading and trailing edges are sloped at a sufficient angle to create an audible and vibratory warning.

Audible bumps shall be at least 0.45 inches above the pavement surface at the highest point of the bump. The height shall be measured after the application of drop-on material. The bumps shall have a minimum dimension of two and one-half inches (2½") in both transverse and longitudinal directions. The bumps may have a drainage channel. The width of each drainage channel shall not exceed one-quarter of an inch (¼") at the bottom of the channel.

907-626.02.2--Audible Transverse Bars. The length of transverse bars is the measurement lateral to the direction of travel, also known as transverse width. The width of transverse bars is the measurement parallel to the travel way.

Transverse bars on centerline shall have a length of 10 inches, a width of three inches (3"), and a height of 350 mils. Transverse bars on centerline shall be placed on 2-foot centers through no-passing zones and 5-foot centers through passing zones. Transverse bars on centerline shall be placed in advance of permanent thermoplastic markings.

Transverse bars on edge lines shall have a length of six inches (6"), a width of three inches (3"), and a height of 350 mils. Transverse bars on edge lines shall be placed on 2-foot centers. Tolerance for the longitudinal and transverse measurements shall be one quarter of an inch (¼") and the tolerance for height shall be 50 mils. The above dimensions are based on 6-inch strip application.

Thermoplastic material for edge line transverse bars shall be as specified on the Plans and meet the requirements of Special Provision 907-720 or as specified on the plans. Thermoplastic material for centerline transverse bars shall be black and shall meet the requirements of Special Provision 907-720.

907-626.02.3--High Contrast Markings. High contrast markings shall be black with the pertinent marking color overlaid on top and shall meet the requirements of Special Provision 907-720.

907-626.03--Construction Requirements.

907-626.03.1--Equipment. Equipment for hot application shall be of sufficient size and stability to ensure smooth, uniform, properly aligned markings of the dimensions specified. The equipment shall be suitably equipped for heating and controlling the flow of the material. The equipment shall be constructed to provide continuous mixing and agitation of the material. The conveying parts of the equipment, between the main material reservoir and applicator, shall be so constructed as to prevent accumulation and clogging. The equipment shall be constructed so that all mixing and conveying parts, up to and including the applicator, maintain the material at the plastic temperature. The thermoplastic material shall be dispensed at a temperature recommended by the manufacturer. The applicator shall include a cutoff device remotely controlled to provide clean, square stripe ends and to provide a method for applying skip lines. The thermoplastic reservoir shall be insulated and equipped with an automatic thermostatic control to maintain the proper temperature of the material.

The application equipment shall be capable of automatic placement of intermittent and continuous line patterns in single or double line applications simultaneously. The intermittent timer mechanism shall provide a variable ratio of materials applied and variable cycle length such that accurate placement of new patterns, or replacement of existing patterns can be achieved.

The equipment shall also be capable of applying the top dressing of optics (beads) in a manner that firmly embeds them into the surface of the thermoplastic material for at least one half of the diameter of the larger gradation sizes of the optics. The dispensing equipment shall be equipped with an automatic cut-off control for the application of the optics that is synchronized with the cut-off of the thermoplastic material.

Optics applied to the surface of the completed stripe shall be applied by an automatic dispenser attached to the pavement marking equipment in such a manner that the optics are immediately dispensed upon the completed line. The dispenser shall be equipped with an automatic cutoff control, synchronized with the cutoff of the pavement marking equipment. The double-drop optics as defined in 907-720 shall be automatically applied at a uniform rate to achieve the minimum retroreflectivity requirements of 907-626.

907-626.03.2--Construction Details. The thermoplastic compound shall be screed or ribbon extruded to the pavement surface. Heat-fused, pre-formed pavement markings shall be fusible to asphalt surfaces by means of the normal heat of a propane weed-burner type of torch or other heating device as recommended by the manufacturer. Heat-fused, pre-formed pavement markings shall be instantly highly reflective without the application of additional optics.

Thermoplastic markings shall not be applied to the pavement surface when the pavement surface temperature is less than 55°F. The pavement surface shall be dry, to the satisfaction of the Engineer, before application will be permitted. Unless otherwise specified by the manufacturer, thermoplastic pavement marking material shall be applied to the surface between 400°F and 450°F with a recommended application temperature being 420°F.

Immediately before application, all areas to be marked shall be thoroughly cleaned. Cleaning may be done by rotary brooms, air blast, scrapers, or whatever combination of equipment is necessary to clean the pavement thoroughly without damage to the pavement surface. On areas of pavement

cured with compound, the membrane shall be removed completely by shot blasting, sand blasting or other approved method. Before edge striping, particular care shall be taken to remove all vegetation, loose soil, and the like from the area to be marked. Should other methods fail, the surface shall be wetted with a water jet and scrubbed as necessary to dislodge all foreign material. After washing, the surface shall be allowed to dry thoroughly, and all films of dried mud apparent after surface drying shall be removed before application of markings. Marking shall follow as closely as practicable after the surface has been cleaned and dried, but no markings shall be applied until the surface has been inspected and permission given to proceed. The cost for preparing the surface shall be included in the contract unit prices for the marking items.

Unless otherwise directed by the Engineer, traffic stripes that are conflicting with the thermoplastic stripe shall be removed prior to placement of the thermoplastic material. Removal of pavement markings shall be done by a means that will not gouge the surface of the pavement in a manner that requires patching to ensure the integrity of the pavement. Temporary paint stripe may be left in place when satisfactorily placed in the proper location. Any temporary stripe not covered shall be removed. Payment for removal of stripe, except temporary stripe, will be made under Section 202.

On newly constructed asphalt pavements, any sand, grit, or other surface contaminants shall be removed using compressed air and/or sweeping. Water blasting may be necessary to remove surface contaminants which cannot be removed by the use of compressed air and/or sweeping. This work is considered surface preparation.

The finished lines shall have well defined edges and the thickness of thermoplastic markings above the roadway surface shall be no less than 90 mils for edge lines, center lines, lane lines, barrier lines, and detail stripe including gore markings, and no less than 120 mils for crosswalks, stop lines, and railroad, word and symbol markings. The minimum thickness, as required above, will be measured in the center of the line when gauged. The minimum thickness one-half inch (½") from the edges shall not be less than 75% of the thickness required in the center.

Any thermoplastic traffic marking less than the required thickness shall be corrected by recapping at no additional costs to the Department. Although a thickness tolerance of 25 percent from center to edge is allowed, a consistent underrun of any amount in thickness as determined by the Engineer will not be acceptable.

The length and width of lines shall be within a tolerance of ±3 inches and ±1/8 inch, respectively. For skip markings, the tolerance for intervals shall not exceed the line length tolerance. On curves, unsightly variations from the normal curvature will not be permitted unless specifically shown on the plans or ordered by the Engineer.

Heat-fused, pre-formed pavement markings shall be supplied with a minimum average thickness of 90 mils before application on the roadway surface.

All newly applied thermoplastic material shall be protected from traffic until the material is sufficiently dry so as not to sustain damage from vehicle tires. Any material so damaged by traffic shall be repaired, and the thermoplastic material tracked onto the pavement shall be removed and

replaced.

907-626.03.3--Reflectivity Requirements. The longitudinal pavement markings shall meet the following retroreflectivity values when measured within 10 to 30 calendar days of placement, after removing loose beads.

Table 1. Minimum Dry Retroreflectivity

Color	All Stripe without Rumble mcd/m²/lx	Rumble Stripe mcd/m²/lx
White	375	250
Yellow	225	150

For projects with less than two miles between the BOP and EOP, retroreflectivity measurements will not be required.

907-626.03.3.1--Measuring Devices. Retroreflectivity measurements are required to be taken using a vehicle mounted mobile retroreflectometer using 30-meter geometry with video and mapping capabilities as per AASHTO T-398. The retroreflectometer and operator shall be certified by the manufacturer, authorized representative of the manufacturer, or an MDOT approved program such as the Texas A&M Transportation Institute (TTI) Mobile Retroreflectometer Certification Program. The Contractor shall provide copies of current certifications for the operator(s) and the device(s) to the Engineer.

907-626.03.3.2--Acceptance Procedure. Averages of the mobile measurements shall be provided for every 0.1 miles unless otherwise specified or approved. Take measurements on each section of roadway for each series of markings (i.e., edge line, center skip line, each line of a double line, etc.) and for each direction of traffic flow. Measure each line in both directions for centerlines on two-way roadways (i.e., measure both double solid line in both directions and measure all center skip lines in both directions). Furnish measurements in compliance with the below requirements. Use all equipment in accordance with the manufacturer's recommendations and directions. Inform the Engineer at least 24 hours before taking any measurements.

A marking meets the retroreflectivity requirements if:

- The combined average retroreflectivity value for a one-mile segment meets the minimum retroreflectivity values specified, and
- Within the one-mile segment, no more than three consecutive 0.1 mile intervals shall have an average retroreflectivity value below the minimum required value.

The one-mile segment will start from the beginning of the data collection and end after a mile worth of measurements have been taken; each subsequent mile of measurements will be a new segment. If the remainder is 0.5 miles or less, it shall be included in the previous mile segment, otherwise the remaining segment of greater than 0.5 mile shall be its own segment. Centerlines with 2 stripes (either solid or broken) will result in 2 miles of data for each mile segment. Each centerline stripe must be tested for compliance as a stand-alone stripe.

The Contractor may elect to restripe with a minimum of 0.060 in. (60 mils) at no cost to the Department each one-mile segment that failed to meet the minimum retroreflectivity requirements.

Measurements shall be retaken within 10 to 30 calendar days after the second application for the mile segment for that series of markings. If the markings do not meet minimum retroreflectivity after the second application, the Engineer may require removal of all existing markings, a new application as initially specified, and a repeat of the application process until minimum retroreflectivity requirements are met.

907-626.03.3.3--Mobile Retroreflectivity Data Collection. Mobile Retroreflectivity Data Collection (MRDC) shall be conducted on dry pavement only and when the ambient air temperature is greater than 40°F. Data shall be submitted to the Engineer no later than 3 working days after the day the data is collected. Submit all raw data collected in addition to all other data submitted. Provide data files in Microsoft Excel format or a format approved by the Engineer. The data file and video must contain the following information.

907-626.03.3.3.1--Data File. Data files shall be provided with the following:

- Date;
- District;
- County;
- Name of mobile retroreflectometer operator;
- Route number with reference markers or other reference information provided by the Engineer to indicate the location of beginning and end data collection points on that roadway;
- Cardinal direction;
- Line type (single solid, single broken, double solid, etc.);
- Line color;
- File name corresponding to video;
- Data for each centerline listed separately;
- Average reading taken for each 0.1-mi. interval (or interval designated by the Engineer);
- Accurate GPS coordinates (within 20 ft.) for each interval;
- Color-coding for each interval indicating passing or failing, unless otherwise directed by the Engineer (passing and failing thresholds provided by the Engineer);
- Graphical representation of the MRDC (y-axis showing retroreflectivity and x-axis showing intervals) corresponding with each data file;
- Distance in miles driven while measuring the pavement markings;
- Event codes (pre-approved by the Engineer) indicating problems with measurement;
- Upper validation threshold (may be included separately with the raw data but must be clearly identified with the data collected using that threshold).

907-626.03.3.3.2--Map. A map shall be provided in an electronic format approved by the Engineer with each MRDC submission that includes the following information:

- Date;
- District number;
- County;

- Color-coded 1-mi. intervals (or interval length designated by the Engineer) for passing and failing retroreflectivity values or retroreflectivity threshold values provided by the Engineer; and
- Percentage of passing and failing intervals, if required by the Engineer.

907-626.03.3.3.3--Video. A high-quality video file shall be provided with the following information:

- Date and corresponding data file name on label;
- District number;
- County;
- Route number with reference markers or other designated reference information to indicate the location of beginning and end collection points on that roadway; and
- Retroreflectivity values presented on the same screen with the following information:
    - Date;
    - Location;
    - Starting and ending mileage;
    - Total miles;
    - Retroreflectivity readings; and
    - Upper validation thresholds (may be included separately with the raw data but must be clearly identified with the data collected using that threshold).

907-626.03.4--Reflectivity Verification Testing. The Engineer or a third party may perform retroreflectivity verification testing on any project. At a minimum, each Contractor performing work for the Department will be verified on an annual basis. The Contractor-submitted retroreflectivity data will be compared to the verification test data to determine acceptability of the Contractor's mobile retroreflectometer data. Comparison of the data will result in one of the two scenarios below:

- Contractor's Data is Validated – If the difference between Contractor's and Engineer/third party data is 20% or less, then the Contractor's data is validated. The Contractor's data will be used for acceptance.
- Contractor's Data is not Validated – If the difference between the Contractor's and Engineer/third party data is more than 20%, then the Contractor's data is not validated. The Engineer/third party data will be used for acceptance and the Contractor will be required to take corrective action prior to additional Contractor data collection and may require re-certification of the mobile retroreflectometer.

907-626.04--Method of Measurement. Thermoplastic stripe completed in accordance with the plans and specifications will be measured by the mile or by the linear foot, as indicated, from end-to-end of individual stripes. In the case of skip lines the measurement will include skip intervals. The length used to measure centerline, lane lines, and edge stripes will be the horizontal length computed along the roadway.

Detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where

skips are specified. Stripes more than six inches (6") in width will be converted to equivalent lengths of 6-inch stripe.

Hot-applied legend, which is to include railroad markings, pedestrian crosswalks, and stop lines, will be measured by the square foot or linear foot. Pay areas of individual letters and symbols will usually be shown on the plans and measured by the square foot. Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the linear foot, in which case, stripes more than six inches (6") in width will be converted to equivalent lengths of 6-inch widths.

Pre-formed legend which is to include railroad markings and pedestrian crosswalks will be measured and paid for by each.

The length measured for thermoplastic audible bump edge stripe will not include the permanent thermoplastic edge stripe. Permanent thermoplastic edge stripe will be measured for payment under a separate pay item.

Thermoplastic audible bar centerline skip stripe will be measured by the linear foot or mile. Measurements will be made along the surface from end-to-end of the stripe and will include skip intervals. The length used to measure audible bar centerline stripe will be the horizontal length computed along the roadway. The length measured for thermoplastic audible bar centerline skip stripe will not include the permanent centerline continuous or skip stripe. Permanent centerline continuous and skip stripe will be measured for payment under separate pay items.

Thermoplastic audible bar edge stripe will be measured by the linear foot or mile. Measurements will be made along the surface from end-to-end of the stripe. The length used to measure thermoplastic audible bar edge stripe will be the horizontal length computed along the roadway. The length measured for thermoplastic audible bar edge stripe will not include the permanent thermoplastic edge stripe. Permanent thermoplastic edge stripe will be measured for payment under a separate pay item.

907-626.05--Basis of Payment. Thermoplastic traffic markings will be paid for at the contract unit price per mile, linear foot, square foot or each as applicable. Any deductions for non-satisfactory material test results will be made after final testing has been performed.

Payment will be made under:

907-626-A:	6" Thermoplastic Traffic Stripe, Skip White	- per linear foot or mile
907-626-B:	6" Thermoplastic Traffic Stripe, Continuous White	- per linear foot or mile
907-626-C:	6" Thermoplastic Edge Stripe, Continuous White	- per linear foot or mile
907-626-D:	6" Thermoplastic Traffic Stripe, Skip Yellow	- per linear foot or mile
907-626-E:	6" Thermoplastic Traffic Stripe, Continuous Yellow	- per linear foot or mile

907-626-F:	6" Thermoplastic Edge Stripe, Continuous Yellow	- per linear foot or mile
907-626-G:	Thermoplastic Detail Stripe, Color *	- per linear foot
907-626-H:	Thermoplastic Legend, Color *	- per linear foot, square foot, or per each
907-626-Q:	Thermoplastic Audible Bump Edge Stripe	-per linear foot or mile
907-626-R:	Thermoplastic Detail Audible *** Stripe, Color **,	-per mile
907-626-AA:	6" High Contrast Thermoplastic Traffic Stripe, Skip White	- per linear foot or mile
907-626-BB:	6" High Contrast Thermoplastic Traffic Stripe, Continuous White	- per linear foot or mile
907-626-CC:	6" High Contrast Thermoplastic Edge Stripe, Continuous White	- per linear foot or mile
907-626-DD:	6" High Contrast Thermoplastic Traffic Stripe, Skip Yellow	- per linear foot or mile
907-626-EE:	6" High Contrast Thermoplastic Traffic Stripe, Continuous Yellow	- per linear foot or mile
907-626-FF:	6" High Contrast Thermoplastic Edge Stripe, Continuous Yellow	- per linear foot or mile
907-626-GG:	High Contrast Thermoplastic Detail Stripe, Color *	- per linear foot
907-626-HH:	High Contrast Thermoplastic Legend, Color *	- per linear foot, square foot, or each

* Indicate Blue - ADA if applicable
** Indicate White or Black
*** Indicate Centerline - Passing Zone, Centerline - No-Passing Zone, or Edge Line

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-627-1 **CODE: (IS)**

DATE: 06/24/2024

SUBJECT: Raised Pavement Markers

Section 627, Raised Pavement Markers, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 627.02 on page 496, and substitute the following.

907-627.02--Materials. Pavement and jiggle markers of the types specified shall conform to the applicable requirements of Subsection 907-720.06 and shall be listed on the Department's APL.

Type B through G High Performance reflective markers shall be listed on the Department's APL for high performance raised pavement markers.

The bituminous adhesive for pavement markers shall meet the requirements of Subsection 907-720.07.3.

907-627.05--Basis of Payment. Add the "907" prefix to the pay items listed on page 498.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-640-1 **CODE: (IS)**

DATE: 11/15/2017

SUBJECT: Inductive Loop Vehicle Detection Systems

Section 640, Inductive Loop Vehicle Detection Systems, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-640.01--Description. Delete the first sentence of Subsection 640.01 on page 578, and substitute the following.

This work consists of furnishing all component materials required to form complete independent vehicle inductive loop detection systems as specified herein.

907-640.02--Materials.

907-640.02.2.4.1--Tuning. Delete the sentence in Subsection 640.02.2.4.1 on page 579, and substitute the following.

The amplifier card shall tune automatically upon the application of power in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.20.

907-640.02.2.4.2--Modes of Operation. Delete the sentence in Subsection 640.02.2.4.2 on page 579, and substitute the following.

Each amplifier card channel shall be capable of functioning in both presence and pulse mode in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.17.

907-640.02.2.4.3--Sensitivity Control. Delete the sentence in Subsection 640.02.2.4.3 on page 579, and substitute the following.

Each channel of the amplifier card shall meet NEMA TS 2-2003 v02.06 Section 6.5.2.15 requirements for sensitivity controls.

907-640.02.2.4.4--Crosstalk Avoidance. Delete the sentence in Subsection 640.02.2.4.4 on page 579, and substitute the following.

The amplifier card shall be capable of preventing crosstalk between channels of the same unit in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.23.

907-640.02.2.4.5--Outputs. Delete the sentence in Subsection 640.02.2.4.5 on page 579, and substitute the following.

Each output device shall conform to NEMA TS 2-2003 v02.06 Section 6.5.2.26 requirements.

907-640.02.2.4.6--Controls and Indicators. Delete the sentence in Subsection 640.02.2.4.6 on page 580, and substitute the following.

All amplifier card controls and indicators shall be in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.25.

907-640.02.2.4.7--Self-Tracking. Delete the sentence in Subsection 640.02.2.4.7 on page 580, and substitute the following.

The amplifier card shall automatically accommodate after- tuning changes in the loop/lead-in in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.21.

907-640.02.2.4.10--Loop Detector Amplifier Tests. Delete the sentence in Subsection 640.02.2.4.10 on page 580, and substitute the following.

Each amplifier card shall conform to the performance requirements set forth in NEMA TS 2-2003 v02.06 Section 2.8.

907-640.02.2.4.12--Delay and Extension Timing. Delete the last two sentences in Subsection 640.02.2.4.12 on page 580, and substitute the following.

Detector card delay timing capabilities shall be provided in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.24.1. Detector card extension timing capabilities shall be provided in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.24.2.

907-640.03.1.2--Saw Cuts. Delete the second sentence of the second paragraph of Subsection 640.03.1.2 on page 581, and substitute the following.

Where lead-in cable is required to pass through the curbside, it shall be installed in ¾-inch PVC or rigid steel conduit.

907-640.04--Method of Measurement. Delete the first paragraph of Subsection 640.04 on page 583.

Vehicle Loop Assembly and Shielded Cable will be measured by the linear foot computed horizontally along the saw slot, regardless of number of turns, in which the loop wire or shielded cable is installed and will include the loop lead-in to the pull box.

907-640.05--Basis of Payment. Delete the pay items listed on pages 583 and 584, and substitute the following.

907-640-A: Vehicle Loop Assembly - per linear foot

907-640-B: Shielded Cable, AWG __, ___ Conductor - per linear foot

907-640-C: Loop Detector Amplifier * - per each

* Additional information may be indicated

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-688-2 **CODE: (SP)**

DATE: 1/09/2018

SUBJECT: Traffic Recorder Weigh-In-Motion (WIM) System

Section 907-688, Traffic Recorder WIM System, 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 907-688 – TRAFFIC RECORDER WIM SYSTEM

907-688.01--Description. This work consists of furnishing Traffic Recorder WIM Systems of the types specified which includes assembling, constructing, erecting, and installing a new complete system in conformity with these specifications to insure properly operating units in accordance with the designs and at the locations shown on the plans, or as directed. This axle detector system should classify and weigh vehicles in all lanes. Submittals shall be sent directly to the Planning Analysis section of the Planning Division with a copy of the cover letter sent to the Project Engineer. The submittals will be returned within a seven (7) business day period from when they are received.

The Contractor shall include all hardware and software necessary to operate the field station unattended, which includes a battery backup and modem. The station is to operate continuously without human intervention.

The system may be a Traffic Recorder WIM Kistler System (907-688-A) or a Traffic Recorder WIM Brass Linguini (BL) Piezo System (907-688-B). The type of system shall be defined in the plans or contract documents.

The Traffic Recorder WIM Kistler System shall utilize two (2) Kistler quartz sensor strips as utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT and one (1) loop per lane in all lanes as recommended by the manufacturer.

The Traffic Recorder WIM Brass Linguini (BL) Piezo System shall utilize two (2) Class 1 BL Piezo strips as utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT and one (1) loop per lane in all lanes as recommended by the manufacturer.

The person(s) performing the installation of the Mikros RAKTEL Piezo Classification System must be certified by Mikros or an authorized Mikros representative in the installation procedures of the Mikros RAKTEL Piezo Classification System and must be on the job site at each installation when the Mikros RAKTEL Systems are being installed. Certification can be acquired from Mikros or an authorized Mikros representative as long as a certified Mikros representative is on site to assist during the installation. Details regarding Mikros certification can be acquired through direct communication with Mikros or an authorized Mikros representative. Any delays in the construction due to the certification process will not be grounds for an extension of the completion date.

A multiplexer shall be required for sites utilizing two (2) Mikros RAKTEL Systems in order for both systems to have access to one phone line.

The Contractor shall provide three (3) copies of all manuals on Installation, Operating, Schematics, and Maintenance for the entire System.

The sensors, equipment cabinet, inductive loops, cables, leads, and electronic hardware and software will be furnished, installed, tested, calibrated and made operational by the Contractor. The Contractor shall provide all services required for construction, tests, the satisfactory performance period(s), and miscellaneous usage on this project until the site inspection of the project. Deposits, customer charges, connection cost, etc., associated with the System up to and including the date of the site inspection (Subsection 907-688.03.18.1--Site Inspection) of the System shall be the responsibility of the Contractor. At least five (5) business days prior to starting work, the Contractor shall provide notice to the MDOT Planning Division and the MDOT Project Office so that a representative of the Planning Division can be on site while the work is being performed.

907-688.02--Materials. The materials used in the traffic recorder WIM system shall conform with the requirements of these specifications as set out herein. Prior to the scheduled start of work, the Contractor shall provide the Engineer with submittals on the following items and shall obtain the Engineer's approval before starting affected work. The Contractor shall use new materials and equipment. Any existing traffic counting equipment at the site is the sole property of the MDOT and shall not be removed by the Contractor.

907-688.02.1--Sensors. For Traffic Recorder WIM BL Piezo Systems, vehicle axle detectors shall utilize piezoelectric cable in a sensor assembly and be of a type that has been shown to be successful for vehicle classification in both asphaltic and portland cement concrete pavements. BL Piezo sensor length shall be eleven (11) feet minimum. Sensors as delivered from manufacturer shall include a shielded transmission cable of sufficient length for a continuous run to the equipment cabinet without splicing. Piezoelectric Cable/Sensors shall be as those utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT. Sensitivity dispersion shall be Class 1, ±5%.

For Traffic Recorder WIM Kistler Systems, the Kistler Quartz Cable/Sensors shall be utilized and be of a type that has been shown to be successful on other MDOT projects for weigh-in-motion in both asphaltic and portland cement concrete pavements. Kistler Quartz sensor length shall be six (6) feet minimum. Sensors as delivered from manufacturer shall include a shielded transmission cable of sufficient length for a continuous run to the equipment cabinet without splicing. All Kistler Quartz Sensors shall be grounded using AWG # 8 stranded copper, green jacketed ground wire. The ground wire shall be of sufficient length for a continuous run from the sensor to the equipment cabinet without splicing. Kistler Quartz Cable/Sensors shall be as those utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT.

907-688-02.2--Shielded Transmission Cable. Coaxial cable type RG58 C/U shall conform to IMSA 50-2 for polyethylene insulated, polyethylene jacketed cable, AWG #14. Cable shall meet the requirements of Section 636 for the Standard Specifications.

907-688.02.3--Conduit and Pull Boxes. Conduit and pull boxes shall meet the requirements of Sections 647 & 668 of the Standard Specifications.

907-688.02.3.1--Under Roadways. Conduit under the roadway shall be Schedule 80 PVC or coated rigid galvanized steel.

907-688.02.3.2--Other Conduit. Other conduit shall be Schedule 40 PVC, direct buried conduit unless noted otherwise.

907-688.02.3.3--Pull Boxes. Pull boxes shall be size Type 2 and the cover does not require words inscribed on the top.

907-688.02.4--Loop Wire. Loop wire, IMSA 51-3, AWG #14 stranded copper, shall meet the requirements of Subsection 722.03 of the Standard Specifications.

907-688.02.5--Loop Sealant. Loop sealant shall be "Traffic Loop Sealant" as manufactured by 3M Corporation, or approved equal.

907-688.02.6--Sensor Cement. The sensor assembly shall be cemented into the pavement with sand – epoxy grouting of a type recommended by the sensor manufacturer for Traffic Recorder WIM Kistler Systems and with epoxy resin of a type recommended by the sensor manufacturer for Traffic Recorder WIM BL Piezo Systems.

907-688.02.7--Equipment Cabinet. The installation and setup of the equipment cabinet and all its applications must comply with all requirements of the plans. The Contractor will install the equipment cabinet along the highway right of way at a location approved by the Engineer. The equipment cabinet shall utilize a locking door. The housing shall be positioned so that the data collector will be approximately four (4) feet above the ground and mounted on a pole as depicted in the plans. Lightning protection shall be provided for each installation. A 5/8-inch by 12-foot ground rod shall be used with AWG #6 copper conductors. Class B concrete shall be used for equipment cabinet footings and 4'x6'x4" concrete work pad as described in the plans.

907-688.03--Construction Requirements. The general layout of the work shall conform to the detail shown on the typical installation plans and shall be verified at each location with the Project Engineer. No hazards, such as open holes on site during construction, shall be left overnight.

All traffic control shall meet the requirements as defined in the most updated Manual on Uniform Traffic Control Devices.

907-688.03.1--Manufacturer's Recommendations. Sensors must be installed in accordance with the approved procedures and specifications provided by the sensor manufacturer. All sensors and connecting cables shall be positioned and installed to assure compatibility with the inductive loops to provide electrical signals for vehicle classification.

907-688.03.2--Conflicts. Conflicts between any piece of equipment, which if installed as shown in relation to any previously installed equipment that may impair the proper operation of that equipment, shall be resolved by the Contractor as approved by the Engineer.

907-688.03.3--Conduit Runs. The number of conductors, conduits and fittings necessary to produce an operative system as specified herein shall be provided by the contractor. All joints, connections, etc. shall be completely water and moisture tight. Shielded transmission cable and wire leads shall be installed in conduit from paved shoulders to pull boxes.

907-688.03.4--Slots in Pavement. All slots required in pavement and paved shoulders shall be saw cut with diamond blade power saw. Edges shall be straight, smooth and true. Depth shall be uniform.

907-688.03.4.1--Loop Slots. Slots for loop wire shall be ¼-inch minimum width. Slot depth shall be 2½ inches in asphalt and 1½ inches in concrete. Diagonal slots shall be cut at corners by overlapping cuts so that the entire slot intended for wire has full depth. There shall be no jagged edges or protrusions which may damage wire. When the top lift of asphalt is an Open Graded Friction Course, the loops shall be cut in the top immediate lift beneath the open graded friction course.

907-688.03.4.2--Cable Slots. Slots for cable shall be protected by a foam tube layer below the bitumen protective layer and be 0.32-inch width (± 1/16") and 3.15-inch depth for Traffic Recorder WIM Kistler Systems and 3/8-inch width (±1/16") and 2¼-inch depth for Traffic Recorder WIM BL Piezo Systems. To ensure that the slots are full depth, all turns and overlay cuts shall not exceed 45 degrees. There shall be no jagged edges or protrusions which may damage cable. Cable leads from each sensor shall be run in individual saw cut slots at a minimum spacing of 12 inches.

907-688.03.4.3--Sensors Slots. Slots for sensors shall be of the width and depth specified by the sensor manufacturer. Cavity of sensor slots may be made with chisel between saw cut sides, but the bottom shall be smooth and level without protrusions. In overlays of four inches (4") or less, the slot shall extend to the top of the course below the overlay. Before placing sensor, the slot shall be cleaned with compressed air.

907-688.03.5--Loop Assemblies. Inductive loop assemblies shall meet the requirements of Section 635 of the Standard Specifications.

907-688.03.6--Inspection. Pavement slots shall be inspected at time of sensor and cable installation. Surfaces shall be clean and dry, free of all dust, grit, moisture and other contaminants that might affect sealant or cement bond.

907-688.03.6.1--Sensor Check. Prior to final installation, sensor assembly shall be placed in position in slot and inspected for compliance with manufacturer's requirements as to clearance, surface alignment, etc. Sensor output shall be checked using an oscilloscope or other test equipment recommended by the sensor manufacturer. For Kistler sensors, a Kistler test kit must also be used to ensure each sensor output is within acceptable range per manufacturer recommendation before use.

907-688.03.6.2--Cable Inspection. The cable shall not have any cuts, nicks, abrasions or breaks in the insulation at the time of filling slot with sealant. Any sensor having defects in the shielded transmission cable shall be replaced.

907-688.03.6.3--Loop Inspection. The loop wire shall not have any cuts, nicks, abrasions or breaks in the insulation before or after installation in the slot. Loop inductance shall be 124 microhenries.

907-688.03.7--Sensor Installation. For Traffic Recorder WIM Kistler Systems, approved sand/epoxy grouting shall completely fill the cavity spaces and surround all three sides of the sensor assembly. To insure that there are no voids under the sensor assembly the sensor shall first be removed after installation inspection, the slot partially filled with epoxy, then the sensor pressed into position and the side cavities filled to the pavement surface before the bottom epoxy has hardened. Sensor installation shall be protected from traffic until sand/epoxy grouting is sufficiently cured. The person(s) performing the installation of the Kistler quartz sensors must be certified by Kistler in the installation procedures of Kistler quartz sensors and must be on the job site at each installation when the quartz sensors are being installed. Certification can be acquired from Kistler as long as a certified Kistler representative is on site to assist during the installation. Details regarding Kistler certification can be acquired through direct communication with Kistler. Any delays in the construction due to the certification process will not be grounds for an extension of the completion date.

For Traffic Recorder WIM BL Piezo Systems, approved epoxy cement shall completely fill the cavity spaces and surround all four sides of the sensor assembly. All excess encapsulate shall be removed from pavement surface and sensor to conduit to prevent damage during installation. Sensor installation shall be protected from traffic until epoxy cement is sufficiently cured.

907-688.03.8--Sleeves. Flexible sleeve or other protection shall be provided for shielded cable at sensor ends to prevent damage. The Contractor shall take care to insure that the sleeve is not filled with epoxy cement. In addition, the Contractor shall provide flexible sleeve, approximately 12 inches long, at pavement construction joints including joints between lanes and between pavement and paved shoulder.

907-688.03.9--Cable and Wire Installation. The cable or lead wires shall be placed in the bottom of the slot so that there are no kinks, curls, straining or stretching of the insulation. The two loop lead wires shall be twisted two to five turns per foot before placement in the slot. Special care shall be taken in seating the cable and wire so that the insulation will not be broken or abraded. No sharp tools such as screwdriver or metal object shall be used for this operation.

907-688.03.9.1--Conditions. The Contractor shall install the sealant in strict adherence to the manufacturer's recommendation and these specifications. No sealant shall be installed during inclement weather or under any condition which might introduce moisture into the pavement slots.

907-688.03.9.2--Sealant. The viscosity of the sealant shall be such that it can be readily placed in the slot, completely surround the wires, displace all air and fill the slot so that the sealant is flush with the roadway surface. The finished installation shall be waterproof and present a neat workmanlike appearance. Minimum required clearance shall be maintained to cable and wire.

907-688.03.9.3--Protection. The sealant shall be sufficiently hardened before opening to traffic.

907-688.03.10--Cleaning. All excess encapsulate and sealant shall be removed from pavement surface, inductive loop, and sensor after installation. A hand grinder shall be used to smooth out rough or high areas that might affect sensor operation.

907-688.03.11--Tags. Each shielded transmission cable and pair of lead wires shall be uniquely identified by an insulated, waterproof tag in every pull box.

907-688.03.12--Trenching and Backfilling. All trenching shall be done by mechanical means and all sides shall be straight and vertical. Width of trenches shall not exceed eight (8) inches on either side of placed conduits. All backfill shall be made with a friable material, which has been approved by the Engineer. Material shall be placed in compacted lifts as approved by the Engineer. The site, including shoulders and grassing, shall be returned to its original condition.

907-688.03.13--Jacking or Boring. Approved jacking or boring methods shall be used where a conduit must be placed under an existing roadway. Jacking/boring pits shall be kept a minimum of five (5) feet from the edge of shoulder, and care shall be taken not to disturb existing pavement. Excessive use of water or other methods which could undermine pavements shall not be permitted. The jacking/boring site must be returned to its undisturbed state upon completion of the operation. Only experienced labor shall be used for jacking/boring work. Conduit shall be not less than 36 inches below pavement surface.

907-688.03.14--Pull Boxes. The location of the pull boxes must be approved by the Project Engineer. Pull boxes shall be set on 12-inch minimum thickness washed gravel. Holes for drainage shall be provided in bottom of pull box. Conduit entering pull box shall be located so as to leave the major portion of the box clear.

907-688.03.15--Conduit. Conduit shall be laid to a depth of not less than 36 inches below the finished grade, except at conduit ends. All conduits shall be run at least 10 feet outside shoulder unless otherwise approved. One size of conduit shall be used for each run; no reducing couplings will be permitted.

907-688.03.16--Conductor Installation. Before placing shielded cable or wire leads in conduit, the conduit shall be cleaned with compressed air and rigid metal conduit shall be cleaned with a mandrel. Only approved lubricants which will not injure conductor insulation while pulling cables shall be used.

907-688.03.17--Plant Establishment. Any areas of vegetation disturbed during the installation of the WIM, pull boxes, equipment cabinets, etc. shall be graded and grassed / solid sodded to the satisfaction of the Engineer to return the area to its condition prior to construction. It also may be necessary to install temporary erosion control devices during the installation process. Unless pay items for these items of work are included in the bid items, the cost of this work will be included in other items bid.

907-688.03.18--System Acceptance. The Contractor shall be required to demonstrate to the Engineer the satisfactory operation of each device installed on this project.

Calibration. The Contractor shall be required to perform calibration on Traffic Recorder WIM Systems as to conform to the below Planning Division WIM calibration standards. The Contractor/Subcontractor must have a representative from the vendor or manufacturer who is knowledgeable of the system to make necessary adjustments to the system during calibration. The Contractor must provide an air ride suspension truck and air ride suspension flatbed trailer (18-wheeler weighing approximately 75,000 to 80,000 pounds) along with a driver who is an insured motor carrier for the calibration. Five (5) consecutive passes at the same consistent speed ranging between 50 mph to 60 mph over the sensors are required per lane to set the calibration factors of the sensors. Ten (10) consecutive passes at the same consistent speed ranging between 50 mph to 60 mph over the sensors without any adjustments to meet the tolerance level are required per lane. Each pass over the sensors must be at a constant speed without deceleration or acceleration. The tolerance level must meet 95% probability of conformity for the functional performance requirements for WIM systems for MDOT and be within ± 10% for the steering weight, ± 15% for the truck tandem, ± 15% for the trailer tandem, and ± 7 for the gross weight. An MDOT representative will be present during the calibration to determine if the tolerance level is met. Calibration shall take place one (1) week after the installation of the BL Piezo sensors and two (2) weeks after the installation of the Kistler sensors as recommended in the Kistler Installation Instructions Manual.

907-688.03.19--Material Warranty. The following warranty stipulations are in addition to those covered by Subsection 106.01 of the Standard Specifications.

907-688.03.19.1--Site Inspection. After meeting the consecutive polling requirement, a site inspection may be made upon completion of an individual site but must be made before the final inspection of the project.

The Contractor, with MDOT's representatives present to verify that the site is working properly, shall test all Traffic Recorder WIM Systems.

Sensors, loops and related components at all sites shall be operational at the final inspection of the project.

Consecutive Polling. All Traffic Recorder WIM Systems shall have polled and transmitted data without any problems for at least 10 consecutive days and data for each day must pass quality control and quality assurance checks prior to site inspection.

907-688.03.19.2--Guarantee. At each location, the Contractor shall warrant and guarantee all sensors, loops and related components for a period of 12 months, beginning at the date of release from maintenance, or partial release from maintenance, of the project.

907-688.03.19.3--Responsibility. It is the intent of the preceding paragraph to provide for equipment that performs as intended by the manufacturer. It is the further intent to obtain from the Contractor a level of workmanship that will assure the Department of an operation system devoid of Contractor laxities. Failure to perform as indicated shall require the Contractor to replace

in kind or repair, at the Contractor's option, the equipment or workmanship in question. All material and labor cost resulting from the replacement or repair of equipment or correction of poor workmanship shall be at no additional costs to the Department.

907-688.03.19.4--Repairs. The Department shall report any failures and outages to the Contractor. The Contractor will be required to make the necessary repairs within 10 business days of the report. The Contractor shall not be responsible for outages occurring during the 12-month warranty period due to vandalism, traffic accidents, or any problems not related to materials or workmanship. The Contractor will be required to make the necessary repairs for such outages and a reasonable cost for such repair(s) will be borne by the Department.

907-688.03.19.5--Manufacturer's Guarantees. All manufacturer's standard warranties or guarantees for all electrical and mechanical equipment which are provided as customary trade practice shall be made out to the Department and shall begin simultaneously with the commencement of the 12-month warranty period.

907-688.03.19.6--Guarantee of Repairs. This warrantee and guarantee on the fixed or replaced items shall be identical in scope to the warrantee and guarantee in Subsections 907-688.03.19.1 through 907-688.03.19.5.

907-688.04--Method of Measurement. Traffic Recorder WIM system of the type specified, complete in place and accepted, will be measured per each location.

907-688.05--Basis of Payment. Traffic Recorder WIM system, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing, installing, testing and guaranteeing all equipment, and for all materials, labor, equipment, operation, and other incidentals necessary to complete the work.

Payment will be made under:

907-688-A: Traffic Recorder WIM Kistler System, _*_ - per each

907-688-B: Traffic Recorder WIM Brass Linguini (BL) Piezo System, _*_ - per each

* Site No. or Location may be specified

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-700-3 **CODE: (IS)**

DATE: 4/20/2026

SUBJECT: Materials and Tests

Section 700, Materials and Tests, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete fourth, fifth, sixth, and seventh paragraph of Subsection 700.01 on page 713, and add the following.

907-700.01.1--Buy America/Build America. Buy America (BABA) Requirements.

Iron or Steel Products. Iron or steel or wire products (including prestressed cables and strands) are products that consist wholly or predominantly of iron or steel or a combination of both.

Predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of the iron and steel components.

Iron or steel or wire products, as described above, that are permanently incorporated into a construction project must be produced domestically. All manufacturing processes for iron or steel or wire products, from the initial melting stage through the application of coatings, that are permanently incorporated into a construction project, must occur domestically. However, pig iron and processed, pelletized, and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for iron and/or steel and/or wire products. Coating includes all processes that protect or enhance the value of the material to which the coating is applied.

Construction Materials. Construction materials are articles, materials, or supplies that consist of only one of the items listed (non-ferrous metals, plastic and polymer-based products, glass, fiber-optic cables (including drop cables), optical fibers, lumber, drywall, and engineered woods). Minor additions of articles, materials, supplies, or binding agents to a construction material do not change the categorization of the construction material. All manufacturing processes for the listed construction materials, from the initial processes as described within 2 CFR 184.6 to the final processes as described within 2 CFR 184.6, that are permanently incorporated into a construction project, must occur domestically.

Manufactured Products. Manufactured products are articles, materials, or supplies that have been processed into a specific form or shape; or when combined with other articles, materials, or supplies create a product with different properties than the individual articles, materials, or supplies. An item that is classified as an iron or steel product, a construction material, or an excluded material is not a manufactured product. However, an article, material, or supply classified as a manufactured product

may include components that are iron or steel products, excluded materials, or other product categories as specified by law or in 2 CFR part 184. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product. For construction projects obligated on or after October 1, 2025, the manufactured product must be manufactured domestically. For construction projects obligated on or after October 1, 2026, the manufactured product must be manufactured domestically and the cost of the components of the manufactured product that are mined, produced, or manufactured domestically is greater than 55 percent of the total cost of all components of the manufactured product.

Excluded Materials. Excluded materials, as listed in Section 70917(c) of the Build America, Buy America (BABA) Act, are cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives. However, an article, material, or supply classified as a manufactured product may include components that are iron or steel products, excluded materials, or other product categories as specified by law or in 2 CFR part 184. Mixtures of excluded materials delivered to a work site without final form for incorporation into a project are not a manufactured product.

Domestically shall be understood to mean all States of the United States, District of Columbia, Puerto Rico, American Samoa, Guam, and Virgin Islands and any other place subject to the jurisdiction of the United States.

907-700.01.2—Certificate of Compliance Requirements. Prior to incorporation into the work, the Contractor shall furnish the Project Engineer with a Domestic Materials Self-Certification Form documenting conformance to the requirements of Subsection 907-106.14. Attached hereto is the Domestic Materials Self-Certification Form that shall be furnished by the Contractor to the Project Engineer.

Domestic Materials
Self-Certification Form

This certification is for a manufacturer/supplier to certify the below articles, materials, or supplies are in compliance with the applicable domestic material content procurement preferences found in the Buy America Act requirements (23 CFR 635.410) and the Build America, Buy America Act (BABA) requirements (2 CFR part 184). The individual completing this form takes full responsibility for the information included in the form. State agencies have the authority to request additional details related to the information provided in the form. All forms shall be submitted via AASHTO DataMine for delivery to authorized governmental users through the Industry Document Repository. The manufacturer/supplier is required to include updates to process changes within 10 days of the change occurring via uploading a revised form into DataMine.

PART 1: COMPANY CONTACT INFORMATION

Company/Producer/Manufacturer Name:

Supplier Representative Name:

Contact Email Address: Contact Phone Number:

Date Form is Being Submitted: mm/dd/yyyy

PART 2: DETAILS OF THE ARTICLE, MATERIAL, OR SUPPLY:

Using Table 1 below, provide the classification of the article, material, or supply as one of the following: (1) iron or steel product; (2) construction material (3) manufactured product; or (4) excluded materials including Section 70917(c) materials.

Classification	
Producer of the Article, Material, or Supply:	
Product/Model/Part/Material:	
Manufacturing Address:	
Manufacturing City:	
Manufacturing State:	
Manufacturing Zip Code:	
DataMine # (if applicable):	
Federal/State/Local Project number(s):	
Pay Code Number (PCN):	
Project Item code:	
Project Item Description:	
Quantity Certified:	

TABLE 1: Material Classifications

(1) Iron or Steel Product	
Wholly or predominantly Iron or Steel, or a combination of both (23 CFR 635.410(b)(1)(ii))	Certification requires predominantly of iron or steel or a combination of both means that the cost of the iron and steel content exceeds 50 percent of the total cost of all its components. The cost of iron and steel is the cost of the iron or steel mill products (such as bar, billet, slab, wire, plate, or sheet), castings, or forgings utilized in the manufacture of the product and a good faith estimate of the cost of iron or steel components.
(2) Construction Material	
Non-Ferrous Metals (2 CFR 184.6(a)(1))	Certification requires all manufacturing processes, from initial smelting or melting through final shaping, coating, and assembly, occurred in the United States.
Plastic and Polymer based products (including polyvinyl chloride, composite building materials, and polymers used in fiber optic cables) (2 CFR 184.6(a)(2))	Certification requires all manufacturing processes, from initial combination of constituent plastic or polymer-based inputs, or where applicable, constituent composite materials, until the item is in its final form, occurred in the United States.
Glass (including optic glass) (2 CFR 184.6(a)(3))	Certification requires all manufacturing processes, from initial batching and melting of raw materials through annealing, cooling, and cutting, occurred in the United States.
Fiber Optic Cable (including drop cable) (2 CFR 184.6(a)(4))	Certification requires all manufacturing processes, from the initial ribboning (if applicable), through buffering, fiber stranding and jacking, occurred in the United States. All manufacturing processes also include the standards for glass and optical fiber, but not for non-ferrous metals, plastics and polymer-based products, or any others.
Optical Fiber (2 CFR 184.6(a)(5))	Certification requires all manufacturing processes, from the initial preform fabrication stage through the completion of the draw, occurred in the United States
Lumber (2 CFR 184.6(a)(6))	Certification requires all manufacturing processes, from initial debarking through treatment and planing, occurred in the United States.
Drywall (2 CFR 184.6(a)(7))	Certification requires all manufacturing processes, from initial blending of mined or synthetic gypsum plaster and additives through cutting and drying of sandwiched panels, occurred in the United States.
Engineered Wood (2 CFR 184.6(a)(8))	Certification requires all manufacturing processes, from initial combination of constituent materials until the wood product is in its final form, occurred in the United States.
(3) Manufactured Product	
Manufactured Products other than Precast Concrete Products and Intelligent Transportation Systems and Other Electronic Hardware Systems Installed on the Highway ROW or Other Real Property (23 CFR 635.410(c)(1)(vii)) and 23 CFR 635.410(c)(1)(iv)	• Certification requires for projects obligated before October 1, 2025, no certification is required (excludes EV chargers). • Certification requires for projects obligated on or after October 1, 2025, certification requires the final manufacturing process occurred in the United States (excludes EV chargers). • Certification requires for projects obligated on or after October 1, 2026, and all EV chargers , certification requires the final manufacturing process occurred in the United States and the cost of the components that are mined,

	produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product.
Precast Concrete Products (23 CFR 635.410(c)(2)(i))	Classified as a manufactured product must comply with both the wholly or predominantly iron or steel or a combination of both product and manufactured product certification requirements as stated above.
Intelligent Transportation Systems and Other Electronic Hardware Systems Installed on the Highway ROW or Other Real Property (23 CFR 635.410(c)(2)(ii))	Classified as a manufactured product must comply with both the wholly or predominantly iron or steel or a combination of both product certification requirements for any iron or steel enclosures as well as the manufacturing certification requirements as stated above.
(4) Excluded Materials	
Excluded Materials Including Section 70917(c) Materials (23 CFR 635.410(c)(1)(ii))	No certification is required for excluded materials including Section 70917(c) materials. Section 70917(c) materials means cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

PART 3: DECLARATION OF SUBMITTAL

Do the articles, materials, or supplies submitted in this form comply with applicable domestic materials content procurement preferences found in the Buy America Act requirements (23 CFR 635.410) and the Build America, Buy America Act requirements (2 CFR part 184) (Y/N)? _____

PART 4: CERTIFICATION (Read and check all boxes before signing)
Note: State Departments of Transportation may have different language requirements for this section.

☐ I certify that the description above is a true and accurate description of the article, material, or supply provided, and that the undersigned is in a position to legally bind the Company/Organization represented in this form.

☐ I certify that the iron or steel product, construction material, or manufactured product complies with the applicable Buy America or BABA requirements.

Signature: Date: mm/dd/yyyy

Printed Name:
Title:
Company/Organization:
Company/Organization address:

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-701-4

DATE: 11/05/2024

SUBJECT: Hydraulic Cement

907-701.04--Blended Hydraulic Cement.

907-701.04.1--Types of Blended Hydraulic Cement. After the last paragraph of Subsection 907-701.04.1 on page 1, add the following.

Blended cement Types IL meeting the "HE" high early strength requirement listed in AASHTO M 240, Table 3 shall have the "(HE)" suffix added to the type designation.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-701-4 **CODE: (IS)**

DATE: 11/21/2023

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.

907-701.01--General. 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."

907-701.02--Portland Cement.

907-701.02.1-General. Delete Subsections 701.02.1.1, 701.02.1.2, 701.02.2, 701.02.2.1, and 701.02.2.2 on pages 719 and 720, and substitute the following.

907-701.02.1.1--Types of Portland Cement. Portland cement shall be either Type I, Type II, or Type III conforming to AASHTO M85 or Type III (MS). Type III (MS) is defined as a Type III cement conforming to AASHTO M85 having a maximum tricalcium aluminate (C_3A) content of 8%.

907-701.02.2--Blank.

907-701.02.2.1--Blank.

907-701.02.2.2--Blank.

Delete Subsection 701.04 on pages 720 and 721, and substitute the following.

907-701.04--Blended Hydraulic Cement.

907-701.04.1--Types of Blended Hydraulic Cement. Blended hydraulic cements (blended cements) shall be of the following types and conform to AASHTO M 240:

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-702-4 **CODE: (IS)**

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.

907-702.04--Sampling. 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.

907-702.07--Emulsified Asphalt. 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.

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

TABLE V
SPECIFICATION FOR FOG SEAL

	LD-7		CHPF-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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

907-703.03.2.4--Gradation. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-705-1 **CODE: (IS)**

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.

907-705.04--Stone Riprap. 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 pre-approved source and be visually approved prior to use.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-712-1 **CODE: (SP)**

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.

907-712.01--General. 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.

907-712.02--Barbed Wire. 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.

907-712.03--Metallic-Coated, Steel Woven Wire Fence Fabric. 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.

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

907-712.04.1--Fabric. 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.

907-712.04.2--Tie Wire. 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.

907-712.04.3--Tension Wire. 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 III, Type IV, or Type I Classes 1, 2, or 3 tension wires shall be furnished.

907-712.04.4--Posts Rails, Gate Frames, and Expansion Sleeves. 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.

907-712.04.5--Miscellaneous Fittings and Hardware. 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.

907-712.05.1.1--General. 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.

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

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

907-712.05.1.4--Sawed Braces. 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.

907-712.05.2.1--Round Steel Pipe. 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.

907-712.05.2.2--Steel Fence Post and Assemblies, Hot-Wrought. 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.

907-712.05.2.5--Aluminum-Alloy Posts and Assemblies. 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.

907-712.05.2.6--Formed Steel Section Posts. 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.

907-712.06.2.1--Square Posts. 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 ±3/8" of the dimensions shown on the plans.

907-712.06.2.2--Round Posts. 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.

907-712.06.5--Treated Wood Blocks for Use with Metal Guardrail Posts. 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 ±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.

907-712.16--Hardware. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-4 **CODE: (SP)**

DATE: **07/28/2025**

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.

907-714.01.2--Water for Use in Concrete. 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.

907-714.01.3--Water for Use in Chemically Stabilized Based. 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.

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

Delete Subsection 714.06 on page 798, and substitute the following.

907-714.06--Slag Cement.

907-714.06.1--General. The slag cement source must be approved for listing in the Department's

APL prior to use. The acceptance of slag cement shall be based on certified test reports, certification of shipment from the supplier, and tests performed on samples obtained after delivery in accordance with the Department's *Materials Division Inspection, Testing, and Certification Manual* and Department SOP.

The Contractor shall provide suitable means for storing and protecting the slag cement against dampness and contamination. Separate storage silos, bins, or containers shall be provided for slag cement. Slag cement that is partially set, caked or contains lumps shall not be used.

The State Materials Engineer shall be notified in writing of the nature, amount and identity of any processing or other additions made to the slag cement during production.

Slag cement from different mills shall not be mixed or used alternately in any one class of construction or structure without written permission from the Engineer; except that this requirement will not be applicable to cement treatment of design soils or bases.

No additional cementitious materials, such as blended hydraulic cement, fly ash, metakaolin, or others, shall be added to or as a replacement for hydraulic cement when used with slag cement in the production of concrete. The replacement of hydraulic cement with slag cement shall be in accordance with the applicable replacement content specified in Subsection 701.02.2.

907-714.06.2--Specific Requirements. Slag cement shall meet the requirements of AASHTO M 302, Grade 100 or 120. Slag cement shall contain no chlorides.

907-714.13--Geotextiles.

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

Table 1 - Geotextiles

Type Designation	I[1]	II[1]	III	IV	V	VI		VII		VIII	IX	
	Sediment Control		Drainage	Paving	Separation & Drainage	Separation, Stabilization & Reinforcement				High Strength		
Physical Property[2]						Woven	Non-Woven	Woven	Non-Woven			**Test Method**
Grab Strength (lb)	50	90	110	90	200	280	180	450	280	----	----	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 (lb)	----	----	40	----	80	110	75	180	115	----	----	ASTM D 6241
Trapezoidal Tear (lb)	----	----	40	----	80	100	70	150	100	----	----	ASTM D 4533
Asphalt Retention (gal/yd^2)	----	----	----	0.2	----	----	----	----	----	----	----	ASTM D 6140
Permittivity (sec^{-1}) min	0.05	0.05	0.5	----	0.2	0.2	0.2	0.2	0.2	----	----	ASTM D 4491
AOS Woven (mm) max	0.60	0.60	0.6	----	0.6	0.43	----	0.43	----	----	----	ASTM D 4751
AOS Non-Woven (mm) max	0.84	0.84	0.43	----	0.43	----	0.43	----	0.43	----	----	
Tensile 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)	----	----	----	----	----	----	----	----	----	660	2000	ASTM D 4595

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

Delete Subsec

907-714.15--Geogrids.

907-714.15.1–General. 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.

907-714.15.1.2--Geogrid for Subgrade Stabilization. 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.

907-714.15.3--Manufacturer Certification. 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.

907-714.15.4--Acceptance Sampling and Testing. 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 Designation						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).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-718-1 **CODE: (SP)**

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.

907-718.01--General. 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.

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

907-718.03--Treated Timber and Dimension Lumber. 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.

907-718.03.2.1--General. 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.

907-718.03.2.3--Inspection. 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.

907-718.03.4--Storage of Treated Material. 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.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-4 **CODE: (IS)**

DATE: **06/17/2025**

SUBJECT: **Pavement Marking Materials**

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

Delete Section 720 on pages 840 thru 854, and substitute the following.

SECTION 720 - PAVEMENT MARKING MATERIALS

907-720.01--General. The Department reserves the right to perform sampling and testing of any materials at any time. Upon request of the Engineer, samples of the material shall be furnished.

907-720.02--Color Requirements. All pavement markings except raised pavement markers are required to meet the color requirements of ASTM D6628.

907-720.03--Optics. Optics used in thermoplastic pavement markings shall consist of a double-drop system of glass beads or advanced optics.

907-720.03.1--Glass Beads. The manufacturer shall furnish the Engineer with a certified test report indicating that the glass beads meet AASHTO M 247. AASHTO Type 4 beads shall be applied to the newly placed stripe first, followed by the application of AASHTO Type 1 or Type 2 beads. Type 1, 2, and 4 glass beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles. Type 1, 2, and 4 glass beads shall be coated with a bead coating that is compatible with the traffic marking material to which the glass beads will be applied and will provide adequate moisture proofing, increased adhesion, and optimum embedment of the glass beads.

907-720.03.1.1—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual).

907-720.03.2--Advanced Optics. Advanced optics are materials that do not meet the specific requirements of AASHTO M 247 but produce a final drop-on optics system that meets or exceeds the reflectivity requirements in Special Provision 907-626. Advanced optics shall be a double-

drop system that is pre-approved and listed on the Department's Approved Products List.

907-720.03.2.1—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing may be conducted at the request of the Engineer.

907-720.04--Thermoplastic Marking Material. Thermoplastic marking material shall meet the color requirements of Subsection 907-720.02.

There shall be no obvious change in the color of the material if held at its plastic temperature for a period of four (4) hours nor by reason of four (4) re-heatings to its plastic temperature.

The pavement markings shall maintain its original dimension and placement. The material shall not be slippery when wet and it shall not lift from the pavement in freezing weather.

907-720.04.1--Extruded Thermoplastic Material. Extruded thermoplastic pavement marking material shall meet the requirements of AASHTO M 249, and shall meet the requirements of 907-720.04 with the following exceptions:

- Blue - ADA thermoplastic marking material shall meet the requirements of Subsection 907-720.04.2 with the exception that the color shall be Blue – ADA, and the Contractor may use hot applied thermoplastic materials meeting the satisfaction of the Engineer.

907-720.04.2--Spray-Applied Thermoplastic Material. Spray-applied thermoplastic pavement marking material shall meet the requirements of AASHTO M 249 and shall meet the requirements of 907-720.04.

907-720.04.3--Pre-formed Thermoplastic Material. Heat-fused, pre-formed thermoplastic pavement marking material shall meet the color requirements of 907-720.02.

907-720.04.4—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

907-720.05--Pavement Marking Tape. Pavement marking tape shall be listed on the Department's Approved Lists.

907-720.05.1—Cold Plastic Pavement Markings (Permanent Pavement Marking Tape). Pavement marking tape for use in roadway applications shall be designated on the Department's Approved Lists as permanent.

The prefabricated markings described shall consist of white or yellow pigmented plastic films with reflective optics uniformly distributed throughout their entire cross-sectional area, and be capable of being affixed by either a pressure sensitive pre-coated adhesive or a liquid contact cement. The markings shall be provided complete in a form that will facilitate rapid application and protect the markings in shipment and storage. The manufacturer shall identify proper solvents and/or adhesives to be applied at the time of application, all equipment necessary for proper application, and recommendations for application that will assure an effective performance life.

Prefabricated legends and symbols shall conform to the applicable shapes and sizes as outlined in the current "Manual on Uniform Traffic Control Devices."

907-720.05.1.1--Specific Requirements. Unless otherwise indicated on the plans, the patterned material without adhesive shall have a minimum caliper of 0.065 inch at the thickest portion of the patterned cross-section and a minimum caliper of 0.020 inch at the thinnest portion of the cross-section. The material shall be a pliant polymer film with 50±15% of the surface are raised and presenting a near vertical face angle of 0° to 60° to traffic from any direction. The channels between the raised areas shall be substantially free of exposed optics or particles.

The size and quality of the optics will be such that performance requirements of Subsection 907-720.02 for the retroreflective pliant polymer film shall be met. The pigments shall be selected and blended to provide a marking film that is white or yellow conforming to the performance requirements of Subsection 907-720.02 through the expected life of the film.

907-720.05.1.2--Conformability and Resealing. The marking shall be capable of conforming to pavement contours, breaks, faults, etc. through the action of traffic at normal pavement temperatures.

The marking shall have resealing characteristics that allows it to be capable of fusing with itself and previously applied marking of the same composition under normal conditions of use. The marking shall be capable of use for patching worn areas of the same type in accordance with manufacturer's instructions.

907-720.05.1.3--Tensile Strength and Elongation. The material shall have a minimum tensile strength of 40 pounds per square inch of cross section when tested according to ASTM D 638. A 6-inch x 1-inch x 0.06-inch sample shall be tested at a temperature between 70°F and 80°F using a jaw speed of 12 inches per minute.

The material shall have a minimum elongation of 75% at break when tested according to ASTM D 638 using a jaw speed of 12 inches per minute.

907-720.05.1.4--Skid Resistance. The surface of the material shall provide a minimum skid resistance value of 45 BPN when tested according to ASTM E 303 except values will be taken at

downweb and at a 45-degree angle from downweb. These two values will then be averaged to find the skid resistance of the patterned surface.

907-720.05.1.5--Effective Performance Life and Warranty. When applied according to the recommendations of the manufacturer the pavement marking tape shall provide a neat and durable marking that will not flow or distort due to temperature if the pavement surface remains stable. The film shall be weather resistant and through normal traffic wear shall show no appreciable fading, lifting, or shrinkage throughout the useful life of the marking, nor shall it show significant tearing, roll back, or other signs of poor adhesion.

All manufacturer's standard warranties and guarantees on pavement marking tape, which are provided as customary trade practice, shall be delivered to the Engineer at the final inspection. All warranties and guarantees shall be made out to the Department.

907-720.05.1.6—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual). Samples of the material shall be furnished and shall be provided at no cost to the State.

907-720.05.2--Preformed Pavement Markings for Construction Zones. Preformed pavement markings for construction zones shall be designated Department's Approved Lists as temporary. Retroreflective preformed pavement markings for construction zones shall be as specified on the plans or in the contract documents.

The markings shall be provided in specified widths and shapes. Preformed words and symbols shall conform to the applicable shapes and sizes as outlined in the current "Manual on Uniform Traffic Control Devices for Streets and Highways," or as modified.

The materials shall be packaged in accordance with accepted commercial standards and when stored indoors in a cool dry place, shall be suitable for use one year after date of purchase.

907-720.05.2.1--Specific Requirements. Preformed markings shall consist of retroreflective materials on a conformable backing and shall meet the performance requirements of Subsection 907-720.02. The markings shall consist of a mixture of high-quality polymeric materials, pigments, and optics with a reflective layer of optics bonded to the top surface. The markings shall be pre-coated with a pressure sensitive adhesive capable of adhering to pavement in accordance with the manufacturer's instructions without the use of heat, solvents, or other additional adhesives. The markings and/or adhesive shall not require any curing time after application. A coated non-metallic medium shall be incorporated with the pressure sensitive adhesive to facilitate removal.

907-720.05.2.2—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

907-720.06--Raised Pavement Markers. Pavement markers shall be listed on the Department's Approved Lists and shall conform to ASTM D 4280.

907-720.06.1--Packaging. Shipments shall be made in containers acceptable to common carriers and packaged in such a manner as to ensure delivery in perfect condition. All damaged shipments shall be replaced by the Contractor. Each package shall be clearly marked as to the name of the manufacturer, type, quantity enclosed, lot number, and date of manufacture.

907-720.06.2--Non-Reflective Pavement Markers. Non-reflective pavement markers are occasionally referred to as "jiggle markers". Non-reflective markers consisting of a heat-fired, vitreous, ceramic base, and a heat-fired, opaque, glazed surface are permitted for use; the bottom of the marker shall not be glazed. Ceramic markers shall be produced from any suitable combination of intimately mixed clays, shales, talcs, flints, feldspars, or other inorganic material. Ceramic markers shall be thoroughly and evenly matured, and all non-reflective pavement markers shall be free from defects which affect appearance or serviceability.

Ceramic non-reflective markers shall conform to the following finish and testing requirements in Table 2 below.

Table 2

Ceramic Non-Reflective Marker Requirements	
Glaze Thickness	0.005 inch, minimum
Mohs Hardness	6, minimum
Autoclave	Glaze shall not spall, craze, or peel.
Compressive Strength	750 psi, minimum
Water Absorption	2.0%, maximum

907-720.06.3—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

907-720.07--Adhesive for Pavement Markers. The adhesive shall be listed on the Department's Approved Lists and shall be an asphaltic material suitable for bonding pavement markers to surfaces when the road surface and marker temperatures are in the range of 50°F to 160°F. The composition of the adhesive must be such that its properties will not deteriorate when heated to and applied at temperatures up to 425°F. Samples may be submitted in the form of an adhesive

testing package from each batch or material obtained from a package shipped to the project.

907-720.07.1--Packaging and Labeling. The adhesive shall be packaged in self-releasing cardboard containers that will stack properly. The label shall show the manufacturer, quantity, and lot or batch number. "Adhesive for Pavement Markers" or "Adhesive for Traffic Markers" shall be printed in bold lettering on the label.

907-720.07.2--Bituminous Adhesive. The asphaltic adhesive material shall be flexible type.

907-720.07.2.1--Flexible Bituminous Adhesive. Flexible bituminous adhesive shall be designated on the Department's Approved Lists as flexible and shall comply with requirements of Table 3 below.

Table 3

Flexible Bituminous Adhesive Properties			
	Min	Max	Test Method
Penetration @ 77°F	-	25	ASTM D 5
Softening Point, °F	200	-	ASTM D 36
Brookfield Viscosity @ 400°F, cp.	-	10,000	ASTM D 3236
Ductility @ 77°F, 5 cm/min	15	-	ASTM D 113
Ductility @ 39.2°F, 1 cm/min	5	-	ASTM D 113
Asphalt Compatibility	Pass		ASTM D 5329
Flexibility @ 20°F	Pass		Per Subsection

907-720.07.3—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual). Samples of the material shall be furnished and shall be provided at no cost to the State.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-4 **CODE: (IS)**

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.

907-721.06.2--Performance Requirements. 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/ft^2)
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.

907-721.11--Digital Applied Printing. 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.

907-721.11.1--Digitally Printed Ink Systems. 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.

907-721.11.2--Protective Overlay Film. 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.

907-721.11.3--Inspection. 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.

907-721.11.4--Traffic Sign Performance Warranty Provisions. 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.

907-721.11.5--Certified Digital Sign Fabricator. 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.

S E C T I O N 9 0 5 - P R O P O S A L

Date _____

Mississippi Transportation Commission
Jackson, Mississippi

Sirs: The following proposal is made on behalf of _____
_____ of _____
_____
for constructing the following designated project(s) within the time(s) hereinafter specified.

The plans are composed of drawings and blue prints on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

The Specifications are the current Standard Specifications 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.

1. Two or more items entered opposite a single unit quantity WITHOUT DEFINITE DESIGNATION AS "ALTERNATE ITEMS" are considered as "OPTIONAL ITEMS". Bidders may or may not indicate on bids the Optional Item proposed to be furnished or performed WITHOUT PREJUDICE IN REGARD TO IRREGULARITY OF BIDS.
2. Items classified on the bid schedule as "ALTERNATE ITEMS" and/or "ALTERNATE TYPES OF CONSTRUCTION" must be preselected and indicated on bids. However, "Alternate Types of Construction" may include Optional Items to be treated as set out in Paragraph 1, above.
3. Optional items not preselected and indicated on the bid schedule MUST be designated in accordance with Subsection 102.06 prior to or at the time of execution of the contract.
4. Optional and Alternate items designated must be used throughout the project.

I (We) further propose to perform all "force account or extra work" that may be required of me (us) on the basis provided in the Specifications and to give such work my (our) personal attention in order to see that it is economically performed.

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

For Informational Purposes Only

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

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

_____
President Address

_____
Secretary Address

_____
Treasurer Address

The following is my (our) itemized proposal.

For Informational Purposes Only

Remove OGFC & Replace with Micro-Surface on I-55 for approximately 14.1 miles from approximately 2.2 miles north of the Desoto/Tate County Line to the Tate/Panola County Line, known as Federal Aid Project Nos. IM-0055-04(124) / 110064301, IM-0055-04(125) / 110065301 & IM-0055-04(126) / 110066301 in Desoto & Tate Counties.

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
				Roadway Items	
0010	201-D001		329	Station	Random Clearing
0020	202-B006		2,466	Square Yard	Removal of Asphalt Paved Shoulders, All Depths
0030	202-B158		10,950	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends
0040	202-B199		581	Each	Removal of Raised Reflective Pavement Marker
0050	202-B215		76	Each	Removal of Sign Including Post & Footing
0060	202-B240		15,240	Linear Feet	Removal of Traffic Stripe
0070	304-B004	(GT)	400	Ton	Granular Material, Class 5, Group D , for guardrail
0080	304-B004	(GT)	650	Ton	Granular Material, Class 5, Group D , for shoulders
0090	406-A002		400	Square Yard	Cold Milling of Bituminous Pavement, All Depths
0100	406-D001		461,714	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0110	503-C010		1,960	Linear Feet	Saw Cut, Full Depth
0120	606-B002		9,225	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam
0130	606-C003		32	Each	Guard Rail, Cable Anchor, Type 1
0140	606-D005		12	Each	Guard Rail, Bridge End Section, Type A
0150	606-D022		6	Each	Guard Rail, Bridge End Section, Type I
0160	606-E005		47	Each	Guard Rail, Terminal End Section, Flared
0170	606-E007		3	Each	Guard Rail, Terminal End Section, Non-Flared
0180	618-B001		3	Square Feet	Additional Construction Signs ($10.00)
0190	619-A1001		87	Mile	Temporary Traffic Stripe, Continuous White
0200	619-A2001		87	Mile	Temporary Traffic Stripe, Continuous Yellow
0210	619-A3001		87	Mile	Temporary Traffic Stripe, Skip White
0220	620-A001		1	Lump Sum	Mobilization
0230	630-A001		63	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0240	630-A003		439	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0250	630-A005		228	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness
0260	630-C001		180	Linear Feet	Square Tube Posts, 4.0 lb/ft
0270	630-C005		778	Linear Feet	Square Tube Posts, 2.0 lb/ft
0280	630-F002		20	Each	Delineators, Flexible Post Mounted, Crossover, Type I, Yellow
0290	630-F006		231	Each	Delineators, Guard Rail, White
0300	630-F007		126	Each	Delineators, Guard Rail, Yellow
0310	630-G004		22	Each	Type 3 Object Markers, OM-3R or OM-3L
0320	907-403-A013	(BA1)	700	Ton	9.5-mm, HT, Asphalt Pavement
0330	907-407-A001	(A2)	789	Gallon	Asphalt for Tack Coat
0340	907-418-A001	(A2)	126,981	Gallon	Emulsified Asphalt for Micro-Surfacing Type II
0350	907-418-A001	(A2)	176,361	Gallon	Emulsified Asphalt for Micro-Surfacing Type III

For Informational Purposes Only

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
0360	907-418-B001	(GT)	4,325	Ton	Aggregate for Micro-Surfacing Type II
0370	907-418-B001	(GT)	6,000	Ton	Aggregate for Micro-Surfacing Type III
0380	907-428-C001	(A2)	15,819	Gallon	Bituminous-Based Fog Seal with Rejuvenator
0390	907-618-A001		1	Lump Sum	Maintenance of Traffic
0400	907-619-E3001		6	Each	Changeable Message Sign
0410	907-626-A010		30	Mile	6" Thermoplastic Traffic Stripe, Skip White
0420	907-626-C014		30	Mile	6" Thermoplastic Edge Stripe, Continuous White
0430	907-626-F005		30	Mile	6" Thermoplastic Edge Stripe, Continuous Yellow
0440	907-626-G004		10,104	Linear Feet	Thermoplastic Detail Stripe, White
0450	907-627-K001		3,685	Each	Red-Clear Reflective High Performance Raised Markers
0460	907-640-A001		140	Linear Feet	Vehicle Loop Assemblies
0470	907-688-A001		1	Each	Traffic Recorder WIM Kistler System

For Informational Purposes Only

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.

* * * *

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

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Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
9. _____	_____ _____	_____ _____	_____ _____	_____ _____	
10. _____	_____ _____	_____ _____	_____ _____	_____ _____	

(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 $ _____.

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

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Certification with regard to the Performance of Previous Contracts or Subcontracts subject to the Equal Opportunity Clause and the filing of Required Reports

The Bidder hereby certifies that he has ___, has not ___, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10925, or 11114, and that he has ___, has not ___, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

_____
(COMPANY)

DATE: _____

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the Equal Opportunity Clause. Contracts and Subcontracts which are exempt from the Equal Opportunity Clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EE0-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime Contractors and Subcontractors who have participated in a previous contract or subcontract subject to the Executive orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such Contractors submit a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

For Informational Purposes Only

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION

I,_____,
(Name of person signing bid)

individually, and in my capacity as_____ of
(Title of person signing bid)

_____do hereby certify under
(Name of Firm, partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that_____

_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **IM-0055-04(124)/ 110064301000, IM-0055-04(125)/ 110065301000 & IM-0055-04(126)/ 110066301000**

in **Desoto & Tate** County(ies), Mississippi, has not either

directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds:

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

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

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

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

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.

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Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently $25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

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

2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than $10,000 and not more than $100,000. The bidder shall include the language of the certification in all subcontracts exceeding $100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing is true and correct.

Executed on _____ _____

Signature

(01/2016 F)

For Information Purposes Only

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SAM.GOV Registration and Unique Entity ID

Bidders are advised that the Prime Contractor must register and maintain a current registration in the **System for Award Management** (http://sam.gov) at all times during the project. Upon registration, the Contractor will be assigned a SAM Unique Entity ID.

Bidders are advised that prior to the award of this contract, they MUST be registered in the System for Award Management.

I (We) acknowledge that this contract cannot be awarded if I (We) are not registered in the System for Award Management prior to the award of this contract. _____ (Yes / No)

I (We) have a SAM Unique Entity ID. _____ (Yes / No)

SAM Unique Entity ID: _____

Company Name: _____

Company e-mail address: _____

For Informational Purposes Only

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.

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The Contractor agrees that he has read each and every clause of the Contract Documents, and fully understands the meaning of same, and hereby acknowledges that he will comply with all terms, covenants and agreements therein.

Witness our signatures, this the _____ day of _____, 20___.

_____
Contractor

By: _____
Title: _____

_____
Signed and sealed in the presence of: (name and address of witness)

_____
_____

MISSISSIPPI TRANSPORTATION COMMISSION

_____
Executive Director

_____
Secretary to the Commission

Award authorized by the Mississippi Transportation Commission in session on the ____ day of _____, _____, Minute Book No._____, Page No. _____.

For Informational Purposes Only

SECTION 903
PERFORMANCE BOND

PERFORMANCE BOND FOR THE FOLLOWING CONTRACT:
Project No.: _____

For the construction of: _____

Contract date: _____ Contract Price: _____

FOR OWNER: MISSISSIPPI TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON, MISSISSIPPI 39201.

CONTRACTOR (full legal name, contact person, phone number and address):
_____
_____
_____
_____

SURETY (legal name, phone number, principal place of business and address ***for notice purposes***):
_____
_____
_____

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. 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, the Surety shall, after discussions with and consent from the Owner, and at the Surety's expense, elect to take one of the following actions:
   (a) Arrange for the Contractor, with the consent of the Owner, to perform and complete the Contract;
   (b) Undertake to perform and complete the Contract itself, through its agents or independent contractors;
   (c) Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and after investigation, determine the amount for which it may be liable to the Owner (subject to the consent of the Owner) and as soon as practicable after the amount is determined, make payment to the Owner.

For Informational Purposes Only

4. If the Surety does not proceed, within a reasonable time frame, to enact and carry out the election made in Paragraph 3, 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 equal to the Contract Price; however, the penal sum may be increased or decreased as the result of 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.

CONTRACTOR AS PRINCIPAL
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: _____
_____

For Informational Purposes Only

SECTION 903
PAYMENT BOND

PAYMENT BOND FOR THE FOLLOWING CONTRACT:
Project No.: _____

For the construction of: _____

Contract date: _____ Contract Price: _____

FOR OWNER: MISSISSIPPI TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON, MISSISSIPPI 39201.

CONTRACTOR (full legal name, contact person, phone number and address):
_____
_____
_____

SURETY (legal name, phone number, principal place of business and address ***for notice purposes***):
_____
_____
_____
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, sub-subcontractors, suppliers to the Contractor, suppliers to subcontractors and/or laborers who have performed work on the project site, 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.

For Informational Purposes Only

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 equal to the Contract Price; however, the penal sum may be increased or decreased as the result of any subsequent Supplemental Agreements and/or final contract quantities.

CONTRACTOR AS PRINCIPAL
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: _____
_____

For Informational Purposes Only

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we_____
Contractor

_____
Address

_____
City, State ZIP

As principal, hereinafter called the Principal, and _____
Surety

a corporation duly organized under the laws of the state of _____

as Surety, hereinafter called the Surety, are held and firmly bound unto **State of Mississippi, Jackson, Mississippi**

As Obligee, hereinafter called Obligee, in the sum of **Five Per Cent (5%) of Amount Bid**

Dollars($_____)

for the payment of which sum will and truly to be made, the said Principal and said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for **Remove OGFC & Replace with Micro-Surface on I-55 for approximately 14.1 miles from approximately 2.2 miles north of the Desoto/Tate County Line to the Tate/Panola County Line, known as Federal Aid Project Nos. IM-0055-04(124) / 110064301, IM-0055-04(125) / 110065301 & IM-0055-04(126) / 110066301 in Desoto & Tate Counties.**

NOW THEREFORE, the condition of this obligation is such that if the aforesaid Principal shall be awarded the contract, the said Principal will, within the time required, enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this obligation to be void; otherwise the Principal and Surety will pay unto the Obligee the difference in money between the amount of the bid of the said Principal and the amount for which the Obligee legally contracts with another party to perform the work if the latter amount be in excess of the former, but in no event shall liability hereunder exceed the penal sum hereof.

Signed and sealed this _____day of _____, 20___

_____
(Principal) (Seal)

_____ By:_____
(Witness) (Name) (Title)

_____
(Surety) (Seal)

_____ By:_____
(Witness) (Attorney-in-Fact)

_____
(MS Agent)

_____
Mississippi Insurance ID Number

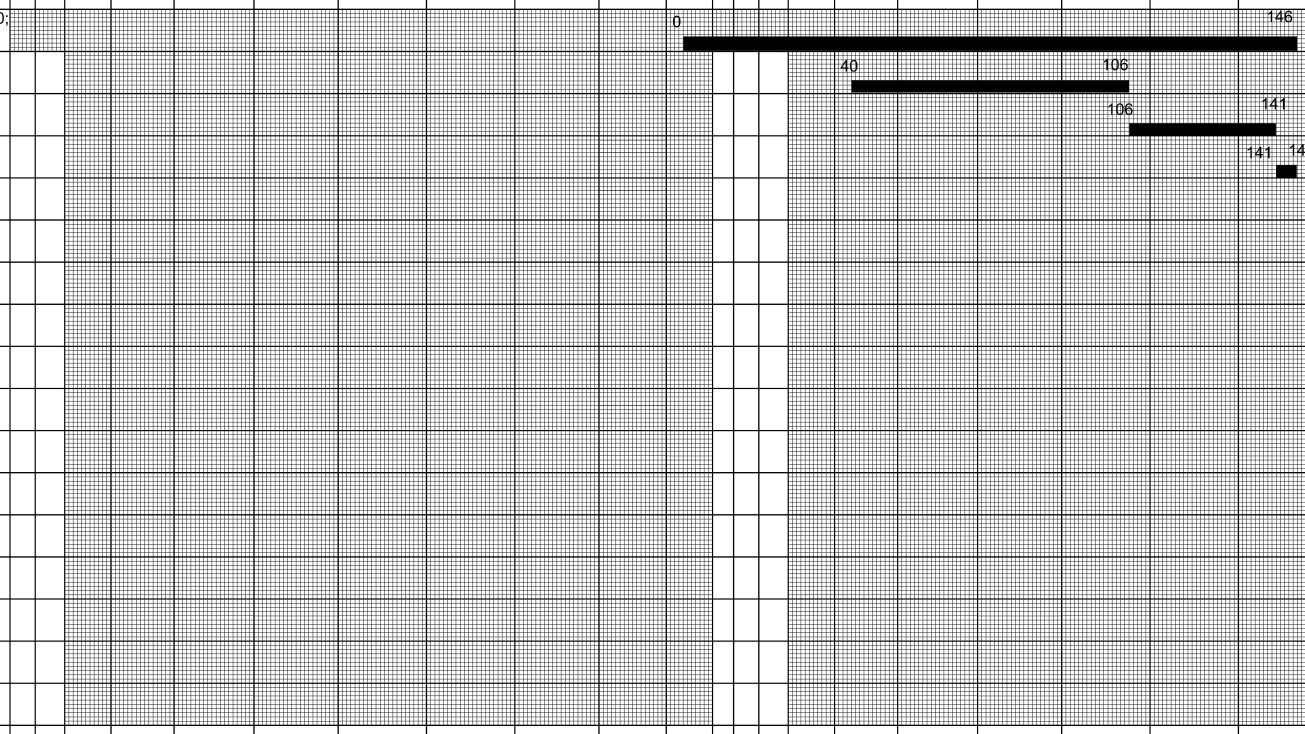
FORM CSD-612
Rev. 1 / 2015

YEAR 2026 PROGRESS SCHEDULE YEAR 2027

PROJECT NUMBER
IM-0055-04(124) 110064-301
IM-0055-04(125) 110065-301
IM-0055-04(126) 110066-301

COUNTY
Tate and Desoto County

WORK PHASE NO.	WORK PHASE DESCRIPTION	LINE NUMBERS
1	Miscellaneous	10-60; 120; 190-320; 400-410; 450-470
2	Milling/Paving/ Granular	70-110; 330-390
3	Guardrail	130-180
4	Stripe	420-450
LET:	09/22/2026	
NOA:	10/13/2026	
NTP/BCT:	11/12/2026	
W.D.:	146	



MONTH	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	172 WORKING DAYS PER YEAR
ANTICIPATED WORKING DAYS PER MONTH	6	7	11	15	19	20	21	21	20	16	11	5	6	7	11	15	19	20	21	21	20	16	11	5	

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.