MDOT Use Only
Checked _____
Loaded _____
Keyed _____

17 -

SM No. CSP1441000081

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

17
Thin Lift Overlay approximately 10.2 miles of MS 467 from beginning of maintenance to South of Edwards, known as State Project No. SP-1441-00(008) / 110008301 in Hinds County.

Project Completion: 10/15/2026

(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
TABLE OF CONTENTS

PROJECT: SP-1441-00(008)/110008301 - Hinds

Section 901 - Advertisement

Section 904 - Notice to Bidders

#1	Governing Specification, w/ Supplement
#3	Final Cleanup
#13	Safety Edge
#296	Reduced Speed Limit Signs
#445	Mississippi Agent or Qualified Nonresident Agent
#516	Errata and Modifications to the 2017 Standard Specifications
#1225	Early Notice to Proceed
#1226	Material Storage Under Bridges
#1241	Fuel and Material Adjustments
#1963	Guardrail Pads
#2206	MASH Compliant Devices
#2273	Mississippi Special Fuel Tax Law
#2895	Exploratory Joint Cleanout
#2954	Reflective Sheeting for Signs
#3676	Asphalt Gyratory Compactor Internal Angle Calibration
#4702	App for Traffic Control Report
#5086	Detail of Square Tube Sign Posts
#5551	Federal Bridge Formula
#6531	Corrugated Polypropylene Pipe
#7624	Standard Drawings w/Supplement
#7971	Contract Time
#7973	Scope of Work
#7974	Temporary Construction Signs
#7975	Underground Utilities
#7976	Lane Closure Restrictions

906	Required Federal Contract Provisions -- FHWA 1273, w/Supplements

Section 907 - Special Provisions

907-101-1	Definitions and Terms
907-102-2	Bidding Requirements and Conditions
907-103-2	Award and Execution of Contract
907-104-2	Minor Alterations to the Contract
907-105-2	Control of Work
907-108-4	Subletting of Contract
907-108-6	Default and Termination of Contract
907-109-5	Measurement and Payment
907-401-4	Asphalt Pavements - General
907-403-4	Asphalt Pavements
907-407-1	Tack Coat
907-410-2	Rejuvenating Fog Seal
907-411-2	Ultra-Thin Asphalt Pavement

907-413-2	Cleaning and Sealing Joints and Cracks
907-601-1	Structural Concrete
907-618-12	Traffic Control Management
907-619-6	Temporary Portable Rumble Strips
907-626-12	Thermoplastic Traffic Markings
907-627-1	Raised Pavement Markings
907-701-4	Hydraulic Cement, w/ Supplement
907-702-4	Bituminous Materials
907-703-2	Gradation
907-705-1	Stone Riprap
907-707-3	Joint Materials
907-708-4	Concrete Pipe
907-711-2	Plain Steel Wire
907-712-1	Fence and Guardrail
907-714-4	Miscellaneous Materials
907-718-1	Timber and Dimension Lumber
907-720-4	Pavement Marking Materials
907-721-4	Materials for Signing
907-808-1	Joint Repair
907-823-8	Preformed Joint Seal

Section 905 - Proposal, Proposal Bid Items, Combination Bid Proposal
State Board of Contractors Requirement
State Certification Regarding Non-Collusion, Debarment and Suspensions
Section 902 - Contract Form
Section 903 - Contract Bond Forms

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

05/01/2026 10:11 AM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Wednesday, May 27, 2026, from the Bid Express Service and shortly thereafter publicly read on the Sixth Floor for:

Thin Lift Overlay approximately 10.2 miles of MS 467 from beginning of maintenance to South of Edwards, known as State Project No. SP-1441-00(008) / 110008301 in Hinds County.

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

The 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. 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.

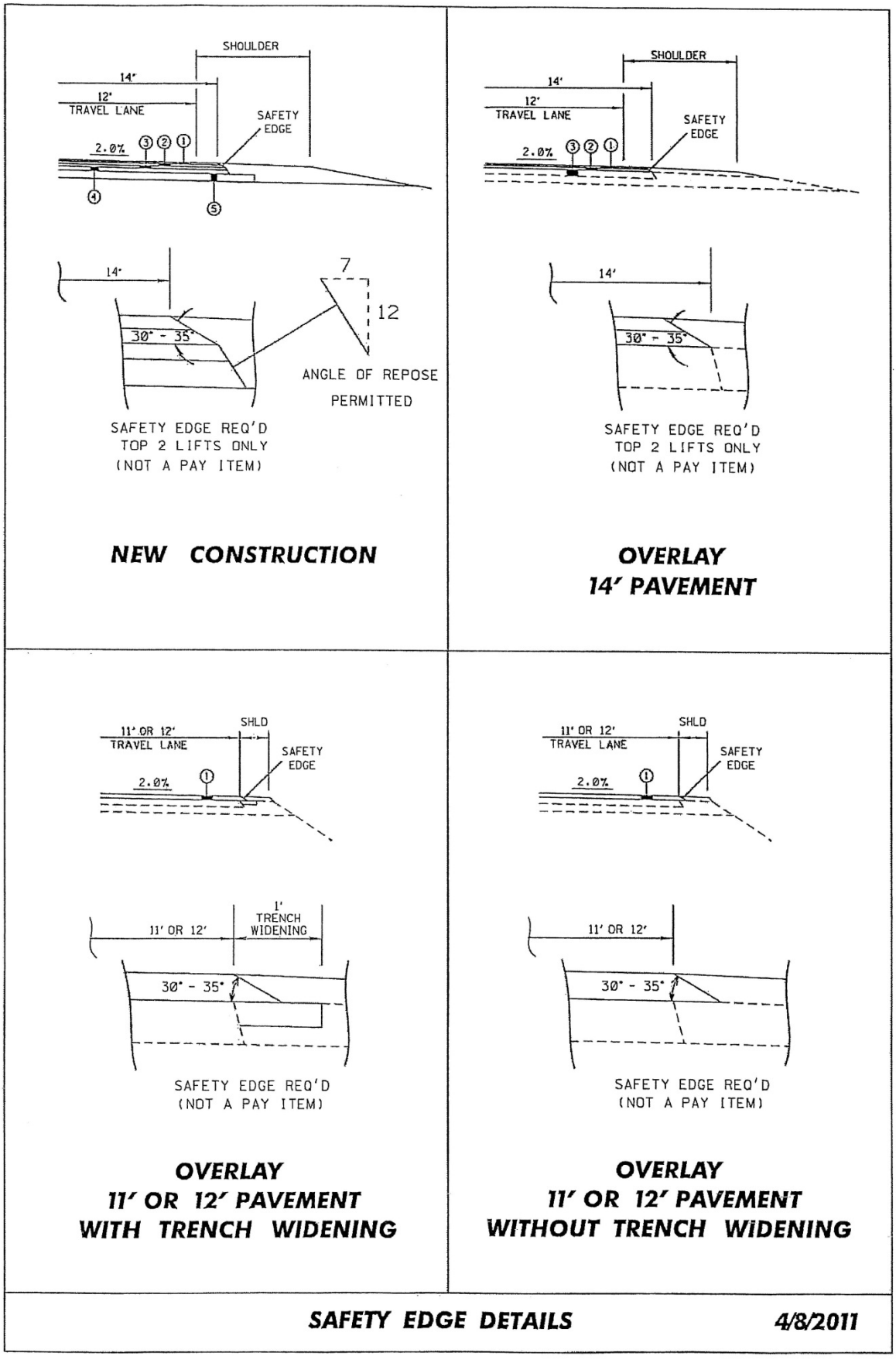
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 13 **CODE: (IS)**

DATE: 03/01/2017

SUBJECT: Safety Edge

Bidders are hereby advised that the Shoulder Wedge (Safety Edge) specified in Section 401, Asphalt Pavements, shall only apply to the top two (2) lifts of asphalt. Open Graded Friction Courses (OGFC) are not to be considered a lift as it pertains to safety edge. Attached is a drawing showing the safety edge. Note that the shoulder dimensions in the bottom two drawings will be less than three feet (3').


SHOULDER
14'
12'
TRAVEL LANE
SAFETY EDGE
2.0%
③ ② ①
④
⑤
14'
7
12
30° - 35°
ANGLE OF REPOSE PERMITTED
SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)
NEW CONSTRUCTION
SHOULDER
14'
12'
TRAVEL LANE
SAFETY EDGE
2.0%
③ ② ①
14'
30° - 35°
SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)
OVERLAY 14' PAVEMENT
11' OR 12'
TRAVEL LANE
SHLD
SAFETY EDGE
2.0%
①
1' TRENCH WIDENING
11' OR 12'
30° - 35°
SAFETY EDGE REQ'D (NOT A PAY ITEM)
OVERLAY 11' OR 12' PAVEMENT WITH TRENCH WIDENING
11' OR 12'
TRAVEL LANE
SHLD
SAFETY EDGE
2.0%
①
11' OR 12'
30° - 35°
SAFETY EDGE REQ'D (NOT A PAY ITEM)
OVERLAY 11' OR 12' PAVEMENT WITHOUT TRENCH WIDENING
SAFETY EDGE DETAILS
4/8/2011

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. 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. 2895 **CODE: (SP)**

DATE: 10/14/2020

SUBJECT: Exploratory Joint Cleanout

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

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. 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

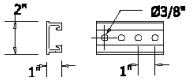
SUBJECT: Detail of Square Tube Sign Posts

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.

FHWA CON:

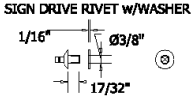
STATE	PROJECT NO.
MISS.	

FLAT PANEL SIGN BRACE



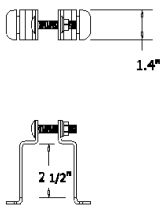
6061-T6 ALUMINUM ALLOY; 2" MOUNTING SURFACE x 7/8" DEPTH x 1/8" NOMINAL WALL THICKNESS. 3/8" HOLES ON 1" CENTERS, CENTERED ALONG ENTIRE LENGTH OF THE BRACE. A MINIMUM OF TWO HORIZONTAL BRACES MUST BE USED.

SIGN DRIVE RIVET w/WASHER



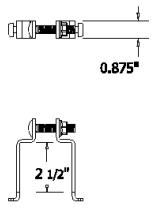
3/8" ALUMINUM SHELL / STEEL CORE RIVET WITH NYLON WASHER. MAXIMUM DISTANCE BETWEEN RIVETS SHOULD BE 12". WASHER MUST BE PRE-INSTALLED AND FIT INTO SIGN BRACE TO SECURE ALUMINUM SIGN PANEL. ALL EXTRUDED PANEL SIGNS SHALL USE 3/16"x3/8" GRIP RANGE ALUMINUM POP RIVITS (#66).

FLAT PANEL SIGN CLAMP



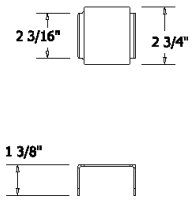
MATERIALS: 1.4" WIDE x 11ga. TYPE 304, #2B FINISHED STAINLESS STEEL BRACKET. INCLUDES STAINLESS STEEL 3/8"-16 x 2" CARRIAGE BOLT AND SERRATED FLANGED NUT. ONE CLAMP REQUIRED FOR EACH BRACE TO POST JUNCTION.

EXTRUDED PANEL SIGN CLAMP



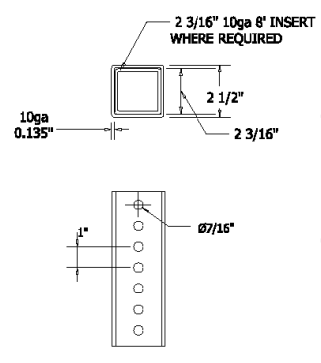
MATERIALS: 1.4" WIDE x 11ga. TYPE 304, #2B FINISHED STAINLESS STEEL BRACKET. INCLUDES STAINLESS STEEL 3/8"-16 x 2" CARRIAGE BOLT AND SERRATED FLANGED NUT. ONE CLAMP REQUIRED FOR EACH BRACE TO POST JUNCTION.

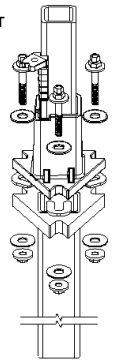
POST CAP



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



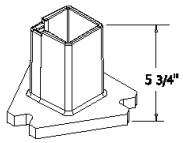


example slip base assembly (detailed below)

NOTES:

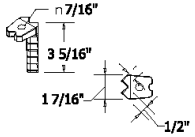
A. CONCRETE FOOTING MUST BE 12" DIAMETER x 36" DEEP.
B. BRASS SHIMS MAY BE USED BETWEEN SLIP PLATES TO LEVEL THE UPPER SLIP PLANE.
C. SLIP BASE IS FHWA ACCEPTED, MEETING CURRENT AASHTO & NCHRP 350 REQUIREMENTS.
D. SIGN BRACE CLAMPS ALLOW SIGN BRACE TO BE ADJUSTED UP, DOWN, LEFT OR RIGHT IN ORDER TO ACHIEVE 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



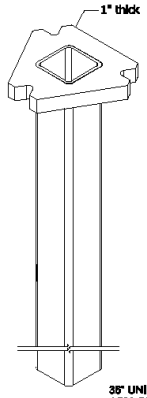
RECEIVER TO BE CAST FROM DUCTILE IRON ASTM A536 CLASS 65-45-12, GALVANIZED PER ASTM A153.

POST LOCKING WEDGE



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

UNIBASE ANCHOR STUB



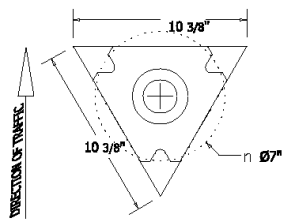
35" UNIBASE ANCHOR A500 GRADE B TUBE WELDED TO A572 SLIP PLATE. GALVANIZED PER ASTM A153.

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

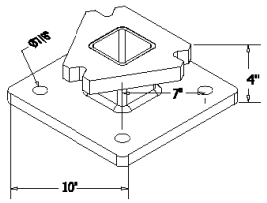
* based on two legs per sign
** Minimum of two braces per flat panel sign

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	

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

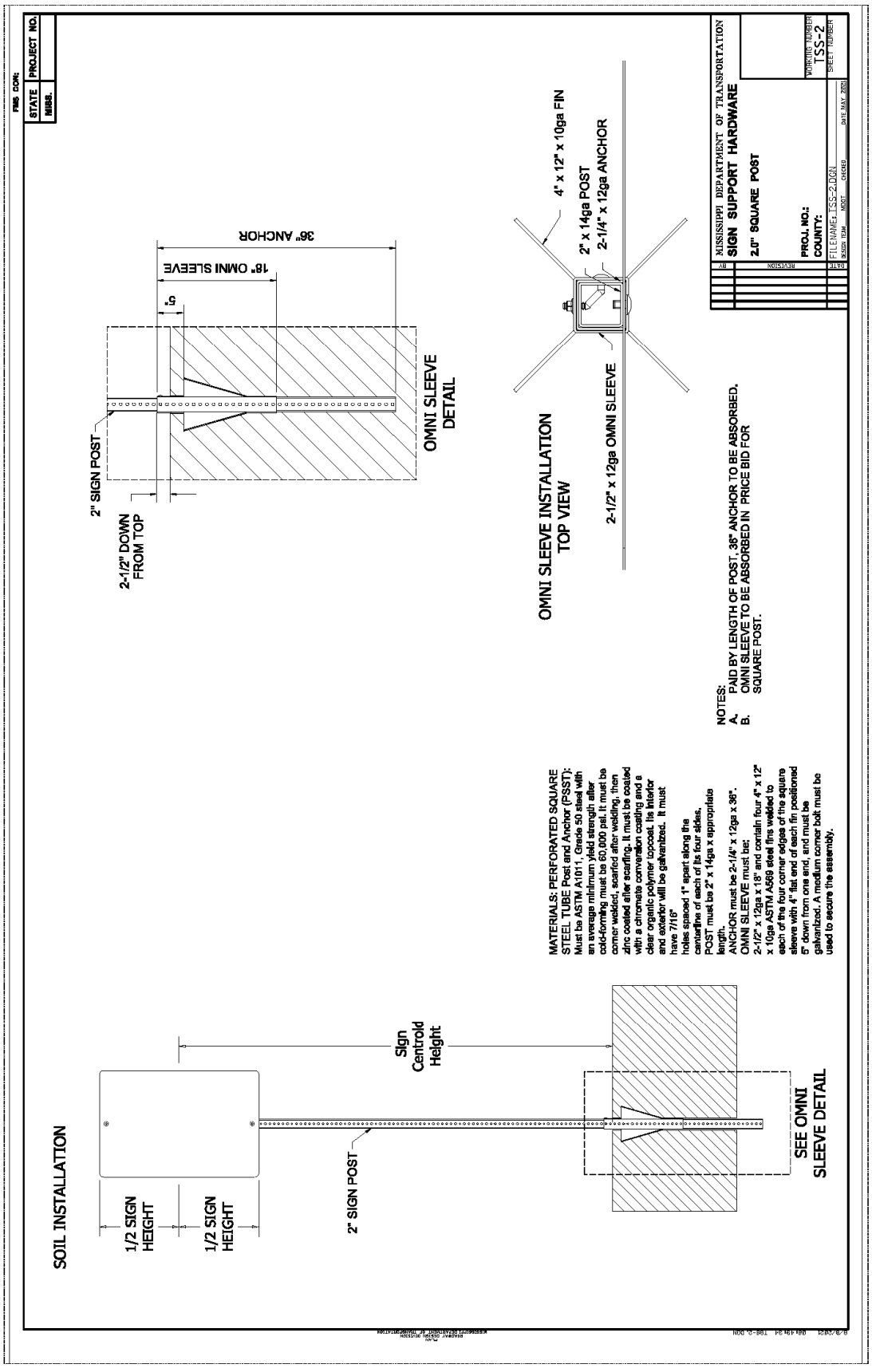
SIGN SUPPORT HARDWARE

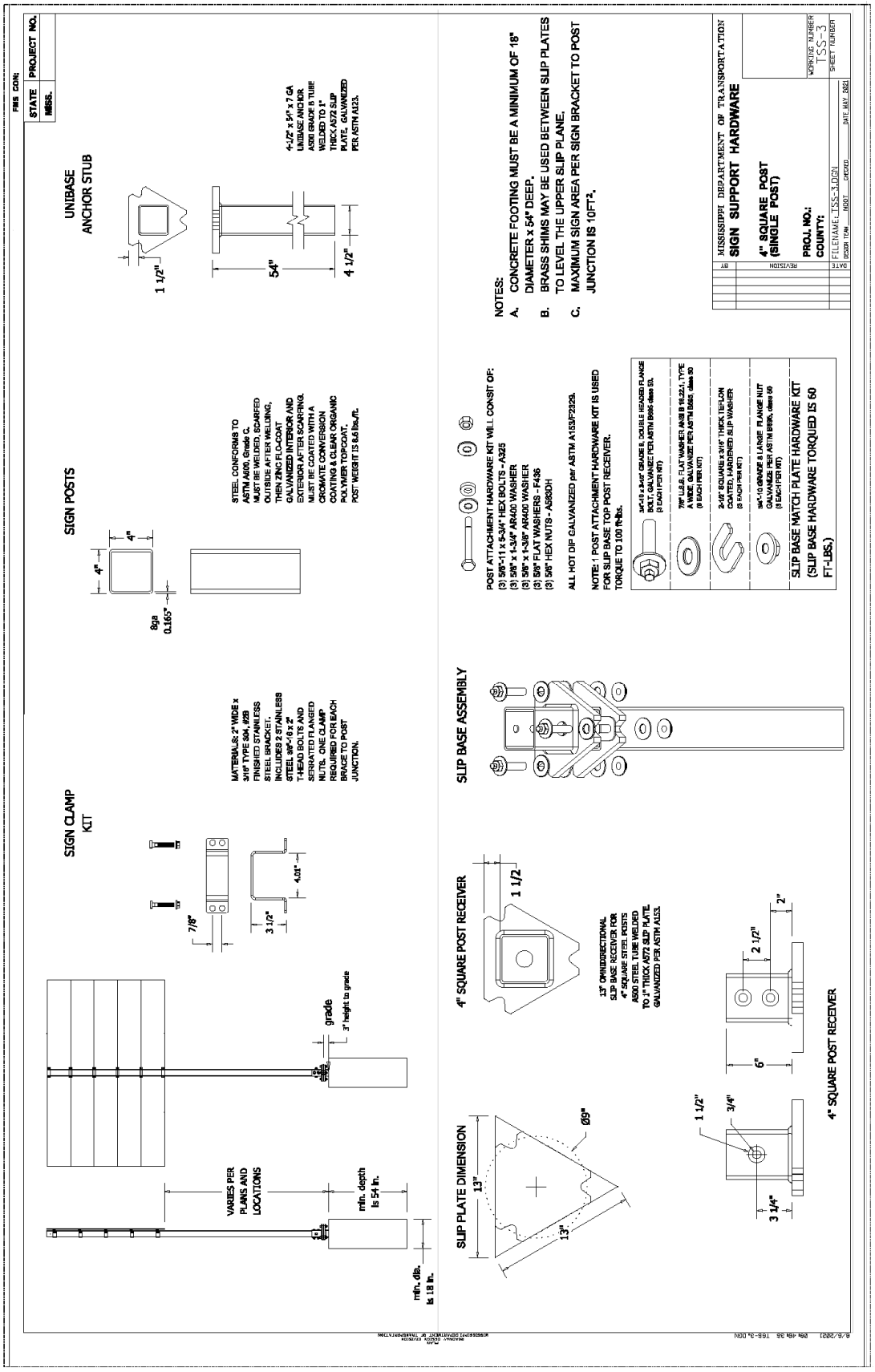
2.5" SQUARE POST

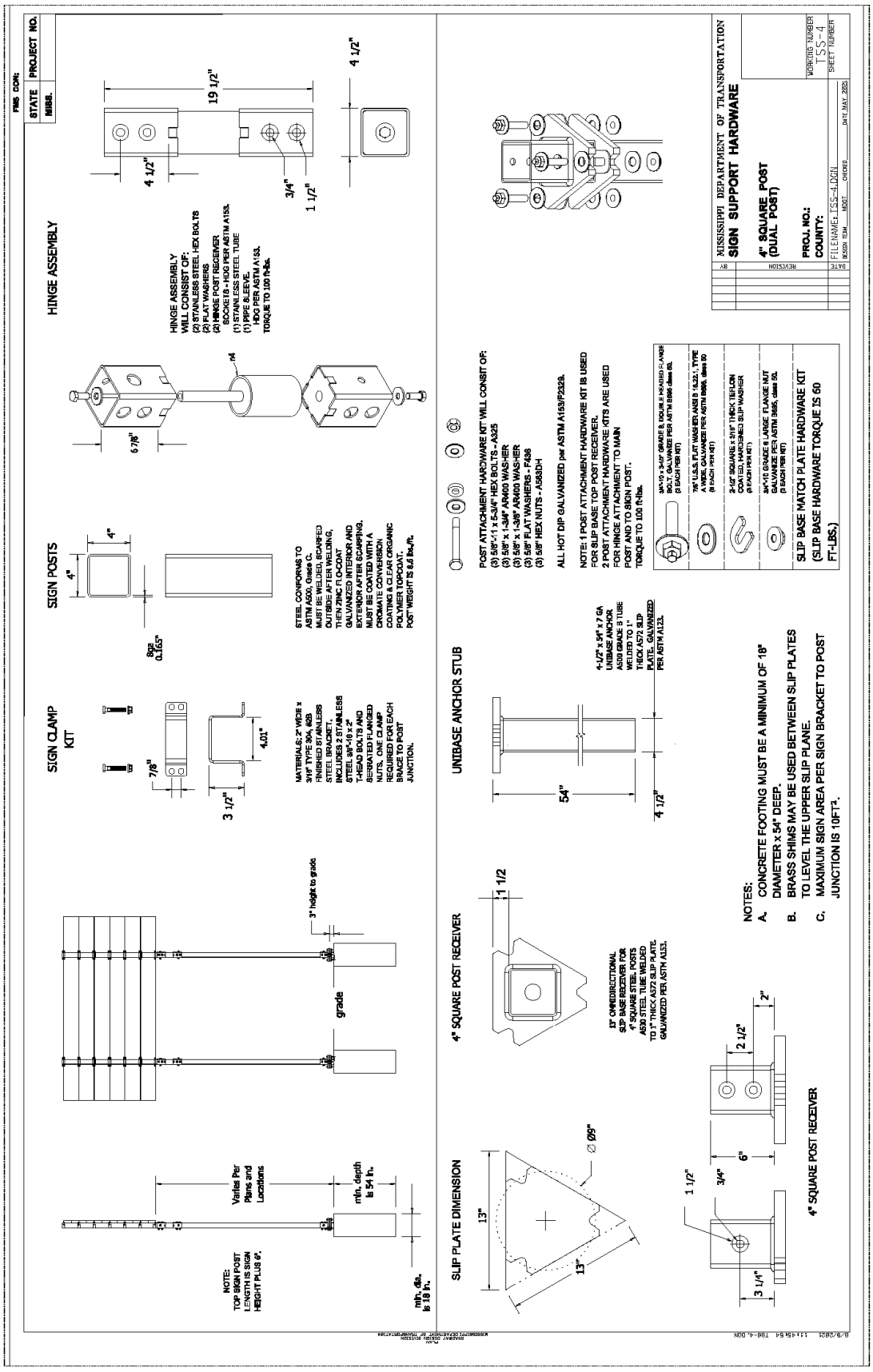
PROJ. NO.:
COUNTY:

WORKING NUMBER: TSS-1
SHEET NUMBER

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
2" SIGN POST
Sign Centroid Height
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
36" ANCHOR
18" OMNI SLEEVE
5"
2" SIGN POST
2-1/2" DOWN FROM TOP
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
DRAWING NUMBER
TSS-2
SHEET NUMBER


FHWA CON:
STATE
PROJECT NO.
MISS.
UNIBASE
ANCHOR STUB
1 1/2"
54"
4 1/2"
4-1/2" x 5" 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
MATERIAL-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.
7/8"
3 1/2"
4.01"
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 HEXED FLANGE BOLT, GALVANIZE PER ASTM B695 class 55. (8 EACH PER KIT)
7/8" U.S.S. FLAT WASHER ANSI B 18.22.1, TYPE A WIDE, GALVANIZE PER ASTM B695 class 50 (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 A LARGE FLANGE NUT GALVANIZE 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
MONOTUBE NUMBER
TSS-3
SHEET NUMBER
DATE
REVISION
BY
VARIES PER PLANS AND LOCATIONS
min. depth is 54 in.
min. dia. is 18 in.
3" height to grade
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


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. 6531 **CODE: (SP)**

DATE: 02/21/2025

SUBJECT: Corrugated Polypropylene Pipe

Bidders are hereby advised that corrugated polypropylene pipe may be substituted for reinforced concrete pipe in certain cases. All requirements of polypropylene pipe will adhere to the requirements shown on Special Design Sheet HPPP and in this Notice to Bidders.

Corrugated polypropylene pipe will be allowed for use in storm drains, side drains, and cross drains on 2-lane roadways only. Pipe extensions utilizing corrugated polypropylene pipe will be allowed and will require a Marmac coupler or an approved equal. No splices will be allowed under the roadway.

Corrugated polypropylene pipe will only be allowed as a substitution for Reinforced Concrete Pipe where fill heights do not exceed the maximum fill height provided in Table 1, Special Design Sheet HPPP. For fill heights greater that those provided, the Contractor shall use Reinforced Concrete Pipe.

Corrugated polypropylene pipe will **NOT** be allowed on 4-lane roadways, roadways with more than two (2) lanes of traffic, interstate right-of-way, or in agricultural areas (areas within 500 LF of land cultivated periodically for growing agricultural crops), adjacent national forest lands, and in vertical applications. The Contractor shall notify the Project Engineer in writing of the intention and locations to use HPPP following the notice of award and prior to the Pre-Construction Conference, for Project Engineer approval.

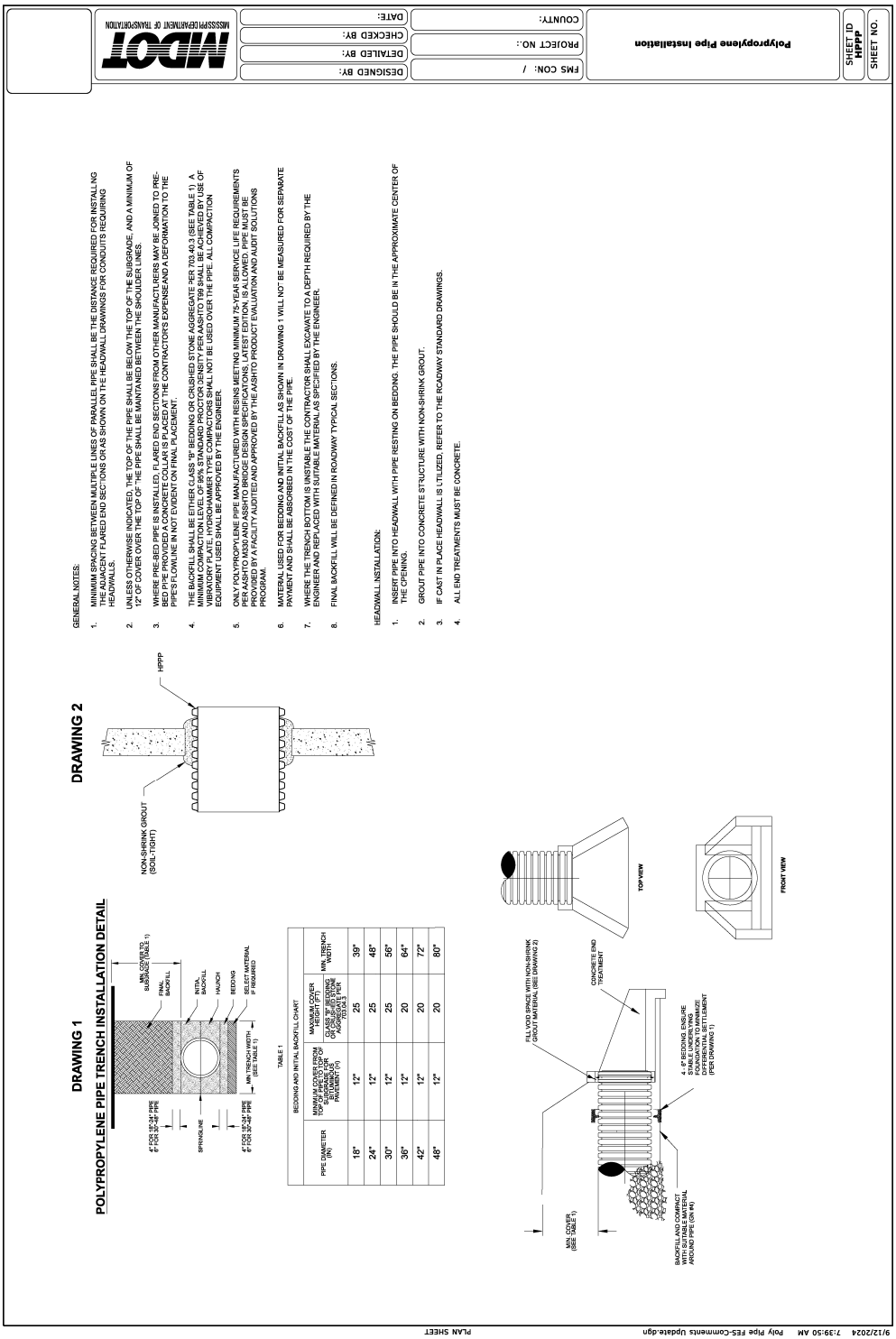
If the Contractor elects to substitute corrugated polypropylene pipe for concrete pipe, it will be paid for under the applicable concrete pipe pay item. All bedding, initial backfill, couplers, additional connections, gaskets, required pipe collars not shown for concrete pipe, or any other items not required in the original plans will not be measured for separate payment.

Corrugated polypropylene pipe shall conform to the requirements of AASHTO M 330 with plant certification from the AASHTO Product Evaluation & Audit Solutions and shall have watertight joints unless otherwise specified. Post-consumer and post-industrial recycled resins will not be allowed.

The Contractor shall furnish to the Engineer a copy of the certified test reports for all materials used for installation of corrugated polypropylene pipe. Certified test reports shall be for lot(s) of materials from which each shipment of material originated. The test report shall show all the test results for the material properties and characteristics as specified herein, on Special Design Sheet HPPP, and within other Contract documents. 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 certified test reports to the Engineer for each material and each shipment of the material to the project.

The Contractor shall verify at a minimum of 25% of the installed length of the corrugated polypropylene pipe on the project shall be inspected for excess deflection no sooner than 30 days after the embankment material over the pipe is placed to the required subgrade elevation or the maximum required fill height. The deflection testing shall be conducted in coordination with the Project Engineer or the Project Engineer's Designee. If pipe inspection provides that pipe deflections are apparent or it is determined that visual deflections are present the project engineer may request additional testing at no cost to the Department. The inspection shall be performed using either electronic deflectometers, calibrated television or video cameras, or a "go, no-go" mandrel that has an effective diameter of 95% of the normal inside diameter of the pipe. Pipe found to have deflection greater than 5% shall be removed and replaced at no cost to the State.

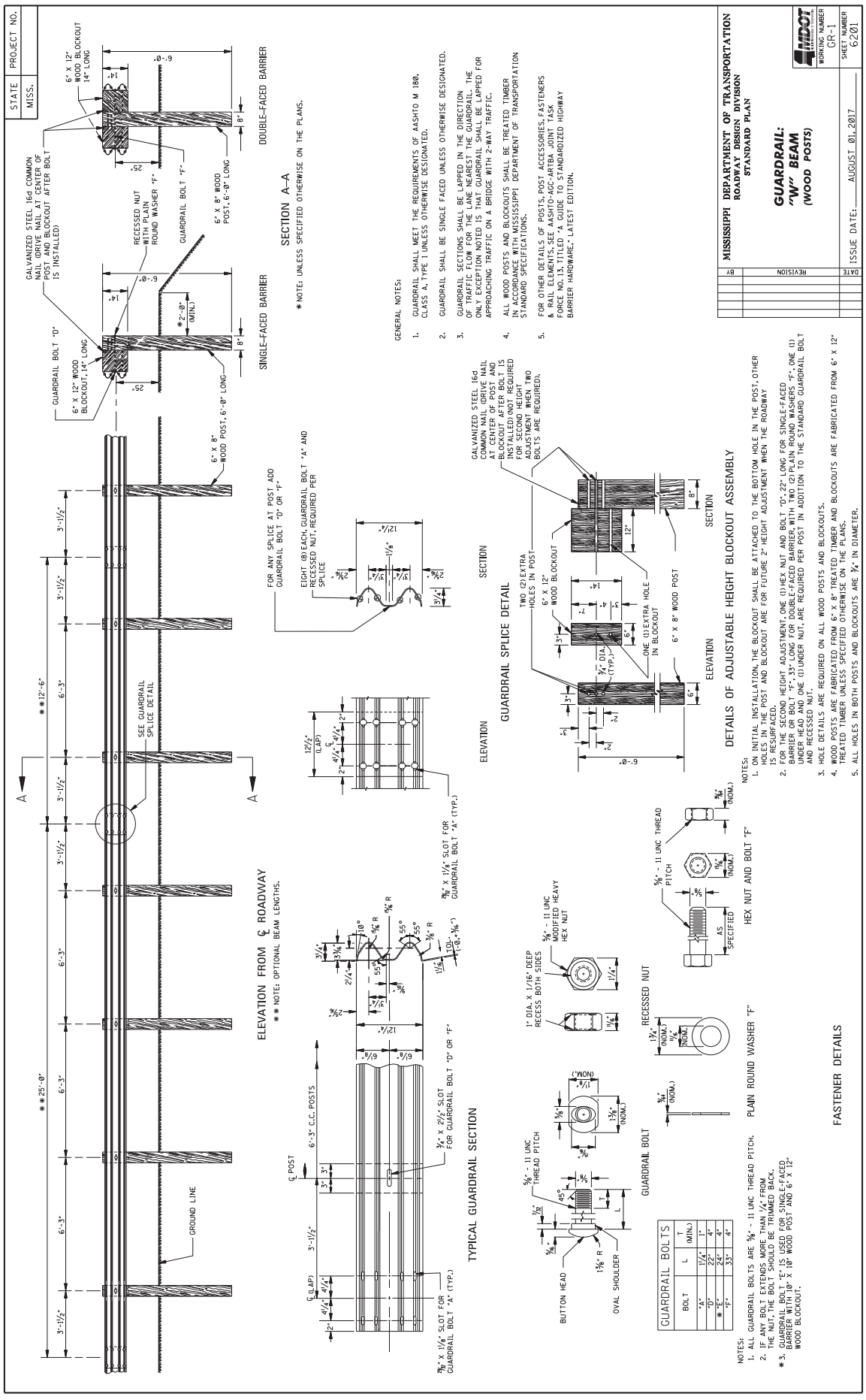

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
Polypropylene Pipe Installation
SHEET ID
HPPP
SHEET NO.
FMS CON: /
PROJECT NO.:
COUNTY:
DESIGNED BY:
DETAILED BY:
CHECKED BY:
DATE:
GENERAL NOTES:
1. MINIMUM SPACING BETWEEN MULTIPLE LINES OF PARALLEL PIPE SHALL BE THE DISTANCE REQUIRED FOR INSTALLING THE MINIMUM SIZE FLARED END SECTIONS OR AS SHOWN ON THE HEADWALL DRAWINGS FOR CONDUITS REQUIRING HEADWALLS.
2. UNLESS OTHERWISE INDICATED, THE TOP OF THE PIPE SHALL BE BELOW THE TOP OF THE SUBGRADE, AND A MINIMUM OF 12" OF COVER OVER THE TOP OF THE PIPE SHALL BE MAINTAINED BETWEEN THE SHOULDER LINES.
3. WHERE PRE-BED PIPE IS INSTALLED, FLARED END SECTIONS FROM OTHER MANUFACTURERS MAY BE JOINED TO PRE-BED PIPE PROVIDED A CONCRETE COLLAR IS PLACED AT THE CONTRACTOR'S EXPENSE AND A DEFORMATION TO THE PIPE'S FLOWLINE IN NOT EVIDENT ON FINAL PLACEMENT.
4. THE BACKFILL SHALL BE EITHER CLASS "B" BEDDING OR CRUSHED STONE AGGREGATE PER 703.40.3 (SEE TABLE 1). A MINIMUM COMPACTION LEVEL OF 95% STANDARD PROCTOR DENSITY PER AASHTO T99 SHALL BE ACHIEVED BY USE OF VIBRATORY PLATE, HYDROHAMMER TYPE COMPACTORS SHALL NOT BE USED OVER THE PIPE. ALL COMPACTION EQUIPMENT USED SHALL BE APPROVED BY THE ENGINEER.
5. ONLY POLYPROPYLENE PIPE MANUFACTURED WITH RESINS MEETING MINIMUM 75-YEAR SERVICE LIFE REQUIREMENTS PER AASHTO M330 AND AASHTO BRIDGE DESIGN SPECIFICATIONS, LATEST EDITION, IS ALLOWED. PIPE MUST BE PRODUCED IN A FACILITY AUDITED AND APPROVED BY THE AASHTO PRODUCT EVALUATION AND AUDIT SOLUTIONS PROGRAM.
6. MATERIAL USED FOR BEDDING AND INITIAL BACKFILL AS SHOWN IN DRAWING 1 WILL NOT BE MEASURED FOR SEPARATE PAYMENT AND SHALL BE ABSORBED IN THE COST OF THE PIPE.
7. WHERE THE TRENCH BOTTOM IS UNSTABLE THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACED WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER.
8. FINAL BACKFILL WILL BE DEFINED IN ROADWAY TYPICAL SECTIONS.
HEADWALL INSTALLATION:
1. INSERT PIPE INTO HEADWALL WITH PIPE RESTING ON BEDDING. THE PIPE SHOULD BE IN THE APPROXIMATE CENTER OF THE OPENING.
2. GROUT PIPE INTO CONCRETE STRUCTURE WITH NON-SHRINK GROUT.
3. IF CAST IN PLACE HEADWALL IS UTILIZED, REFER TO THE ROADWAY STANDARD DRAWINGS.
4. ALL END TREATMENTS MUST BE CONCRETE.
DRAWING 1
POLYPROPYLENE PIPE TRENCH INSTALLATION DETAIL
MIN. COVER TO SUBGRADE (TABLE 1)
FINAL BACKFILL
INITIAL BACKFILL
HAUNCH
BEDDING
SELECT MATERIAL FOUNDATION
SPRING LINE
4" FOR 15"-30" PIPE
6" FOR 36"-72" PIPE
4" FOR 15"-30" PIPE
6" FOR 36"-72" PIPE
MIN TRENCH WIDTH (SEE TABLE 1)
TABLE 1
BEDDING AND INITIAL BACKFILL CHART
PIPE DIAMETER (IN)
MINIMUM COVER FROM TOP OF PIPE TO SUBGRADE OR PAVEMENT (IN)
MAXIMUM COVER FROM TOP OF PIPE TO SUBGRADE FOR CLASS "B" BEDDING OR AGGREGATE (IN) (NOTE 2)
MIN. TRENCH WIDTH
18" 12" 25 39"
24" 12" 25 48"
30" 12" 25 56"
36" 12" 20 64"
42" 12" 20 72"
48" 12" 20 80"
DRAWING 2
HPPP
NON-SHRINK GROUT (SOIL TIGHT)
TOP VIEW
FRONT VIEW
FILL VOID SPACE WITH NON-SHRINK GROUT MATERIAL (SEE DRAWING 2)
CONCRETE END TREATMENT
MIN. COVER (SEE TABLE 1)
4 - 6" BEDDING ENSURE STABLE UNDERLYING FOUNDATION MATERIAL DIFFERENTIAL SETTLEMENT (PER DRAWING 1)
BACKFILL AND COMPACT WITH SELECT MATERIAL AROUND PIPE (SEN #4)
PLAN SHEET
9/12/2024 7:39:50 AM Poly Pipe FES-Comments Update.dgn

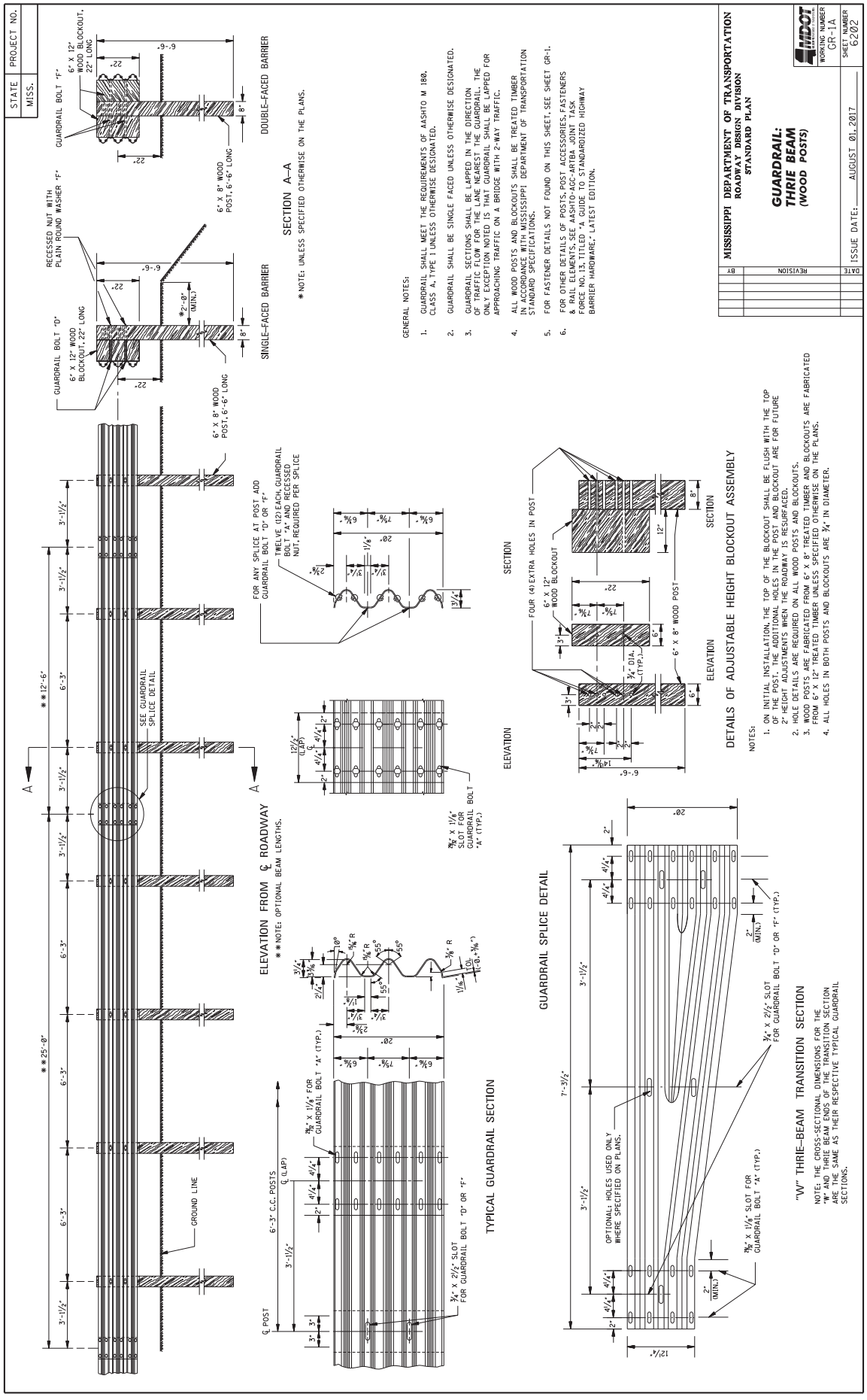
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

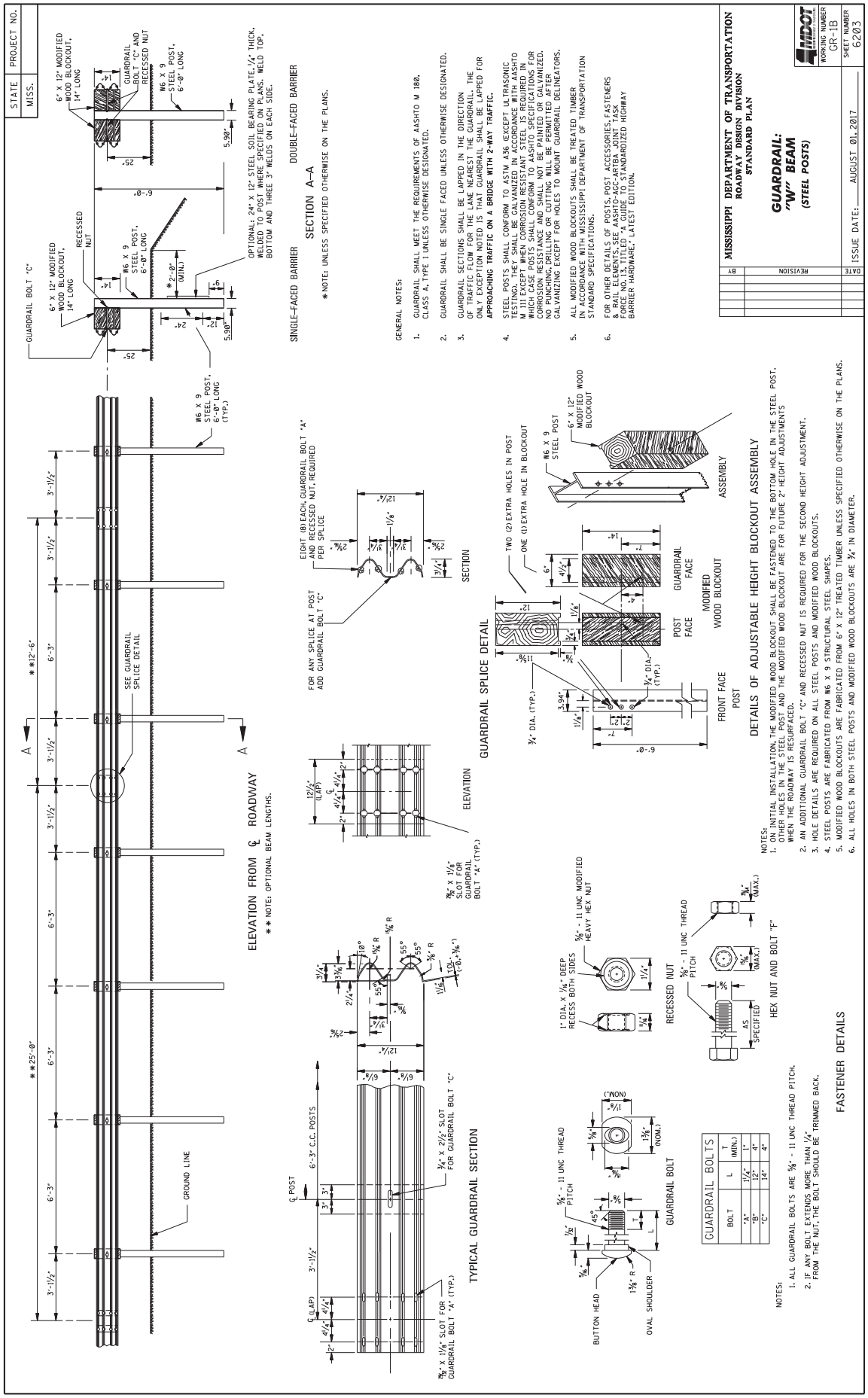
SUPPLEMENT TO NOTICE TO BIDDERS NO. 7624

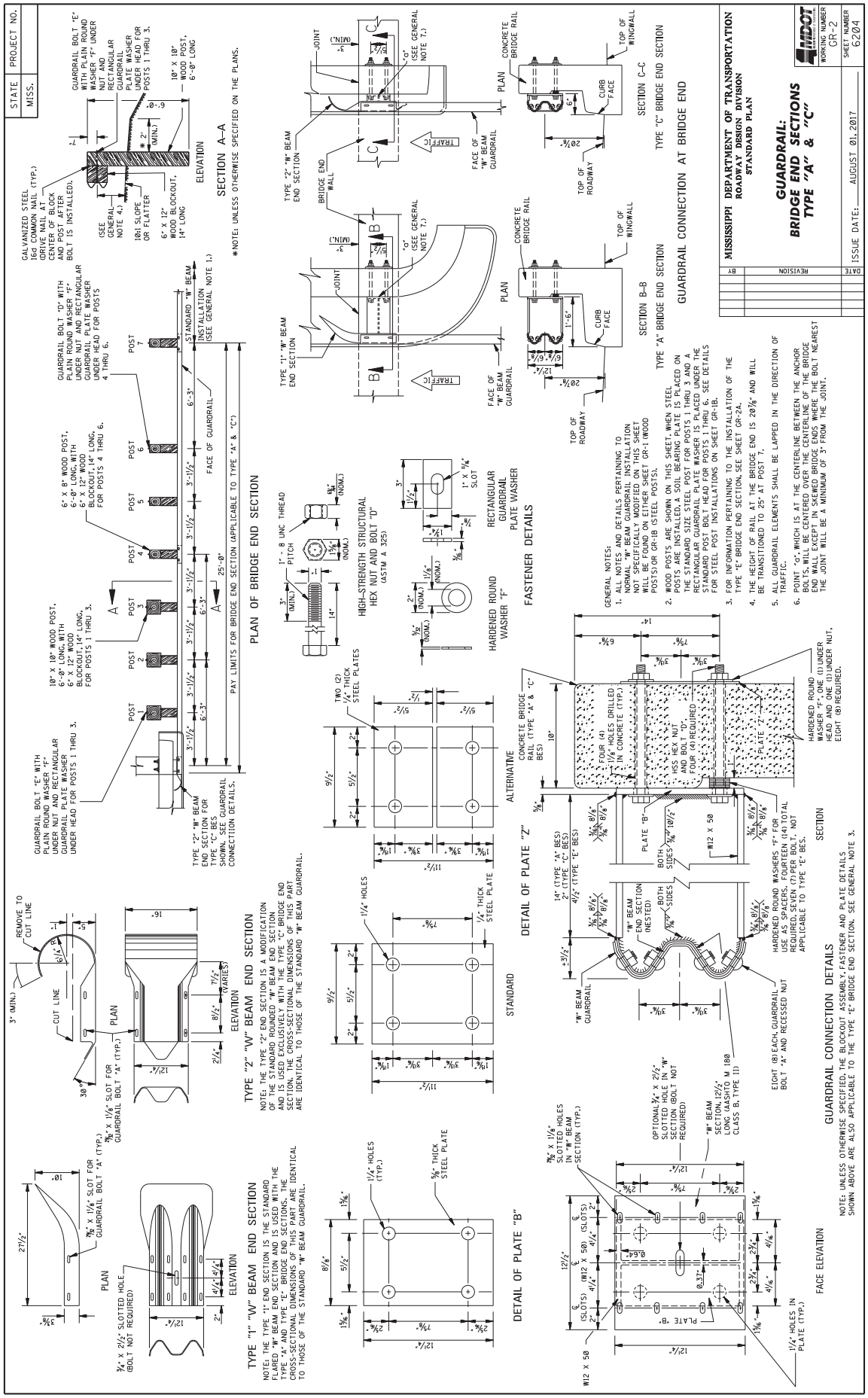
DATE: **01/23/2026**

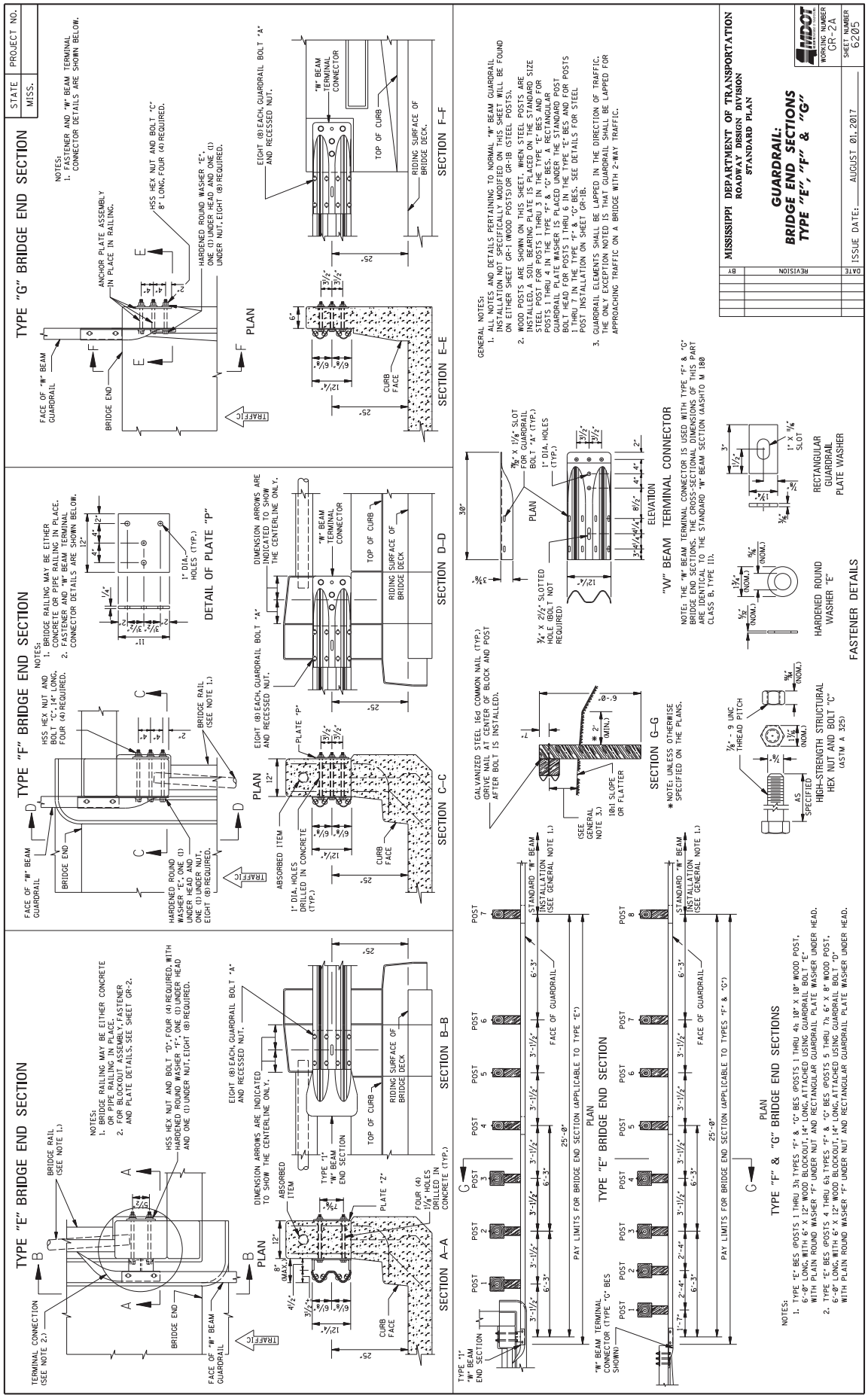
After the last drawing on page 33, add the following.

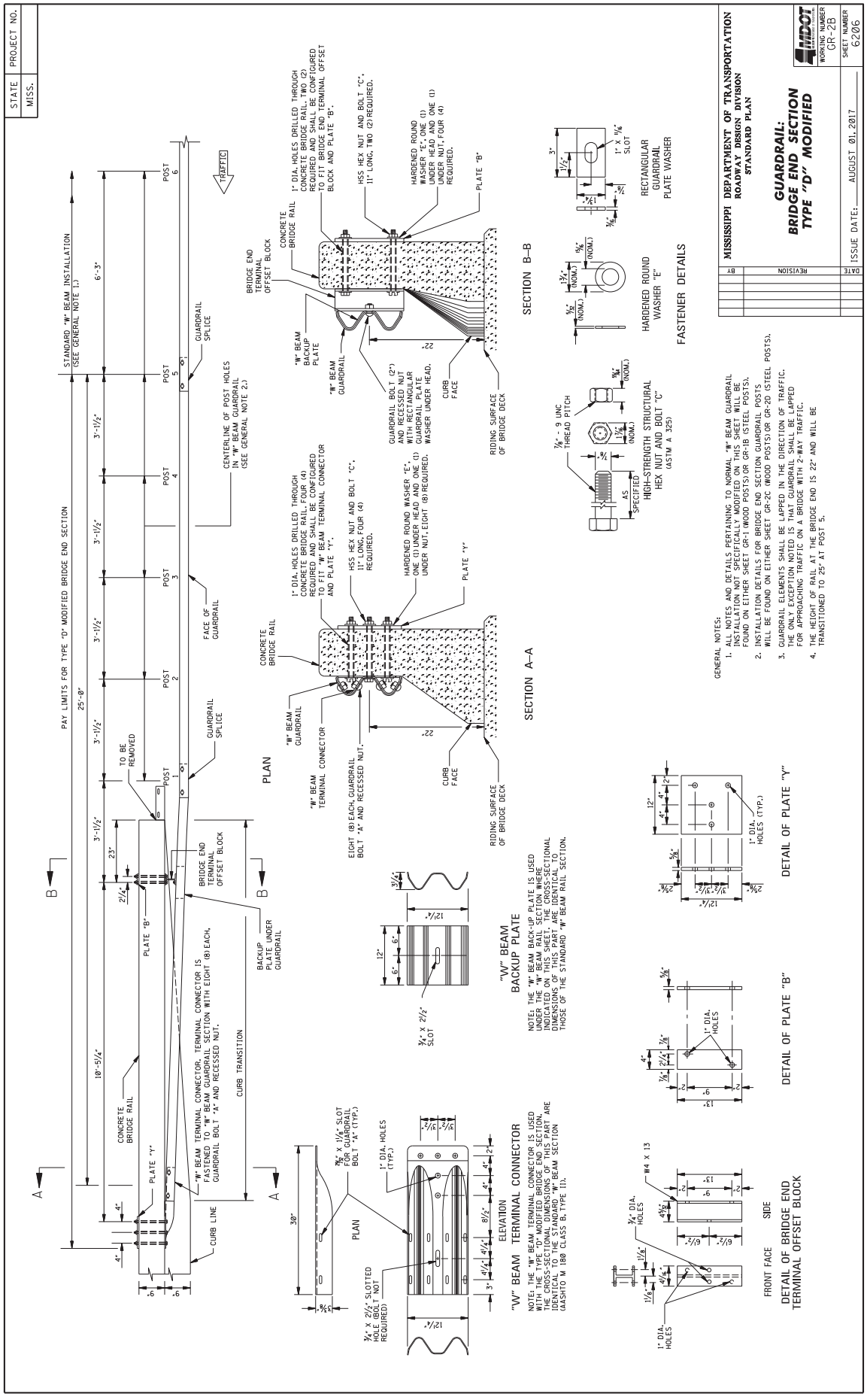

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: "W" BEAM (WOOD POSTS)
WORKING NUMBER GR-1
SHEET NUMBER 6201
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, 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
DOUBLE-FACED BARRIER
SECTION A–A
*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
GALVANIZED STEEL 16d COMMON NAIL (DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER BOLT IS INSTALLED)
RECESSED NUT WITH PLAIN ROUND WASHER "F"
GUARDRAIL BOLT "F"
GUARDRAIL BOLT "D"
6" X 12" WOOD BLOCKOUT, 14" LONG
6" X 8" WOOD POST, 6'-0" LONG
6" X 12" WOOD BLOCKOUT 14" LONG
*2'-0" (MIN.)
ELEVATION FROM ℄ ROADWAY
** NOTE: OPTIONAL BEAM LENGTHS.
SEE GUARDRAIL SPLICE DETAIL
GROUND LINE
TYPICAL GUARDRAIL SECTION
℄ POST
6'-3" C.C. POSTS
℄ (LAP)
¾" X 2½" SLOT FOR GUARDRAIL BOLT "D" OR "F"
⅞" X 1¼" 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
⅞" X 1⅛" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
ELEVATION
SECTION
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 ¾" IN DIAMETER.
GUARDRAIL BOLTS
BOLT | L | T (MIN.)
"A" | 11¼" | 1"
"D" | 22" | 4"
* "E" | 24" | 4"
"F" | 33" | 4"
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.
* 3. GUARDRAIL BOLT "E" IS USED FOR SINGLE-FACED BARRIER WITH 10" X 10" WOOD POST AND 6" X 12" WOOD BLOCKOUT.
FASTENER DETAILS
BUTTON HEAD
OVAL SHOULDER
⅝" - 11 UNC THREAD
GUARDRAIL BOLT
1" DIA. X 1/16" DEEP RECESS BOTH SIDES
¾" - 11 UNC MODIFIED HEAVY HEX NUT
RECESSED NUT
PLAIN ROUND WASHER "F"
⅝" - 11 UNC THREAD PITCH
HEX NUT AND BOLT "F"

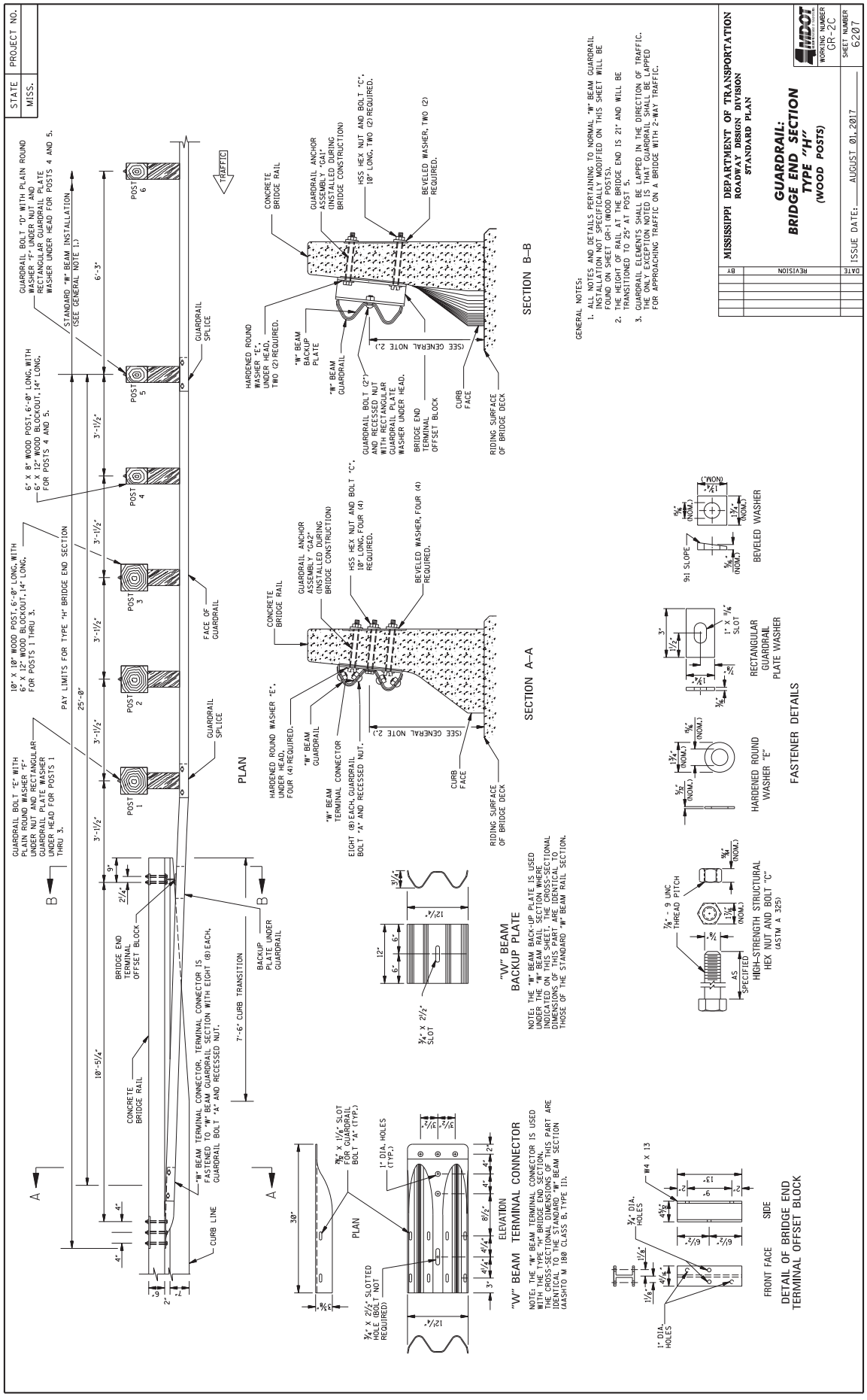

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: THRIE BEAM (WOOD POSTS)
WORKING NUMBER GR-1A
SHEET NUMBER 6202
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 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 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
GUARDRAIL BOLT "F"
RECESSED NUT WITH PLAIN ROUND WASHER "F"
6" X 8" WOOD POST, 6'-6" LONG
*2'-0" (MIN.)
ELEVATION FROM ℄ ROADWAY
**NOTE: OPTIONAL BEAM LENGTHS.
SEE GUARDRAIL SPLICE DETAIL
GROUND LINE
"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.
TYPICAL GUARDRAIL SECTION
℄ POST
6'-3" C.C. POSTS
℄ (LAP)
GUARDRAIL BOLT "A" (TYP.)
FOR ANY SPLICE AT POST ADD TWELVE (12) EACH, GUARDRAIL BOLT "D" OR "F" GUARDRAIL BOLT "A" AND RECESSED NUT, REQUIRED PER SPLICE
SECTION
ELEVATION
GUARDRAIL SPLICE DETAIL
OPTIONAL HOLES USED ONLY WHERE SPECIFIED ON PLANS.
DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY
FOUR (4) EXTRA HOLES IN POST
6" X 12" WOOD BLOCKOUT
6" X 8" WOOD POST
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.

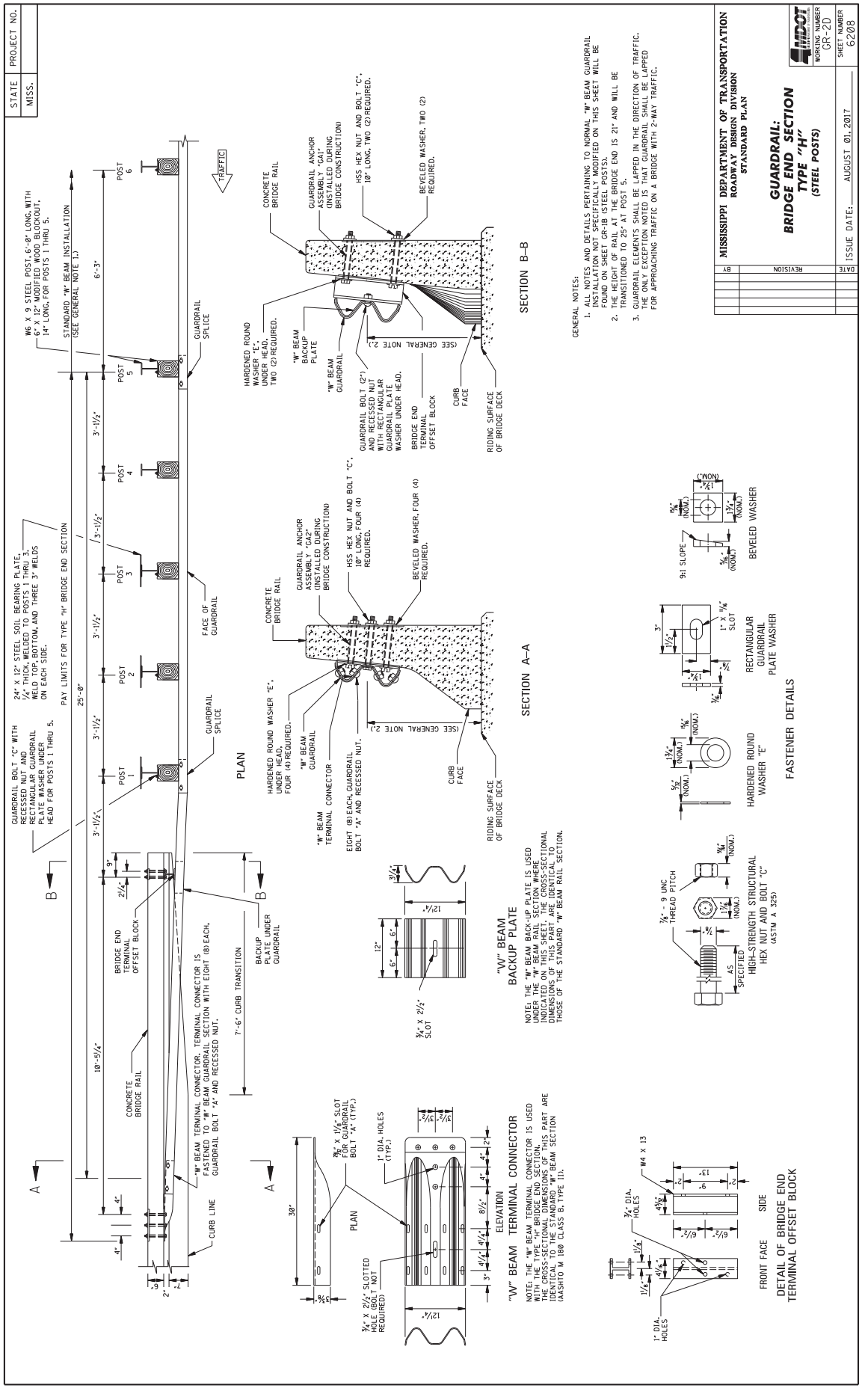

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: "W" BEAM (STEEL POSTS)
WORKING NUMBER GR-1B
SHEET NUMBER 6203
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
SINGLE-FACED BARRIER
DOUBLE-FACED BARRIER
SECTION A–A
*NOTE: UNLESS SPECIFIED OTHERWISE 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.
ELEVATION FROM ℄ ROADWAY
** NOTE: OPTIONAL BEAM LENGTHS.
GROUND LINE
SEE GUARDRAIL SPLICE DETAIL
GUARDRAIL BOLT "C"
6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG
RECESSED NUT
W6 X 9 STEEL POST, 6'-0" LONG
W6 X 9 STEEL POST, 6'-0" LONG (TYP.)
OPTIONAL: 24" X 12" STEEL SOIL BEARING PLATE, ¼" THICK, WELDED TO POST WHERE SPECIFIED ON PLANS. WELD TOP, BOTTOM AND THREE 3" WELDS ON EACH SIDE.
GUARDRAIL BOLT "A" AND RECESSED NUT
TYPICAL GUARDRAIL SECTION
¾" X 2½" SLOT FOR GUARDRAIL BOLT "C"
¾" X 1½" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
6'-3" C.C. POSTS
BUTTON HEAD
OVAL SHOULDER
GUARDRAIL BOLT
GUARDRAIL BOLTS
BOLT L T (MIN.)
"A" 1¼" 1"
"B" 12" 4"
"C" 14" 4"
FASTENER DETAILS
1" DIA. X ⅛" DEEP RECESS BOTH SIDES
⅝" - 11 UNC MODIFIED HEAVY HEX NUT
RECESSED NUT
⅝" - 11 UNC THREAD PITCH
HEX NUT AND BOLT "F"
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.
FOR ANY SPLICE AT POST ADD GUARDRAIL BOLT "C"
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT, REQUIRED PER SPLICE
SECTION
ELEVATION
GUARDRAIL SPLICE DETAIL
TWO (2) EXTRA HOLES IN POST
ONE (1) EXTRA HOLE IN BLOCKOUT
¾" DIA. (TYP.)
POST FACE
GUARDRAIL FACE
MODIFIED WOOD BLOCKOUT
FRONT FACE POST
W6 X 9 STEEL POST
6" X 12" MODIFIED WOOD BLOCKOUT
ASSEMBLY
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.

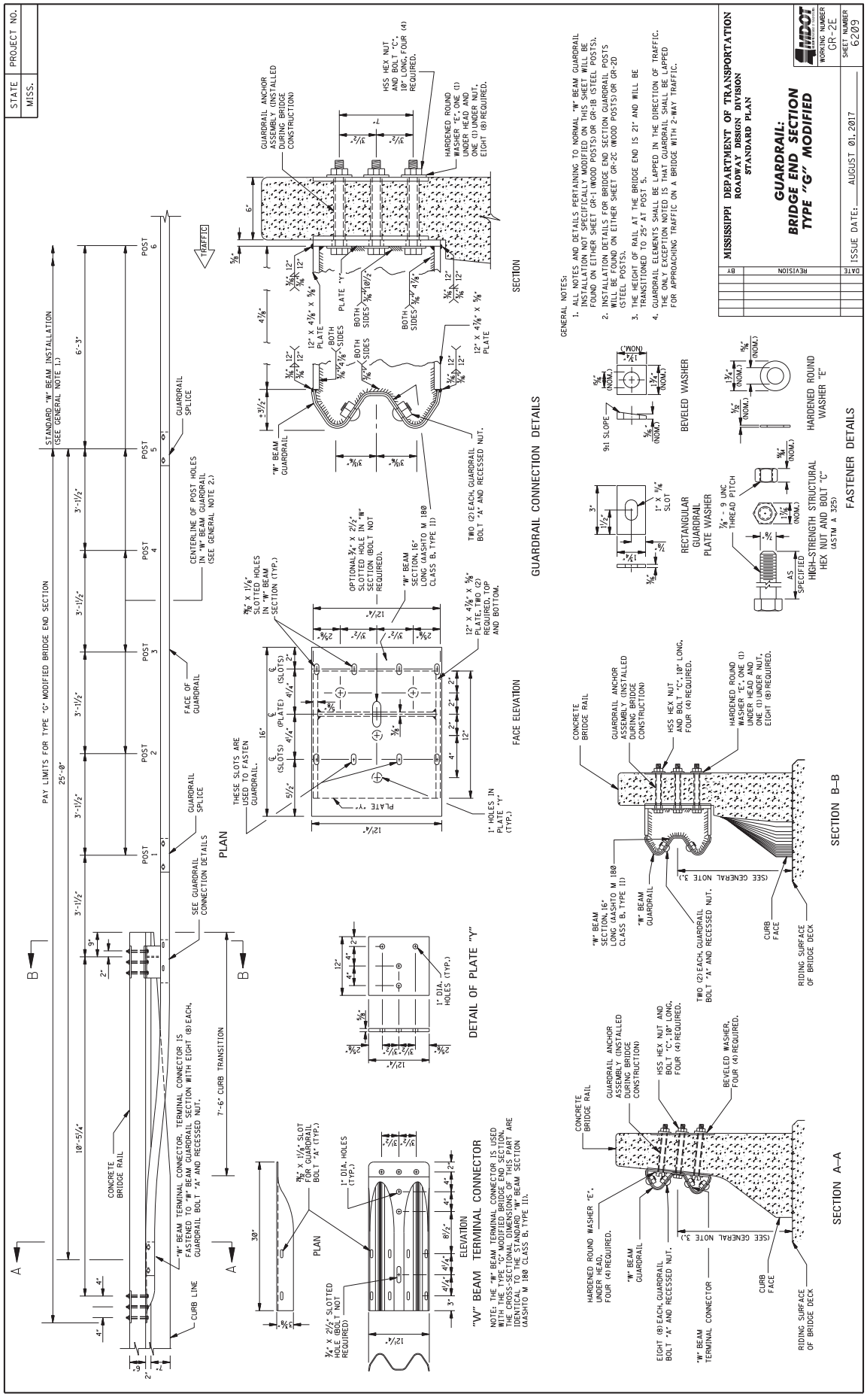

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTIONS
TYPE "A" & "C"
WORKING NUMBER GR-2
SHEET NUMBER 6204
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
TYPE "A" BRIDGE END SECTION
GUARDRAIL CONNECTION AT BRIDGE END
TYPE "C" BRIDGE END SECTION
PLAN OF BRIDGE END SECTION
SECTION A–A
ELEVATION
SECTION B–B
SECTION C–C
PLAN
TYPE "1" "W" BEAM END SECTION
TYPE "2" "W" BEAM END SECTION
STANDARD
ALTERNATIVE
DETAIL OF PLATE "A"
DETAIL OF PLATE "B"
DETAIL OF PLATE "Z"
FASTENER DETAILS
GUARDRAIL CONNECTION DETAILS
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 AND A RECTANGULAR GUARDRAIL PLATE WASHER IS PLACED UNDER THE STANDARD POST BOLT HEAD FOR POSTS 1 THRU 6. SEE DETAILS FOR STEEL POST INSTALLATIONS ON SHEET GR-1B.
3. FOR INFORMATION PERTAINING TO THE INSTALLATION OF THE TYPE "E" BRIDGE END SECTION, SEE SHEET GR-2A.
4. THE HEIGHT OF RAIL AT THE BRIDGE END IS 20⅞" AND WILL BE TRANSITIONED TO 25" AT POST 7.
5. ALL GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC.
6. POINT "O", WHICH IS AT THE CENTERLINE BETWEEN THE ANCHOR BOLTS, WILL BE CENTERED OVER THE CENTERLINE OF THE BRIDGE END WALL EXCEPT IN SKEWED BRIDGE ENDS WHERE THE BOLT NEAREST THE JOINT WILL BE A MINIMUM OF 3" FROM THE JOINT.

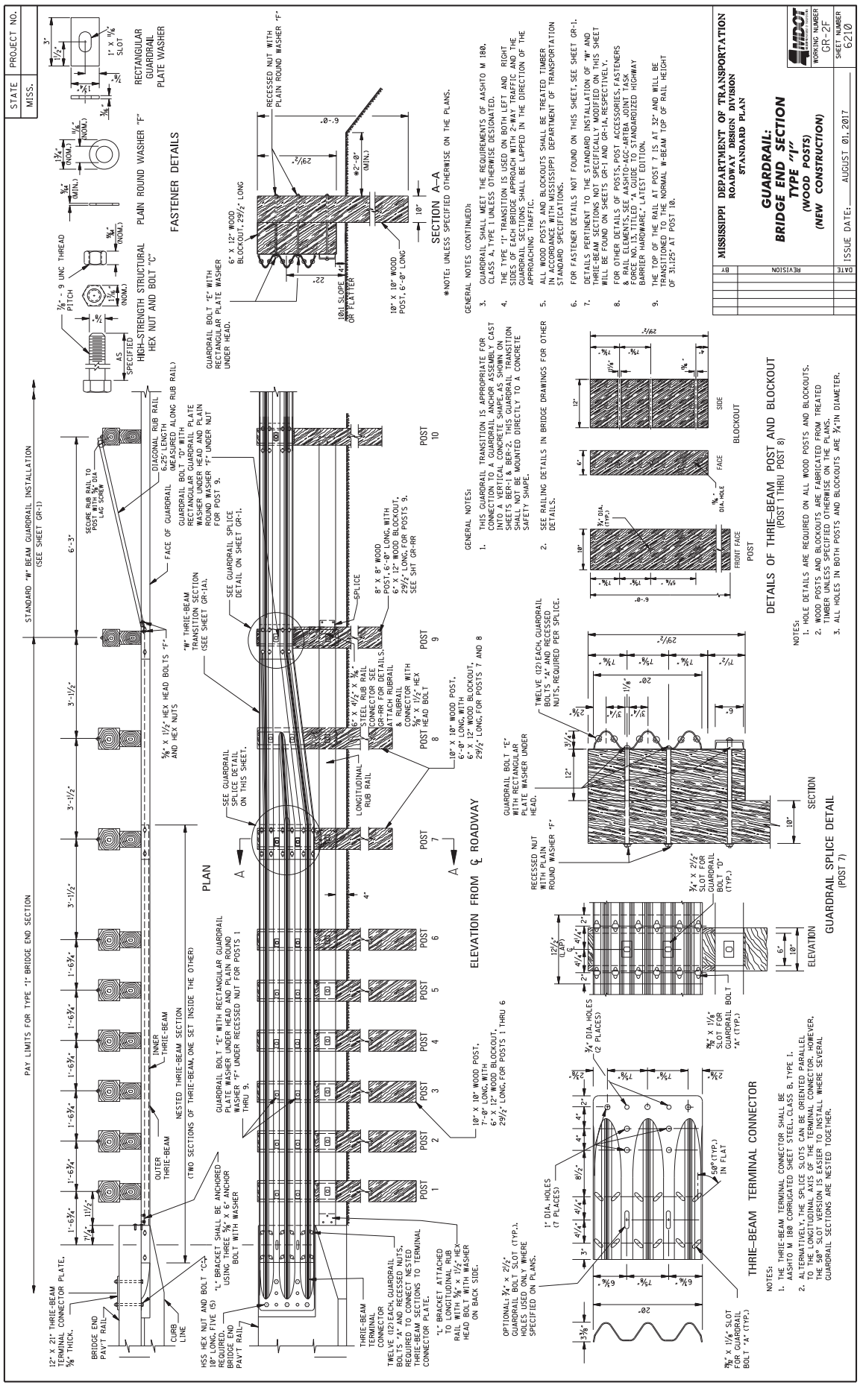

TYPE "E" BRIDGE END SECTION
TYPE "F" BRIDGE END SECTION
TYPE "G" BRIDGE END SECTION
"W" BEAM TERMINAL CONNECTOR
GUARDRAIL: BRIDGE END SECTIONS TYPE "E", "F" & "G"
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
WORKING NUMBER GR-2A
SHEET NUMBER 6205
ISSUE DATE: AUGUST 01, 2017
STATE MISS.
PROJECT NO.

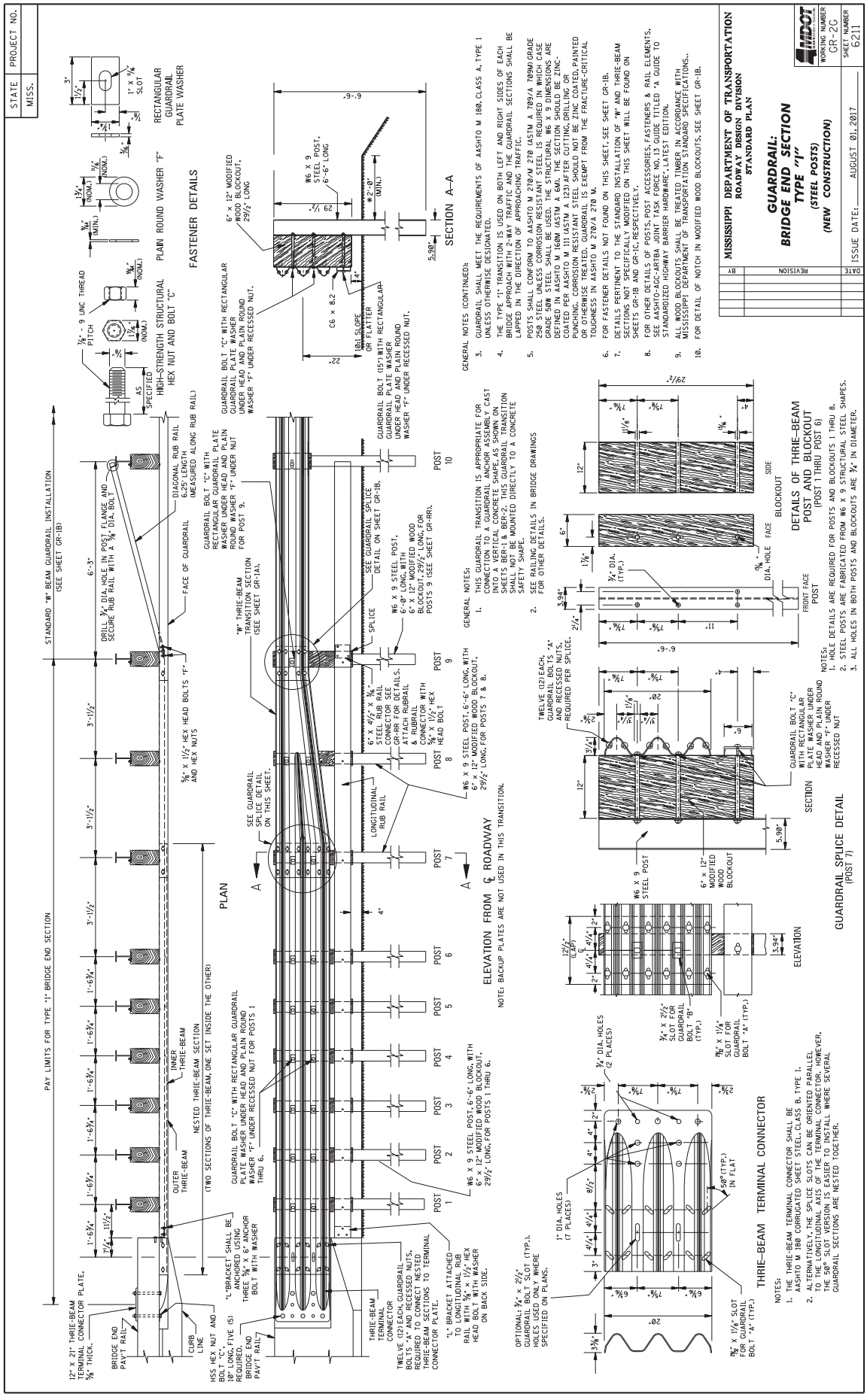

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "D" MODIFIED
WORKING NUMBER GR-2B
SHEET NUMBER 6206
ISSUE DATE: AUGUST 01, 2017
REVISION
DATE
BY
PLAN
SECTION A–A
SECTION B–B
FASTENER DETAILS
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
"W" BEAM BACKUP PLATE
NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INSTALLATION DETAILS SHOW CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.
"W" BEAM TERMINAL CONNECTOR
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "D" 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).
DETAIL OF PLATE "B"
DETAIL OF PLATE "Y"
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION SHOWN ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-2 (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.

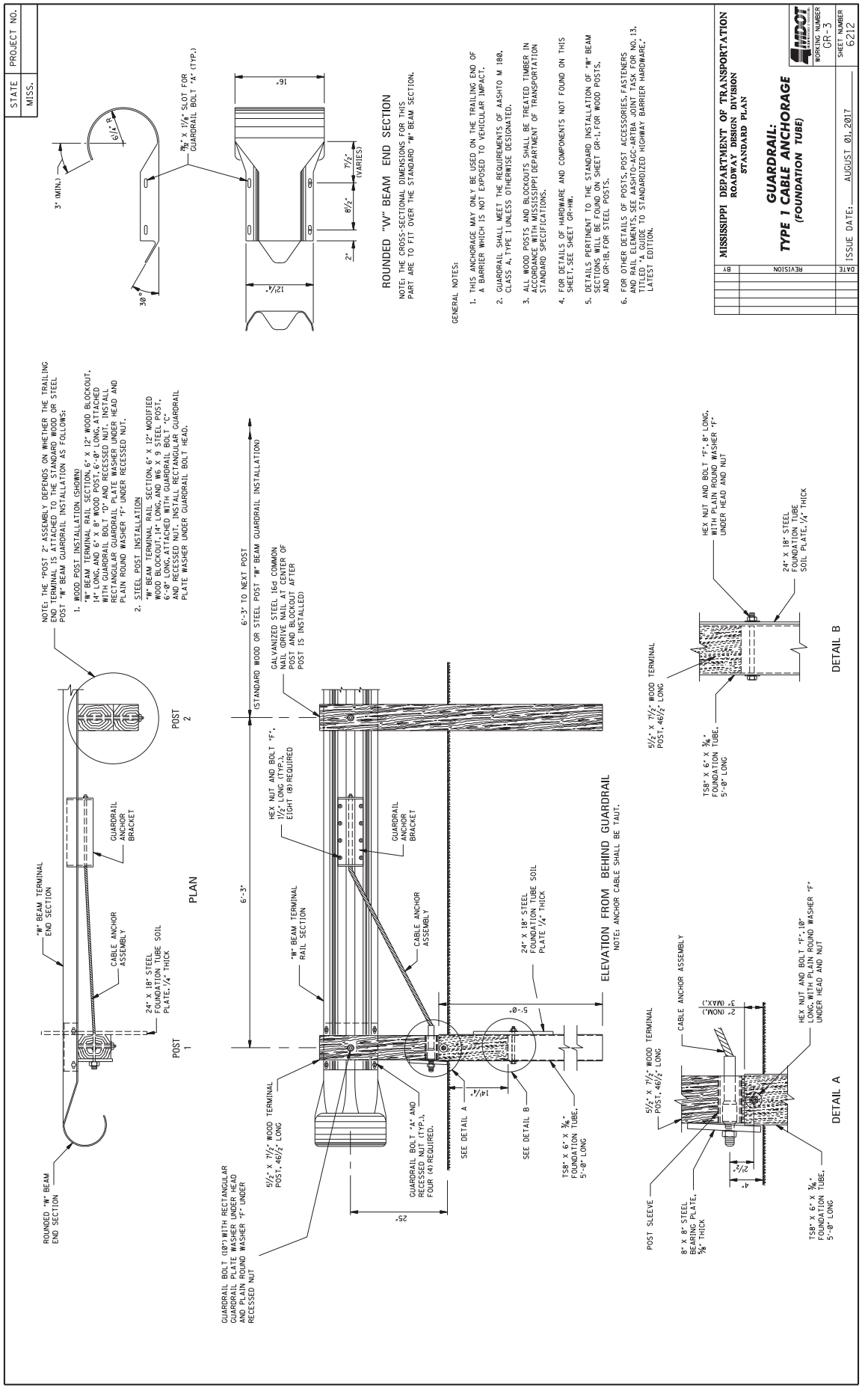

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "H"
(WOOD POSTS)
WORKING NUMBER GR-2C
SHEET NUMBER 6207
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" 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
"W" BEAM TERMINAL CONNECTOR
"W" BEAM BACKUP PLATE
FASTENER DETAILS
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
TRAFFIC
POST 1
POST 2
POST 3
POST 4
POST 5
POST 6
CONCRETE BRIDGE RAIL
BRIDGE END TERMINAL OFFSET BLOCK
BACKUP PLATE UNDER GUARDRAIL
GUARDRAIL SPLICE
FACE OF GUARDRAIL
CURB LINE
7'-6" CURB TRANSITION
PAY LIMITS FOR TYPE "H" BRIDGE END SECTION
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
10" X 10" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, FOR POSTS 1 THRU 3.
6" X 8" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, 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.
GUARDRAIL BOLT "D" WITH PLAIN ROUND WASHER UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 4 AND 5.
"W" BEAM TERMINAL CONNECTOR. TERMINAL CONNECTOR IS FASTENED TO "W" BEAM GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
"W" BEAM GUARDRAIL
"W" BEAM TERMINAL CONNECTOR
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
GUARDRAIL ANCHOR ASSEMBLY "GA2" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
BEVELED WASHER, FOUR (4) REQUIRED.
(SEE GENERAL NOTE 2.)
CURB FACE
RIDING SURFACE OF BRIDGE DECK
HARDENED ROUND WASHER "E", UNDER HEAD, TWO (2) REQUIRED.
"W" BEAM BACKUP PLATE
GUARDRAIL ANCHOR ASSEMBLY "GA1" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, TWO (2) REQUIRED.
BEVELED WASHER, TWO (2) REQUIRED.
GUARDRAIL BOLT (2") AND RECESSED NUT WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.
BRIDGE END TERMINAL OFFSET BLOCK
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).
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
BEVELED WASHER
9:1 SLOPE
FRONT FACE
SIDE

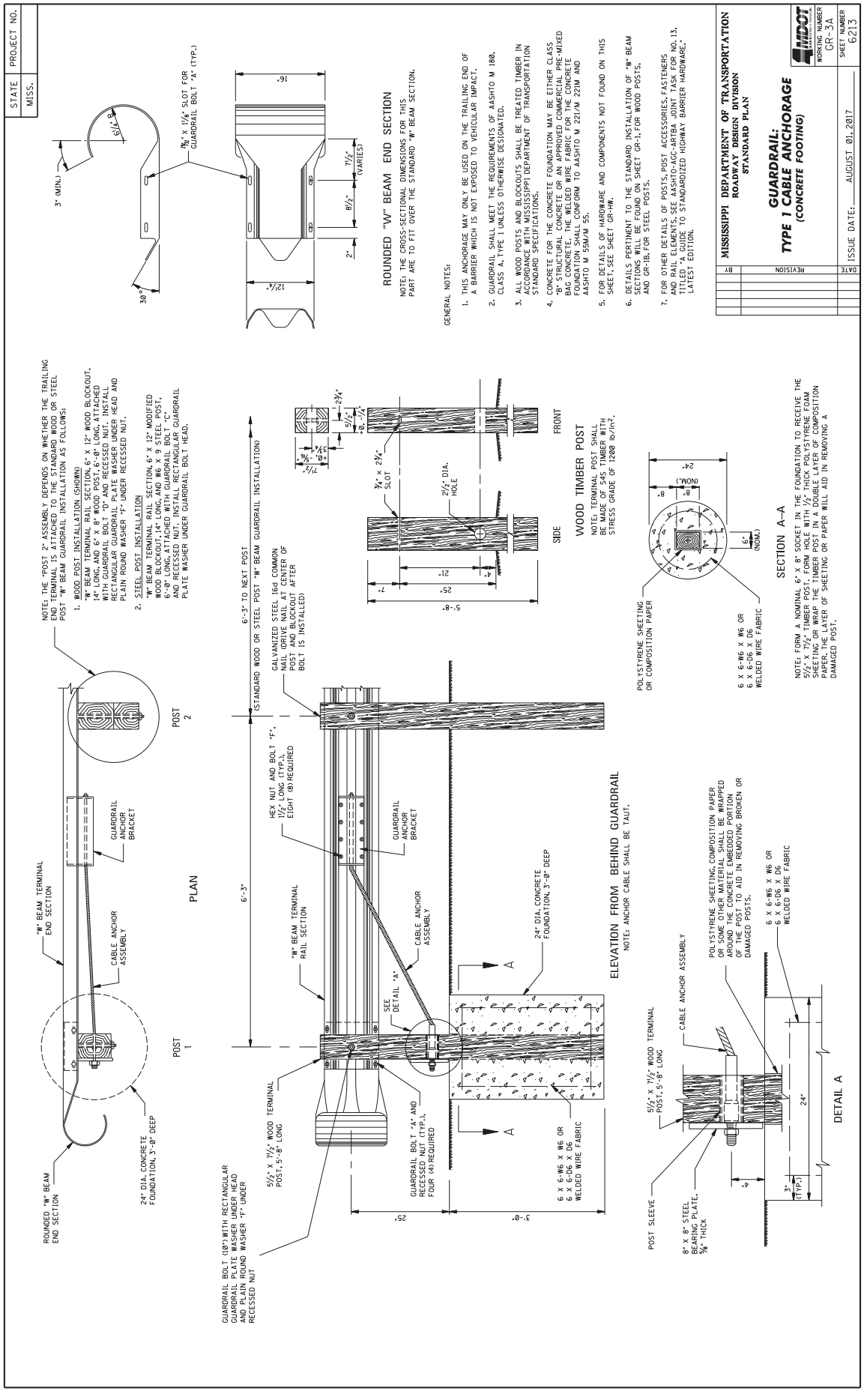

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "H"
(STEEL POSTS)
WORKING NUMBER GR-2D
SHEET NUMBER 6208
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "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
FASTENER DETAILS
"W" BEAM BACKUP PLATE
"W" BEAM TERMINAL CONNECTOR
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
TRAFFIC
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
PAY LIMITS FOR TYPE "H" BRIDGE END SECTION
CONCRETE BRIDGE RAIL
GUARDRAIL ANCHOR ASSEMBLY "GA1" (INSTALLED DURING BRIDGE CONSTRUCTION)
GUARDRAIL ANCHOR ASSEMBLY "GA2" (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.)
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
"W" BEAM TERMINAL CONNECTOR
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
BEVELED WASHER, FOUR (4) REQUIRED.
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
FACE OF GUARDRAIL
GUARDRAIL SPLICE
BACKUP PLATE UNDER 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"
3'-1½"
6'-3"
10'-5¼"
4'
9"
2¼"
30"
12'
6'
12½"
3¼"
¾" X 2½" SLOT
¾" X 1¼" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
1" DIA. HOLES (TYP.)
¾" X 2½" SLOTTED HOLE (BOLT NOT REQUIRED)
1" DIA. HOLES
¾" DIA. HOLES
W4 X 13
FRONT FACE
SIDE
⅞" - 9 UNC THREAD PITCH
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
AS SPECIFIED
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
1" X 1⅛" SLOT
9:1 SLOPE
BEVELED WASHER
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. CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.

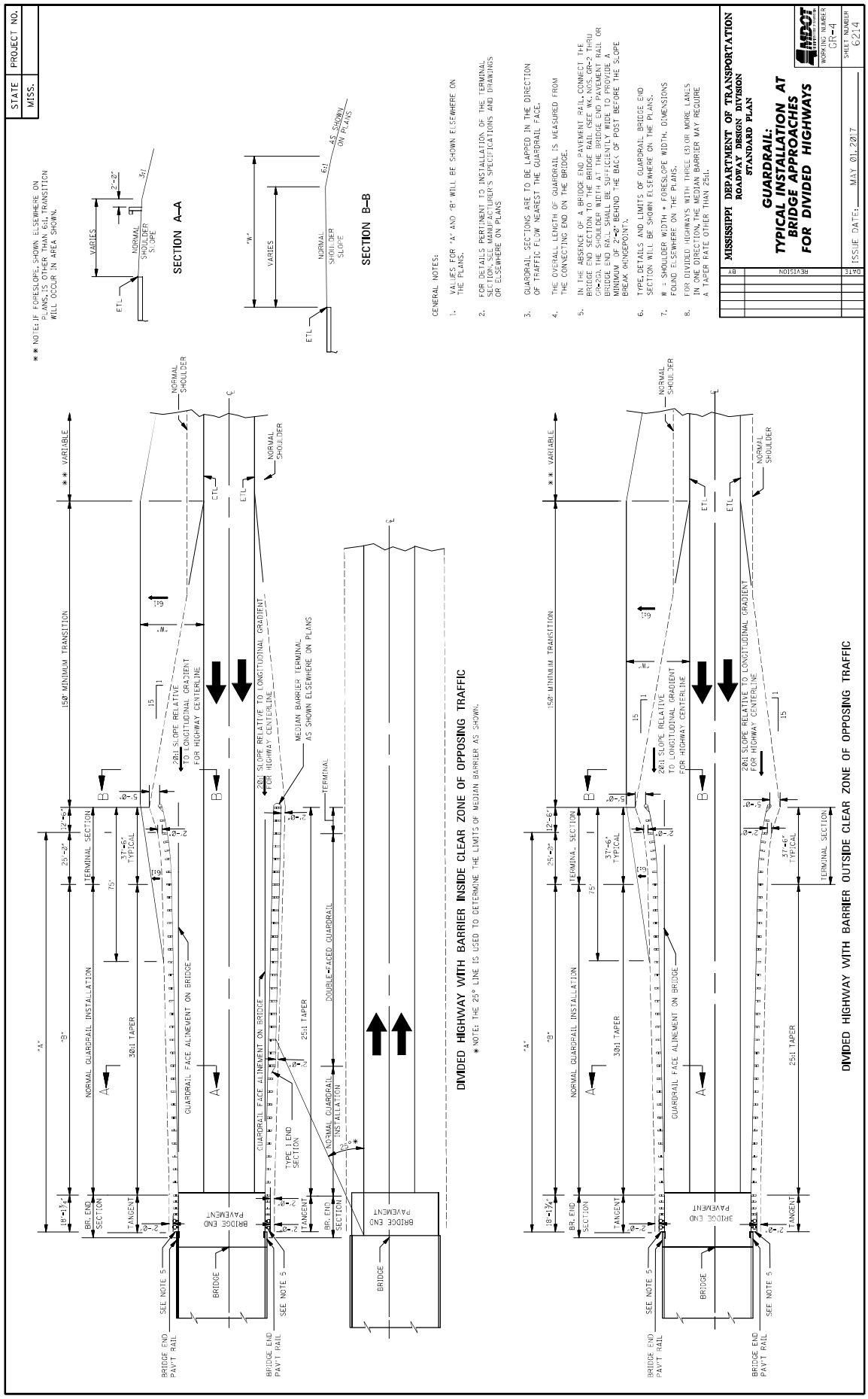

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "G" MODIFIED
WORKING NUMBER GR-2E
SHEET NUMBER 6209
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON 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.
PLAN
SECTION A–A
SECTION B–B
ELEVATION
SECTION
FACE ELEVATION
PLAN
GUARDRAIL CONNECTION DETAILS
"W" BEAM TERMINAL CONNECTOR
DETAIL OF PLATE "Y"
BEVELED WASHER
RECTANGULAR GUARDRAIL PLATE WASHER
HARDENED ROUND WASHER "E"
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C"
FASTENER DETAILS
PAY LIMITS FOR TYPE "G" MODIFIED BRIDGE END SECTION
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
CENTERLINE OF POST HOLES IN "W" BEAM GUARDRAIL (SEE GENERAL NOTE 2.)
FACE OF GUARDRAIL
GUARDRAIL SPLICE
SEE GUARDRAIL CONNECTION DETAILS
CONCRETE BRIDGE RAIL
CURB LINE
7'-6" CURB TRANSITION
"W" BEAM TERMINAL CONNECTOR IS FASTENED TO THE GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
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).
THESE SLOTS ARE USED TO FASTEN GUARDRAIL.
OPTIONAL 3/4" X 2 1/2" SLOTTED HOLE IN "W" SECTION (BOLT NOT REQUIRED).
"W" BEAM SECTION, 16' LONG (AASHTO M 180 CLASS B, TYPE II)
TWO (2) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
12" X 4 1/8" X 5/8" PLATE, TWO (2) REQUIRED, TOP AND BOTTOM.
1" HOLES IN PLATE "Y" (TYP.)
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.
"W" BEAM GUARDRAIL
12" X 4 1/8" X 5/8" PLATE
BOTH SIDES
PLATE "Y"
TRAFFIC
HARDENED ROUND WASHER "E", FOUR (4) REQUIRED.
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
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)
CURB FACE
RIDING SURFACE OF BRIDGE DECK
(SEE GENERAL NOTE 3.)
3/4" X 2 1/2" SLOTTED HOLE (BOLT NOT REQUIRED)
7/8" X 1 1/8" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
1" DIA. HOLES (TYP.)
9:1 SLOPE
1" X 1 1/4" SLOT
3/4" - 9 UNC THREAD PITCH
AS SPECIFIED

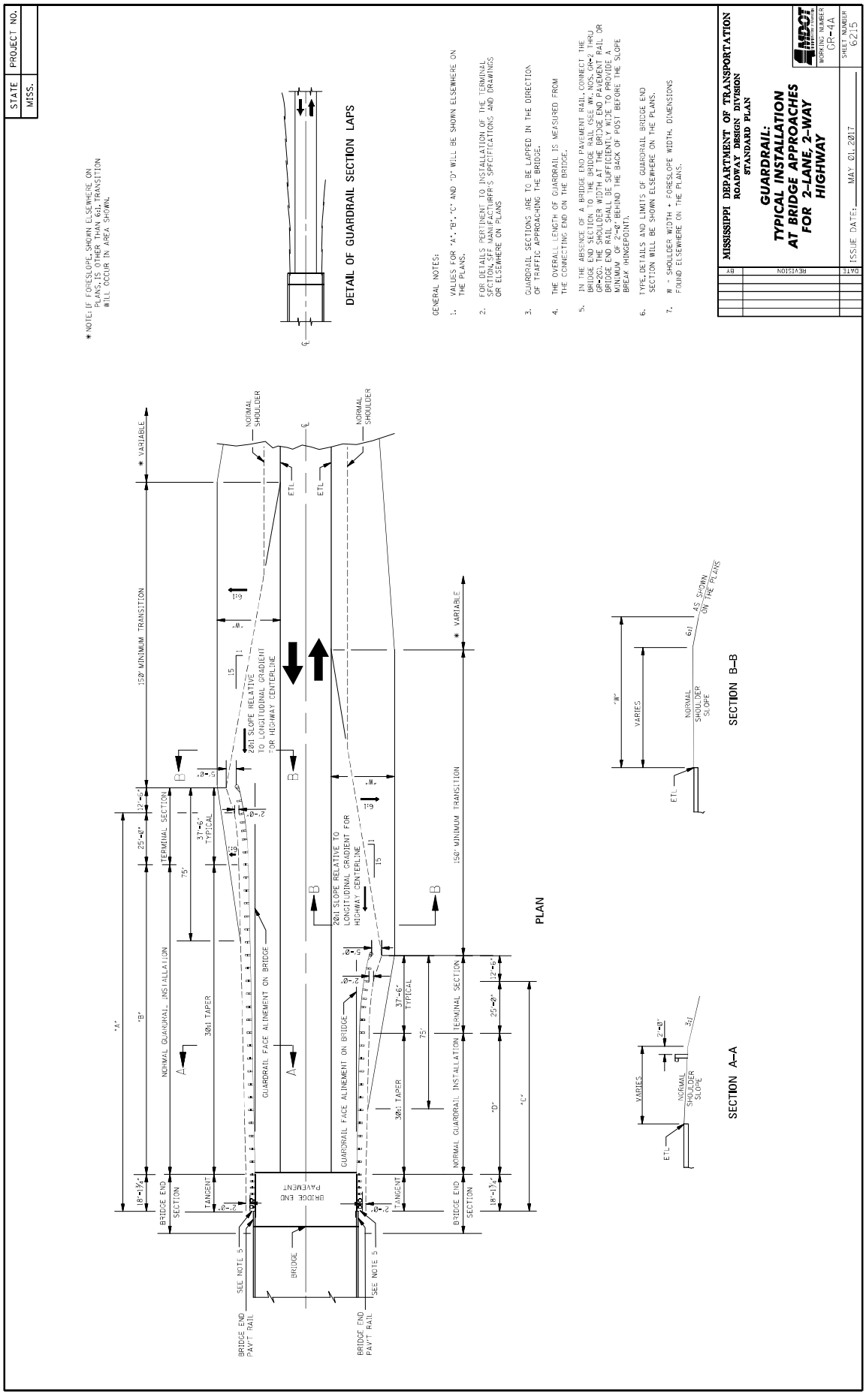

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "I"
(WOOD POSTS)
(NEW CONSTRUCTION)
WORKING NUMBER GR-2F
SHEET NUMBER 6210
ISSUE DATE: AUGUST 01, 2017
REVISION
BY
DATE
STANDARD "W" BEAM GUARDRAIL INSTALLATION (SEE 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):
GENERAL NOTES:
DETAILS OF THRIE-BEAM POST AND BLOCKOUT
(POST 1 THRU POST 8)
THRIE-BEAM TERMINAL CONNECTOR
GUARDRAIL SPLICE DETAIL
(POST 7)
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.

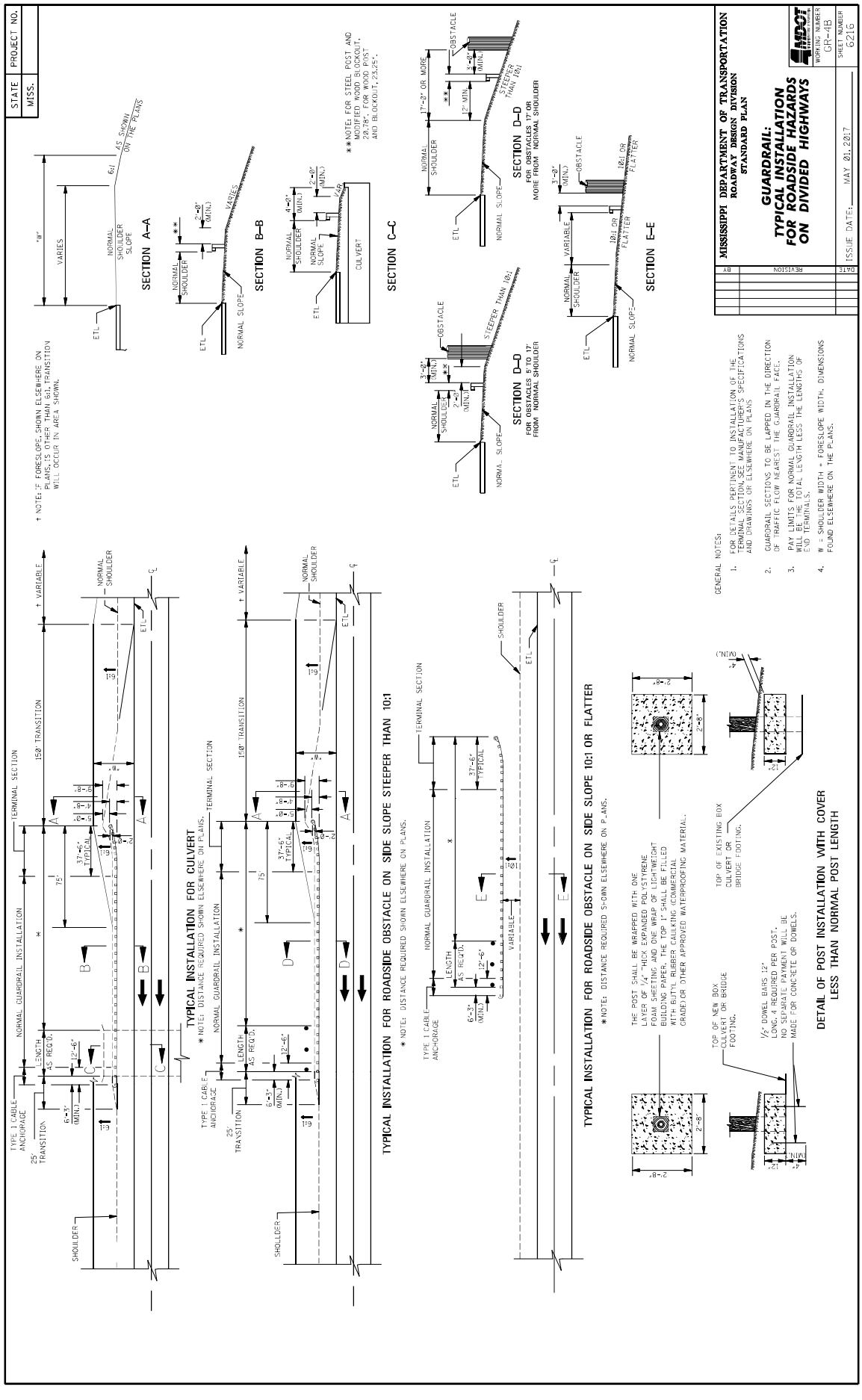

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "1"
(STEEL POSTS)
(NEW CONSTRUCTION)
WORKING NUMBER GR-2G
SHEET NUMBER 6211
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
PAY LIMITS FOR TYPE "1" BRIDGE END SECTION
STANDARD "W" BEAM GUARDRAIL INSTALLATION (SEE SHEET GR-1B)
PLAN
ELEVATION FROM ℄ ROADWAY
NOTE: BACKUP PLATES ARE NOT USED IN THIS TRANSITION.
FASTENER DETAILS
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C"
PLAIN ROUND WASHER "F"
RECTANGULAR GUARDRAIL PLATE WASHER
SECTION A–A
GUARDRAIL SPLICE DETAIL (POST 7)
THRIE-BEAM TERMINAL CONNECTOR
DETAILS OF THRIE-BEAM POST AND BLOCKOUT (POST 1 THRU POST 6)
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-2A. THIS GUARDRAIL TRANSITION SHALL NOT BE MOUNTED DIRECTLY TO A CONCRETE SAFETY SHAPE.
2. SEE RAILING DETAILS IN BRIDGE DRAWINGS FOR OTHER DETAILS.
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 A6/A6M. ALL STEEL SHALL BE 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.

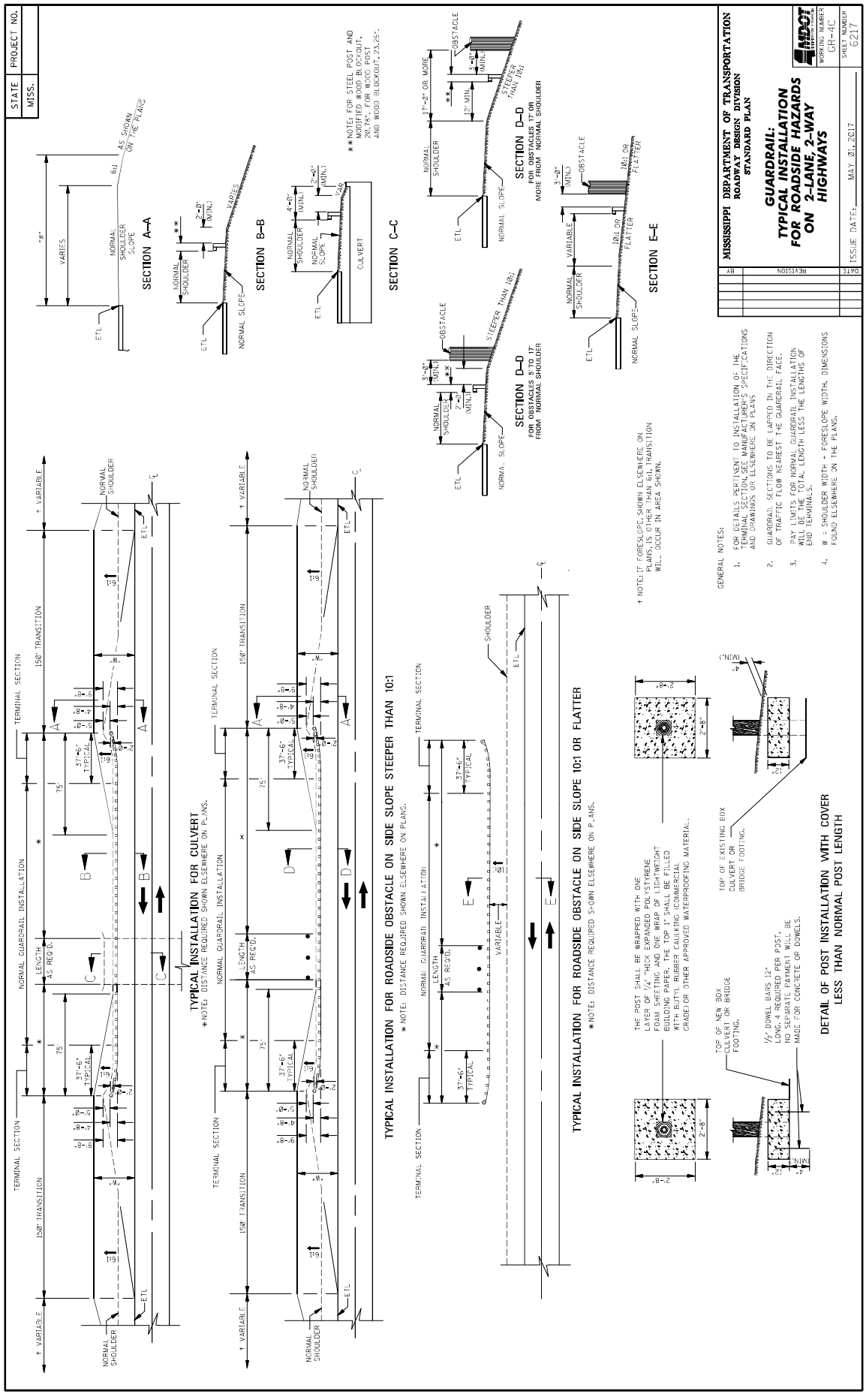

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPE 1 CABLE ANCHORAGE
(FOUNDATION TUBE)
WORKING NUMBER GR-3
SHEET NUMBER 6212
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING 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.
ROUNDED "W" BEAM END SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.
3" (MIN.)
6 1/4" R
30°
7/8" X 1 1/4" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
16"
12 1/4"
8 1/2"
7 1/2" (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 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'-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, 1/4" THICK
POST 1
POST 2
PLAN
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", 1/2" LONG (TYP.) EIGHT (8) REQUIRED
"W" BEAM TERMINAL RAIL SECTION
CABLE ANCHOR ASSEMBLY
GUARDRAIL ANCHOR BRACKET
24" X 18" STEEL FOUNDATION TUBE SOIL PLATE, 1/4" THICK
5'-0"
14 1/4"
SEE DETAIL A
SEE DETAIL B
5 1/2" X 7 1/2" WOOD TERMINAL POST, 46 1/2" LONG
GUARDRAIL BOLT "A" AND RECESSED NUT (TYP.), FOUR (4) REQUIRED.
TS8" X 6" X 3/16" FOUNDATION TUBE, 5'-0" LONG
25"
GUARDRAIL BOLT (10") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT
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
24" X 18" STEEL FOUNDATION TUBE SOIL PLATE, 1/4" THICK
5 1/2" X 7 1/2" WOOD TERMINAL POST, 46 1/2" LONG
TS8" X 6" X 3/16" FOUNDATION TUBE, 5'-0" LONG
DETAIL B
POST SLEEVE
8" X 8" STEEL BEARING PLATE, 3/8" THICK
5 1/2" X 7 1/2" WOOD TERMINAL POST, 46 1/2" LONG
CABLE ANCHOR ASSEMBLY
2" (NOM.) 3" (MAX.)
HEX NUT AND BOLT "F", 10" LONG, WITH PLAIN ROUND WASHER "F" UNDER HEAD AND NUT
2 1/2"
4"
TS8" X 6" X 3/16" FOUNDATION TUBE, 5'-0" LONG
DETAIL A

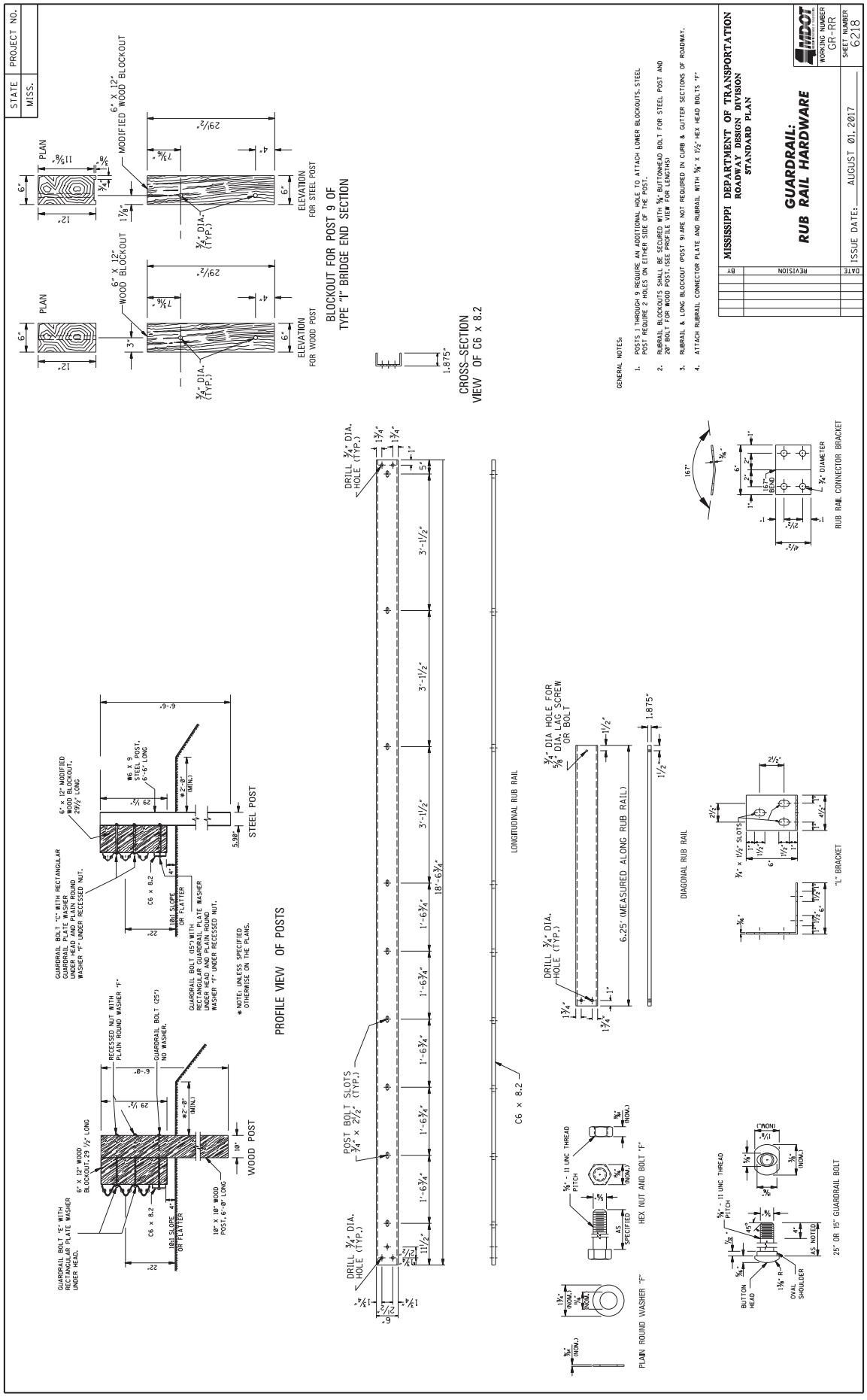

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPE 1 CABLE ANCHORAGE
(CONCRETE FOOTING)
WORKING NUMBER GR-3A
SHEET NUMBER 6213
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
ROUNDED "W" BEAM END SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS 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 I 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.
3" (MIN.)
30°
13/16" DIA. HOLE
3/4" X 1 1/16" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
16"
12 1/4"
2"
8 1/2"
7 1/2" (VARIES)
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.
"W" BEAM END SECTION
ROUNDED "W" BEAM END SECTION
CABLE ANCHOR ASSEMBLY
GUARDRAIL ANCHOR BRACKET
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", 1 1/2" LONG (TYP.), EIGHT (8) REQUIRED
"W" BEAM TERMINAL RAIL SECTION
GUARDRAIL ANCHOR BRACKET
CABLE ANCHOR ASSEMBLY
SEE DETAIL "A"
24" DIA. CONCRETE FOUNDATION, 3'-0" DEEP
5 1/2" X 7 1/2" WOOD TERMINAL POST, 5'-8" LONG
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.
GUARDRAIL BOLT (10") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT
NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 lb/in².
WOOD TIMBER POST
SIDE
FRONT
3/4" X 2 3/4" SLOT
2 1/2" DIA. HOLE
5'-8"
25"
21"
7"
4"
5 1/2"
+0, -1/4"
2 3/4"
3/4"
7/16"
POLYSTYRENE SHEETING OR COMPOSITION PAPER
6 X 6-W6 X W6 OR 6 X 6-D6 X D6 WELDED WIRE FABRIC
24" (NOM.)
8" (NOM.)
8"
SECTION A–A
NOTE: FORM A NOMINAL 6" X 8" SOCKET IN THE FOUNDATION TO RECEIVE THE 5 1/2" X 7 1/2" TIMBER POST. FORM AROUND THE TIMBER POST WITH POLYSTYRENE 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.
5 1/2" X 7 1/2" 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, 5/8" THICK
24"
4"
3" (TYP.)
DETAIL A

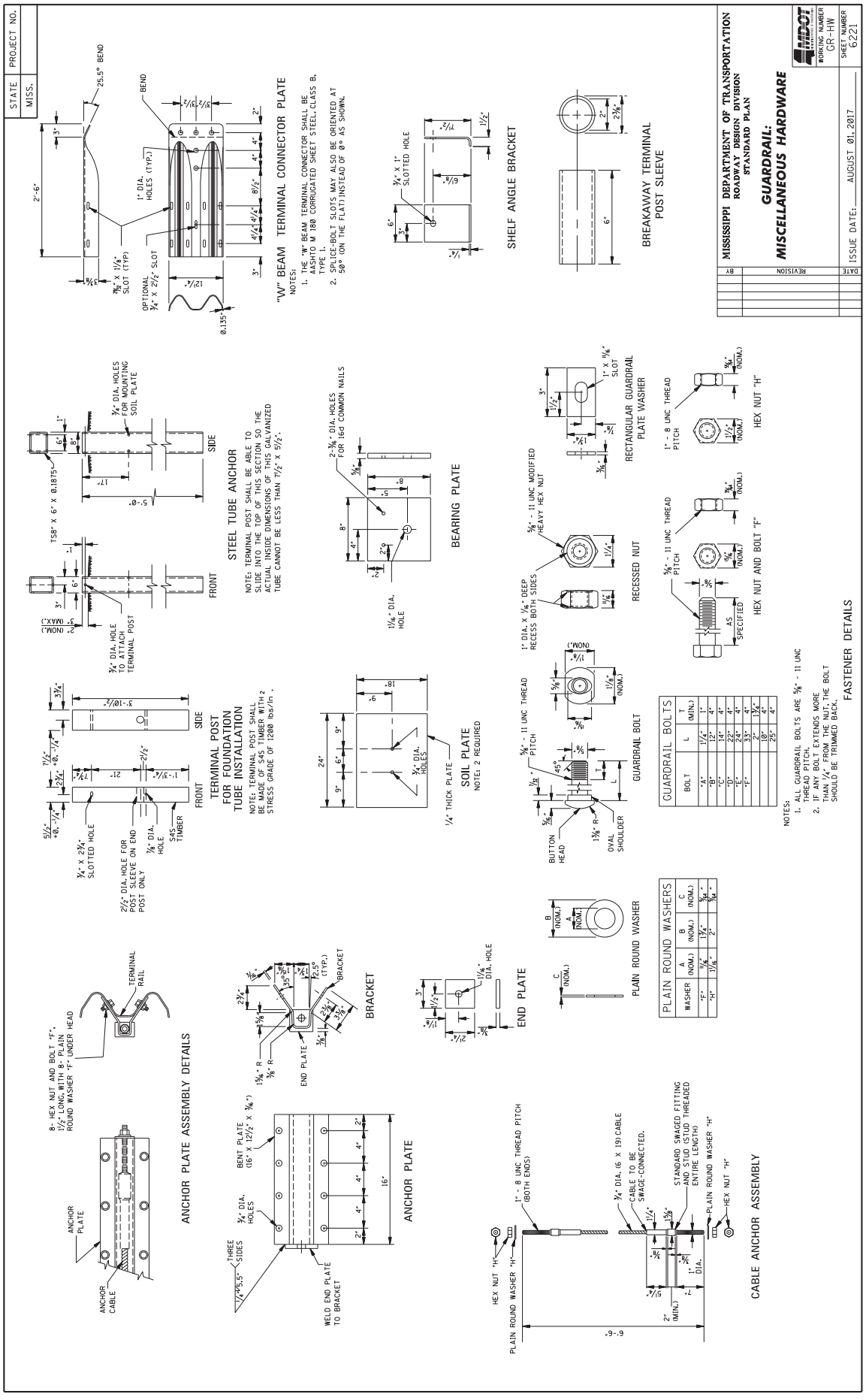

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION AT BRIDGE APPROACHES FOR DIVIDED HIGHWAYS
WORKING NUMBER GR-4
SHEET NUMBER 6214
ISSUE DATE: MAY 01, 2017
BY
REVISION
DATE
** NOTE: IF FORESLOPE, SHOWN ELSEWHERE ON PLANS, 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 ACROSS STA. 2+75 THRU STA. 3+50, THE SHOULDER WIDTH AT THE BRIDGE END PAVEMENT RAIL OR BRIDGE END RAIL SHALL BE SUFFICIENTLY WIDE TO PROVIDE A MINIMUM OF 2'-6" 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
NORMAL SHOULDER
ETL
CL
** VARIABLE
150' MINIMUM TRANSITION
20:1 SLOPE RELATIVE TO LONGITUDINAL GRADIENT FOR HIGHWAY CENTERLINE
MEDIAN BARRIER TERMINAL AS SHOWN ELSEWHERE ON PLANS
TERMINAL SECTION
NORMAL GUARDRAIL INSTALLATION
30:1 TAPER
25:1 TAPER
GUARDRAIL FACE ALINEMENT ON BRIDGE
DOUBLE-FACED GUARDRAIL
TYPE I END SECTION
BR. END SECTION
TANGENT
BRIDGE END PAVEMENT
BRIDGE
SEE NOTE 5
BRIDGE END PAVT RAIL
"A"
"B"
"W"
VARIES
NORMAL SHOULDER SLOPE
AS SHOWN ON PLANS

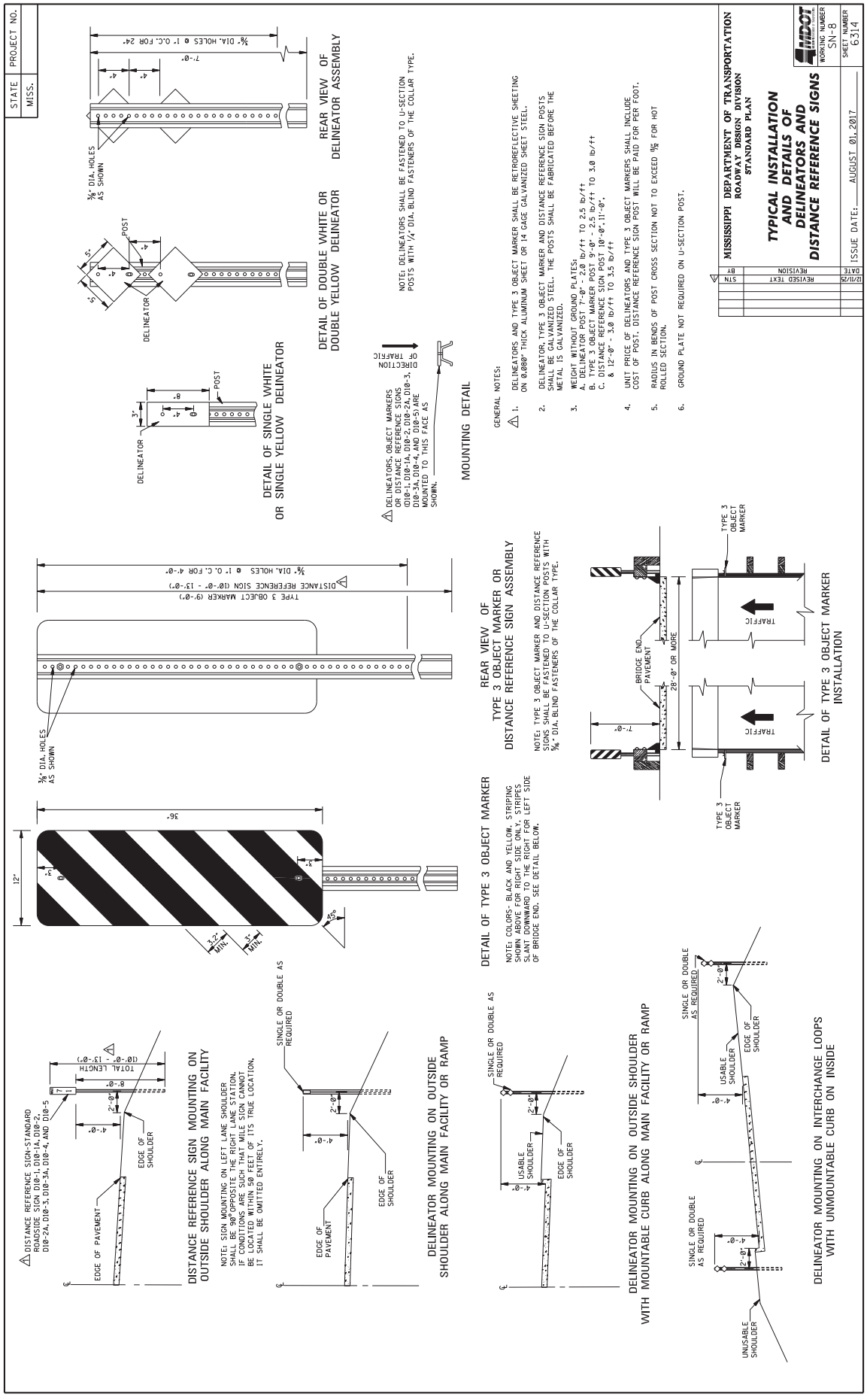

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION
AT BRIDGE APPROACHES
FOR 2-LANE 2-WAY
HIGHWAY
WORKING NUMBER GR-4A
SHEET NUMBER 6215
ISSUE DATE: MAY 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. VALUES FOR "A", "B", "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 MB-5, GR-2 THRU GR-2C). THE SHOULDER WIDTH AT THE BRIDGE END PROVIDED A BRIDGE END RAIL SHALL BE EQUAL TO OR GREATER THAN THE 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.
* NOTE: IF FORESLOPE SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
DETAIL OF GUARDRAIL SECTION LAPS
PLAN
SECTION A-A
SECTION B-B
* VARIABLE
150' MINIMUM TRANSITION
NORMAL GUARDRAIL INSTALLATION
TERMINAL SECTION
BRIDGE END SECTION
TANGENT
30:1 TAPER
37'-6" TYPICAL
75'
25'-0"
12'-6"
18'-1½"
"A"
"B"
"C"
"D"
"W"
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
NORMAL SHOULDER
ETL
VARIES
NORMAL SHOULDER SLOPE
2'-0"
3:1
6:1
AS SHOWN ON THE PLANS

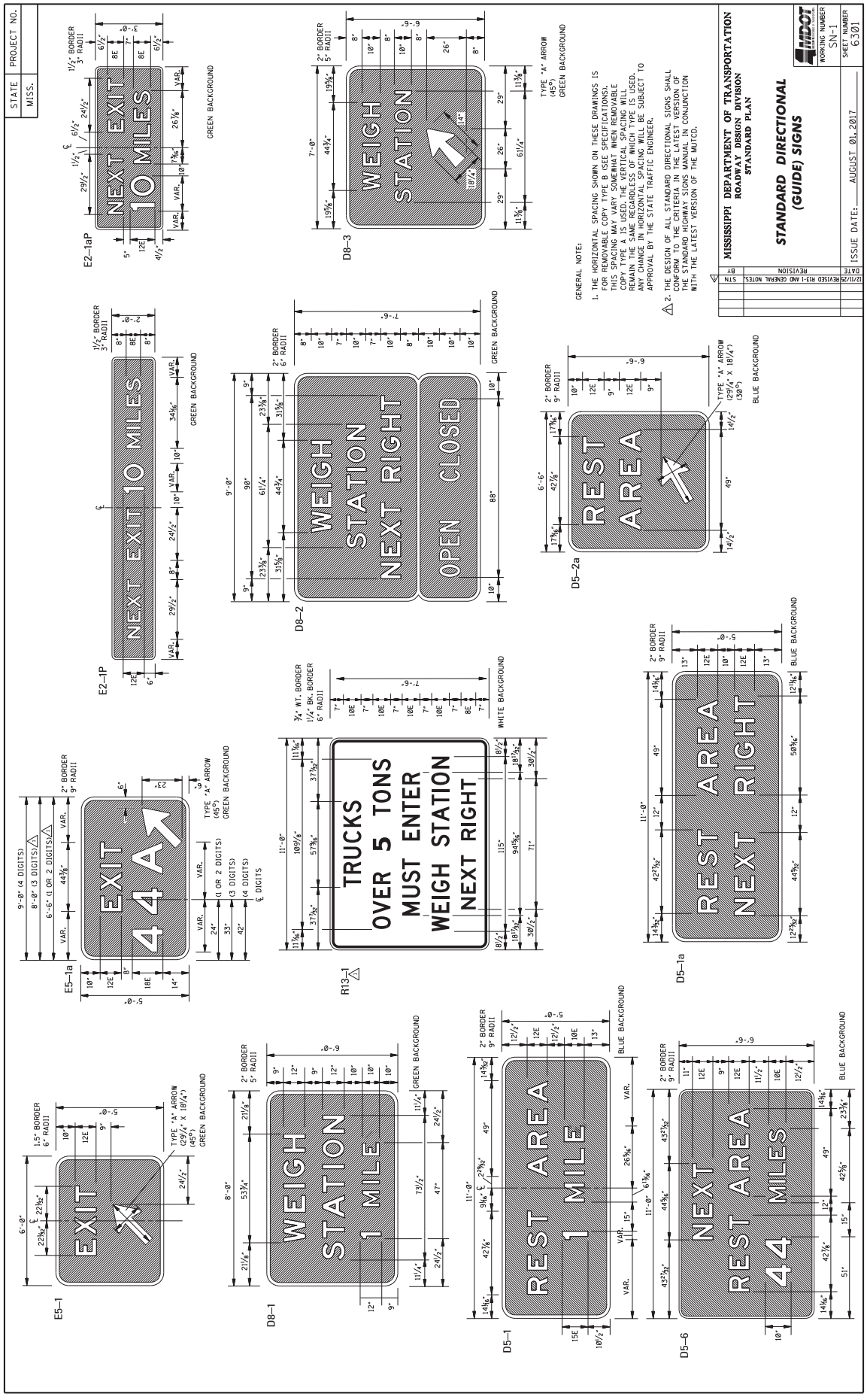

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION
FOR ROADSIDE HAZARDS
ON DIVIDED HIGHWAYS
WORKING NUMBER GR-4B
SHEET NUMBER 6216
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
SECTION A–A
SECTION B–B
SECTION C–C
SECTION 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: IF FORESLOPE, SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
** NOTE: FOR STEEL POST AND 4"x6" POWDER POST MODIFIED WOOD BLOCKOUT, SEE STANDARD PLAN FOR POST AND BLOCKOUT DETAILS.
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.

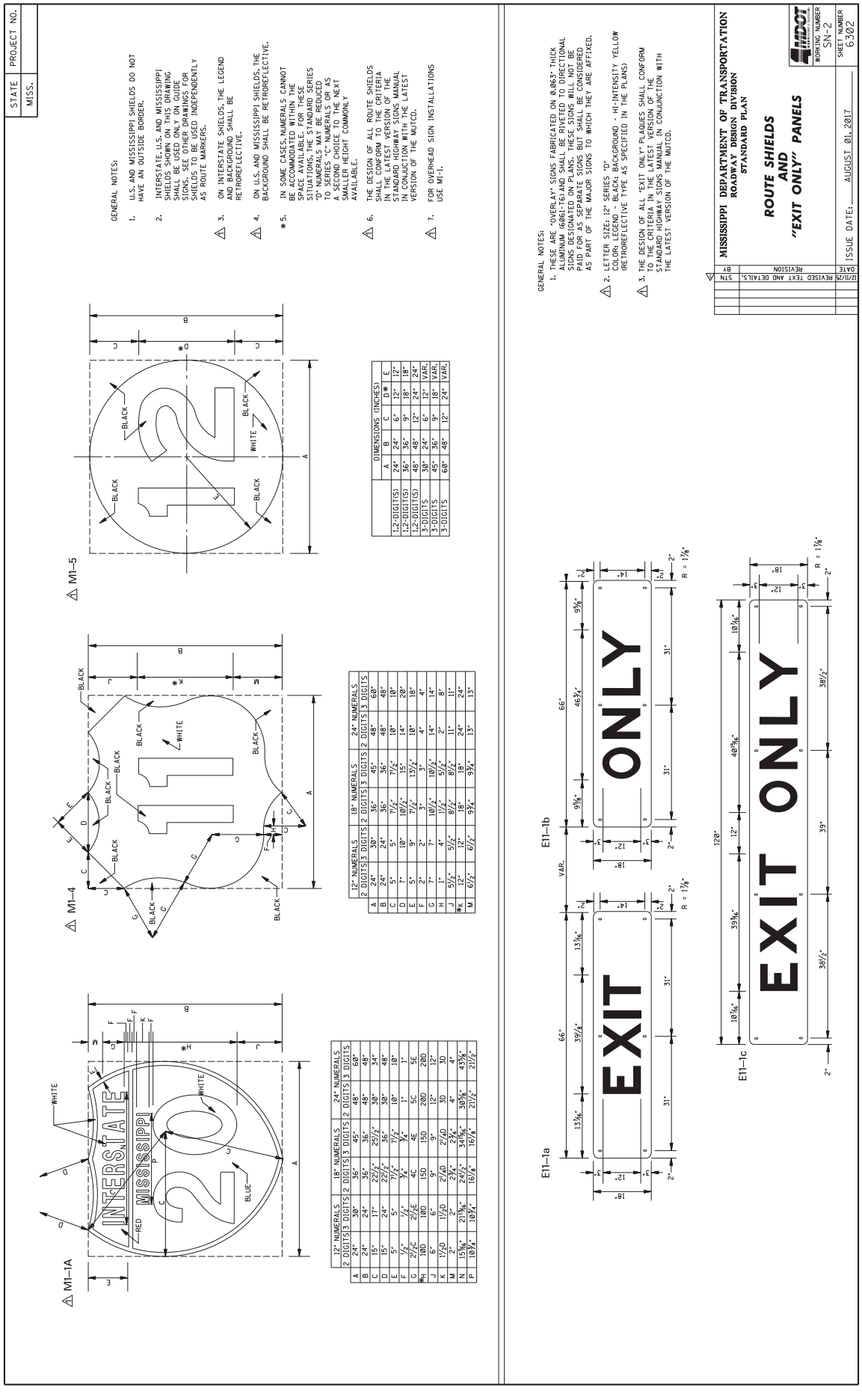

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON 2-LANE, 2-WAY HIGHWAYS
WORKING NUMBER GR-4C
SHEET NUMBER 6217
ISSUE DATE: MAY 01, 2017
DATE
BY
REVISION
SECTION A-A
SECTION B-B
SECTION C-C
SECTION 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 12FB31 AND WOOD BLOCKOUT, 23.25".
† NOTE: IF FORESLOPE SHOWN ELSEWHERE ON PLANS IS OTHER THAN 6:1, TRANSITION WIL. OCCUR IN AREA SHOWN.
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.
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.
THE POST SHALL BE WRAPPED WITH ONE LAYER OF 1/4" THICK EXPANDED POLYSTYRENE FOAM SHEETING AND ONE WRAP OF LIGHTWEIGHT BUILDING PAPER. THE TOP 1' SHALL BE FILLED WITH BUTYL RUBBER CAULKING (COMMERCIAL GRADE) OR OTHER APPROVED WATERPROOFING MATERIAL.
TOP OF NEW BOX CULVERT OR BRIDGE FOOTING.
TOP OF EXISTING BOX CULVERT OR BRIDGE FOOTING.
1/2" DOWEL BARS 12" LONG 4 REQUIRED PER POST. NO SPECIAL EQUIPMENT WILL BE MADE FOR CONCRETE OR DOWELS.
DETAIL OF POST INSTALLATION WITH COVER LESS THAN NORMAL POST LENGTH


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
BY REVISION DATE
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"
BLOCKOUT FOR POST 9 OF TYPE "1" BRIDGE END SECTION
6" X 12" WOOD BLOCKOUT
MODIFIED WOOD BLOCKOUT
PLAN
ELEVATION FOR WOOD POST
ELEVATION FOR STEEL POST
¾" DIA. (TYP.)
CROSS-SECTION VIEW OF C6 x 8.2
PROFILE VIEW OF POSTS
GUARDRAIL BOLT "C" WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
6" X 12" MODIFIED WOOD BLOCKOUT, 29½" LONG
#6 X 9 STEEL POST, 6'-6" LONG
C6 x 8.2
10¹/₂° SLOPE OR FLATTER
GUARDRAIL BOLT (25") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
STEEL POST
RECESSED NUT WITH PLAIN ROUND WASHER "F"
GUARDRAIL BOLT (25") NO WASHER.
6" X 12" WOOD BLOCKOUT, 29 ½" LONG
10" X 10" WOOD POST, 6'-0" LONG
WOOD POST
GUARDRAIL BOLT "E" WITH RECTANGULAR PLATE WASHER UNDER HEAD.
DRILL ¾" DIA. HOLE (TYP.)
POST BOLT SLOTS ¾" X 2½" (TYP.)
LONGITUDINAL RUB RAIL
C6 x 8.2
DIAGONAL RUB RAIL
¾" DIA HOLE FOR ⅝" DIA. LAG SCREW OR BOLT
6.25" (MEASURED ALONG RUB RAIL)
HEX NUT AND BOLT "F"
PLAIN ROUND WASHER "F"
¾" - 11 UNC THREAD PITCH
AS SPECIFIED
AS NOTED
25° OR 15° GUARDRAIL BOLT
BUTTON HEAD
OVAL SHOULDER
"L" BRACKET
¾" x 1½" SLOTS
RUB RAIL CONNECTOR BRACKET
¾" DIAMETER
16° BEND


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.
25.5° BEND
BEND
1" DIA. HOLES (TYP.)
OPTIONAL ¾" X 2½" SLOT
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".
TS8" X 6" X 0.1875"
¾" DIA. HOLES FOR MOUNTING SOIL PLATE
¾" DIA. HOLE TO ATTACH TERMINAL POST
SIDE
FRONT
BEARING PLATE
2-⅞" DIA. HOLES FOR 16d COMMON NAILS
1⅛" DIA. HOLE
TERMINAL POST FOUNDATION TUBE INSTALLATION
NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH a STRESS GRADE OF 1200 lbs/in².
¾" X 2¾" SLOTTED HOLE
⅞" DIA. HOLE
S4S TIMBER
2½" DIA. HOLE FOR POST SLEEVE ON END POST ONLY
SOIL PLATE
NOTE: 2 REQUIRED
¼" THICK PLATE
¾" DIA. HOLES
RECTANGULAR GUARDRAIL PLATE WASHER
1" X ⅞" SLOT
RECESSED NUT
⅝" - 11 UNC MODIFIED HEAVY HEX NUT
1" DIA. X ⅛" DEEP RECESS BOTH SIDES
HEX NUT AND BOLT "F"
⅝" - 11 UNC THREAD PITCH
AS SPECIFIED
HEX NUT "H"
1" - 8 UNC THREAD PITCH
GUARDRAIL BOLT
⅝" - 11 UNC THREAD PITCH
45°
BUTTON HEAD
OVAL SHOULDER
GUARDRAIL BOLTS
BOLT | L | T (MIN.)
"A" | 1¼" | 1"
"B" | 12" | 4"
"C" | 14" | 4"
"D" | 22" | 4"
"E" | 24" | 4"
"F" | 33" | 4"
"G" | 2' | 1½"
"H" | 10' | 4"
"I" | 25' | 4"
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
PLAIN ROUND WASHER
PLAIN ROUND WASHERS
WASHER | A (NOM.) | B (NOM.) | C (NOM.)
"F" | ¾" | 1½" | ⅝"
"H" | 1⅛" | 2" | ⅝"
END PLATE
BRACKET
8- HEX NUT AND BOLT "F", 1½" LONG, WITH 8- PLAIN ROUND WASHER "F" UNDER HEAD
TERMINAL RAIL
ANCHOR PLATE ASSEMBLY DETAILS
ANCHOR PLATE
ANCHOR CABLE
BENT PLATE (16" X 12½" X ⅜")
¾" DIA. HOLES
THREE SIDES
WELD END PLATE TO BRACKET
ANCHOR PLATE
HEX NUT "H"
PLAIN ROUND WASHER "H"
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)
1" DIA.
CABLE ANCHOR ASSEMBLY

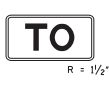
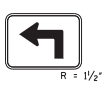
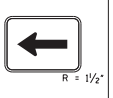
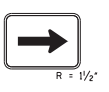
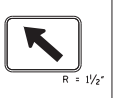
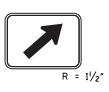

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS
WORKING NUMBER SN-8
SHEET NUMBER 6314
ISSUE DATE: AUGUST 01, 2017
REVISION DATE BY
REVISED TEXT 12/1/25 STN
GENERAL NOTES:
1. DELINEATORS AND TYPE 3 OBJECT MARKER SHALL BE RETROREFLECTIVE SHEETING ON 0.080" THICK ALUMINUM SHEET OR 14 GAGE GALVANIZED SHEET STEEL.
2. DELINEATOR, TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGN POSTS SHALL BE GALVANIZED STEEL. THE POSTS SHALL BE FABRICATED BEFORE THE METAL IS GALVANIZED.
3. WEIGHT WITHOUT GROUND PLATES:
A. DELINEATOR POST 7'-0" - 2.0 lb/ft TO 2.5 lb/ft
B. TYPE 3 OBJECT MARKER POST 9'-0" - 2.5 lb/ft TO 3.0 lb/ft
C. DISTANCE REFERENCE SIGN POST 10'-0",11'-0", & 12'-0" - 3.0 lb/ft TO 3.5 lb/ft
4. UNIT PRICE OF DELINEATORS AND TYPE 3 OBJECT MARKERS SHALL INCLUDE COST OF POST. DISTANCE REFERENCE SIGN POST WILL BE PAID FOR PER FOOT.
5. RADIUS IN BENDS OF POST CROSS SECTION NOT TO EXCEED 5/8 FOR HOT ROLLED SECTION.
6. GROUND PLATE NOT REQUIRED ON U-SECTION POST.
NOTE: DELINEATORS SHALL BE FASTENED TO U-SECTION POSTS WITH 1/4" DIA. BLIND FASTENERS OF THE COLLAR TYPE.
REAR VIEW OF DELINEATOR ASSEMBLY
DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR
DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR
MOUNTING DETAIL
DELINEATORS, OBJECT MARKERS OR DISTANCE REFERENCE SIGNS (D10-1, D10-1A, D10-2, D10-2A, D10-3, D10-3A, D10-4, AND D10-5) ARE MOUNTED TO THIS FACE AS SHOWN.
DIRECTION OF TRAFFIC
REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY
NOTE: TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGNS SHALL BE FASTENED TO U-SECTION POSTS WITH 3/8" DIA. BLIND FASTENERS OF THE COLLAR TYPE.
DETAIL OF TYPE 3 OBJECT MARKER
NOTE: COLORS- BLACK AND YELLOW. STRIPING SHOWN ABOVE FOR RIGHT SIDE ONLY. STRIPES SLANT DOWNWARD TO THE RIGHT FOR LEFT SIDE OF BRIDGE END. SEE DETAIL BELOW.
DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION
DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY
NOTE: SIGN MOUNTING ON LEFT LANE SHOULDER SHALL BE 90° OPPOSITE THE RIGHT LANE STATION. CONDITIONS ARE SUCH THAT A MILE SIGN CANNOT BE LOCATED WITHIN 500 FEET OF ITS TRUE LOCATION, IT SHALL BE OMITTED ENTIRELY.
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP
DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE


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 STN
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
E2-1P
NEXT EXIT 10 MILES
D8-3
WEIGH STATION
D8-2
WEIGH STATION NEXT RIGHT
OPEN CLOSED
D5-2a
REST AREA
E5-1a
EXIT 44
E5-1
EXIT
R13-1
TRUCKS OVER 5 TONS MUST ENTER WEIGH STATION NEXT RIGHT
D5-1a
REST AREA NEXT RIGHT
D8-1
WEIGH STATION 1 MILE
D5-1
REST AREA 1 MILE
D5-6
NEXT REST AREA 44 MILES
GREEN BACKGROUND
BLUE BACKGROUND
WHITE BACKGROUND
TYPE "A" ARROW (29¼" X 18¼") (45°)
TYPE "A" ARROW (29¼" X 18¼") (30°)


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 AS 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 ACCOMMODATED 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.
DIMENSIONS (INCHES)
1,2-DIGIT(S) A 24" B 24" C 6" D 12" E 12"
1,2-DIGIT(S) A 36" B 36" C 9" D 18" E 18"
1,2-DIGIT(S) A 48" B 48" C 12" D 24" E 24"
3-DIGITS A 30" B 24" C 6" D 12" E VAR.
3-DIGITS A 45" B 36" C 9" D 18" E VAR.
3-DIGITS A 60" B 48" C 12" D 24" E VAR.
△ M1-1A
INTERSTATE
MISSISSIPPI
20
RED
WHITE
BLUE
△ M1-4
11
BLACK
WHITE
△ M1-5
12
BLACK
WHITE
12" NUMERALS 18" NUMERALS 24" NUMERALS
2 DIGITS 3 DIGITS 2 DIGITS 3 DIGITS 2 DIGITS 3 DIGITS
A 24" 36" 36" 36" 48" 48"
B 24" 36" 36" 36" 48" 48"
C 15" 17" 22½" 25½" 30" 34"
D 15" 24" 22½" 36" 30" 48"
E 5" 5" 7½" 7½" 10" 10"
F ½" ½" ¾" ¾" 1" 1"
G 2½C 2½E 4C 4E 5C 5E
*H1 10D 10D 15D 15D 20D 20D
J 6" 6" 9" 9" 12" 12"
K 1½D 1½D 2¼D 2¼D 3D 3D
M 2" 2" 2¾" 2¾" 4" 4"
N 15⅜" 21⅜" 23⅝" 34⅜" 30⅝" 43⅝"
P 10¼" 10¼" 16⅛" 16⅛" 21½" 21½"
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"
13⅜"
39⅛"
31"
9⅝"
46¾"
18"
12"
14"
2"
R = 1⅞"
△ E11-1b
△ E11-1c
EXIT ONLY
120"
10⅜"
35⅜"
40⅝"
38½"
39"
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
ROUTE SHIELDS AND "EXIT ONLY" PANELS
WORKING NUMBER SN-2
SHEET NUMBER 6302
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY STN
12/11/25 REVISED TEXT AND DETAILS.

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"	⚠1 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"	
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"		⚠1 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

MDOT
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	STOP		YIELD R=2" R=3" R=4"			SPEED LIMIT 70 R=1½" R=2¼" R=3"			SPEED LIMIT 70 MINIMUM 40 R=3"	R=1½" R=2¼"		R=1½" R=2¼"		R=1½" R=2¼"		ONLY R=1⅞"	SLOWER TRAFFIC KEEP RIGHT 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"			DIVIDED HIGHWAY	DO NOT ENTER R=1⅞" R=3"		WRONG WAY R=2¼"	ONE WAY R=1½"	ONE WAY R=1½"	EMERGENCY PARKING ONLY R=2¼"		KEEP OFF MEDIAN R=3"	
LETTER & NUMERAL SERIES					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.

SYM	BY	REVISED TEXT REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

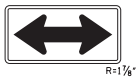
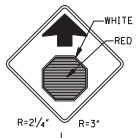
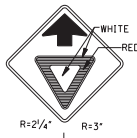
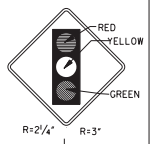
MDOT

WORKING NUMBER SN-3A

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER 6304

STATE	PROJECT NO.
MISS.	

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	¾" BLACK ½" YELLOW	¾" BLACK ½" 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"	48" X 24"	48" X 24"	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	
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & "LIGHTS"	BACKGROUND & "LIGHTS"	
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	2	2	1	1	1	1	
NUMBER OF HOLES TO BE PUNCHED (⅝" DIA.)	2	4	2	4	4	4	2	4	2	4	
PUNCHING DISTANCE FROM EACH VERT. EDGE	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	
PUNCHING DISTANCE FROM TOP EDGE	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	

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	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"	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			
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND			
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1			
NUMBER OF HOLES TO BE PUNCHED (⅝" DIA.)	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	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	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.

DATE	REVISED TEXT REVISION	BY
12/17/25		SJN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

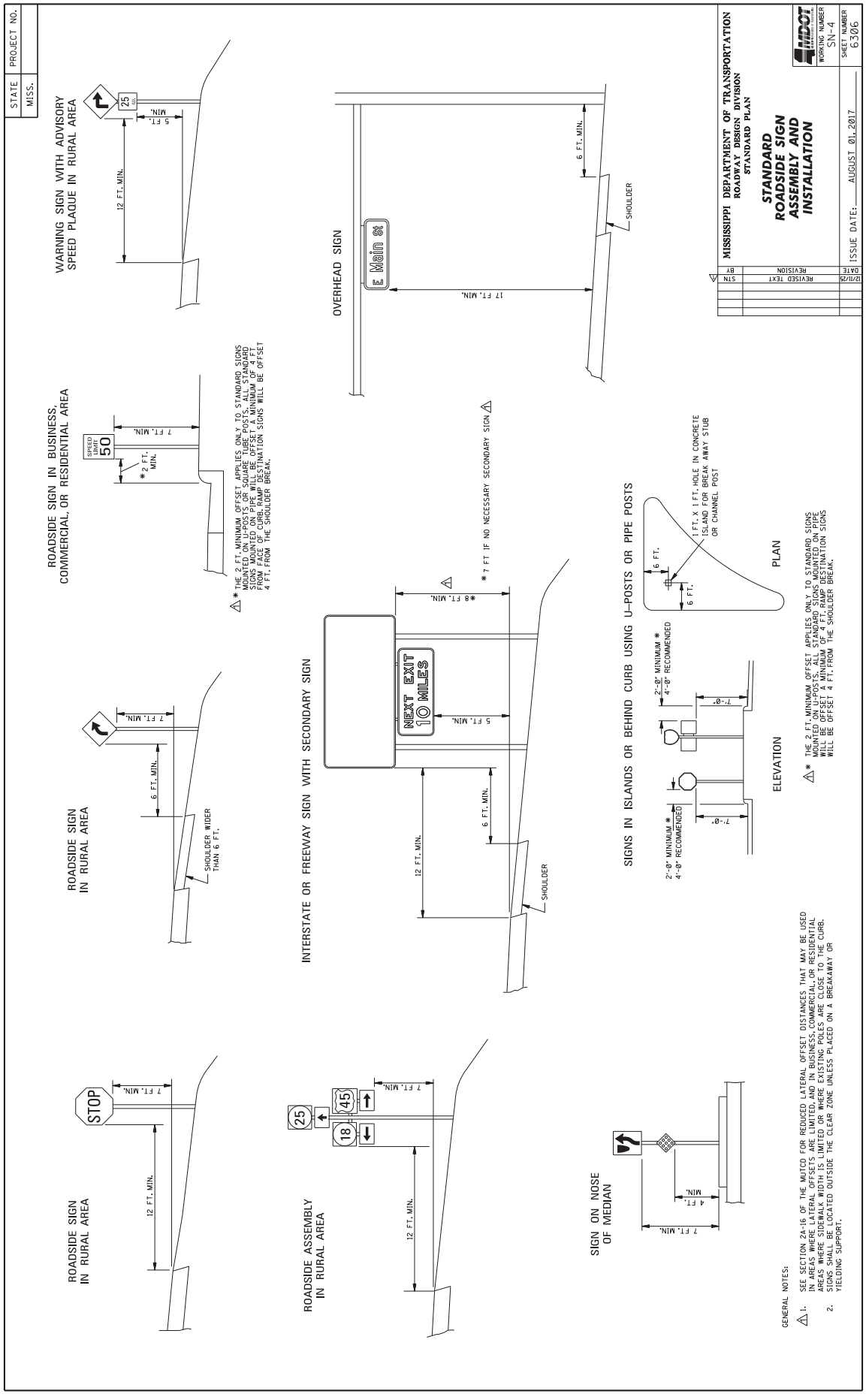
STANDARD ROADSIDE SIGNS

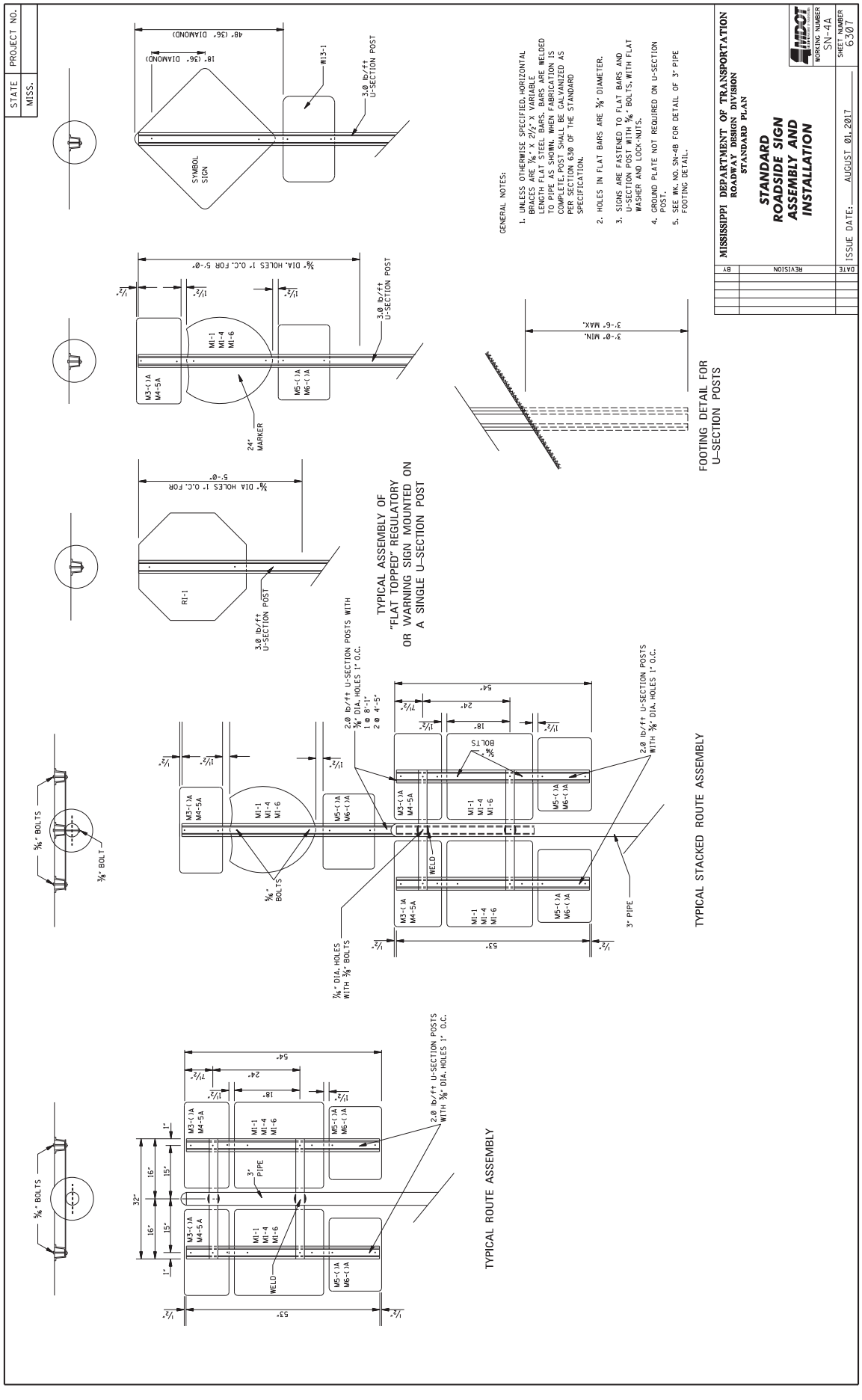
MDOT

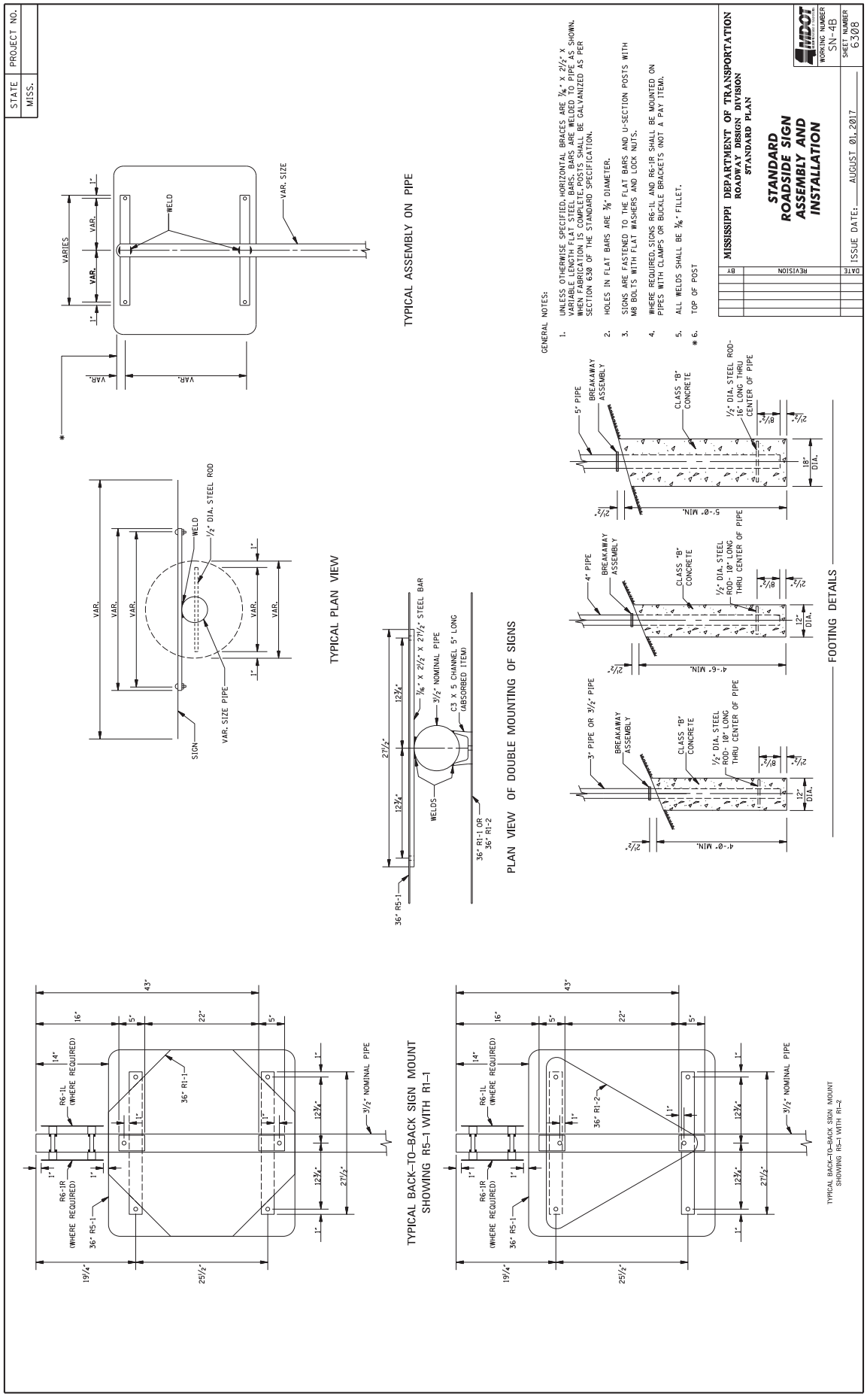
WORKING NUMBER
SN-3B

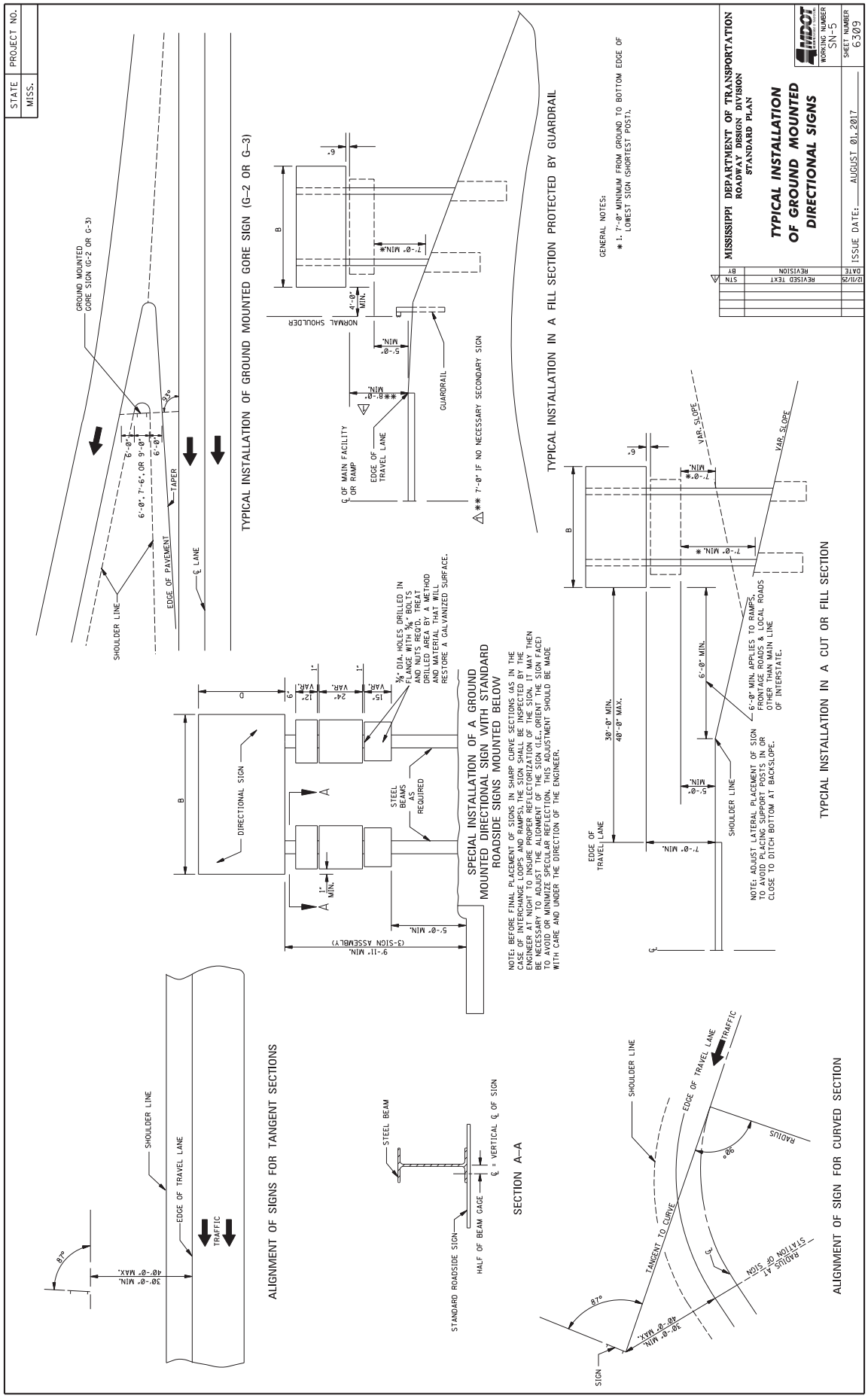
ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6305

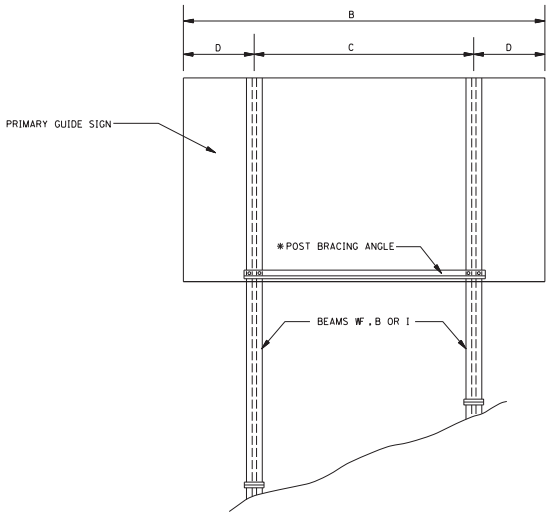

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION
WORKING NUMBER SN-4
SHEET NUMBER 6306
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT STN 12/11/25
WARNING SIGN WITH ADVISORY SPEED PLAQUE IN RURAL AREA
ROADSIDE SIGN IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA
ROADSIDE SIGN IN RURAL AREA
ROADSIDE SIGN IN RURAL AREA
ROADSIDE ASSEMBLY IN RURAL AREA
INTERSTATE OR FREEWAY SIGN WITH SECONDARY SIGN
OVERHEAD SIGN
SIGNS IN ISLANDS OR BEHIND CURB USING U-POSTS OR PIPE POSTS
SIGN ON NOSE OF MEDIAN
ELEVATION
PLAN
SHOULDER
SHOULDER WIDER THAN 6 FT.
12 FT. MIN.
6 FT. MIN.
5 FT. MIN.
7 FT. MIN.
17 FT. MIN.
4 FT. MIN.
2'-0" MINIMUM * 4'-0" RECOMMENDED
1 FT. X 1 FT. HOLE IN CONCRETE ISLAND FOR BREAK AWAY STUB OR CHANNEL POST
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 3/16" X 2 1/2" 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 3/8" DIAMETER.
3. SIGNS ARE FASTENED TO FLAT BARS AND U-SECTION POST WITH 3/8" 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
3/8" DIA. HOLES 1" O.C. FOR 5'-0"
R1-1
24" MARKER
3'-0" MIN.
3'-6" MAX.
2.0 lb/ft U-SECTION POSTS WITH 3/8" DIA. HOLES 1" O.C.
1 @ 8"-1"
2 @ 4"-5"
3/8" BOLTS
3/8" BOLT
WELD
3" PIPE
BOLTS
M3-( )A M4-5A
M1-1 M1-4 M1-6
M5-( )A M6-( )A

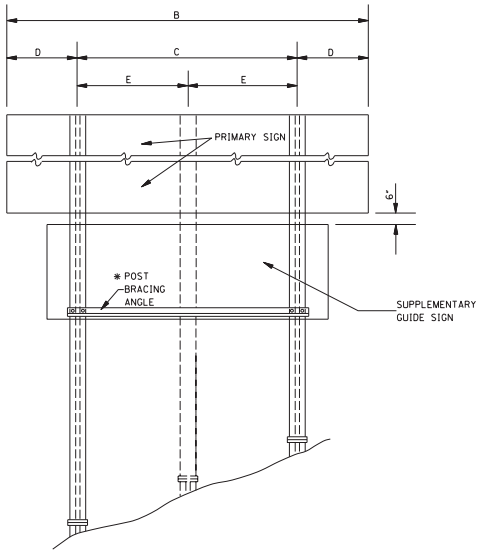

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION
WORKING NUMBER SN-48
SHEET NUMBER 6308
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE 7/8" 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 STN 12/11/25
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
GENERAL NOTES:
* 1. 7'-0" MINIMUM FROM GROUND TO BOTTOM EDGE OF LOWEST SIGN (SHORTEST POST).
℄ OF MAIN FACILITY OR RAMP
EDGE OF TRAVEL LANE
GUARDRAIL
NORMAL SHOULDER
7'-0" MIN.*
4'-0" MIN.
5'-0" MIN.
8'-0" MIN.**
** 7'-0" IF NO NECESSARY SECONDARY SIGN
SPECIAL INSTALLATION OF A GROUND MOUNTED DIRECTIONAL SIGN WITH STANDARD ROADSIDE SIGNS MOUNTED BELOW
DIRECTIONAL SIGN
B
D
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"
9"
1"
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 MISALIGNED 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
7'-0" MIN.*
6'-0" MIN.
5'-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
8°
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

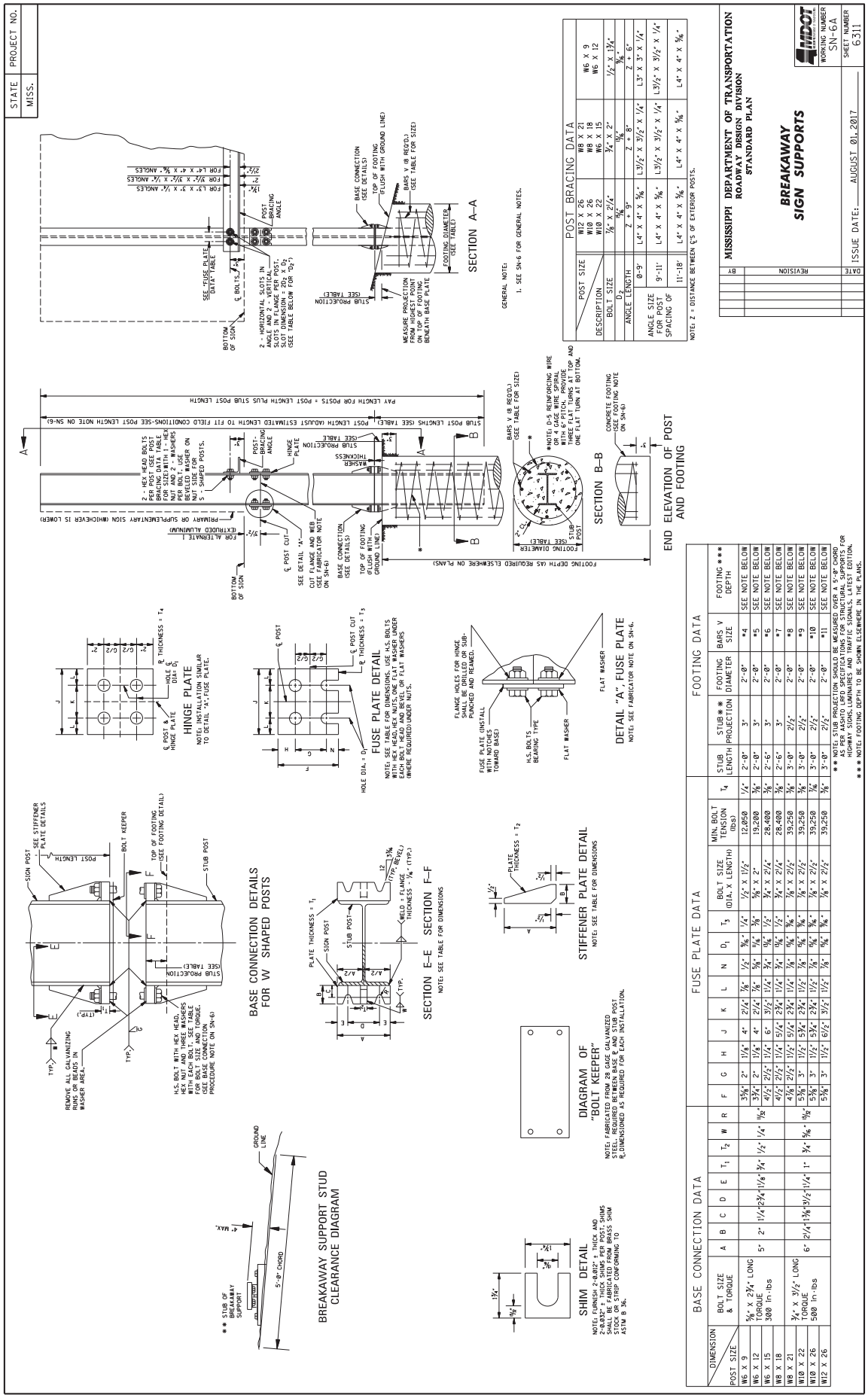
BREAKAWAY SIGN SUPPORTS

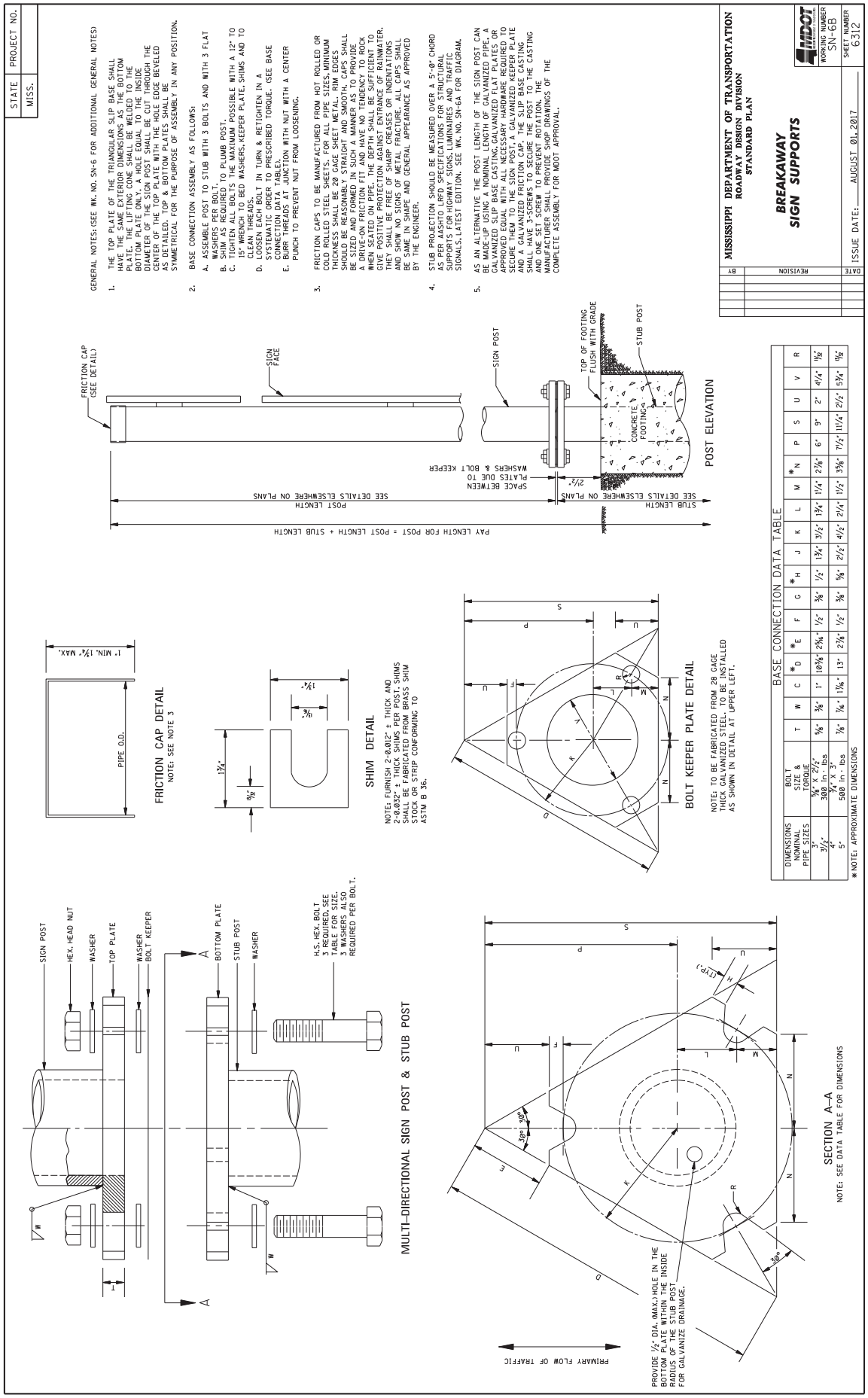
MDOT

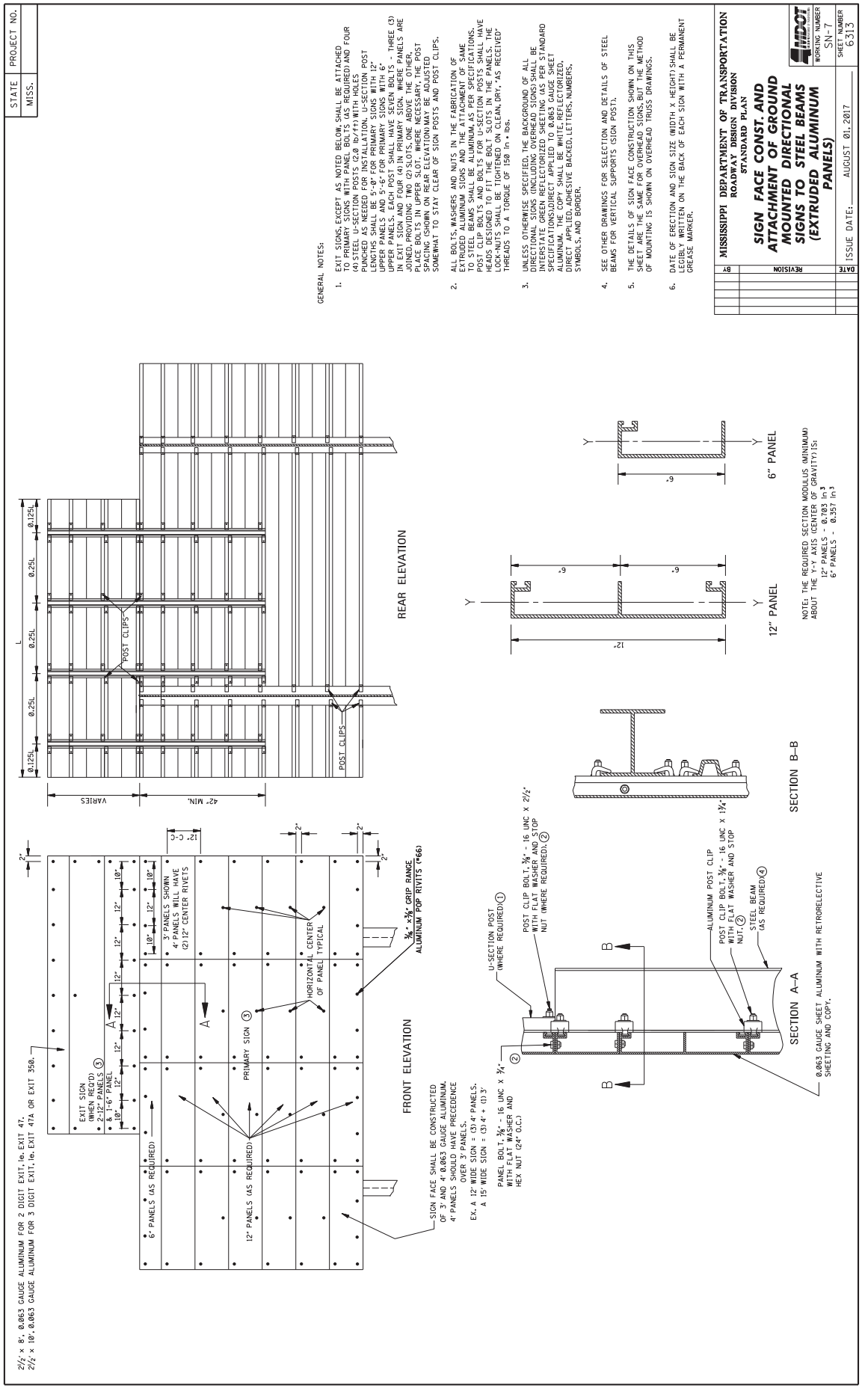
WORKING NUMBER
SN-6

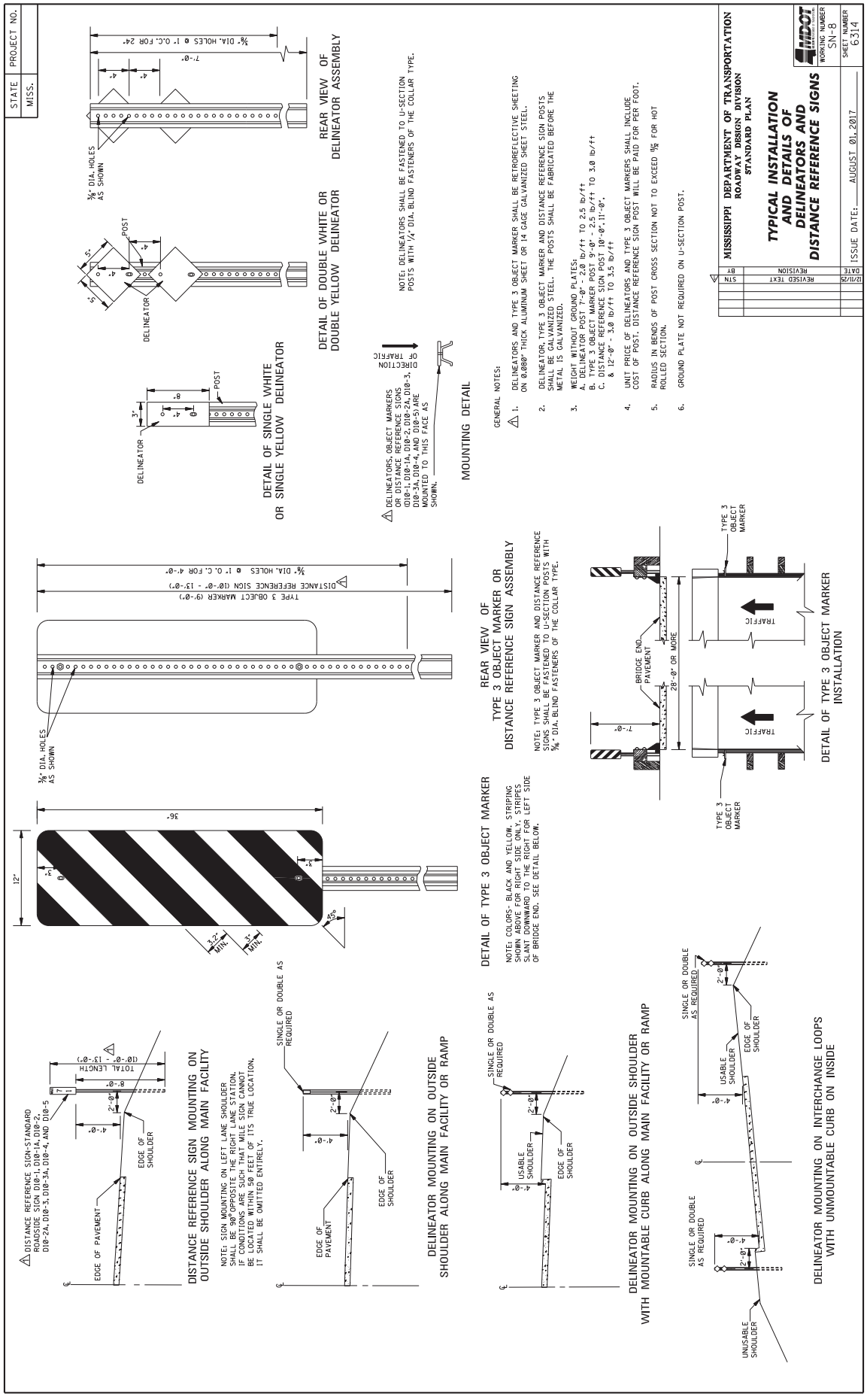
ISSUE DATE: AUGUST 01, 2017

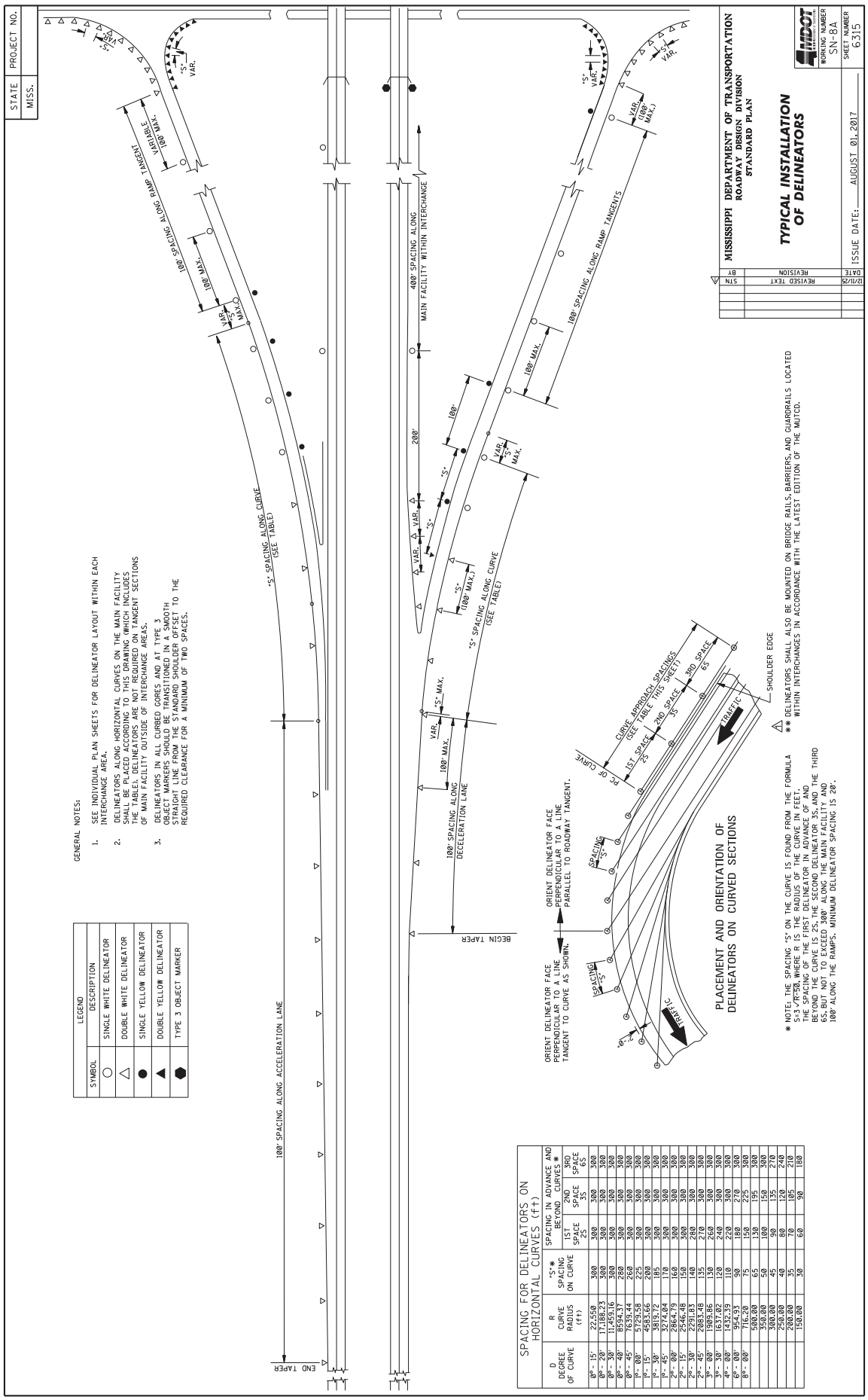
SHEET NUMBER
6310


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
BY REVISION DATE
END ELEVATION OF POST AND FOOTING
SECTION A–A
SECTION B–B
GENERAL NOTE:
1. SEE SN-6 FOR GENERAL NOTES.
POST BRACING DATA
BASE CONNECTION DETAILS FOR W SHAPED POSTS
FUSE PLATE DETAIL
HINGE PLATE
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


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 SEED 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 THICKNESS SHALL BE 12GA. SHEET METAL. RIM & 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. THEY SHALL BE FREE OF SHARP EDGES OR PROTRUSIONS AND SHOW 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 CAST ALUMINUM CAP 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 MDOT 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
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 In 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" | 1/2"
3 1/2" 4" | 3/4" X 3" 500 In 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"
*NOTE: APPROXIMATE DIMENSIONS
1" MIN. 1 3/4" MAX.
PIPE O.D.
FRICTION CAP DETAIL
NOTE: SEE NOTE 3
1 3/4"
5/8"
SHIM DETAIL
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.
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.
MULTI-DIRECTIONAL SIGN POST & STUB POST
PRIMARY FLOW OF TRAFFIC
PROVIDE 1/2" DIA. (MAX.) HOLE IN THE BOTTOM PLATE WITHIN THE RADIUS OF THE STUB POST FOR GALVANIZE DRAINAGE.
SECTION A-A
NOTE: SEE DATA TABLE FOR DIMENSIONS

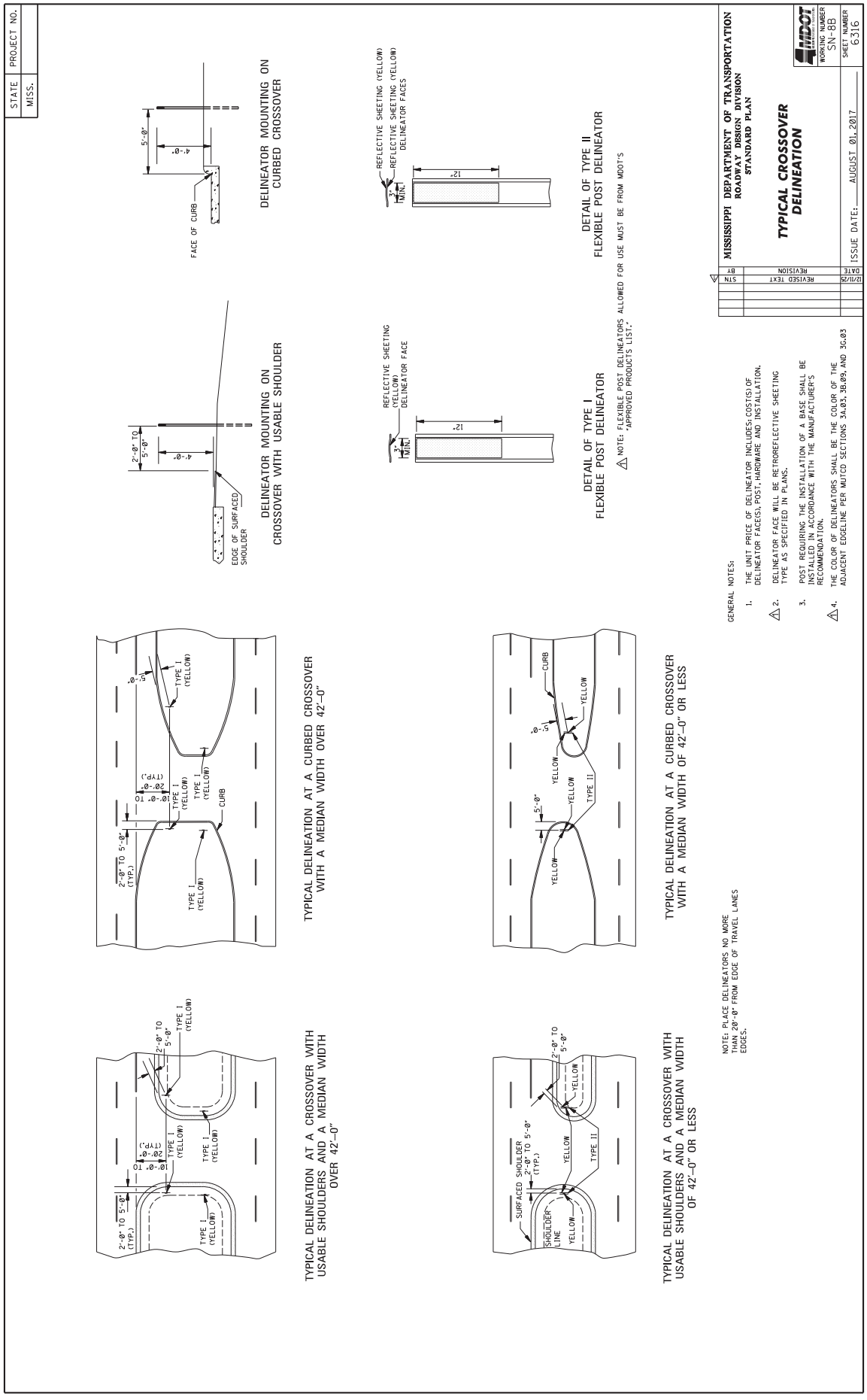

STATE MISS.
PROJECT NO.
GENERAL NOTES:
1. EXIT SIGNS, EXCEPT AS NOTED BELOW, SHALL BE ATTACHED TO PRIMARY SIGNS WITH PANEL BOLTS (AS REQUIRED) AND FOUR (4) STEEL U-SECTION POSTS 12'-0" LONG WITH 1" HOLES PUNCHED AS NEEDED FOR INSTALLATION. U-SECTION POST LENGTHS SHALL BE 5'-0" FOR PRIMARY SIGNS WITH 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, PLACED SO THAT THE UPPER SLOT WHERE NEEDED ON 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 INTERSTATE GREEN REFLECTORIZED SHEETING SHALL BE 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.
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
REVISION
BY
DATE
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)
12" PANELS (AS REQUIRED)
3' PANELS SHOWN
4' PANELS WILL HAVE
(2) 12" CENTER RIVETS
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 ¾" GRIP RANGE ALUMINUM POP RIVITS (*66)
FRONT ELEVATION
REAR ELEVATION
POST CLIPS
VARIES
42" MIN.
L
0.125L
0.25L
SECTION A–A
SECTION B–B
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.
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

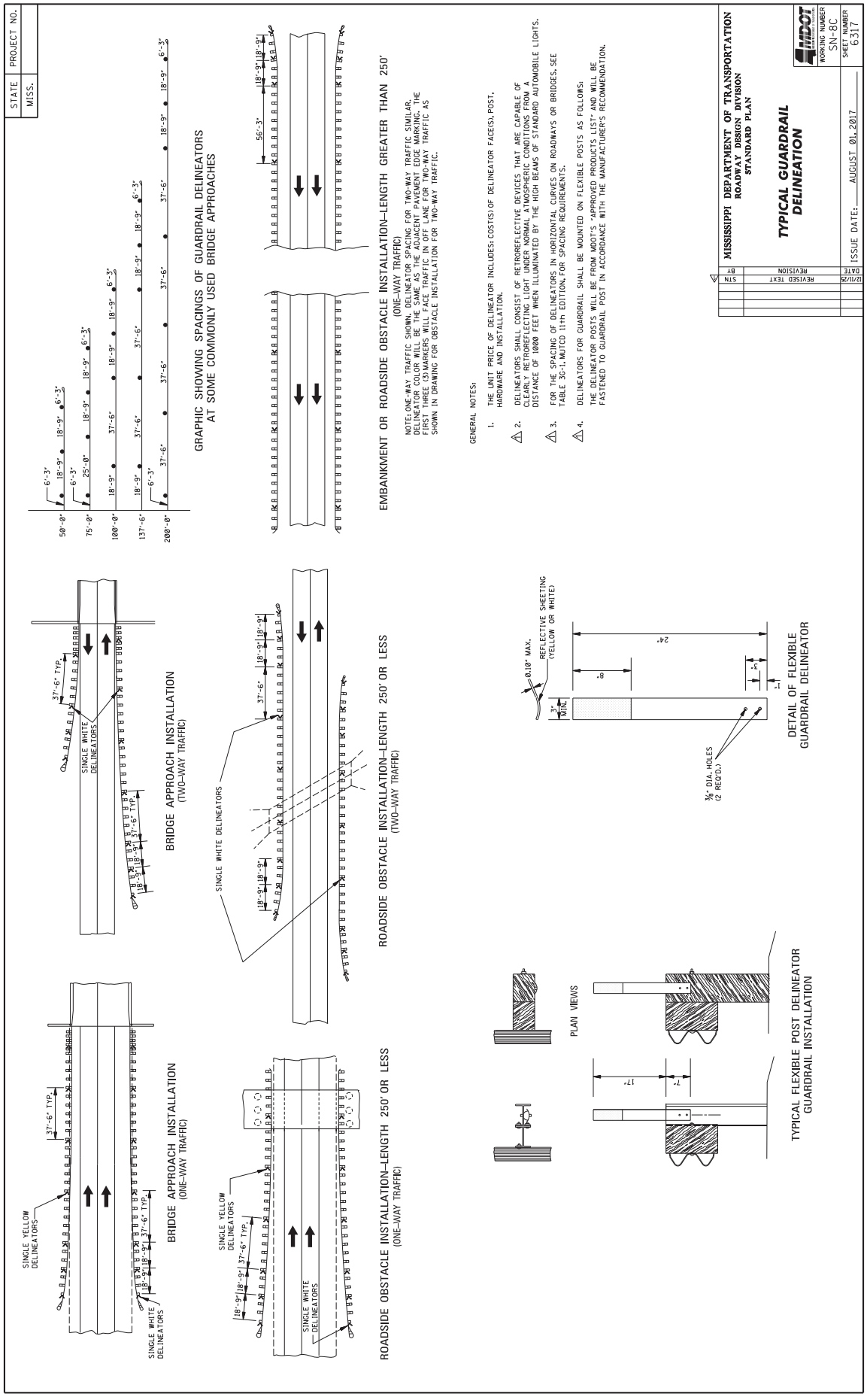

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS
WORKING NUMBER SN-8
SHEET NUMBER 6314
ISSUE DATE: AUGUST 01, 2017
REVISION DATE BY
REVISED TEXT 12/1/25 STN
GENERAL NOTES:
1. DELINEATORS AND TYPE 3 OBJECT MARKER SHALL BE RETROREFLECTIVE SHEETING ON 0.080" THICK ALUMINUM SHEET OR 14 GAGE GALVANIZED SHEET STEEL.
2. DELINEATOR, TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGN POSTS SHALL BE GALVANIZED STEEL. THE POSTS SHALL BE FABRICATED BEFORE THE METAL IS GALVANIZED.
3. WEIGHT WITHOUT GROUND PLATES:
A. DELINEATOR POST 7'-0" - 2.0 lb/ft TO 2.5 lb/ft
B. TYPE 3 OBJECT MARKER POST 9'-0" - 2.5 lb/ft TO 3.0 lb/ft
C. DISTANCE REFERENCE SIGN POST 10'-0",11'-0", & 12'-0" - 3.0 lb/ft TO 3.5 lb/ft
4. UNIT PRICE OF DELINEATORS AND TYPE 3 OBJECT MARKERS SHALL INCLUDE COST OF POST. DISTANCE REFERENCE SIGN POST WILL BE PAID FOR PER FOOT.
5. RADIUS IN BENDS OF POST CROSS SECTION NOT TO EXCEED 5/8 FOR HOT ROLLED SECTION.
6. GROUND PLATE NOT REQUIRED ON U-SECTION POST.
NOTE: DELINEATORS SHALL BE FASTENED TO U-SECTION POSTS WITH 1/4" DIA. BLIND FASTENERS OF THE COLLAR TYPE.
REAR VIEW OF DELINEATOR ASSEMBLY
DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR
DELINEATOR
POST
3/4" DIA. HOLES AS SHOWN
3/4" DIA. HOLES @ 1'-0" O.C. FOR 24'
7'-0"
DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR
DELINEATORS OBJECT MARKERS OR DISTANCE REFERENCE SIGNS (D10-1, D10-1A, D10-2, D10-2A, D10-3, D10-3A, D10-4, AND D10-5) ARE MOUNTED TO THIS FACE AS SHOWN.
DIRECTION OF TRAFFIC
MOUNTING DETAIL
TYPE 3 OBJECT MARKER (9'-0")
DISTANCE REFERENCE SIGN (10'-0" - 13'-0")
3/4" DIA. HOLES @ 1'-0" O. C. FOR 4'-0"
3/4" DIA. HOLES AS SHOWN
REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY
NOTE: TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGNS SHALL BE FASTENED TO U-SECTION POSTS WITH 3/4" DIA. BLIND FASTENERS OF THE COLLAR TYPE.
36"
12"
3'-2" MIN.
3" MIN.
45°
DETAIL OF TYPE 3 OBJECT MARKER
NOTE: COLORS- BLACK AND YELLOW. STRIPING SHOWN ABOVE FOR RIGHT SIDE ONLY. STRIPES SLANT DOWNWARD TO THE RIGHT FOR LEFT SIDE OF BRIDGE END. SEE DETAIL BELOW.
BRIDGE END
PAVEMENT
7'-0"
28'-0" OR MORE
TRAFFIC
TYPE 3 OBJECT MARKER
DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION
DISTANCE REFERENCE SIGN-STANDARD ROADSIDE SIGN D10-1, D10-1A, D10-2, D10-2A, D10-3, D10-3A, D10-4, AND D10-5
TOTAL LENGTH (10'-0" - 13'-0")
8'-0"
2'-0"
4'-0"
EDGE OF SHOULDER
EDGE OF PAVEMENT
DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY
NOTE: SIGN MOUNTING ON LEFT LANE SHOULDER SHALL BE 500' OPPOSITE THE RIGHT LANE STATION. CONDITIONS ARE SUCH THAT A MILE SIGN CANNOT BE LOCATED WITHIN 500 FEET OF ITS TRUE LOCATION, IT SHALL BE OMITTED ENTIRELY.
SINGLE OR DOUBLE AS REQUIRED
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP
USABLE SHOULDER
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP
DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE
UNUSABLE SHOULDER

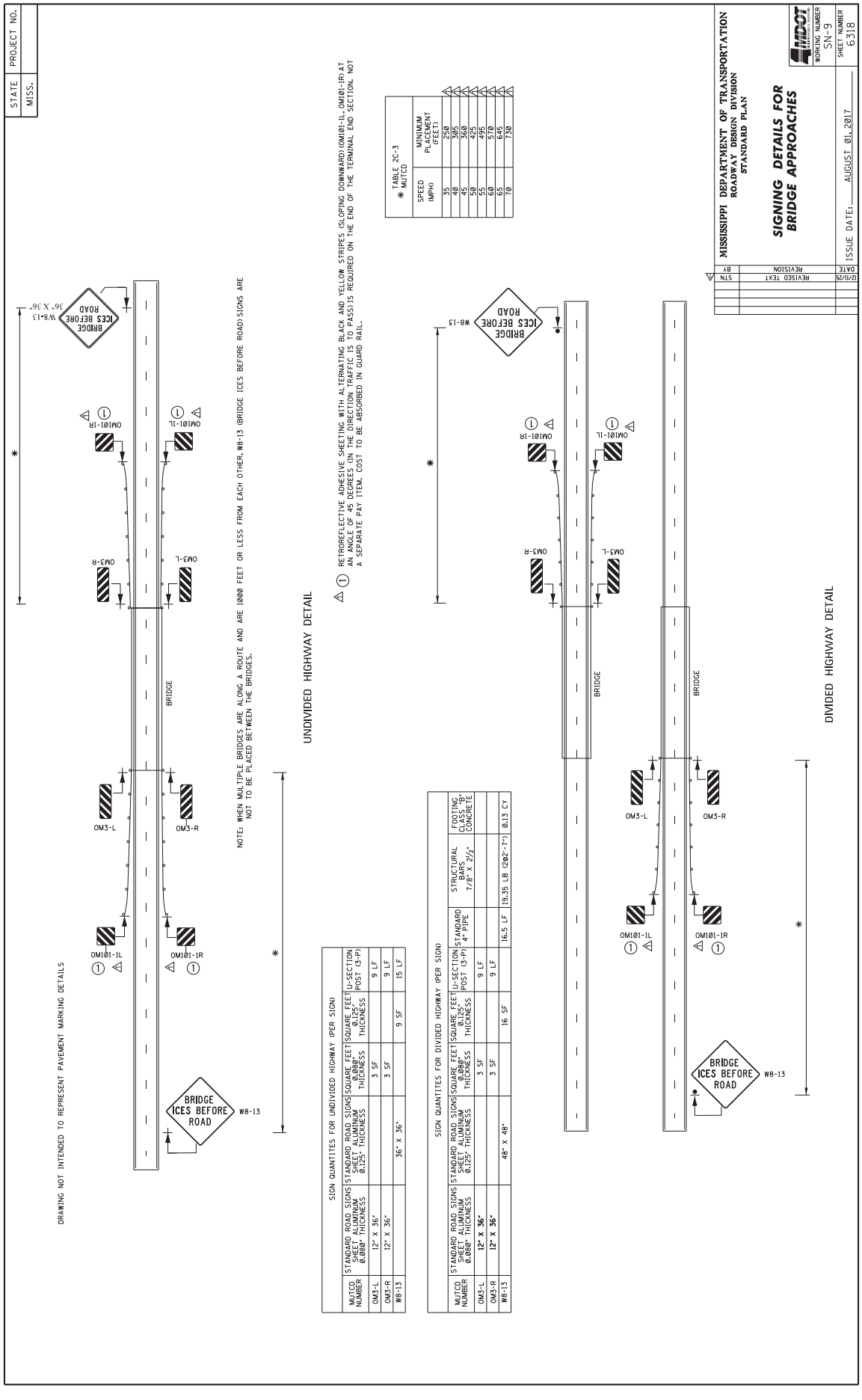


SPACING FOR DELINEATORS ON HORIZONTAL CURVES (ft)

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'	17,188.23	300	300	300	300
0° - 30'	11,459.16	300	300	300	300
0° - 40'	8,594.37	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	280	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'	1273.23	100	200	270	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.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL CROSSOVER DELINEATION
WORKING NUMBER SN-88
SHEET NUMBER 6316
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT STN 12/11/25
DELINEATOR MOUNTING ON CURBED CROSSOVER
FACE OF CURB
DELINEATOR MOUNTING ON CROSSOVER WITH USABLE SHOULDER
EDGE OF SURFACED SHOULDER
DETAIL OF TYPE II FLEXIBLE POST DELINEATOR
REFLECTIVE SHEETING (YELLOW)
DELINEATOR FACES
DETAIL OF TYPE I FLEXIBLE POST DELINEATOR
REFLECTIVE SHEETING (YELLOW)
DELINEATOR FACE
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"
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OF 42'-0" OR LESS
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OVER 42'-0"
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OF 42'-0" OR LESS
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


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" 6'-3" 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)
56'-3" 18'-9" 18'-9"
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 STN
DATE REVISION BY
12/11/25
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL GUARDRAIL DELINEATION
WORKING NUMBER SN-8C
ISSUE DATE: AUGUST 01, 2017
SHEET NUMBER 6517
BRIDGE APPROACH INSTALLATION (TWO–WAY TRAFFIC)
SINGLE WHITE DELINEATORS
37'-6" TYP.
BRIDGE APPROACH INSTALLATION (ONE–WAY TRAFFIC)
SINGLE YELLOW DELINEATORS
SINGLE WHITE DELINEATORS
ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS (TWO–WAY TRAFFIC)
SINGLE WHITE DELINEATORS
37'-6" 18'-9" 18'-9"
ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS (ONE–WAY TRAFFIC)
SINGLE YELLOW DELINEATORS
SINGLE WHITE DELINEATORS
18'-9" 18'-9" 37'-6" TYP.
0.10" MAX.
REFLECTIVE SHEETING (YELLOW OR WHITE)
3" MIN.
24"
8"
3/8" DIA. HOLES (2 REQ'D.)
DETAIL OF FLEXIBLE GUARDRAIL DELINEATOR
PLAN VIEWS
17"
7"
TYPICAL FLEXIBLE POST DELINEATOR GUARDRAIL INSTALLATION


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
SIGNING DETAILS FOR BRIDGE APPROACHES
WORKING NUMBER SN-9
SHEET NUMBER 6318
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISED TEXT STN
DRAWING NOT INTENDED TO REPRESENT PAVEMENT MARKING DETAILS
NOTE: WHEN MULTIPLE BRIDGES ARE ALONG A ROUTE AND ARE 1000 FEET OR LESS FROM EACH OTHER, W8-13 (BRIDGE ICES BEFORE ROAD) SIGNS ARE NOT TO BE PLACED BETWEEN THE BRIDGES.
UNDIVIDED HIGHWAY DETAIL
DIVIDED HIGHWAY DETAIL
BRIDGE
BRIDGE ICES BEFORE ROAD
W8-13
36" X 36"
OM101-1L
OM101-1R
OM3-L
OM3-R
* MUTCD TABLE 2C-3
SPEED (MPH) MINIMUM PLACEMENT (FEET)
35 250
40 305
45 360
50 425
55 495
60 570
65 645
70 730
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 OF REFLECTIVE SHEETING
SQUARE FEET OF REFLECTIVE SHEETING
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 OF REFLECTIVE SHEETING
SQUARE FEET OF REFLECTIVE SHEETING
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 16.5 LF 19.35 LB (2@2'-7") 0.13 CY
W8-13 48" X 48" 16 SF
1 RETROREFLECTIVE ADHESIVE SHEETING WITH ALTERNATING BLACK AND YELLOW STRIPES (SLOPING DOWNWARD) (OM101-1L, OM101-1R) AT AN ANGLE OF 45 DEGREES (IN THE DIRECTION TRAFFIC IS TO PASS) IS REQUIRED ON THE END OF THE TERMINAL END SECTION. NOT A SEPARATE PAY ITEM. COST TO BE ABSORBED IN GUARD RAIL.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 7624 **CODE: (SP)**

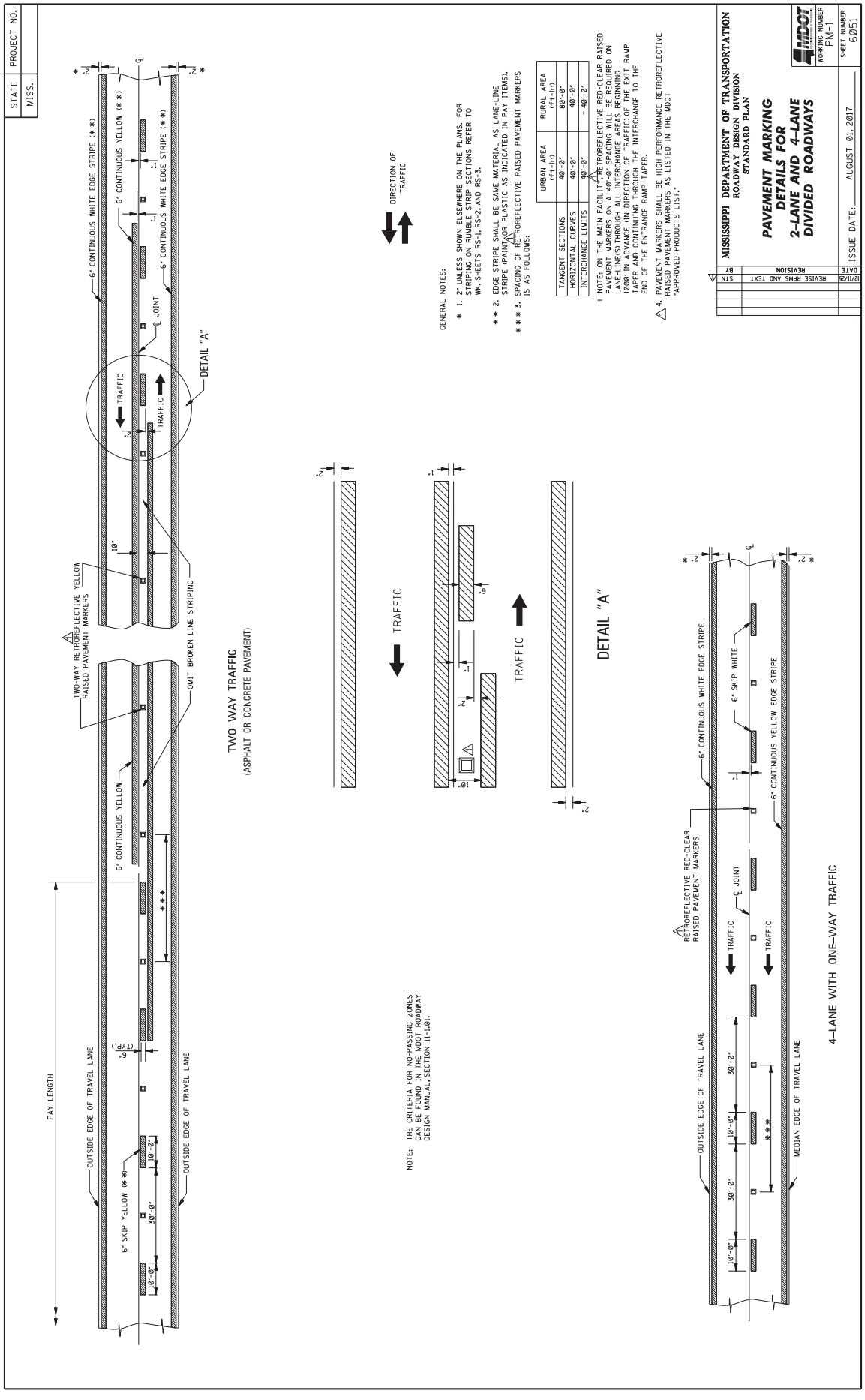
DATE: 01/20/2026

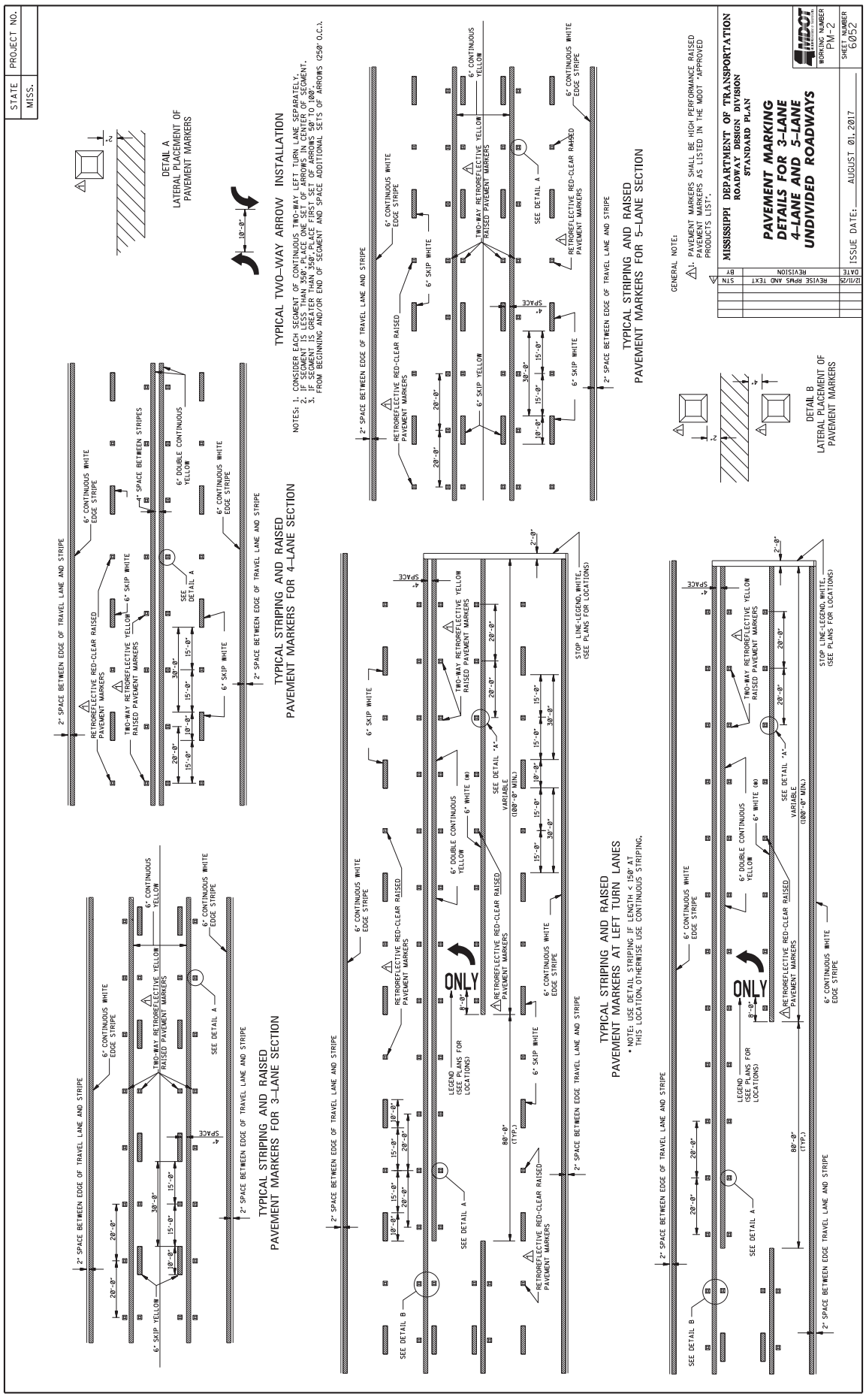
SUBJECT: Standard Drawings

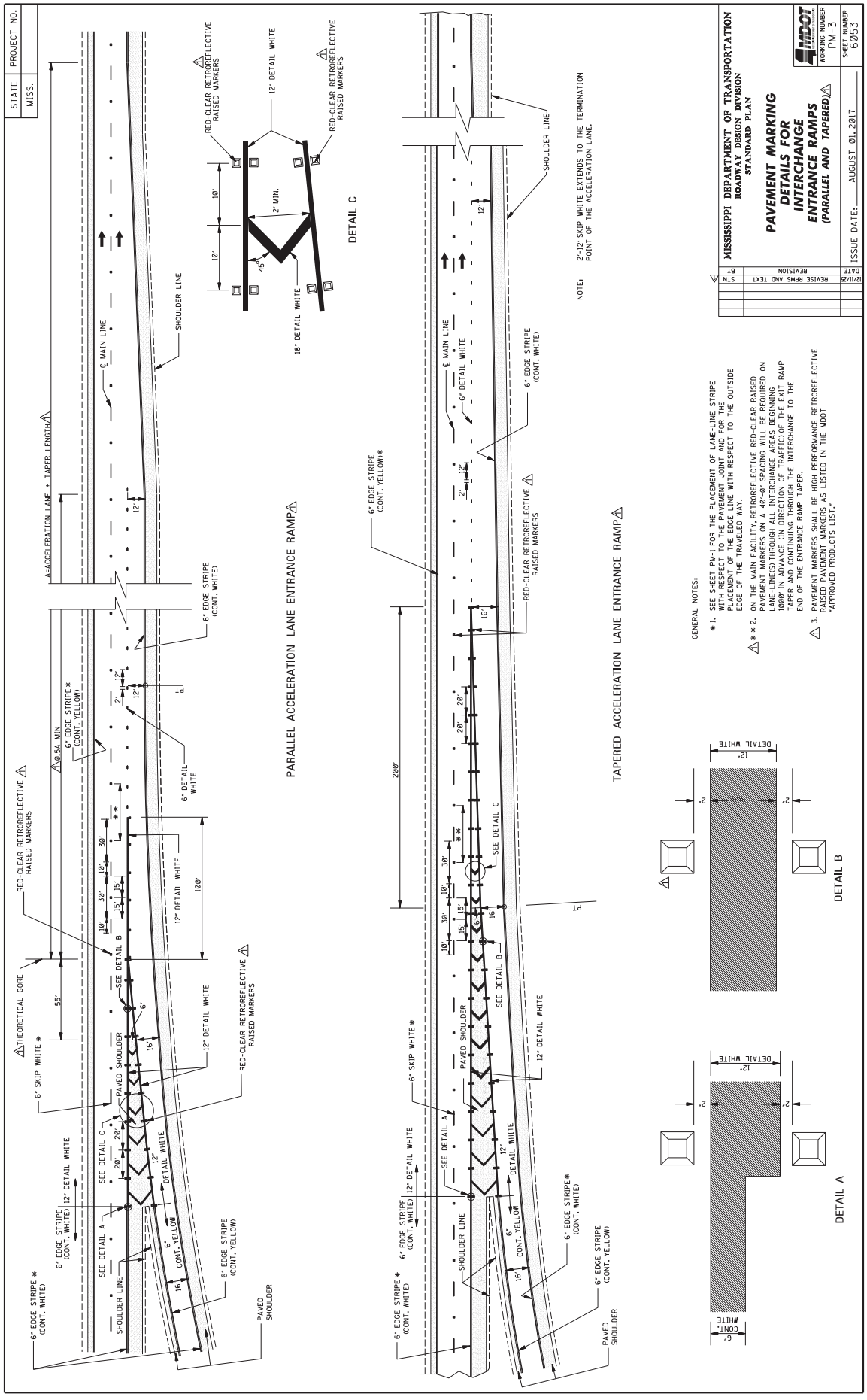
Standard Drawings attached hereto shall govern appropriate items of required work.

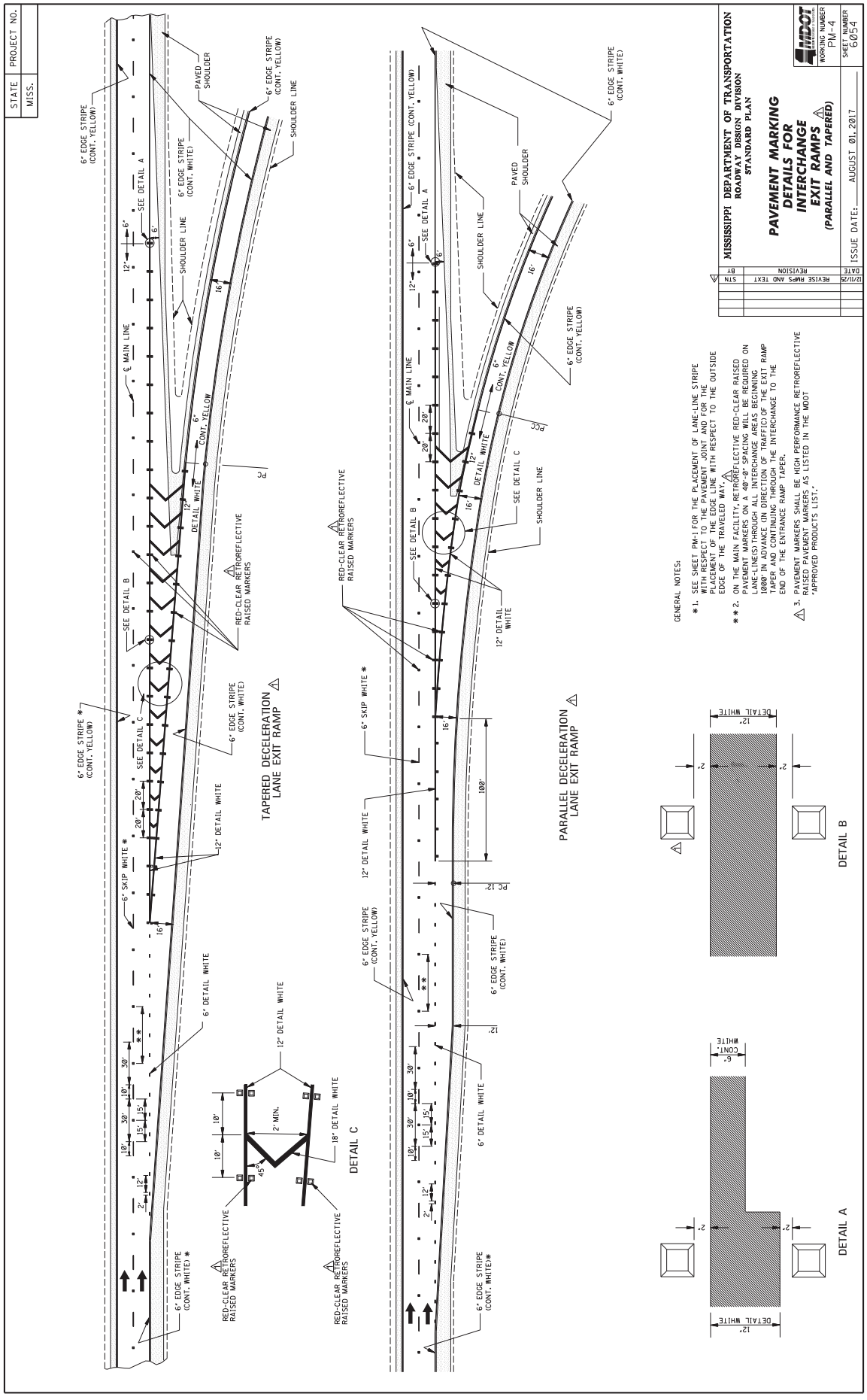
Larger copies of Standard Drawings may be purchased from:

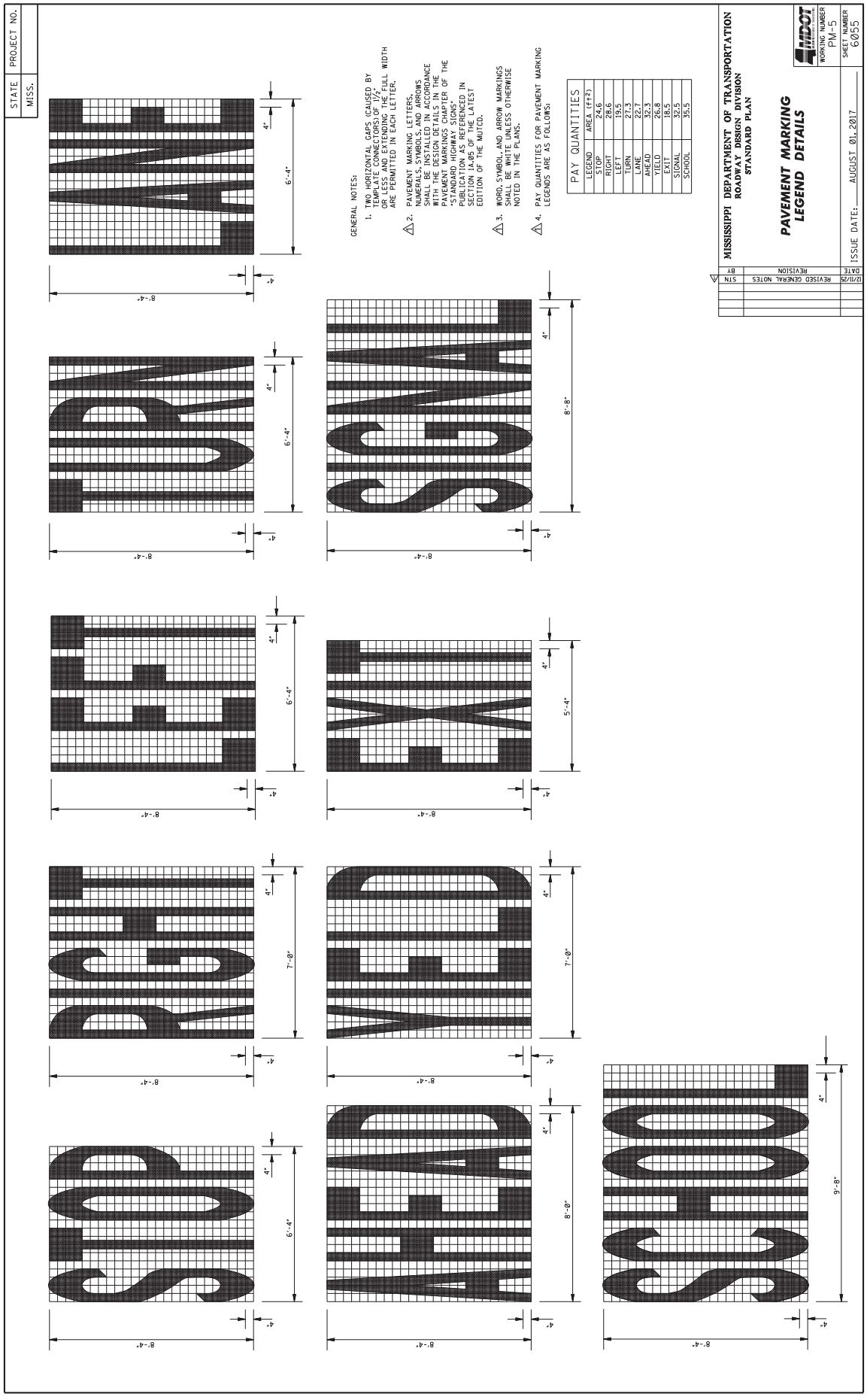
MDOT Plans Print Shop
MDOT Shop Complex, Building C, Room 114
2567 North West Street
P.O. Box 1850
Jackson, MS 39215-1850
Telephone: (601) 359-7460
or FAX: (601) 359-7461
or e-mail: plans@mdot.state.ms.us

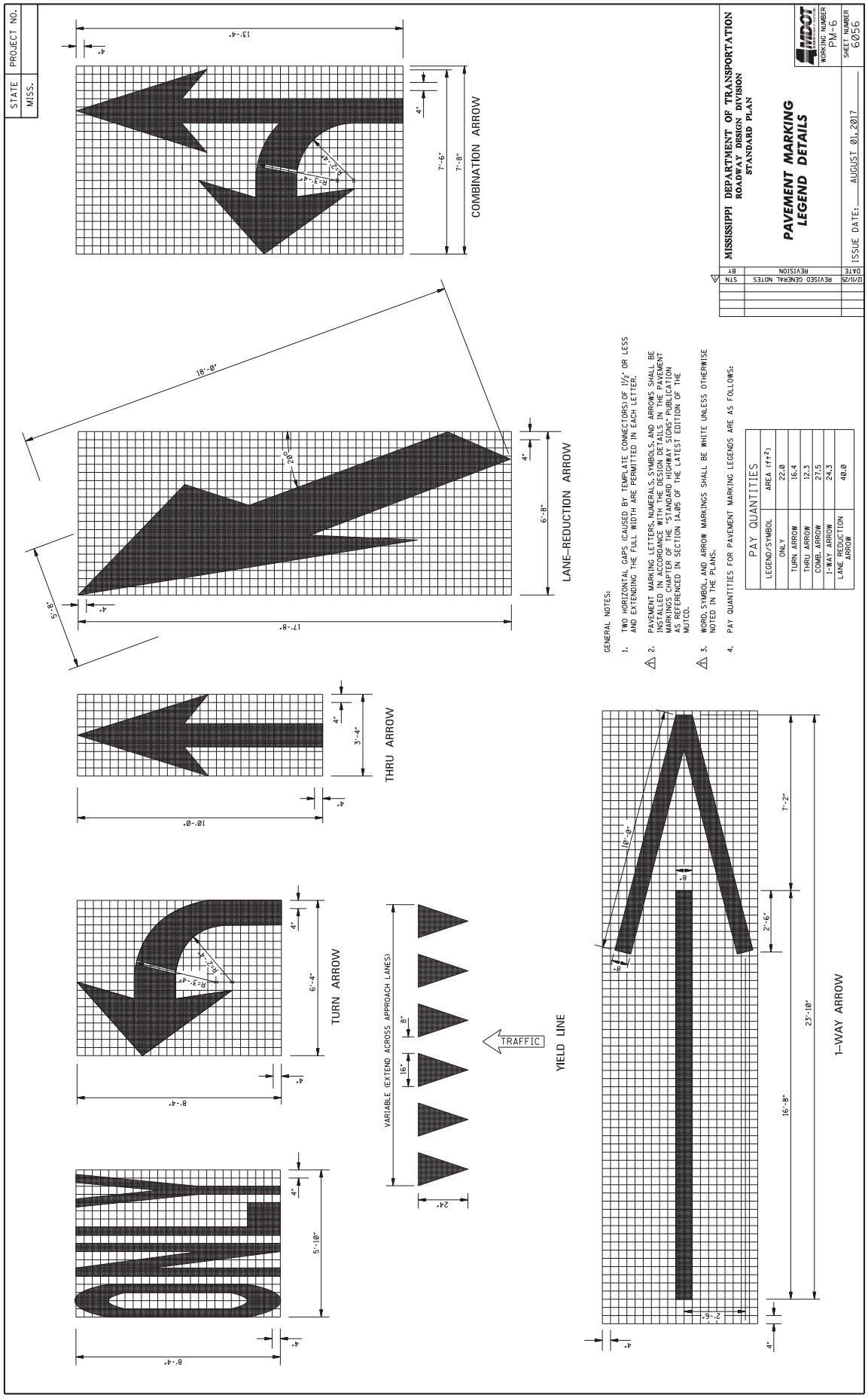

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS
WORKING NUMBER PM-1
SHEET NUMBER 6051
ISSUE DATE: AUGUST 01, 2017
REVISE RPMS AND TEXT
DATE 12/11/25
BY
STN
GENERAL NOTES:
* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO WK. 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 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 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.
△4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST."
DIRECTION OF TRAFFIC
TRAFFIC
DETAIL "A"
TWO-WAY RETROREFLECTIVE YELLOW RAISED PAVEMENT MARKERS
6" CONTINUOUS WHITE EDGE STRIPE (**)
6" CONTINUOUS YELLOW (**)
℄ JOINT
OMIT BROKEN LINE STRIPING
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
PAY LENGTH
OUTSIDE EDGE OF TRAVEL LANE
6" SKIP YELLOW (**)
6" CONTINUOUS YELLOW
OUTSIDE EDGE OF TRAVEL LANE
NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDOT ROADWAY DESIGN MANUAL, SECTION 11-1.01.
RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
6" CONTINUOUS WHITE EDGE STRIPE
6" SKIP WHITE
6" CONTINUOUS YELLOW EDGE STRIPE
MEDIAN EDGE OF TRAVEL LANE
4-LANE WITH ONE-WAY TRAFFIC

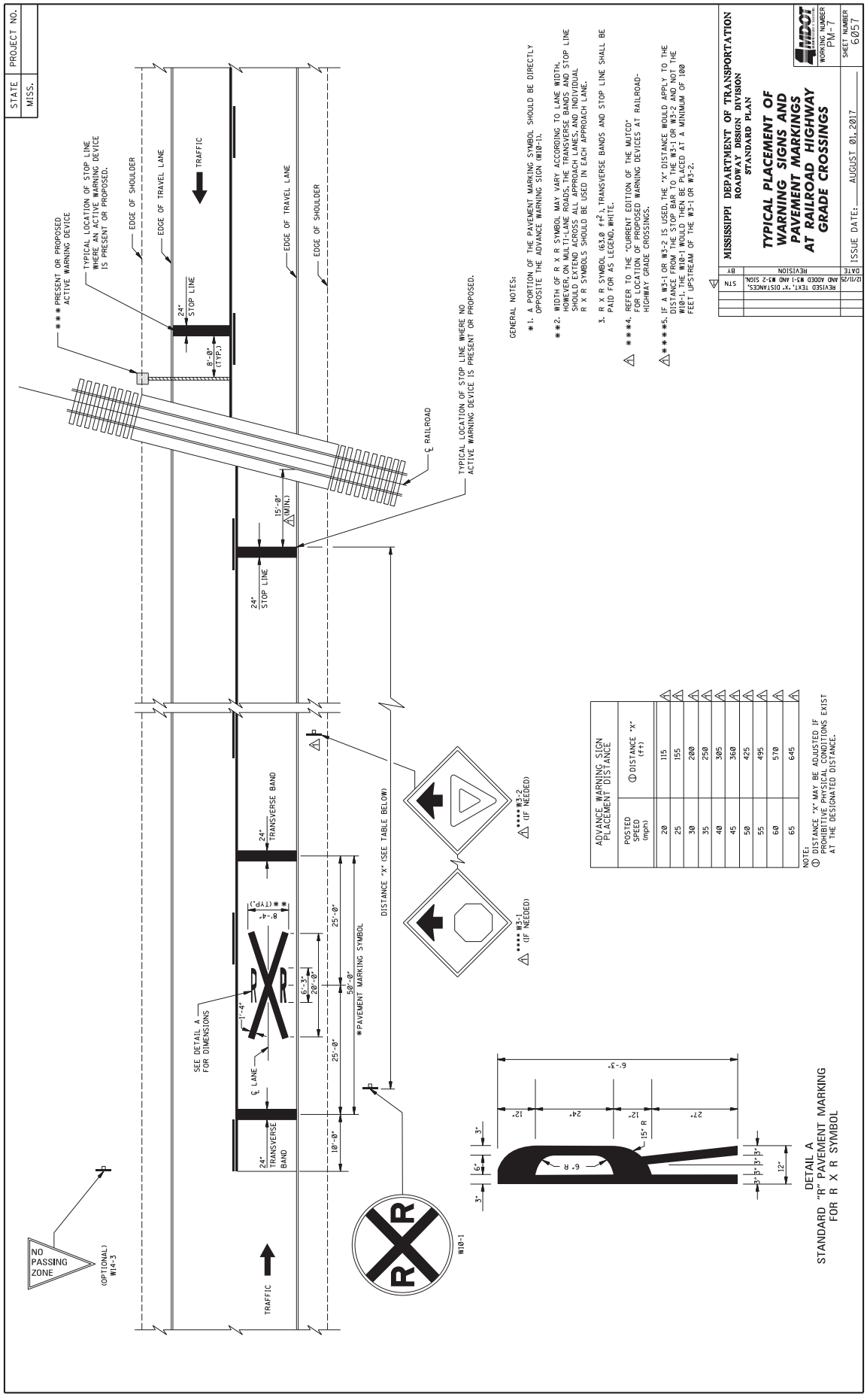

STATE MISS.
PROJECT NO.
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 3-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION
TYPICAL TWO-WAY ARROW INSTALLATION
NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN EACH 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
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 STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION
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 BY DATE REVISION
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
WORKING NUMBER FM-2
ISSUE DATE: AUGUST 01, 2017
SHEET NUMBER 6052

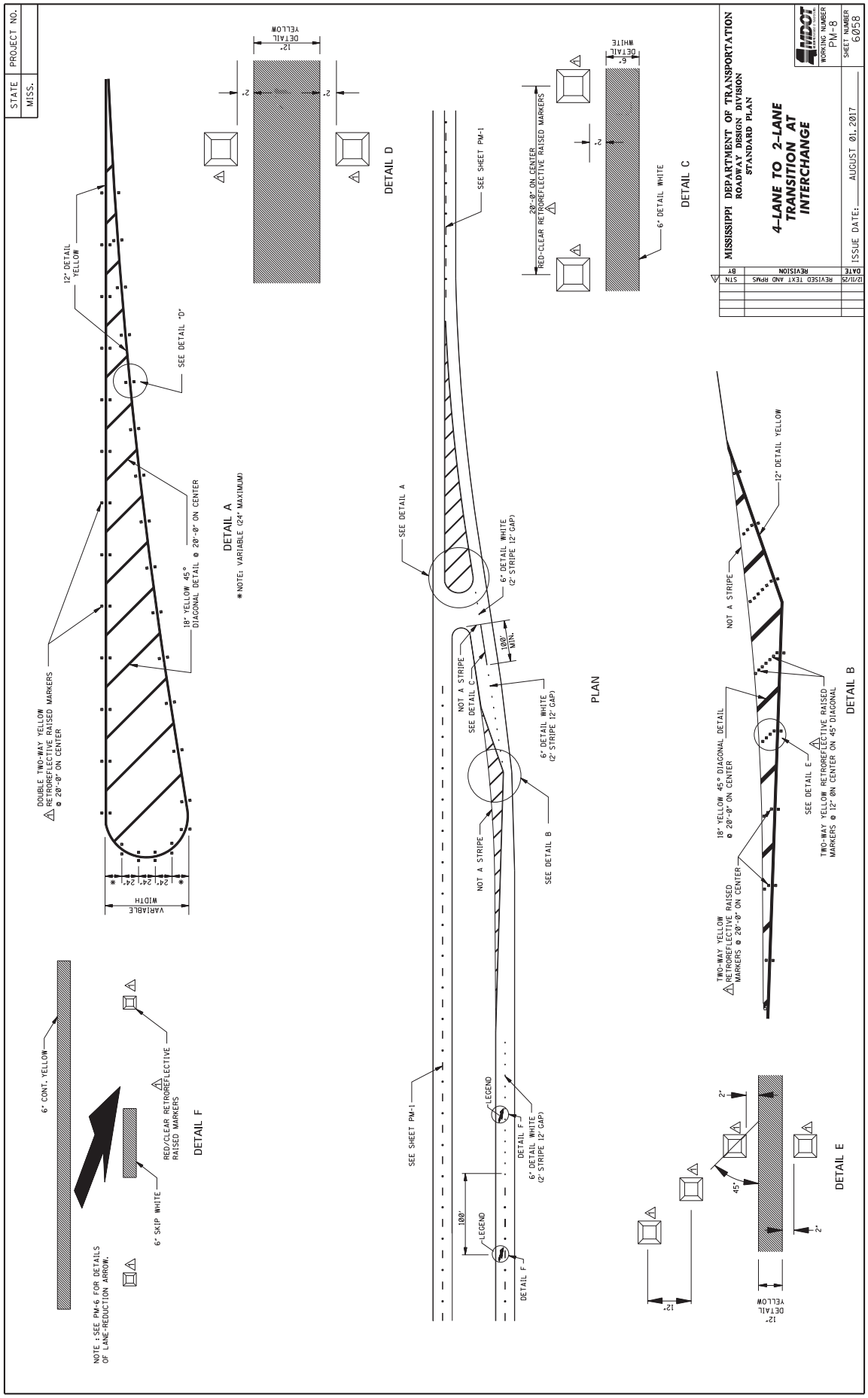

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPERED)
WORKING NUMBER PM-3
SHEET NUMBER 6053
ISSUE DATE: AUGUST 01, 2017
REVISE RPMS AND TEXT
PARALLEL ACCELERATION LANE ENTRANCE 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.

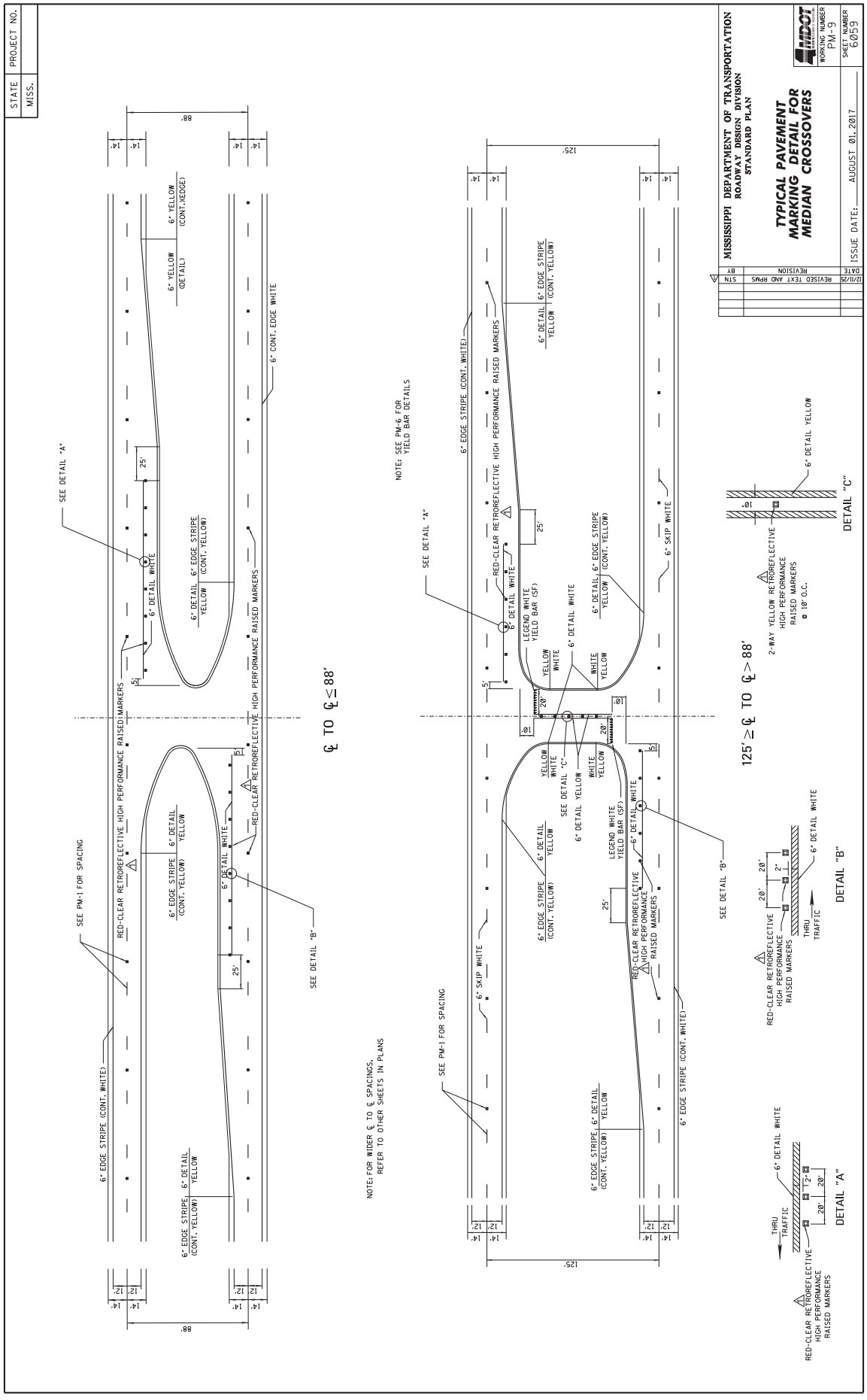

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMPS
(PARALLEL AND TAPERED)
WORKING NUMBER PM-4
SHEET NUMBER 6054
ISSUE DATE: AUGUST 01, 2017
DATE 12/11/25 BY STN REVISION REVISE RAMPS AND TEXT
TAPERED 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 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."

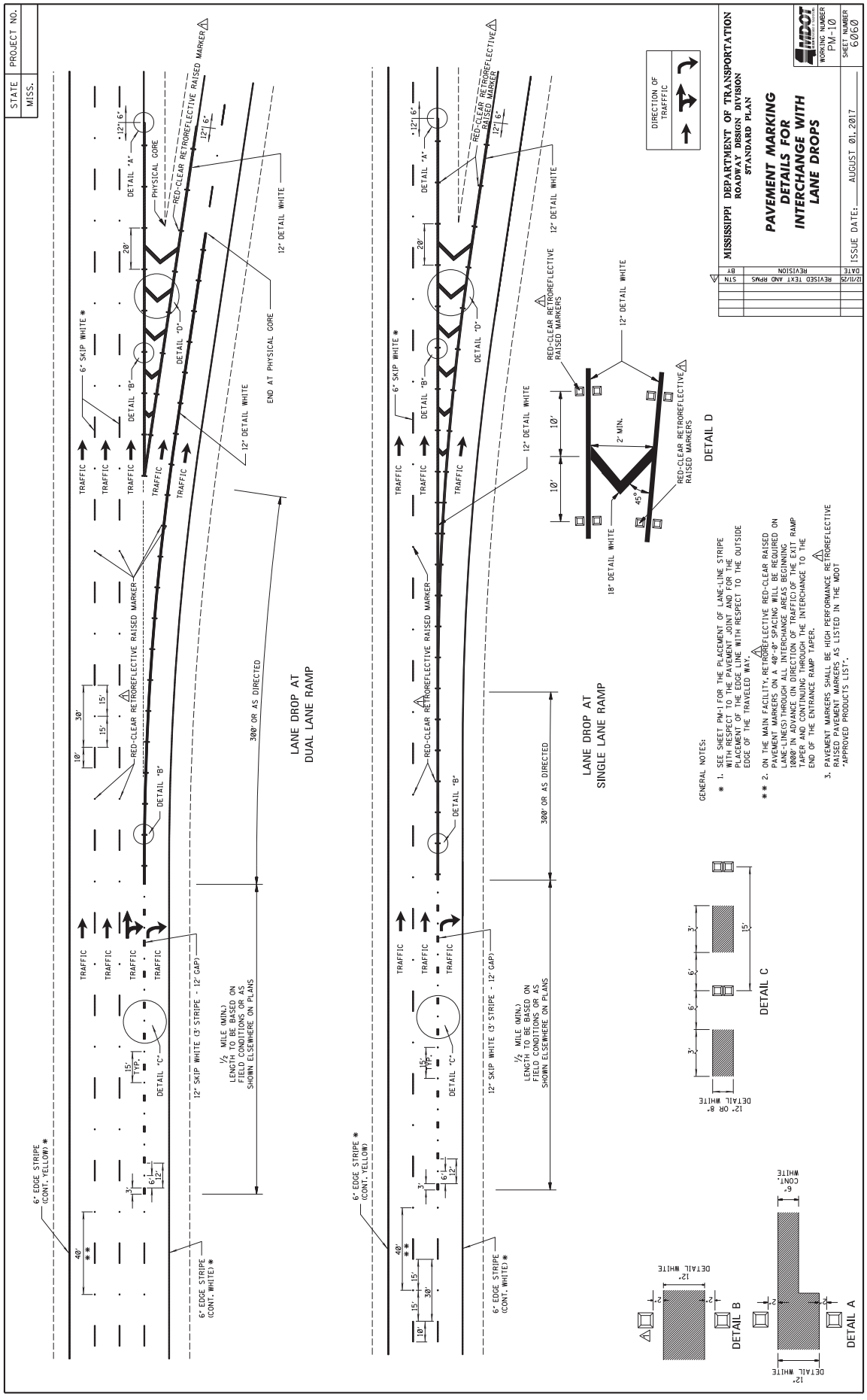

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING LEGEND DETAILS
WORKING NUMBER PM-5
SHEET NUMBER 6055
ISSUE DATE: AUGUST 01, 2017
GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING 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 | 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
STN BY REVISION DATE
REVISED GENERAL NOTES 12/1/25

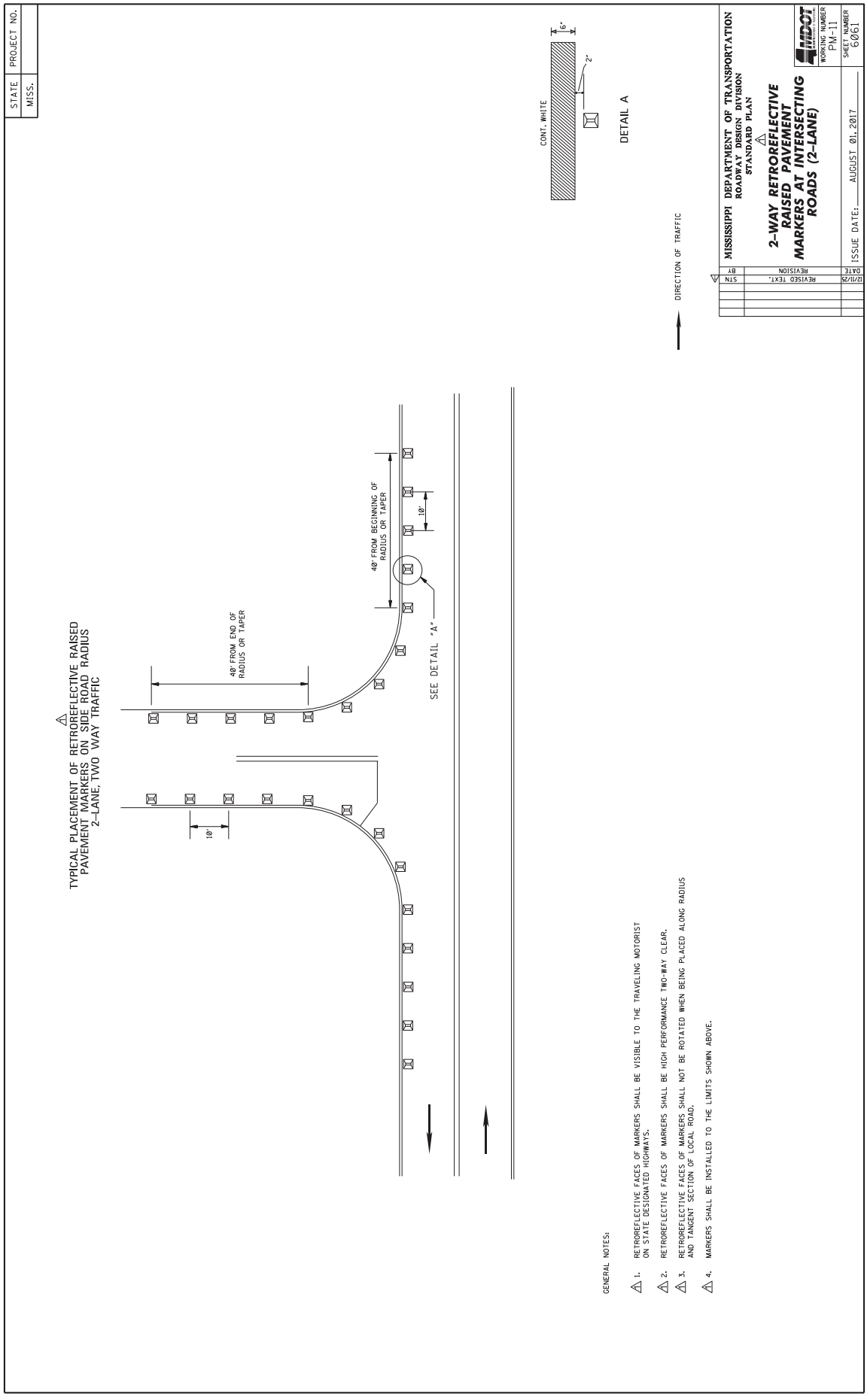

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING LEGEND DETAILS
WORKING NUMBER PM-6
SHEET NUMBER 6056
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISED GENERAL NOTES STN
GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1½" 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

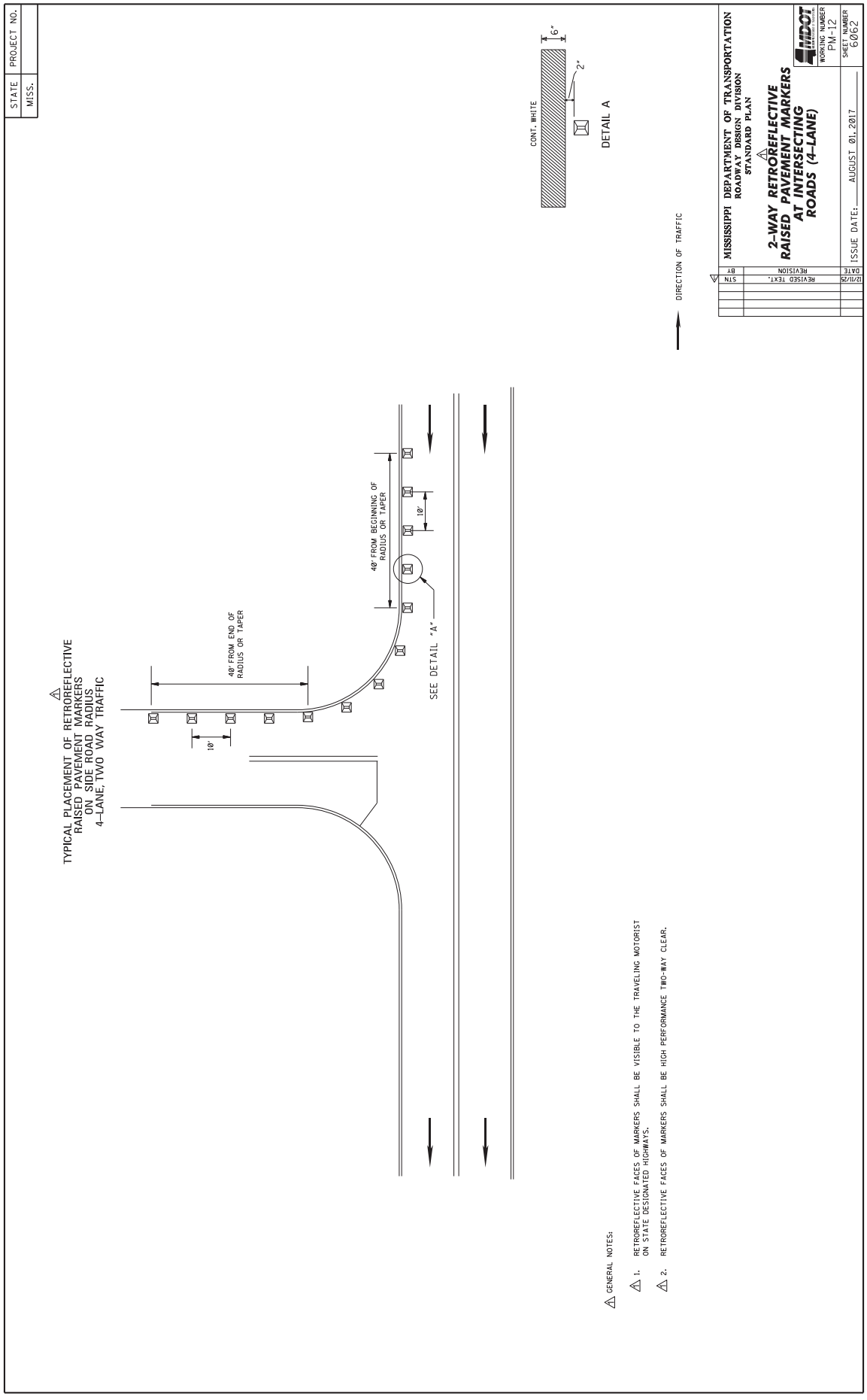

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PLACEMENT OF WARNING SIGNS AND PAVEMENT MARKINGS AT RAILROAD HIGHWAY GRADE CROSSINGS
WORKING NUMBER FM-7
SHEET NUMBER 6057
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT, 'X' DISTANCES, AND ADDED M3-1 AND M3-2 SIGN.
12/11/20
STN
DATE
REVISION
BY
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 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.
*** 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
SEE DETAIL A FOR DIMENSIONS
1'-4"
6'-3"
20'-0"
25'-0"
50'-0"
*PAVEMENT MARKING SYMBOL
DISTANCE "X" (SEE TABLE BELOW)
10'-0"
℄ LANE
W10-1
**** W3-1 (IF NEEDED)
**** W3-2 (IF NEEDED)
NO PASSING ZONE
(OPTIONAL) W14-3
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.
6'-3"
12'
24'
27'
15° R
6" R
3"
6"
12'
DETAIL A
STANDARD "R" PAVEMENT MARKING FOR R X R SYMBOL

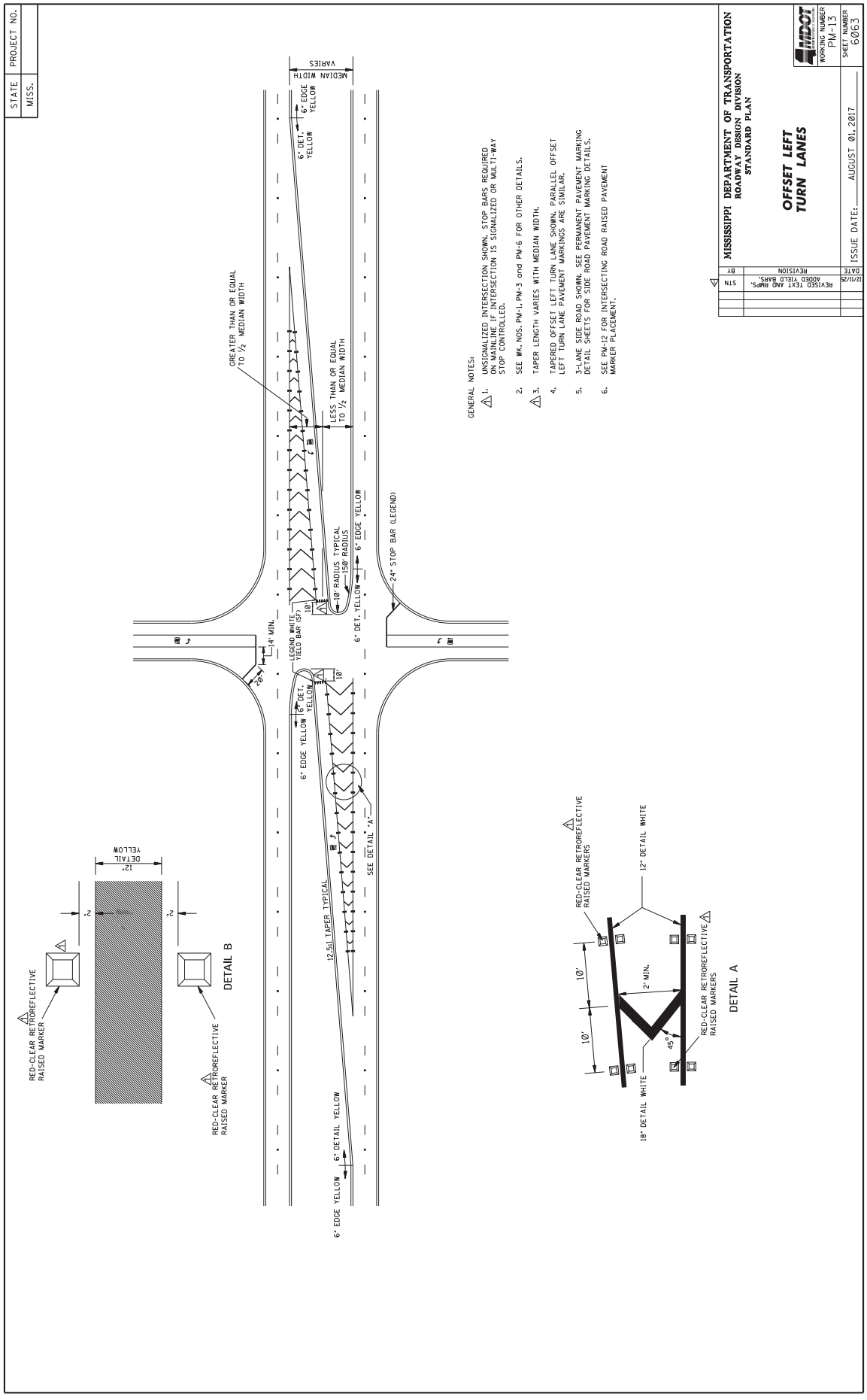

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
4-LANE TO 2-LANE TRANSITION AT INTERCHANGE
WORKING NUMBER PM-8
SHEET NUMBER 6058
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY STN
12/11/20 REVISED TEXT AND RPMS
DOUBLE TWO-WAY YELLOW RETROREFLECTIVE 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)
DETAIL D
12" DETAIL YELLOW
2"
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
SEE DETAIL B
LEGEND
DETAIL F
PLAN
6" CONT. YELLOW
RED/CLEAR RETROREFLECTIVE RAISED MARKERS
6" SKIP WHITE
NOTE : SEE PM-6 FOR DETAILS OF LANE-REDUCTION ARROW.
DETAIL F
TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 20'-0" ON CENTER
18" YELLOW 45° DIAGONAL DETAIL @ 20'-0" ON CENTER
SEE DETAIL E
TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 12' ON CENTER ON 45° DIAGONAL
DETAIL B
45°
DETAIL E

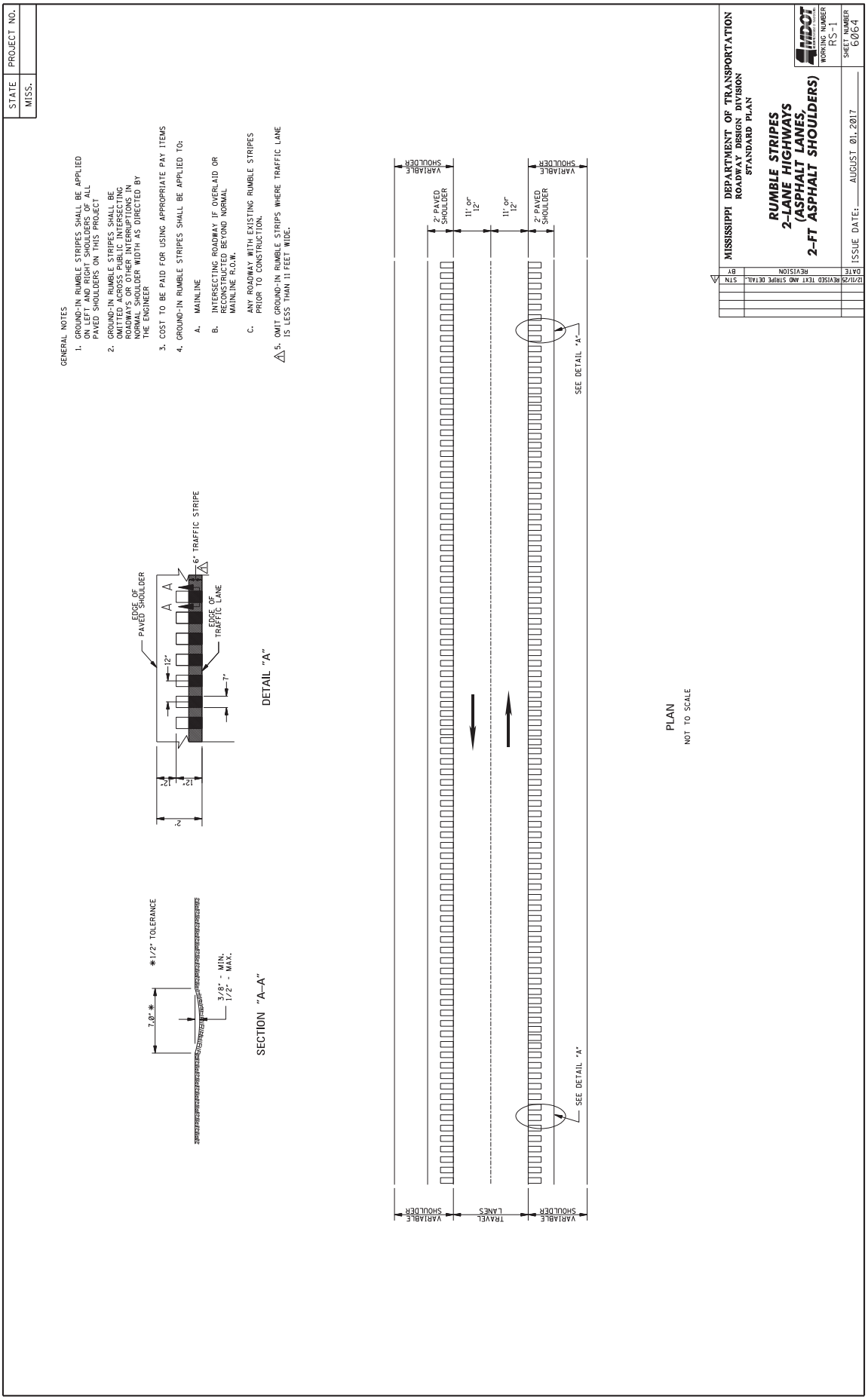

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PAVEMENT MARKING DETAIL FOR MEDIAN CROSSOVERS
WORKING NUMBER PM-9
SHEET NUMBER 6059
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISED TEXT AND RPMS STN
6" EDGE STRIPE (CONT. WHITE)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

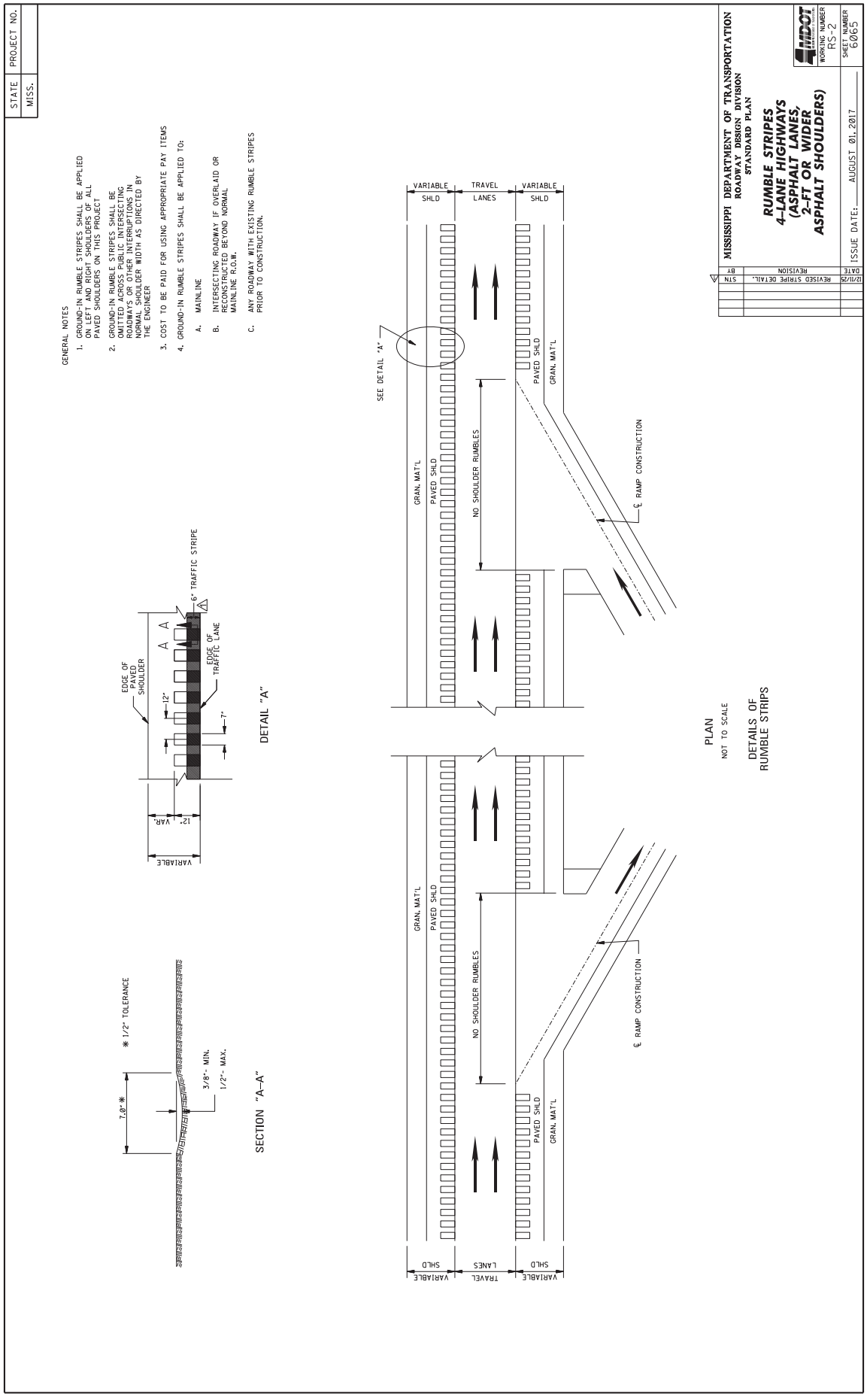

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE WITH LANE DROPS
WORKING NUMBER PM-10
SHEET NUMBER 6060
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/11/25 REVISED TEXT AND RPMS STN
LANE DROP AT DUAL LANE RAMP
LANE DROP AT SINGLE LANE RAMP
6" EDGE STRIPE (CONT. YELLOW) *
6" EDGE STRIPE (CONT. WHITE) *
6" SKIP WHITE *
RED-CLEAR RETROREFLECTIVE RAISED MARKER
PHYSICAL GORE
END AT PHYSICAL GORE
12" DETAIL WHITE
300' OR AS DIRECTED
½ MILE (MIN.) LENGTH TO BE BASED ON FIELD CONDITIONS OR AS SHOWN ELSEWHERE ON PLANS
12" SKIP WHITE (3' STRIPE - 12' GAP)
DETAIL "A"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DIRECTION OF TRAFFIC
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
18" DETAIL WHITE
2' MIN.
45°
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".
DETAIL A
DETAIL B
DETAIL C
DETAIL WHITE
CONT. WHITE

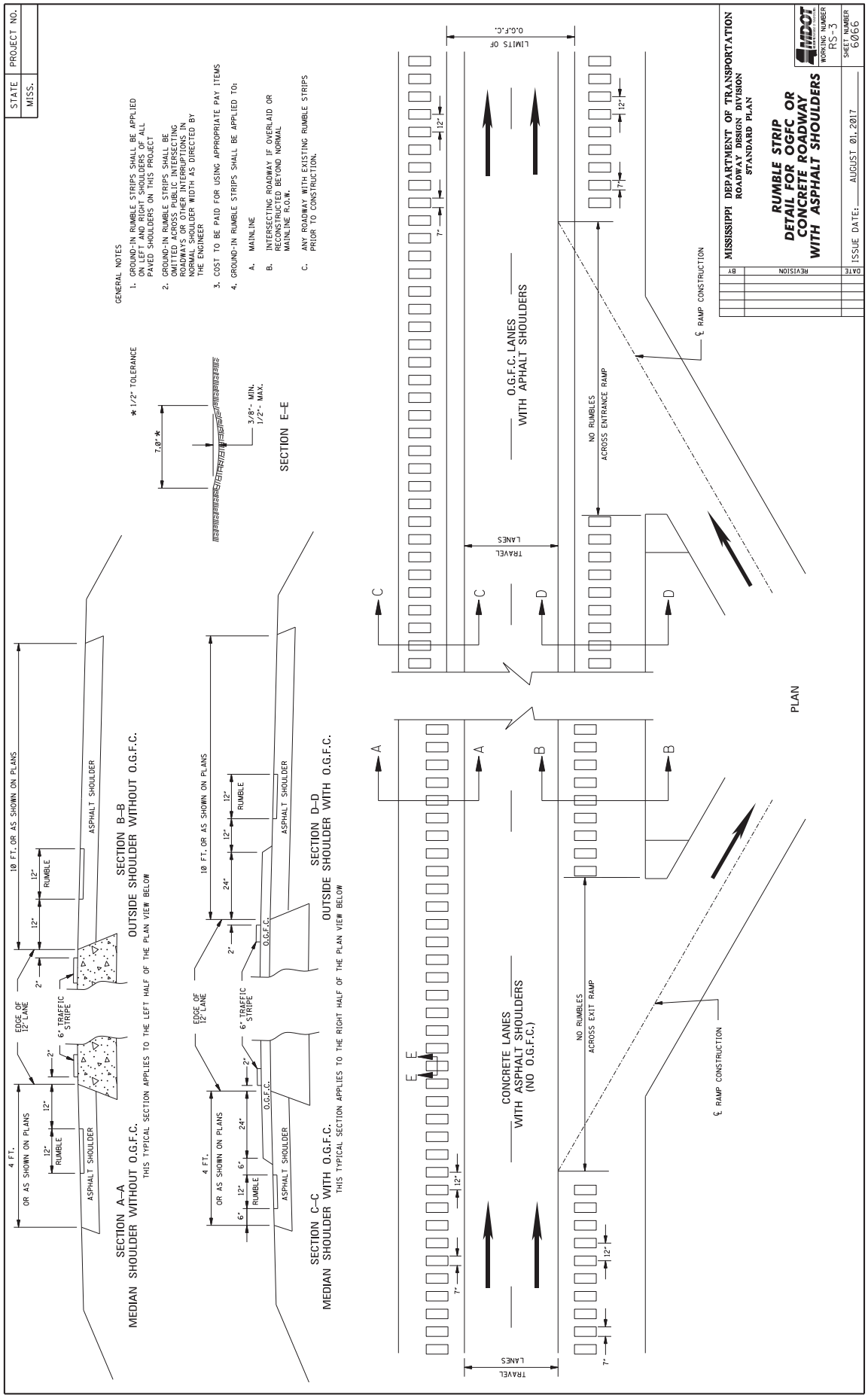

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RETROREFLECTIVE RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2-LANE)
WORKING NUMBER PM-11
SHEET NUMBER 6061
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT.
DATE
REVISION
BY
STN
12/11/25
TYPICAL PLACEMENT 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
DETAIL A
CONT. WHITE
6"
2"
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.

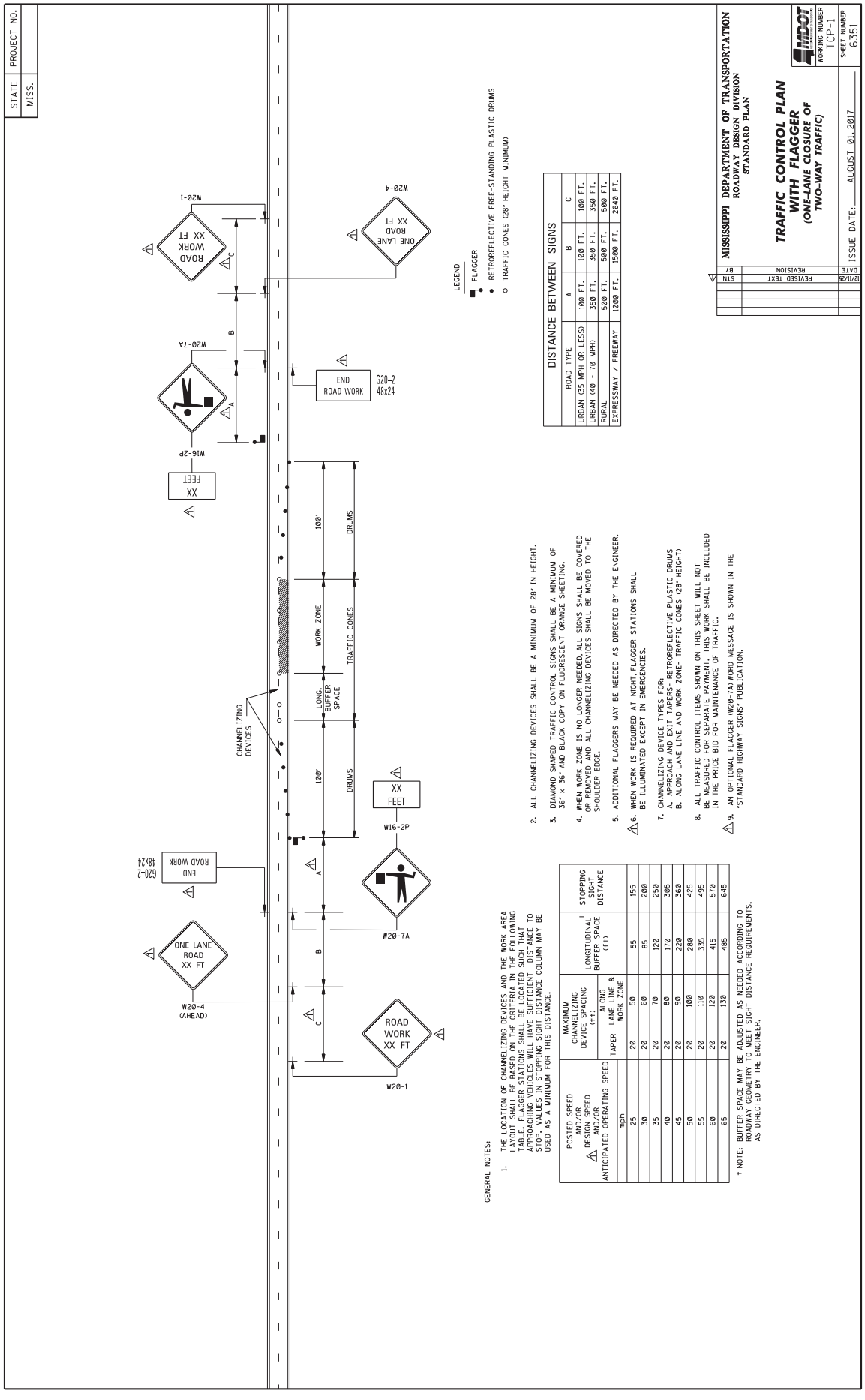

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RETROREFLECTIVE RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (4-LANE)
WORKING NUMBER PM-12
SHEET NUMBER 6062
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
12/11/25
REVISED TEXT.
STN
TYPICAL PLACEMENT 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'
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.


STATE MISS.
PROJECT NO.
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" EDGE YELLOW
24" STOP BAR (LEGEND)
6" DET. YELLOW
LEGEND WHITE YIELD BAR (SF)
14' MIN.
20'
6" EDGE YELLOW
6" DET. YELLOW
12.5% TAPER TYPICAL
SEE DETAIL "A"
6" EDGE YELLOW
6" DETAIL YELLOW
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.
RED-CLEAR RETROREFLECTIVE RAISED MARKER
12" DETAIL YELLOW
2"
2"
RED-CLEAR RETROREFLECTIVE RAISED MARKER
DETAIL B
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
12" DETAIL WHITE
10'
10'
2' MIN.
45°
18" DETAIL WHITE
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
DETAIL A
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
OFFSET LEFT TURN LANES
MDOT
WORKING NUMBER PM-13
SHEET NUMBER 6063
BY REVISION DATE
STN REVISED TEXT AND DWGS, ADDED YIELD BARS. 12/11/29
ISSUE DATE: AUGUST 01, 2017


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"
*1/2" TOLERANCE
7.0"*
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
PAVED SHLD
GRAN. MAT'L
℄ 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
REVISED STRIPE DETAIL.
DATE
BY
REVISION


STATE MISS.
PROJECT NO.
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
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" 6"
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"
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIP DETAIL FOR OGFC OR CONCRETE ROADWAY WITH ASPHALT SHOULDERS
REVISION
BY
DATE
ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER RS-3
SHEET NUMBER 6066



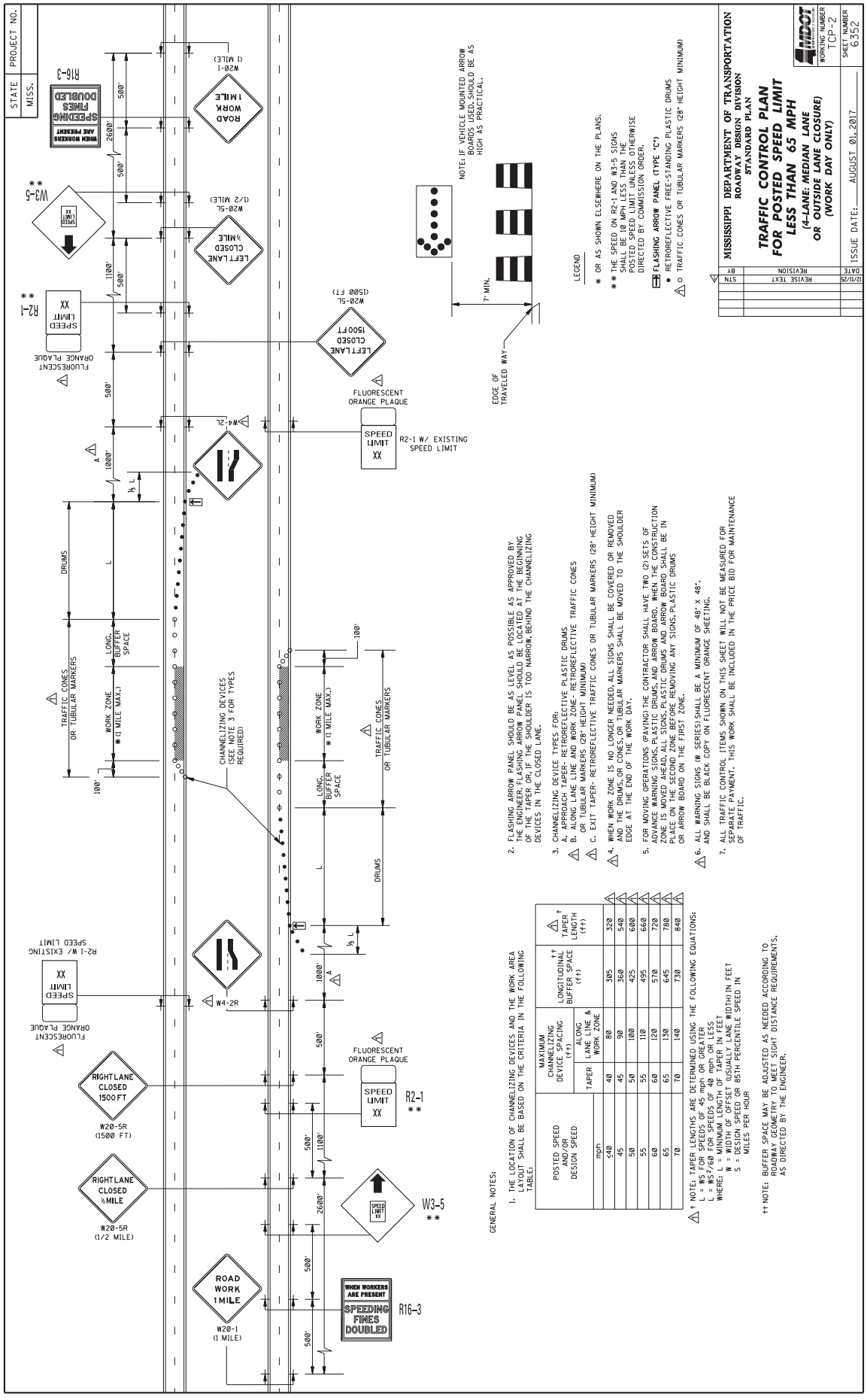
GENERAL NOTES:

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.

POSTED SPEED AND/OR ⚠ DESIGN SPEED AND/OR ANTICIPATED OPERATING SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL † BUFFER SPACE (ft)	STOPPING SIGHT DISTANCE
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
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.

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" × 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.



GENERAL NOTES:

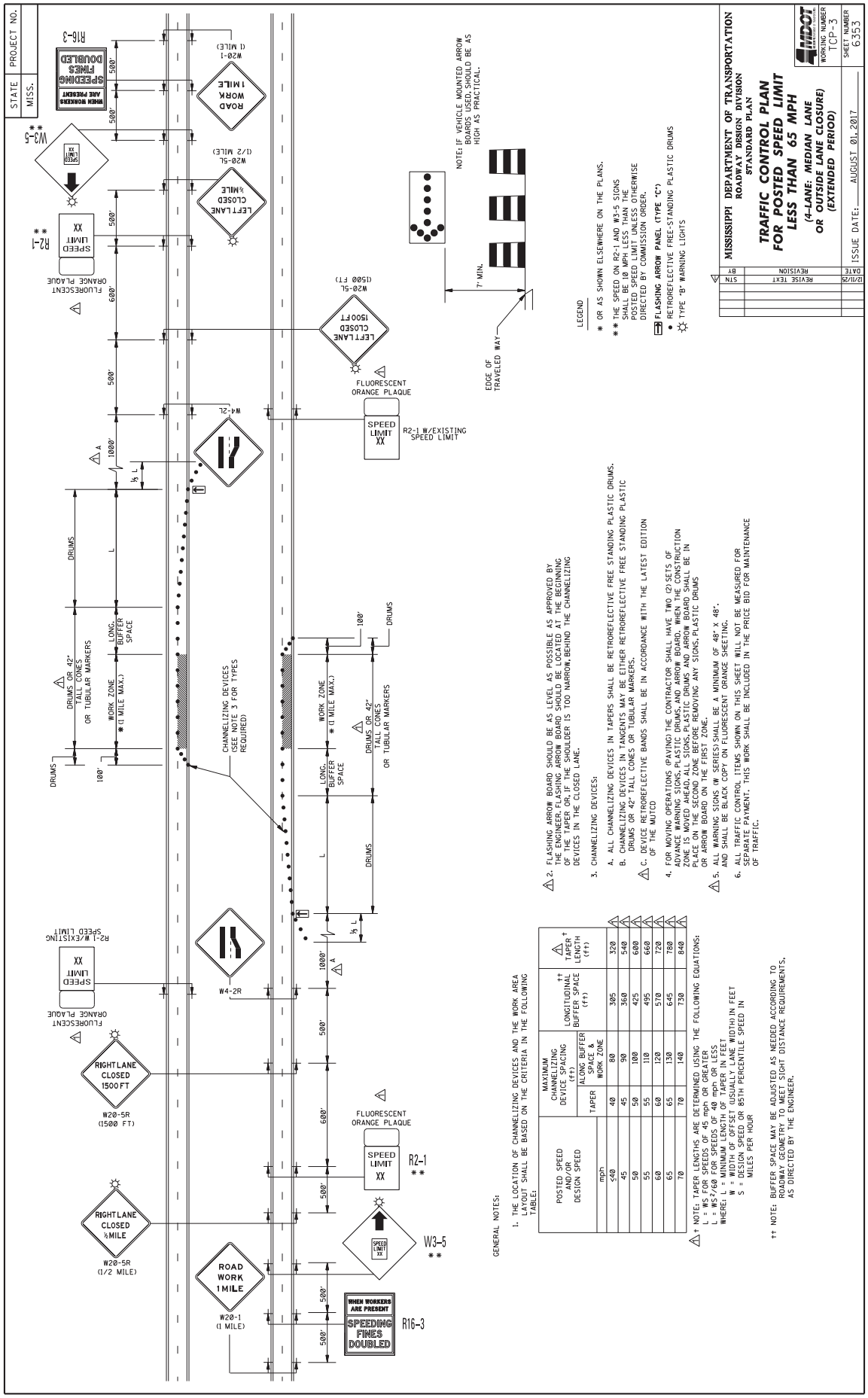
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

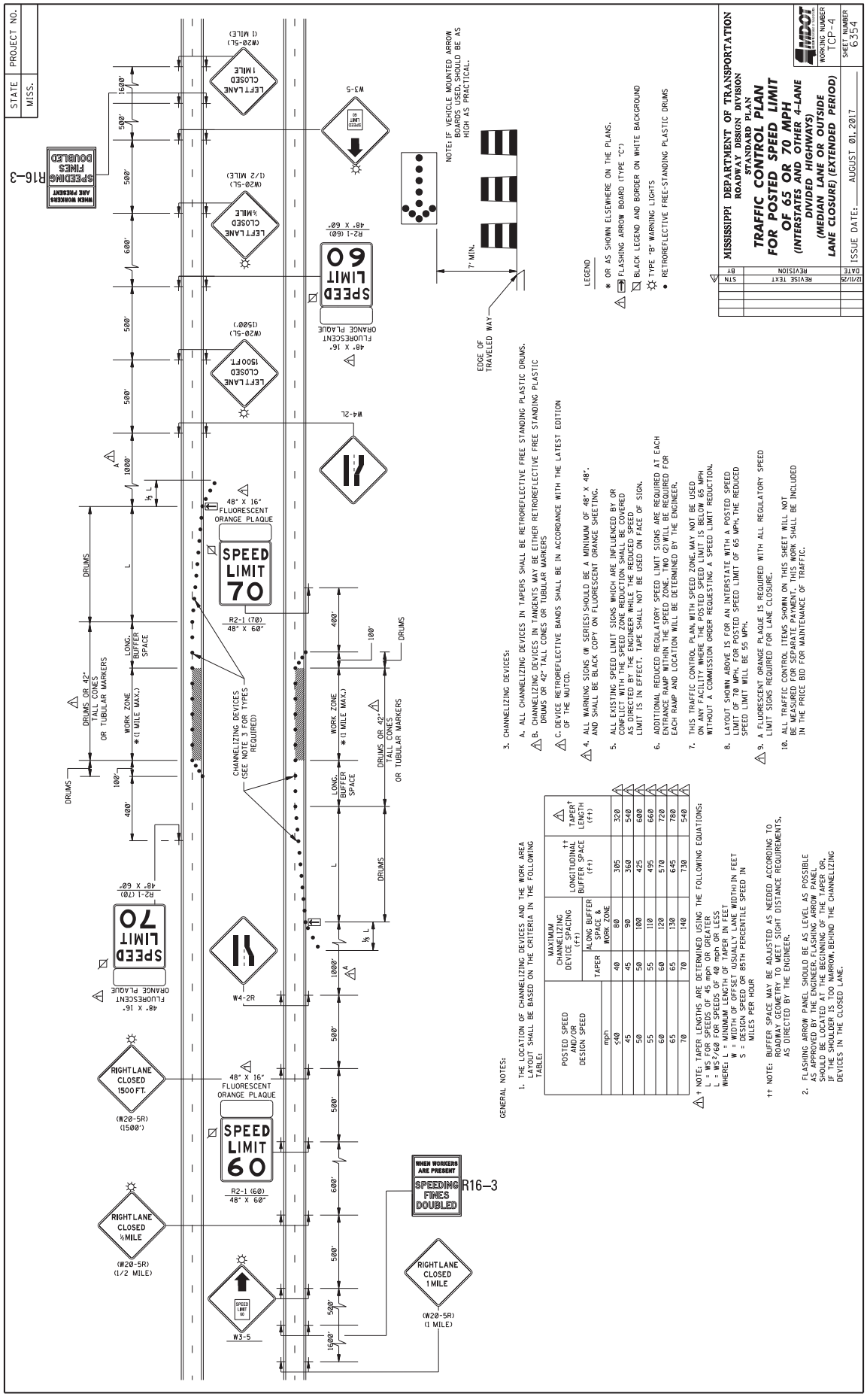
POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft) ††	TAPER LENGTH (ft) †
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	305	320
45	45	90	360	540
50	50	100	425	600
55	55	110	495	660
60	60	120	570	720
65	65	130	645	780
70	70	140	730	840

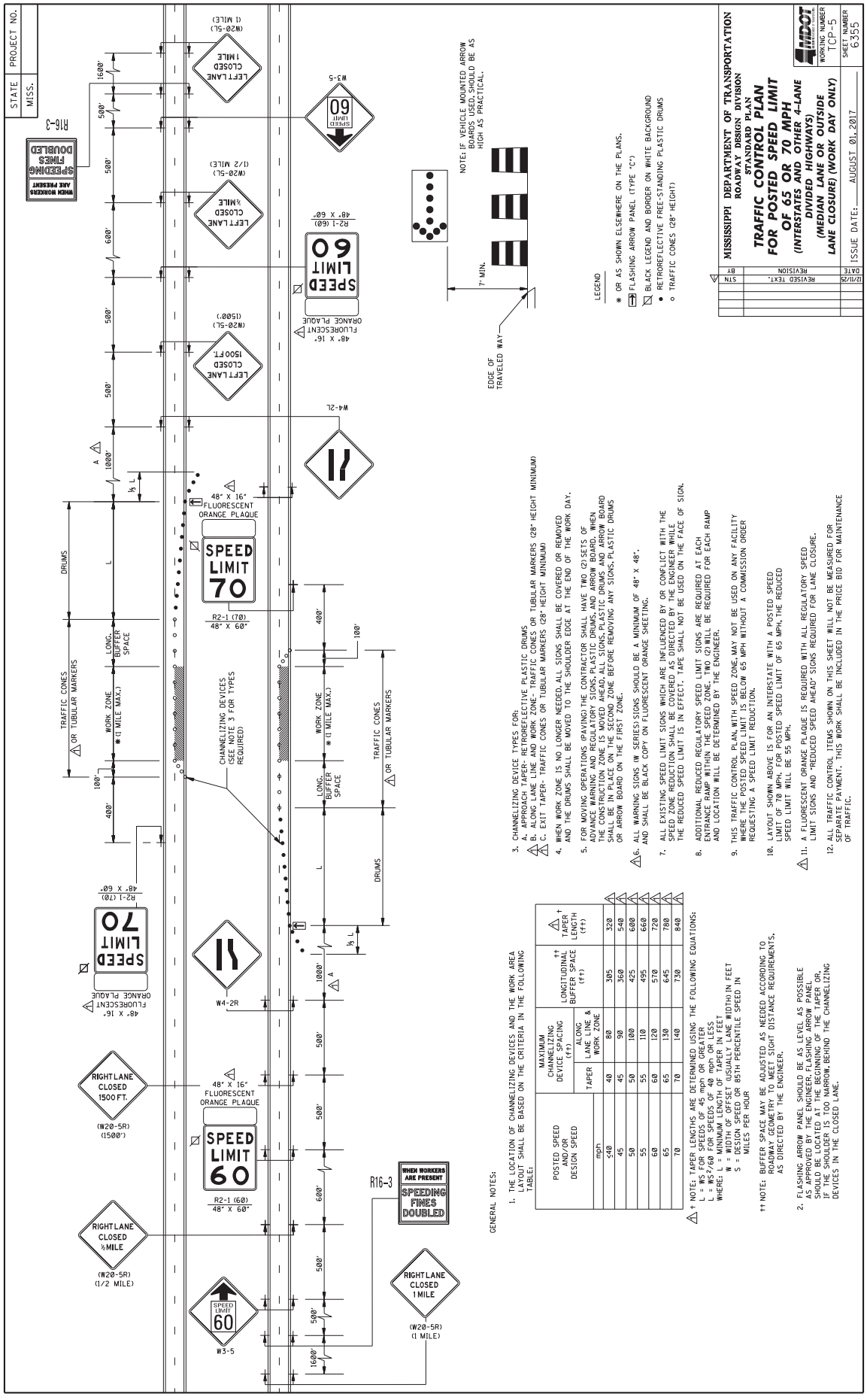
† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

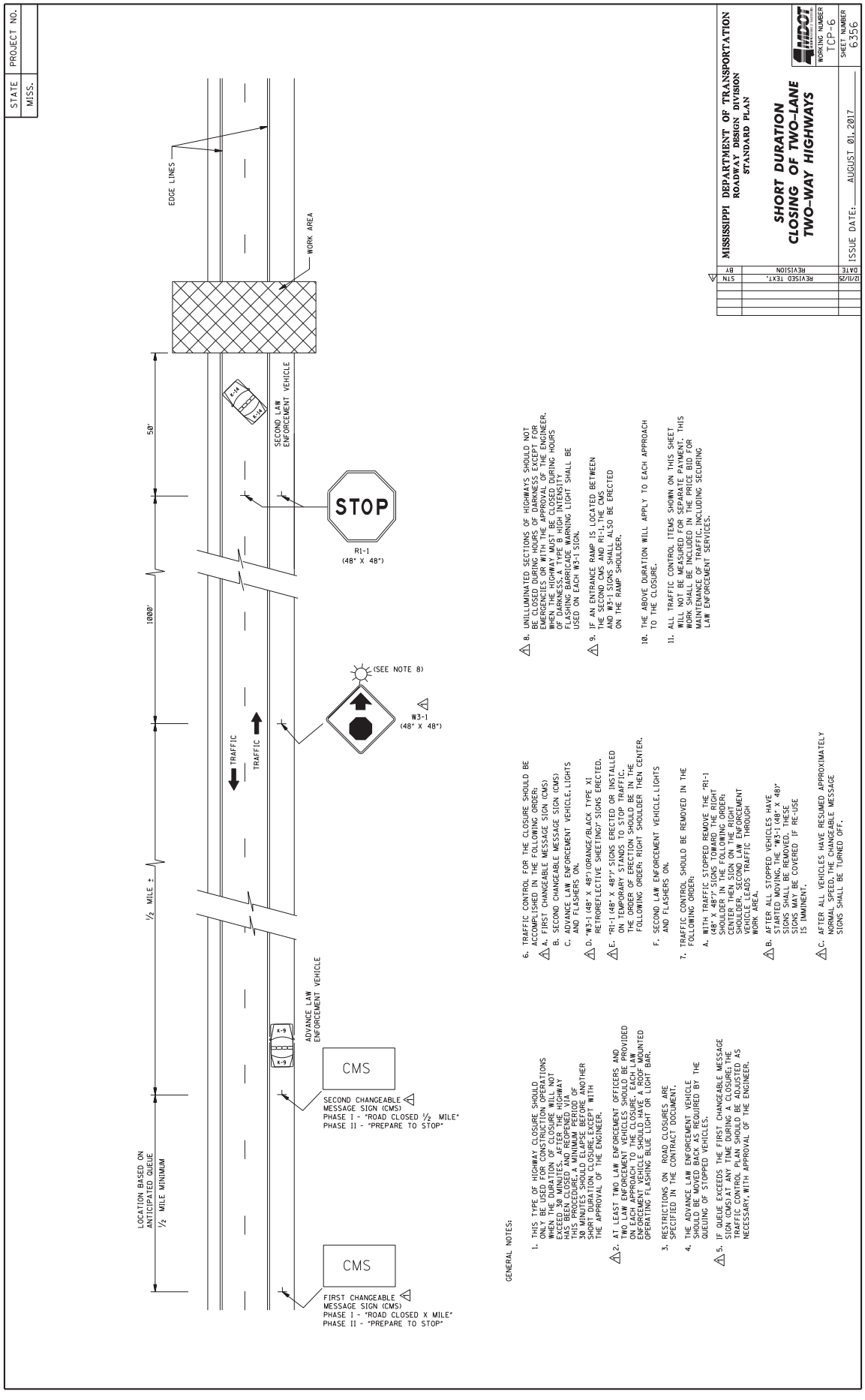
†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

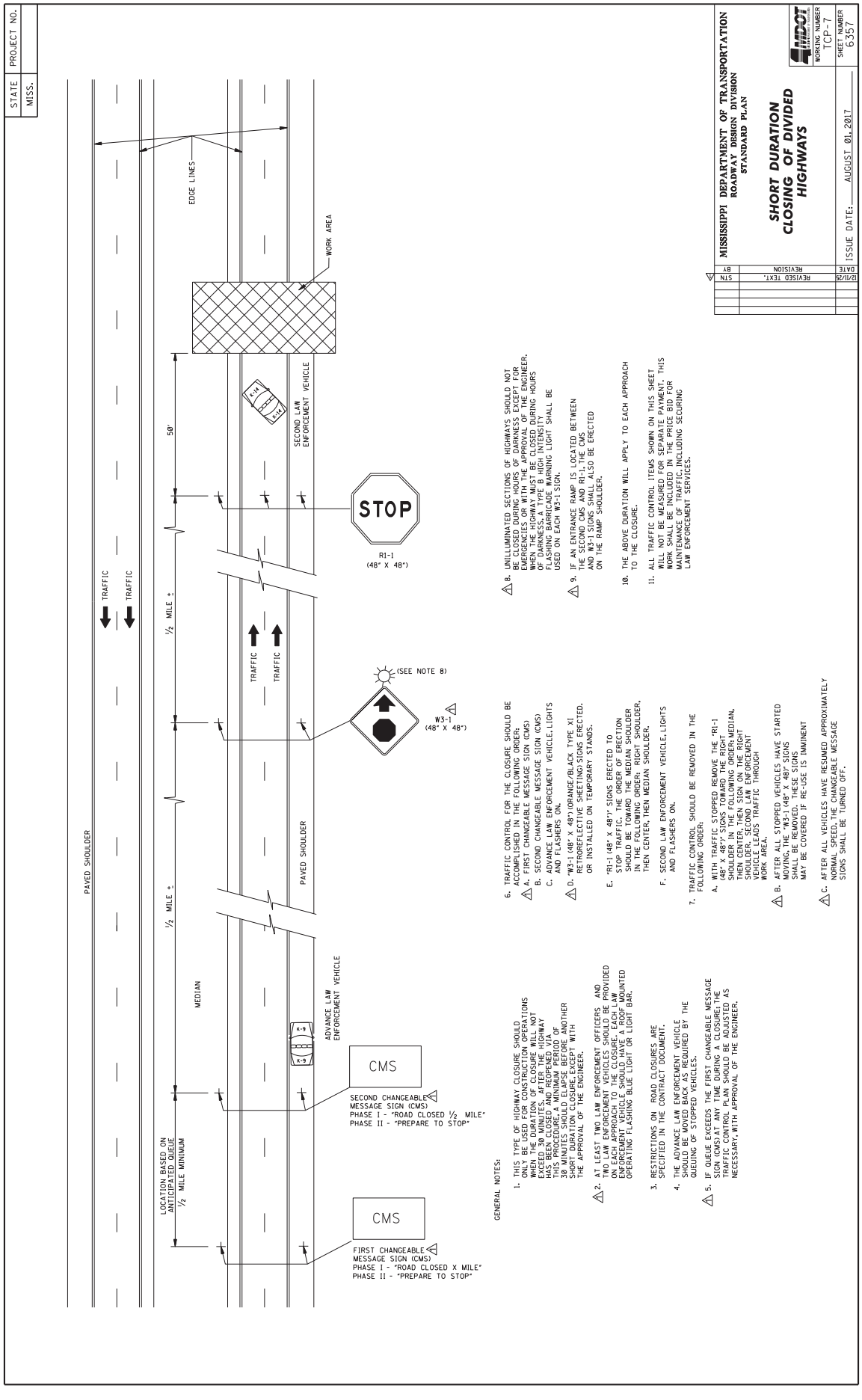
2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICE TYPES FOR:
A. APPROACH TAPER- RETROREFLECTIVE 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 TRAFFIC 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 FOR 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 BY REVISION STN
12/11/20 REVISE TEXT
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)
LEFT LANE CLOSED ½ MILE
W20-5L (1/2 MILE)
LEFT LANE CLOSED 1500 FT
W20-5L (1500 FT)
RIGHT LANE CLOSED ½ MILE
W20-5R (1/2 MILE)
RIGHT LANE CLOSED 1500 FT
W20-5R (1500 FT)
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
R16-3
W3-5 **
SPEED LIMIT XX
R2-1 **
SPEED LIMIT XX
R2-1 W/EXISTING SPEED LIMIT
FLUORESCENT ORANGE PLAQUE
W4-2R
W4-2L
DRUMS
DRUMS OR 42" TALL CONES OR TUBULAR MARKERS
WORK ZONE * (1 MILE MAX.)
LONG. BUFFER SPACE
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
L
½ L
A
100'
500'
600'
1000'
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 BOARDS 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.

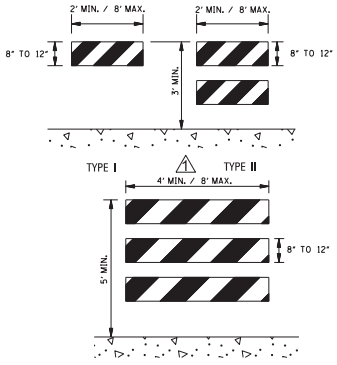

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR POSTED SPEED LIMIT
OF 65 OR 70 MPH
(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS)
(MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)
WORKING NUMBER TCP-4
SHEET NUMBER 6354
ISSUE DATE: AUGUST 01, 2017
REVISE TEXT STN 12/11/25
REVISION BY DATE
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) PLACED
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 70 140 730 540
† 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 ENSURE 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 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. 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.
DRUMS OR 42" TALL CONES OR TUBULAR MARKERS
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
W4-2R
W4-2L
W3-5
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 1500FT (W20-5L) (1500')
LEFT LANE CLOSED ½ MILE (W20-5L) (1/2 MILE)
LEFT LANE CLOSED 1 MILE (W20-5L) (1 MILE)
WHEN WORKERS ARE PRESENT SPEEDING FINES DOUBLED R16-3
48" X 16" FLUORESCENT ORANGE PLAQUE
SPEED LIMIT 70
R2-1 (70) 48" X 60"
SPEED LIMIT 60
R2-1 (60) 48" X 60"
WHEN WORKERS ARE PRESENT SPEEDING FINES DOUBLED R16-3
DRUMS
L
½ L
A
100'
400'
500'
600'
1000'
1500'


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
DATE REVISION BY
12/11/25 REVISED TEXT. 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 † LENGTH (††)
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 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
WORK ZONE * (1 MILE MAX.)
LONG. BUFFER SPACE
DRUMS
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
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 ½MILE
(W20-5R) (1/2 MILE)
RIGHT LANE CLOSED 1 MILE
(W20-5R) (1 MILE)
LEFT LANE CLOSED 1 MILE
(W20-5L) (1 MILE)
LEFT LANE CLOSED ½MILE
(W20-5L) (1/2 MILE)
LEFT LANE CLOSED 1500 FT.
(W20-5L) (1500')
48" X 16" FLUORESCENT ORANGE PLAQUE
A
½ L
100'
400'
500'
600'
1000'
1600'


STATE
MISS.
PROJECT NO.
EDGE LINES
WORK AREA
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1
(48" X 48")
50'
1000'
½ MILE ±
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
TRAFFIC
TRAFFIC
(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 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 FOLLOWING THE ROUTE; 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 REMOVE THE W3-1 (48" X 48") SIGNS. 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
12/11/23 REVISED TEXT. STM

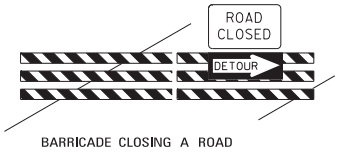

STATE
MISS.
PROJECT NO.
PAVED SHOULDER
TRAFFIC
TRAFFIC
½ MILE ±
EDGE LINES
WORK AREA
50'
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1
(48" X 48")
TRAFFIC
TRAFFIC
½ MILE ±
PAVED SHOULDER
(SEE NOTE 8)
W3-1
(48" X 48")
MEDIAN
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
ADVANCE LAW ENFORCEMENT VEHICLE
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 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 TOWARD THE 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
MDOT
WORKING NUMBER
TCP-7
SHEET NUMBER
6357
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
12/11/20
REVISED TEXT.
STM

STATE	PROJECT NO.
MISS.	



STANDARD BARRICADES

1. THE RETROREFLECTIVE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION THAT TRAFFIC IS TO PASS).
2. RAIL STRIPE SHOULD BE 6 INCHES, EXCEPT THAT 4-INCH WIDE STRIPES MAY BE USED IF RAIL LENGTHS ARE LESS THAN 36 INCHES.
3. DO NOT PLACE SANDBAGS OR OTHER DEVICES ON BARRICADE RAILS TO PROVIDE MASS SANDBAGS, HOWEVER, MAY BE PLACES AS BALLAST TO THE LOWER PARTS OF THE FRAME OR THE STAYS TO BARRICADES.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://highways.dot.gov/safety/RwD/reduce-crash-severity
6. WHERE ROAD USERS INCLUDE PEDESTRIANS, THE PROVISION OF SUPPLEMENTAL AUDIBLE INFORMATION OR DETECTABLE BARRIERS OR BARRICADES SHOULD BE PROVIDED FOR PEOPLE WITH VISION DISABILITIES.
7. BARRICADE RAIL SUPPORTS SHOULD NOT PROJECT INTO PEDESTRIAN CIRCULATION ROUTES MORE THAN 4 INCHES FOR THE SUPPORTS LOCATED BETWEEN 27 INCHES TO 80 INCHES ABOVE THE EXISTING SURFACE.



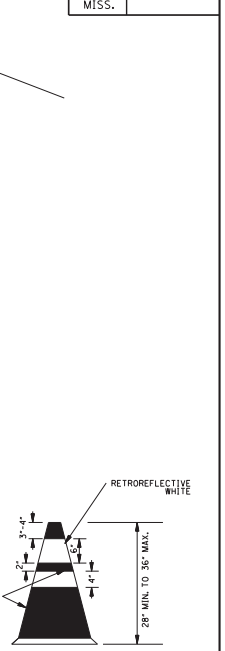
BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

	I	II	III
WIDTH OF RAIL * *	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL * *	24" MIN. / 96" MAX.	24" MIN. /96" MAX.	48" MIN. / 96" MAX.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

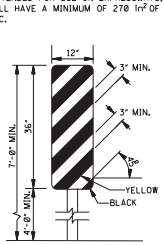
* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in^2 OF REFLECTIVE AREA FACING TRAFFIC.



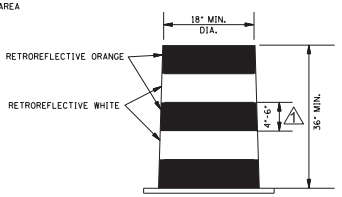
WING BARRICADES

1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
   A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
   B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.

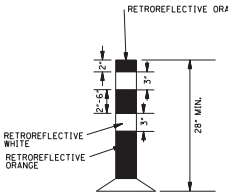


TYPE 3 OBJECT MARKER
(OM3-R)

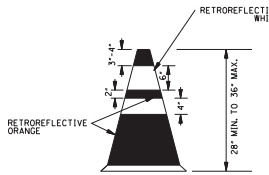
1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM3-R IS SHOWN. THE OM3-L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.
4. THE STRIPING SHALL CONSIST OF ALTERNATING BLACK AND RETOREFLECTIVE YELLOW SLOPING DOWNWARD TOWARD THE SIDE ON WHICH TRAFFIC IS THE PASS.



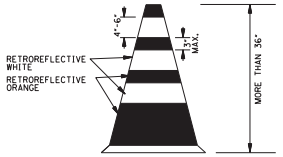
PLASTIC DRUM DETAIL



TUBULAR MARKER DETAIL

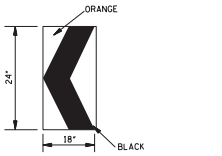


PLASTIC CONE DETAIL
(28" – 36")



PLASTIC CONE DETAIL
(36" OR GREATER)

1. PLASTIC DRUMS, TUBULAR MARKERS, OR PLASTIC CONES SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF THE DEVICE USED SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON THE DEVICE USED SHALL BE ORANGE WITH RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL WHITE STRIPES AS SHOWN ON THE DETAILS.
2. DRUMS, TUBULAR MARKERS, OR PLASTIC CONES SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS, TUBULAR MARKERS, OR PLASTIC CONES SHOULD BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.
4. BALLAST SHALL NOT BE PLACED ON THE TOP OF THE DRUM.



RETROREFLECTIVE CHEVRON ALIGNMENT SIGN DETAIL
(W1-8)

1. A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
2. THE CHEVRON SIGN SHALL BE MOUNTED ON CRASHWORTHY SUPPORT.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHOULD BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.
4. CHEVRON SIGNS SHALL BE INSTALLED AT A MINIMUM HEIGHT OF 4 FEET MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE ELEVATION OF THE NEAR EDGE OF THE TRAVELWAY.

DATE	REVISION	BY
12/17/25	REVISED TEXT AND DETAILS.	SYN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

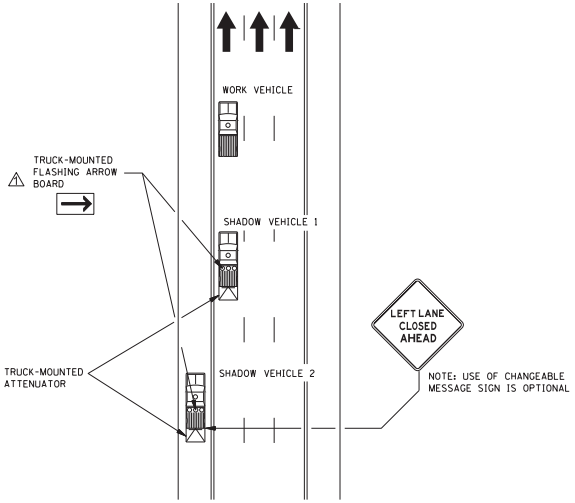
WORKING NUMBER
TCP-8

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6358

STATE	PROJECT NO.
MISS.	

MOBILE OPERATIONS ON MULTILANE ROAD

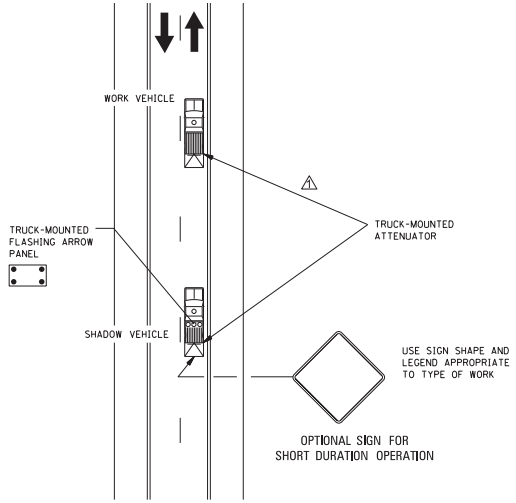


MOBILE OPERATIONS ON MULTILANE ROAD

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
12/17/25	REVISED TEXT AND DETAILS	SYN

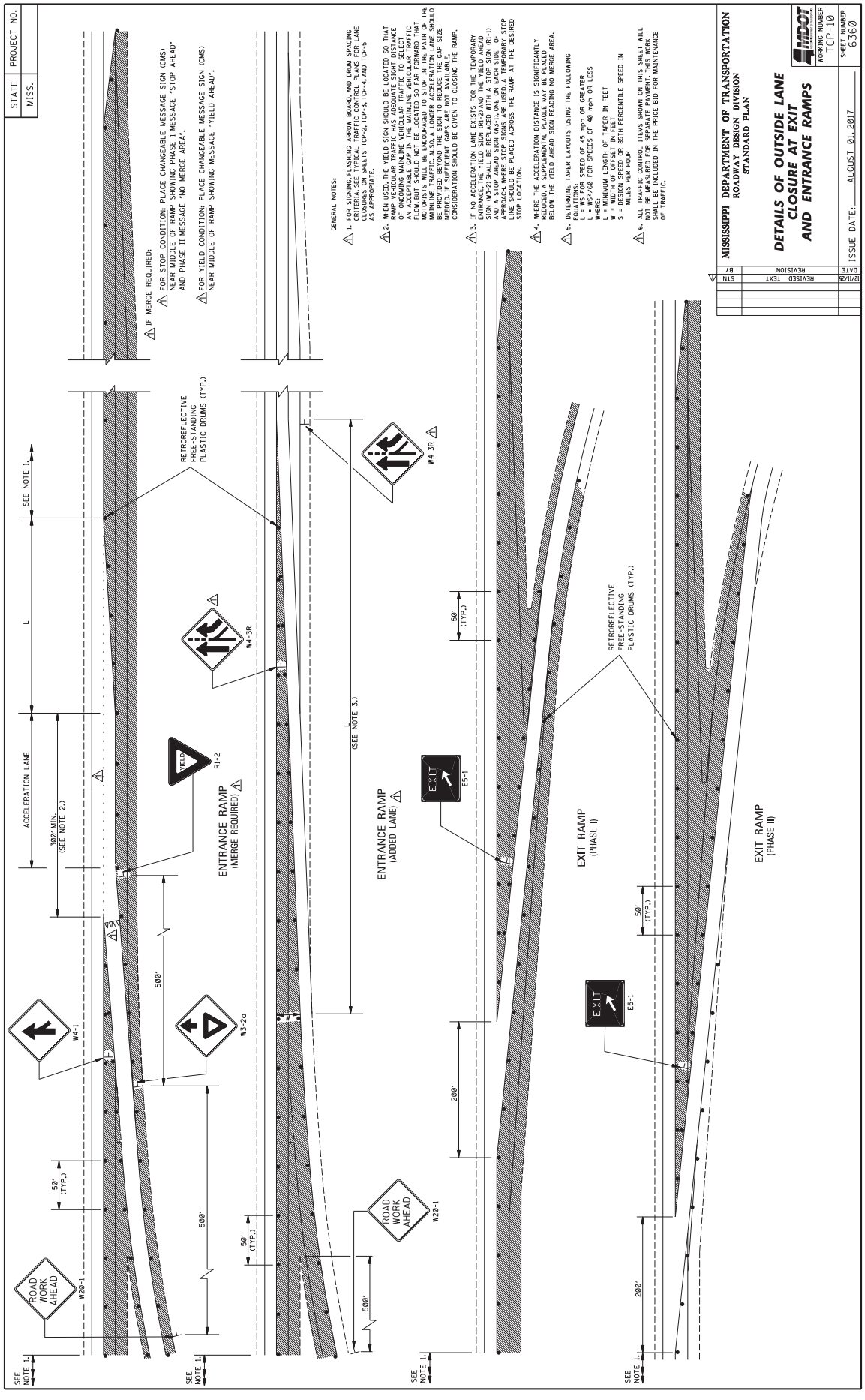
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

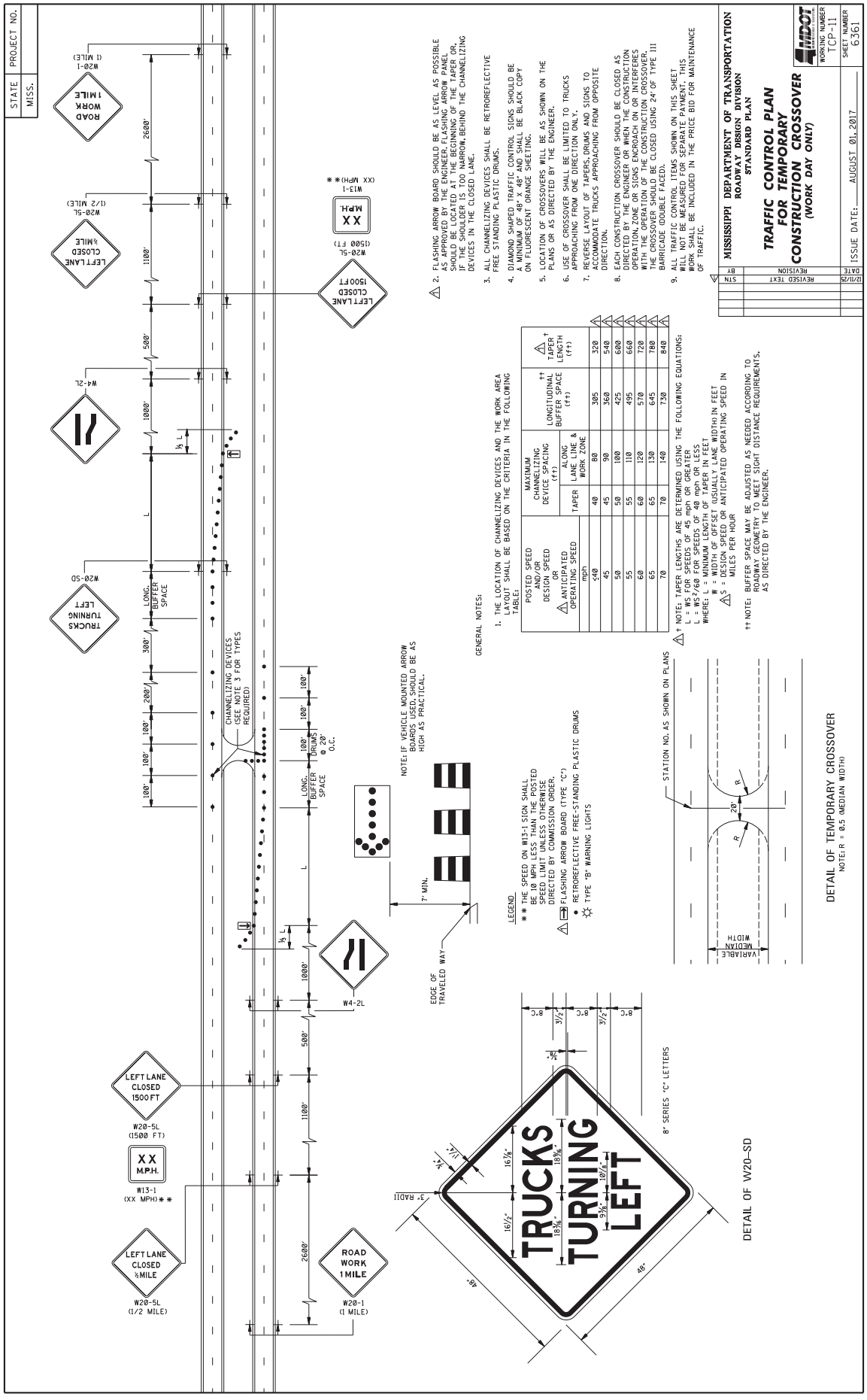
TRAFFIC CONTROL PLAN MOBILE OPERATIONS MULTILANE ROADS AND TWO–LANE ROADS

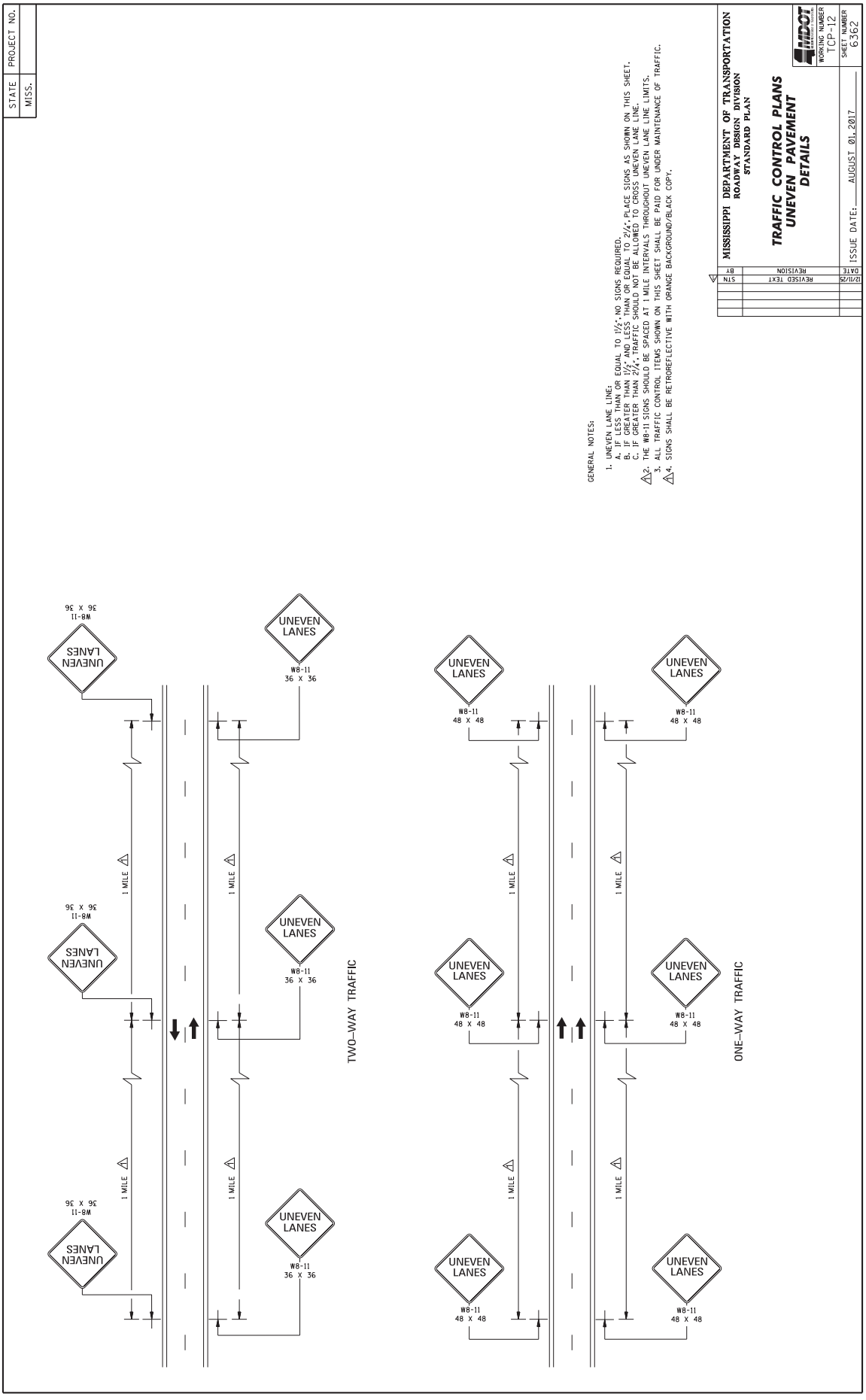
WORKING NUMBER TCP-9

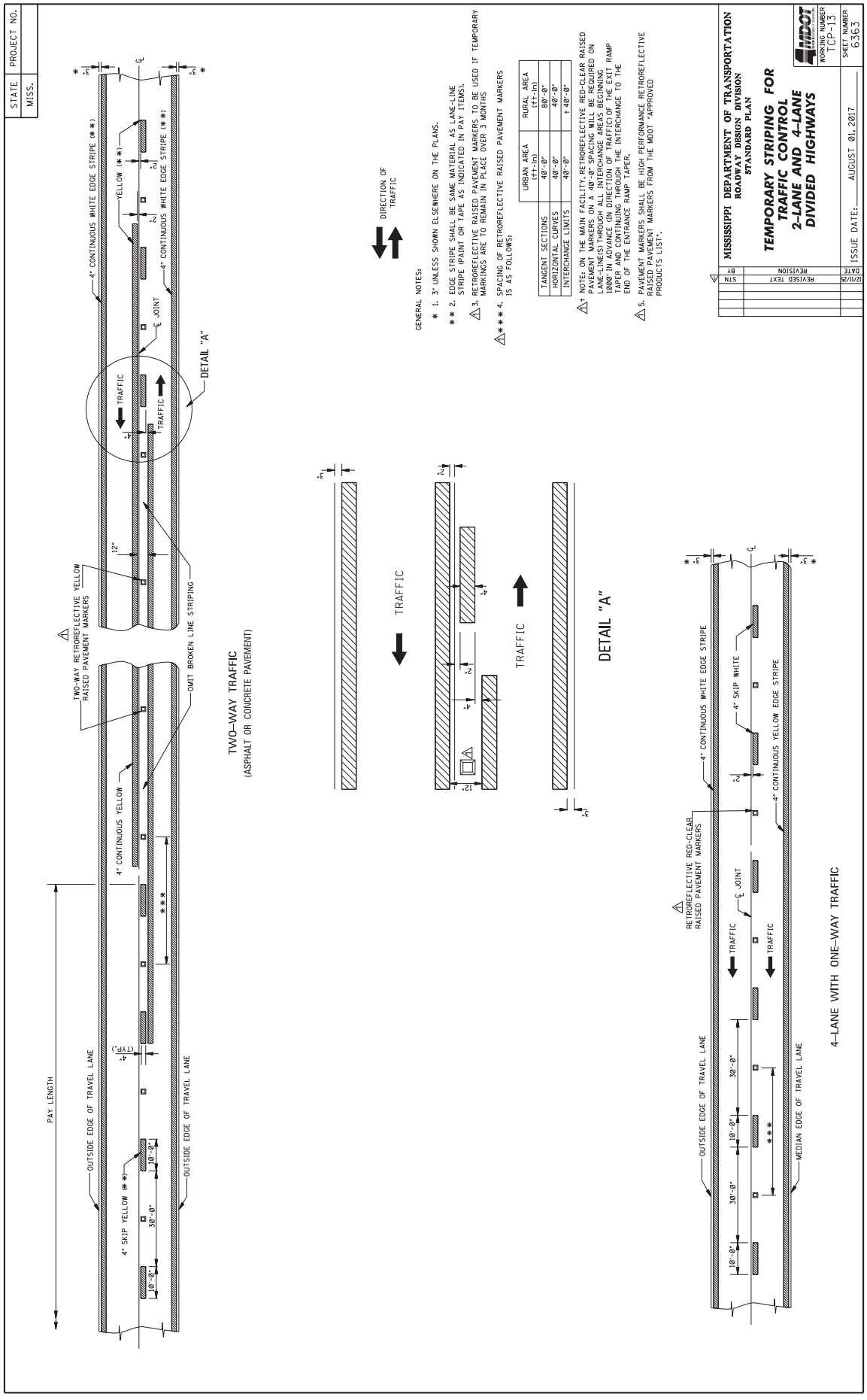
ISSUE DATE: AUGUST 01, 2017

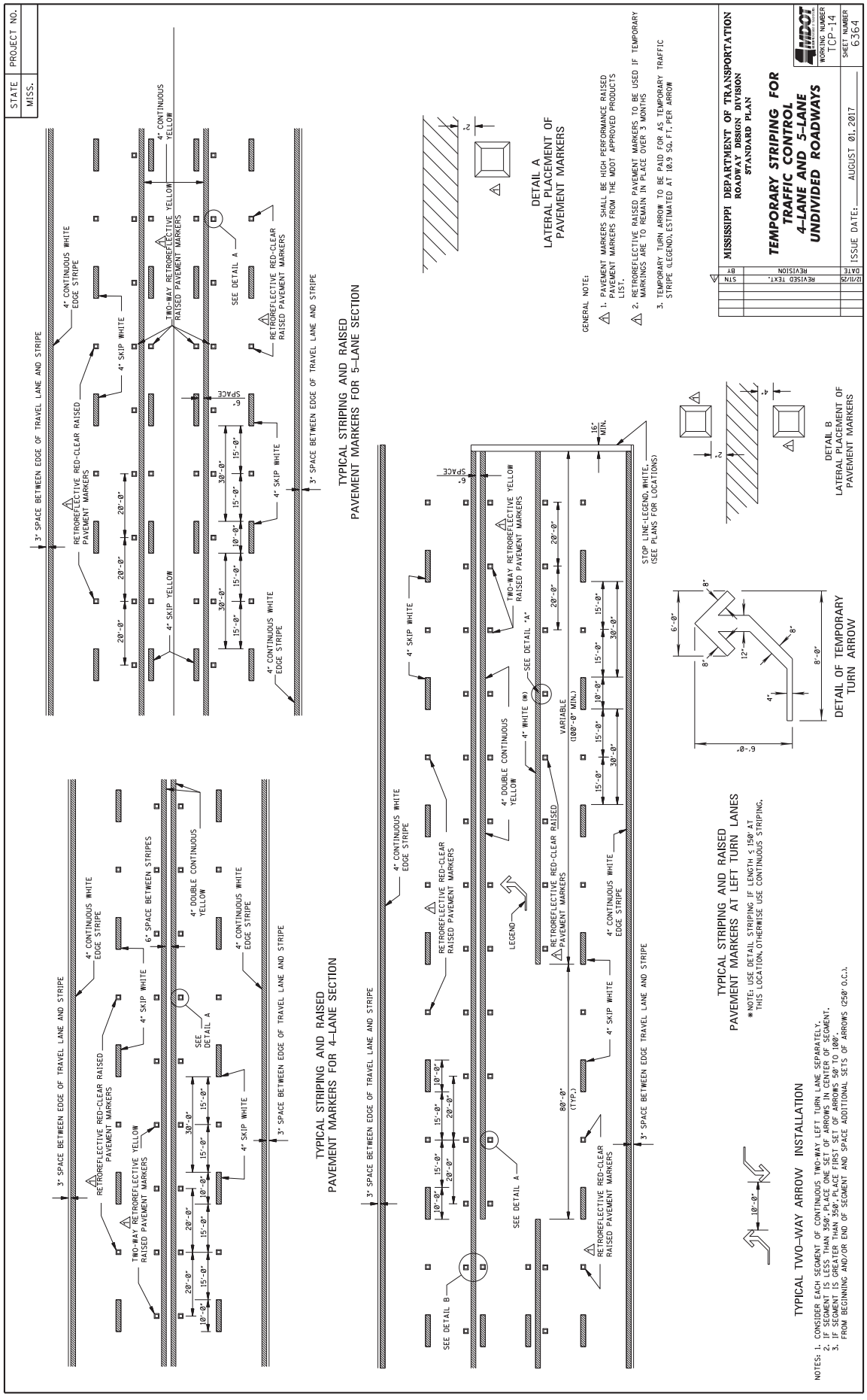
SHEET NUMBER 6359

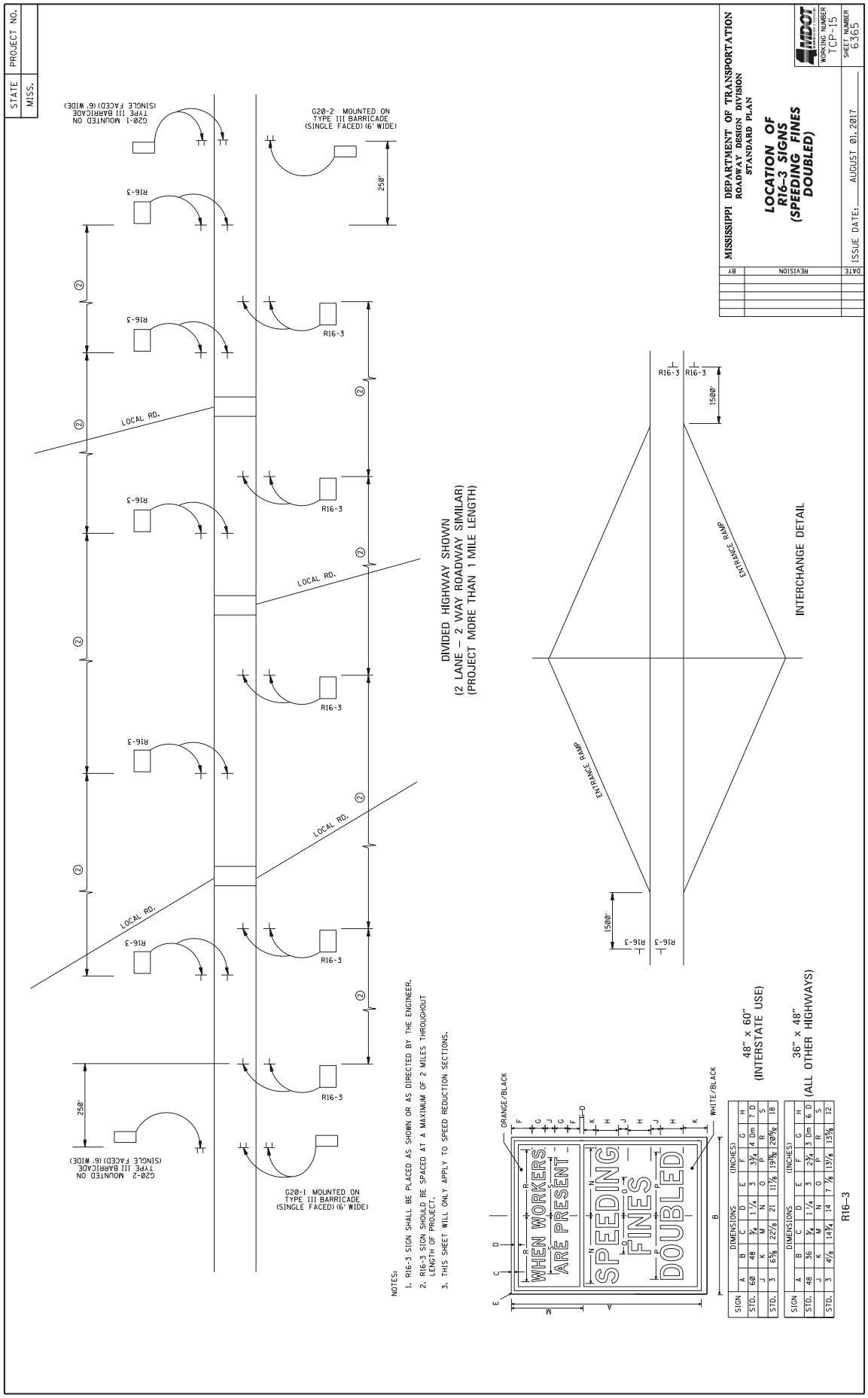

STATE MISS.
PROJECT NO.
GENERAL NOTES:
1. FOR SIGNING, FLASHING ARROW BOARD, AND DRUM SPACING CRITERIA SEE TYPICAL TRAFFIC CONTROL PLANS FOR LANE CLOSURES ON SHEETS TCP-2, TCP-3, TCP-4, AND TCP-5 AS APPROPRIATE.
2. WHEN USED, THE YIELD SIGN SHOULD BE LOCATED SO THAT RAMP VEHICULAR TRAFFIC HAS ADEQUATE SIGHT DISTANCE OF ONCOMING MAINLINE VEHICULAR TRAFFIC TO SELECT AN ACCEPTABLE GAP IN 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 BEYOND THIS POINT TO PROVIDE THE GAP SIZE NEEDED. IF SUFFICIENT GAPS ARE NOT AVAILABLE, CONSIDERATION 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 APPROACHING TRAFFIC. ALSO, A SUPPLEMENTAL 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 CRITERIA:
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, WHICHEVER IS GREATER
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".
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 12/11/25
REVISION REVISED TEXT
BY STN
ROAD WORK AHEAD W20-1
W4-1
W3-2o
500'
50' (TYP.)
ACCELERATION LANE
L
300' MIN. (SEE NOTE 2.)
SEE NOTE 1.
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS (TYP.)
ENTRANCE RAMP (MERGE REQUIRED)
YIELD R1-2
W4-3R
ENTRANCE RAMP (ADDED LANE)
L (SEE NOTE 3.)
EXIT E5-1
EXIT RAMP (PHASE I)
EXIT RAMP (PHASE II)
200'


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
DATE
BY
12/11/20
REVISED TEXT
STN
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
2. FLASHING ARROW BOARD 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 SIGN DOES NOT HAVE AN ARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48" AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
5. LOCATION OF CROSSOVERS WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. USE OF CROSSOVER SHALL BE LIMITED TO TRUCKS APPROACHING FROM ONE DIRECTION ONLY.
7. REVERSE LAYOUT OF TAPERS, DRUMS AND SIGNS TO ACCOMMODATE TRUCKS APPROACHING FROM OPPOSITE DIRECTION.
8. EACH CONSTRUCTION CROSSOVER SHOULD BE CLOSED AS DIRECTED BY THE ENGINEER OR WHEN THE CONSTRUCTION OPERATION, ZONE OR SIGNS ENCROACH ON OR INTERFERES WITH THE OPERATION OF THE CONSTRUCTION CROSSOVER. THE CROSSOVER SHOULD BE CLOSED USING 24" OF TYPE III BARRICADE, DOUBLE FACED.
9. 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.
POSTED SPEED AND/OR DESIGN SPEED OR ANTICIPATED OPERATING SPEED mph
MAXIMUM CHANNELIZING DEVICES SPACING (ft)
TAPER
ALONG LANE LINE & WORK ZONE
LONGITUDINAL BUFFER SPACE (ft) ††
TAPER LENGTH (ft) †
≤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 (EQUAL TO LANE WIDTH) IN FEET
S = DESIGN SPEED OR ANTICIPATED OPERATING 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.
LEGEND
** THE SPEED ON W13-1 SIGN SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.
FLASHING ARROW BOARD (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
STATION NO. AS SHOWN ON PLANS
VARIABLE MEDIAN WIDTH
20'
R
DETAIL OF TEMPORARY CROSSOVER
NOTE: R = 0.5 MEDIAN WIDTH)
DETAIL OF W20-5D
8" SERIES "C" LETTERS
3" RADII
TRUCKS TURNING LEFT
48"
W20-5D
TRUCKS TURNING LEFT
W4-2L
W20-5L (1500 FT)
LEFT LANE CLOSED 1500FT
W13-1 (XX MPH)**
XX M.P.H.
W20-5L (1/2 MILE)
LEFT LANE CLOSED ½MILE
W20-1 (1 MILE)
ROAD WORK 1 MILE
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
LONG. BUFFER SPACE
100' DRUMS @ 20' O.C.
L
½ L
100' 100' 200' 300' 500' 1000' 1100' 2600'
W20-5L (1500 FT)
LEFT LANE CLOSED 1500FT
W13-1 (XX MPH)**
XX MPH.
W20-5L (1/2 MILE)
LEFT LANE CLOSED ½MILE
W20-1 (1 MILE)
ROAD WORK 1 MILE


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 BY REVISION
12/1/25 STN REVISED TEXT
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 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.
TWO-WAY TRAFFIC
ONE-WAY TRAFFIC
UNEVEN LANES
W8-11
36 X 36
48 X 48
1 MILE

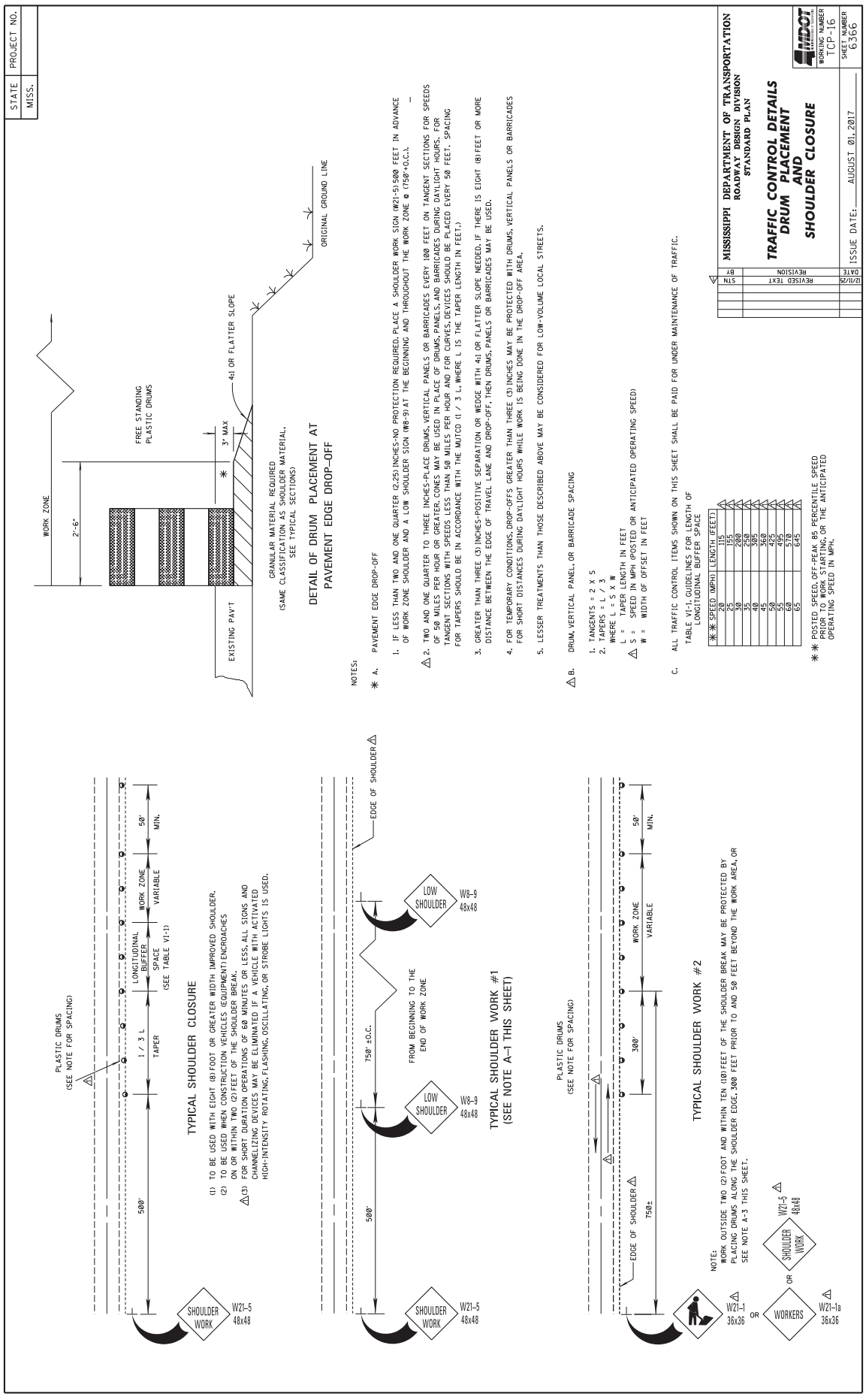

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS
WORKING NUMBER TCP-13
SHEET NUMBER 6363
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT 12/11/20
DATE REVISION BY STN
GENERAL NOTES:
* 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 WARNING) DISTANCE FROM THE GORE POINT OF THE 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".
DIRECTION OF TRAFFIC
TRAFFIC
DETAIL "A"
TWO-WAY RETROREFLECTIVE YELLOW RAISED PAVEMENT MARKERS
4" CONTINUOUS YELLOW
4" SKIP YELLOW (**)
4" CONTINUOUS WHITE EDGE STRIPE (**)
YELLOW (**)
℄ JOINT
OMIT BROKEN LINE STRIPING
OUTSIDE EDGE OF TRAVEL LANE
PAY LENGTH
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
4" SKIP WHITE
RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
4" CONTINUOUS YELLOW EDGE STRIPE
MEDIAN EDGE OF TRAVEL LANE
4-LANE WITH ONE-WAY TRAFFIC


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
12/11/25 REVISED TEXT.
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION
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.
TYPICAL TWO-WAY ARROW INSTALLATION
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
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.).



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 ⅞	13⅛	13⅝	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	320
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.
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.
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 WORK #1 (SEE NOTE A-1 THIS SHEET)
EDGE OF SHOULDER △
750' ±O.C.
FROM BEGINNING TO THE END OF WORK ZONE
LOW SHOULDER
W8-9 48x48
TYPICAL SHOULDER WORK #2
PLASTIC DRUMS (SEE NOTE FOR SPACING)
300'
750±
WORK ZONE VARIABLE
50' MIN.
W21-1 36x36
OR
WORKERS
W21-1a 36x36
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.
△ REVISED TEXT STN 12/11/25
REVISION BY DATE
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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7706 **CODE: (SP)**

DATE: **04/30/2026**

SUBJECT: **Contract Time**

PROJECT: **SP-1441-00(008) / 110008301 – Hinds County**

The calendar date for completion of work to be performed by the Contractor for this project shall be **October 15, 2026** which date or extended date as provided in Subsection 108.06 shall be the end of contract time. It is anticipated that the Notice of Award will be issued no later than **June 09, 2026** and the effective date of the Notice to Proceed / Beginning of Contract Time will be simultaneous with the execution of the contract.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7973 **CODE: (SP)**

DATE: 05/01/2026

SUBJECT: Scope of Work

PROJECT: SP-1441-00(008) / 110008301 – Hinds 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".

A general description of the work required on the project is as follows:

Preventative Maintenance of approximately 10.2 miles of SR 467 from the Beginning of Maintenance (BOP Station 100+00) to south of Edwards (EOP Station 637+65). Details of specific work are mentioned in the following sections.

From Station 100+00 (BOP) to Station 637+65 (EOP):

Work in this area shall consist of placing a 1" lift of Ultra-Thin Asphalt Pavement. Prior to placement of the Ultra-Thin Asphalt Pavement, pre-grinding will be conducted at the locations listed in the provided table. Intersecting roads requiring major rehabilitation will be milled and inlaid with 12.5mm, ST, Asphalt. Intersecting roads requiring minor crack/pothole repairs less than 1½" in size will be conducted using standard crack sealing practices, with a fog seal coating. Intersecting roads requiring minor crack/pothole repairs over 1½" in size will be repaired with mastic patching material, per the manufacturer's specifications. Failed areas shall be repaired at full depth using 12.5mm, ST, Leveling Asphalt at the locations listed in the provided tables. Cross drains listed in the provided table shall be repaired. Guardrail deficiencies will be addressed and updated to current standards, locations listed in the table provided. Bridge joints shall be repaired at the locations provided in the Joint Repair/Saw Cut/Preformed Joint Seal table. Traffic will **NOT** be allowed to ride on the milled surface.

Milling

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

The Reclaimed Asphalt Pavement (RAP) material removed by the milling operation shall become the property of the Contractor.

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

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

Traffic will NOT be allowed to travel on the mainline milled surface, and the Contractor will be assessed a penalty of $5,000 per calendar day afterwards until the mainline milled surface is covered with the next lift of asphalt.

The Contractor will be allowed to place the crushed stone to the top of the roadway temporarily until asphalt can be placed. If the Contractor elects to place the crushed stone to the top of the roadway, the crushed stone shall be adequately maintained as directed by the Engineer in order to provide a safe riding surface for the traveling public.

Paving

Per Section 401.02.3.2, the asphalt mix design shall be submitted to the Engineer at least 10 working days prior to its proposed use.

Per section 401.03.1.4, irregular areas shall be compacted to refusal densification. An irregular area shall be defined as any area less than 8 feet wide by 300 feet long. The Contractor shall be responsible for conducting all necessary density shots as well as establishing the rolling pattern.

Prior to mainline paving operations, failed areas in the existing pavement shall be removed and backfilled with 12.5-mm ST, Leveling asphalt pavement as per the attached typical sections and details. Asphalt shall be placed in multiple lifts with a maximum lift thickness of 3". Leveling areas shall be keyed in 1½" to the existing asphalt at the locations provide in the tables. Any granular/stone base or subgrade material deemed unsuitable by the Engineer shall be removed as directed and backfilled with 12.5-mm ST, Leveling asphalt pavement. Payment for the excavation of the granular base and subgrade will be made using the 203-G Excess Excavation pay item. A list of the failed areas is shown in the attached tables. Pavement repairs shall be completed as a continuous operation in order to minimize traffic impacts. Lane closures shall remain in place until the failed area has been completely repaired. Lane closures may not be left unattended.

The surface lift for failed area repair shall have a maximum deviation of 1/8" as determined by a 10 foot straight edge. Any location that deviates more than this tolerance, as determined by the Engineer, shall be corrected at no additional cost to the State.

Prior to mainline paving operations, pre-grinding shall be performed in areas determined by the Contractor as per section 412.03 and at other areas as directed by the Engineer. The Contract quantity is for estimating purposes only.

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

Privately owned entrances shall be paved to the shoulder line per the included typical drawing unless otherwise directed. Pad dimensions shall match the existing lengths and widths unless

otherwise directed. Pads shall be shaped horizontally and vertically to prevent excessive drop-offs. Any new driveway pads deemed necessary by the Engineer shall be placed according to specifications.

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

Granular Shoulder Material

Where applicable, the existing shoulders are to be raised to match the new pavement elevation by placing variable depth Granular Material. The shoulders shall be graded and pulled up on a daily basis to eliminate drop-offs in excess of 2¼". Placement of the granular material on the finished asphalt course shall not be permitted. The existing shoulder shall be scarified to allow incorporation of the new shoulder material. The material shall be bladed, rolled, and compacted to a finished slope of four percent (4%) in normal crown sections. Placement of this material shall be performed to provide a uniform and compacted shoulder with a minimum depth and width of material placed. Shoulders with adequate shoulder material in place shall be bladed to a slope of four percent (4%) in normal crown sections. The cost of blading will be an absorbed item and is to be included in the price of other items bid.

Granular material (Class 5, Group "D") shall be provided around driveway pads as directed to prevent shoulder drop-offs and shall be placed in a timely manner. Drop-offs exceeding 2¼" shall be corrected within 2 calendar days of the placement of the pad. Stabilizer aggregate shall be used as directed by the Engineer.

Any material excavated from the existing shoulder as a result of shoulder blading shall be used on the existing shoulder to match the new pavement elevation and any surplus material shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas as directed by the Engineer and will be an absorbed item. Material which cannot be suitably placed in adjacent areas and deemed to be excess excavation by the Engineer shall be removed from the project site. Payment for removal of excess material will be made using Pay Item No. 203-G Excess Excavation.

Temporary and Permanent Pavement Markings

Temporary traffic stripe will be required immediately after the milling and/or required overlay and prior to opening area to traffic. Temporary stripe is to be placed in the same location and configuration as the permanent stripe except that it may be offset as required for milling and paving operations. If temporary stripe is offset, the Contractor shall conduct operations in a manner to ensure the final temporary stripe is placed at the required location of the permanent stripe. If removal of temporary offset stripe is required in order to achieve the correct location and alignment

of permanent stripe, the cost of removal will be absorbed in other items bid. Placing double temporary centerline will not be allowed.

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

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

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

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

Payment for edge stripe on local roads shall be made under Pay Item No. 907-626-G004, Thermoplastic Detail Stripe, White when the length of said stripe is less than 150 feet when measured from the end of the radius. If the measured length is greater than 150 feet, then payment shall be made under Pay Item No. 907-626-B006: 6" Thermoplastic Traffic Stripe, Continuous White.

Payment for centerline stripe on local roads shall be made under Pay Item No. 907-626-G005, Thermoplastic Detail Stripe, Yellow when the length of said stripe is less than 150 feet when measured from the stop bar. If the measured length is greater than 150 feet, then payment shall be made under Pay Item No. 907-626-E005: 6" Thermoplastic Traffic Stripe, Continuous Yellow. Centerline Stripe shall be omitted on local roads whose width is less than 20 feet.

Guardrail

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

The asphalt guardrail pad shall be milled and paved up to the face of the guardrail. The remainder of the guardrail pad shall be modified or constructed to conform to Special Design Drawing SDGR-PI. Pay Item No. 202-B006 Removal of Asphalt Paved Shoulders, All Depths and Pay Item No. 503-C010 Saw Cut, Full Depth shall be used to modify any existing asphalt guardrail pads. If blading is required in order to meet the minimum depth, then said blading shall be an absorbed item and the excavated material shall be retained and used to raise the existing shoulder to match the new pavement elevation. Material which cannot be placed and blended in adjacent areas and deemed to be excess excavation by the Engineer shall be removed under Pay Item No.

203-G Excess Excavation. The installed guardrail shall meet all requirements in order to be MASH compliant.

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

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

Permanent Signs

Permanent signs as listed on the attached tables are to be replaced. Unless otherwise listed in the attached tables, existing posts, anchors, angles/bars, and other components are to be reused. The Contractor shall use new bolts, screws, washers, nuts, etc. of the required sizes in the installation of signs. If required as part of the sign replacement activities, all post and I-beam lengths in these plans are estimated. Post lengths for all signs shall be verified in the field by the Contractor prior to fabrication. Installation dates shall be clearly written in bold black markings on the back bottom half off all signs with a permanent marking stick that is waterproof, fade resistant, and marks on wet or dry surfaces. If existing sign posts or footings are to be replaced, the existing posts and footings are to be removed and the area backfilled and compacted in accordance with Section 203 of the Standard Specifications. Removal of sign, post, and footing and backfilling will be paid using the removal of sign pay item.

Object markers at bridge approaches and other locations are to be replaced as shown in the attached table. Removal of object markers shall be absorbed in the cost of other items bid.

Traffic Control

The Contractor shall erect and maintain construction signing and provide all signs and traffic control devices necessary to safely maintain traffic around and through the work areas in accordance with the Traffic Control Plan and the MUTCD. The cost is to be included in the price bid for Pay Item No. 618-A, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except those designated in the plans to be black legend and border on white background.

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

The Contractor shall on a daily basis, remove all debris from within the roadway and a 30-foot clear zone which, in the opinion of the Engineer, is a hazard to the traveling public. This activity shall begin with the beginning of work or the beginning of the contract time, whichever comes first. No direct payment will be made for the debris removal; the cost is to be included in the prices

of items bid. Failure of the Contractor to remove the debris as prescribed herein shall be just cause for withholding the monthly progress estimate payment or suspending active operations until the debris is satisfactorily removed by the Contractor.

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

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

Temporary Portable Rumble Strips, as described in Special Provision No. 907-619, shall be used in advance of each lane closure. Direct payment will be made for this item. Once the Project is complete, the Department will retain the Temporary Portable Rumble Strips used on the Project.

Random Clearing

Random clearing shall be required at a distance of forty feet (40') from the center line. Tree limbing shall be required at a distance of up to thirty feet (30') vertically within the clearing limits. The random clearing shall encompass trees four inches (4") or greater in diameter, scrubs, and overhang within the clearing limits. Trees shall either be cut flush with the ground line or if the Contractor elects to cut the tree above the groundline then the tree stump shall be ground flush with the ground line. The cut material shall either be hauled away from the project site or mulched in place to a depth of four inches (4") maximum in any one location. If the Contractor elects to utilize other means of disposal for the cut material, then said method shall be approved by the Engineer prior to commencement.

All costs associated with the cutting, mulching, removal, stump grinding, or any other work associated with the dead tree removal shall be included in Pay Item No.201-D001 Random Clearing (Per Station).

All areas disturbed by the Contractor shall be stabilized to the satisfaction of the Engineer at no additional cost to the state. The Contractor shall be responsible for any damage caused to above ground utilities, private property, and State owned property within the limits of the random clearing.

The Contractor shall be allowed to close both lanes of the roadway for a maximum of five (5) minutes at one time in order to safely fell any dead trees. After the maximum time limit of five (5) minutes of both lanes being closed has occurred, the Contractor shall be required to allow one lane of traffic to be opened to traffic for a minimum of fifteen (15) minutes with all required traffic control devises. The Contractor will be charged a fee of $500.00 for each full or partial 5 - minute period until the roadway is back in compliance with the requirements stated above.

Miscellaneous Notes

The cross drain repairs will involve removal and replacement of the existing pipe which shall be completed as a continuous operation in order to minimize traffic impacts and will require special traffic control according to the current edition of the Manual on Uniform Traffic Control Devices. Lane closures shall remain in place until the failed area has been completely repaired. Lane closures shall not be left unattended.

The Contractor will have the option to use Corrugated Polypropylene Pipe instead of Reinforced Concrete Pipe at Sites 1, 2, and 3 listed in the Cross Drain Repair table in the Scope Attachments. If the Contractor elects to use Corrugated Polypropylene Pipe, the work will be done according to Notice to Bidders No. 6531.

The existing 72” RCP at Site 4 can be kept in place and repaired or relined, or it can be replaced by a new 72” RCP. The use of Corrugated Polypropylene Pipe **WILL NOT** be allowed at Site 4.

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

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

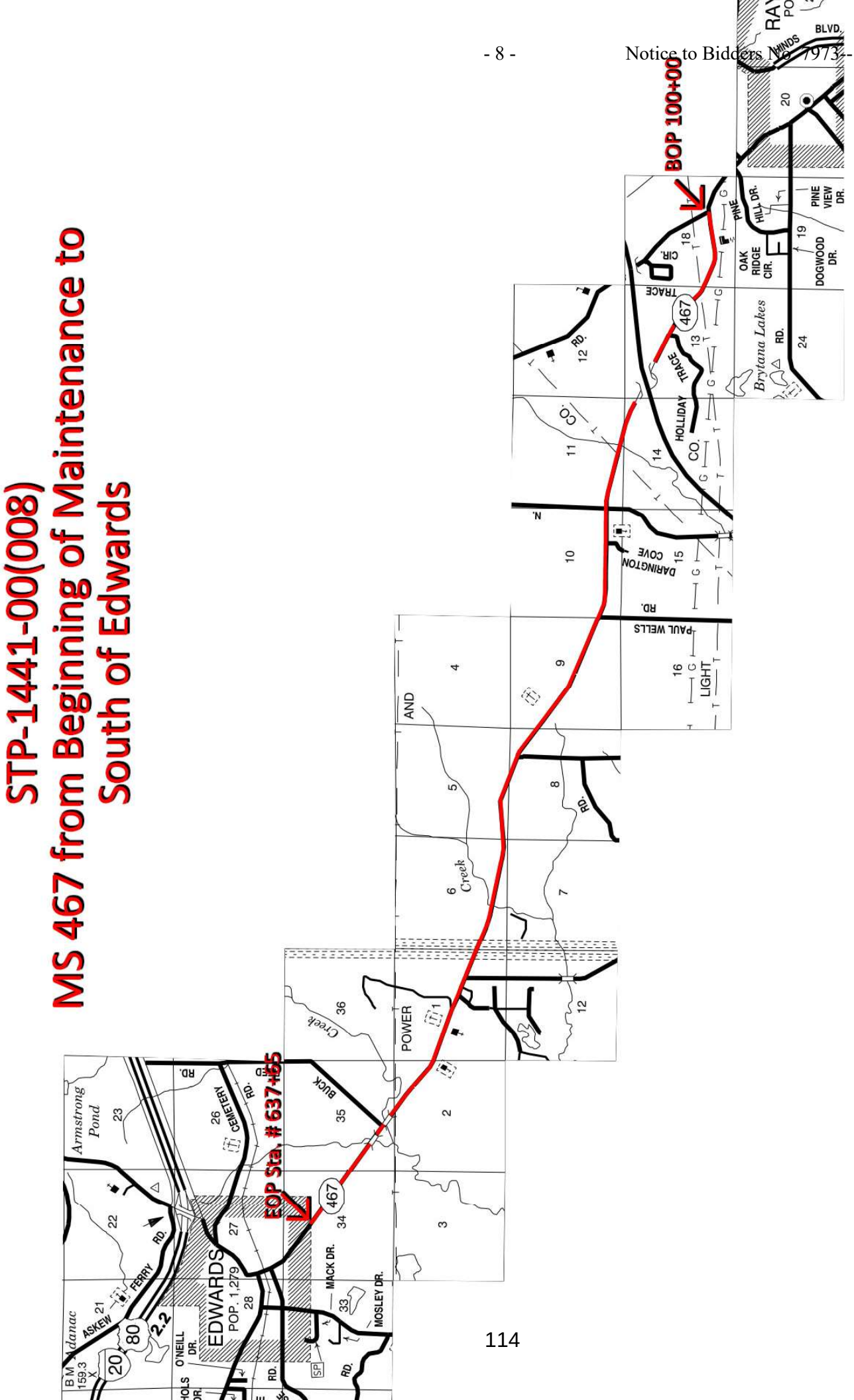
Removal of existing raised pavement markers is to be included in the prices for other items bid.

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

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

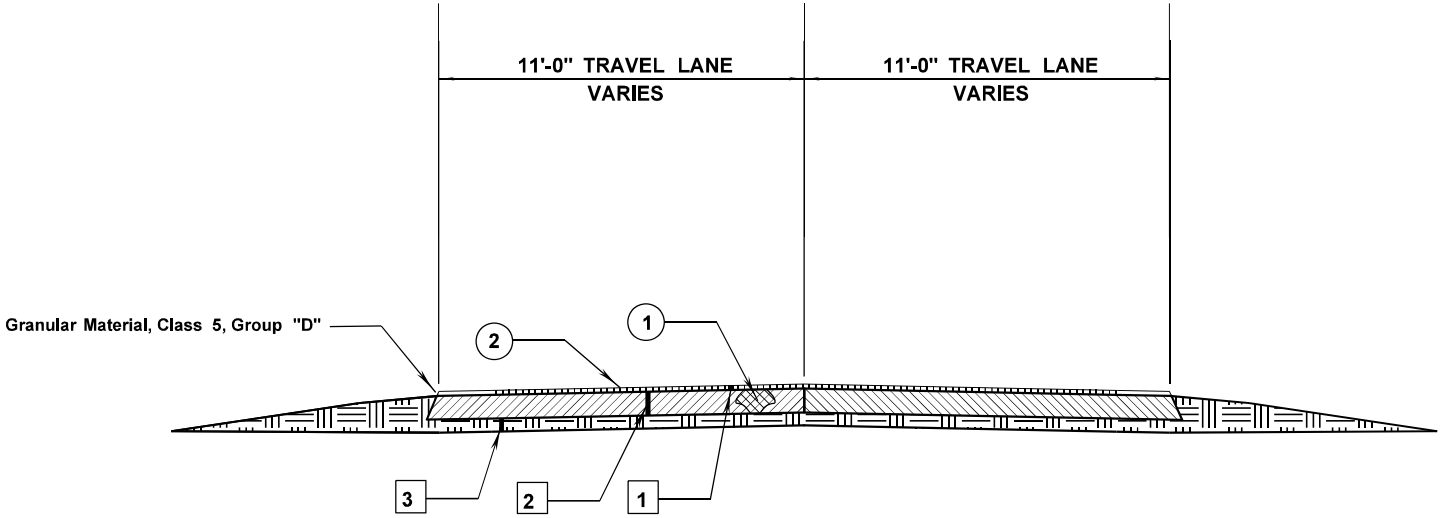
The cost for removal of all headwalls and wingwalls for drainage structures shall be absorbed in other items bid.

Any references to Project Number STP-1441-00(008) in the following attachments is understood to mean SP-1441-00(008) / 110008301.


STP-1441-00(008)
MS 467 from Beginning of Maintenance to South of Edwards
EOP Sta. # 637+65
BOP 100+00
EDWARDS
POP. 1,279
Armstrong Pond
Brytana Lakes
Creek
467
20
80
2.2

Typical Section

Mainline Hwy 467



EXISTING

1 - 3/8" and Variable Chip Seal

2 - 5 1/2" and Variable Asphalt Pavement

3 - 4" Clay Gravel

PROPOSED

① Repair failed areas with 12.5mm, ST, Asphalt Pavement, Leveling full depth

② 1" Ultra Thin Asphalt Pavement overlay

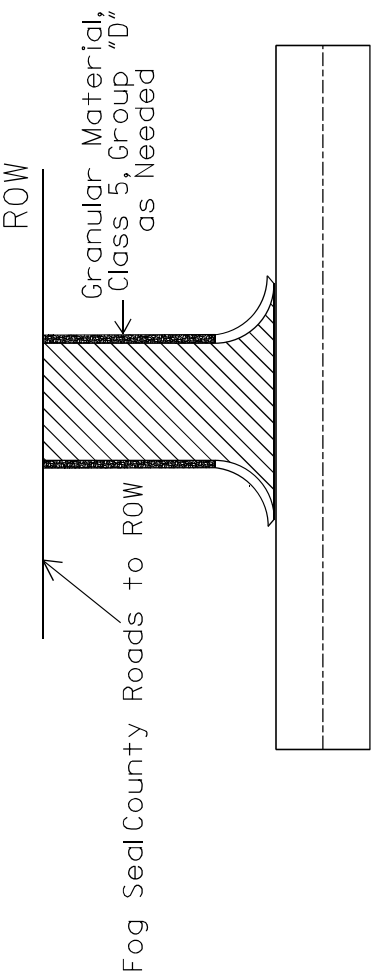
Notice to Bidders
Typical Section
Mainline Hwy 467
Project No.: SP-1441-00(008)--
County: Hinds
FMS CON: 110008/301000
DESIGNED BY: Matthew Little
DETAILED BY: Matthew Little
CHECKED BY: Stephen Little
DATE: March 2, 2026
MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SHEET ID
SHEET NO. 1

115973 -- County
PLAN SHEET
3/11/2026 3:16:43 PM TS.dgn

Milling and Paving Detail
County Roads
HWY 467 Hinds County

County Roads:

Chapel Hill Rd West
Darlington Cove
Adams Ln
Buck Reed Rd



Milling and Paving Detail
County Roads
HWY 467 Hinds County

County Roads:

Holliday Trace
Chapel Hill E.
Russell Tilman
Bill Downing
Military Rd

Notes:

-Mill limits of county/local roads at a maximum depth of 1".

-Place 2" of 12.5mm, ST, Mixture

-Milling/Paving area = ▨

SP-1441-00(008) 110008/301000

Hinds County

201-D001 Random Clearing

Northbound			Southbound		
From STA	To STA	Quantity (STA)	From STA	To STA	Quantity (STA)
100+00	104+16	4.160	100+00	101+45	1.450
105+80	109+00	3.200	101+79	102+10	0.310
110+00	110+50	0.500	103+44	105+10	1.660
112+00	117+65	5.650	105+47	105+68	0.210
121+30	125+65	4.350	106+28	106+32	0.040
128+20	128+74	0.540	108+00	112+26	4.260
133+30	137+16	3.860	112+72	122+31	9.590
140+27	144+10	3.830	124+85	132+21	7.360
147+73	165+00	17.270	133+95	134+35	0.400
165+18	174+04	8.860	135+93	136+73	0.800
178+90	185+10	6.200	138+09	138+65	0.560
197+35	224+15	26.800	141+91	150+37	8.460
225+90	226+95	1.050	153+12	158+60	5.480
227+38	227+60	0.220	159+60	160+33	0.730
228+10	241+25	13.150	160+76	164+50	3.740
241+75	254+45	12.700	165+45	181+28	15.830
255+30	287+36	32.060	181+88	182+35	0.470
288+88	291+70	2.820	183+09	184+10	1.010
294+54	295+10	0.560	196+37	198+30	1.930
295+48	337+92	42.440	198+97	199+37	0.400
338+45	346+95	8.500	202+92	204+92	2.000
348+60	349+83	1.230	205+87	207+85	1.980
350+42	351+43	1.010	208+60	228+00	19.400
352+33	367+13	14.800	232+72	232+92	0.200
369+54	369+80	0.260	234+00	234+16	0.160
370+24	371+50	1.260	235+41	235+89	0.480
372+00	372+72	0.720	237+06	237+28	0.220
375+73	379+70	3.970	237+93	239+25	1.320
379+87	388+50	8.630	245+00	254+52	9.520
388+82	395+31	6.490	255+32	266+27	10.950
400+76	416+87	16.110	268+76	269+64	0.880
417+17	418+10	0.930	270+20	271+67	1.470
418+59	441+34	22.750	272+00	279+38	7.380
442+25	442+60	0.350	279+58	281+21	1.630
443+00	448+16	5.160	281+58	286+92	5.340
450+21	452+66	2.450	289+40	292+40	3.000
453+24	461+08	7.840	294+43	308+00	13.570
	Total (STA):	292.680		Total (STA):	144.190

SP-1441-00(008) 110008/301000

Hinds County

201-D001 Random Clearing

Northbound			Southbound		
From STA	To STA	Quantity (STA)	From STA	To STA	Quantity (STA)
463+00	466+96	3.960	308+57	340+12	31.550
493+19	494+43	1.240	351+17	386+30	35.130
496+74	497+97	1.230	386+97	400+53	13.560
498+69	501+35	2.660	401+13	406+46	5.330
504+45	513+38	8.930	407+34	420+10	12.760
514+35	524+53	10.180	421+06	427+20	6.140
527+36	532+05	4.690	430+42	431+25	0.830
533+78	540+25	6.470	434+31	440+15	5.840
573+26	579+30	6.040	443+04	446+58	3.540
580+79	580+96	0.170	450+37	452+39	2.020
581+85	637+65	55.800	455+61	460+46	4.850
			462+55	465+08	2.530
			465+49	470+77	5.280
			471+12	473+11	1.990
			473+91	475+75	1.840
			480+21	480+43	0.220
			492+81	494+65	1.840
			497+38	498+59	1.210
			498+80	500+53	1.730
			507+00	510+94	3.940
			514+80	516+00	1.200
			517+00	517+17	0.170
			517+61	522+00	4.390
			524+65	525+90	1.250
			528+63	528+93	0.300
			529+65	535+55	5.900
			536+43	536+75	0.320
			537+25	537+50	0.250
			542+06	542+71	0.650
			550+58	550+98	0.400
			566+53	571+29	4.760
			572+00	605+88	33.880
			606+38	606+80	0.420
			607+50	609+00	1.500
			609+18	613+38	4.200
			613+75	631+77	18.020
			634+88	635+18	0.300
	Total (STA):	101.370		Total (STA):	220.040

SP-1441-00(008) - 110008/301					
Hinds County					
Joint Repair/Saw Cut/Preformed Joint Seal					
Sta.#	Length	907-808-A002 Joint Repair (LF)	907-823-B002 Saw Cut, Type II (LF)	907-823-A002 Preformed Joint Seal, Type II (LF)	Remarks Bridge #
223+09	34	68	68	34	8.7
223+10	34	68	68	34	8.7
223+99	34	68	68	34	8.7
224+00	34	68	68	34	8.7
290+50	34	68	68	34	7.3
290+51	34	68	68	34	7.3
291+70	34	68	68	34	7.3
291+71	34	68	68	34	7.3
458+35	34	68	68	34	4
458+36	34	68	68	34	4
459+96	34	68	68	34	4
459+97	34	68	68	34	4
575+71	44	88	88	44	1.8
575+72	44	88	88	44	1.8
579+57	44	88	88	44	1.8
579+58	44	88	88	44	1.8
	Total	**1168**	**1168**	**584**	

SP-1441-00(008) - 110008/301000																			
Hinds County																			
Cross Drain Repair																			
Site	From Station	To Station	Lane	503-C010 Saw Cut, Full Depth (LF)	202-B007 Removal of Asphalt Pavement, Failed Areas (SY)	206-A001 Structure Excavation (CY)	202-B191 Removal of Pipe, 8" and Above (LF)	202-B129 Removal of Flared End Section, All Sizes (EA)	603-CA055 36" RCP (LF)	603-CA076 48" RCP (LF)	603-CA119 72" RCP (LF)	Reinforced Concrete End Sections (EA)			304-F002 Size 610 Crushed Stone Base (Ton)	907-403-B003 12.5 ST Leveling Asphalt (Ton)	815-A007 Loose Riprap, Size 300 (Ton)	815-E001 Geotextile Under Riprap (SY)		Remarks
												36"	48"	72"				LT	RT	
1	227+21	227+56	Both	44	85.556	157.829	80	2		160			4		320.60	28.23	80	36.56	36.56	
2	427+13	427+30	Both	44	41.556	46.086	56		60			2			98.76	13.71	20	5.96	5.18	
3	493+64	493+86	Both	44	53.778	89.001	52			104			4		182.51	17.75	100	44.72	26.95	
4	633+98	634+44	Both	44	112.444	398.569	80				80			2	669.04	37.11	140	68	12.58	
				176	**293.334**	**691.485**	**268**	**2**	**60**	**264**	**80**	**2**	**8**	**2**	**1270.91**	**96.80**	**340**	**155.24**	**81.27**	
																		Total SY: 236.51		

NOTE: Any areas disturbed by the Contractor shall be re-stabilized at no additional cost to the State.
NOTE: Installing Double Line of pipe at Sites 1 and 3.

Hinds County - SP-1441-00(008) - 110008/301000

Removal of Debris and Sand From Box Culvert, 10-foot and Greater Width

202-B096

Location	Sta.	Width	Length	Total Length	Notes
Hwy 467	587+05	32	60	120	Double Barrel
			TOTAL	120	

SP-1441-00(008) 110008/301000					
Hinds Co.					
Fog Seal Local Rds.					
Local Rds.	Sq. Yds.	Sta.	907-410-D001 Fog Seal (Gallons)	907-413-A002 Mastic (Gallons)	907-413-D001 Cleaning and Filling Joints and Cracks
Chapel Hill Rd West	183.352	255+00	20.169	0	0
Darlington Cove	205.85	271+90	22.644	30	20
Adams Ln.	484.327	505+00	53.276	60	95
Buck Reed Rd.	449.461	581+41	49.441	10	97
		Total:	**145.529**	**100**	**212**

SP-1441-00(008) SR 467 Guardrail Quantities

Hinds County

GUARDRAIL					TERMINAL END		BRIDGE END SECTION		DELINEATORS		SIGNS		
STATION	LOCATION (LT/RT)	606-B002 W-BEAM (LF)	THRIE BEAM TRANS. SECT. (LF)	THRIE BEAM (LF)	606-E005 FLARED END SECT. (EA)	NON-FLARED END SECT. (EA)	606-D019 TYPE "H" (EA)	TYPE "I" (EA)	630-F006 WHITE (EA)	YELLOW (EA)	630-G005 TYPE 3 OBJECT MARKERS	202-B158 GUARDRAIL REMOVAL (LF)	REMARKS
189+88	Lt	62.5			2				7				Natchez Trace
189+62	Rt	62.5			2				7				Natchez Trace
221+69	RT	93.75			1		1		5		1	156.25	
222+32	LT	31.25			1		1		3		1	93.75	
223+88	Rt	31.25			1		1		3		1	93.75	
223+88	LT	93.75			1		1		5		1	156.25	
289+10	Rt	93.75			1		1		5		1	156.25	
289+72	Lt	31.25			1		1		3		1	93.75	
291+59	Rt	31.25			1		1		3		1	93.75	
291+59	Lt	93.75			1		1		5		1	156.25	
456+95	Rt	93.75			1		1		5		1	156.25	
457+57	Lt	31.25			1		1		3		1	93.75	
459+84	Rt	31.25			1		1		3		1	93.75	
459+84	Lt	93.75			1		1		5		1	156.25	
573+70	Rt	143.75			1		1		10		1	206.25	
574+95	Lt	43.75			1		1		5		1	106.25	
579+33	Rt	43.75			1		1		5		1	106.25	
579+57	Lt	143.75			1		1		10		1	206.25	
	Total	1250	0	0	20	0	16		92	0	16	2125	

* REMOVAL OF ALL GUARDRAIL (BRIDGE END SECTIONS, W-BEAM, TYPE-I CABLE ANCHORAGE, TERMINAL END SECTIONS, ETC.) WILL BE PAID UNDER PAY ITEM 202-B REMOVAL OF GUARD RAIL.
* REMOVAL OF GUARDRAIL DELINEATORS ARE CONSIDERED INCIDENTAL TO THE REMOVAL OF GUARDRAIL AND WILL NOT BE MEASURED AS A SEPARATE PAY ITEM.
* ALL GUARDRAIL, POSTS, BLOCKOUTS, CONCRETE ANCHORS, HARDWARE, ETC. WILL BE THE PROPERTY OF THE CONTRACTOR.
* TOTAL GUARDRAIL LENGTH IS BASED ON A TERMINAL END SECTION 37.5' LONG. IF A TERMINAL END SECTION OF A DIFFERENT LENGTH IS USED, THE LENGTH OF THE W-BEAM MAY HAVE TO BE ADJUSTED.
*REMOVAL OF OBJECT MARKERS WILL NOT BE MEASURED AS A SEPARATE PAY ITEM AND SHALL BE ABSORBED IN OTHER ITEMS
*EXISTING TERMINAL ENDS AND HARDWARE (NUTS, BOLTS, ETC.) SHALL BE RETAINED BY THE DEPARTMENT.

SP-1441-00(008) - 110008/301000

Hinds County

907-403-B003 12.5-mm, ST, Asphalt Pavement, Leveling

Station	Station	Lane	Length	Width	12.5 mm ST (Ton)	Tack (Gal)
436+80	437+34	Rt & Lt	54	22	15	13
438+92	439+44	Lt	52	11	7	6
498+23	498+72	Rt & Lt	49	22	13	12
499+55	499+78	Rt & Lt	23	22	6	6
506+25	507+28	Rt & Lt	103	22	28	25
				Total:	69	62

SP-1414-00(008) 110008/301000

Hinds County

Standard Roadsign Sign Assembly

Station	Location	Sign To Be Mounted	630-A005 Standard Roadside Sign, Sheet Aluminum, 0.100" Thickness (SF)	630-A003 Standard Roadside Sign, Sheet Aluminum, 0.125" Thickness (SF)	630-C005 Square Tube Post 2" (LF)	630-G005 Type III Object Markers, OM-3R or 3L, Post Mounted Each	Remarks
131+25	Rt of Rt Ln.	W1-2R		9	15		
146+25	Rt of Rt Ln.	W1-2L		9	15		
160+05	Rt of Rt Ln.	W2-2		9	15		
170+05	Lt of Lt Ln.	W2-2		9	15		
184+20	Lt of Lt Ln.	OM				1	Missing 1-OM Sign Post in Place
195+11	Lt of Lt Ln.	OM				4	4-OM Signs, 2-Post
202+90	Rt of Rt Ln.	W1-2L		9	15		
216+60	Lt of Lt Ln.	W1-2R		9	15		
227+46	Lt of Lt Ln.	OM				4	4-OM Signs, 2-Post
235+15	Rt of Rt Ln.	W1-2L		9	15		
238+17	Lt of Lt Ln.	W1-2L		9	15		
250+00	Rt of Rt Ln.	W2-1		9	15		
250+30	Lt of Lt Ln.	W1-2R		9	15		
271+95	Rt of Rt Ln.	W1-7	8		30		Sign Mounted on 2 Post
291+53	Rt of Rt Ln.	W1-2R		9	15		
303+00	Lt of Lt Ln.	OM				4	4-OM Signs, 2-Post
303+20	Rt of Rt Ln.	W2-2		9	15		
306+27	Lt of Lt Ln.	W1-2L		9	15		
332+70	Rt of Rt Ln.	W1-2R		9	15		
353+39	Lt of Lt Ln.	W1-2L		9	15		
364+08	Lt of Lt Ln.	OM				1	Missing 1-OM Sign Post in Place
367+88	Lt of Lt Ln.	OM				2	2-OM Signs, 1-Post
372+33	Rt of Rt Ln.	W1-2L		9	15		
378+20	Lt of Lt Ln.	OM				2	2-OM Signs, 1-Post
389+70	Lt of Lt Ln.	W1-2R		9	15		
399+75	Rt of Rt Ln.	W1-2L		9	15		
423+46	Rt of Rt Ln.	W1-2R		9	15		
427+33	Lt of Lt Ln.	OM				2	2-OM Signs, 1-Post
436+95	Rt of Rt Ln.	W1-2L		9	15		
458+40	Rt of Rt Ln.	W1-2R		9	15		
468+80	Rt of Rt Ln.	W1-2R		9	15		
479+80	Lt of Lt Ln.	W1-2L		9	15		
483+60	Rt of Rt Ln.	W1-2L		9	15		
495+10	Lt of Lt Ln.	W1-2R		9	15		
496+35	Rt of Rt Ln.	W1-7	8		30		Sign Mounted on 2 Post
499+88	Rt of Rt Ln.	W2-2		9	15		
501+35	Lt of Lt Ln.	W2-2		9	15		
504+88	Rt of Rt Ln.	W1-7	8		30		Sign Mounted on 2 Post
531+85	Rt of Rt Ln.	W1-2R		9	15		
548+20	Rt of Rt Ln.	W1-2L		9	15		
551+88	Lt of Lt Ln.	W1-2L		9	15		
559+75	Rt of Rt Ln.	OM				2	2-OM Signs, 1-Post
563+42	Lt of Lt Ln.	W1-2R		9	15		
576+37	Rt of Rt Ln.	W2-2		9	15		
586+37	Lt of Lt Ln.	W2-2		9	15		
589+42	Rt of Rt Ln.	W1-2L		9	15		
600+85	Lt of Lt Ln.	W1-2R		9	15		
Totals:			**24**	**315**	**615**	**22**	

NOTE: ALL INSTALLATION COMPONENTS (OMNI SLEEVES, ANCHORS, BOLTS, WASHERS, ETC.) ARE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED AS A SEPARATE PAY ITEM.

NOTE: INSTALLATION DATES SHALL BE CLEARLY MARKED ON THE BACK BOTTOM HALF OF ALL SIGNS.

SP-1441-00(008) - 110008/301							
Hinds County							
412-A001 - Pre-Grinding							
North Bound				South Bound			
Start Distance (ft)	Stop Distance (ft)	Length	Area (SF)	Start Distance (ft)	Stop Distance (ft)	Length	Area (SF)
2089	2106	17	204	122	145	23	276
4699	4704	5	60	445	455	10	120
4917	4918	1	12	5533	5548	15	180
4920	4922	2	24	8497	8522	25	300
4928	4934	6	72	11827	11841	15	180
4935	4936	1	12	13217	13218	1	12
12018	12023	5	60	13612	13641	25	300
12787	12838	25	300	14471	14500	25	300
18453	18472	19	228	16065	16090	25	300
19692	19696	4	48	19955	19974	19	228
19699	19710	11	132	20123	20138	14	168
19711	19725	14	168	20159	20170	11	132
24231	24231	1	12	20189	20231	25	300
25286	25287	1	12	21301	21303	2	24
26486	26491	5	60	21314	21325	11	132
26829	26847	17	204	23348	23352	4	48
28446	28470	25	300	26613	26627	14	168
31954	31959	5	60	27828	27832	5	60
32052	32060	8	96	28438	28456	19	228
32572	32596	23	276	30246	30248	2	24
33704	33712	8	96	33674	33680	7	84
36452	36463	11	132	35524	35535	12	144
39704	39746	25	300	40609	40620	12	144
40312	40368	25	300	41224	41260	25	300
40376	40405	25	300	46343	46372	25	300
40407	40408	1	12	53886	53893	7	84
40491	40516	25	300				
40761	40772	11	132				
43546	43564	18	216				
44076	44099	23	276				
47951	47964	13	156				
48081	48087	6	72				
50911	50913	2	24				
	Total		4656		Total		4536

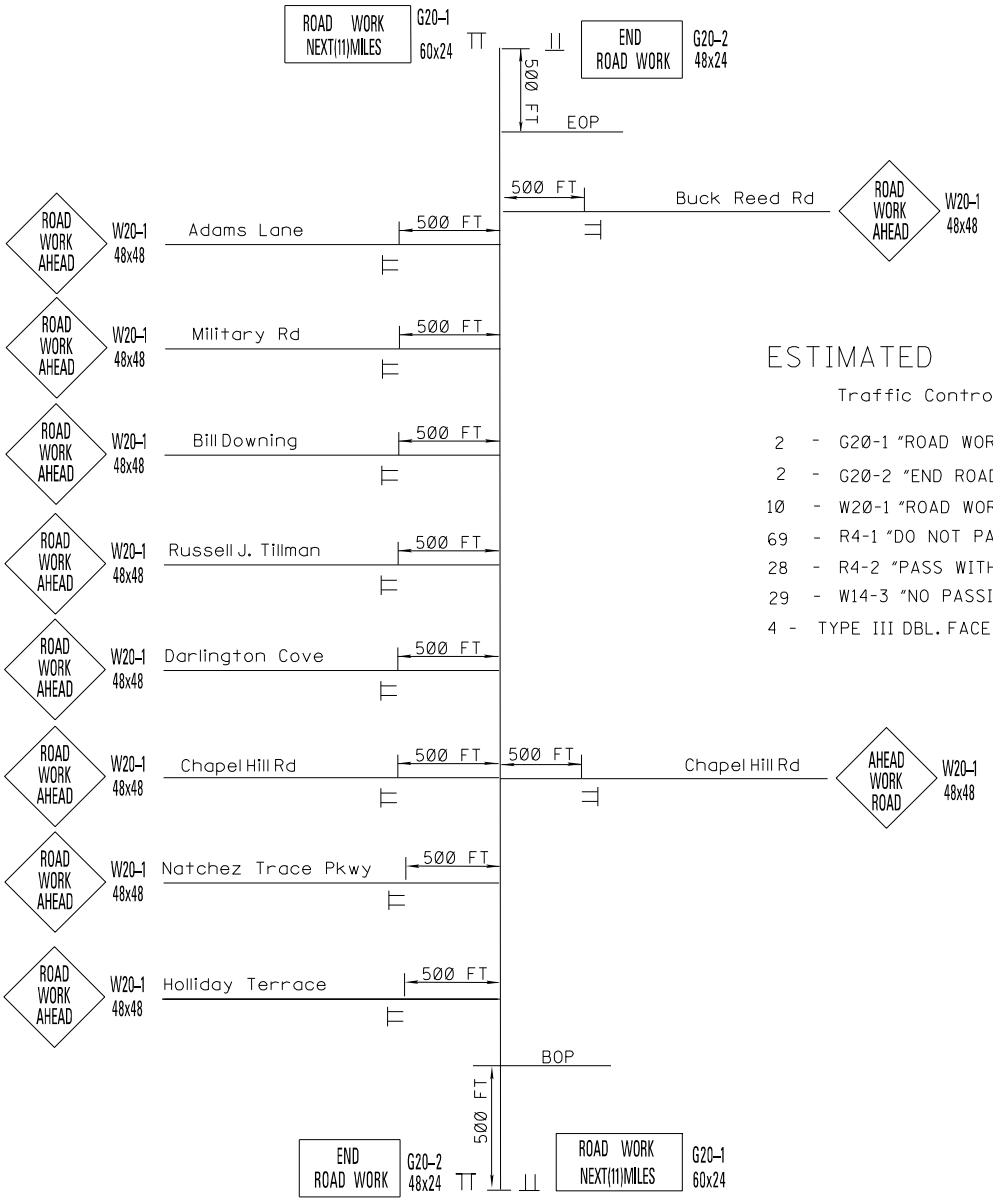
*Pre-grinding shall not exceed 25 feet in length.

*Distance measurements begin at 32.272690 N -90.439300 W for North Bound(at BOP) and at 32.324340 N -90.597340 W for South Bound(at EOP).

SP-1441-00(008) - 110008/301									
Hinds County									
Full Depth Asphalt Repair Quantities									
Station	Station	Location	Width	Length	503-C010 Saw Cut, Full Depth (LF)	202-B009 Removal of Asphalt Pavement, Failed Areas (SY)	203-G001 Excess Excavation, FM, AH (CY)	407-A001 Asphalt for Tack Coat (Gal)	907-403-B003 12.5-mm, ST, Asphalt Pavement Leveling (Ton)
206+67	207+04	Lt. Ln.	11	37	59	45.222	7.537	0.33	29.847
502+25	502+52	Lt. Ln.	11	27	49	33.000	5.500	0.27	21.780
504+52	504+80	Rt. Ln.	11	28	50	34.222	5.704	0.28	22.587
570+47	570+85	Lt. Ln.	11	38	60	46.444	7.741	0.33	30.653
574+19	574+78	Rt. Ln.	11	59	81	72.111	12.019	0.45	47.593
583+15	583+44	Rt. Ln.	11	29	51	35.444	5.907	0.28	23.393
				Total	**350**	**266.444**	**44.407**	**1.94**	**175.853**

SP1414-00(008) 110008/301000					
Hinds County					
406-D001 Fine Milling Bituminous Pavement (Transitions)					
Station	Station	Length	Width	SY	Remarks
100+00	101+00	100	22	244.444	B.O.P.
221+93	222+93	100	22	244.444	Bridge
224+22	225+22	100	22	244.444	Bridge
289+32	290+32	100	22	244.444	Bridge
291+93	292+93	100	22	244.444	Bridge
457+19	458+19	100	22	244.444	Bridge
460+17	461+17	100	22	244.444	Bridge
574+54	575+54	100	22	244.444	Bridge
579+85	580+85	100	22	244.444	Bridge
636+65	637+65	100	22	244.444	E.O.P.
165+00 Holliday Trace				105	Local Rd.
225+00 Chapel Hill E.				152	Local Rd.
308+29 Russell Tilman				150	Local Rd.
386+70 Bill Downing				183	Local Rd.
496+70 Military Rd				430	Local Rd.
			Total:	3464.44	

CONSTRUCTION SIGNING DETAIL
SP-1441-00(008)-110008/301
SR 467 OVERLAY
HINDS COUNTY
FROM BOM TO SOUTH OF EDWARDS



ESTIMATED

Traffic Control Signs Required:

2	-	G20-1 "ROAD WORK NEXT (11) MILES"
2	-	G20-2 "END ROAD WORK"
10	-	W20-1 "ROAD WORK AHEAD"
69	-	R4-1 "DO NOT PASS"
28	-	R4-2 "PASS WITH CARE"
29	-	W14-3 "NO PASSING ZONE"
4	-	TYPE III DBL. FACE BARRICADES(6LF)

NOTES: One (1) W20-1 "ROAD WORK AHEAD" Sign is Required at each Local Road, Street or Highway Entering the Project.

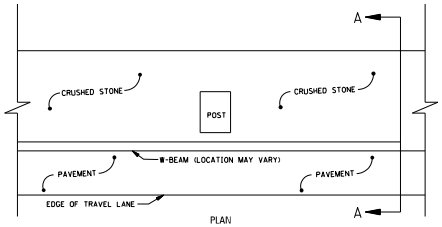
G20-1 and G20-2 signs mounted on Type III Double Faced Barricade.

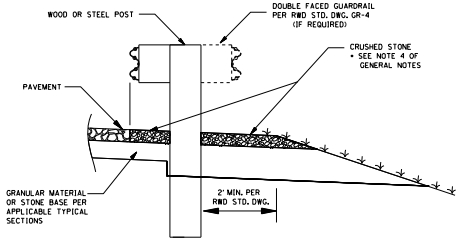
R4-1 "DO NOT PASS", R4-2 "PASS WITH CARE" AND W14-3 "NO PASSING ZONE" signs are required in accordance with Subsection 618.03.3 and as specified in the MUTCD. If No Passing zones are 1000 ft or more, install additional "DO NOT PASS" signs on maximum spacing of 750 ft.

Payment for these signs will be under the appropriate pay item numbers in the summary of quantities

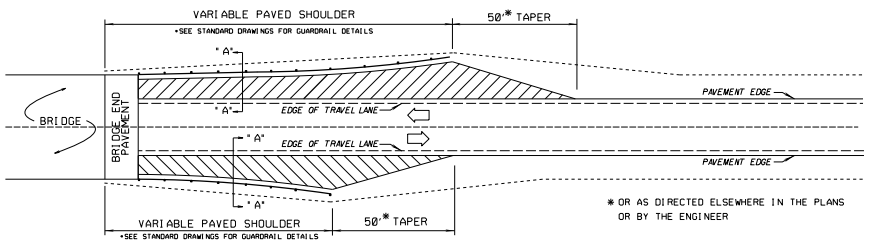
FMS CON: /

STATE	PROJECT NO.
MISS.	

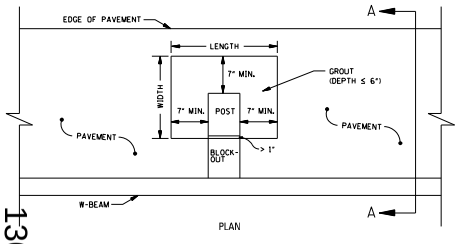


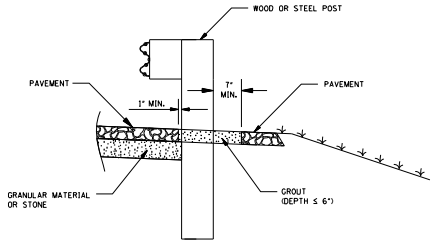


PAVEMENT LEAVE–OUT AREA FOR GUARDRAIL POSTS
SINGLE–FACED GUARDRAIL (CRUSHED STONE OPTION)
- SHOWN WITH DOUBLE-FACED RAIL CONFIGURATION PER RWD STD. DWG. GR-4 (AS APPLICABLE)

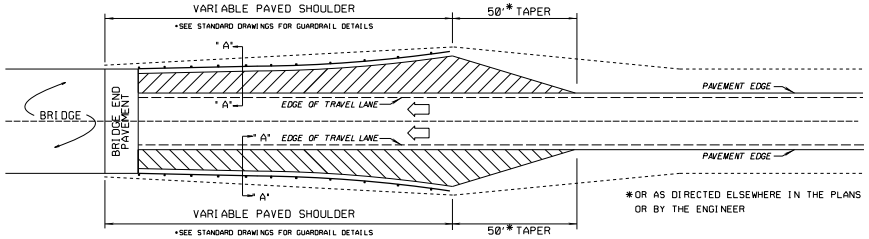


TYPICAL DETAIL OF PAVED SHOULDERS AT BRIDGE ENDS
(2-WAY TRAFFIC)
SEE SECTION "A" - "A"

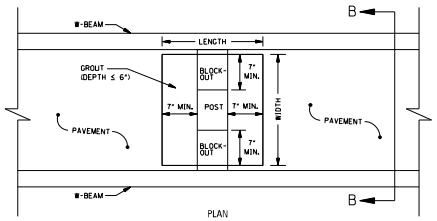


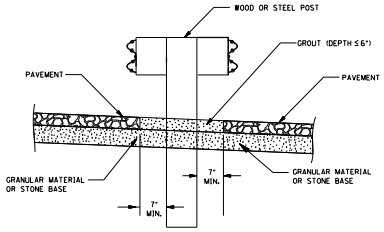


PAVEMENT LEAVE–OUT AREA FOR GUARDRAIL POSTS
SINGLE–FACED GUARDRAIL (GROUT OPTION)



TYPICAL DETAIL OF PAVED SHOULDERS AT BRIDGE ENDS
(1-WAY TRAFFIC)
SEE SECTION "A" - "A"





PAVEMENT LEAVE–OUT AREA FOR GUARDRAIL POSTS
DOUBLE–FACED GUARDRAIL

GENERAL NOTES:

1. THE CRUSHED STONE OPTION WILL BE USED FOR SINGLE-FACED GUARD RAIL PAD APPLICATIONS AND DOUBLE-FACED APPLICATIONS AS SHOWN ON GR-4 UNLESS SPECIFICALLY DIRECTED IN THE PLANS.
2. THE ALTERNATIVES SHOWN HEREON APPLY TO ALL GUARDRAIL CONSTRUCTION WHERE MOW STRIPS ARE ADDED.
3. DIMENSIONS OF GUARDRAIL PLACEMENT AND SHOULDER WIDTHS/SLOPES BEHIND GUARDRAIL POSTS SHALL CONFORM TO APPLICABLE GUARDRAIL DETAILS AND TYPICAL SECTIONS.
4. FOR OVERLAY PROJECTS, THE EXISTING SHOULDER WILL BE EXCAVATED AND A MINIMUM DEPTH OF 3" OF CRUSHED STONE WILL BE PLACED ON THE SHOULDER IN THE AREA BELOW THE GUARDRAIL AND ADJACENT TO THE ASPHALT PAD. FOR NEW CONSTRUCTION PROJECTS, THE SHOULDER MATERIAL TYPE WILL CONFORM TO THE APPLICABLE TYPICAL SECTIONS AND A MINIMUM DEPTH OF 3" OF CRUSHED STONE WILL BE PLACED ON THE SHOULDER IN THE AREA BELOW THE GUARDRAIL AND ADJACENT TO THE ASPHALT PAD. CRUSHED STONE APPLICATION WILL RUN FROM THE BEGINNING OF THE ASPHALT PAD TO THE DOWNSTREAM TERMINUS OF THE PAD. CRUSHED STONE IN THIS AREA WILL EXTEND FROM THE ASPHALT TO THE SHOULDER BREAK AS SHOWN.

GENERAL NOTES FOR CRUSHED STONE OPTION

1. GUARDRAIL POSTS SHALL NOT BE COMPLETELY SURROUNDED BY PAVEMENT. PAVEMENT EDGE SHOULD BE LOCATED NEAR THE FACE OF THE GUARDRAIL BUT MAY NOT BE CLOSER THAN 1" TO THE GUARDRAIL POST.
2. PAVEMENT LEAVE-OUT AREAS ARE REQUIRED FOR STEEL AND WOOD POSTS.
3. STANDARD EMBEDMENT DEPTHS STILL APPLY, MEASURED FROM THE TOP OF THE PROJECTED PAVEMENT SURFACE.
4. IMMEDIATELY PRIOR TO PLACING CRUSHED STONE ON THE GUARDRAIL PAD, THE ENTIRE AREA SHALL BE TREATED UNIFORMLY WITH A SOIL STERILANT. THE SOIL STERILANT SHALL BE APPLIED AT THE MAXIMUM RATE RECOMMENDED ON THE MANUFACTURER'S LABEL FOR PERENNIAL WEED CONTROL. ANY GRANULAR OR PELLETIZED SOIL STERILANT THAT IS APPROVED BY THE ENGINEER MAY BE USED. SEPARATE PAYMENT WILL NOT BE MADE FOR TREATING THE GUARDRAIL PAD AREA WITH SOIL STERILANT.
5. PAYMENT FOR CONSTRUCTION OF MOW STRIPS FOR THIS OPTION WILL BE MADE WITH APPROPRIATE PAY ITEMS (CRUSHED STONE, GRANULAR MATERIAL, ASPHALT, ETC.).
6. THIS OPTION MAY BE USED FOR APPLICATIONS OF DOUBLE-FACED GUARDRAIL WITH OPEN SHOULDERS (PER RWD STD. DWG. GR-4).

GENERAL NOTES FOR GROUT OPTION

1. GUARDRAIL POSTS SHALL NOT BE COMPLETELY SURROUNDED BY PAVEMENT. THE AREA BEHIND AND LATERAL OF THE POST SHALL HAVE A MINIMUM 7" CLEARANCE FROM THE PAVEMENT. THIS AREA SHALL BE FILLED WITH A LOW STRENGTH GROUT WITH A MAXIMUM 28 DAY COMPRESSIVE STRENGTH OF 120 PSI.
2. GROUT SHALL BE INSTALLED AT A DEPTH EQUAL TO THE SURROUNDING PAVEMENT, UP TO A MAXIMUM OF 6". IF SURROUNDING PAVEMENT IS GREATER THAN 6", THE DIFFERENCE SHALL BE FILLED IN WITH SHOULDER GRANULAR MATERIAL.
3. PAVEMENT LEAVE-OUT AREAS ARE REQUIRED FOR STEEL AND WOOD POSTS.
4. STANDARD EMBEDMENT DEPTHS STILL APPLY, MEASURED FROM THE TOP OF THE PROJECTED PAVEMENT SURFACE.
5. COST FOR GROUT, FORMING OR REMOVAL OF ASPHALT, AND OTHER NECESSARY ITEMS TO COMPLETE THE WORK FOR LEAVE-OUT SECTIONS WILL BE ABSORBED IN OTHER ITEMS BID.

MIN. PAV'T LEAVE-OUT AREA

POST	SINGLE-FACED LENGTH (IN.)	SINGLE-FACED WIDTH (IN.)	DOUBLE-FACED LENGTH (IN.)	DOUBLE-FACED WIDTH (IN.)
6"x8" WOOD	20	15	20	22
8"x8" WOOD	22	15	22	22
10"x10" WOOD	24	17	24	24
W6x9 STEEL	18	13	18	20

BY	REVISION
CN	SECTION DETAIL REVISIONS
TT-KS	
DWH	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GUARDRAIL:
POST INSTALLATION IN PAVED AREAS

PROJ. NO.:
COUNTY:

FILE NAME: SDGR-PI-PowerGeopak.dgn
DESIGN TEAM _____ CHECKED _____ DATE _____

PRELIMINARY NOT FOR CONSTRUCTION

WORKING NUMBER
SDGR-PI
SHEET NUMBER
PG

130

- 24 -

Notice to Bidders Nov. 2025 Edition

PLAN REVIEW DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

11/7/2025 11:50:12 PMRDGR-PI-POWERGEOPAK.DGN

SHEET NO.	SHEET ID	TYPICAL SECTION ROADSIDE CLEAR ZONES REQUIRED	COUNTY:
		FMS CON: / PROJECT NO.:	DESIGNED BY:
			DETAILED BY:
			CHECKED BY:
			DATE:

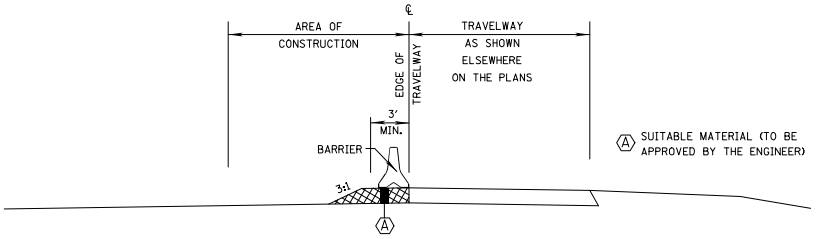
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS - ROADSIDE CLEAR ZONE REQ'D

NOTE: THE PROJECT ENGINEER MAY REQUEST CLEARING IN OTHER LOCATIONS AS NEEDED.

3/13/2024 2:51:42 PM New Clearing limits Interstate.dgn PLAN SHEET

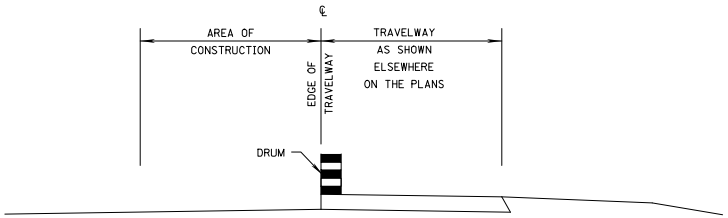
STATE	PROJECT NO.
MISS.	UPDATE



ELEVATION VIEW FOR POSITIVE BARRIER

NOTES:

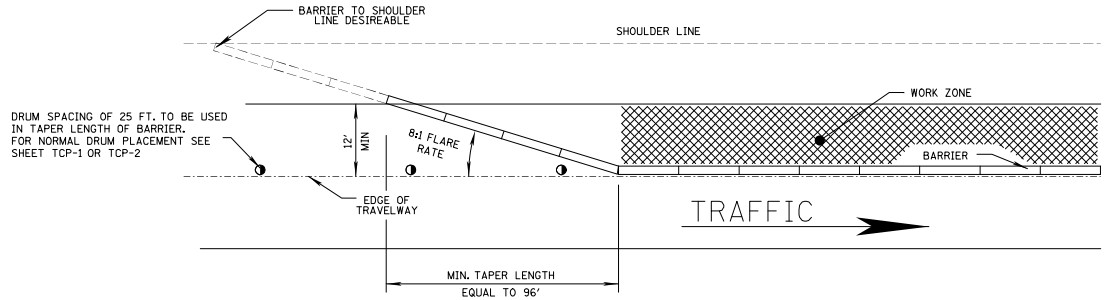
1. POSITIVE BARRIER IS REQ'D IN THE AREA OF OPEN PUNCH OUTS THAT ARE WITHIN SIX (6) FEET OF THE TRAVELWAY WHENEVER ACTUAL REPAIR WORK IS NOT BEING PERFORMED WITHIN THE LANE CLOSURE.
2. MATERIAL USED TO SUPPORT POSITIVE BARRIER MUST BE AT SAME ELEVATION AS PAVEMENT IN ADJACENT TRAVELWAY.
3. DELINEATORS REQUIRED ON ALL NON-REFLECTIVE BARRIER, AS SHOWN ON WORKING NO. CMB-3.



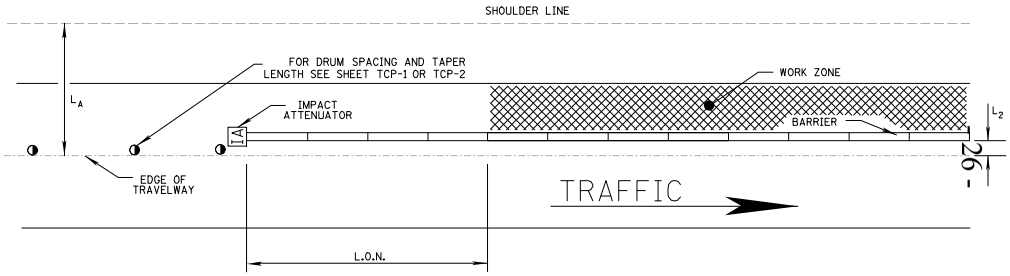
ELEVATION VIEW FOR DRUM

NOTES:

1. WHILE WORK IS BEING PERFORMED WITHIN THE LANE CLOSURE, DROP-OFFS MUST BE PROTECTED WITH DRUMS, ETC. IN EMERGENCIES EXCAVATED SECTION MAY BE BACKFILLED WITH GRANULAR MATERIAL, STONE OR OTHER APPROVED MATERIAL TO AVOID OVERNIGHT DROP-OFFS.
2. LANE CLOSURES WITH OPEN PUNCH OUT AREAS MAY NOT BE LEFT UNATTENDED WHEN DRUMS ARE BEING USED FOR LANE CLOSURE



DETAIL OF POSITIVE BARRIER WITH TAPER



DETAIL OF POSITIVE BARRIER WITH IMPACT ATTENUATOR

NOTES:

1. LENGTH OF NEED, L.O.N. = $\frac{L_R(L_A - L_2)}{L_A}$

WHERE: L_A = LATERAL EXTENT OF THE AREA OF CONCERN
L_R = RUNOUT LENGTH
L_2 = LATERAL OFFSET FROM EDGE OF TRAVELED WAY TO BARRIER.

2. RUNOUT LENGTH (L_R) IS TO BE DETERMINED USING THE FOLLOWING TABLE:

RUNOUT LENGTH (L_R) GIVEN TRAFFIC VOLUME (ADT) (ft)				
DESIGN SPEED (mph)	OVER 10,000 veh/day	5,000-10,000 veh/day	1,000-5,000 veh/day	UNDER 1,000 veh/day
70	360	330	290	250
60	300	250	210	200
50	230	190	160	150
40	160	130	110	100
30	110	90	80	70

GENERAL NOTES:

1. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER OTHER BID ITEMS.
2. FOR DETAILS OF DRUM PLACEMENT SEE OTHER TRAFFIC CONTROL PLANS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

LANE CLOSURE DETAILS FOR GREATER THAN 3 INCH DROPOFF

PROJ. NO.: UPDATE
COUNTY: UPDATE

BY | REVISION | DATE

FILENAME: SDTCP-C.DGN
DESIGN TEAM UPDATE CHECKED UPDATE DATE UPDATE

PRELIMINARY NOT FOR CONSTRUCTION

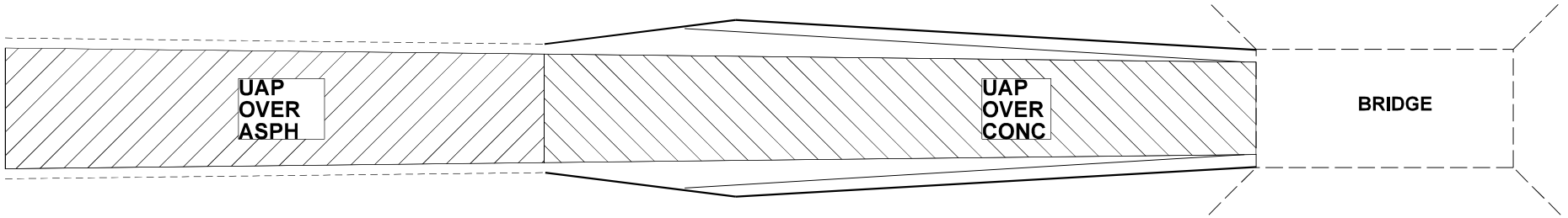
WORKING NUMBER SDTCP-C

SHEET NUMBER PG

Notice to Bidders Not for Construction

PLAN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PROJECT LEADER DIVISION
MCCOY 001.00 AMPH DGNFILENAME

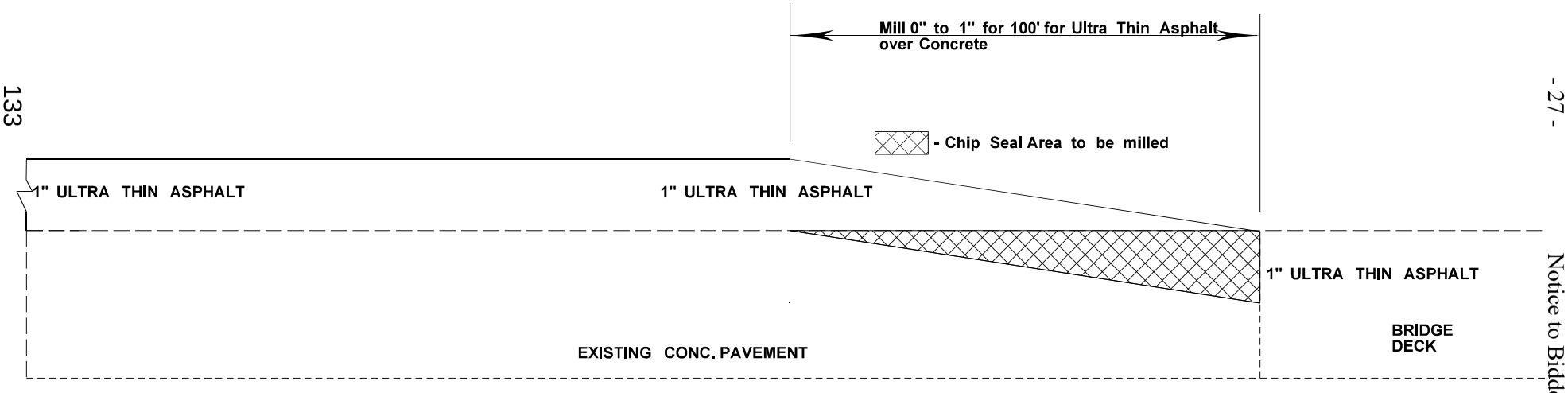
STATE	PROJECT NO.
MISS.	SP-1441-00(008)



- ULTRA THIN ASPHALT PAVING LIMITS

- ULTRA THIN ASPHALT PAVING LIMITS

BRIDGE LIMITS - APPROACH/DEPARTURE



MILLING REQUIREMENTS

(NOT TO SCALE)

Note:
Weep holes shall be required through the shoulder to prevent water from ponding in the milled areas as directed by Engineer.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVING LIMITS
ULTRA THIN ASPHALT
REQUIRMENTS
@ BRIDGES

PROJ. NO.: SP-1441-00(008)
COUNTY: HINDS
FILENAME:
DESIGN TEAM LITTLE CHECKED DATE

SHEET NO. 133 TOTAL SHEETS 133

PLBR-2

Notice to Bidders No. 7

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7974 **CODE: (SP)**

DATE: 3/25/2026

SUBJECT: Temporary Construction Signs

PROJECT: SP-1441-00(008) / 110008301 – Hinds County

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7975 **CODE: (SP)**

DATE: **3/25/2026**

SUBJECT: **Underground Utilities**

PROJECT: **SP-1441-00(008) / 110008301 – Hinds County**

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

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

The contacts for MDOT utility lines are as follows:

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

Underground Communication Lines:
Kerby McFarland – 601-359-7450 – kmcfarland@mdot.ms.gov
Steven Newell – 601-359-7450 – snewell@mdot.ms.gov
Henry Lewis – 601-359-1454 – hlewis@mdot.ms.gov

Underground Signal Lines:
Amrik Singh – 601-359-1454 – asingh@mdot.ms.gov
Kenneth Welch – 601-359-1454 – kwelch@mdot.ms.gov

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7976 **CODE: (SP)**

DATE: 4/8/2026

SUBJECT: Lane Closure Restrictions

PROJECT: SP-1441-00(008) / 110008301 – Hinds County

Bidders are hereby advised of the following lane closure restrictions on the above captioned project:

- Cross Drain Replacement Operations - The roadway shall be allowed to be closed beginning at 6:00 PM Friday evening to 6:00 AM Monday morning. This allowance shall be for cross drain replacement operations **ONLY.** The Project Engineer shall approve all weekend closures, and a seven (7) calendar day notice shall be required from the Contractor.

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

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

SUPPLEMENT TO FORM FHWA-1273

DATE: 07/26/2022

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 REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246), 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-521 and Form CAD-725 must be attached to the CAD-720.

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Non-segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. 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. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements 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 shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The 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, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

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. 23 CFR 633.102(d).

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 (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 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; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 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; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The 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. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

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

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

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

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

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

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

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

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

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

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

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

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

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

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

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

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

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

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

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

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

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

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

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 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 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 are incorporated by reference. 49 CFR Part 21.

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

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

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

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

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. 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 V, 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

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

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 IV. 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 FHWA-1273 in any subcontracts, 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.

V. 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.

* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) 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 IV 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.

VI. 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 Section VI 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 Section VI 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).

VII. 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).

VIII. 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."

IX. 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.

X. 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.

* * * * *

XI. 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.

XII. 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 (23 CFR 633, Subpart B, Appendix B)
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 23 CFR 633.207(e) 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.

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

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

2. The goal for female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work, is 6.9%.

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

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

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4.2(d). Compliance with the goals will be measured against the total work hours performed.

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

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

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

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

(12/04/2018)

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. 907-103-2 **CODE: (SP)**

DATE: 06/22/2017

SUBJECT: Award and Execution of Contract

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

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

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

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

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. 907-105-2 **CODE: (IS)**

DATE: 07/20/2023

SUBJECT: Control of Work

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

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) two full scale copies of the plans, five half-scale copies of the Plans, and Electronic Files Identified as Plans. The Contractor shall have one copy of the proposal and contract documents and one half-scale copy of the plans available at all times during work activity on the project.

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. 907-410-2 **CODE: (SP)**

DATE: 06/13/2018

SUBJECT: Rejuvenating Fog Seal

PROJECT: SP-1441-00(008) / 110008301 -- Hinds County

Section 410, Bituminous Surface Treatment, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-410.01--Description. After the paragraph in Subsection 410.01 on page 313, add the following.

When specified on the plans or in the contract documents, this work may require the placement of a rejuvenating fog seal coat on an existing surface. The rejuvenating fog seal shall be placed at locations shown on the plans or as directed by the Engineer.

907-410.03--Construction Requirements. After Subsection 410.03.7 on page 319, add the following.

907-410.03.8--Rejuvenating Fog Seal. The placement of the rejuvenating fog seal 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.

The rejuvenating fog seal shall be placed at a rate of 0.11 gallons per square yard, or as directed by the Engineer.

907-410.04--Method of Measurement. After the last paragraph of Subsection 410.04 on page 319, add the following.

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

907-410.05--Basis of Payment. After the paragraph in Subsection 410.05 on page 319, add the following.

Asphalt for rejuvenating fog seal, 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 rejuvenating fog seal, and all incidentals necessary to complete the work.

After the last pay item listed on page 319, add the following.

907-410-D: Asphalt for Rejuvenating Fog Seal, CMS-1PF - per gallon

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-411-2 **CODE: (SP)**

DATE: **01/16/2026**

SUBJECT: **Ultra-Thin Asphalt Pavement**

Section 411, Ultra-Thin Asphalt Pavement, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-411.02 Materials

907-411-02-4 Standards of Acceptance

907-411.02.4.4 Acceptance Procedure for Density.

Delete the first and second sentence in the first paragraph of Subsection 411.02.4.4 and substitute the following:

The density requirement for UTAP shall be roll to refusal as defined in Subsection 907-401.02.6.4.3.

907-411.03--Construction Requirements. After Subsection 411.03.10 on page 327, add the following.

907-411.03.11--Material Transfer Equipment. Excluding the areas mentioned below, the material transferred from the hauling unit shall be remixed prior to being placed in the paver hopper or insert by using an approved Materials Transfer Device. Information on approved devices can be obtained from the State Construction Engineer. Areas excluded from this requirement include: temporary work of short duration, detours, bridge replacement projects having less than 1,000 feet of pavement on each side of the structure, acceleration and deceleration lanes less than 1,000 feet in length, tapered sections, transition sections (for width), shoulders less than 10 feet in width, crossovers, ramps, side street returns and other areas designated by the Engineer.

907-411.05--Basis of Payment. Add the "907" prefix to the pay item listed on page 328.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-413-2 **CODE: (SP)**

DATE: 05/09/2023

SUBJECT: Cleaning and Sealing Joints and Cracks

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

907-413.03--Construction Requirements.

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-601-1 **CODE: (IS)**

DATE: 11/21/2023

SUBJECT: Structural Concrete

Section 601, Structural Concrete, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-601.02--Materials.

907-601.02.1--General. Delete the first sentence of Subsection 601.02.1 on page 377, and substitute the following.

Materials for structural concrete and their use, care, and handling shall be in accordance with Subsection 907-804.02.

907-601.02.2--Classification of Concrete. Delete the second sentence of Subsection 601.02.2 on page 377, and substitute the following.

Classes of concrete are identified in Subsection 907-799.01.

907-601.03--Construction Requirements.

Delete Subsection 601.03.1 on page 378 and substitute the following.

907-601.03.1--Blank.

907-601.05--Basis of Payment. Delete the pay items listed at the end of Subsection 601.05, and substitute the following.

907-601-A: Class ___ Structural Concrete - per cubic yard

907-601-B: Class ___ Structural Concrete, Minor Structures - per cubic yard

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. 907-619-6 **CODE: (SP)**

DATE: **03/21/2018**

SUBJECT: **Temporary Portable Rumble Strips**

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

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

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

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

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

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

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

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

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

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

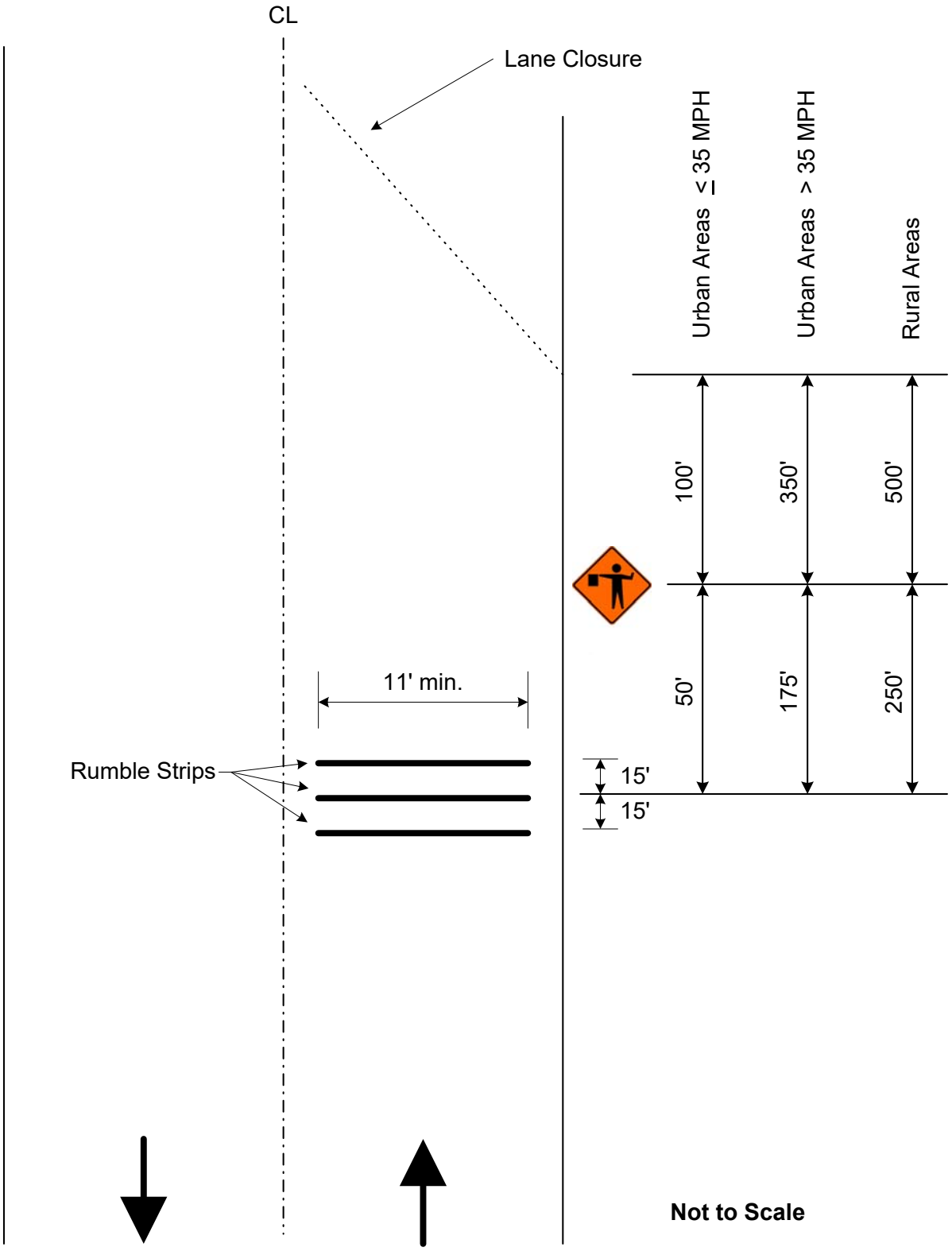
Temporary Portable Rumble Strips will be measured for payment by the linear foot only when a pay item for temporary portable rumble strips is included in the contract. Otherwise, temporary portable rumble strips will be included in the cost of pay item 618-A, Maintenance of Traffic. The quantity of temporary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

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

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

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

907-619-B: Temporary Portable Rumble Strips - per linear foot



Detail of Temporary Portable Rumble Strips

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

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. 907-708-4 **CODE: (IS)**

DATE: **09/21/2021**

SUBJECT: **Concrete Pipe**

Section 708, Non-Metal Structures and Cattlepasses, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-708.02--Concrete Pipe.

907-708.02.1--Materials for Use in Concrete Pipe.

907-708.02.1.2--Fly Ash. Delete Subsection 708.02.1.2 on page 758, and substitute the following.

Fly ash conforming to the requirements of Subsection 714.05 may be used to replace hydraulic cement on a one to one replacement rate. If a type IL cement conforming to the requirements of Subsection 701.04 is used, the fly ash replacement shall not exceed 35% by weight of the cement. For all other Types of cement, the fly ash replacement rate shall not exceed 25% by weight of hydraulic cement.

907-708.02.3--Exceptions to AASHTO Standard Specifications. After Subsection 708.02.3.7 on page 760, add the following.

907-708.02.3.8--Lifting Device. In lieu of lift holes, the producer may cast an approved lifting device in the pipe during the manufacturing process. Should a lifting device be included with the pipe, the Contractor shall cut off or grind down the lifting device flush with the pipe surface after placement of the pipe. The area around the lifting device shall be coated with a sealer approved by the Engineer.

907-708.02.5--Reinforced Concrete Pipe. Delete the second paragraph in Subsection 708.02.5 on page 760, and substitute the following.

907-708.02.5.1--Class V Pipe With Diameter 54 Inches and Greater. Class V pipe with diameters of 54 inches and larger shall meet the requirements of AASHTO M 170 or M 242 as modified by Subsection 708.02 and herein.

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-808-1 **CODE: (IS)**

DATE: 11/01/2018

SUBJECT: Joint Repair

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

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

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

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

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

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

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

Payment will be made under:

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

907-808-B: Mortar Mix - per gallon

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS NO. 907-823-8 **CODE: (SP)**

DATE: 08/06/2024

SUBJECT: Preformed Joint Seal

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

SECTION 907-823--PREFORMED JOINT SEAL

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

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

The preformed joint seal shall be one of the following, or an approved equal. The size of the seal, Type I, Type II, or Type III shall be determined based on the size of the joint opening, as detailed in the Plans or drawings provided. It is the Contractor's responsibility to ensure that the size selected is appropriate for the width of the joint. Type I shall be used for joint openings less than two inches (2"). Type II shall be used for joint openings greater than two inches (2"), with the maximum joint opening being two and one-half inches (2½"). Type III shall be used for joint openings greater than two and one-half inch (2½"), with the maximum joint opening being three and one-half inch (3½"). In cases where the joint opening (design width "A" plus seat widths on both sides of the joint opening) is greater than four inches (4"), another type of expansion material shall be required as directed by the Director of Structures, State Bridge Engineer.

1. Silicoflex Joint Sealing System
   Manufactured by R.J. Watson, Inc. in Alden, NY
   www.rjwatson.com

2. Wabo®SPS Joint System
   Manufactured by Watson Bowman Acme Corporation in Amherst, NY
   www.wbacorp.com

3. Silspec SSS Silicone Strip Seal
   Manufactured by SSI Commercial & Highway Construction Materials in Tulsa, OK
   www.ssicm.com

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

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

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

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

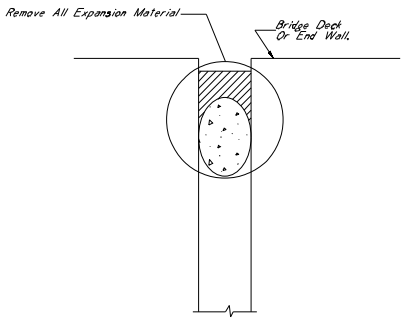
907-823.05--Basis of Payment. Preformed joint seal, measured as prescribed above, will be paid for at the contract unit price per linear foot, which shall be full compensation for furnishing all labor, equipment, tools, materials, and incidentals necessary to complete the work.

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

Payment will be made under:

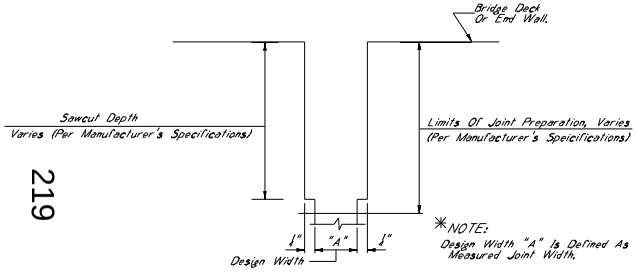
907-823-A: Preformed Joint Seal, Type ___ - per linear foot

907-823-B: Saw Cut, Type _____ - per linear foot



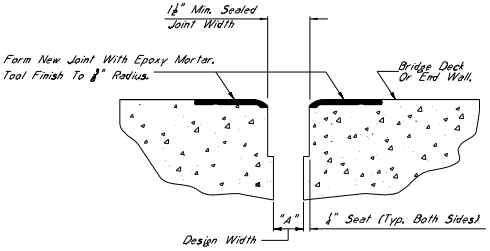
TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Materials To Be Removed And Replaced With Preformed Joint Seal



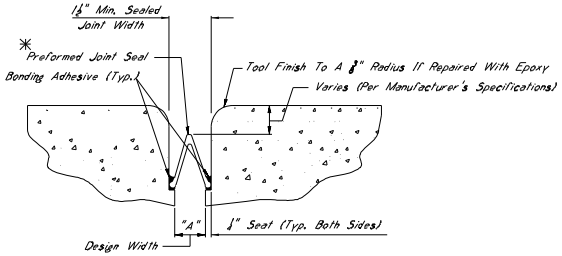
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Sawcut



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut, With Epoxy Mortar Or Approved Equivalent



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut

*NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

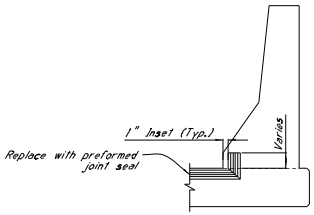
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec S55 Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The ½" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 2½". Type III Shall Be Used For Design Width Greater Than 2½", With The Maximum Design Width Being 3½". In Cases Where Design Widths Are Greater Than 3½", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



ELEVATION AT END OF SPAN

*NOTES:

For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3". For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier is 6".

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-A002 JOINT REPAIR

Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Epoxy Mortar Shall Also Be Included Under This Item Of Work. Removal Of Existing Silicone Sealed, Compression, And AC Sealed Joint Materials Will Not Be Paid For Directly And Shall Be Considered As Absorbed Under This Item Of Work. Removal Of Joint Materials And Any Trash And Debris (Including But Not Limited to Compacted Dirt, Vegetation and Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-808-A003 JOINT REPAIR WITHOUT EPOXY

Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Removal Of Existing Silicone Sealed, Compression, And AC Sealed Joint Materials Shall Be Included Under This Item Of Work. Removal Of Joint Materials And Any Trash And Debris (Including But Not Limited to Compacted Dirt, Vegetation and Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck, On Each Side Of The Centerline Joint. It Is The Contractor's Responsibility To Ensure That The Proper Depth Is Selected Based On The Manufacturer's Recomendations.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

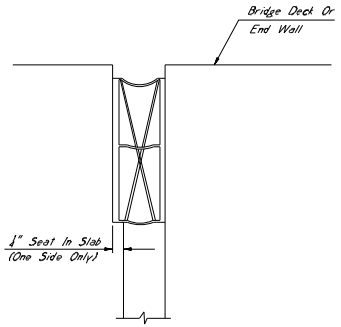
Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines For Selection Of Materials Can Be Found In Section 808 of the Specifications.

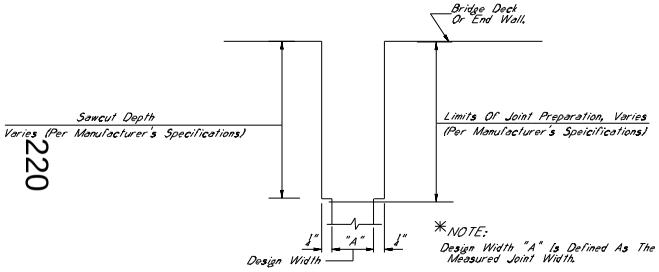
GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.



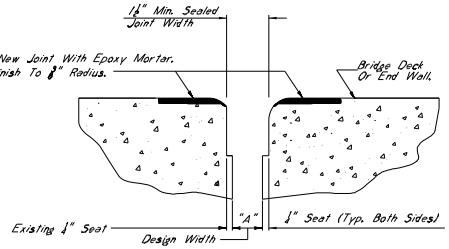
TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal



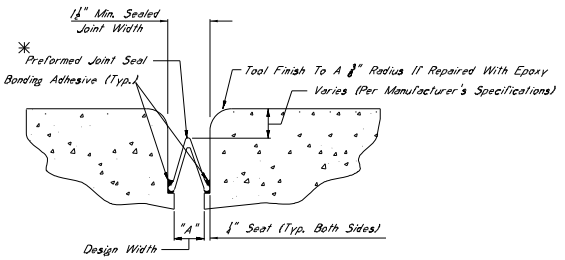
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Sawcut



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut, With Epoxy Mortar Or Approved Equivalent



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

✳NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

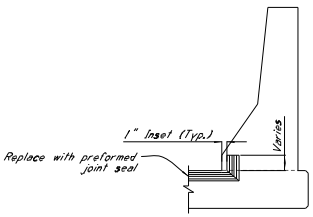
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec SSS Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The ½" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 2½". Type III Shall Be Used For Design Width Greater Than 2½", With The Maximum Design Width Being 3½". In Cases Where Design Widths Are Greater Than 3½", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



✳NOTES:

For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3".
For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-A002 JOINT REPAIR

Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Removal Of Joint Materials And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation and Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work. Epoxy Mortar Shall Also Be Included Under This Item Of Work. Removal of Existing Silicone Sealed, Compression, And AC Sealed Joint Materials Will Not Be Paid For Directly And Shall Be Considered As Absorbed Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-808-A003 JOINT REPAIR WITHOUT EPOXY

Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Removal Of Existing Silicone Sealed, Compression, And AC Sealed Joint Materials Shall Be Included Under This Item Of Work. Removal Of Joint Materials And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation and Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint. It Is The Contractor's Responsibility To Ensure That The Proper Depth Is Selected Based On The Manufacturer's Recomendations.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

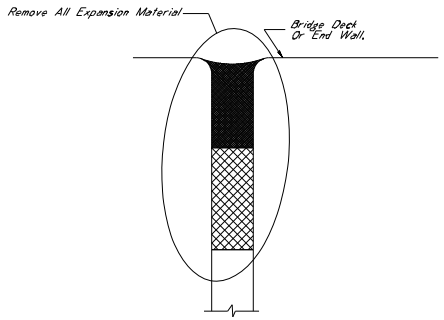
Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines For Selection Of Materials Can Be Found In Section 808 of the Specifications.

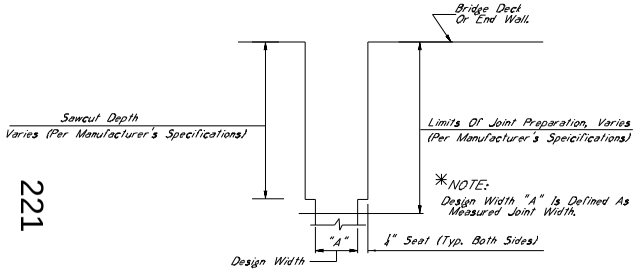
GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.



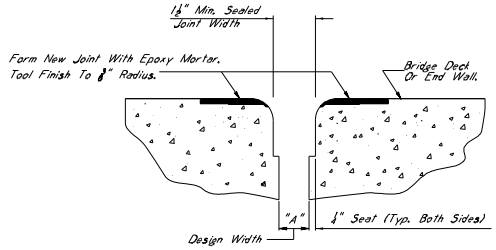
TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Material To Be Removed And Replaced With Preformed Joint Seal



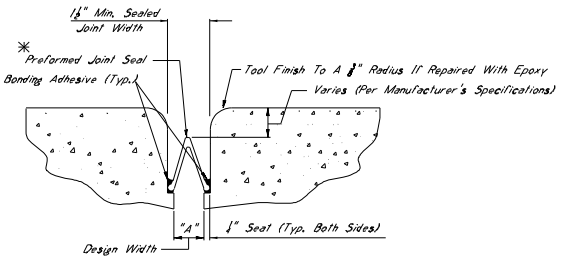
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Sawcut



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut, With Epoxy Mortar Or Approved Equivalent



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

✳NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

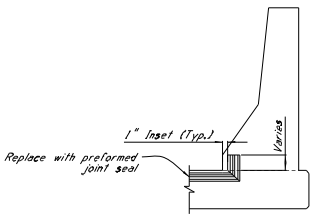
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec 555 Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The ¼" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 2½". Type III Shall Be Used For Design Width Greater Than 2½" With The Maximum Design Width Being 3". In Cases Where Design Widths Are Greater Than 3", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



✳NOTES:

For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3". For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-A002 JOINT REPAIR

Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Epoxy Mortar Shall Also Be Included Under This Item Of Work. Removal Of Existing Silicone Sealed, Compression, And AC Sealed Joint Materials Will Not Be Paid For Directly And Shall Be Considered As Absorbed Under This Item Of Work. Removal Of Joint Materials And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation and Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-808-A003 JOINT REPAIR WITHOUT EPOXY

Description: Shall Include The Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, As Designated In The Detail Drawings Provided. Removal Of Existing Silicone Sealed, Compression, And AC Sealed Joint Materials Will Not Be Paid For Directly And Shall Be Considered As Absorbed Under This Item Of Work. Removal Of Joint Materials And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation And Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint. It Is The Contractor's Responsibility To Ensure That The Proper Depth Is Selected Based On The Manufacturer's Recomendations.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines For Selection Of Materials Can Be Found In Section 808 of the Specifications.

GENERAL NOTES:

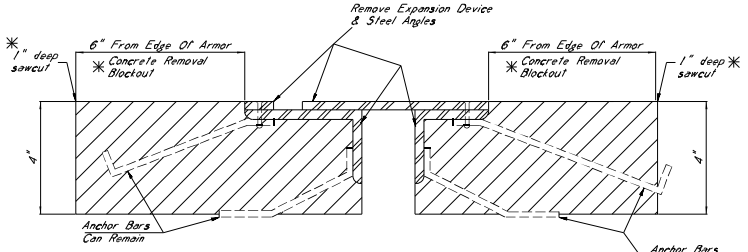
1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

✳1" SAWCUT NOTES:

All 1" Sawcuts Shall Be Considered An Absorbed Item of Work. The Contractor Shall Verify Depth Of Reinforcing Steel Before Making Any Sawcuts. The Depth Of The Sawcut Shall Be No More Than The Depth Of The Reinforcing Steel. Any Damage To Reinforcing Steel Shall Be Repaired To The Satisfaction Of The Engineer At No Cost To The State.

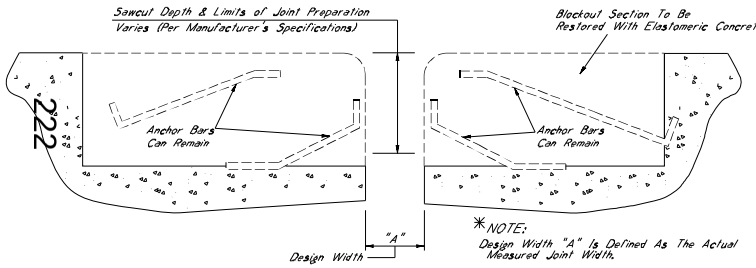
✳CONCRETE REMOVAL BLOCKOUT NOTES

Removal Of The Concrete Blockout Area Shall Be Considered An Absorbed Item Of Work Under Pay Item 202-B169. The Contractor Shall Use A Hammer No Larger Than 30 LBs To Complete This Work.



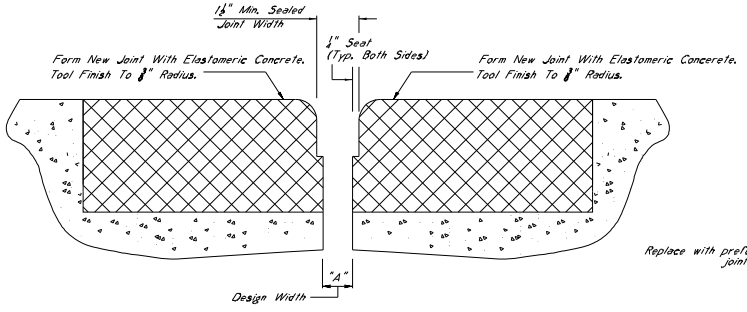
TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal



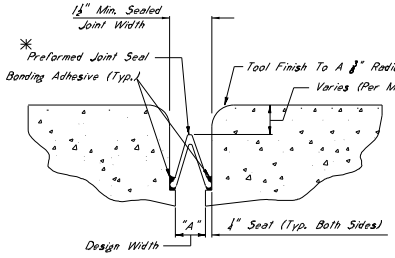
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

✳NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

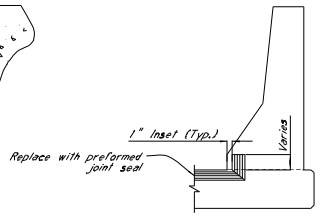
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec 555 Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The ¼" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 2½". Type III Shall Be Used For Design Width Greater Than 2½" With The Maximum Design Width Being 3½". In Cases Where Design Widths Are Greater Than 3½", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



✳NOTES:

For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3".
For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-B169 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Sliding Plate, And Neoprene Expansion Joints, As Designated In The Detail Drawings Provided. Removal of The Concrete Blockout Area Shall Be Absorbed Under This Item Of Work. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer. Removal of Joint Material And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation And Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work.

Basis Of Payment: Removal of Armor And Sliding Plate Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint, While Removal Of Neoprene Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

ELASTOMERIC CONCRETE NOTES

907-824-PP007 BRIDGE REPAIR, ELASTOMERIC CONCRETE

Description: Elastomeric Concrete Shall Be One Of The Following Products, Installed According To The Manufacturer's Specifications:

A. Poly-Tron Elastomeric Concrete
Manufactured By R.J. Watson, Inc. In Alden, NY
www.rjwatson.com

B. WaboCrete II
Manufactured By Watson Bowman Acme Corporation In Amherst, NY
www.wbacorp.com

C. Delcrete Elastomeric Concrete
Manufactured By The D.S. Brown Company In North Baltimore, OH
www.dsbrown.com

Basis of Payment: The Accepted Quantities Will Be Paid For In Cubic Yards At The Contract Unit Price.

GENERAL NOTES:

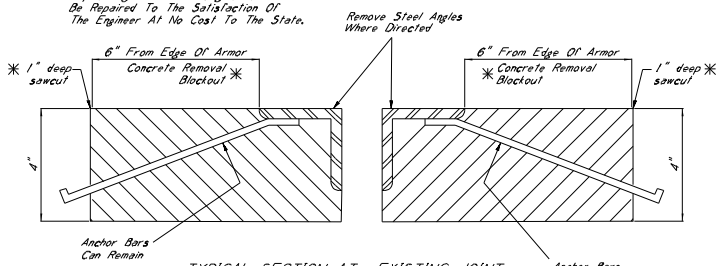
1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

✳1" SAWCUT NOTES:

All 1" Sawcuts Shall Be Considered An Absorbed Item of Work. The Contractor Shall Verify Depth Of Reinforcing Steel Before Making Any Sawcuts. The Depth Of The Sawcut Shall Be No More Than The Depth Of The Reinforcing Steel. Any Damage To Reinforcing Steel Shall Be Repaired To The Satisfaction Of The Engineer At No Cost To The State.

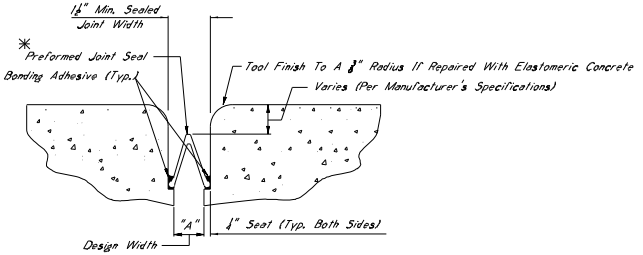
✳CONCRETE REMOVAL BLOCKOUT NOTES

Removal Of The Concrete Blockout Area Shall Be Considered An Absorbed Item Of Work Under Pay Item 202-B169. The Contractor Shall Use A Hammer No Larger Than 30 LBs To Complete This Work.



TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

✳NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

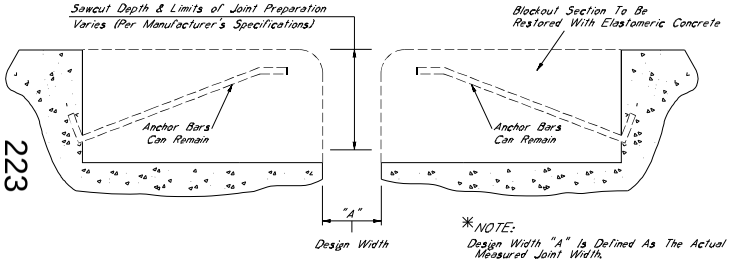
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec SSS Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The R.J. Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The ½" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 2½". Type III Shall Be Used For Design Width Greater Than 2½", With The Maximum Design Width Being 3½". In Cases Where Design Widths Are Greater Than 3½", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.

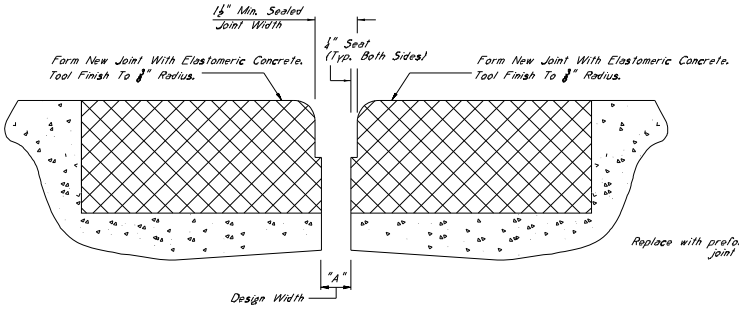


✳NOTE:

Design Width "A" Is Defined As The Actual Measured Joint Width.

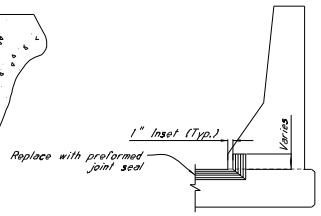
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete



✳NOTES:

For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3".
For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-B169 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Sliding Plate, And Neoprene Expansion Joints, As Designated In The Detail Drawings Provided. Removal of The Concrete Blockout Area Shall Be Absorbed Under This Item Of Work. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer. Removal of Joint Material And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation And Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work.

Basis Of Payment: Removal of Armor And Sliding Plate Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint, While Removal Of Neoprene Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

ELASTOMERIC CONCRETE NOTES

907-824-PP007 BRIDGE REPAIR, ELASTOMERIC CONCRETE

Description: Elastomeric Concrete Shall Be One Of The Following Products, Installed According To The Manufacturer's Specifications:

A. Poly-Tron Elastomeric Concrete
Manufactured By R.J. Watson, Inc. In Alden, NY
www.rjwatson.com

B. WaboCrete II
Manufactured By Watson Bowman Acme Corporation In Amherst, NY
www.wbacorp.com

C. Delcrete Elastomeric Concrete
Manufactured By The D.S. Brown Company In North Baltimore, OH
www.dsbrown.com

Basis of Payment: The Accepted Quantities Will Be Paid For In Cubic Yards At The Contract Unit Price.

GENERAL NOTES:

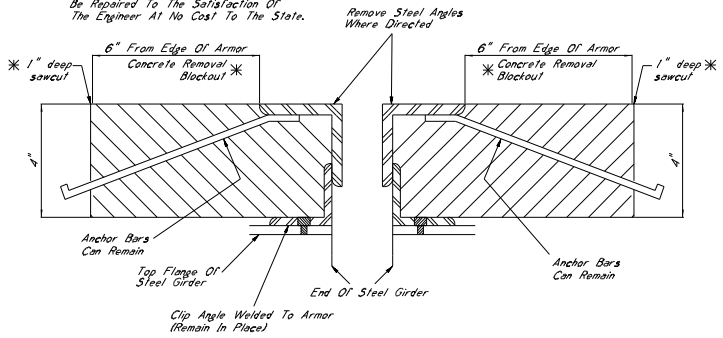
1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

✳1" SAWCUT NOTES:

All 1" Sawcuts Shall Be Considered An Absorbed Item of Work. The Contractor Shall Verify Depth Of Reinforcing Steel Before Making Any Sawcuts. The Depth Of The Sawcut Shall Be No More Than The Depth Of The Reinforcing Steel. Any Damage To Reinforcing Steel Shall Be Repaired To The Satisfaction Of The Engineer At No Cost To The State.

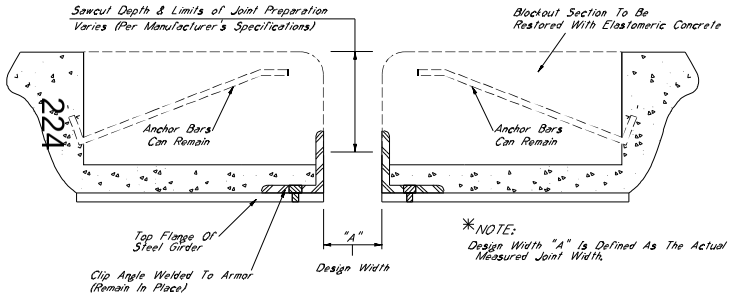
✳CONCRETE REMOVAL BLOCKOUT NOTES

Removal Of The Concrete Blockout Area Shall Be Considered An Absorbed Item Of Work Under Pay Item 202-B169. The Contractor Shall Use A Hammer No Larger Than 30 LBs To Complete This Work.



TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal

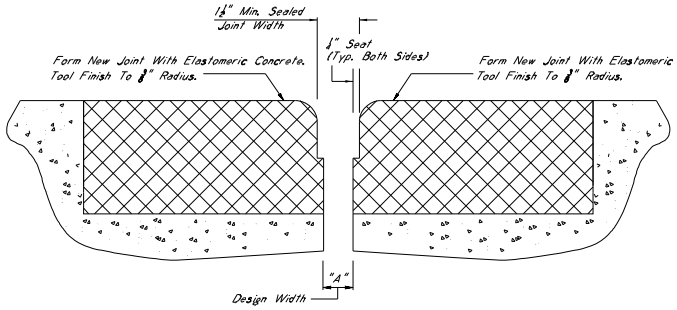


✳NOTE:

Design Width "A" Is Defined As The Actual Measured Joint Width.

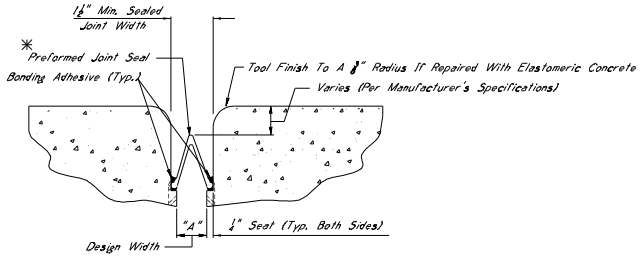
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

✳NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

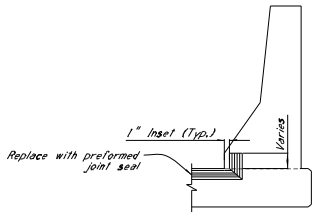
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec 555 Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The 1" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2" With The Maximum Design Width Being 2½". Type III Shall Be Used For Design Width Greater Than 2½". With The Maximum Design Width Being 3½". In Cases Where Design Widths Are Greater Than 3½", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



✳NOTES:

For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3".
For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-B169 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Sliding Plate, And Neoprene Expansion Joints, As Designated In The Detail Drawings Provided. Removal of The Concrete Blockout Area Shall Be Absorbed Under This Item Of Work. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer. Removal of Joint Material And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation And Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work.

Basis Of Payment: Removal of Armor And Sliding Plate Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint, While Removal Of Neoprene Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

ELASTOMERIC CONCRETE NOTES

907-824-PP007 BRIDGE REPAIR, ELASTOMERIC CONCRETE

Description: Elastomeric Concrete Shall Be One Of The Following Products, Installed According To The Manufacturer's Specifications:

A. Poly-Tron Elastomeric Concrete
Manufactured By R.J. Watson, Inc. In Alden, NY
www.rjwatson.com

B. WaboCrete II
Manufactured By Watson Bowman Acme Corporation In Amherst, NY
www.wbacorp.com

C. Delcrete Elastomeric Concrete
Manufactured By The D.S. Brown Company In North Baltimore, OH
www.dsbrown.com

Basis of Payment: The Accepted Quantities Will Be Paid For In Cubic Yards At The Contract Unit Price.

GENERAL NOTES:

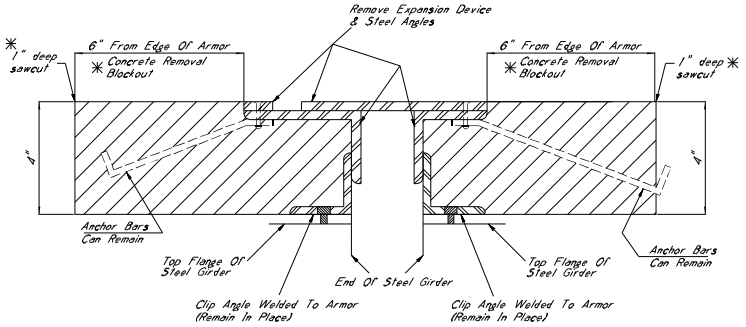
1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

✳1" SAWCUT NOTES:

All 1" Sawcuts Shall Be Considered An Absorbed Item of Work. The Contractor Shall Verify Depth Of Reinforcing Steel Before Making Any Sawcuts. The Depth Of The Sawcut Shall Be No More Than The Depth Of The Reinforcing Steel. Any Damage To Reinforcing Steel Shall Be Repaired To The Satisfaction Of The Engineer At No Cost To The State.

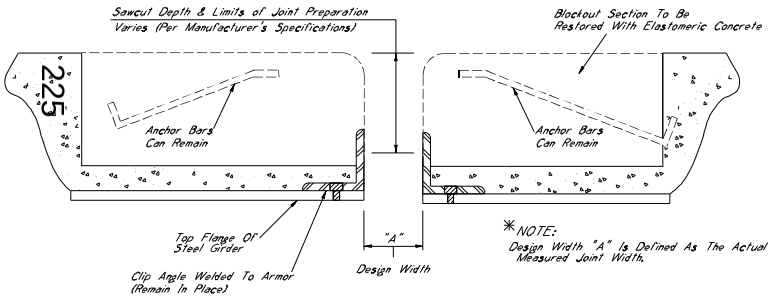
✳CONCRETE REMOVAL BLOCKOUT NOTES

Removal Of The Concrete Blockout Area Shall Be Considered An Absorbed Item Of Work Under Pay Item 202-B169. The Contractor Shall Use A Hammer No Larger Than 30 LBs To Complete This Work.



TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal

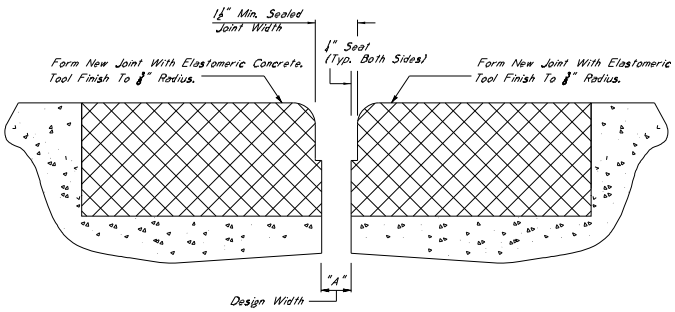


✳NOTE:

Design Width "A" Is Defined As The Actual Measured Joint Width.

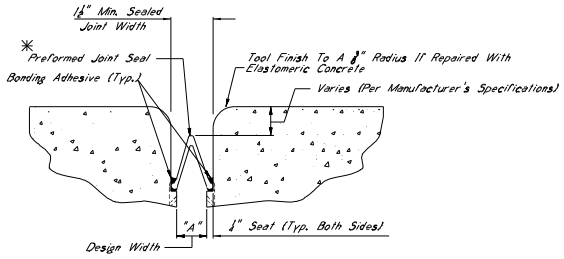
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

✳NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

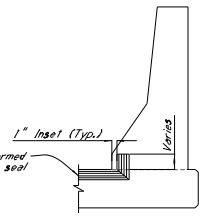
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec 555 Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The 1" Seal Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 2". Type III Shall Be Used For Design Width Greater Than 2", With The Maximum Design Width Being 3". In Cases Where Design Widths Are Greater Than 3", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



✳NOTES:

For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3". For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-B169 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Sliding Plate, And Neoprene Expansion Joints, As Designated In The Detail Drawings Provided. Removal of The Concrete Blockout Area Shall Be Absorbed Under This Item Of Work. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer. Removal of Joint Material And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation And Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work.

Basis Of Payment: Removal of Armor And Sliding Plate Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint, While Removal Of Neoprene Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

ELASTOMERIC CONCRETE NOTES

907-824-PP007 BRIDGE REPAIR, ELASTOMERIC CONCRETE

Description: Elastomeric Concrete Shall Be One Of The Following Products, Installed According To The Manufacturer's Specifications:

A. Poly-Tron Elastomeric Concrete
Manufactured By R.J. Watson, Inc. In Alden, NY
www.rjwatson.com

B. WaboCrete II
Manufactured By Watson Bowman Acme Corporation In Amherst, NY
www.wbacorp.com

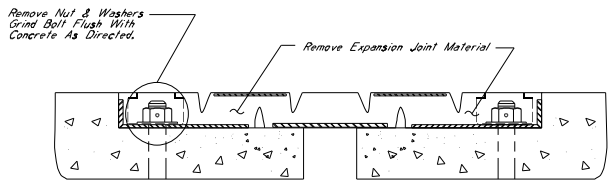
C. Delcrete Elastomeric Concrete
Manufactured By The D.S. Brown Company In North Baltimore, OH
www.dsbrown.com

Basis of Payment: The Accepted Quantities Will Be Paid For In Cubic Yards At The Contract Unit Price.

GENERAL NOTES:

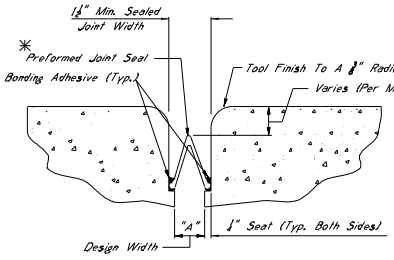
1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

S.P. No. 907-823-8 -- Cont'd.



TYPICAL SECTION AT EXISTING JOINT

Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

✳NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

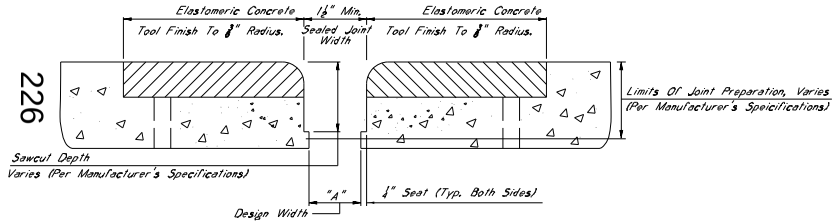
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation In Amherst, NY
   www.wbacorp.com

   C. Silspec 555 Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

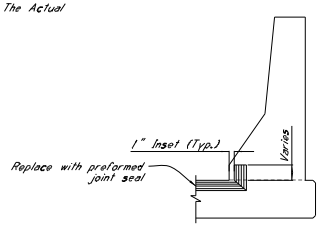
3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The ½" Seat Required On Both Sides Of The Joint. Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 2". Type III Shall Be Used For Design Width Greater Than 2", With The Maximum Design Width Being 3". In Cases Where Design Widths Are Greater Than 3", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials

✳NOTE:
Design Width "A" Is Defined As The Actual Measured Joint Width.



✳NOTES:
For Jersey Shape Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3".
For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-B169 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Sliding Plate, And Neoprene Expansion Joints, As Designated In The Detail Drawings Provided. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer. Removal of Joint Material And Any Trash And Debris (Including But Not Limited To Compacted Dirt, Vegetation And Trash) Located At Any Depth Within The Joint Shall Be Included Under This Item Of Work.

Basis Of Payment: Removal of Armor And Sliding Plate Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint, While Removal Of Neoprene Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-823-B001 SAW CUT, TYPE I
907-823-B002 SAW CUT, TYPE II
907-823-B003 SAW CUT, TYPE III

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-A001 PREFORMED JOINT SEAL, TYPE I
907-823-A002 PREFORMED JOINT SEAL, TYPE II
907-823-A003 PREFORMED JOINT SEAL, TYPE III

Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris With Compressed Air And Placement Of The New Preformed Joint Seal

Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

ELASTOMERIC CONCRETE NOTES

907-824-PP007 BRIDGE REPAIR, ELASTOMERIC CONCRETE

Description: Elastomeric Concrete Shall Be One Of The Following Products, Installed According To The Manufacturer's Specifications:

A. Poly-Tron Elastomeric Concrete
Manufactured By R.J. Watson, Inc. In Alden, NY
www.rjwatson.com

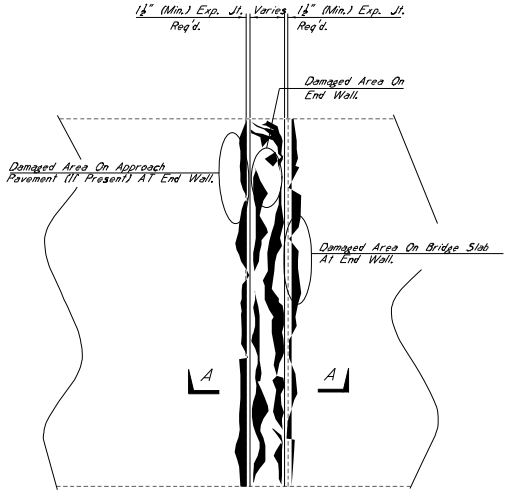
B. WaboCrete II
Manufactured By Watson Bowman Acme Corporation In Amherst, NY
www.wbacorp.com

C. Delcrete Elastomeric Concrete
Manufactured By The D.S. Brown Company In North Baltimore, OH
www.dsbrown.com

Basis of Payment: The Accepted Quantities Will Be Paid For In Cubic Yards At The Contract Unit Price.

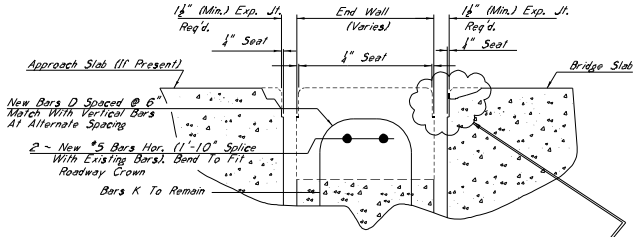
GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.



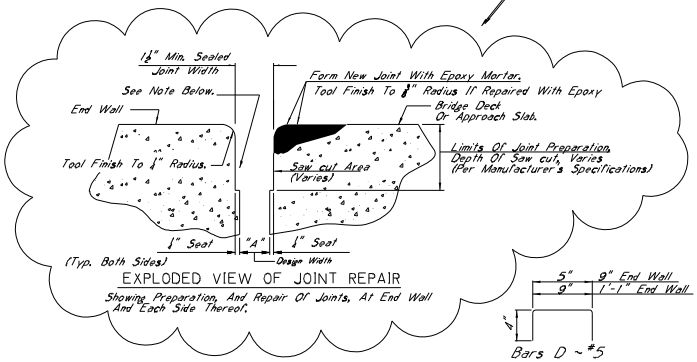
PLAN VIEW

Showing Existing Damaged Areas On And Around End Wall.



DETAIL "D"

Showing Repair Details Of End Wall, Reinforcing Steel, And Expansion Joint Formation.

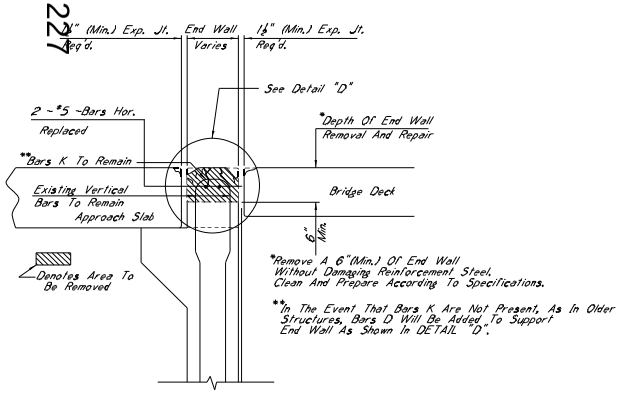


EXPLODED VIEW OF JOINT REPAIR

Showing Preparation, And Repair Of Joints, At End Wall And Each Side Thereof.

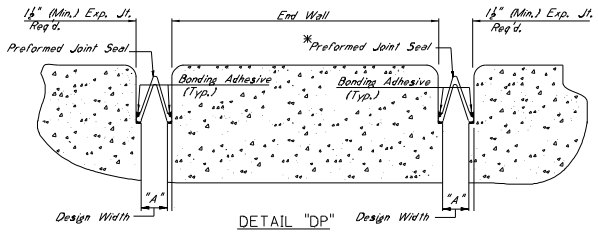
*NOTE:
Form Vertical Faces Of End Wall To Include ¼" Seat Such That The Preformed Joint Seal May Be Applied Per Manufacturer's Specification. See Detail "DP" On This Sheet.

*NOTE:
Design Width "A" Is Defined As The Actual Measured Joint Width.



ELEVATION (SECTION A-A)

Showing Details Of Removal Of Damaged End Wall.



DETAIL "DP"

Showing Sealed Joint After Saw cut And Repair With Epoxy Mortar

*NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:

   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc.
   www.rjwatson.com

   B. Wabo SPS Joint System
   Manufactured By Watson Bowman Acme Corporation
   www.wbacorp.com

   C. Silspec SSS Silicone Strip Seal
   Manufactured By SSI Commercial & Highway Construction Materials
   www.ssicm.com

2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting Times, And Any Other Variances Between The Specifications Provided By The Manufacturers. A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The Seat Required On Both Sides Of The Joint. Preformed Joint Strip Type I, Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than or Equal To 2", With The Maximum Design Width Being 4". Type III Shall Be Used For Design Width Greater Than 4", With The Maximum Design Width Being 8". In Cases Where Design Widths Are Greater Than 8", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.

NOTES ON ASSOCIATED ITEMS OF WORK:

907-824-PP008 BRIDGE REPAIR, ENDWALL REPAIR

Description: Shall Include The Work Necessary To Remove And Replace The Damaged Endwall, As Designated In The Detail Drawings Provided. Instead Of Limiting The Repair To The Damaged Section, The Specified Depth Of Endwall Shall Be Removed Along The Entire Width Of The Bridge Deck.

Basis of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Width Of The Bridge Deck.

Damage Caused To Other Elements Of The Structure Or Roadway While Completeing This Item Of Work Shall Be Repaired By The Contractor At No Cost To The Department.

Prior to Placing New Concrete, All Concrete Surfaces That Will Be In Contact With The New Concrete Shall Be Painted With An Approved Epoxy Binder Designed To Bond New Concrete To Old.

New Concrete Shall Be High Early Strength Bridge Concrete, As Follows:

The concrete mixture design shall be furnished by the Contractor for approval by the Materials Division. Mixture design parameters are as follows:

Required Strength:	2500 psi prior to releasing to traffic
Total Air Content:	3-6 %
Maximum Slump:	6 inches

Non-chloride based accelerator may be used if the ambient temperature is 50°F or less, but shall not be used if the ambient temperature is greater than 50°F.

Synthetic structural fibers shall be used. The Contractor shall select a manufacturer from MDOT's Approved Products List, and the manufacturer's recommendations shall be followed for the dosage rate.

Curing is to be continuous until 2500 psi is attained. Traffic is to be diverted from the repair area until this value is reached. The Contractor may use the Maturity Method per Section 907-804 to estimate the concrete compressive strength for the purposes of releasing the repair area to traffic. However, final acceptance of the in-place concrete shall be determined using eight concrete test cylinders, which shall be cured in a container next to the concrete placement. Two cylinders are to be tested at 9, 16, and 24 hour intervals. The two remaining cylinders shall be used to determine the 28-day compressive strength of the concrete.

The Removal Of Existing Expansion Material May Require Any Number Of The Pay Items Listed Below. Once The Expansion Device Is Identified, Refer To The Corresponding Joint Repair Detail Sheet For Additional Details On The Associated Items Of Work.

202-B169	REMOVAL OF EXISTING JOINT MATERIAL
907-808-A002	JOINT REPAIR
907-808-A003	JOINT REPAIR WITHOUT EPOXY
907-823-B001	SAW CUT, TYPE I
907-823-B002	SAW CUT, TYPE II
907-823-B003	SAW CUT, TYPE III
907-823-A001	PREFORMED JOINT SEAL, TYPE I
907-823-A002	PREFORMED JOINT SEAL, TYPE II
907-823-A003	PREFORMED JOINT SEAL, TYPE III

GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2012.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

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

Thin Lift Overlay approximately 10.2 miles of MS 467 from beginning of maintenance to South of Edwards, known as State Project No. SP-1441-00(008) / 110008301 in Hinds County.

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
			Roadway Items		
0010	201-D001		759	Station	Random Clearing
0020	202-B006		1,050	Square Yard	Removal of Asphalt Paved Shoulders, All Depths
0030	202-B009		560	Square Yard	Removal of Asphalt Pavement, Failed Areas
0040	202-B096		120	Linear Feet	Removal of Debris and Sand From Box Culvert, 10-foot and Greater Width
0050	202-B129		2	Each	Removal of Flared End Section, All Sizes
0060	202-B158		2,125	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends
0070	202-B191		263	Linear Feet	Removal of Pipe, 8" And Above
0080	202-B240		4,000	Linear Feet	Removal of Traffic Stripe
0090	203-G001	(E)	100	Cubic Yard	Excess Excavation, FM, AH
0100	206-A001	(S)	692	Cubic Yard	Structure Excavation
0110	209-A005		1,300	Square Yard	Geotextile Stabilization, Type V, Non-Woven
0120	304-B004	(GT)	3,300	Ton	Granular Material, Class 5, Group D
0130	304-D002	(GT)	225	Ton	Granular Material, Crushed Stone
0140	304-F002	(GT)	1,271	Ton	Size 610 Crushed Stone Base
0150	406-D001		3,465	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0160	412-A001		9,192	Square Feet	Pre-Grinding ($3.25)
0170	503-C010		526	Linear Feet	Saw Cut, Full Depth
0180	603-CA055	(S)	60	Linear Feet	36" Reinforced Concrete Pipe, Class III
0190	603-CA076	(S)	264	Linear Feet	48" Reinforced Concrete Pipe, Class III
0200	603-CA119	(S)	80	Linear Feet	72" Reinforced Concrete Pipe, Class III
0210	603-CB006	(S)	2	Each	36" Reinforced Concrete End Section
0220	603-CB008	(S)	8	Each	48" Reinforced Concrete End Section
0230	603-CB012	(S)	2	Each	72" Reinforced Concrete End Section
0240	606-B003		1,250	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post
0250	606-D019		16	Each	Guard Rail, Bridge End Section, Type H
0260	606-E005		20	Each	Guard Rail, Terminal End Section, Flared
0270	619-A1001		41	Mile	Temporary Traffic Stripe, Continuous White
0280	619-A2001		35	Mile	Temporary Traffic Stripe, Continuous Yellow
0290	619-A4002		22	Mile	Temporary Traffic Stripe, Skip Yellow
0300	619-A5001		4,700	Linear Feet	Temporary Traffic Stripe, Detail
0310	619-A6002		2,000	Linear Feet	Temporary Traffic Stripe, Legend
0320	619-D1001		646	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0330	619-D2001		180	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0340	619-G4001		24	Linear Feet	Barricades, Type III, Double Faced
0350	620-A001		1	Lump Sum	Mobilization

For Informational Purposes Only

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
0360	630-A003		315	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0370	630-A005		24	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness
0380	630-C005		615	Linear Feet	Square Tube Posts, 2.0 lb/ft
0390	630-F006		92	Each	Delineators, Guard Rail, White
0400	630-G005		38	Each	Type 3 Object Markers, OM-3R or OM-3L, Post Mounted
0410	815-A007	(S)	340	Ton	Loose Riprap, Size 300
0420	815-E001	(S)	237	Square Yard	Geotextile under Riprap
0430	907-403-A003	(BA1)	125	Ton	12.5-mm, ST, Asphalt Pavement
0440	907-403-B003	(BA1)	359	Ton	12.5-mm, ST, Asphalt Pavement, Leveling
0450	907-407-A001	(A2)	13,300	Gallon	Asphalt for Tack Coat
0460	907-410-D001	(A2)	146	Gallon	Asphalt for Rejuvenating Fog Seal, Grade CMS-1PF
0470	907-411-A001	(BA1)	7,300	Ton	Ultra Thin Asphalt Pavement
0480	907-413-A002		100	Gallon	Joint Sealer Material, Mastic Patching Material
0490	907-413-D001		212	Linear Feet	Cleaning and Filling Joints and Cracks
0500	907-601-B001	(S)	50	Cubic Yard	Class "B" Structural Concrete, Minor Structures
0510	907-618-A001		1	Lump Sum	Maintenance of Traffic
0520	907-619-B001		66	Linear Feet	Temporary Portable Rumble Strips
0530	907-626-B006		21	Mile	6" Thermoplastic Traffic Stripe, Continuous White
0540	907-626-C003		21	Mile	Thermoplastic Audible Edge Stripe
0550	907-626-D005		7	Mile	6" Thermoplastic Traffic Stripe, Skip Yellow
0560	907-626-E005		12	Mile	6" Thermoplastic Traffic Stripe, Continuous Yellow
0570	907-626-G004		1,550	Linear Feet	Thermoplastic Detail Stripe, White
0580	907-626-G005		850	Linear Feet	Thermoplastic Detail Stripe, Yellow
0590	907-626-H010		1,450	Linear Feet	Thermoplastic Legend, White
0600	907-627-J001		1,900	Each	Two-Way Clear Reflective High Performance Raised Markers
0610	907-627-L001		875	Each	Two-Way Yellow Reflective High Performance Raised Markers
0620	907-808-A002	(S)	1,168	Linear Feet	Joint Repair
0630	907-823-A002		584	Linear Feet	Preformed Joint Seal, Type II
0640	907-823-B002		1,168	Linear Feet	Saw Cut, Type II

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. _____	_____	_____	_____	_____	

For Informational Purposes Only

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.

For Informational Purposes Only

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

CERTIFICATE

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

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

(Individual or Firm)	(Address)
(Individual or Firm)	(Address)
(Individual or Firm)	(Address)
(Individual or Firm)	(Address)

NOTE: Failure to complete the above DOES NOT preclude subsequent subcontracts. Subsequent subcontracts, if any, equal to or in excess of fifty thousand dollars ($50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on September 8, 2011.

Contractor _____

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)

_____
(Name of Firm, partnership, or Corporation)

do hereby certify under penalty of perjury under the laws of the United States and the State of Mississippi

that_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **SP-1441-00(008)/ 110008301000**

in **Hinds** County(ies), Mississippi, has not either directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds are not currently under suspension, debarment, voluntary exclusion or determination of ineligibility; nor have a debarment pending; nor been suspended, debarred, voluntarily excluded or determined ineligible within the past three years by the Mississippi Transportation Commission, the State of Mississippi, any other State or a federal agency; nor been indicted, convicted or had a civil judgment rendered by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

Do exceptions exist and are made a part thereof? Yes / No

Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

All of the foregoing is true and correct.

(1/2016 S)

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.

For Informational Purposes Only

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 **Thin Lift Overlay approximately 10.2 miles of MS 467 from beginning of maintenance to South of Edwards, known as State Project No. SP-1441-00(008) / 110008301 in Hinds County.**

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