MDOT Use Only
Checked _____
Loaded _____
Keyed _____

11 -

SM No. CMP2014040081

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

11
Scrub Seal & Overlay approximately 6 miles of SR 14 from SR 35 to 0.75 miles west of SR 19, known as State Project No. MP-2014-04(008) / 307902301 in Attala County.

Project Completion: 52 Working Days

(STATE DELEGATED)

NOTICE

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

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

SECTION 900

OF THE CURRENT 2017 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

JACKSON, MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
TABLE OF CONTENTS

PROJECT: MP-2014-04(008)/307902301 - Attala

Section 901 - Advertisement

Section 904 - Notice to Bidders

#1	Governing Specification, w/ Supplement
#3	Final Cleanup
#9	Federal Bridge Formula
#13	Safety Edge
#113	Tack Coat
#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
#2206	MASH Compliant Devices
#2273	Mississippi Special Fuel Tax Law
#2954	Reflective Sheeting for Signs
#3599	Standard Drawings
#4625	Contract Time
#4626	Scope of Work

Section 907 - Special Provisions

907-102-2	Bidding Requirements and Conditions
907-103-2	Award and Execution of Contract
907-105-1	Authority of the Engineer
907-108-4	Subletting of Contract
907-109-4	Measurement and Payment
907-414-1	Polymer Modified Asphalt Rejuvenating Scrub Seal
907-618-4	Additional Signing Requirements, w/Supplement
907-619-6	Temporary Portable Rumble Strips
907-701-3	Hydraulic Cement
907-702-4	Bituminous Materials
907-703-1	Gradation
907-705-1	Stone Riprap
907-707-3	Joint Materials
907-711-2	Plain Steel Wire
907-712-1	Fence and Guardrail
907-714-3	Miscellaneous Materials
907-718-1	Timber and Dimension Lumber
907-720-2	Acceptance Procedure for Glass Beads
907-721-4	Materials for Signing

Section 905 - Proposal, Proposal Bid Items, Combination Bid Proposal
State Board of Contractors Requirement
State Certification Regarding Non-Collusion, Debarment and Suspensions

PROJECT: MP-2014-04(008)/307902301 - Attala

Section 902 - Contract Form
Section 903 - Contract Bond Forms

Progress Schedule

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

10/27/2022 04:27 PM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Tuesday, November 22, 2022, from the Bid Express Service and shortly thereafter publicly read on the Sixth Floor for:

Scrub Seal & Overlay approximately 6 miles of SR 14 from SR 35 to 0.75 miles west of SR 19, known as State Project No. MP-2014-04(008) / 307902301 in Attala County.

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

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

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

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

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

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

BRAD WHITE
EXECUTIVE DIRECTOR

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. 9 **CODE: (IS)**

DATE: 03/01/2017

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

http://www.ops.fhwa.dot.gov/Freight/publications/brdg_frm_wghts/bridge_formula_all_rev.pdf

An on line **BRIDGE FORMULA WEIGHTS CALCULATOR** is available at

http://ops.fhwa.dot.gov/freight/sw/brdgcalc/calc_page.htm

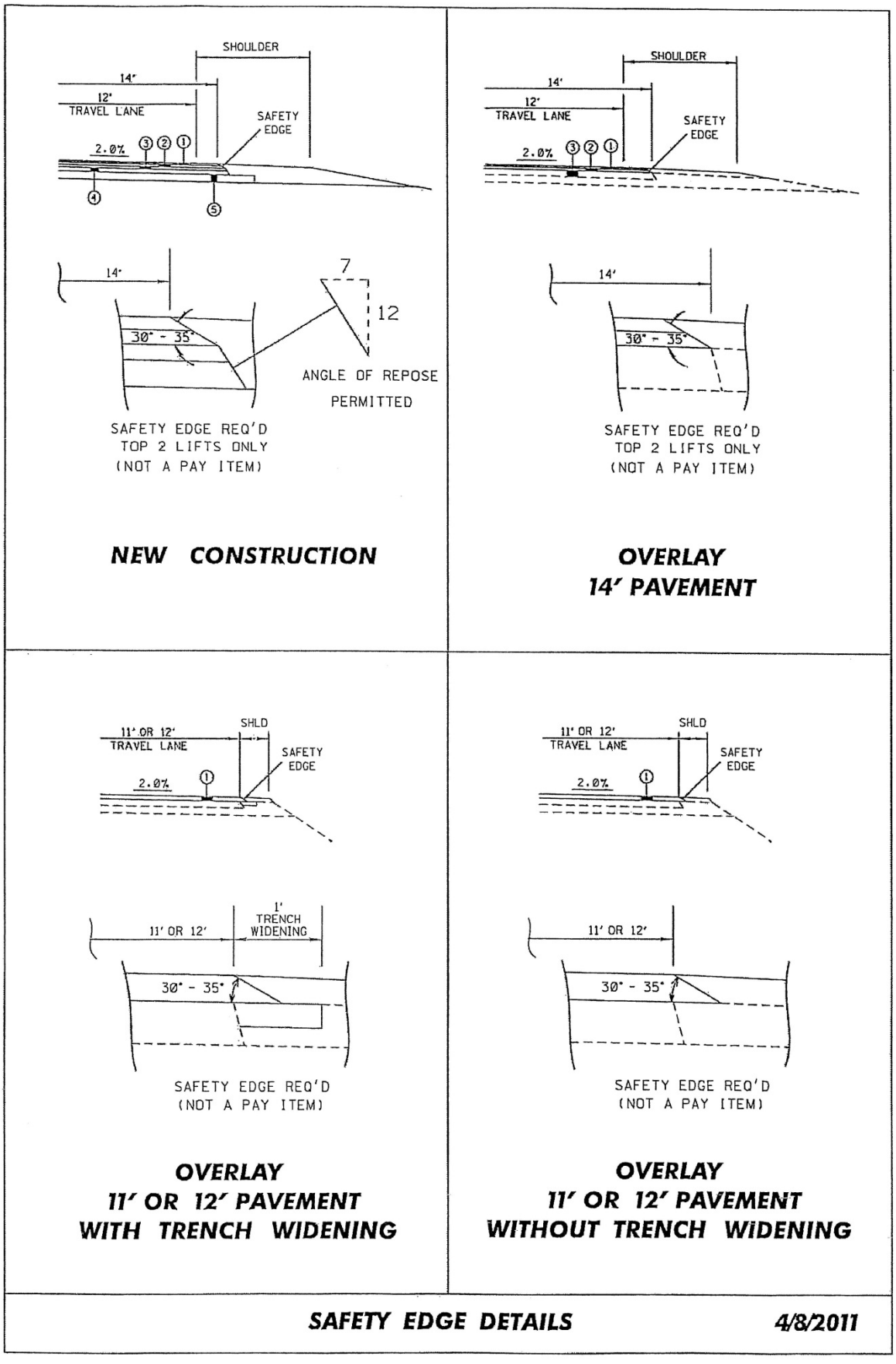
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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. 113 **CODE: (SP)**

DATE: 04/18/2017

SUBJECT: Tack Coat

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

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

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. 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.

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.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2954 **CODE: (IS)**

DATE: **12/01/2020**

SUBJECT: **Reflective Sheeting for Signs**

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

Temporary Construction Signs

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

Permanent Signs

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

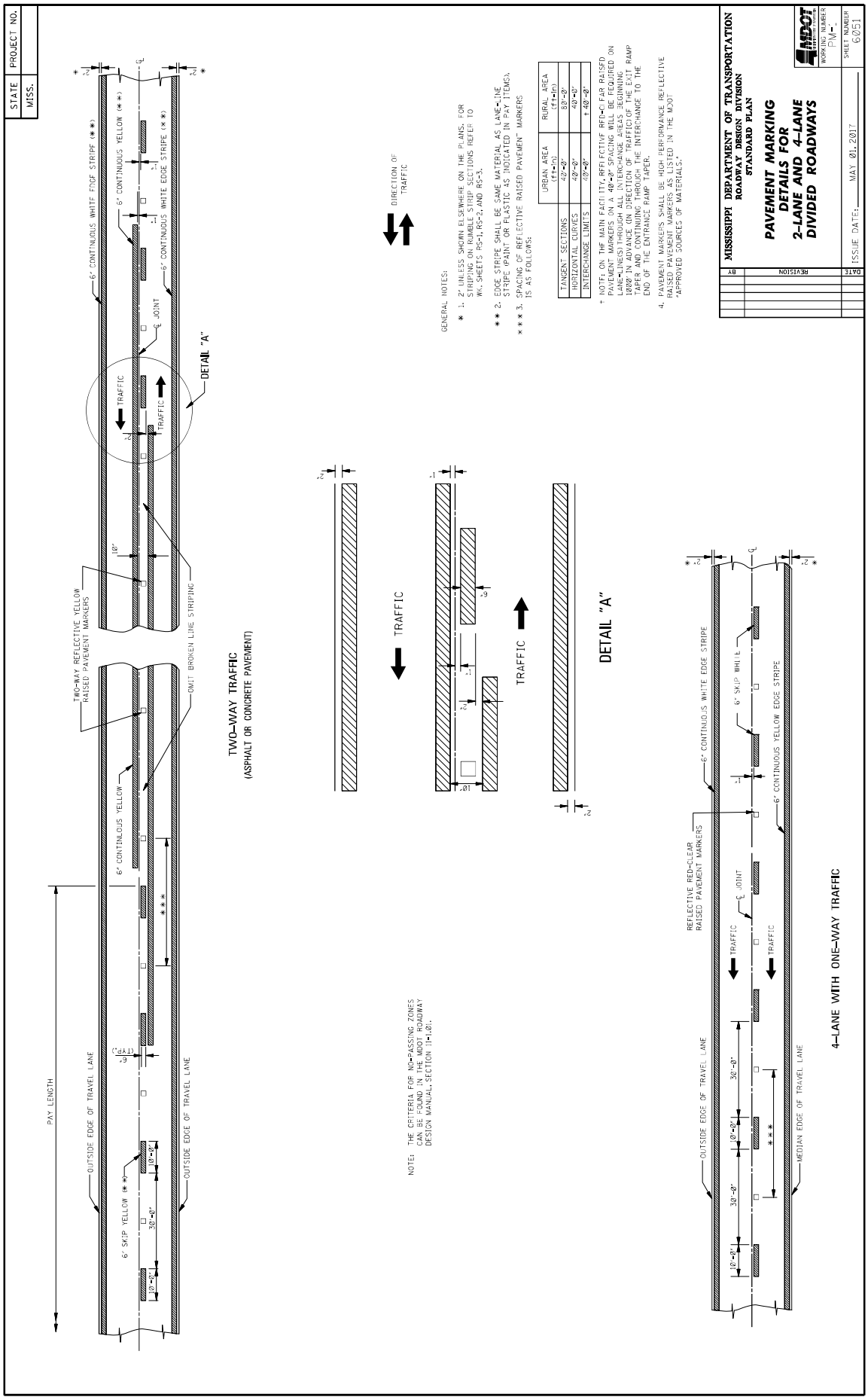
DATE: 08/11/2021

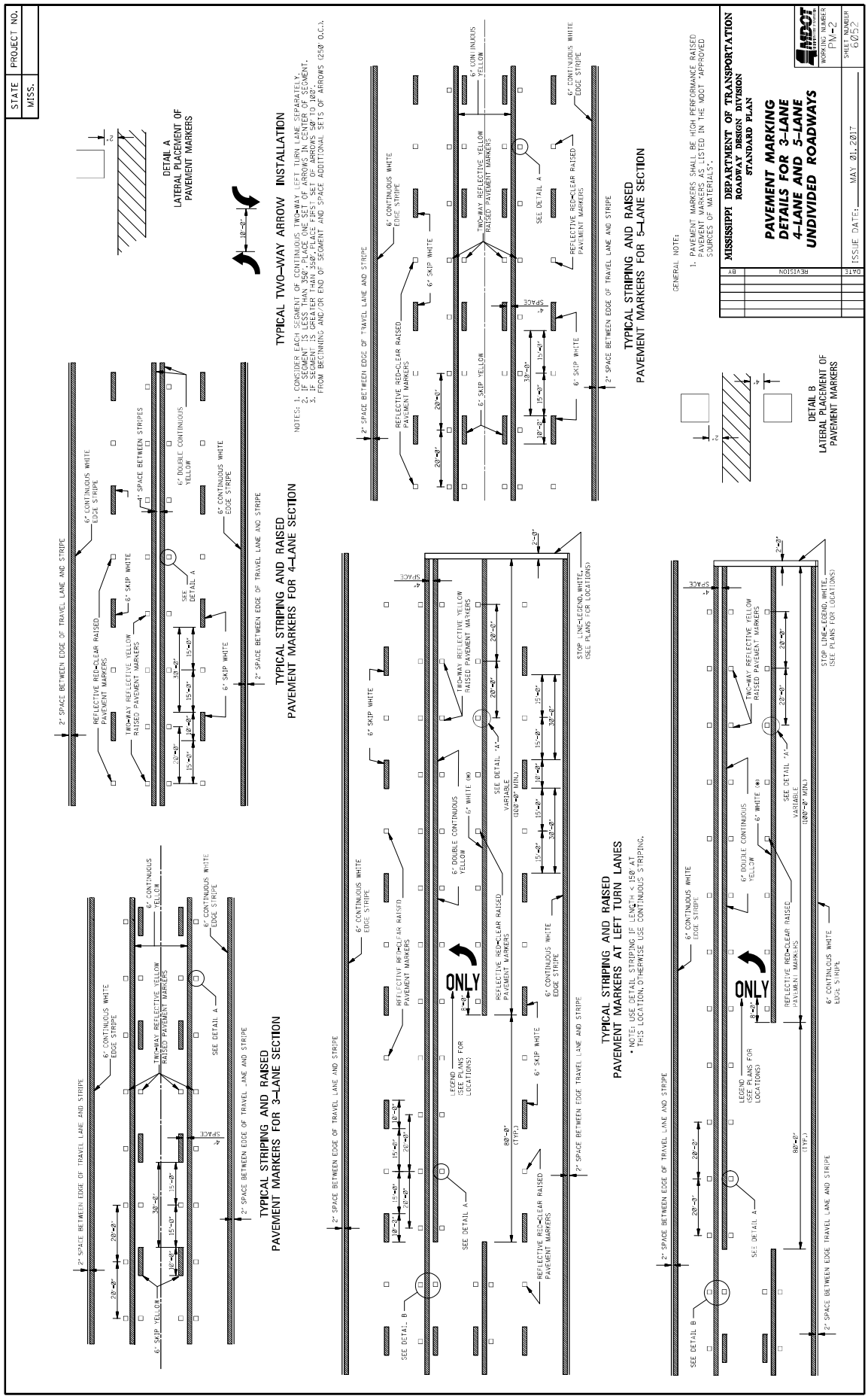
SUBJECT: Standard Drawings

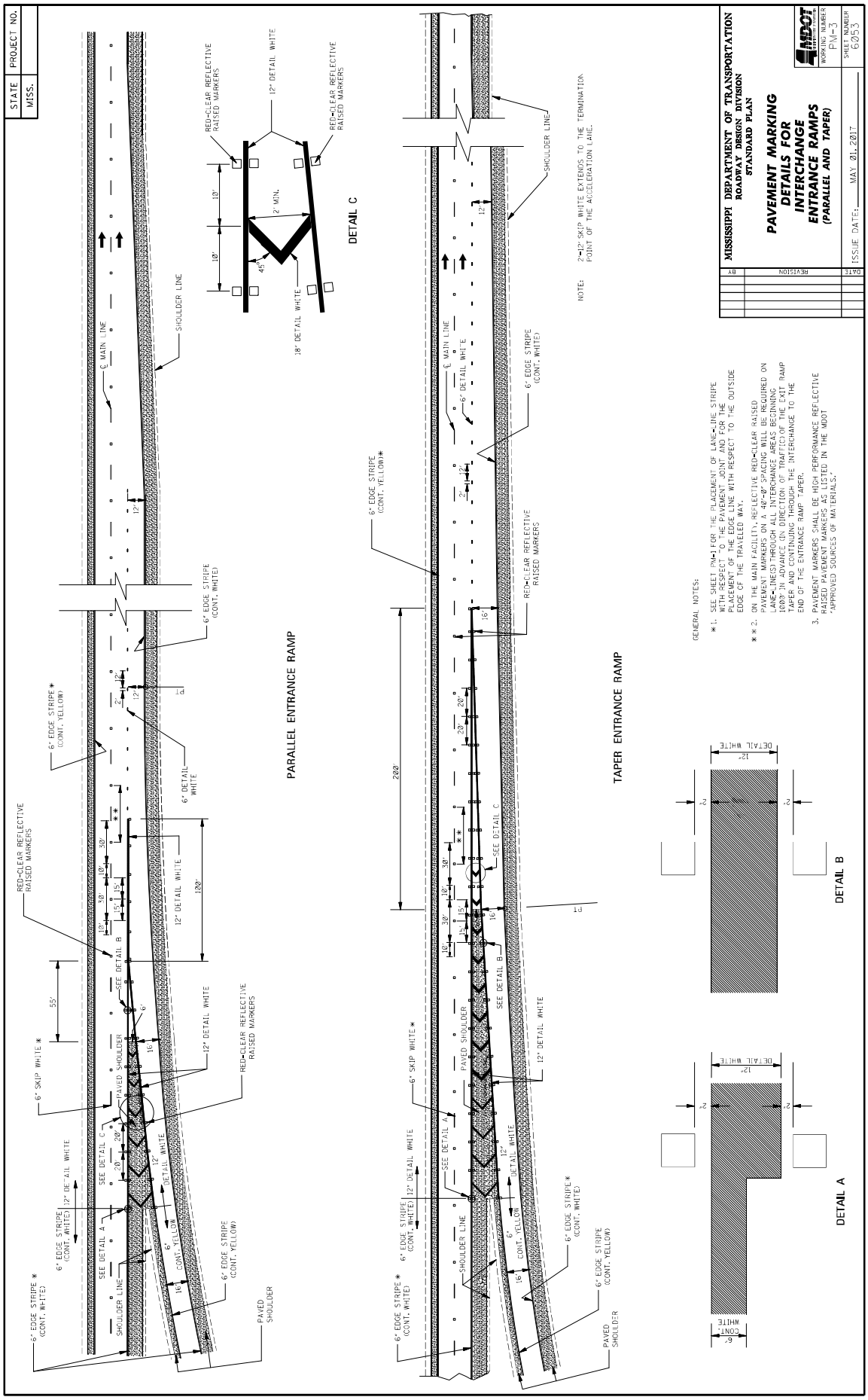
Standard Drawings attached hereto shall govern appropriate items of required work.

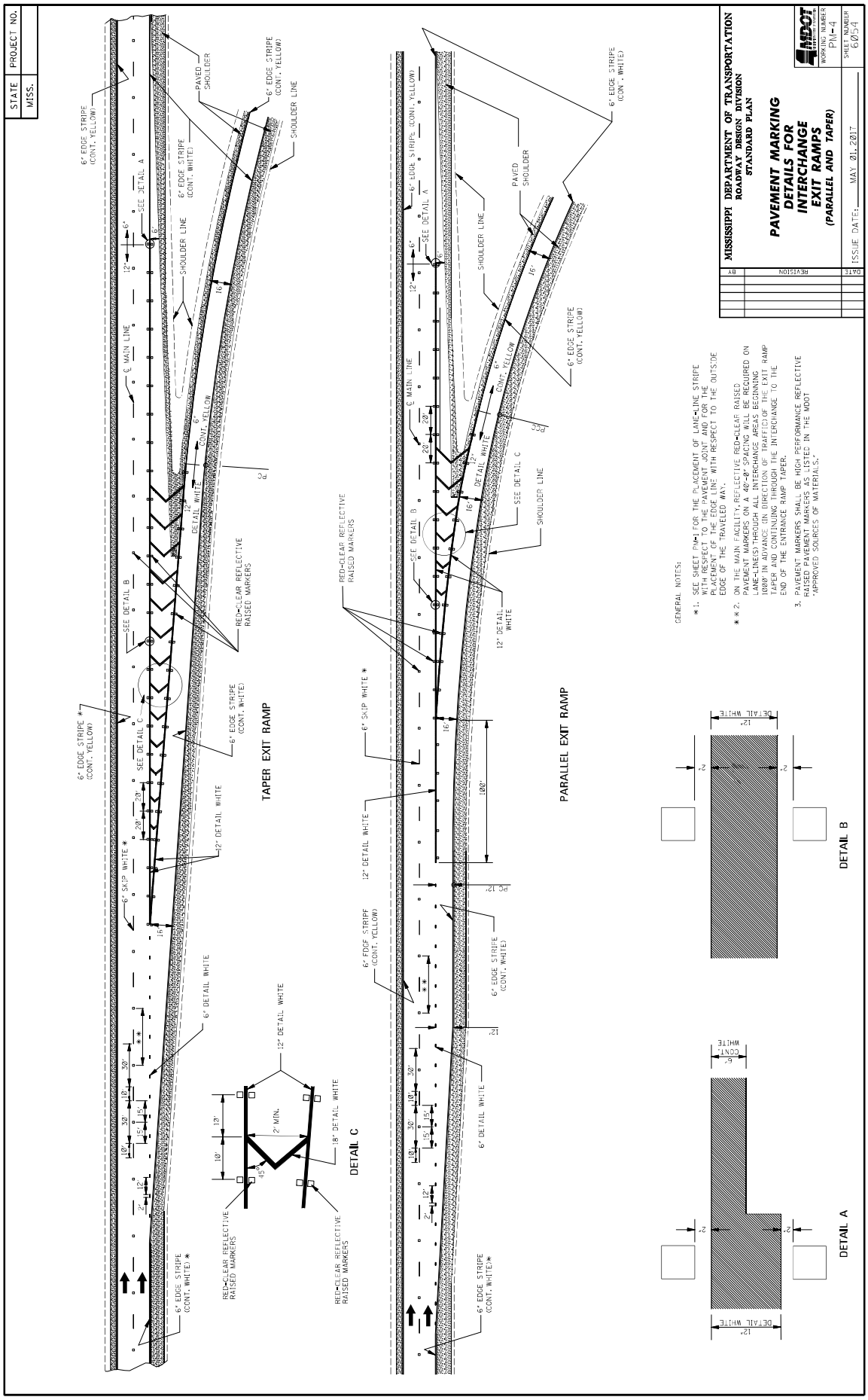
Larger copies of Standard Drawings may be purchased from:

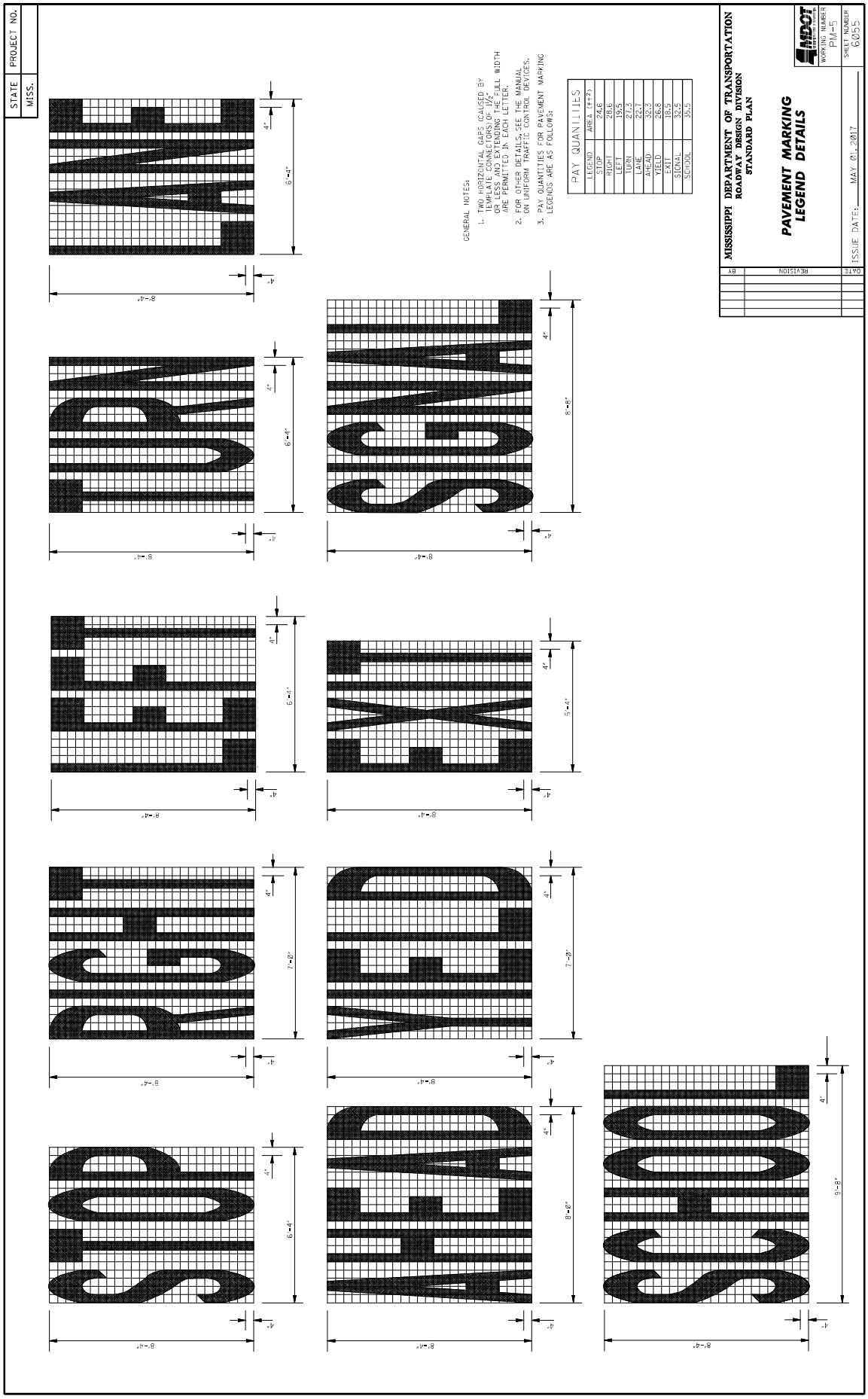
MDOT Plans Print Shop
MDOT Shop Complex, Building C, Room 114
2567 North West Street
P.O. Box 1850
Jackson, MS 39215-1850
Telephone: (601) 359-7460
or FAX: (601) 359-7461
or e-mail: plans@mdot.state.ms.us

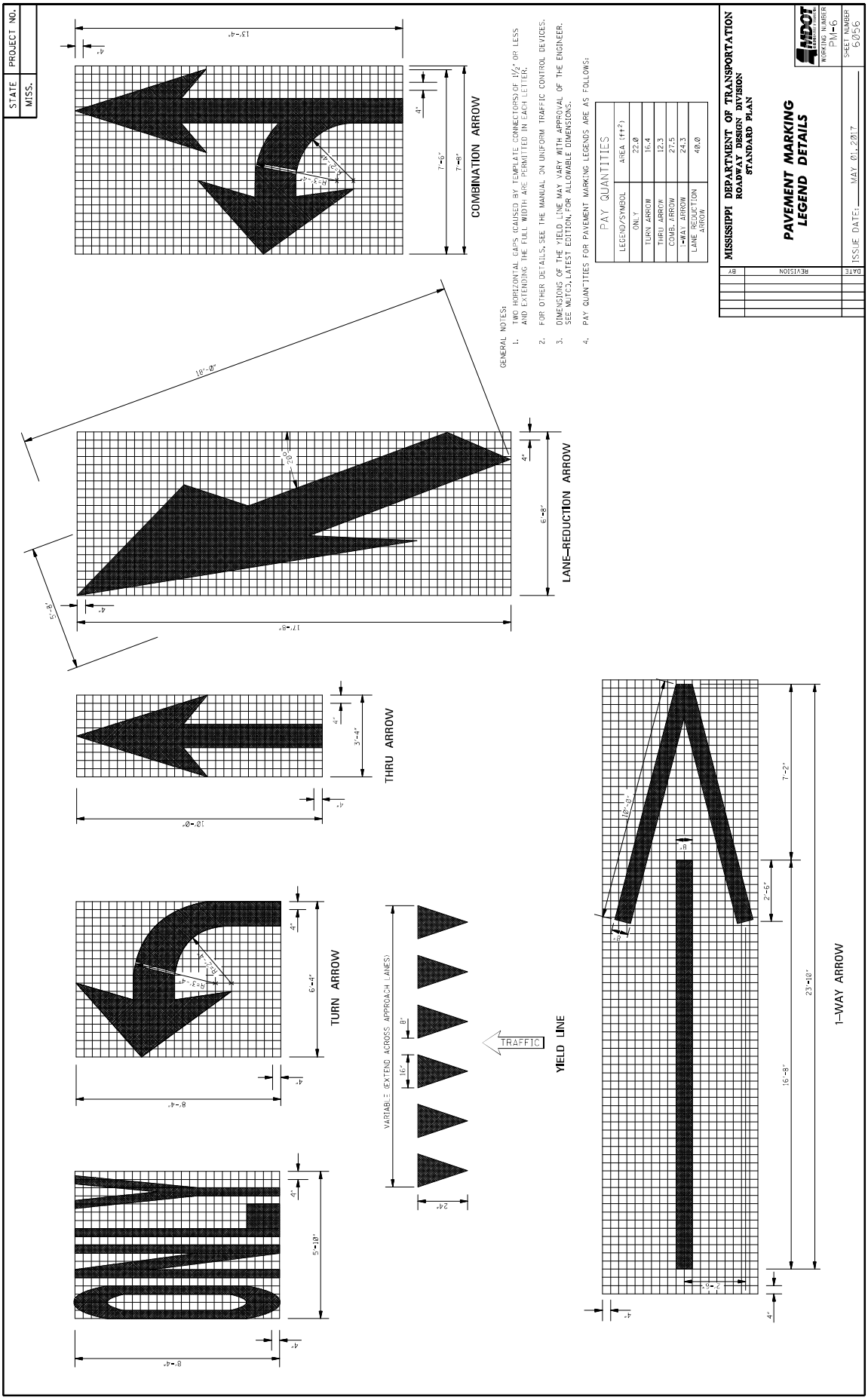

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING
DETAILS FOR
2-LANE AND 4-LANE
DIVIDED ROADWAYS
WORKING NUMBER
PW-_
SHEET NUMBER
6051
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
GENERAL NOTES:
* 1. 2' UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO Mx. 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 REFLECTIVE 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, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS AT 40'-0" SPACING WILL BE REQUIRED ON LANE LINES THROUGHOUT ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE OF 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."
TWO-WAY REFLECTIVE YELLOW RAISED PAVEMENT MARKERS
6" CONTINUOUS WHITE EDGE STRIPE (**)
6" CONTINUOUS YELLOW (**)
6" CONTINUOUS WHITE EDGE STRIPE (**)
℄ JOINT
DETAIL "A"
TRAFFIC
DIRECTION OF TRAFFIC
OMIT BROKEN LINE STRIPING
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
6" CONTINUOUS YELLOW
6" SKIP YELLOW (**)
OUTSIDE EDGE OF TRAVEL LANE
PAY LENGTH
NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDOT ROADWAY DESIGN MANUAL, SECTION 1-1.01.
DETAIL "A"
4-LANE WITH ONE-WAY TRAFFIC
REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
6" SKIP WHITE
MEDIAN EDGE OF TRAVEL LANE

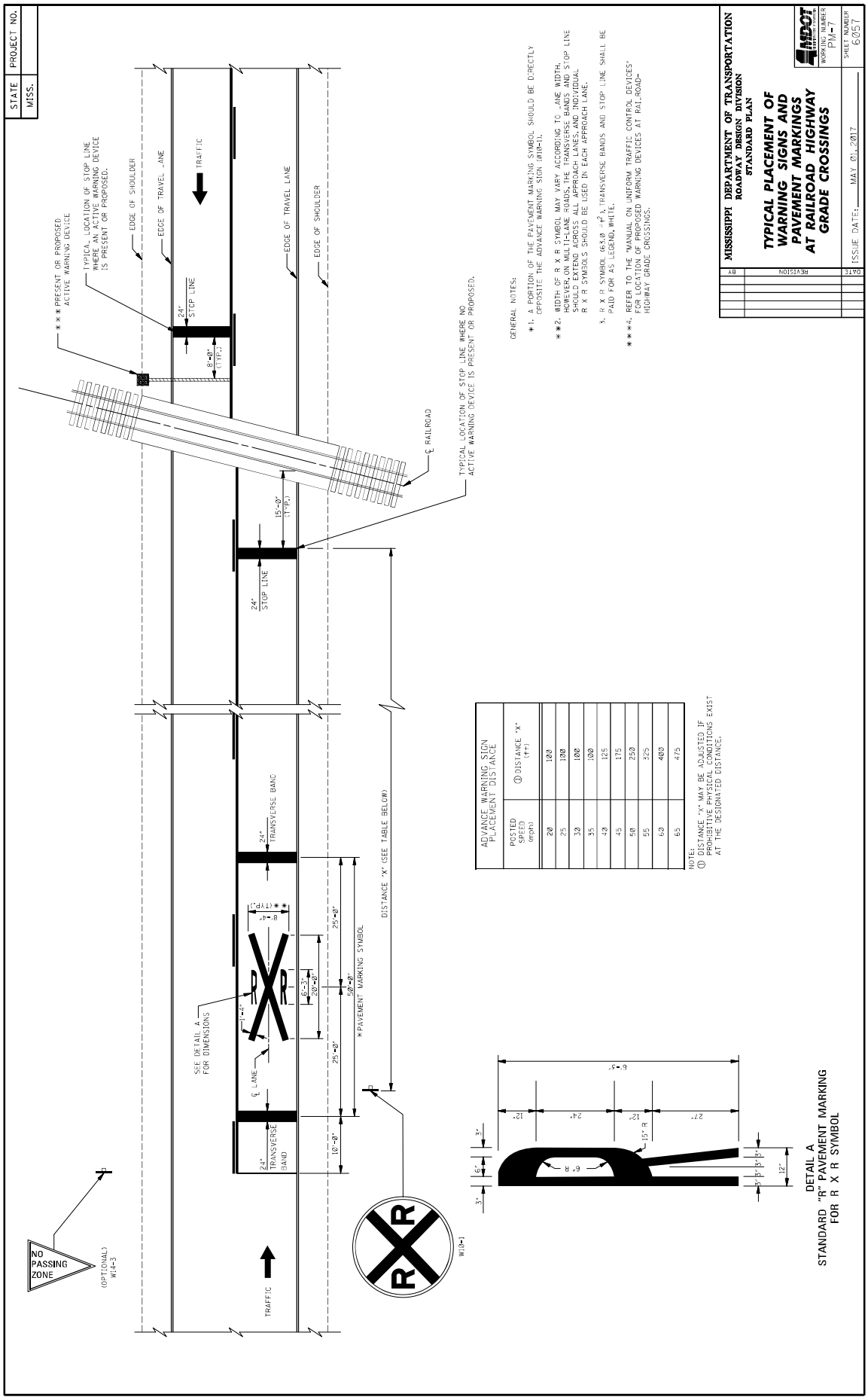

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR 3-LANE 4-LANE AND 5-LANE UNDIVIDED ROADWAYS
WORKING NUMBER FM-2
SHEET NUMBER 6052
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 3-LANE SECTION
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
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 AT CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350' PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).
DETAIL A LATERAL PLACEMENT OF PAVEMENT MARKERS
DETAIL B LATERAL PLACEMENT OF PAVEMENT MARKERS

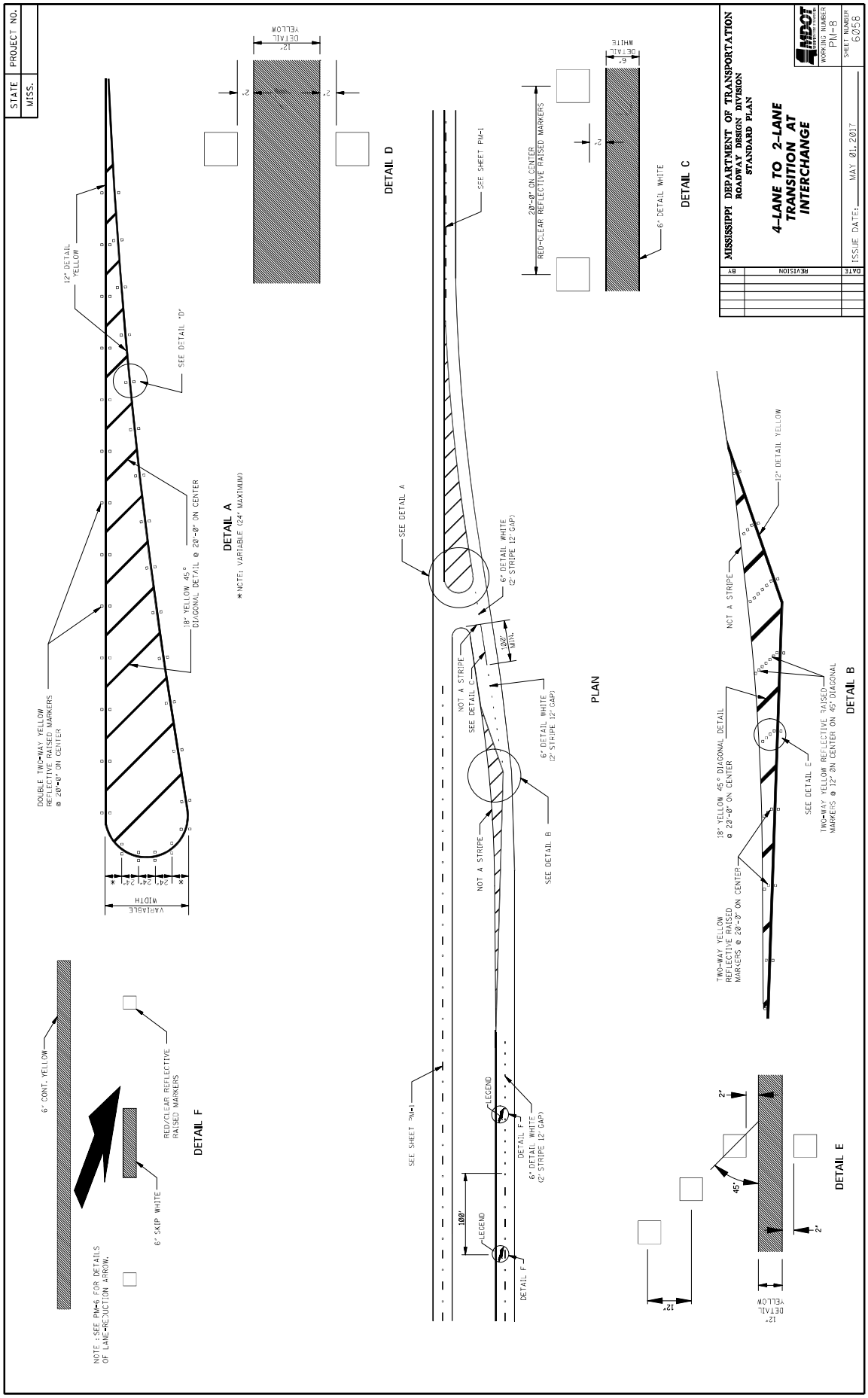

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPER)
WORKING NUMBER FM-3
SHEET NUMBER 6055
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
PARALLEL ENTRANCE RAMP
TAPER ENTRANCE RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
*1. SEE SHEET FM-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, REFLECTIVE 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."
NOTE: 2-12" SKIP WHITE EXTENDS TO THE TERMINATION POINT OF THE ACCELERATION LANE.

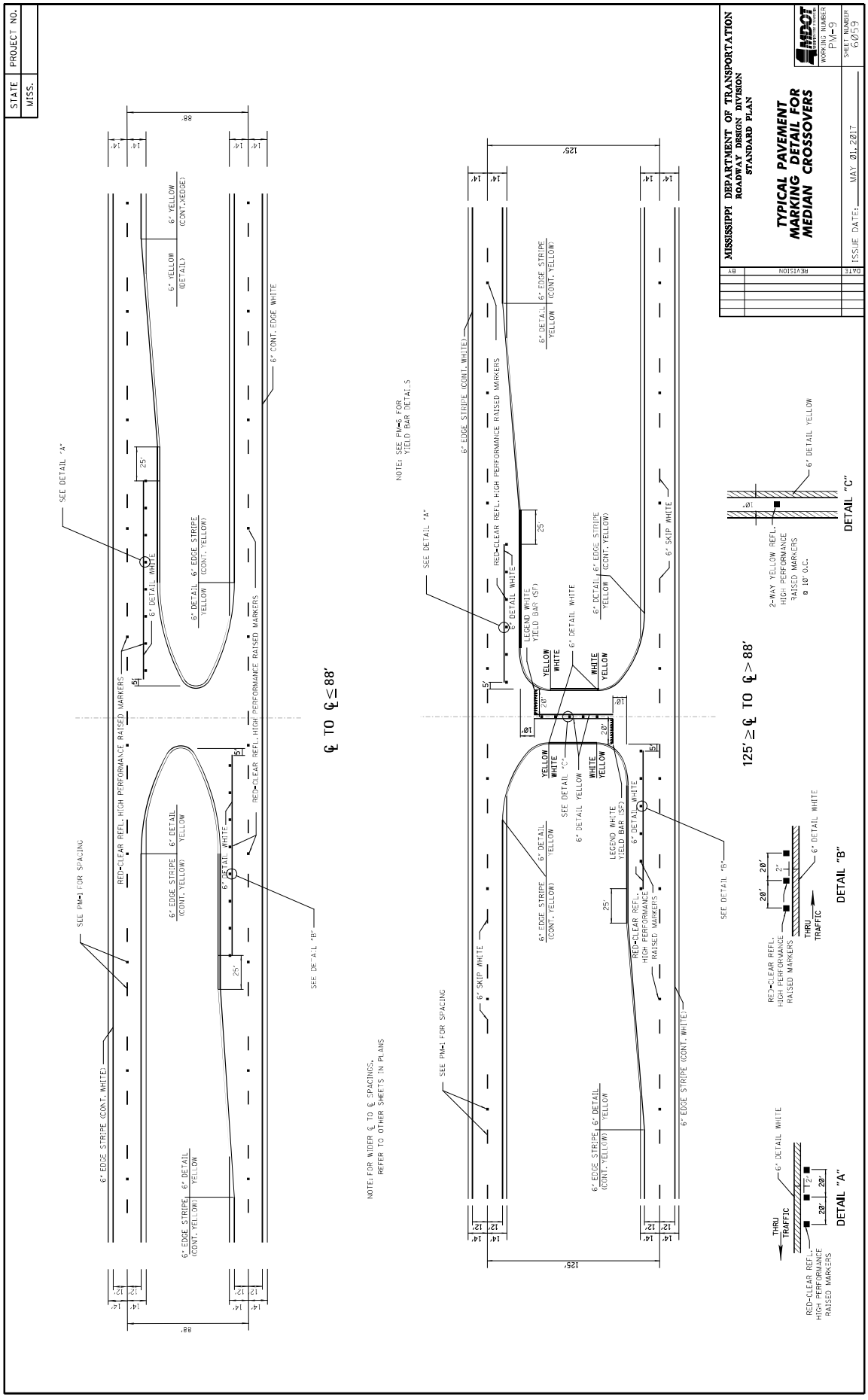

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMPS
(PARALLEL AND TAPER)
WORKING NUMBER PIN-4
SHEET NUMBER 6054
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
TAPER EXIT RAMP
PARALLEL EXIT RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
*1. SEE SHEET 6W-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND/OR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
**2. ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINES 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."

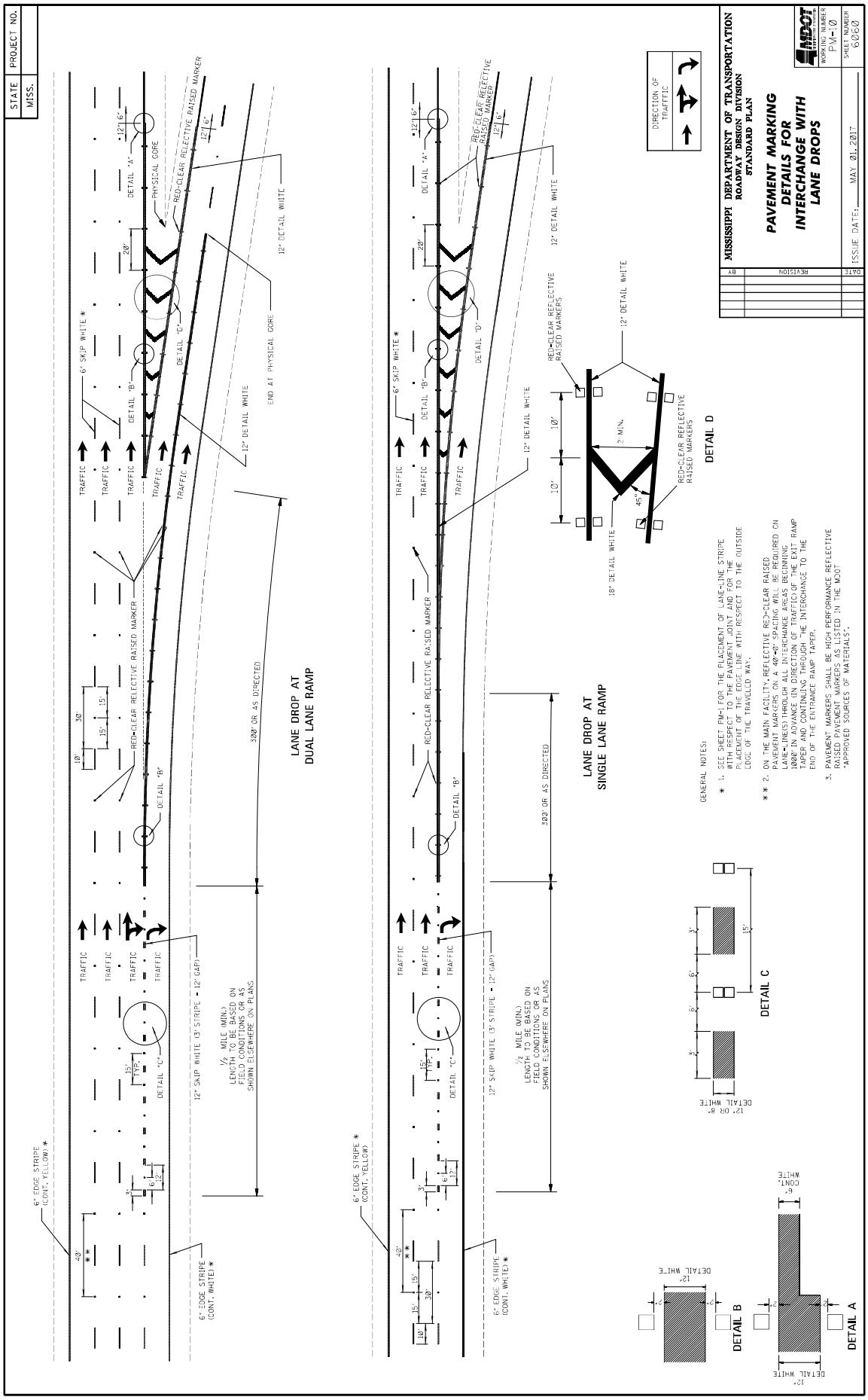

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING
LEGEND DETAILS
WORKING NUMBER
PM-5
SHEET NUMBER
6055
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1½" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:
PAY QUANTITIES
LEGEND
AREA (SF)
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

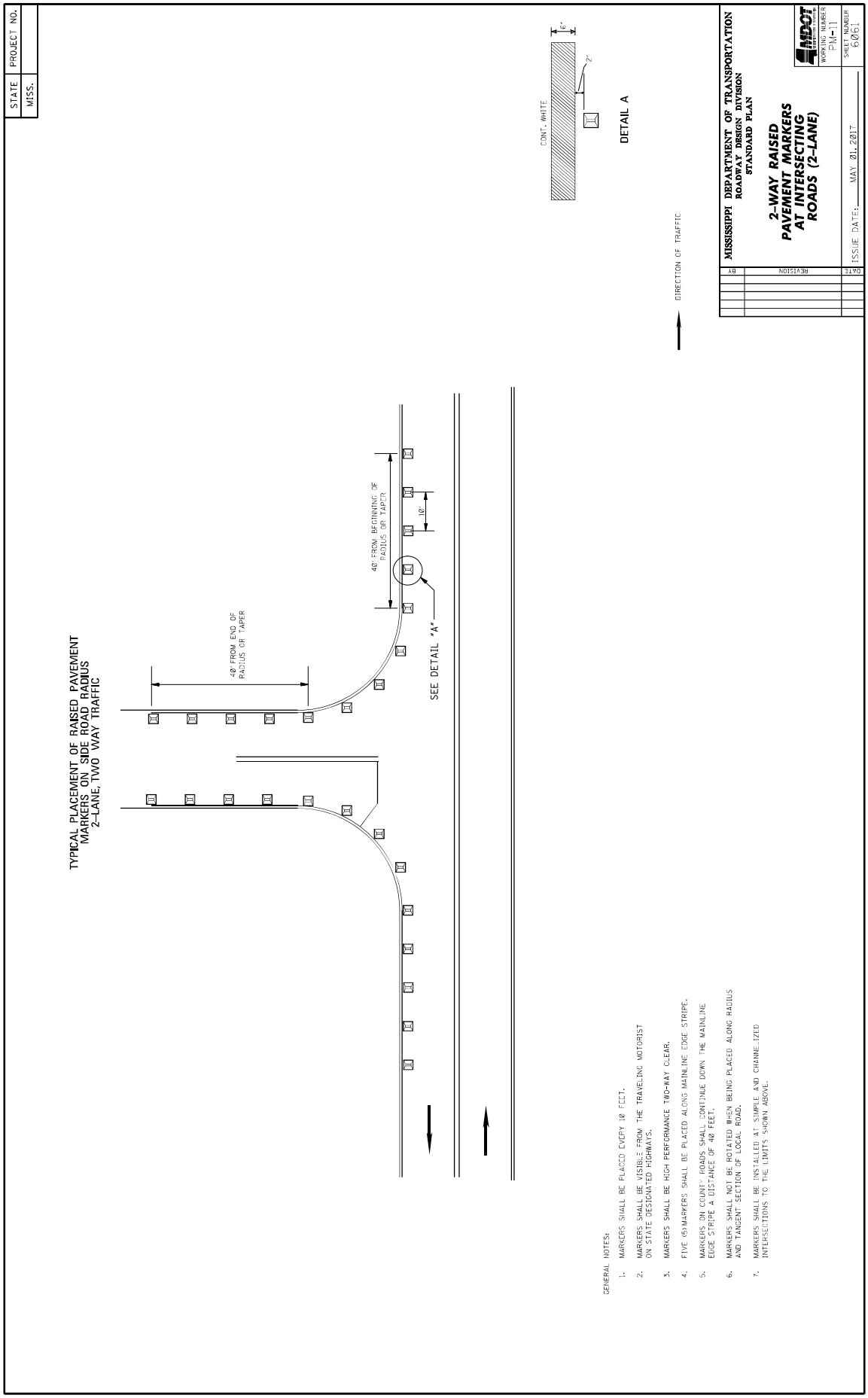

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING LEGEND DETAILS
MDOT
WORKING NUMBER PM-6
SHEET NUMBER 6056
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
GENERAL NOTES:
1. TWO HORIZONTAL CAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.
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

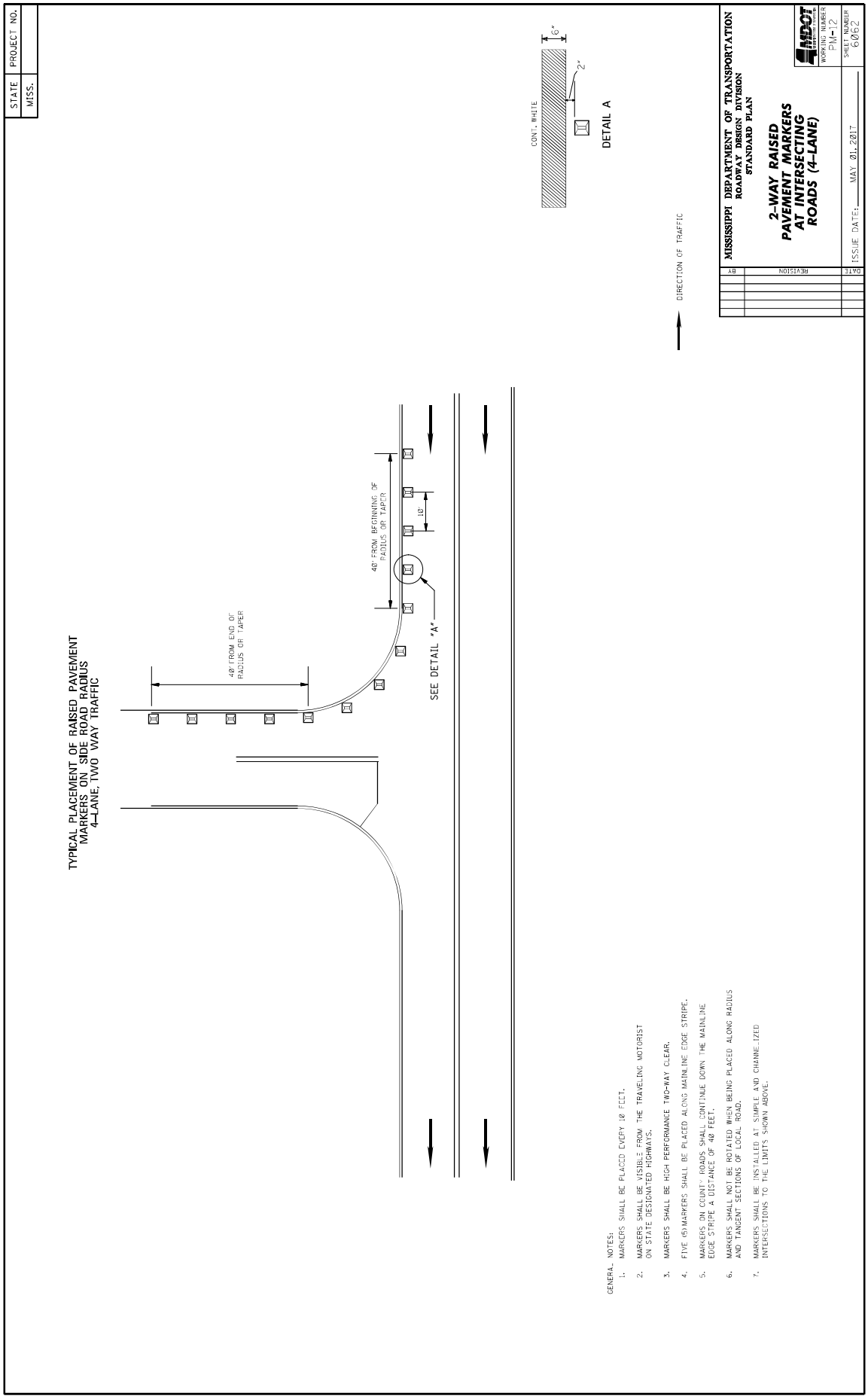

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PLACEMENT OF WARNING SIGNS AND PAVEMENT MARKINGS AT RAILROAD HIGHWAY GRADE CROSSINGS
WORKING NUMBER PM-7
SHEET NUMBER 6057
ISSUE DATE: MAY 01, 2017
BY REVISION DATE
GENERAL NOTES:
*1. A PORTION 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 (65.0 ft²), TRANSVERSE BANDS AND STOP LINE SHALL BE PAID FOR AS LEGEND, WHITE.
***4. REFER TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR LOCATION OF PROPOSED WARNING DEVICES AT RAIL-ROAD-HIGHWAY GRADE CROSSINGS.
***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" (TYP.)
24" TRANSVERSE BAND
SEE DETAIL A FOR DIMENSIONS
*PAVEMENT MARKING SYMBOL
DISTANCE "X" (SEE TABLE BELOW)
℄ LANE
NO PASSING ZONE
(OPTIONAL) W14-3
W10-1
ADVANCE WARNING SIGN PLACEMENT DISTANCE
POSTED SPEED (mph) | ① DISTANCE "X" (FT)
20 100
25 100
30 100
35 100
40 125
45 175
50 250
55 325
60 400
65 475
NOTE:
① DISTANCE "X" MAY BE ADJUSTED IF PROHIBITIVE PHYSICAL CONDITIONS EXIST AT THE DESIGNATED DISTANCE.
DETAIL A
STANDARD "R" PAVEMENT MARKING FOR R X R SYMBOL

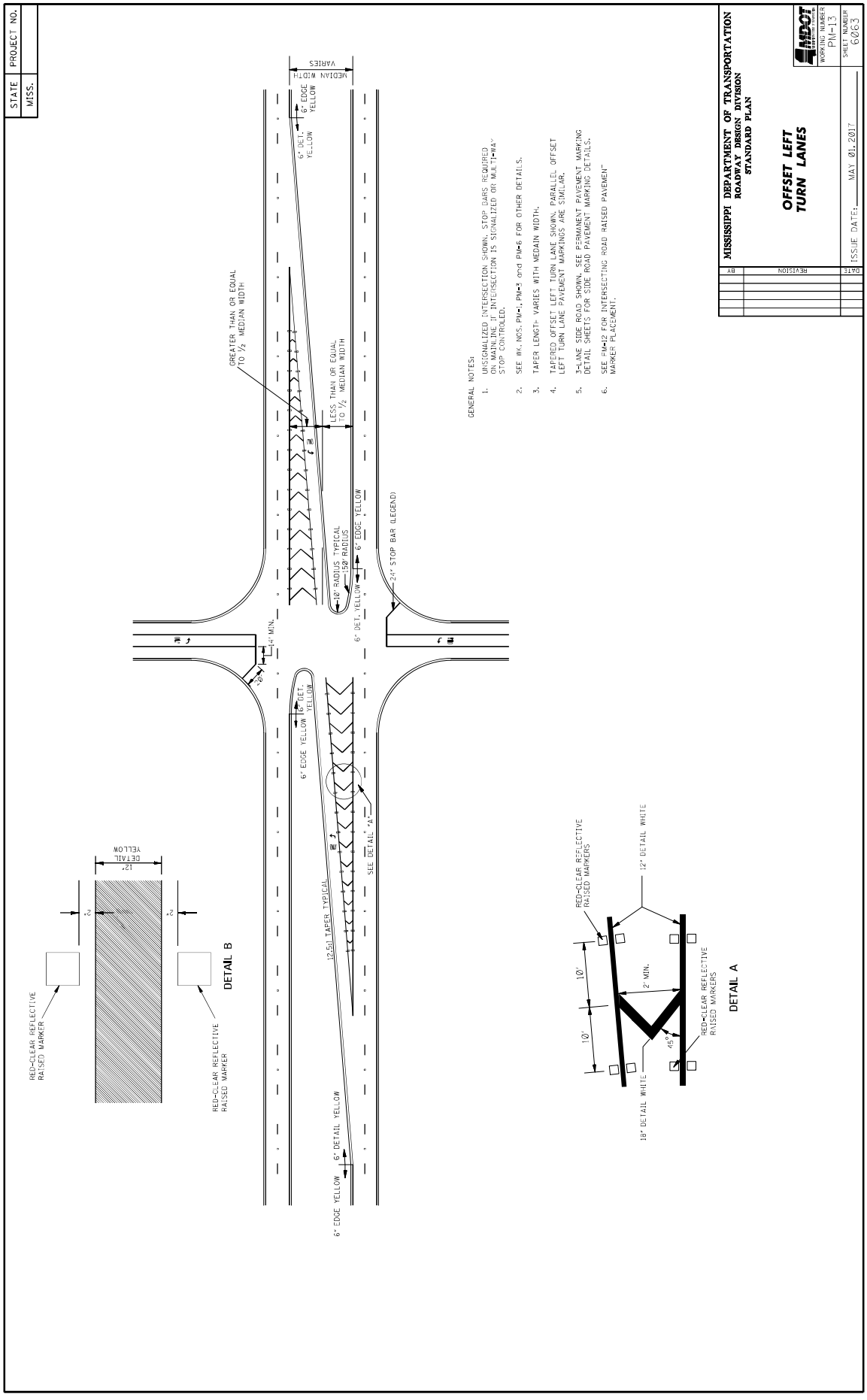

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
4-LANE TO 2-LANE TRANSITION AT INTERCHANGE
WORKING NUMBER PM-8
SHEET NUMBER 6058
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
DETAIL A
* NOTE: VARIABLE (24" MAXIMUM)
DETAIL B
DETAIL C
DETAIL D
DETAIL E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

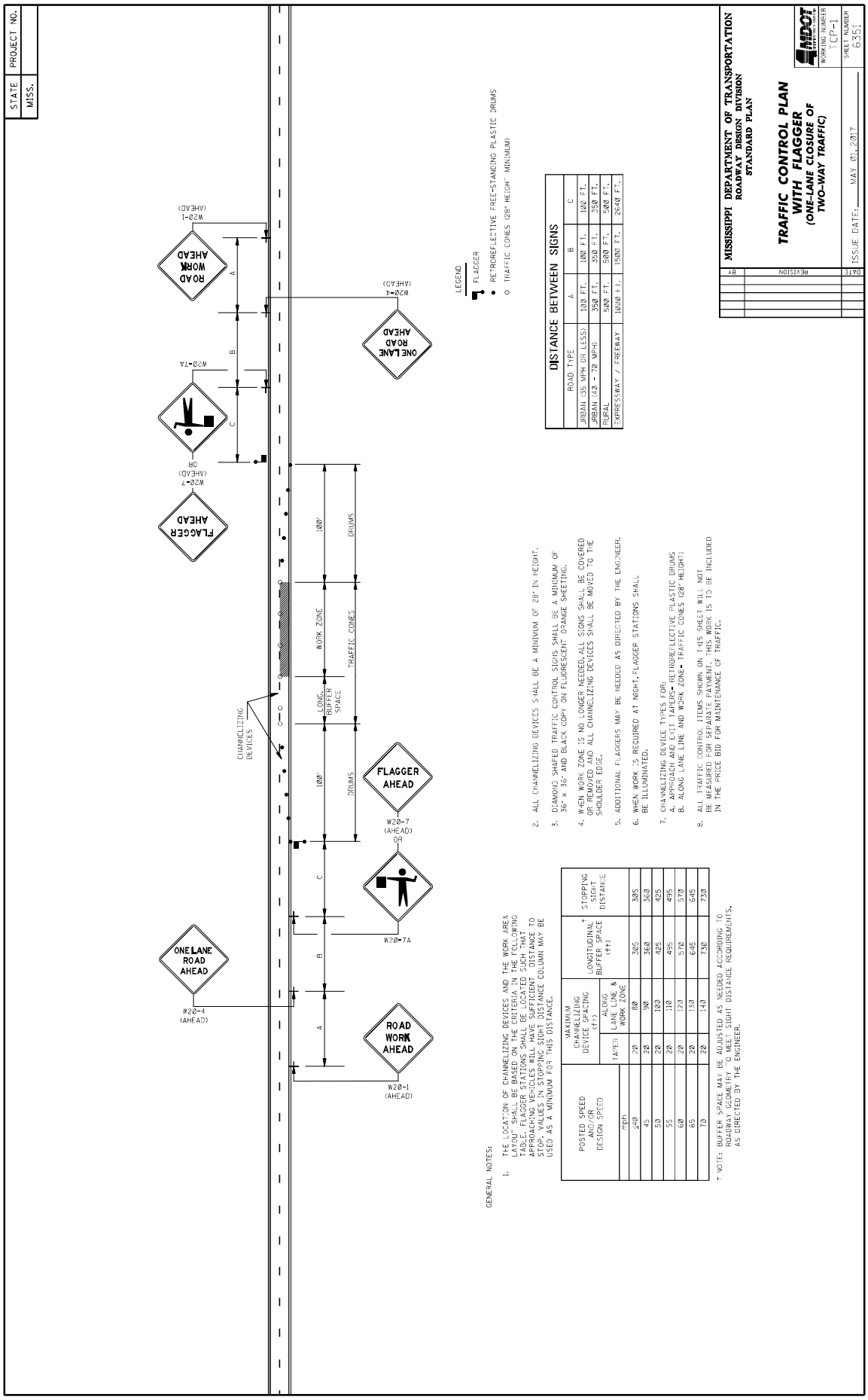

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PAVEMENT MARKING DETAIL FOR MEDIAN CROSSOVERS
WORKING NUMBER FM-49
SHEET NUMBER 60759
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
℄ TO ℄ ≤ 88'
125' ≥ ℄ TO ℄ > 88'
SEE DETAIL "A"
SEE DETAIL "B"
SEE DETAIL "C"
SEE PM-1 FOR SPACING
RED-CLEAR REFL. HIGH PERFORMANCE RAISED MARKERS
6" EDGE STRIPE (CONT. WHITE)
6" CONT. EDGE WHITE
6" EDGE STRIPE (CONT. YELLOW)
6" DETAIL YELLOW
6" DETAIL WHITE
6" YELLOW (DETAIL)
6" YELLOW (CONT. EDGE)
6" SKIP WHITE
LEGEND WHITE YIELD BAR (SP)
NOTE: SEE PM-5 FOR YIELD BAR DETAILS
NOTE: FOR WIDER ℄ TO ℄ SPACINGS, REFER TO OTHER SHEETS IN PLANS
2-WAY YELLOW REFL. HIGH PERFORMANCE RAISED MARKERS @ 10' O.C.
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: MAY 01, 2017
DATE REVISION BY
LANE DROP AT DUAL LANE RAMP
LANE DROP AT SINGLE LANE RAMP
DETAIL A
DETAIL B
DETAIL C
DETAIL D
DIRECTION OF TRAFFIC
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, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-40' 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT *APPROVED SOURCES OF MATERIALS*.


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2-LANE)
WORKING NUMBER
PM-11
SHEET NUMBER
6061
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
TYPICAL PLACEMENT OF 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'
SEE DETAIL "A"
DIRECTION OF TRAFFIC
DETAIL A
CONT. WHITE
6"
2"
GENERAL NOTES:
1. MARKERS SHALL BE PLACED EVERY 10 FEET.
2. MARKERS SHALL BE VISIBLE FROM THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
3. MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.
4. FIVE (5) MARKERS SHALL BE PLACED ALONG MAINLINE EDGE STRIPE.
5. MARKERS ON COUNTY ROADS SHALL CONTINUE DOWN THE MAINLINE EDGE STRIPE A DISTANCE OF 40 FEET.
6. MARKERS SHALL NOT BE ROTATED WHEN BEING PLACED ALONG RADIUS AND TANGENT SECTION OF LOCAL ROAD.
7. MARKERS SHALL BE INSTALLED AT SIMPLE AND CHANNELIZED INTERSECTIONS TO THE LIMITS SHOWN ABOVE.


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (4-LANE)
WORKING NUMBER PM-12
SHEET NUMBER 6062
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS ON SIDE ROAD RADIUS 4-LANE, TWO WAY TRAFFIC
40' FROM END OF RADIUS OR TAPER
40' FROM BEGINNING OF RADIUS OR TAPER
10'
SEE DETAIL "A"
DIRECTION OF TRAFFIC
DETAIL A
CONT. WHITE
6"
2"
GENERAL NOTES:
1. MARKERS SHALL BE PLACED EVERY 10 FEET.
2. MARKERS SHALL BE VISIBLE FROM THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
3. MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.
4. FIVE (5) MARKERS SHALL BE PLACED ALONG MAINLINE EDGE STRIPE.
5. MARKERS ON COUNTY ROADS SHALL CONTINUE DOWN THE MAINLINE EDGE STRIPE A DISTANCE OF 40 FEET.
6. MARKERS SHALL NOT BE ROTATED WHEN BEING PLACED ALONG RADIUS AND TANGENT SECTIONS OF LOCAL ROAD.
7. MARKERS SHALL BE INSTALLED AT SIMPLE AND CHANNELIZED INTERSECTIONS TO THE LIMITS SHOWN ABOVE.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
OFFSET LEFT TURN LANES
WORKING NUMBER PM-13
SHEET NUMBER 6063
ISSUE DATE: MAY 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. UNSIGNALIZED INTERSECTION SHOWN. STOP BARS REQUIRED ONLY WHEN THE INTERSECTION IS SIGNALIZED OR MULTI-WAY STOP CONTROLED.
2. SEE MX. NOS. PM-1, PM-3 and PM-6 FOR OTHER DETAILS.
3. TAPER LENGTH VARIES WITH MEDAIN 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.
GREATER THAN OR EQUAL TO ½ MEDIAN WIDTH
LESS THAN OR EQUAL TO ½ MEDIAN WIDTH
MEDIAN WIDTH VARIES
6" DET. YELLOW
6" EDGE YELLOW
10' RADIUS TYPICAL
24" STOP BAR (LEGEND)
4' MIN.
12:6:1 TAPER TYPICAL
SEE DETAIL "A"
6" DETAIL YELLOW
DETAIL B
RED-CLEAR REFLECTIVE RAISED MARKER
12" DETAIL YELLOW
2'
DETAIL A
RED-CLEAR REFLECTIVE RAISED MARKERS
12" DETAIL WHITE
18" DETAIL WHITE
10'
2' MIN.
45°



DISTANCE BETWEEN SIGNS			
ROAD TYPE	A	B	C
URBAN (35 MPH OR LESS)	100 FT.	100 FT.	100 FT.
URBAN (40 - 70 MPH)	350 FT.	350 FT.	350 FT.
RURAL	500 FT.	500 FT.	500 FT.
EXPRESSWAY / FREEWAY	1000 FT.	1500 FT.	2640 FT.

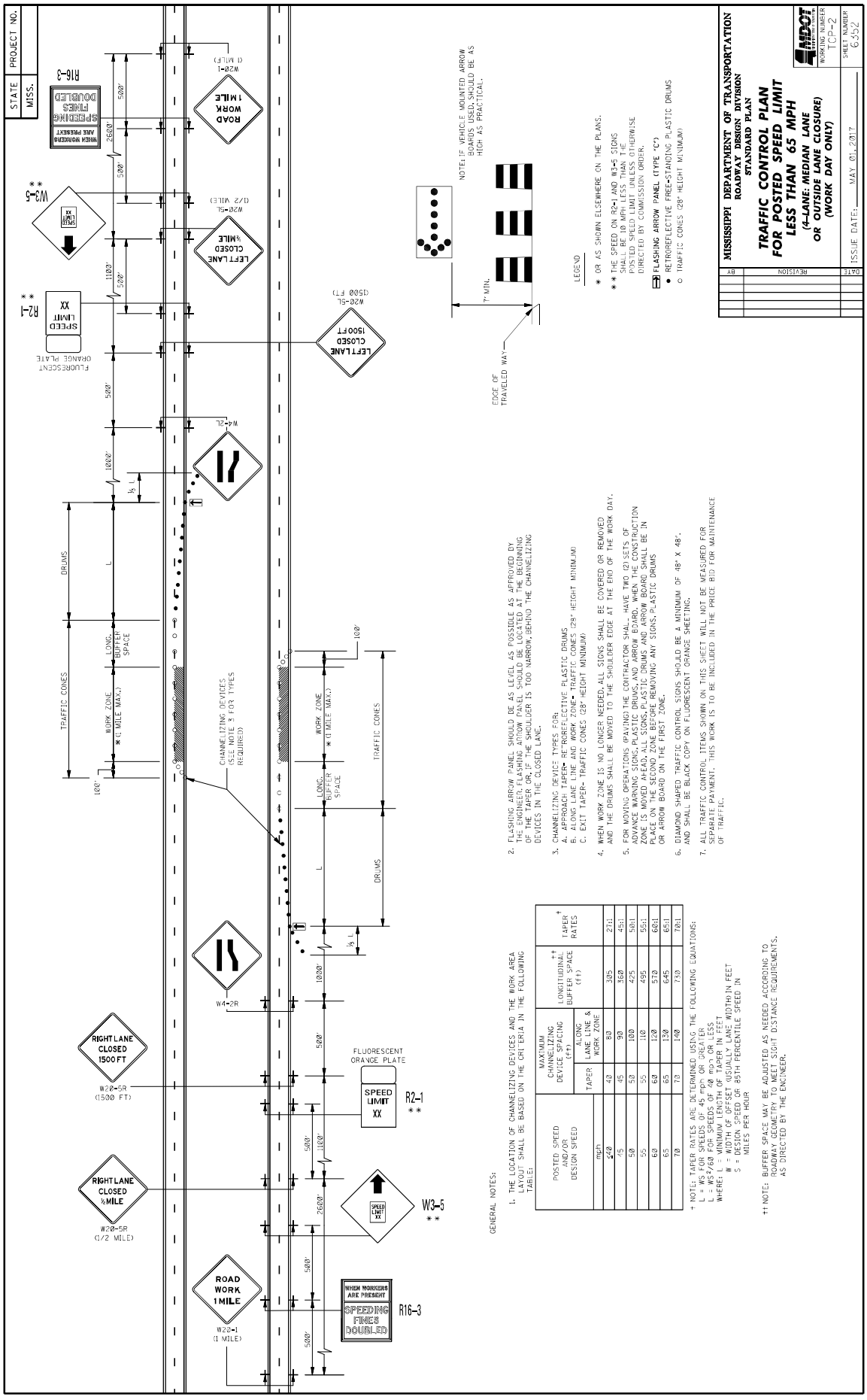
GENERAL NOTES:

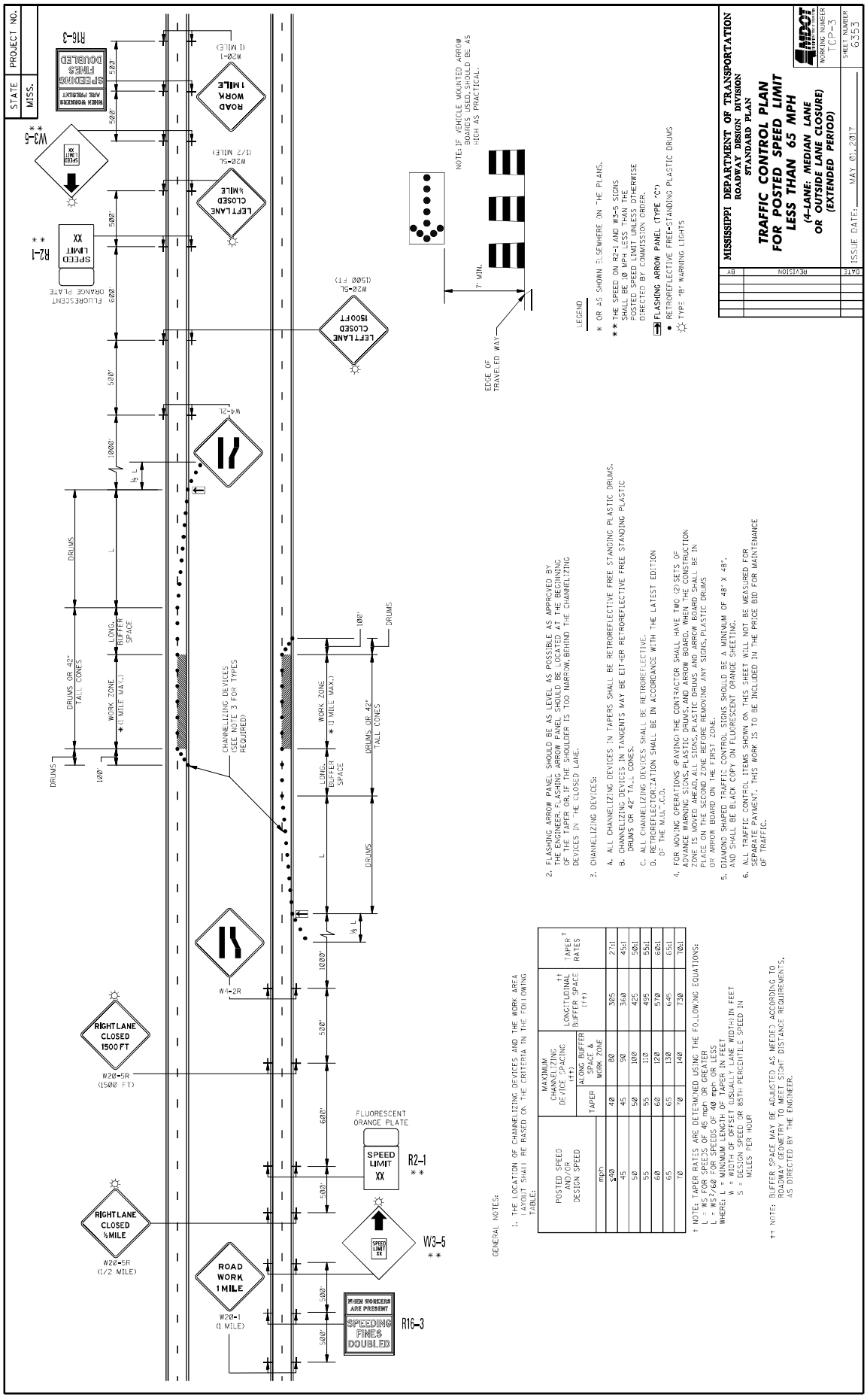
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE. FLAGGER STATIONS SHALL BE LOCATED SUCH THAT APPROACHING VEHICLES WILL HAVE SUFFICIENT DISTANCE TO STOP. VALUES IN STOPPING SIGHT DISTANCE COLUMN MAY BE USED AS A MINIMUM FOR THIS DISTANCE.

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL† BUFFER SPACE (ft)	STOPPING SIGHT DISTANCE
	TAPER	ALONG LANE & WORK ZONE		
mph				
≤40	20	80	305	305
45	20	90	360	360
50	20	100	425	425
55	20	110	495	495
60	20	120	570	570
65	20	130	645	645
70	20	140	730	730

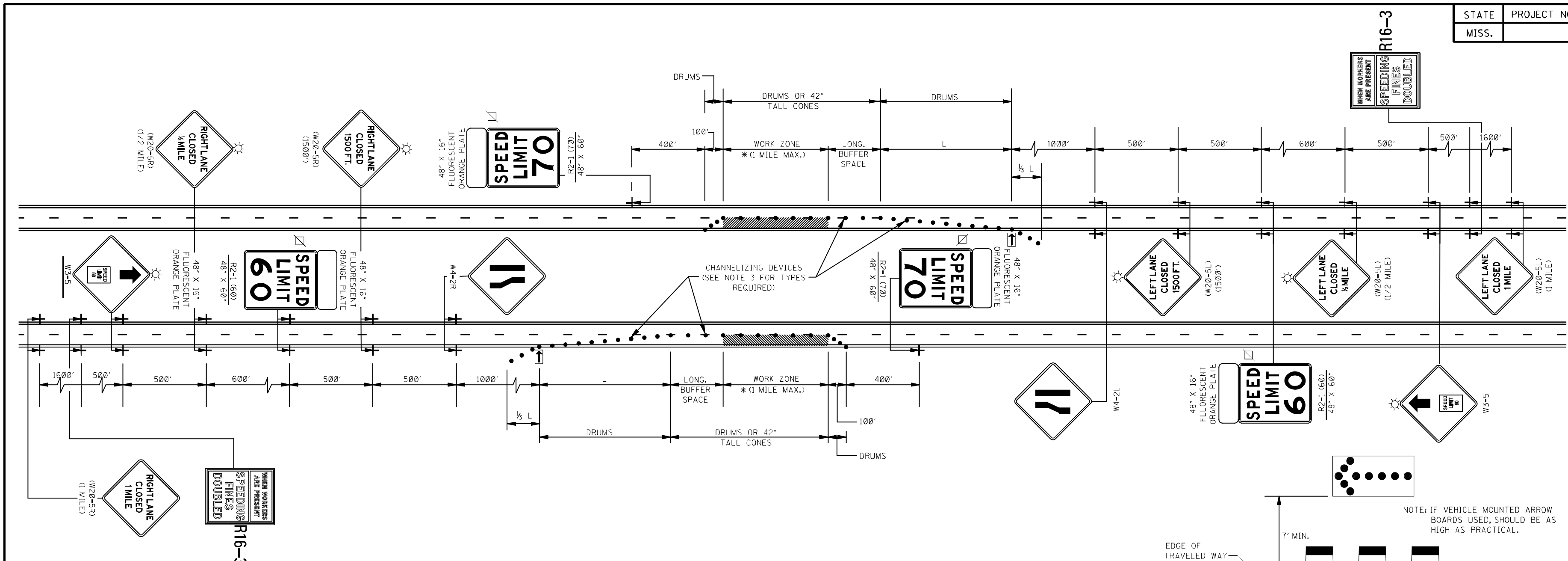
† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
5. ADDITIONAL FLAGGERS MAY BE NEEDED AS DIRECTED BY THE ENGINEER.
6. WHEN WORK IS REQUIRED AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED.
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 IS TO 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)
(WORK DAY ONLY)
WORKING NUMBER TCP-2
SHEET NUMBER 6352
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
LEGEND
* OR AS SHOWN ELSEWHERE ON THE PLANS.
** THE SPEED ON R2-1 AND W3-5 SIGNS SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.
FLASHING ARROW PANEL (TYPE "C")
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TRAFFIC CONES (28" HEIGHT MINIMUM)
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
W20-5L (1500 FT)
W20-5L (1/2 MILE)
W20-1 (1 MILE)
R16-3
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
W4-2L
W4-2R
W3-5
SPEED LIMIT XX
R2-1
FLUORESCENT ORANGE PLATE
RIGHT LANE CLOSED 1500 FT
RIGHT LANE CLOSED ½MILE
ROAD WORK 1 MILE
LEFT LANE CLOSED ½MILE
LEFT LANE CLOSED 1500FT
TRAFFIC CONES
DRUMS
WORK ZONE * (1 MILE MAX.)
LONG. BUFFER SPACE
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
100'
500'
1000'
1100'
2600'
⅓ L
L
S
W
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
POSTED SPEED AND/OR DESIGN SPEED | MAXIMUM CHANNELIZING DEVICE SPACING (ft) TAPER | ALONG LANE LINE & WORK ZONE | LONGITUDINAL BUFFER SPACE (ft) †† | TAPER RATES †
mph | 40 | 80 | 305 | 2L:1
40 | 45 | 90 | 360 | 4S:1
45 | 50 | 100 | 425 | 5S:1
50 | 55 | 110 | 495 | 5S:1
55 | 60 | 120 | 570 | 6S:1
60 | 65 | 130 | 645 | 6S:1
65 | 70 | 140 | 730 | 7S:1
† NOTE: TAPER RATES 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 (28" HEIGHT MINIMUM)
C. EXIT TAPER- TRAFFIC CONES (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 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. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD 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 IS TO 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: MAY 01, 2017
DATE
REVISION
BY
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
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 BUFFER SPACE & WORK ZONE
LONGITUDINAL BUFFER SPACE (++)
TAPER † RATES
mph
≤40 40 80 305 2:1
45 45 90 360 45:1
50 50 100 425 50:1
55 55 110 495 55:1
60 60 120 570 60:1
65 65 130 645 65:1
70 70 140 730 70:1
† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS²/60 FOR SPEEDS OF 40 MPH OR LESS
L = WS/60 FOR SPEEDS OF 45 MPH OR GREATER
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. ONE FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR AT THE SHOULDER IF 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.
C. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
D. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MAS.C.O.
4. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING SIGNS, PLASTIC DRUMS, AND ARROW BOARD, WHEN THE CONSTRUCTION ZONES MOVES 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. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
R16-3
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
W20-1 (1 MILE)
ROAD WORK 1 MILE
W20-5L (1/2 MILE)
LEFT LANE CLOSED ½MILE
W3-5 **
SPEED LIMIT XX
R2-1 **
FLUORESCENT ORANGE PLATE
W4-2L
LEFT LANE CLOSED 1500FT
W20-5L (1500 FT)
W4-2R
RIGHT LANE CLOSED 1500 FT
W20-5R (1500 FT)
RIGHT LANE CLOSED ½MILE
W20-5R (1/2 MILE)
DRUMS
DRUMS OR 42" TALL CONES
LONG. BUFFER SPACE
WORK ZONE * (1 MILE MAX.)
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
100'
½ L
L
500'
600'
1000'

STATE	PROJECT NO.
MISS.	



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 RATES †
mph	TAPER	ALONG BUFFER SPACE & WORK ZONE		
≤40	40	80	305	2?:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
$L = WS$ FOR SPEEDS OF 45 mph OR GREATER
$L = WS^2/60$ 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 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.

C. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.

D. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.

5. ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR CONFLICT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED AS DIRECTED BY THE ENGINEER WHILE THE REDUCED SPEED LIMIT IS IN EFFECT. TAPE SHALL NOT BE USED ON FACE OF SIGN.

6. ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.

7. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.

8. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH. FOR POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.

9. A FLUORESCENT ORANGE PLATE 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

LEGEND

- * OR AS SHOWN ELSEWHERE ON THE PLANS.
- FLASHING ARROW PANEL (TYPE "C")
- BLACK LEGEND AND BORDER ON WHITE BACKGROUND
- TYPE "B" WARNING LIGHTS
- ● RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS

REVISION	BY
DATE	

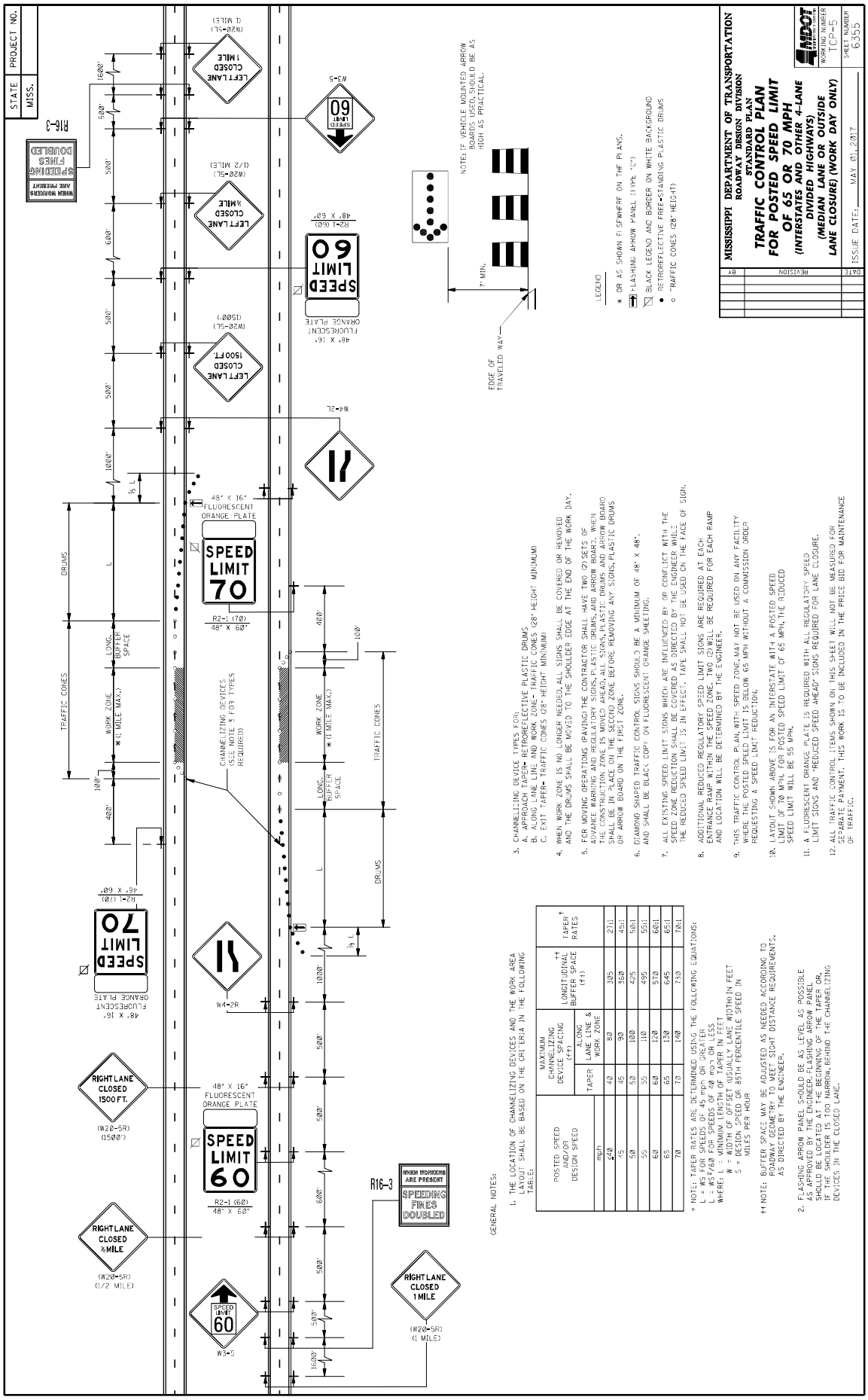
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT OF 65 OR 70 MPH
(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS) (MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)

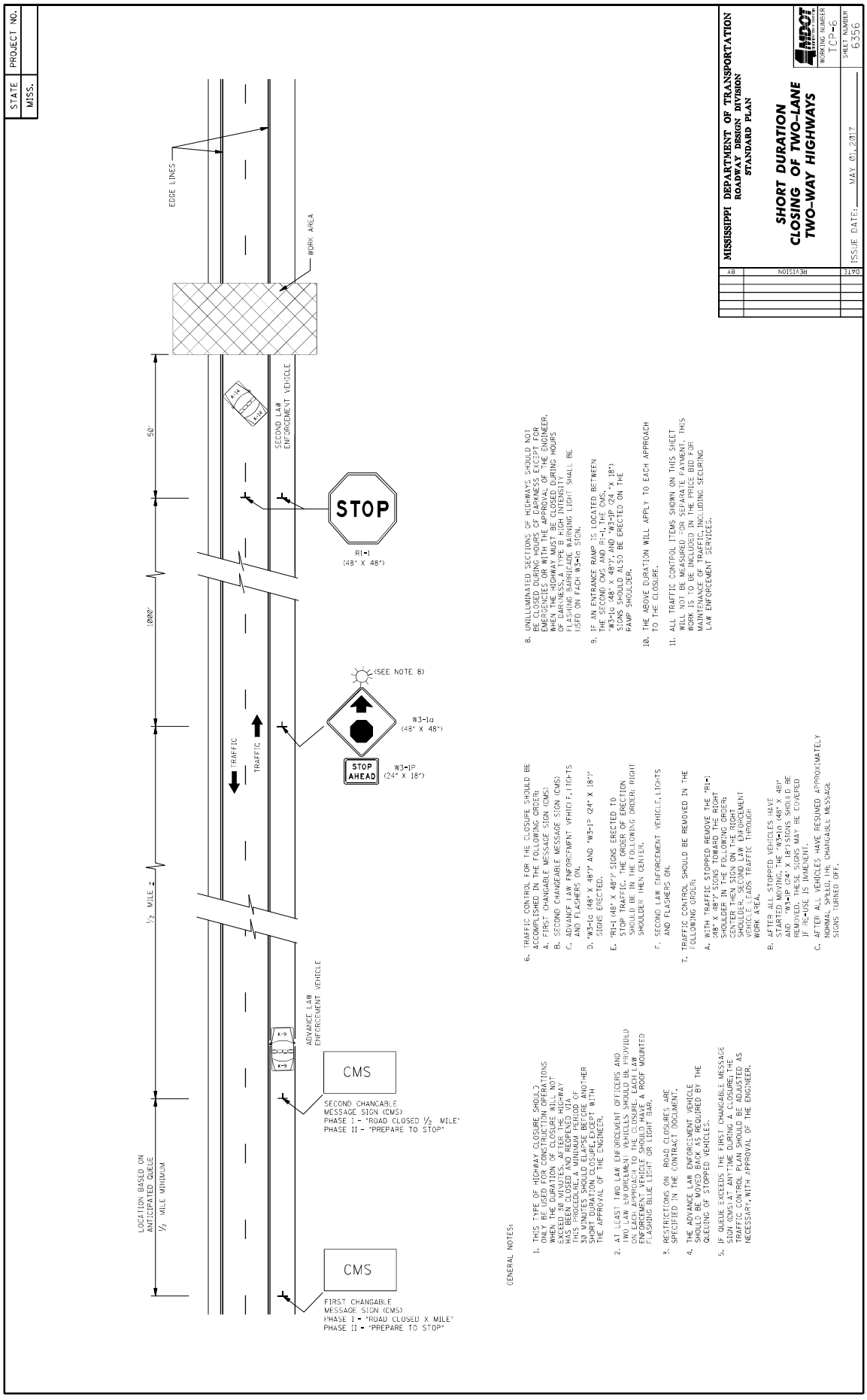
MDOT

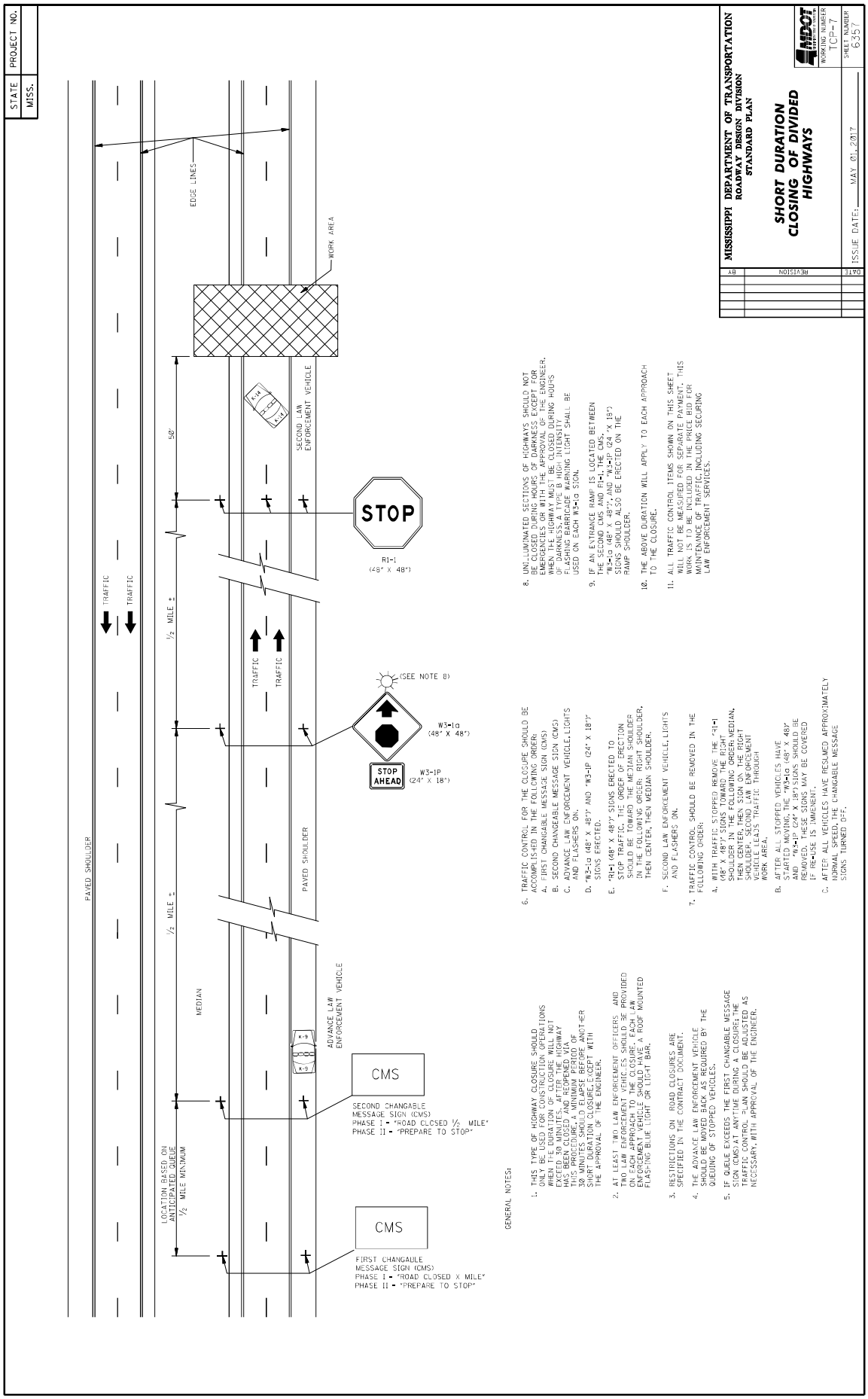
WORKING NUMBER TCP-4

ISSUE DATE: MAY 01, 2017

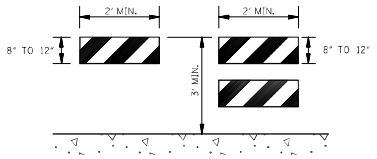
SHEET NUMBER 6354


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)
WORKING NUMBER TCP-5
SHEET NUMBER 6355
ISSUE DATE: MAY 01, 2017
BY REVISION DATE
LEGEND
* OR AS SHOWN FSFWHFRF ON THF PLANS.
FLASHING ARROW PANEL (11PE "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† RATES
mph
40 40 80 305 2:1
45 45 90 360 4.5:1
50 50 100 425 5.0:1
55 55 110 495 5.5:1
60 60 120 570 6.0:1
65 65 130 645 6.5:1
70 70 140 730 7.0:1
† NOTE: TAPER RATES 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 (28" HEIGHT MINIMUM)
C. EXIT TAPER- TRAFFIC CONES (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. DIAMOND SHAPED TRAFFIC CONTROL 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 SPECIAL CONSTRUCTION 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 PLATE 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
W4-2L
W4-2R
W3-5
R16-3
SPEEDING FINES DOUBLED
WHEN WORKERS ARE PRESENT
R2-1 (70) 48" X 60"
R2-1 (60) 48" X 60"
SPEED LIMIT 70
SPEED LIMIT 60
48" X 16" FLUORESCENT ORANGE PLATE
LEFT LANE CLOSED 1 MILE (W20-5L) (1 MILE)
LEFT LANE CLOSED ½ MILE (W20-5L) (1/2 MILE)
LEFT LANE CLOSED 1500 FT (W20-5L) (1500')
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)
SPEED LIMIT 60 W3-5
48" X 16" FLUORESCENT ORANGE PLATE
TRAFFIC CONES
DRUMS
WORK ZONE * (1 MILE MAX.)
LONG. BUFFER SPACE
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
½ L
L
100'
400'
500'
600'
1000'
1600'

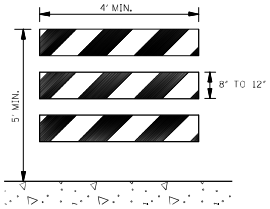

STATE MISS.
PROJECT NO.
EDGE LINES
WORK AREA
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1 (48" X 48")
50'
1000'
½ MILE ±
TRAFFIC
TRAFFIC
(SEE NOTE 8)
W3-1a (48" X 48")
STOP AHEAD
W3-1P (24" X 18")
ADVANCE LAW ENFORCEMENT VEHICLE
CMS
SECOND CHANGABLE MESSAGE SIGN (CMS) PHASE I - "ROAD CLOSED ½ MILE" PHASE II - "PREPARE TO STOP"
CMS
FIRST CHANGABLE MESSAGE SIGN (CMS) PHASE I - "ROAD CLOSED X MILE" PHASE II - "PREPARE TO STOP"
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
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 TRAFFIC STOPPED. IF 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 SHALL HAVE A ROOF MOUNTED 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 CHANGABLE 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 BY THE FOLLOWING ORDER:
A. FIRST CHANGABLE MESSAGE SIGN (CMS).
B. SECOND CHANGEABLE MESSAGE SIGN (CMS).
C. ADVANCE LAW ENFORCEMENT VEHICLE WITH FLASHING BLUE LIGHTS AND FLASHERS ON.
D. W3-1a (48" X 48") AND W3-1P (24" X 18") SIGNS ERECTED.
E. R1-1 (48" X 48") SIGNS ERECTED 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" SIGNS AND PROCEED TOWARDS THE RIGHT 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, THE "W3-1a (48" X 48") AND "W3-1P (24" X 18") SIGNS SHOULD BE REMOVED. THESE SIGNS MAY BE COVERED IF REUSE IS IMMENENT.
C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGABLE MESSAGE SIGNS 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 W3-1a SIGN.
9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND R1-1, THE CMS, W3-1a (48" X 48") AND W3-1P (24" X 18") SIGNS SHOULD 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 IS TO 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
REVISION BY DATE
ISSUE DATE: MAY 01, 2017
WORKING NUMBER TCP-6
SHEET NUMBER 6356


STATE MISS.
PROJECT NO.
PAVED SHOULDER
EDGE LINES
WORK AREA
TRAFFIC
TRAFFIC
½ MILE ±
50'
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1 (48" X 48")
TRAFFIC
TRAFFIC
(SEE NOTE 8)
W3-1a (48" X 48")
STOP AHEAD
W3-1P (24" X 18")
PAVED SHOULDER
½ MILE ±
MEDIAN
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
ADVANCE LAW ENFORCEMENT VEHICLE
CMS
SECOND CHANGABLE MESSAGE SIGN (CMS)
PHASE I - "ROAD CLOSED ½ MILE"
PHASE II - "PREPARE TO STOP"
CMS
FIRST CHANGABLE 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 AND AFTER THE HIGHWAY HAS BEEN CLOSED AND REOPENED WITH 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 FOR EACH APPROACH TO BE CLOSED. EACH LAW ENFORCEMENT VEHICLE SHOULD HAVE A ROOF MOUNTED 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 CHANGABLE MESSAGE SIGN (CMS) AT ANYTIME 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 CHANGABLE MESSAGE SIGN (CMS)
B. SECOND CHANGEABLE MESSAGE SIGN (CMS)
C. ADVANCE LAW ENFORCEMENT VEHICLE LIGHTS AND FLASHERS ON.
D. "W3-1a (48" X 48") AND "W3-1P (24" X 18") SIGNS ERECTED.
E. "R1-1 (48" X 48") SIGNS ERECTED TO STOP TRAFFIC TRAVELING IN EACH DIRECTION SHOULD BE TOWARD THE MEDIAN SHOULDER IN 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 IN THE FOLLOWING ORDER: MEDIAN, THEN CENTER, THEN SIGN ON THE RIGHT SHOULDER. SECOND LAW ENFORCEMENT SHOULD CLEAR TRAFFIC THROUGH WORK AREA.
B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1a (48" X 48" AND "W3-1P (24" X 18") SIGNS SHOULD BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGABLE MESSAGE SIGNS 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 HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W3-1a SIGN.
9. IF AN EXTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND "R1-1 THE CMS, "W3-1a (48" X 48") AND "W3-1P (24" X 18") SIGNS SHOULD 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING LAW ENFORCEMENT SERVICES.
BY
REVISION
DATE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
SHORT DURATION CLOSING OF DIVIDED HIGHWAYS
MDOT
WORKING NUMBER TCP-7
ISSUE DATE: MAY 01, 2017
SHEET NUMBER 635-7

STATE	PROJECT NO.
MISS.	



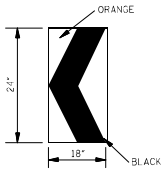
TYPE I TYPE II



TYPE III

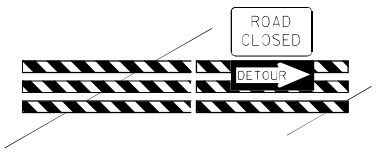
STANDARD BARRICADES

1. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
2. RAIL STRIPE SHALL 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 TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATAGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://safety.fhwa.dot.gov/roadway_dept/policy.guide/road_hardware/cat2.cfm



CHEVRON SIGN DETAIL

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.



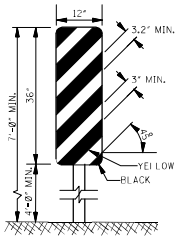
BARRICADE CLOSING A ROAD

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.	24" MIN.	48" MIN.
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

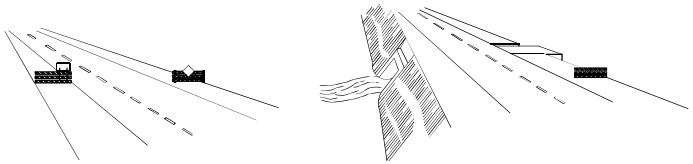
* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in² OF REFLECTIVE AREA FACING TRAFFIC.



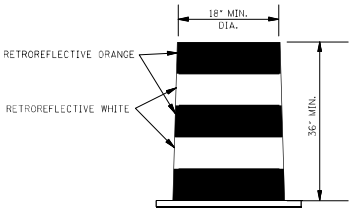
TYPE 3 OBJECT MARKER (OM-3R)

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 OM-3R IS SHOWN. THE OM-3L 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.



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.



PLASTIC DRUM STRIPING DETAIL

1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHOULD BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

MDOT

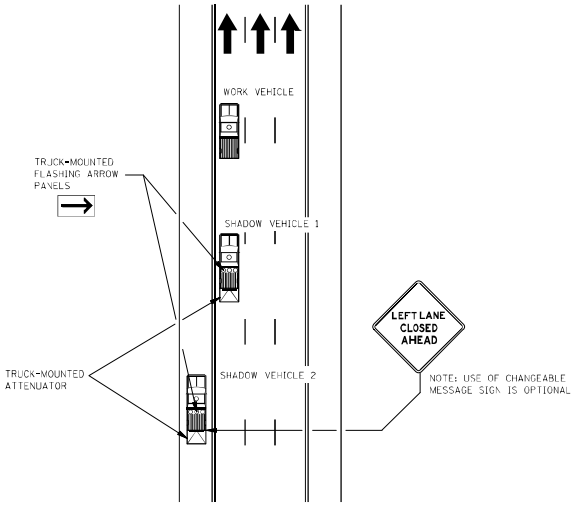
WORKING NUMBER
TCP-8

ISSUE DATE: MAY 31, 2017

SHEET NUMBER
6358

STATE	PROJECT NO.
MISS.	

MOBILE OPERATIONS ON MULTILANE ROAD

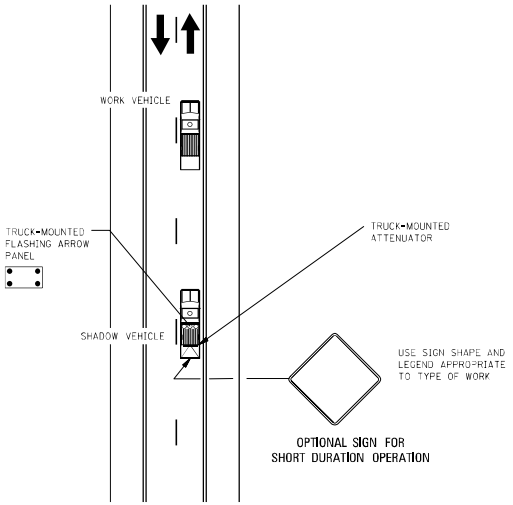


MOBILE OPERATIONS ON MULTILANE ROAD

NOTES FOR MULTILANE LANE OPERATION:

1. VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLAGS, SIGNS, OR ARROW PANELS.
2. SHADOW VEHICLE 2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK MOUNTED ATTENUATOR (TMA). AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON SHADOW VEHICLE 2 SO AS NOT TO OBSCURE THE ARROW PANEL.
3. SHADOW VEHICLE 1 SHOULD BE EQUIPPED WITH AN ARROW PANEL 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. WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, SHADOW VEHICLE 2 SHOULD BE ELIMINATED.
6. ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE SHOULD BE USED (i.e., VEHICLE 3 ON THE SHOULDER (IF PRACTICAL), VEHICLE 2 IN THE CLOSED LANE, AND VEHICLE 1 IN THE CLOSED LANE).
7. ARROW PANELS 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. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

DATE	REVISION	BY

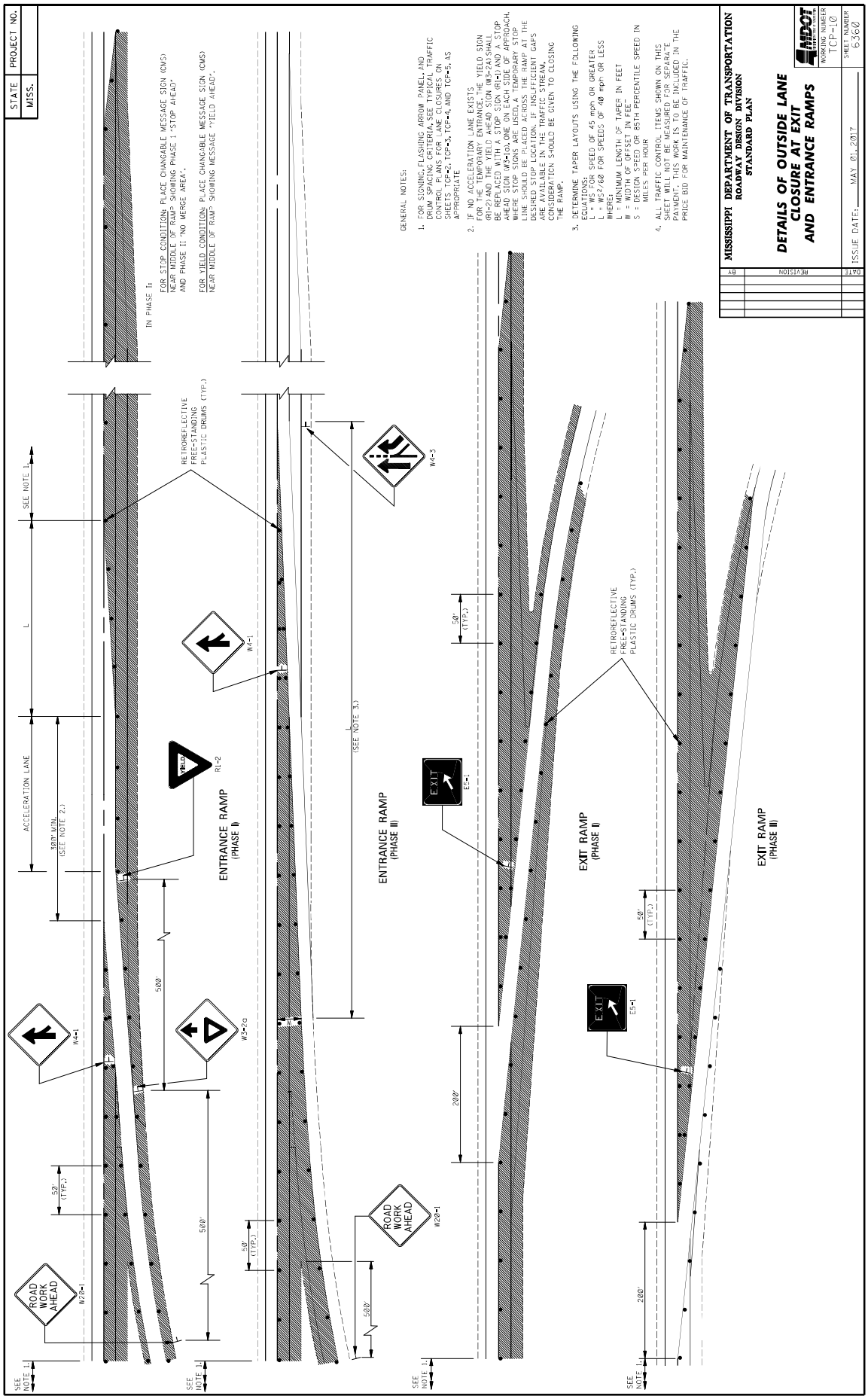
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

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

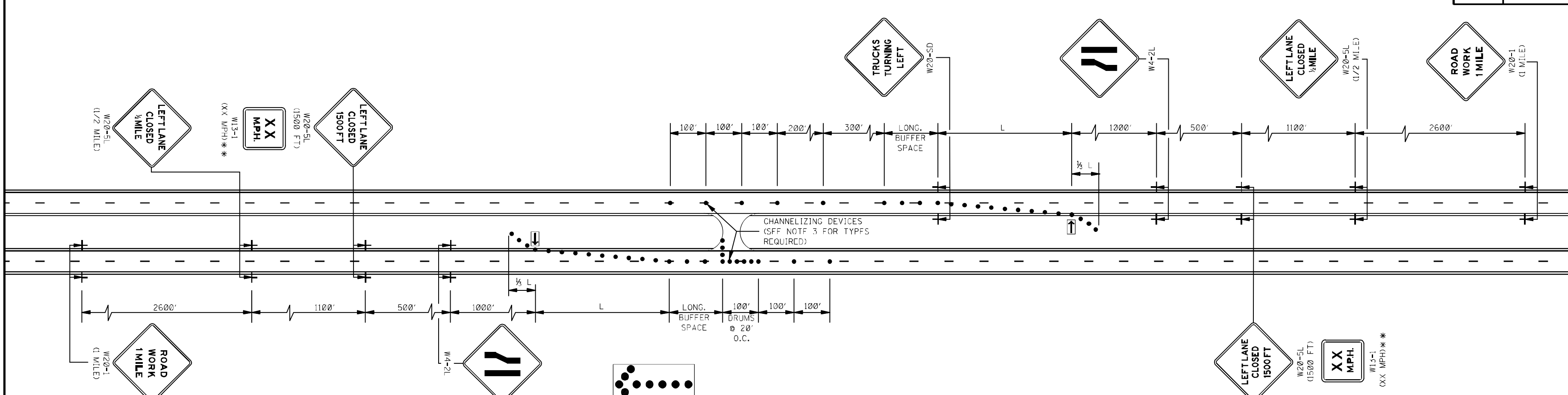
ISSUE DATE: MAY 01, 2017

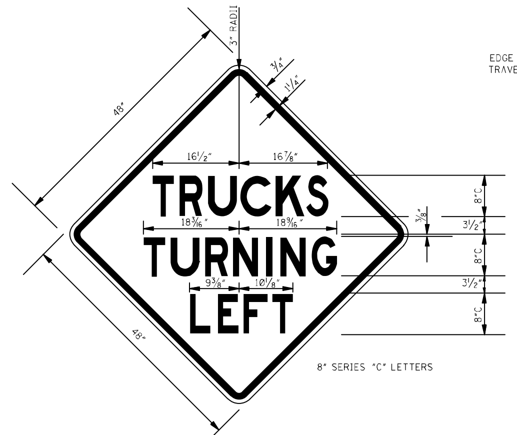
WORKING NUMBER: TCP-9

SHEET NUMBER: 6359

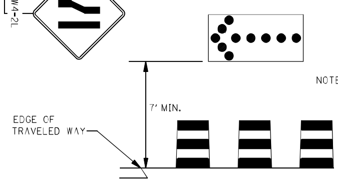

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
DETAILS OF OUTSIDE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS
WORKING NUMBER TCP-10
SHEET NUMBER 6360
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. FOR SIGNING, FLASHING ARROW PANEL AND DRUM SPACING CRITERIA, SEE TYPICAL TRAFFIC CONTROL PLANS FOR LANE CLOSURES ON SHEETS TCP-2, TCP-3, TCP-4, AND TCP-5, AS APPROPRIATE
2. IF NO ACCELERATION LANE EXISTS FOR THE TEMPORARY ENTRANCE, THE YIELD SIGN (R1-2) AND THE YIELD AHEAD SIGN (W3-2A) SHALL BE REPLACED WITH A STOP SIGN (R1-1) AND A STOP AHEAD SIGN (W3-1), ONE ON EACH SIDE OF APPROACH. WHERE STOPPING IS USED, A TEMPORARY STOP BAR LINE SHOULD BE PLACED ACROSS THE RAMP AT THE DESIRED STOP LOCATION. IF INSUFFICIENT GAPS ARE AVAILABLE IN THE TRAFFIC STREAM, CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP.
3. DETERMINE TAPER LAYOUTS USING THE FOLLOWING EQUATIONS:
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 MILES PER HOUR
4. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
IN PHASE I:
FOR STOP CONDITION: PLACE CHANGABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING PHASE 1 "STOP AHEAD" AND PHASE II "NO MERGE AREA".
FOR YIELD CONDITION: PLACE CHANGABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING MESSAGE "YIELD AHEAD".
ENTRANCE RAMP (PHASE I)
ENTRANCE RAMP (PHASE II)
EXIT RAMP (PHASE I)
EXIT RAMP (PHASE II)
ACCELERATION LANE
L
300' MIN. (SEE NOTE 2.)
SEE NOTE 1.
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS (TYP.)
W4-1
W4-3
R1-2
W3-2a
W20-1
E5-1
EXIT
50' (TYP.)
500'
200'
ROAD WORK AHEAD

STATE	PROJECT NO.
MISS.	





DETAIL OF W20–SD



NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.

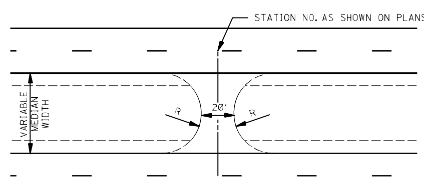
LEGEND

✱✱ THE SPEED ON W13-1 SIGN SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.

⟹ FLASHING ARROW PANEL (TYPE "C")

● RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS

☼ TYPE "B" WARNING LIGHTS



DETAIL OF TEMPORARY CROSSOVER

NOTE: R = 0.5 (MEDIAN WIDTH)

GENERAL NOTES:

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

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft) TAPER	MAXIMUM CHANNELIZING DEVICE SPACING (ft) ALONG LANE LINE & WORK ZONE	LONGITUDINAL BUFFER SPACE (ft) ††	TAPER RATES †
mph				
≤40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
$L = WS$ FOR SPEEDS OF 45 mph OR GREATER
$L = WS^2/60$ 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. 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

DATE	REVISION	BY

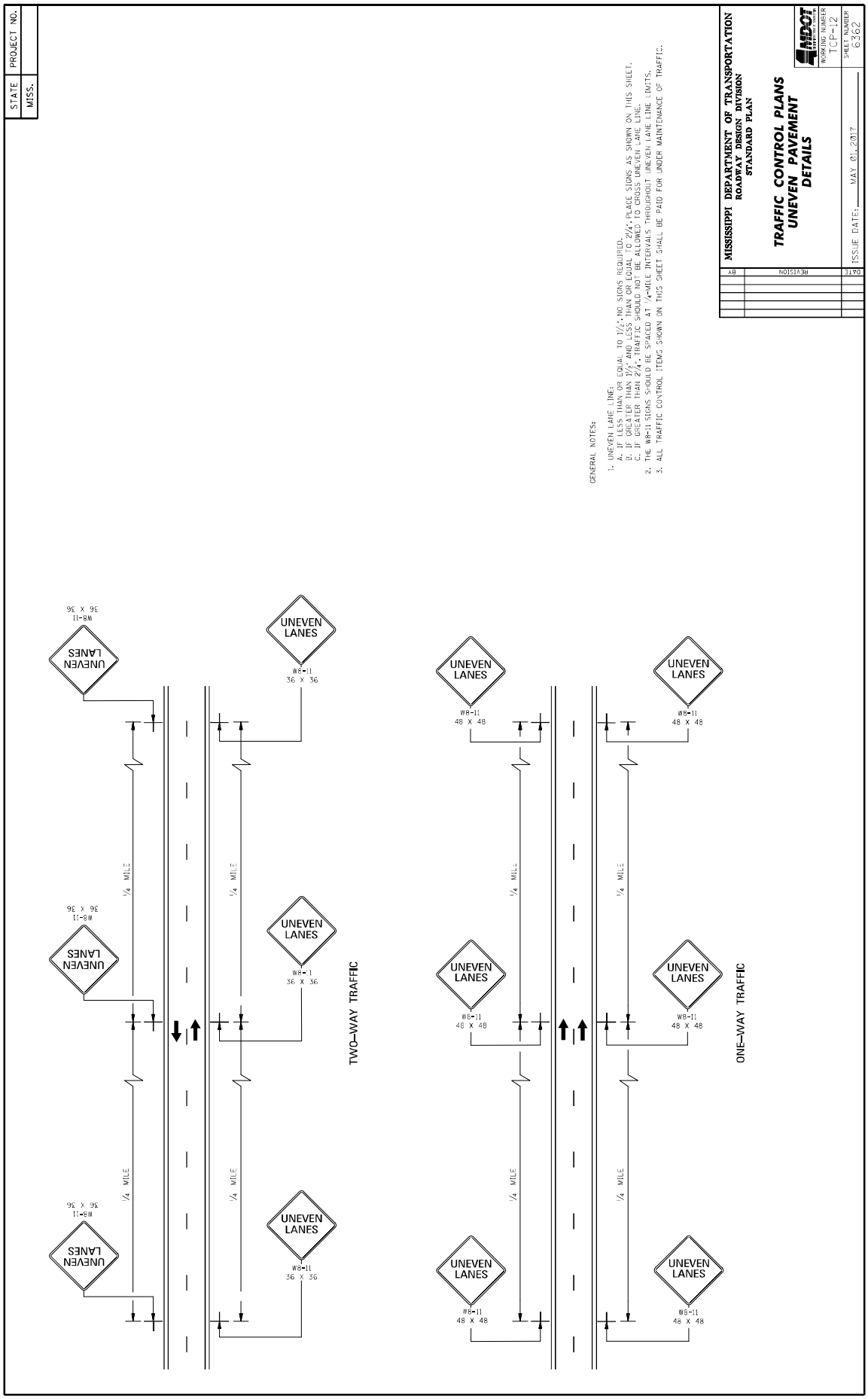
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

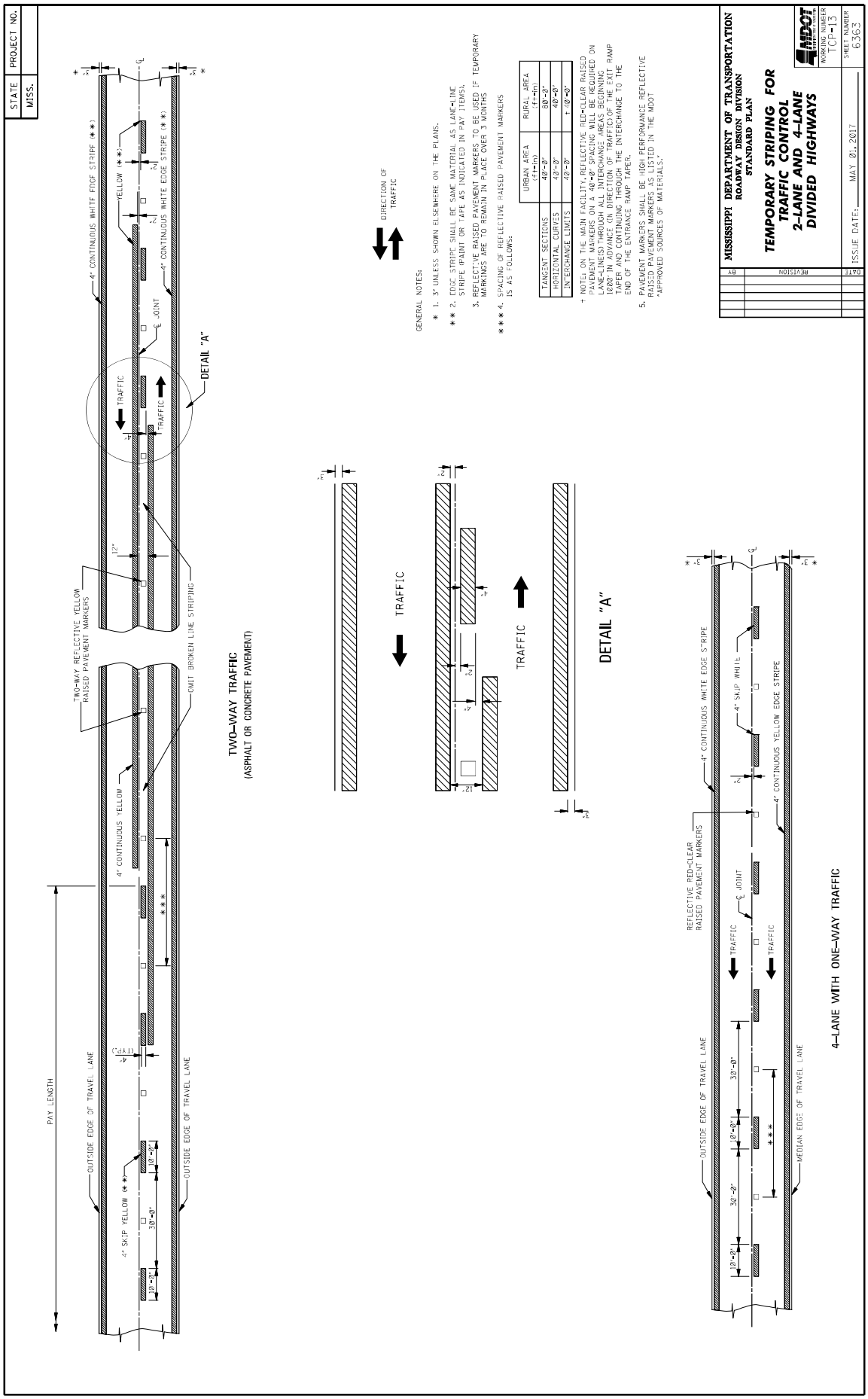
TRAFFIC CONTROL PLAN FOR TEMPORARY CONSTRUCTION CROSSOVER
(WORK DAY ONLY)

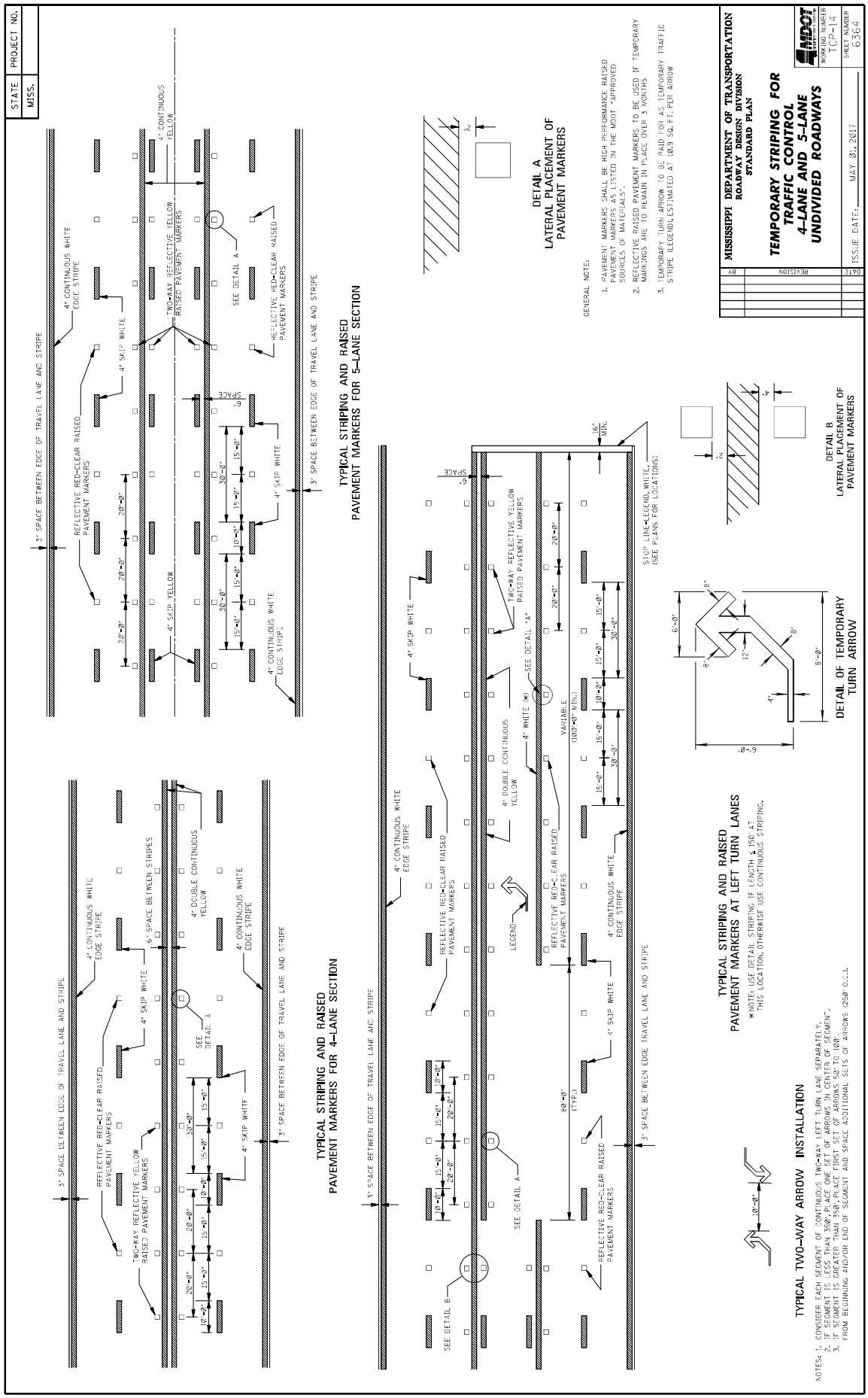
ISSUE DATE: MAY 01, 2017

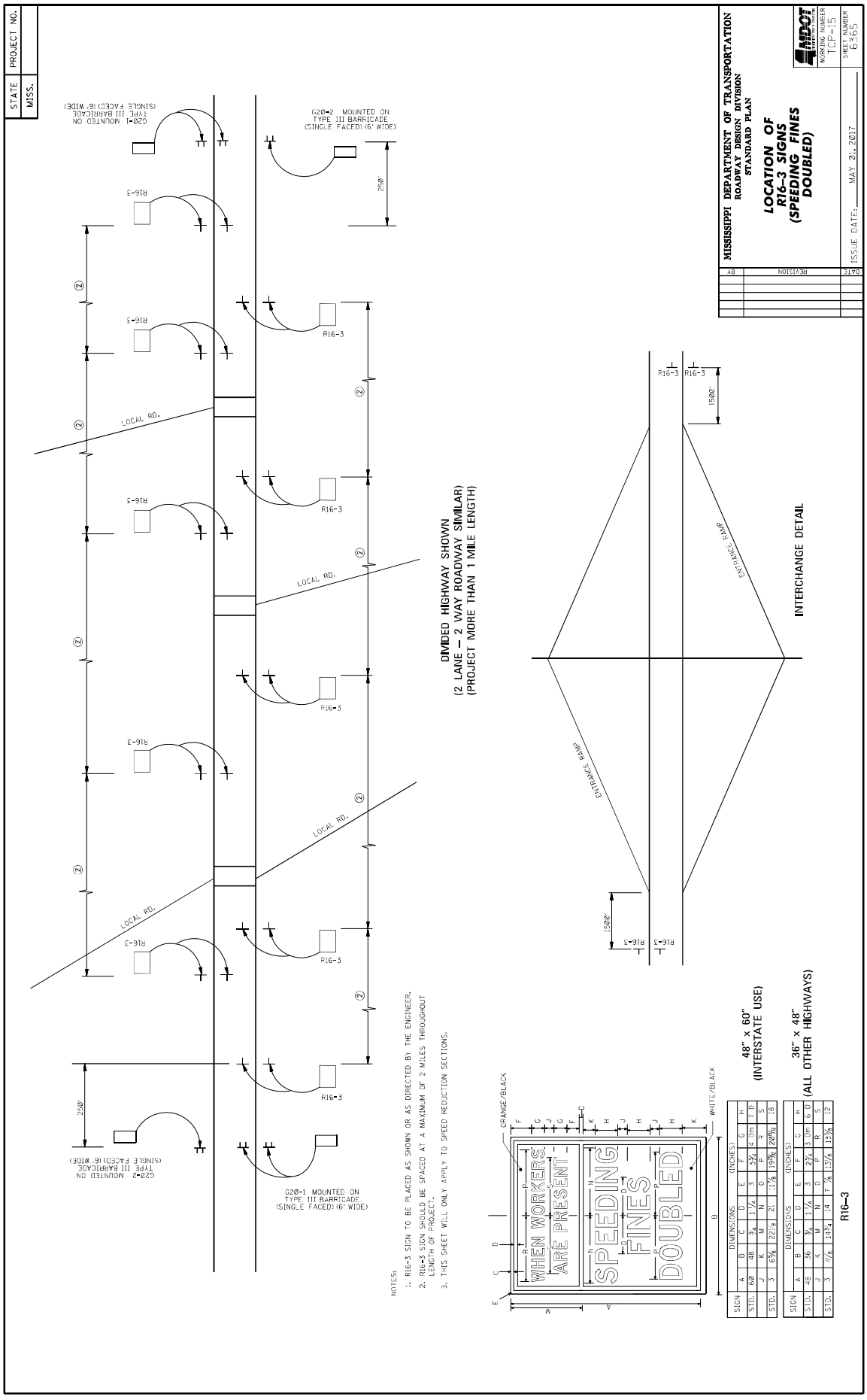
WORKING NUMBER TCP-11

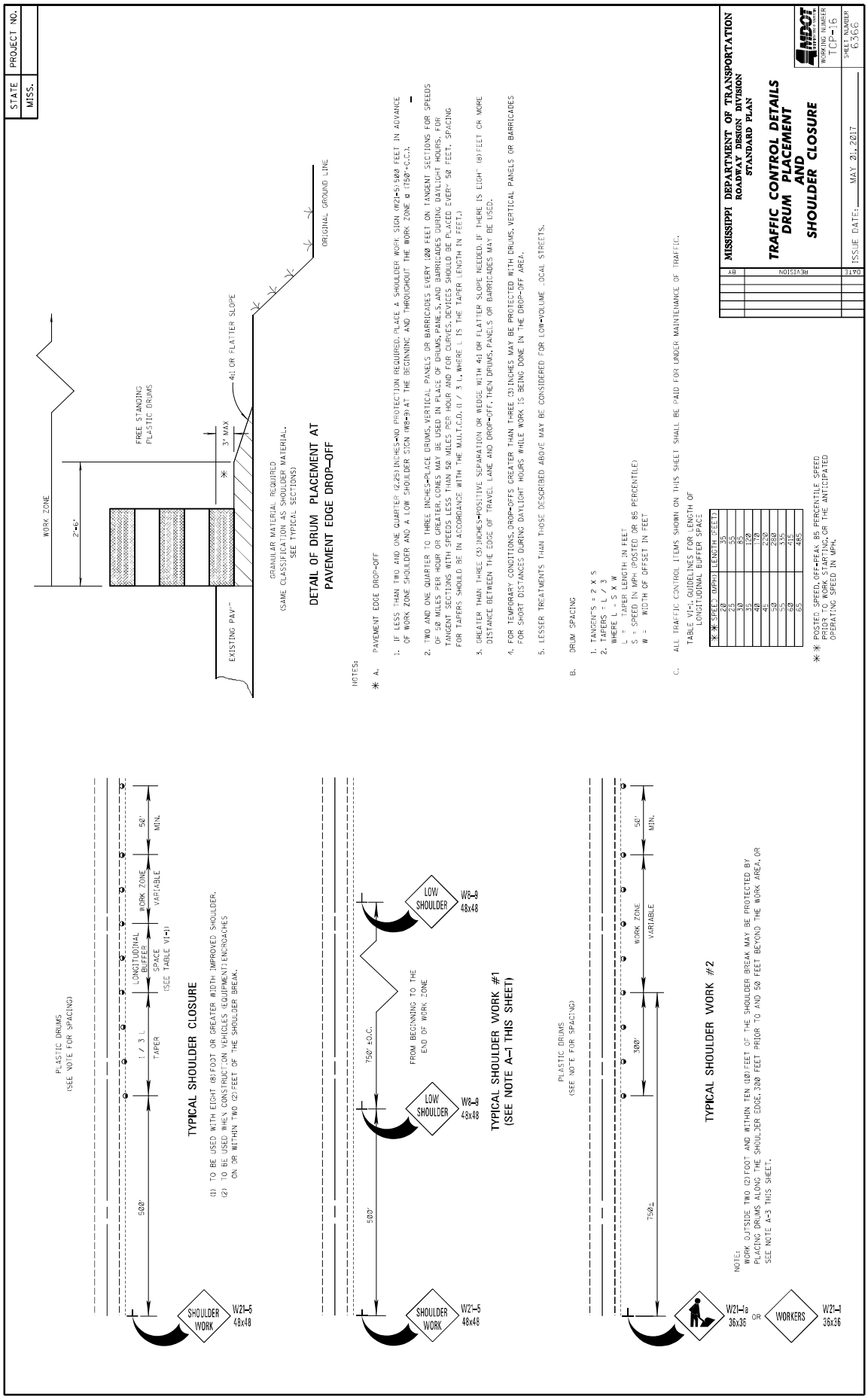
SHEET NUMBER 6361


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: MAY 01, 2017
DATE REVISION BY
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 ¼-MILE INTERVALS THROUGHOUT UNEVEN LANE LINE LIMITS.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
UNEVEN LANES
W8-11
36 X 36
¼ MILE
TWO-WAY TRAFFIC
UNEVEN LANES
W8-11
48 X 48
¼ MILE
ONE-WAY TRAFFIC


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: MAY 01, 2017
DATE
REVISION
BY
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. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
*** 4. SPACING OF REFLECTIVE 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, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 100'-0" IN ADVANCE OF THE BEGINNING 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."
DIRECTION OF TRAFFIC
TRAFFIC
DETAIL "A"
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
TWO-WAY REFLECTIVE YELLOW RAISED PAVEMENT MARKERS
4" CONTINUOUS YELLOW
4" CONTINUOUS WHITE EDGE STRIPE (**)
4" SKIP YELLOW (**)
OMIT BROKEN LINE STRIPING
OUTSIDE EDGE OF TRAVEL LANE
PAY LENGTH
4-LANE WITH ONE-WAY TRAFFIC
REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
4" SKIP WHITE
4" CONTINUOUS YELLOW EDGE STRIPE
MEDIAN EDGE OF TRAVEL LANE


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: MAY 01, 2017
DATE
REVISION
BY
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 AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".
2. REFLECTIVE 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.

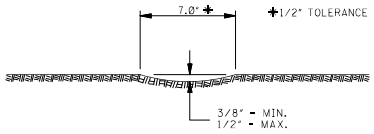

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
LOCATION OF R16-3 SIGNS (SPEEDING FINES DOUBLED)
WORKING NUMBER TCP-15
SHEET NUMBER 6365
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
G20-1 MOUNTED ON TYPE III BARRICADE (SINGLE FACED) (6' WIDE)
G20-2 MOUNTED ON TYPE III BARRICADE (SINGLE FACED) (6' WIDE)
R16-3
250'
LOCAL RD.
G20-2 MOUNTED ON TYPE III BARRICADE (SINGLE FACED) (6' WIDE)
G20-1 MOUNTED ON TYPE III BARRICADE (SINGLE FACED) (6' WIDE)
DIVIDED HIGHWAY SHOWN
(2 LANE – 2 WAY ROADWAY SIMILAR)
(PROJECT MORE THAN 1 MILE LENGTH)
NOTES:
1. R16-3 SIGN TO BE PLACED AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. R16-3 SIGN SHOULD BE SPACED AT A MAXIMUM OF 2 MILES THROUGHOUT LENGTH OF PROJECT.
3. THIS SHEET WILL ONLY APPLY TO SPEED REDUCTION SECTIONS.
ENTRANCE RAMP
EXIT RAMP
1500'
INTERCHANGE DETAIL
ORANGE/BLACK
WHITE/BLACK
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
48" x 60" (INTERSTATE USE)
36" x 48" (ALL OTHER HIGHWAYS)
R16-3
SIGN A B C D E F G H
STD. 3 6⅝ 22⅛ 21 11⅛ 19⅝ 20⅝ 13
SIGN A B C D E F G H
STD. 3 4⅛ 14¾ 14 7 ⅞ 13⅛ 13½ 12


STATE MISS.
PROJECT NO.
WORK ZONE
2'-6"
FREE STANDING PLASTIC DRUMS
3" MAX
4:1 OR FLATTER SLOPE
EXISTING PAV'T
ORIGINAL GROUND LINE
GRANULAR MATERIAL REQUIRED (SAME CLASSIFICATION AS SHOULDER MATERIAL. SEE TYPICAL SECTIONS)
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'+C.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 M.U.T.C.D. (L / 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 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 85 PERCENTILE)
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 35
25 55
30 85
35 120
40 160
45 230
50 280
55 335
60 410
65 485
** POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.
PLASTIC DRUMS (SEE NOTE FOR SPACING)
500'
L / 3 L
LONGITUDINAL BUFFER SPACE (SEE TABLE VI-1)
WORK ZONE TAPER
VARIABLE
50' MIN.
SHOULDER WORK W21-5 48x48
TYPICAL SHOULDER CLOSURE
(1) TO BE USED WITH EIGHT (8) FOOT OR GREATER WIDTH IMPROVED SHOULDER.
(2) TO BE USED WHEN CONSTRUCTION VEHICLES (EQUIPMENT) ENCROACHES ON OR WITHIN TWO (2) FEET OF THE SHOULDER BREAK.
500'
750' ±O.C.
FROM BEGINNING TO THE END OF WORK ZONE
LOW SHOULDER W8-9 48x48
LOW SHOULDER W8-9 48x48
SHOULDER WORK W21-5 48x48
TYPICAL SHOULDER WORK #1 (SEE NOTE A-1 THIS SHEET)
PLASTIC DRUMS (SEE NOTE FOR SPACING)
750±
300'
WORK ZONE
VARIABLE
50' MIN.
W21-1a 36x36
OR
WORKERS W21-1 36x36
NOTE:
WORK OUTSIDE TWO (2) FOOT AND WITHIN TEN (10) FEET OF THE SHOULDER BREAK MAY BE PROTECTED BY PLACING DRUMS ALONG THE SHOULDER EDGE. 300 FEET PRIOR TO AND 50 FEET BEYOND THE WORK AREA, OR SEE NOTE A-3 THIS SHEET.
TYPICAL SHOULDER WORK #2
BY
REVISION
DATE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL DETAILS
DRUM PLACEMENT
AND
SHOULDER CLOSURE
ISSUE DATE: MAY 01, 2017
WORKING NUMBER TCP-16
SHEET NUMBER 6366

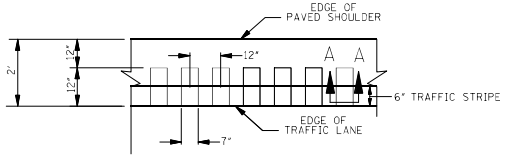
STATE	PROJECT NO.
MISS.	

GENERAL NOTES

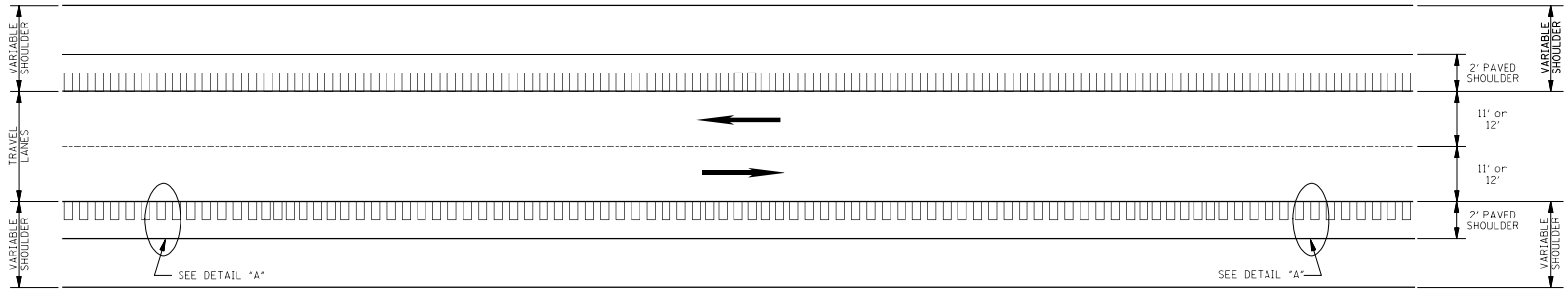
1. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPES SHALL BE OMITTED ACROSS PUBLIC INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR USING APPROPRIATE 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. DO NOT USE WHERE TRAVEL LANE IS LESS THAN 11' WIDE.



SECTION "A–A"



DETAIL "A"



PLAN

NOT TO SCALE

BY	DATE	REVISION
DSP	2/8/21	REVISED STRIPE LOCATION

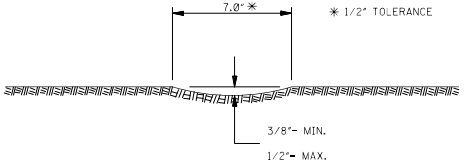
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

RUMBLE STRIPES
2-LANE HIGHWAYS
(ASPHALT LANES,
2-FT ASPHALT SHOULDERS)

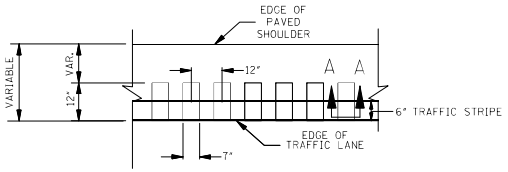
ISSUE DATE: AUGUST 01, 2017

MDOT
DRAWING NUMBER
RS-1
SHEET NUMBER
6064

STATE	PROJECT NO.
MISS.	



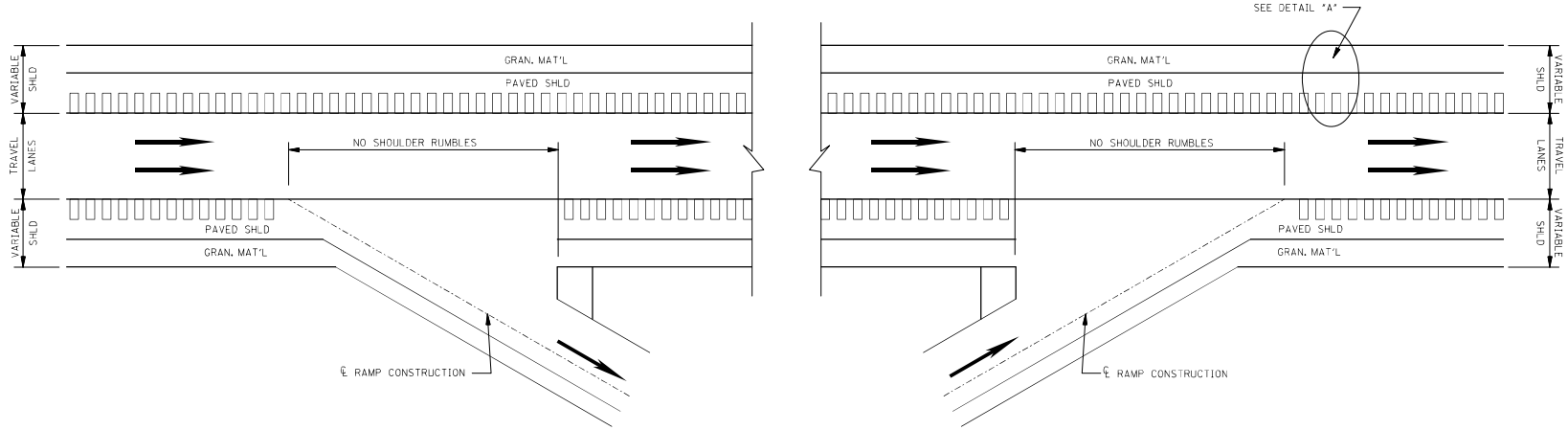
SECTION "A–A"



DETAIL "A"

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.



PLAN

NOT TO SCALE

DETAILS OF
RUMBLE STRIPS

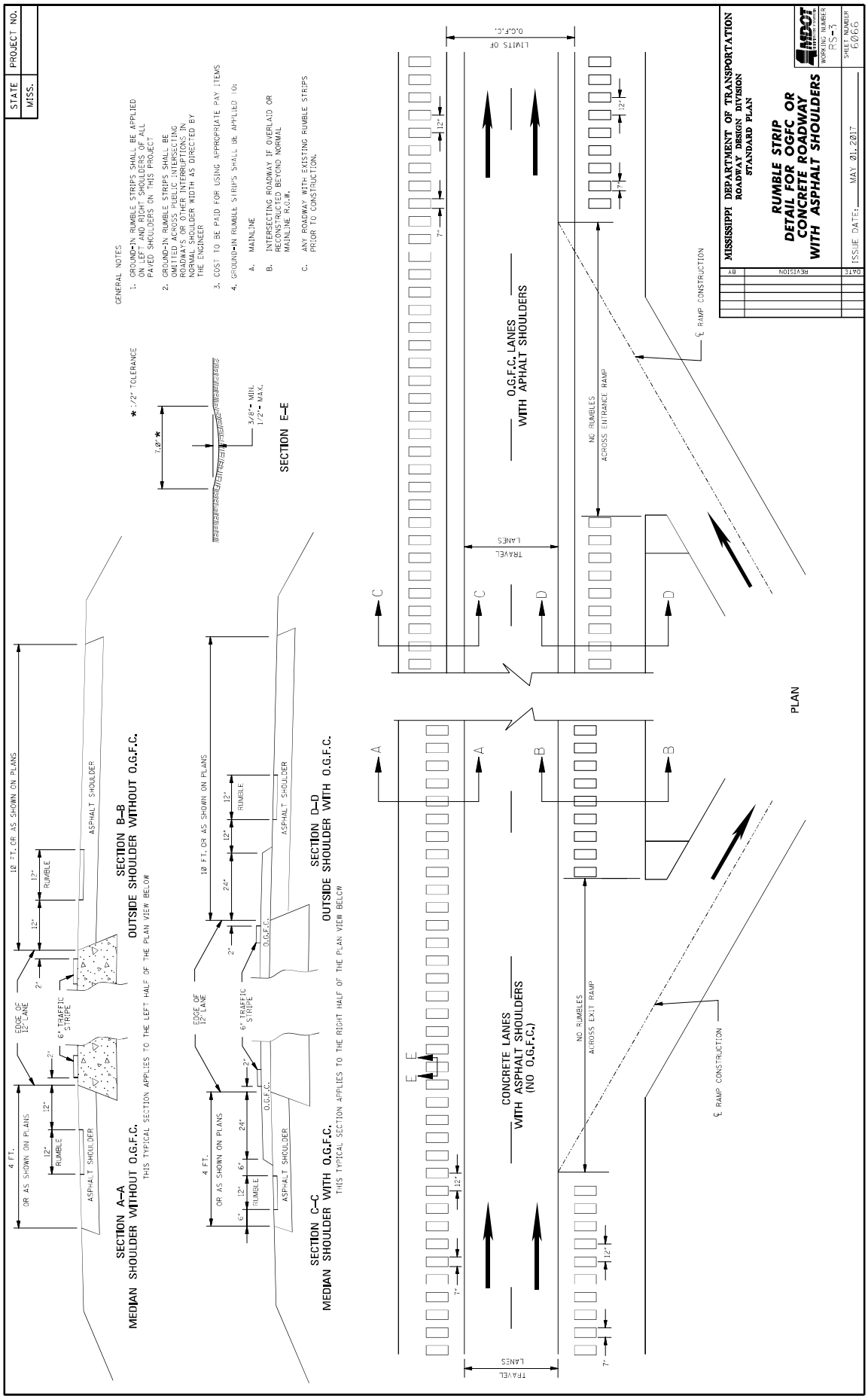
DATE	REVISION	BY
2/8/21	REVISED STRIPE LOCATION	DSP

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**RUMBLE STRIPES
4-LANE HIGHWAYS
(ASPHALT LANES,
2-FT OR WIDER
ASPHALT SHOULDERS)**

ISSUE DATE: AUGUST 01, 2017

MDOT
DRAWING NUMBER
RRS-2
SHEET NUMBER
6065


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIP DETAIL FOR OGFC OR CONCRETE ROADWAY WITH ASPHALT SHOULDERS
WORKING NUMBER RS-3
SHEET NUMBER 6066
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
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"*
3/16" - 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
SECTION B–B
OUTSIDE SHOULDER WITHOUT O.G.F.C.
SECTION C–C
MEDIAN SHOULDER WITH O.G.F.C.
THIS TYPICAL SECTION APPLIES TO THE RIGHT HALF OF THE PLAN VIEW BELOW
SECTION D–D
OUTSIDE SHOULDER WITH O.G.F.C.
4 FT. OR AS SHOWN ON PLANS
10 FT. OR AS SHOWN ON PLANS
EDGE OF 12" LANE
6" TRAFFIC STRIPE
12" RUMBLE
ASPHALT SHOULDER
O.G.F.C.
24"
6"
2"
7"
12"
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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4625 **CODE: (SP)**

DATE: 10/18/2022

SUBJECT: Contract Time

PROJECT: MP-2014-04(008) / 307902301 – Attala County

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable working days are assessed, or any extension thereto as provided in Subsection 108.06. It is anticipated that the Notice of Award will be issued no later than **December 13, 2022** and the date for Notice to Proceed / Beginning of Contract Time will be **March 16, 2023**.

Should the Contractor request a Notice to Proceed earlier than **March 16, 2023** and it is agreeable with the Department for an early Notice to Proceed, the requested date will become the new Notice to Proceed date. Regardless of whether or not an early Notice to Proceed is granted, contract time will start at the original Notice to Proceed date.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 4626 **CODE: (SP)**

DATE: 10/05/2022

SUBJECT: Scope of Work

PROJECT: MP-2014-04(008) / 307902301 -- Attala 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".

The work to be accomplished using the pay items and corresponding specifications set forth in this contract is for the scrub sealing and overlaying of MS Highway 14 beginning at SR 35 (MP:23.460) and going easterly for approximately 5.8 miles to a point that is 0.75 mile west of SR 19 (MP:29.278) in Attala County.

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

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

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

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

Shoulders shall be maintained throughout the duration of the project to assure traffic safety.

The work shall consist of the following.

1. Failed areas shall be repaired on MS Highway 14 as needed using the following:

    - 202-B, Removal of Asphalt Pavement, All Depths
    - 203-G, Excess Excavation
    - 403-A, 19-mm, ST Asphalt Pavement
    - 503-C, Saw Cut Full Depth

Station	Lane	Length (ft)	Width (ft)	Area (SY)
9+00	RT	50	14	77.8
11+00	RT	60	14	93.3
113+35	RT	15	14	23.3
113+75	RT	10	14	15.6
113+95	RT	30	14	46.7
114+75	RT	30	14	46.7
115+60	RT	70	14	108.9
173+85	RT	85	14	132.2
179+55	RT	35	14	54.4
259+15	LT	25	14	38.9
376+18	RT	78	14	121.3
369+82	RT	58	14	90.2
			Total	849.3

NOTE: Failed areas have been estimated at one foot (1') of excavation and backfilled with one foot (1') (maximum 3½" lifts) of 19-mm, ST, asphalt. The asphalt shall be placed per the Project Engineer's instructions. Saw cuts will be required and will be paid for separately.

NOTE: Failed areas shall be backfilled the same day as excavation.

2. Scrub seal shall be placed on the mainline. All roadway surfaces shall be broomed before the placement of the CRS-2P material.

   NOTE: The scrub seal shall cover the entire roadway.

   NOTE: County road intersections and driveways will not require a scrub seal

   NOTE: Existing raised markers shall be removed prior to the scrub seal operations. The cost shall be absorbed in other bid items.

3. The Contractor shall place ¾" and variable of 9.5-mm, ST, Leveling asphalt for the leveling of the mainline to correct cross slopes. A quantity of 50 Tons/Lane Mile has been included to accomplish this work.

4. The Contractor shall cold mill the existing asphalt pavement at the tie-ins to a depth of 1½" and variable in order to provide a smooth transition. The entire section will not be milled. The cold milling material obtained shall become the property of the Contractor.

5. The Contractor shall place 1½" of 9.5-mm, ST asphalt as a surface course on the previous sealed/leveled surface.

Area	9.5-mm, ST Asphalt (Tons)
Mainline	7,500
Local Roads	450
Pads	325
Total	8,275

6. Granular material shall be placed on the shoulders as directed to raise the existing shoulders to the new surface course grade.

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

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

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

7. Temporary traffic stripe shall be placed daily as per Section 618 of the Standard Specifications.

8. Rumble strips shall be installed for rumble stripe on the outside of edge of the roadway.

9. Permanent pavement markings (double drop thermoplastic striping, two-way clear high performance raised pavement markers and two-way yellow reflective high performance raised) shall be placed as required. A 6-inch thermoplastic stripe shall be placed on the rumble strip using an atomization method to create a "rumble stripe."

10. All existing post mounted standard roadside signs estimated in the attached tables shall be replaced. The Contractor shall deliver the removed signs to the Attala County Maintenance Shop located at 2539 Attala Road 3034 in Kosciusko. All existing u-channel posts shall be replaced with 2.0 lb./ft. square posts. The existing u-channel posts shall be removed and shall become the property of the Contractor. Pay length for the square posts is estimated at 15 feet each for all signs. This length includes the anchor section shown on the attached standard drawing.

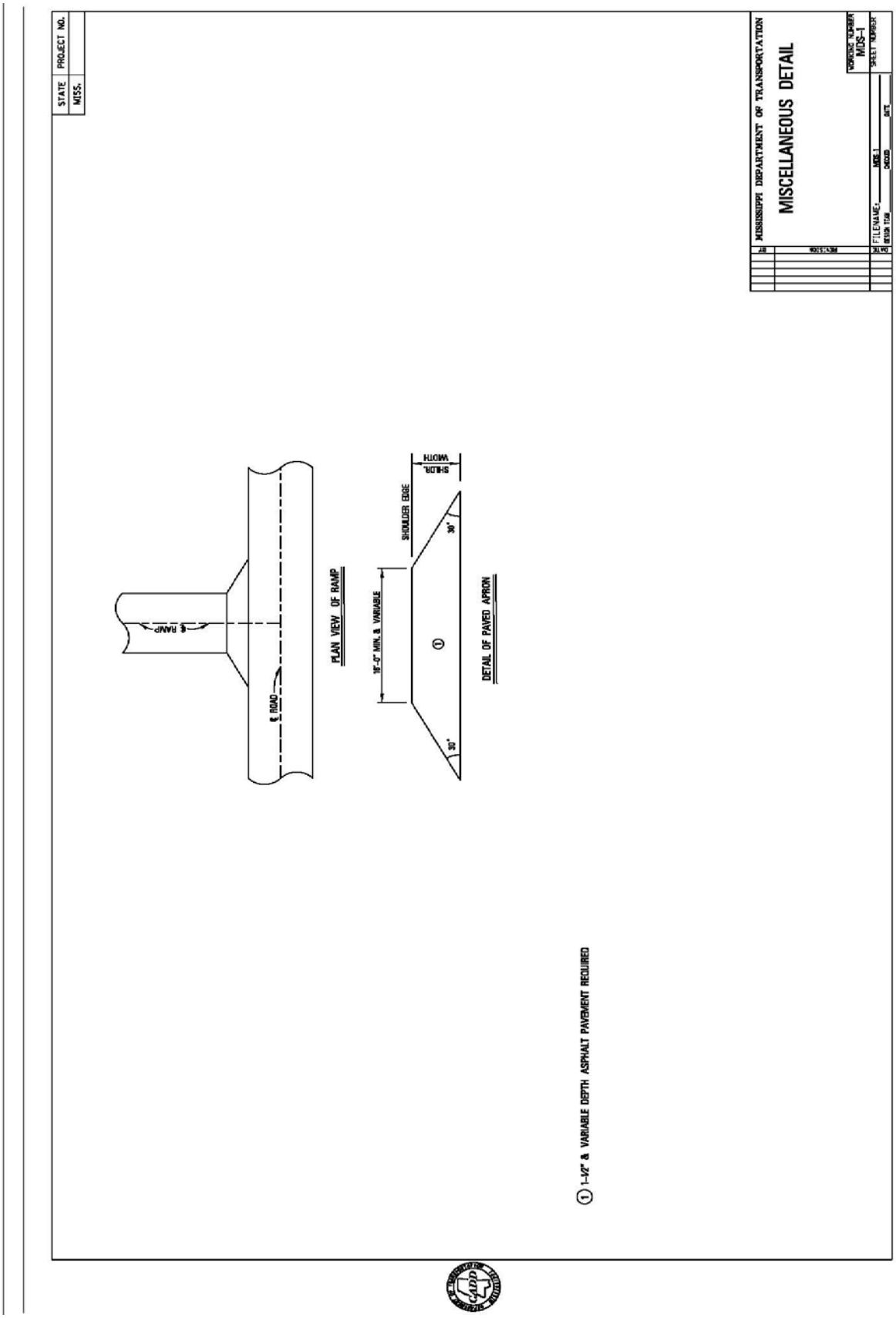
    No separate payment will be made for the anchor section and all costs for the installation of the square posts shall be absorbed in pay item 630-C: Square Tube Posts, 2.0 lb/ft. Signs on existing round pipe posts shall be replaced on Square Tube Post, 4.0 lb/ft. The cost of removal of the pipe post will be paid under pay item 202-B: Removal of Sign Including Post & Footing. The Contractor shall verify the sign and post quantity prior to ordering materials.

Sign Quantity			
Pay Item	Description	Unit	Quantity
202-B	Removal of Sign, Including Post and Footing	EA	7
630-A	Standard Roadside Signs, Sheet Aluminum, 0.08" Thickness	SF	168
630-A	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness	SF	195
630-A	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness	SF	201
630-C	Square Tube Post, 2.0 lb/ft	LF	945
630-C	Square Tube Post, 4.0 lb/ft	LF	105

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

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

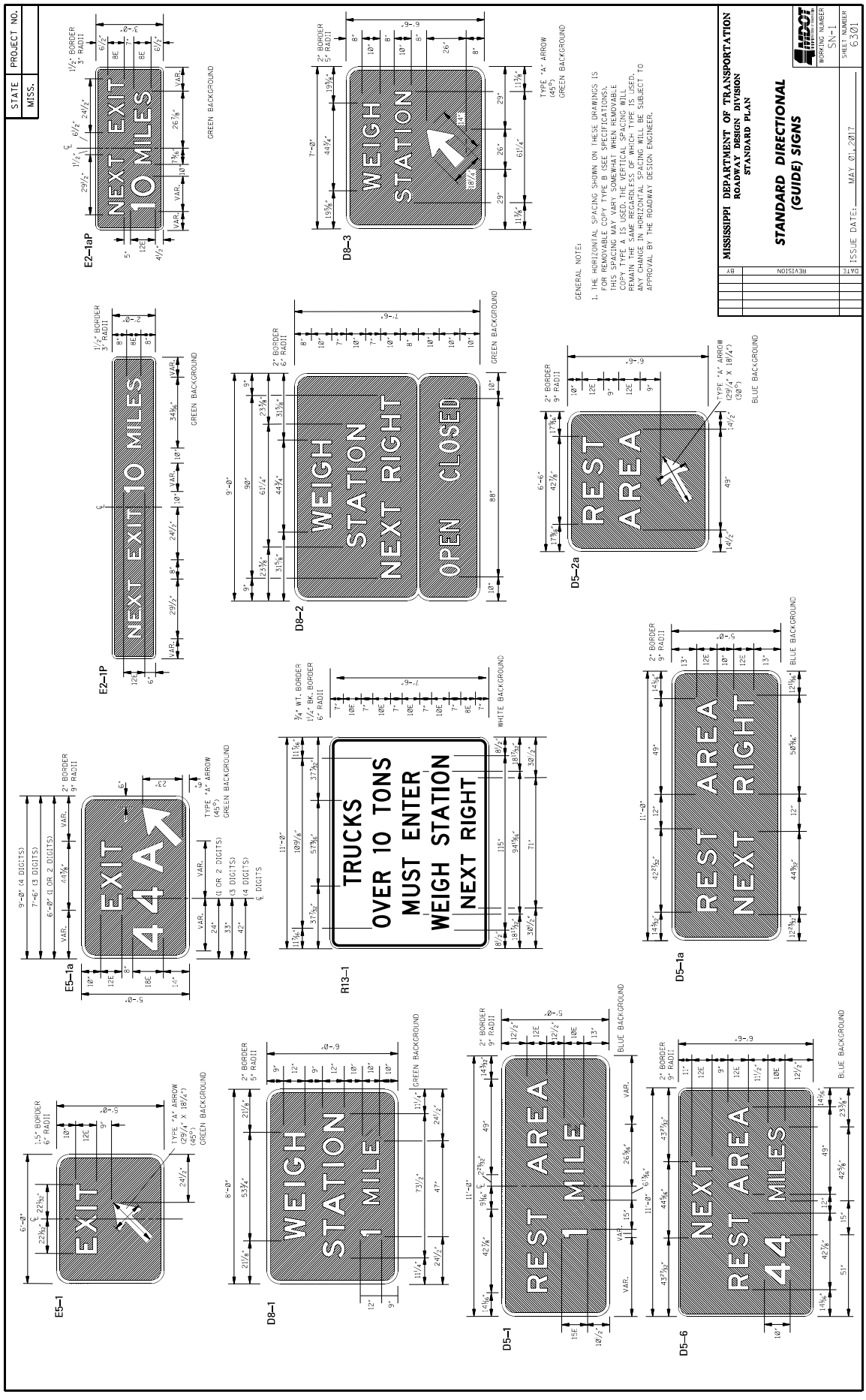
The Engineer may direct the use of additional cones at County Roads or Intersections within lane closures and will be absorbed in pay item 618-A: Maintenance of Traffic.


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
MISCELLANEOUS DETAIL
WORKING NUMBER
MDS-1
SHEET NUMBER
FILENAME:
MDS-1
DESIGN TITLE
CHECKED
DATE
BY
PLAN VIEW OF RAMP
RAMP
S. ROAD
DETAIL OF PAVED APRON
SHOULDER EDGE
SHLDR. WIDTH
18'-0" MIN. & VARIABLE
30°
30°
① 1-1/2" & VARIABLE DEPTH ASPHALT PAVEMENT REQUIRED

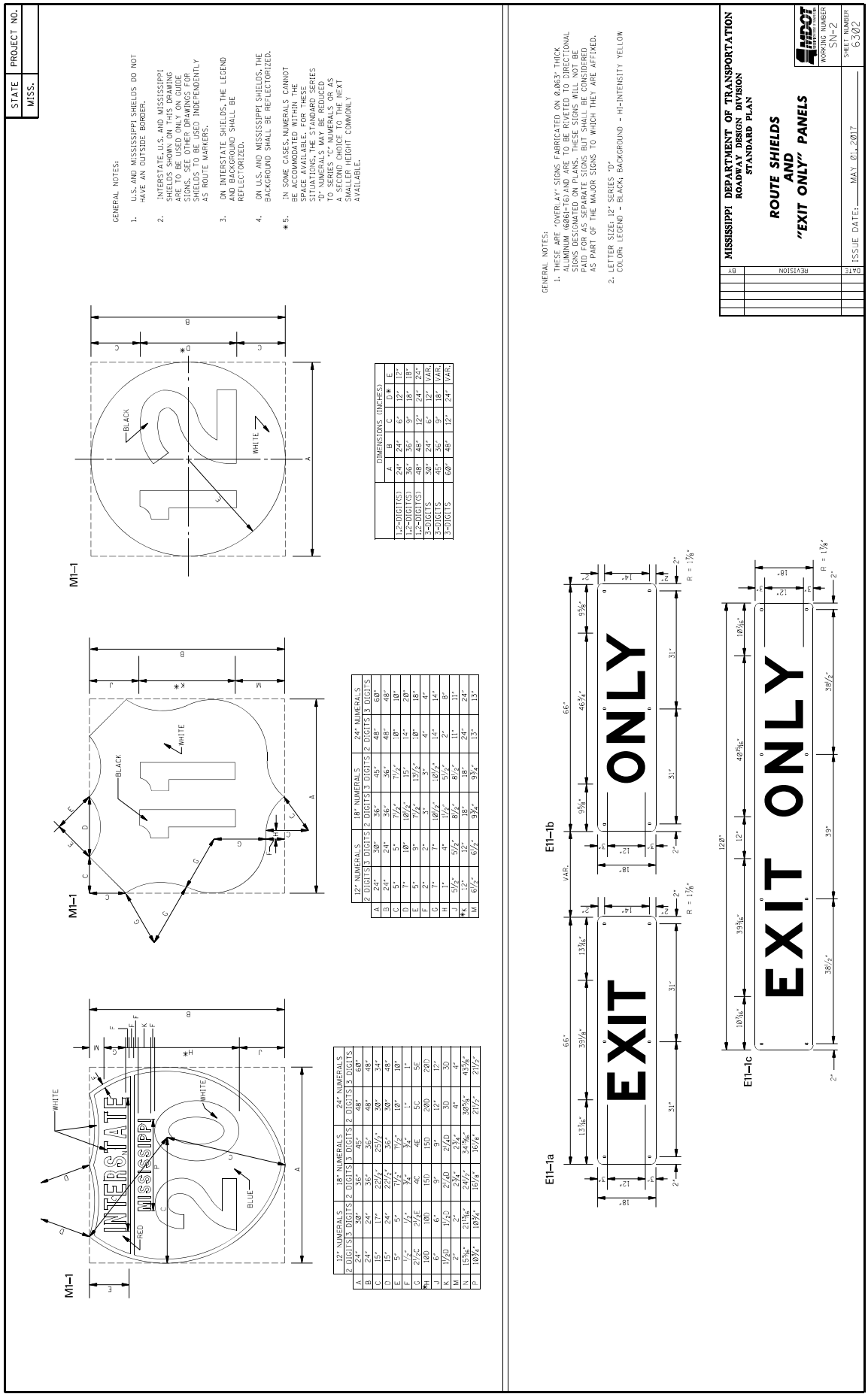
SIGN TABLE

STATION		CODE	DESCRIPTION	THICKNESS			TOTAL		
							0.080	0.1	0.125
10+06	LT	M3-1	North	0.080			5		
10+06	LT	M1-5	MS Route Marker (19)	0.080			4		
10+06	LT	M6-2R	Angle Right Dir. Arrow	0.080			2.1875		
10+06	LT	M3-3	South	0.080			2		
10+06	LT	M1-5	MS Route Marker (35)	0.080			4		
10+06	LT	M6-1	Left or Right Dir. Arrow	0.080			2.1875		
10+06	LT	M3-1	North	0.080			5		
10+06	LT	M6-2R	Angle Right Dir. Arrow	0.080			2.1875		
10+06	LT	M1-5	MS Route Marker (35)	0.080			4		
10+57	RT	W2-2	Side Road			0.125			9
100+81	LT	R2-1	Speed Limit (55)	0.080			5		
103+27	LT	W2-1	Crossroad			0.125			9
104+91	RT	M3-4	West	0.080			2		
104+91	RT	M1-5	MS Route Marker (736)	0.080			4		
104+91	RT	M6-1	Left or Right Dir. Arrow	0.080			2.1875		
105+45	LT	R1-1	Stop (SR 736)		0.1			7.46	
107+41	RT	W2-2	Side Road			0.125			9
107+45	LT	M3-4	West	0.080			2		
107+45	LT	M1-5	MS Route Marker (SR 736)	0.080			4		
107+45	LT	M6-1	Left or Right Dir. Arrow	0.080			2.1875		
109+84	RT	R2-1	Speed Limit (55)	0.080			5		
11+75	RT	R1-1	Stop (1166)		0.1			7.46	
110+10	LT	W2-2	Side Road			0.125			9
110+90	LT	R1-1	Stop (1213)		0.1			7.46	
112+44	LT	M2-1	Junction	0.080			2.1875		
112+44	LT	M1-5	MS Route Marker (736)	0.080			4		
116+12	LT	W2-2	Side Road			0.125			9
128+15	LT	R1-1	Stop (1154)		0.1			7.46	
132+67	RT	R1-1	Stop (1167)		0.1			7.46	
139+40	LT	W2-2	Side Road			0.125			9
14+29	RT	R2-1	Speed Limit (55)	0.080			5		
152+71	RT	R1-1	Stop (1163)		0.1			7.46	
158+27	LT	R1-1	Stop (1154)		0.1			7.46	
158+27	RT	R1-1	Stop (1154)		0.1			7.46	
16+77	RT	R1-1	Stop (1183)		0.1			7.46	
16+83	LT	R1-1	Stop (1201)		0.1			7.46	
166+25	LT	W2-1	Crossroad			0.125			9
17+64	LT	M2-1	Junction	0.080			2.1875		
17+64	LT	M1-5	MS Route Marker (35)	0.080			4		
176+17	LT	R1-1	Stop (1217)		0.1			7.46	
18+70	LT	W3-1	Stop Ahead (WITH POLE MOUNTED LIGHTS)			0.125			16
192+22	LT	R1-1	Stop (1226)		0.1			7.46	
204+20	RT	W2-2	Side Road			0.125			9
205+42	LT	R1-1	Stop (1226)		0.1			7.46	
208+15	RT	R1-1	Stop (1137)		0.1			7.46	
22+22	RT		(UNLAWFUL TO PASS STOPPED SCHOOL BUS)	0.080			4		
240+10	LT	R1-1	Stop (1223)		0.1			7.46	
244+88	LT	W2-2	Side Road			0.125			9
25+71	RT	R1-1	Stop (1177)		0.1			7.46	
264+70	RT	R1-1	Stop (1155)		0.1			7.46	
27+12	RT	W2-1	Crossroad			0.125			9
309+54	RT	W2-2	Side Road			0.125			9
315+81	LT	R1-1	Stop (5207)		0.1			7.46	
33+11	LT	R1-1	Stop (1175)		0.1			7.46	
33+23	RT	R1-1	Stop (1175)		0.1			7.46	
34+98	RT		($250 FINE FOR THROWING TRASH ON HIGHWAY)	0.080			3		
366+95	RT	M3-3	South	0.080			2		
366+95	RT	M1-5	MS Route Marker (19)	0.080			4		

STATION		CODE	DESCRIPTION	THICKNESS			TOTAL		
							0.080	0.1	0.125
368+08	LT	M3-1	North	0.080			5		
368+08	LT	M1-5	MS Route Marker (14)	0.080			4		
368+08	LT	M6-3	Up Dir. Arrow	0.080			2.1875		
368+08	LT	M3-2	East	0.080			2		
368+08	LT	M1-5	MS Route Marker (14)	0.080			4		
368+08	LT	M6-1	Left or Right Dir. Arrow	0.080			2.1875		
369+14	LT	M3-3	South	0.080			2		
369+14	LT	M1-5	MS Route Marker (14)	0.080			4		
369+14	LT		(WEIGHT LIMIT 57650 LBS)	0.080			2.1875		
369+21	RT	W1-7	Two Direction Large Arrow			0.125			8
370+13	RT	M1-5	MS Route Marker (14)	0.080			4		
370+13	RT	M6-1	Left or Right Dir. Arrow	0.080			2.1875		
370+13	RT	M1-5	MS Route Marker (19)	0.080			4		
370+13	RT	M6-3	Up Dir. Arrow	0.080			2.1875		
371+10	LT	W2-2	Side Road			0.125			9
372+94	LT	M3-1	North	0.080			5		
372+94	LT	M1-5	MS Route Marker (19)	0.080			4		
374+11	RT	M1-5	MS Route Marker (14)	0.080			4		
374+11	RT	M5-1L	Adv. Left Dir. Arrow	0.080			2.1875		
374+11	RT		(WEIGHT LIMIT 57650 LBS)	0.080			2.1875		
376+57	RT	R1-1	Stop		0.1			7.46	
377+73	LT	R2-1	Speed Limit (55)	0.080			5		
382+10	RT	W2-2	Side Road			0.125			9
392+72	LT	W2-2	Side Road			0.125			9
396+14	LT	R1-1	Stop (SR 14)		0.1			7.46	
397+00	RT	R1-1	Stop (5036)		0.1			7.46	
400+76	RT	W2-2	Side Road			0.125			9
402+61	LT	W2-2	Side Road			0.125			9
41+79	LT	W2-1	Crossroad			0.125			9
45+73	RT	R1-1	Stop (1008)		0.1			7.46	
74+64	LT	R1-1	Stop (1211)		0.1			7.46	
85+62	RT	W2-1	Crossroad			0.125			9
9+54	RT	M3-2	East	0.080			2		
9+54	RT	M3-3	South	0.080			2		
9+54	RT	M1-5	MS Route Marker (14)	0.080			4		
9+54	RT	M1-5	MS Route Marker (19)	0.080			4		
94+15	LT	R1-1	Stop (5131)		0.1			7.46	
94+22	RT	R1-1	Stop (5131)		0.1			7.46	
98+36	RT	W2-2	Side Road			0.125			9
99+85	RT	M2-1	Junction	0.080			2.1875		
99+85	RT	M1-5	MS Route Marker (736)	0.080			4		
						TOTAL	**168**	**201**	**195**


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: MAY 01, 2017
DATE
REVISION
BY
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 ROADWAY DESIGN ENGINEER.
E2-1aP
NEXT EXIT 10 MILES
GREEN BACKGROUND
D8-3
WEIGH STATION
TYPE "A" ARROW (45°)
GREEN BACKGROUND
E2-1P
NEXT EXIT 10 MILES
GREEN BACKGROUND
D8-2
WEIGH STATION NEXT RIGHT
OPEN CLOSED
GREEN BACKGROUND
D5-2a
REST AREA
TYPE "A" ARROW (29¼" X 18¼") (30°)
BLUE BACKGROUND
E5-1a
EXIT 44 A
TYPE "A" ARROW (45°)
GREEN BACKGROUND
R13-1
TRUCKS OVER 10 TONS MUST ENTER WEIGH STATION NEXT RIGHT
WHITE BACKGROUND
D5-1a
REST AREA NEXT RIGHT
BLUE BACKGROUND
E5-1
EXIT
TYPE "A" ARROW (29¼" X 18¼") (45°)
GREEN BACKGROUND
D8-1
WEIGH STATION 1 MILE
GREEN BACKGROUND
D5-1
REST AREA 1 MILE
BLUE BACKGROUND
D5-6
NEXT REST AREA 44 MILES
BLUE BACKGROUND

Notice to Bidders No. 4626-- Cont'd.



STATE	PROJECT NO.
MISS.	

SIGN NUMBER	D9-2		D10-1	D10-2	D10-3	D10-1a	D10-2a	D10-3a	D10-4	D10-5	M1-1	M1-1	M1-4	M1-6
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"	e = 11" (24" X 24") e = VAR. (30" X 24") R = 1½"
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"	36" X 36"	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 (VERT. PUNCHING)
													2 (HORIZ. 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
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"

SIGN NUMBER	M2-1	M2-1A	M3-3*	M3-3A*	M3-103A*	M4-5	M4-5A	M5-1L	M5-1LA	M5-1R	M5-1RA	M5-2L	M5-2LA	M5-2R	M5-2RA	M6-1L	M6-1LA	M6-1R	M6-1RA	M6-2L	M6-2LA	M6-2R	M6-2RA	M6-3	M6-3A
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"		0.080"		0.080"	0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"	
LEGEND	R = 1½"		R = 1½"		R = 1½"	R = 1½"		R = 1½"		R = 1½"		R = 1½"		R = 1½"		R = 1½"		R = 1½"		R = 1½"		R = 1½"		R = 1½"	
LETTER & NUMERAL SERIES	9" SERIES "C"		7" SERIES "C" 6" SERIES "C"		10" SERIES "C" 8" SERIES "C"	6" SERIES "E"																			
WIDTH OF BORDER INSIDE OUTSIDE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE
SIZE (WIDTH X HEIGHT)	21" X 15"		24" X 12"		30" X 15"	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 THE INTERSTATE AND U.S. SHIELDS SHALL CONFORM WITH THOSE SHOWN IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
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. M1-6: 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

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

MDOT

WORKING NUMBER SN-3

ISSUE DATE: MAY 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	¾" RED ¾" WHITE	1" RED 1" WHITE	1½" RED 1½" WHITE	⅜" BLACK ⅜" WHITE	⅝" BLACK ⅝" WHITE	¾" BLACK ¾" WHITE	¾" WHITE	⅝" BLACK ⅞" 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	⅝" 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"	18" SERIES "C"
WIDTH OF BORDER INSIDE / OUTSIDE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	1¼" BLACK ¾" WHITE	⅝" BLACK ⅜" 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	1½" 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.

REVISION / BY / DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

MDOT

WORKING NUMBER SN-3A

ISSUE DATE: MAY 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	W3-1a		W3-2a		W3-3		W4-1L W4-1R	W4-10L W4-10R
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	Ø.125"		Ø.125"		Ø.125"		Ø.125"		Ø.100"	Ø.100"	Ø.125"		Ø.125"		Ø.125"		Ø.125"	Ø.125"
LEGEND	R=2¼"	R=3"	R=2¼"	R=3"	R=2¼"	R=3"	R=2¼"	R=3"	R=1⅞"	R=1⅞"	R=2¼"	R=3"	R=2¼"	R=3"	R=2¼"	R=3"	R=2¼"	R=3"
LETTER & NUMERAL SERIES																		
WIDTH OF BORDER INSIDE	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	¾" BLACK	¾" BLACK	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK
OUTSIDE	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW	½" YELLOW	½" YELLOW	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW
SIZE (WIDTH X HEIGHT)	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	48" X 24"	48" X 24"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"
COLORS COPY	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
BACKGROUND	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & "LIGHTS"	BACKGROUND & "LIGHTS"	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (⅝" DIA.)	2	4	2	4	2	4	2	4	4	4	2	4	2	4	2	4	2	4
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	9"	9"	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER
PUNCHING DISTANCE FROM TOP EDGE	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3"; 21"	3"; 21"	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER

SIGN NUMBER	W4-2		W6-1		W6-2		W6-3		W13-1	W13-2	W13-3		W10-1					
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	Ø.125"		Ø.125"		Ø.125"		Ø.125"		Ø.080"	Ø.125"	Ø.125"		Ø.100"					
LEGEND	NOTE: SEE PLAN SHEETS FOR IDEOGRAM REQUIRED ON INDIVIDUAL SIGNS.								35 MPH R=1½"	EXIT 30 MPH R=3"	RAMP 30 MPH R=3"		R R					
	R=2¼"	R=3"	R=2¼"	R=3"	R=2¼"	R=3"	R=2¼"	R=3"										
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	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	⅞" BLACK	1¼" BLACK	⅝" BLACK	1¼" BLACK	1¼" BLACK		¾" BLACK					
OUTSIDE	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	¾" YELLOW	⅝" YELLOW	½" YELLOW	⅝" YELLOW	¾" YELLOW	¾" YELLOW		½" YELLOW					
SIZE (WIDTH X HEIGHT)	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	36" X 36"	48" X 48"	24" X 24"	48" X 60"	48" X 60"		36" DIAMETER					
COLORS COPY	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK		BLACK					
BACKGROUND	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW		YELLOW					
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND		BACKGROUND					
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	1	1	1		1					
NUMBER OF HOLES TO BE PUNCHED (⅝" DIA.)	2	4	2	4	2	4	2	4	2	6	6		2					
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	VERT. CENTER	15" FROM VERT. CENTER	12" (VERT. CENTER)	9"	9"		15"					
PUNCHING DISTANCE FROM TOP EDGE	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3"; 21"	4"; 30"; 56"	4"; 30"; 56"		15" FROM HORIZ. CENTER					

GENERAL NOTES:

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

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

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

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

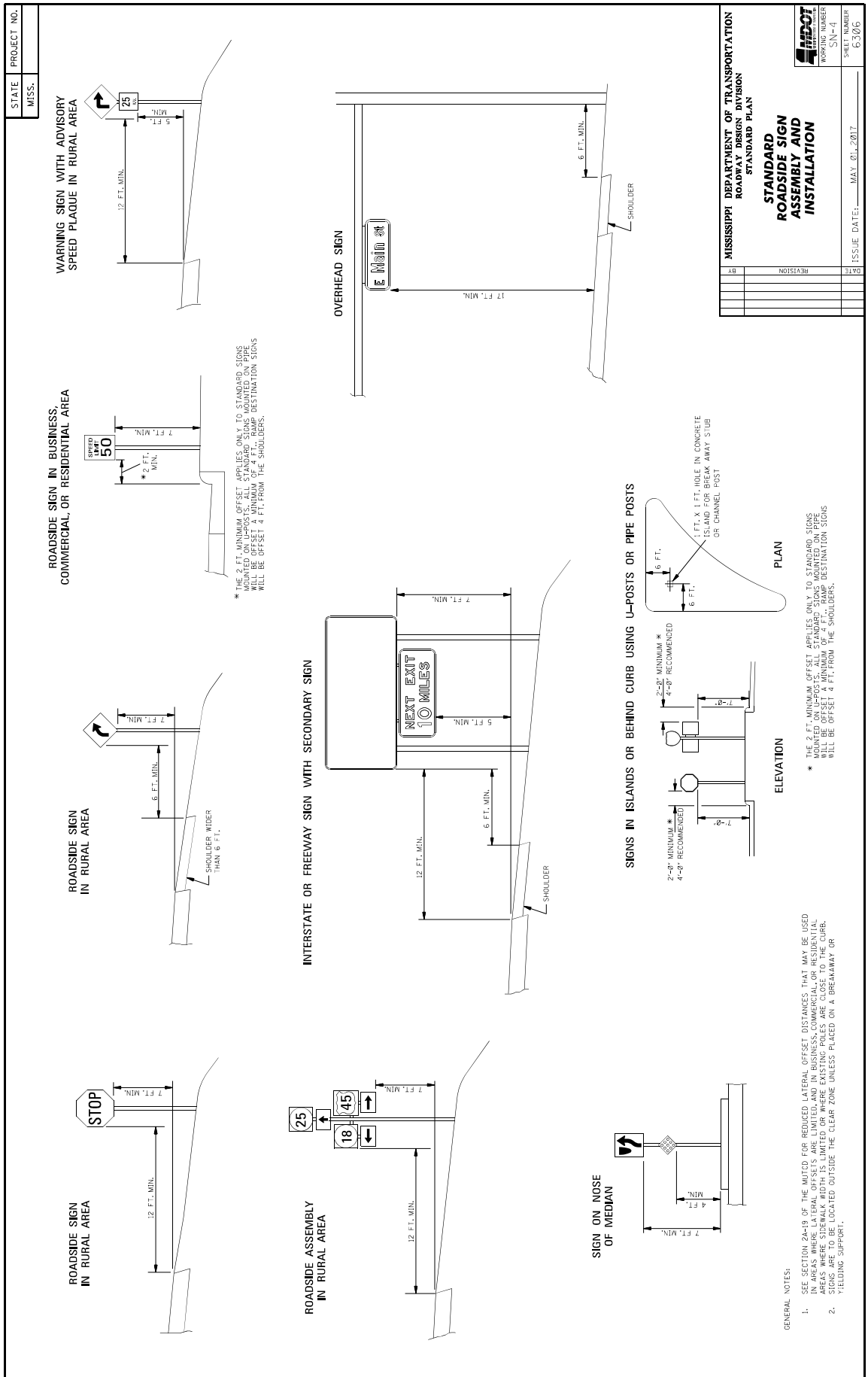
STANDARD ROADSIDE SIGNS

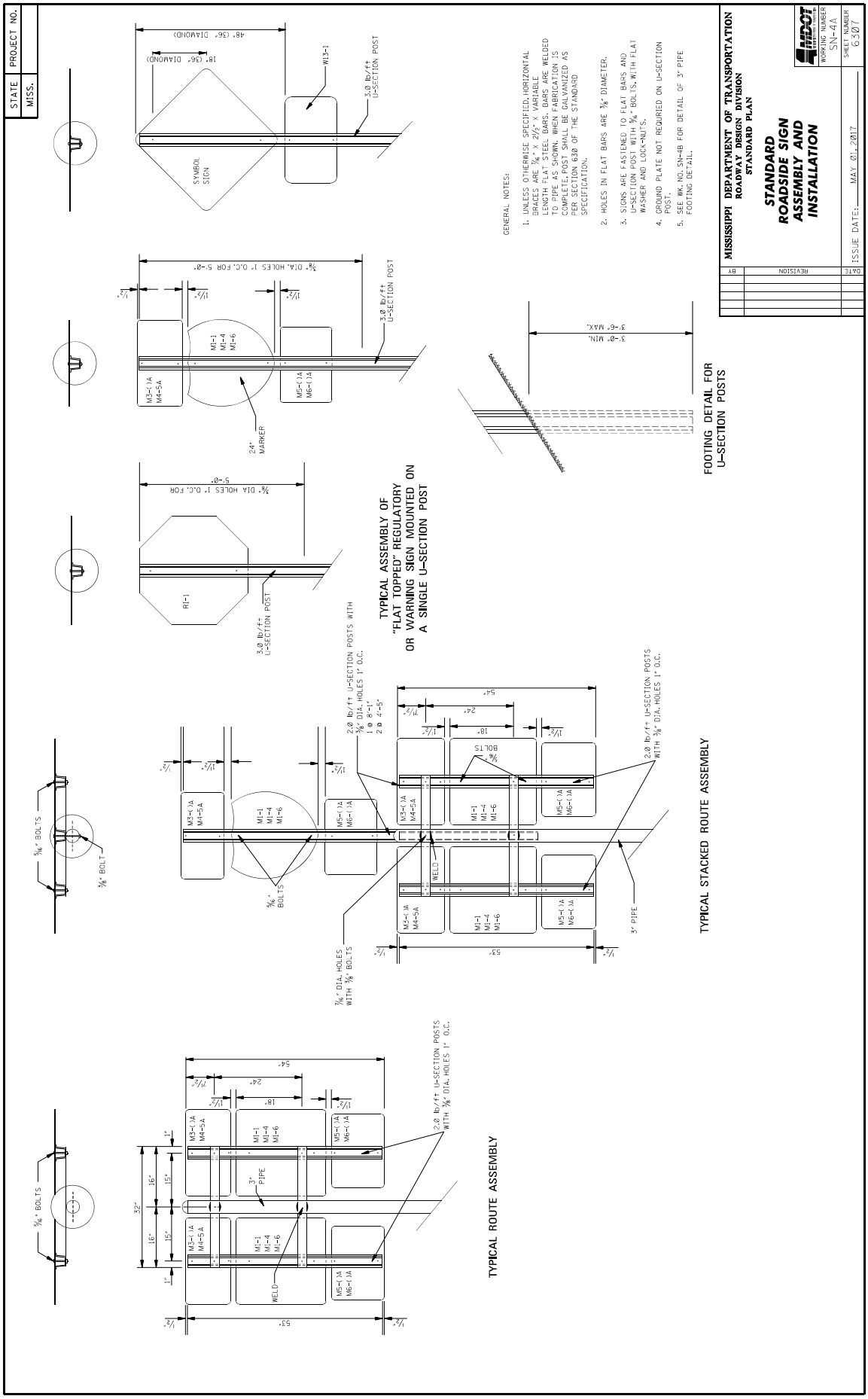
MDOT

WORKING NUMBER: SN-3B

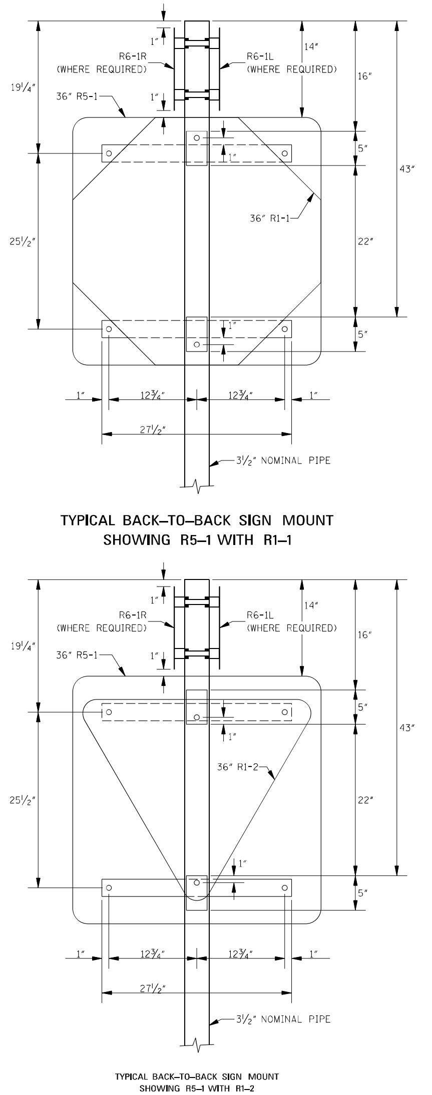
SHEET NUMBER: 6305

ISSUE DATE: MAY 01, 2017


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: MAY 01, 2017
DATE REVISION BY
WARNING SIGN WITH ADVISORY SPEED PLAQUE IN RURAL AREA
12 FT. MIN.
5 FT. MIN.
OVERHEAD SIGN
17 FT. MIN.
6 FT. MIN.
SHOULDER
ROADSIDE SIGN IN BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA
SPEED LIMIT 50
7 FT. MIN.
* 2 FT. MIN.
* THE 2 FT. MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET A MINIMUM OF 4 FT.. RAMP DESTINATION SIGNS WILL BE OFFSET 4 FT. FROM THE SHOULDERS.
ROADSIDE SIGN IN RURAL AREA
7 FT. MIN.
6 FT. MIN.
SHOULDER WIDER THAN 6 FT.
INTERSTATE OR FREEWAY SIGN WITH SECONDARY SIGN
NEXT EXIT 10 MILES
7 FT. MIN.
5 FT. MIN.
12 FT. MIN.
6 FT. MIN.
SHOULDER
SIGNS IN ISLANDS OR BEHIND CURB USING U-POSTS OR PIPE POSTS
6 FT.
1 FT. X 1 FT. HOLE IN CONCRETE ISLAND FOR BREAK AWAY STUB OR CHANNEL POST
PLAN
2'-0" MINIMUM * 4'-0" RECOMMENDED
7'-0"
ELEVATION
* THE 2 FT. MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET A MINIMUM OF 4 FT.. RAMP DESTINATION SIGNS WILL BE OFFSET 4 FT. FROM THE SHOULDERS.
ROADSIDE SIGN IN RURAL AREA
STOP
7 FT. MIN.
12 FT. MIN.
ROADSIDE ASSEMBLY IN RURAL AREA
25
45
18
7 FT. MIN.
12 FT. MIN.
SIGN ON NOSE OF MEDIAN
4 FT. MIN.
7 FT. MIN.
GENERAL NOTES:
1. SEE SECTION 2A-19 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 NOT BE LOCATED OUTSIDE THE CLEAR ZONE UNLESS PLACED ON A BREAKAWAY OR YIELDING SUPPORT.

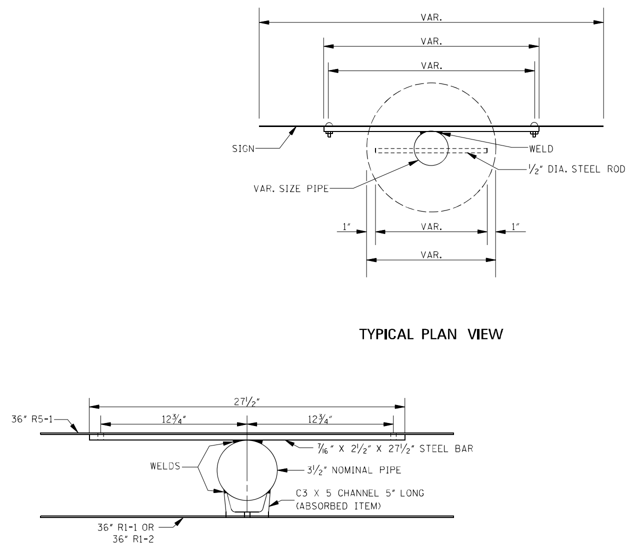

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION
WORKING NUMBER SN-4A
SHEET NUMBER 6501
ISSUE DATE: MAY 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE 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 638 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.
48" (36" DIAMOND)
18" (36" DIAMOND)
SYMBOL SIGN
W13-1
3.0 lb/ft U-SECTION POST
3/8" DIA. HOLES 1" O.C. FOR 5'-0"
M1-1 M1-4 M1-6
M3-1A M4-5A
M5-1A M6-1A
24" MARKER
TYPICAL ASSEMBLY OF "FLAT TOPPED" REGULATORY OR WARNING SIGN MOUNTED ON A SINGLE U-SECTION POST
R1-1
3'-0" MIN.
3'-6" MAX.
FOOTING DETAIL FOR U-SECTION POSTS
2.0 lb/ft U-SECTION POSTS WITH 3/8" DIA. HOLES 1" O.C.
1 @ 8"
2 @ 4"
54"
24"
18"
BOLTS
WELD
3" PIPE
53"
3/16" DIA. HOLES WITH 3/8" BOLTS
TYPICAL STACKED ROUTE ASSEMBLY
3/16" BOLTS
3/8" BOLT
32"
16"
15"
1"
TYPICAL ROUTE ASSEMBLY

STATE	PROJECT NO.
MISS.	



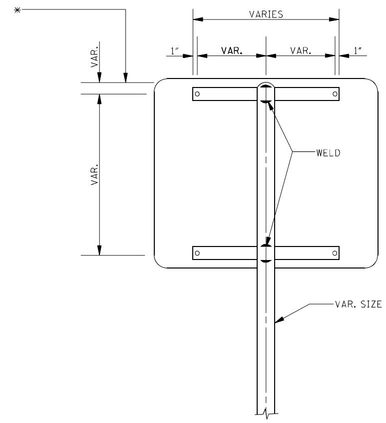
TYPICAL BACK–TO–BACK SIGN MOUNT SHOWING R5–1 WITH R1–1

TYPICAL BACK–TO–BACK SIGN MOUNT SHOWING R5–1 WITH R1–2

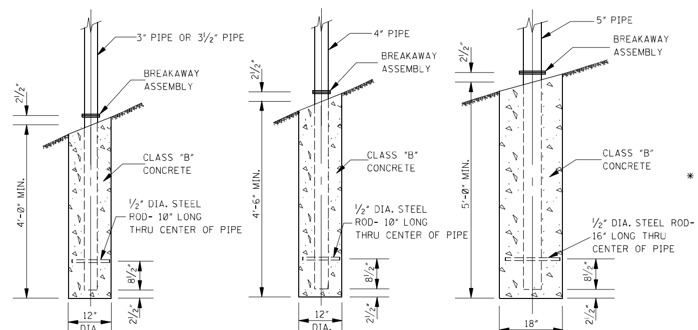


TYPICAL PLAN VIEW

PLAN VIEW OF DOUBLE MOUNTING OF SIGNS



TYPICAL ASSEMBLY ON PIPE



FOOTING DETAILS

GENERAL NOTES:

1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE ⅞" X 2½" 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 ⅜" 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 ARE TO 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

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

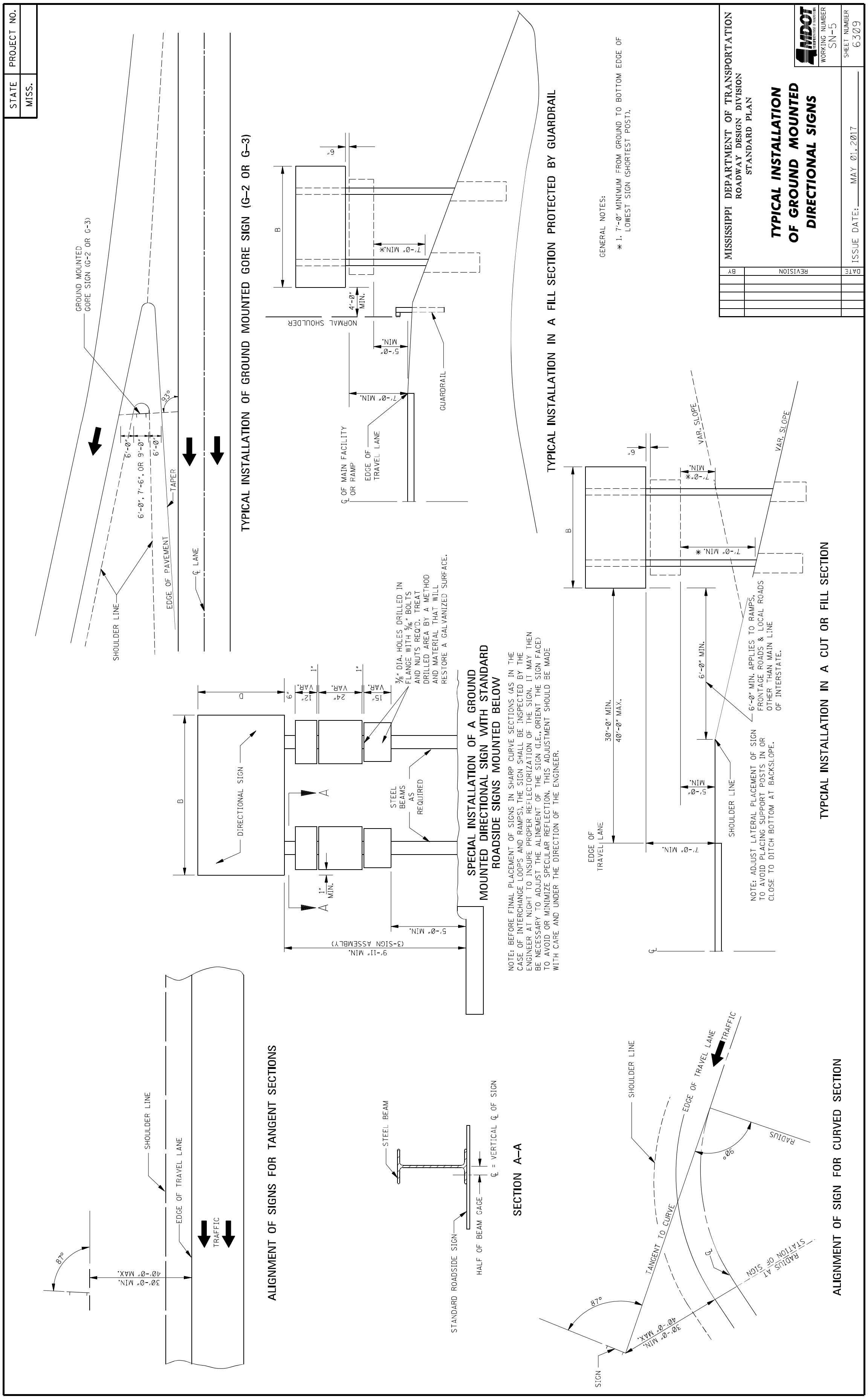
STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION

MDOT

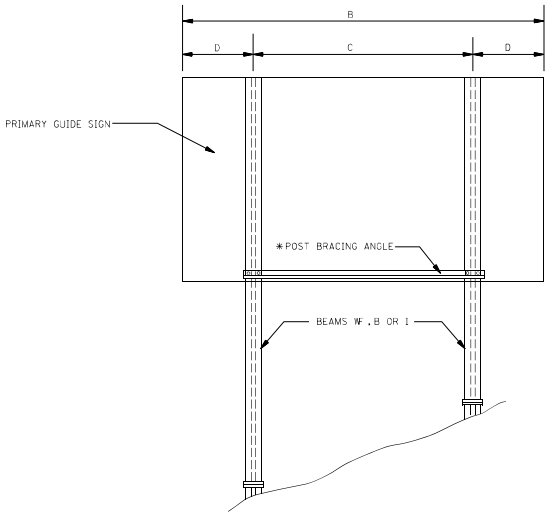
WORKING NUMBER SN-4B

SHEET NUMBER 6308

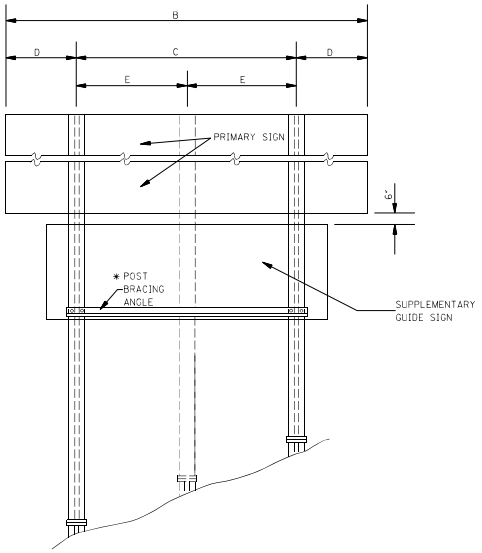
ISSUE DATE: MAY 01, 2017


STATE MISS. PROJECT NO.
TYPICAL INSTALLATION OF GROUND MOUNTED GORE SIGN (G-2 OR G-3)
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).
SPECIAL INSTALLATION OF A GROUND MOUNTED DIRECTIONAL SIGN WITH STANDARD ROADSIDE SIGNS MOUNTED BELOW
TYPCIAL INSTALLATION IN A CUT OR FILL SECTION
ALIGNMENT OF SIGNS FOR TANGENT SECTIONS
SECTION A-A
ALIGNMENT OF SIGN FOR CURVED SECTION
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: MAY 01, 2017

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

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 ROADWAY DESIGN 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 SHALL PREFERABLY 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 123
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

* 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"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BREAKAWAY SIGN SUPPORTS

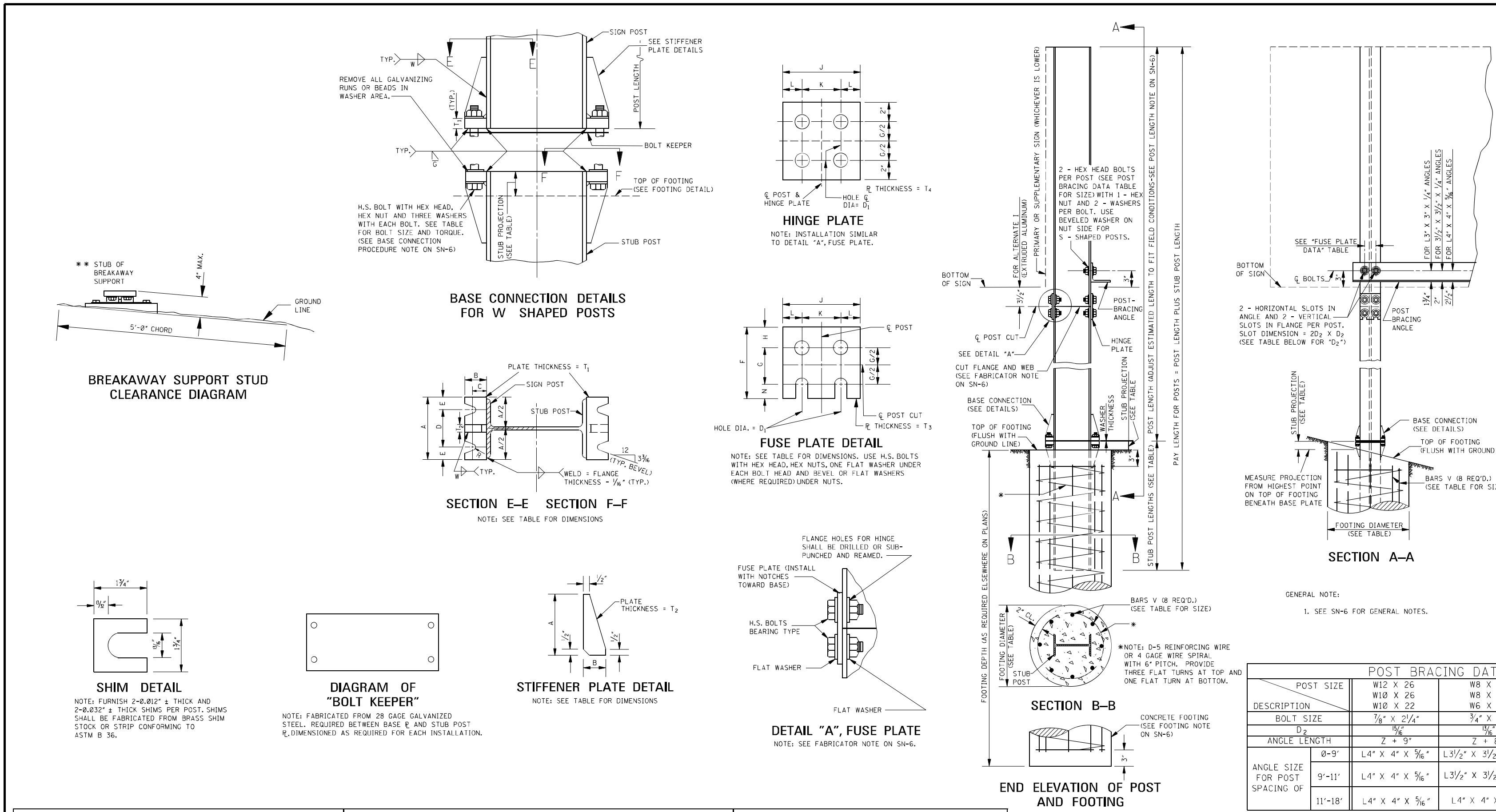
BY | REVISION | DATE

ISSUE DATE: MAY 01, 2017

WORKING NUMBER SN-6

SHEET NUMBER 6310

STATE	PROJECT NO.
MISS.	



GENERAL NOTE:

1. SEE SN-6 FOR GENERAL NOTES.

POST SIZE / DESCRIPTION		W12 X 26 W10 X 26 W10 X 22	W8 X 21 W8 X 18 W6 X 15	W6 X 9 W6 X 12
BOLT SIZE		7/8" X 2 1/4"	3/4" X 2"	1/2" X 1 3/4"
D_2		15/16"	13/16"	9/16"
ANGLE LENGTH		Z + 9"	Z + 8"	Z + 6"
ANGLE SIZE FOR POST SPACING OF	0-9'	L4" X 4" X 5/16"	L3 1/2" X 3 1/2" X 1/4"	L3" X 3" X 1/4"
	9'-11'	L4" X 4" X 5/16"	L3 1/2" X 3 1/2" X 1/4"	L3 1/2" X 3 1/2" X 1/4"
	11'-18'	L4" X 4" X 5/16"	L4" X 4" X 5/16"	L4" X 4" X 5/16"

NOTE: Z = DISTANCE BETWEEN ℄'S OF EXTERIOR POSTS.

BASE CONNECTION DATA / FUSE PLATE DATA / FOOTING DATA

POST SIZE (DIMENSION)	BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_2	W	R	F	G	H	J	K	L	N	D_1	T_3	BOLT SIZE (DIA. X LENGTH)	MIN. BOLT TENSION (lbs)	T_4	STUB LENGTH	STUB** PROJECTION	FOOTING DIAMETER	BARS V SIZE	FOOTING*** DEPTH
W6 X 9	5/8" X 2 3/4" LONG TORQUE 300 in·lbs	5"	2"	1 1/4"	2 3/4"	1 1/8"	3/4"	1/2"	1/4"	11/32"	3 5/8"	2"	1 1/8"	4"	2 1/4"	7/8"	1/2"	9/16"	1/4"	1/2" X 1 1/2"	12,050	1/4"	2'-0"	3"	2'-0"	#4	SEE NOTE BELOW
W6 X 12											3 3/4"	2"	1 1/8"	4"	2 1/4"	7/8"	5/8"	11/16"	3/8"	5/8" X 2"	19,200	3/8"	2'-0"	3"	2'-0"	#5	SEE NOTE BELOW
W6 X 15											4 1/2"	2 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	3/4"	13/16"	1/2"	3/4" X 2 1/4"	28,400	3/8"	2'-6"	3"	2'-0"	#6	SEE NOTE BELOW
W8 X 18											4 1/2"	2 1/2"	1 1/4"	5 1/4"	2 3/4"	1 1/4"	3/4"	13/16"	1/2"	3/4" X 2 1/4"	28,400	3/8"	2'-6"	3"	2'-0"	#7	SEE NOTE BELOW
W8 X 21	3/4" X 3 1/2" LONG TORQUE 500 in·lbs	6"	2 1/4"	1 3/8"	3 1/2"	1 1/4"	1"	3/4"	5/16"	13/32"	4 7/8"	2 1/2"	1 1/2"	5 1/4"	2 3/4"	1 1/4"	7/8"	15/16"	9/16"	7/8" X 2 1/2"	39,250	3/8"	3'-0"	2 1/2"	2'-0"	#8	SEE NOTE BELOW
W10 X 22											5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	15/16"	9/16"	7/8" X 2 1/2"	39,250	3/8"	3'-0"	2 1/2"	2'-0"	#9	SEE NOTE BELOW
W10 X 26											5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	15/16"	9/16"	7/8" X 2 1/2"	39,250	7/16"	3'-0"	2 1/2"	2'-0"	#10	SEE NOTE BELOW
W12 X 26											5 3/8"	3"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	7/8"	15/16"	9/16"	7/8" X 2 1/2"	39,250	3/8"	3'-0"	2 1/2"	2'-0"	#11	SEE NOTE BELOW

** NOTE: STUB PROJECTION SHOULD BE MEASURED OVER A 5'-0" CHORD AS PER AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, LATEST EDITION.

*** NOTE: FOOTING DEPTH TO BE SHOWN ELSEWHERE IN THE PLANS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BREAKAWAY SIGN SUPPORTS

MDOT

WORKING NUMBER SN-6A

SHEET NUMBER 6311

ISSUE DATE: MAY 01, 2017

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STATE	PROJECT NO.
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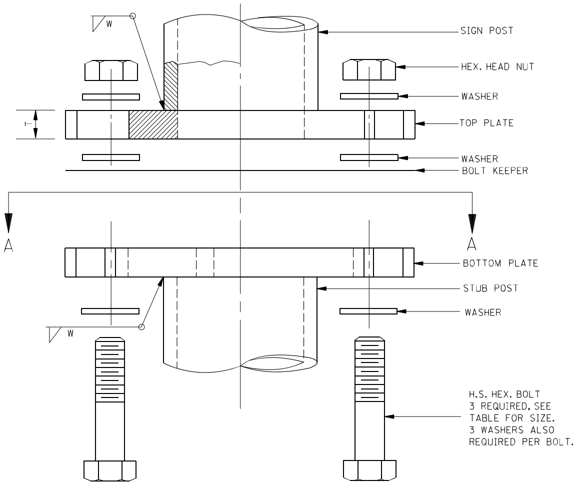
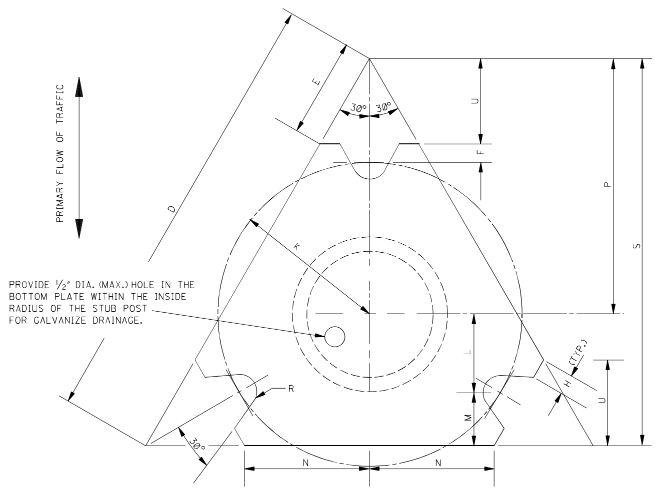
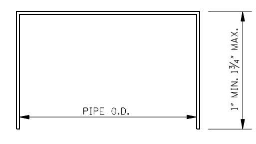


MULTI-DIRECTIONAL SIGN POST & STUB POST



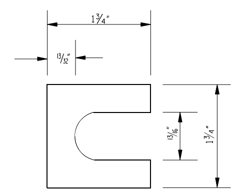
SECTION A–A

NOTE: SEE DATA TABLE FOR DIMENSIONS



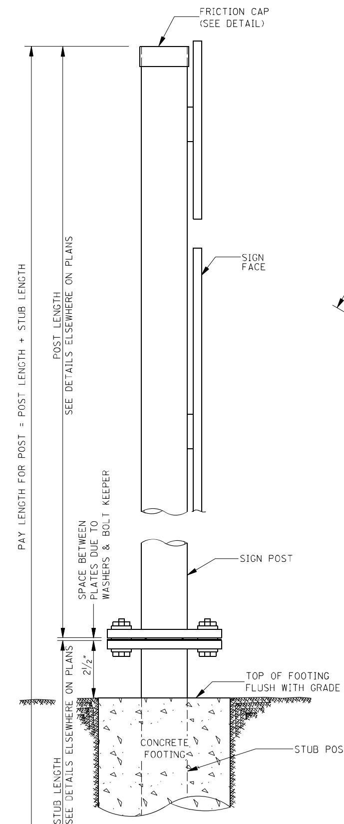
FRICTION CAP DETAIL

NOTE: SEE NOTE 3

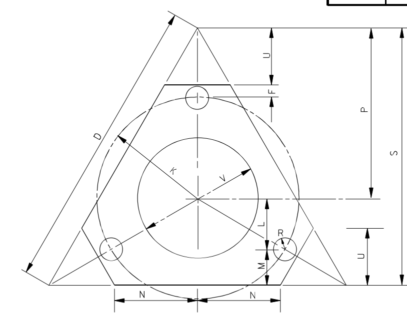


SHIM DETAIL

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.



POST ELEVATION



BOLT KEEPER PLATE DETAIL

NOTE: TO BE FABRICATED FROM 28 GAGE THICK GALVANIZED STEEL. TO BE INSTALLED AS SHOWN IN DETAIL AT UPPER LEFT.

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 SIGN POST SHALL BE CUT THROUGH THE CENTER OF THE TOP PLATE WITH THE HOLE EDGE BEVELED AS DETAILED. TOP & BOTTOM PLATES SHALL BE SYMMETRICAL FOR THE PURPOSE OF ASSEMBLY IN ANY POSITION.

2. BASE CONNECTION ASSEMBLY AS FOLLOWS:
   A. ASSEMBLE POST TO STUB WITH 3 BOLTS AND WITH 3 FLAT WASHERS PER BOLT.
   B. SHIM AS REQUIRED TO PLUMB POST.
   C. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS, KEEPER PLATE, SHIMS AND TO CLEAN THREADS.
   D. LOOSEN EACH BOLT IN TURN & RETIGHTEN IN A SYSTEMATIC ORDER TO PRESCRIBED TORQUE. (SEE BASE CONNECTION DATA TABLE).
   E. BURR THREADS AT JUNCTION WITH NUT WITH A CENTER PUNCH TO PREVENT NUT FROM LOOSENING.

3. FRICTION CAPS TO BE MANUFACTURED FROM HOT ROLLED OR COLD ROLLED STEEL SHEETS. FOR ALL PIPE SIZES, MINIMUM THICKNESS SHALL BE 20 GAGE SHEET METAL. RIM EDGES SHALL 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 CREASES OR INDENTATIONS AND SHOW NO SIGNS OF METAL FRACTURE. ALL CAPS TO BE SAME IN SHAPE AND GENERAL APPEARANCE AS APPROVED BY THE ENGINEER.

4. STUB PROJECTION SHOULD BE MEASURED OVER A 5'-0" CHORD AS PER AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, LATEST EDITION. SEE WK. NO. SN-6A FOR DIAGRAM.

5. AS AN ALTERNATIVE THE POST LENGTH OF THE SIGN POST CAN BE MADE-UP USING A NOMINAL LENGTH OF GALVANIZED PIPE, A GALVANIZED SLIP BASE CASTING, 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.

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" 3½"	⅝" X 2½" 300 in · lbs	⅝"	⅜"	1"	10⅜"	2 5/16"	½"	⅜"	½"	1¾"	3½"	1¾"	1¼"	2⅞"	6"	9"	2"	4¼"	11/32"
4" 5"	¾" X 3" 500 in · lbs	⅞"	7/16"	1 7/16"	13"	2⅞"	½"	⅜"	⅝"	2½"	4½"	2¼"	1½"	3⅝"	7½"	11¼"	2½"	5¾"	13/32"

*NOTE: APPROXIMATE DIMENSIONS

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BREAKAWAY SIGN SUPPORTS

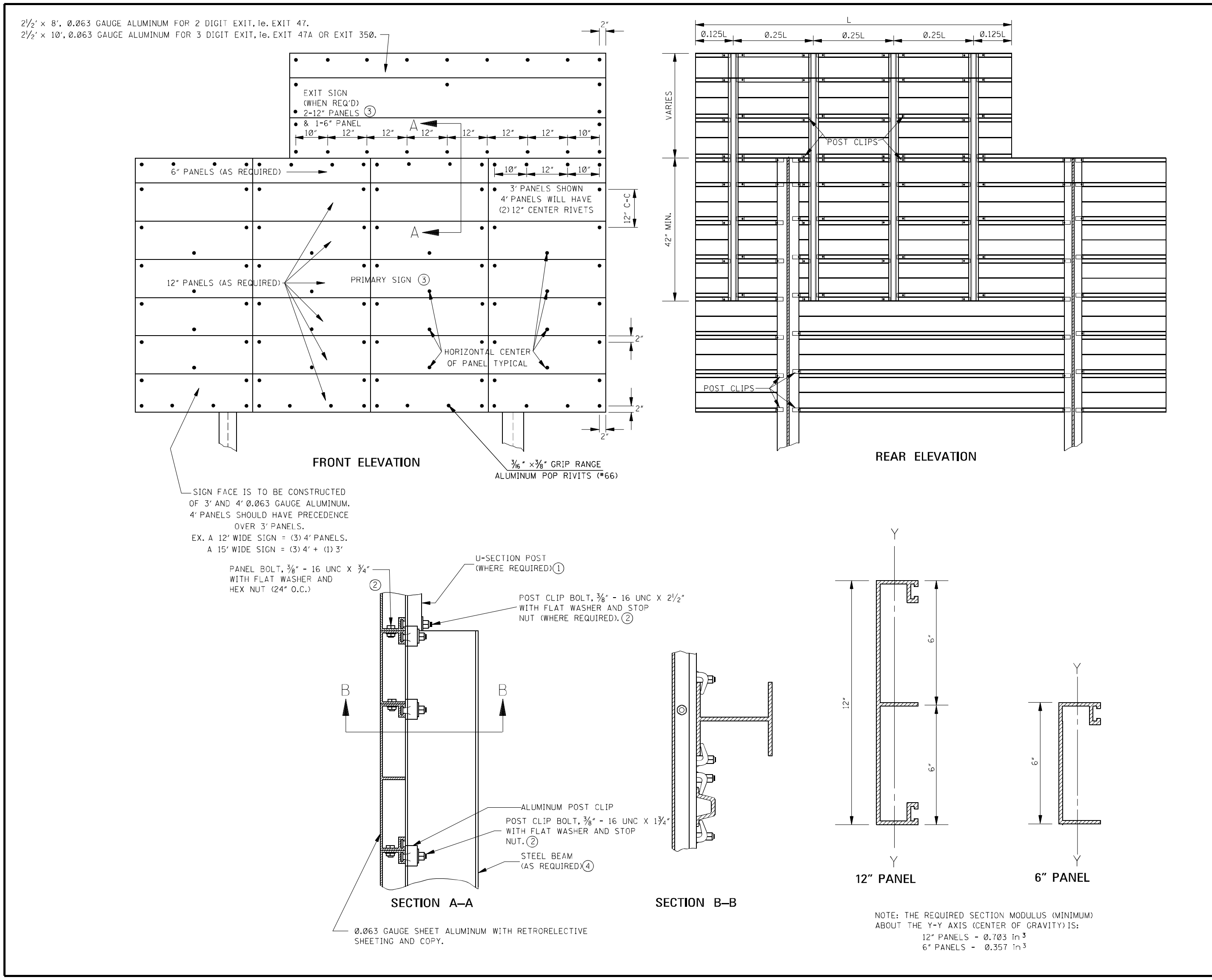
MDOT

WORKING NUMBER SN-6B

ISSUE DATE: MAY 01, 2017

SHEET NUMBER 6312

STATE	PROJECT NO.
MISS.	



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 (2.0 lb/ft) WITH 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, PLACE BOLTS IN UPPER SLOT. WHERE NECESSARY, THE POST SPACING (SHOWN ON REAR ELEVATION) MAY BE ADJUSTED SOMEWHAT TO STAY CLEAR OF SIGN POSTS AND POST CLIPS.

2. ALL BOLTS, WASHERS AND NUTS IN THE FABRICATION OF EXTRUDED ALUMINUM SIGNS AND THE ATTACHMENT OF SAME TO STEEL BEAMS SHALL BE ALUMINUM, AS PER SPECIFICATIONS. POST CLIP BOLTS AND BOLTS FOR U-SECTION POSTS SHALL HAVE HEADS DESIGNED TO FIT THE BOLT SLOTS IN THE PANELS. THE LOCK-NUTS SHALL BE TIGHTENED ON CLEAN, DRY, "AS RECEIVED" THREADS TO A TORQUE OF 150 In • lbs.

3. UNLESS OTHERWISE SPECIFIED, THE BACKGROUND OF ALL DIRECTIONAL SIGNS (INCLUDING OVERHEAD SIGNS) SHALL BE INTERSTATE GREEN REFLECTORIZED SHEETING (AS PER STANDARD SPECIFICATIONS), DIRECT APPLIED TO 0.063 GAUGE SHEET ALUMINUM. THE COPY SHALL BE WHITE, REFLECTORIZED, DIRECT APPLIED, ADHESIVE BACKED, LETTERS, NUMBERS, SYMBOLS, AND BORDER.

4. SEE OTHER DRAWINGS FOR SELECTION AND DETAILS OF STEEL BEAMS FOR VERTICAL SUPPORTS (SIGN POST).

5. THE DETAILS OF SIGN FACE CONSTRUCTION SHOWN ON THIS SHEET ARE THE SAME FOR OVERHEAD SIGNS, BUT THE METHOD OF MOUNTING IS SHOWN ON OVERHEAD TRUSS DRAWINGS.

6. DATE OF ERECTION AND SIGN SIZE (WIDTH X HEIGHT) SHALL BE LEGIBLY WRITTEN ON THE BACK OF EACH SIGN WITH A PERMANENT GREASE MARKER.

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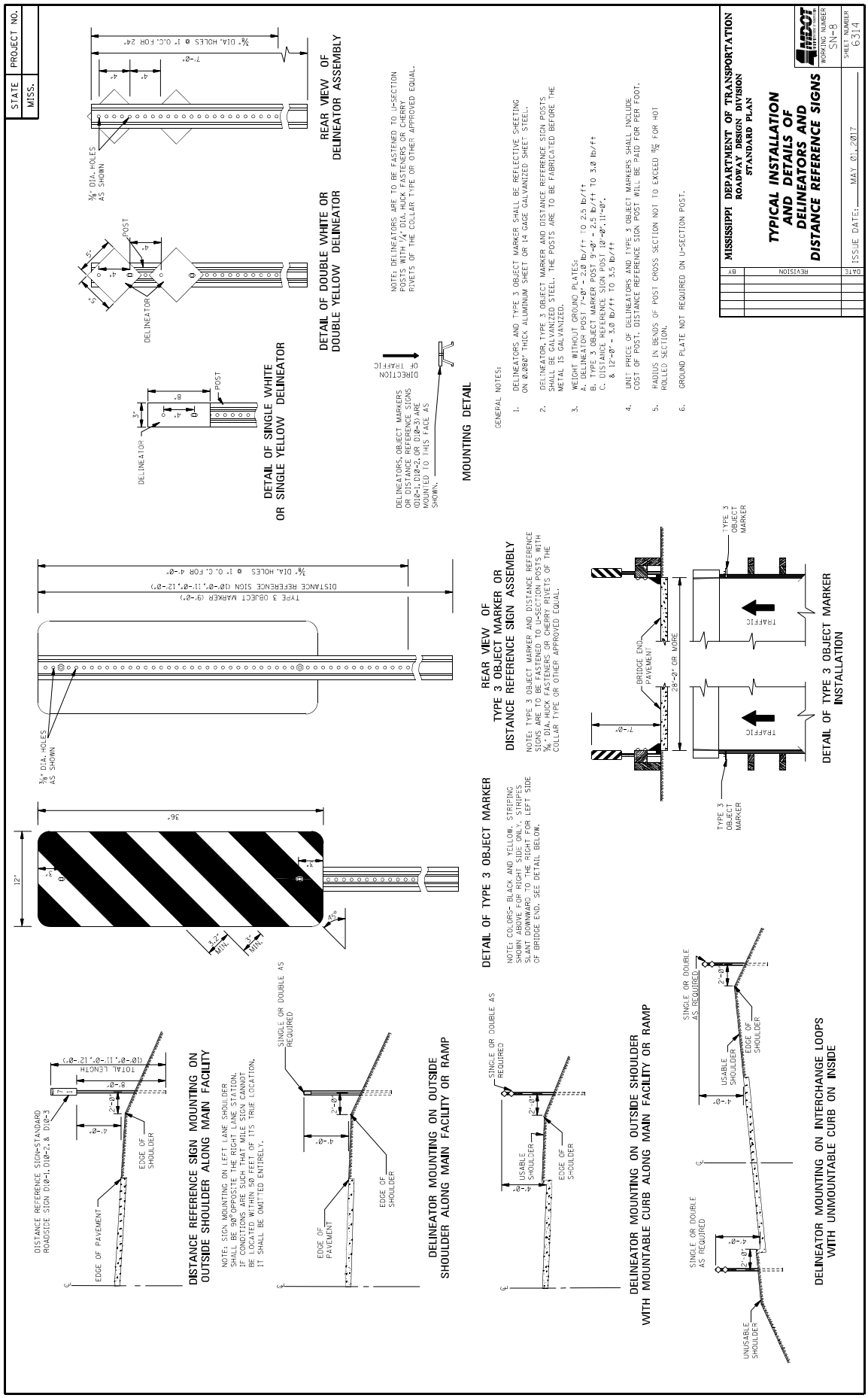
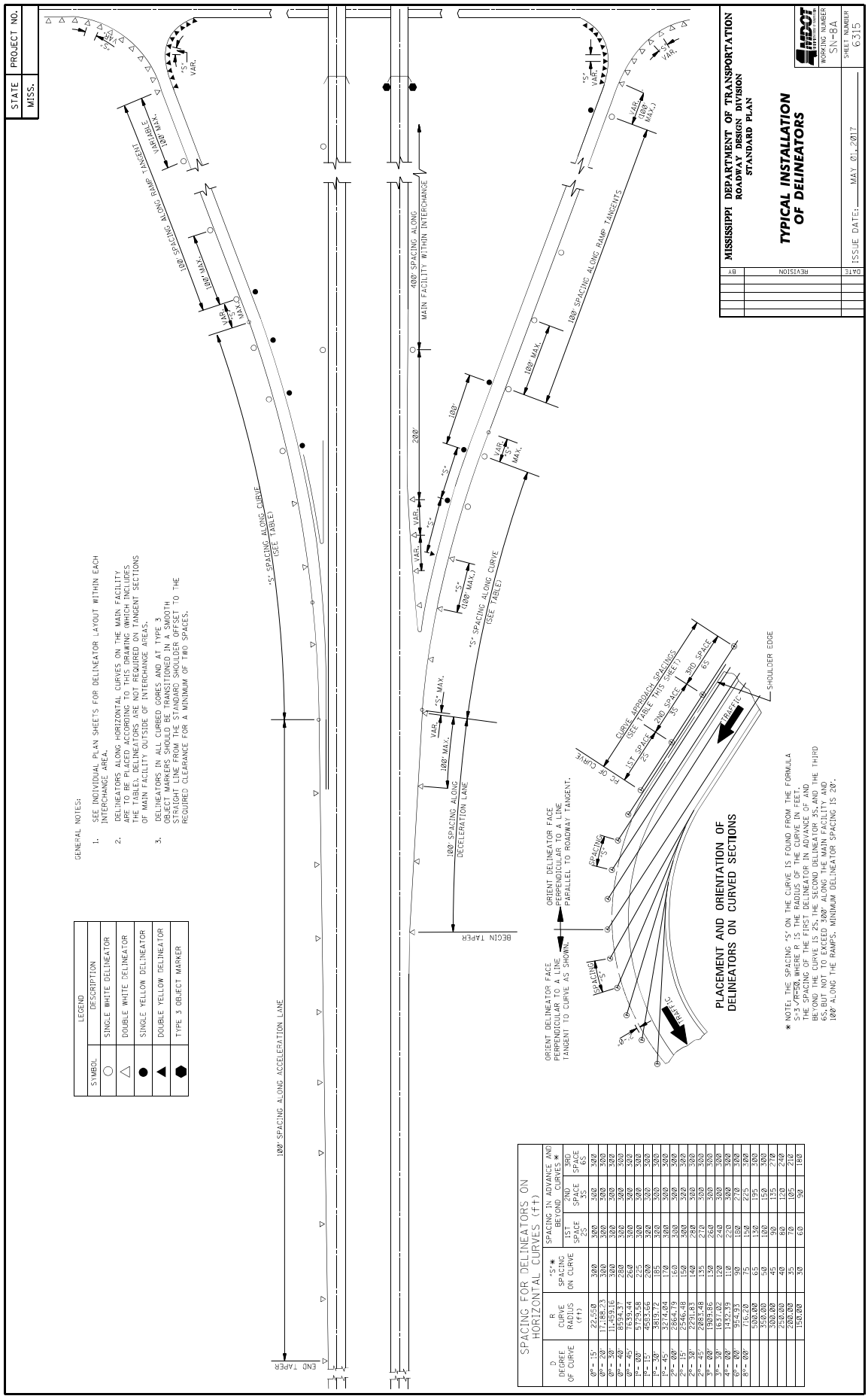
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SIGN FACE CONST. AND ATTACHMENT OF GROUND MOUNTED DIRECTIONAL SIGNS TO STEEL BEAMS (EXTRUDED ALUMINUM PANELS)

ISSUE DATE: MAY 01, 2017

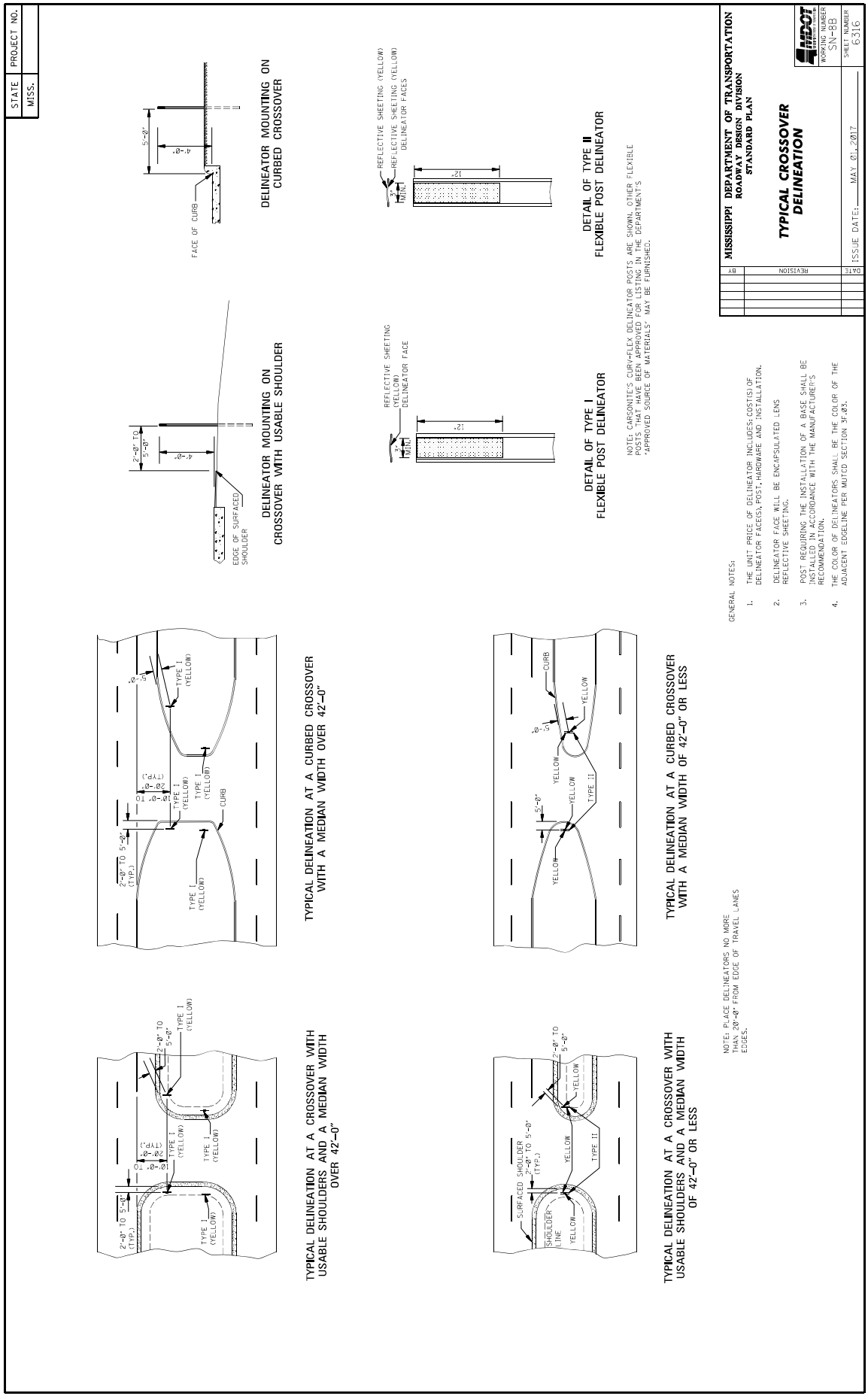
MDOT
WORKING NUMBER SN-7
SHEET NUMBER 6313

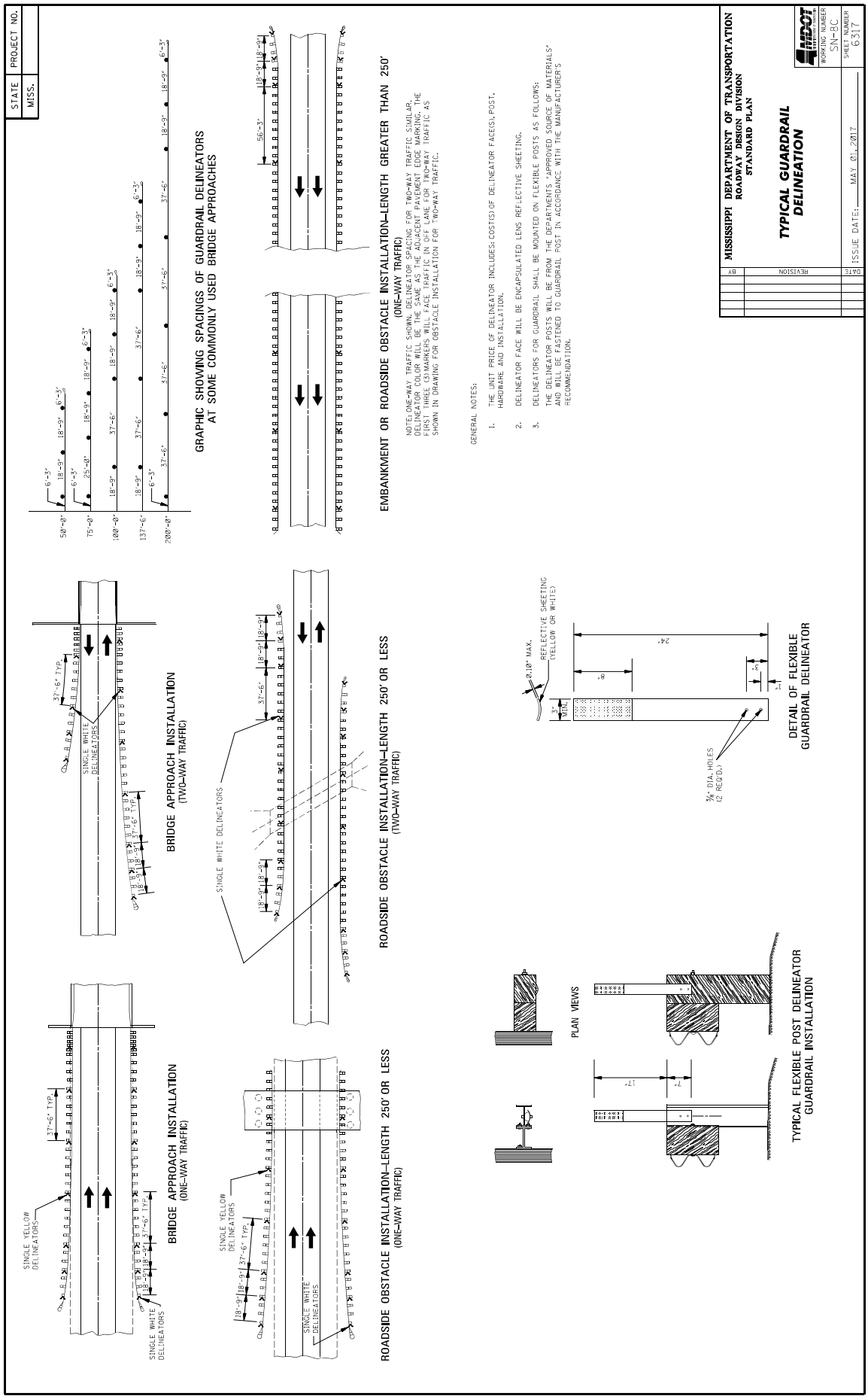

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS
WORKING NUMBER SN-8
SHEET NUMBER 6314
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR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

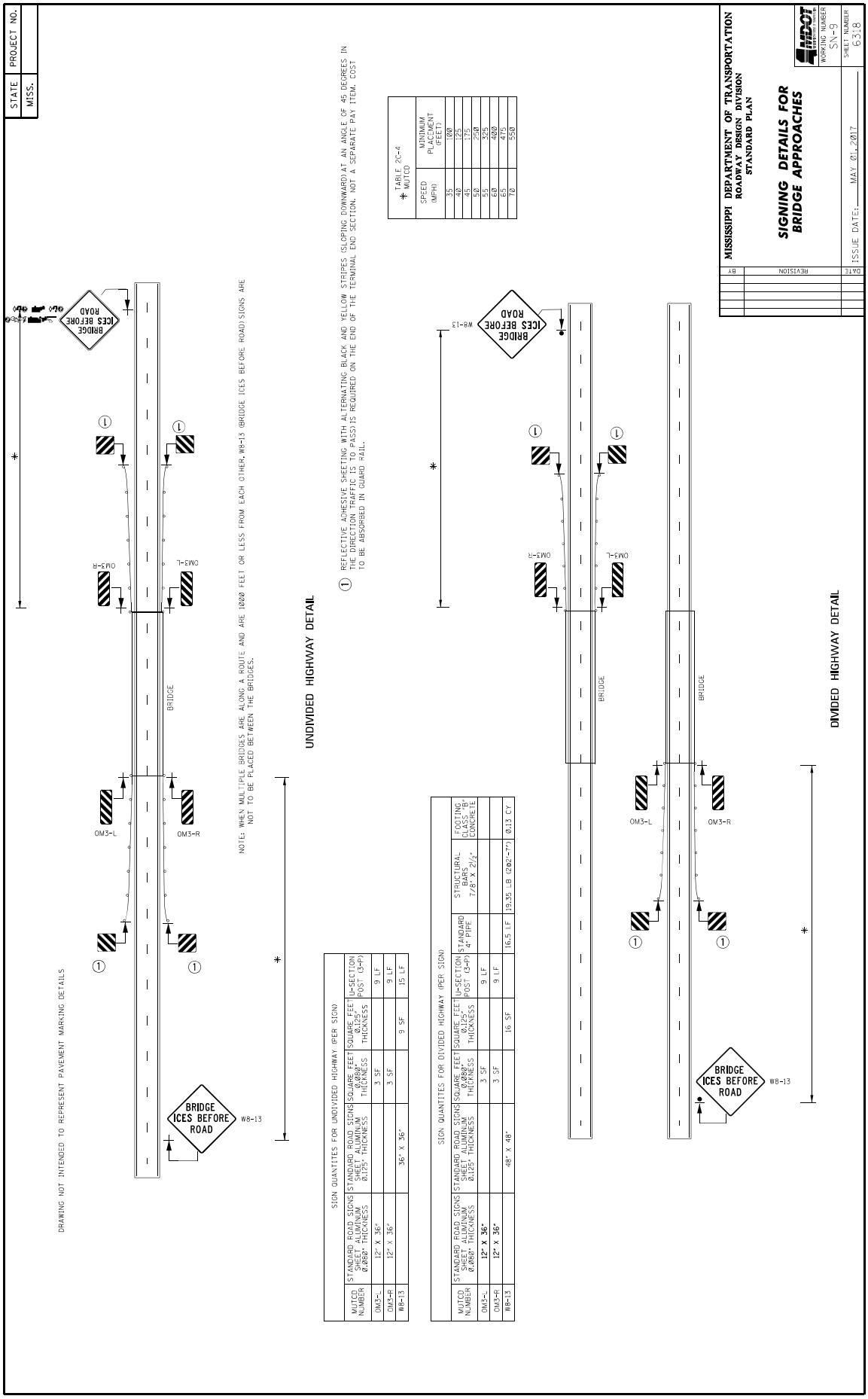


SPACING FOR DELINEATORS ON HORIZONTAL CURVES (ft)

D DEGREE OF CURVE	R CURVE RADIUS (ft)	'S'* SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVE *		
			1ST SPACE 2S	2ND SPACE 3S	3RD SPACE 6S
0°- 15'	22,550	300	300	300	300
0°- 20'	17,188.73	300	300	300	300
0°- 30'	11,459.16	300	300	300	300
0°- 40'	8594.37	300	300	300	300
0°- 45'	7639.44	260	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
5°- 00'	1146.28	90	180	225	300
	1000.00	80	160	200	300
	900.00	75	150	195	300
	800.00	70	140	190	300
	700.00	65	130	185	300
	600.00	60	120	180	300
	500.00	50	100	150	300
	400.00	45	90	135	270
	350.00	40	80	120	240
	300.00	35	70	105	210
	250.00	30	60	90	180
	200.00	25	50	75	150
	150.00	20	40	60	120


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL CROSSOVER DELINEATION
WORKING NUMBER SN-8B
SHEET NUMBER 6316
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
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: CARSONITE'S CURV-FLEX DELINEATOR POSTS ARE SHOWN. OTHER FLEXIBLE POSTS THAT HAVE BEEN APPROVED FOR LISTING IN THE DEPARTMENT'S "APPROVED SOURCE OF MATERIALS" MAY BE FURNISHED.
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OVER 42'-0"
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND 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 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), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
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 SECTION 3F.03.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL GUARDRAIL DELINEATION
WORKING NUMBER SN-8C
SHEET NUMBER 6517
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
GRAPHIC SHOWING SPACINGS OF GUARDRAIL DELINEATORS AT SOME COMMONLY USED BRIDGE APPROACHES
50'-0" 75'-0" 100'-0" 137'-6" 200'-0"
6'-3" 18'-9" 25'-0" 37'-6"
EMBANKMENT OR ROADSIDE OBSTACLE INSTALLATION-LENGTH GREATER THAN 250' (ONE-WAY TRAFFIC)
NOTE: ONE-WAY TRAFFIC SHOWN. DELINEATOR SPACING FOR TWO-WAY TRAFFIC SIMILAR. DELINEATOR COLOR WILL BE THE SAME AS THE ADJACENT PAVEMENT EDGE MARKING. THE FIRST THREE (3) MARKERS WILL FACE TRAFFIC IN OFF LANE FOR TWO-WAY TRAFFIC AS SHOWN IN DRAWING FOR OBSTACLE INSTALLATION FOR TWO-WAY TRAFFIC.
GENERAL NOTES:
1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
3. DELINEATORS FOR GUARDRAIL SHALL BE MOUNTED ON FLEXIBLE POSTS AS FOLLOWS: THE DELINEATOR POSTS WILL BE FROM THE DEPARTMENTS "APPROVED SOURCE OF MATERIALS" AND WILL BE STEMED TO GUARDRAIL POST IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
BRIDGE APPROACH INSTALLATION (TWO-WAY TRAFFIC)
SINGLE WHITE DELINEATORS
37'-6" TYP.
18'-9" TYP.
BRIDGE APPROACH INSTALLATION (ONE-WAY TRAFFIC)
SINGLE YELLOW DELINEATORS
SINGLE WHITE DELINEATORS
ROADSIDE OBSTACLE INSTALLATION-LENGTH 250' OR LESS (TWO-WAY TRAFFIC)
ROADSIDE OBSTACLE INSTALLATION-LENGTH 250' OR LESS (ONE-WAY TRAFFIC)
SINGLE YELLOW DELINEATORS
SINGLE WHITE DELINEATORS
0.10" MAX.
REFLECTIVE SHEETING (YELLOW OR WHITE)
3" MIN.
24"
3/8" DIA. HOLES (2 REQ'D.)
DETAIL OF FLEXIBLE GUARDRAIL DELINEATOR
PLAN VIEWS
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: MAY 01, 2017
DATE REVISION BY
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 ICES BEFORE ROAD
W8-13
OM3-L
OM3-R
BRIDGE
* TABLE 2C-4 MUTCD
SPEED (MPH) | MINIMUM PLACEMENT (FEET)
35 | 100
40 | 125
45 | 175
50 | 250
55 | 325
60 | 400
65 | 475
70 | 550
① REFLECTIVE ADHESIVE SHEETING WITH ALTERNATING BLACK AND YELLOW STRIPES (SLOPING DOWNWARD) 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.
SIGN QUANTITIES FOR UNDIVIDED HIGHWAY (PER SIGN)
MUTCD NUMBER | STANDARD ROAD SIGNS SHEET ALUMINUM 0.125" THICKNESS | STANDARD ROAD SIGNS SHEET ALUMINUM 0.080" THICKNESS | SQUARE FEET OF POSTS THICKNESS | SQUARE FEET OF POSTS THICKNESS | U-SECTION POST (3-P)
OM3-L | 12" X 36" | | 3 SF | | 9 LF
OM3-R | 12" X 36" | | 3 SF | | 9 LF
W8-13 | | 36" X 36" | 9 SF | | 15 LF
SIGN QUANTITIES FOR DIVIDED HIGHWAY (PER SIGN)
MUTCD NUMBER | STANDARD ROAD SIGNS SHEET ALUMINUM 0.125" THICKNESS | STANDARD ROAD SIGNS SHEET ALUMINUM 0.080" THICKNESS | SQUARE FEET OF POSTS THICKNESS | SQUARE FEET OF POSTS THICKNESS | U-SECTION POST (3-P) | STANDARD 4" PIPE | STRUCTURAL BARS 7/8" X 2½" | FOOTING CLASS "B" CONCRETE
OM3-L | 12" X 36" | | 3 SF | | 9 LF | | | |
OM3-R | 12" X 36" | | 3 SF | | 9 LF | | | |
W8-13 | | 48" X 48" | | 16 SF | | 16.5 LF | 19.35 LB (2@2-7") | 0.13 CY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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. 907-105-1 **CODE: (SP)**

DATE: 05/07/2021

SUBJECT: Authority of the Engineer

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

907-105.1--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.

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. 907-109-4 **CODE: (IS)**

DATE: **04/19/2021**

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.

907-109.06--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. 907-414-1 **CODE: (SP)**

DATE: 05/02/2017

SUBJECT: Polymer Modified Asphalt Rejuvenating Scrub Seal

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

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

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

907-414.02--Materials.

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

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

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

(1) Exception to AASHTO T59: Bring the temperature on the lower thermometer slowly to 350ºF plus or minus 10ºF. Maintain at this temperature for 20 minutes. Complete total distillation in 60 plus or minus 5 minutes from first application of heat.

(2) Polymer Modifier Testing: Suitable substrate for film formation shall be polyethylene boards, silicone rubber sheeting, glass, or any substrate which produces a cured film of uniform cross-section. Polymer film shall be prepared from latex as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Seal Aggregate Gradation	Bituminous Material	Target Application Rate (gal/yd^2)	Tolerance
Size No. 7	Emulsified Asphalt	0.33	±0.03
Size No. 8 or 89	Emulsified Asphalt	0.30	±0.03

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

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

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

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

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

Size 7 Slag, Stone, Gravel or Expanded Clay	= 0.30 ±0.02 ft^3 / yd^2
Size 8 Expanded Clay	= 0.25 ±0.02 ft^3 / yd^2
Size 89 Slag, Stone, or Gravel	= 0.25 ±0.02 ft^3 / yd^2

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

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

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

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

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

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

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

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

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

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

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

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

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

A. Asphalt Distributor. The asphalt distributor for application of the emulsion shall have a full circulation spray bar that is adjustable to at least sixteen feet (16') wide in two (2) feet increments and capable of heating and circulating the emulsion simultaneously. It must have computerized rate control for adjusting and controlling the application from the cab within 0.01 gallons per square yard increments. The distributor shall also be equipped with a volume measuring device and a thermometer for measuring the emulsion temperature in the tank.

B. Scrub Broom. A scrub broom as described herein shall be used to scrub the emulsion after application. The scrub broom frame shall be constructed of metal. The scrub broom shall be attached to and pulled by the distributor truck. The scrub broom must be equipped with a means of raising and lowering the scrub broom at desired points. It shall be towable in the elevated position to the next area of construction. The weight of the broom assembly shall be such that it does not squeegee the emulsion off the roadway surface.

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

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

D. Roller. A minimum of two (2) pneumatic rollers weighing at least five (5) tons each.

E. Power Broom. Two (2) mechanically powered kick-brooms or vacuum type brooms.

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

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

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

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

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

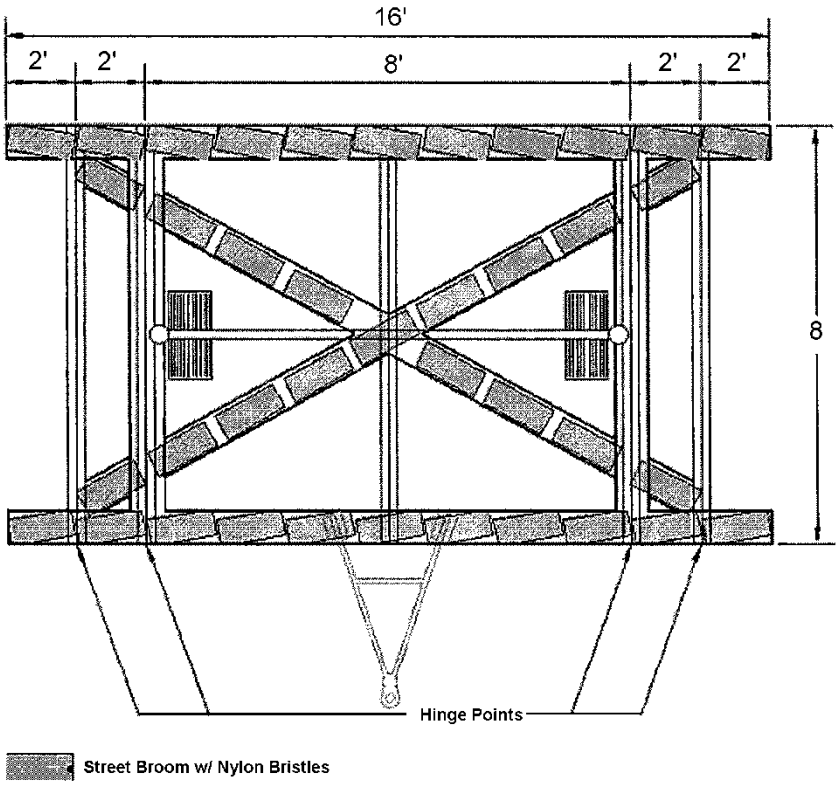
907-414.05--Basis of Payment. Scrub seal, measured as prescribed above, will be paid for at the contract bid price per square yard, which shall be full compensation for furnishing all labor, materials, equipment, temporary markers, vegetation removal, cleaning of the surface, pre-sweeping, post-sweeping,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

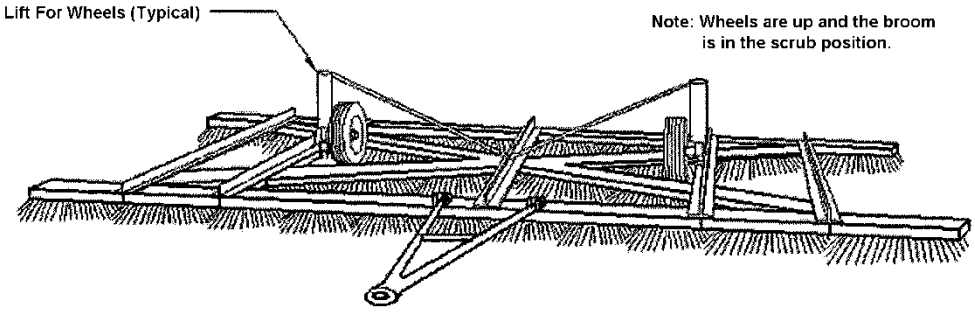
Asphalt for fog seal will be paid for at the contract unit price per gallon, which shall be full compensation for furnishing all labor, materials, equipment, applying and protecting the fog seal, and all incidentals necessary to complete the work.

Payment will be made under:

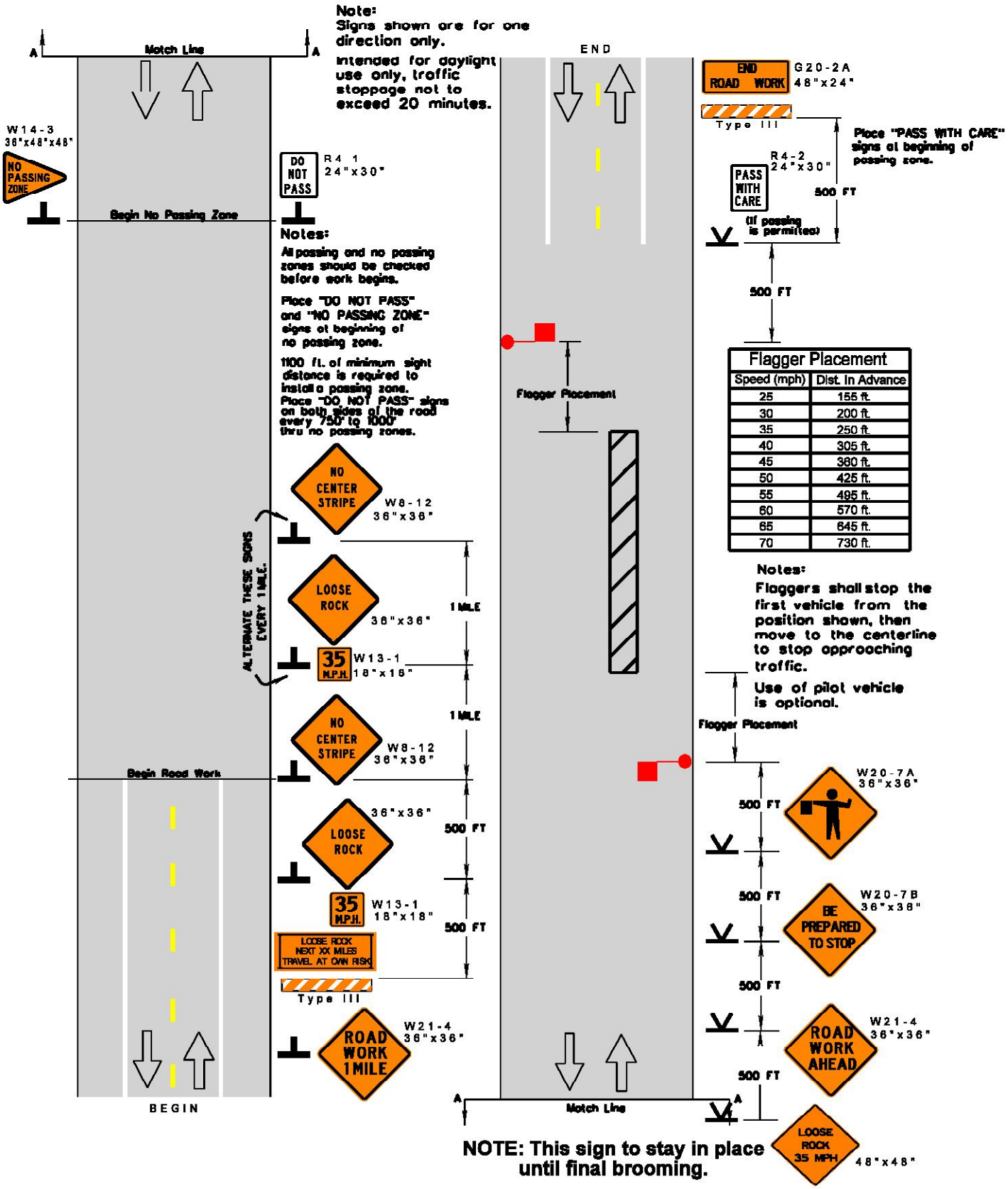
907-414-A: Scrub Seal - per square yard

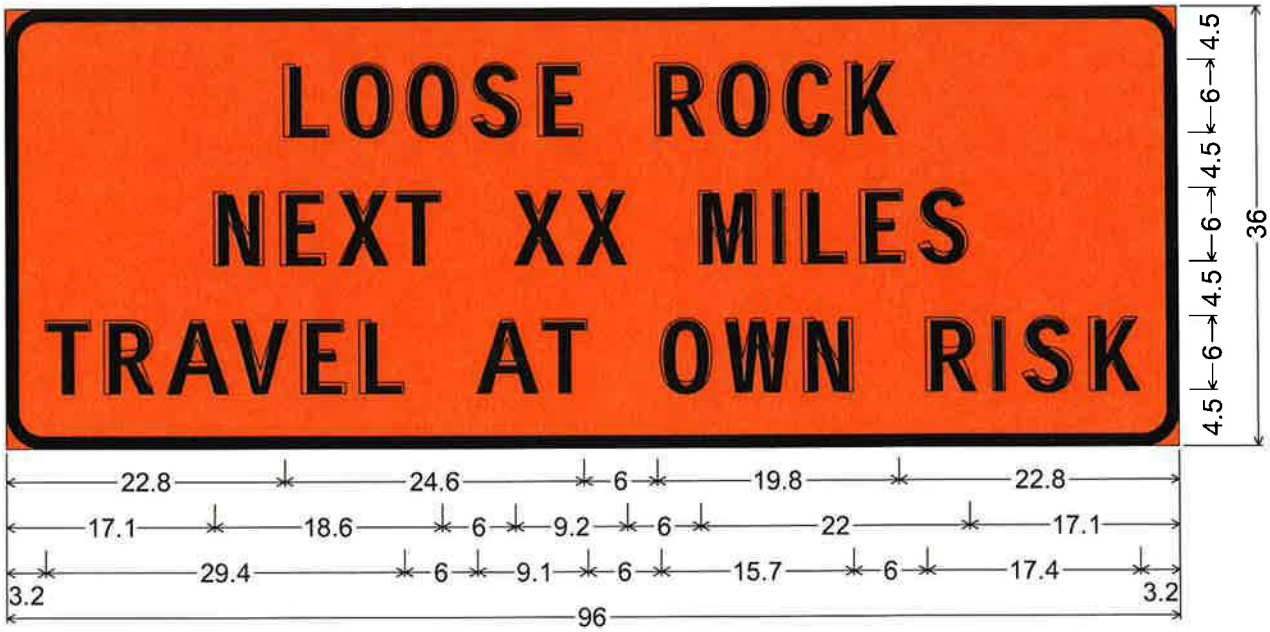
907-414-B: Asphalt for Fog Seal - per gallon


16'
2'
2'
8'
2'
2'
8
Hinge Points
Street Broom w/ Nylon Bristles


Lift For Wheels (Typical)
Note: Wheels are up and the broom is in the scrub position.

Scrub Broom


Note:
Signs shown are for one direction only.
Intended for daylight use only, traffic stoppage not to exceed 20 minutes.
Match Line
A
A
W14-3
36"x48"x48"
NO PASSING ZONE
Begin No Passing Zone
DO NOT PASS
R4-1
24"x30"
Notes:
All passing and no passing zones should be checked before work begins.
Place "DO NOT PASS" and "NO PASSING ZONE" signs at beginning of no passing zone.
1100 ft. of minimum sight distance is required to install a passing zone.
Place "DO NOT PASS" signs on both sides of the road every 750' to 1000' thru no passing zones.
ALTERNATE THESE SIGNS EVERY 1 MILE.
NO CENTER STRIPE
W8-12
36"x36"
LOOSE ROCK
36"x36"
1 MILE
35 M.P.H.
W13-1
18"x18"
1 MILE
NO CENTER STRIPE
W8-12
36"x36"
Begin Road Work
36"x36"
LOOSE ROCK
500 FT
35 M.P.H.
W13-1
18"x18"
500 FT
LOOSE ROCK NEXT XX MILES TRAVEL AT OWN RISK
Type III
ROAD WORK 1 MILE
W21-4
36"x36"
BEGIN
END
Flagger Placement
Match Line
A
A
END ROAD WORK
G20-2A
48"x24"
Type III
Place "PASS WITH CARE" signs at beginning of passing zone.
R4-2
24"x30"
PASS WITH CARE
500 FT
(if passing is permitted)
500 FT
Flagger Placement
Speed (mph) | Dist. In Advance
25 | 155 ft.
30 | 200 ft.
35 | 250 ft.
40 | 305 ft.
45 | 380 ft.
50 | 425 ft.
55 | 495 ft.
60 | 570 ft.
65 | 645 ft.
70 | 730 ft.
Notes:
Flaggers shall stop the first vehicle from the position shown, then move to the centerline to stop approaching traffic.
Use of pilot vehicle is optional.
Flagger Placement
500 FT
W20-7A
36"x36"
500 FT
BE PREPARED TO STOP
W20-7B
36"x36"
500 FT
ROAD WORK AHEAD
W21-4
36"x36"
500 FT
LOOSE ROCK 35 MPH
48"x48"
NOTE: This sign to stay in place until final brooming.

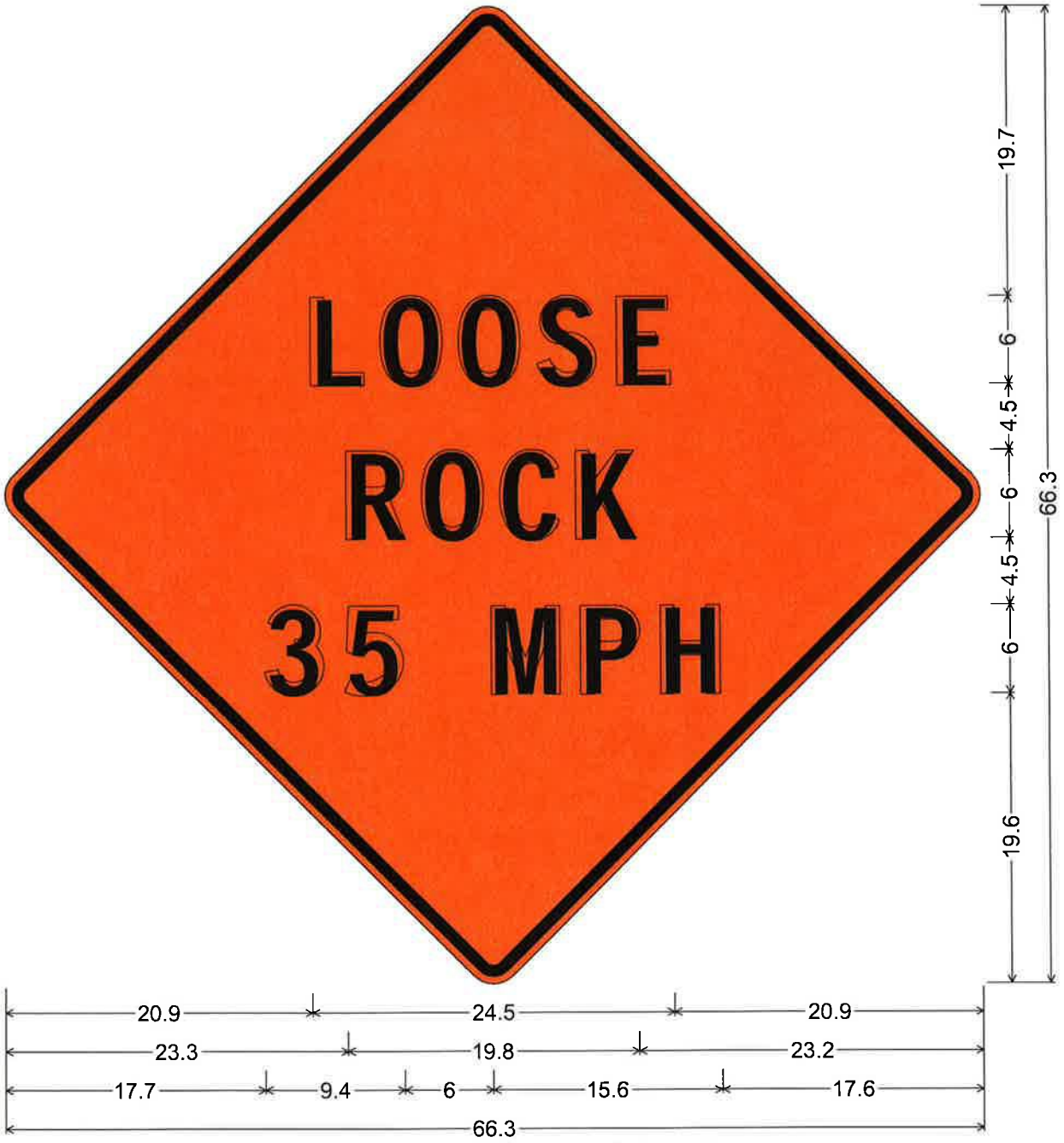


3.0" Radius, 1.0" Border, Black on Orange;
"LOOSE ROCK" D; "NEXT XX MILES" D; "TRAVEL AT OWN RISK" D;
Table of letter and object lefts.

L 22.8	O 27.6	O 33.0	S 38.3	E 43.7	R 53.4	O 58.5	C 63.9	K 69.0

N 17.1	E 22.5	X 27.3	T 32.1	X 41.7	X 46.9	M 56.9	I 63.0	L 65.3	E 70.1	S 74.9

T 3.2	R 8.0	A 13.2	V 18.6	E 24.2	L 29.0	A 38.6	T 44.0	O 53.7	W 59.0	N 65.4	R 75.4	I 80.9	S 83.2	K 88.6



48.0" across sides 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange;
"LOOSE" D; "ROCK" D; "35 MPH" D;
Table of letter and object lefts.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

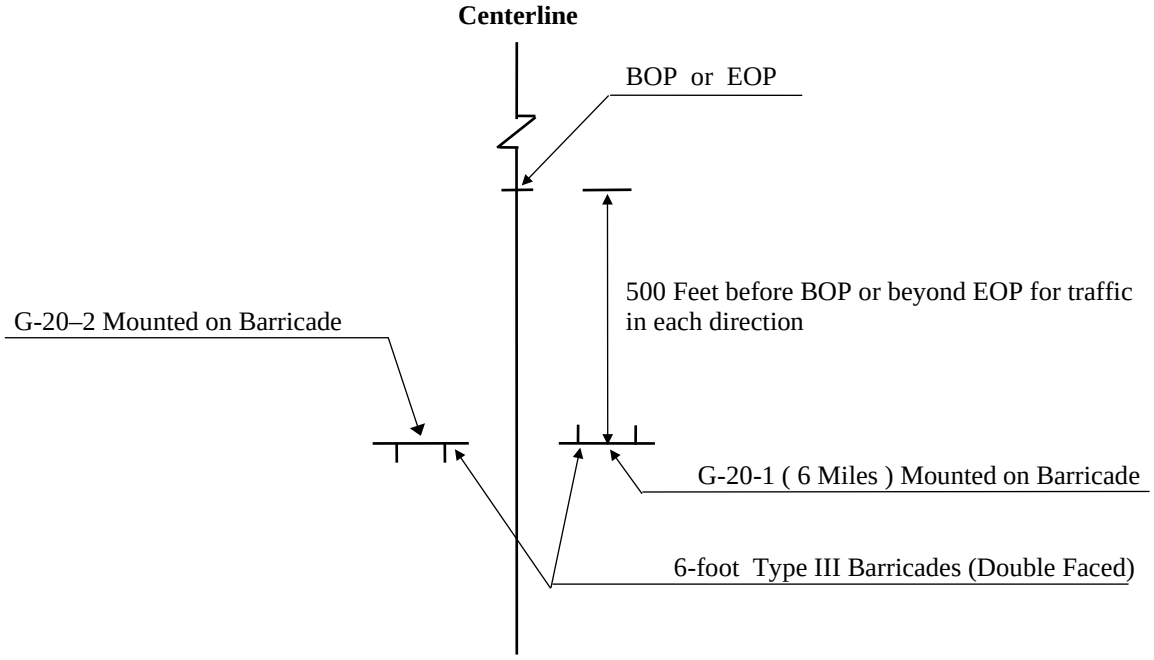
SUPPLEMENT TO SPECIAL PROVISION NO. 907-618-4

DATE: 08/16/2022

PROJECT: MP-2014-04(008) / 307902301 – Attala County

After the first paragraph of Subsection 907-618.01.2 on page 1, add the following.

Additional traffic control devices will be required as follows.

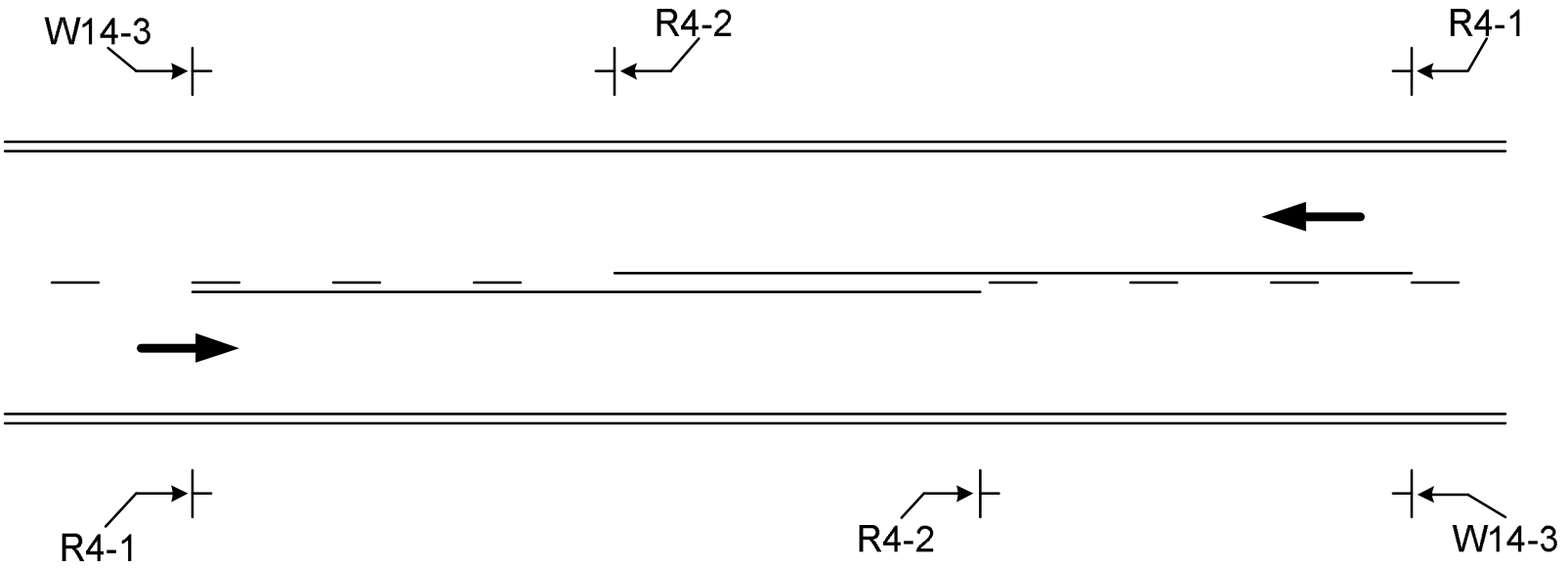


ADDITIONAL TRAFFIC CONTROL SIGNS REQUIRED:

- 26 - W20-1 “AHEAD” signs required. One (1) W20-1 “AHEAD” sign is required at each local road or street entering the project.
- 37 - R4-1 “DO NOT PASS” signs required.
- 14 - R4-2 “PASS WITH CARE” signs required.
- 14 - W14-3 “NO PASSING ZONE” signs required.

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, this drawing, and as specified in the Manual on Uniform Traffic Control Devices.

All construction signs and barricades shown on this page shall be included in the bid price for Pay Item 618-A, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except for R4-1 and R4-2 signs which shall be black legend and border on white background.



The W14-3, No Passing Zone sign, shall be placed on the left side of the road at the beginning of each no passing zone.

The R4-1, Do Not Pass signs, shall be placed on the right side of the road at the beginning of the no passing zone. Additional R4-1 signs shall be placed right and left in increments of 750 to 1000 feet throughout the length of the no passing zone.

The R4-2, Pass With Care sign, shall be placed on the right side of the road at the end of the no passing zone.

The R4-1, R4-2 and W14-3 signs are to be used when standard pavement markings are not in place. The signs may also be used to emphasize pavement markings.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

DATE: 02/01/2018

SUBJECT: Additional Signing Requirements

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-619-6 **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.

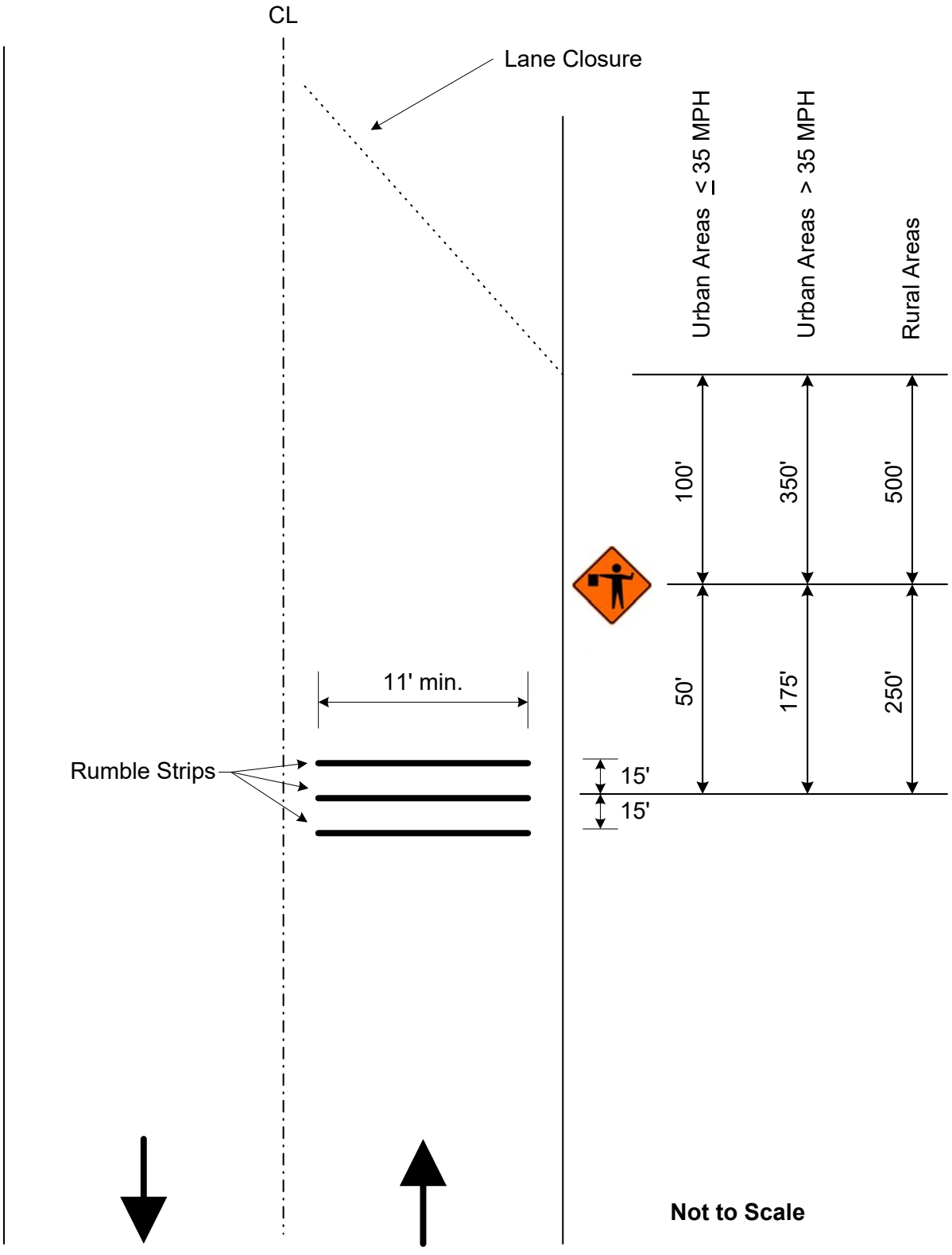
Temporary Portable Rumble Strips will be measured for payment by the linear foot only when a pay item for temporary portable rumble strips is included in the contract. Otherwise, temporary portable rumble strips will be included in the cost of pay item 618-A, Maintenance of Traffic. The quantity of temporary 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. 907-701-3 **CODE: (IS)**

DATE: 05/04/2021

SUBJECT: Hydraulic Cement

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

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.

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

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

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

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

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

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

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

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

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

Table 1- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Sulfate Exposure	Water-soluble sulfate (SO_4) in soil, % by mass	Sulfate (SO_4) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type I cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS or Type II*,** cement
Severe	0.20 - 2.00	1,500 - 10,000	Type I cement with a replacement by weight of 49.5 - 50.0% GGBFS, or Type II* cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS

* Type III cement conforming to AASHTO M85 with a maximum 8% tricalcium aluminate (C_3A) may be used in lieu of Type II cement as allowed in Subsection 701.02.1; this cement is given the designation "Type III(MS)."

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

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

907-701.02.2.2--Portland Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions or Seawater. When portland cement for use in soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall meet the requirements of Subsection 701.02.2.1.

907-701.04--Blended Hydraulic Cement.

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

907-701.04.1.1--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.

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

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

The blended cement manufacturer shall include the percent equivalent alkalis as Na_2O on their cement mill reports.

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

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

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

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

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

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

Table 2- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Sulfate Exposure	Water-soluble sulfate (SO_4) in soil, % by mass	Sulfate (SO_4) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type IL (MS)* cement, Type IL cement with one of the following replacements of cement by weight: 24.5 - 35.0% Class F fly ash, or 49.5 - 50.0% GGBFS, Type IP (MS) cement, or Type IS (MS) cement
Severe	0.20 - 2.00	1,500 - 10,000	Type IL cement with a replacement of cement by weight of 49.5 - 50.0% GGBFS, or Type IL (MS) cement with one of following replacements of cement by weight: 24.5 - 35.0% Class F fly ash, or 49.5 - 50.0% GGBFS

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

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

907-701.04.2.2--Blended Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions or Seawater. When blended cement for use in soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall meet the requirements of Subsection 701.04.2.1.

Delete Subsection 701.04.3 on page 721.

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. 907-703-1 **CODE: (IS)**

DATE: 06/13/2018

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--Course 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-705-1 **CODE: (IS)**

DATE: 06/13/2018

SUBJECT: Stone Riprap

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-707-3 **CODE: (IS)**

DATE: **10/27/2021**

SUBJECT: **Joint Materials**

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

907-707.02--Joint Filler.

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-711-2 **CODE: (IS)**

DATE: 09/11/2018

SUBJECT: Plain Steel Wire

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-712-1 **CODE: (SP)**

DATE: 12/07/2021

SUBJECT: Fence and Guardrail

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

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

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

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

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

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

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

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

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

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

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

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

907-712.05--Fence Posts and Braces.

907-712.05.1--Treated Timber Posts and Braces.

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

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

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

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

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

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

907-712.05.2--Metal Posts.

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

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

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

907-712.05.2.3--Blank.

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

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

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

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

907-712.06--Guard and Guardrail Posts.

907-712.06.2--Treated Wood Posts.

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

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

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

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-3 **CODE: (SP)**

DATE: **08/31/2021**

SUBJECT: **Miscellaneous Materials**

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

907-714.01--Water.

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

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.

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

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. 907-720-2 **CODE: (IS)**

DATE: 09/11/2018

SUBJECT: Acceptance Procedure for Glass Beads

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

907-720.01--Glass Beads.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-4 **CODE: (IS)**

DATE: **04/19/2022**

SUBJECT: **Materials for Signing**

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

907-721.06--Reflective Sheeting.

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

MINIMUM COEFFICIENTS OF RETROREFLECTION
Candela per foot candle per square foot (cd/fc/ft^2)
Per ASTM Designation D4956

TABLE 4
Type IX Sheeting

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

TABLE 5
Type XI Sheeting

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

After Subsection 721.10 on page 864, add the following.

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

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

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

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

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

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

Table 1
Retroreflective Film Minimum Durability Requirements

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

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

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

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

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

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

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

S E C T I O N 9 0 5 - P R O P O S A L

Date _____

Mississippi Transportation Commission
Jackson, Mississippi

Sirs: The following proposal is made on behalf of _____
_____ of _____
_____
for constructing the following designated project(s) within the time(s) hereinafter specified.

The plans are composed of drawings and blue prints on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

The Specifications are the current Standard Specifications of the Mississippi Department of Transportation approved by the Federal Highway Administration, except where superseded or amended by the plans, Special Provisions and Notice(s) to Bidders attached hereto and made a part thereof.

I (We) certify that I (we) possess a copy of said Standard and any Supplemental Specifications.

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

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

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

1. Two or more items entered opposite a single unit quantity WITHOUT DEFINITE DESIGNATION AS "ALTERNATE ITEMS" are considered as "OPTIONAL ITEMS". Bidders may or may not indicate on bids the Optional Item proposed to be furnished or performed WITHOUT PREJUDICE IN REGARD TO IRREGULARITY OF BIDS.
2. Items classified on the bid schedule as "ALTERNATE ITEMS" and/or "ALTERNATE TYPES OF CONSTRUCTION" must be preselected and indicated on bids. However, "Alternate Types of Construction" may include Optional Items to be treated as set out in Paragraph 1, above.
3. Optional items not preselected and indicated on the bid schedule MUST be designated in accordance with Subsection 102.06 prior to or at the time of execution of the contract.
4. Optional and Alternate items designated must be used throughout the project.

I (We) further propose to perform all "force account or extra work" that may be required of me (us) on the basis provided in the Specifications and to give such work my (our) personal attention in order to see that it is economically performed.

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

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

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.

Scrub Seal & Overlay approximately 6 miles of SR 14 from SR 35 to 0.75 miles west of SR 19, known as State Project No. MP-2014-04(008) / 307902301 in Attala County.

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
				Roadway Items	
0010	202-B007		850	Square Yard	Removal of Asphalt Pavement, All Depths
0020	202-B215		7	Each	Removal of Sign Including Post & Footing
0030	203-G001	(E)	50	Cubic Yard	Excess Excavation, FM, AH
0040	304-B004	(GT)	2,200	Ton	Granular Material, Class 5, Group D
0050	403-A006	(BA1)	575	Ton	19-mm, ST, Asphalt Pavement
0060	403-A015	(BA1)	8,275	Ton	9.5-mm, ST, Asphalt Pavement
0070	403-B012	(BA1)	600	Ton	9.5-mm, ST, Asphalt Pavement, Leveling
0080	406-A002		1,300	Square Yard	Cold Milling of Bituminous Pavement, All Depths
0090	407-A001	(A2)	7,800	Gallon	Asphalt for Tack Coat
0100	423-A001		12	Mile	Rumble Strips, Ground In
0110	503-C010		900	Linear Feet	Saw Cut, Full Depth
0120	618-A001		1	Lump Sum	Maintenance of Traffic
0130	618-B001		1	Square Feet	Additional Construction Signs ($10.00)
0140	619-A1001		24	Mile	Temporary Traffic Stripe, Continuous White
0150	619-A2001		8	Mile	Temporary Traffic Stripe, Continuous Yellow
0160	619-A4002		8	Mile	Temporary Traffic Stripe, Skip Yellow
0170	619-A5001		11,650	Linear Feet	Temporary Traffic Stripe, Detail
0180	619-A6002		4,000	Linear Feet	Temporary Traffic Stripe, Legend
0190	620-A001		1	Lump Sum	Mobilization
0200	626-C002		12	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0210	626-D001		4	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0220	626-E001		4	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0230	626-G004		3,810	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0240	626-G005		2,010	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
0250	626-H002		1,972	Linear Feet	Thermoplastic Double Drop Legend, White
0260	627-J001		586	Each	Two-Way Clear Reflective High Performance Raised Markers
0270	627-L001		682	Each	Two-Way Yellow Reflective High Performance Raised Markers
0280	630-A001		168	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0290	630-A003		195	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0300	630-A005		201	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.1" Thickness
0310	630-C001		105	Linear Feet	Square Tube Posts, 4.0 lb/ft
0320	630-C005		945	Linear Feet	Square Tube Posts, 2.0 lb/ft
0330	907-414-A001		95,600	Square Yard	Scrub Seal
0340	907-619-B001		66	Linear Feet	Temporary Portable Rumble Strips

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.

* *

COMBINATION BID PROPOSAL

This proposal is tendered as one part of a Combination Bid Proposal utilizing option ___* of Subsection 102.11 on the following contracts:

* Option to be shown as either (a), (b), or (c).

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

(a) If Combination A has been selected, your Combination Bid is complete.

(b) If Combination B has been selected, then complete the following page.

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

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.

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 _____

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION

I,_____,
(Name of person signing bid)

individually, and in my capacity as_____ of
(Title of person signing bid)

_____
(Name of Firm, partnership, or Corporation)

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

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

on Project No. **MP-2014-04(008)/ 307902301000**

in **Attala** 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)

SECTION 902

CONTRACT FOR **MP-2014-04(008)/ 307902301000**

LOCATED IN THE COUNTY(IES) OF **Attala**

STATE OF MISSISSIPPI,
COUNTY OF HINDS

This contract entered into by and between the Mississippi Transportation Commission on one hand, and the undersigned contractor, on the other witnesseth;

That, in consideration of the payment by the Mississippi Transportation Commission of the prices set out in the proposal hereto attached, to the undersigned contractor, such payment to be made in the manner and at the time of times specified in the specifications and the special provisions, if any, the undersigned contractor hereby agrees to accept the prices stated in the proposal in full compensation for the furnishing of all materials and equipment and the executing of all the work contemplated in this contract.

It is understood and agreed that the advertising according to law, the Advertisement, the instructions to bidders, the proposal for the contract, the specifications, the revisions of the specifications, the special provisions, and also the plans for the work herein contemplated, said plans showing more particularly the details of the work to be done, shall be held to be, and are hereby made a part of this contract by specific reference thereto and with like effect as if each and all of said instruments had been set out fully herein in words and figures.

It is further agreed that for the same consideration the undersigned contractor shall be responsible for all loss or damage arising out of the nature of the work aforesaid; or from the action of the elements and unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work, exceptions being those specifically set out in the contract; and for faithfully completing the whole work in good and workmanlike manner according to the approved Plans, Specifications, Special Provisions, Notice(s) to Bidders and requirements of the Mississippi Department of Transportation.

It is further agreed that the work shall be done under the direct supervision and to the complete satisfaction of the Executive Director of the Mississippi Department of Transportation, or his authorized representatives, and when Federal Funds are involved subject to inspection at all times and approval by the Federal Highway Administration, or its agents as the case may be, or the agents of any other Agency whose funds are involved in accordance with those Acts of the Legislature of the State of Mississippi approved by the Governor and such rules and regulations issued pursuant thereto by the Mississippi Transportation Commission and the authorized Federal Agencies.

The Contractor agrees that all labor as outlined in the Special Provisions may be secured from list furnished by

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

The Contractor agrees that he has read each and every clause of this Contract, and fully understands the meaning of same and that he will comply with all the terms, covenants and agreements therein set forth.

Witness our signatures this the____ day of _____,_____.

_____
Contractor(s)

By_____

Title_____

Signed and sealed in the presence of:
(names and addresses of witnesses)

_____

MISSISSIPPI TRANSPORTATION COMMISSION

By_____
Executive Director

_____
Secretary to the Commission

Award authorized by the Mississippi Transportation Commission in session on the ____ day of _____,_____, Minute Book No. _____, Page No. _____.

Revised 8/06/2003

SECTION 903
PERFORMANCE AND PAYMENT BOND

CONTRACT BOND FOR: **MP-2014-04(008)/ 307902301000**

LOCATED IN THE COUNTY(IES) OF: **Attala**

STATE OF MISSISSIPPI,
COUNTY OF HINDS

Know all men by these presents: that we, _____
(Contractor)
_____ Principal, a _____

residing at_____ in the State of _____

and _____
(Surety)
residing at _____ in the State of _____,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, effective as of the contract date shown below, are held and firmly bound unto the State of Mississippi in the sum of _____

_____

($_____) Dollars, lawful money of the United States of America, to be paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or assigns jointly and severally by these presents.

The conditions of this bond are such, that whereas the said _____

_____

principal, has (have) entered into a contract with the Mississippi Transportation Commission, bearing the date of _____ day of _____ A.D. _____ hereto annexed, for the construction of certain projects(s) in the State of Mississippi as mentioned in said contract in accordance with the Contract Documents therefor, on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

Now therefore, if the above bounden _____
_____in all things shall stand to and abide by and well and truly observe, do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract, contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the manner and form and furnish all of the material and equipment specified in said contract in strict accordance with the terms of said contract which said plans, specifications and special provisions are included in and form a part of said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in Subsection 109.11 of the approved specifications, and save harmless said Mississippi Transportation Commission from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud, or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employees in the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by the State at the instance of the Mississippi Transportation Commission or any officer of the State authorized in such cases, for double any amount in money or property, the State may lose or be overcharged or otherwise defrauded of, by reason of wrongful or criminal act, if any, of the Contractor(s), his (their) agents or employees, and shall promptly pay the said agents, servants and employees and all persons furnishing labor, material, equipment or supplies therefor, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; with the additional obligation that such Contractor shall promptly make payment of all taxes, licenses, assessments, contributions, damages,

any liquidated damages which may arise prior to any termination of said principal's contract, any liquidated damages which may arise after termination of the said principal's contract due to default on the part of said principal, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision: in the course of the performance of said work and in accordance with Sections 31-5-51 et seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of the Executive Director of the Mississippi Department of Transportation, all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with the terms thereof and all of the expense and cost and attorney's fee that may be incurred in the enforcement of the performance of said contract, or in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

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

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we_____
Contractor

_____
Address

_____
City, State ZIP

As principal, hereinafter called the Principal, and _____
Surety

a corporation duly organized under the laws of the state of _____

as Surety, hereinafter called the Surety, are held and firmly bound unto **State of Mississippi, 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 **Scrub Seal & Overlay approximately 6 miles of SR 14 from SR 35 to 0.75 miles west of SR 19, known as State Project No. MP-2014-04(008) / 307902301 in Attala 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

FORM CSD-612
Rev. 1 / 2015

YEAR 2023 PROGRESS SCHEDULE YEAR 2024

PROJECT NUMBER MP-2014-04(008) 307902301
COUNTY Attala

WORK PHASE NO.	WORK PHASE DESCRIPTION	LINE NUMBERS	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	
1	Miscellaneous	10-30, 100-190, 280-320, 340			0			52																			
2	Pavement	50-90, 330				5		39																			
3	Granular Material and Permanent Stripe	40, 200-270						39	52																		
	LET:	November 22, 2022																									
	NOA:	December 13, 2022																									
	NTP/BCT:	March 16, 2023																									
	W.D.:	52																									

MONTH	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	172 WORKING DAYS PER YEAR
ANTICIPATED WORKING DAYS PER MONTH	6	7	11	15	19	20	21	21	20	16	11	5	6	7	11	15	19	20	21	21	20	16	11	5	

NOTE: THE ANTICIPATED WORKING DAYS SHOWN ON THIS SCHEDULE ARE FOR INFORMATIONAL PURPOSES ONLY.
THE ACTUAL WORKING DAY TOTAL AS ASSESSED BY THE PROJECT ENGINEER ON FORM CSD-765 SHALL GOVERN.