

MDOT Use Only

Checked _____

Loaded _____

Keyed _____

08 -



SM No. CSP5021500201

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

08

Mill & Overlay approximately 11 miles of SR 21 from Dixon to SR 15, known as State Project No. SP-5021-50(020) / 108569301 in Neshoba County.

Project Completion: 94 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: SP-5021-50(020)/108569301 - Neshoba

Section 901 - Advertisement

Section 904 - Notice to Bidders

#1	Governing Specification
#3	Final Cleanup
#9	Federal Bridge Formula
#13	Safety Edge
#113	Tack Coat
#296	Reduced Speed Limit Signs
#401	Standard Drawings w/Supplement
#445	Mississippi Agent or Qualified Nonresident Agent
#446	Traffic on Milled Surface in Urban Areas
#516	Errata and Modifications to the 2017 Standard Specifications
#1225	Early Notice to Proceed
#1226	Material Storage Under Bridges
#1241	Fuel and Material Adjustments
#1963	Guardrail Pads
#2206	MASH Compliant Devices
#2207	Reflective Sheeting for Signs
#2273	Mississippi Special Fuel Tax Law
#2278	Smoothness Tolerances
#2365	Special Project Sign
#2503	Contract Time
#2504	Scope of Work
#2505	Temporary Construction Signs
#2506	Underground Utilities

Section 907 - Special Provisions

907-102-2	Bidding Requirements and Conditions
907-103-2	Award and Execution of Contract
907-109-1	Measurement and Payment
907-414-1	Polymer Modified Asphalt Rejuvenating Scrub Seal
907-619-6	Temporary Portable Rumble Strips
907-701-2	Hydraulic Cement
907-702-4	Bituminous Materials
907-703-1	Gradation
907-705-1	Stone Riprap
907-707-2	Joint Material
907-711-2	Plain Steel Wire
907-720-2	Acceptance Procedure for Glass Beads
907-721-2	Materials for Signs
907-808-1	Joint Repair
907-823-6	Preformed Joint Seal

Section 905 - Proposal, Proposal Bid Items, Combination Bid Proposal

PROJECT: SP-5021-50(020)/108569301 - Neshoba

State Board of Contractors Requirement

State Certification Regarding Non-Collusion, Debarment and Suspensions

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)

07/28/2020 01:51 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, August 25, 2020, from the Bid Express Service and shortly thereafter publicly read on the Sixth Floor for:

Mill & Overlay approximately 11 miles of SR 21 from Dixon to SR 15, known as State Project No. SP-5021-50(020) / 108569301 in Neshoba 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://shopmdot.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://shopmdot.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.

MELINDA L. MCGRATH
EXECUTIVE DIRECTOR

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 as glass, paper products, tires, wood products, metal, synthetic materials and other miscellaneous debris.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 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_wgths/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').



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

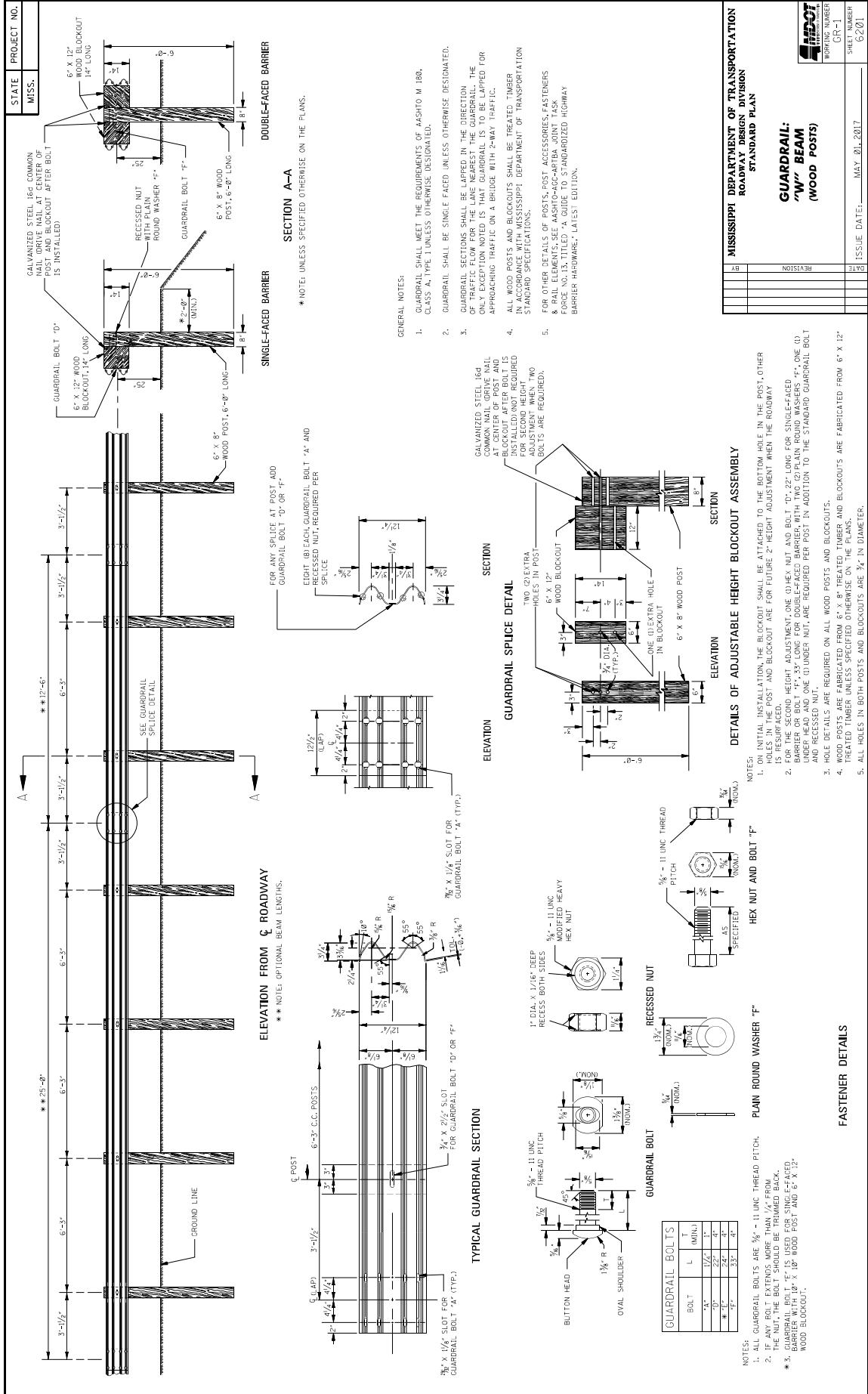
Bidders are advised that when the plans or contract documents require the speed limit on a project to be reduced, the Contractor shall begin work within 48 hours of installing the reduced speed limit signs. Should the Contractor not start work or have no plans to start work within 48 hours of installing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

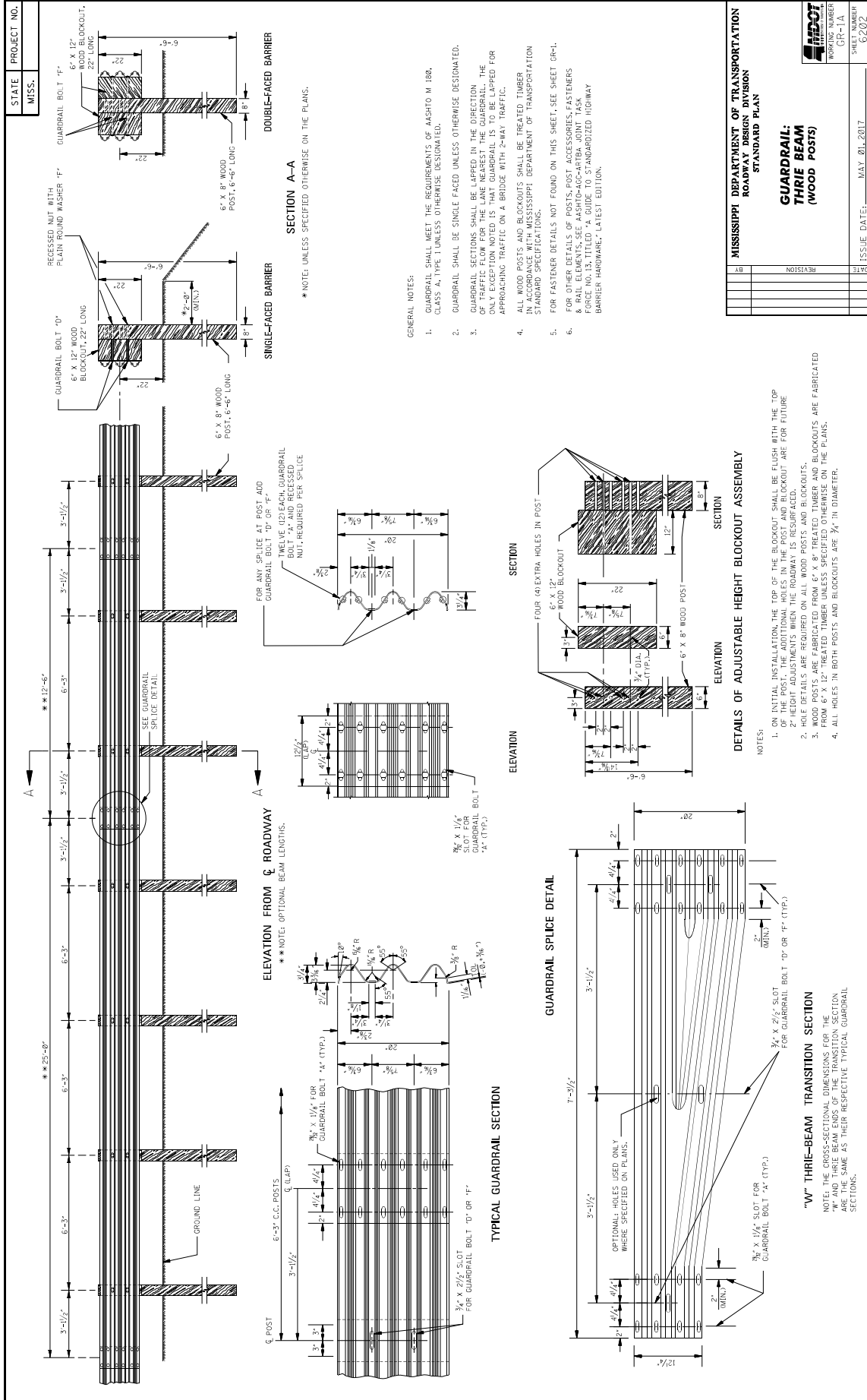
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

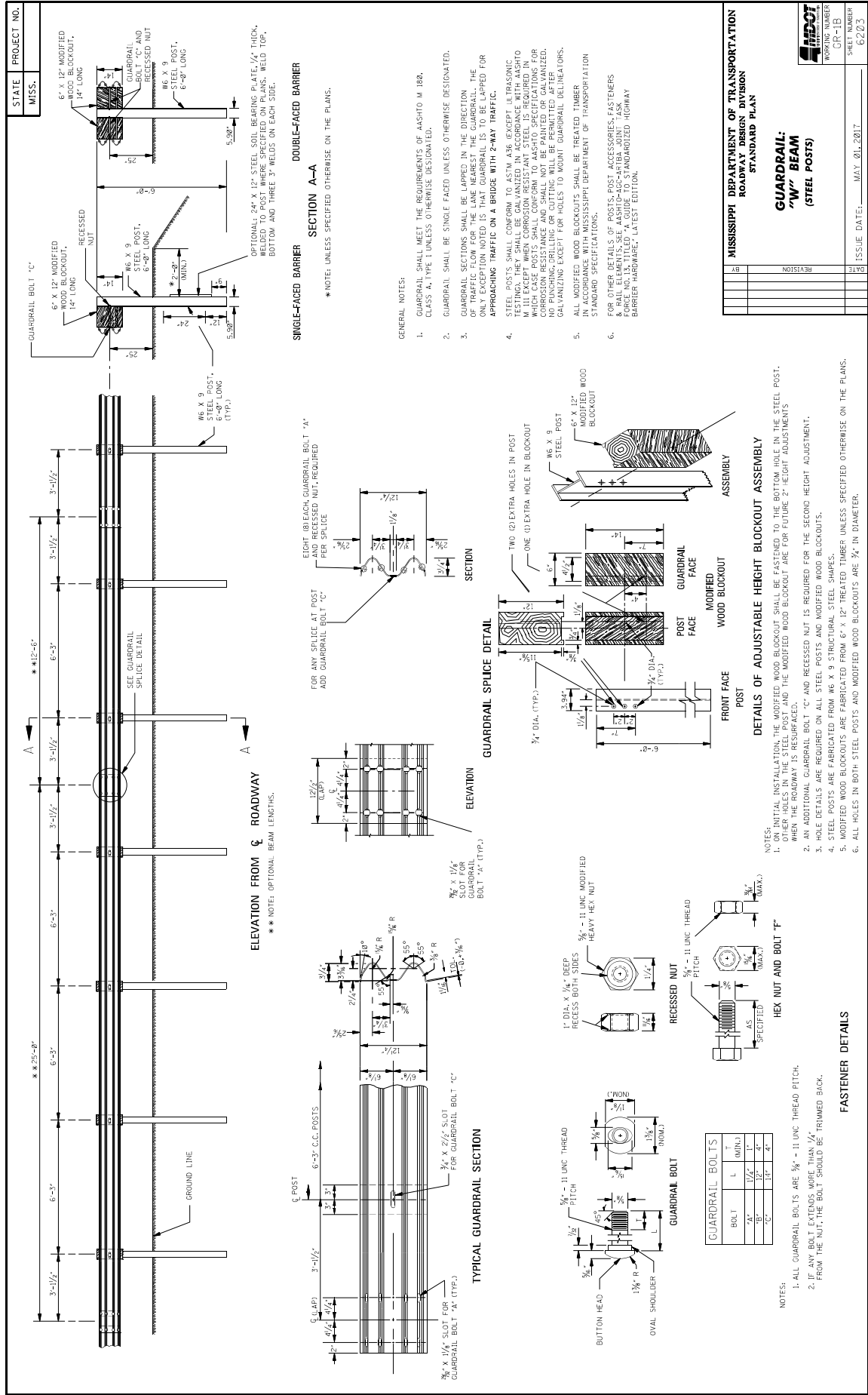
SUPPLEMENT TO NOTICE TO BIDDERS NO. 401

DATE: 09/12/2017

After the last drawing on page 25, add the following.







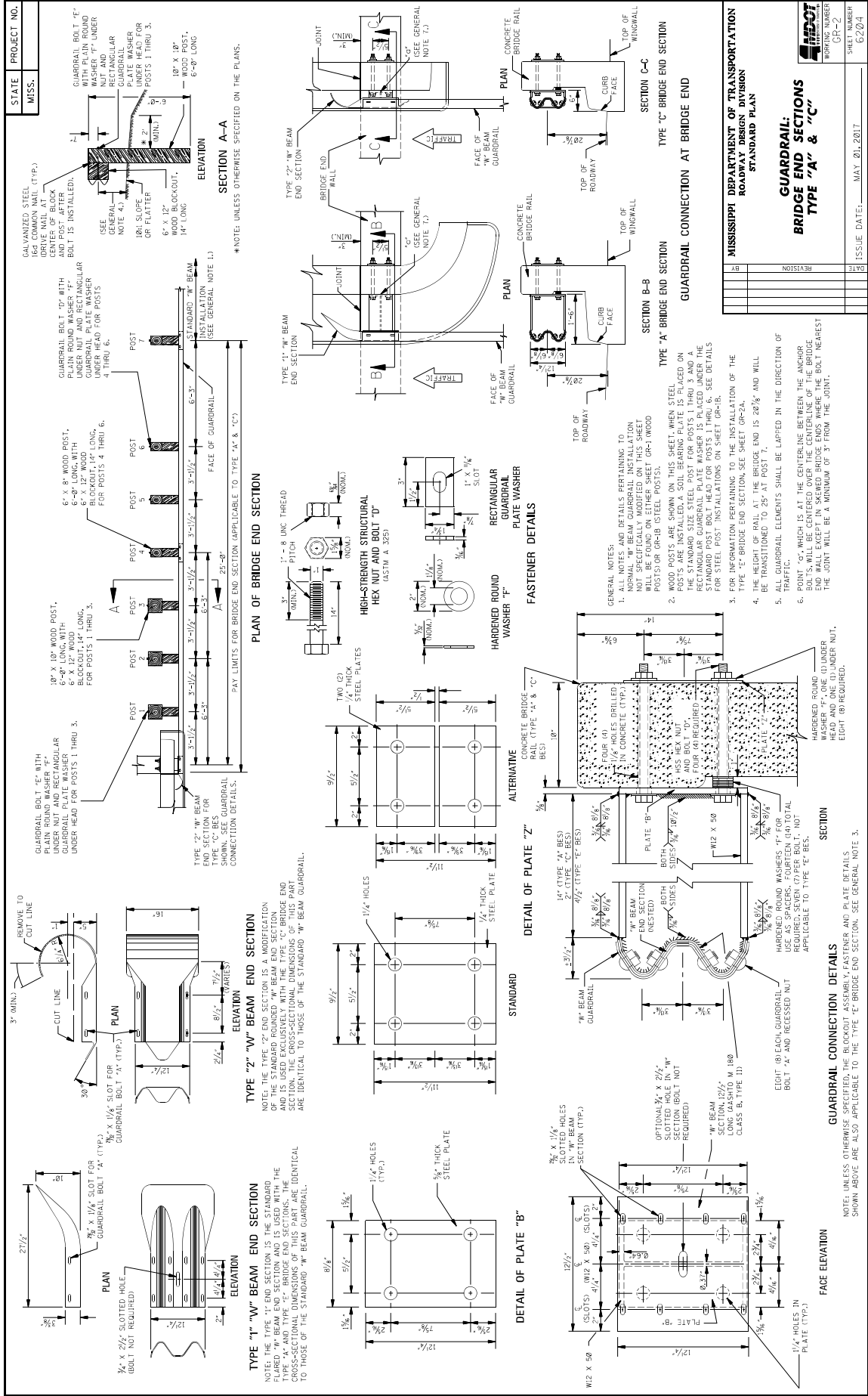
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

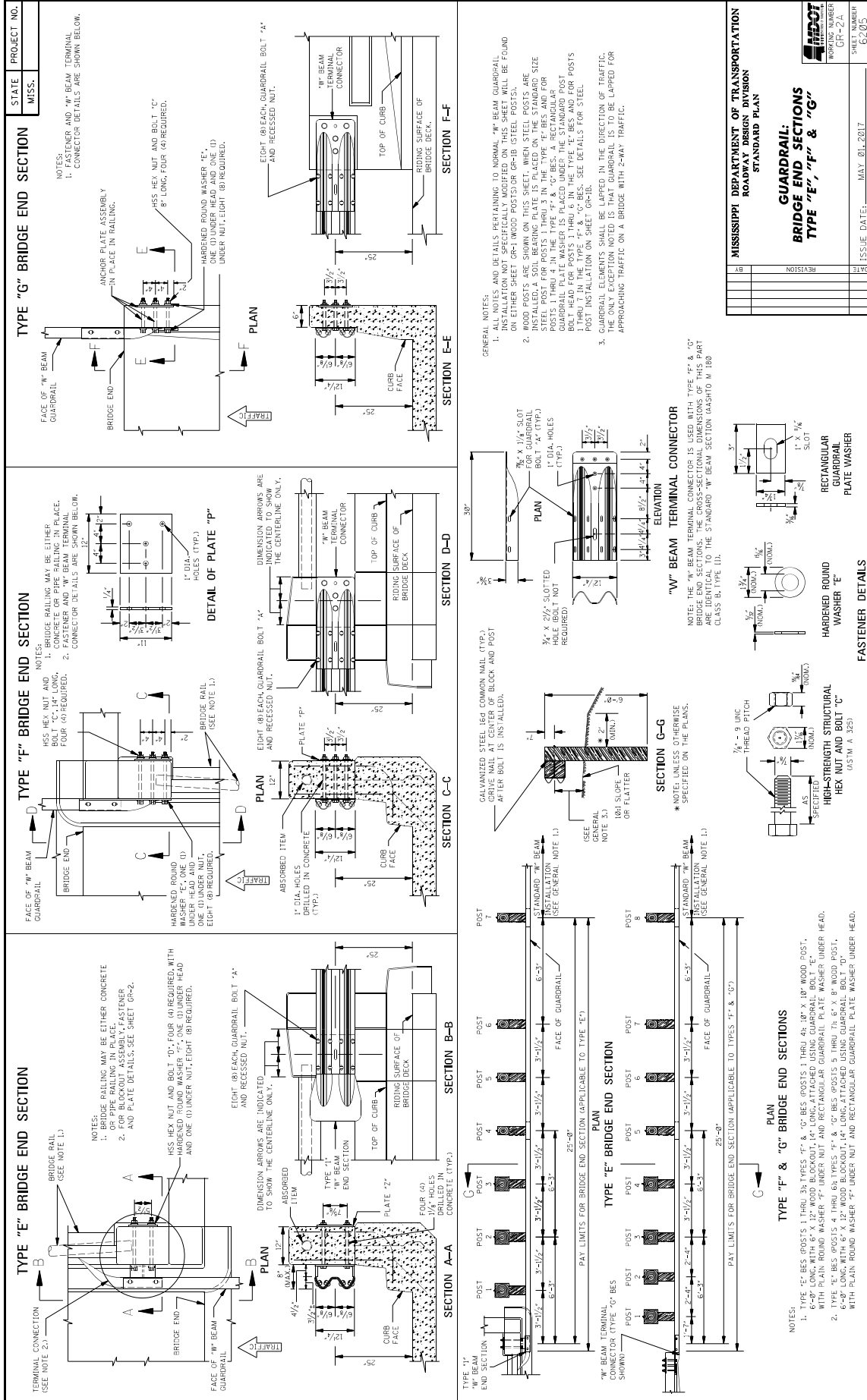
GUARDRAIL:
"W" BEAM
(STEEL POSTS)

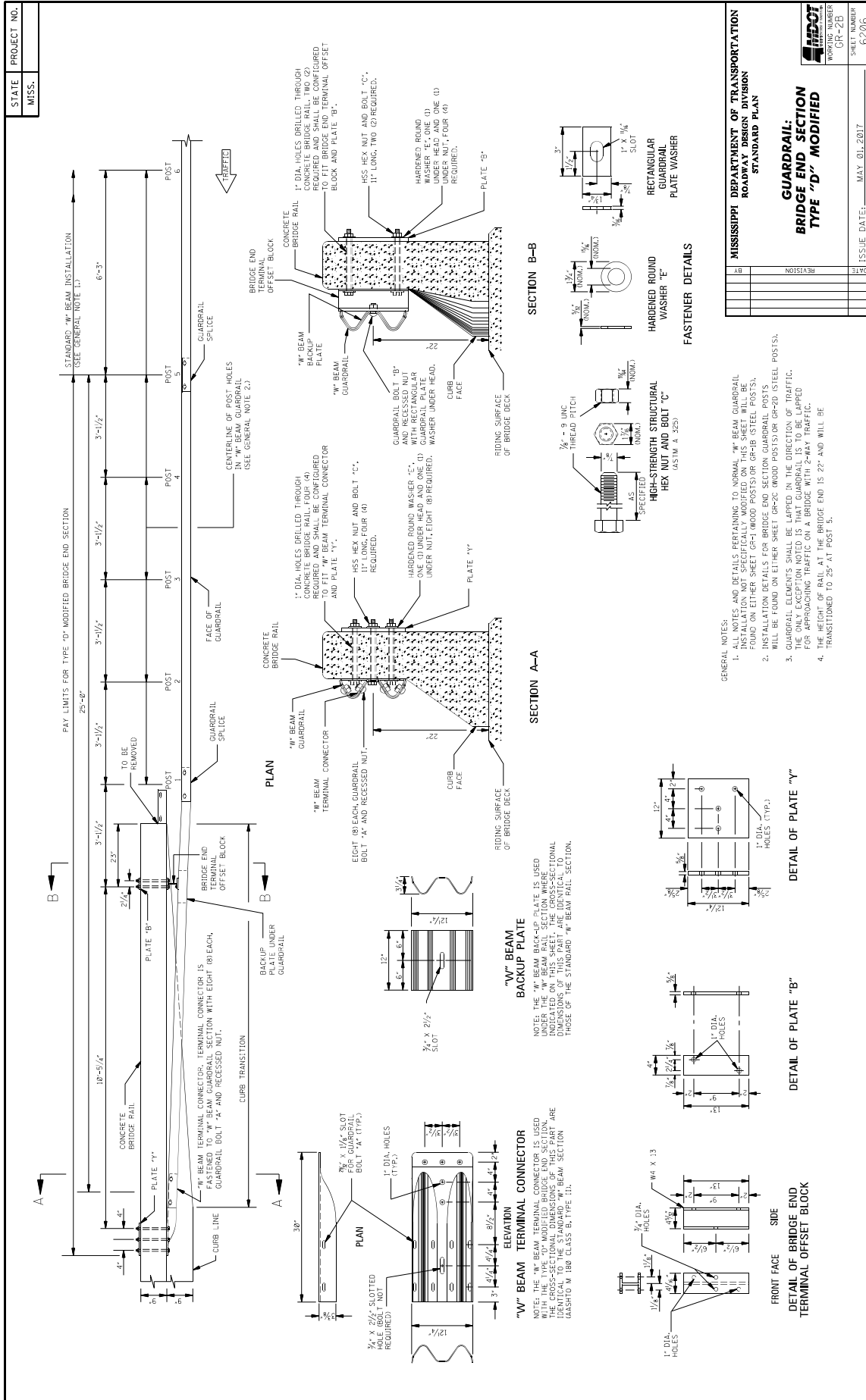
WORKING NUMBER
GT-1B

SHEET NUMBER
82/83

ISSUE DATE: MAY 01, 2017







STATE	PROJECT NO.
MISS.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		SHEET NUMBER GR-ZD	
		6206	
DATE	REVISION	ISSUE DATE:	MAY 01, 2017

**GUARDRAIL:
BRIDGE END SECTION
TYPE "D" MODIFIED**

- GENERAL NOTES:**
- ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION SHALL APPLY TO THIS SECTION UNLESS SPECIFICALLY NOTED OTHERWISE.
 - INSTALLATION DETAILS FOR BRIDGE END SECTION GUARDRAIL POSTS WILL BE FOUND ON EITHER SHEET GR-20C (WOOD POSTS) OR GR-20D (STEEL POSTS).
 - GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
 - THE HEIGHT OF RAIL AT THE BRIDGE END IS 22" AND WILL BE TRANSITIONED TO 25" AT POST 5.

NOTE: THE "W" BEAM BACKUP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.

NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "D" MODIFIED BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM SECTION (AS SHOWN IN 1809 CLASS B, TYPE 13).

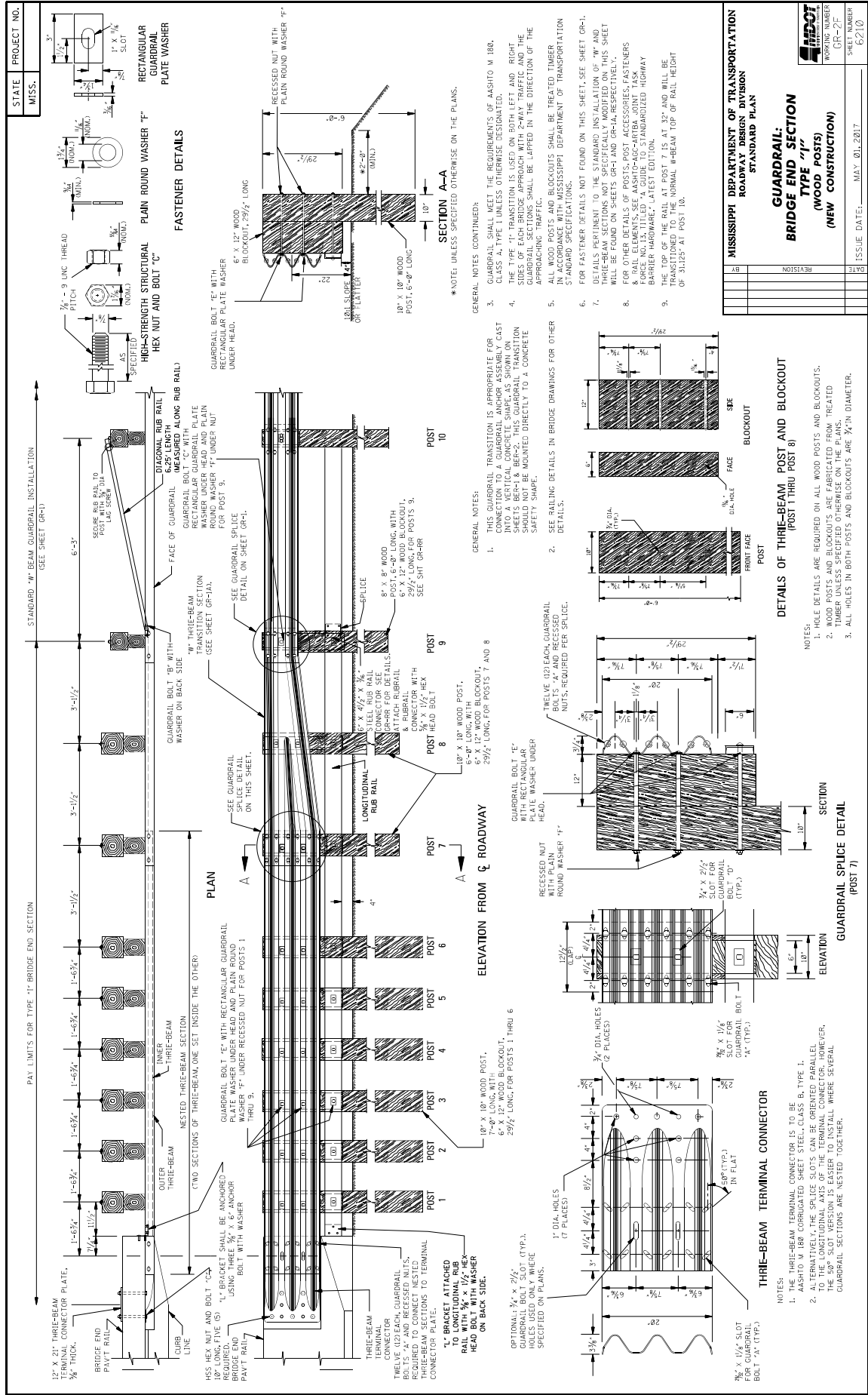
DETAIL OF PLATE "Y"

DETAIL OF PLATE "B"

FRONT FACE
DETAIL OF BRIDGE END
TERMINAL OFFSET BLOCK

SIDE
DETAIL OF BRIDGE END
TERMINAL OFFSET BLOCK

FRONT FACE
DETAIL OF BRIDGE END
TERMINAL OFFSET BLOCK



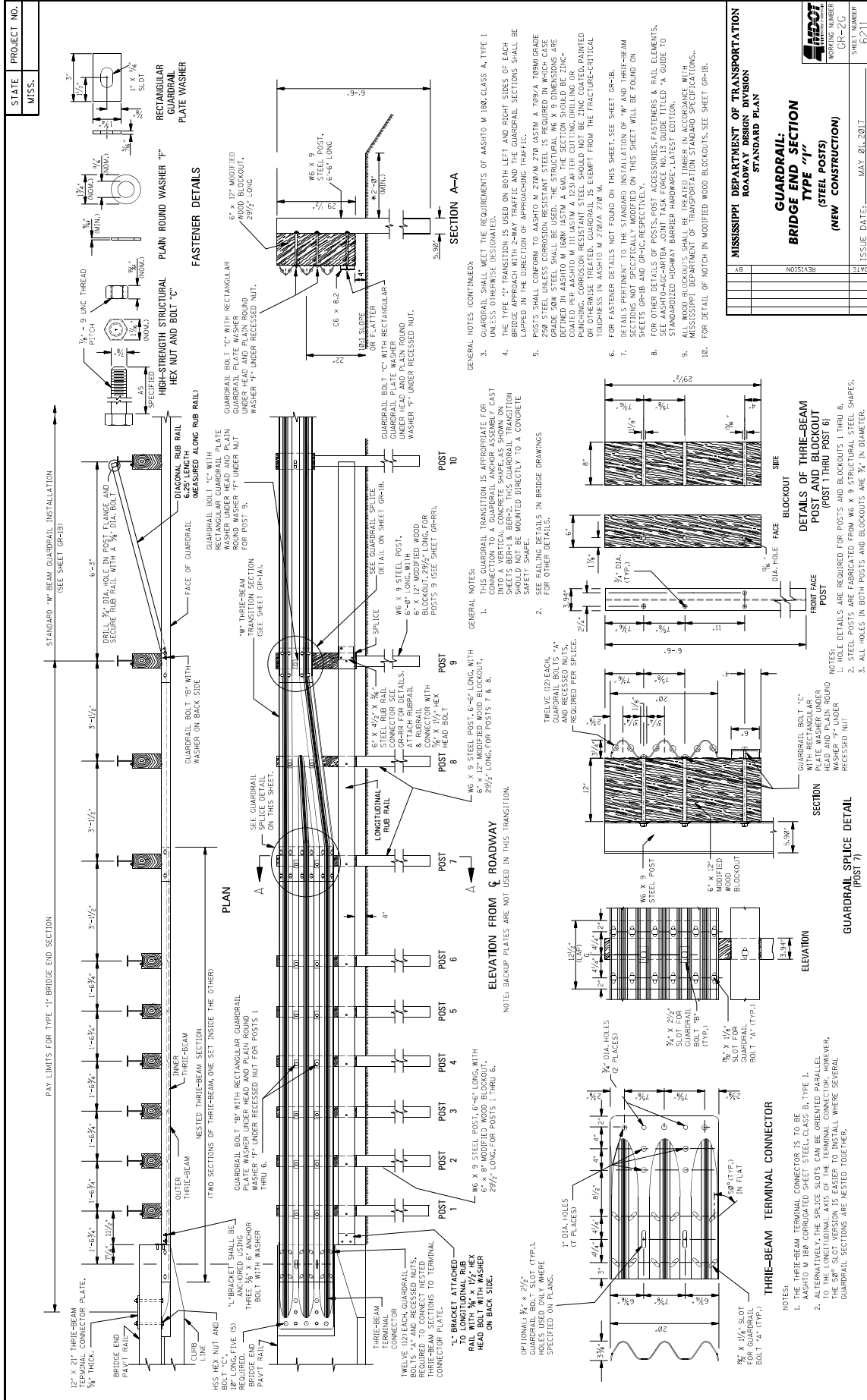
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

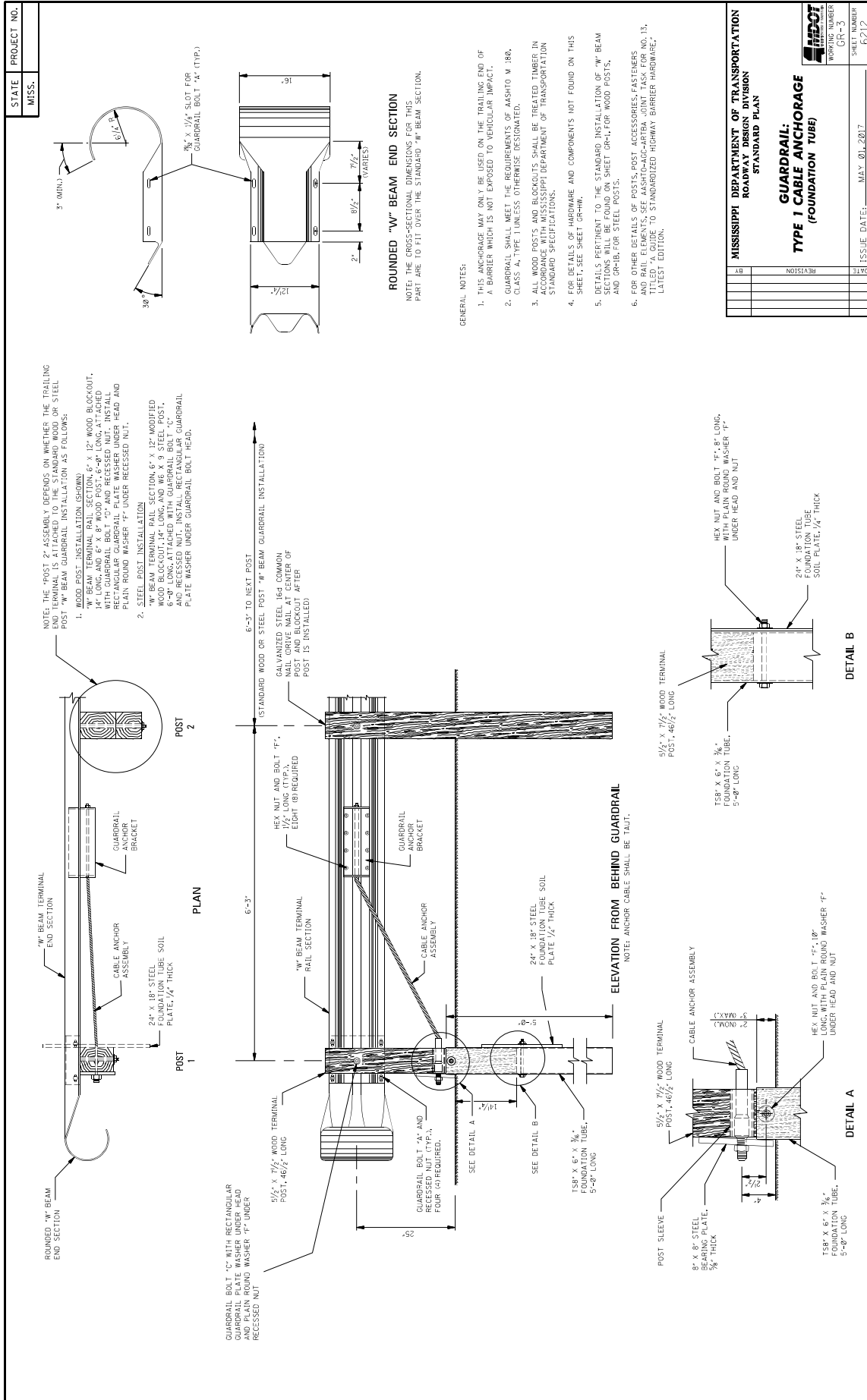
GUARDRAIL:
BRIDGE END SECTION
TYPE "1"
(WOOD POSTS)
(NEW CONSTRUCTION)

DATE	REVISION	ISSUE DATE

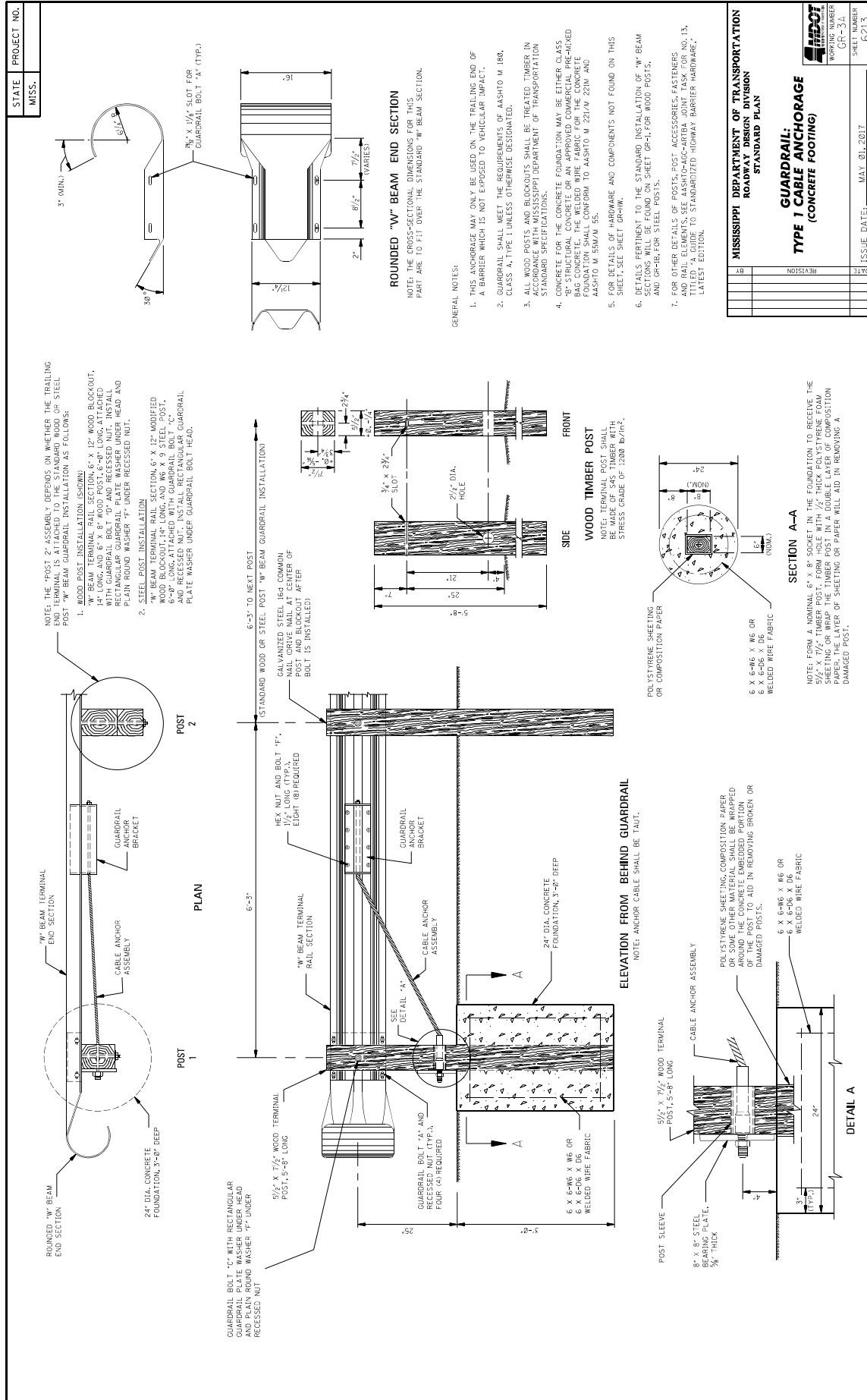
PROJECT NUMBER: GR-2

SHEET NUMBER: 62/10





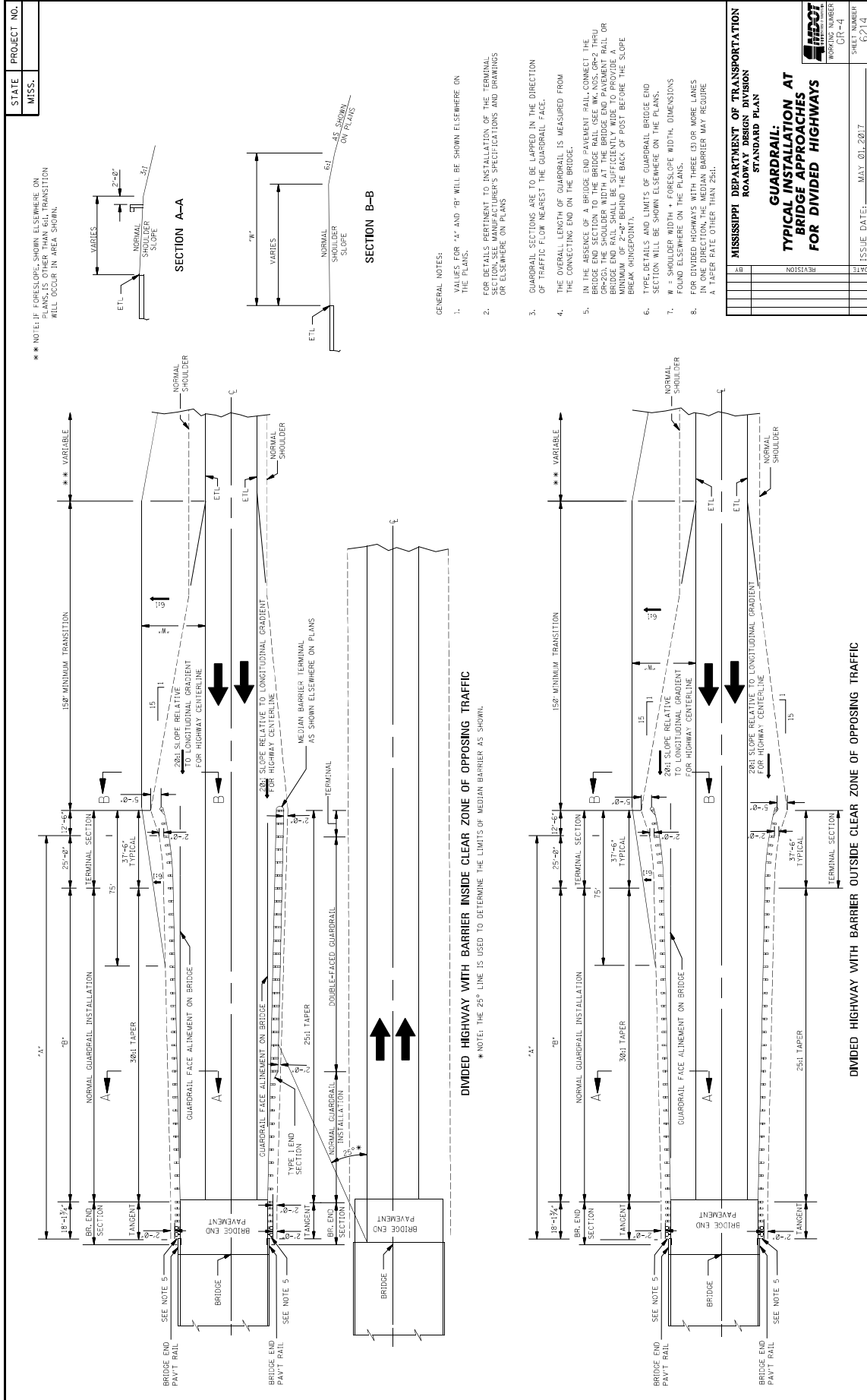
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
GUARDRAIL: TYPE 1 CABLE ANCHORAGE (FOUNDATION TUBE)	
REV	REVISION
DATE	ISSUE DATE: MAY 01, 2017
SHEET NUMBER	GR-5



STATE	PROJECT NO.
MISS.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
GUARDRAIL: TYPE 1 CABLE ANCHORAGE (CONCRETE FOOTING)	
DATE	ISSUE DATE: MAY 01, 2017
REVISION	
BY	

WORKING NUMBER	GT-34
SHEET NUMBER	0213



*** NOTE: IF FORESLOPE, SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.

SECTION A-A



SECTION B-B



GENERAL NOTES:

- VALUES FOR 'A', AND 'B' WILL BE SHOWN ELSEWHERE ON THE PLANS.
- FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS.
- GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
- THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
- IN THE ABSENCE OF A BRIDGE END PAVEMENT RAIL, CONNECT THE BRIDGE END SECTION TO THE BRIDGE RAIL (SEE MK, NCS, GR-2 THRU GR-20). THE SHOULDER WIDTH AT THE BRIDGE END PAVEMENT RAIL OR BRIDGE END RAIL SHALL BE SUFFICIENTLY WIDE TO PROVIDE A BREAK IN POINT BEHIND THE BACK OF POST BEFORE THE SLOPE.
- TYPE DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.
- W 5 SHOULDER WIDTH & FORESLOPE WIDTH DIMENSIONS FOUND ELSEWHERE ON THE PLANS.
- FOR DIVIDED HIGHWAYS WITH THREE OR MORE LANES IN ONE DIRECTION, THE MEDIAN BARRIER MAY REQUIRE A TAPER RATE OTHER THAN 25:1.

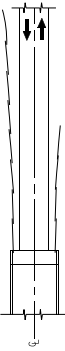
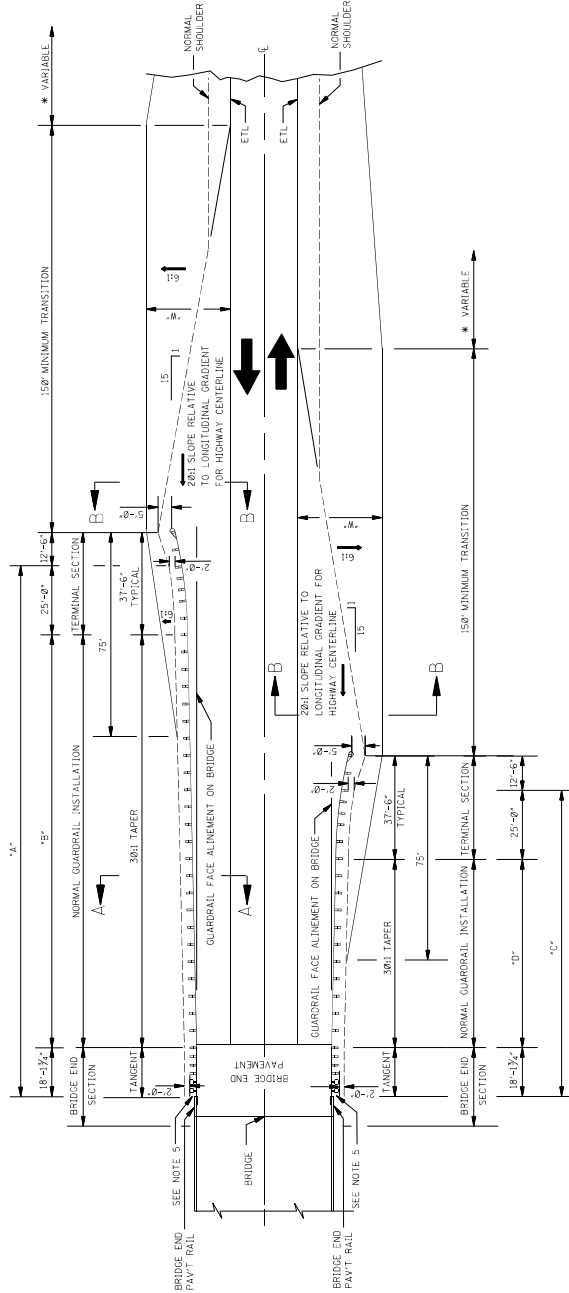
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ROADWAY DESIGN DIVISION	
STANDARD PLAN	
GUARDRAIL: TYPICAL INSTALLATION AT BRIDGE APPROACHES FOR DIVIDED HIGHWAYS	
DATE	REVISION
ISSUE DATE: MAY 01, 2017	
SHEET NUMBER	CR-4
WORKING NUMBER	0214

DIVIDED HIGHWAY WITH BARRIER INSIDE CLEAR ZONE OF OPPOSING TRAFFIC
 * NOTE: THE 25° LINE IS USED TO DETERMINE THE LIMITS OF MEDIAN BARRIER AS SHOWN.

DIVIDED HIGHWAY WITH BARRIER OUTSIDE CLEAR ZONE OF OPPOSING TRAFFIC

STATE	PROJECT NO.
MISS.	

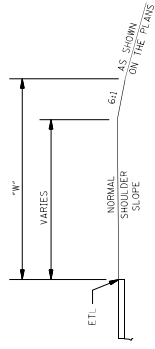
* NOTE: IF FORESLOPE, SHOWN ELSEWHERE ON THIS DRAWING, TRANSITION WILL OCCUR IN AREA SHOWN.



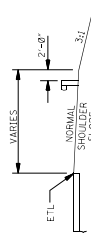
DETAIL OF GUARDRAIL SECTION LAPS

GENERAL NOTES:

- VALUES FOR "A", "B", "C" AND "D" WILL BE SHOWN ELSEWHERE ON THE PLANS.
- FOR DETAILS PERTAINING TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS.
- GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC APPROACHING THE BRIDGE.
- THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
- IN THE ABSENCE OF A BRIDGE END PAVEMENT RAIL, CONNECT THE BRIDGE END PAVEMENT RAIL TO THE BRIDGE END PAVEMENT RAIL OR GR-202. THE SHOULDER WIDTH AT THE BRIDGE END PAVEMENT RAIL OR BRIDGE END RAIL SHALL BE SUFFICIENTLY WIDE TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
- TYPE, DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.
- W = SHOULDER WIDTH + FORESLOPE WIDTH, DIMENSIONS FOUND ELSEWHERE ON THE PLANS.

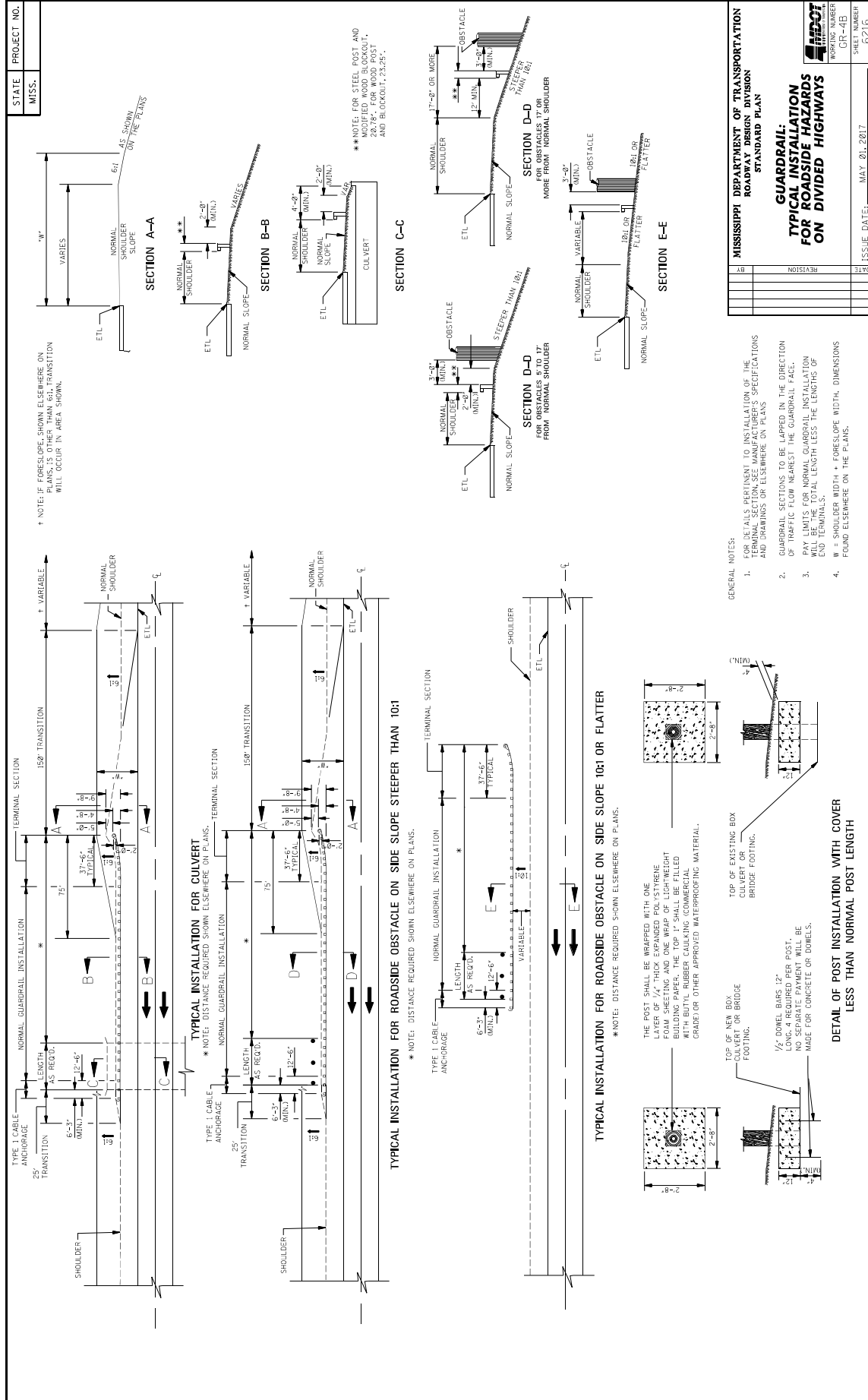


SECTION B-B



SECTION A-A

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
GUARDRAIL: TYPICAL INSTALLATION AT BRIDGE APPROACHES FOR 2-LANE, 2-WAY HIGHWAY	
WORKING NUMBER CR-41A	SHEET NUMBER 0215
DATE	ISSUE DATE: MAY 01, 2017
REVISION	



STATE	PROJECT NO.
MISS.	

* NOTE: IF FORESLOPE SHOWN ELSEWHERE ON PLANS IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.

** NOTE: FOR STEEL POST AND MODIFIED WOOD BLOCKOUT, 22.78' FOR WOOD POST AND BLOCKOUT, 23.25'.

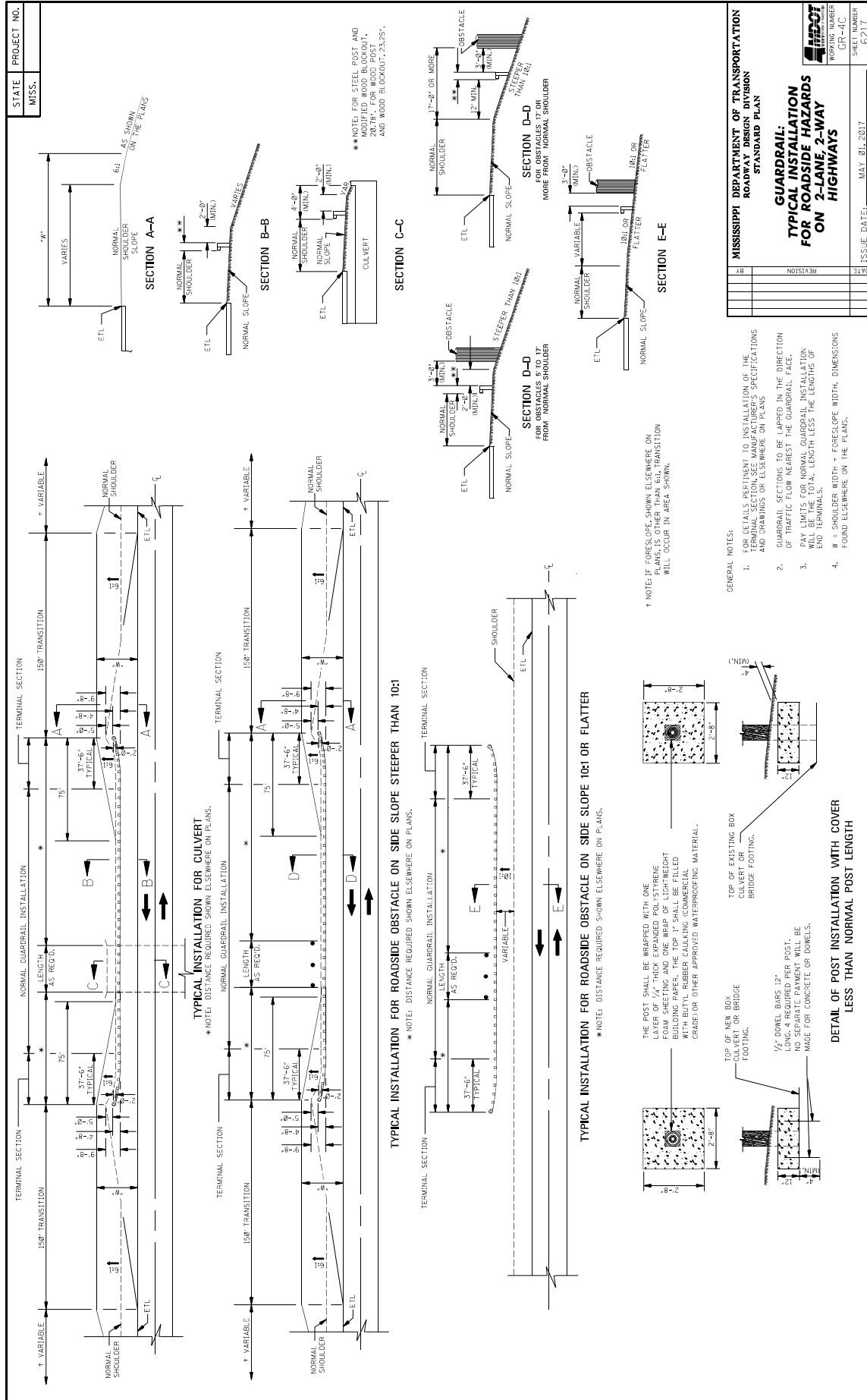
- GENERAL NOTES:
1. TERMINAL SECTIONS PERMANENT TO INSTALLATION OF THE TERMINAL SECTION. SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS.
 2. GUARDRAIL SECTIONS TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
 3. PAY LIMITS FOR NORMAL GUARDRAIL INSTALLATION WILL BE THE TOTAL LENGTH LESS THE LENGTHS OF END TERMINALS.
 4. W = SHOULDER WIDTH + FORESLOPE WIDTH, DIMENSIONS FOUND ELSEWHERE ON THE PLANS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**GUARDRAIL:
TYPICAL INSTALLATION
FOR ROADSIDE HAZARDS
ON DIVIDED HIGHWAYS**

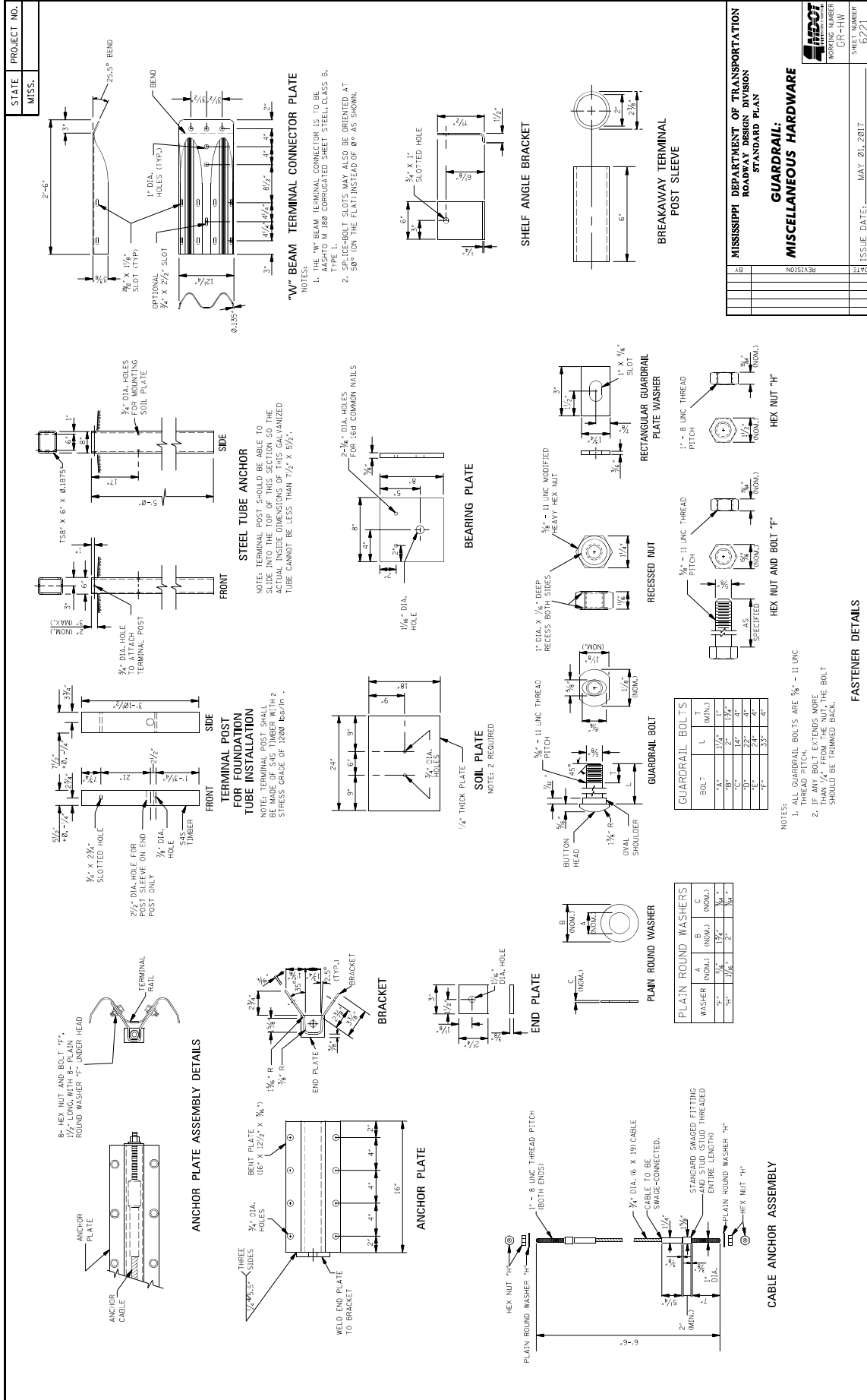
WORKING NUMBER: CR-415
SHEET NUMBER: 6216
ISSUE DATE: MAY 01, 2017

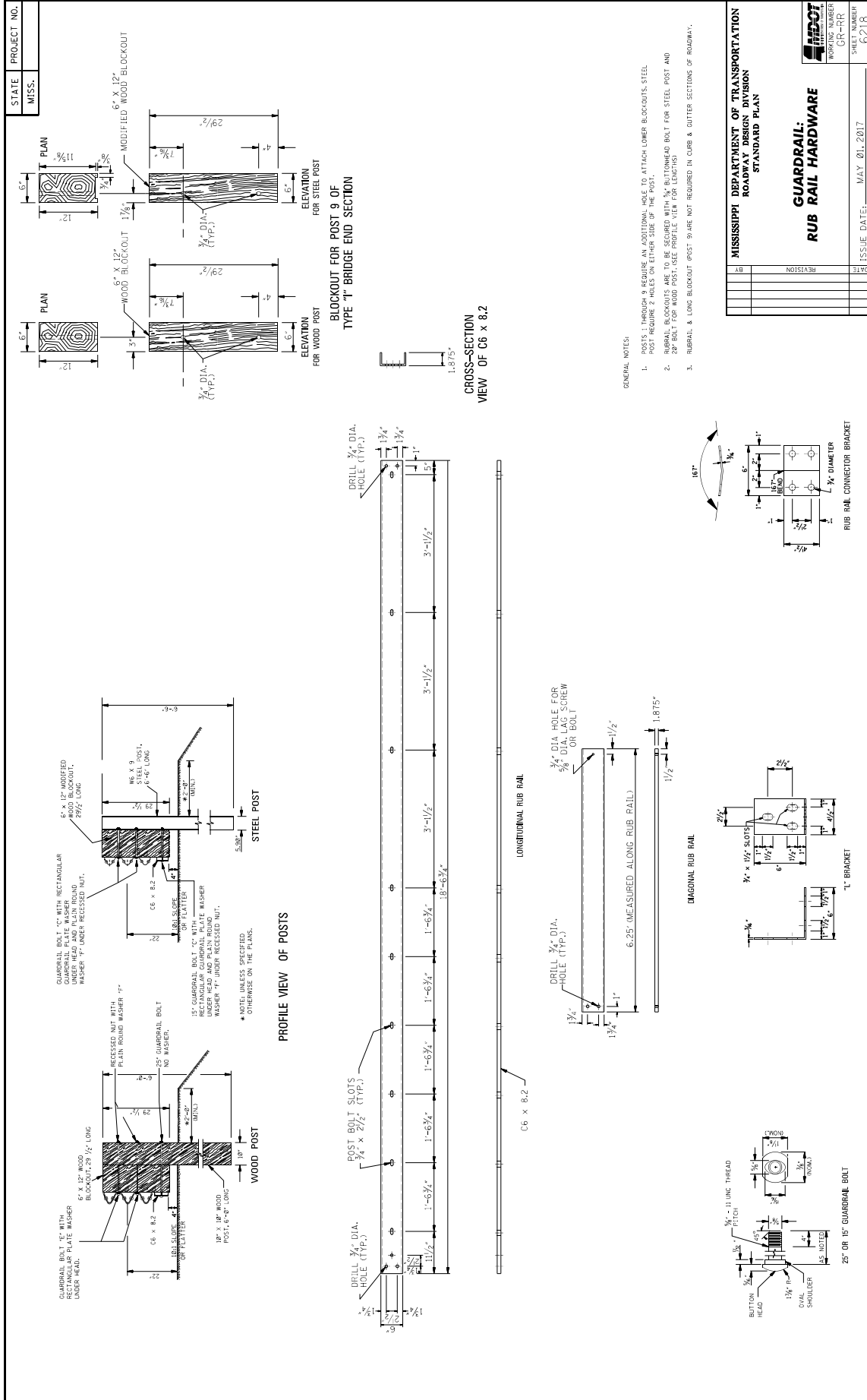
DATE	REVISION

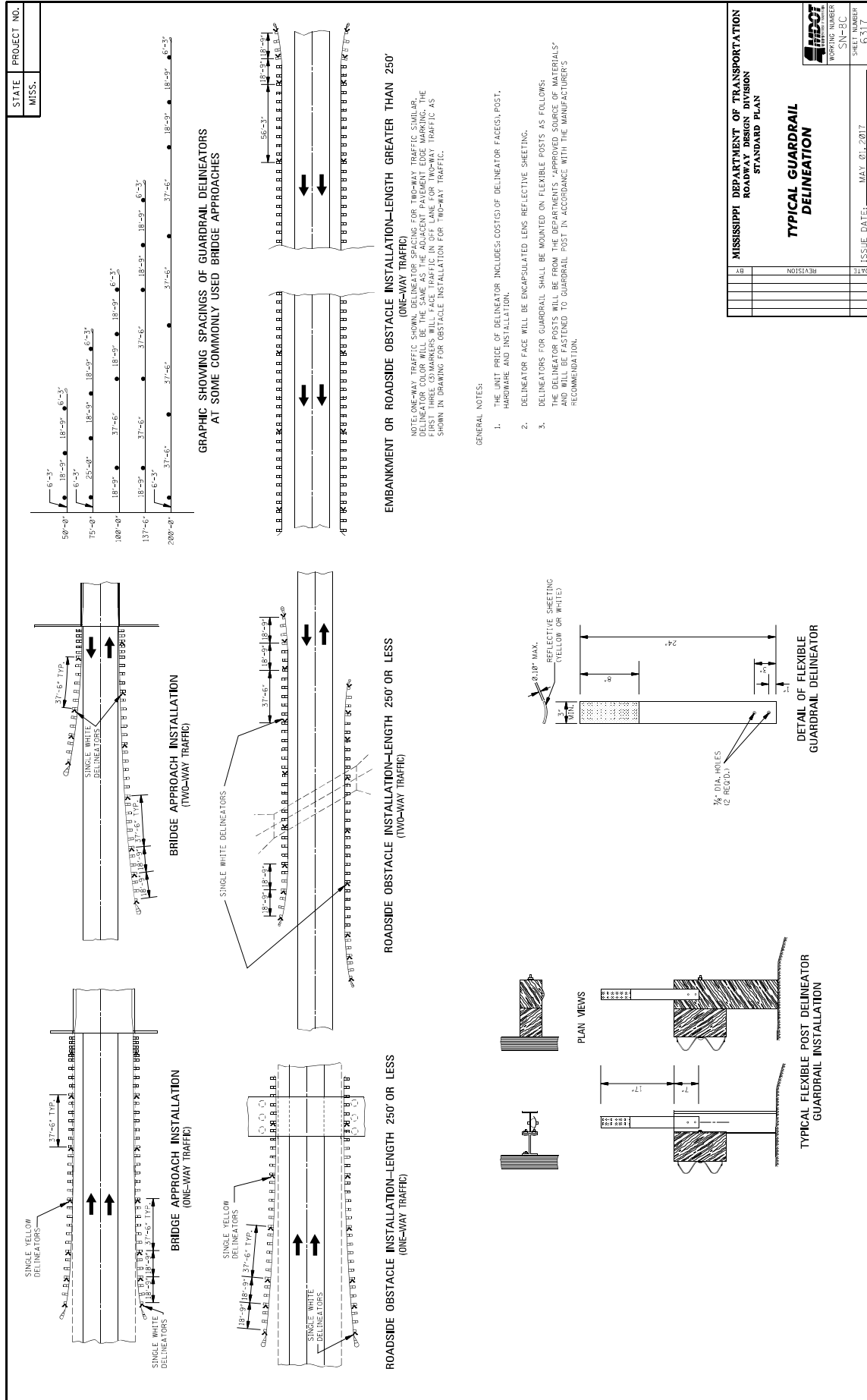


STATE	PROJECT NO.
MISS.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
GUARDRAIL: TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON 2-LANE, 2-WAY HIGHWAYS	
WORKING NUMBER	CR-41C
SHEET NUMBER	6211
ISSUE DATE:	MAY 01, 2017
DATE	
REVISION	







STATE PROJECT NO.		WORKING NUMBER SN-8C SHEET NUMBER 8311
MISS.		
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		ISSUE DATE: MAY 01, 2017
TYPICAL GUARDRAIL DELINEATOR		
BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 401

CODE: (SP)

DATE: 09/12/2017

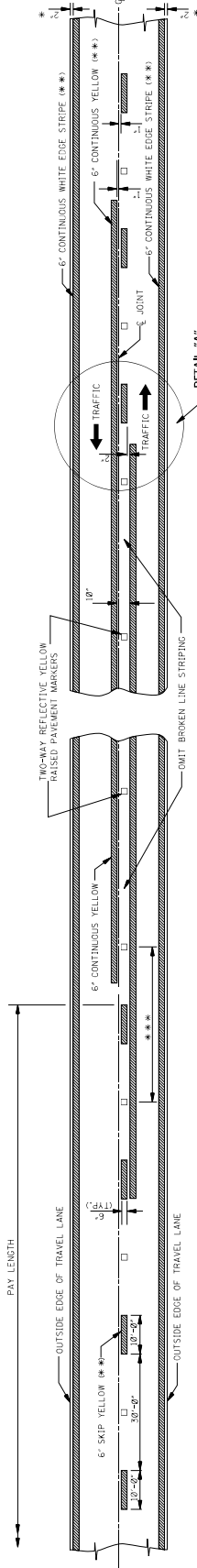
SUBJECT: Standard Drawings

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

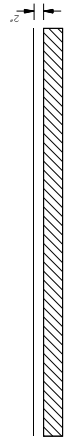
Larger copies of Standard Drawings may be purchased from:

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 PROJECT NO.
MISS.



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



TRAFFIC

NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MOOT ROADWAY DESIGN MANUAL, SECTION 11-1.01.

GENERAL NOTES:

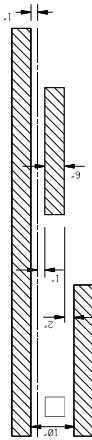
- * 1. UNLESS SHOWN ELSEWHERE ON THE PLANS FOR INTERCHANGES, REFER TO WJ SHEETS RP-1, RP-2, AND RP-3.
- ** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPING AND BE INDICATED IN PAY ITEMS.
- *** 3. SOURCE OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

TANGENT SECTIONS	HORIZONTAL CURVES	INTERCHANGE LIMITS	URBAN AREA	RURAL AREA
40'-9"	40'-9"	40'-9"	40'-9"	80'-0"
40'-9"	40'-9"	40'-9"	40'-9"	40'-9"

* NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-9" SPACING WILL BE REQUIRED ON LANE-LINES THROUGH ALL INTERCHANGE AREAS BEGINNING 100' FROM THE MAIN FACILITY. THROUGH THE INTERCHANGE RAMP AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

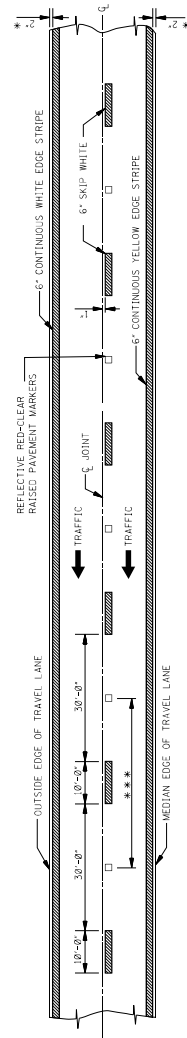
4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MOOT 'APPROVED SOURCES OF MATERIALS.'

DIRECTION OF TRAFFIC



TRAFFIC

DETAIL "A"



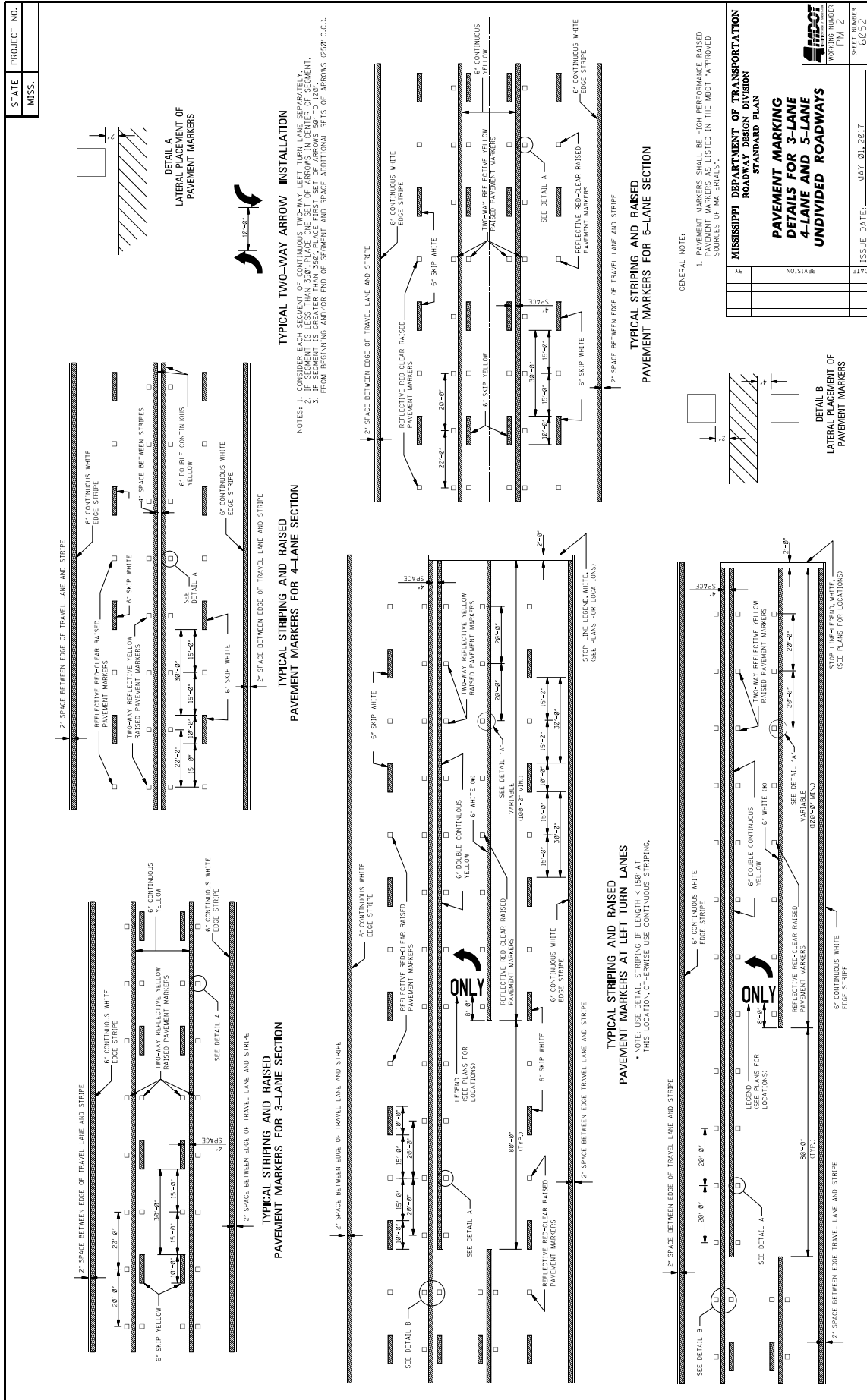
4-LANE WITH ONE-WAY TRAFFIC

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

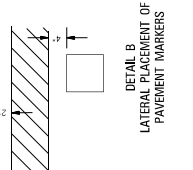
PAVEMENT MARKING
DETAILS FOR
2-LANE AND 4-LANE
DIVIDED ROADWAYS

DATE	REVISION	BY

ISSUE DATE: MAY 01, 2017
SHEET NUMBER: 6031
WORKING NUMBER: PM-1



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ROADWAY DESIGN DIVISION	
STANDARD PLAN	
PAVEMENT MARKING	
DETAILS FOR 3-LANE	
4-LANE AND 3-LANE	
UNDIVIDED ROADWAYS	
DATE	ISSUE DATE: MAY 21, 2017
REVISION	SHEET NUMBER
	PJM-2
	SHEET NUMBER
	60352



GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MOST APPROVED SOURCE OF MATERIALS.

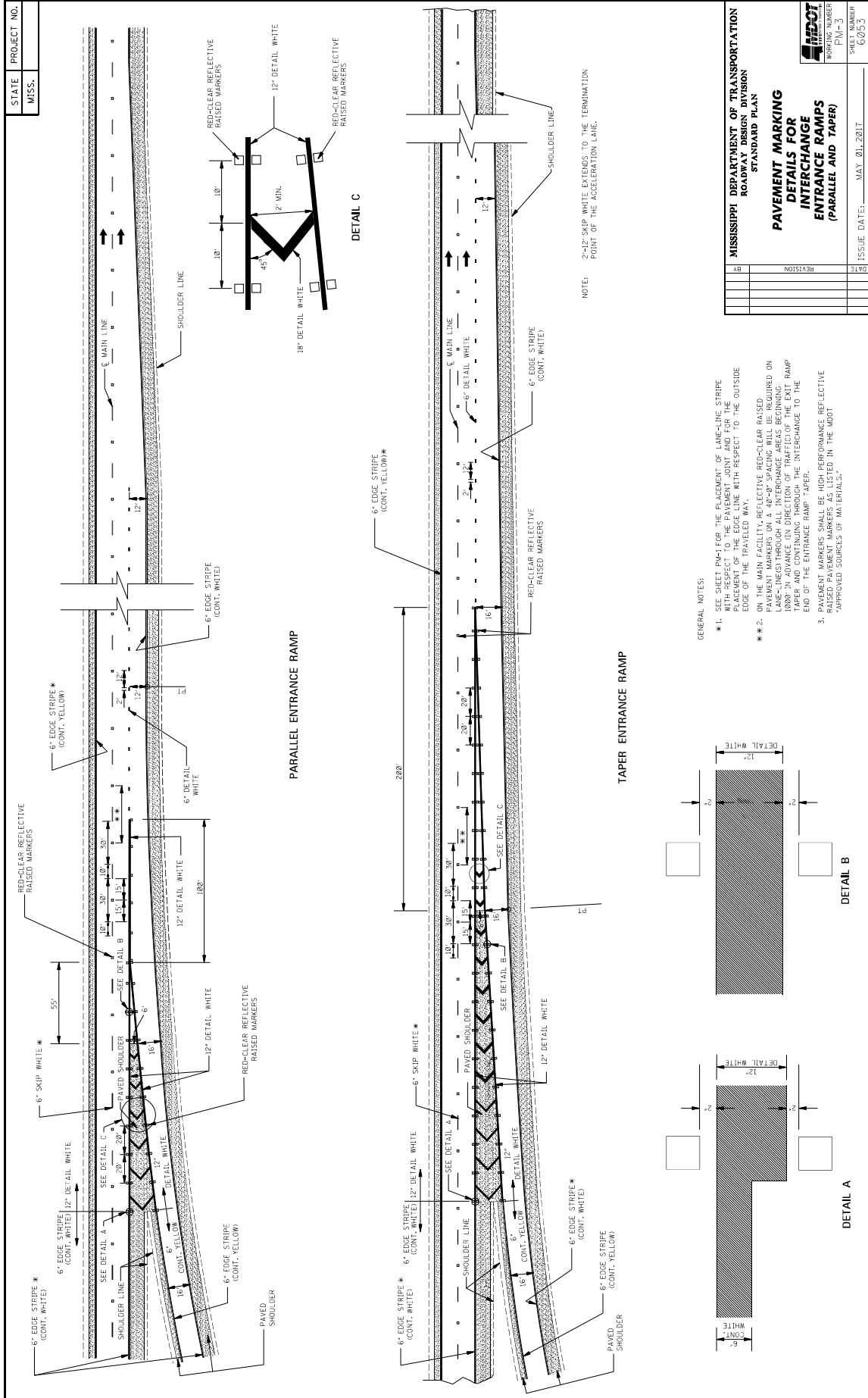
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 3-LANE SECTION

TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION

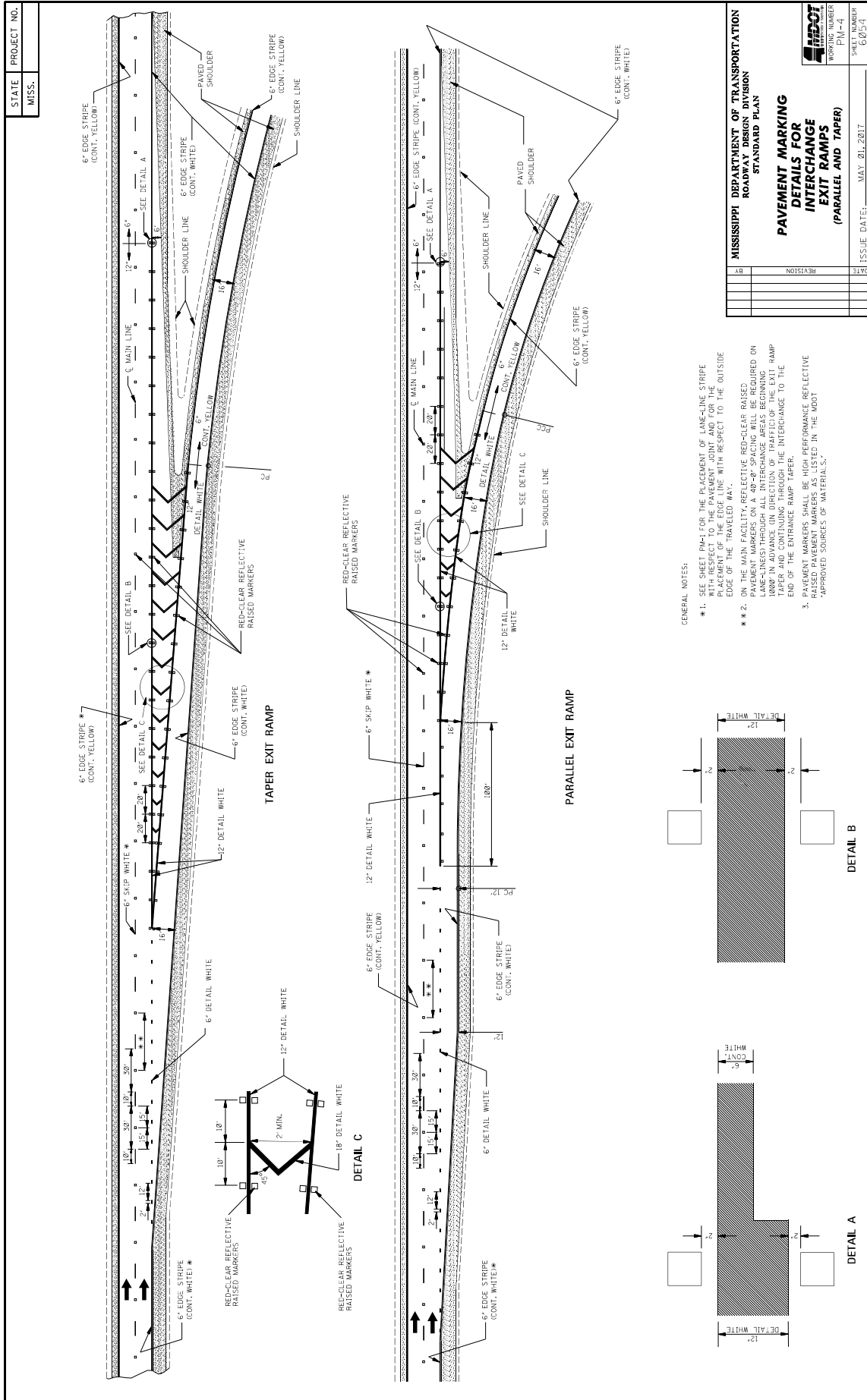
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES

TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 3-LANE SECTION

TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ROADWAY DESIGN DIVISION	
PAVEMENT MARKING	
DETAILS FOR	
INTERCHANGE	
(PARALLEL AND TAPER)	
BY	REVISION
DATE	
SHEET NUMBER	
PW-3	
SHEET NUMBER	
6933	
ISSUE DATE:	MAY 21, 2017

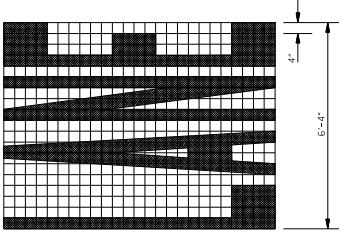
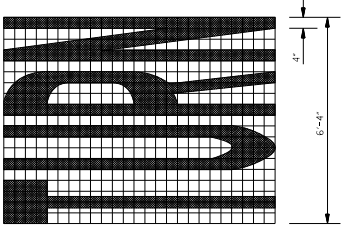
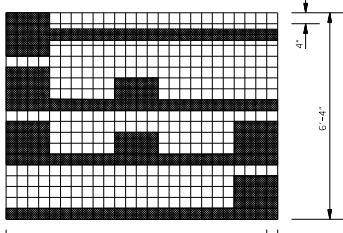
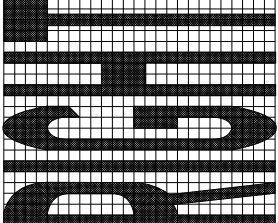
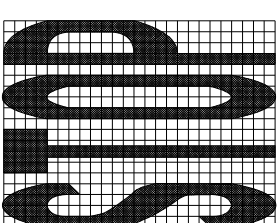


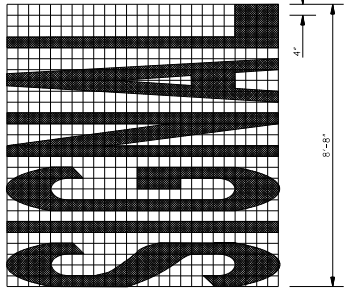
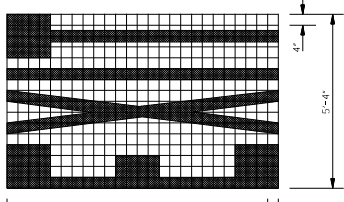
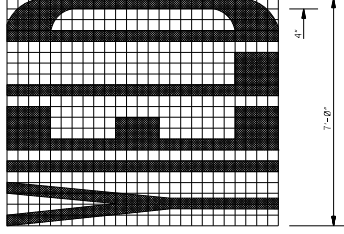
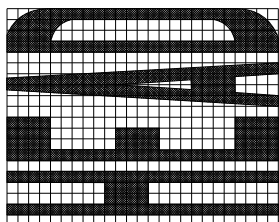
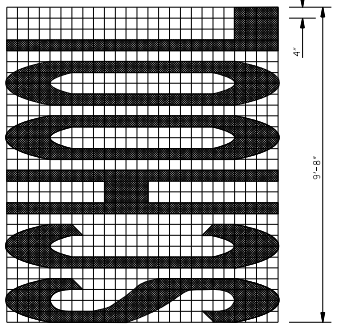
GENERAL NOTES:

- ** 1. SEE SHEET PMA-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF PAVED SHOULDER WITH RESPECT TO THE OUTSIDE EDGE OF MAIN PAVED REFLECTIVE SHOULDERS.
- ** 2. PAVED SHOULDER REFLECTIVE SHOULDERS REQUIRES PAVEMENT MARKERS ON A 48"-60" 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. RAISED PAVEMENT MARKERS BE HIGH PERFORMANCE REFLECTIVE 'APPROVED SOURCES OF MATERIALS.'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMP (PARALLEL AND TAPER)	
WORKING NUMBER PM-4	SHEET NUMBER 602/5-1
DATE	ISSUE DATE: MAY 01, 2017
BY	REVISION

STATE MISS.	PROJECT NO.								
----------------	-------------	--	--	--	--	--	--	--	--

GENERAL NOTES:

- TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTIONS) OF 1/2" LESS THAN THE STEMMING LETTERS SHALL BE SHOWN IN THE LETTERS. THE GAPS SHALL BE UNIFORM THROUGHOUT THE LETTERS.
- FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

LEGEND	AREA (FT ²)
STOP	24.6
RIGHT	28.6
LEFT	19.5
UPR	22.2
LR	22.2
AHEAD	32.3
YIELD	26.8
EXIT	18.5
SIGNAL	32.5
SCHOOL	35.5

PAVEMENT MARKING LEGEND DETAILS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

	SHEET NUMBER PM-5 6035
	ISSUE DATE: MAY 01, 2017

STATE MISS.	PROJECT NO.	
----------------	-------------	--

TURN ARROW

THRU ARROW

LANE-REDUCTION ARROW

COMBINATION ARROW

YIELD LINE

1-WAY ARROW

PAY QUANTITIES

LEGEND/SYMBOL	AREA (FT ²)
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

GENERAL NOTES:

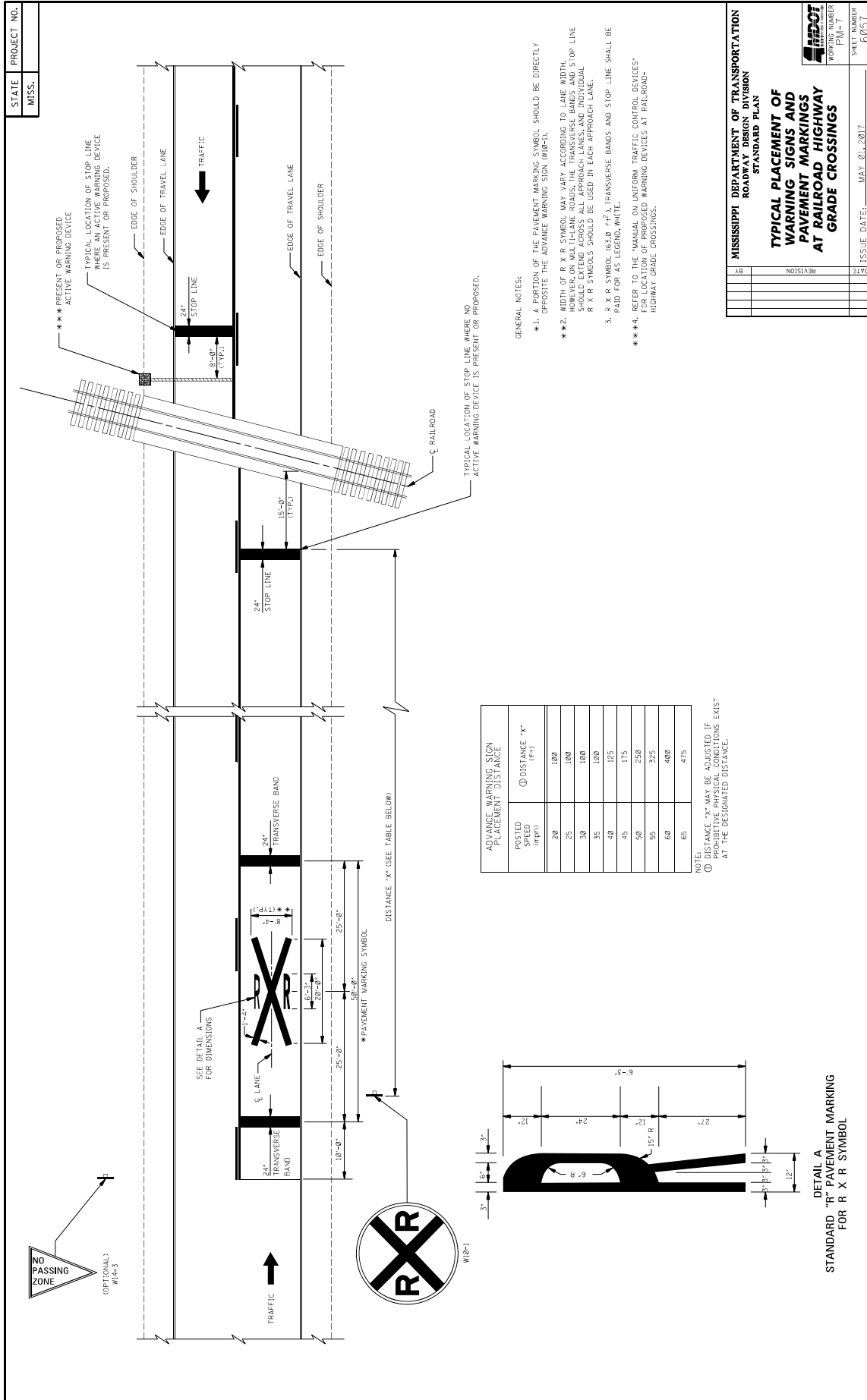
- TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS OF 1/16" OR LESS AND EXTENDING THE FULL WIDTH) ARE PERMITTED IN EACH LETTER.
- FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.
- PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING
LEGEND DETAILS

WORKING NUMBER: PM-6
SHEET NUMBER: 60/56

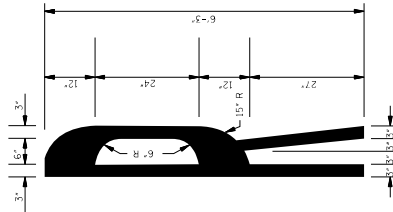
ISSUE DATE: MAY 01, 2017



- 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. SYMBOL SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.
 - 3. R X R SYMBOL (63.0 x 47.1) 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 RAILROAD-HIGHWAY GRADE CROSSINGS.

POSTED SPEED (mph)	ADVANCE WARNING SIGN PLACEMENT DISTANCE (ft)
20	1000
25	1000
30	1000
35	1000
40	125
45	175
50	250
55	325
60	400
65	475

NOTE: DISTANCE 'X' MAY BE SHORTER IF PROTECTIVE PHYSICAL CONDITIONS EXIST AT THE DESIGNATED DISTANCE.



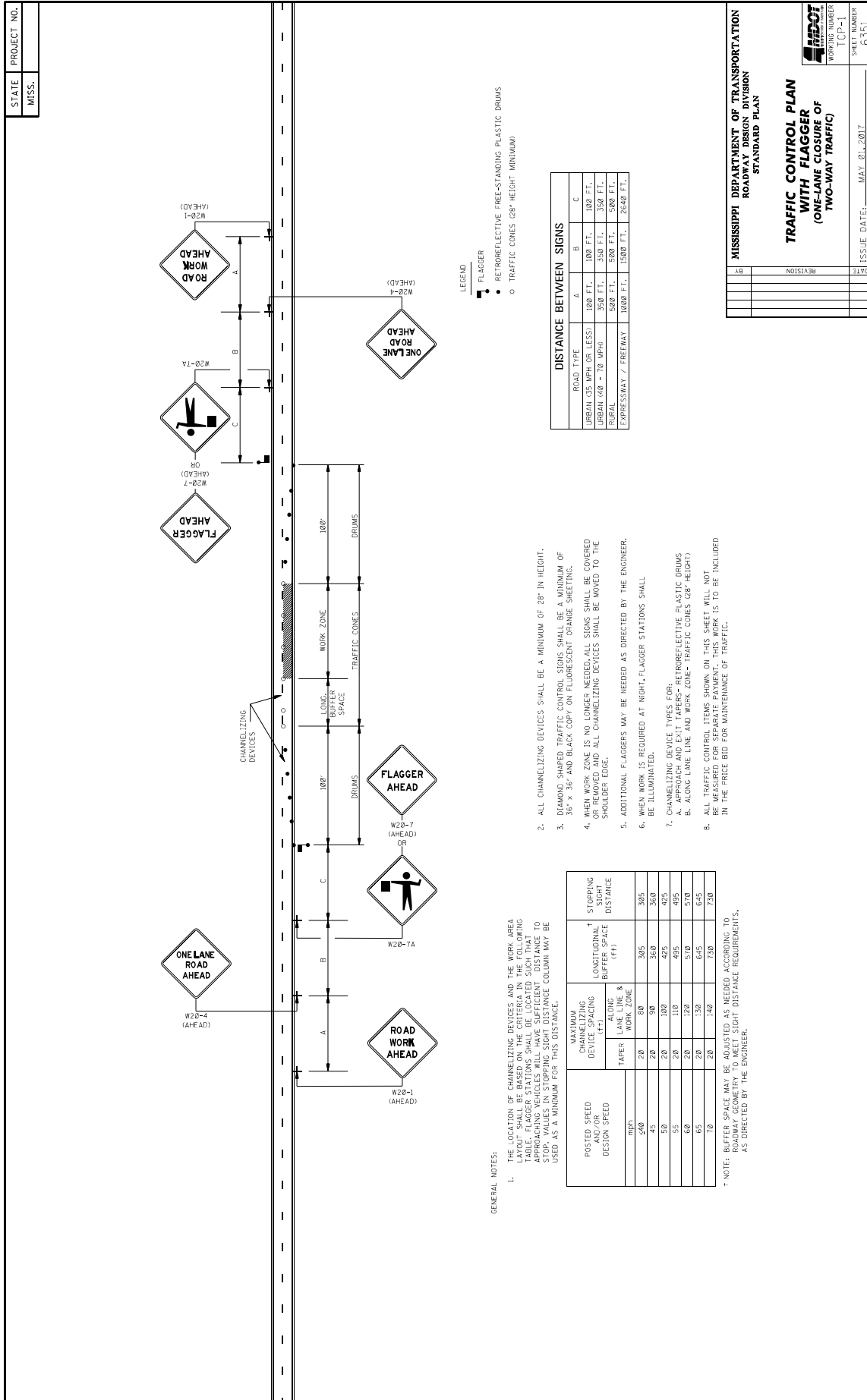
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

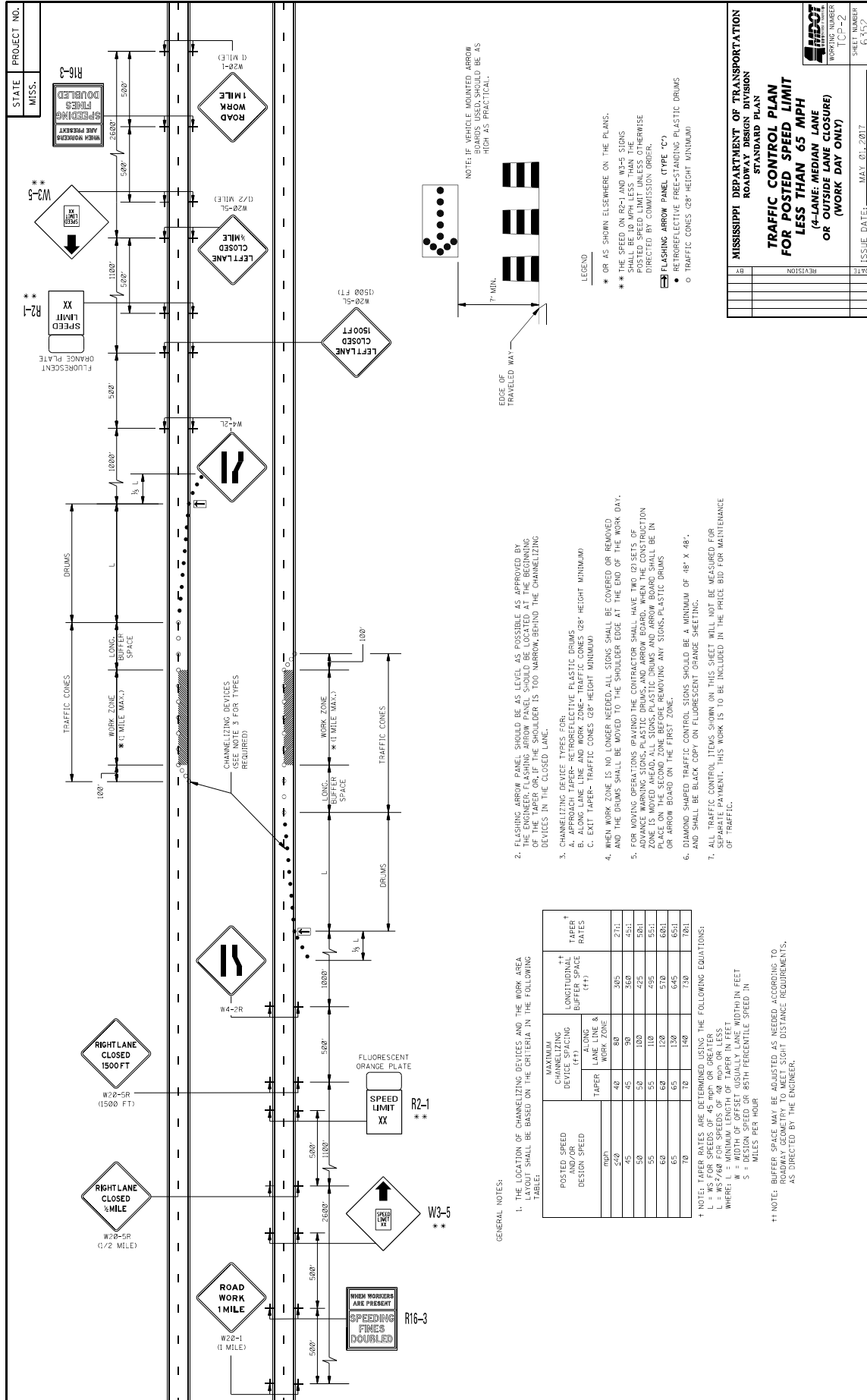
TYPICAL PLACEMENT OF WARNING SIGNS AND PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSINGS

WORKING NUMBER: P10-1

SHEET NUMBER: 6031

ISSUE DATE: MAY 01, 2017





STATE PROJECT NO. MISS. R16-3

W20-1R (1500 FT) RIGHT LANE CLOSED 1500 FT

W20-5P (1/2 MILE) RIGHT LANE CLOSED 1/2 MILE

W20-1 (1 MILE) ROAD WORK 1 MILE

W20-5L (1/2 MILE) LEFT LANE CLOSED 1/2 MILE

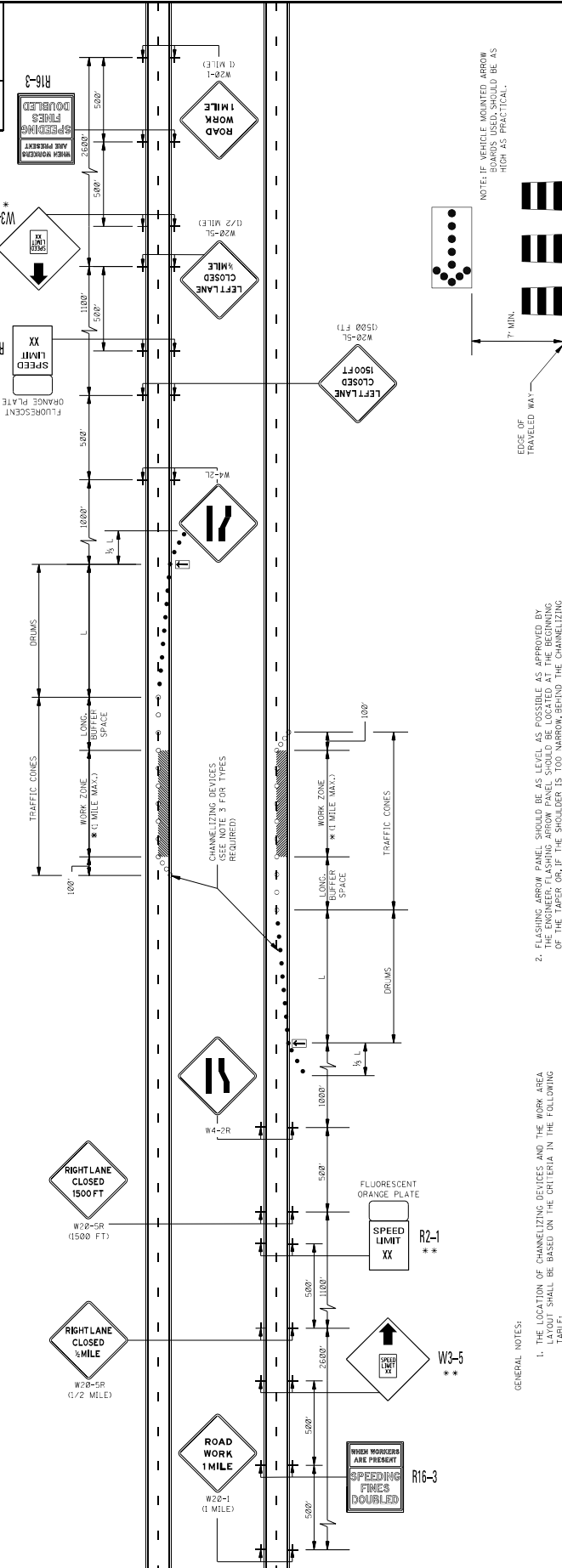
W20-5L (1500 FT) LEFT LANE CLOSED 1500 FT

W4-2R

W3-5

R2-1

R16-3



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 PANELS SHOULD BE AS HIGH AS PRACTICAL.

EDGE OF TRAVELED WAY

7' MIN.

GENERAL NOTES:

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

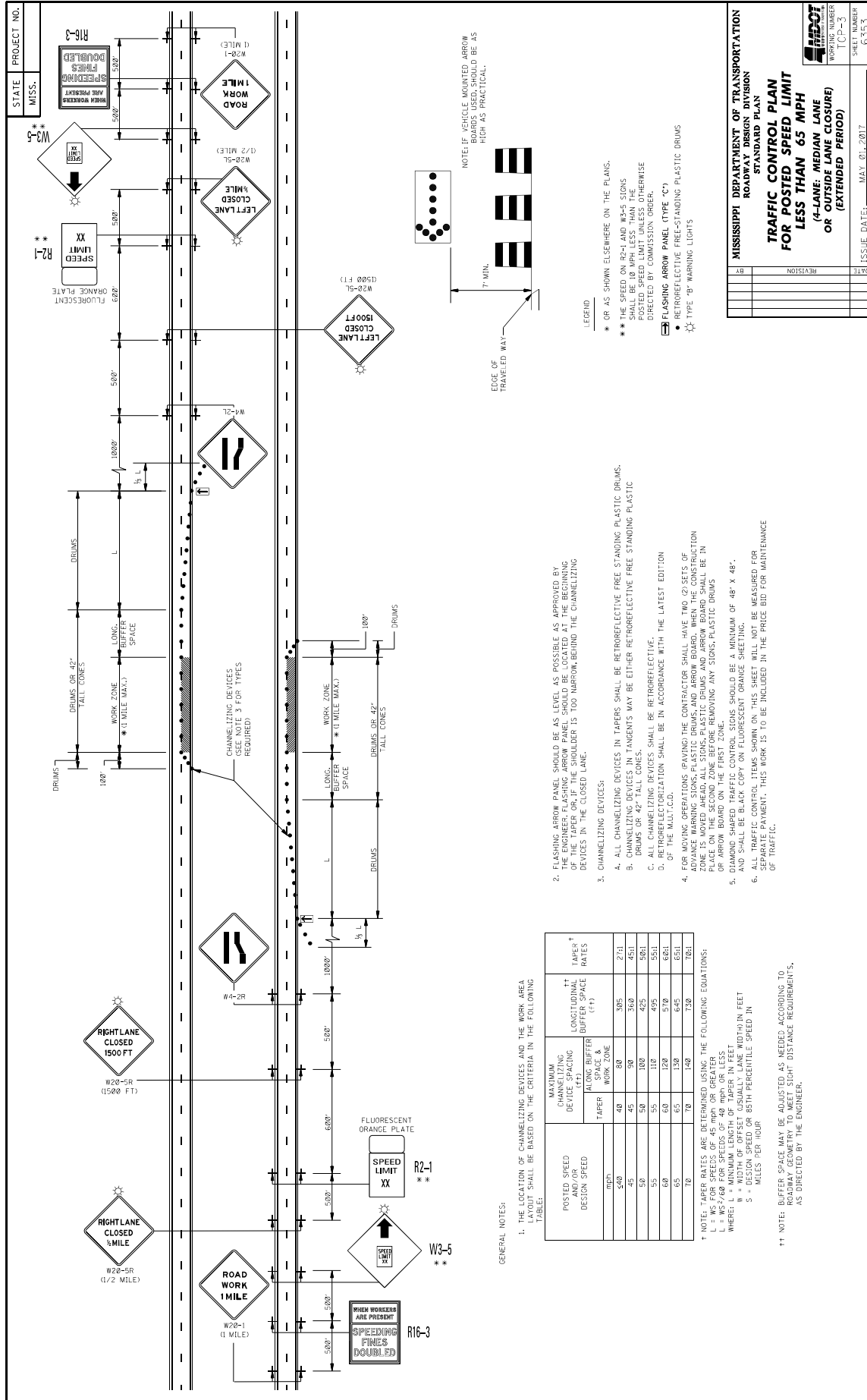
POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (FT)		LONGITUDINAL BUFFER SPACE (FT)	TAPER RATES
	LANE LINE & WORK ZONE	WORK ZONE		
40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
 $L = WS$ FOR SPEEDS OF 45 MPH OR GREATER
 $L = WS^2$ FOR SPEEDS OF 30 MPH OR LESS
 WHERE: L = MINIMUM LENGTH OF TAPER 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.

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) OR (WORK DAY ONLY)

ISSUE DATE: MAY 01, 2017
 SHEET NUMBER: 1CP-2
 WORKING NUMBER: 6932



GENERAL NOTES:

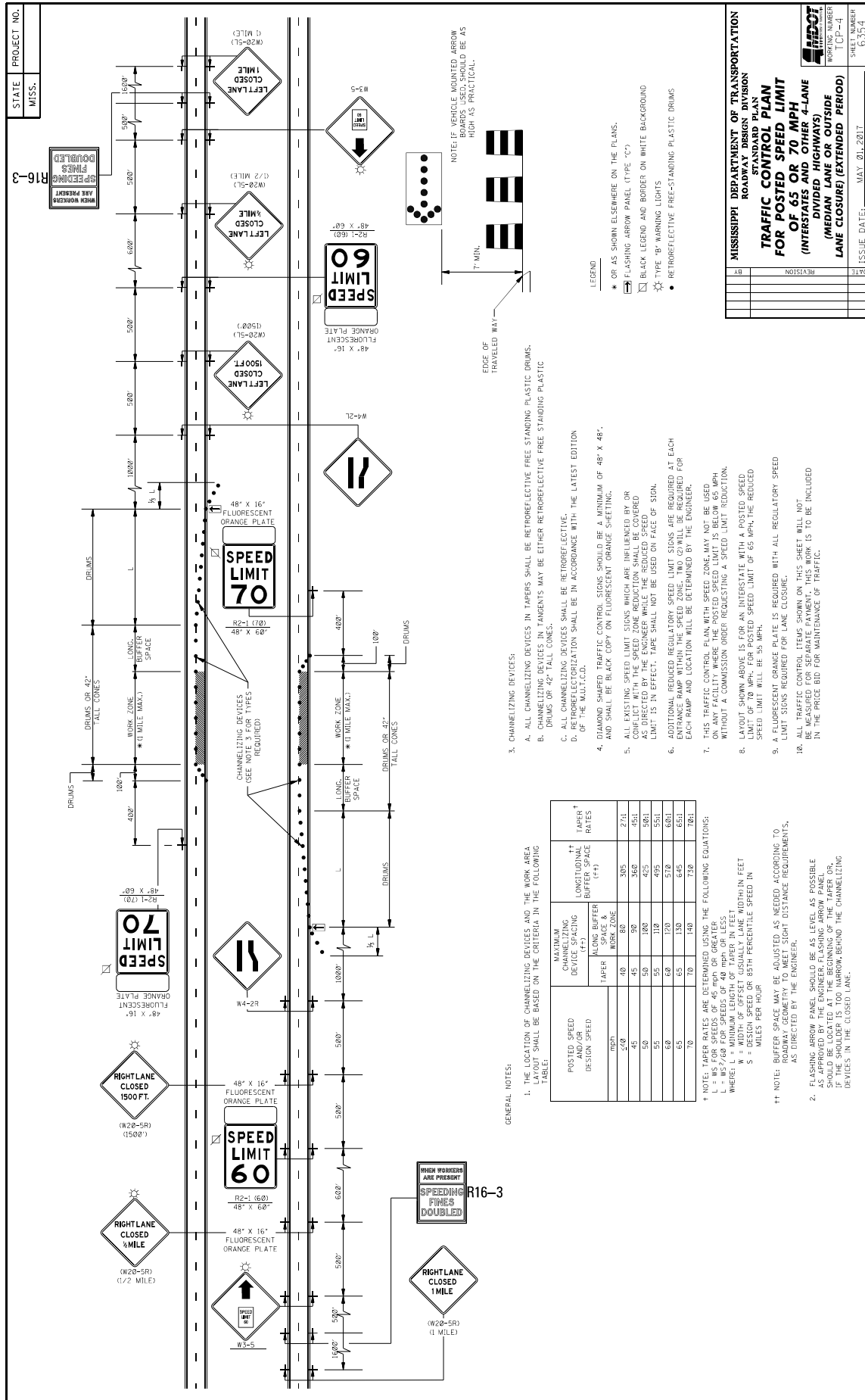
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED DESIGN SPEED (MPH)	MAXIMUM CHANNELIZING DEVICES SPACING (FT)		TAPER RATES (PERCENT)	TAPER LENGTH (FT)	TAPER RATES (PERCENT)
	ALONG BUFFER	WORK ZONE			
40	40	80	45	360	45%
45	45	90	50	405	50%
50	50	100	55	450	55%
55	55	110	60	500	60%
60	60	120	65	540	65%
65	65	130	70	595	70%

† TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
 L = 4S FOR SPEEDS OF 45 MPH OR GREATER
 L = 4S/2 FOR SPEEDS OF 40 MPH OR LESS
 WHERE: L = TAPER LENGTH 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.

- 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 WORK ZONE. THE BUFFER SHOULD BE 100' AHEAD OF THE CHANNELIZING DEVICES IN THE CLOSED LANE.
- CHANNELIZING DEVICES:
 - ALL CHANNELIZING DEVICES IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
 - CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES.
 - ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
 - RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD.
- FOR TAPERING (WORK ZONE) TAPERS THE CONTRACTOR SHALL HAVE TWO (2) FEET OF WORK ZONE AHEAD OF THE CHANNELIZING DEVICES. 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.
- ALL CHANNELIZING DEVICES SHALL BE 48" X 48" IN SIZE. TYPE 'B' WARNING LIGHTS SHOULD BE A MINIMUM OF 48" X 48".
- 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 PROJECT NO.
MISS. R16-3

WHEN WORKERS ARE PRESENT SPEEDING FINES DOUBLED

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

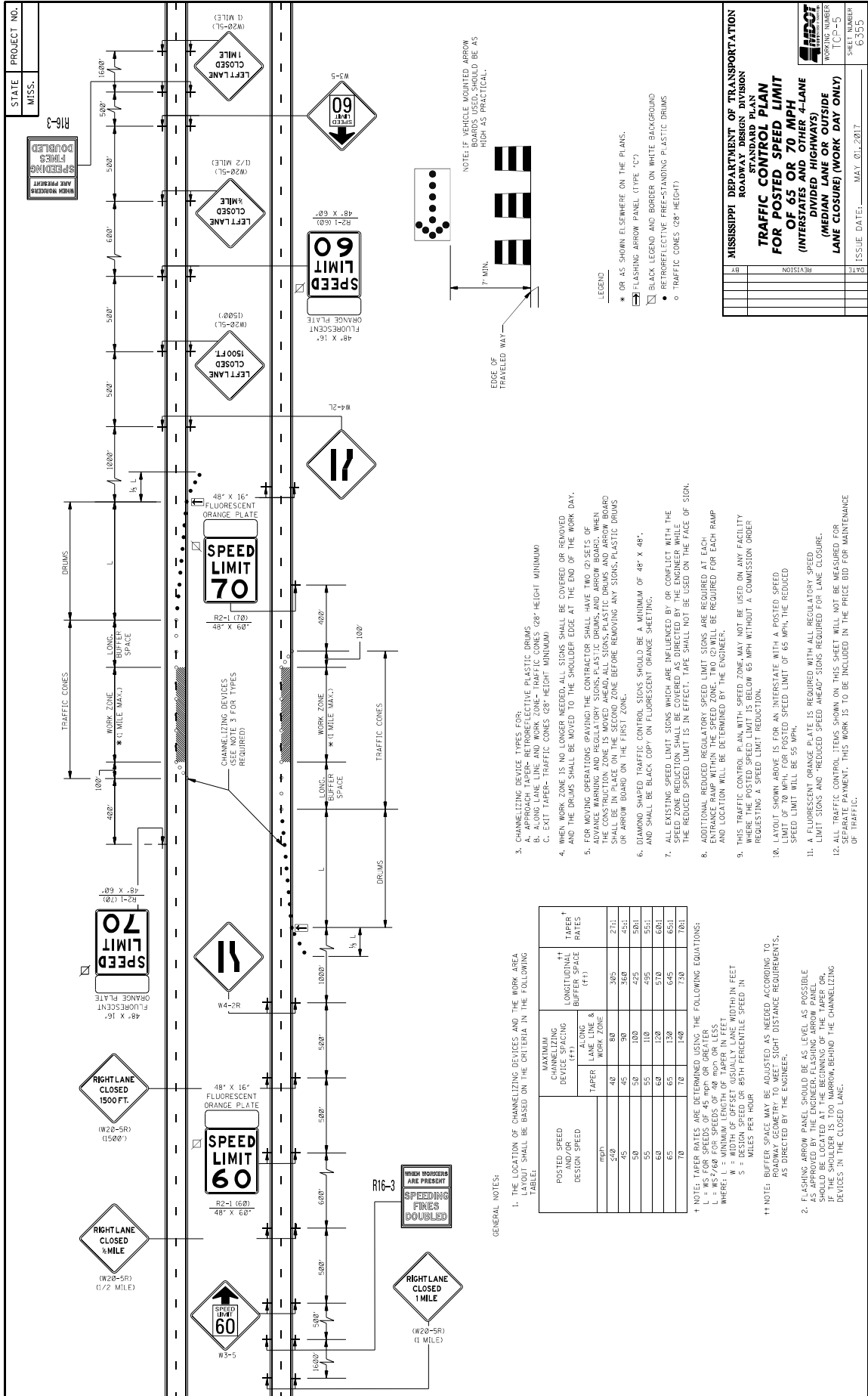
ISSUE DATE: MAY 01, 2017

WORKING NUMBER: TCF-4
SHEET NUMBER: 6534

3. CHANNELIZING DEVICES:
- ALL CHANNELIZING DEVICES IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
 - CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES.
 - ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
 - RETROREFLECTIVIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD-6A.
 - DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48" AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
 - ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR COMPLECT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED WITH A BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
 - ADDITIONAL REQUIRED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO CONES ARE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
 - 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.
 - 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.
 - A FLUORESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS REQUIRED FOR LANE CLOSURE.
 - 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.

POSTED SPEED DESIGN SPEED mph	MAXIMUM CHANNELIZING DEVICE SPACING		LONGITUDINAL BUFFER SPACE (FT)	TAPER RATES
	TAPER	WORK ZONE		
50	40	80	305	2/1
45	45	90	360	4/1
40	50	100	420	5/1
35	60	120	450	6/1
30	60	120	520	6/1
25	65	130	645	6/1
20	70	140	730	7/1

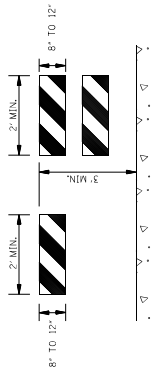
1. NOTES: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
 T = 100 S / (S - V) FOR SPEEDS OF 45 MPH OR GREATER
 L = WS² / 60 FOR SPEEDS OF 40 MPH OR LESS
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
 V = BUFFER SPACE MAY BE ADJUSTED 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 END OF THE WORK ZONE, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.



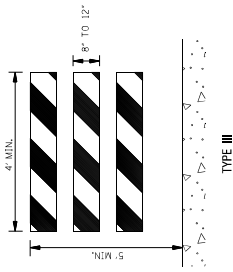
GENERAL NOTES:

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 (MPH) | MAXIMUM CHANNELIZING DEVICE SPACING (FT) | | LONGITUDINAL BUFFER SPACE (FT) | TAPER [†] RATES |
|--|--|-----------|--------------------------------|--------------------------|
| | LANE LINE & WORK ZONE | WORK ZONE | | |
| 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 FOR SPEEDS OF 60 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 LOCAL LIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AND SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR IF THE SHOULDER IS TOO NARROW BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.

STATE PROJECT NO.
MISS.



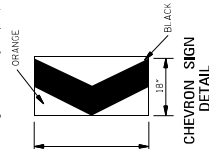
TYPE I
TYPE II



TYPE III

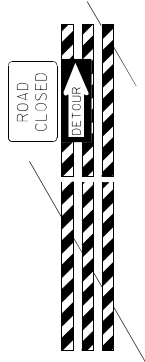
STANDARD BARRICADES

1. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION OF 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 SUCCESSFUL CRASH TESTING. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://safety.fhwa.dot.gov/roadway_dept/policy_guidance/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.

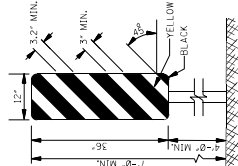


BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

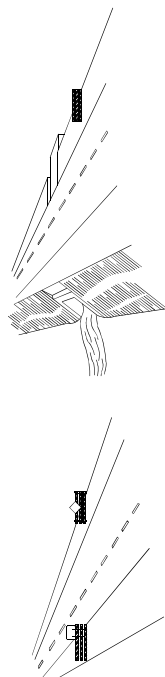
	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE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



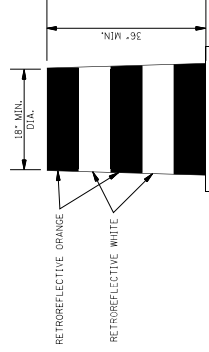
TYPE 3 OBJECT MARKER
(OM-3R)

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 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 OF A ROADWAY TO RESTRICT TRAFFIC FROM ENTERING OR EXITING A ZONE OF WORKING 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 THE MARKING OF THE ROADWAY. THE DRUMS SHALL BE MARKED WITH RETROREFLECTIVE STRIPES 12 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

NO.	REVISION	DATE

WORKING NUMBER: TSP-6
SHEET NUMBER: 6350
ISSUE DATE: MAY 01, 2017

STATE MISS.	PROJECT NO.	
----------------	-------------	--

MOBILE OPERATIONS ON MULTILANE ROAD

MOBILE OPERATIONS ON MULTILANE ROAD

MOBILE OPERATIONS ON TWO-LANE ROAD

MOBILE OPERATIONS ON TWO-LANE ROAD

NOTES FOR MULTILANE LANE OPERATION:

- VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLASERS, SIGNS, OR ARROW PANELS.
- SHADOW VEHICLE 2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK MOUNTED ATTENUATOR (TMA), AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE LEGIBLY MOUNTED ON SHADOW VEHICLE 2 SO AS NOT TO OBSCURE THE ARROW PANEL.
- SHADOW VEHICLE 1 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK-MOUNTED ATTENUATOR (TMA).
- 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.
- WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, SHADOW VEHICLE 2 SHOULD BE ELIMINATED.
- ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE SHOULD BE USED (I.e., VEHICLE 3 ON THE SHOULDER OF PRACTICALLY, VEHICLE 2 IN THE CLOSED LANE, AND VEHICLE 1 IN THE CLOSED LANE).
- ARROW PANELS SHALL BE AS A MINIMUM TYPE B, 60" X 30" IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCO.
- WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.
- 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.
- 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.

NOTES FOR TWO-LANE OPERATION:

- 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.
- 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 SIGHT DISTANCE IS NOT AVAILABLE, SHADOW VEHICLES 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.
- 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.
- A TRUCK-MOUNTED ATTENUATOR (TMA) SHOULD BE USED ON THE SHADOW VEHICLE AND MAY BE USED ON THE WORK VEHICLE.
- THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE SHADOW VEHICLE SHALL BE EQUIPPED WITH BEACONS. HIGH-BEAM LIGHTS AND WORK 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.
- 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.
- ARROW BOARD TO BE USED IN CAUTION MODE.
- 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.

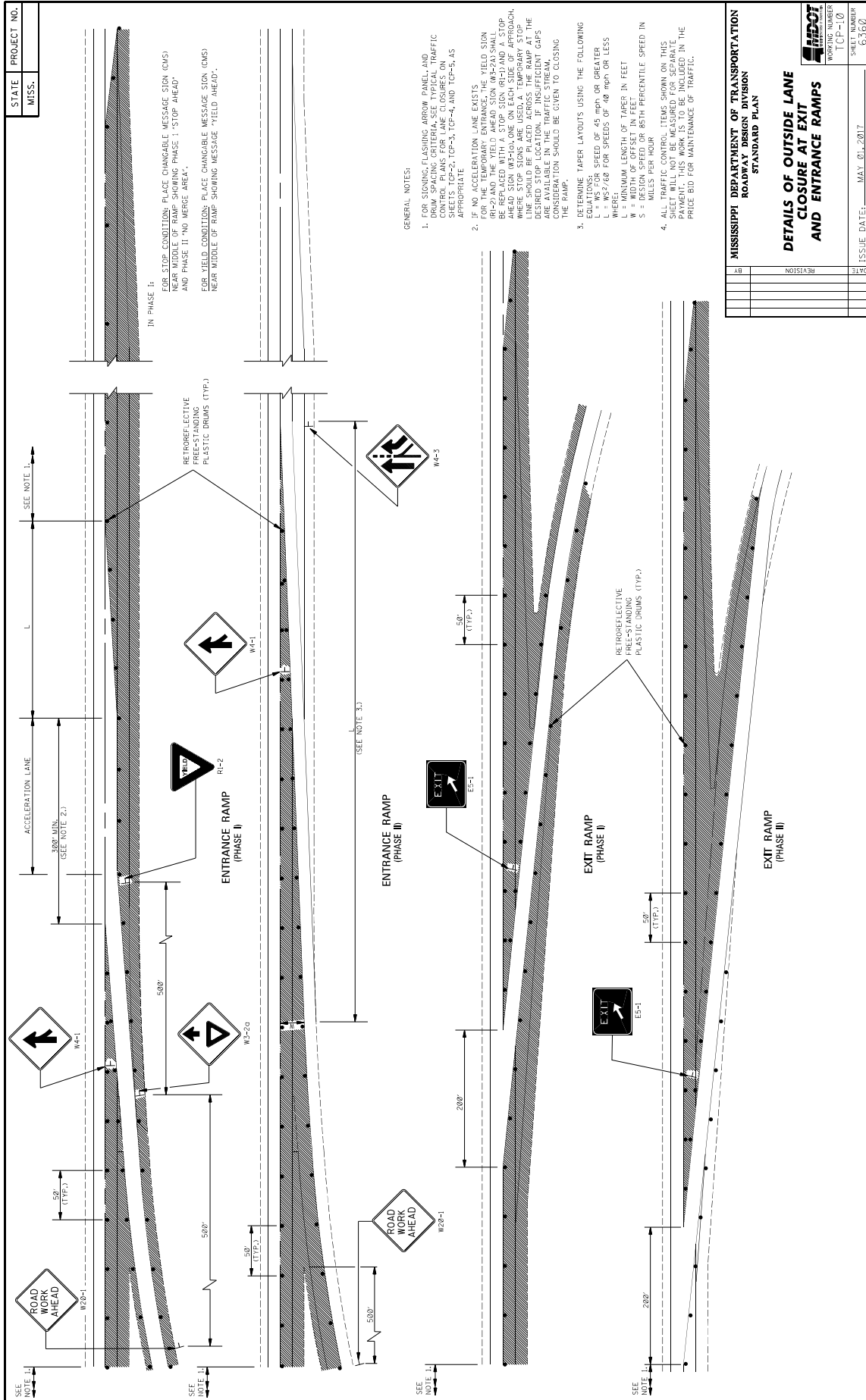
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

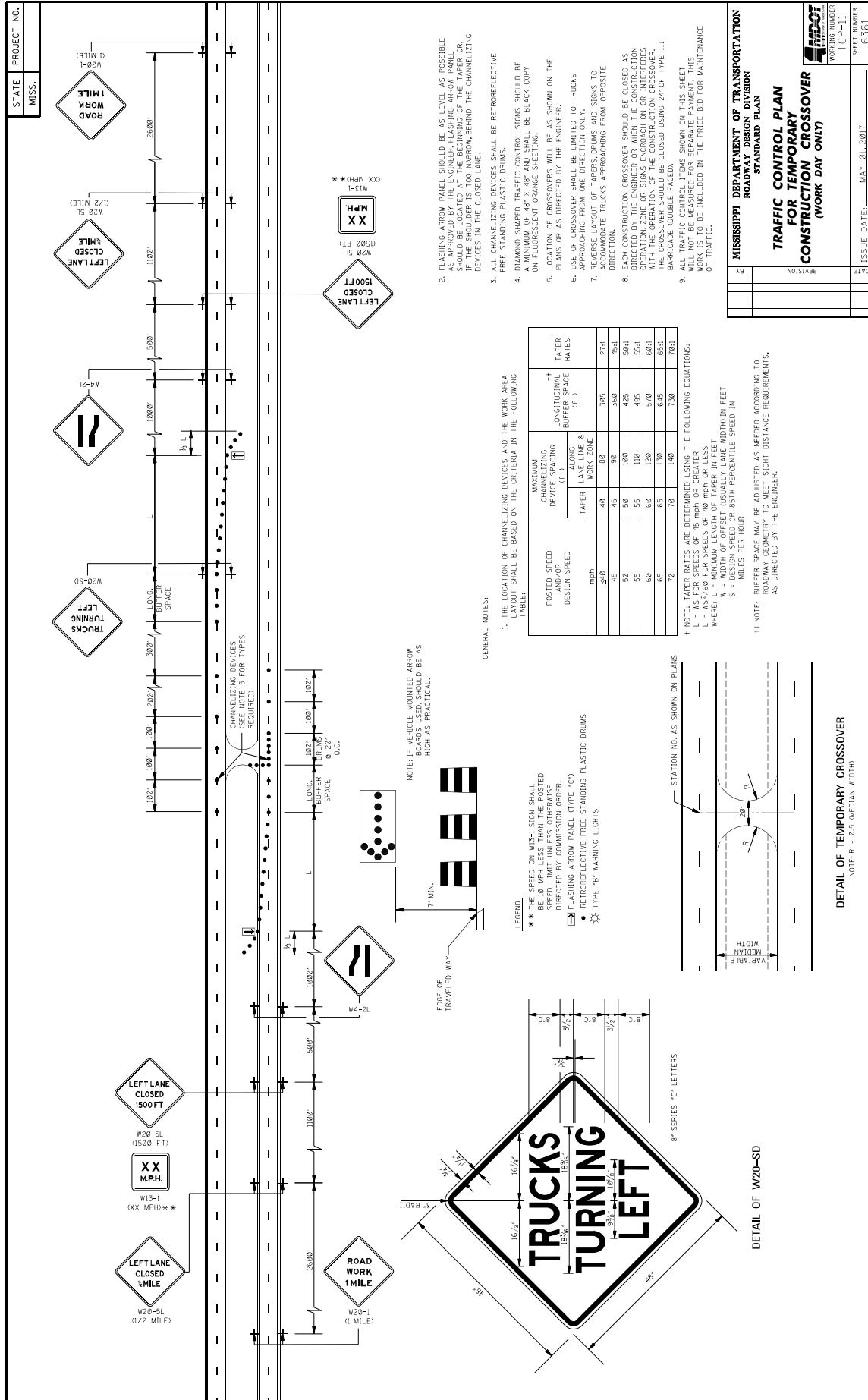
TRAFFIC CONTROL PLAN
MOBILE OPERATIONS
MULTILANE ROADS
TWO-LANE ROADS

NO.	REVISION	DATE

ISSUE DATE: MAY 01, 2017

SHEET NUMBER TCP-9	PROJECT NUMBER G339
-----------------------	------------------------

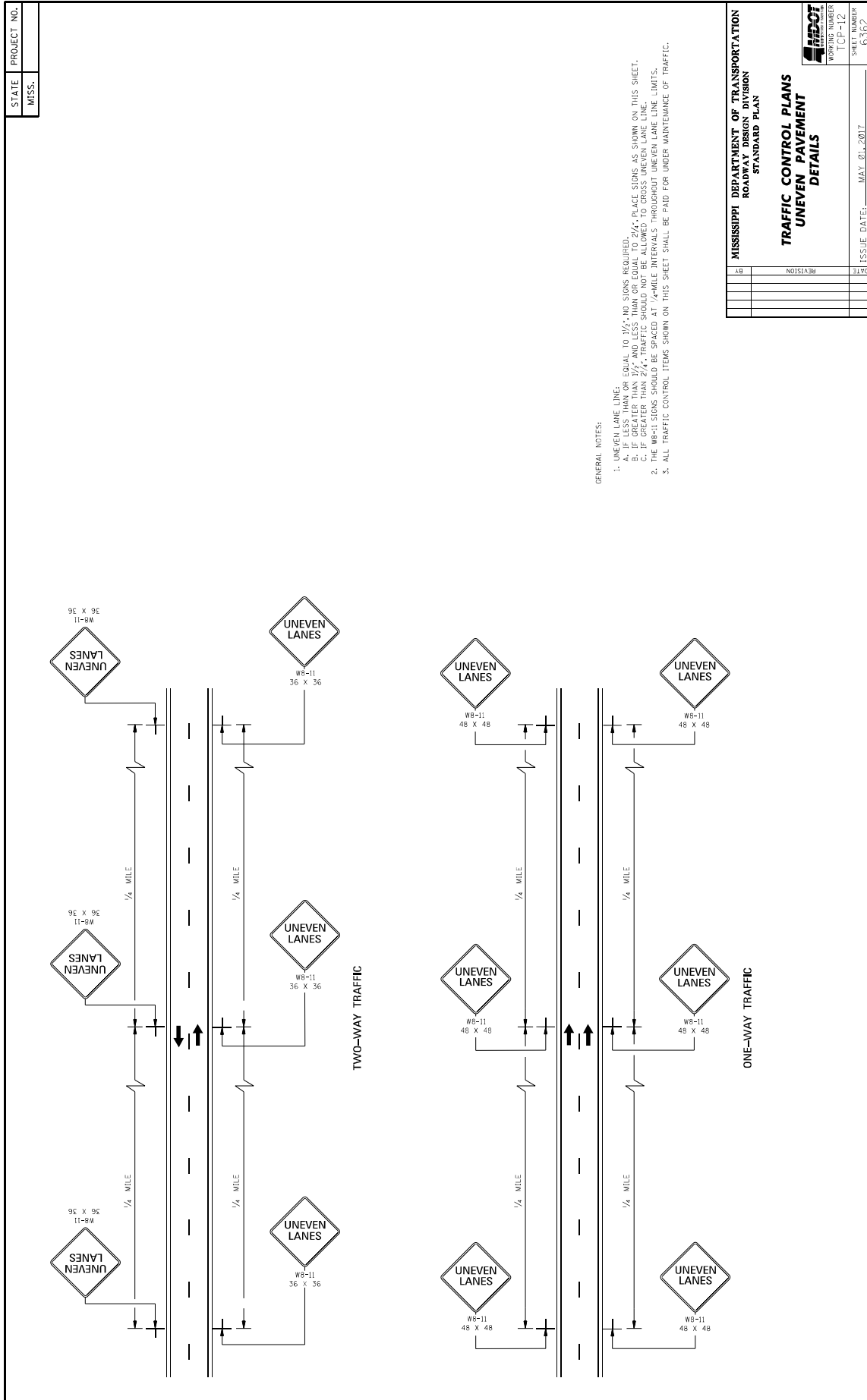




MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR TEMPORARY
CONSTRUCTION CROSSOVER
(WORK DAY ONLY)

WORKING NUMBER: TCP-11
SHEET NUMBER: 6361

ISSUE DATE: MAY 01, 2017



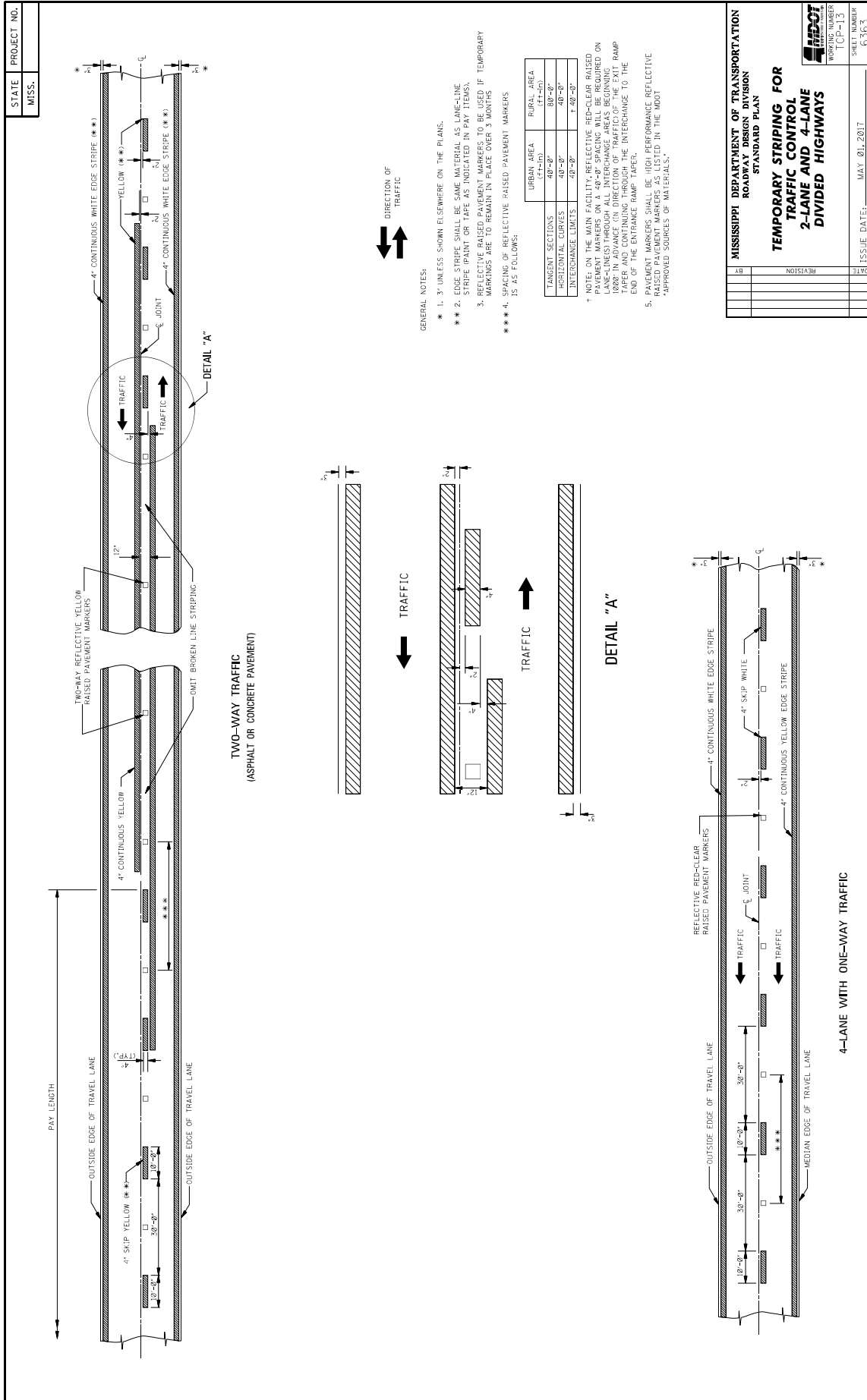
	DATE	REVISION							

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**TRAFFIC CONTROL PLANS
UNEVEN PAVEMENT
DETAILS**

WORKING NUMBER	SHEET NUMBER								
TCP-12	6362								

ISSUE DATE: MAY 01, 2017



DATE

ISSUE DATE: MAY 01, 2017

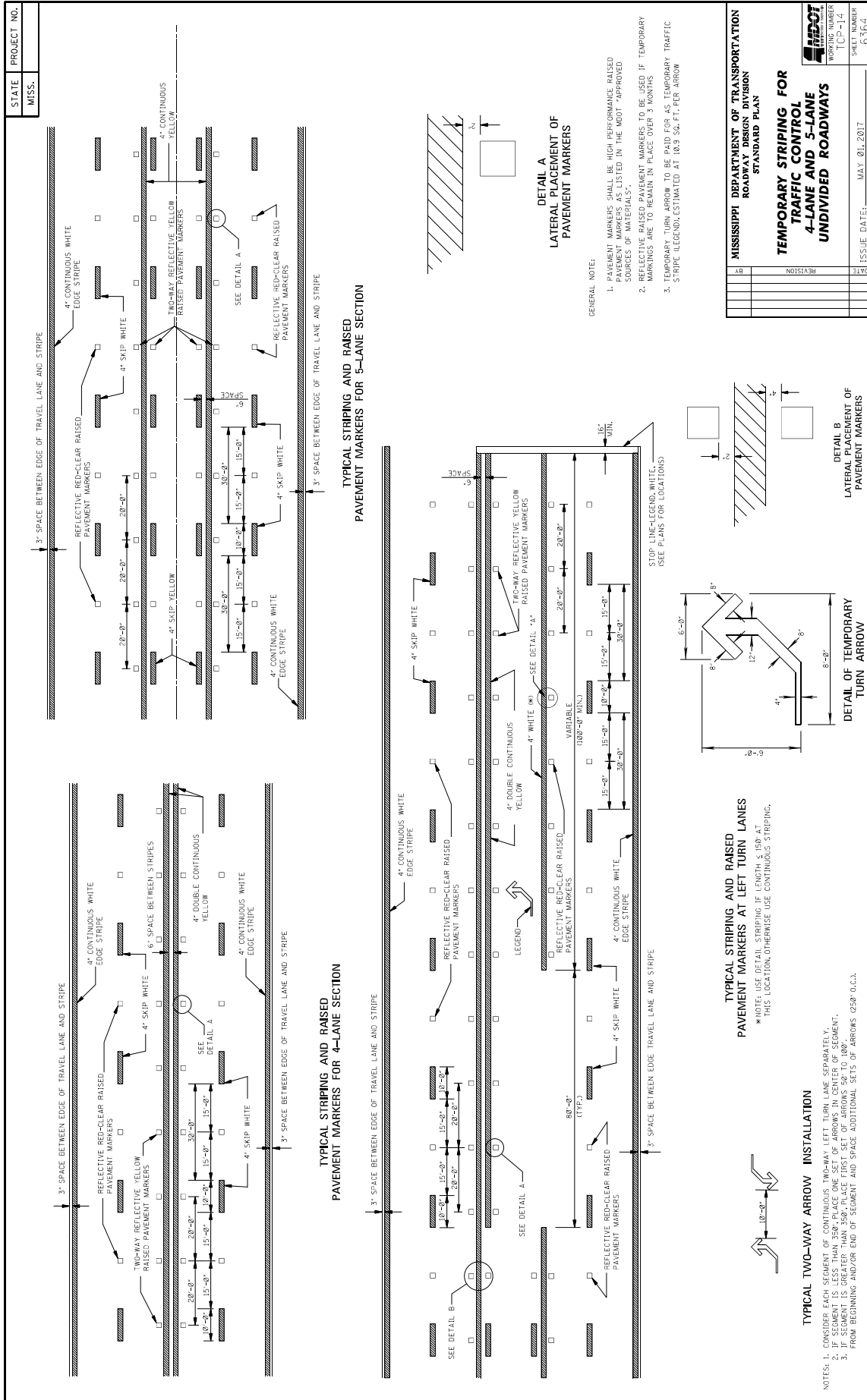
REVISION

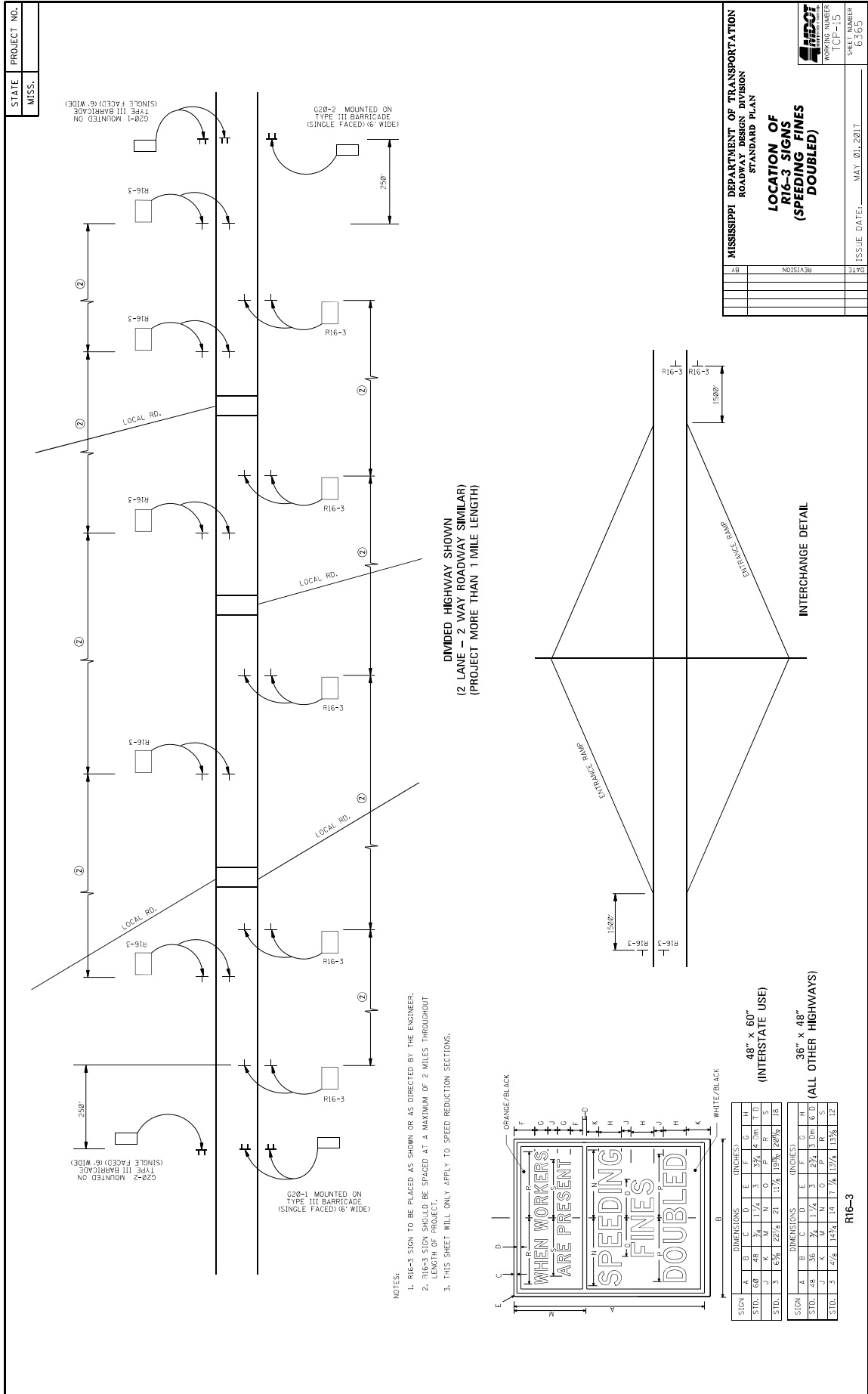
SHEET NUMBER 6363

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

WORKING NUMBER [CP-13]

**TEMPORARY STRIPING FOR
2-LANE AND 4-LANE
DIVIDED HIGHWAYS**





STATE MISS.	PROJECT NO.	
----------------	-------------	--

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.

TYPICAL SHOULDER WORK #1
(SEE NOTE A-I THIS SHEET)

TYPICAL SHOULDER WORK #2

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.

DETAIL OF DRUM PLACEMENT AT PAVEMENT EDGE DROP-OFF

GRANULAR MATERIAL REQUIRED (SAME CLASSIFICATION AS SHOULDER MATERIAL, SEE TYPICAL SECTIONS)

NOTES:

- * A. PAVEMENT EDGE DROP-OFF
 1. IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER 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 B (1538'+O.C.).
 2. TWO AND ONE QUARTER TO THREE INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 120 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 MULTIPLIER $L/3L$, 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 = $2 \times S$
 2. WHERE $S =$ SPEED IN MPH (POSTED OR 85 PERCENTILE)
 3. WHERE $L =$ TAPER LENGTH IN FEET
 4. WHERE $W =$ WIDTH OF OFFSET IN FEET
- C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

TABLE V-1. GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE	
X = SPEED (MPH)	LENGTH (FEET)
25	35
30	45
35	55
40	65
45	75
50	85
55	95
60	105
65	115

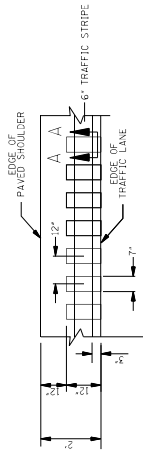
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**TRAFFIC CONTROL DETAILS
DRUM PLACEMENT
AND SHOULDER CLOSURE**

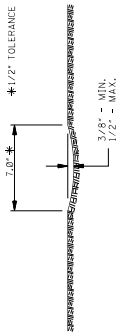
WORKING NUMBER: T-CP-16
SHEET NUMBER: 63-06
ISSUE DATE: MAY 01, 2017

STATE	PROJECT NO.
MISS.	

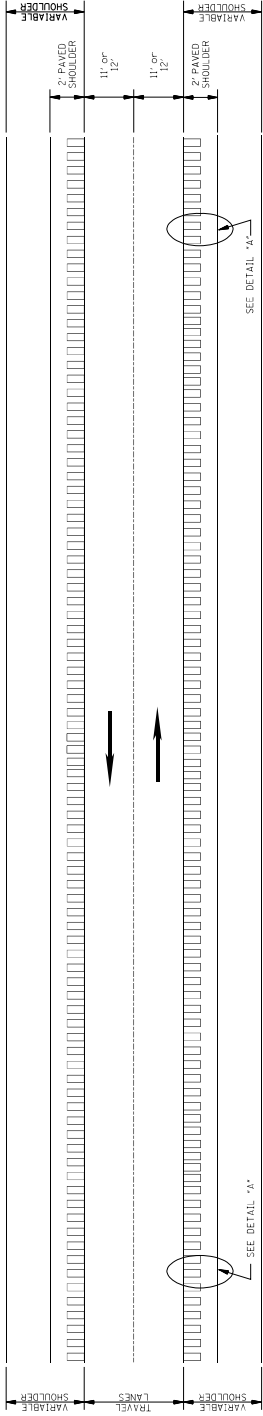
- GENERAL NOTES
- GROUND-IN RUMBLE STRIPES SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT.
 - GROUND-IN RUMBLE STRIPES SHALL BE APPLIED TO ALL PAVED SHOULDERS ON ROADWAYS OR OTHER INTERUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER.
 - COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS.
 - GROUND-IN RUMBLE STRIPES SHALL BE APPLIED TO:
 - MAINLINE
 - INTERSECTING ROADWAY IF OVERLAD OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
 - ANY ROADWAY WITH EXISTING RUMBLE STRIPES PRIOR TO CONSTRUCTION.
 - DO NOT USE WHERE TRAVEL LANE IS LESS THAN 11' WIDE.



DETAIL "A"



SECTION "A-A"

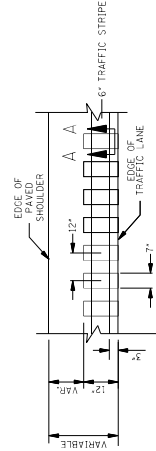


PLAN
NOT TO SCALE

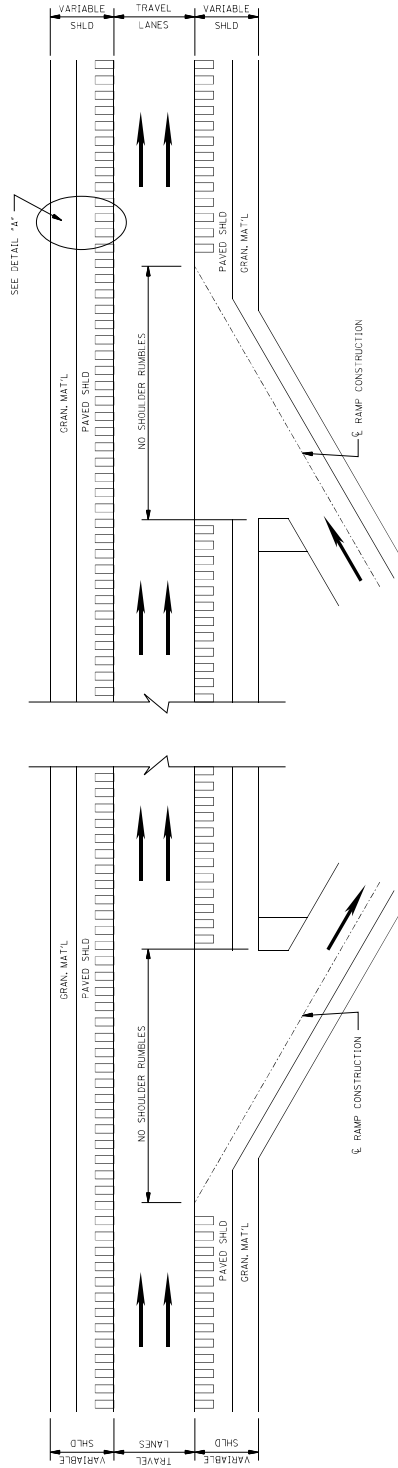
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
RUMBLE STRIPES 2-LANE HIGHWAYS (ASPHALT LANES, 2-FT ASPHALT SHOULDERS)	
WORKING NUMBER RS-1	SHEET NUMBER 606-1
DATE	ISSUE DATE: MAY 21, 2017
BY	REVISION

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 APPLIED TO ALL EXISTING AND NEW ROADWAYS OR OTHER INTERUPTIONS 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 OVERLAD OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
 - C. ANY ROADWAY WITH EXISTING RUMBLE STRIPES PRIOR TO CONSTRUCTION.

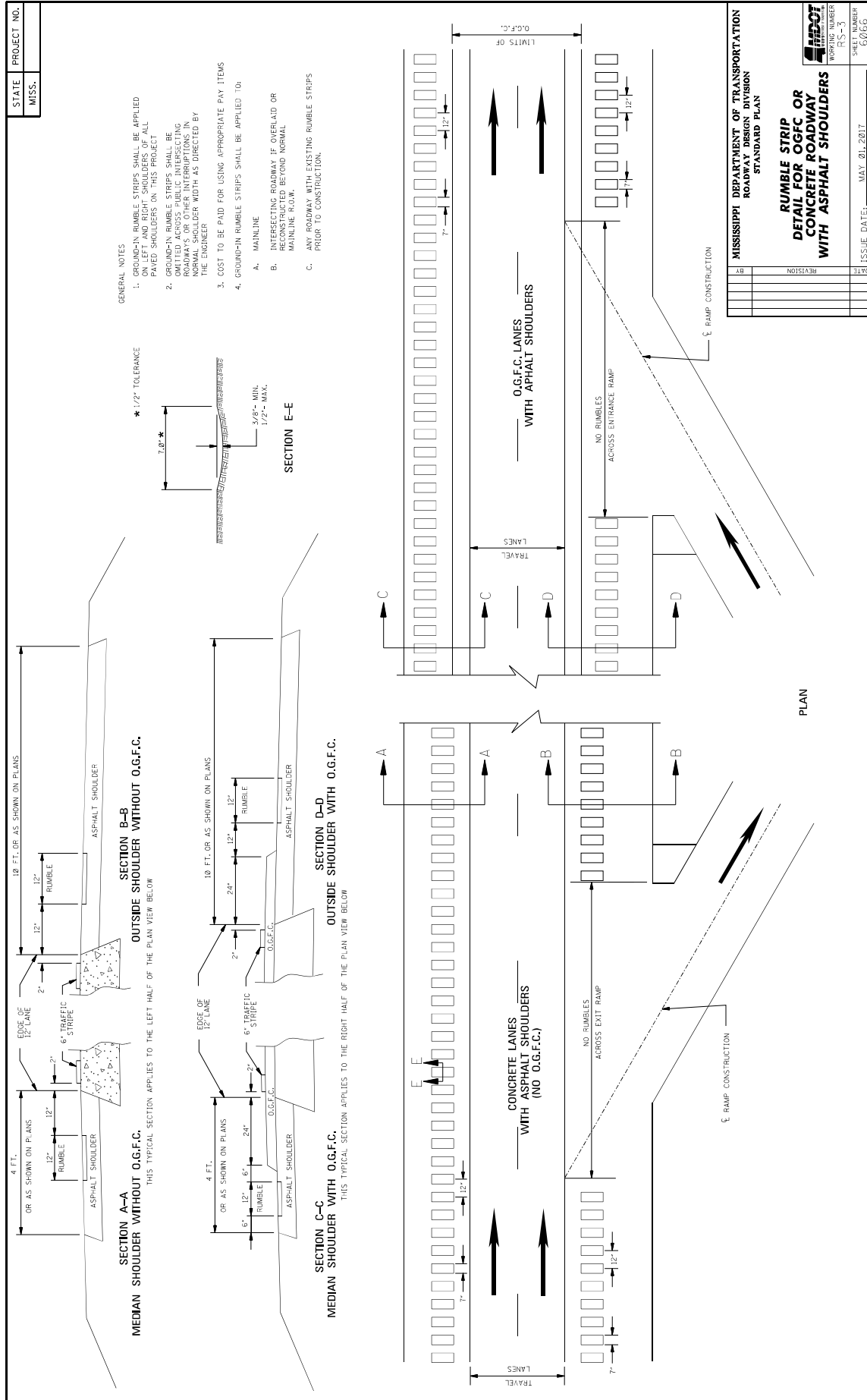


SECTION "A-A"



PLAN
NOT TO SCALE
DETAILS OF
RUMBLE STRIPS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
RUMBLE STRIPES 4-LANE HIGHWAYS (ASPHALT LANES, 2-FT OR WIDER, ASPHALT SHOULDERS)	
BY	REVISION
SHEET NUMBER R.3-2	ISSUE DATE: MAY 21, 2017
60603	



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. 446

CODE: (SP)

DATE: 10/18/2017

SUBJECT: Traffic on Milled Surface in Urban Areas

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 516

CODE: (IS)

DATE: 11/28/2017

SUBJECT: Errata and Modifications to the 2017 Standard Specifications

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

725 702.08.3 In the second sentence of the first paragraph, change “hot-mix” to “asphalt.”

954 804.02.13.1.6 In the definition for “M” in the % Reduction formulas, change “paragraph 7.3” to “paragraph 5.3.”

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1225

CODE: (SP)

DATE: 11/13/2018

SUBJECT: Early Notice to Proceed

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1226

CODE: (IS)

DATE: 11/16/2018

SUBJECT: Material Storage Under Bridges

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1241

CODE: (IS)

DATE: 11/27/2018

SUBJECT: Fuel and Material Adjustments

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1963

CODE: (SP)

DATE: 9/23/2019

SUBJECT: Guardrail Pads

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2206

CODE: (IS)

DATE: 01/14/2020

SUBJECT: MASH Compliant Devices

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2207

CODE: (IS)

DATE: 01/08/2020

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, fluorescent yellow, and fluorescent yellow/green sheeting shall be Type XI sheeting.

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.

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.



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.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 2278

CODE: (SP)

DATE: 03/04/2020

SUBJECT: Smoothness Tolerances

Bidders are hereby advised that the smoothness tolerances for this project shall meet the requirements of a Category C project according to Subsection 403.03.2.1. Bidders are responsible for the collection of a preliminary smoothness profile prior to any work being performed.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 2365

CODE: (SP)

DATE: 03/23/2020

SUBJECT: Special Project Signs

Bidders are advised that this project will require Special Project Signs. The signs and posts will be State Furnished and Contractor will only be required to install, maintain, and remove the signs. The signs shall be erected prior to beginning any construction and remain in place for the duration of the project. The signs shall be installed near the beginning and end of the project at locations approved by the Engineer. The signs will remain the property of the Department at the end of the project. All costs for special project signs should be included in the bid price for pay item 618-A: Maintenance of Traffic.



6.0" Radius, 0.8" Border, Blue on White;

"Project Funded By" D 2K; "Mississippi Lottery" D 2K; "Thank Your" E 2K; "State Legislator" E 2K;

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2503

CODE: (SP)

DATE: 6/01/2020

SUBJECT: Contract Time

PROJECT: SP-5021-50(020) / 108569301 – Neshoba 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 September 8, 2020 and the date for Notice to Proceed / Beginning of Contract Time will be October 8, 2020.

Should the Contractor request a Notice to Proceed earlier than October 8, 2020 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.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 2504

CODE: (SP)

DATE: 04/13/2020

SUBJECT: Scope of Work

PROJECT: SP-5021-50(020) / 108569301 -- Neshoba County

The contract documents do not include an official set of plans, but may by reference include some Standard Drawings or Special Drawings. All other references to plans in the contract documents and Standard Specifications for Road and Bridge Construction are to be disregarded.

Work on this project shall consist of the following:

Spot milling/inlaying, scrub sealing, and overlaying approximately 11 miles of existing SR 21 from Dixon (BOP Station 10+00) to the intersection of SR 21 and SR 15 (EOP Station 575+27).

The existing pavement for SR 21 consists of 4½” to 7½” of asphalt over 6” to 10” of untreated granular material with 11-foot to 12-foot lanes and 1-foot to 3-foot shoulders.

Construction signage shall be installed as per the detail sheets included prior to the beginning of work.

The existing asphalt roadway shall be rehabilitated using the following sequence of event. Failed areas shall be repaired full depth using 12.5-mm, MT, Leveling asphalt. The roadway shall then be spot milled/inlayed by fine milling 2” and inlayed 2” using 12.5-mm, MT, asphalt. A scrub seal shall then be placed on the mainline pavement. After the scrub seal has cured for five (5) working days, the roadway shall then be overlaid 2” using 12.5-mm, MT, asphalt.

The repair of failed asphalt pavement shall be accomplished by saw cutting the asphalt pavement and removing the asphalt full depth. Any existing asphalt pavement adjacent to the asphalt failed area if required shall be removed during the repair process and shall be paid for using pay item 202-B: Removal of Asphalt Pavement, Failed Areas. Any failed base or subgrade should be removed and will be paid for using pay item 203-G: Excess Excavation. The area will be backfilled with 12.5-mm, MT, Leveling asphalt in lifts not to exceed three inches (3”). The joints shall be tacked prior to placement of the asphalt. The Contractor shall only remove the amount of pavement that can be replaced on the same day. The removal sections shall be adequately delineated and protected until the work is completed. Tables showing the location of the failed asphalt areas are attached. No other asphalt failed area repairs shall be added without the approval of the Engineer.

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

The polymer modified asphalt rejuvenating scrub seal shall be placed on the full width of the travel lanes as per Special Provision No. 907-414 and the attached typical section. Prior to placing the scrub seal, the cracks in the roadway shall be cleaned using compressed air, or a comparable method, to remove any excess material. The existing thermoplastic pavement markings shall be removed prior to the scrub seal and the method of removal shall be approved by the Engineer and shall be absorbed in other items. The thermoplastic pavement markings shall only be removed in the areas of the daily anticipated run for the scrub seal. If the Contractor elects to remove the entirety of the thermoplastic pavement markings contained in the project limits, temporary pavement markings shall be required and the cost shall be absorbed in other items bid. The scrub seal will not be applied to county roads, guardrail pads, or driveway pads. Scrub Seal will be paid by the square yard of pavement surface to which it is applied under pay item 907-414-A and the bid price shall include all labor, materials, equipment, temporary markers, vegetation removal, thermoplastic removal, cleaning of the pavement surface, pre-sweeping, post-sweeping, removing excess aggregate, doing all the work involved in mixing, applying, and protecting the polymer modified asphalt rejuvenating scrub seal, and all incidentals necessary to complete the work. Prior to any sealing operation, the rectangular "Loose Rock" signs addressed in Special Provision No. 907-414 shall be installed and remain in place until all sealing operations are complete and the roadway overlaid or until directed by the Engineer. The "Loose Rock" signs shall be installed throughout the project limits in both directions at one (1) mile spacing beginning at the BOP and EOP as required. Payment for signs shown in the sign detail drawings shall be made under pay item 618-A: Maintenance of Traffic.

Traffic on the milled surface shall be limited to five (5) days. The Contractor will be assessed a penalty of **\$5,000 per calendar day** after the 5-day period until the milled surfaces are covered with the next lift of asphalt. A 150-foot milling tie in shall be required at the BOP, EOP, and at the bridge ends of Bridge #32.7 (Stations 255+35 and 256+97). Scrub seal shall not be placed at the locations of the milled tie ins.

A table showing the locations of curve widening is shown below. The curve widening shall consist of a 2½-inch layer of 12.5-mm, MT, Leveling asphalt, followed by a 2-inch layer of 12.5-mm, MT, Leveling asphalt. The curve widening shall be two feet (2') wide. After the paving operation, any material bladed aside for these areas shall be pulled back to the asphalt pavement edge as directed by the Engineer and all cost shall be absorbed. This operation shall be performed before the scrub seal is placed.

Local paved public roads shall be either milled/inlaid/overlaid or overlaid with 2" of 12.5-mm, MT, asphalt to the end of the existing asphalt pavement, end of MDOT maintenance or to right-of-way or as shown on the attached tables. Where a minimum of five feet (5') of shoulder width can be paved at the beginning of local road radii, a 100-foot asphalt pavement taper shall be constructed. Said taper shall be 6" thick and shall be placed in two (2) 3" lifts of 12.5-mm, MT, asphalt and shall conform to the detail drawings. After the paving operation, any material bladed aside for this area shall be pulled back to the asphalt pavement edge as directed by the Engineer and all cost shall be absorbed. A table showing the locations of the local paved public roads that shall be milled/overlaid is shown below. A table showing the locations of the local paved public roads that shall have a milled key way in order to tie in the overlaid pavement surface to the

existing roadway is shown below. Local paved public roads that are milled/inlaid/overlaid shall also have a milled tie in for the final surface lift of asphalt.

Local public road 2416 located at Station 448+60 shall be paved by placing two (2) 2" lifts of 12.5-mm, MT, asphalt to the end of the MDOT maintenance or to right-of-way or as directed. Local unpaved public roads shall be bladed, shaped, and compacted prior to paving as directed by the Engineer. After the paving operation, any material bladed aside for this area shall be pulled back to the asphalt pavement edge as directed by the Engineer and all cost shall be absorbed.

Temporary pavement markings shall be placed at the end of each day's paving operations and prior to opening the road to traffic. Permanent pavement markings shall be placed after completion of all paving operations as per Subsection 403.03.5.2.

The existing shoulders are to be raised to match the new pavement elevation by placing variable depth crushed stone on the existing shoulders. Placement of the granular material on the finished asphalt course shall not be permitted. The material shall be bladed, rolled, and compacted to a finished slope of four percent (4%). Placement of this material shall be performed to provide a uniform and compacted shoulder with a minimum depth and width of material placed. Shoulders with adequate shoulder material in place shall be bladed to a slope of four percent (4%). The cost of blading will be an absorbed item and is not to be included in the price of pay items bid.

Removal of the existing shoulder material shall be coincident with the milling/overlying operation to prevent the possible ponding of water. No payment will be made for blading or removal of the existing shoulder material. Any material excavated from the existing shoulder shall be used to raise the existing shoulder to match the new pavement elevation and any surplus material shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas as directed by the Engineer and will be an absorbed item. Material which cannot be placed in adjacent areas and deemed to be excess excavations by the Engineer will be an absorbed item.

Tables are attached showing locations where crushed stone is required to be placed to eliminate excessive drop offs. This operation shall be the first order of business for the project once construction signs are placed.

Guardrails are required to be replaced at various locations within the project (see attached Table for locations/quantities). All guardrail removed is to be replaced the same day and prior to reopening the adjacent lane of traffic. This work shall consist of the following sequence of operations: removal of the existing guardrail and posts, removal of the entire guardrail pad and repaving the guardrail pad, and installation of the new guardrail. Voids created by the removal of posts, concrete anchors, footings, etc. shall be backfilled and tamped in accordance with Section 203 of the Standard Specifications. All guard rails, including rail, terminal end sections, bridge end sections, and metal posts will become property of MDOT and shall be delivered by the Contractor to the MDOT Philadelphia Maintenance Facility located at 1115 Highway 15 Bypass Philadelphia, MS. The Contractor shall coordinate the delivery of these items with MDOT in advance. Concrete anchors, wooden posts, wooden rails will become the property of the Contractor and will be removed from the Project Site. The Contractor shall not damage or disturb the existing guardrail or posts during the grading or the paving operation. The guardrail

pad shall be constructed using 12.5-mm, MT, asphalt and shall be 4" thick. The cost of the removal of the guardrail delineators and object marker signs shall be included in other items bid. The length of guardrail required is based on a terminal section of 37.5' being used. For any other length terminal section, the length of normal guardrail shall be adjusted.

The joint repair, pay item 907-808-A, shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designated in the detail drawings provided. All concrete approach slab joints shall be sealed. If the bridge has an asphalt approach, the joint between the asphalt and concrete shall not be disturbed. Removal of existing silicone sealed, compression, and AC sealed joint materials will not be paid directly and shall be considered an absorbed item of work.

After the existing joint material has been removed, the joints shall then be saw cut as per the Joint Repair Standard Drawing. Saw cuts will be paid for under pay item 907-823-B: Saw Cut, Type II. The joints are then to be repaired, if necessary, with epoxy mortar or an approved equivalent. This work will be paid for under pay item 907-808-A. The joints shall then be sealed by one of the approved Manufacturers and installed according to the Manufacturer's specifications.

Temporary Portable Rumble Strips, as described in Special Provision No. 907-619, shall be used in advance of each lane closure. Payment shall be made under pay item 907-619-B: Temporary Portable Rumble Strips. At the conclusion of the project, MDOT will take possession of the set of temporary portable rumble strips used for the project.

Any bridges shall be swept off and cleaned at the end of the project to remove any existing debris plus any debris accumulated from construction activities. The sweeping and cleaning of bridges shall be absorbed in other items bid.

GENERAL NOTES

Milling and paving operations shall be performed such that a -2% slope from centerline is provided in normal crown roadway sections. Superelevation through curves shall be maintained as it currently exists or improved as directed.

Temporary asphalt joints (aka paper joints) shall be constructed at the end of each day's milling/overlay operations where the milled/overlaid surface joins the existing asphalt pavement surface. Paper joints shall be a minimum of nine feet (9') in length and for the full width of the milled surface. Paper joints shall be adequately maintained.

The Contractor is responsible for providing shoulder drainage outlets as applicable in milled areas. Payment for these outlets shall be included in the bid price for the milling of bituminous pavement.

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

Existing asphalt/concrete driveway connections shall be overlaid in order to match the new mainline pavement height using 12.5-mm, MT, asphalt. The existing asphalt/concrete driveway

connections shall be paved to the shoulder line per the included typical drawing. Pads shall be shaped horizontally and vertically to prevent excessive drop-offs. Granular material shall be placed around the pads to prevent shoulder drop-offs as directed and shall be placed in a timely manner. Drop-offs exceeding 2½" shall be corrected within two (2) calendar days of the placement of the pad. Crushed stone will be used as directed by the Engineer to fill in existing low shoulders.

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

Temporary stripe is required for scrub seal operations. Centerline stripe may be offset as needed to maintain lane delineation, but two sets of centerline markings may not be present at any time. Edge lines on projects requiring shoulders constructed of granular material may be delayed for a period not to exceed three (3) days. Placement of temporary stripes shall be placed as soon as possible but should not be placed until after the final brooming has taken place.

Temporary stripe will be required immediately after the milling or overlay operations and prior to opening the area to traffic. Short term temporary stripe may be offset as required for the sequence of operations; however, temporary stripe placed on the finished surface is to be placed in the same location and layout as permanent stripe.

All permanent striping will be thermoplastic. The width of the permanent stripe will be six inches (6") for continuous, edge, and skip stripe. Detail and legend stripe will be as shown in the standard drawings. Permanent raised pavement markers shall be installed on mainline and local public roads after completion of all paving operations.

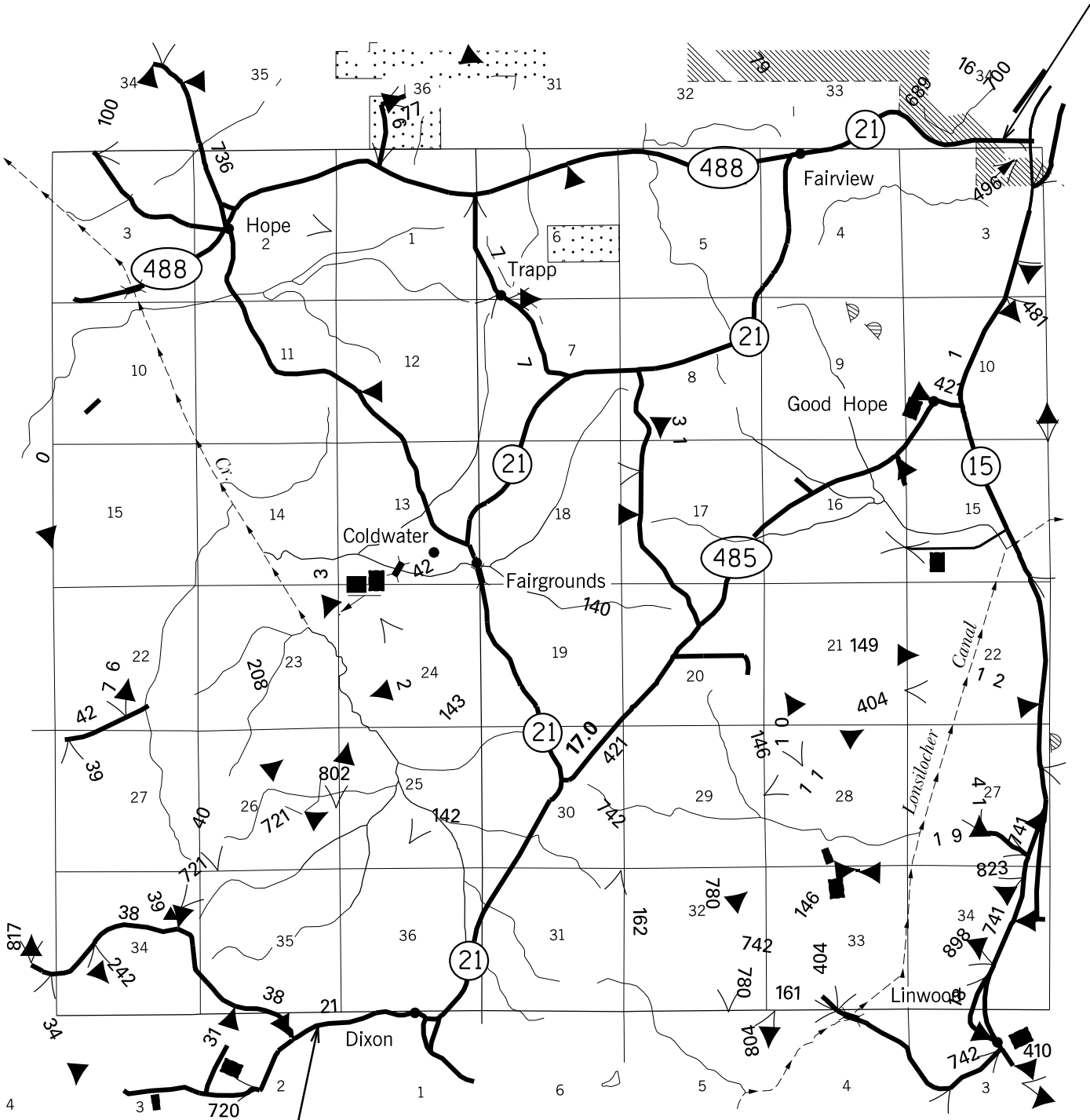
The Contractor shall erect and maintain construction signing, and provide and maintain all temporary signs and traffic control devices necessary to safely conduct traffic through the work area in accordance with the Traffic Control Plan and the MUTCD. All traffic control devices shall meet current MDOT and MUTCD requirements.

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

It shall be the responsibility of the Contractor to protect existing structures such as pipes, aprons, signs, utilities, etc. from damage occurring as a result of construction activities. The Contractor shall replace or repair, as directed by the Engineer, any structures damaged during the life of the contract. No payment will be made for replacements and or repairs resulting from such damages.

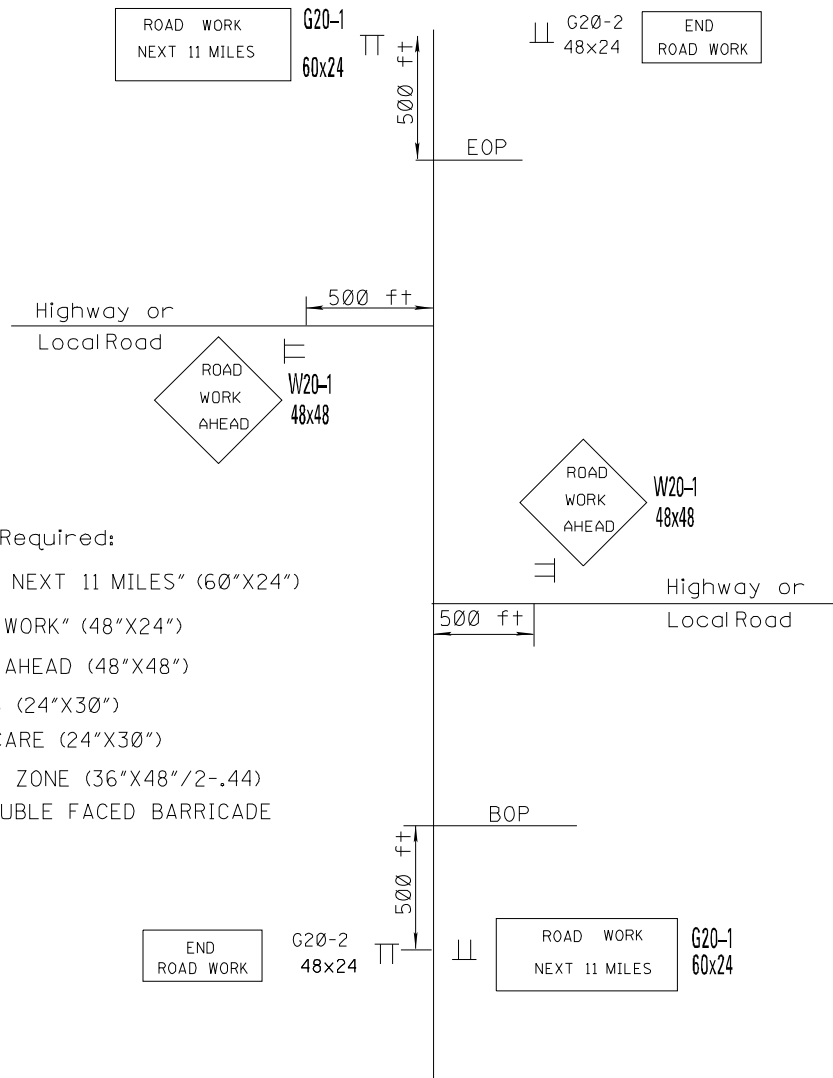
SR 21 - NESHOBBA COUNTY PROJECT LOCATION MAP

E.O.P 575+27



B.O.P 10+00

SR 21 - NESHOPA COUNTY CONSTRUCTION SIGNING



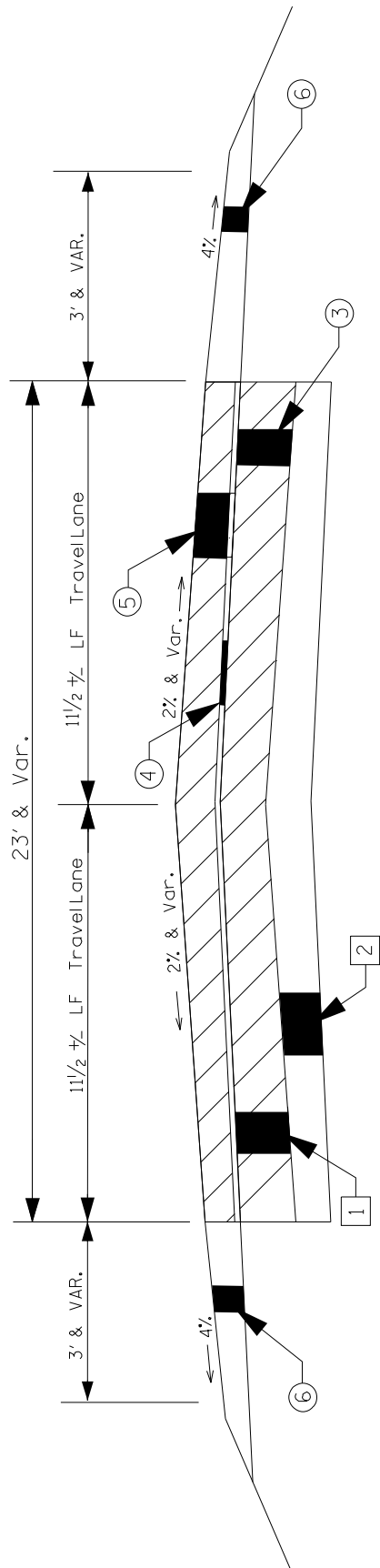
Traffic Control Signs Required:

- 2 - G20-1 "ROAD WORK NEXT 11 MILES" (60"x24")
- 2 - G20-2 "END ROAD WORK" (48"x24")
- 24 - W20-1 ROAD WORK AHEAD (48"x48")
- 142 - R4-1 DO NOT PASS (24"x30")
- 6 - R4-2 PASS WITH CARE (24"x30")
- 8 - W14-3 NO PASSING ZONE (36"x48"/2-.44)
- 4 619-G TYPE III DOUBLE FACED BARRICADE

- NOTES:
- ① One (1) W20-1 "ROAD WORK AHEAD" Sign is Required at each Local Road, Street or Highway Entering the Project.
 - ② G20-1 and G20-2 signs mounted on Type III Double Faced Barricade.
 - ③ R4-1 "DO NOT PASS", R4-2 "PASS WITH CARE", and W14-3 "NO PASSING ZONE" signs are required in accordance with Subsection 618.03.3 and as specified in the MUTCD. If No Passing zones are 1000 ft or more, install additional "DO NOT PASS" signs on maximum spacing of 750 ft.
 - ④ Placement of W20-1 signs on intersecting roads may vary from typical shown as conditions warrant.

SR 21 - NESHOPA COUNTY TYPICAL SECTION - SPOT MILL, INLAY & OVERLAY

STATIONS: 10+00-575+27



EXISTING

- 1 4 1/2" - 7 1/2" Existing Thickness based on Core Evaluation
- 2 6"-10" Untreated Granular Material

PROPOSED

- 3 2" Mill & Inlay 12.5mm, MT, Asphalt Pavement
- 4 Scrub Seal
- 5 2" Overlay 12.5mm, MT, Asphalt Pavement
- 6 Crushed Limestone 2 1/2" and Var. (As Directed)

NOTES: 1. Repair any failed areas full depth with 12.5mm, MT, Asphalt Pavement, Leveling
 2. Fog seal shall be applied over all milled/inlaid sections and failed area sections.

SR 21 FAILED AREA LOCATIONS										
Location	Sta.	To	Sta.	Length (FT)	Width (FT)	Area (SF)	202-B009 Removal of Asphalt, Failed Areas (SY)	503-C010 Saw Cut, Full Depth (LF)	403-B002 12.5mm, MT, Asphalt Pavement, Leveling (TONS)	907-410-C005 Asphalt for Fog Seal, Grade LD-7 or CHPF-1 (Gal.)
RT LANE	72+46		73+38	92	6	552	61	104	21	7
RT LANE	130+85		134+00	315	6	1,890	210	327	71	23
RT LANE	197+75		199+00	125	8	1,000	111	141	38	12
RT LANE	290+30		290+45	15	11	165	18	52	6	2
RT LANE	381+35		382+08	73	11.5	840	93	169	31	10
RT LANE	442+25		442+55	30	6	180	20	42	7	2
RT LANE	520+00		520+77	77	11.5	886	98	100	33	11
LT LANE	100+13		100+50	37	7	259	29	51	10	3
LT LANE	102+36		107+75	539	8	4,312	479	555	162	53
LT LANE	185+97		186+53	56	7	392	44	70	15	5
LT LANE	290+30		290+45	15	11	165	18	52	6	2
LT LANE	295+75		298+00	225	3	675	75	231	25	8
						Total =	1257	1894	424	138
Additional Quantities To Be Used As Directed By The Engineer:						Total =	126	189	42	14

Note: Locations and Measurements are Approximate and May Vary With Field Conditions

DEPTH = Variable

HWY 21 CURVE WIDENING LOCATION								
LOCATION	STA.	TO	STA.	LENGTH (FT)	WIDTH (FT)	AREA (SF)	403-B003 12.5mm, ST, ASPHALT PAVEMENT, LEVELING (TONS)	907-410-C005 ASPHALT FOR FOG SEAL, GRADE LD-7 OR CHPF-1 (GAL.)
RT LANE	266+13	--	271+00	487	2	974	30	12
RT LANE	294+28	--	297+92	364	2	728	23	9
RT LANE	405+37	--	408+30	293	2	586	18	7
RT LANE	408+65	--	413+64	499	2	998	31	12
RT LANE	517+37	--	525+91	854	2	1,708	53	21
LT LANE	294+00	--	297+92	392	2	784	25	10
LT LANE	405+37	--	413+64	827	2	1,654	52	20
						Total =	232	91

SR 21 MAINLINE SPOT MILLING LOCATIONS									
Location	Sta.	To	Sta.	Length (FT)	Width (FT)	Area (SF)	406-D001 Fine Milling of Bituminous Pavement, All Depths (SY)	403-A002 12.5mm, MT, Asphalt Pavement (TONS)	907-410-C005 Asphalt for Fog Seal, Grade LD-7 or CHPF-1 (Gal.)
RT LANE	10+00		12+55	255	11.5	2,933	326	37	36
RT LANE	18+50		20+50	200	11.5	2,300	256	29	28
RT LANE	30+53		32+03	150	11.5	1,725	192	22	21
RT LANE	83+00		86+40	340	11.5	3,910	434	50	48
RT LANE	92+00		98+60	660	11.5	7,590	843	97	93
RT LANE	105+00		114+10	910	11.5	10,465	1,163	133	128
RT LANE	145+92		147+42	150	11.5	1,725	192	22	21
RT LANE	253+85		255+35	150	11.5	1,725	192	22	21
RT LANE	256+97		258+65	168	11.5	1,932	215	25	24
RT LANE	364+70		366+30	160	11.5	1,840	204	23	22
RT LANE	400+50		403+30	280	11.5	3,220	358	41	39
RT LANE	414+43		415+93	150	11.5	1,725	192	22	21
RT LANE	469+00		470+50	150	11.5	1,725	192	22	21
RT LANE	482+65		485+00	235	11.5	2,703	300	34	33
RT LANE	494+00		496+75	275	11.5	3,163	351	40	39
RT LANE	504+75		506+25	150	11.5	1,725	192	22	21
RT LANE	514+86		516+36	150	11.5	1,725	192	22	21
RT LANE	521+12		522+62	150	11.5	1,725	192	22	21
RT LANE	533+01		534+51	150	11.5	1,725	192	22	21
RT LANE	536+00		538+42	242	11.5	2,783	309	35	34
RT LANE	573+77		575+27	150	11.5	1,725	192	22	21
LT LANE	10+00		11+50	150	11.5	1,725	192	22	21
LT LANE	37+00		40+20	320	11.5	3,680	409	47	45
LT LANE	49+50		51+00	150	11.5	1,725	192	22	21
LT LANE	90+65		92+15	150	11.5	1,725	192	22	21
LT LANE	97+70		100+00	230	11.5	2,645	294	34	32
LT LANE	253+85		255+35	150	11.5	1,725	192	22	21
LT LANE	256+97		258+65	168	11.5	1,932	215	25	24
LT LANE	346+08		347+58	150	11.5	1,725	192	22	21
LT LANE	351+88		353+38	150	11.5	1,725	192	22	21
LT LANE	437+00		442+55	555	11.5	6,383	709	81	78
LT LANE	449+80		451+30	150	11.5	1,725	192	22	21
LT LANE	469+00		470+50	150	11.5	1,725	192	22	21
LT LANE	485+03		486+53	150	11.5	1,725	192	22	21
LT LANE	512+78		514+28	150	11.5	1,725	192	22	21
LT LANE	573+77		575+27	150	11.5	1,725	192	22	21
						Total =	10411	1195	1145
Additional Quantities To Be Used As Directed By The Engineer:						Total =	1041	119	115

Note: Locations and Measurements are Approximate and May Vary With Field Conditions

DEPTH = 2"

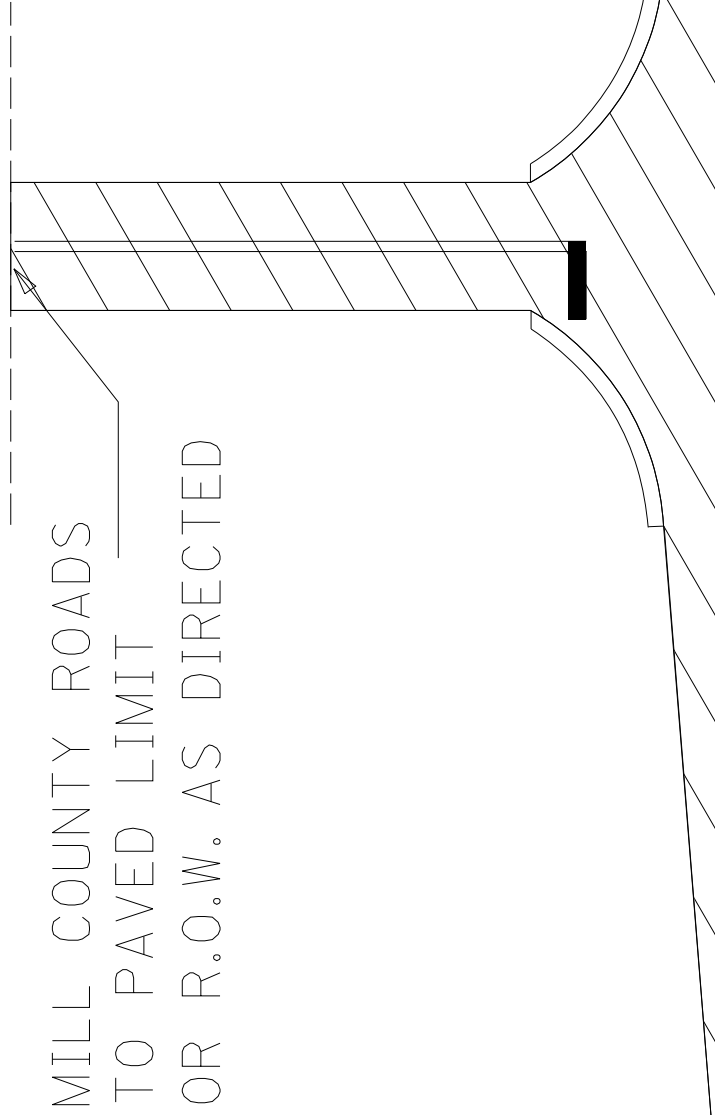
SR 21 COUNTY ROAD MILLING LOCATIONS				
County Road	Sta.	Area (SF)	406-D001 Fine Milling of Bituminous Pavement, All Depths (SY)	403-A002 12.5mm, MT, Asphalt Pavement (TONS)
412	158+00	803	89	10
420	195+75	1,516	168	19
359	205+90	778	86	10
422	233+31	1,022	114	13
147	263+59	7,056	784	90
Fair Ground Road	263+59	4,710	523	60
365	366+17	2,782	309	35
1333	372+36	658	73	8
SR 488	482+85	10,025	1,114	128
		Total =	3260	374
	Additional Quantities	Total =	326	37

Note: Locations and Measurements are Approximate and May Vary With Field Condition
DEPTH = 2"

SR 21 COUNTY ROAD MILLED TIE IN LOCATIONS				
County Road	Sta.	Area (SF)	406-D001 Fine Milling of Bituminous Pavement, All Depths (SY)	403-A002 12.5mm, MT, Asphalt Pavement (TONS)
338	53+52	592	6	8
339	55+60	1,507	6	19
339	58+50	1,065	6	14
129	62+56	1,033	6	13
129	64+00	2,347	6	30
410	97+40	1,585	6	20
485	166+23	5,204	6	66
414	257+85	7,357	6	94
404	279+23	1,899	6	24
424	293+70	2,070	6	26
367	340+52	2,503	6	32
369	448+89	1,532	6	20
BIA 0228	455+35	2,904	6	37
373	485+50	1,777	6	23
		Total =	84	426
	Additional Quantities	Total =	8	43

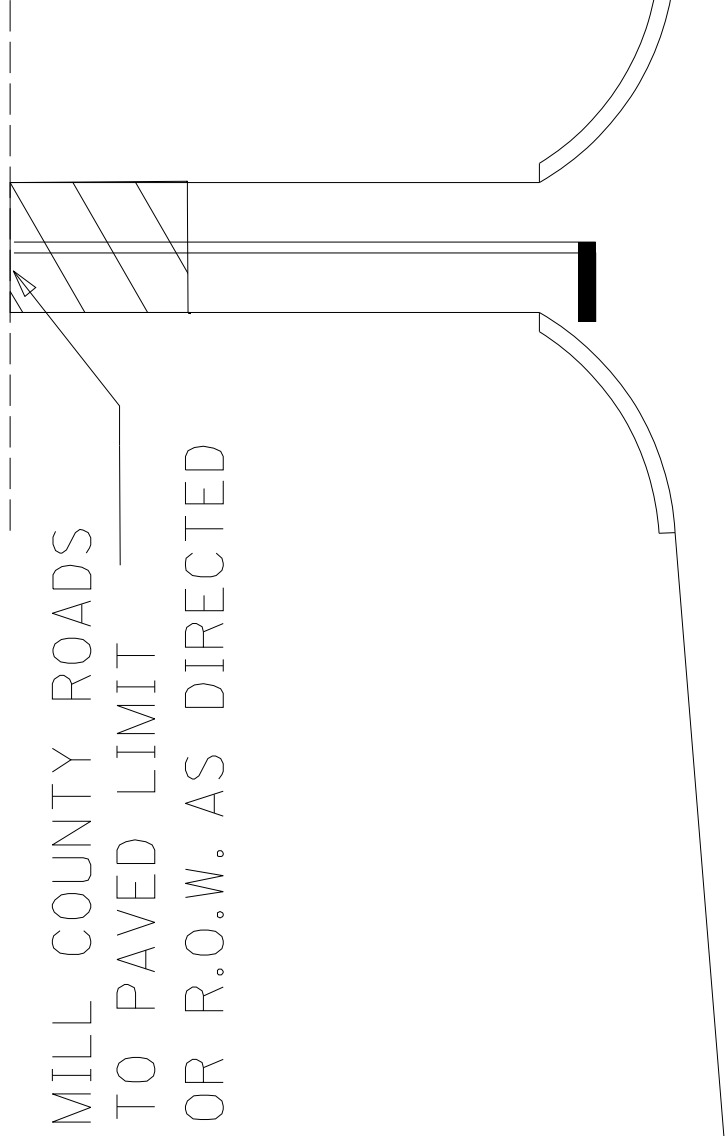
Note: Locations and Measurements are Approximate and May Vary With Field Conditions
DEPTH = 2"

SR 21 - NESHOPA COUNTY
MILLING FOR COUNTY ROADS

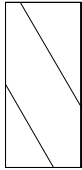


NOTE: A table is attached showing locations pertaining to this operation.

SR 21 - NESHOBIA COUNTY MILLING TIE INS FOR COUNTY ROADS



MILL COUNTY ROADS
TO PAVED LIMIT
OR R.O.W. AS DIRECTED


 2" MILL AREA

NOTE: A table is attached showing locations pertaining to this operation.

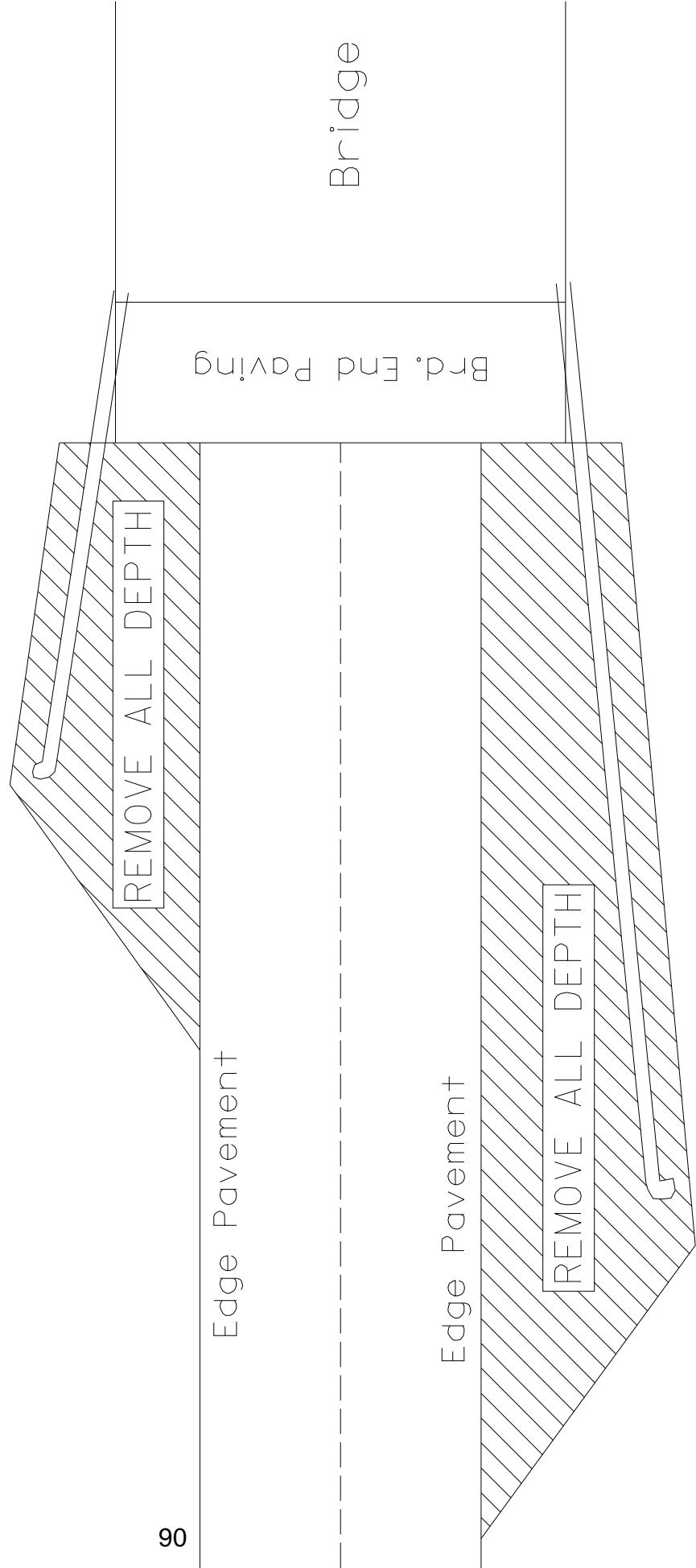
SR 21

GUARD RAIL REMOVAL AND INSTALLATION

Bridge No.	Direction	Removal (LF)	Type "H" Bridge End (EA)	"W" Beam (LF)	Terminal End Section, Flared (EA)	Delimiters, White (EA)	Object Markers		202-B007 Removal of Asphalt Pavement, All Depths (SY)	403-A002 12.5mm, MT, Asphalt Pavement (TONS)
							OM-3R (EA)	OM-3L (EA)		
32.7	SOUTH BOUND	240	2	127.5	2	8	1	1	217	49
32.7	NORTH BOUND	214	2	101.5	2	8	1	1	266	60
TOTALS		454	4	229	4	16	2	2	483	109

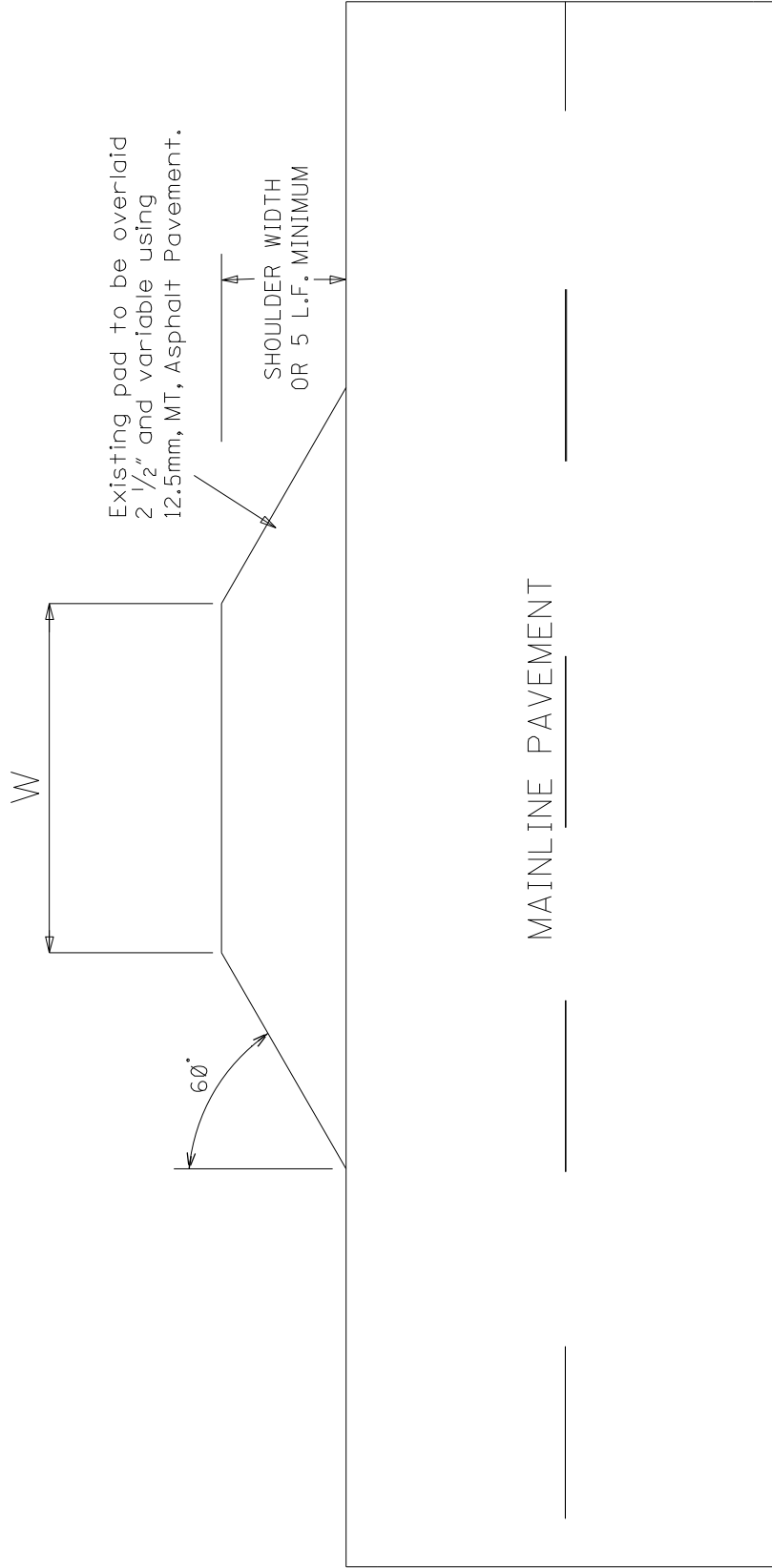
* Removal of guardrails, including rails, posts, and terminal ends will be paid for under Pay Item No. 202-B158

SR 21 - NESHOPA COUNTY
REMOVE & REPAVE BRIDGE GUARDRAIL PAD



NESHOPA COUNTY
HIGHWAY 21

DRIVEWAY PAD DETAIL

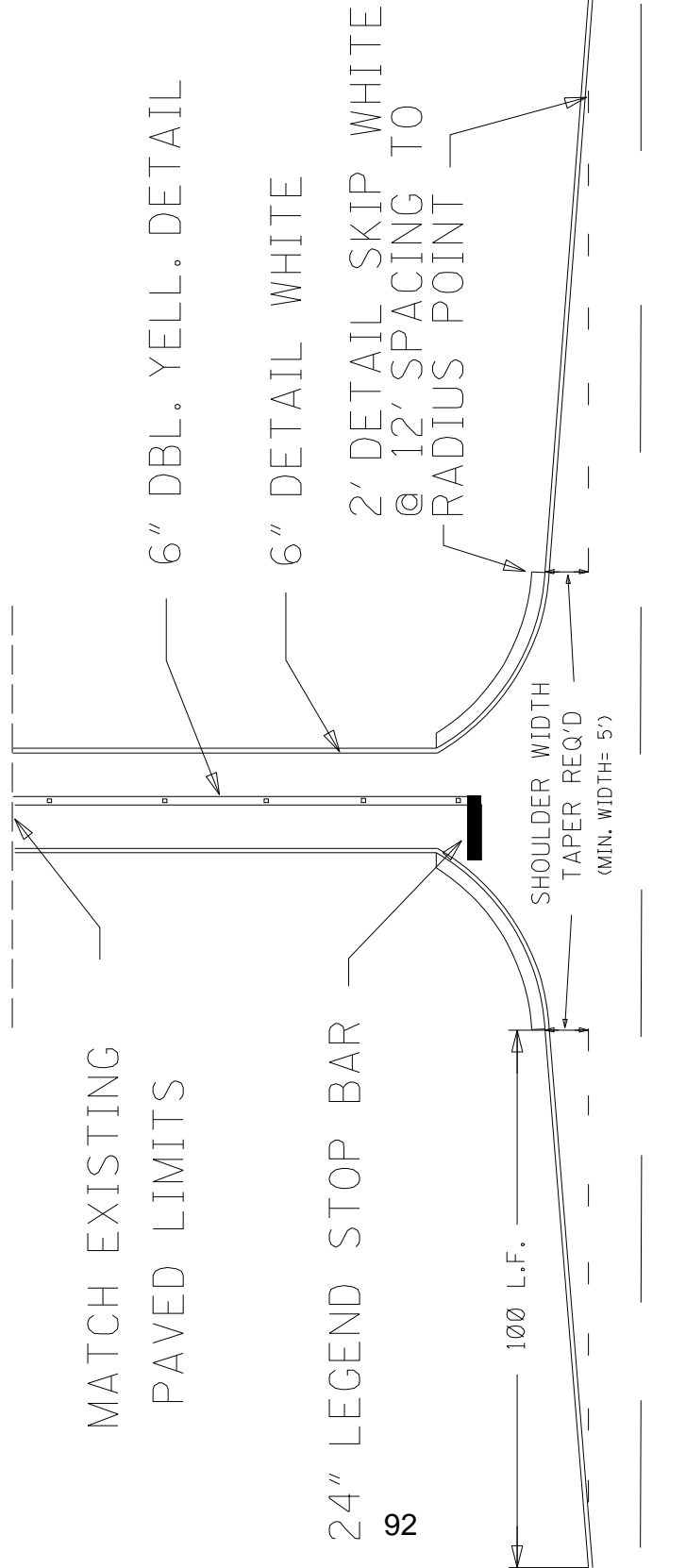


W = 16' MAX RESIDENTIAL
W = 30'-50' COMMERCIAL

NOTE: 1. THE ASPHALT ON THE EXISTING DRIVEWAY/RAMP PADS ARE TO REMAIN IN THEIR CURRENT SIZE AND LOCATION AND MILLED/OVERLAID. IF, IN THE OPINION OF THE ENGINEER, A PAD SHOULD BE MODIFIED OR REPLACED, PAYMENT WILL BE MADE FOR THE WORK USING THE APPROPRIATE PAY ITEMS. GRANULAR MATERIAL AND/OR STABILIZER AGGREGATE SHOULD BE PLACED AROUND THE PADS AS REQUIRED.

2. THE DRIVEWAY PAD IS TO BE OVERLAID 2 1/2" & VARIABLE THICKNESS IN ORDER TO ACCOUNT FOR THE STRUCTURE OF THE CHIPSEAL (2 1/2") AND THE 2" OVERLAY

SR 21 - NESHOPA COUNTY
 COUNTY ROAD PAVING/STRIPING



92

NOTE: 100' TAPERS TO BE CONSTRUCTED WHERE 5' SHOULDER WIDTH IS AVAILABLE AT THE BEGINNING OF LOCAL ROAD RADIUS.

NOTE: ASPHALT PAVEMENT THICKNESS IN TAPER SHALL BE 6" of 12.5mm,MT, Asphalt Pavement in two 3" lifts.

NOTE: DETAIL SKIP SHALL BE PLACED ON LOCAL ROADS WITH TAPERS.

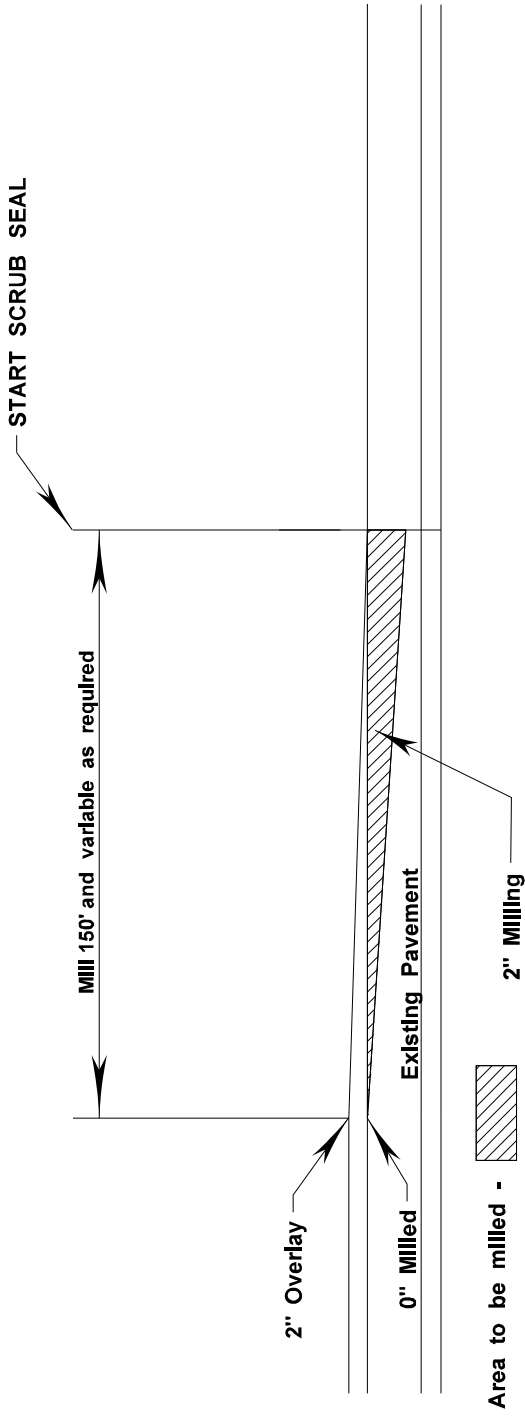
SR 21 CRUSHED STONE LEFT LANE PRE-LEVELING LOCATIONS						
Location	Sta.	To	Sta.	Length (FT)	Width (FT)	304-E003 Granular Material, LVM, Crushed Stone (CY)
LT LN	27+36		28+50	114	2	3
LT LN	36+50		41+00	450	2	11
LT LN	43+00		45+30	230	2	6
LT LN	46+75		48+75	200	2	5
LT LN	57+50		60+00	250	2	6
LT LN	63+00		64+55	155	2	4
LT LN	72+00		84+00	1200	2	29
LT LN	93+50		95+75	225	2	6
LT LN	101+50		124+00	2250	2	55
LT LN	127+40		135+00	760	2	19
LT LN	140+00		143+50	350	2	9
LT LN	147+70		153+00	530	2	13
LT LN	163+00		166+00	300	2	7
LT LN	175+00		178+00	300	2	7
LT LN	182+00		185+75	375	2	9
LT LN	208+00		211+00	300	2	7
LT LN	235+50		242+00	650	2	16
LT LN	247+00		254+00	700	2	17
LT LN	278+30		298+00	1970	2	48
LT LN	306+00		309+30	330	2	8
LT LN	371+00		374+50	350	2	9
LT LN	404+80		417+00	1220	2	30
LT LN	435+50		444+00	850	2	21
LT LN	540+00		554+50	1450	2	35
					TOTAL=	379
Additional Quantities To Be Used As Directed By The Engineer:						38

Note: Locations and Measurements are Approximate and May Vary With Field Conditions

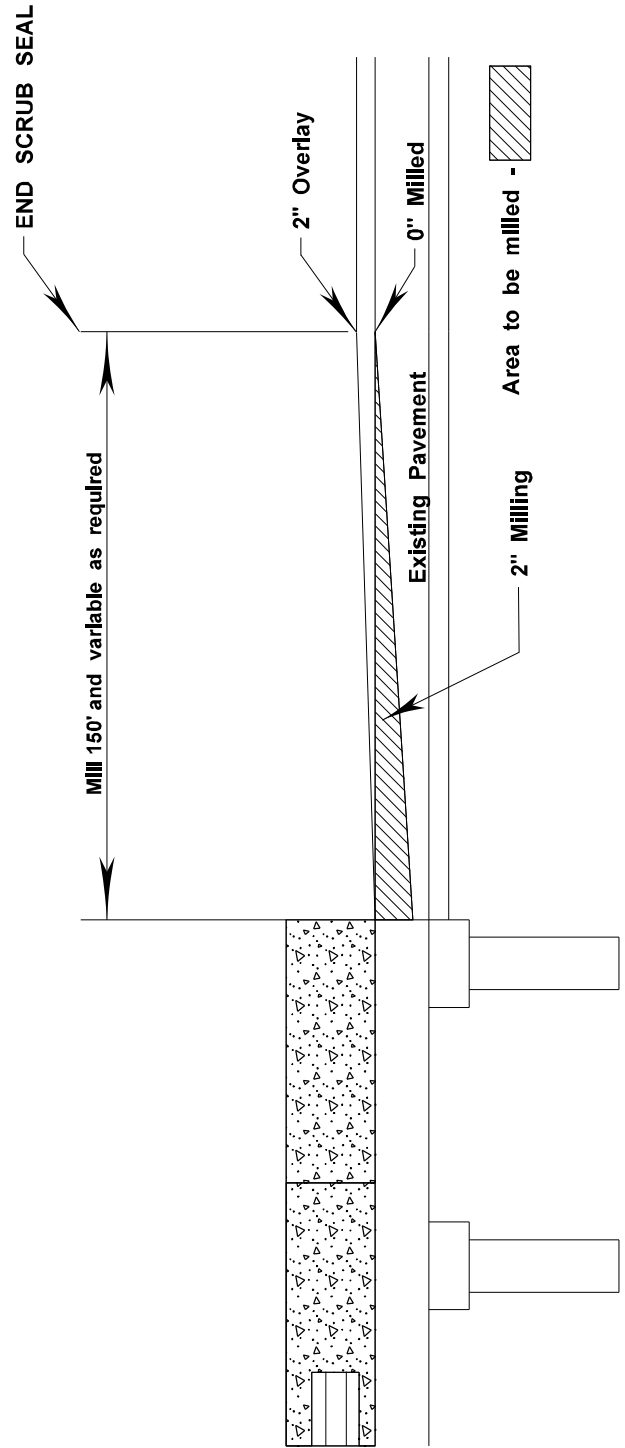
SR 21 CRUSHED STONE RIGHT LANE PRE-LEVELING LOCATIONS						
Location	Sta.	To	Sta.	Length (FT)	Width (FT)	304-E003 Granular Material, LVM, Crushed Stone (CY)
RT LN	17+50		20+50	300	2	7
RT LN	31+50		34+00	250	2	6
RT LN	39+50		42+64	314	2	8
RT LN	51+00		57+00	600	2	15
RT LN	86+00		89+50	350	2	9
RT LN	92+50		95+75	325	2	8
RT LN	127+40		132+00	460	2	11
RT LN	140+00		143+00	300	2	7
RT LN	144+50		150+50	600	2	15
RT LN	153+00		161+00	800	2	20
RT LN	176+00		179+80	380	2	9
RT LN	208+00		214+75	675	2	17
RT LN	222+00		231+75	975	2	24
RT LN	249+00		253+00	400	2	10
RT LN	259+00		262+85	385	2	9
RT LN	264+70		271+00	630	2	15
RT LN	273+30		275+30	200	2	5
RT LN	282+66		289+00	634	2	15
RT LN	313+75		316+00	225	2	6
RT LN	338+00		341+30	330	2	8
RT LN	343+80		346+65	285	2	7
RT LN	405+40		427+60	2220	2	54
RT LN	453+00		456+85	385	2	9
RT LN	475+50		489+50	1400	2	34
RT LN	501+25		503+50	225	2	6
RT LN	514+00		537+00	2300	2	56
RT LN	558+40		575+27	1687	2	41
					TOTAL=	431
Additional Quantities To Be Used As Directed By The Engineer:						43

Note: Locations and Measurements are Approximate and May Vary With Field Conditions

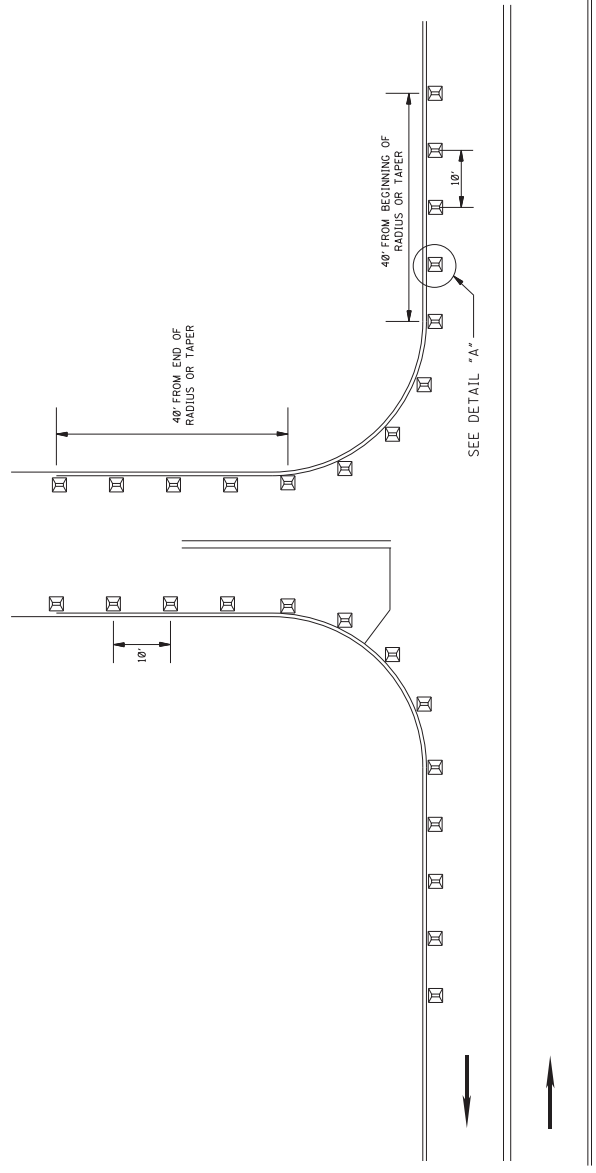
B.O.P. & E.O.P. PAVING DETAIL



BRIDGE END PAVING DETAIL

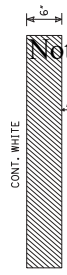


TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS ON SIDE ROAD RADIUS 2-LANE, TWO WAY TRAFFIC



GENERAL NOTES:

1. MARKERS SHALL BE VISIBLE FROM THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
2. MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.
3. MARKERS SHALL NOT BE ROTATED WHEN BEING PLACED ALONG RADIUS AND TANGENT SECTION OF LOCAL ROAD.
4. MARKERS SHALL BE INSTALLED AT SIMPLE AND CHANNELIZED INTERSECTIONS TO THE LIMITS SHOWN ABOVE.



DETAIL A

↑ DIRECTION OF TRAFFIC

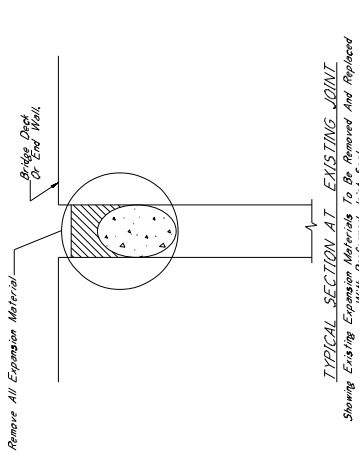
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

2-WAY RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2-LANE)

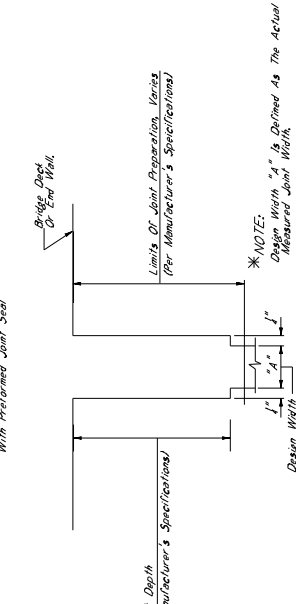
ISSUE DATE: AUGUST 01, 2017

PROJECT NUMBER: 6061

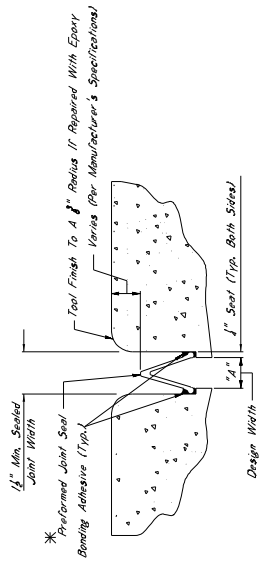
DATE	REVISION



TYPICAL SECTION AT EXISTING JOINT
Showing Existing Expansion Materials To Be Removed And Replaced With Preformed Joint Seal

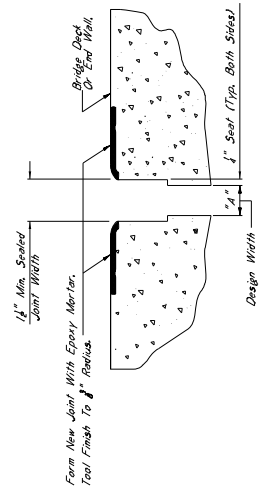


TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT
Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Sawcut

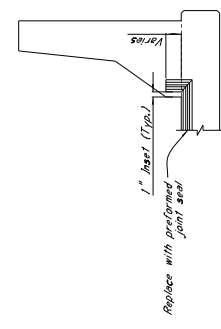


TYPICAL SECTION AT SAWCUT & SEALED JOINT
Showing Sealed Joint After Sawcut

- *NOTES:
- The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - Silicone Joint Sealing System Manufactured By R.J. Wilson, Inc. In Alden, NY www.rjwilson.com
 - Mega SFS Joint Sealing System Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com
 - For Estimating Purposes, The R.J. Wilson Silicone Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Obtain The Manufacturer's Installation Details And Details, Adhesive Setting Times, And Any Other Variables Between The Specifications Provided By The Manufacturer, To Ensure That The Contractor Is Properly Scheduled In Installation Of The Joint Material.
 - Joints Shall Be Sealed At Their Design Width, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. The Width Does Not Account For The Sawcut Preparation, Installation Details And Details, Adhesive Setting Times, And Other Variables Greater Than Or Equal To 2". With The Maximum Design Width Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Sawcut Is Appropriate For The Width Of The Joint.



TYPICAL SECTION AT SAWCUT & JOINT REPAIR
Showing Area Where Repairs Are Made After Sawcut With Epoxy Mortar Or Approved Equivalent



ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-A002 JOINT REPAIR	907-808-A003 JOINT REPAIR WITHOUT EPOXY	907-803-B001 SAW CUT, TYPE I & 907-803-B002 SAW CUT, TYPE II	907-803-A001 PREFORMED JOINT SEAL, TYPE I	907-803-A002 PREFORMED JOINT SEAL, TYPE II
Description: Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designated in the detail drawings provided. Epoxy Mortar Seal Also Be Included Under This Item Of Work. Removal Of Existing Expansion Material, Sawcutting, Cleaning, and Materials Will Not Be Paid For Directly, And Shall Be Considered As Also Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.	Description: Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designated in the detail drawings provided. Removal Of Existing Expansion Material, Sawcutting, and Cleaning All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.	Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.	Description: The Accepted Quantities Will Be Paid For In Linear Feet At Each Side Of The Centerline Joint. It Is The Contractor's Responsibility To Ensure That The Proper Depth Is Selected Based On The Manufacturer's Recommendations.	Description: Shall include the manufacturer's required joint preparation including sandblasting both sides of the joint and blowing the joint free of debris with compressed air and placement of the new preformed joint seal.
Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At Each Side Of The Centerline Joint.	Basis Of Payment: The Accepted Quantities Will Be Paid For In Linear Feet At Each Side Of The Centerline Joint.	Basis Of Payment: The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.	Basis Of Payment: The Contract Unit Price Along The Length Of The Centerline Joint.	Basis Of Payment: The Contract Unit Price Along The Length Of The Centerline Joint.

EPoxy MORTAR AND POLYMER CONCRETE NOTES:
Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines For Selection Of Materials Can Be Found In Section 808 of the Specifications.

GENERAL NOTES:

- Specifications, Maintain Standard Specifications For Road And Bridge Construction, 2013.
- No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Any Change To The Contract Documents, Specifications, Or Plans May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment. Work For Which No Pay Item Is Provided In The Proposal Will Be Considered As Work For Which No Pay Item Is Provided In The Proposal Will Be Considered As Work.

*NOTES:
For Jersey Slope Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3". The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

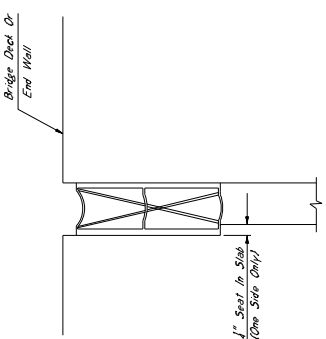
NOTES ON ASSOCIATED ITEMS OF WORK:

- 907-809-4002 JOINT REPAIR**
 Description: Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designated in the detail drawings provided. Epoxy mortar of 1/2" depth shall be placed in the joint. The remaining joint depth shall be filled with concrete. Epoxy mortar shall be placed directly in the joint. All other requirements shall be in accordance with the applicable provisions of Section 809 of the specifications and any other sections specified therein.
 Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline joint.
- 907-809-4003 JOINT REPAIR WITHOUT EPOXY**
 Description: Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designated in the detail drawings provided. Removal of epoxy mortar shall be in accordance with the applicable provisions of Section 809 of the specifications and any other sections specified therein.
 Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline joint.
- 907-823-8001 SAW CUT, TYPE I & 907-823-8002 SAW CUT, TYPE II**
 Description: The saw cut depth shall be equivalent to the installation depth required by the manufacturer's specifications. The saw cut type shall be the same as the performer joint seal selected.
 Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline joint. It is the contractor's responsibility to ensure that the proper depth is selected based on the manufacturer's recommendations.
- 907-823-4001 PREFORMED JOINT SEAL, TYPE I**
907-823-4002 PREFORMED JOINT SEAL, TYPE II
 Description: Shall include the manufacturer's required joint preparation including sandblasting both sides of the joint and blowing the joint free of debris with compressed air and placement of the new performer joint seal.
 Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the centerline joint.

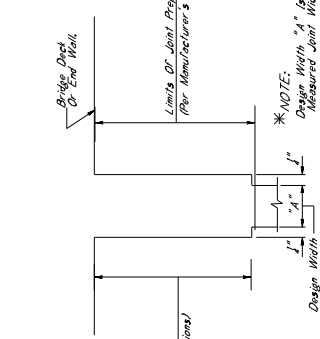
EROXY MORTAR AND POLYMER CONCRETE NOTES:
 Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines For Selection Of Materials Can Be Found In Section 809 of the Specifications.

GENERAL NOTES:

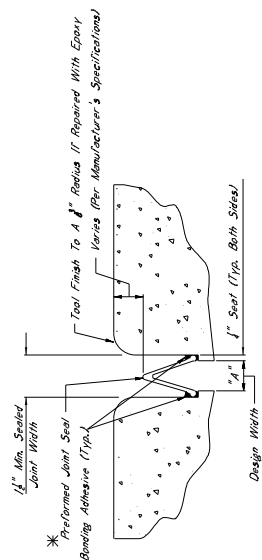
1. Specifications, Mississippi Standard Specifications For Road And Bridge Construction, 2017, shall apply unless otherwise specified.
2. Approval Of The Director Of Structures, State Bridge Engineer, May Be Authorized By The Bridge Engineer Provided Such Changes Do Not Affect The Safety Or Integrity Of The Structure. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item Of Work.



TYPICAL SECTION AT EXISTING JOINT
 Showing Existing Epoxy Mortar To Be Removed And Replaced With Performer Joint Seal

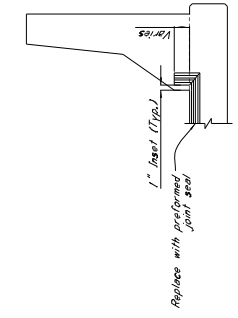


TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT
 Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Sawcut

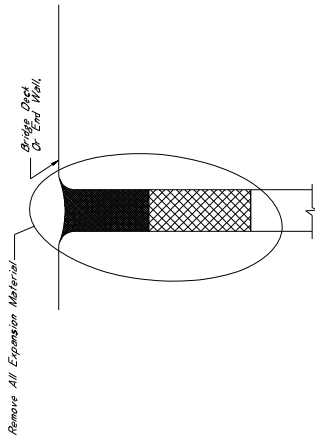


TYPICAL SECTION AT SAWCUT & SEALED JOINT
 Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

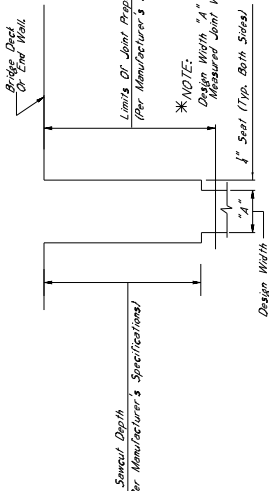
- *NOTES:
1. The Performer Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - A. Sikaflex Joint Sealing System
 www.sika.com
 - B. Wika SSS Joint Sealing System
 www.wika.com
 - C. Sikaone SSS Silicone Strip Seal
 Manufactured By SSI Commercial & Highway Construction Materials
 www.ssi.com
 2. For Estimating Purposes, The RJ, Wikaone Silicone Joint Sealing System Was Used For Design Purposes. The Manufacturer's Recommendations Shall Be Followed For Joint Preparation, Installation Depth, And Widths, Adhesive Sealing Times, And All Other Details. The Contractor Shall Be Responsible For Obtaining The Joint Seal Material To Ensure That The Contractor Is Properly Scheduled In Installation Of The Joint Material.
 3. Joints Shall Be Sealed At Their Opening. The Width Of A Joint Is Defined As The Size Required With Both Sides Of Opening Prepared. The Contractor Shall Be Responsible For Design Widths Less Than 2\"/>



ELEVATION AT END OF SPAN



TYPICAL SECTION AT EXISTING JOINT
Showing Existing Expansion Material To Be Removed And Replaced With Preformed Joint Seal



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SEAMCUT
Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Seamcut



TYPICAL SECTION AT SEAMCUT & JOINT REPAIR
Showing Area Where Repairs Are Made After Seamcut With Epoxy Mortar Or Approved Equivalent

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-4002 JOINT REPAIR

Description:

Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designed in the detail drawings provided. Epoxy mortar shall be used for all repairs. The use of any other material of existing silicone based composition, and AC sealed joint materials will not be paid for directly. All other requirements as specified under this item of work. All other requirements shall be in accordance with the applicable provisions of Section 808 of the specifications and any other sections specified therein.

Basis Of Payment:

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

907-808-4003 JOINT REPAIR WITHOUT EPOXY

Description:

Shall include the work necessary to repair joints in preparation for the placement of new expansion material, as designed in the detail drawings provided. Cementitious materials shall be included under this item of work. All other requirements shall be in accordance with the applicable provisions of Section 808 of the specifications and any other sections specified therein.

Basis Of Payment:

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

907-823-8001 SAW CUT, TYPE I & 907-823-8002 SAW CUT, TYPE II

Description:

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

Basis Of Payment:

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

907-823-4001 PREFORMED JOINT SEAL, TYPE I

Description:

Shall include the manufacturer's required joint preparation including sandblasting both sides of the joint and blowing the joint free of debris with compressed air and placement of the new preformed joint seal.

Basis Of Payment:

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

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

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

GENERAL NOTES:

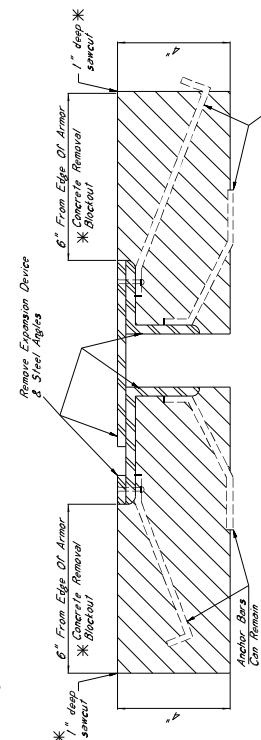
1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017, Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer.
2. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Do Not Affect The Performance Characteristics Of The Work. Work Will Be Paid For Directly And Shall Therefore Be Considered An Allowed Item Of Work.

* NOTES:
For Jersey Slope Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 3".
For Abut And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

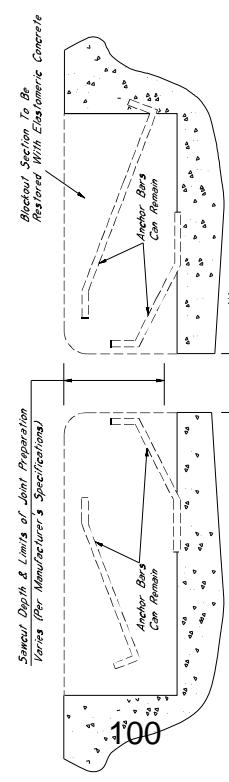
ELEVATION AT END OF SPAN

*** 1" SAWCUT NOTES:**
 All 1" Sawcuts Shall Be Considered An Absorbed Item of Work. The Contractor Shall Verify Depth of Work. The Contractor Shall Verify Depth of Reinforcing Steel Before Sawing Any Sawcuts. The Depth of the Reinforcing Steel Shall Be Repaired To The Satisfaction Of The Engineer At No Cost To The State.

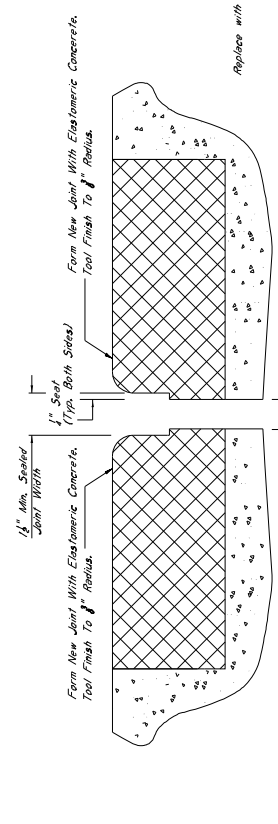
*** CONCRETE REMOVAL BLOCKOUT NOTES**
 Removal Of The Concrete Blockout Area Shall Be Considered An Absorbed Item Of Work Under Pay Item 202-B168. The Contractor Shall Use Minimum 4000 PSI Concrete To Complete This Work.



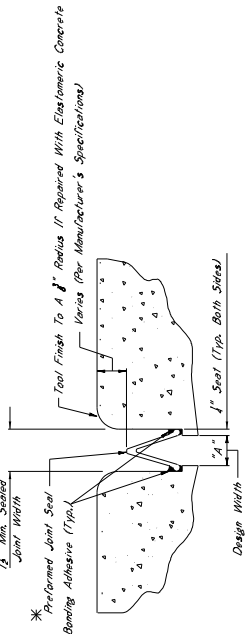
TYPICAL SECTION AT EXISTING JOINT
 Showing Existing Expansion Device To Be Removed And Replaced With Performed Joint Seal



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL
 Showing Limits Of Joint Preparation For Application Of Seal Materials



TYPICAL SECTION AT SAWCUT & JOINT REPAIR
 Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete

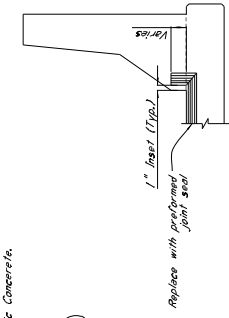


TYPICAL SECTION AT SAWCUT & SEALED JOINT
 Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

*** NOTES:**
 1. The Performed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 A. Silicone Joint Sealing System Manufactured By R.J. Watson, Inc. In Alden, NY
 B. Welo SPS Joint System Manufactured By Wilson Bowman Acme Corporation In Amherst, NY
 C. Silicone SSS Silicone Strip Seal Manufactured By SSI Commercial & Highway Construction Materials

2. For Estimating Purposes, The R.J. Watson Silicone Joint Sealing System Was Selected As The Basis For The Bid. The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For All Applications Involving Sealants, Adhesives, Sealing Finishes, And Other Preparations Available On The Market At The Time Of Bidding, Shall Be Assumed By A Manufacturer Representative. The Contractor Shall Be Responsible For Obtaining The Manufacturer Representative's Approval For Any Sealant, Adhesive, Sealing Finish, Or Other Preparation Used In The Work.
 3. Joints Shall Be Sealed At Their Design Width. Dimension "A", Which Is Defined As Seal Applied On Both Sides Of The Joint, Performed Joint Seal, Type I, Shall Be Used For Design. The Sealant Shall Be Applied To The Joint To A Depth Of At Least 1/2" (Typ.) In Cases Where Design Width Is Greater Than 2". Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, Selected As Appropriate For The Width Of The Joint.

*** NOTES:**
 For Areas, Signs, Barriers, The Minimum Required Vertical Joint Seal Dimension For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".



ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:
202-B168 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Sliding Plates, and Hoopings Exposed, Removal As Designated In The Detail Drawings Provided. Removal Of The Concrete Blockout Area Shall Be Absorbed Under This Item of Work. Other Joint Types Shall Not Be Included Under This Item of Work Unless Otherwise Directed by The Engineer.

Basis Of Payment: Removal of Armor and Sliding Plate Joint Material Will Be Paid For On A Unit Price Basis Per Linear Foot Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint, While Removal Of Hoopings Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-B23-0001 SAW CUT, TYPE I & 907-B23-0002 SAW CUT, TYPE II

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

Basis Of Payment: The Accepted Quantities Will Be Paid For On A Linear Feet At On Each Side Of The Centerline Joint.

907-B23-1001 REFORMED JOINT SEAL, TYPE I
907-B23-1002 REFORMED JOINT SEAL, TYPE II

Description: Shall Include The Manufacturer's Required Joint Preparation From The Joint Surface To The Manufacturer's Specifications. The Joint Preparation Shall Be As Directed By The Manufacturer's Specifications.

Basis Of Payment: The Accepted Quantities Will Be Paid For On A Linear Feet At On Each Side Of The Centerline Joint.

ELASTOMERIC CONCRETE NOTES
907-B24-0007 BRIDGE REPAIR ELASTOMERIC CONCRETE

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

- A. Poly-Ton Elastomeric Concrete Manufactured By R.J. Watson, Inc. In Alden, NY
www.jwatson.com
- B. Welo-Crete II Manufactured By Wilson Bowman Acme Corporation In Amherst, NY
www.wbcorp.com
- C. Durocrete Elastomeric Concrete Manufactured By The D.S. Brown Company In North Billmire, OH
www.dsbrown.com

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

GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of Things Will Be Permitted Except By Written Approval Of The Engineer. The Contractor Shall Be Responsible For Minor Changes To Detail Of Design Or Construction Procedure. Major Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment. Approval Will Be Granted Only For Changes That Do Not Affect The Safety Or Functionality Of The Work.
3. Absorbed Item of Work.

NOTES ON ASSOCIATED ITEMS OF WORK:

907-823-0001 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall include the removal of material associated with armor, stinging plates, and neoprene expansion joints, as designated in the detail drawings provided. Removal of material shall be done in accordance with the following:
 1. All material to be removed shall be cut out in a manner that will allow the joint to be replaced without the need for any other work.
 2. All material to be removed shall be placed in a container provided by the contractor and shall be disposed of in a manner acceptable to the Engineer.
Basis of Payment: Removal of armor and stinging plate material will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline. Material to be removed shall be measured along the centerline of the joint.
907-823-0002 SAW CUT, TYPE I & 907-823-0002 SAW CUT, TYPE II

Description: The saw cut depth shall be equivalent to the installation depth required by the manufacturer's specifications. The saw cut type shall be the same as the performed joint seal selected.
Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline joint.

907-823-0001 PREFORMED JOINT SEAL, TYPE I

907-823-0002 PREFORMED JOINT SEAL, TYPE II

Description: Shall include the manufacturer's required joint preparation including sandblasting both sides of the joint and blowing the joint free of debris with compressed air and placement of the new preformed joint seal.
Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the centerline joint.

ELASTOMERIC CONCRETE NOTES

907-823-0007 BRIDGE REPAIR ELASTOMERIC CONCRETE

Description: Elastomeric concrete shall be one of the following products installed according to the manufacturer's specifications:

- A. Poly-Top Elastomeric Concrete Manufactured By R.L. Wilson, Inc. In Alden, NY www.rwilson.com
- B. Wika-SIS II Manufactured By Wilson Bowman Acme Corporation In Amherst, NY www.wbcorp.com
- C. Duxco-8 Elastomeric Concrete Manufactured By The U.S. Green Company In North Baltimore, MD www.dbrw.com

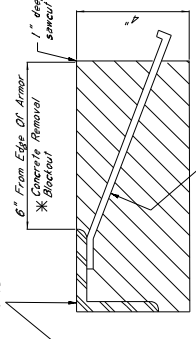
Basis of Payment: The accepted quantities will be paid for in cubic yards. The contract unit price.

GENERAL NOTES:

1. Specifications: Massachusetts Standard Specifications For Road And Bridge Construction 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Engineer. Any Change To Detail Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Charge For Contract Price Adjustment. Material Installed In Accordance With Approved Plans Shall Be Considered An Accepted Item Of Work.

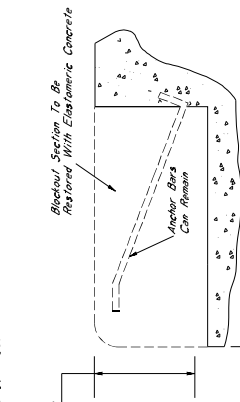
*** CONCRETE REMOVAL BLOCKOUT NOTES**

Removal of the concrete blockout area shall be considered an associated item of work. The contractor shall use a hammer No. 30 or larger to complete this work.
 Remove steel angles where directed.
 6" From Edge Of Armor Concrete Removal Blockout.
 Anchor Bars Can Remain.
 1" deep sawcut.
 6" From Edge Of Armor Concrete Removal Blockout.
 Anchor Bars Can Remain.



TYPICAL SECTION AT EXISTING JOINT

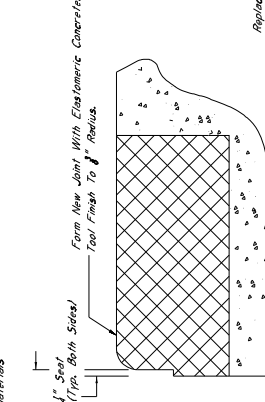
Showing Existing Elongation Joints To Be Removed And Replaced With Performed Joint Seal



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

TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

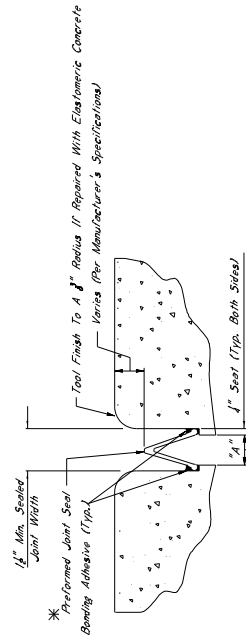
Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials



Form New Joint With Elastomeric Concrete. Tool Finish To 1/2" Radius.
 1/2" Min. Sealed Joint Width.
 Design Width.
 1" Seal (Top, Both Sides).
 Replace with pre-formed joint seal.

TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sawcut, Adhesive, Sealant and Repair With Elastomeric Concrete

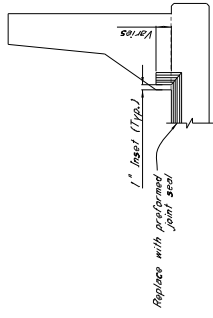
*** NOTES:**
 1. The Performed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 A. Silcoflex Joint Sealing System Manufactured By R.L. Wilson, Inc. In Alden, NY www.rwilson.com
 B. Wika SIS Joint Sealing System Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com
 C. Silcoflex SSS Silicone Strip Seal Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com

2. For Estimating Purposes, The R.L. Wilson Silcoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Obtain The Manufacturer's Specifications For The System. For Joint Preparation, Installation Details And Details, Adhesive, Sealing Times, And Any Other Variables Between The Specifications Provided By The Manufacturer, To Ensure That The Contractor Is Properly Scheduled In Installation Of The Joint Material.
 3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For Seal Be Applied For Design Widths Less Than 2". Performed Joint Seal Type III Shall Be Used For Design Widths Greater Than Or Equal To 2". With The Maximum Design Width Of Expansion Material Shall Be As Required As Directed By The Contractor Of Structures. State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.

*** NOTES:**

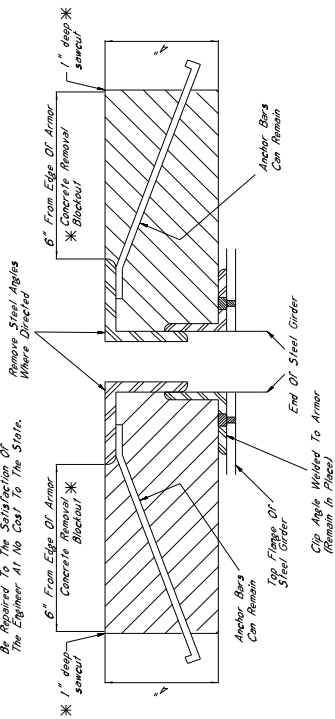
For Jersey Slope Barrings, The Minimum Required Vertical Joint Seal Dimension Within The Bottom Barrings, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

ELEVATION AT END OF SPAN



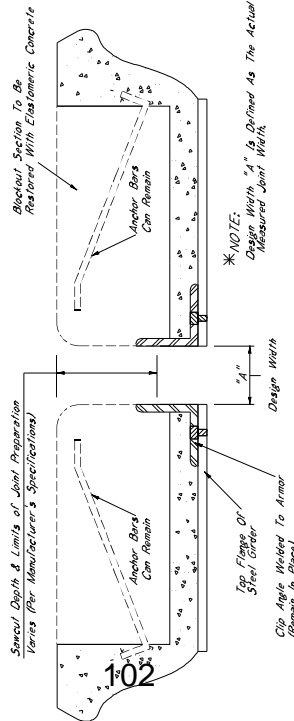
*** 1" SAWCUT NOTES:**

All 1" Sawcuts Shall Be Considered An Absorbed Item of Work. The Contractor Shall Verify Depth of Reinforcing Steel, and Slicing Depth, to the Depth of the Sawcut. The Sawcut Shall Be Made to the Depth of the Reinforcing Steel. Any Damage to Reinforcing Steel Shall Be Repaired to the Satisfaction of the Engineer At No Cost to the State.



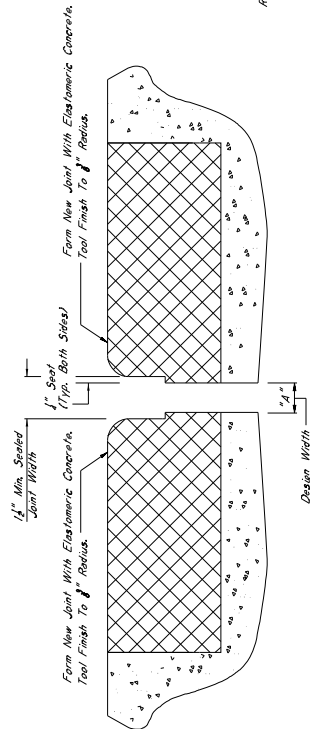
TYPICAL SECTION AT EXISTING JOINT

Showing Existing Existing Joint Details to Be Repaired and Replaced With Performed Joint Seal



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

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

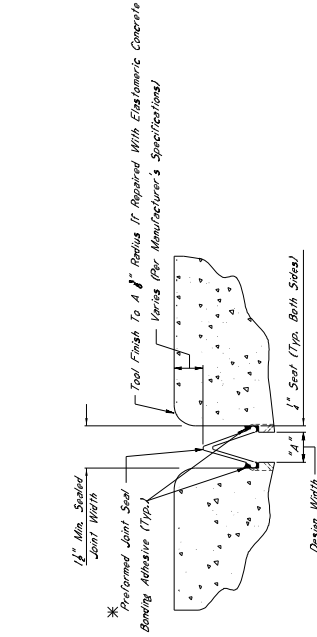


TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete

*** CONCRETE REMOVAL BLOCKOUT NOTES**

Removal of the Concrete Blockout Area Shall Be Considered An Absorbed Item of Work Where Item 202-9169. The Contractor Shall Remove All Material Deeper Than 30 Lbs. To Complete This Work.



TYPICAL SECTION AT SAWCUT & SEALED JOINT

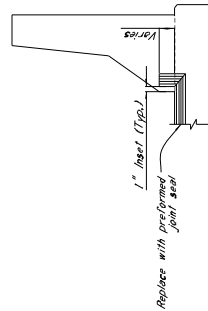
Showing Sealed Joint After Sawcut and Repair With Elastomeric Concrete

*** NOTES:**

- The Performed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - Silcoflex Joint Sealing System Manufactured By R.J. Watson, Inc. In Alden, NY www.rjwatson.com
 - Waco SFS Joint System Manufactured By Waco Seals Corporation In Amherst, NY www.waco.com
 - Silcrete SSS Slitless Strip Seal Manufactured By Silcrete Commercial & Highway Construction Materials www.silcrete.com
- For Estimating Purposes, The R.J. Watson Silicone Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed. Any Other Variance Between The Specifications Provided By The Manufacturer, A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins. In Cases Where Design Widths Are Greater Than 24\"/>
- Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The Seal Required On Both Sides Of The Joint. Performed Joint Seal, If It Shall Be For Design Widths Greater Than or Equal To 24\"/>

*** NOTES:**

For Design Steps, Bearings, The Minimum Required Vertical Joint Seal Dimension For Post And Beam Barricades, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6\"/>



ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-9169 REMOVAL OF EXISTING JOINT MATERIAL

Shall Include The Removal Of Material Associated With Armor, Slicing Plans, And Neoprene Expansion Joints, As Absorbed Item of Work. The Contractor Shall Remove All Concrete Blockout Area Shall Be Absorbed Under This Item of Work. Other Joint Types Shall Not Be Included Under This Item of Work Unless Otherwise Directed By The Engineer.

202-9169 REMOVAL OF EXISTING JOINT MATERIAL

Removal of Armor and Slicing Plans Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length of the Bridge Deck On Each Side Of The Centerline of the Joint.

907-823-0001 SAW CUT, TYPE I & 907-823-0002 SAW CUT, TYPE II

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

907-823-0001 PREFORMED JOINT SEAL, TYPE I

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

907-823-0002 PREFORMED JOINT SEAL, TYPE II

Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Area Of Debris With Compressed Air And Placement Of The New Performed Joint Seal

907-823-0001 SAW CUT, TYPE I & 907-823-0002 SAW CUT, TYPE II

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

ELASTOMERIC CONCRETE NOTES

907-823-0007 BRIDGE REPAIR ELASTOMERIC CONCRETE

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

- Poly-Tex Elastomeric Concrete Manufactured By R.L. Watson, Inc. In Alden, NY www.rjwatson.com
- WacoCrete II Manufactured By Waco Seals Corporation In Amherst, NY www.waco.com
- Debrete Elastomeric Concrete Manufactured By The U.S. Seem Company In North Berlin, OH www.usseem.com

907-823-0001 SAW CUT, TYPE I & 907-823-0002 SAW CUT, TYPE II

The Accepted Quantities Will Be Paid For In Cubic Yards For The Contract Unit Price.

GENERAL NOTES:

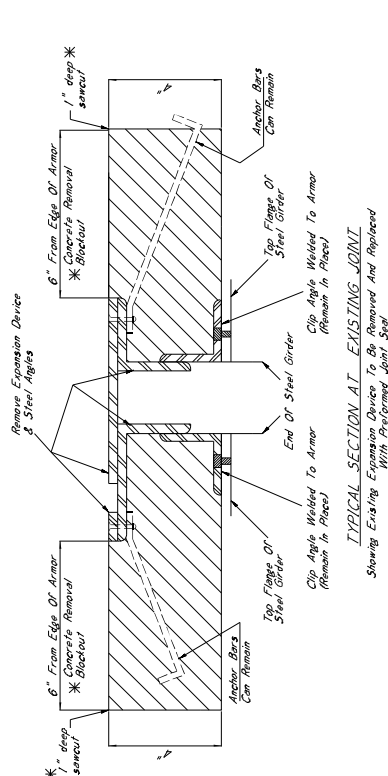
- Specifications, Materials, Standard Specifications For Road And Bridge Construction, 2017.
- No Change of Price Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer.
- Any Change in Specifications, Materials, or Methods May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment. Work For Which No Pay Item Is Provided In The Proposal Will Be Paid For At The Contract Unit Price Directly And Shall Therefore Be Considered An Absorbed Item of Work.

*** 1" SAWCUT NOTES:**

Concrete Sawcutting shall be considered in accordance with the provisions of the contract. Work shall be considered in Abstract Item 01-01-01. The Contractor shall use a Hammer No. Larger Than 30 Lbs To Complete This Work.

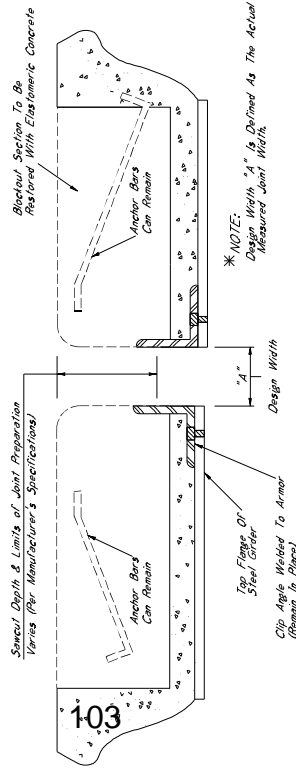
*** CONCRETE REMOVAL BLOCKOUT NOTES**

Concrete Removal shall be considered in accordance with the provisions of the contract. Work shall be considered in Abstract Item 01-01-01. The Contractor shall use a Hammer No. Larger Than 30 Lbs To Complete This Work.



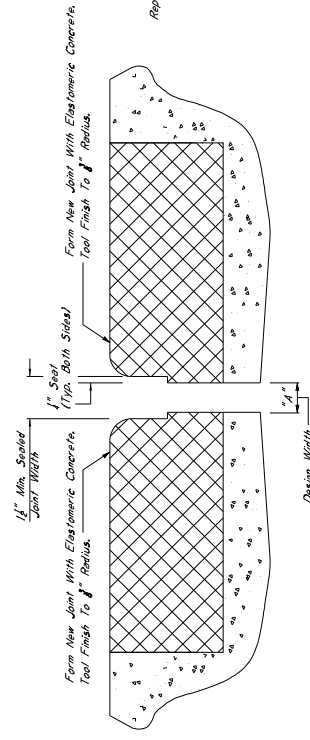
TYPICAL SECTION AT EXISTING JOINT

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



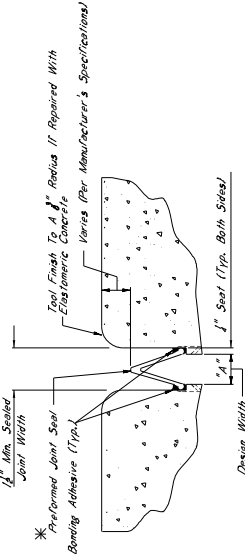
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

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



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairing Area Made After Sawcut



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sawcut Joint After Sawcut And Repair With Elastomeric Concrete

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 A. Silcoflex Joint Sealing System
 B. Wika SPS Joint System
 C. Silcoflex SSS Silicone Strip Seal

2. For Estimating Purposes, The R.J. Watson Silcoflex Joint Sealing System May Be Used For Design Widths Less Than 2". Preformed Joint Seal Shall Be Used For Design Widths Greater Than 2".
 A Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.
 3. Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As Seal Prepared On Both Sides Of The Joint. Preformed Joint Seal Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal Shall Be Used For Design Widths Greater Than 2".
 Expansion Material Shall Be Applied In Areas Where Design Widths Are Greater Than 2".
 Expansion Material Shall Be Applied As Directed By The Director Of Structures, Selected & Appropriate For The Width Of The Joint.

* NOTES:

For Joints, Slope Barriers, The Minimum Required Vertical Joint Seal Dimension For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

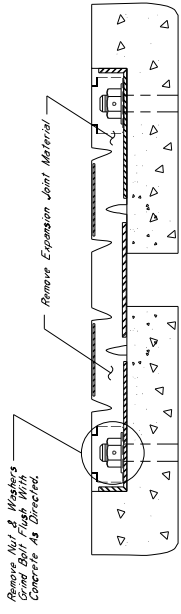
202-8169 REMOVAL OF EXISTING JOINT MATERIAL
 Description: Shall include the removal of material associated with armor, slitting plate, and neoprene expansion joints. As designated in the detail drawings provided. Removal of material shall include the removal of neoprene expansion joints. Other items of work shall be included under this item of work unless otherwise directed by the Engineer.
 Basis of Payment: Removal of armor and slitting plate material will be paid for in linear feet at the contract unit price. The saw cut material will be paid for in linear feet at the contract unit price. The saw cut material will be paid for in linear feet at the contract unit price. The saw cut material will be paid for in linear feet at the contract unit price.

907-823-0001 SAW CUT, TYPE I & 907-823-0002 SAW CUT, TYPE II
 Description: The saw cut depth shall be equivalent to the installation depth required by the manufacturer's specifications. The saw cut type shall be the same as the preformed joint seal selected.
 Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the bridge deck on each side of the centerline of the joint.

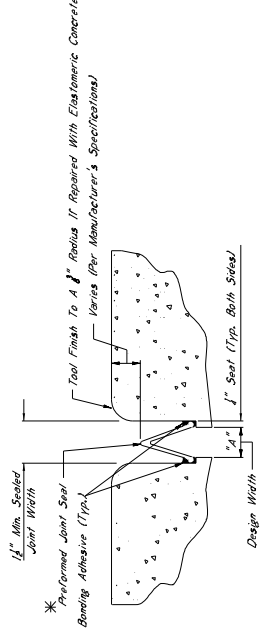
907-823-0001 PREFORMED JOINT SEAL, TYPE I
907-823-0002 PREFORMED JOINT SEAL, TYPE II
 Description: Shall include the manufacturer's required joint preparation including sandblasting both sides of the joint and blowing the joint free of debris with compressed air and placement of the new preformed joint seal.
 Basis of Payment: The accepted quantities will be paid for in linear feet at the contract unit price along the length of the centerline of the joint.

ELASTOMERIC CONCRETE REPAIR, ELASTOMERIC CONCRETE
 Description: Elastomeric concrete shall be one of the following products, installed according to the manufacturer's specifications:
 A. Poly-Ton Elastomeric Concrete
 B. WakaCrete II
 C. Delectra Elastomeric Concrete

GENERAL NOTES:
 1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
 2. Approval of the Director of Structures, State Bridge Engineers, shall be required for any change to design or construction procedure. The contractor shall be responsible for obtaining all necessary permits for work for which no pay item is provided in the proposal. Work shall be paid for directly and shall therefore be considered an absorbed item of work.



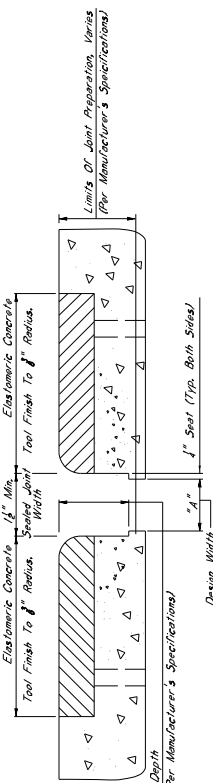
TYPICAL SECTION AT EXISTING JOINT
Showing Existing Expansion Device To Be Removed and Replaced With Preformed Joint Seal



TYPICAL SECTION AT SAWCUT & SEALED JOINT
Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

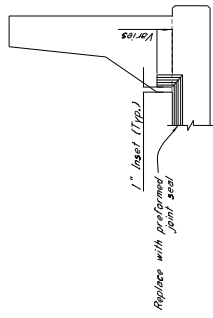
*NOTES:

- The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - Silcoflex Joint Sealing System Manufactured By R.J. Watson, Inc. In Aiken, NY www.rjwatson.com
 - Weld 505 Joint System Manufactured By Watson Bowman Aene Corporation In Amherst, NY www.wbcorp.com
 - Silgose SSS Siligose Strip Seal Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com
- For Estimating Purposes, The R.J. Watson Silcoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Obtain The Manufacturer's Installation Details And Methods, And Any Other Pertinence Between The Specifications Provided By The Manufacturer, To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.
- Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As The Actual Width Of The Joint Opening. This Width Does Not Account For The Sealant, The Sealant Material, Or The Sealant System. The Contractor Shall Be Liable For Design Widths Less Than "A" When Performing Joint Sealing. The Design Widths Greater Than Or Equal To "A" With The Maximum Design Width Of The Expansion Material Shall Be Approved As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL
Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials

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



ELEVATION AT END OF SPAN

*NOTES:

- For Jersey Slope Barriers, The Minimum Required Vertical Joint Seal Dimension For The Barrier Shall Be 3'-0".
- For Roadway Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6'-0".

NOTES ON ASSOCIATED ITEMS OF WORK:

202-0169 REMOVAL OF EXISTING JOINT MATERIAL
Description: Shall Include The Removal Of Material Associated With Armor, Slitting Plats, And Rebar Expansion Joints, As Designated In The Existing Drawings. Preparation Of Work Unless Otherwise Directed By The Engineer.

Basis Of Payment: Removal of armor and slitting plate joint material will be paid for in place of the material removed. The cost of the material removed will be paid for as the length along the centerline of the joint.

907-023-0001 SAW CUT, TYPE I & 907-023-0002 SAW CUT, TYPE II
Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis Of Payment: The Accepted Quantity Will Be Paid For In Linear Feet At Each Side Of The Centerline Joint.

907-023-1001 PREFORMED JOINT SEAL, TYPE I
907-023-1002 PREFORMED JOINT SEAL, TYPE II
Description: Shall include The Manufacturer's Required Joint Preparation, The Joint Seal, And The Sealant Material. The Joint Seal Shall Be Preformed Joint Seal.

Basis Of Payment: The Accepted Quantity Will Be Paid For In Linear Feet At Each Side Of The Centerline Joint.

ELASTOMERIC CONCRETE NOTES

907-023-0007 BRIDGE REPAIR ELASTOMERIC CONCRETE
Description: Elastomeric Concrete Shall Be One Of The Following Products: Installed According To The Manufacturer's Specifications:

- Poly-Ton Elastomeric Concrete Manufactured By R.J. Watson, Inc. In Aiken, NY www.rjwatson.com
- Weldcrete II Manufactured By Watson Bowman Aene Corporation In Amherst, NY www.wbcorp.com
- Dycrete Elastomeric Concrete Manufactured By The D.S. Brown Company In North Baltimore, MD www.dsbrown.com

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

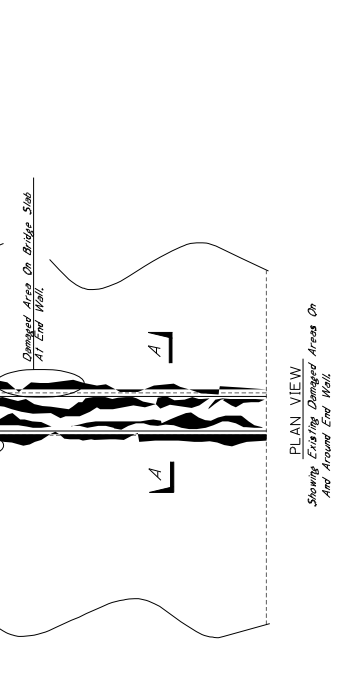
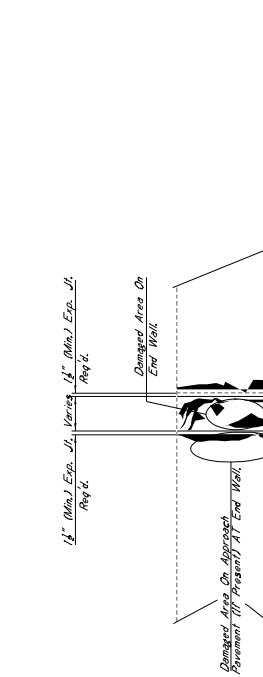
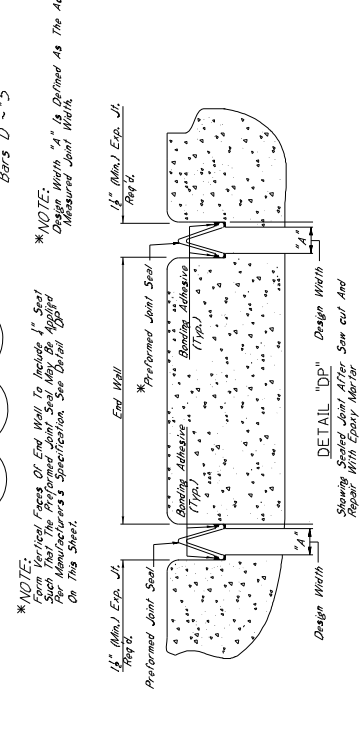
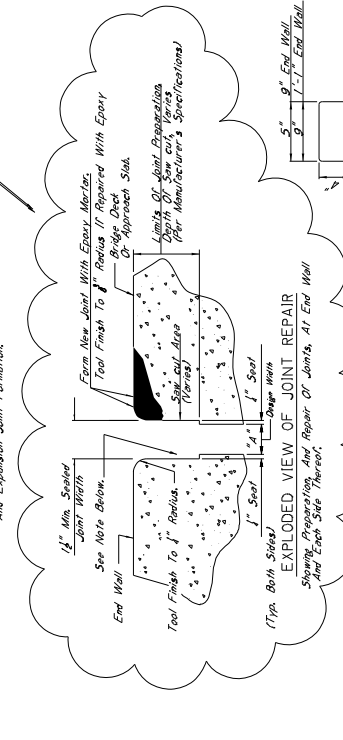
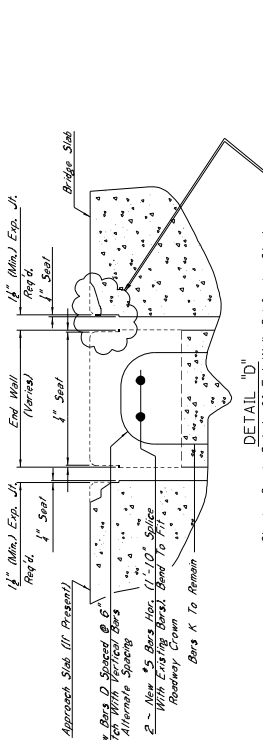
GENERAL NOTES:

- Specifications, MassDOT Standard Specifications For Road And Bridge Construction, 2017.
- Approval Of The Director Of Structures, State Bridge Engineer, May Be Authorized By The Bridge Engineer Provide Such Changes To The Specifications As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.

NOTES ON ASSOCIATED ITEMS OF WORK:

- 907-R24-R0028 BRIDGE REPAIR, ENDWALL REPAIR**
- Description:** Shall include the Work Necessary To Remove And Replace The Damaged Concrete On The End Wall At The Damaged Section, The Specified Depth Of Limiting The Repair To The Damaged Section, The Entire Width Of The Bridge Deck, Embedment Shall Be Removed Along The Entire Width Of The Bridge Deck.
- Items of Work:** The Associated Quantities Will Be Paid For In Lower Part At The Contract Unit Price Along The Width Of The Bridge Deck.
- Damage Caused To Other Elements Of The Structure Or Roadway While Completing Work Shall Be Repaired By The Contractor At No Cost To The Department.**
- Prior To Placing New Concrete, All Concrete Surfaces That Will Be In Contact With The New Concrete Shall Be Painted With An Approved Chloride Inhibitor Designed To Retain New Concrete To Bed.**
- New Concrete Shall Be High Early-Strength Bridge Concrete, As Follows:**
- The concrete mixture design shall be furnished by the Contractor for approval by the Materials Division. Mixture design parameters are as follows:
- Required Strength: 5000 psi
 Maximum Slump: 6 inches
- Non-chloride based accelerator may be used if the ambient temperature is 50°F or less, but shall not be used if the ambient temperature is greater than 50°F. Synthetic structural fibers shall be used. The Contractor shall select a manufacturer from AODI's Approved Products List, and the manufacturer's recommendations shall be followed for the dosage rate.
- Curing is to be continuous until 2500 psi is attained. Traffic is to be diverted from the repair area until this value is reached. The Contractor may use the Ministry of Transport Section 907-R24 to estimate the concrete traffic. However, final acceptance of the in-place concrete shall be determined using eight concrete test cylinders, which shall be cured in a container next to the concrete placement. Two cylinders are to be tested at 3, 16, and 28-hour compressive strength of the concrete.
- The Removal Of Existing Expansion Material May Require Any Number Of The Pay Corresponding Joint Repair Detail Sheet For Additional Details On The Associated Items Of Work.

- 907-R24-R0029 REMOVAL OF EXISTING JOINT MATERIAL**
- 907-R24-R0029 JOINT REPAIR WITHOUT EPOXY
 907-R24-R0030 SAW CUT, TYPE I
 907-R24-R0031 PREFORMED JOINT SEAL, TYPE I
 907-R24-R0032 PREFORMED JOINT SEAL, TYPE II
- GENERAL NOTES:**
- No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Design Construction. Any Change To Detail Of Design Construction May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Change For Contract Price Adjustment. Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item Of Work.
 - And Bridge Construction 2017.
 - Approved By The Bridge Engineer.



- *NOTES:**
- The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - A. Silcaflex Joint Sealing System manufactured by A.J. Wilkox, Inc. www.silcaflex.com
 - B. Wicks SSS Silicone Strip Seal manufactured by Wicks Buman Acme Corporation www.wicksacme.com
 - C. Silcaflex SSS Silicone Strip Seal manufactured by SSI Commercial & Highway Construction Materials www.ssi.com
 - For Estimating Purposes, The Full Width Silcaflex Joint Sealing System Was Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depth, And Width, Adhesive, Sealing Times, And Material. The Contractor Shall Be Responsible For Ensuring That The Manufacturer's Recommendations Are Followed To Ensure That The Contractor Is Properly Trained In Installation Of The Joint Material.
 - Joints Shall Be Sealed At Their Design Width, Dimension "A", Which Is Defined As: Seal Provided On Both Sides Of The Joint. The Preformed Joint Seal Shall Be Used For Design Widths Less Than 2". Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than 2". Grout For The Repair Of Damaged Areas Shall Be Applied As Directed By The Director Of Structures. The Contractor Shall Be Responsible For Ensuring That The Sealant Is Applied As Directed By The Director Of Structures. The Contractor Shall Be Responsible For Ensuring That The Sealant Is Applied As Directed By The Director Of Structures.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2505

CODE: (SP)

DATE: 06/18/2019

SUBJECT: Temporary Construction Signs

PROJECT: SP-5021-50(020) / 108569301 -- Neshoba County

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2506

CODE: (SP)

DATE: 7/16/2019

SUBJECT: Underground Utilities

PROJECT: SP-5021-50(020) / 108569301 -- Neshoba County

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

Underground Power Lines:

Michael Lee – 601-683-3341 – mlee@mdot.ms.gov

Vince Herrington – 601-683-3341 – vherrington@mdot.ms.gov

Underground Communication Lines:

Celina Sumrall – 601-359-1454 – csumrall@mdot.ms.gov

Lauren Landers – 601-359-1454 – llanders@mdot.ms.gov

Henry Lewis – 601-359-1454 – hlewis@mdot.ms.gov

Underground Signal Lines:

Amrik Singh – 601-359-1454 – asingh@mdot.ms.gov

Kenneth Welch – 601-359-1454 – kwelch@mdot.ms.gov

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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. 907-109-1

CODE: (IS)

DATE: 05/08/2019

SUBJECT: Measurement and Payment

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

907-109.01--Measurement of Quantities. Delete the sixth full paragraph of Subsection 109.01 on 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.

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

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

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

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

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

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 70°F.

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

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

Seal Aggregate Gradation	Bituminous Material	Target Application Rate (gal/yd²)	Tolerance
Size No. 7	Emulsified Asphalt	0.33	+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 140° to 180°F. For smaller areas, the emulsion may be applied with a wand. The emulsion shall be immediately broomed to fill cracks and voids. The emulsion scrub broom shall be as described below.

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

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

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

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 yd² area on the roadway surface. After allowing the aggregate spreader to pass over the tarp, the aggregate on the tarp should be collected and weighed to determine the weight of aggregate. The measured weight should then be compared to the target weight calculated using the following formula.

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

Where:

- W = target weight of aggregate in lbs.
- G_{sb} = bulk specific gravity of aggregate
- U_w = Unit weight of water at 70°F = 62.3 lbs./ft³
- R = target application rate in ft³/yd²
- A = area of tarp in yd²
- 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.

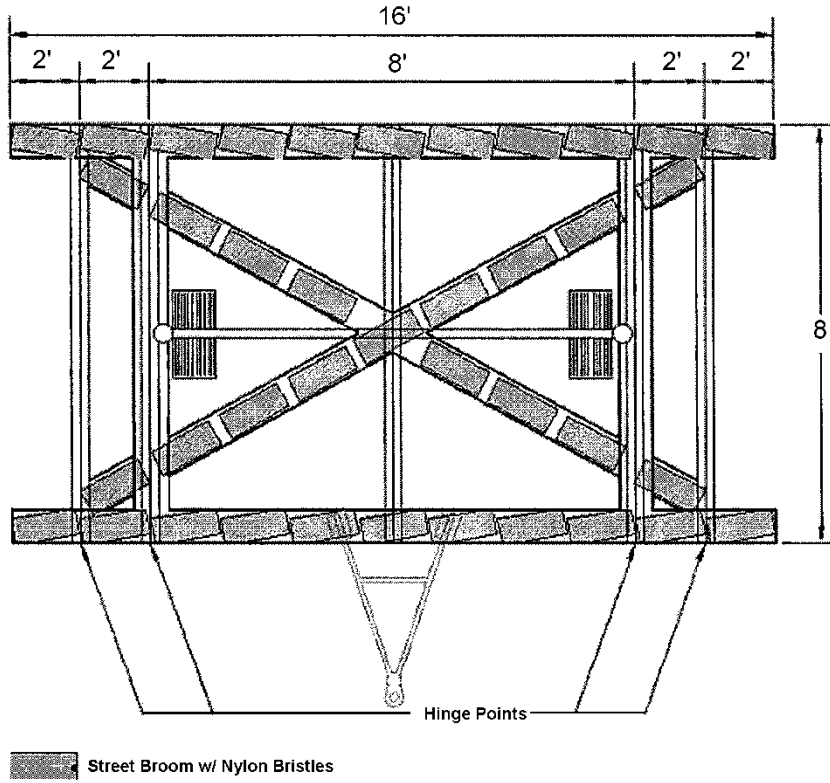
907-414.05--Basis of Payment. Scrub seal, measured as prescribed above, will be paid for at the contract bid price per square yard, which shall be full compensation for furnishing all labor, materials, equipment, temporary markers, vegetation removal, cleaning of the surface, pre-sweeping, post-sweeping, 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:

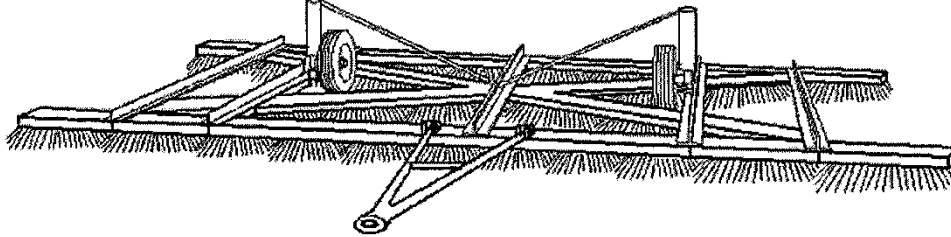
907-414-A: Scrub Seal - per square yard

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

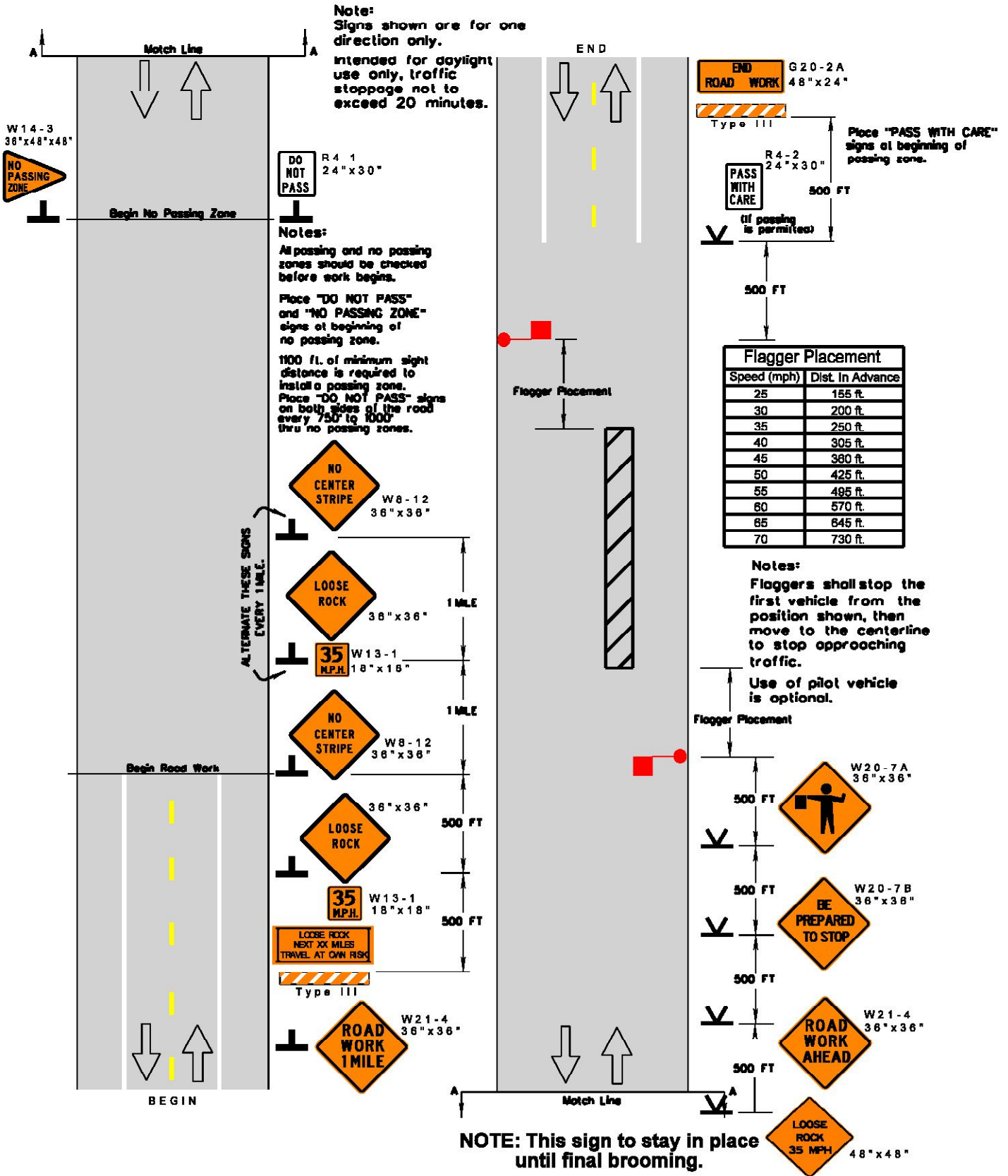


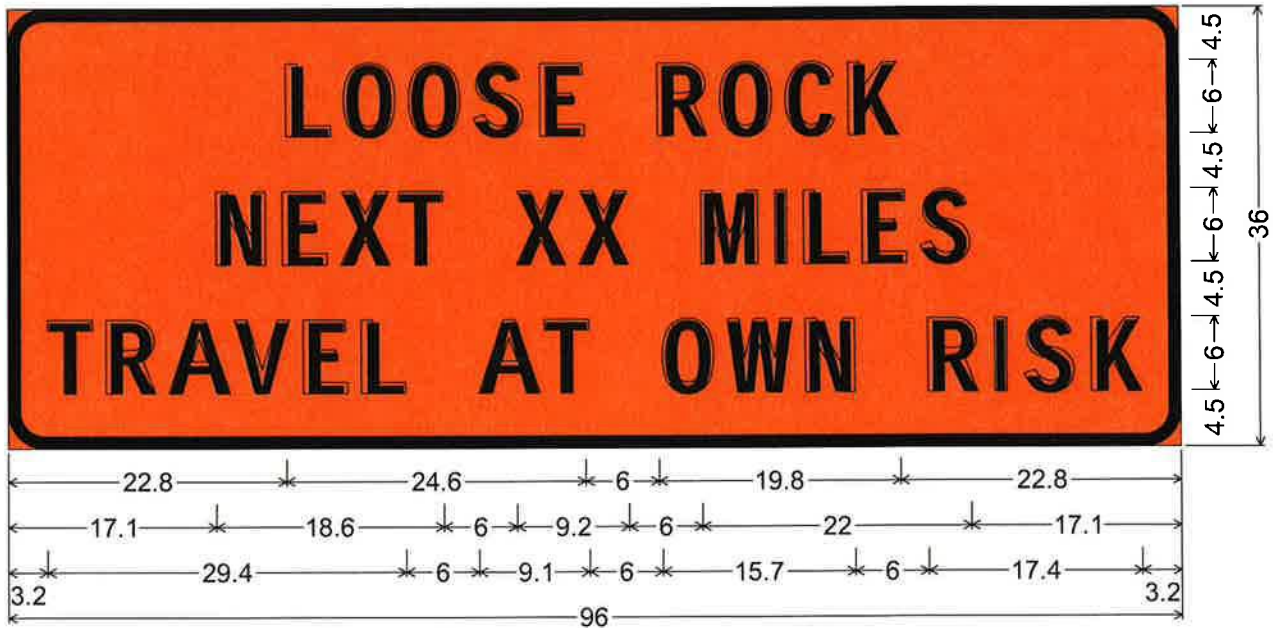
Lift For Wheels (Typical)

Note: Wheels are up and the broom is in the scrub position.



Scrub Broom



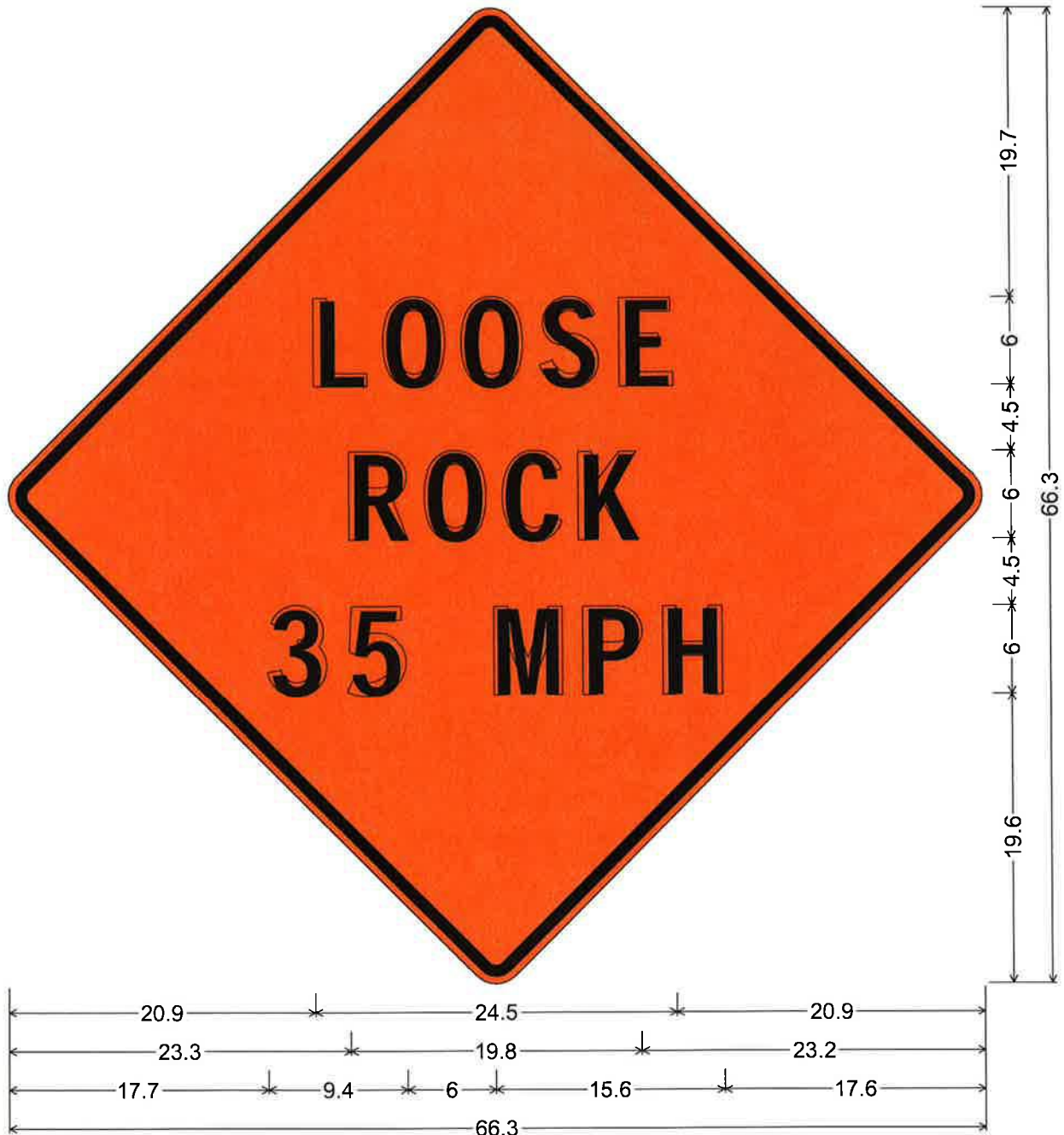


3.0" Radius, 1.0" Border, Black on Orange;

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

Table of letter and object lefts.

L	O	O	S	E	R	O	C	K						
22.8	27.6	33.0	38.3	43.7	53.4	58.5	63.9	69.0						
N	E	X	T	X	X	M	I	L	E	S				
17.1	22.5	27.3	32.1	41.7	46.9	56.9	63.0	65.3	70.1	74.9				
T	R	A	V	E	L	A	T	O	W	N	R	I	S	K
3.2	8.0	13.2	18.6	24.2	29.0	38.6	44.0	53.7	59.0	65.4	75.4	80.9	83.2	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	O	O	S	E
20.9	25.7	31.0	36.4	41.8
R	O	C	K	
23.3	28.4	33.8	38.9	
3	5	M	P	H
17.7	23.1	33.1	39.2	44.6

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.

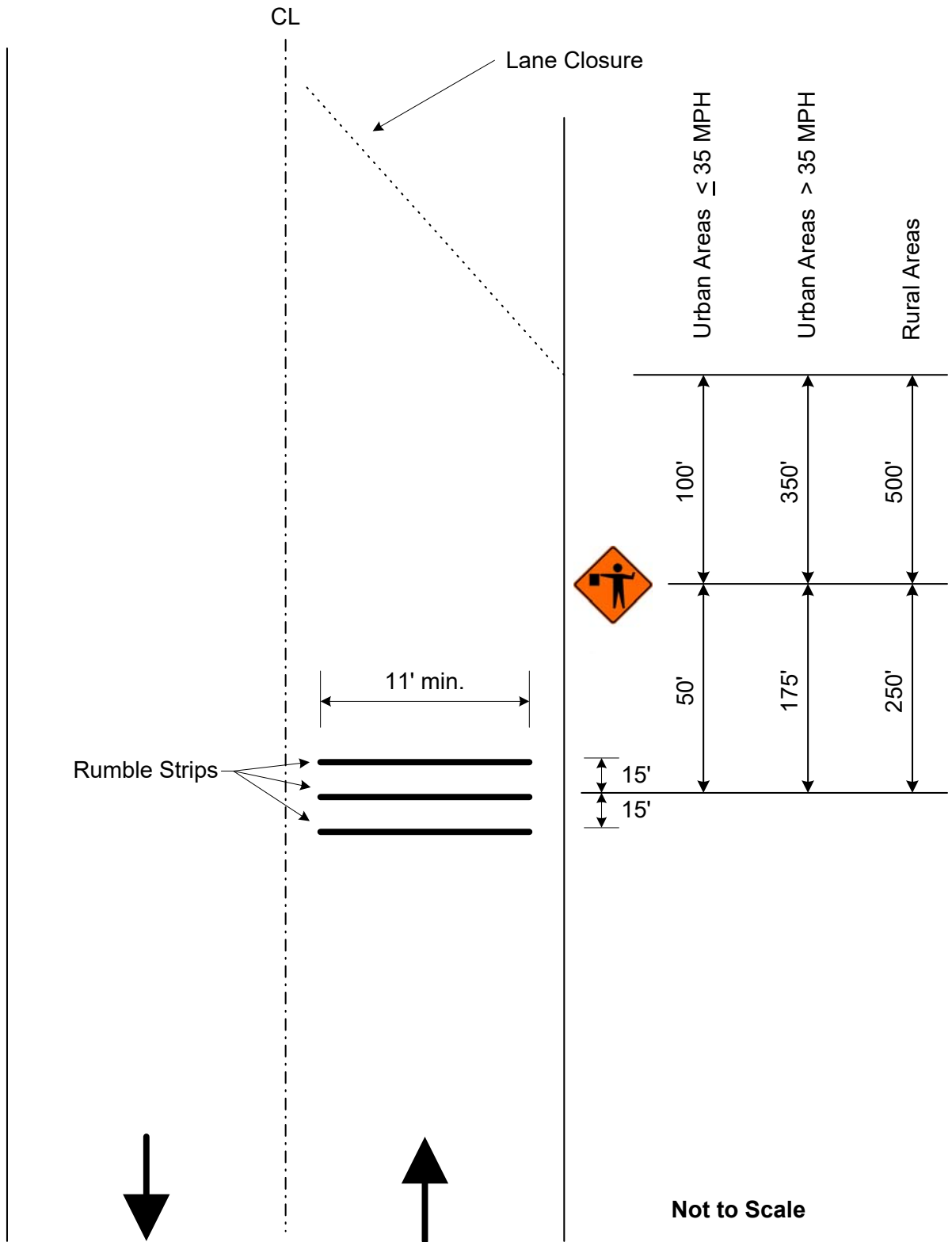
Temporary Portable Rumble Strips will be measured for payment by the linear foot only when a pay item for temporary portable rumble strips is included in the contract. Otherwise, temporary portable rumble strips will be included in the cost of pay item 618-A, Maintenance of Traffic. The quantity of temporary 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. 907-701-2

CODE: (IS)

DATE: 01/08/2020

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.

The Equivalent alkali content for all cement types in this Subsection shall not exceed 0.60%.

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 (C₃A) may be used in lieu of Type II cement as allowed in Subsection 701.02.1; this cement is given the designation “Type III(MS).”

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

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.

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**

Test Requirements	LD-7		CHPF-1		Test Method
	Min.	Max.	Min.	Max.	
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. 907-707-2

CODE: (IS)

DATE: 06/05/2019

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.

907-707.02.3--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. 907-720-2

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. 907-721-2

CODE: (IS)

DATE: 01/08/2020

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/ft²)
Per ASTM Designation D4956**

**TABLE 4
Type IX Sheeting**

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

**TABLE 5
Type XI Sheeting**

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-808-1

CODE: (IS)

DATE: 11/01/2018

SUBJECT: Joint Repair

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

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

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

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

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

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

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

Payment will be made under:

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

907-808-B: Mortar Mix - per gallon

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISIONS NO. 907-823-6

CODE: (SP)

DATE: 07/18/2019

SUBJECT: **Preformed Joint Seal**

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

SECTION 907-823--PREFORMED JOINT SEAL

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

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

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

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

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

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

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

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

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

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

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

Payment will be made under:

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

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

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-402E JOINT REPAIR

Description:

Shall include the Work Necessary To Repair Joints In As Designed In The Detail Drawings Provided. Epoxy Mortar Shall Also Be Included Under This Item Of Work. Removal Of Existing Mortar, Cleaning, Compression And Sealant Joint As Indicated Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment:

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

907-808-4023 JOINT REPAIR WITHOUT EPOXY

Description:

Shall include the Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material. Epoxy Mortar Shall Not Be Included Under This Item Of Work. Removal Of Existing Mortar, Cleaning, Compression And Sealant Joint Materials Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment:

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

907-823-8001 SAW CUT, TYPE I & 907-823-8002 SAW CUT, TYPE II

Description:

The Saw Cut Depth Shall Be Established To The Indicated Depth At The Joint. The Saw Cut Depth Shall Be The Same As The Preformed Joint Seal Selected.

Basis Of Payment:

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

907-823-4001 PREFORMED JOINT SEAL, TYPE I

Description:

Shall include the Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of Debris. The Preformed Joint Seal Compressed Air And Placement Of The Preformed Joint Seal.

Basis Of Payment:

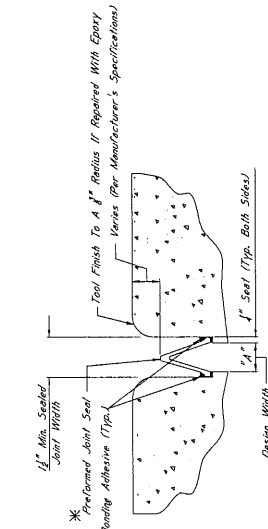
The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

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

GENERAL NOTES:

1. Specifications: Minimum Standard Specifications For Road And Bridge Construction 2017.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Engineer.
3. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Considered As A Change In Contract Price. Work Not To Be Paid For Directly And Shall Therefore Be Considered An Assembled Item of Work.

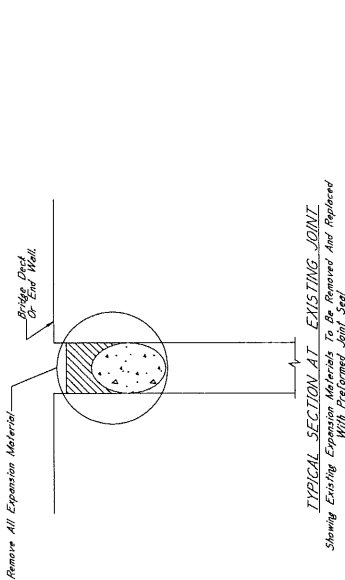


TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut

***NOTES:**

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 a. Sealant, Inc. Sealant, Inc. In Akron, NY
 www.sealant.com
 b. Welo SFS Joint System
 Manufactured By Welo Bannum Acme Corporation In Amherst, NY
 www.weloseal.com
 c. Silgru SFS-357 Strip Seal
 Manufactured By R.J. Watson, Inc. In Adam, NY
 www.rjwatson.com
 d. Welo SFS Joint System
 Manufactured By Welo Bannum Acme Corporation In Amherst, NY
 www.weloseal.com
2. For Estimating Purposes, The R.J. Watson Silgru Joint Sealing System Was Specified. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Verify That The Sealant Is Compatible With The Epoxy Mortar. Any Other Variance Between The Specifications Approved By The Manufacturer, To Ensure That The Contractor Is Properly Sealed In Installation Of The Joint Material.
3. Joints Shall Be Sealed At Their Design Width, Dimension "A", Which Is Defined As Seal Depth On Both Sides Of The Joint. The Preformed Joint Seal Type To Be Used For Design Widths Less Than The Preformed Joint Seal Type To Be Used Being Shown In Cases Where Design Widths Are Greater Than The Minimum Required Seal Depth Shall Be As Specified In The Specifications. The Contractor Shall Verify That The Sealant Is Properly Sealed For The Width Of The Joint.



TYPICAL SECTION AT EXISTING JOINT

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

Remove All Expansion Material From New Joint With Epoxy Mortar. Tool Finish To 1/2" Radius.

Bridge Deck Or End Wall.

Design Width

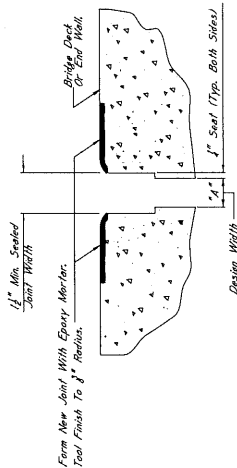
1/2" Min. Sealed Joint Width

1" Seal (Top Both Sides)

1/4" Seal (Top Both Sides)

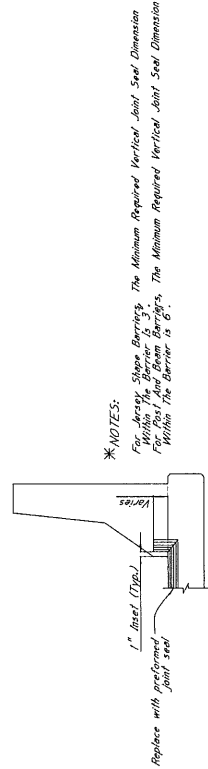
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT

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



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

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



***NOTES:**

Replace with preformed joint seal. Minimum Required Vertical Joint Seal Dimension For Post And Beam Barrages. The Minimum Required Vertical Joint Seal Dimension Within The Barrier is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-4002 JOINT REPAIR

Description:

Shall include the Work Necessary To Repair Joints As Shown On The Detail Drawings Provided. Epoxy Mortar Shall Also Be Included Under This Item Of Work. Removal Of Existing Silicone Sealant, Compression, And Expansion Material Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment:

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

907-808-4003 JOINT REPAIR WITHOUT EPOXY

Description:

Shall include the Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material, Or Existing Silicone Sealant, Compression, And Expansion Material Shall Be Included Under This Item Of Work. All Other Requirements Shall Be In Accordance With The Applicable Provisions Of Section 808 Of The Specifications And Any Other Sections Specified Therein.

Basis Of Payment:

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

907-823-8001 SAW CUT, TYPE I & 907-823-8002 SAW CUT, TYPE II

Description:

The Saw Cut Depth Shall Be Equivalent To The Installation Depth Of The Preformed Joint Seal. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

Basis Of Payment:

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

907-823-4001 PREFORMED JOINT SEAL, TYPE I

Description:

Shall include the Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of All Dust. Compressor Air And Placement Of The New Preformed Joint Seal.

Basis Of Payment:

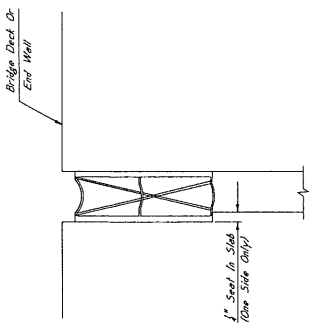
The Accepted Quantities Will Be Paid For In Linear Feet At The Contract Unit Price Along The Length Of The Centerline Joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

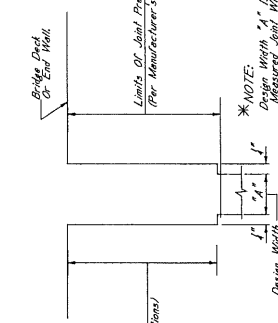
Either Epoxy Mortar Or Polymer Concrete May Be Used. Questions Regarding Specifications Can Be Found In Section 808 Of The Specifications.

GENERAL NOTES:

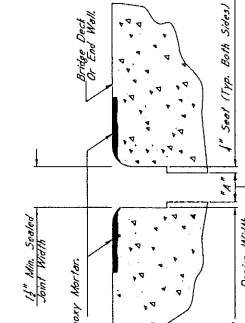
1. Specifications, Mississippi Standard Specifications For Road Construction, Shall Apply Unless Otherwise Stated.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Or Design Or Construction Procedures Will Be Permitted Only When Necessary To Accommodate Such Changes. Work Not To Cause For Contract Price Adjustments.
3. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For. Correctly And Shall Therefore Be Considered An Abstract Item Of Work.



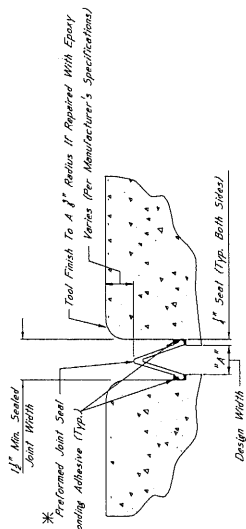
TYPICAL SECTION AT EXISTING JOINT
Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT
Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials And Sawcut



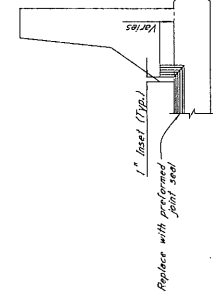
TYPICAL SECTION AT SAWCUT & JOINT REPAIR
Showing Area Where Repairs Are Made After Sawcut, With Epoxy Mortar Or Approved Equivalent



TYPICAL SECTION AT SAWCUT & SEALED JOINT
Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

*NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - A. Silastic Joint Sealing System Manufactured By R.J. Watson, Inc. In Allen, NY www.rjwatson.com
 - B. Wido SFS Joint Sealing System Manufactured By Wido Systems, Highway Construction Materials www.widosystems.com
 - C. Silastic SSS Silicone High Seal System Manufactured By Silastic, Inc. In Allen, NY www.silastic.com
2. For Estimating Purposes, The R.J. Watson Silastic Joint Sealing System Was Selected However, Show Other Options For The Joint Seal. The Contractor Shall Be Responsible For Joint Preparation, Installation Details, And Methods, Adhesive, Sealing Times, And Other Details. The Contractor Shall Be Responsible For Obtaining The Manufacturer's Approval To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Sealant.
3. Joints Shall Be Sealed At Their Design Widths. Dimension 'A', Which Is Defined As Seal Depth On Both Sides Of The Joint, Preformed Joint Seal, Type I, Shall Be Seal Depth On Both Sides. Dimension 'B', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'C', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'D', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'E', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'F', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'G', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'H', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'I', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'J', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'K', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'L', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'M', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'N', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'O', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'P', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'Q', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'R', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'S', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'T', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'U', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'V', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'W', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'X', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'Y', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides. Dimension 'Z', Which Is Defined As Seal Depth On Both Sides, Shall Be Seal Depth On Both Sides.



ELEVATION AT END OF SPAN

*NOTES:
Provide Shop Details For Detail And Form Barriers. The Minimum Required Vertical Joint Seal Dimension For Detail And Form Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-002 JOINT REPAIR

Description:

Shall include the Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material As Detailed In The Detail Drawing Provided. Epoxy Mortar Shall Also Be Included Under This Item Of Work. Epoxy Mortar Materials Will Not Be Paid For Directly And Shall Be Considered As Absorbed Under This Item Of Work. All Other Requirements Shall Be As Stated In The Application For Approval. Specifications Shall Be As Stated In The Specifications And Any Other Sections Specified Therein.

Basis Of Payment:

The Accepted Quantities Will Be Paid For In Linear Feet Al On Each Side Of The Centerline Joint.

907-808-003 JOINT REPAIR WITHOUT EPOXY

Description:

Shall include the Work Necessary To Repair Joints In Preparation For The Placement Of New Expansion Material Or Existing Silicone Seals, Compression And AC Seals. Joint Materials Shall Be Included Under This Item Of Work. All Other Requirements Shall Be As Stated In The Application For Approval. Specifications Shall Be As Stated In The Specifications And Any Other Sections Specified Therein.

Basis Of Payment:

The Accepted Quantities Will Be Paid For In Linear Feet Al On Each Side Of The Centerline Joint.

907-823-001 SAW CUT, TYPE I & 907-823-002 SAW CUT, TYPE II

Description:

The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Performed Joint Seal Selected. The Accepted Quantities Will Be Paid For In Linear Feet Al On Each Side Of The Centerline Joint. It Is The Contractor's Responsibility To Obtain The Manufacturer's Recommendations.

Basis Of Payment:

The Contract Unit Price Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint.

907-823-001 SAW CUT, TYPE I

Description:

Shall include the Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Placement Of The New Performed Joint Seal.

Basis Of Payment:

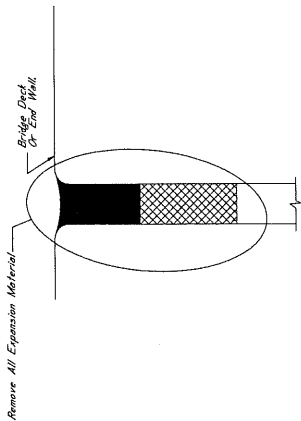
The Accepted Quantities Will Be Paid For In Linear Feet Al Along The Length Of The Centerline Joint.

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

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

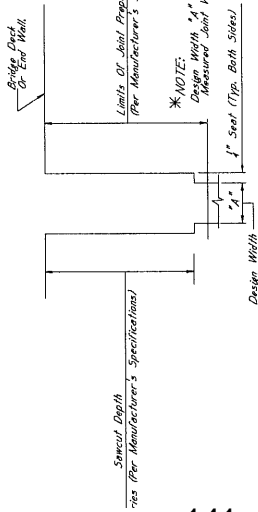
GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road And Bridge Construction (MS-SS).
2. Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure Shall Not Be Cause For Contract Price Adjustment. Such Changes Will Not Be Paid For Directly Under This Item Of Work. All Other Requirements Shall Be As Stated In The Application For Approval. Specifications Shall Be As Stated In The Specifications And Any Other Sections Specified Therein.
3. Absorbent Item of Work.



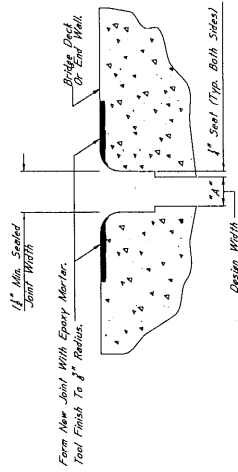
TYPICAL SECTION AT EXISTING JOINT

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



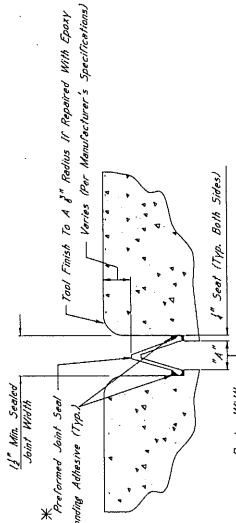
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT

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



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

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



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

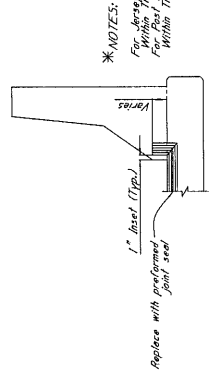
***NOTES:**

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

- A. Silastic Joint Sealing System
Manufactured By: R.J. Watson, Inc. In Albany, NY
www.rjwatson.com
- B. Veritas Seal System
Manufactured By: Veritas Seals, Inc. In Amherst, NY
www.veritas.com
- C. Silastic 555 Silicone Strip Seal
Manufactured By: SSI Commercial & Highway Construction Materials
www.ssi.com

2. For Estimating Purposes, The R.J. Watson Silastic Joint Sealing System Was Selected. However, The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depth, And Width, Adhesive, Setting Times, And Curing Times. In Cases Where Design Details Are Conflicting, The Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Scheduled In Installation Of The Joint Material.

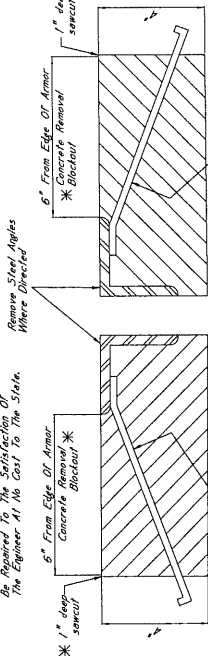
3. Joints Shall Be Sealed At Their Design Widths, Quantities *1.5 Which Is Defined As Seal Required On Both Sides Of The Joint. Performed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than Equal To 1.5. The Maximum Design Width Being Sealed In Cases Where Design Details Are Conflicting Shall Be Another Sealing System. The Contractor Shall Be Responsible For Ensuring That The Seal Size Selected Is Appropriate For The Width Of The Joint.



ELEVATION AT END OF SPAN

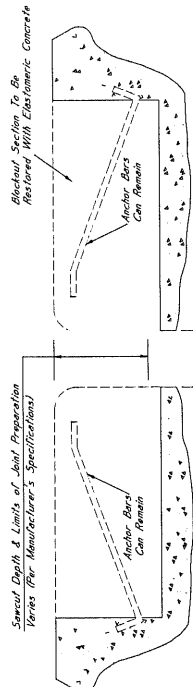
*** 1" SAWCUT NOTES:**

All 1" Sawcuts Shall Be Considered As Absorbed Item of Work. The Contractor Shall Verify Depth of Reinforcing Steel At The Sawcut Shall Be No More Than The Depth Of The Reinforcing Steel. Any Change To Reinforcing Steel Shall Be Made At The Discretion Of The Engineer At No Cost To The State.



TYPICAL SECTION AT EXISTING JOINT

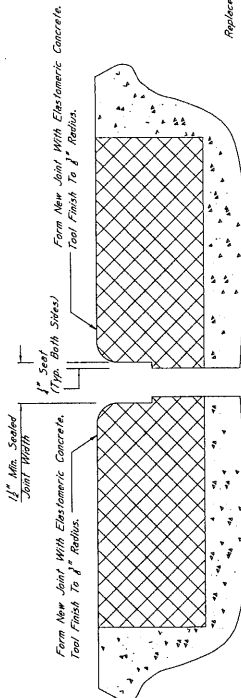
Showing Existing Expansion Devices To Be Removed And Replaced With Preformed Joint Seal



***NOTE:** Sawcut Depth 3/4" Is Defined As The Actual Measured Joint Width

TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

Showing Limits of Joint Preparation For Application of New Seal

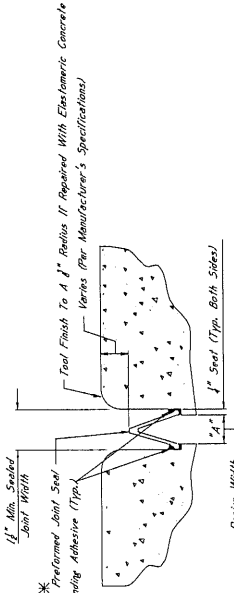


TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete

*** CONCRETE REMOVAL BLOCKOUT NOTES**

Removal Of The Concrete Blockout Area Shall Be Considered An Absorbed Item Of Work. The Contractor Shall Verify Depth of Reinforcing Steel At The Sawcut Shall Use A Hammer No Larger Than 30 LBS To Complete This Work.



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

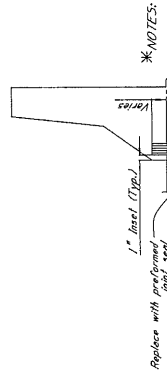
***NOTES:**

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

- A. Silibond Joint Sealing System; Manufactured By R.J. Watson, Inc. In Akron, NY www.rjwatson.com
- B. Wobol SPS Joint System Manufactured By Watson Boman Acme Corporation In Amherst, NY www.watson.com
- C. Silibond SSS 650000 Strip Seal; Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com

2. For Estimating Purposes, The R.J. Watson Silicone Joint Sealing System Was Selected. However, Should Another Supplier Be Used, The Contractor Shall Verify That The Joint Sealant Meets The Following Requirements: It Shall Be Applied To A Clean, Dry, and Free From Oil, Grease, and Other Contaminants Surface. It Shall Be Applied To A Surface That Is Properly Prepared. It Shall Be Applied To A Surface That Is Properly Sealed. It Shall Be Applied To A Surface That Is Properly Sealed. It Shall Be Applied To A Surface That Is Properly Sealed.

3. Joints Shall Be Sealed At Their Design Widths. Dimension 'A' Which Is Defined As Seal Required On Both Sides Of The Joint. Preformed Joint Seal Type Is To Be Used For Design Widths Less Than 2". For Design Widths Greater Than 2" The Sealant Shall Be Applied To The Joint With A Sealant Gun. The Sealant Shall Be Applied To The Joint With A Sealant Gun. The Sealant Shall Be Applied To The Joint With A Sealant Gun.



***NOTES:** For Design Widths Greater Than 2" The Sealant Shall Be Applied To The Joint With A Sealant Gun. The Sealant Shall Be Applied To The Joint With A Sealant Gun. The Sealant Shall Be Applied To The Joint With A Sealant Gun.

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-B169 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall include the Removal Of Material Associated With Joint Sealing, Plate and Mortar Expansion Joints, As Designated In The Detail Drawings Expansion Removal Of The Concrete Blockout Area Shall Be Absorbed Under This Item Of Work Unless Otherwise Directed By The Engineer.

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

907-823-8001 SAW CUT, TYPE I & 907-823-8002 SAW CUT, TYPE II

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

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

907-823-4001 PREFORMED JOINT SEAL, TYPE I

907-823-4002 PREFORMED JOINT SEAL, TYPE II

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

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

ELASTOMERIC CONCRETE REPAIR, ELASTOMERIC CONCRETE

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

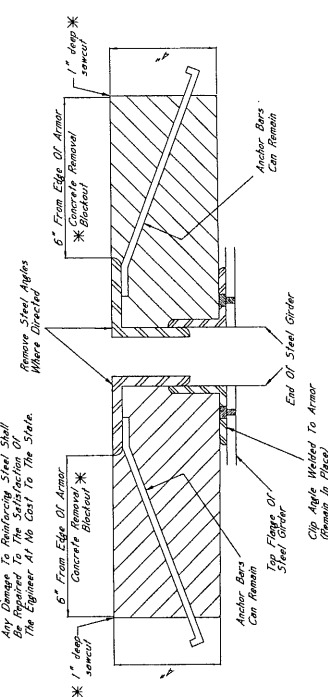
- A. Poly-Ton Elastomeric Concrete Manufactured By R.J. Watson, Inc. In Akron, NY www.rjwatson.com
- B. Wobol-Crete II Manufactured By Watson Boman Acme Corporation In Amherst, NY www.watson.com
- C. Ductile Elastomeric Concrete Manufactured By The R.J. Boman Company In North Baltimore, OH www.ducton.com

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

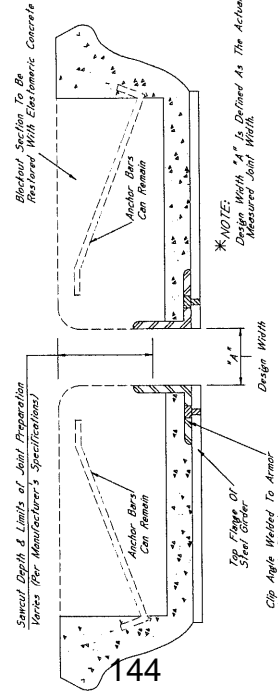
GENERAL NOTES:

1. Specifications: MassDOT Standard Specifications For Road And Bridge Construction, 2017.
2. No Change Of The Direction Of Structures, Side Bridge Engineers Minor Changes To Detail Of Design Or Construction Procedures May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Affect The Overall Functionality Of The Structure. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item of Work.

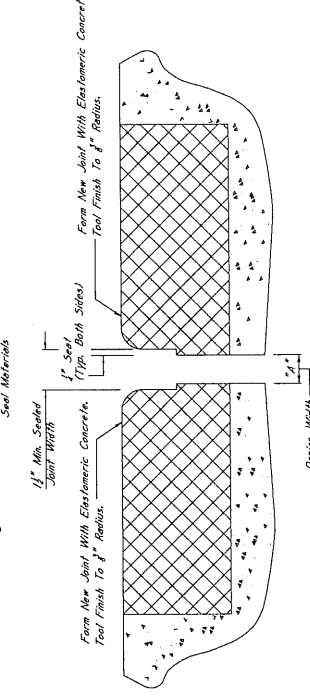
*** 1" SAWCUT NOTES:**
 All 1" Sawcuts Shall Be Considered An
 Removal Of The Concrete Blockout Area Of
 Work Under Pay Item 202-0165. The
 Contractor Shall Use A Hammer No Larger
 Than 30 Lbs. To Complete This Work.



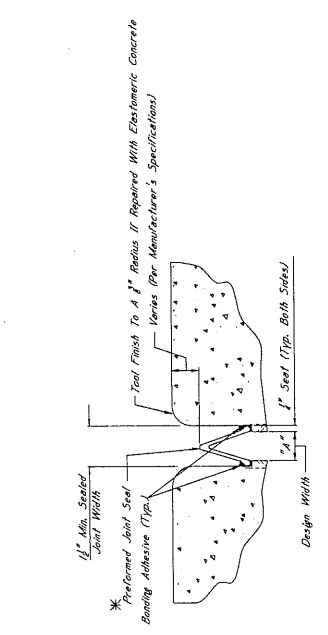
TYPICAL SECTION AT EXISTING JOINT
 Showing Existing Existing Seal Material And Repaired
 With Preformed Joint Seal



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL
 Showing Limits Of Joint Preparation For Application Of New Joint Seal Materials



TYPICAL SECTION AT SAWCUT & JOINT REPAIR
 Showing Area Where Repairs Are Made After Sawcut



TYPICAL SECTION AT SAWCUT & SEALED JOINT
 Showing Sawcut Joint After Sawcut And
 Repair With Elastomeric Concrete

- * NOTES:**
- The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - A. Siligore, 555 Siligore Ship, Sped. 555 Siligore, Inc. In Allen, NY
 - B. Welo SPS Joint System Manufactured By Welson Boman Acme Corporation In Amherst, NY
 - C. Siligore, 555 Siligore Ship, Sped. 555 Siligore, Inc. In Allen, NY
 - For Estimating Purposes, The RJ Welson Siligore Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Obtain The Necessary Details And Materials, And To Ensure That The Contractor Is Properly Scheduled In Installation Of The Joint Material.
 - Joints Shall Be Sealed At Their Design Widths. Dimension "A" Which Is Defined As Seal Placed On Both Sides Of The Joint, Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". Seal Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than 2". In Cases Where Design Widths Are Greater Than 2", Compression Material Shall Be Required As Directed By The Manufacturer's Specifications To Ensure That The Contractor Has Adequate Ability To Ensure That The Seal Is Applied At The Width Of The Joint.

*** NOTES:**
 For Jersey Slope Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".
 The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

202-0169 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Sliding Plate, And Measure Expansion Joints, As Designated In The Detail Drawings. The Contractor Shall Remove The Existing Joint Material From The Joint. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer.

Basis Of Payment: Removal Of Armor And Sliding Plate Joint Material Will Be Paid For In Linear Feet At The Contract Unit Price For The Removal Of The Material, While Removal Of Measure Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-023-0001 SAW CUT, TYPE I & 907-023-0002 SAW CUT, TYPE II

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

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

907-023-0001 PREFORMED JOINT SEAL, TYPE I

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

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

907-023-0002 PREFORMED JOINT SEAL, TYPE II

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

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

ELASTOMERIC CONCRETE REPAIR, ELASTOMERIC CONCRETE

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

- Poly-Ton Elastomeric Concrete Manufactured By R.L. Wilson, Inc. In Allen, NY
- Welo-Crete II Manufactured By Welson Boman Acme Corporation In Amherst, NY
- Decorative Elastomeric Concrete Manufactured By The U.S. Brown Company In North Baltimore, ON

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

GENERAL NOTES:

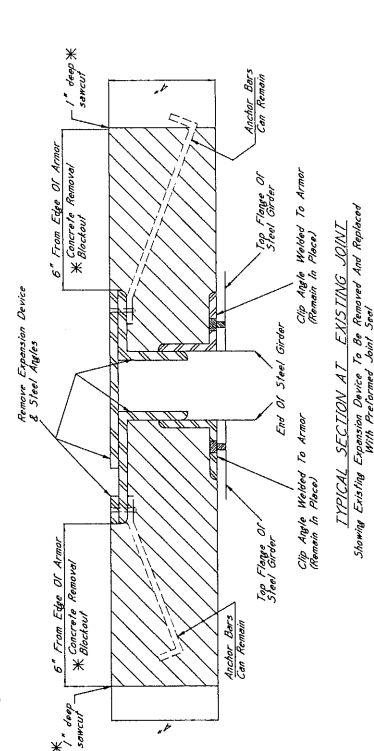
- Specifications: Massachusetts Standard Specifications For Road And Bridge Construction, 2017.
- No Change Of The Detail Will Be Made Except By Written Approval From The Engineer. Any Change To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer. Proposed Such Changes Shall Be Submitted To The Engineer For Approval. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly And Shall Therefore Be Considered An Absorbed Item Of Work.

*** 1" SAWCUT NOTES:**

All 1" Sawcuts Shall Be Considered An Absorbed Item of Work. The Contractor Shall Obtain Approval From 907-823-650, The Bridge Maintenance Section, Before Making Any Sawcuts. The Depth Of The Sawcut Shall Be No More Than 1/2" Below The Reinforcing Steel. The Depth Of The Reinforcing Steel Shall Be Approved To The Satisfaction Of The Engineer. At No Cost To The State.

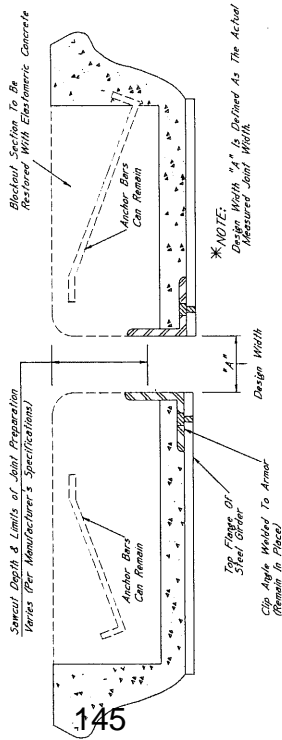
*** CONCRETE REMOVAL BLOCKOUT NOTES:**

Removal Of The Concrete Blockout Area Considered An Absorbed Item of Work. The Contractor Shall Obtain Approval From 907-823-650, The Bridge Maintenance Section, Before Making Any Sawcuts. The Depth Of The Sawcut Shall Be No More Than 30 LBS To Complete This Work.



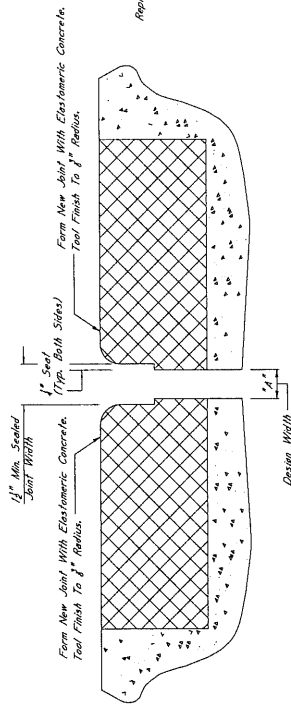
TYPICAL SECTION AT EXISTING JOINT

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



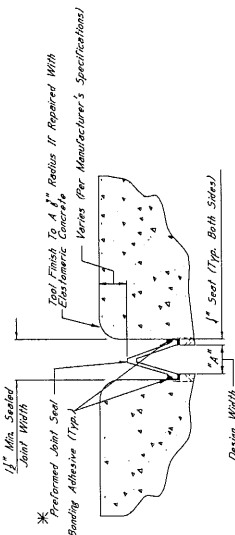
TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL

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



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

Showing Area Where Repairs Are Made After Sawcut With Elastomeric Concrete



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

* NOTES:
1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
A. Silicone Joint Sealing System Manufactured By R.J. Watson, Inc. In Adels, NY www.rjwatson.com
B. Water Stop Joint Sealing System Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com
C. Silicone SSS Silicone Strip Seal Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com

2. For Estimating Purposes, The R.J. Watson Silicone Joint Sealing System Was Used. The Contractor Shall Be Responsible To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depth, And Width, Adhesive Sealing Times, And Cure Time. The Contractor Shall Be Responsible To Ensure That The Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Scheduled In Installation Of The Joint Material.

3. Joints Shall Be Sealed At Their Design Width. The Width Does Not Account For The Seal Required On Both Sides Of The Joint. The Preformed Joint Seal Type To Be Used Shall Be Determined By The Engineer. The Contractor Shall Be Responsible To Ensure That The Seal Widths Greater Than Or Equal To 2" With The Maximum Design Width Being 2". In Cases Where Design Widths Are Greater Than 2", Another Sealing System Shall Be Used. The Contractor Shall Be Responsible To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.

* NOTES:

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

ELEVATION AT END OF SPAN

NOTES ON ASSOCIATED ITEMS OF WORK:

907-823-6001 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor, Siding Plates, And Negative Expansion Joints, As Designated In The Detail Drawings. The Contractor Shall Be Responsible For The Removal Of The Concrete Blockout Area. The Contractor Shall Be Responsible For The Removal Of The Concrete Blockout Area. The Contractor Shall Be Responsible For The Removal Of The Concrete Blockout Area. The Contractor Shall Be Responsible For The Removal Of The Concrete Blockout Area.

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

907-823-6002 SAW CUT, TYPE I & 907-823-6002 SAW CUT, TYPE II

Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Of The Joint Seal. The Saw Cut Depth Shall Be The Same As The Preformed Joint Seal Selected. The Contractor Shall Be Responsible For The Removal Of The Material Along The Length Of The Saw Cut.

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

907-823-6001 PREFORMED JOINT SEAL, TYPE I

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

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

907-823-6002 PREFORMED JOINT SEAL, TYPE II

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

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

ELASTOMERIC CONCRETE REPAIR

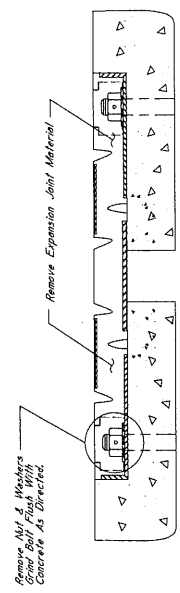
Description: Elastomeric Concrete Shall Be One Of The Following Products, Installed According To The Manufacturer's Specifications:
A. Poly-Ton Elastomeric Concrete Manufactured By R.J. Watson, Inc. In Adels, NY www.rjwatson.com
B. Water Stop Joint Sealing System Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com
C. Silicone SSS Silicone Strip Seal Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com

2. For Estimating Purposes, The R.J. Watson Silicone Joint Sealing System Was Used. The Contractor Shall Be Responsible To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depth, And Width, Adhesive Sealing Times, And Cure Time. The Contractor Shall Be Responsible To Ensure That The Manufacturer Representative Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Scheduled In Installation Of The Joint Material.

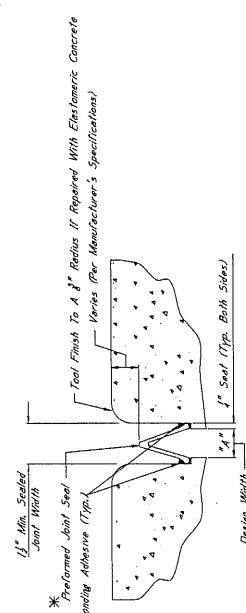
3. Joints Shall Be Sealed At Their Design Width. The Width Does Not Account For The Seal Required On Both Sides Of The Joint. The Preformed Joint Seal Type To Be Used Shall Be Determined By The Engineer. The Contractor Shall Be Responsible To Ensure That The Seal Widths Greater Than Or Equal To 2" With The Maximum Design Width Being 2". In Cases Where Design Widths Are Greater Than 2", Another Sealing System Shall Be Used. The Contractor Shall Be Responsible To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.

GENERAL NOTES:

1. Specifications, Mississippi Standard Specifications For Road Construction, 2010 Edition, Shall Apply Unless Otherwise Stated.
2. No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Drawings Or Construction Methods Will Not Be Cause For Contract Price Adjustment. Work For Which No Pay Item Is Provided In The Proposal Will Be Considered An Absorbed Item of Work.

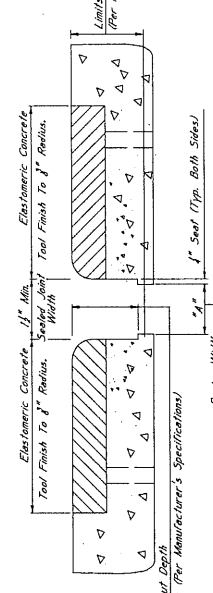


TYPICAL SECTION AT EXISTING JOINT
Showing Existing Expansion Device To Be Removed And Replaced With Preformed Joint Seal



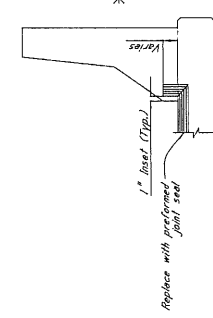
TYPICAL SECTION AT SAWCUT & SEALED JOINT
Showing Sealed Joint After Sawcut And Repair With Elastomeric Concrete

- * NOTES:
1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
 - A. Silflex, Butyl Sealing System, www.jelco.com
 - B. W400 SPS Joint System, Manufactured By Watson Bowman Acme Corporation In Amherst, NY, www.watson.com
 - C. Silgrate 553 Silicone Strip Seal, www.silgrate.com
 2. For Existing Repairs, The RJ Watson Silicone Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Obtain Approval From The Designer For The Proposed System. Any Other Variations Between The Specifications Provided By The Manufacturer, To Ensure That The Contractor Is Properly Schooled In Installation Of The Joint Material.
 3. Joints Shall Be Sealed At Their Design Width, Dimension "A", Which Is Defined As Seal Width On Both Sides Of The Joint. The Preformed Joint Seal, Type I, Shall Be Used For Design Widths Less Than 2". The Preformed Joint Seal, Type II, Shall Be Used For Design Widths Greater Than 2". In Cases Where Design Widths Are Greater Than 2", The Expansion Material Shall Be Applied As Directed By The Designer Of Structures. The Contractor Shall Be Responsible For The Width Of The Joint.



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL
Showing Limits Of Joint Preparation For Application Of New Seal

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



ELEVATION AT END OF SPAN

* NOTES:
Provide Slope Barrier. The Minimum Required Vertical Joint Seal Dimension For Post And Beam Barriers, The Minimum Required Vertical Joint Seal Dimension Within The Barrier Is 6".

NOTES ON ASSOCIATED ITEMS OF WORK
907-823-001 REMOVAL OF EXISTING JOINT MATERIAL

Description: Shall Include The Removal Of Material Associated With Armor Sliding Plates And Expansion Joints As Designated In The Detail Drawings Provided. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer.

Basis Of Payment: Removal Of Armor And Sliding Plate Joint Material Along The Length Of The Bridge Deck On Each Side Of The Centerline Joint, While Removal Of Expansion Joint Material Will Only Be Paid For As The Length Along The Centerline Of The Joint.

907-823-001 SAW CUT, TYPE I & 907-823-002 SAW CUT, TYPE II
Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

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

907-823-001 PREFORMED JOINT SEAL, TYPE I
907-823-002 PREFORMED JOINT SEAL, TYPE II
Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of All Debris. The Preformed Joint Seal Shall Be Applied To The Joint.

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

ELASTOMERIC CONCRETE NOTES
907-824-000 BRIDGE REPAIR ELASTOMERIC CONCRETE

Description: Elastomeric Concrete Shall Be One Of The Following Products: A. Poly-Ton Elastomeric Concrete, www.polyton.com B. W400 SPS, www.watson.com C. Silgrate 553, www.silgrate.com

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

GENERAL NOTES:

1. Specifications: Message Standard Specifications For Road And Bridge Construction.
2. Approval Of The Director Of Structures, State Bridge Engineer, Must Be Obtained Before Proceeding With Any Work. Any Changes To Detail Or Design Or Construction Procedure Will Not Be Cause For Contract Price Adjustment. Work For Which No Pay Item Is Provided In The Proposal Will Not Be Paid For Directly. And Shall Therefore Be Considered An Absorbed Item Of Work.

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

- A. Poly-Ton Elastomeric Concrete, www.polyton.com
- B. W400 SPS, www.watson.com
- C. Silgrate 553, www.silgrate.com

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

907-824-000 BRIDGE REPAIR ELASTOMERIC CONCRETE
Description: Elastomeric Concrete Shall Be One Of The Following Products: A. Poly-Ton Elastomeric Concrete, www.polyton.com B. W400 SPS, www.watson.com C. Silgrate 553, www.silgrate.com

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

907-823-001 PREFORMED JOINT SEAL, TYPE I
907-823-002 PREFORMED JOINT SEAL, TYPE II
Description: Shall Include The Manufacturer's Required Joint Preparation Including Sandblasting Both Sides Of The Joint And Blowing The Joint Free Of All Debris. The Preformed Joint Seal Shall Be Applied To The Joint.

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

907-823-001 SAW CUT, TYPE I & 907-823-002 SAW CUT, TYPE II
Description: The Saw Cut Depth Shall Be Equivalent To The Installation Depth Required By The Manufacturer's Specifications. The Saw Cut Type Shall Be The Same As The Preformed Joint Seal Selected.

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

Description: Shall Include The Removal Of Material Associated With Armor Sliding Plates And Expansion Joints As Designated In The Detail Drawings Provided. Other Joint Types Shall Not Be Included Under This Item Of Work Unless Otherwise Directed By The Engineer.

NOTES ON ASSOCIATED ITEMS OF WORK
907-823-001 REMOVAL OF EXISTING JOINT MATERIAL

NOTES ON ASSOCIATED ITEMS OF WORK:

907-824-0008 BRIDGE REPAIR, ENHWALL REPAIR

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

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

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

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

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

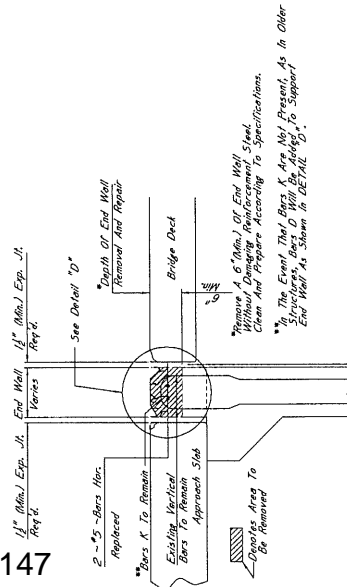
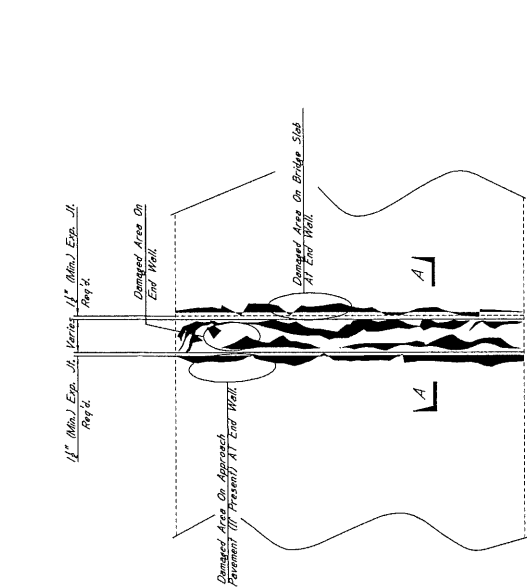
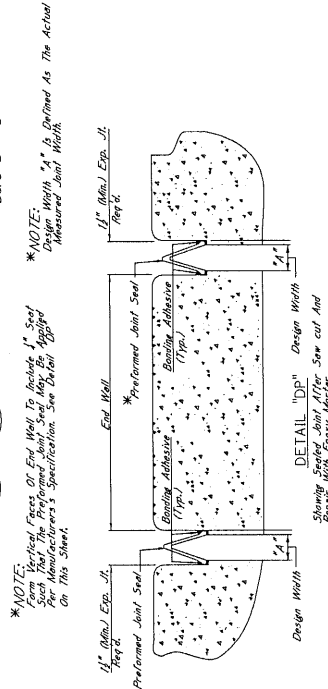
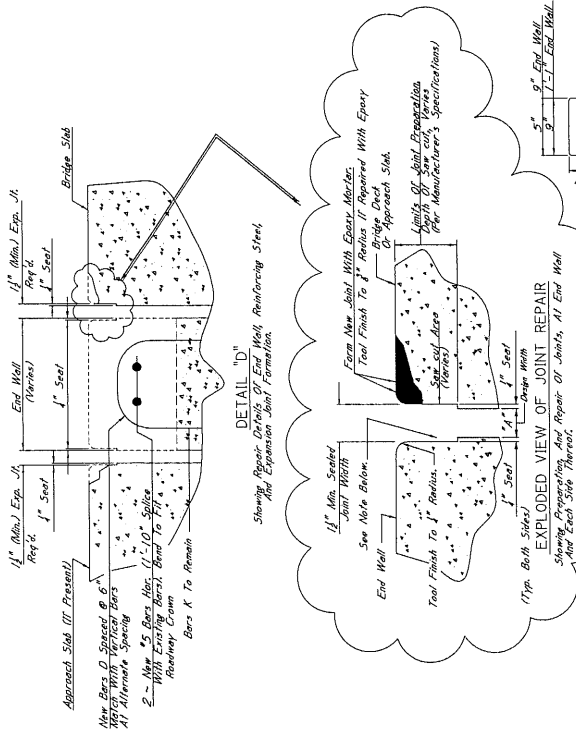
- The concrete mixture design shall be furnished by the Contractor for approval by the Materials Division. Mixture design parameters are as follows:
- Required Strength: 5200 psi prior to releasing to traffic
- Minimum Slump: 6 inches
- Non-aerated based accelerometer may be used if the ambient temperature is 50°F or less, but shall not be used if the ambient temperature is greater than 30°F.
- Synthetic structural fibers shall be used. The Contractor shall submit a recommendation for the type and quantity of fibers to be used. The manufacturer's recommendations shall be followed for the dosage rate.
- Curing is to be continuous until 90% psi is attained. Traffic is to be use the maturity method per Section 907-804 to estimate the concrete compressive strength for the purpose of releasing the repair area to traffic.
- Two cylinders are to be cast for each 1000 sq. ft. of repair area. The cylinders are to be tested at 3, 16, and 24 hour intervals. The two remaining cylinders shall be used to determine the 28-day compressive strength of the concrete.

The Removal Of Existing Expansion Material May Require Any Number Of The Pay Items Listed Below. Once The Expansion Device Is Removed, The Contractor Shall Place A Reinforcing Steel For Additional Details On The Associated Items Of Work.

- 907-819-0009 REMOVAL OF EXISTING JOINT MATERIAL
- 907-809-4002 JOINT REPAIR WITHOUT EPKRY
- 907-823-8003 SAW CUT TYPE I
- 907-823-4001 PREFORMED JOINT SEAL, TYPE I
- 907-823-4002 PREFORMED JOINT SEAL, TYPE II

GENERAL NOTES:

1. Specifications: Missouri Standard Specifications For Road And Bridge Construction 2017.
2. Approval Of The Director Of Structures, State Bridge Engineer. Above Changes To Detail Of Design Or Construction Procedures Will Not Be Cause For Contract Price Adjustment. Such Changes Will Be Made To Pay Item Is Provided In The Proposal Will Affectively And Shall Therefore Be Considered An Absorbed Item of Work.



NOTES:

1. The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications.
 - A. Silicone Joint Sealing System Manufactured By A.C. Wilson, Inc. www.acwilson.com
 - B. Mako SPS Joint Sealing System Manufactured By Wilson Bowman Acme Corporation www.wilsonpb.com
 - C. SiliSeal 555 Silicone Strip Seal Manufactured By SSI Commercial & Highway Construction Materials www.ssi.com
2. For Estimating Purposes, The R.I. Wilson Silicone Joint Sealing System Was Approved For Use On This Project. The Contractor Shall Be Responsible To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Details, And Width, Adhesive Mixing Times, And Cure Times. The Contractor Shall Be Responsible For Obtaining All Necessary Approvals From The Department Of Transportation To Ensure That The Contractor Is Properly Licensed In Installation Of The Joint Sealant.
3. Joints Shall Be Sealed At Their Design Width. Dimension "A" Which Is Defined As The Actual Width Of The Joint Opening, Has Width Does Not Account For The Sealant Applied On Both Sides Of The Joint. The Contractor Shall Seal The Joint For Design Widths Greater Than Or Equal To 2" With The Maximum Design Width Being 2". In Cases Where Design Widths Are Greater Than The Allowable Sealing Width, The Contractor Shall Be Responsible To Obtain Approval From The State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Sealing Is Appropriate For The Width Of The Joint.

SECTION 905 - PROPOSAL

Date _____

Mississippi Transportation Commission
Jackson, Mississippi

Sirs: The following proposal is made on behalf of _____
_____ of _____

for constructing the following designated project(s) within the time(s) hereinafter specified.

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

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

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

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

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

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

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.

Mill & Overlay approximately 11 miles of SR 21 from Dixon to SR 15, known as State Project No. SP-5021-50(020) / 108569301 in Neshoba County.

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
Roadway Items					
0010	202-B007		483	Square Yard	Removal of Asphalt Pavement, All Depths
0020	202-B009		1,383	Square Yard	Removal of Asphalt Pavement, Failed Areas
0030	202-B158		454	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends
0040	202-B240		526	Linear Feet	Removal of Traffic Stripe
0050	203-G002	(E)	100	Cubic Yard	Excess Excavation, LVM, AH
0060	304-E003	(GY)	4,000	Cubic Yard	Granular Material, LVM, Crushed Stone
0070	403-A002	(BA1)	20,050	Ton	12.5-mm, MT, Asphalt Pavement
0080	403-B002	(BA1)	700	Ton	12.5-mm, MT, Asphalt Pavement, Leveling
0090	406-D001		16,718	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0100	407-A001	(A2)	16,000	Gallon	Asphalt for Tack Coat
0110	503-C010		2,083	Linear Feet	Saw Cut, Full Depth
0120	606-B003		229	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post
0130	606-D019		4	Each	Guard Rail, Bridge End Section, Type H
0140	606-E005		4	Each	Guard Rail, Terminal End Section, Flared
0150	618-A001		1	Lump Sum	Maintenance of Traffic
0160	619-A1001		42	Mile	Temporary Traffic Stripe, Continuous White
0170	619-A2001		84	Mile	Temporary Traffic Stripe, Continuous Yellow
0180	619-A4002		5	Mile	Temporary Traffic Stripe, Skip Yellow
0190	619-A5001		13,912	Linear Feet	Temporary Traffic Stripe, Detail
0200	619-A6001		2,480	Square Feet	Temporary Traffic Stripe, Legend
0210	619-D1001		801	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0220	619-D2001		404	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0230	619-G4001		24	Linear Feet	Barricades, Type III, Double Faced
0240	620-A001		1	Lump Sum	Mobilization
0250	626-B002		21	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous White
0260	626-D001		2	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0270	626-E001		21	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0280	626-G004		4,546	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0290	626-G005		2,410	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
0300	626-H001		1,240	Square Feet	Thermoplastic Double Drop Legend, White
0310	627-J001		695	Each	Two-Way Clear Reflective High Performance Raised Markers
0320	627-L001		1,534	Each	Two-Way Yellow Reflective High Performance Raised Markers
0330	630-F006		16	Each	Delineators, Guard Rail, White
0340	630-G003		2	Each	Type 3 Object Markers, OM-3L, Post Mounted
0350	630-G007		2	Each	Type 3 Object Markers, OM-3R, Post Mounted

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
0360	907-414-A001		145,000	Square Yard	Scrub Seal
0370	907-414-B001	(A2)	1,484	Gallon	Asphalt for Fog Seal
0380	907-619-B001		66	Linear Feet	Temporary Portable Rumble Strips
Bridge Items					
0390	907-808-A002	(S)	296	Linear Feet	Joint Repair
0400	907-823-A002		148	Linear Feet	Preformed Joint Seal, Type II
0410	907-823-B002		296	Linear Feet	Saw Cut, Type II

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

CONDITIONS FOR COMBINATION BID

If a bidder elects to submit a combined bid for two or more of the contracts listed for this month's letting, the bidder must complete and execute these sheets of the proposal in each of the individual proposals to constitute a combination bid. In addition to this requirement, each individual contract shall be completed, executed and submitted in the usual specified manner.

Failure to execute this Combination Bid Proposal in each of the contracts combined will be just cause for each proposal to be received and evaluated as a separate bid.

It is understood that the Mississippi Transportation Commission not only reserves the right to reject any and all proposals, but also the right to award contracts upon the basis of lowest separate bids or combination bids most advantageous to the State.

It is further understood and agreed that the Combination Bid Proposal is for comparison of bids only and that each contract shall operate in every respect as a separate contract in accordance with its proposal and contract documents.

I (We) agree to complete each contract on or before its specified completion date.

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).

	<u>Project No.</u>	<u>County</u>	<u>Project No.</u>	<u>County</u>
1.	_____	_____	6.	_____
2.	_____	_____	7.	_____
3.	_____	_____	8.	_____
4.	_____	_____	9.	_____
5.	_____	_____	10.	_____

(a) If 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.					

For Informational Purposes Only

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
9.					
10.					

(c) If 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. **SP-5021-50(020)/ 108569301000**

in **Neshoba** _____ 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 SP-5021-50(020)/ 108569301000

LOCATED IN THE COUNTY(IES) OF Neshoba

STATE OF MISSISSIPPI,
COUNTY OF HINDS

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

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

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

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

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

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

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

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

Witness our signatures this the ___ day of _____, _____.

Contractor(s)

By _____

MISSISSIPPI TRANSPORTATION COMMISSION

Title _____

By _____

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

Executive Director

Secretary to the Commission

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

Revised 8/06/2003

SECTION 903
PERFORMANCE AND PAYMENT BOND

CONTRACT BOND FOR: SP-5021-50(020)/108569301000

LOCATED IN THE COUNTY(IES) OF: Neshoba

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 **Mill & Overlay approximately 11 miles of SR 21 from Dixon to SR 15, known as State Project No. SP-5021-50(020) / 108569301 in Neshoba 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__

(Witness)

(Principal) (Seal)

By: _____
(Name) (Title)

(Surety) (Seal)

(Witness)

By: _____
(Attorney-in-Fact)

(MS Agent)

Mississippi Insurance ID Number

