1st O.REV.

STATE	PROJECT NUMBER	SHEET NO.
MISSISSIPPI	BR–2839–00(020)	1

GENERAL INDEX

BRIDGE STRUCTURES REQ'D.

NONE

BOX BRIDGES REQ'D.

NONE

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY FEDERAL AID PROJECT NO. BR–2839–00(020)

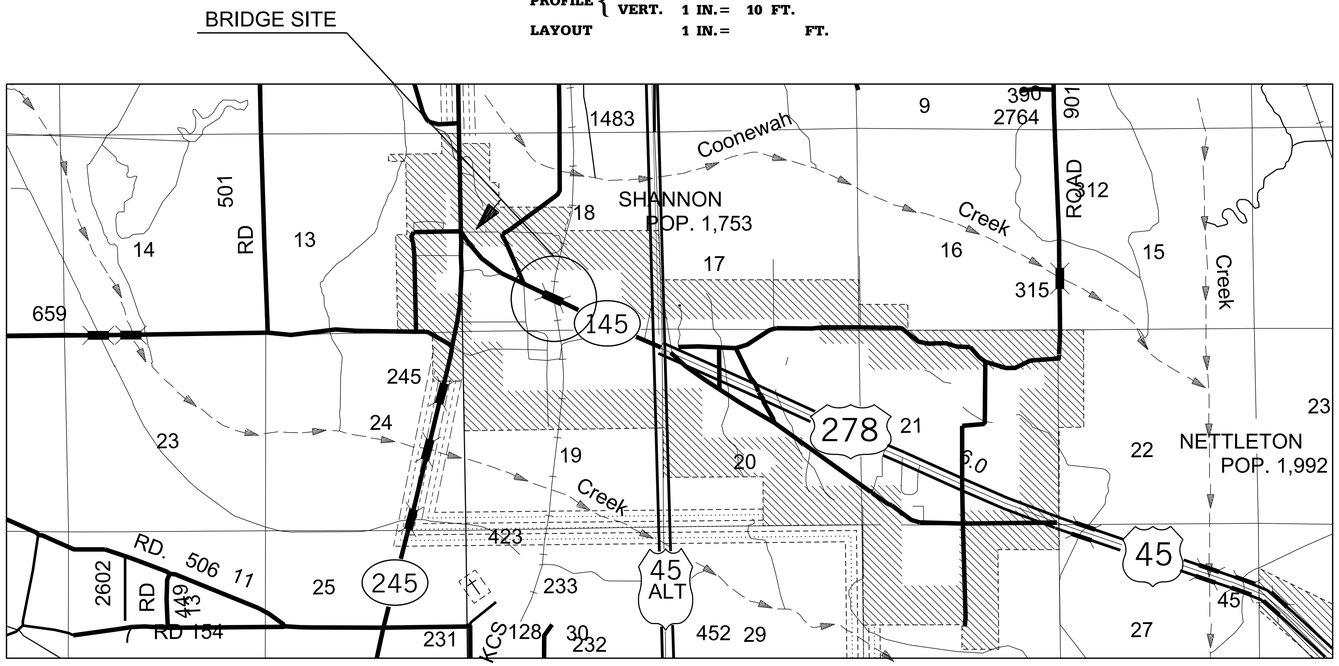
FMS CON. NO. 107859/ 301000

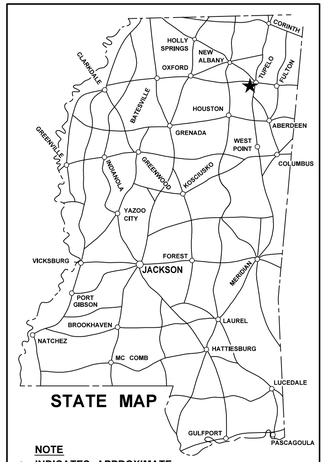
SR 145 BTW SR 245 and US 45 (0.5)

1 BRIDGE REPAIR OVER KCS RAILROAD

SCALES

PLAN		1 IN. = 100 FT.
PROFILE	HOR.	1 IN. = 100 FT.
	VERT.	1 IN. = 10 FT.
LAYOUT		1 IN. = FT.





STATE MAP

NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.

LAT. 34° 07' 14.67" N LONG. 88° 42' 39.13" W
(APPROX. MIDDLE OF PROJECT)

DESIGN CONTROL
_____ MPH = V (SPEED DESIGN)
ADT (____) = _____ : ADT (____) = _____
DHV = _____ : D = _____% T = _____%

PERMITS ACQUIRED BY MDOT

WETLANDS AND WATERS PERMITS

	WATERS	WETLANDS
NATIONWIDE #14	N	N
NATIONWIDE (OTHER)*	N	N
GENERAL*	N	N
INDIVIDUAL (404)*	N	N

STORMWATER PERMIT [N]

Y	REQUIRED, CNOI SUBMITTED BY MDOT (DISTURBED AREA = 5 ACRES)
S	REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)

APPROVED BY: _____

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN CORPORATION LINE
SECTION LINE
EXISTING ROAD OR TRAVELED WAY
PROPOSED ROAD OR TRAVELED WAY
RAILROAD
SURVEY LINE
BRIDGES

EQUATIONS

NONE

EXCEPTIONS

NONE

LENGTH DATA

	FT.	MI.
LENGTH OF ROADWAY		
LENGTH OF BRIDGES	FT.	MI.
LENGTH OF PROJECT (NET)		MI.
LENGTH OF EXCEPTIONS	FT.	MI.
LENGTH OF PROJECT (GROSS)		MI.

P S & E DATE: 1/9/2018

APPROVED:

DEPUTY EXECUTIVE DIRECTOR / CHIEF ENGINEER

EXECUTIVE DIRECTOR

DATE	DESCRIPTION	BY
2/2/19	ADDED PROJECT REVISIONS	DSP

MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TITLE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

3/1/2019 11:20:35 AM D:\TITLE SH-145

FMS CON: 107859/301000

1st O.REV.

STATE	PROJECT NO.
MISS.	BR-2839-00(020)

DESCRIPTION OF SHEET

	WKG. NO.	SH. NO.
TITLE SHEET (1)		
DETAILED INDEX AND GENERAL NOTES (1)	DI-1	2
QUANTITY SHEETS (1)		
SUMMARY OF QUANTITIES	SQ-1	3
SPECIAL DESIGN SHEETS (3)		
DETAIL CONSTRUCTION SIGNING	DCS-1	4
DETAIL CONSTRUCTION SIGNING	DCS-2	5
TRAFFIC CONTROL SIGNING	TCP-1	6
STANDARD DRAWINGS (2017) - ROADWAY SHEETS (19)		
PAVEMENT MARKING DETAILS FOR 2-LANE & 4-LANE DIVIDED HIGHWAYS	PM-1	6051
TYPICAL TEMPORARY EROSION CONTROL/SEDIMENT CONTROL APPLICATIONS	ECD-1	6101
DETAILS OF SEDIMENT BARRIER APPLICATIONS	ECD-2	6102
DETAILS OF SILT FENCE APPLICATIONS	ECD-3	6103
DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS	ECD-4	6104
TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES		
(SILT FENCE AND HAY BALE DITCH CHECKS)	ECD-5	6105
DETAILS OF EROSION CONTROL WATTLE DITCH CHECK	ECD-6	6106
DETAILS OF EROSION CONTROL SILT DIKE DITCH CHECK	ECD-7	6107
ROCK DITCH CHECK	ECD-8	6108
ROCK FILTER DAM	ECD-9	6109
ROCK DITCH CHECK WITH SUMP EXCAVATION AND ROCK FILTER DAM	ECD-10	6110
STABILIZED CONSTRUCTION ENTRANCE	ECD-16	6116
SEDIMENT RETENTION BARRIER	ECD-22	6122
TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)	TCP-1	6351
SHORT DURATION CLOSING OF TWO-LANE TWO-WAY HIGHWAYS	TCP-6	6356
HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS	TCP-8	6358
TRAFFIC CONTROL PLAN: UNEVEN PAVEMENT DETAILS	TCP-12	6362
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS	TCP-13	6363
TRAFFIC CONTROL DETAILS DRUM PLACEMENT AND SHOULDER CLOSURE	TCP-16	6366
SPECIAL DESIGN BRIDGE SHEETS - SEE BRIDGE SHEETS BEGINNING ON 8001		
TOTAL SHEETS (NOT INCLUDING BRIDGE SHEETS) (25)		

GENERAL NOTES

1. THE LOCATION AND SPACING OF SIGNS, SHOWN ON THE TRAFFICCONTROL PLANS, ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.
2. ALL TRAFFIC CONTROL DEVICES ON THIS PROJECT SHALL COMPLY WITH PART VI OF THE MUTCD (LATEST EDITION).
3. ALL PLASTIC DRUMS SHALL HAVE A BALLASTING COLLAR MADE FROM RECYCLED TRUCK TIRES OR OTHER SUITABLE MATERIAL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING STRUCTURES SUCH AS, BUT NOT LIMITED TO, PIPES, INLETS, APRONS, AND BRIDGES FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
5. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED ON THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
6. REMOVAL OF RAISED PAVEMENT MARKERS THAT ARE IN CONFLICT WITH REQUIRED CONSTRUCTION IS NOT CONSIDERED A SEPARATE PAY ITEM. COST TO BE ABSORBED IN OTHER ITEMS BID.
7. ALL ITEMS OF WORK ASSOCIATED WITH THE INSTALLATION OF A CONSTRUCTION ENTRANCE SHALL BE ABSORBED IN OTHER ITEMS OF WORK.
8. ALL ADDENDA TO THESE PLANS WILL BE POSTED TO WWW.MDOT.MS.GOV UNDER THE PROPOSAL ADDENDA COLUMN. BIDDERS ARE ADVISED THAT HARD COPIES OF ANY ADDENDA FOR THIS PROJECT WILL NOT BE MAILED. IT IS THE BIDDER'S RESPONSIBILITY TO CHECK AND SEE IF ANY ADDENDA HAVE BEEN POSTED FOR THIS PROJECT.
9. STORAGE OF FLAMMABLE MATERIALS WILL NOT BE ALLOWED UNDER ANY BRIDGE STRUCTURES.
10. WHEN JOINT REPAIR IS SEEN IN THE PLANS IT IS UNDERSTOOD TO BE JOINT REPAIR WITHOUT EPOXY.

PS & E PLANS-DATE 1/9/2018		
FMS CON. #107859/301000		
REVISIONS		
DATE	SHEET NO.	BY
2/19/19	2, 3	DSP
2/21/19	1, 2, 3	DSP

DATE	REVISION	BY
2/21/19	DELETED GENERAL NOTE, ADDED NOTE	DSP

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAILED INDEX

DETAILED INDEX

PROJ. NO.: BR-2839-00(020)

COUNTY: LEE

FILENAME: RWD-DI-145

DESIGN TEAM _____ CHECKED _____ DATE _____

WORKING NUMBER: DI-1

SHEET NUMBER: 2

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

2/21/2019 9:47:39 AM RWD-DI-145

FMS: 107859-301000

1st O.REV.

STATE	PROJECT NO.
MISS	BR-2839-00(020)

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	LEE : 107859-301000		
			Prelim	Final	
203-I002	Site Grading	SY	450		
907-420-A002	Undersealing Concrete Pavement	LBS	8,700		1
618-A001	Maintenance of Traffic	LS	1		
618-B001	Additional Construction Signs	SF	1		
620-A001	Mobilization	LS	1		
626-B003	6" Thermoplastic Traffic Stripe, Continuous White	LF	40		
626-E003	6" Thermoplastic Traffic Stripe, Continuous Yellow	LF	40		
627-L001	Two-Way Yellow Reflective High Performance Raised Markers	EA	2		
907-808-A002	Joint Repair Without Epoxy	LF	554		2
907-823-A001	Preformed Joint Seal, Type I	LF	277		
907-823-B001	Saw Cut, Type I	LF	554		
907-824-PP005	Bridge Repair, Epoxy Repair, Per Plans	CF	33		
907-824-PP006	Bridge Repair, Cap Cleaning, Per Plans	EA	4		
907-824-PP006	Bridge Repair, Pin and Hanger Tightening, Per Plans	EA	16		
907-824-PP006	Bridge Repair, Masonry Plate Replacement & Bearing Reset, Per Plans	EA	8		
907-824-PP006	Bridge Repair, Pressure Relief Joint, Per Plans	EA	2		
907-824-PP006	Bridge Repair, Repair and Replace Pipe Drains, Per Plans	EA	42		
907-824-PP006	Bridge Repair, Replace Secondary Steel Members, Per Plans	EA	10		
907-832-PP003	Concrete Mat	SY	450		
907-845-A001	Coating Existing Structural Steel	LS	1		
907-899-A001	Railway-Highway Provisions	LS	1		2

1 2

By	Revision	Date
DP	REVISED QUANTITY	02/19/2019
DP	REVISED DESCRIPTION, ADDED ITEM	02/21/2019

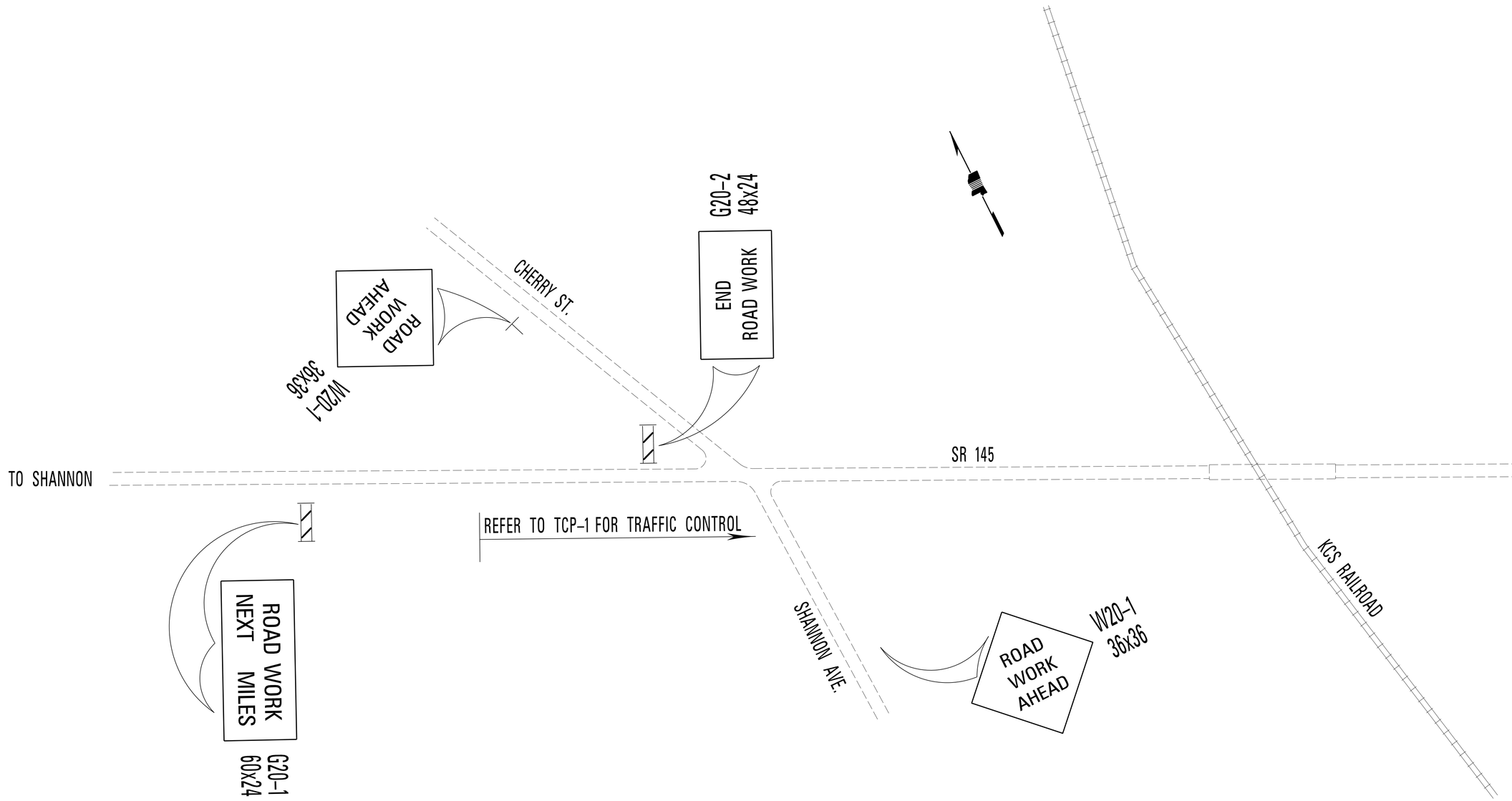
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

PROJ NO: BR-2839-00(020)
COUNTY: LEE
FILENAME: SQ-1
Design Team Checked Date

Working Number: SQ-1
Sheet Number: 3

FMS CON: 107859/301000

STATE	PROJECT NO.
MISS.	BR-2839-00(020)



NOTE: ALL ITEMS SHOWN ON THIS SHEET WILL BE ABSORBED IN MAINTENANCE OF TRAFFIC, 618-A001.

NOTE: ALL SIGNS ON LOCAL ROADS WILL BE PLACED APPROXIMATELY 500' FROM THE INTERSECTION.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAIL OF CONSTRUCTION SIGNING

PROJ. NO.: BR-2839-00(020)
COUNTY: LEE

WORKING NUMBER
DCS-1

SHEET NUMBER
4

BY | REVISION | DATE

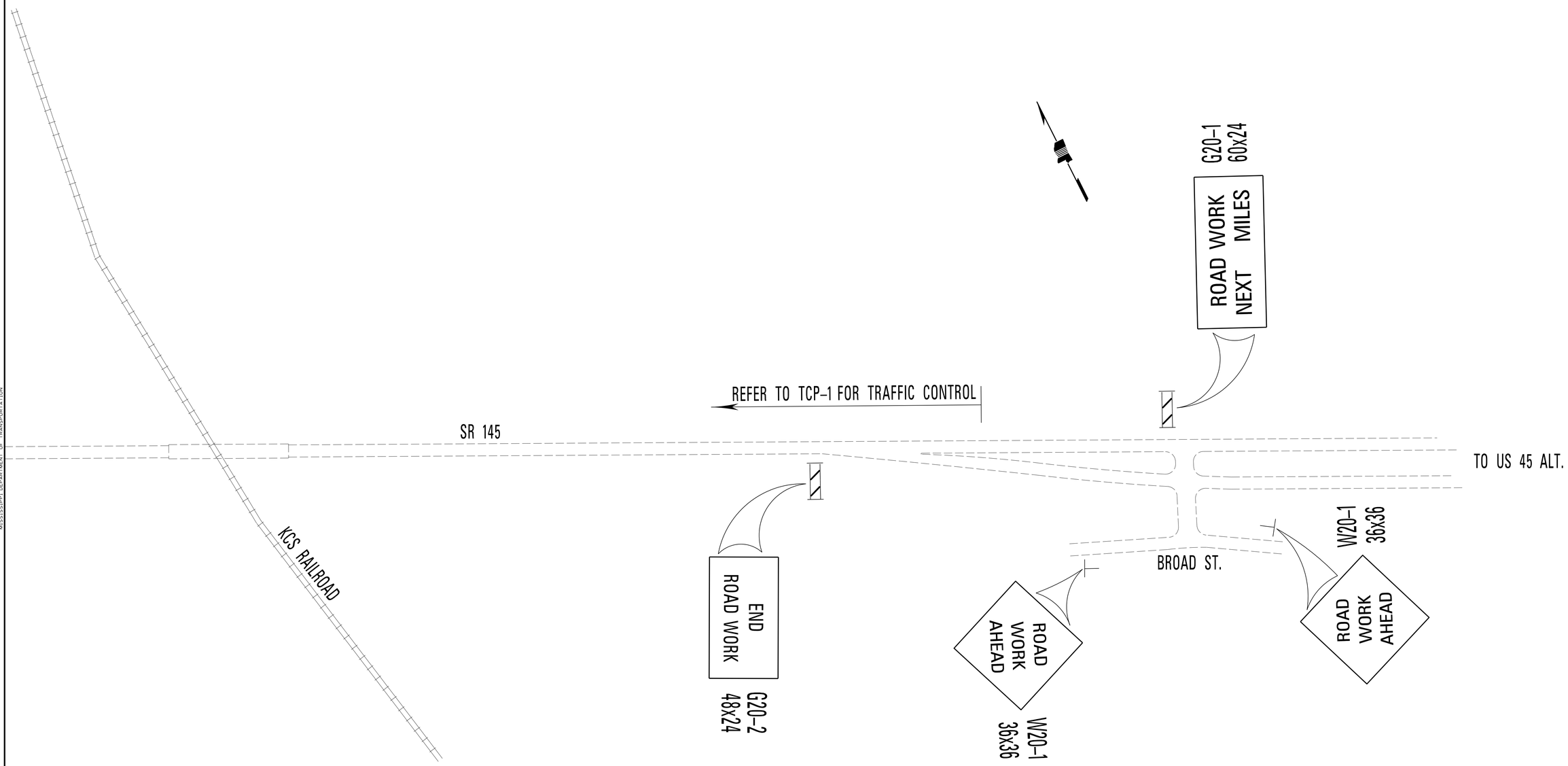
FILENAME: filename
DESIGN TEAM designteam CHECKED checked DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

3/1/2019 11:23:08 AM\D-DCS-145

FMS CON: 107859/301000

STATE	PROJECT NO.
MISS.	BR-2839-00(020)



NOTE: ALL ITEMS SHOWN ON THIS SHEET WILL BE ABSORBED IN MAINTENANCE OF TRAFFIC, 618-A001.

NOTE: ALL SIGNS ON LOCAL ROADS WILL BE PLACED APPROXIMATELY 500' FROM THE INTERSECTION.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAIL OF CONSTRUCTION SIGNING

PROJ. NO.: BR-2839-00(020)
COUNTY: LEE

WORKING NUMBER
DCS-2

SHEET NUMBER
5

BY | REVISION | DATE

FILENAME: filename
DESIGN TEAM designteam CHECKED checked DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

3/1/2019 11:23:25 AM D-DCS-145

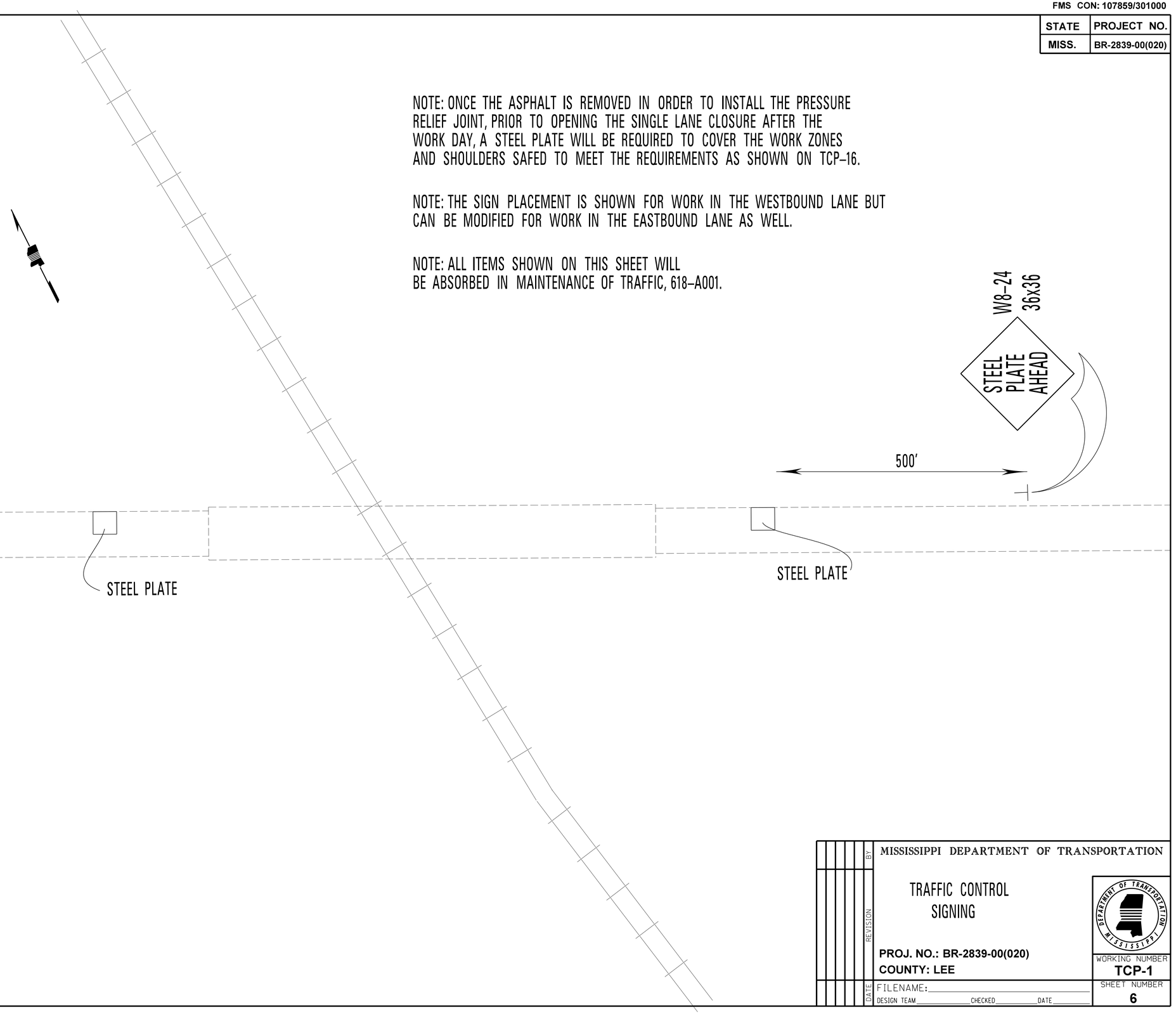
FMS CON: 107859/301000

STATE	PROJECT NO.
MISS.	BR-2839-00(020)

NOTE: ONCE THE ASPHALT IS REMOVED IN ORDER TO INSTALL THE PRESSURE RELIEF JOINT, PRIOR TO OPENING THE SINGLE LANE CLOSURE AFTER THE WORK DAY, A STEEL PLATE WILL BE REQUIRED TO COVER THE WORK ZONES AND SHOULDERS SAFED TO MEET THE REQUIREMENTS AS SHOWN ON TCP–16.

NOTE: THE SIGN PLACEMENT IS SHOWN FOR WORK IN THE WESTBOUND LANE BUT CAN BE MODIFIED FOR WORK IN THE EASTBOUND LANE AS WELL.

NOTE: ALL ITEMS SHOWN ON THIS SHEET WILL BE ABSORBED IN MAINTENANCE OF TRAFFIC, 618–A001.



PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

12/17/2018 10:55:25 AM WD-DGS-145

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
SIGNING

PROJ. NO.: BR-2839-00(020)
COUNTY: LEE

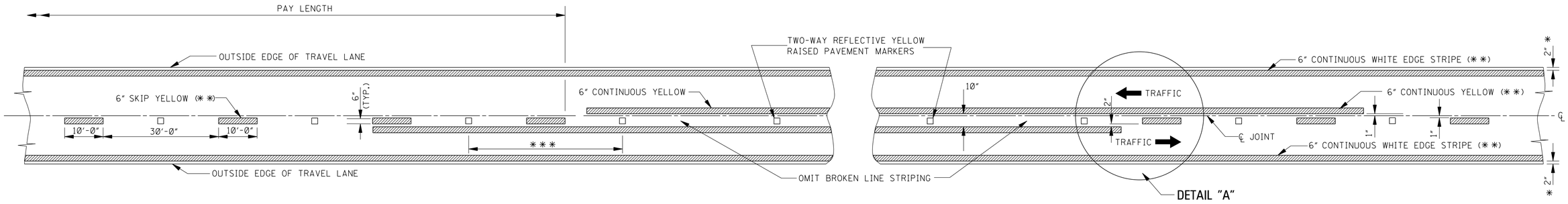
WORKING NUMBER
TCP-1

SHEET NUMBER
6

BY | REVISION | DATE

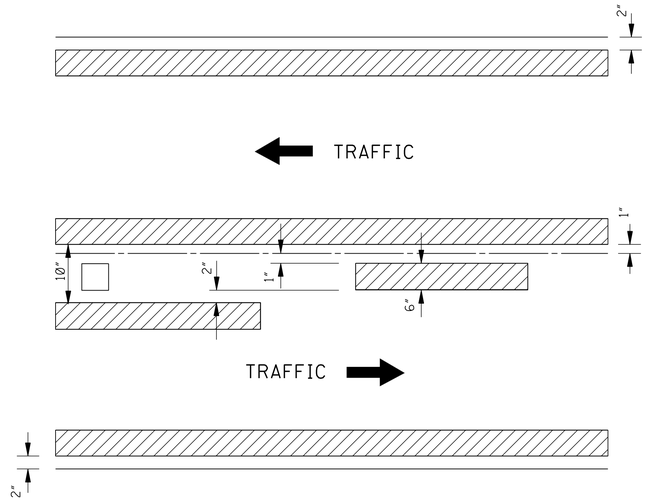
FILENAME:
DESIGN TEAM CHECKED DATE

STATE	PROJECT NO.
MISS.	



TWO–WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)

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



DETAIL "A"

GENERAL NOTES:

* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO WK. SHEETS RS-1, RS-2, AND RS-3.

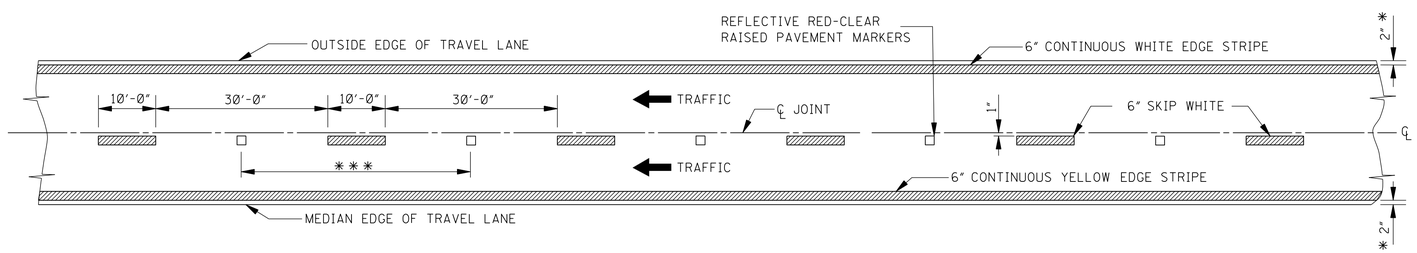
* * 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).

* * * 3. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

	URBAN AREA (ft-in)	RURAL AREA (ft-in)
TANGENT SECTIONS	40'-0"	80'-0"
HORIZONTAL CURVES	40'-0"	40'-0"
INTERCHANGE LIMITS	40'-0"	† 40'-0"

† NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

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



4–LANE WITH ONE–WAY TRAFFIC

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

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

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER
PM-1

SHEET NUMBER
6051

STATE	PROJECT NO.
MISS.	

GENERAL NOTES:

1. "J-HOOK" CONFIGURATION SILT FENCE APPLICATIONS SHOULD BE USED IN CONJUNCTION WITH PERIMETER SILT FENCE WHEN STORMWATER RUNOFF IS IN TWO DIRECTIONS (DOWN A FILL SLOPE AND DOWN GRADIENT ALONG THE RIGHT-OF-WAY).

2. "SMILE CONFIGURATION" APPLICATIONS SHOULD BE USED AS PERIMETER SILT FENCE WHEN THERE IS ONE-DIRECTIONAL FLOW DOWN A SLOPE.

3. SAND BAGS CAN BE USED AS DIVERSION BERMS TO PREVENT SEDIMENT FROM BEING WASHED ONTO OR ACROSS HARD SURFACES, OR TO HELP SLOW SHEET FLOW VELOCITY WHEN DRAINING AWAY FROM HARD SURFACES.

4. FOR SHORTER SLOPES AND/OR SLOPES THAT ARE LESS STEEP, DIVERSION BERMS CAN BE USED TO SAFELY CONVEY STORMWATER AWAY FROM OR AROUND A DENUDED AREA. THEY CAN BE CONSTRUCTED USING MANUFACTURED SILT DIKE OR BY CONSTRUCTING A TEMPORARY EARTH BERM AND TRENCH WITH GEOTEXTILE OR POLYETHYLENE SHEETING PROTECTION.

5. TEMPORARY DEWATERING STRUCTURES CAN BE USED DURING CULVERT CONSTRUCTION, STREAM DIVERSIONS, OR OTHER CONSTRUCITON ACTIVITIES WHERE TURBID WATERS NEED TO BE CLARIFIED BEFORE RELEASE.

6. THE ABUTMENT SLOPE TOE BERM SHALL BE 3 FT. TALL. THE BERM MAY BE CONSTRUCTED WITH ROCK IN ACCORDANCE WITH REQUIREMENTS FOR ROCK DITCH CHECKS ON WK. NO. ECD-8 OR WITH SOIL IN ACCORDANCE WITH WK. NO. BAS-A. IF BERM IS USED, IT MUST BE GRASSED.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BY | REVISION | DATE

TYPICAL TEMPORARY EROSION / SEDIMENT CONTROL APPLICATIONS

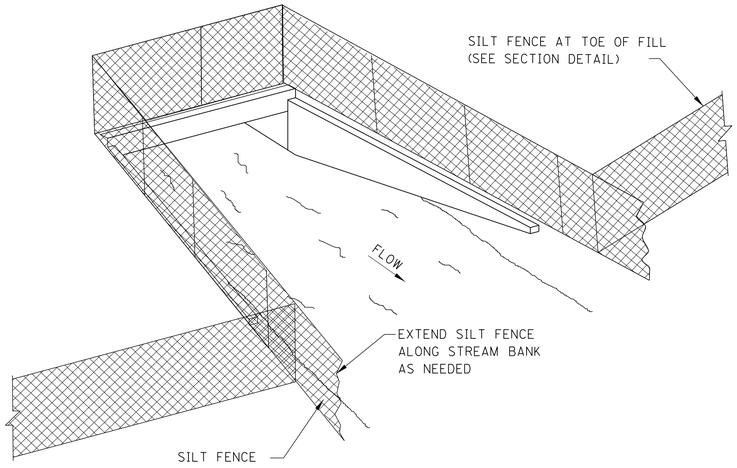
MDOT

ISSUE DATE: AUGUST 01, 2017

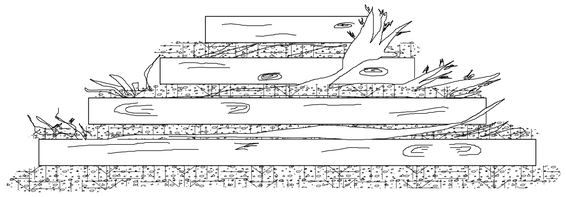
WORKING NUMBER ECD-1

SHEET NUMBER 6101

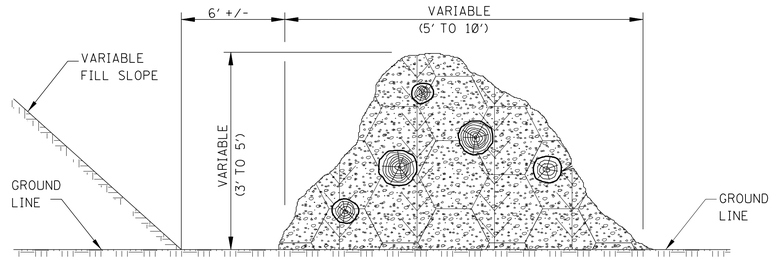
STATE	PROJECT NO.
MISS.	



SEDIMENT BARRIER AT CROSS DRAIN



FRONT ELEVATION



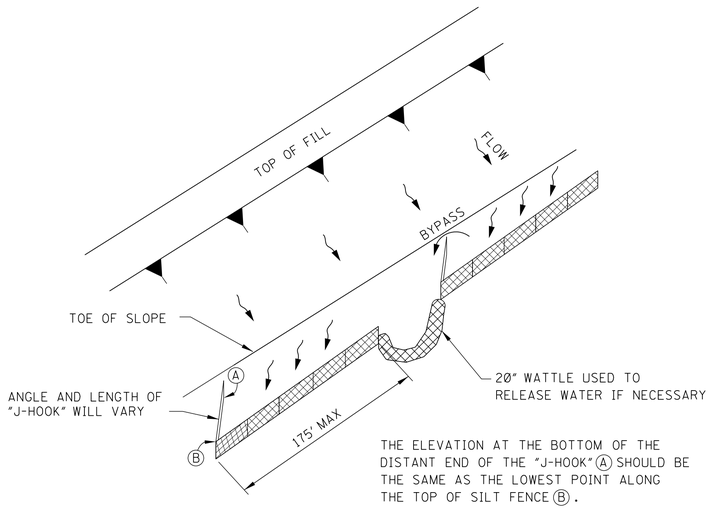
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

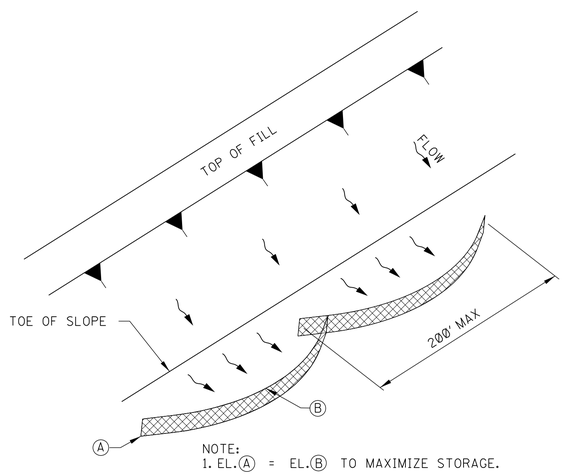
NOTES:

1. BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TO TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED OR PERMITTED BY THE ENGINEER.
3. TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.
4. THE BRUSH BARRIER MAY BE CHOKED WITH FILTER FABRIC. THE COST OF FABRIC TO BE INCLUDED IN OTHER ITEMS BID.
5. TEMPORARY BRUSH BARRIER WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3

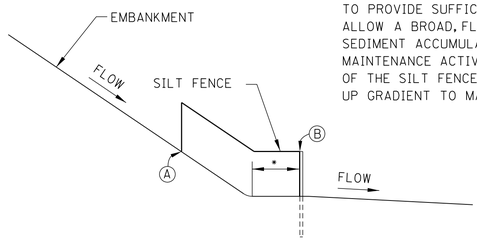


"J–HOOK" SILT FENCE
APPLICATION



NOTE:
1. EL.(A) = EL.(B) TO MAXIMIZE STORAGE.

"SMILE–CONFIGURATION" SILT FENCE
APPLICATION

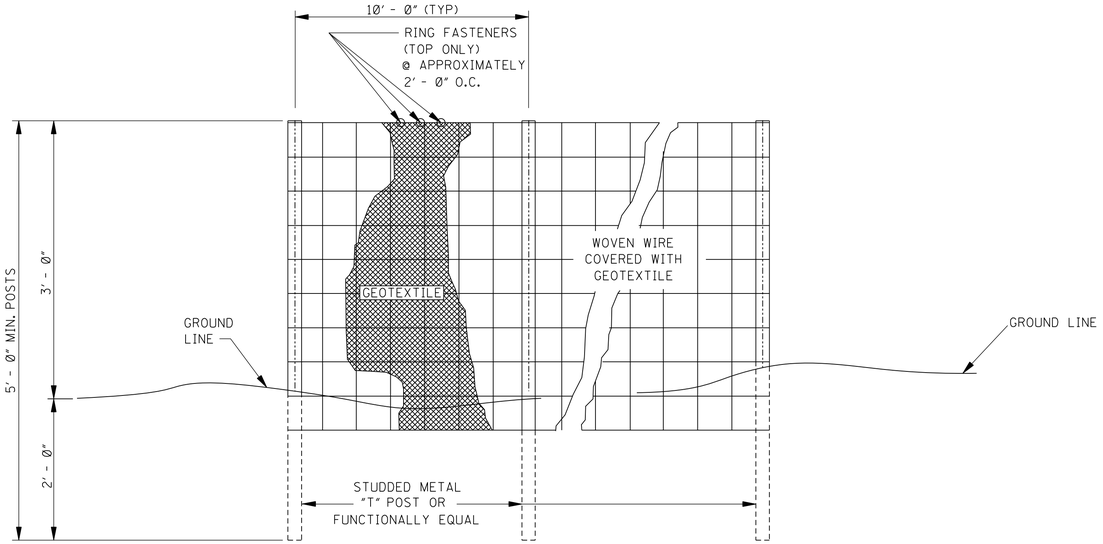


- SILT FENCE SHOULD BE LOCATED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE SUFFICIENT SPACE TO ALLOW A BROAD, FLAT AREA FOR SEDIMENT ACCUMULATION AND MAINTENANCE ACTIVITIES. THE ENDS OF THE SILT FENCE SHOULD BE TURNED UP GRADIENT TO MAXIMIZE STORAGE.

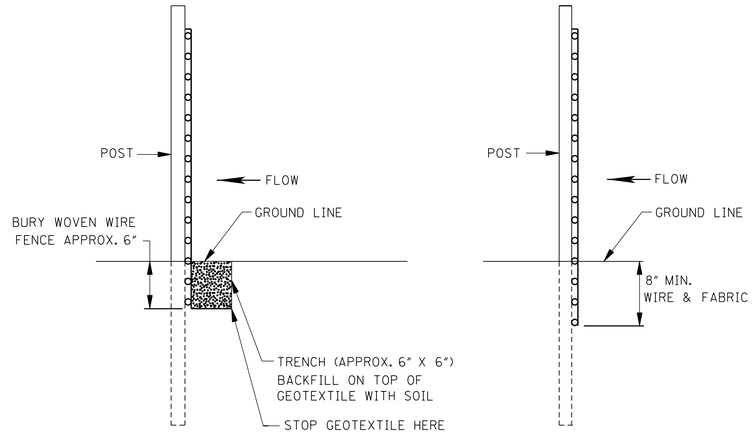
SILT FENCE SECTION AT
TOE OF FILL

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION	**DETAILS OF SEDIMENT BARRIER APPLICATIONS**	WORKING NUMBER ECD-2
DATE	ISSUE DATE: AUGUST 01, 2017	SHEET NUMBER 6102

STATE	PROJECT NO.
MISS.	



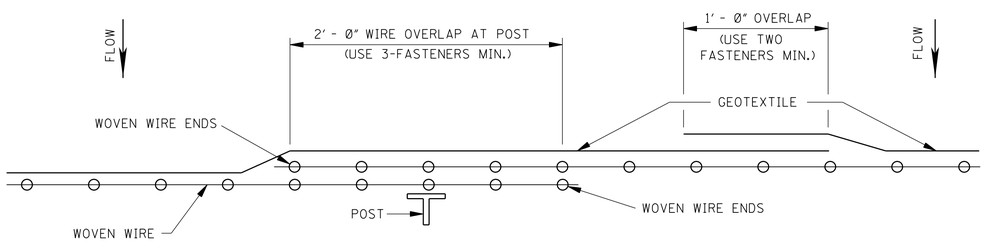
ELEVATION VIEW



METHOD I

METHOD II
MECHANICAL INSTALLATION

SIDE VIEW



PLAN VIEW

REQUIRED LAPPING

GENERAL NOTES:

1. SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STEAMS AND CHANNELS.
3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
4. WHENEVER POSSIBLE SILT FENCE SHOULD BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AN FACILITATES SEDIMENTATION.
5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
7. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF SILT FENCE INSTALLATION

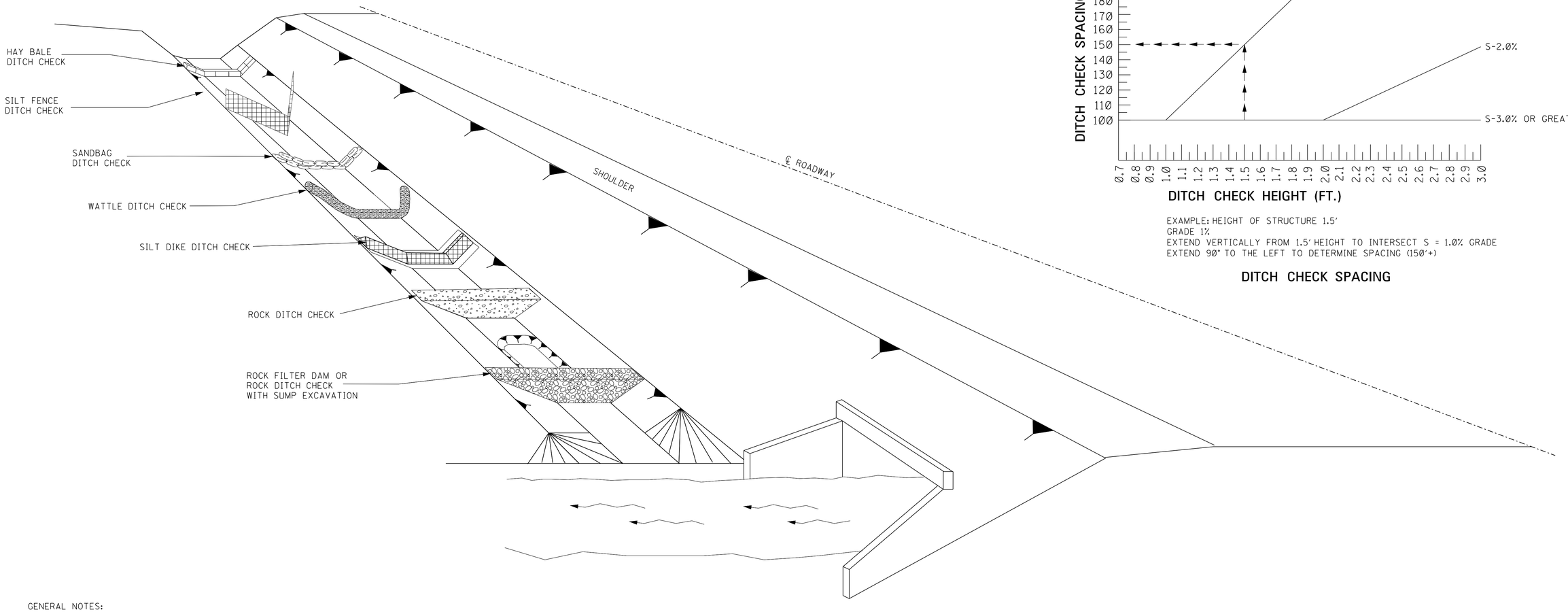
MDOT

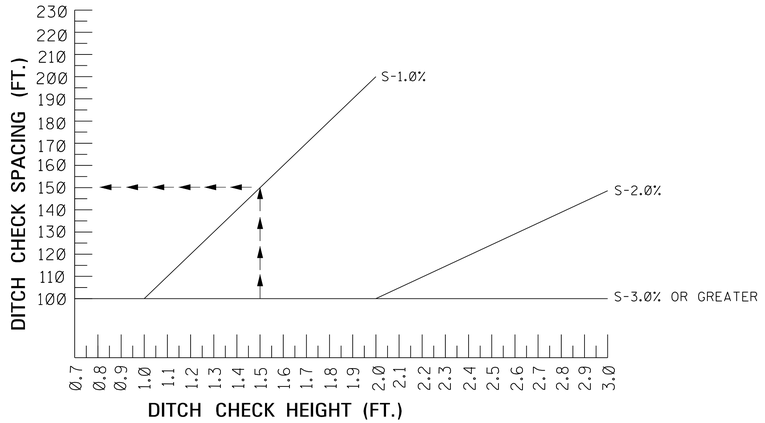
WORKING NUMBER
ECD-3

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6103

STATE	PROJECT NO.
MISS.	





EXAMPLE: HEIGHT OF STRUCTURE 1.5′
GRADE 1%
EXTEND VERTICALLY FROM 1.5′ HEIGHT TO INTERSECT S = 1.0% GRADE
EXTEND 90° TO THE LEFT TO DETERMINE SPACING (150′+)

DITCH CHECK SPACING

GENERAL NOTES:

1. THE DITCH CHECK PERSPECTIVE ILLUSTRATES A TOOL BOX OF TEMPORARY PRACTICES THAT MAY BE USED. DITCH CHECKS ARE INSTALLED TO CONTROL RUNOFF VELOCITY AND THUS REDUCE EROSION AND PROVIDE FOR TRAPPING OF SEDIMENTS.
2. SELECTION OF THE APPROPRIATE DITCH CHECK SHOULD BE A FUNCTION OF CONSTRUCTION PHASE, DRAINAGE AREA, DITCH GRADIENT, SOIL TYPE, ECONOMY AND SAFETY.
3. DITCH CHECKS CAN BE REMOVED FOR MAINTENANCE AND/OR REPLACEMENT BUT MUST REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. MAINTENANCE INCLUDES REMOVAL OF SEDIMENT BEGINNING WHEN SEDIMENT ACCUMULATION REACHES ⅓ THE CAPACITY OR HEIGHT OF THE STRUCTURE AND NEVER ALLOWING FOR SEDIMENT TO ACCUMULATE MORE THAN ½ THE VOLUME OR HEIGHT OF THE DITCH CHECK STRUCTURE.
4. HAY BALES SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
5. SILT FENCE DITCH CHECKS SHOULD BE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
6. SANDBAG DITCH CHECKS SHOULD BE USED FOR VELOCITY REDUCTION AND MINIMAL SEDIMENT TRAPPING IN CONCRETE PAVED DITCHES OR IN DITCHES THAT HAVE ROCK BOTTOMS.
7. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
8. SILT DIKES CAN BE USED IN DITCHES WITH CONCENTRATED FLOWS WITHIN THE CLEAR ZONE WHERE RIPRAP CAN NOT BE USED. AS CONSTRUCTION PROGRESSES.
9. ROCK DITCH CHECKS WITH SUMP EXCAVATION CAN BE PLACED IN DITCHES TO ASSURE ON-SITE SEDIMENT TRAPPING REQUIREMENTS ARE MET. DITCH CHECK WITH SUMP EXCAVATION IS USED WHEN DITCHES RECEIVE DRAINAGE FROM CUT OR FILL SLOPES OR OTHER CRITICAL AREAS WHERE SOIL EROSION IS EXPECTED. DRAINAGE AREA FOR A TEMPORARY SEDIMENT TRAP SHOULD BE LIMITED TO 3 ACRES. THEY CAN BE USED IN SERIES TO INCREASE ON-SITE SEDIMENT TRAPPING EFFICIENCY.
10. DITCH CHECKS, IN NO CASE, SHALL BE PLACED IN LIVE STREAMS.
11. CONFIGURATION AND SPACING MAY BE ADJUSTED IF APPROVED BY THE ENGINEER TO ACCOMMODATE TRAVELWAY SAFETY, WATER FLOW, OR SOIL AND INSTALLATION CHALLENGES.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS

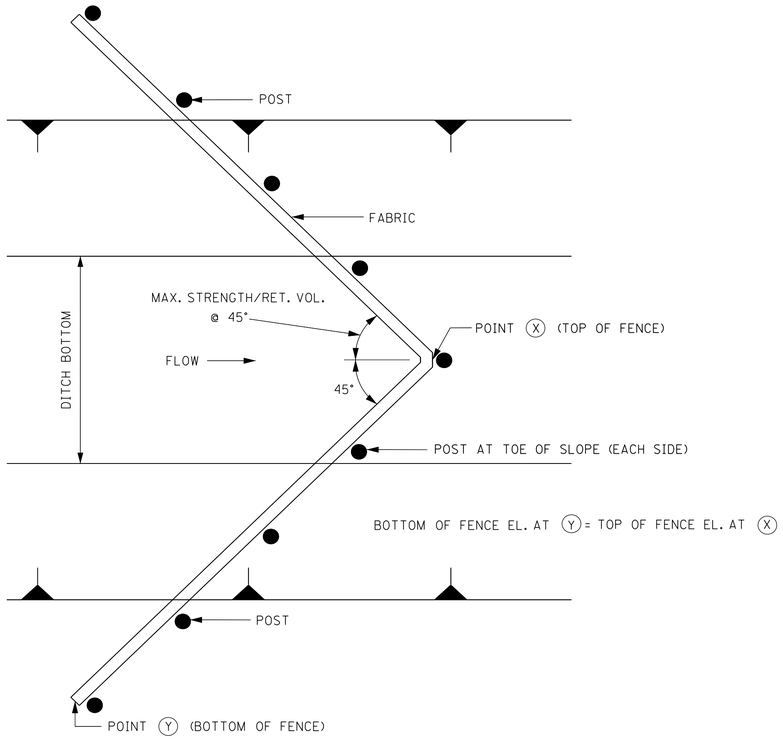
MDOT

WORKING NUMBER
ECD-4

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6104

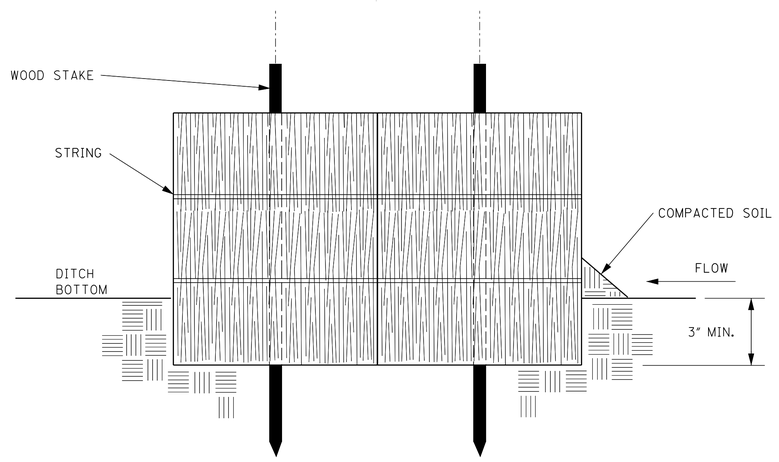
STATE	PROJECT NO.
MISS.	



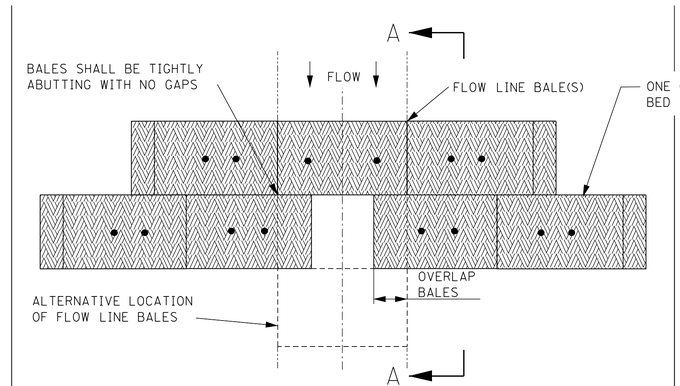
PLAN VIEW

NOTES:

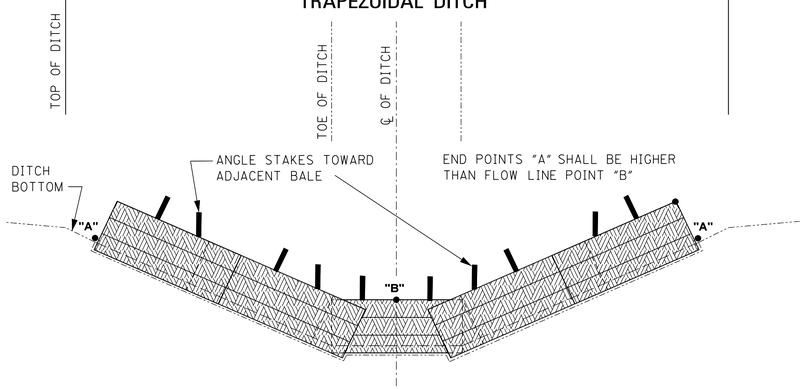
1. ANCHOR AND INSTALL PER DETAILS FOR SILT FENCE SPACING GUIDELINES ON WK. NO. ECD-4.
2. A "W" SHAPE MAY BE USED FOR WIDER DITCHES.



SECTION A–A



PLAN VIEW
TRAPEZOIDAL DITCH



PROFILE VIEW
TRAPEZOIDAL DITCH

NOTES:

1. SILT FENCE DITCH CHECKS SHOULD BE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
2. HAY BALES SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
3. MINIMUM RECOMMENDED CHECK SPACING IS 100 FEET UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
4. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. A MINIMUM OF TWO STAKES PER BALE IS REQUIRED. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
5. BALES SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 3 INCHES.
6. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE BALES SHALL BE PLACED WITH BINDINGS PARALLEL TO THE GROUND.
7. SOIL IS COMPACTED ALONG THE BASE OF THE UPSTREAM FACE TO PREVENT PIPING.
8. MULTIPLE ADJACENT ROWS OF BALES ARE REQUIRED AS SHOWN.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES

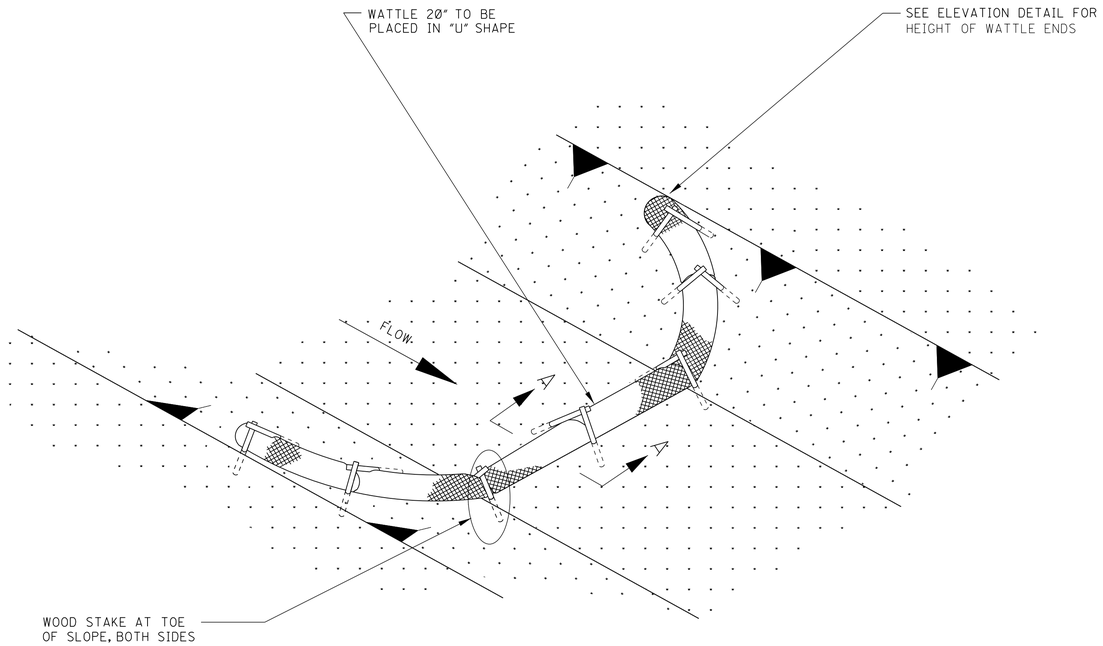
(SILT FENCE AND HAY BALE DITCH CHECKS)

WORKING NUMBER ECD-5

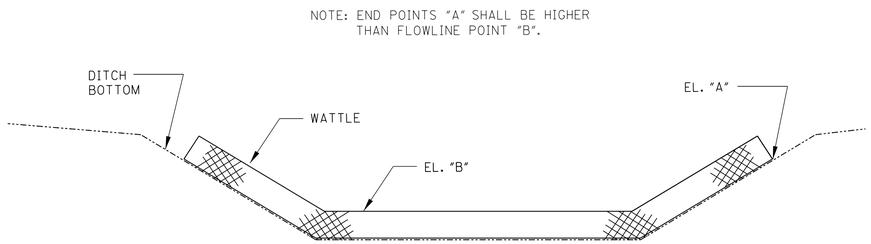
ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER 6105

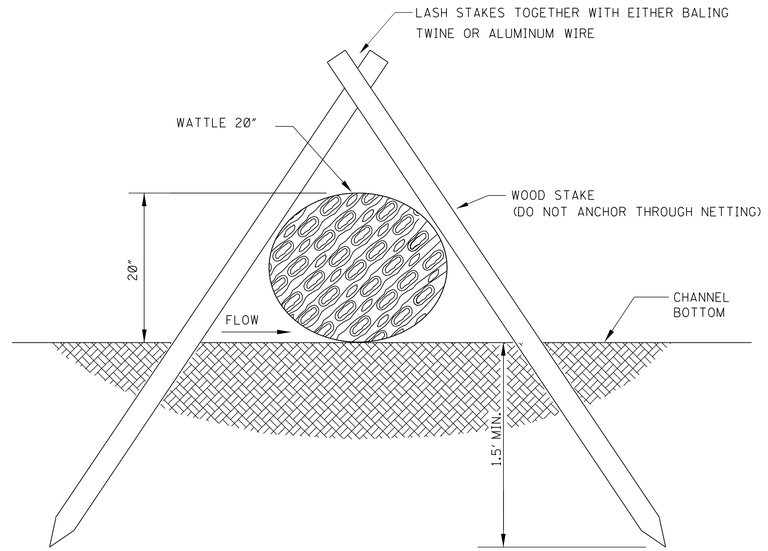
STATE	PROJECT NO.
MISS.	



DETAIL (DITCH CHECK)



ELEVATION DETAIL



SECTION A–A

NOTES:

1. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
2. THE PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK SHALL BE 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
3. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
4. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
5. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.
6. IN THE EVENT WATTLES CANNOT BE SECURED IN PLACE USING WOOD STAKES, SAND BAGS MAY BE USED IN LIEU OF WOOD STAKES IN ORDER TO SECURE THE WATTLES IN PLACE. IF SANDS BAGS ARE USED IN THIS APPLICATION THEY WILL NOT BE A SEPARATE PAY ITEM.

	BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF EROSION CONTROL WATTLE DITCH CHECK

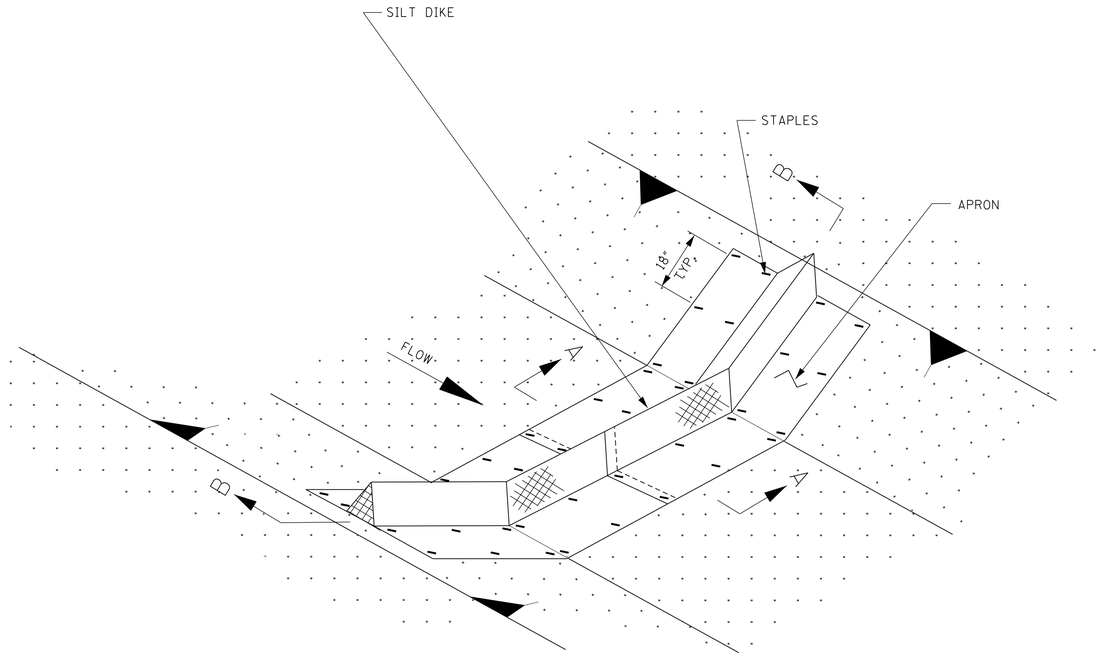
MDOT

WORKING NUMBER
ECD-6

ISSUE DATE: AUGUST 01, 2017

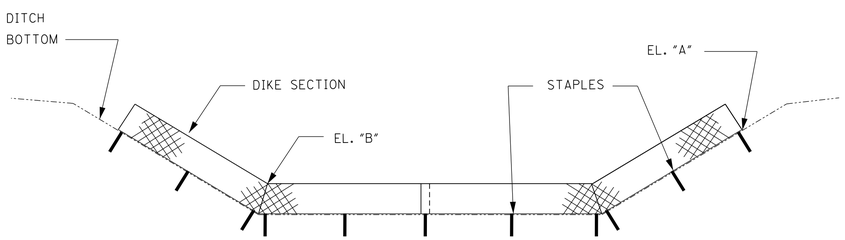
SHEET NUMBER
6106

STATE	PROJECT NO.
MISS.	



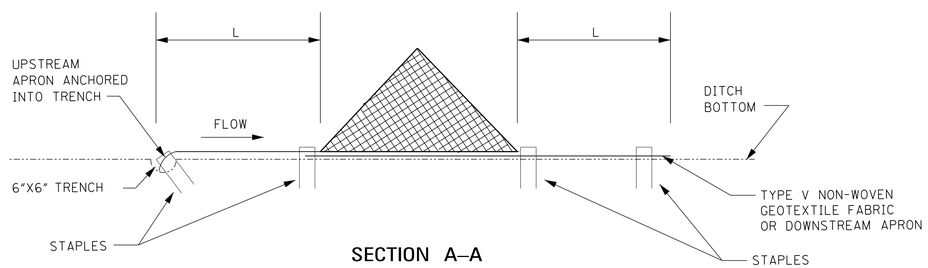
NOTES:

PLAN VIEW



POINT "A" SHALL BE HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS

SECTION B–B



SECTION A–A

NOTE: STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT

SILT DIKE INSTALLATION FOR ROADWAY DITCHES

NOTES:

1. SILT DIKES CAN BE USED IN DITCHES WITH CONCENTRATED FLOWS WITHIN THE CLEAR ZONE WHERE RIPRAP CANNOT BE USED.

2. SILT DIKES MAY ALSO BE USED:

   A. IN AREAS WHERE CONSTRUCTION TRAFFIC TRAVELS (AS SHOWN ON WK. NO. ECD-16), PROVIDED THE SILT DIKE REBOUNDS TO ITS ORIGINAL SHAPE. SILT DIKES WHICH DO NOT REBOUND TO THEIR ORIGINAL SHAPE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE DEPARTMENT.

   B. AT THE ENDS OF AND ALONG THE EDGES OF CONSTRUCTION ROADS THAT CROSS THE WATERS OF THE U.S. (AS SHOWN ON WK. NO. ECD-17).

3. THE PLACEMENT INTERVAL BETWEEN SILT DIKE DITCH CHECK SHALL BE 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.

4. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

5. THE TRIANGULAR SILT DIKE SHAPE IS ONLY SHOWN FOR DEPICTION PURPOSES. OTHER SHAPED SILT DIKES MAY BE USED.

6. WHEN THE SILT DIKE, USED AS A DITCH CHECK, IS MANUFACTURED WITH AN APRON ON ONE SIDE ONLY, THE SILT DIKE SHALL BE INSTALLED AS SHOWN IN SECTION A-A. THE APRON SHALL BE INSTALLED ON THE UPSTREAM SIDE AND TYPE V NON-WOVEN GEOTEXTILE FABRIC INSTALLED ON THE DOWNSTREAM SIDE.

7. THE COST OF THE FABRIC SHALL BE INCLUDED IN OTHER ITEMS BID.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF EROSION CONTROL SILT DIKE DITCH CHECK

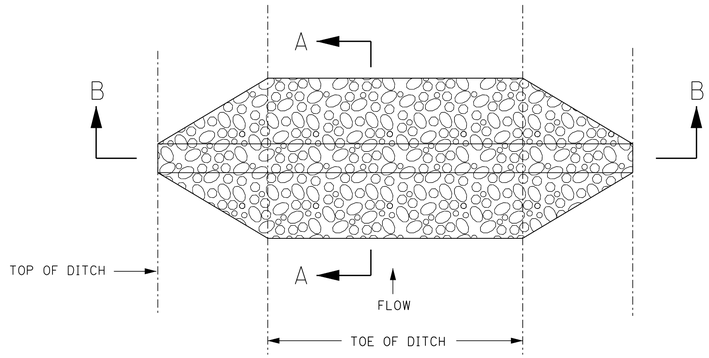
MDOT

WORKING NUMBER
ECD-7

ISSUE DATE: AUGUST 01, 2017

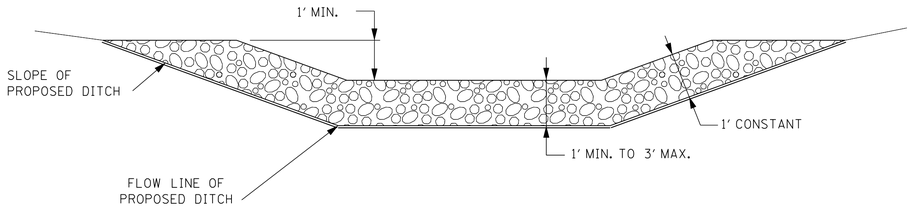
SHEET NUMBER
6107

STATE	PROJECT NO.
MISS.	

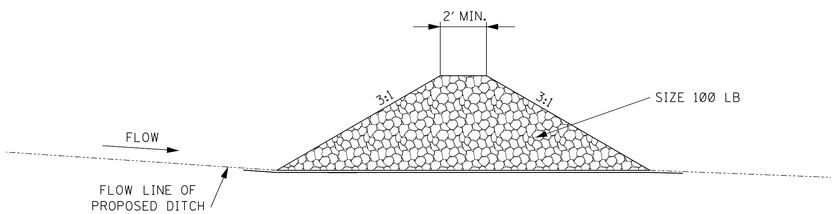


PLAN VIEW

DETAIL FOR TRAPEZOIDAL DITCH

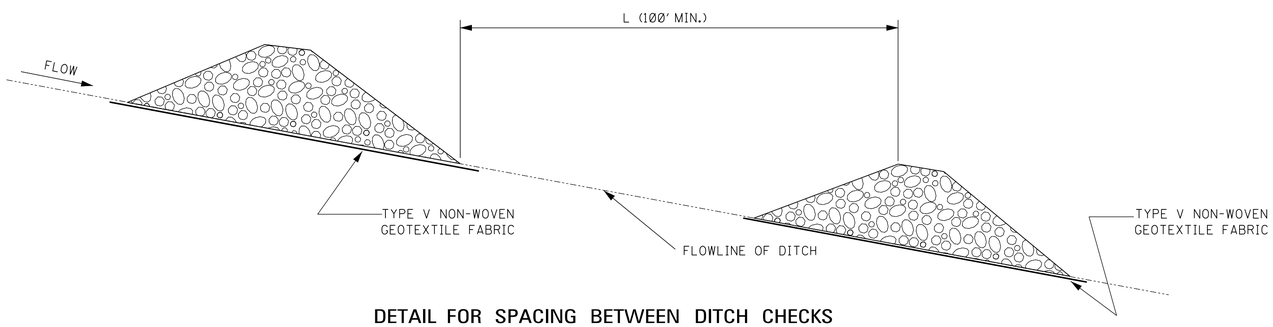


SECTION B–B



SECTION A–A

TEMPORARY ROCK DITCH CHECKS IN ROADSIDE DITCHES



DETAIL FOR SPACING BETWEEN DITCH CHECKS

NOTES:

1. ROCK DITCH CHECKS SHOULD ONLY BE USED FOR REDUCING THE VELOCITY OF FLOWING WATER.
2. MINIMUM SPACING FOR ROCK DITCH CHECKS IS 100 FEET UNLESS OTHERWISE SHOWN ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
3. ROCK DITCH CHECKS SHOULD ONLY BE USED UP-GRADIENT OF AND ALONG WITH ADDITIONAL DOWN-GRADIENT SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S).
4. THE COST OF FABRIC SHALL BE INCLUDED IN OTHER ITEMS BID.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

ROCK DITCH CHECK

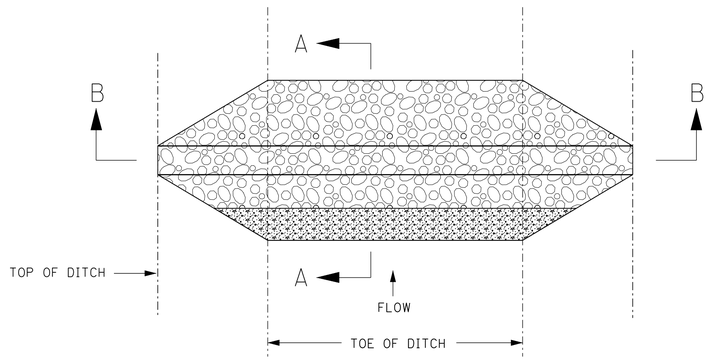
MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
ECD-8

ISSUE DATE: AUGUST 01, 2017

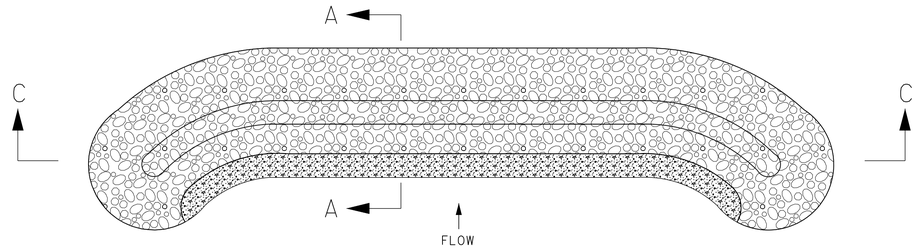
SHEET NUMBER
6108

STATE	PROJECT NO.
MISS.	



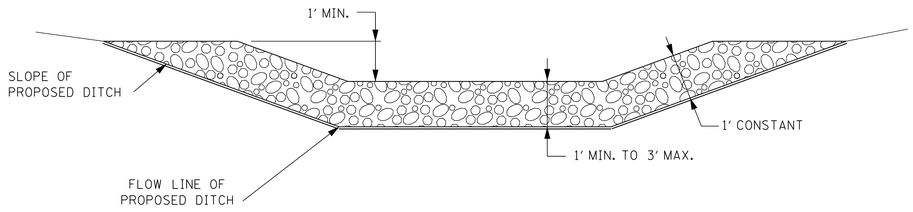
PLAN VIEW

DETAIL FOR TRAPEZOIDAL DITCH

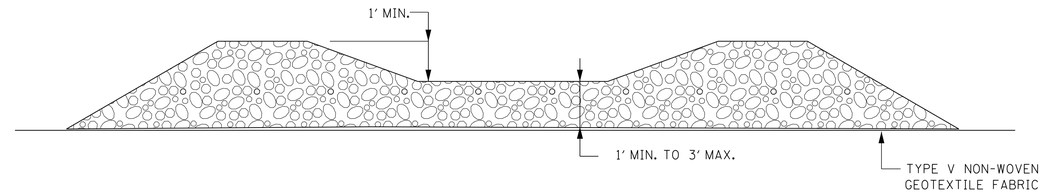


PLAN VIEW

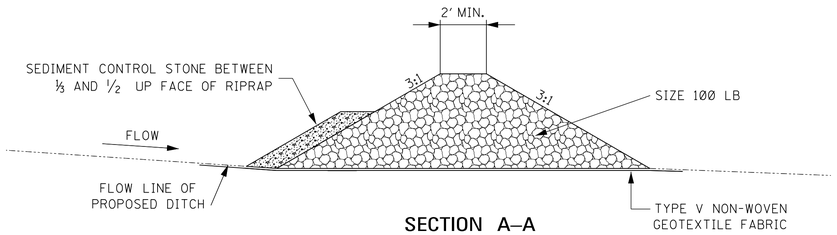
DETAIL FOR USE OTHER THAN DITCH



SECTION B–B



SECTION C–C



SECTION A–A

TEMPORARY ROCK DITCH CHECKS IN ROADSIDE DITCHES

GENERAL NOTES:

1. ROCK FILTER DAMS (RFD) MAY BE USED AS A DISCHARGE STRUCTURE WHILE WORKING WITH HIGHLY EROSIVE SOIL. RFD'S MAY BE USED AS PART OF A "BMP TRAIN" AND MAY BE USED IN SUCCESSION AT A MINIMUM SPACING OF 100 FT. OR PER THE EROSION CONTROL PLAN APPROVED BY THE ENGINEER.

2. THE COST OF THE FABRIC SHALL BE INCLUDED IN OTHER ITEMS BID.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

ROCK FILTER DAM

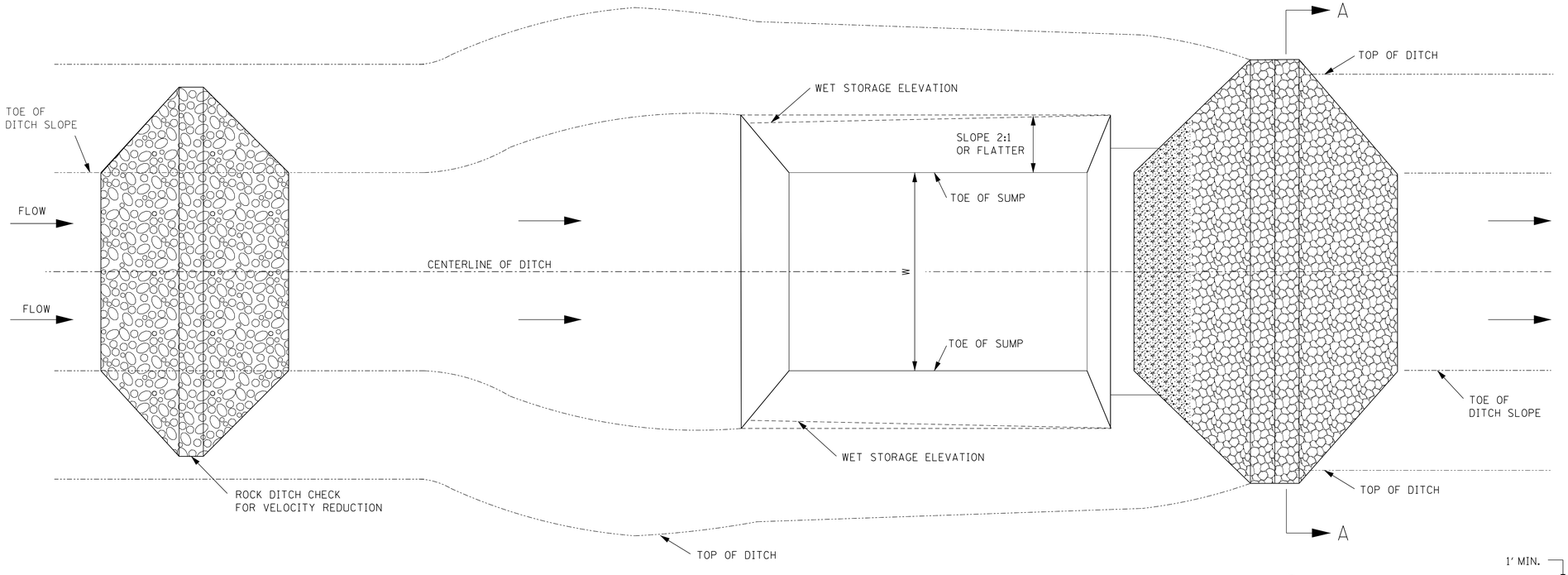
MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
ECD-9

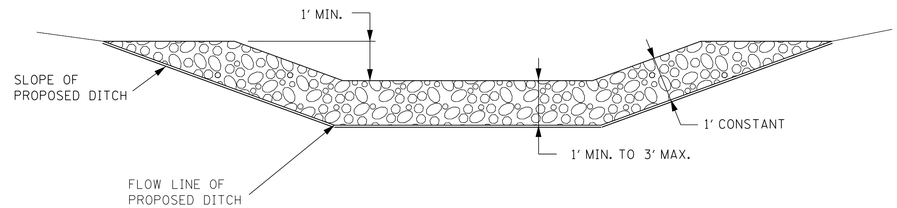
ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6109

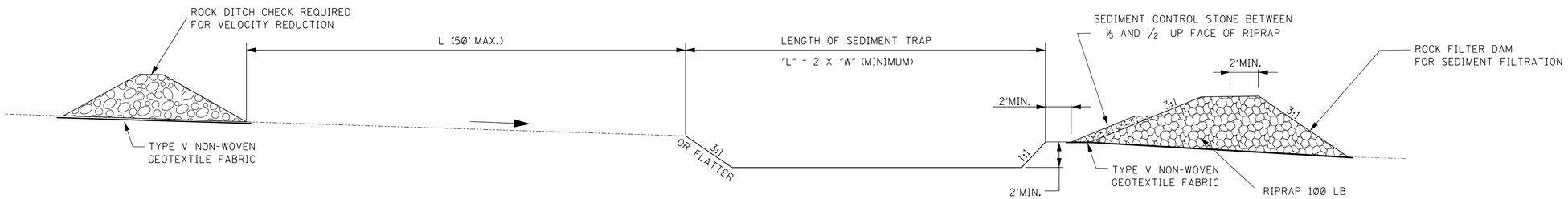
STATE	PROJECT NO.
MISS.	



PLAN VIEW



SECTION A–A



PROFILE VIEW

NOTES:

1. ROCK DITCH CHECKS WITH SUMP EXCAVATION CAN BE PLACED IN DITCHES TO ASSURE ON-SITE SEDIMENT TRAPPING REQUIREMENTS ARE MET. DITCH CHECK WITH SUMP EXCAVATION IS USED WHEN DITCHES RECEIVE DRAINAGE FROM CUT OR FILL SLOPES OR OTHER CRITICAL AREAS WHERE SOIL EROSION IS EXPECTED. DRAINAGE AREA FOR A TEMPORARY SEDIMENT TRAP SHOULD BE LIMITED TO 3 ACRES. THEY CAN BE USED IN SERIES TO INCREASE ON-SITE SEDIMENT TRAPPING EFFICIENCY.

2. THE COST OF THE FABRIC SHALL BE INCLUDED IN OTHER ITEMS BID.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

ROCK DITCH CHECK WITH SUMP EXCAVATION AND ROCK FILTER DAM

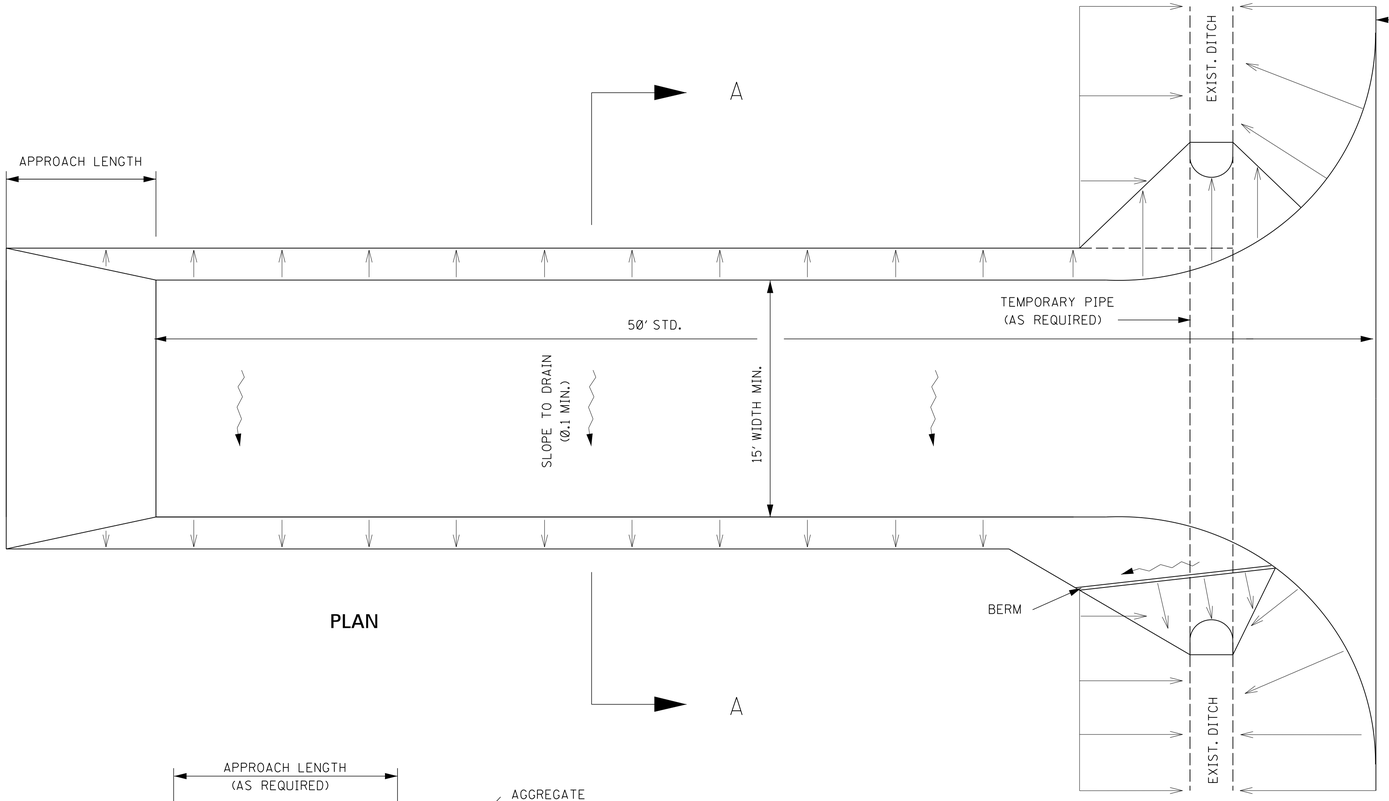
MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
ECD-10

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6110

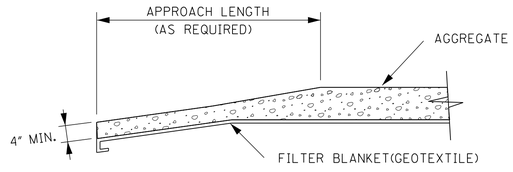
STATE	PROJECT NO.
MISS.	



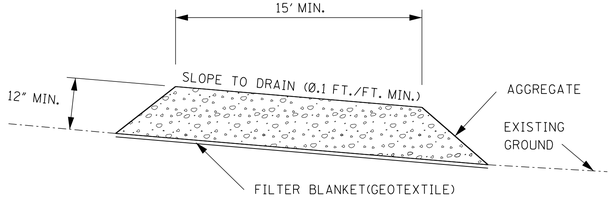
PLAN

GENERAL NOTES:

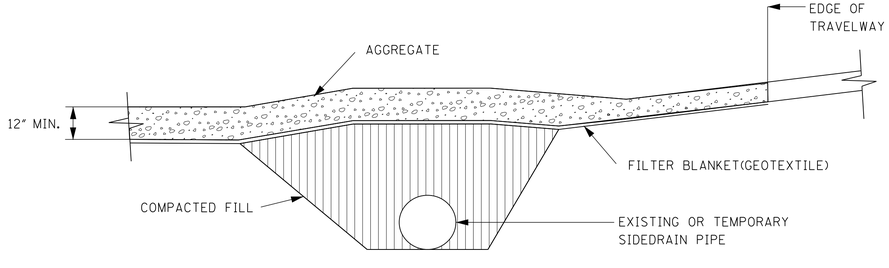
1. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFFSITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE PROJECT SHALL BE DIRECTED THRU THE STABILIZED ENTRANCE. BARRIERS, FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STABILIZED ENTRANCE.
2. THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TECHNIQUE TO MINIMIZE OFFSITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ITS USE.
3. ALL MATERIALS SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE STABILIZED CONSTUCTION ENTRANCE AGGREGATE AND CONSTRUCTION MUD) SHOULD BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER.
4. SIZE III STABILIZER AGGREGATE OR LARGER SHALL BE USED.
5. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION TO PREVENT OFFSITE TRACKING. THE STABILIZED CONSTRUCTION ENTRANCE SHOULD BE RINSED WHEN NECESSARY TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STABILIZED ENTRANCE MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
6. THE NOMINAL SIZE OF A STANDARD STABILIZED CONSTRUCTION ENTRANCE IS 15' X 50' UNLESS OTHERWISE SHOWN IN THE EROSION CONTROL PLAN.
7. COSTS OF ALL ITEMS ON THIS SHEET SHALL BE INCLUDED IN OTHER ITEMS BID.



TRANSITION DETAIL



SECTION A–A



RURAL CONNECTION DETAIL

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

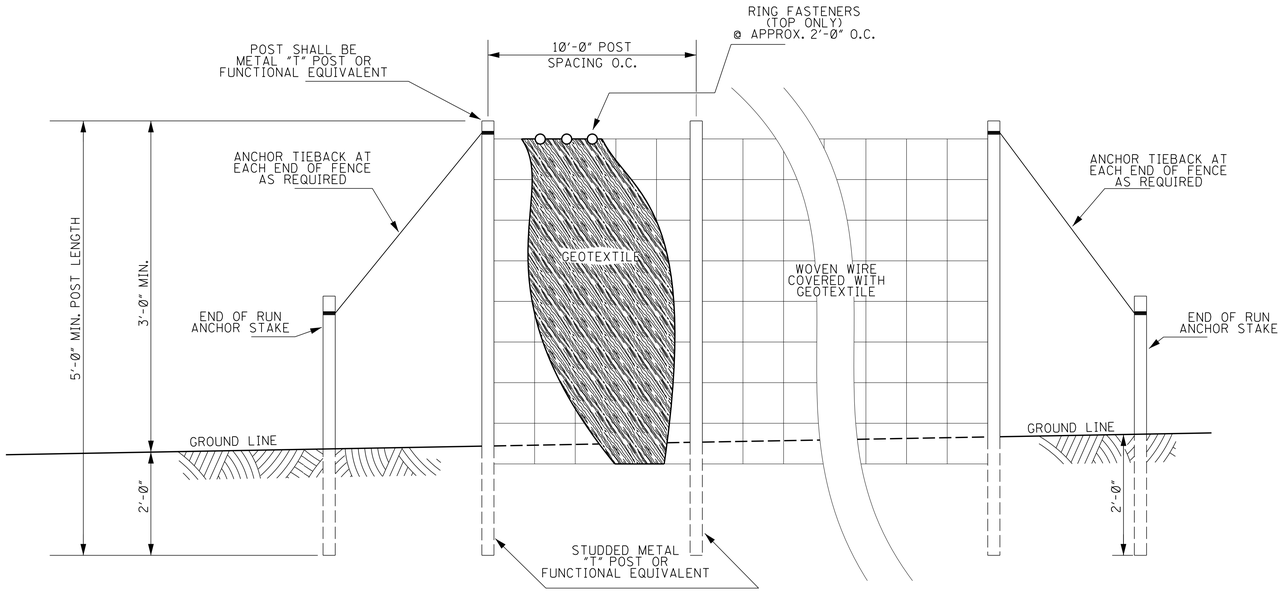
STABILIZED CONSTRUCTION ENTRANCE

WORKING NUMBER
ECD-16

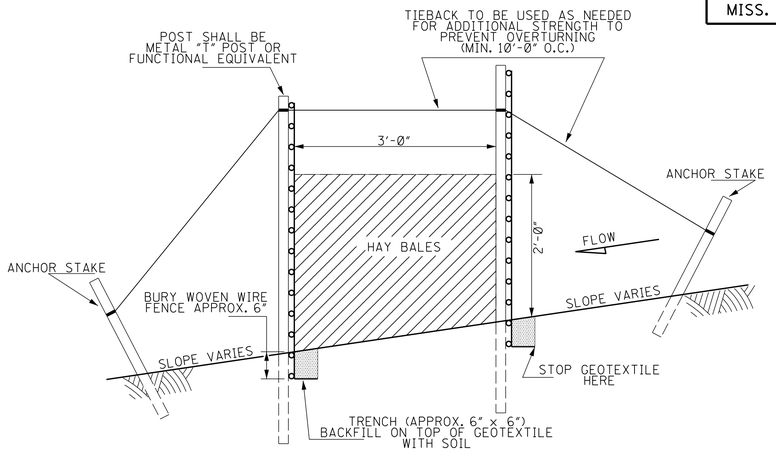
ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6116

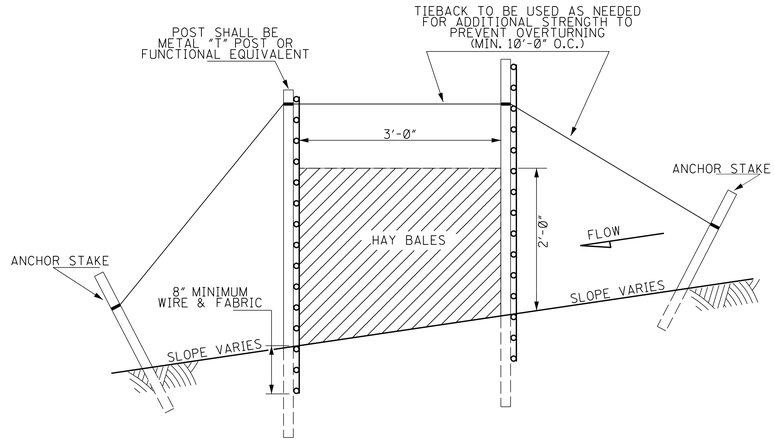
STATE	PROJECT NO.
MISS.	



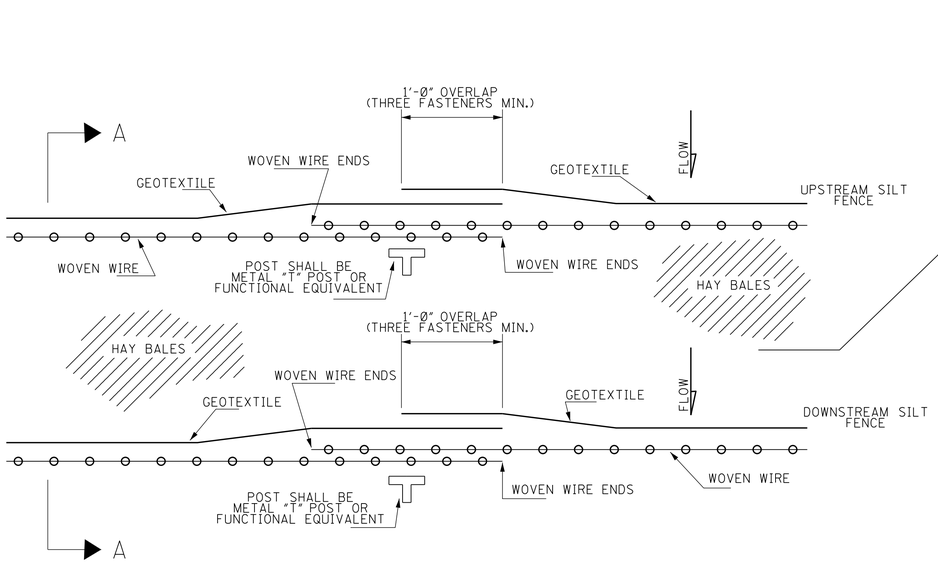
ELEVATION VIEW



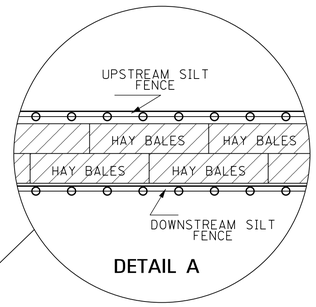
SIDE VIEW
SECTION A–A
METHOD I



SIDE VIEW
SECTION A–A
METHOD II
MECHANICAL INSTALLATION



PLAN VIEW
REQUIRED LAPPING



DETAIL A

GENERAL NOTES:

1. RETENTION BARRIERS SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
2. RETENTION BARRIERS ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
3. RETENTION BARRIERS SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR A BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
4. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SEDIMENT RETENTION BARRIER.
5. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES CONFIGURATION MEETING THE REQUIREMENTS OF THE DETAIL.
6. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
7. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SEDIMENT RETENTION BARRIER

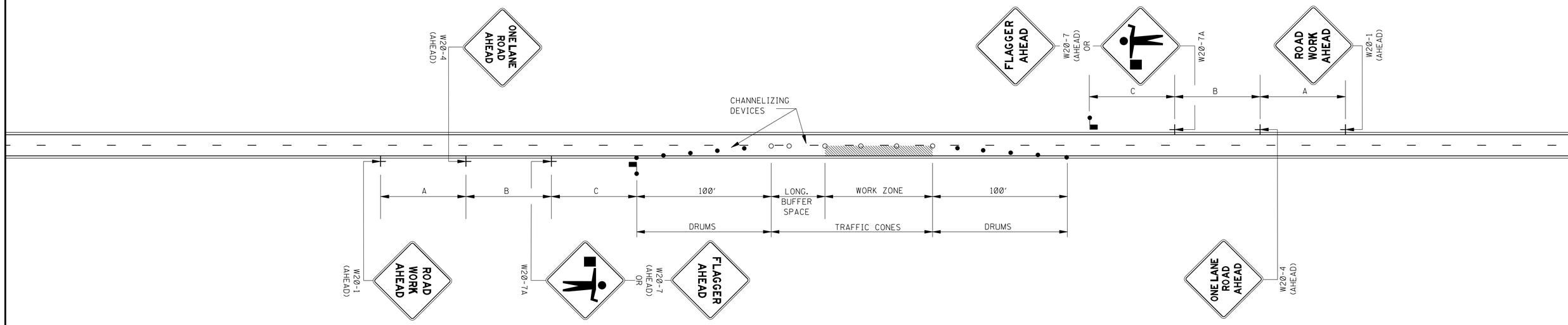
MDOT

WORKING NUMBER
ECD-22

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6122

STATE	PROJECT NO.
MISS.	



LEGEND

- FLAGGER
- ● RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
- ○ TRAFFIC CONES (28" HEIGHT MINIMUM)

GENERAL NOTES:

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

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		† LONGITUDINAL BUFFER SPACE (ft)	STOPPING SIGHT DISTANCE
mph	TAPER	ALONG LANE LINE & WORK ZONE		
25	20	50	55	155
30	20	60	85	200
35	20	70	120	250
40	20	80	170	305
45	20	90	220	360
50	20	100	280	425
55	20	110	335	495
60	20	120	415	570
65	20	130	485	645

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

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
5. ADDITIONAL FLAGGERS MAY BE NEEDED AS DIRECTED BY THE ENGINEER.
6. WHEN WORK IS REQUIRED AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED.
7. CHANNELIZING DEVICE TYPES FOR:
   A. APPROACH AND EXIT TAPERS- RETROREFLECTIVE PLASTIC DRUMS
   B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)
8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

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

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLAN WITH FLAGGER
(ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)

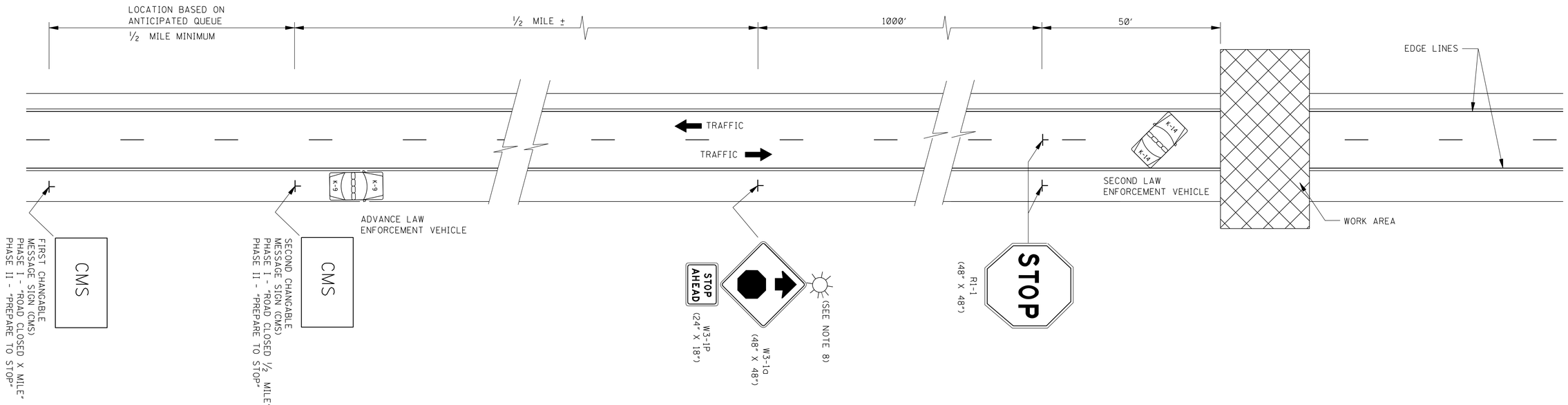
MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER TCP-1

SHEET NUMBER 6351

ISSUE DATE: AUGUST 01, 2017

STATE	PROJECT NO.
MISS.	



GENERAL NOTES:

1. THIS TYPE OF HIGHWAY CLOSURE SHOULD ONLY BE USED FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 30 MINUTES. AFTER THE HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE, A MINIMUM PERIOD OF 30 MINUTES SHOULD ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.

2. AT LEAST TWO LAW ENFORCEMENT OFFICERS AND TWO LAW ENFORCEMENT VEHICLES SHOULD BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH LAW ENFORCEMENT VEHICLE SHOULD HAVE A ROOF MOUNTED FLASHING BLUE LIGHT OR LIGHT BAR.

3. RESTRICTIONS ON ROAD CLOSURES ARE SPECIFIED IN THE CONTRACT DOCUMENT.

4. THE ADVANCE LAW ENFORCEMENT VEHICLE SHOULD BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.

5. IF QUEUE EXCEEDS THE FIRST CHANGABLE MESSAGE SIGN (CMS) AT ANYTIME DURING A CLOSURE; THE TRAFFIC CONTROL PLAN SHOULD BE ADJUSTED AS NECESSARY, WITH APPROVAL OF THE ENGINEER.

6. TRAFFIC CONTROL FOR THE CLOSURE SHOULD BE ACCOMPLISHED IN THE FOLLOWING ORDER:
   - A. FIRST CHANGABLE MESSAGE SIGN (CMS)
   - B. SECOND CHANGEABLE MESSAGE SIGN (CMS)
   - C. ADVANCE LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
   - D. "W3-1a (48" X 48")" AND "W3-1P (24" X 18")" SIGNS ERECTED.
   - E. "R1-1 (48" X 48")" SIGNS ERECTED TO STOP TRAFFIC. THE ORDER OF ERECTION SHOULD BE IN THE FOLLOWING ORDER: RIGHT SHOULDER THEN CENTER.
   - F. SECOND LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.

7. TRAFFIC CONTROL SHOULD BE REMOVED IN THE FOLLOWING ORDER:
   - A. WITH TRAFFIC STOPPED REMOVE THE "R1-1 (48" X 48")" SIGNS TOWARD THE RIGHT SHOULDER IN THE FOLLOWING ORDER: CENTER THEN SIGN ON THE RIGHT SHOULDER. SECOND LAW ENFORCEMENT VEHICLE LEADS TRAFFIC THROUGH WORK AREA.
   - B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1a (48" X 48)" AND "W3-1P (24" X 18") SIGNS SHOULD BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMENENT.
   - C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGABLE MESSAGE SIGNS TURNED OFF.

8. UNILLUMINATED SECTIONS OF HIGHWAYS SHOULD NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN THE HIGHWAY MUST BE CLOSED DURING HOURS OF DARKNESS, A TYPE B HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W3-1a SIGN.

9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND R1-1, THE CMS, "W3-1a (48" X 48")", AND "W3-1P (24 "X 18") SIGNS SHOULD ALSO BE ERECTED ON THE RAMP SHOULDER.

10. THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.

11. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING LAW ENFORCEMENT SERVICES.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SHORT DURATION CLOSING OF TWO-LANE TWO-WAY HIGHWAYS

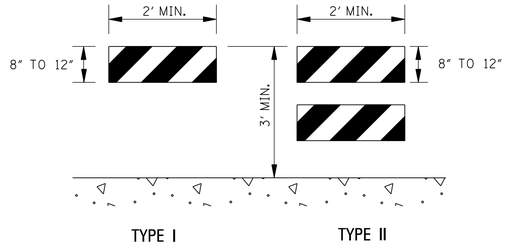
MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
TCP-6

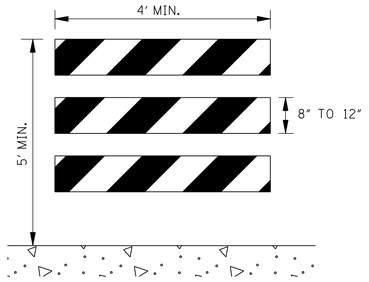
ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6356

STATE	PROJECT NO.
MISS.	



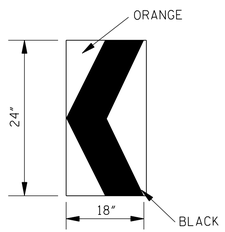
TYPE I TYPE II



TYPE III

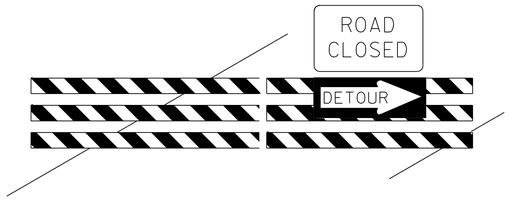
STANDARD BARRICADES

1. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
2. RAIL STRIPE SHOULD BE 6 INCHES, EXCEPT THAT 4-INCH WIDE STRIPES MAY BE USED IF RAIL LENGTHS ARE LESS THAN 36 INCHES.
3. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATAGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://safety.fhwa.dot.gov/roadway_dept/policy.guide/road_hardware/cat2.cfm



CHEVRON SIGN DETAIL

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



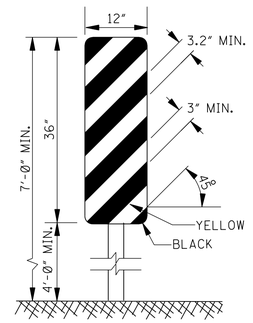
BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

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

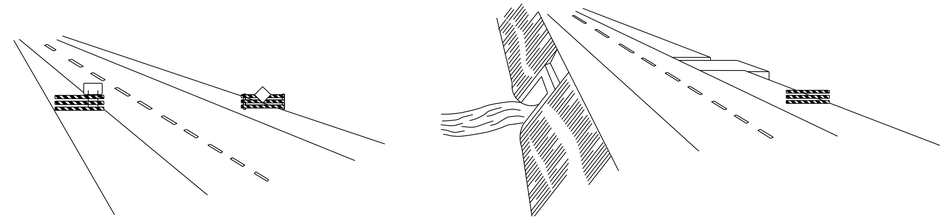
* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

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



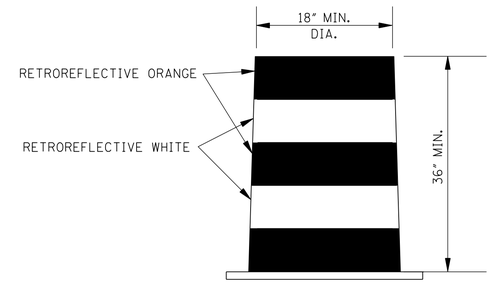
TYPE 3 OBJECT MARKER (OM-3R)

1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM-3R IS SHOWN. THE OM-3L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.



WING BARRICADES

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



PLASTIC DRUM STRIPING DETAIL

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

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

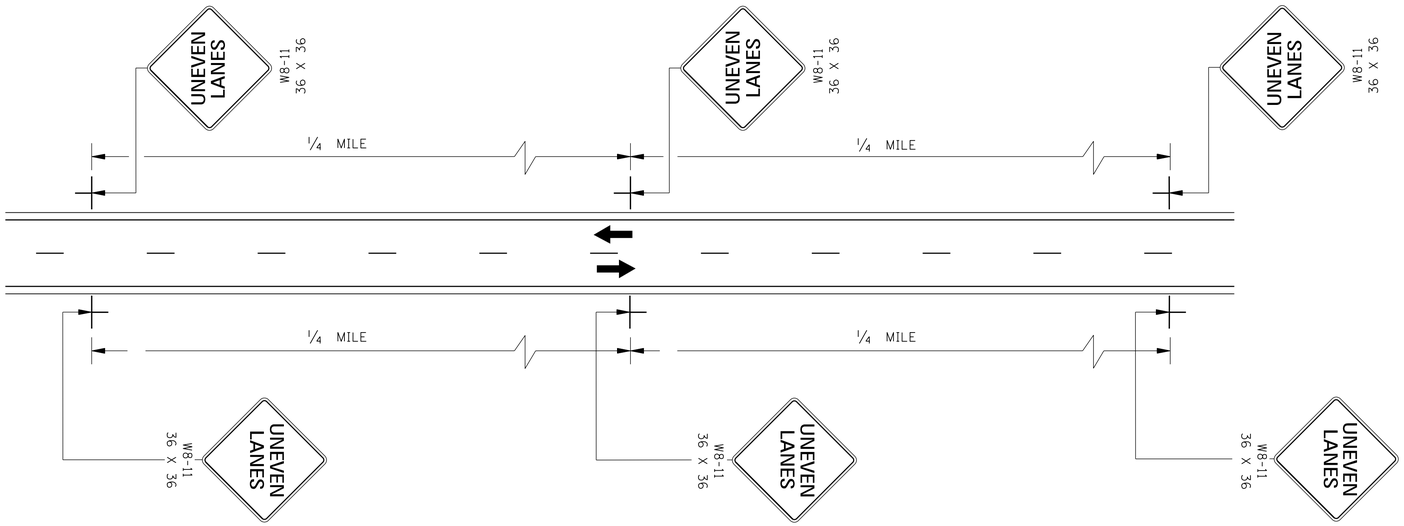
ISSUE DATE: AUGUST 01, 2017

MDOT

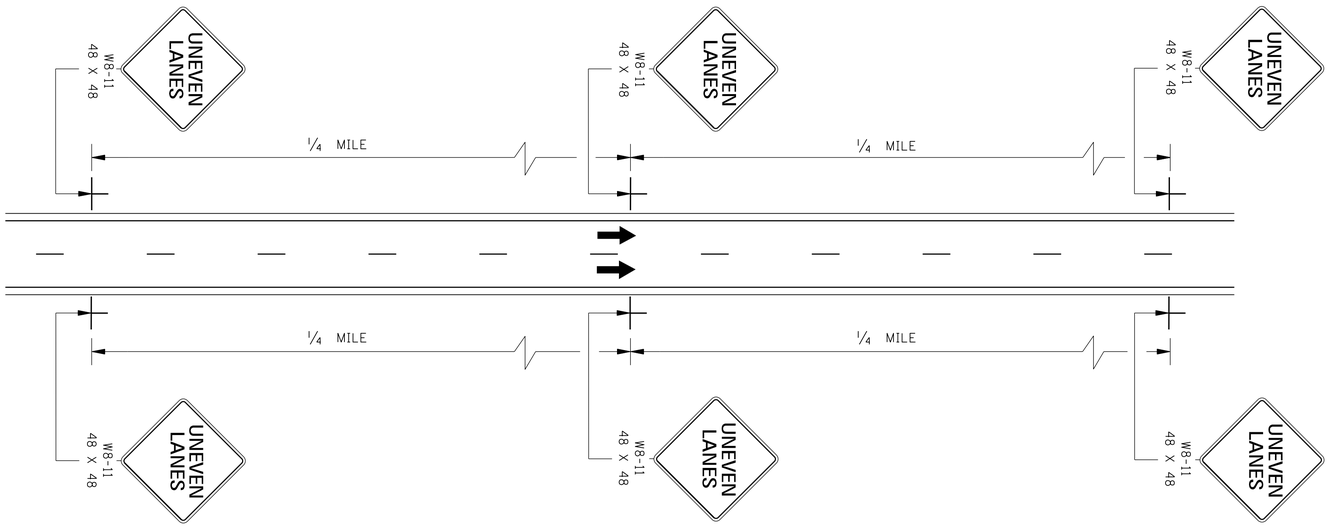
WORKING NUMBER
TCP-8

SHEET NUMBER
6358

STATE	PROJECT NO.
MISS.	



TWO–WAY TRAFFIC



ONE–WAY TRAFFIC

GENERAL NOTES:

1. UNEVEN LANE LINE:
   A. IF LESS THAN OR EQUAL TO 1½", NO SIGNS REQUIRED.
   B. IF GREATER THAN 1½" AND LESS THAN OR EQUAL TO 2¼", PLACE SIGNS AS SHOWN ON THIS SHEET.
   C. IF GREATER THAN 2¼", TRAFFIC SHOULD NOT BE ALLOWED TO CROSS UNEVEN LANE LINE.
2. THE W8-11 SIGNS SHOULD BE SPACED AT ¼-MILE INTERVALS THROUGHOUT UNEVEN LANE LINE LIMITS.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

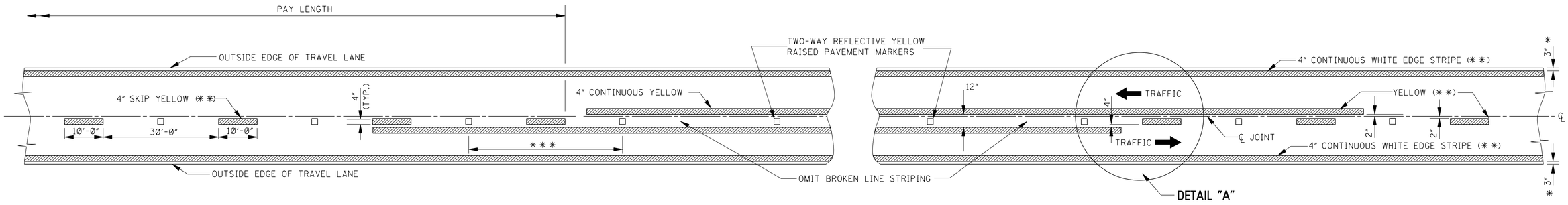
TRAFFIC CONTROL PLANS
UNEVEN PAVEMENT DETAILS

ISSUE DATE: AUGUST 01, 2017

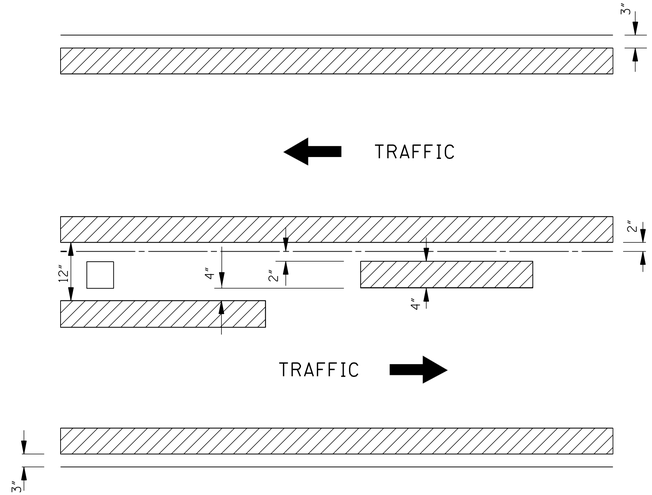
WORKING NUMBER
TCP-12

SHEET NUMBER
6362

STATE	PROJECT NO.
MISS.	



TWO–WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



DETAIL "A"

GENERAL NOTES:

* 1. 3" UNLESS SHOWN ELSEWHERE ON THE PLANS.

** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR TAPE AS INDICATED IN PAY ITEMS).

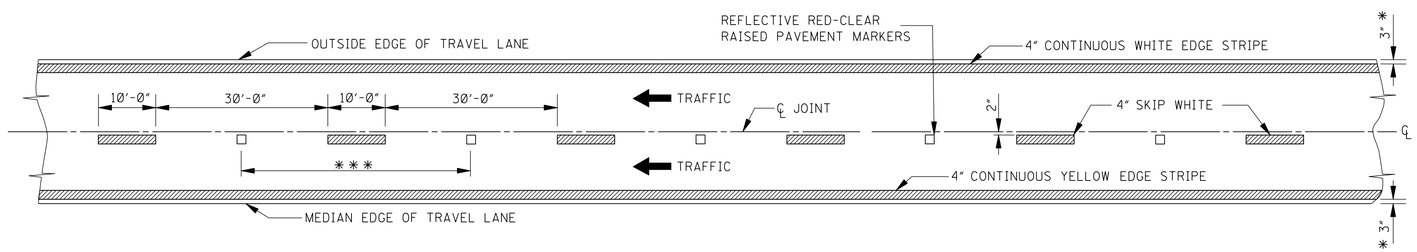
3. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS

*** 4. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

	URBAN AREA (ft-in)	RURAL AREA (ft-in)
TANGENT SECTIONS	40'-0"	80'-0"
HORIZONTAL CURVES	40'-0"	40'-0"
INTERCHANGE LIMITS	40'-0"	† 40'-0"

† NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 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.

5. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."



4–LANE WITH ONE–WAY TRAFFIC

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TEMPORARY STRIPING FOR TRAFFIC CONTROL 2–LANE AND 4–LANE DIVIDED HIGHWAYS

MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

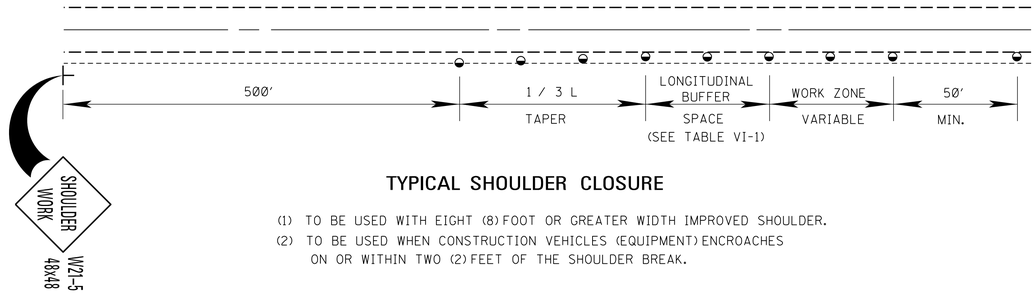
WORKING NUMBER TCP-13

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER 6363

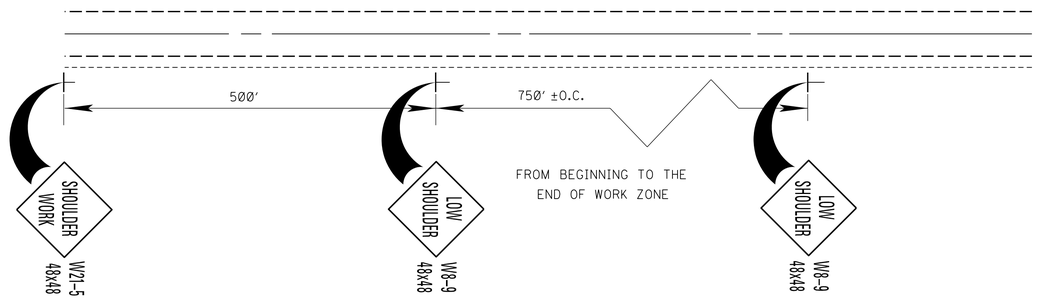
STATE	PROJECT NO.
MISS.	

PLASTIC DRUMS
(SEE NOTE FOR SPACING)



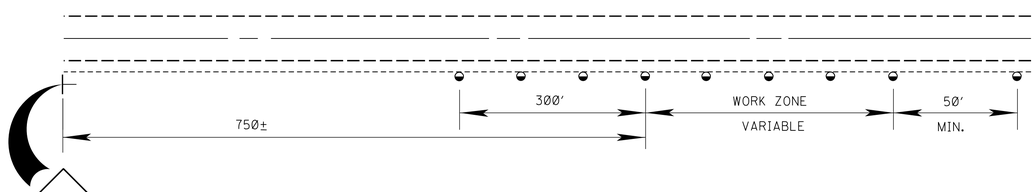
TYPICAL SHOULDER CLOSURE

(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.



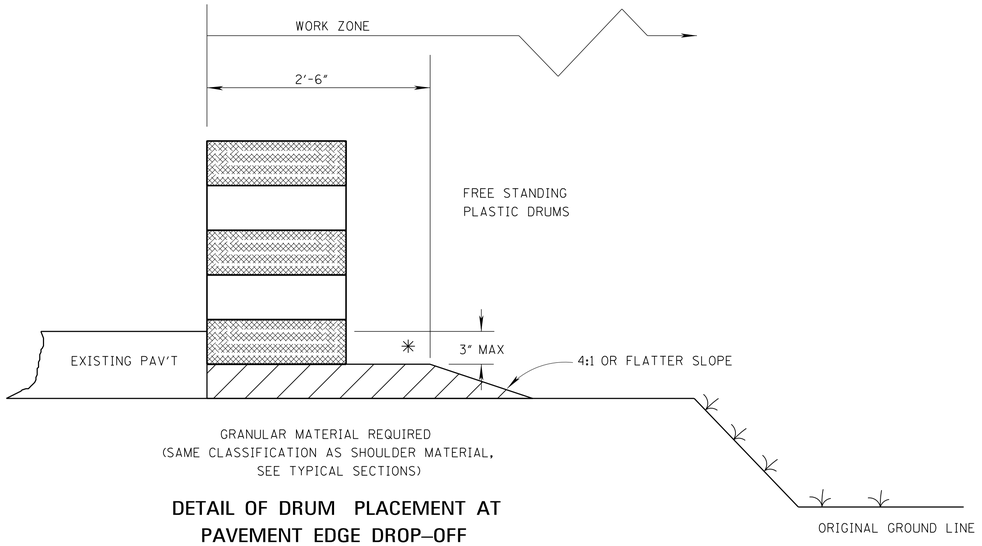
TYPICAL SHOULDER WORK #1
(SEE NOTE A–1 THIS SHEET)

PLASTIC DRUMS
(SEE NOTE FOR SPACING)



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

NOTES:

✳ A. PAVEMENT EDGE DROP-OFF

1. IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (750′+O.C.).

2. TWO AND ONE QUARTER TO THREE INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE M.U.T.C.D. (1 / 3 L, WHERE L IS THE TAPER LENGTH IN FEET.)

3. GREATER THAN THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED.

4. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

5. LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

B. DRUM SPACING

1. TANGENTS = 2 X S
2. TAPERS = L / 3
   WHERE L = S X W
   L = TAPER LENGTH IN FEET
   S = SPEED IN MPH (POSTED OR 85 PERCENTILE)
   W = WIDTH OF OFFSET IN FEET

C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

TABLE VI-1. GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE

✳✳ SPEED (MPH)	LENGTH (FEET)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

✳✳ POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL DETAILS DRUM PLACEMENT AND SHOULDER CLOSURE

MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
TCP-16

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER
6366

1st O.REV.

STATE	PROJECT NO.
MISS.	**BR-2839-00(020)**

DESCRIPTION OF SHEETS SPECIAL DESIGN SHEETS ~ BRIDGE DRAWINGS	WORKING NUMBER	SHEET NUMBER
DETAILED INDEX (BRIDGE)	DI-BR-1	8001
BRIDGE AT STATION 285+96.35 - SR 145 OVER KCS R.R. - BRIDGE REPAIR	1 OF 5	8002
PIN & HANGER TIGHTENING AND BEARING RESET DETAILS	2 OF 5	8003
SECONDARY MEMBER REPLACEMENT & PIPE DRAIN REPLACEMENT DETAILS	3 OF 5	8004
PRESSURE RELIEF JOINT, BRIDGE CONCRETE MAT, & UNDERSEALING DETAILS	4 OF 5	8005
JOINT REPAIR DETAILS	5 OF 5	8006

SPECIAL DESIGN SHEETS INFORMATION PLANS	WORKING NUMBER	SHEET NUMBER
INFORMATION ONLY PLAN		8007
INFORMATION ONLY PLAN		8008
INFORMATION ONLY PLAN		8009
INFORMATION ONLY PLAN		8010
INFORMATION ONLY PLAN		8011
INFORMATION ONLY PLAN		8012
INFORMATION ONLY PLAN		8013
INFORMATION ONLY PLAN		8014
INFORMATION ONLY PLAN		8015

BRIDGE DIVISION		
REVISIONS		
DATE	SHEET NO.	BY
2/18/2019	8002	DAC

PLAN
BRIDGE DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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BY

REVISION

DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAILED INDEX (BRIDGE)

FMS: 107859 / 301000

COUNTY: LEE

PROJECT NUMBER: BR-2839-00(020)

WORKING NUMBER
DI-BR-1

DESIGNER Aaron Cagle CHECKER Chris Duncan

DETAILER Aaron Cagle ISSUE DATE 2018-11-02

DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

SHEET NUMBER
8001

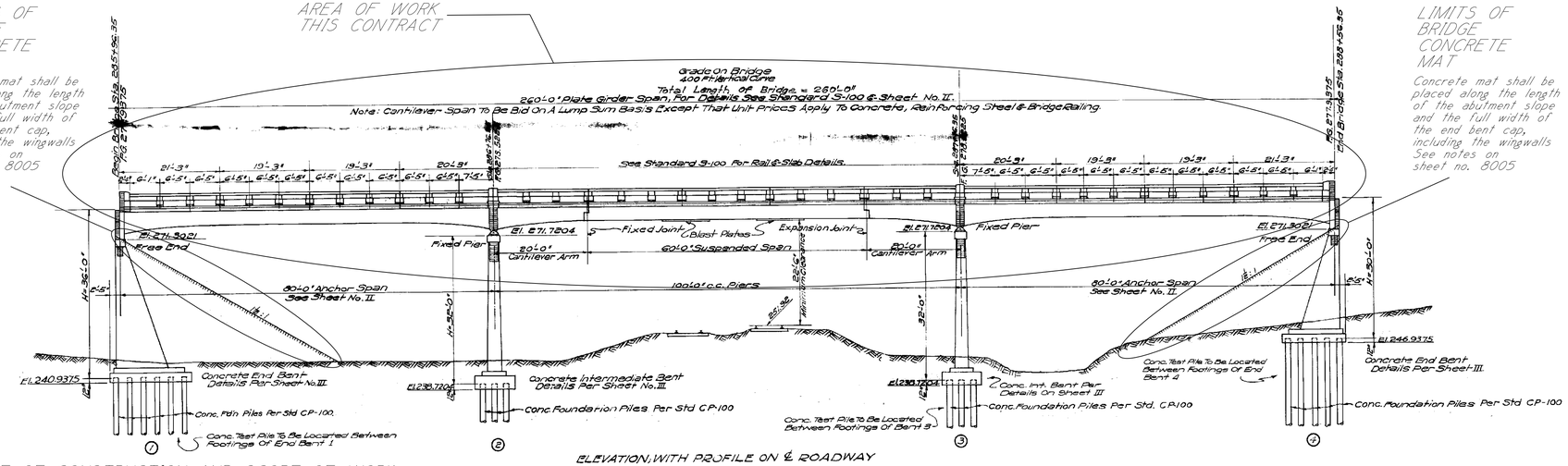
1st O.REV.

STATE	PROJECT NO.
MISS.	BR-2839-00(020)

LIMITS OF BRIDGE CONCRETE MAT

Concrete mat shall be placed along the length of the abutment slope and the full width of the end bent cap, including the wingwalls See notes on sheet no. 8005

AREA OF WORK THIS CONTRACT



ELEVATION, WITH PROFILE ON ℄ ROADWAY

LIMITS OF BRIDGE CONCRETE MAT

Concrete mat shall be placed along the length of the abutment slope and the full width of the end bent cap, including the wingwalls See notes on sheet no. 8005

GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications For Road and Bridge Construction, 2017.
2. No change of plans will be permitted except by written approval of the Director of Structures, State Bridge Engineer.
3. Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment.
4. Work for which no pay item is provided will not be paid for directly and shall therefore be considered an absorbed item of work.
5. All details are based on the dimensions shown on the original plans for the existing structure. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure.
6. Any damage that occurs to the existing structure during the duration of the project shall be repaired to the satisfaction of the Engineer by the Contractor at no additional cost to the State.
7. Contact areas where new concrete is placed against old concrete shall be cleaned then coated with an approved epoxy binder designed to bond new concrete to old. The binder shall be applied in accordance with the Manufacturer's recommendations.
8. During construction care shall be exercised to ensure that no debris fall into the railroad below the structure. The debris that is removed from the bridge shall become the property of the Contractor and shall be removed from the construction site.

CONTRACTOR FIELD VERIFICATION & SHOP DRAWING SUBMITTAL NOTES

1. Prior to fabrication and construction, the Contractor shall field verify the dimensions of the existing structure. The Contractor shall be responsible for adjusting the elements new construction to ensure proper fit with the existing structure.
2. Prior to fabrication and construction, the Contractor shall submit verification of the existing bridge elements associated with Pay Item 907-824-PP006, Bridge Repair, Masonry Plate Replacement & Bearing Reset, Per Plans, to the Director of Structures, State Bridge Engineer for approval. Notes on this item of work can be found on sheet no. 8003.
3. Shop drawings of new structural steel associated with Pay Item 907-824-PP006, Bridge Repair, Replace Secondary Steel Members, Per Plans, will be required and shall be submitted to the Director of Structures, State Bridge Engineer for approval prior to beginning work. Notes on this item of work can be found on sheet no. 8004.

SEQUENCE OF CONSTRUCTION AND SCOPE OF WORK:

1. Jack the bridge's end spans, and remove and replace the existing masonry plates of the existing bearing assemblies at bents 1 and 4. Rockers shall be reset to the plumb position before the end spans are lowered. For masonry plate and anchor bolt details see sheet no. 8003. Work shall be paid for per each bearing under pay item 907-824-PP006, Bridge Repair, Masonry Plate Replacement & Bearing Reset, Per Plans.
2. Tighten existing ¾" ϕ turned bolts and nuts for the 2¾" ϕ pins at all locations on the bridge. Once the 2¾" ϕ pins are properly tightened, they shall be tack welded to the existing link bars. Additional notes on this item of work can be found on sheet no. 8003. Work shall be paid for per each Pin and Hanger assembly under pay item 907-824-PP006, Bridge Repair, Pin and Hanger Tightening, Per Plans.
3. Replace all damaged secondary steel members listed on sheet no. 8004 in accordance with these plans and applicable portions of the standard specifications. Additional members may be identified by the Project Engineer at the time of construction. Work shall be paid for per each steel member replaced under pay item 907-824-PP006, Bridge Repair, Replace Secondary Steel Members, Per Plans.
4. Repair and replace the indicated sections of the pipe drains at all locations on the bridge. For notes on this item of work, see the details on sheet no. 8004. Work shall be paid for per each pipe drain assembly under pay item 907-824-PP006, Bridge Repair, Repair and Replace Pipe Drains, Per Plans.
5. Perform undersealing to fill voids under the end bent caps and approach pavement in accordance with the Manufacuter's recommendations and the notes on sheet no. 8005. Work shall be paid for in pounds under pay item 907-420-A002, Undersealing Concrete Pavement.
6. Install pressure relief joints in accordance with the details and locations shown on sheet no. 8005. Work shall be paid for per each installed joint under pay item 907-824-PP006, Bridge Repair, Pressure Relief Joint, Per Plans.
7. Perform site grading and install Bridge Concrete Mat in accordance with the Manufacturer's recommendations and the notes on sheet no. 8005. Work for Site Grading shall be paid for in square yards under pay item 203-I002, and work for bridge concrete mat shall be paid for in square yards under pay item 907-832-PP003.
8. Remove all damaged or unsound concrete and repair concrete spalled areas using epoxy mortar at the locations indicated by the Project Engineer. See the notes and details on this sheet for more information. Work shall be paid for in cubic feet under pay item 907-824-PP005.
9. Remove existing joint material and repair and reseal existing joints in accordance with the details shown on sheet no. 8006. Work shall be paid for in linear feet under pay item nos. 907-808-A002, 907-823-A001, and 907-823-B001.
10. Abrasive blast and paint all structural steel members in accordance with these plans and Special Provision 907-845. Work shall be paid for by lump sum under pay item 907-845-A001.
11. Clean all bent caps in accordance with the notes on this sheet. Work shall be paid for per each cap cleaned under pay item 907-824-PP006, Bridge Repair, Cap Cleaning, Per Plans.

ABRASIVE BLASTING AND PAINTING NOTE:

All structural steel members of the superstructure and bearings shall be abrasive blasted, as referenced in 907-845.03.7.6 of the required special provision and repainted. The square footage of 13,000 sq. ft. given for these items is for information purposes only and is approximate and will not be measured for payment. Actual square footage may be more or less than given, but shall not be basis for additional compensation. Payment shall be made by the (Lump Sum) regardless of over-run or under-run of the given square footage. A containment system shall be required for this project. The Contractor shall design, install and maintain a containment system in accordance with the special provision to assure that the traveling public will not be exposed to construction debris and materials during the cleaning and painting process. The Contractor will be required to properly dispose of all debris at an approved landfill. Incidental work such as project clean up, debris disposal, and other incidental work necessary to complete the project will not be measured for separate payment and will be considered absorbed items.

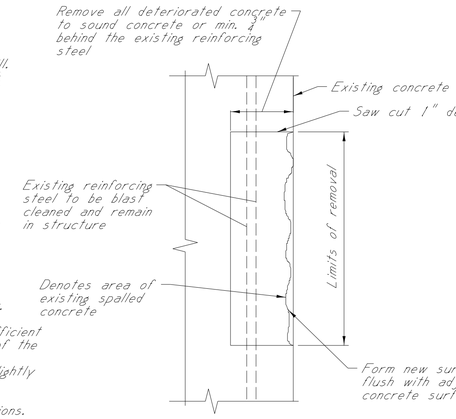
EPOXY MORTAR REPAIR NOTES:

Repair concrete spalled areas using epoxy mortar on the bridge as directed by the Project Engineer and the epoxy mortar spall repair detail on this sheet. Repair areas shall include, but are not limited to, the concrete drop slabs on the underside of the bridge deck and the brackets at each open joint. Spalled areas where pack rust has developed around or on reinforcement shall be removed by small hand tools or pressure washing (using 3500 psi pressure). All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions and details on the information plans.

1. Epoxy Resin: Resin shall be selected from the MDOT Approved Products List.
2. Silica Sand: The materials shall be bagged general purpose cleaning sand.
3. Epoxy Mortar Mix: The epoxy mortar mix shall consist of part liquid epoxy and part clean dry sand mixed in the ratio recommended by the Manufacturer.
4. General:
   A. A Representative of the Epoxy Manufacturer must be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material.
   B. Prior to placement of the mortar mix, the prepared surface shall be lightly primed with neat epoxy.
   C. Acetone alcohol may be used to clean and lubricate trowels.
   D. Curing time shall be in accordance with the Manufacturer's recommendations.
5. All items of work related to epoxy repair shall be paid for under pay item 907-824-PP005: Bridge Repair, Epoxy Repair.

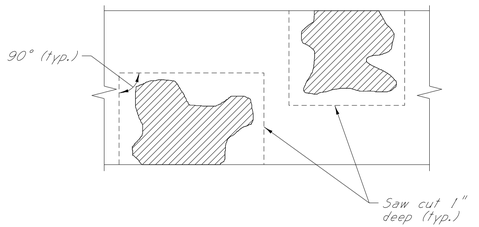
1" SAWCUT NOTES:

All 1" sawcuts shall be considered an absorbed item of work. The Contractor shall verify depth of reinforcing steel before making any sawcuts. The depth of the sawcut shall be no more than the depth of the reinforcing steel. Any damage to reinforcing steel shall be repaired to the satisfaction of the Engineer at no cost to the State.



~ Denotes areas of existing spalled concrete

*NOTE:
Saw cut existing concrete 1" deep so as to obtain a rectangular area. All existing reinforcement shall be carefully preserved and blast cleaned.



EPOXY MORTAR SPALL REPAIR DETAIL

RAILROAD NOTES:

Railroad flagging for work between Bents 2 & 3 shall be required.
The elevation of the existing top of rail profile shall be verified prior to beginning construction.
The Contractor shall notify the Railroad 30 days prior to working in the railroad right-of-way for the purpose of scheduling flagging services from the railroad company. It is the Contractor's responsibility to obtain a flagging conctract with the Railroad and to pay for all flagging services directly.
The Contractor shall detail the method of protection of the ballast during paint removal and paint spray and/or coating operations to the Railroad prior to beginning of work.
The Contractor shall be responsible for submitting plans for all work taking place within the Railroad's right-of-way for approval by the Railroad prior to beginning of work (allow a minimum of 30 days for review).
The Contractor shall be responsible for all cost associated with compliance with the safety practices of the railroad. This includes attendance to safety orientation meetings, provision of personnel equipment and provisions of means and methods of performing the work as required when working within the Railroad right-of-way and for operation of machinery that may foul the railroad clearance envelope.
Vertical and horizontal clearances during construction shall adhere to minimum temporary construction clearances requirements as specified by the Railroad.
The Contractor shall submit construction staging plans to the Railroad for review and approval prior to any construction activities.
The use of vibratory equipment to install or remove shoring or temporary bracing is strictly forbidden on the Railroad right-of-way.
All work on the Railroad right-of-way shall be subject to inspection by Railroad right-of-way.
The Contractor shall be required to have a signed Right-of-Way Entry Agreement from the Railroad prior to beginning work on the project.
The Contractor shall submit to the Director of Structures, State Bridge Engineer and the railroad, detailed plans and design data for temporary construction clearances, stages of construction, falsework plans, and temporary bracing plans and calculations, as required, and shall be sealed by a Mississippi registered Proffessional Engineer.
All submittals must be approved by the railroad before construction can begin.
The Contractor shall verify the station along S.R. 145 at the intersection of ℄ S.R. 145 and KCS Railroad prior to beginning work to ensure that all minimum clearance requirements will be provided.

CAP CLEANING NOTE:

Cap cleaning should be performed by removing all large debris by hand. All other debris (dirt and rust) shall be removed by pressure washing the bent caps to the satisfaction of the Project Engineer. The pressure washer shall be able to maintain 3,500 Psi of pressure.

ESTIMATED BRIDGE QUANTITIES

PAY ITEM CODE	DESCRIPTION	UNIT	QUANTITY
203-I002	Site Grading	SY	450
907-420-A002	Undersealing Concrete Pavement	LBS	8700
907-808-A002	Joint Repair	LF	554
907-823-A001	Preformed Joint Seal, Type 1	LF	277
907-823-B001	Saw Cut, Type 1	LF	554
907-824-PP005	Bridge Repair, Epoxy Repair, Per Plans	CF	33
907-824-PP006	Bridge Repair, Cap Cleaning, Per Plans	EACH	4
907-824-PP006	Bridge Repair, Pin and Hanger Tightening, Per Plans	EACH	16
907-824-PP006	Bridge Repair, Masonry Plate Replacement & Bearing Reset, Per Plans	EACH	8
907-824-PP006	Bridge Repair, Pressure Relief Joint, Per Plans	EACH	2
907-824-PP006	Bridge Repair, Repair and Replace Pipe Drains, Per Plans	EACH	42
907-824-PP006	Bridge Repair, Replace Secondary Steel Members, Per Plans	EACH	10
907-832-PP003	Concrete Mat	SY	450
907-845-A001	Coating Existing Structural Steel	LS	1

SPECIAL PROVISIONS REQUIRED:

907-420: Undersealing Concrete Pavement
907-808: Joint Repair
907-823: Preformed Joint Seal
907-845: Coating Existing Structural Steel

INFORMATION PLANS:

Original proj. no. W.P.G.M. 253-C.
See sheet nos. 8007-8015 of these plans.

MAINTENANCE OF TRAFFIC NOTE:

Maintain traffic in accordance with section 618 of the Standard Specifications of Road and Bridge Construction, 2017 Edition, the latest edition of the Manual on Uniform Traffic Control Devices, and the traffic control sheets included in these plans.

PLAN BRIDGE DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BRIDGE AT STA. 285+96.35

SR 145 OVER KCS R.R. BRIDGE REPAIR

FMS: 107859 / 301000
COUNTY: LEE
PROJECT NUMBER: BR-2839-00(020)

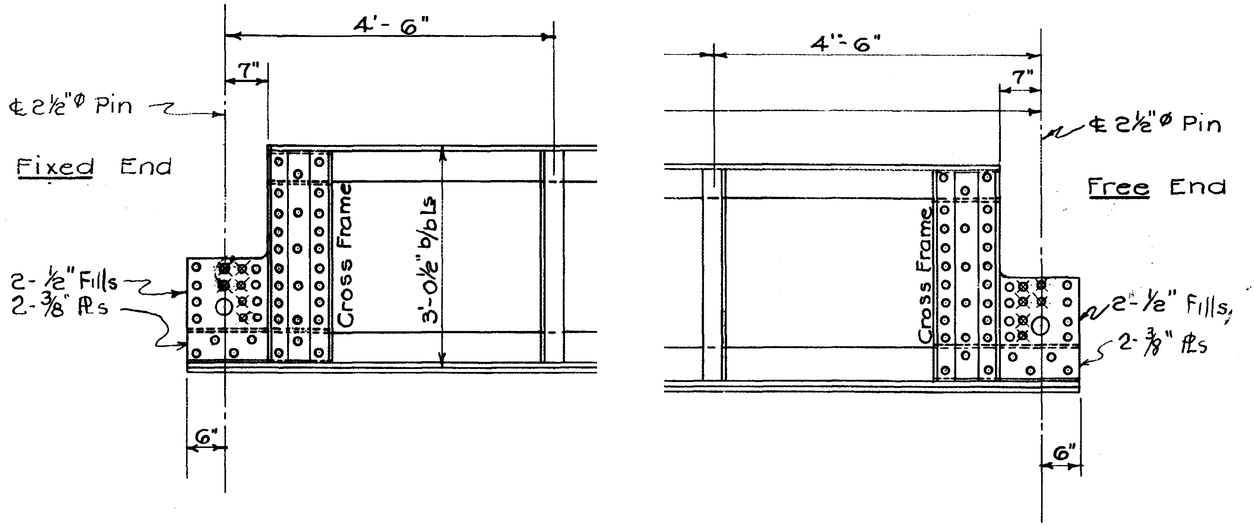
WORKING NUMBER 10F 5

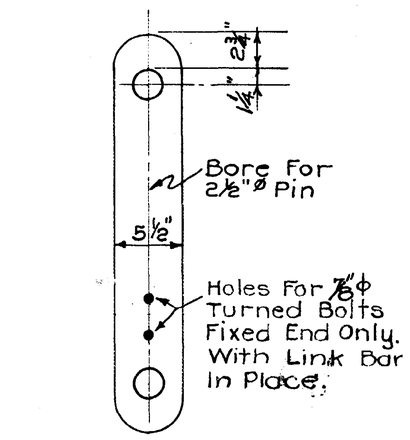
SHEET NUMBER 8002

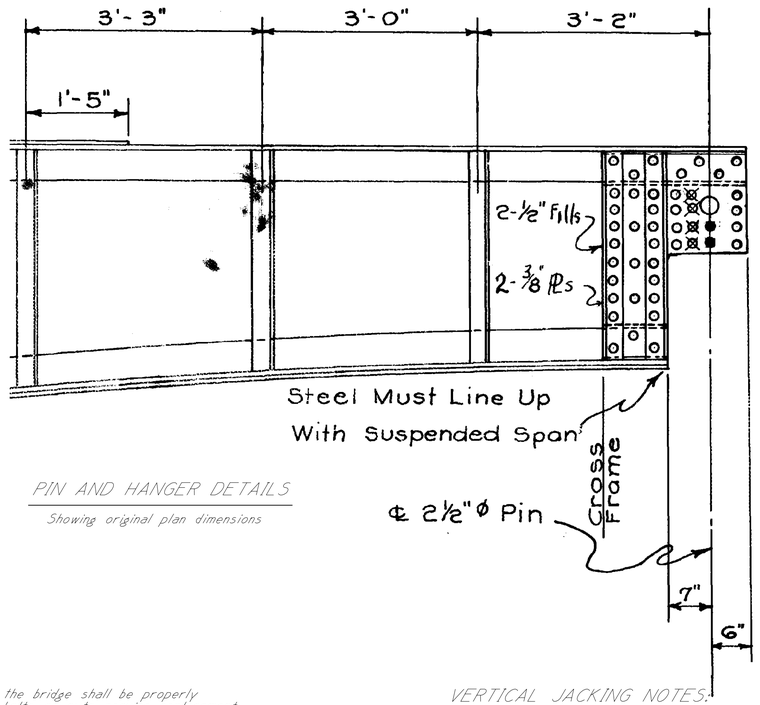
DATE	REVISION	BY
2/18/19	REV. UNDERSEALING QTY.	DAC

DESIGNER Aaron Cagle CHECKER Chris Duncan
DETAILER Aaron Cagle ISSUE DATE 2018-11-02
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

STATE	PROJECT NO.
MISS.	BR-2839-00(020)

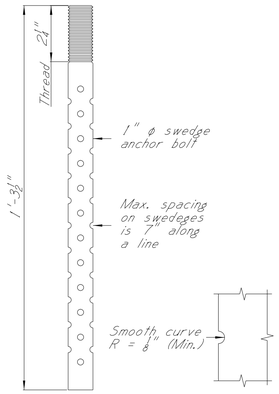




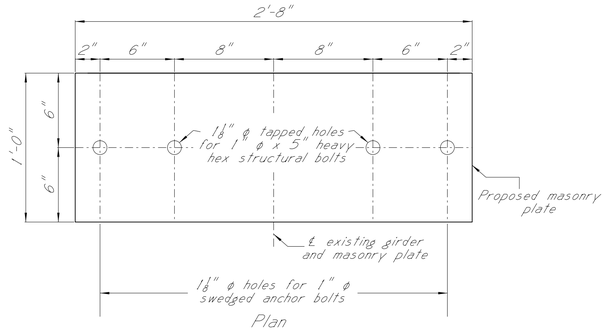


PIN AND HANGER DETAILS

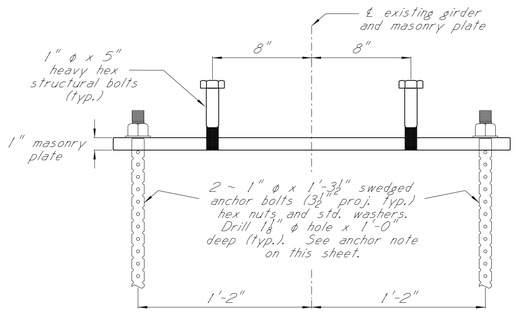
Showing original plan dimensions



SWEDGE ANCHOR BOLT DETAIL



Plan



Elevation from front

MASONRY PLATE DETAILS

Showing new masonry plate and anchor bolt assembles at end bents 1 and 4

BOLT ANCHORING SYSTEM NOTE (Not a Separate Pay Item):

1. Swedged bolt anchoring system shall be one of the following products:
   - A. "HIT RE 500-V3 Epoxy Adhesive Anchor" shall be as manufactured by Hilti, Inc. www.us.hilti.com
   - B. "EPCON C6+" shall be as manufactured by ITW Ramset/Red Head. www.itwredhead.com
   - C. "Ultrabond 1300 " shall be as manufactured by Adhesives Technology Corp. www.atcepoxy.com
2. Installation of the anchoring system shall be performed in accordance with the Manufacturer's recommendations.
3. A representative of the Manufacturer shall be present for sufficient time to assure that the Contractor is properly schooled in the installation of anchoring system.

MASONRY PLATE & BOLT NOTES

1. Prior to fabrication of the masonry plate assemblies and swedged anchor bolts, all dimensions of the existing structure and clearances shall be field verified by the Contractor. The Contractor shall be responsible for adjusting the element of the new construction to ensure proper fit with existing structure.
2. Prior to fabrication and construction, the Contractor shall submit verification of the existing bridge elements that are associated with this item of work to the Director of Structures, State Bridge Engineer for approval.
3. All steel plates shall conform to A.S.T.M., designation A709, grade 50.
4. Existing anchor bolts shall be ground to 4" below the concrete surface and finished smoothed with epoxy mortar such that the new masonry plates will bear on a flat surface of the cap. The epoxy mortar for this activity shall be considered an absorbed item of work.
5. Swedged anchor bolts shall meet or exceed designation A.S.T.M. F3125, Grade A325.
6. Heavy hex structural bolts shall meet or exceed designation A.S.T.M. F3125, Grade A490. Heavy hex structural bolts shall be coated with a zinc/aluminimum coating in accordance with A.S.T.M. F1136.
7. All steel plates and shapes shall be new.
8. Nuts and washers shall conform to A.S.T.M. A194, Grade 2H and A.S.T.M. F436.
9. Nuts shall be heavy hex.
10. Nuts shall be tapped oversize the minimum amount required for proper assembly.
11. All swedged anchor bolts, nuts, and washers shall be galvanized in accordance with A.S.T.M. A153.
12. Structural bolts, swedged anchor bolts, nuts, and washers shall not be reused after tightening.
13. All masonry plates to be painted in accordance with Section 814 of the Mississippi Department of Transportation Specifications for Road and Bridge Construction, 2017 Edition. (Not a Separate Pay Item)

PIN AND HANGER NOTES:

1. Existing ⅞" ø turned bolts at all locations on the bridge shall be properly tightened as per the original plans. If turned bolts or nuts require replacement as determined by the Project Engineer, then the following standards should be used:
   - a. Heavy hex structural bolts shall meet or exceed designation A.S.T.M. F3125, Grade A490
   - b. Nuts and washers shall conform to A.S.T.M. A194, Grade 2H and A.S.T.M. F436.
   - c. All other requirements outlined under the Masonry Plate & Bolt Notes listed on this sheet.
2. Nuts for the 2¾" ø pins shall be properly tightened at all locations on the bridge, and once tightened, shall be tack welded to the existing link bar.
3. The Contractor shall verify all dimensions of the existing structure prior to begnning work.

VERTICAL JACKING NOTES:

1. The Contractor shall provide adequate bracing and jacking arrangements as required to reset the existing bearings at bents 1 and 4 and replace the existing masonry plates at bents 1 and 4 as outlined on this sheet.
2. Traffic shall be maintained on the bridge for the duration of the repair.
3. The Contractor shall employ the service of a mississippi registered professional engineer who is knowledgeable in the field of bridge design. A complete set of bracing and jacking arrangement plans along with design calculations shall be submitted to the Bridge Engineer through the Project Engineer for review prior to construction and shall bear the Design Engineer's seal.
4. Jacks at each bent shall be coupled to a common manifold and the bridge span raised uniformly.
5. Jacking points shall be under the bottom flange of the steel beam at each bent and no jacking points will be allowed under any diaphragms or bays.
6. After the beam ends are raised into position, temporary blocking shall be provided to secure the span in this position while work is being performed.
7. Temporary blocking points shall be under the bottom flange of the steel beam at each bent and no temporary blocking will be allowed under any diaphragms or the bays.
8. Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BRIDGE AT STA. 285+96.35

PIN & HANGER TIGHTENING AND BEARING RESET DETAILS

FMS: 107859 / 301000

COUNTY: LEE

PROJECT NUMBER: BR-2839-00(020)

WORKING NUMBER 2 OF 5

SHEET NUMBER 8003

REVISION | BY | DATE

DESIGNER Aaron Cagle CHECKER Chris Duncan

DETAILER ~~Aaron Cagle~~ ISSUE DATE 2018-11-02

DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.

DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

PLAN
BRIDGE DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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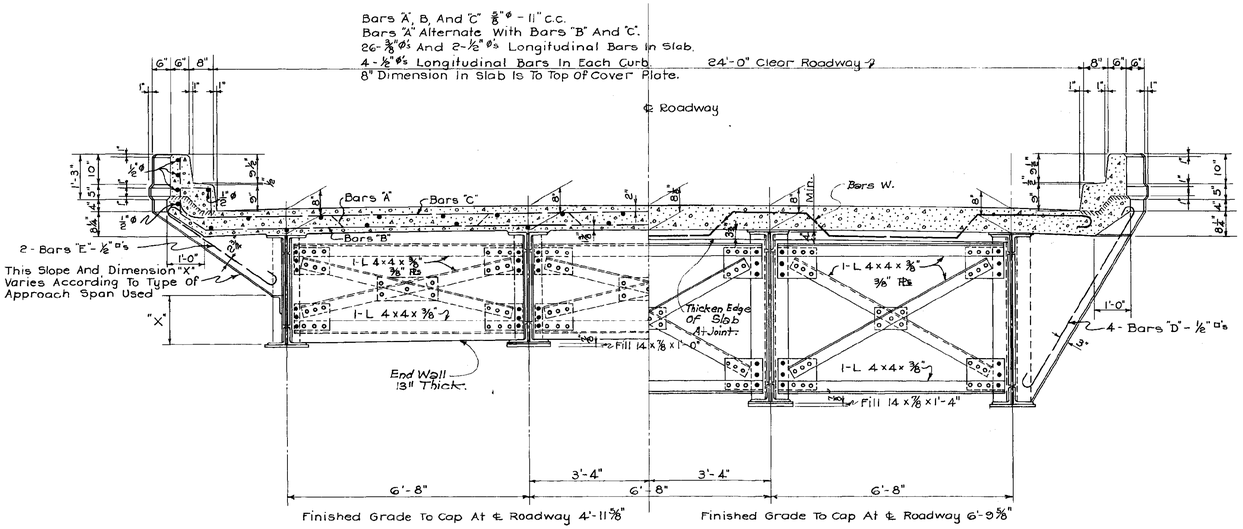
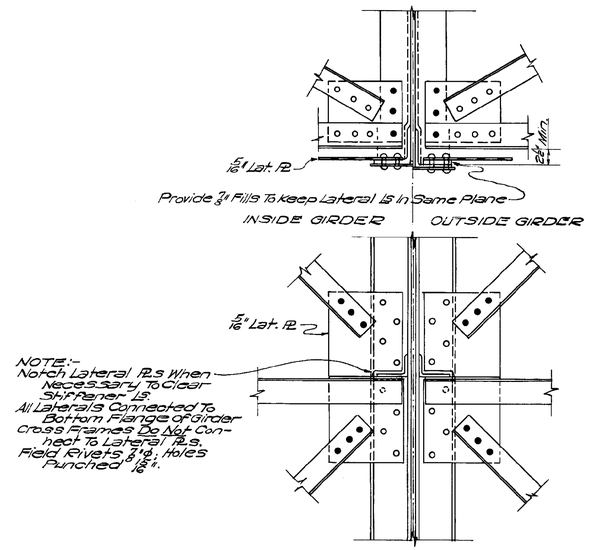
STATE	PROJECT NO.
MISS.	BR-2839-00(020)



HALF ELEVATION AT END OF ANCHOR SPAN WHEN APPROACH SPANS ARE USED

HALF SECTION AT ROCKER PIERS
Showing Thickened Edge Of Slab At Joint.

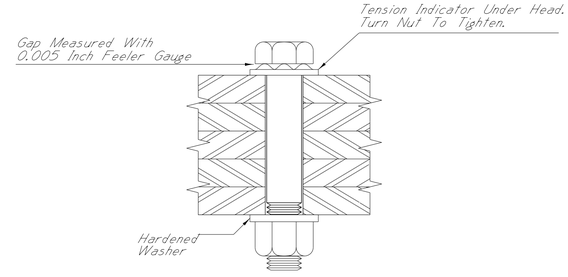


TYPICAL LATERAL CONNECTION

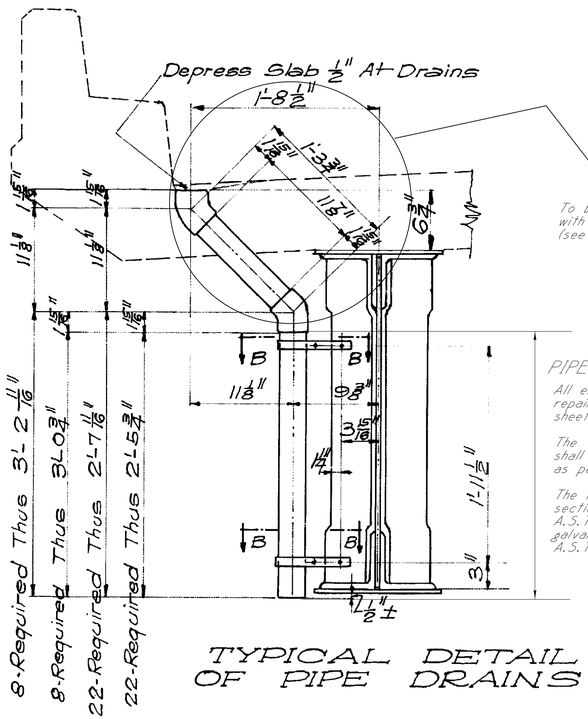
Secondary Members to be Replaced:

1. #2 gusset, span #1, left side of girder #2
2. #3 gusset, span #1, left side of girder #2
3. #3 gusset, span #2, right side of girder #1
4. Cross brace at #3 gusset, span #2, right side of girder #3
5. Lateral brace at #3 gusset, span #2, right side of girder #1
6. East Cross brace at #3 gusset, span #2, right side of girder #1
7. West Cross brace at #3 gusset, span #2, right side of girder #1
8. Cross brace at #3 gusset, span #2, right side of girder #2
9. Cross brace at #5 gusset, span #3, left side of girder #2
10. #5 gusset, span #3, left side of girder #2

** Refer to the information plans for more detail on member sizing, plan views, etc.



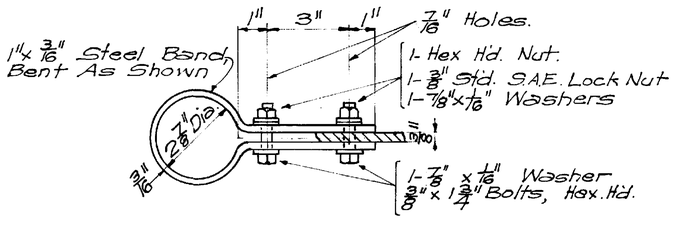
DIRECT TENSION INDICATOR INSTALLATION



TYPICAL DETAIL OF PIPE DRAINS

ENCAPSULATING PAINT NOTES:

1. All pipe drain material designated to be left in place shall be painted with an encapsulating paint designed to encapsulate lead based paints, and applied according to the Manufacturer's recommendations.
2. The Contractor shall provide technical data for the proposed encapsulating paint to be used on this project to the Director of Structures, State Bridge Engineer for approval.
3. The Contractor shall design a containment system to prevent paint from falling into the railway crossings below. The containment system shall be submitted to the Director of Structures, State Bridge Engineer for approval.
4. All pack rust and scale within the designated areas shall be removed by using small hand tools, mechanical process, or needle gun. All areas required to be painted containing grease films after the initial cleaning shall be cleaned with a biodegradable solvent. Existing paint shall be roughened to ensure the new paint will adhere to the existing painted surface. All debris and paint removed from the existing structure shall become property of the Contractor and shall be disposed of properly.
5. New paint shall be applied by hand, with either a brush or roller.
6. Encapsulating paint shall be considered an absorbed item of work under pay item 907-824-M0006, Bridge Repair, Repair and Replace Pipe Drains, Per Plans.



-SECTION-BB-
FOR PIPE DRAIN

SECONDARY MEMBERS NOTES:

1. New members to be fabricated shall be the same or equivalent size as the member being replaced and must fit with the existing structure. The Contractor should be aware that standard fabrication tolerances may cause the new member not to fit. Field measurements should be made so that tolerances may be specified, if required when ordering new members.
2. Shop drawings of new structural steel will be required and shall be submitted to the Director of Structures, State Bridge Engineer for approval prior to beginning work. The Contractor shall be responsible for field measuring the structure and fabricating new steel members that will fit the required repairs.
3. Structural steel removed from the structure shall become the property of the Contractor and its removal from the job site shall be included in the bid price of the repair work.
4. Temporary bracing may be required for installation of members. The Contractor shall submit a temporary bracing plan prior to beginning work to be approved by the Director of Structures, State Bridge Engineer prior to use.
5. To maintain structural integrity and stability, only one member may be replaced at a time. The Project Engineer shall verify that the member and all connections have been successfully installed prior to moving to the next location.
6. Care shall be exercised during installation and removal of the temporary bracing to prevent damage to adjacent members. Any resulting damage shall be repaired to the satisfaction of the Engineer at no cost to the State.
7. The Contractor should be aware that additional minor items of repair work not specifically listed may be necessary to complete the items to be repaired and that compensation therefore will be included in the prices and payments for bid items.
8. Structural steel plates and shapes shall conform to A.S.T.M. designation A709, Grade 50.
9. All steel plates and shapes shall be new.
10. All field connections shall be made with heavy hex structural bolts (A.S.T.M. F3125, Grade A490), heavy hex nuts (A.S.T.M. A194-2H), and hardened washers (A.S.T.M. F436).
11. Nuts shall be tapped oversize the minimum amount required for proper assembly.
12. All thread/hanger bolts shall have washers and jam nuts on both ends.
13. All nuts and washers shall be galvanized in accordance with A.S.T.M. A153.
14. Heavy hex structural bolts shall be coated with a zinc/aluminimum coating in accordance with A.S.T.M. F1136.
15. Direct tension indicators (DTI) shall be used for tension verification and shall meet the requirements of A.S.T.M. F959. Direct tension indicators shall be galvanized by the mechanical process meeting the requirements of A.S.T.M. B695, class 50, coating.
16. Heavy hex structural bolts, nuts, or direct tension indicators shall not be reused after tightening.

PLAN
BRIDGE DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BRIDGE AT STA. 285+96.35

SECONDARY MEMBER REPLACEMENT & PIPE DRAIN REPLACEMENT DETAILS

FMS: 107859 / 301000

COUNTY: LEE

PROJECT NUMBER: BR-2839-00(020)

DATE	REVISION	BY

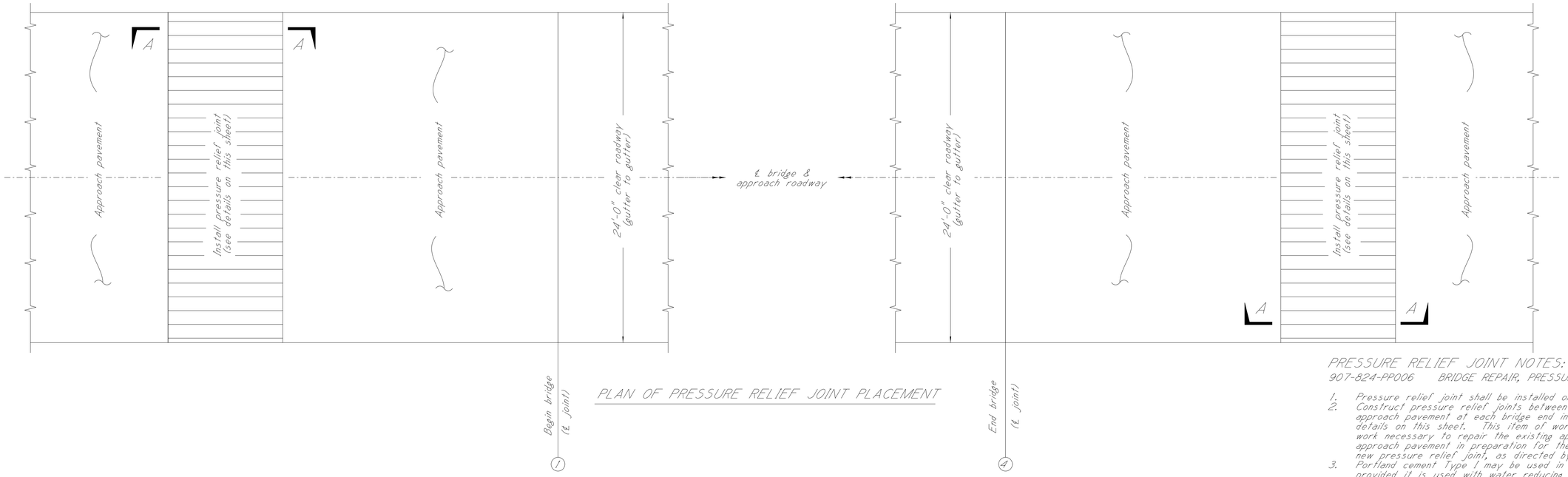
DESIGNER Aaron Cagle CHECKER Chris Duncan
DETAILER Aaron Cagle ISSUE DATE 2018-11-02
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

WORKING NUMBER 3 OF 5

SHEET NUMBER 8004

001: 00AMPM DGNFILENAME

STATE	PROJECT NO.
MISS.	BR-2839-00(020)



PLAN OF PRESSURE RELIEF JOINT PLACEMENT

PRESSURE RELIEF JOINT NOTES:

907-824-PP006 BRIDGE REPAIR, PRESSURE RELIEF JOINT

1. Pressure relief joint shall be installed one lane at a time.
2. Construct pressure relief joints between approach slab and approach pavement at each bridge end in accordance with the details on this sheet. This item of work shall also include the work necessary to repair the existing approach slab or approach pavement in preparation for the placement of the new pressure relief joint, as directed by the Engineer.
3. Portland cement Type I may be used in lieu of Type III provided it is used with water reducing and accelerating admixtures. The usage of admixtures shall be in accordance with manufacturer's instructions.
4. Asphalt mix shall be placed in 1½" maximum lifts and conform to Section 401, 9.5mm MT.
5. Concrete for the reinforced slab shall be class "B"
6. All incidental items of work associated with the installation of the pressure relief joint, included but not limited to, sawcutting, asphalt, tack coat, concrete, and slab reinforcement shall be considered as absorbed under this pay item.
7. The Contractor should be aware that additional minor items of repair work not specifically listed may be necessary to complete the items to be repaired and that compensation therefore will be included in the prices and payments for bid items.
8. 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 shall be paid for per each pressure relief joint.

UNDERSEALING NOTES

1. Voids under end bent caps and approach pavement are to be filled with injectable urethane compound material meeting the required properties below.
2. Prior to injection, the site shall be prepared according to Manufacturer's recommendations. Urethane compound shall be installed in strict accordance with Manufacturer's instructions.
3. All costs associated with filling voids underneath and behind end bent caps with urethane compound shall be included in the price for Undersealing.
4. The accepted quantities will be paid for per pound of urethane compound material as reported on packaging.

REQUIRED URETHANE COMPOUND PROPERTIES		
PROPERTY	MINIMUM REQUIREMENT	ASTM TEST METHOD
Density	4.0 pcf	D 1622
Tensile Strength	90 psi	D 1622
Compressive Strength	80 psi	D 1621

BRIDGE CONCRETE MAT NOTES

1. Bridge concrete mat shall be used for erosion and scour prevention for the abutment slopes at bents 1 and 4. Bridge concrete mats shall be one of the following:

   ARMORFLEX
   CONTECH ENGINEERING SOLUTIONS
   www.conteches.com/products/erosion-control/hard-armor/armorflex

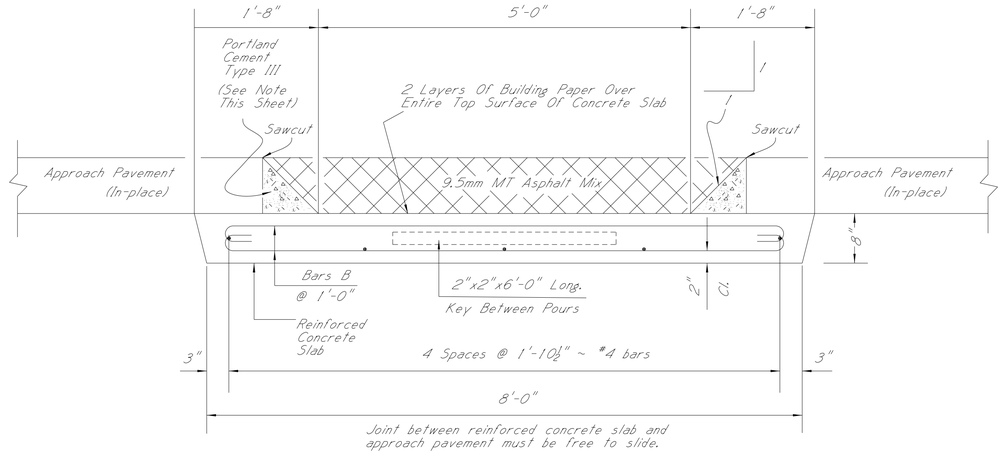
   SHOREBLOCK BD
   SHORETEC, LLC
   www.shoretec.com/shoreblock-bd.php

   CABLE CONCRETE
   INTERNATIONAL EROSION CONTROL SYSTEM INC.
   www.iecs.com/cable-concrete/

2. The mat shall be visually inspected and approved by the Project Engineer prior to use. Once approved by the Engineer, the mat may be incorporated into the work.
3. Bridge concrete mats shall be installed in accordance with the plans and manufacturer's guidelines including any underlayment. The anchor system shall be sufficient to anchor the mat to the ground surface. The installation area shall be graded to a level, smooth surface to avoid water concentration and to create an appropriate base for the concrete mat.
4. Bridge concrete mat installed directly under the bridge deck shall be open cell filled with crushed limestone for ease during future bridge inspections.
5. A representative from the bridge concrete mat manufacturer shall be present for sufficient time to assure that the contractor is properly schooled in the installation.
6. Bridge concrete mat will be paid for at the contract unit price per square yard, which price shall be full compensation for all labor, materials, tools, equipment, underlayment, anchor system, concrete, and all incidentals necessary to complete the work.
7. All obstructions, vegetation, and irregularities in the embankement shall be graded and restored to the slope grading specified by the original plans.

SITE GRADING FOR BRIDGE CONCRETE MAT

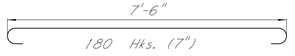
All obstructions, vegetation, and irregularities in the embankement shall be graded and restored to the slope grading specified by the original plans. This item of work shall be paid for in square yards using Pay Item No. 203-1002, Site Grading.



Joint between reinforced concrete slab and approach pavement must be free to slide.

SECTION A-A

Showing typical section of pressure relief joint. Install at each bridge end across full width of approach roadway



BAR B ~ #5

BAR BENDING DETAILS

Dimensions Are Out To Out

PLAN
BRIDGE DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

001.00AMPM DGNFILENAME

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BRIDGE AT STA. 285+96.35

PRESSURE RELIEF JOINT, BRIDGE CONCRETE MAT, & UNDERSEALING DETAILS

FMS: 107859 / 301000

COUNTY: LEE

PROJECT NUMBER: BR-2839-00(020)

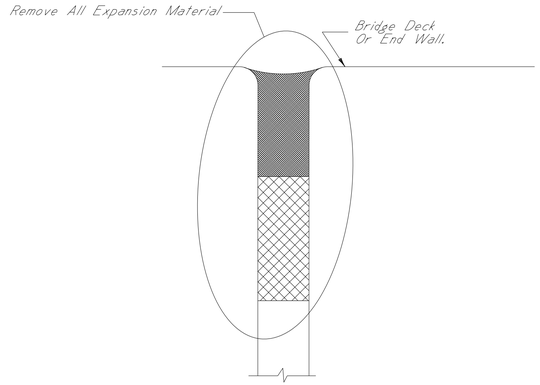
DATE	REVISION	BY

DESIGNER Aaron Cagle CHECKER Chris Duncan
DETAILER Aaron Cagle ISSUE DATE 2018-11-02
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

WORKING NUMBER 4 OF 5

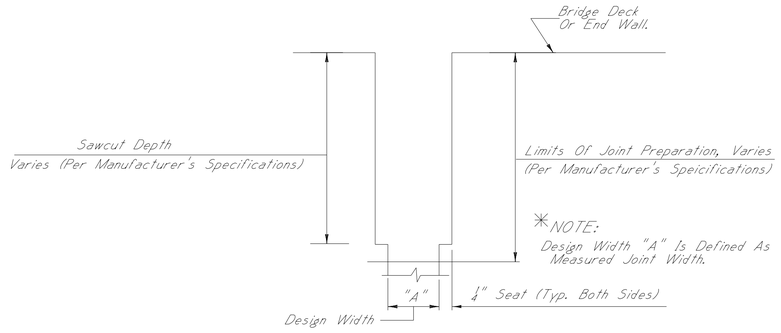
SHEET NUMBER 8005

STATE	PROJECT NO.
MISS.	BR-2839-00(020)



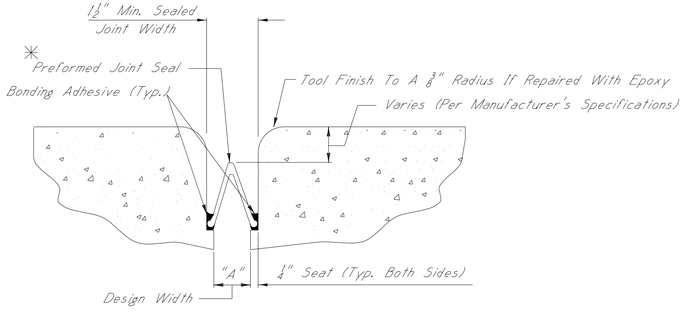
TYPICAL SECTION AT EXISTING JOINT

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



TYPICAL SECTION AT JOINT AFTER REMOVAL OF EXISTING SEAL AND SAWCUT

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



TYPICAL SECTION AT SAWCUT & SEALED JOINT

Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

✳NOTES:

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

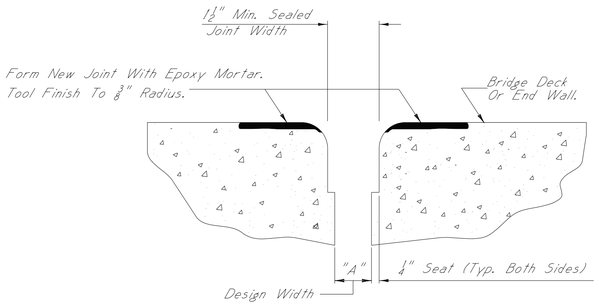
   A. Silicoflex Joint Sealing System
   Manufactured By R.J. Watson, Inc. In Alden, NY
   www.rjwatson.com

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

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

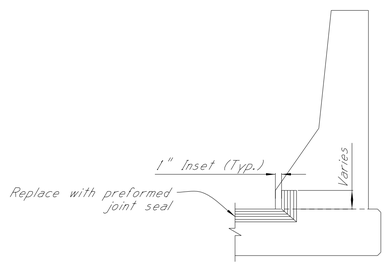
2. For Estimating Purposes, The RJ Watson Silicoflex Joint Sealing System Was Selected. However, Should Another Supplier Be Chosen, It Is The Contractor's Responsibility To Ensure That The Manufacturer's Recommendations Are Followed For Joint Preparation, Installation Depths And Widths, Adhesive Setting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

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



TYPICAL SECTION AT SAWCUT & JOINT REPAIR

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



ELEVATION AT END OF SPAN

✳NOTES:

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

SLIDING PLATE JOINTS:

It should be noted that the sliding plate joints on this bridge shall be left as is. No work shall be perform on these bridge elements.

NOTES ON ASSOCIATED ITEMS OF WORK:

907-808-A002 JOINT REPAIR

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

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

907-823-B001 SAW CUT, TYPE I & 907-823-B002 SAW CUT, TYPE II

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

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

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

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

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

EPOXY MORTAR AND POLYMER CONCRETE NOTES:

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

GENERAL NOTES:

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

DEPARTMENT OF TRANSPORTATION MISSISSIPPI

BY

REVISION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BRIDGE AT STA. 285+96.35

JOINT REPAIR DETAILS

FMS: 107859 / 301000

COUNTY: LEE

PROJECT NUMBER: BR-2839-00(020)

WORKING NUMBER 5 OF 5

SHEET NUMBER 8006

DATE

DESIGNER Aaron Cagle CHECKER Chris Duncan

DETAILER Aaron Cagle ISSUE DATE 2018-11-02

DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

STATE	PROJECT NO.
MISS.	

12673

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

NO
SUMMARY OF QUANTITY
NOR
RECAP SHEETS

REVISIONS BY

DATE

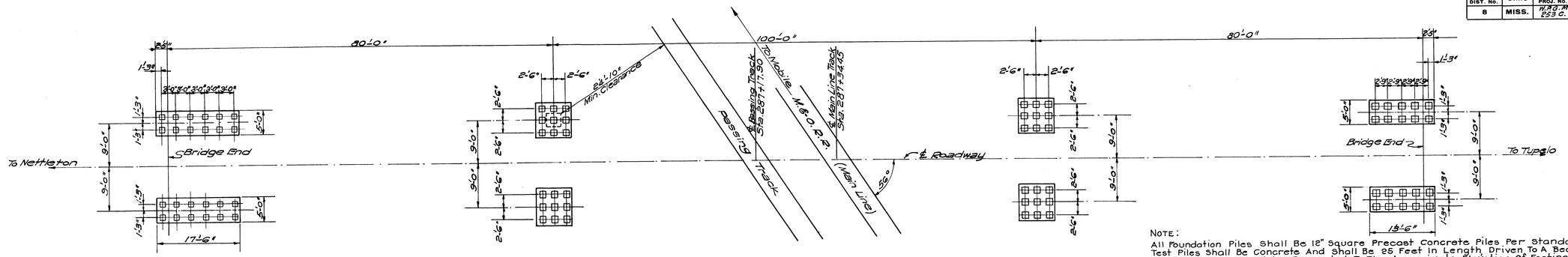
DESIGNED _____ DETAILED _____ TRACED _____

CHECKED _____ ISSUED _____ DATE _____

WORKING NUMBER

SHEET NUMBER

FED. ROAD DIST. No.	STATE	U.S.W.P.G.O. PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
8	MISS.	W.P.G.M. 253 C.	19	I	



FOUNDATION PLAN

NOTE:

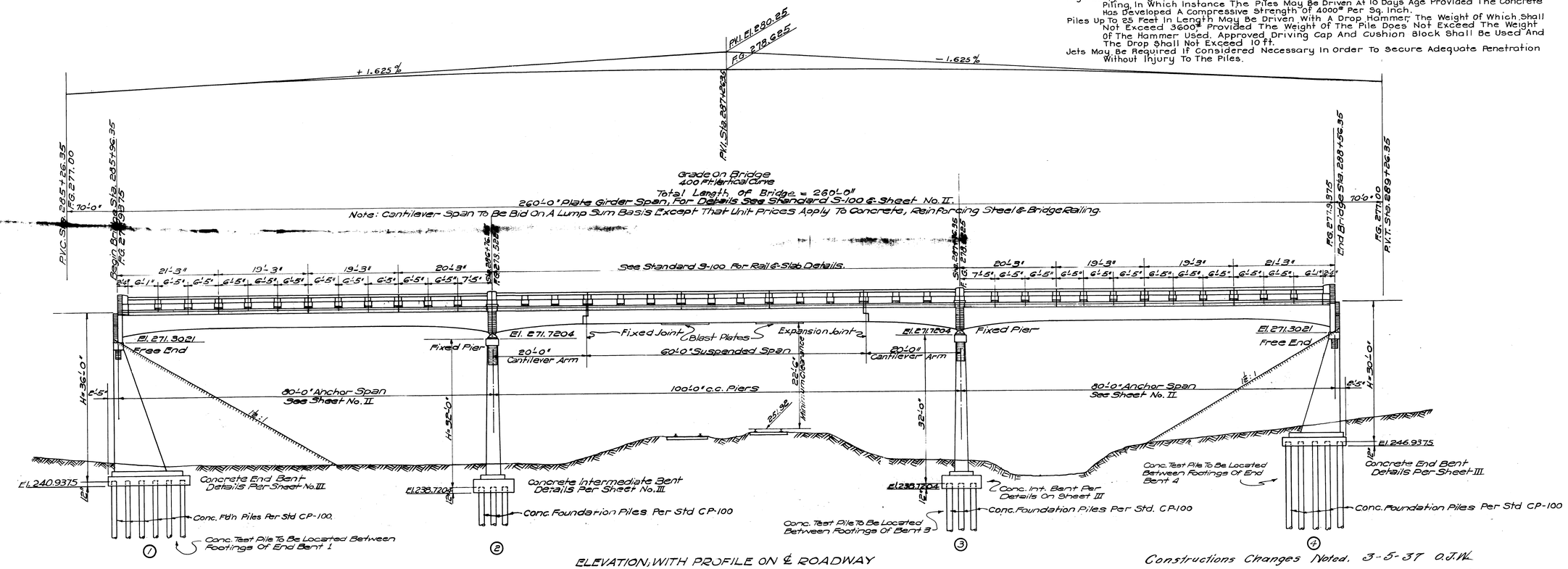
All Foundation Piles Shall Be 12" Square Precast Concrete Piles Per Standard CP-100.

Test Piles Shall Be Concrete And Shall Be 25 Feet In Length, Driven To A Bearing Capacity Of 20 Tons In Holes Excavated To The Approximate Elevation Of Footings As Shown On The Plans, And In Such Manner As To Be Representative Of Actual Driving Conditions Of The Permanent Piles.

High Early Strength Cement Conforming To Specification Requirements May Be Used In The Piling, In Which Instance The Piles May Be Driven At 10 Days Age Provided The Concrete Has Developed A Compressive Strength Of 4000# Per Sq. Inch.

Piles Up To 25 Feet In Length May Be Driven With A Drop Hammer, The Weight Of Which Shall Not Exceed 3600# Provided The Weight Of The Pile Does Not Exceed The Weight Of The Hammer Used. Approved Driving Cap And Cushion Block Shall Be Used And The Drop Shall Not Exceed 10 ft.

Jets May Be Required If Considered Necessary In Order To Secure Adequate Penetration Without Injury To The Piles.



ELEVATION; WITH PROFILE ON ℄ ROADWAY

Constructions Changes Noted. 3-5-37 O.J.W.

ESTIMATED QUANTITIES						
Unit	Class "B" Bridge Conc. Cu. Yds.	Reinforcing Steel Lbs.	Steel Superstructure Units	Conc. Found'n Piling Lin. Ft.	Bridge Railing Lin. Ft.	Test Pile Units.
Spans	229.0	37,500	1 Unit		520	3
Piers 2 & 3	70.4	10,600		432		
End Bents	111.2	13,900		696		
Totals	410.6	62,000	1 Unit	1128	520	3

GENERAL NOTES:—

Standard Plans & Specifications Of The Mississippi State Highway Dep't Are To Apply.

No Unauthorized Change Of Plans Will Be Permitted.

Bar Lists Of Reinforcing Steel & Shop Drawings Of Structural Steel Shall Be Submitted To The Bridge Dep't For Approval Before Fabrication.

The Concrete Substructure For This Bridge Must Be Completed Before Work On The Spans Is Begun, Unless Written Permission Is Secured From The Engineer.

Foundation Elevations Are Subject To Change.

Railing & Curb Must Be Built Exactly On Alignment & Grade.

First Field Coat Of Paint To Be Per Code B-2; Final Field Coat Per Code B-A (Aluminum)

Erection Of Track Span, & Construction Of Piers 2 & 3 Shall Conform To Requirements Of The Railroad Company & Shall Not Interfere With Traffic.

Form Lumber For Concrete Deck Shall Be In Accordance With Std. S-100.

All Concrete Shall Be Class "B", Except For Railing & Piling Which Shall Be Class "A".

Backfill At End Bents To Be Placed Prior To Erection Of Steel.

REVISIONS

Date	Description	By
12-30-35	Creo. Fd'n Piling Changed To Conc.	E.L.E.

Drawn 11-8, 1935 by G.W.
Traced 11-11, 1935 by L.B.R.
Checked ______, 19___ by ______

Standard Plans Required: 5100 (Five Sheets). CP-100

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE AT STA. 285+96.35

OVER M.&O.R.R.
AT SHANNON
W.P.G.M. 253C

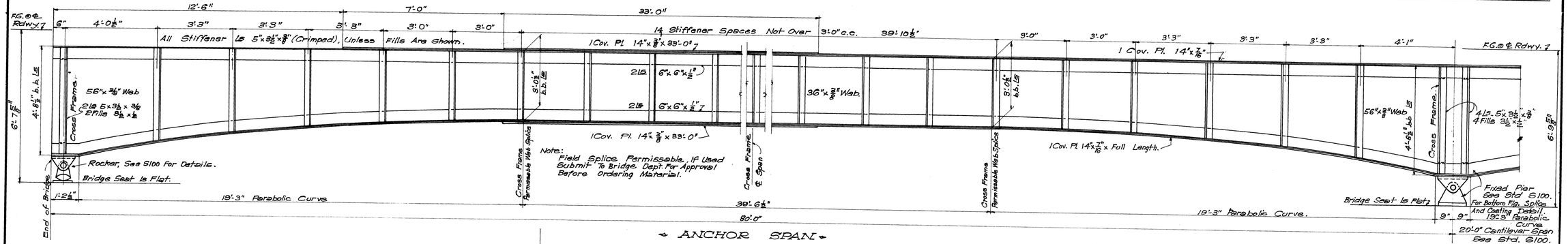
LEE COUNTY

Submitted by C. S. Hill
BRIDGE ENGINEER

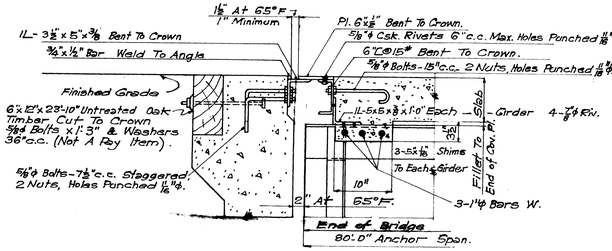
1 of 3

12673

FED. ROAD DIST. No.	STATE	USW P&M PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
8	MISS.	W P & M 253-C.	19	II	

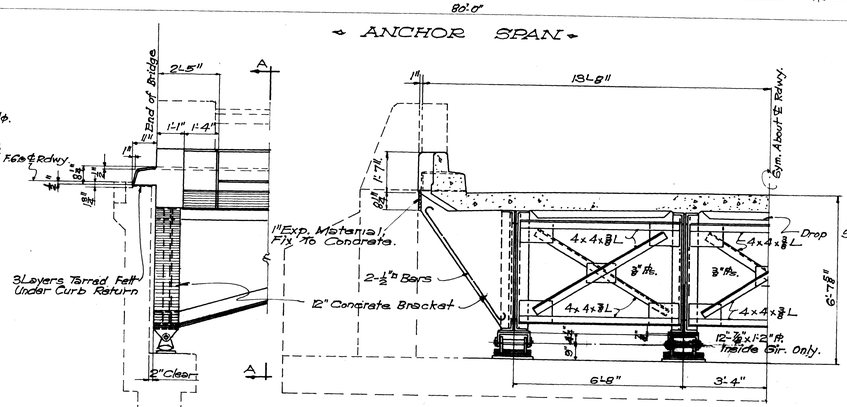


ANCHOR SPAN



DETAIL AT ENDS OF BRIDGE

Note To Steel Erector: Parts Of Expansion Material Which Will Be Inaccessible After Erection Shall Be Painted Two Field Coats Before Erection.

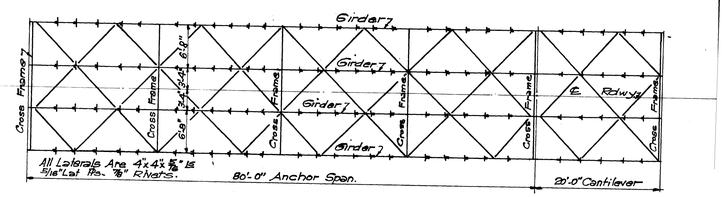


ELEVATION END OF ANCHOR SPAN

End Bent & Rail Removed.

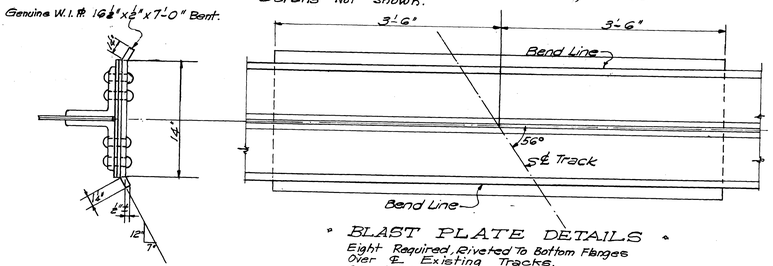
HALF SECTION "AA"

Section From Bridge Side At End Of Bridge See Std S100 For Details.



LATERAL BRACING

Bracing Shown For Anchor & Cantilever Spans; See Std. S100 Sheet 4, For Other Bracing And For Details Not Shown.

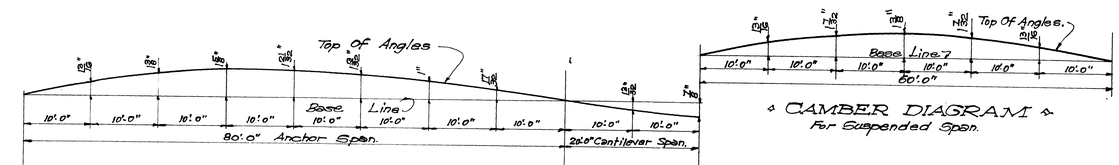


BLAST PLATE DETAILS

Eight Required, Riveted To Bottom Flanges Over ℄ Existing Tracks.
Genuine Wrought Iron Rivets Required For Blast Plates.

GENERAL NOTES:

Standard Plans And Specifications Of The Mississippi State Highway Dept. As Adopted Mar 15, 1934. To Apply. For Details And Notes Not Shown On This Sheet See Std. S100.
Cost Of Blast Plates To Be Included In Lump Sum Price Bid For Steel Superstructure.

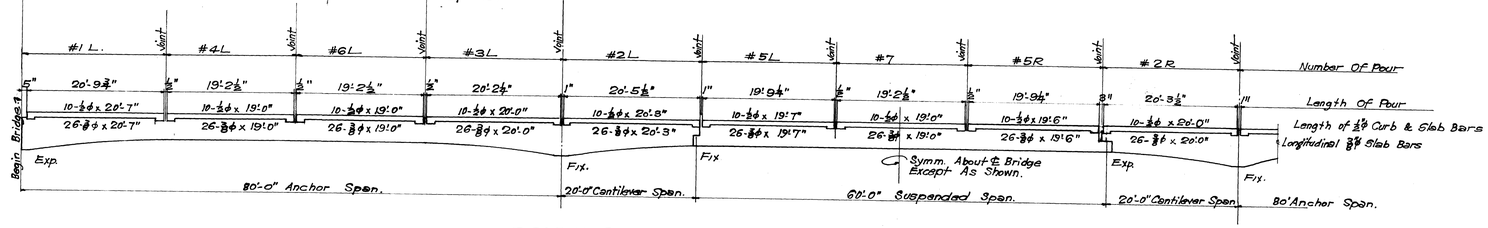


CAMBER DIAGRAM

For Anchor & Cantilever Spans.

CAMBER DIAGRAM

For Suspended Span.



POURING DIAGRAM FOR SLAB

Sketch Shows Order Of Pours And Types Of Joints Required, For Details Of Joints See Std. S100 Sheet 3. Both Right And Left Pours 1, 2, 3, 4, 5 & 6 Shall Be Poured Before Pour 7.

By	Description	Date
	REVISIONS	

Drawn 11-9, 1935 by Dr.
Traced 11-11, 1935 by Dr.
Checked ____, 19__ by ____

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE AT STA. 285 + 96.35
OVER M. & O. R. R.
AT SHANNON

W.P.G.M. 253-C

LEE COUNTY

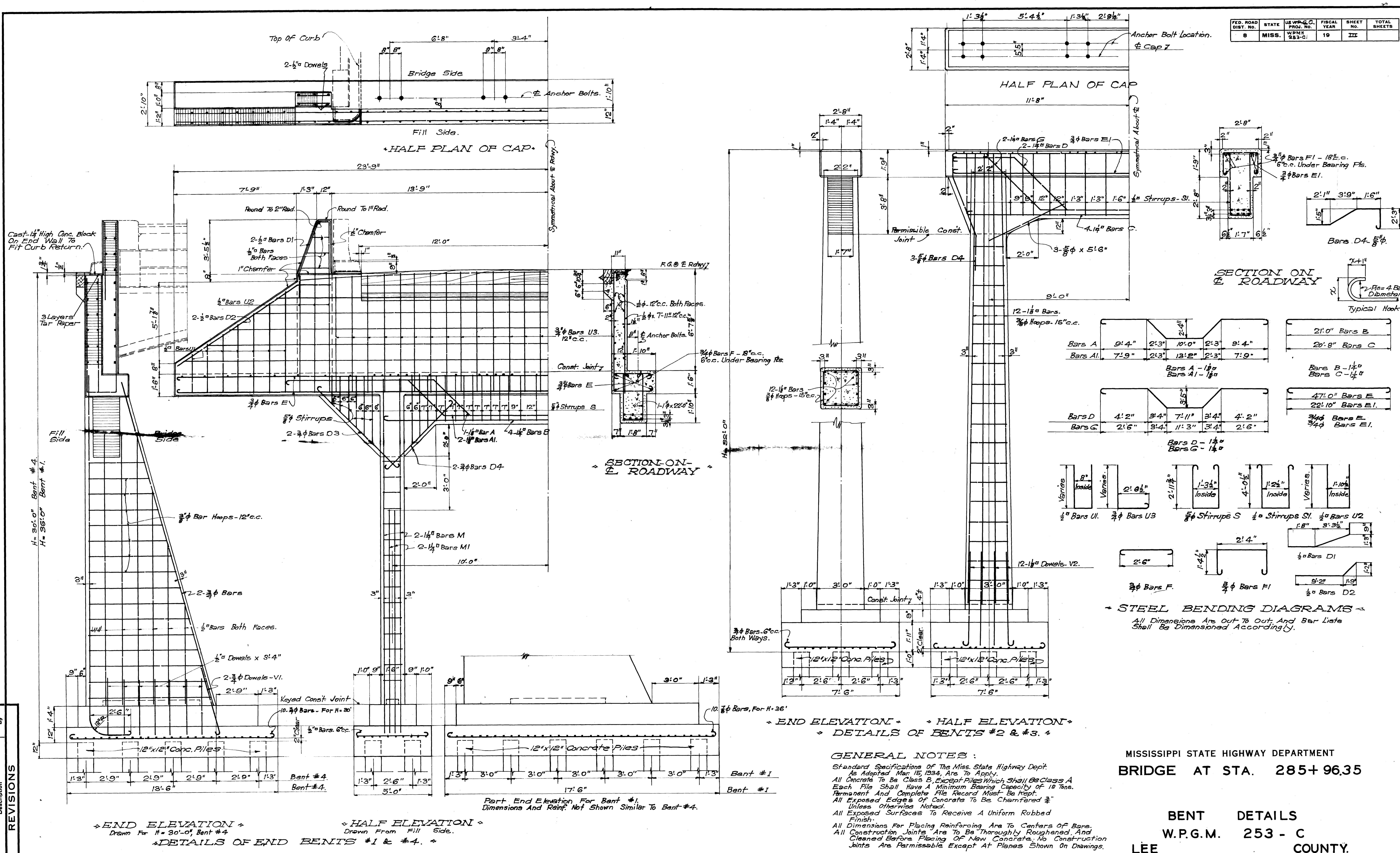
Submitted by ____ BRIDGE ENGINEER

2 of 3

12673

PRINTED ON "IMPERIAL" TRACING CLOTH K & E CO., N.Y.

FED. ROAD DIST. No.	STATE	US ~~WPGC~~ G.C. PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
8	MISS.	WPMH 253-C	19	III	



GENERAL NOTES:

Standard Specifications Of The Miss. State Highway Dept. As Adopted Mar. 15, 1934, Are To Apply.
All Concrete To Be Class B, Except Piles Which Shall Be Class A
Each Pile Shall Have A Minimum Bearing Capacity Of 18 Tons.
Permanent And Complete Pile Record Must Be Kept.
All Exposed Edges Of Concrete To Be Chamfered ¾" Unless Otherwise Noted.
All Exposed Surfaces To Receive A Uniform Rubbed Finish.
All Dimensions For Placing Reinforcing Are To Centers Of Bars.
All Construction Joints Are To Be Thoroughly Roughened, And Cleaned Before Placing Of New Concrete. No Construction Joints Are Permissable Except At Planes Shown On Drawings.

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE AT STA. 285+96.35

BENT DETAILS

W.P.G.M. 253 - C

LEE COUNTY.

Submitted by ______________ BRIDGE ENGINEER

3 of 3

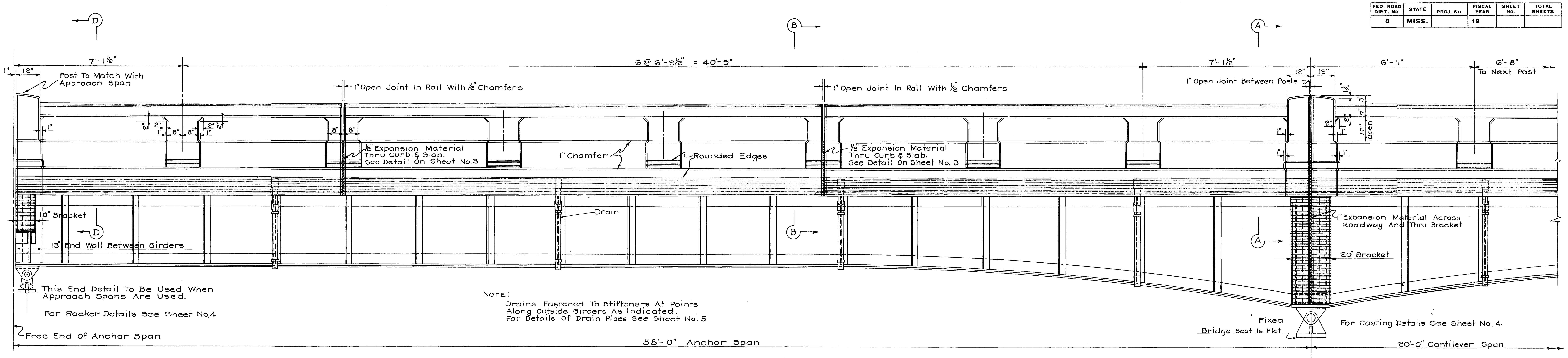
12673

REVISIONS

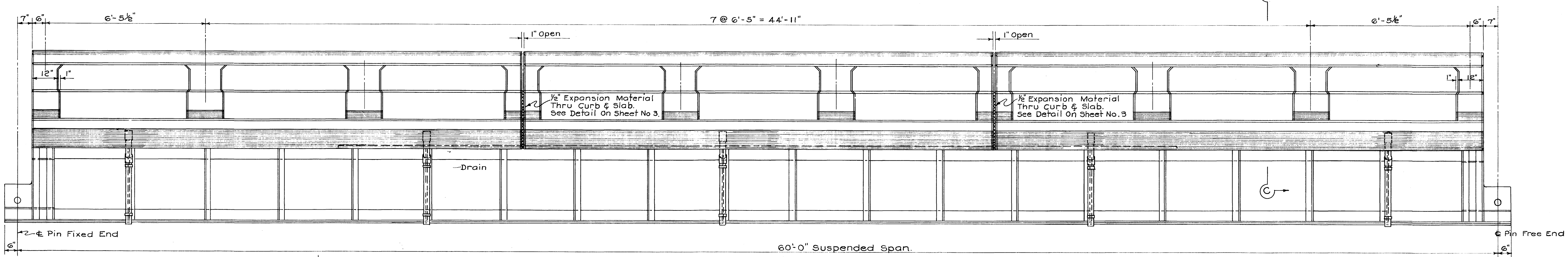
Date	Description	By
12-4-35	Wing Walls. Bars E & Bars D2	Sm.

Drawn 11-5 1935 by ___
Traced 11-14 1935 by ___
Checked ___ 19___ by ___

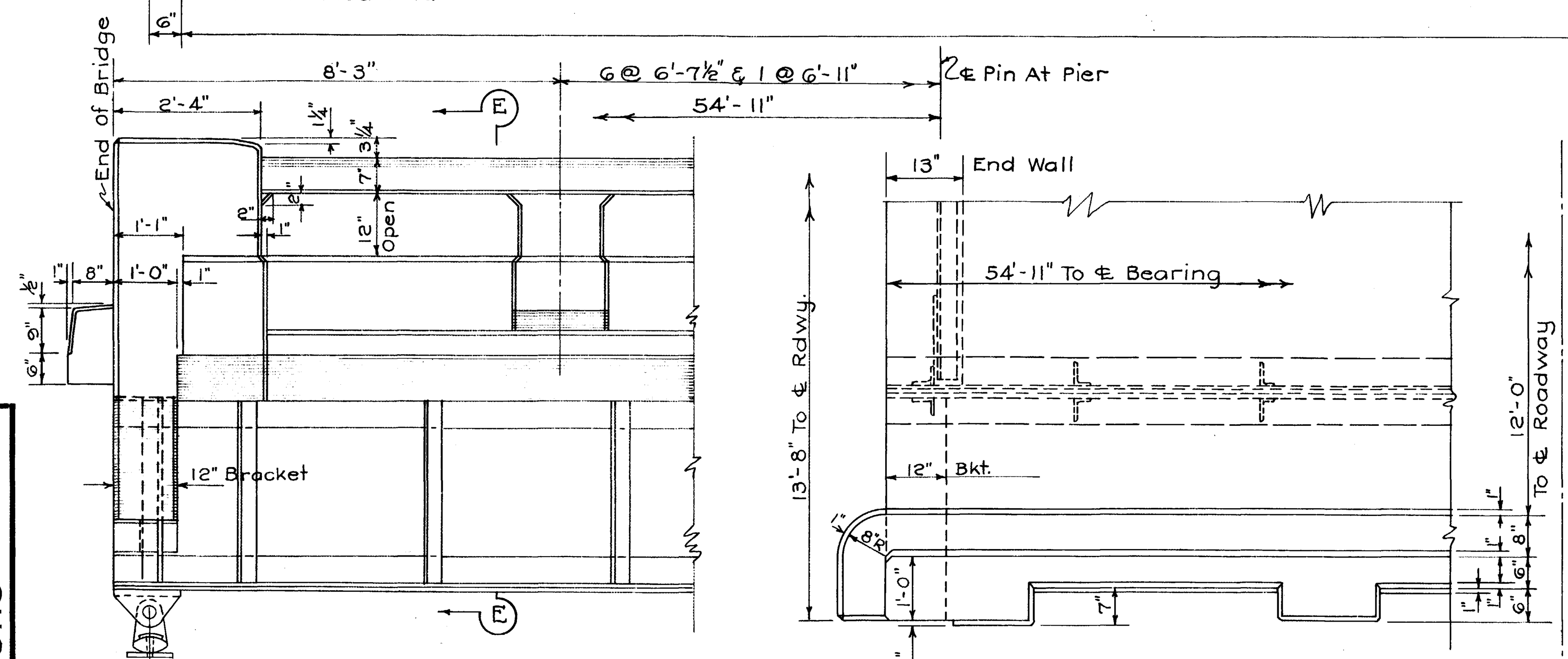
FED. ROAD DIST. No.	STATE	PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
8	MISS.		19		



ELEVATION ~ ANCHOR SPAN & PORTION OF CANTILEVER SPAN
To Be Set On 0.5% Grade

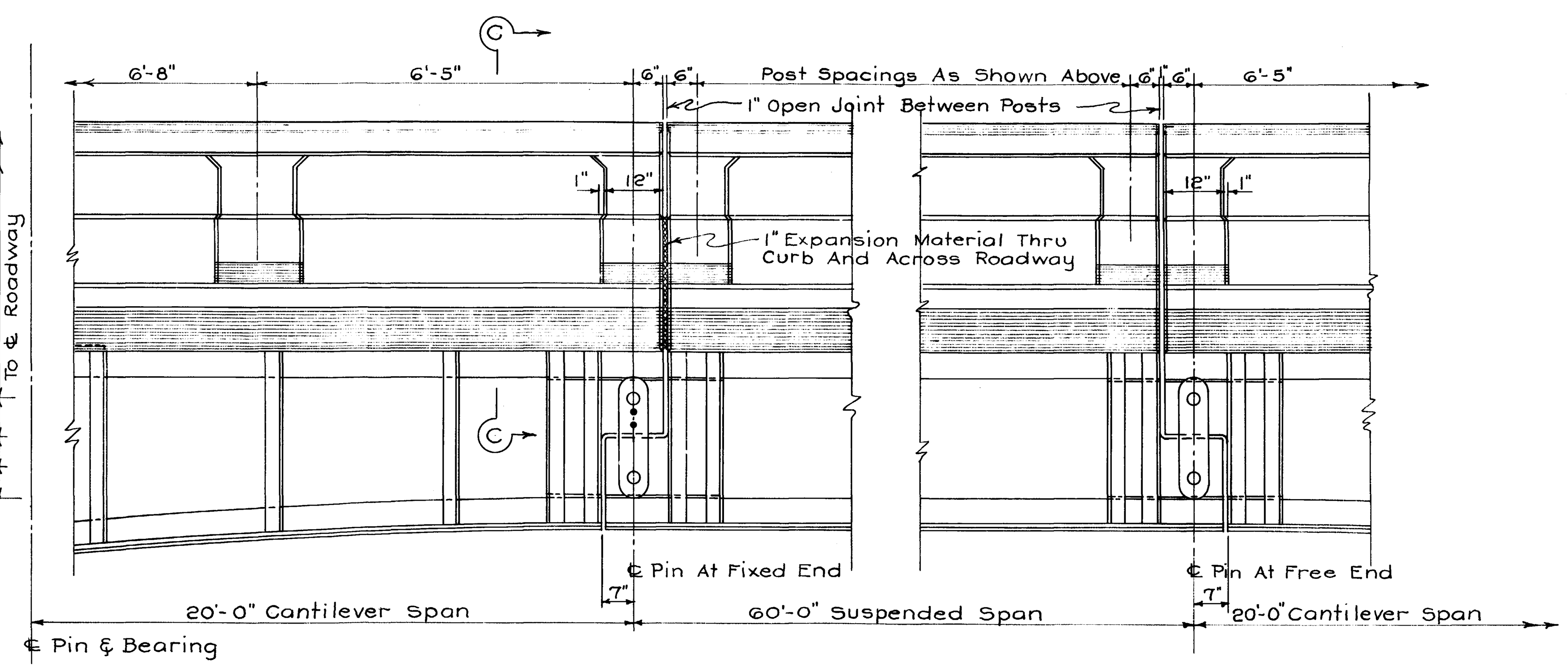


ELEVATION ~ SUSPENDED SPAN



BRIDGE END DETAILS
To Be Used When End Of Anchor Span Is End Of Bridge

PART PLAN OF SPAN
To Be Used When End Of Anchor Span Is End Of Bridge



ELEVATION ~ PORTION OF CANTILEVER SPAN

GENERAL NOTES:

Standard Specifications Of The Mississippi State Highway Dept. As Adopted March 15, 1934, Are To Apply.
Concrete In Span To Be Class "B", In Rail, Class "A".
All Exposed Concrete Surfaces To Receive A Uniform Rubbed Finish.
All Exposed Concrete Edges To Be Chamfered ½" Unless Otherwise Noted.
Shop Drawings Of Structural Steel And Bar Lists Of Reinforcing Steel Shall Be Submitted To The Bridge Dept For Approval Before Fabrication.
Exposed Concrete Construction Joints To Be Neatly Made And Carefully Finished So As Not To Show.
Forms For Concrete To Be Supported On Girders Which Shall Be Swung Free Of Falsework Before Placing Concrete.
Form Lumber For All Exposed Surfaces To Be 1¼" Thick-Minimum.

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE STANDARD

210'-0" CANTILEVER GIRDER SPAN

Submitted by [signature] BRIDGE ENGINEER

Sheet 1 of 5

S-100

REVISIONS

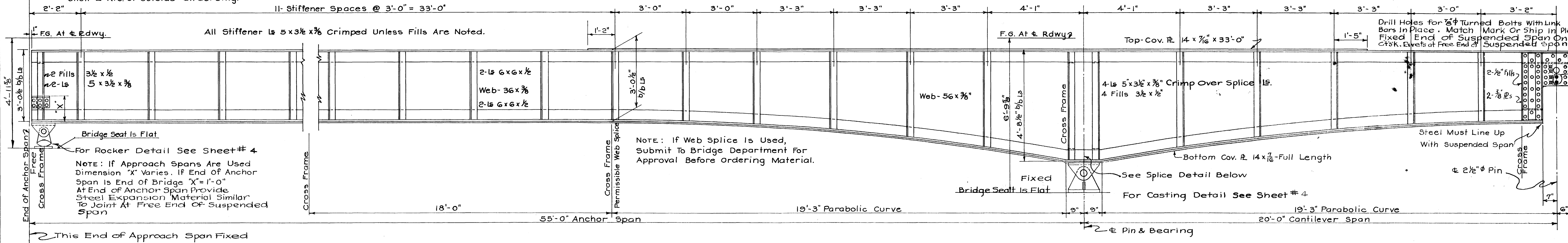
Date	Description	By
11-4-35	Bearing Details	E.L.E.
1-22-36	Drain Pipes	S.W. & E.E.

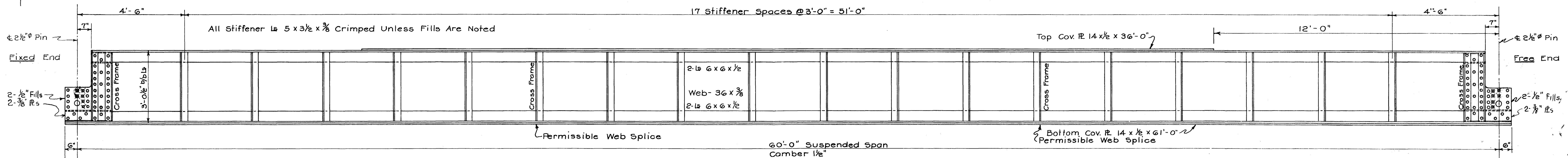
Drawn Feb. 11, 1935 by [signature]
Traced 5-24, 1935 by E.L.E.
Checked ____, 19__ by ____

FOR INFORMATION ONLY: PROJECT NO. BR-2839-00(020) REVISED SHEET NO: 8011

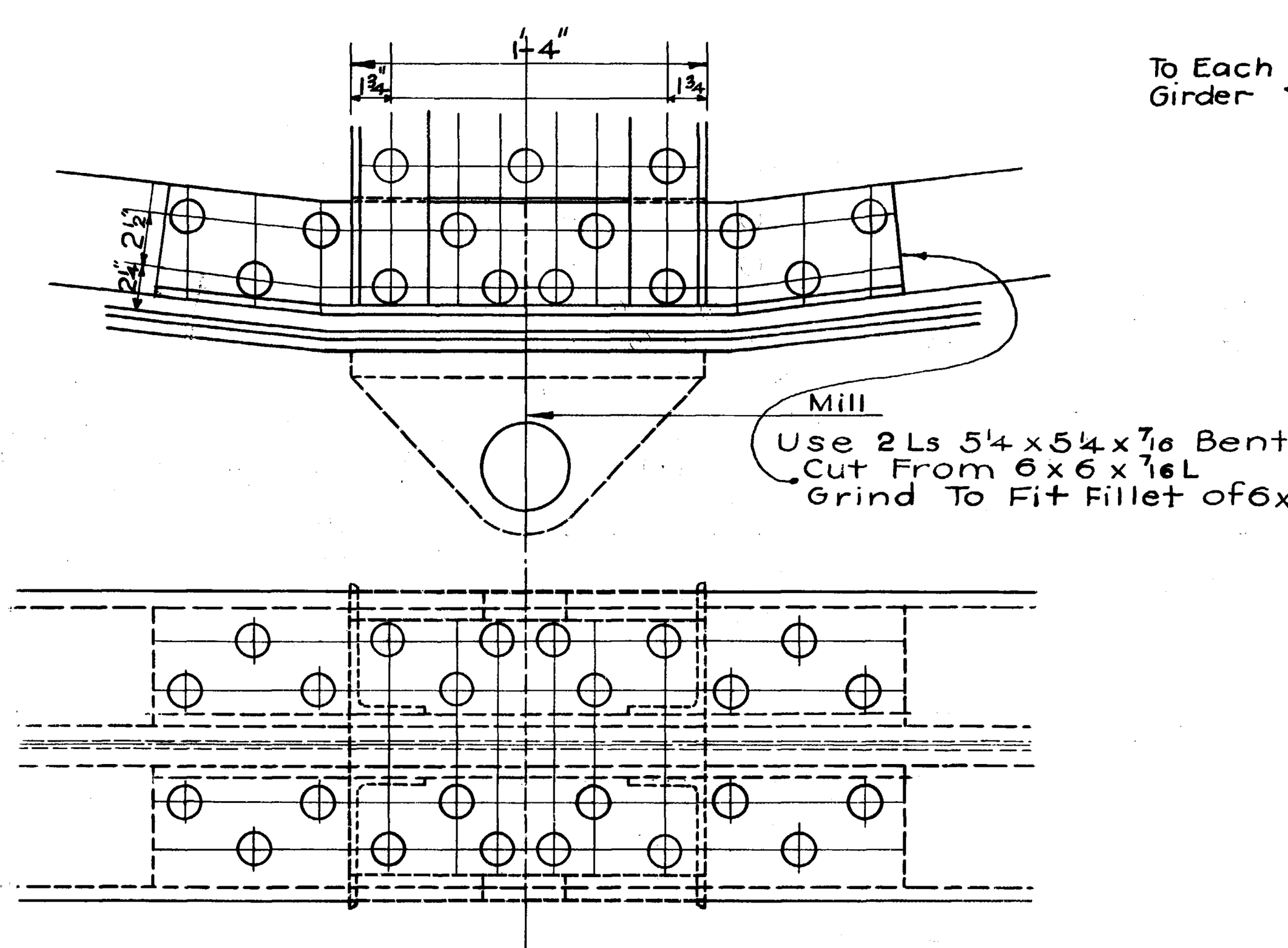
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS.		19		

Shelf Ls 6x6x⅜ Cut So That O.S. Leg Will Be 4¾" From ℄ Gird.
Provide Necessary Fills.
Shelf Ls N.S. Of Outside Girds. Only.

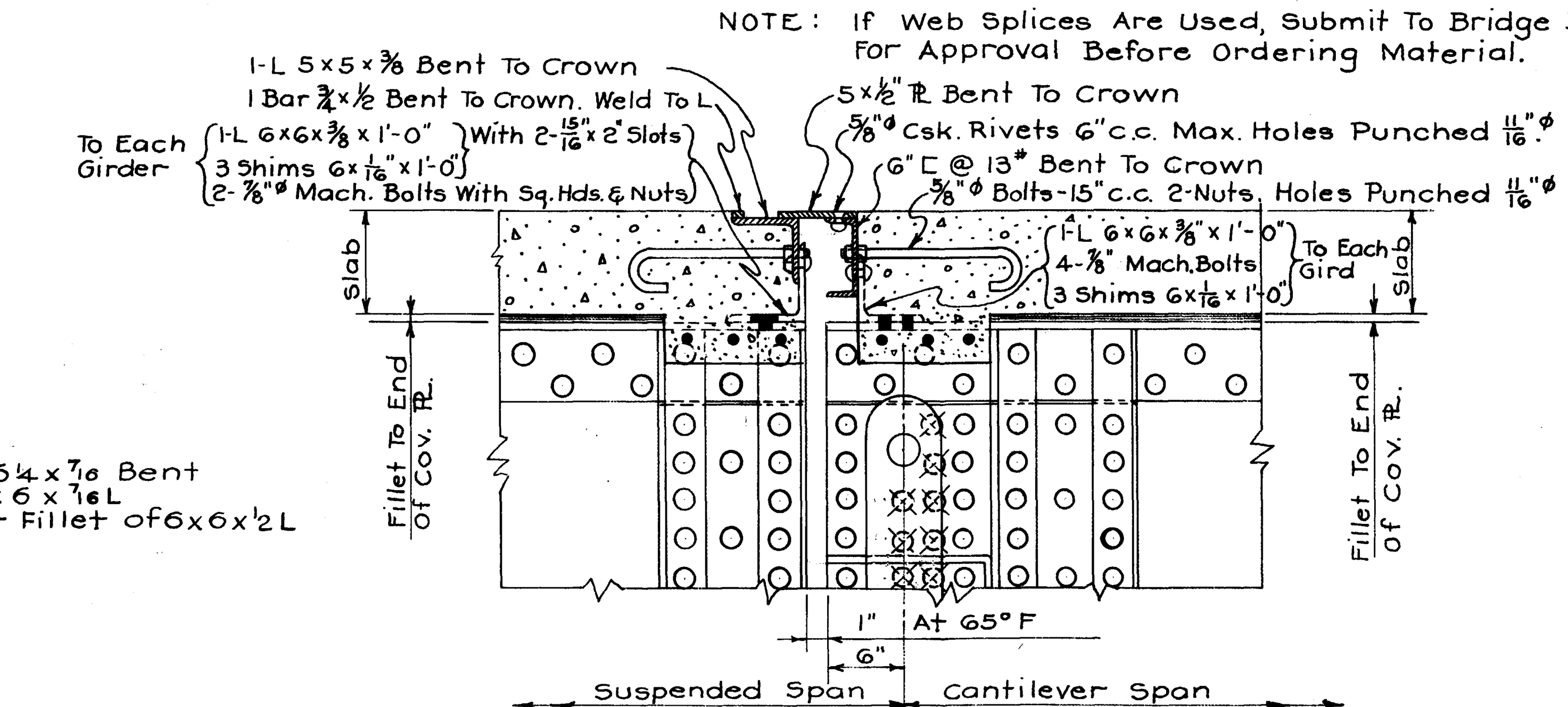




Note: If Web Splices Are Used, Submit To Bridge Department For Approval Before Ordering Material.

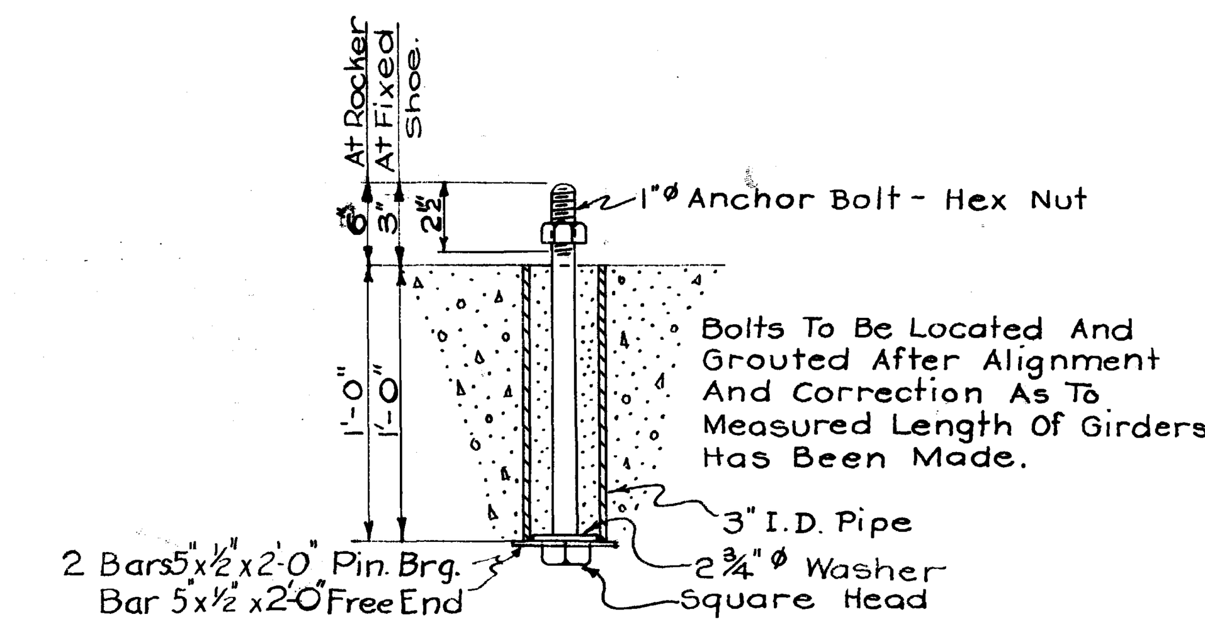


FLANGE SPLICE DETAIL

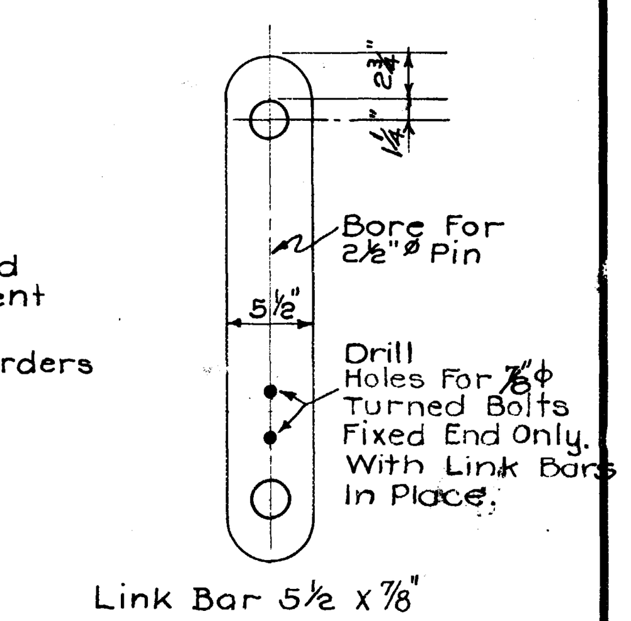


EXPANSION JOINT DETAIL

Note: Parts of Expansion Material Which Will be Inaccessible After Erection Shall be Painted TWO Field Coats Before Erection.



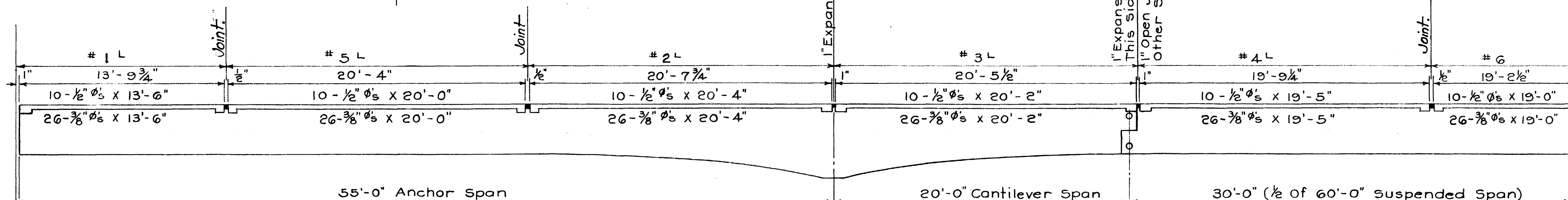
DETAIL OF ANCHOR BOLT SETTING



LINK BAR DETAIL

NOTE TO STEEL ERECTOR:
Link Bars And Area Of Girders, Covered By Link Bars To Be Painted Two Field Coats Before Erection.

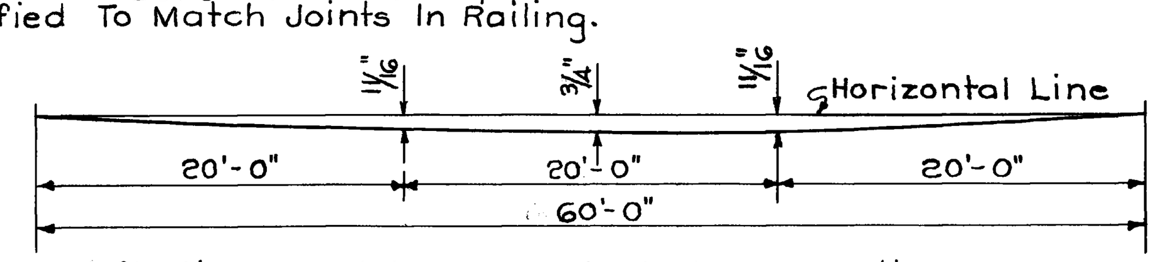
STRUCTURAL STEEL NOTES:-
Shop Rivets ⅞"ϕ; Holes Punched 15/16"ϕ Unless Otherwise Noted.
Field Connections ⅞"ϕ Rivets. Holes Punched 15/16"ϕ Unless Noted.
Holes In Material Over ¾ Thick To Be Sub-Punched And Reamed Or Drilled From Solid.
Stiffener Ls To Be Neatly Fitted At Ends.
Re-entrant Cuts To Be Filleted Before Cutting.
Shop Paint - One Coat- Code RL; First Field Coat - Code B-2; Second Field Coat - Code BA (Aluminum).
Entire Structure To Be Assembled In Shop And Match Marked.
Shop Drawings To Be Submitted To Bridge Department For Approval Before Fabrication.



When End Of Anchor Span Is End Of Bridge, Length Of Pours In Anchor Span To Be Modified To Match Joints In Railing.

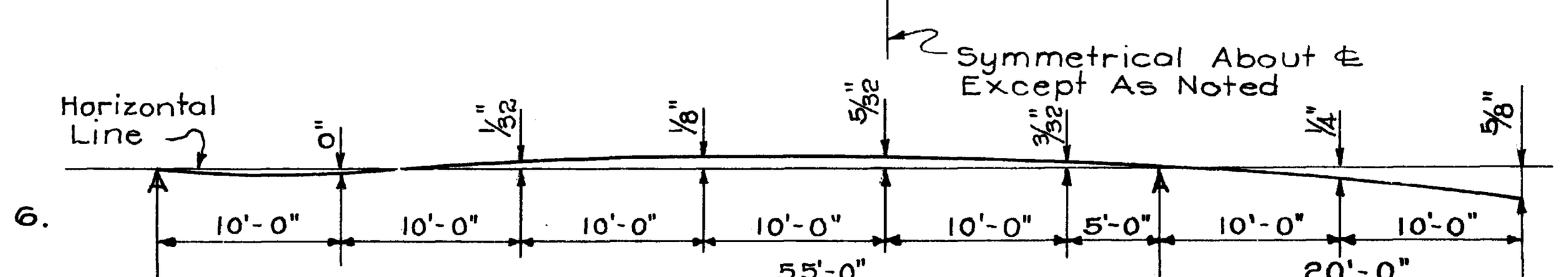
~POURING DIAGRAM FOR SLAB~

Sketch Shows Order Of Pours And Types Of Joints Required.
For Details Of Joints See Sheet #3
Both Right And Left Pours 1, 2, 3, 4 And 5 Shall Be Poured Before Pour 6.



Deflection For Slab Load Only. Make Corrections From Actual Profile Of Girders For Setting Headers.

~FLOOR LOAD DEFLECTION- SUSPENDED SPAN~



Deflection For Slab Load Only. Make Correction From Actual Profile Of Girders For Setting Headers.

FLOOR LOAD DEFLECTION - ANCHOR & CANT. SPANS.

REVISIONS

Date	Description	By
9-1-36	Floor Load Deflection Curve	A.G.J.
4/22/35	Paint Note for Expansion Mat'l	
	Pouring schedule, Link Bar Detail	
11/1/35	Bottom Flg. Splice, Cast Steel Rockers	

Drawn Feb. 21, 1935 by [signature]
Traced 5-27, 1935 by E.L.F.
Checked ______ 19____ by ______

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE STANDARD

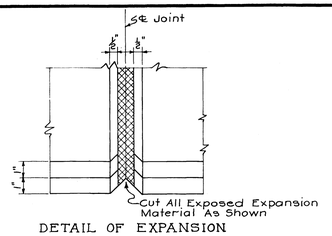
210'-0" CANTILEVER GIRDER SPAN

Sheet 2 of 5

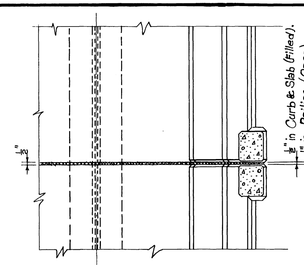
Submitted by ______ BRIDGE ENGINEER

S-100

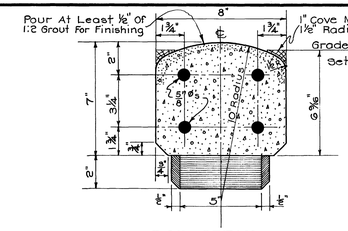
FOR INFORMATION ONLY: PROJECT NO. BR-2839-00(020) REVISED SHEET NO: 8012



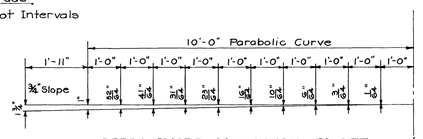
DETAIL OF EXPANSION MATERIAL JOINT



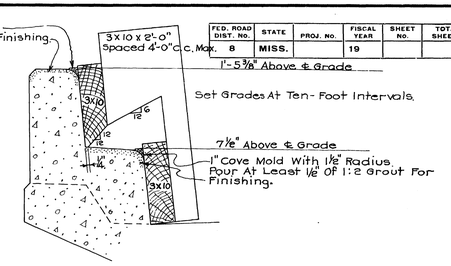
SECTION F-F



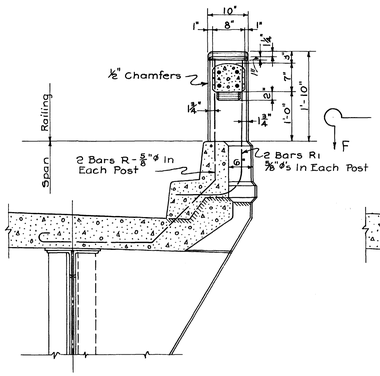
RAIL DETAIL
SCALE 3" = 1'-0"



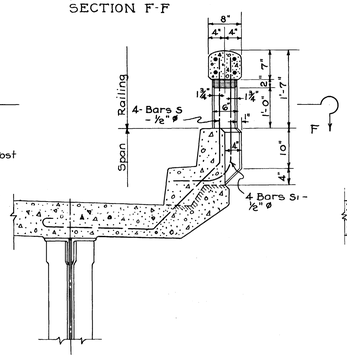
APPROXIMATE GROWN TEMPLATE



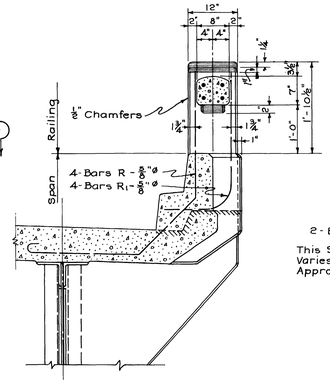
CURB FORM DETAILS
Scale : 1½" = 1'-0"



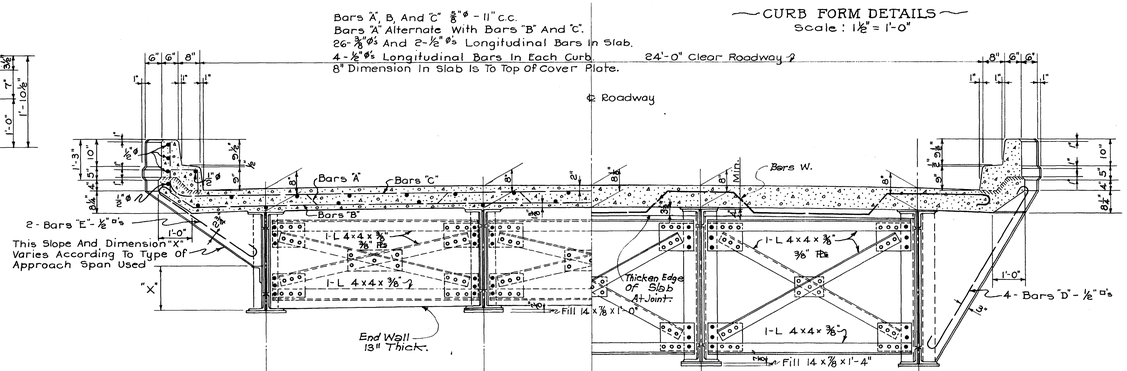
SECTION A-A & D-D
Same Except For Slope On Bracket

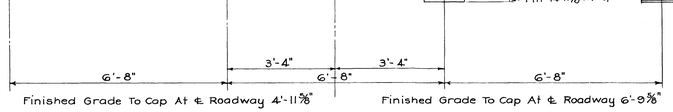


SECTIONS B-B & C-C



SECTION E-E



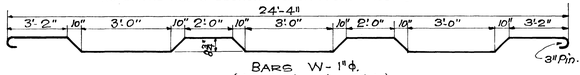


HALF ELEVATION AT END OF ANCHOR SPAN WHEN APPROACH SPANS ARE USED

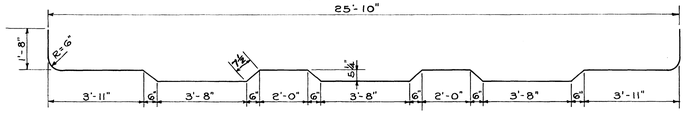
HALF SECTION AT ROCKER PIERS
Showing Thickened Edge Of Slab At Joint.

NOTE:
Top of Cross Frame Shall Be Painted Two Field Coats, Which Shall Be Thoroughly Dry, Before Erection of Slab Forms.

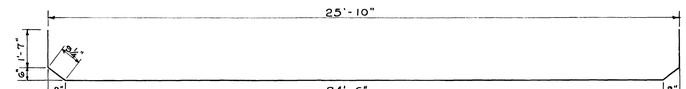
NOTE: The Above Sections Taken From Sheet 1



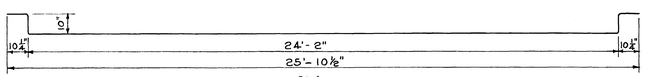
BARS W - 1"ø.
(At Joints In Slab).



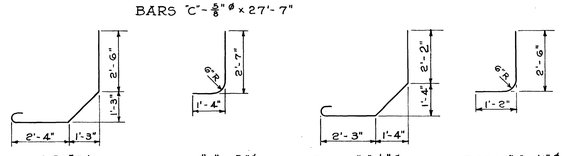
BARS "A" - ⅝"ø x 29'-4½"



BARS "B" ⅝"ø x 29'-3"

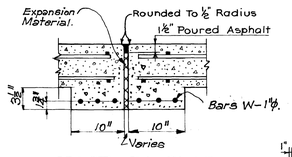


BARS "C" - ⅝"ø x 27'-7"

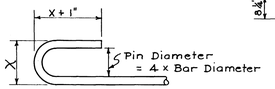


BARS "R" - ⅝"ø BARS "R1" - ⅝"ø BARS "S" - ½"ø BARS "S1" - ½"ø

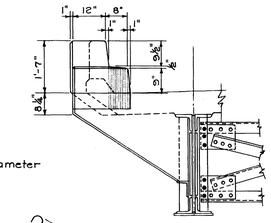
STEEL BENDING DIAGRAM
All Dimensions Are Out To Out Except As Noted And Bar Lists Shall Be So Dimensioned.



JOINT IN SLAB

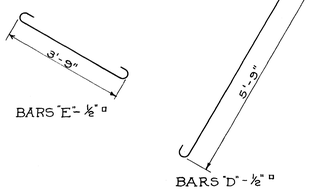


TYPICAL HOOK

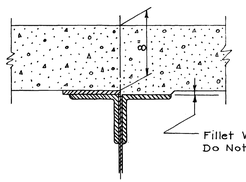


Finished Grade To Cap At ℄ Rdwy 4'-11⅞"

PART ELEVATION AT END OF BRIDGE WHEN NO APPROACH SPANS ARE USED



BARS "E" - ½" □ BARS "D" - ½" □



DETAIL OF SLAB AT GIRDER

GENERAL NOTES:-
Dimensions For Placing Reinforcing Steel Are To Centers Of Bars.
Construction Joints Between Slab And Curb Offsets Are Shown Thus
Concrete Below Joint Poured As Slab; Above Joint Poured As Curb.
Exposed Concrete Edges Not Otherwise Noted To Be Chamfered ½".
Structural Steel Notes Not Found On This Sheet Are Given On Sheet 2.

REVISIONS			
Date	Description	By
2-25-36	Drain Pipe Removed (Sect. B&C-C)	E.L.E.
11-4-35	Rail Detail; Cap To Fin. Grade	A.G.J.

Drawn Feb. 23, 1935 by A.G.J.
Traced 5-29, 1935 by E.L.E.
Checked _____, 19____ by _____

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE STANDARD

210'-0" CANTILEVER GIRDER SPAN

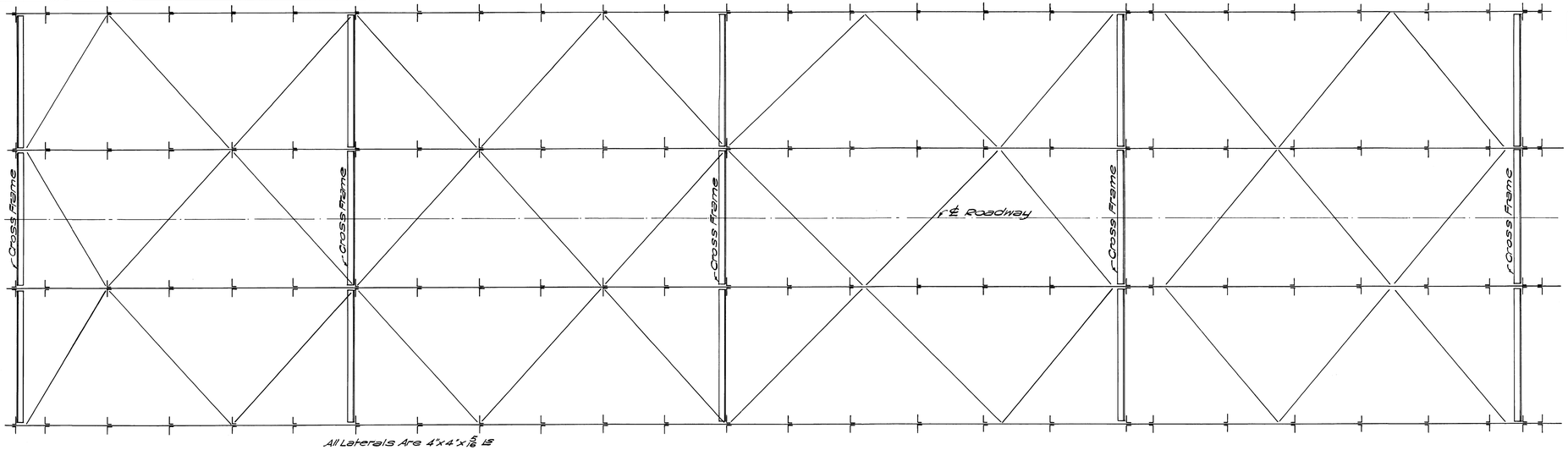
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS.		19		

Submitted by _____ BRIDGE ENGINEER

Sheet 3 of 5
S-100

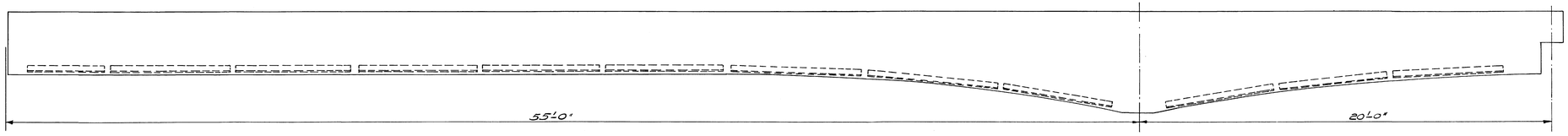
PRINTED ON "IMPERIAL" TRACING CLOTH K & E Co., N. Y.

FED. ROAD DIST. NO.	STATE	PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
8	MISS.		19	IV	

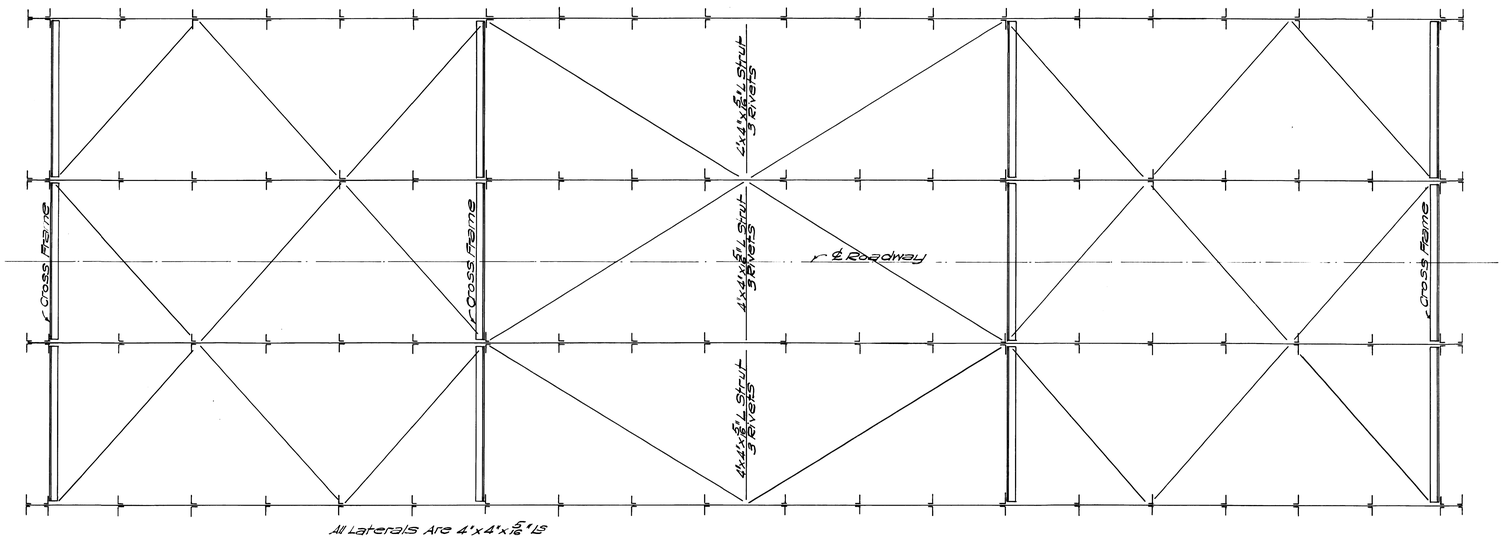


All Laterals Are 4"x4"x 5/16" Ls

PLAN OF ANCHOR & CANTILEVER SPANS

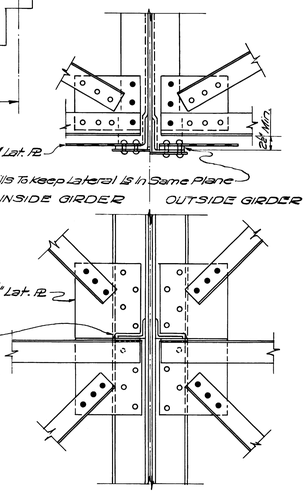


ELEVATION OF ANCHOR & CANTILEVER SPANS



All Laterals Are 4"x4"x 5/16" Ls

PLAN OF SUSPENDED SPAN



TYPICAL LATERAL CONNECTION

REVISIONS

Date	Description	By

Drawn 10-29, 1935 by A.G.J
Traced 11-4, 1935 by L.B.R.
Checked ____, 19__ by ____

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE STANDARD

210 FT. CANTILEVER GIRDER

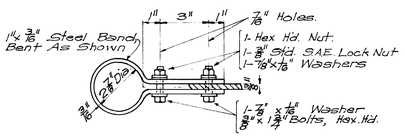
LATERAL BRACING

Submitted by ____
BRIDGE ENGINEER

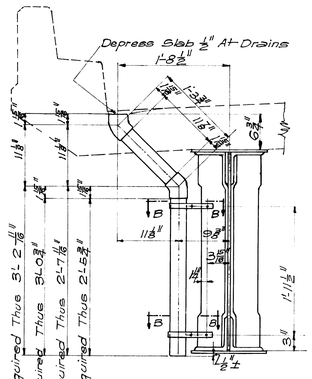
4 OF 5
S-100

PRINTED ON "IMPERIAL" TRACING CLOTH E. & F. CO., N. Y.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS.		19		

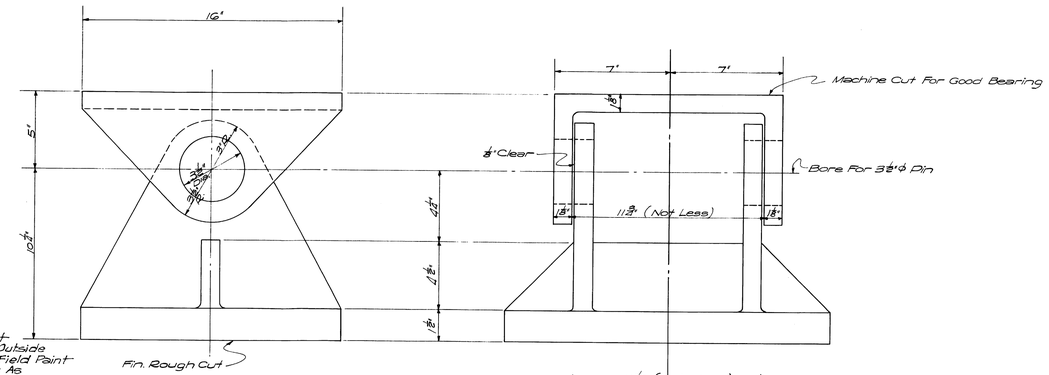


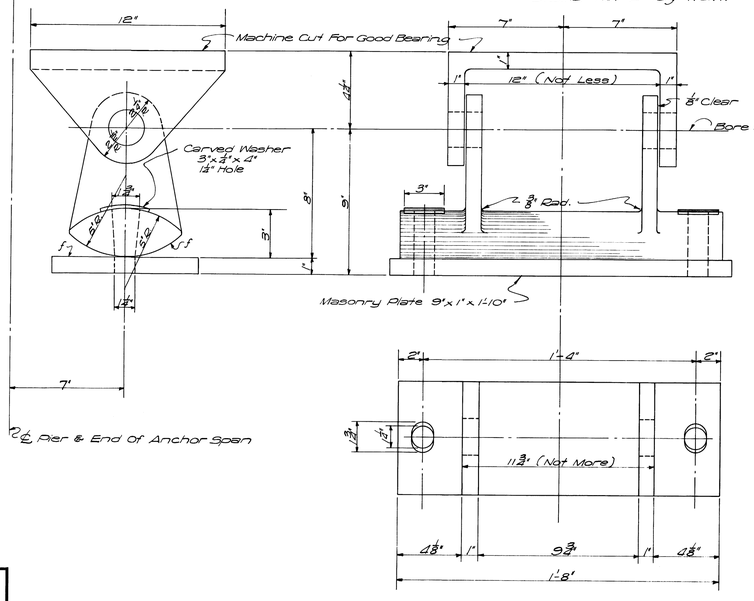
- SECTION - BB -



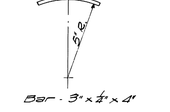
TYPICAL DETAIL OF PIPE DRAINS

Note
Drain Pipe To Be 2½" I.D. Standard Weight Wrought Steel. Shop Paint Inside And Outside Of Pipe Same As Structural Steel. Field Paint Outside Of Pipe Below Slab Same As Structural Steel. Drains Not A Pay Item.

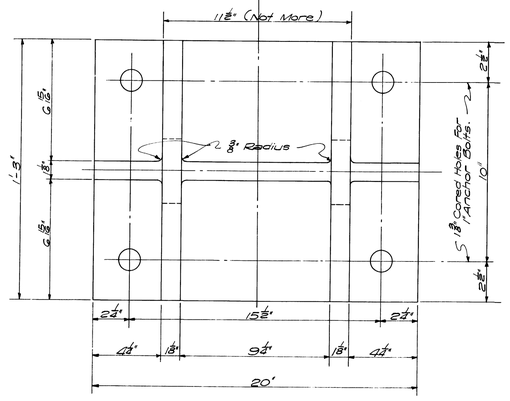




- CASTING AT FREE PIERS -



- WASHER DETAIL -



- CASTING AT FIXED PIERS -

NOTE TO STEEL ERECTOR -
All Parts Which Will Be Inaccessible Or Difficult To Paint After Erection Shall Be Painted Two Field Coats Before Erection.

GENERAL NOTES :-
Surfaces Marked "F" To Be Machine Cut In Direction Of Movement.
Finished Surfaces To Be Coated With Hot White Lead And Tallow Before Removal From Shop. Other Surfaces To Be Painted Same As Structural Steel.
Masonry Plates At Rocker And Fixed Castings To Be Set On Two Layers Of Sheet Lead With ½" Greater Dimensions Each Way & Weighing 4 lbs. Per Sq. Ft. (Approx. 1/8" Thick).
Top Castings To Be Shop Riveted To Girders With ⅞ϕ Rivets. Holes To Be Drilled 1⅛" To A Metal Template.
Vertical Legs Shall Be Straight And Square With Base.

By	Description	Date
C.W.	Drain Details Added	1-28-36

REVISIONS

Drawn 12-24, 1935 by A.E.J.
Traced 11-4, 1935 by E.B.M.
Checked ____, 19____ by ____

MISSISSIPPI STATE HIGHWAY DEPARTMENT

BRIDGE STANDARD

210'-0" CANTILEVER SPAN

CAST STEEL ROCKER & DRAINS

Submitted by ____ BRIDGE ENGINEER

S-100
5 of 5

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FOR INFORMATION ONLY: PROJECT NO. BR-2839-00(020) REVISED SHEET NO: 8015