

STATE	PROJECT NUMBER	SHEET NO.
MISSISSIPPI	BR-0058-01(037)	1

**GENERAL INDEX**

INCLUDED THIS PROJECT	BEGIN WITH SHEET
<input checked="" type="checkbox"/> ROADWAY	1
<input type="checkbox"/> PERMANENT SIGNS	1001
<input type="checkbox"/> TRAFFIC SIGNALS	2001
<input type="checkbox"/> ITS COMPONENTS	3001
<input type="checkbox"/> LIGHTING	4001
<input type="checkbox"/> (RESERVED)	5001
<input checked="" type="checkbox"/> ROADWAY STANDARD DWGS	6001
<input type="checkbox"/> BOX CULVERT STD. DRAWINGS (LRFD)	7001
<input type="checkbox"/> BOX CULVERT STD. DRAWINGS (STD. SPEC.)	7501
<input checked="" type="checkbox"/> BRIDGE	8001
<input type="checkbox"/> CROSS SECTIONS	9001

**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-0058-01(037)**

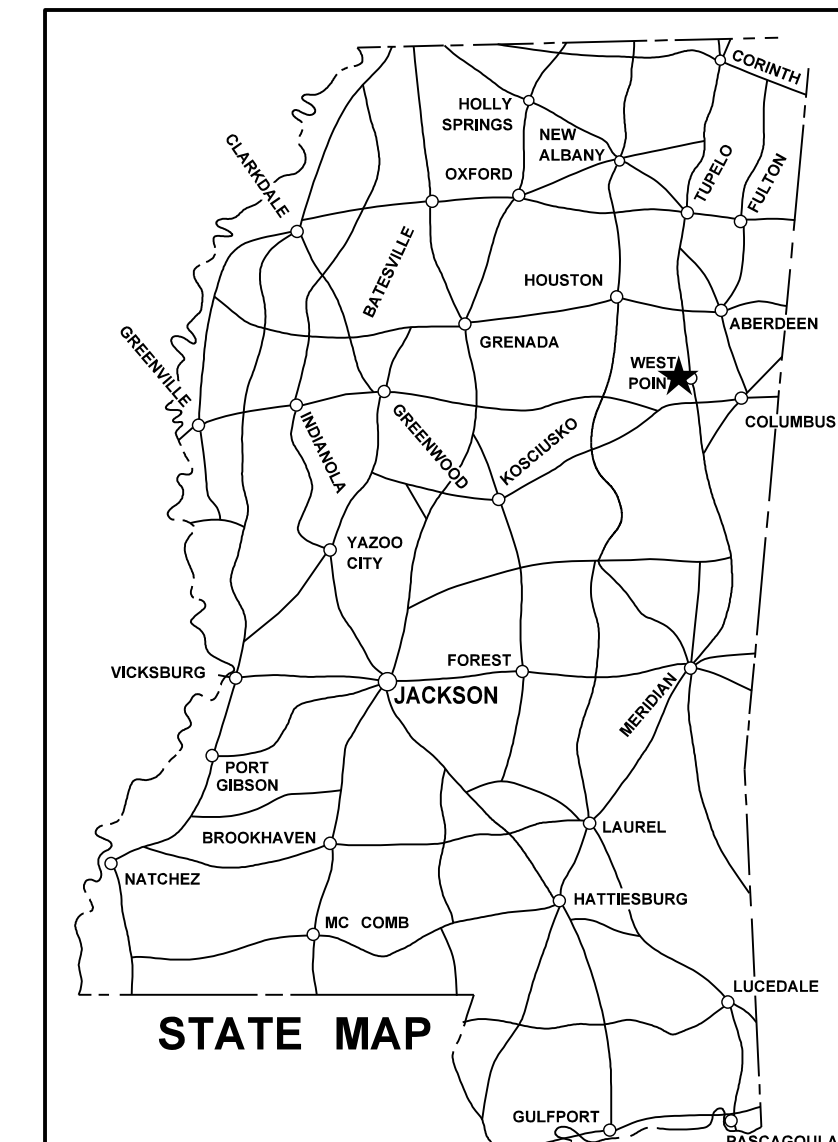
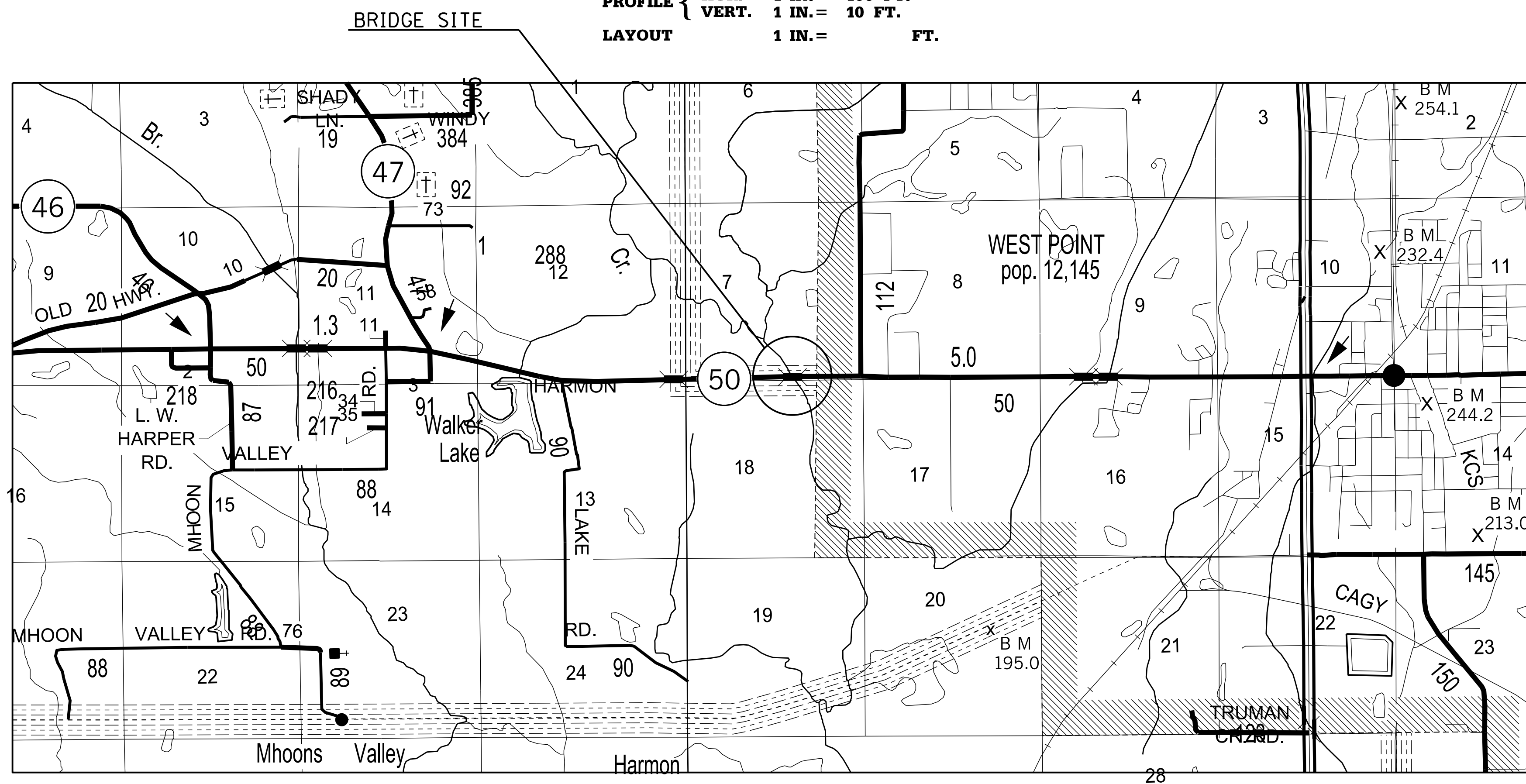
SR 50 over Chuquatonchee Creek(69.9)

**BRIDGE REPAIR**

FMS CON. NO. 107860/ 301000

**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. 33° 36' 26.49" N LONG. 88° 42' 31.11" 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	<input checked="" type="checkbox"/> N	<input type="checkbox"/> N
NATIONWIDE (OTHER)*	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N
GENERAL*	<input type="checkbox"/> N	<input type="checkbox"/> N
INDIVIDUAL (404)*	<input type="checkbox"/> N	<input type="checkbox"/> N
<b>STORMWATER PERMIT</b> <input checked="" type="checkbox"/> N		
Y	REQUIRED, CNDI SUBMITTED BY MDOT (DISTURBED AREA = 5 ACRES)	
S	REQUIRED, SCNDI 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

**LENGTH DATA**

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

**EXCEPTIONS**

NONE

P S & E DATE: 12/18/2018

APPROVED:
DEPUTY EXECUTIVE DIRECTOR / CHIEF ENGINEER
EXECUTIVE DIRECTOR



3/1/2019 11:16:17 ARMD-TITLE SH-50 TITLE DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION




1st O.REV.

STATE	PROJECT NO.
MISS	BR-0058-01(037)

**SUMMARY OF QUANTITIES (SHEET 1)**

PAY ITEM NO.	PAY ITEM	UNIT	CLAY : 107860-301000	
			Prelim	Final
234-A001	Temporary Silt Fence	LF	180	
618-A001	Maintenance of Traffic	LS	1	
618-B001	Additional Construction Signs	SF	1	
620-A001	Mobilization	LS	1	
907-808-A002	Joint Repair	LF	1,108	
815-A007	Loose Riprap, Size 300	TON	730	⚠
815-E001	Geotextile under Riprap	SY	540	⚠
907-823-A001	Preformed Joint Seal, Type I	LF	554	
907-823-B001	Saw Cut, Type I	LF	1,108	
907-824-PP005	Bridge Repair, Epoxy Repair, Per Plans	CF	35	
907-824-PP006	Bridge Repair, Bearing Plate Replacement, Per Plans	EA	8	
907-824-PP006	Bridge Repair, Steel Pile Connecting Angles, Per Plans	EA	104	
907-824-PP006	Bridge Repair, Riser Repair Plates, Per Plans	EA	14	
907-824-PP006	Bridge Repair, Cap Cleaning, Per Plans	EA	22	
907-824-PP006	Bridge Repair, Exterior Girder Support Plates, Per Plans	EA	7	
907-824-PP006	Bridge Repair, Interior Girder Support Plates, Per Plans	EA	6	
907-845-A001	Coating Existing Structural Steel	LS	1	

REVISION	DP	By	<b>MISSISSIPPI DEPARTMENT OF TRANSPORTATION</b> <b>SUMMARY OF QUANTITIES</b>
	Date	Revision	
02/19/2019	Design Team	Checked	PROJ NO: BR-0058-01(037) COUNTY: CLAY FILENAME: SQ-1 Date
			 Working Number <b>SQ-1</b> Sheet Number <b>3</b>

STATE	PROJECT NO.
MISS.	BR-0058-01(037)

PLAN DIVISION  
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

11/26/2018 11:50 PM RWD-DCS-50



SR 50

SR 50

ROAD WORK  
NEXT 1 MILE


G20-1  
60X24

REFER TO TCP-1 FOR TRAFFIC CONTROL

END  
ROAD WORK

G20-2  
48X24

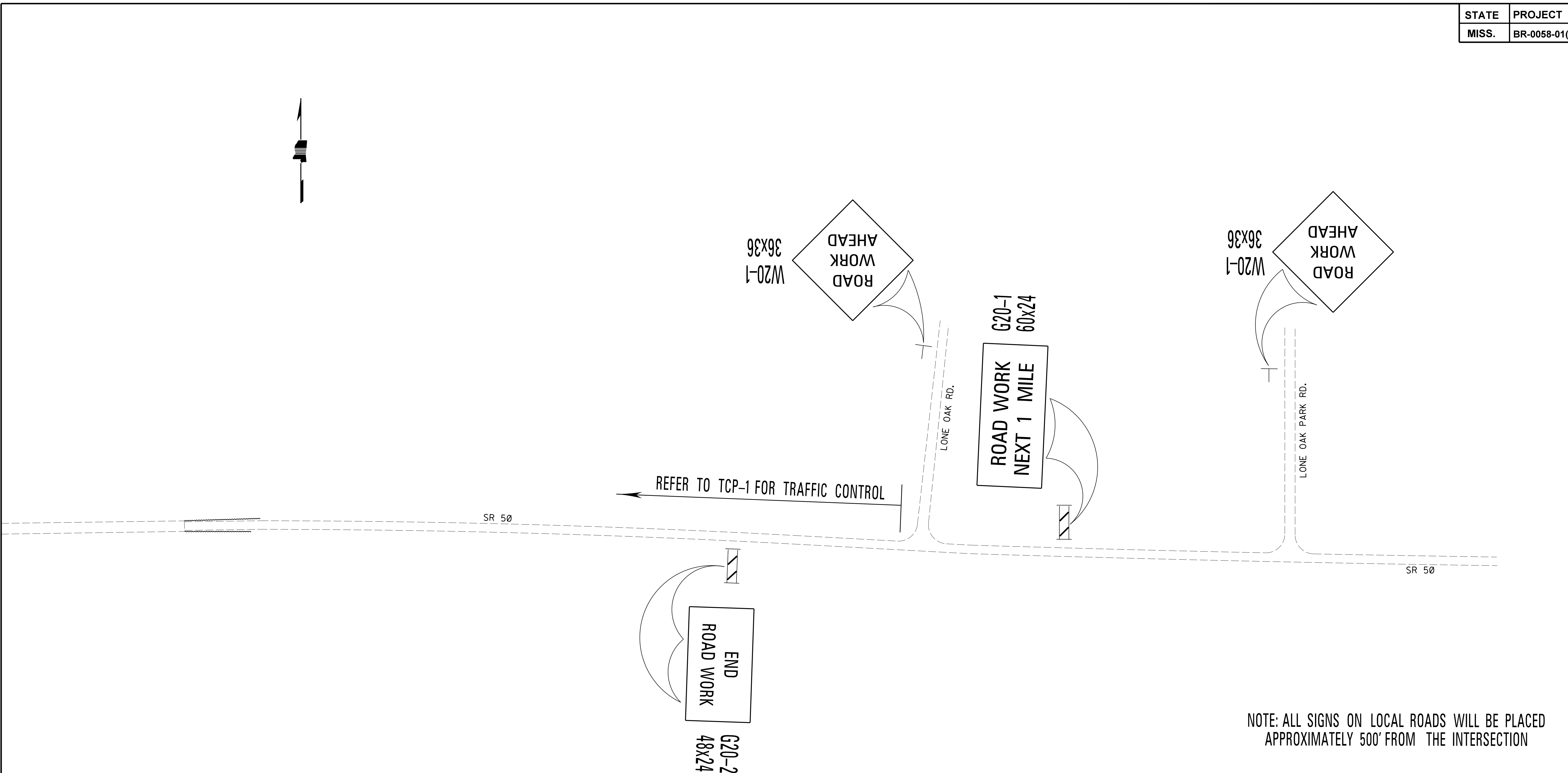
NOTE: ALL ITEMS SHOWN ON THIS SHEET WILL BE ABSORBED IN MAINTENANCE OF TRAFFIC, 618-A001.

		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
		<b>DETAIL OF CONSTRUCTION SIGNING</b>	
		PROJ. NO.: BR-0058-01(037)	
		COUNTY: CLAY	
		FILENAME: <b>RWD-DCS-50</b>	
DATE	DESIGN TEAM	CHECKED	DATE
		 WORKING NUMBER <b>DCS-1</b> SHEET NUMBER <b>4</b>	

STATE	PROJECT NO.
MISS.	BR-0058-01(037)

ROADWAY PLAN DIVISION  
MISSISSIPPI DEPARTMENT OF TRANSPORTATION


11/26/2018 1:12:11 PM RWD-DCS-50



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

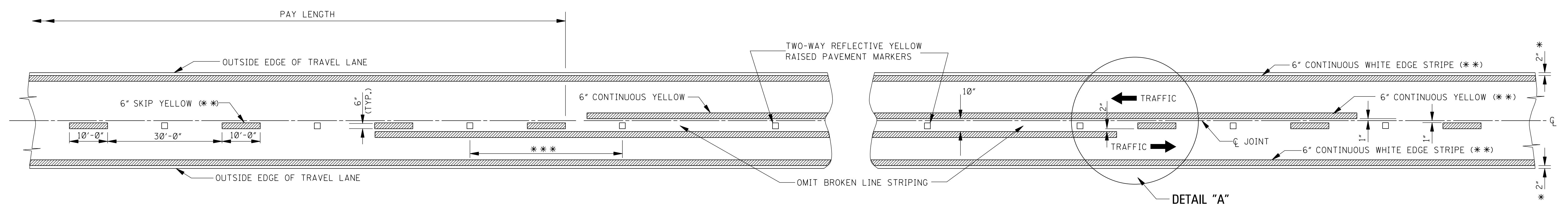
NOTE: ALL ITEMS SHOWN ON THIS SHEET WILL BE ABSORBED IN MAINTENANCE OF TRAFFIC, 618-A001.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
<b>DETAIL OF CONSTRUCTION SIGNING</b>	
PROJ. NO.: BR-0058-01(037)	
COUNTY: CLAY	
DATE	FILENAME: <u>RWD-DCS-50</u>
DESIGN TEAM	CHECKED _____ DATE _____
REVISION	BY



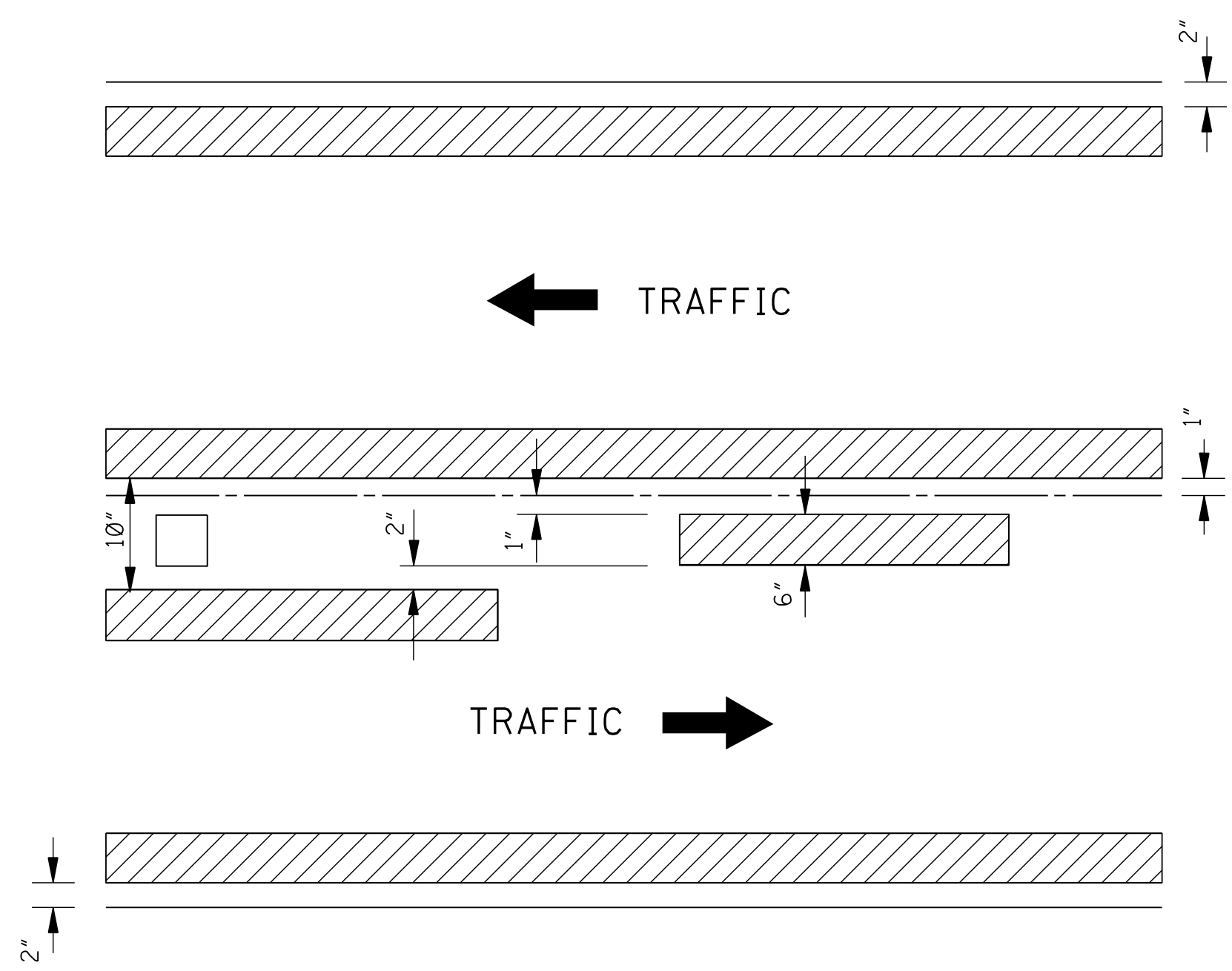
WORKING NUMBER  
**DCS-2**

SHEET NUMBER  
**5**



**TWO-WAY TRAFFIC**  
(ASPHALT OR CONCRETE PAVEMENT)

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



**DETAIL "A"**

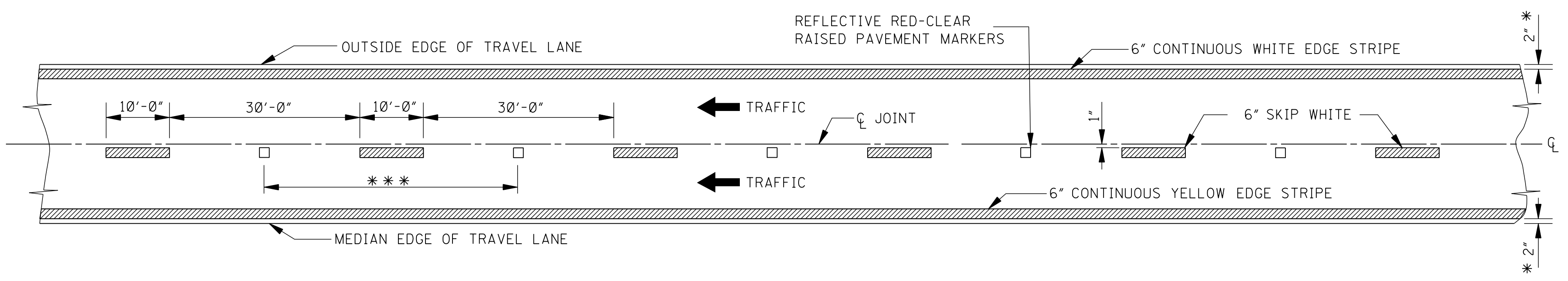
GENERAL NOTES:

- \* 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 MDT "APPROVED SOURCES OF MATERIALS."



**4-LANE WITH ONE-WAY TRAFFIC**

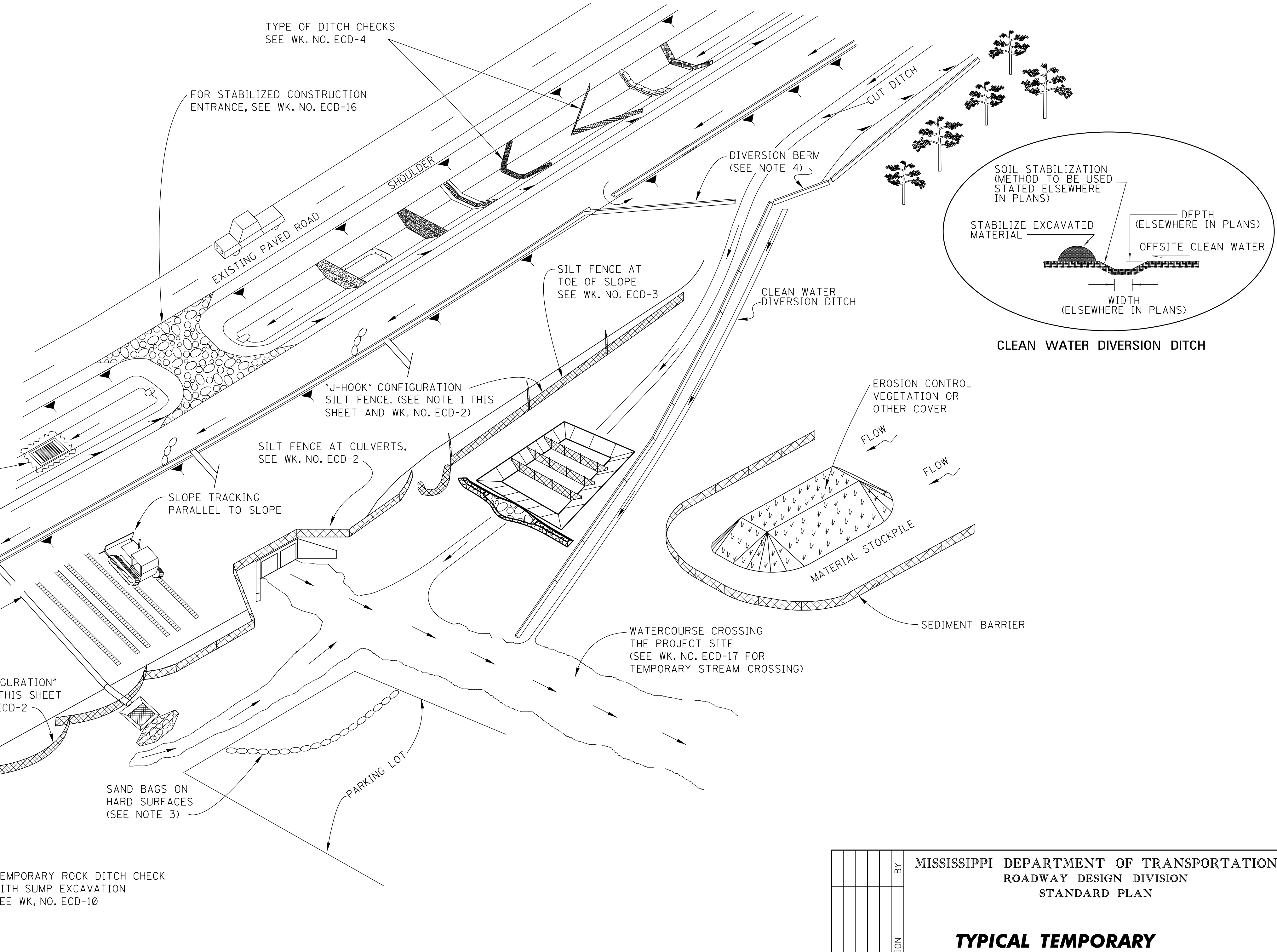
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	<b>PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS</b>
DATE	ISSUE DATE: AUGUST 01, 2017



WORKING NUMBER  
PM-1  
SHEET NUMBER  
6051

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 CONSTRUCTION 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.



ABUTMENT SLOPE TOE BERM  
SEE NOTE 6.

FOR TURBIDITY CURTAIN  
SEE WK. NO. ECD-20

FOR TEMPORARY STREAM  
CROSSING SEE WK.  
NO. ECD-17.

FOR INLET PROTECTION  
SEE WK. NO. ECD-11

TEMPORARY EARTH BERM  
AND SLOPE DRAINS  
SEE WK. NO. BAS-A.

TEMPORARY BRUSH  
BARRIER SEE  
WK. NO. ECD-2.

SILT FENCE  
"SMILE CONFIGURATION"  
SEE NOTE 2 THIS SHEET  
AND WK. NO. ECD-2

SAND BAGS ON  
HARD SURFACES  
(SEE NOTE 3)

TEMPORARY ROCK DITCH CHECK  
WITH SUMP EXCAVATION  
SEE WK. NO. ECD-10

SLOPE TRACKING  
PARALLEL TO SLOPE

SILT FENCE AT CULVERTS,  
SEE WK. NO. ECD-2

"J-HOOK" CONFIGURATION  
SILT FENCE. (SEE NOTE 1 THIS  
SHEET AND WK. NO. ECD-2)

TYPE OF DITCH CHECKS  
SEE WK. NO. ECD-4

FOR STABILIZED CONSTRUCTION  
ENTRANCE, SEE WK. NO. ECD-16

SILT FENCE AT  
TOE OF SLOPE  
SEE WK. NO. ECD-3

DIVERSION BERM  
(SEE NOTE 4)

CLEAN WATER  
DIVERSION DITCH

WATERCOURSE CROSSING  
THE PROJECT SITE  
(SEE WK. NO. ECD-17 FOR  
TEMPORARY STREAM CROSSING)

EROSION CONTROL  
VEGETATION OR  
OTHER COVER

MATERIAL STOCKPILE

SEDIMENT BARRIER

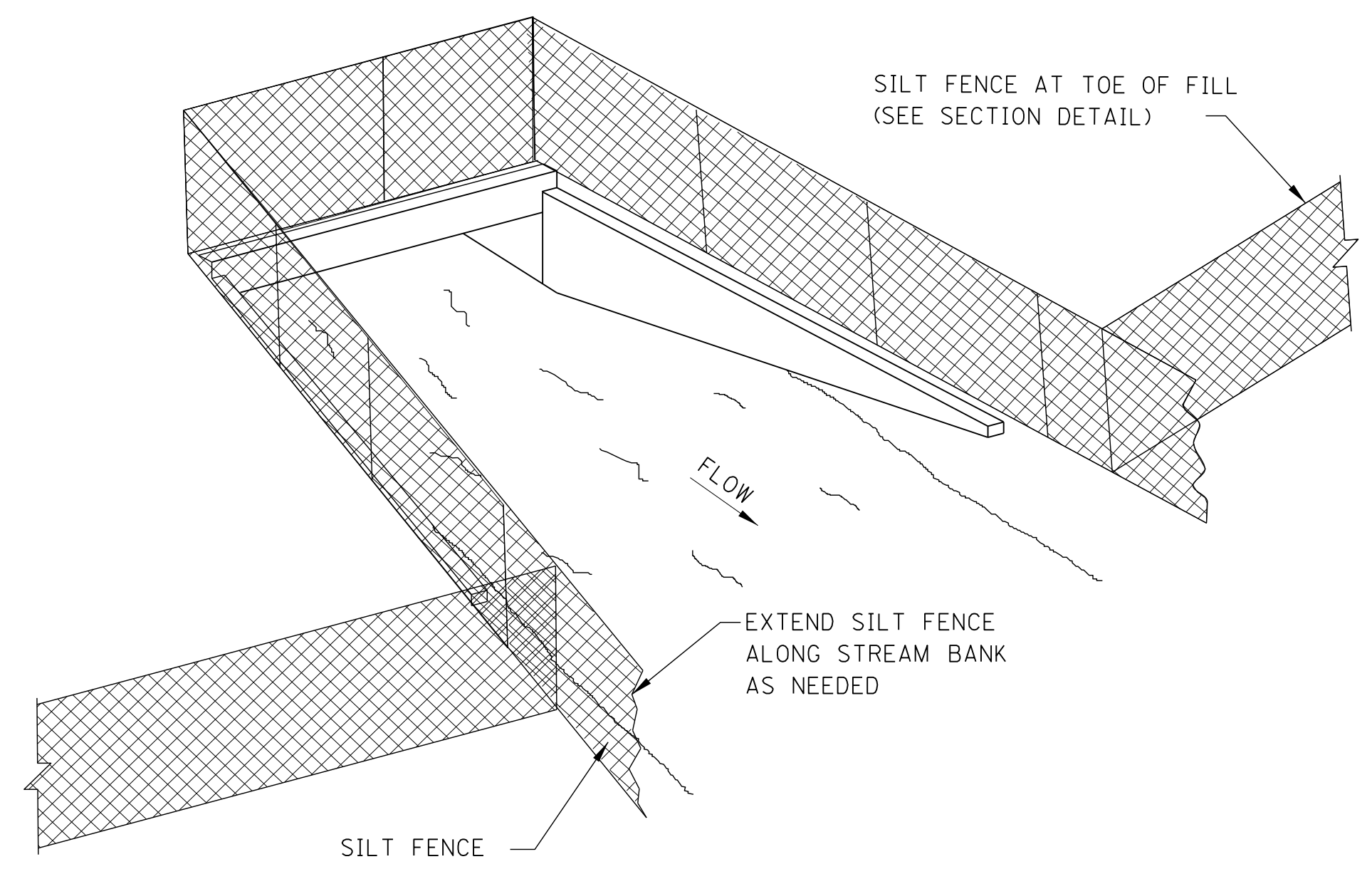
CLEAN WATER DIVERSION DITCH

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017

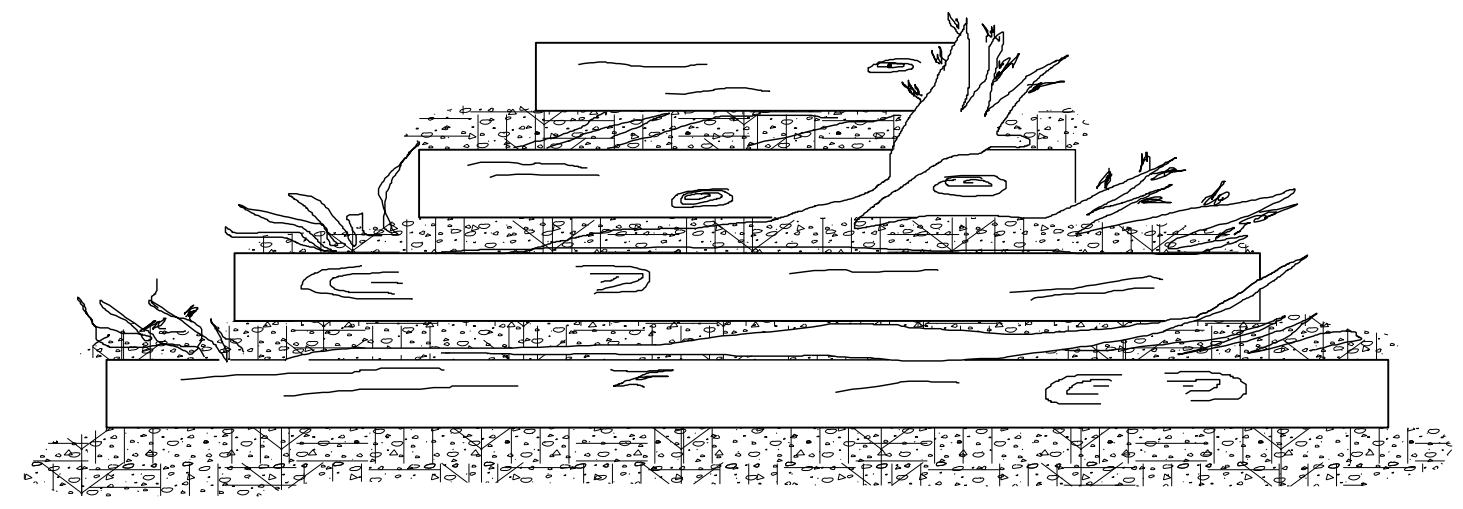
**TYPICAL TEMPORARY  
EROSION / SEDIMENT  
CONTROL APPLICATIONS**

**MDOT**  
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

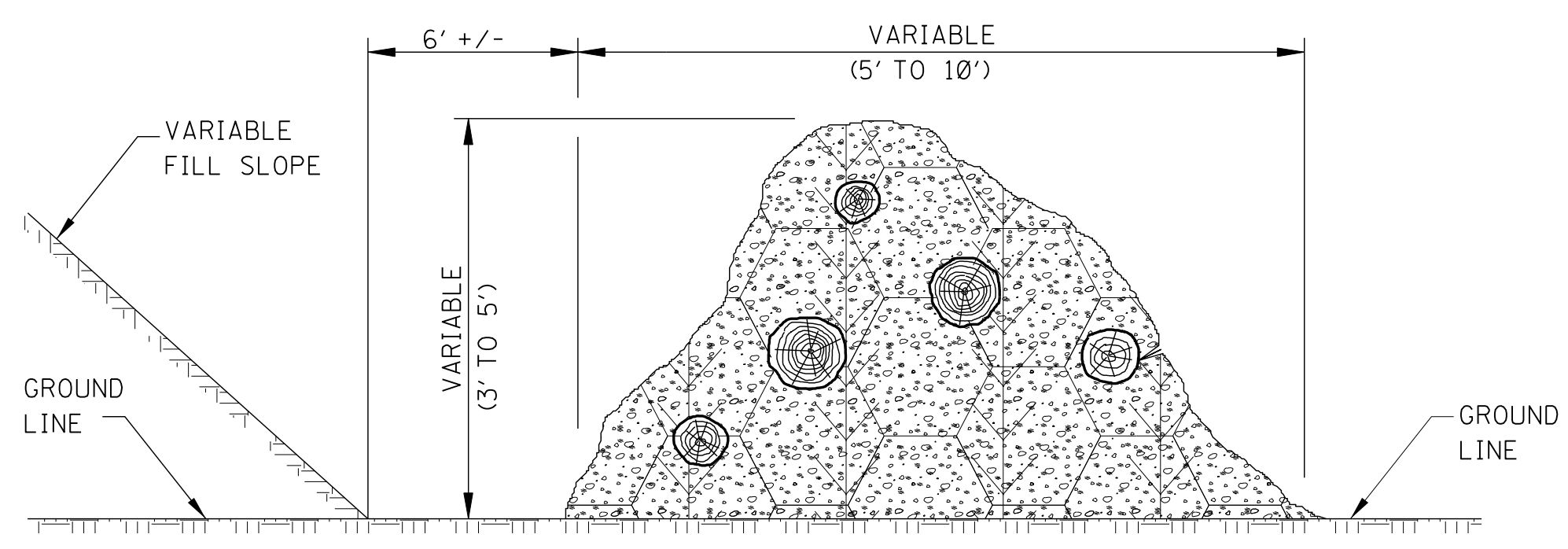
WORKING NUMBER  
ECD-1  
SHEET NUMBER  
6101



**SEDIMENT BARRIER AT CROSS DRAIN**



**FRONT ELEVATION**



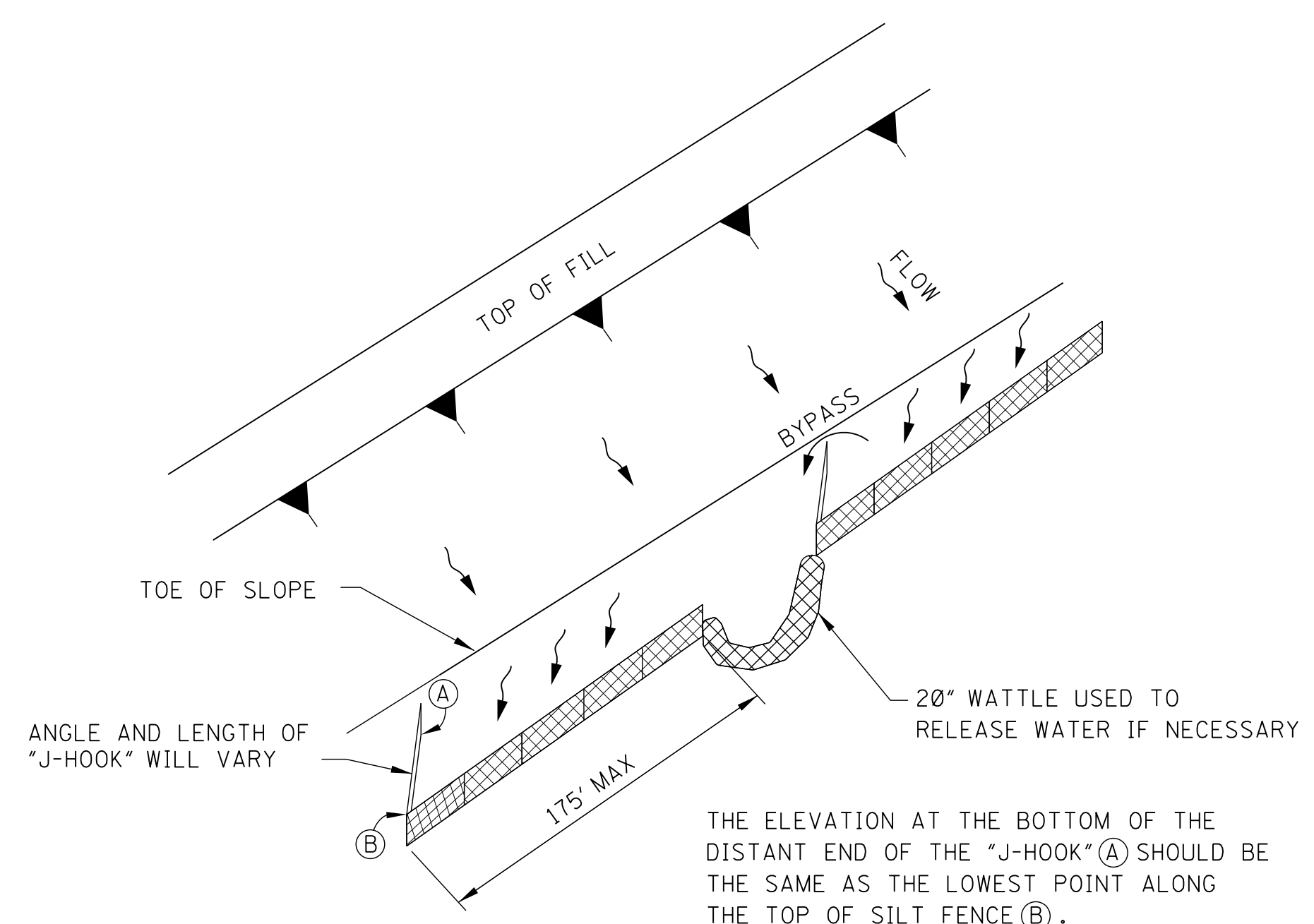
**SIDE ELEVATION**

**TEMPORARY BRUSH BARRIER**

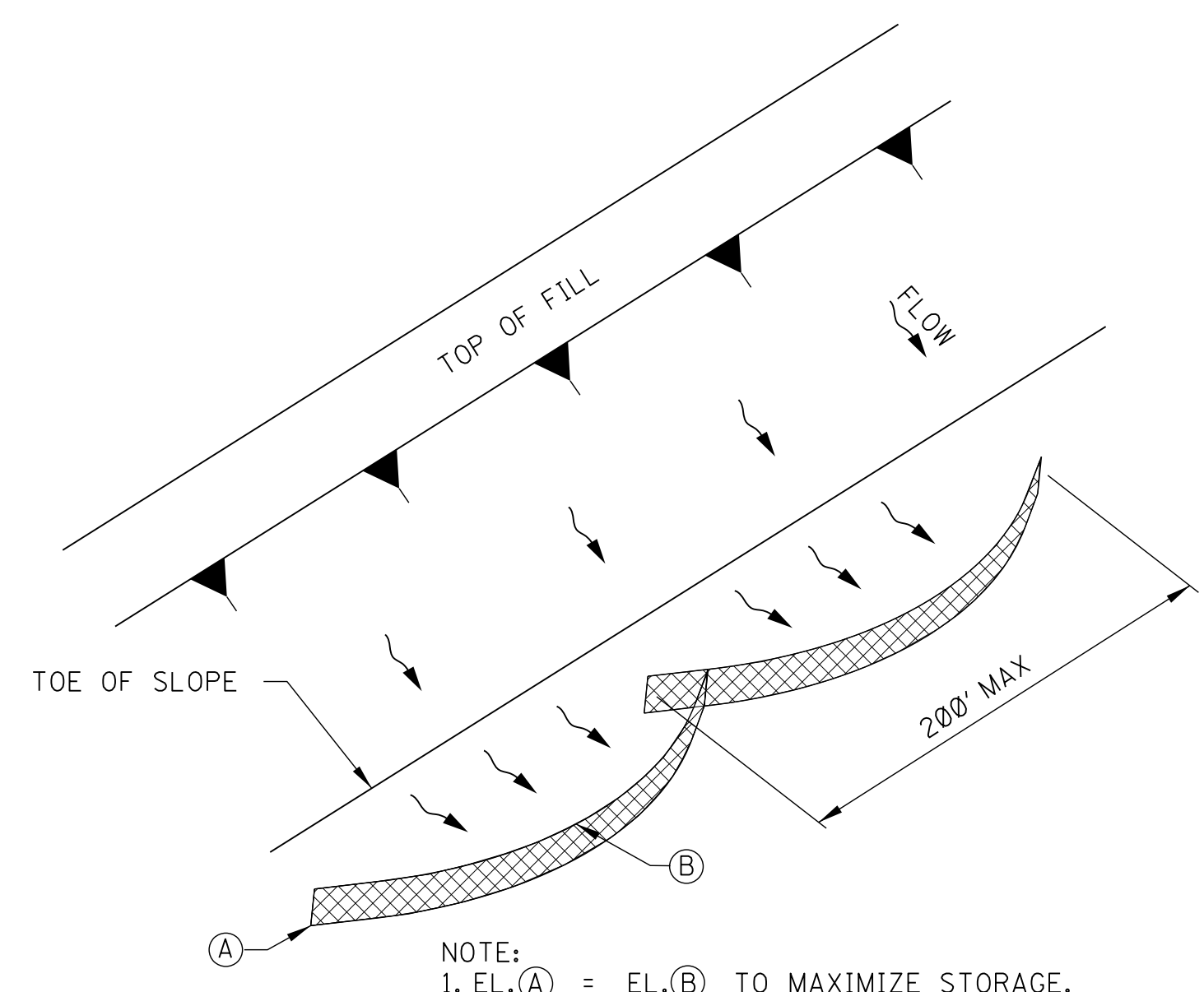
**NOTES:**

- BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
- 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.
- TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.
- THE BRUSH BARRIER MAY BE CHOKED WITH FILTER FABRIC. THE COST OF FABRIC TO BE INCLUDED IN OTHER ITEMS BID.
- TEMPORARY BRUSH BARRIER WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

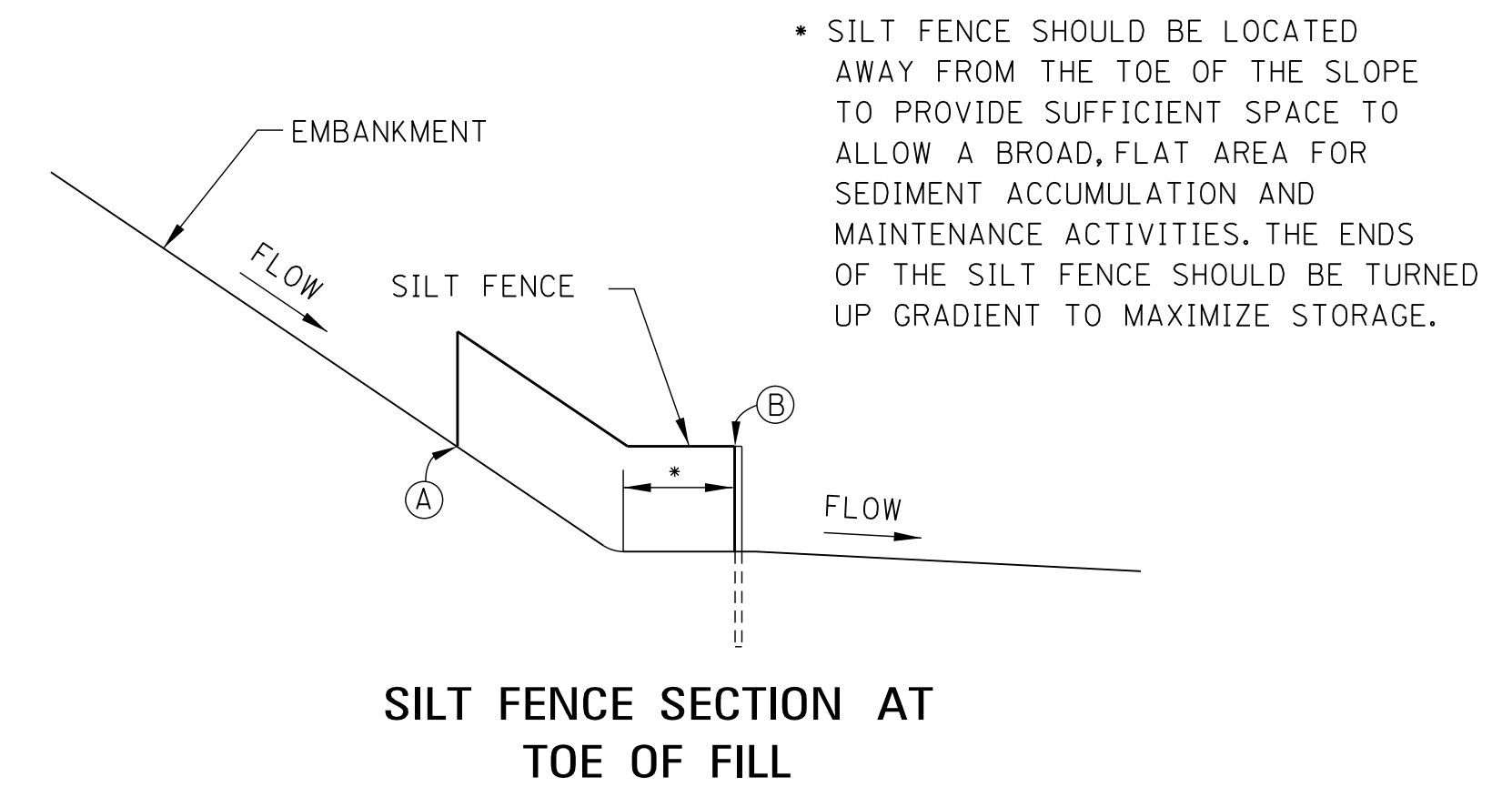
NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3




**"J-HOOK" SILT FENCE APPLICATION**



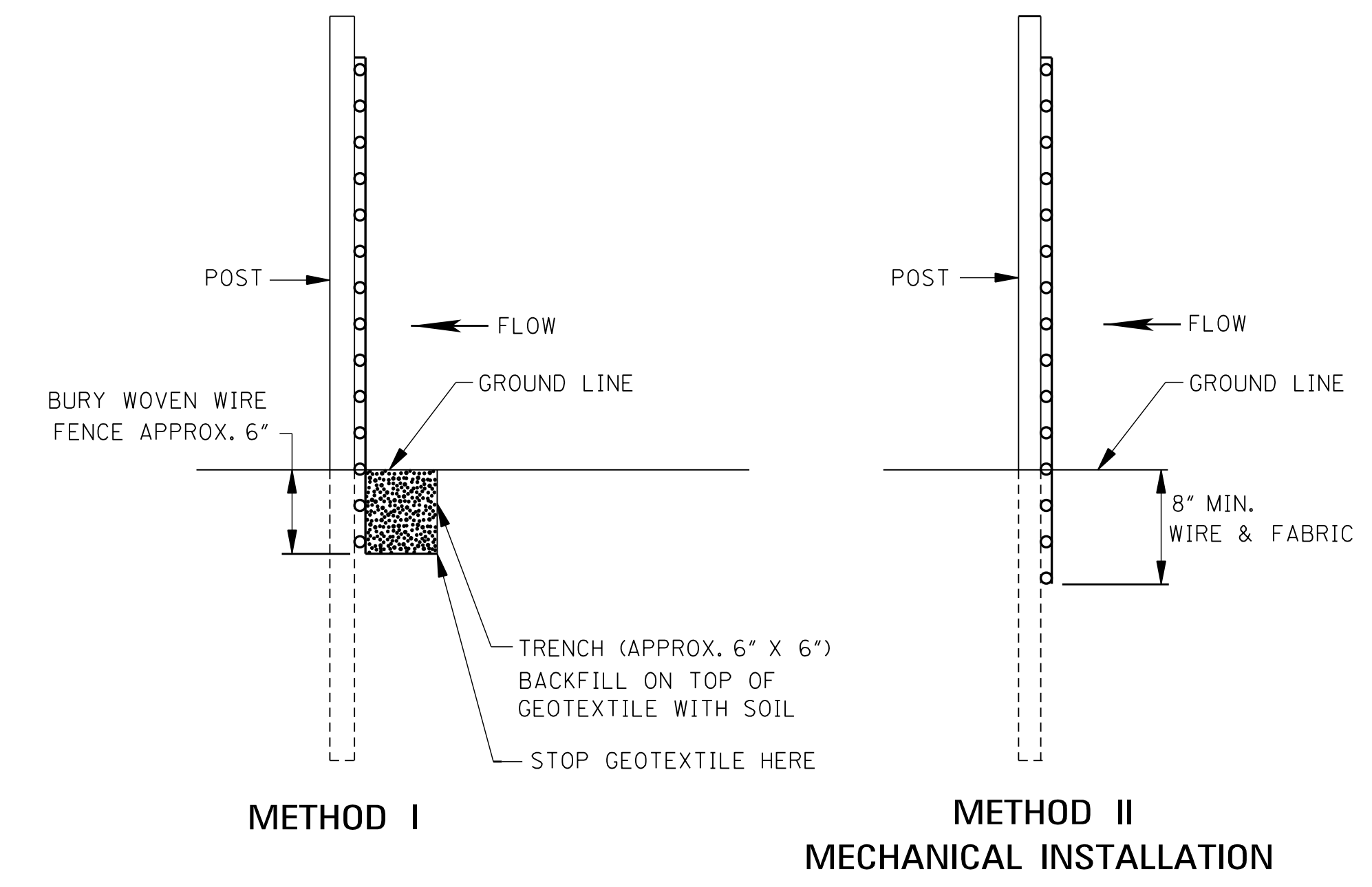
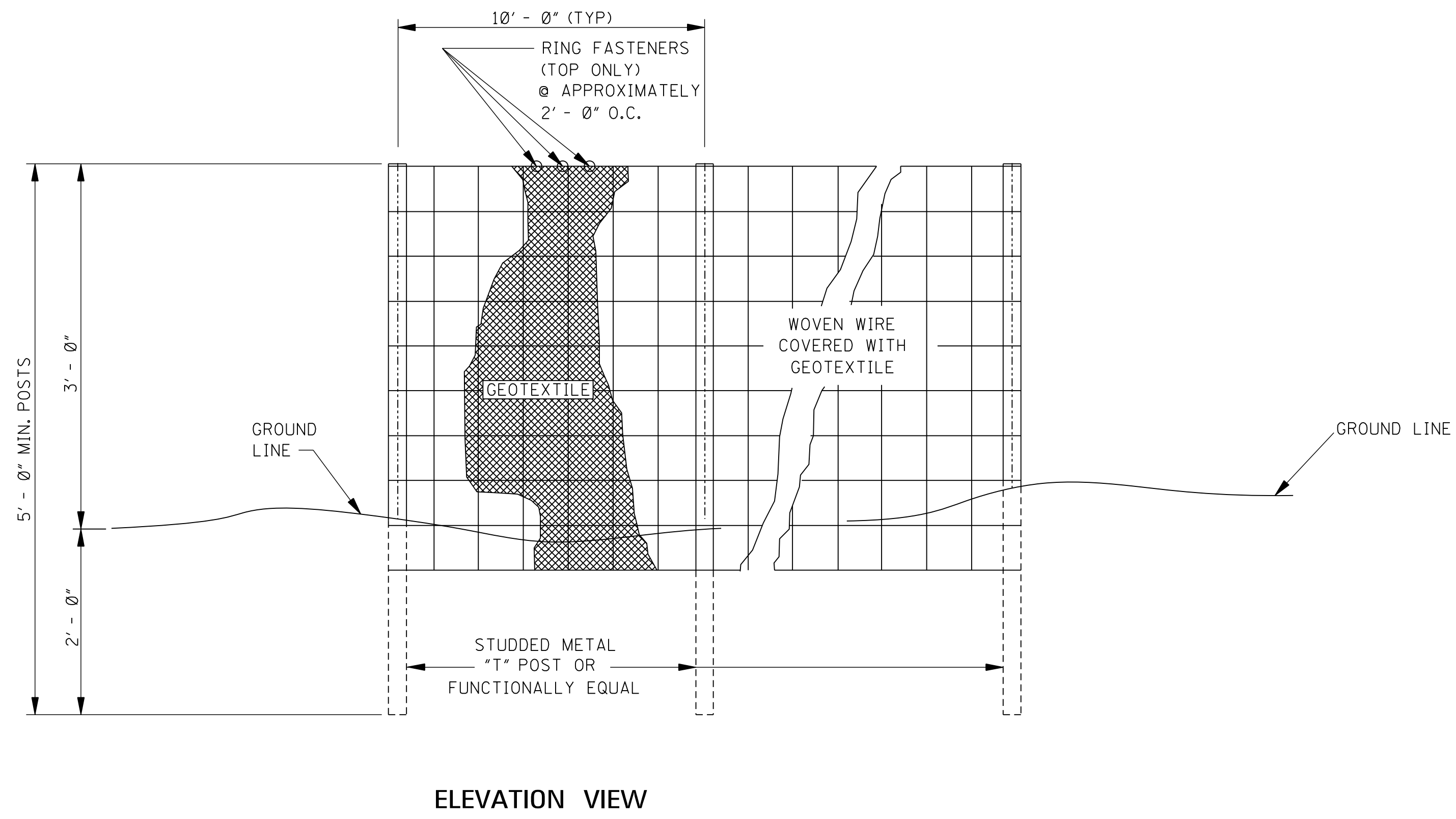
**"SMILE-CONFIGURATION" SILT FENCE APPLICATION**



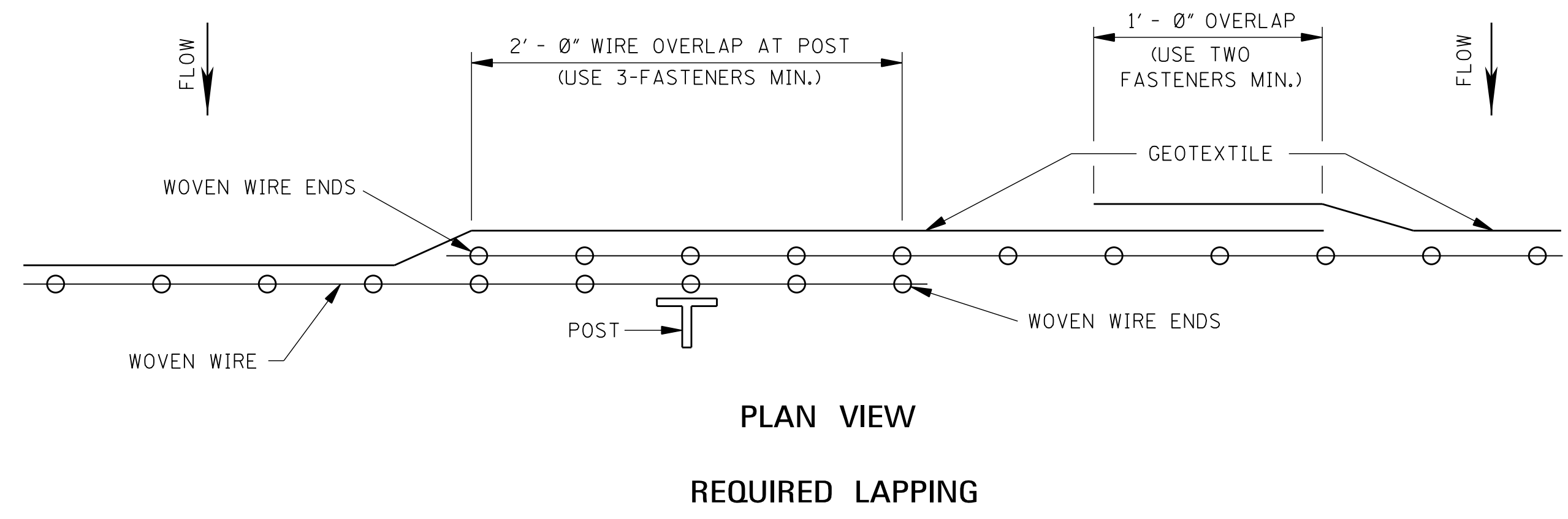
**SILT FENCE SECTION AT TOE OF FILL**

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





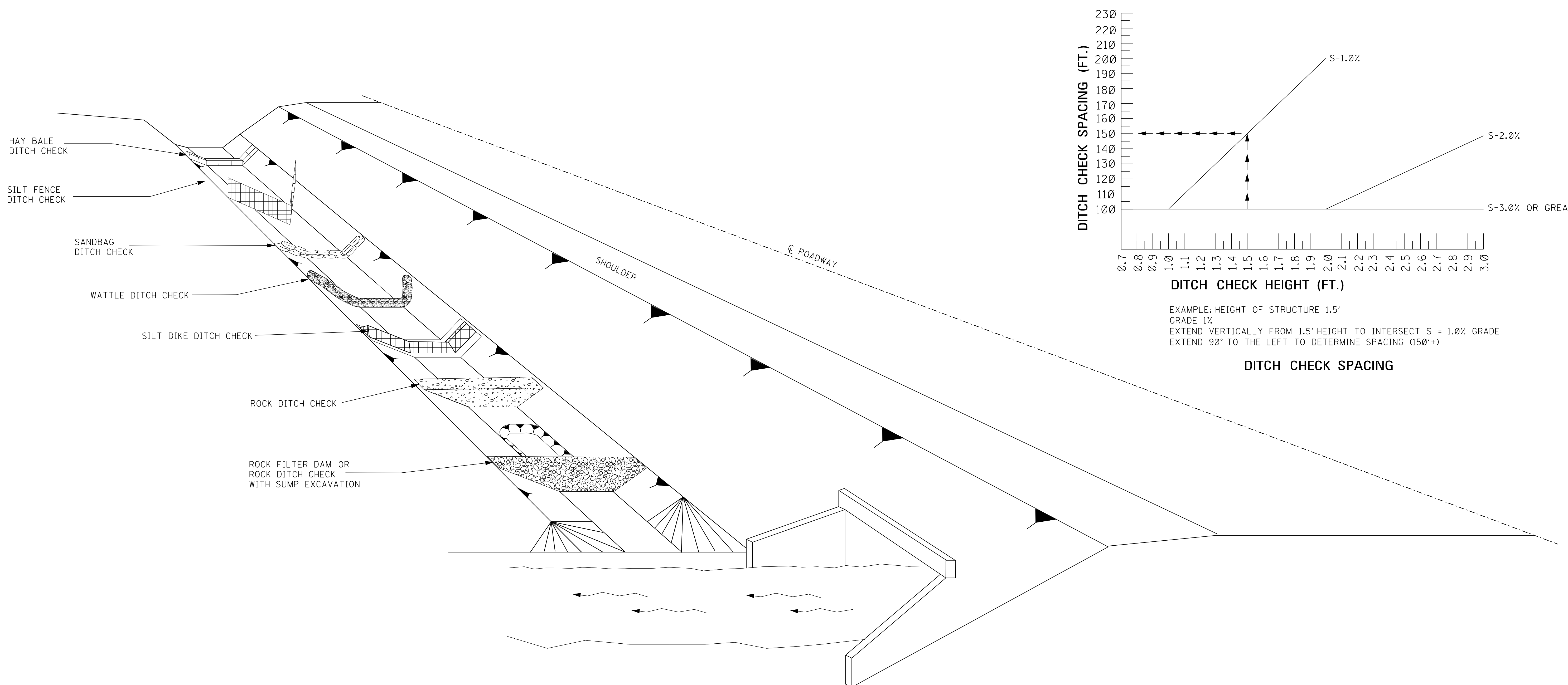
SIDE VIEW



GENERAL NOTES:

- SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
- 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.
- 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.
- 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.
- THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
- METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
- WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
- GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p><b>DETAILS OF SILT FENCE INSTALLATION</b></p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-3	
SHEET NUMBER		6103	




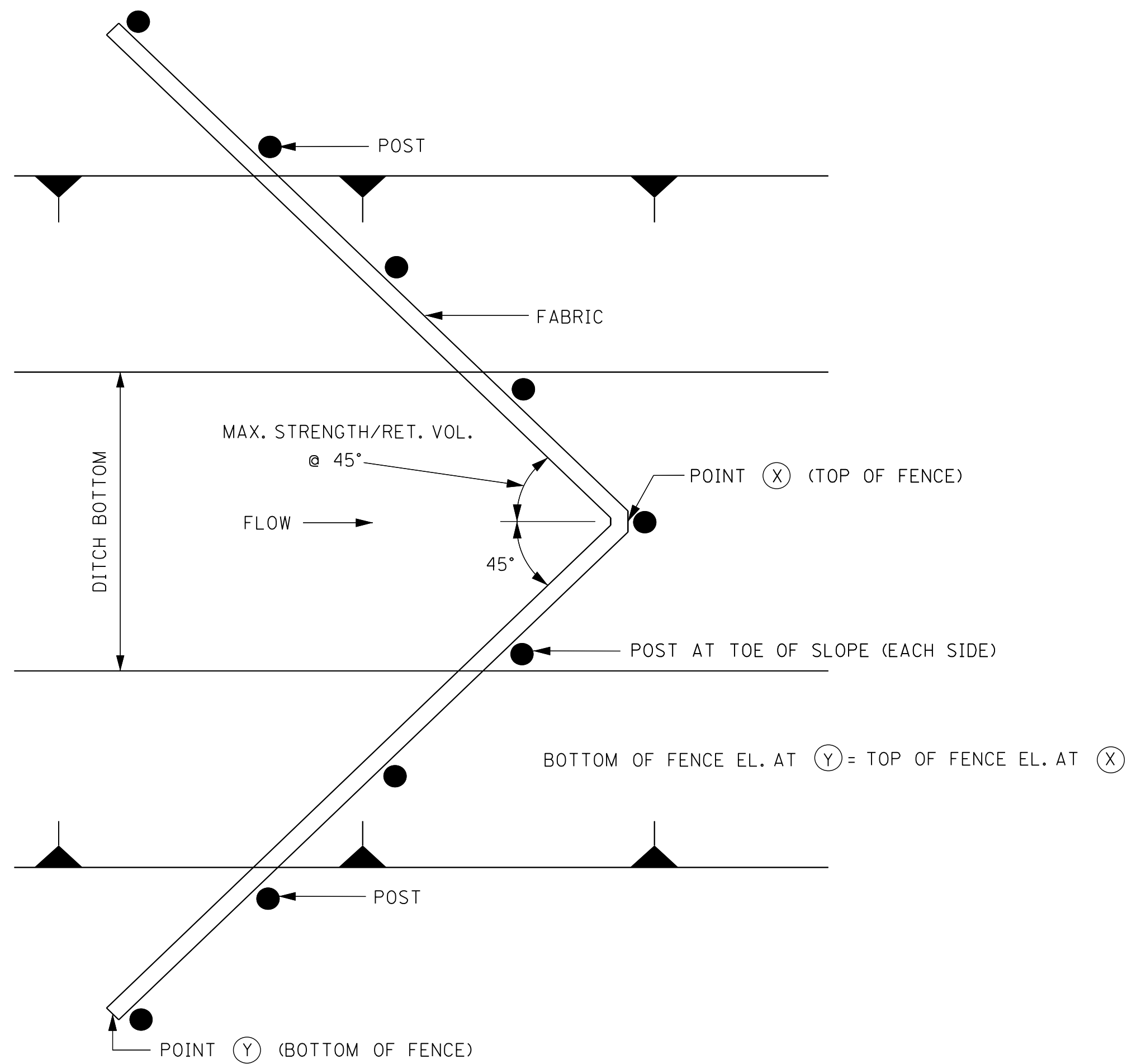
EXAMPLE: HEIGHT OF STRUCTURE 1.5'  
 GRADE 1%  
 EXTEND VERTICALLY FROM 1.5' HEIGHT TO INTERSECT S = 1.0% GRADE  
 EXTEND 90° TO THE LEFT TO DETERMINE SPACING (150'+)

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 1/3 THE CAPACITY OR HEIGHT OF THE STRUCTURE AND NEVER ALLOWING FOR SEDIMENT TO ACCUMULATE MORE THAN 1/2 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
<b>DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS</b>	
DATE	ISSUE DATE: AUGUST 01, 2017
REVISION	
BY	

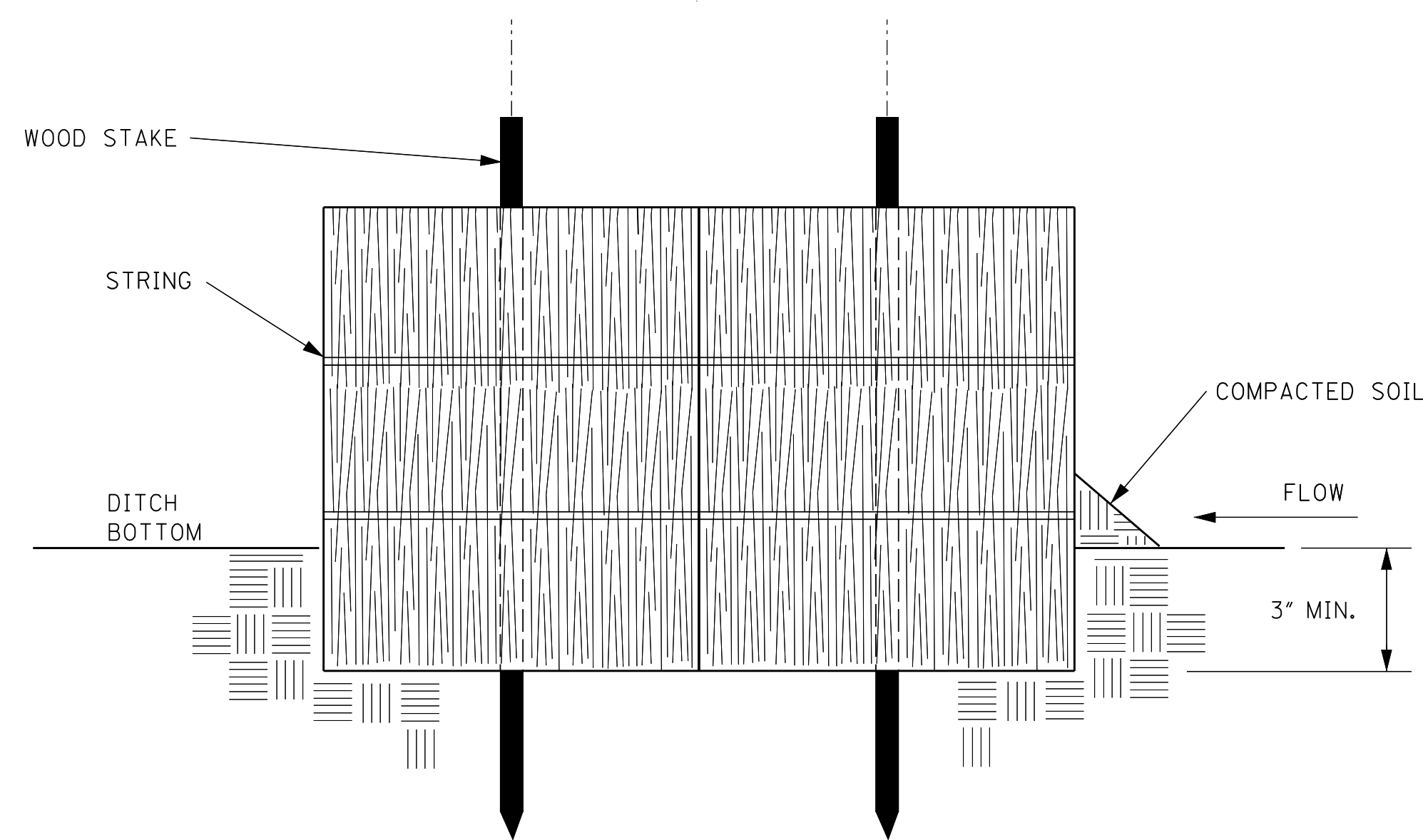
  
 WORKING NUMBER  
 ECD-4  
 SHEET NUMBER  
 6104



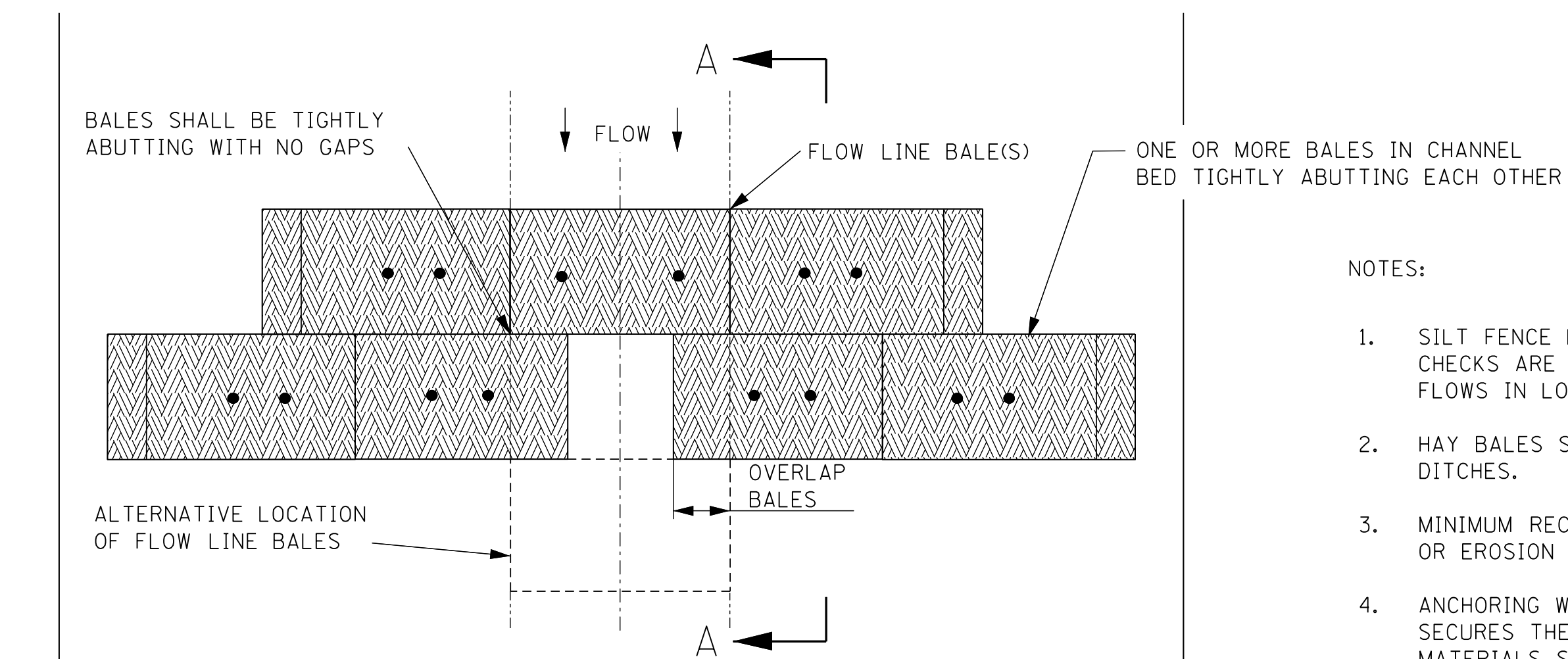
PLAN VIEW

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.



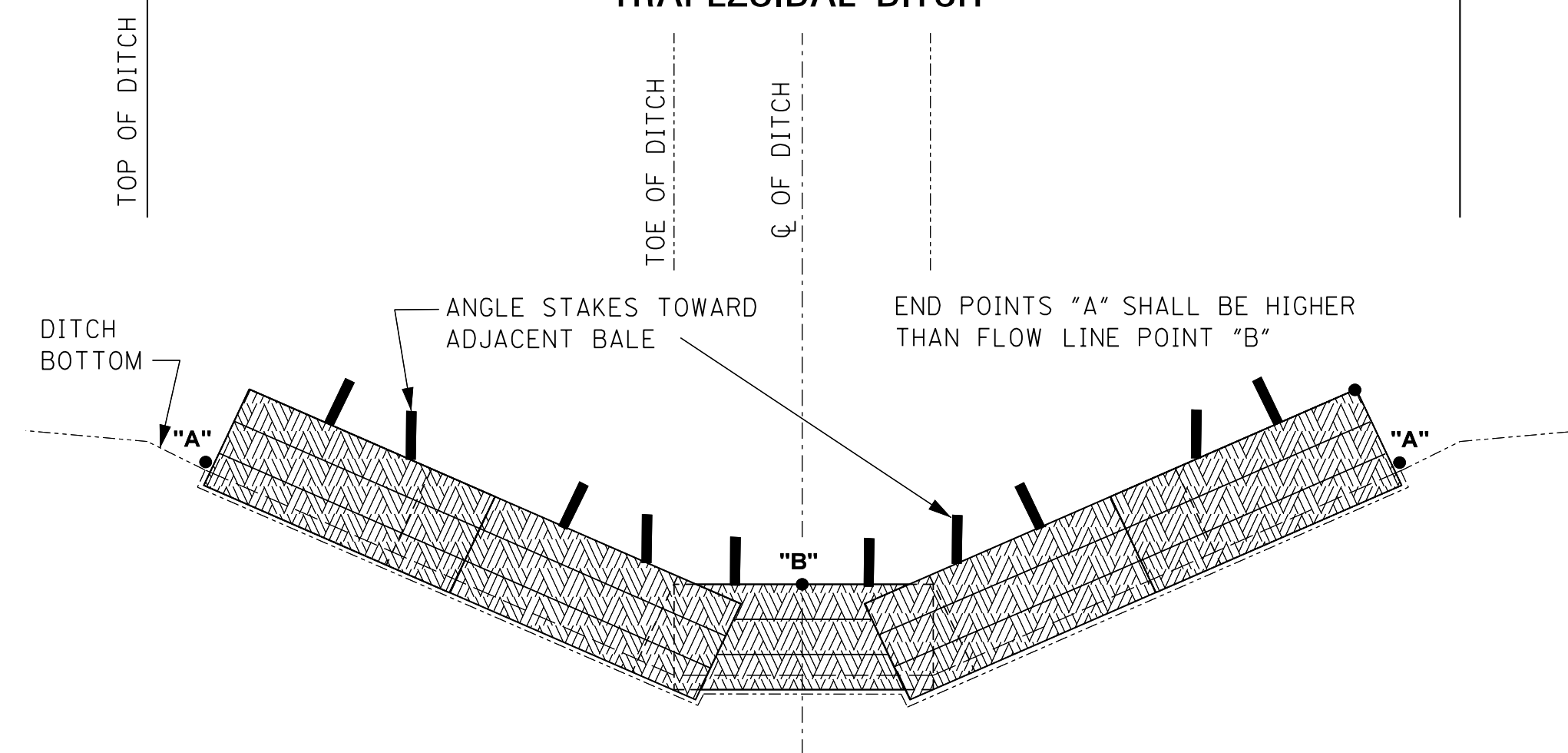
SECTION A-A



PLAN VIEW  
TRAPEZOIDAL DITCH

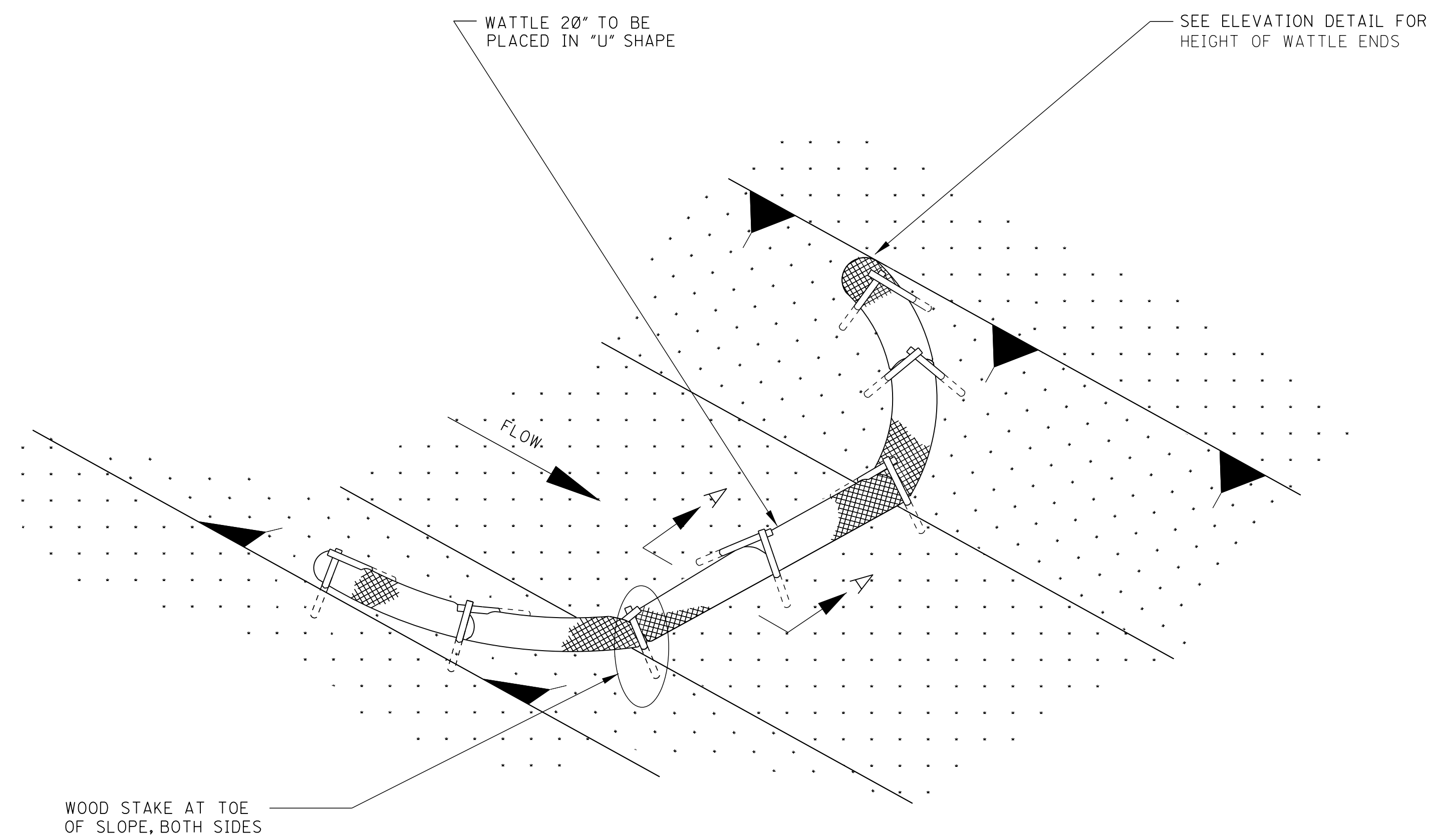
NOTES:

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.



PROFILE VIEW  
TRAPEZOIDAL DITCH

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<b>TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES</b> (SILT FENCE AND HAY BALE DITCH CHECKS)	
DATE		ISSUE DATE: AUGUST 01, 2017	
		 WORKING NUMBER ECD-5 SHEET NUMBER 6105	



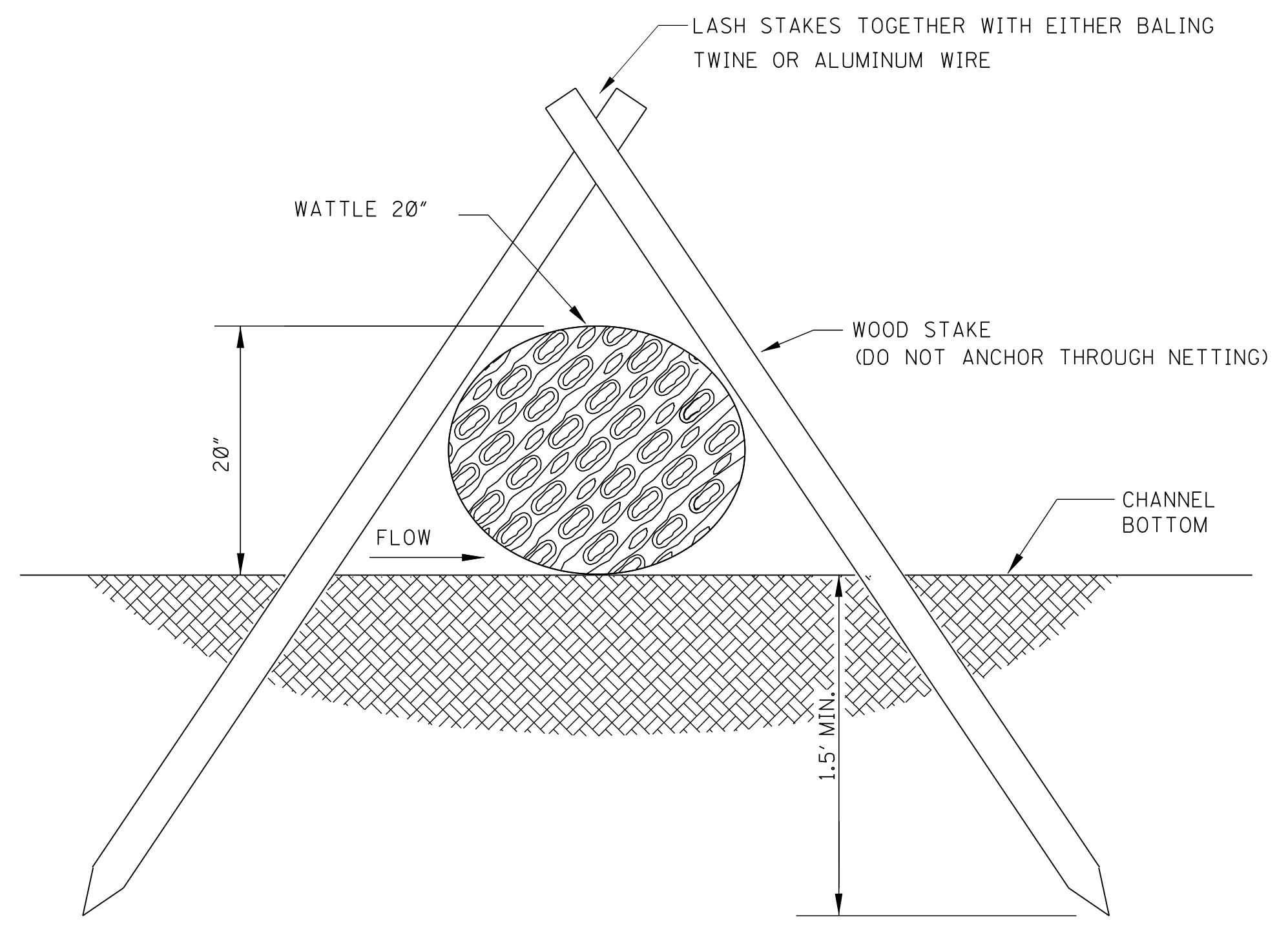
**DETAIL (DITCH CHECK)**

WOOD STAKE AT TOE OF SLOPE, BOTH SIDES

SEE ELEVATION DETAIL FOR HEIGHT OF WATTLE ENDS

FLOW

WATTLE 20" TO BE PLACED IN "U" SHAPE



**SECTION A-A**

LASH STAKES TOGETHER WITH EITHER BALING TWINE OR ALUMINUM WIRE

WATTLE 20"

WOOD STAKE (DO NOT ANCHOR THROUGH NETTING)

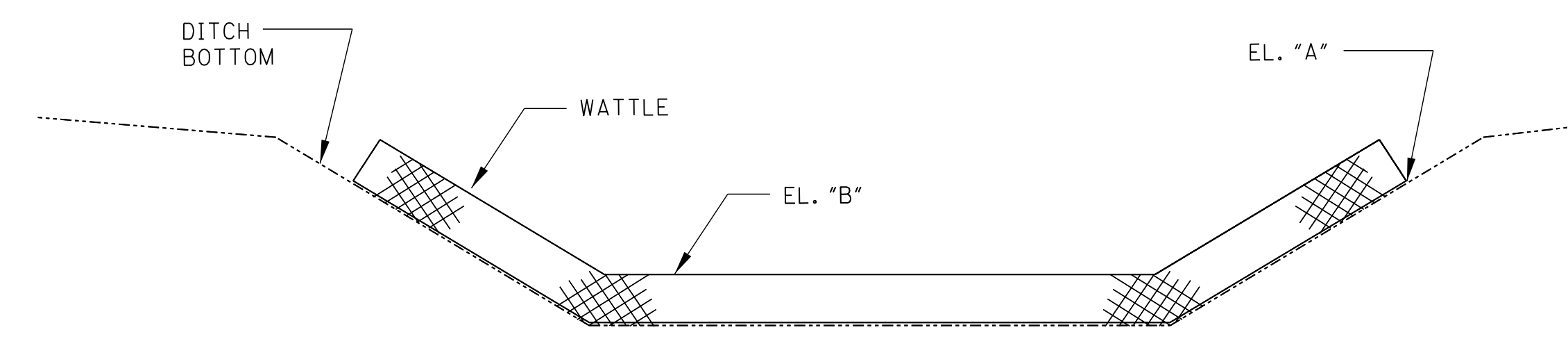
FLOW

CHANNEL BOTTOM

20"

1.5' MIN.

NOTE: END POINTS "A" SHALL BE HIGHER THAN FLOWLINE POINT "B".

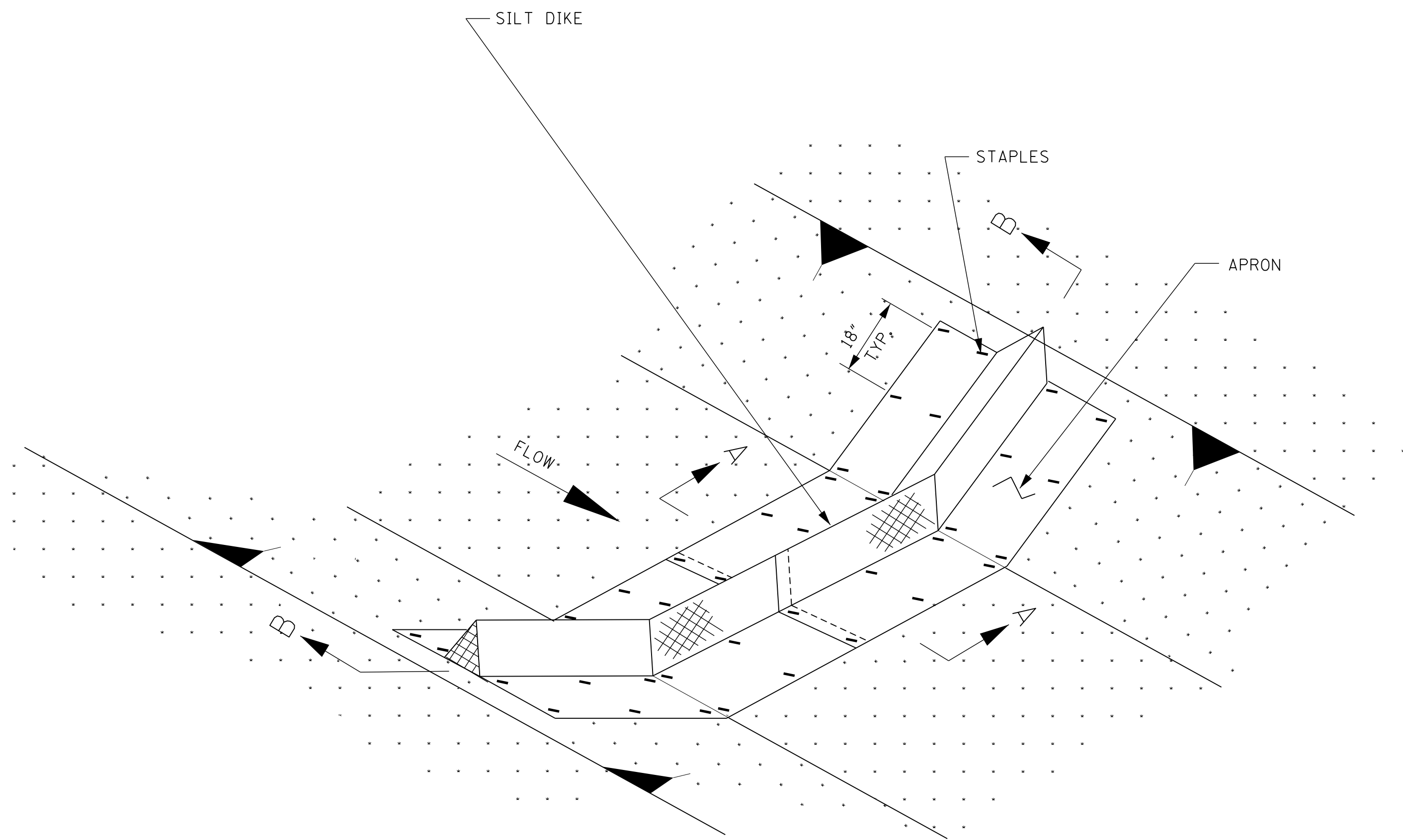


**ELEVATION DETAIL**

**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		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center"><b>DETAILS OF EROSION CONTROL WATTLE DITCH CHECK</b></p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-6	
SHEET NUMBER		6106	

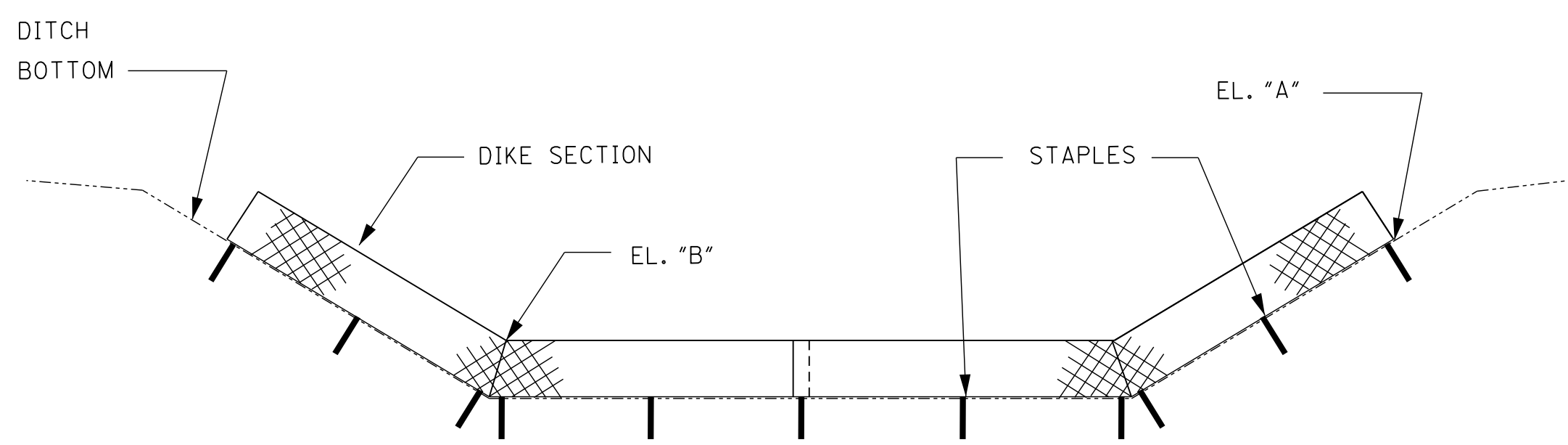


NOTES:

NOTES:

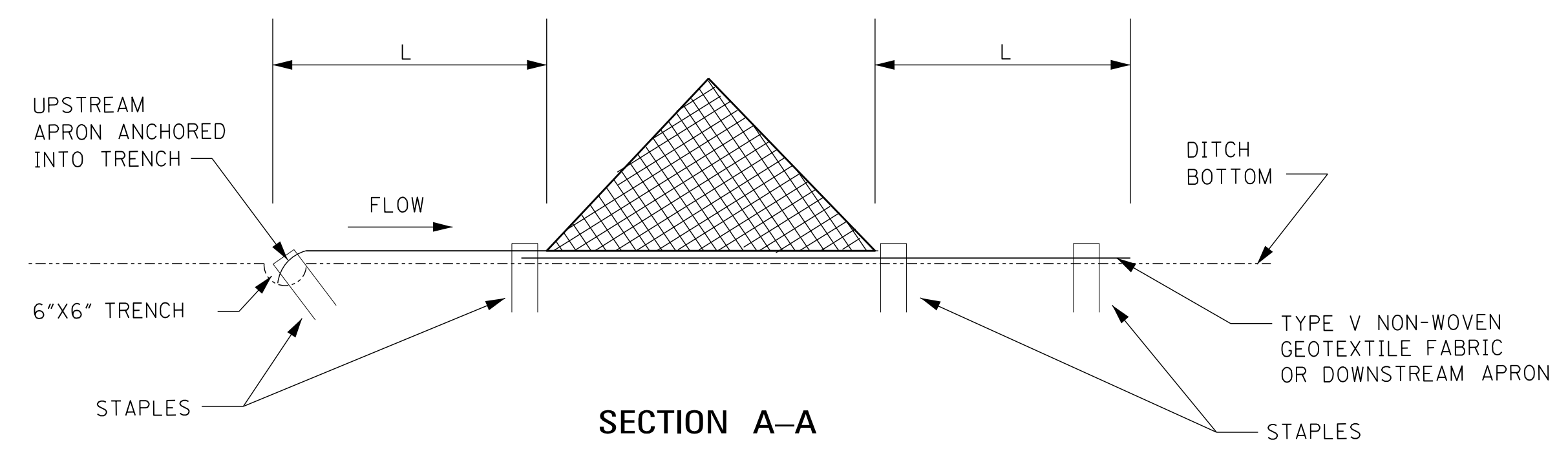
- SILT DIKES CAN BE USED IN DITCHES WITH CONCENTRATED FLOWS WITHIN THE CLEAR ZONE WHERE RIPRAP CANNOT BE USED.
- SILT DIKES MAY ALSO BE USED:
  - IN AREAS WHERE CONSTRUCTION TRAFFIC TRAVELS (AS SHOWN ON WK. NO. ECD-16), PROVIDED THE SILT DIKE REBOUNDS TO ITS ORIGINAL SHAPE. SILT DIKES WHICH DO NOT REBOUND TO THEIR ORIGINAL SHAPE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE DEPARTMENT.
  - 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).
- 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.
- INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THE TRIANGULAR SILT DIKE SHAPE IS ONLY SHOWN FOR DEPICTION PURPOSES. OTHER SHAPED SILT DIKES MAY BE USED.
- 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.
- THE COST OF THE FABRIC SHALL BE INCLUDED IN OTHER ITEMS BID.

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

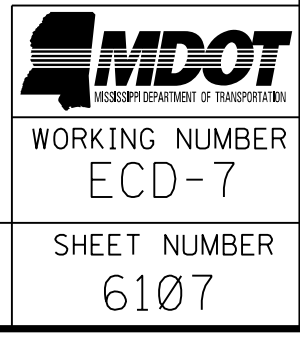


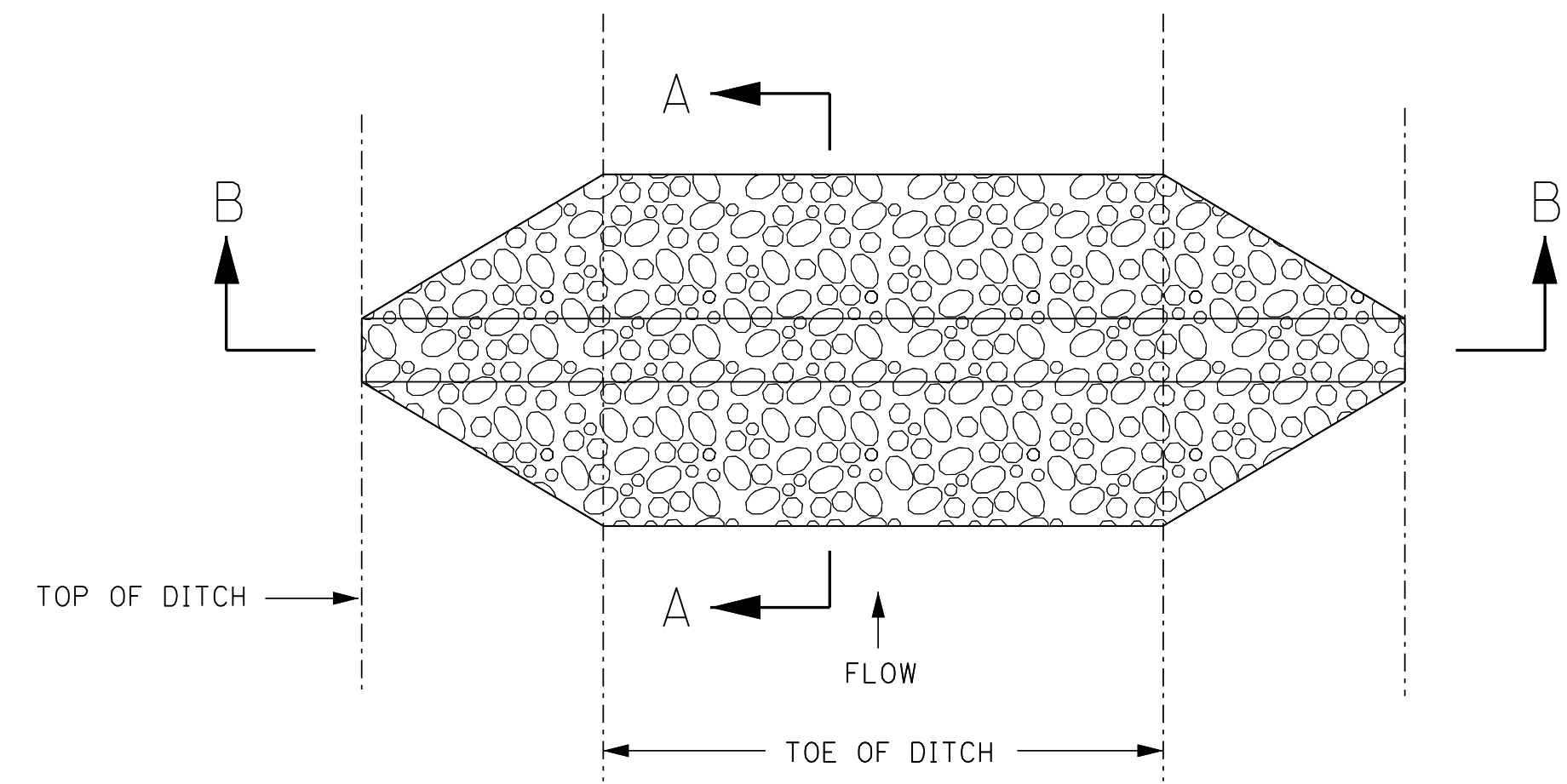
NOTE: STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE UNIT

SECTION A-A

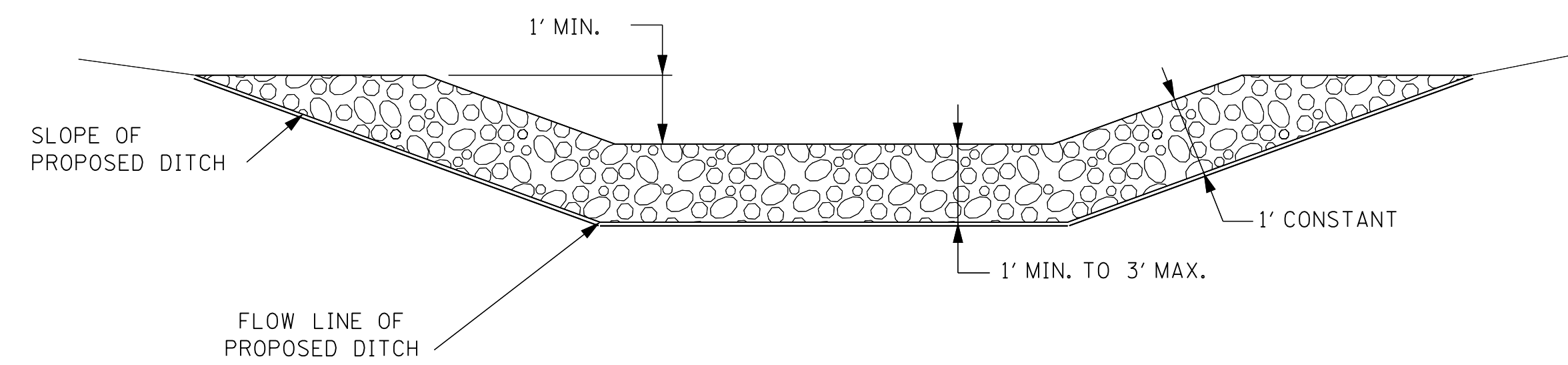
SILT DIKE INSTALLATION FOR ROADWAY DITCHES

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<b>DETAILS OF EROSION CONTROL SILT DIKE DITCH CHECK</b>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-7	
SHEET NUMBER		6107	

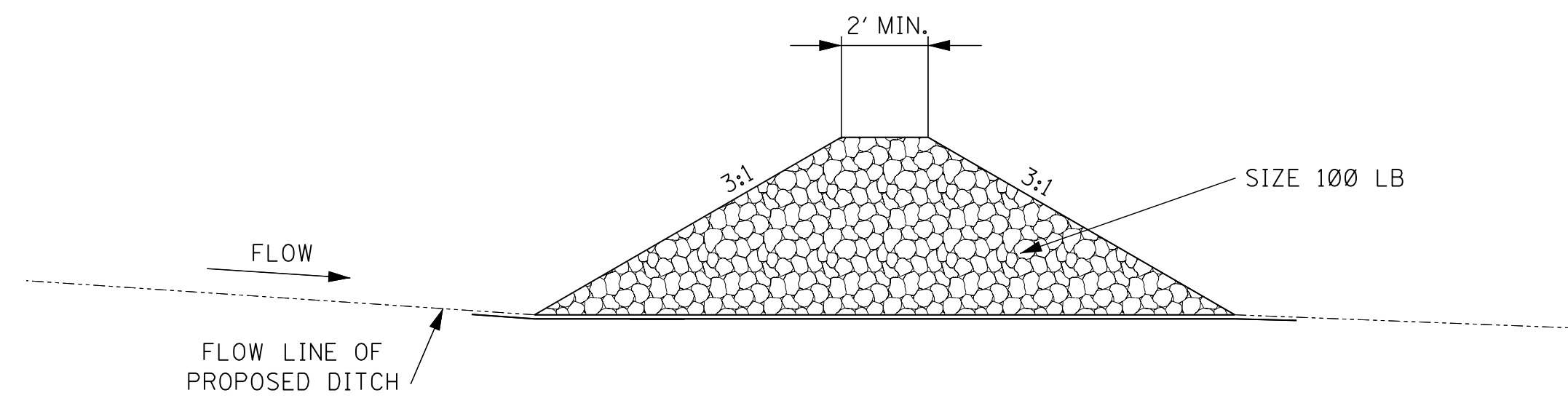




**PLAN VIEW**  
**DETAIL FOR TRAPEZOIDAL DITCH**

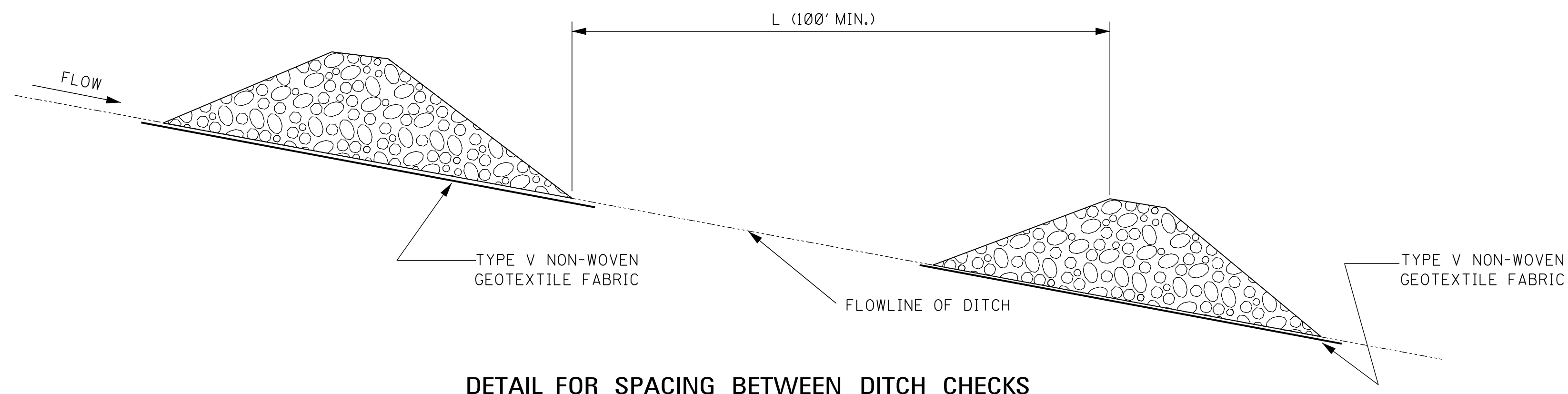


**SECTION B-B**



**SECTION A-A**

**TEMPORARY ROCK DITCH CHECKS IN ROADSIDE DITCHES**

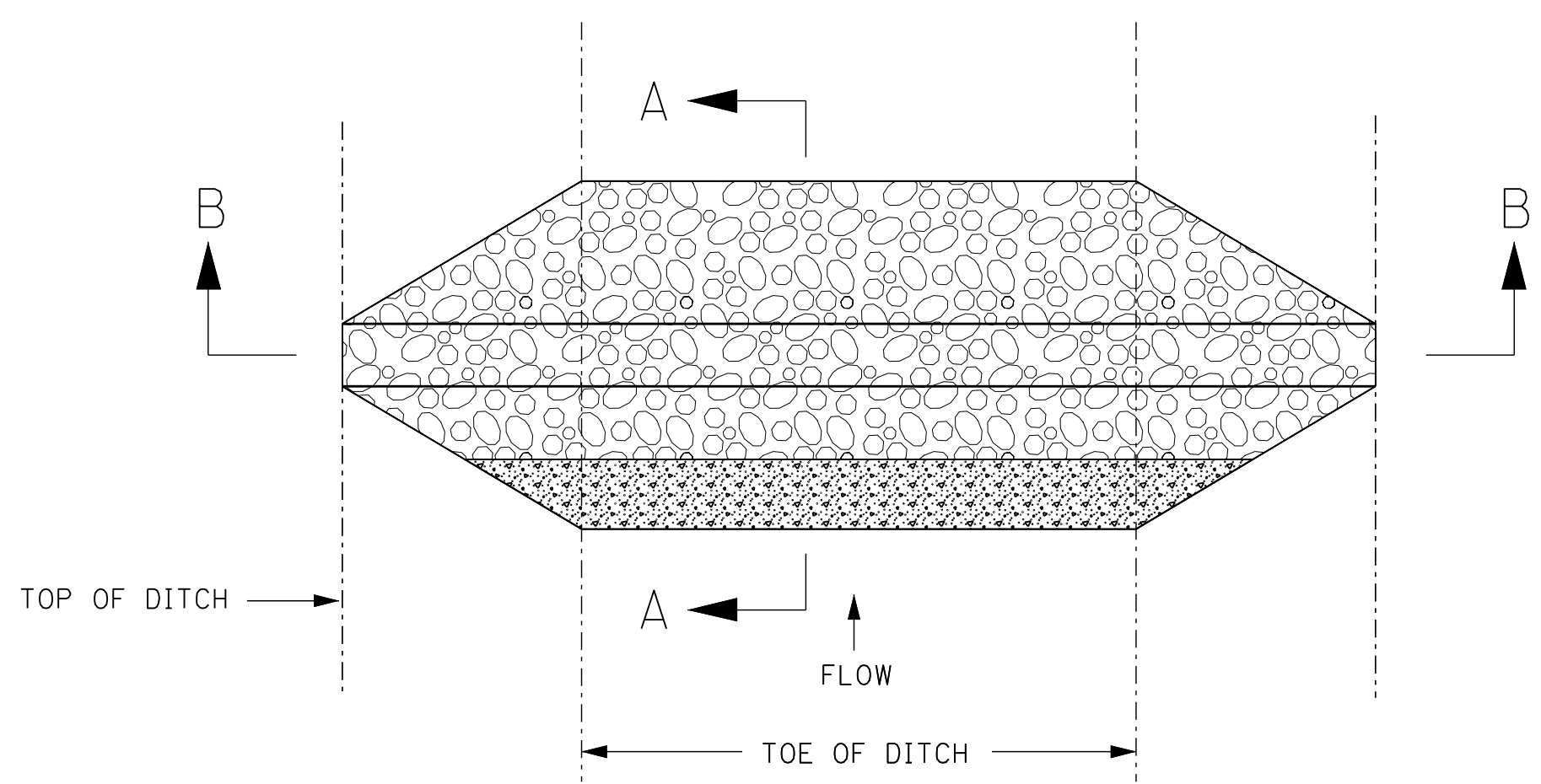


**DETAIL FOR SPACING BETWEEN DITCH CHECKS**

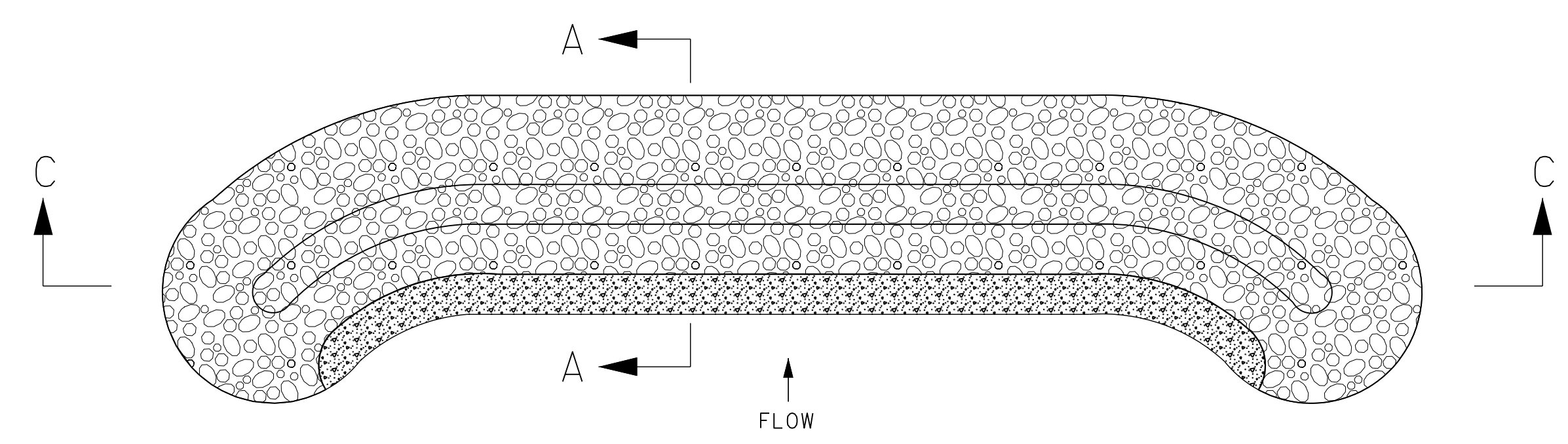
**NOTES:**

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.

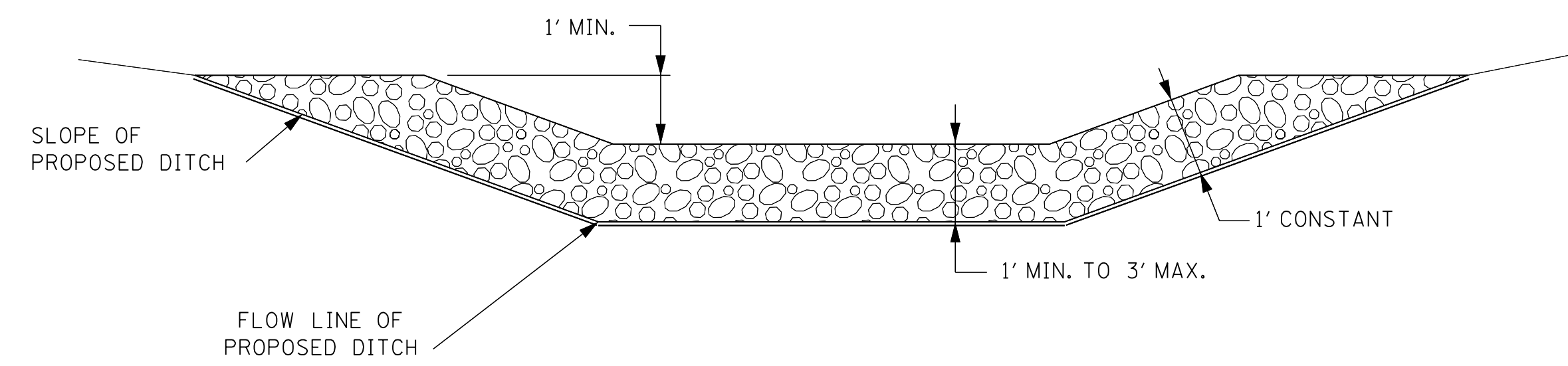
		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
		<b>ROCK DITCH CHECK</b>	
			
		WORKING NUMBER ECD-8	
		SHEET NUMBER 6108	
BY		ISSUE DATE: AUGUST 01, 2017	
REVISION			
DATE			



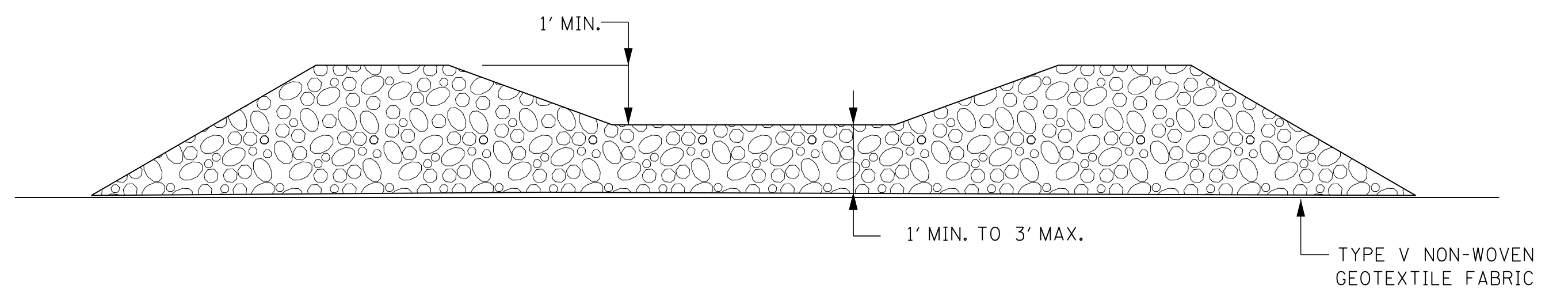
**PLAN VIEW**  
**DETAIL FOR TRAPEZOIDAL DITCH**



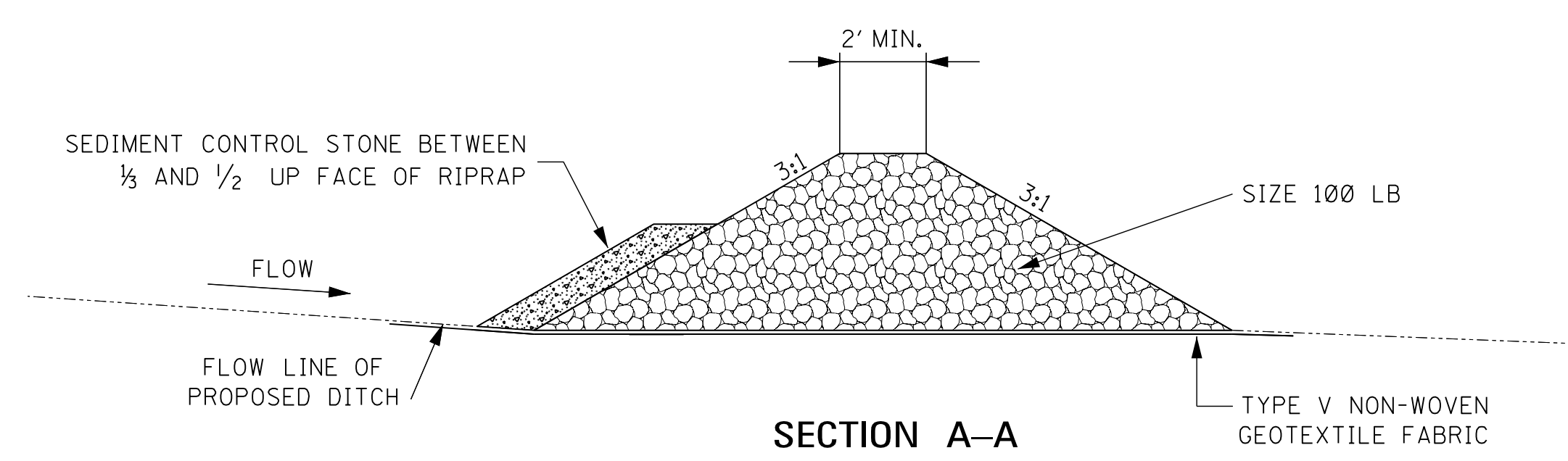
**PLAN VIEW**  
**DETAIL FOR USE OTHER THAN DITCH**



**SECTION B-B**



**SECTION C-C**



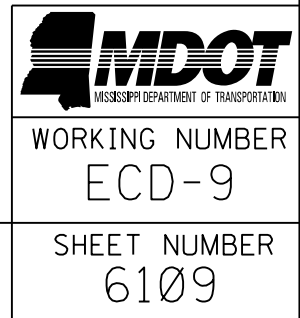
**SECTION A-A**

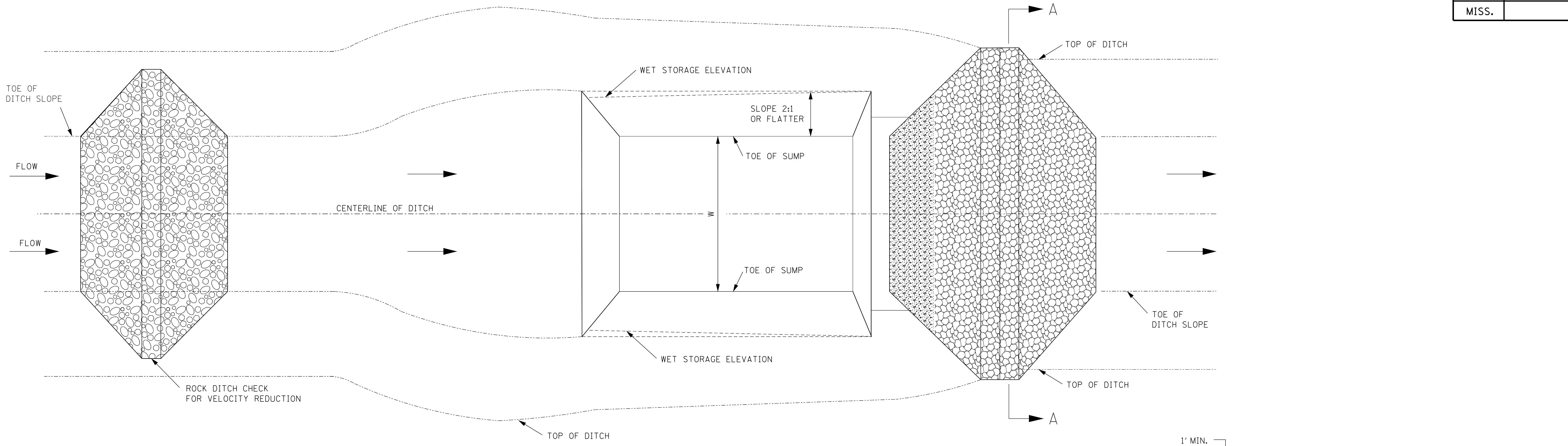
**TEMPORARY ROCK DITCH CHECKS IN ROADSIDE DITCHES**

**GENERAL NOTES:**

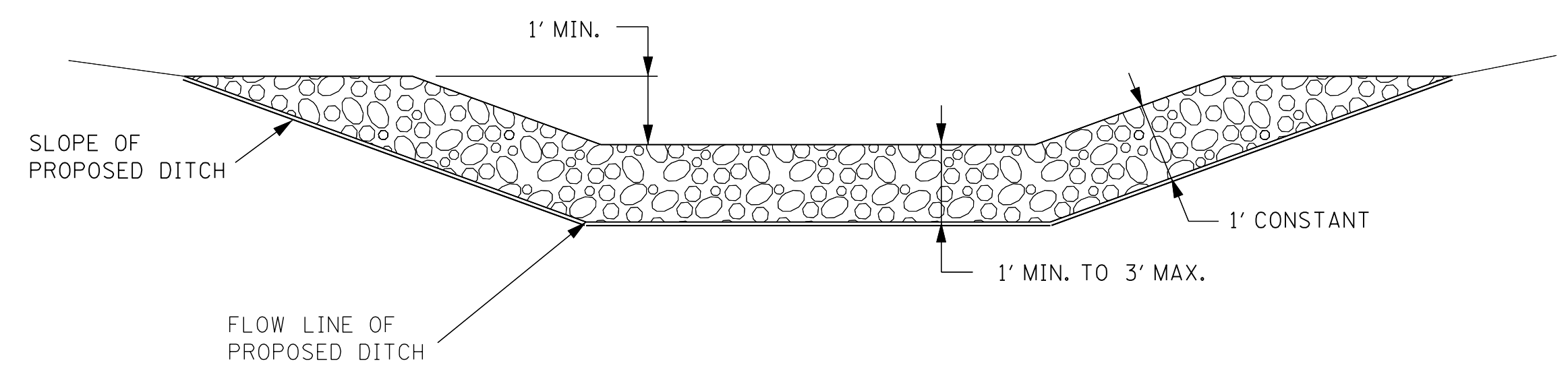
1. ROCK FILTER DAMS (RFD) MAY BE USED AS A DISCHARGE STRUCTURE WHILE WORKING WITH HIGHLY EROSIIVE SOIL. RFD'S MAY BE USED AS PART OF A "BMP TRAIN" AND MAY BE USED IN SUCCESSION AT A MINIMUM SPACING OF 100 FT. OR PER THE EROSION CONTROL PLAN APPROVED BY THE ENGINEER.
2. THE COST OF THE FABRIC SHALL BE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

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<b>ROCK FILTER DAM</b>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-9	
SHEET NUMBER		6109	

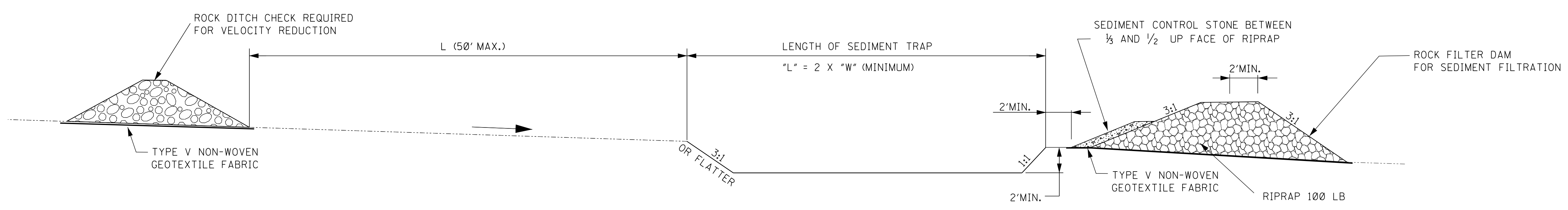




PLAN VIEW



SECTION A-A

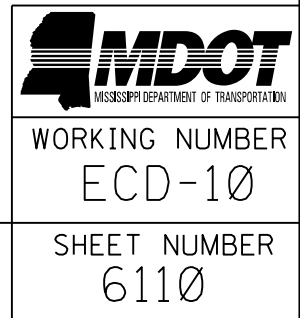


PROFILE VIEW

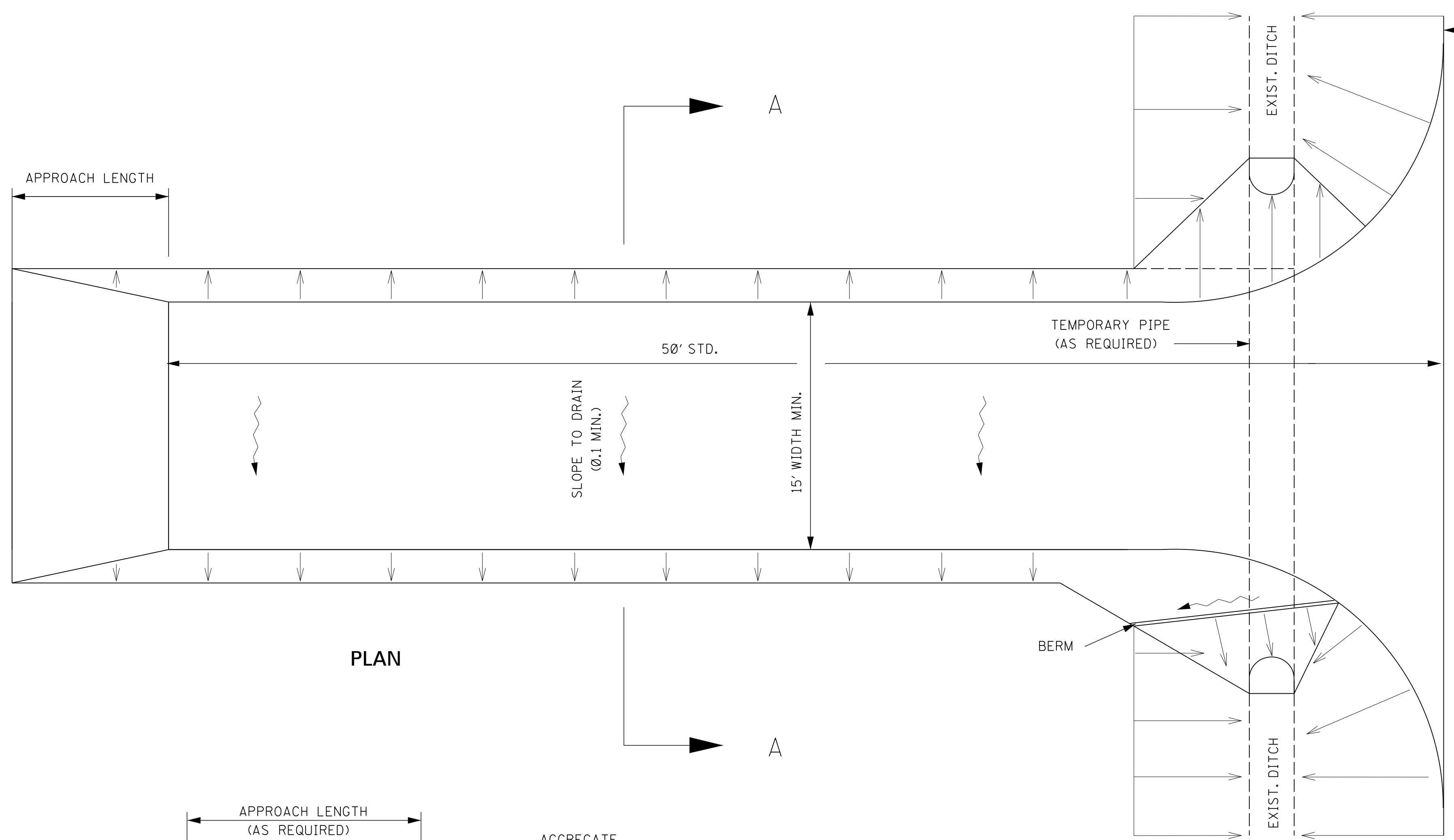
NOTES:

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
<b>ROCK DITCH CHECK WITH SUMP EXCAVATION AND ROCK FILTER DAM</b>	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER	ECD-10
SHEET NUMBER	6110



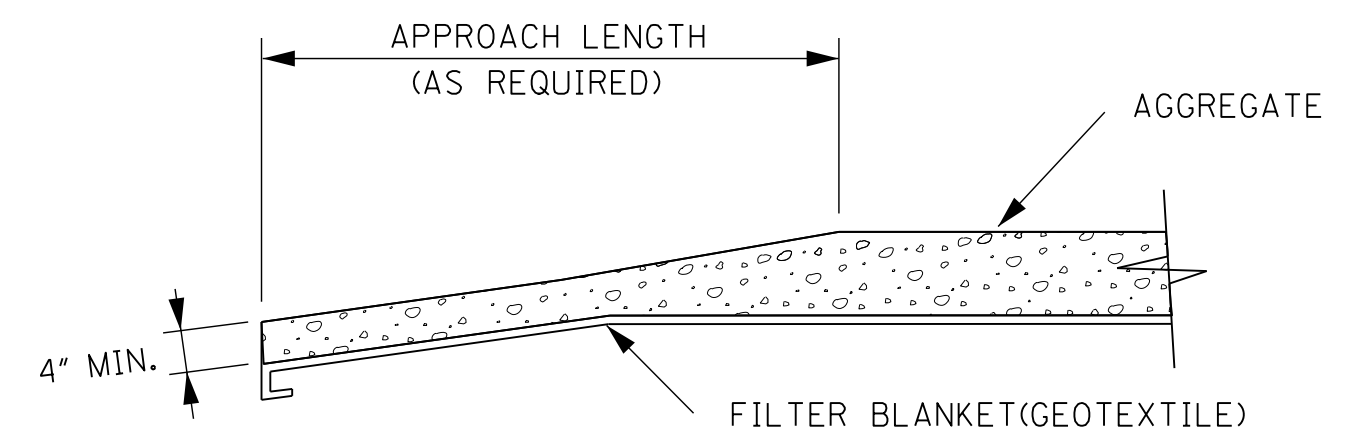




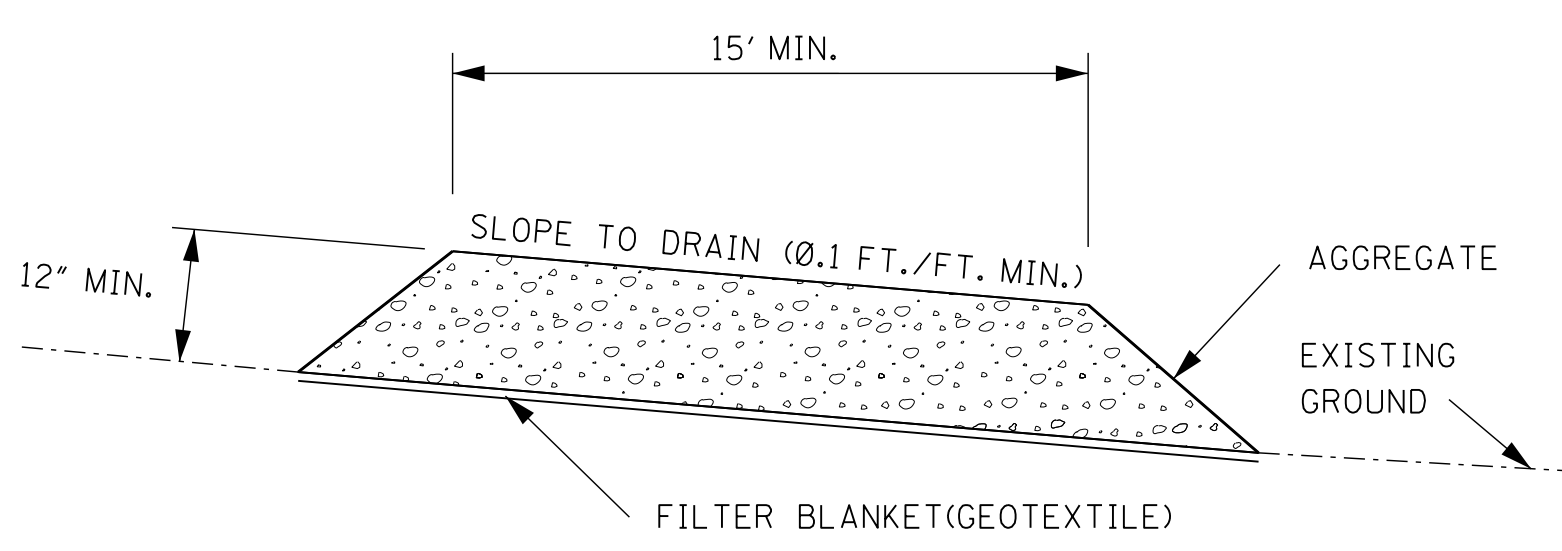
GENERAL NOTES:

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 CONSTRUCTION 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.

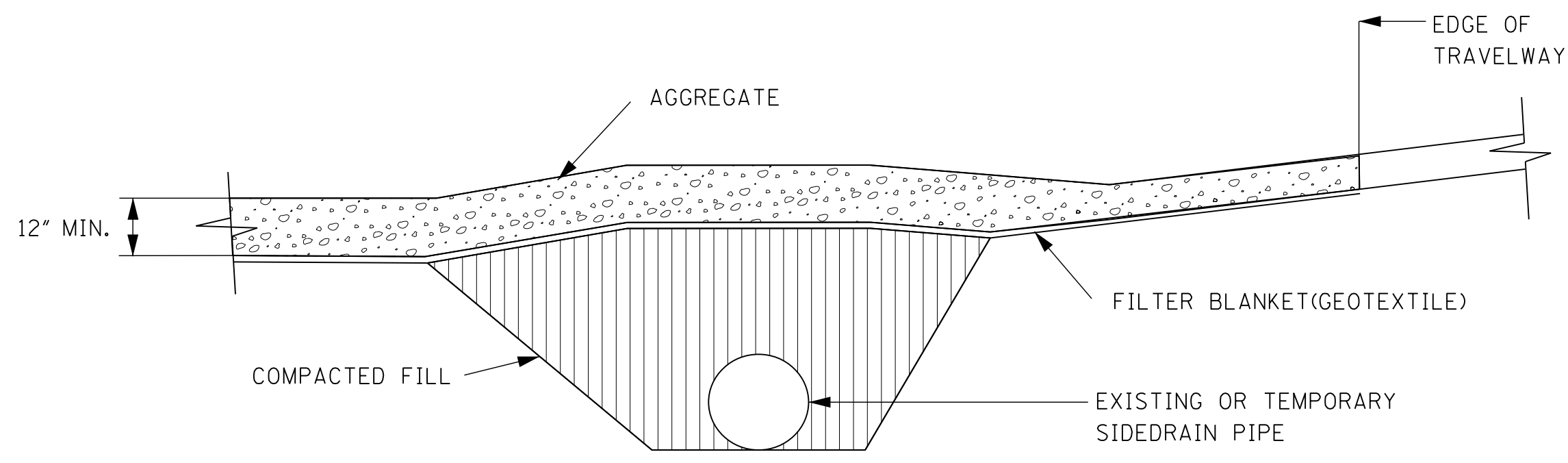
PLAN



TRANSITION DETAIL



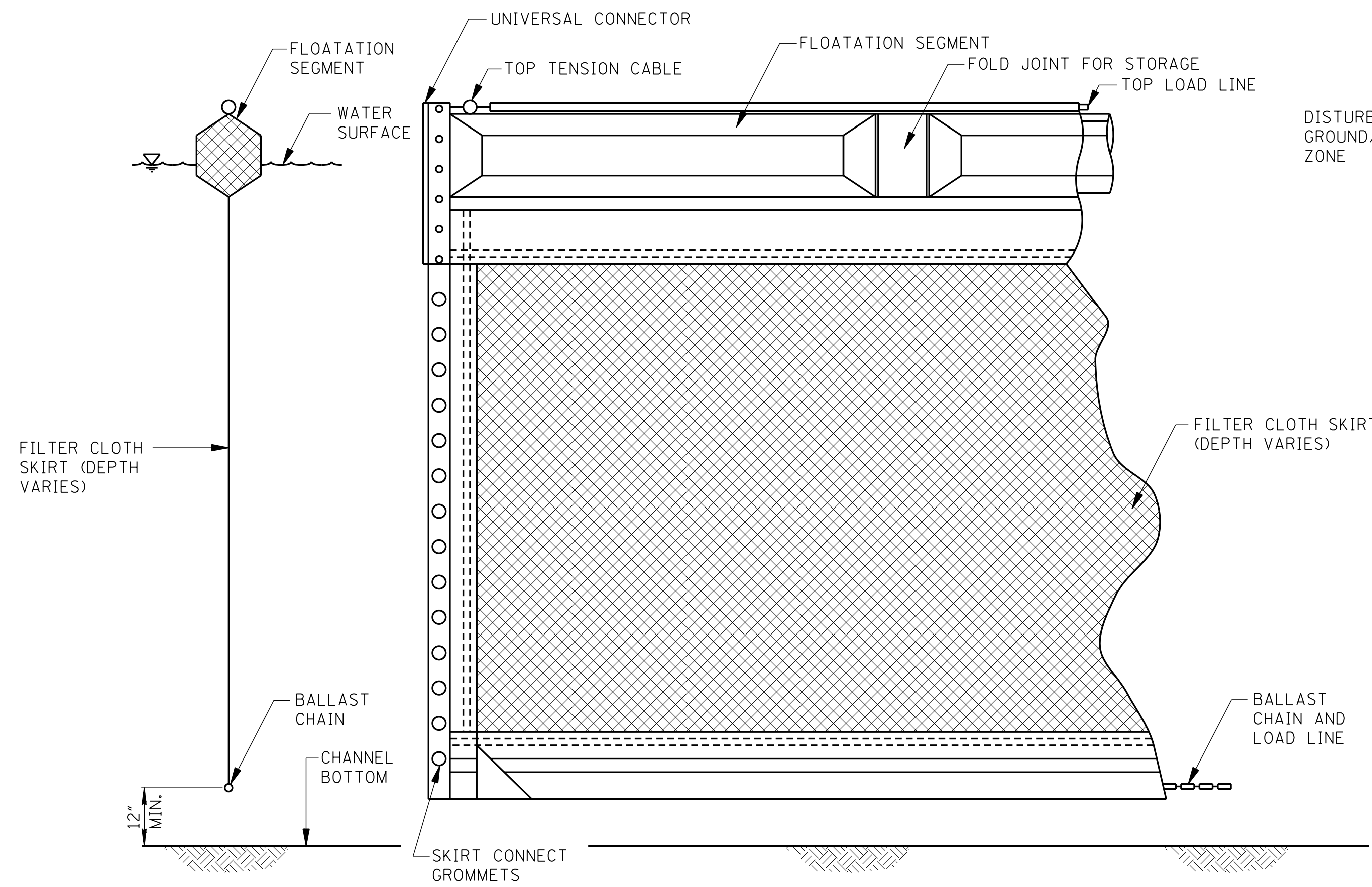
SECTION A-A



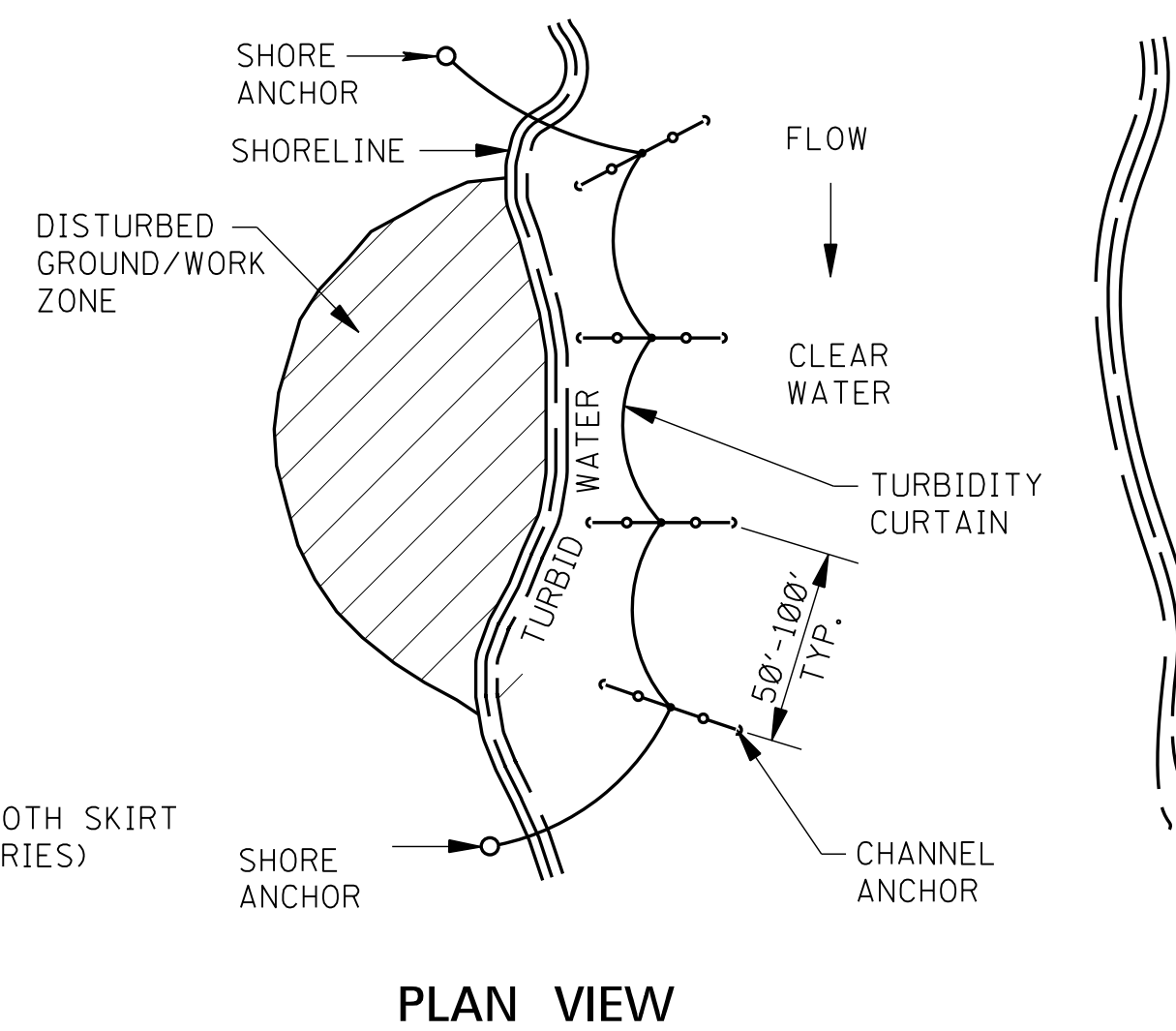
RURAL CONNECTION DETAIL

		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
		<b>STABILIZED CONSTRUCTION ENTRANCE</b>	
	BY		
	REVISION		
	DATE	ISSUE DATE: AUGUST 01, 2017	
		WORKING NUMBER ECD-16	SHEET NUMBER 6116

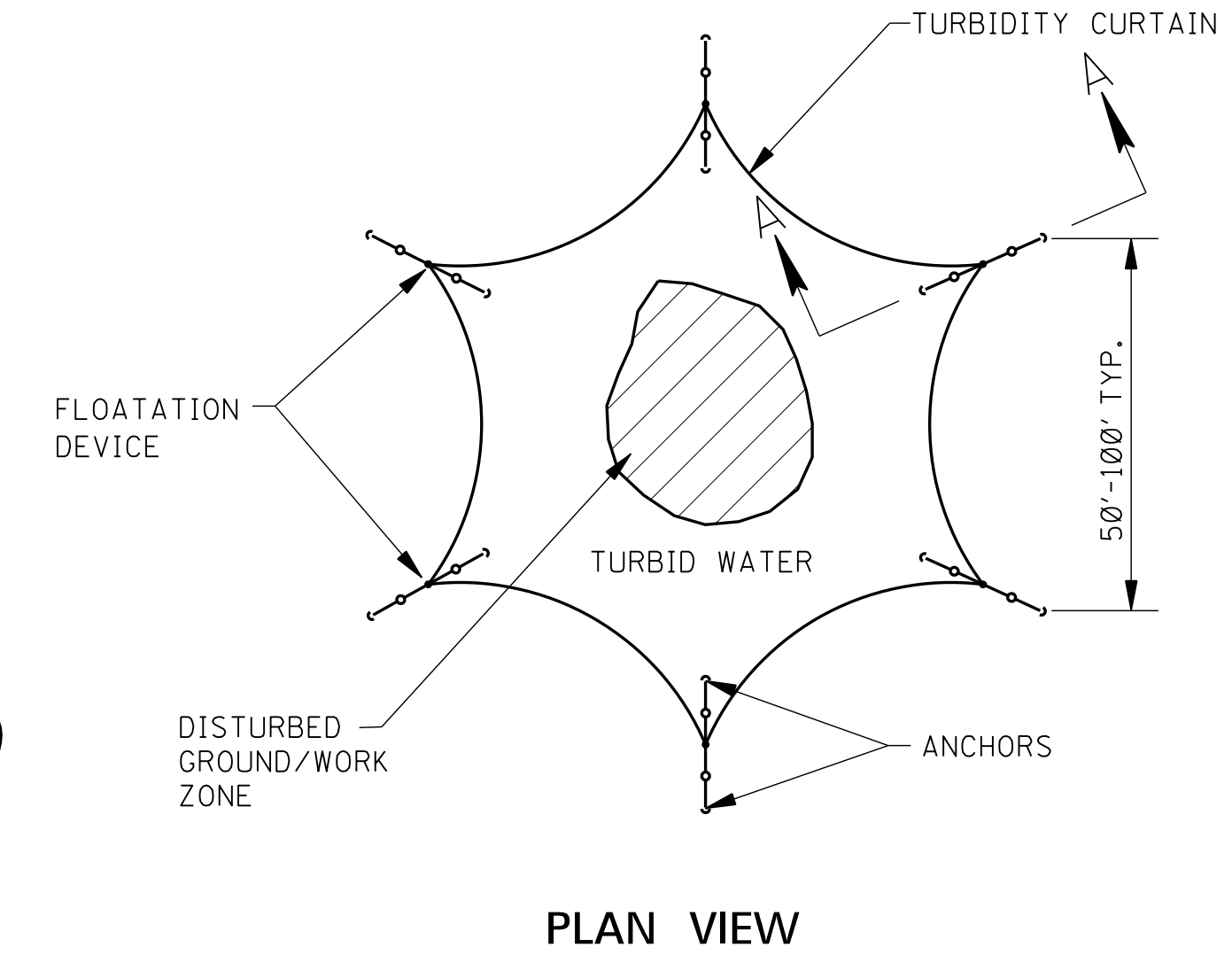
### FLOATING TURBIDITY CURTAIN



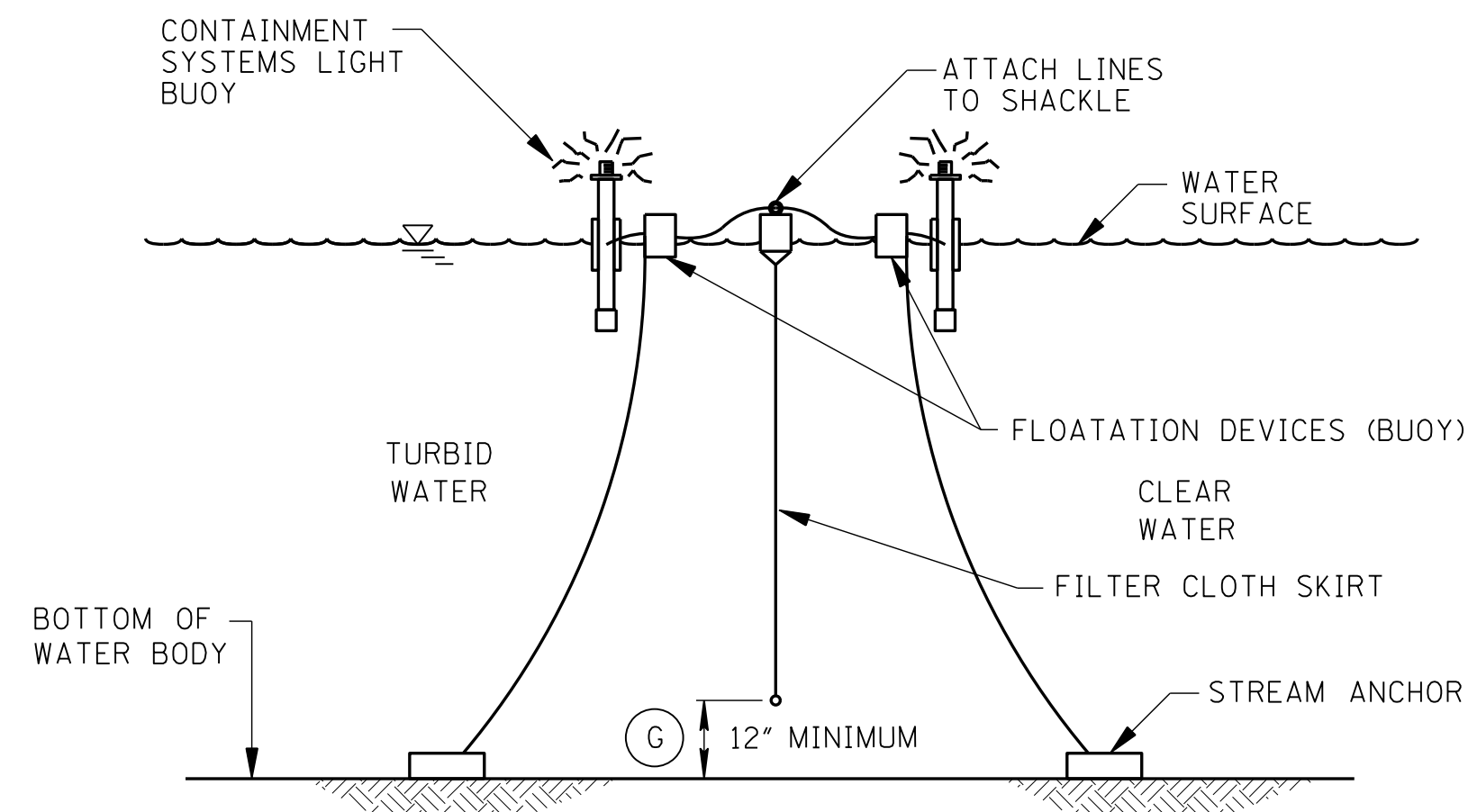
### TYPICAL ANCHORING PLAN FOR SHORELINE/RIVER EDGE WORK



### TYPICAL ANCHORING PLAN FOR MID CHANNEL WORK (BRIDGE PIER, CAISSON, ETC.)



### TYPICAL ANCHORING SECTION



#### SECTION A-A

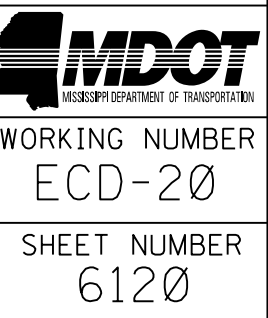
AUTOMATIC FLASHING LIGHT BUOY (ON AT DUSK-OFF AT DAWN) 100' ON CENTER SHALL BE USED IN NAVIGABLE CHANNELS ONLY

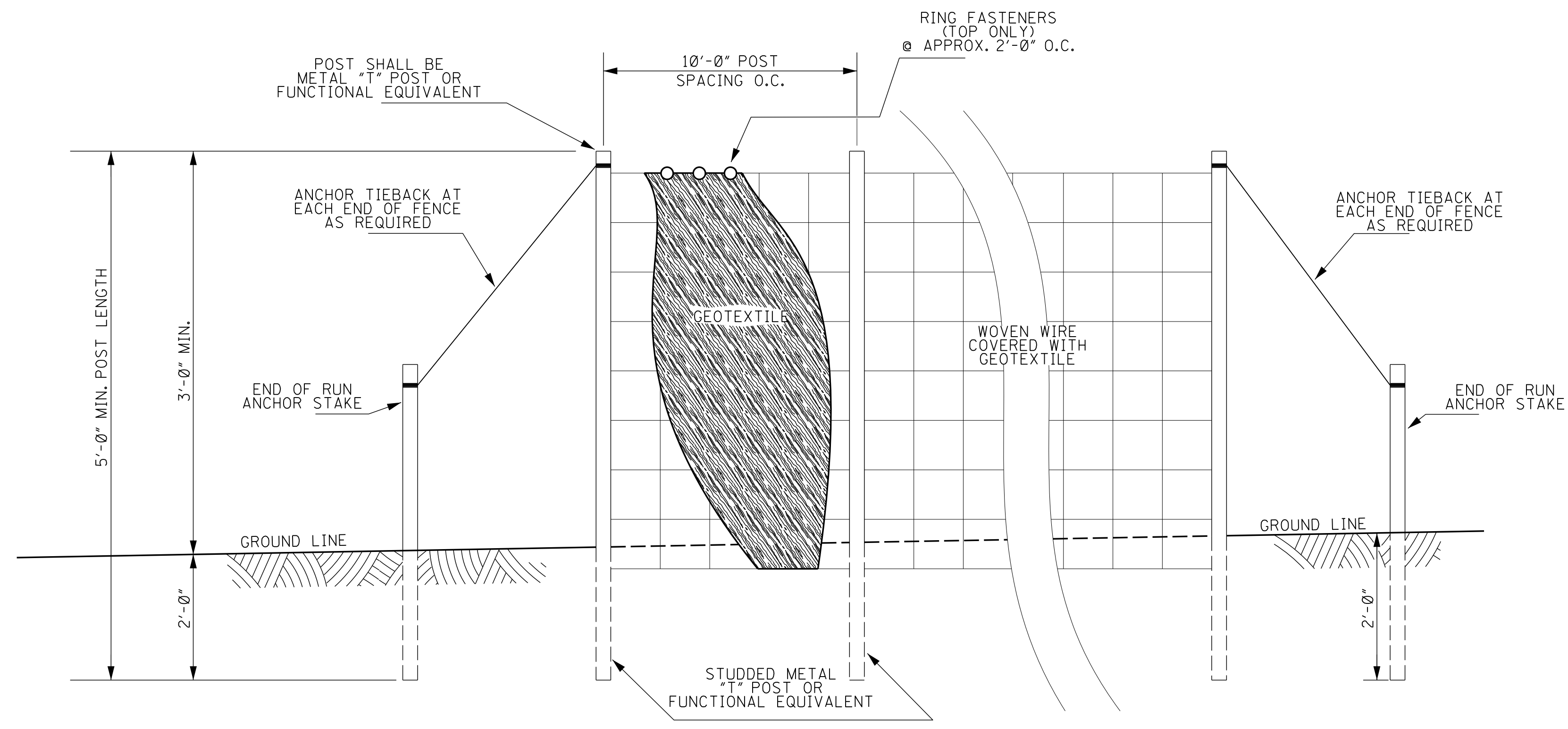
EROSION CONTROL PLAN LEGEND: FLOATING TURBIDITY CURTAIN

#### GENERAL NOTES:

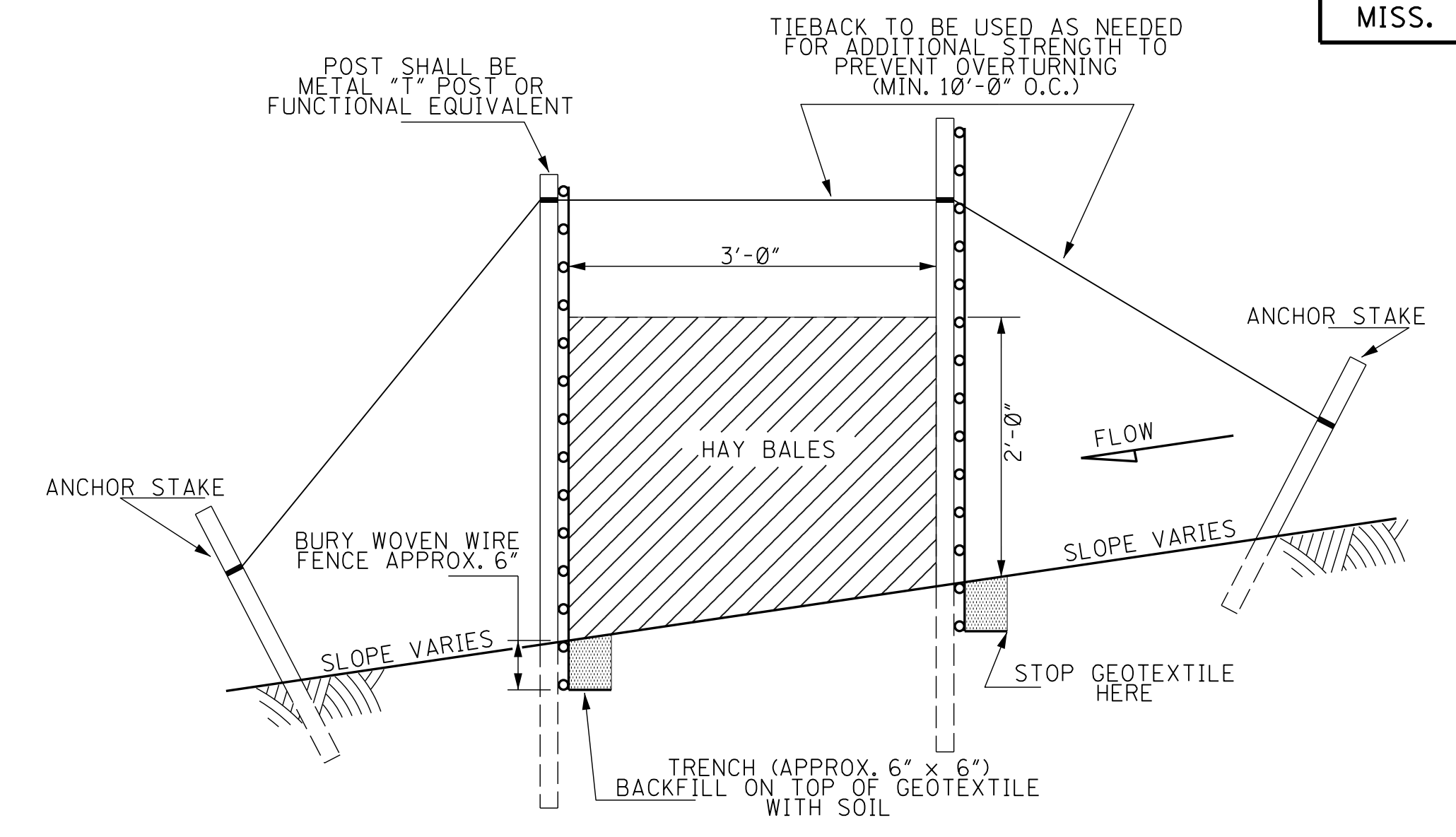
- FLOATING TURBIDITY CURTAINS (ALSO KNOWN AS TURBIDITY BARRIERS OR SILT CURTAINS) CREATE A BARRIER TO PREVENT TURBID WATER FROM ENTERING CLEAR WATER. FLOATING TURBIDITY CURTAINS SHOULD BE USED TO ISOLATE ACTIVE CONSTRUCTION AREAS WITHIN OR ADJACENT TO A BODY OF WATER TO MINIMIZE THE MIGRATION OF SILT LADEN WATER OUT OF THE CONSTRUCTION ZONE.
- TURBIDITY CURTAINS SHALL NOT BE INSTALLED PERPENDICULAR ACROSS THE MAIN FLOW OF A SIGNIFICANT BODY OF MOVING WATER.
- FLOATING TURBIDITY CURTAINS SHOULD NOT BE USED WHERE THE ANTICIPATED FLOW VELOCITIES WILL EXCEED 5 FT/SEC.
- TURBIDITY CURTAINS SHALL BE ANCHORED TO PREVENT DRIFT SHOREWARD OR DOWNSTREAM. ANCHORAGE SHALL BE INSTALLED ON BOTH SHORE AND STREAM SIDE. CURTAINS SHOULD BE INSTALLED AS CLOSE TO PROJECT SITE AS POSSIBLE. BARRIERS SHOULD BE A BRIGHT COLOR (YELLOW OR "INTERNATIONAL" ORANGE ARE RECOMMENDED) THAT WILL ATTRACT THE ATTENTION OF NEARBY BOATERS.
- SHORE ANCHORS SHALL CONSIST OF A POST WITH DEADMAN OR APPROVED EQUAL. STREAM ANCHORS SHALL BE OF SUFFICIENT SIZE TO STABILIZE THE BARRIER WITH NUMBER AND SPACING DEPENDENT ON WATERWAY VELOCITIES AND MANUFACTURER'S RECOMMENDATIONS.
- IN SHALLOW WATER (2 FEET OF DEPTH OR LESS) A TURBIDITY CURTAIN MAY BE INSTALLED ON STAKES DRIVEN INTO THE BED OF THE WATER BODY.
- FABRIC SECTIONS SHALL BE CONNECTED END TO END WITH MINIMUM 5/8" DIAMETER POLYPROPYLENE ROPE. FABRIC SHALL BE SEAMED TOGETHER IN A MANNER THAT RETAINS THE OVERALL TENSILE STRENGTH.
- DESIGN OF CURTAIN AND ANCHORAGE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. FILTER CLOTH SKIRT SHOULD BE ABLE TO WITHSTAND THE FORCES IMPARTED ON IT DUE TO THE EXPECTED WIND VELOCITY OR STREAM VELOCITY. FABRIC SHALL BE MADE OF A NON-DETERIORATING MATERIAL, SUCH AS PLASTIC OR NYLON, WHICH WILL ALLOW WATER TO PASS THROUGH WHILE STILL RETAINING SEDIMENT.
- THE TURBIDITY CURTAIN AND ADJACENT WORK AREAS SHALL NOT BE DISTURBED 12 HOURS PRIOR TO REMOVAL FROM THE WATER BODY. MAINTENANCE SHALL BE PERFORMED AS NEEDED. CONTRACTOR SHALL REMOVE THE CURTAIN AT COMPLETION OF WORK IN A MANNER THAT WILL PREVENT SILTATION OF THE WATERWAY. DURING REMOVAL, EXTREME CARE SHOULD BE TAKEN NOT TO DISTURB ANY SEDIMENT DEPOSITS.
- MAINTAIN 12" MINIMUM GAP BETWEEN SKIRT BOTTOM AND CHANNEL BOTTOM TO PREVENT ACCUMULATED SEDIMENT FROM PULLING TOP OF CURTAIN BELOW WATER SURFACE.
- IN WIND OR WAVE ACTION SITUATIONS, THE MAXIMUM DEPTH OF THE CURTAIN SHALL BE 12 FEET.
- CONCENTRATED FLOWS SHALL NOT DISCHARGE BEYOND FLOATING TURBIDITY CURTAIN. CURTAINS ARE NOT TO BE INSTALLED ACROSS FLOWING BODY OF WATER.
- WHEN INSTALLED IN A NAVIGABLE WATERWAY, BUOYS SHOULD BE LIT ACCORDING TO REGULATORY AGENCY STANDARDS.
- WHEN ESTIMATING THE LENGTH OF THE TURBIDITY CURTAIN, ALLOW 10 TO 20 PERCENT VARIANCE IN STRAIGHT LINE MEASUREMENT.
- PAYMENT FOR FLOATING TURBIDITY CURTAIN SHALL INCLUDE ALL MATERIAL AND ALL LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF TURBIDITY CURTAIN.
- ONLY FLOATING TURBIDITY CURTAINS LISTED ON THE APPROVED PRODUCTS LIST MAY BE USED.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<h2 style="text-align: center;">FLOATING TURBIDITY CURTAIN</h2>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-20	
SHEET NUMBER		6120	

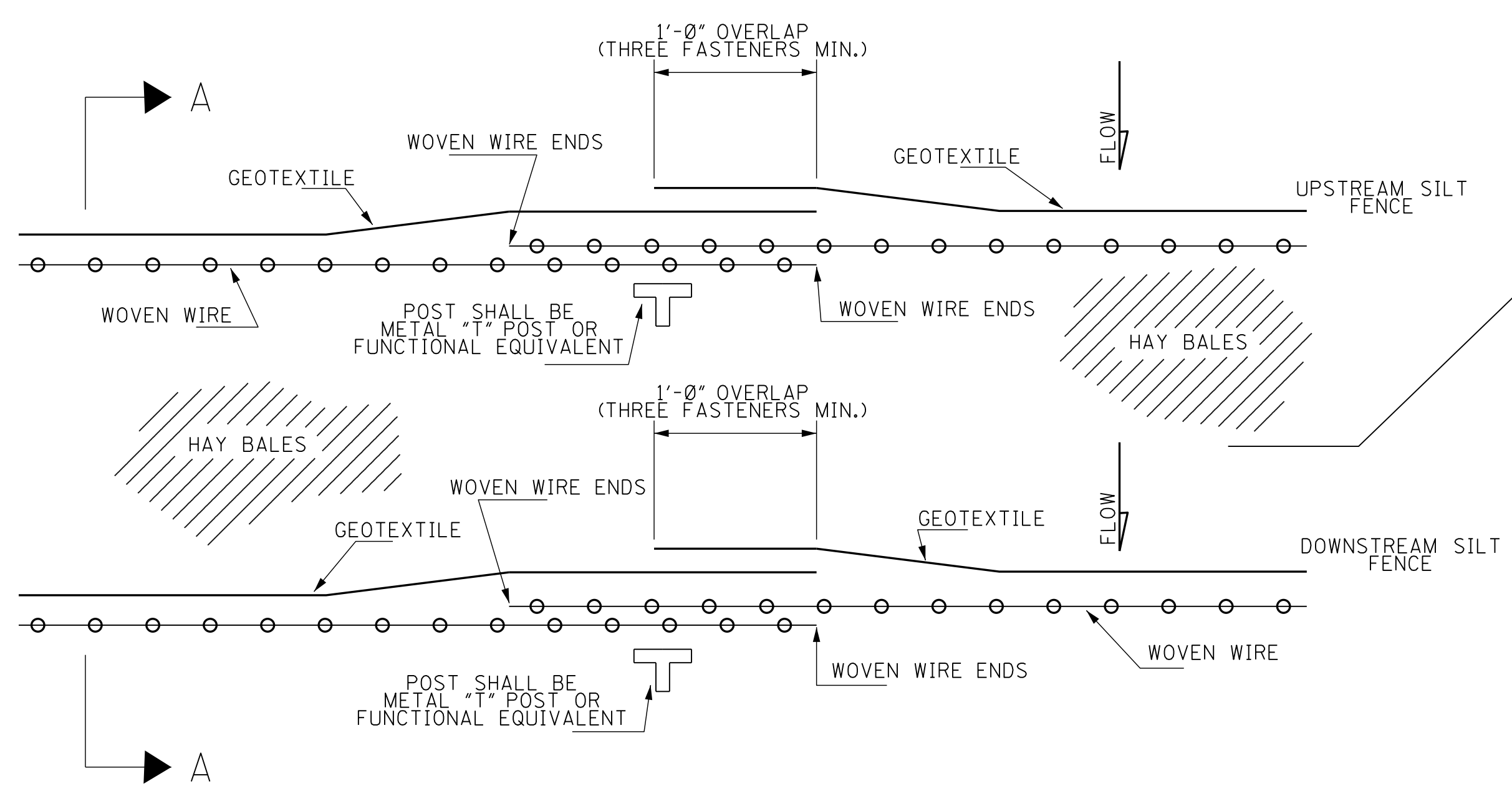




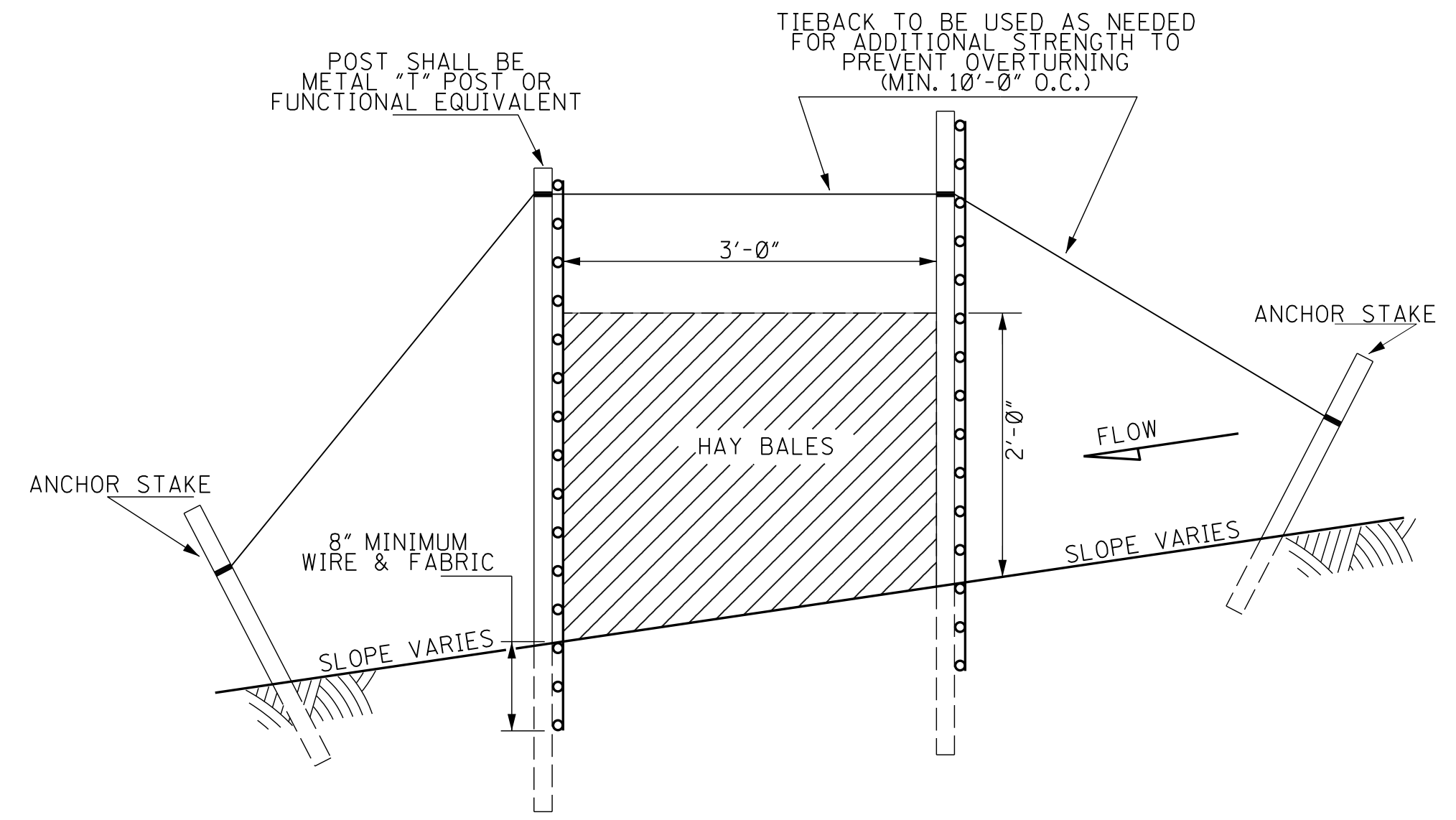
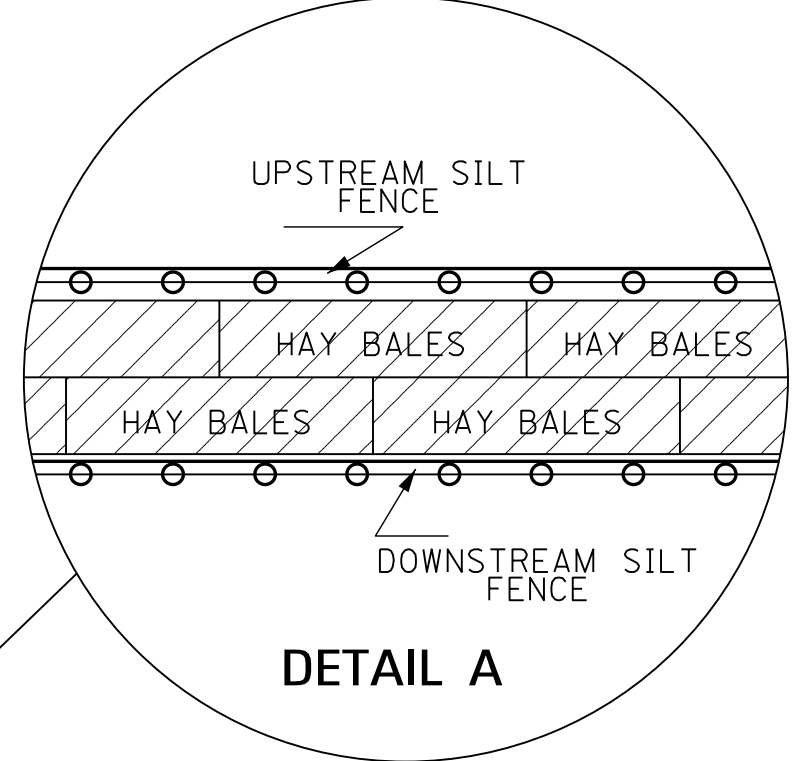
ELEVATION VIEW



SIDE VIEW SECTION A-A METHOD I




PLAN VIEW REQUIRED LAPPING

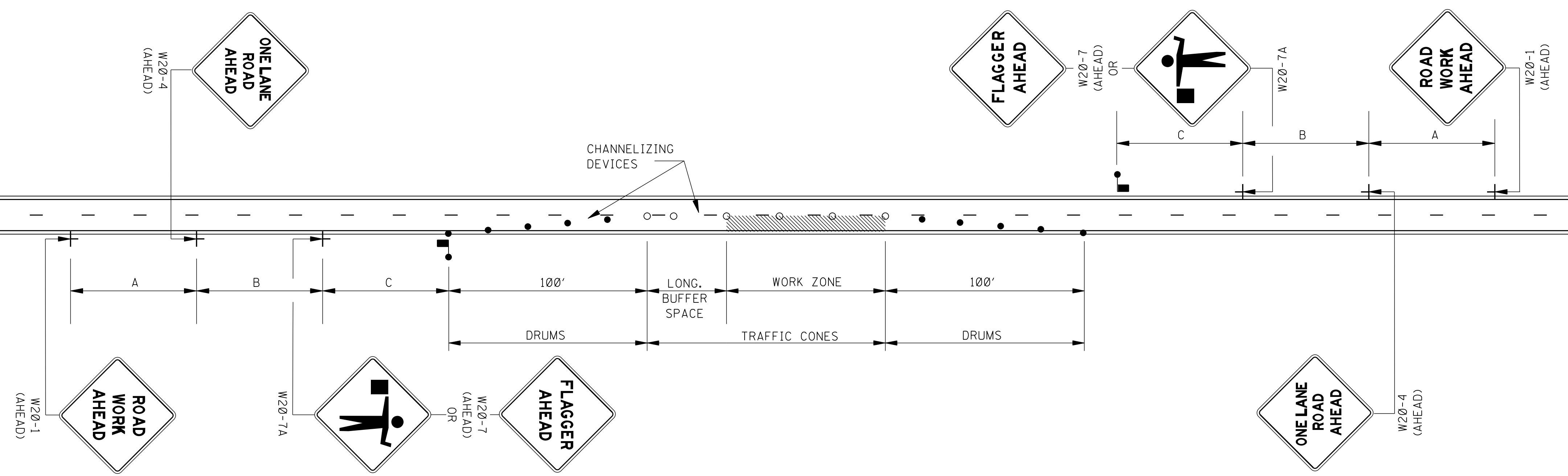


SIDE VIEW SECTION A-A METHOD II MECHANICAL INSTALLATION

GENERAL NOTES:

- RETENTION BARRIERS SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
- 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.
- 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.
- THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SEDIMENT RETENTION BARRIER.
- METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES CONFIGURATION MEETING THE REQUIREMENTS OF THE DETAIL.
- WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
- GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p><b>SEDIMENT RETENTION BARRIER</b></p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-22	
SHEET NUMBER		6122	



- 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.

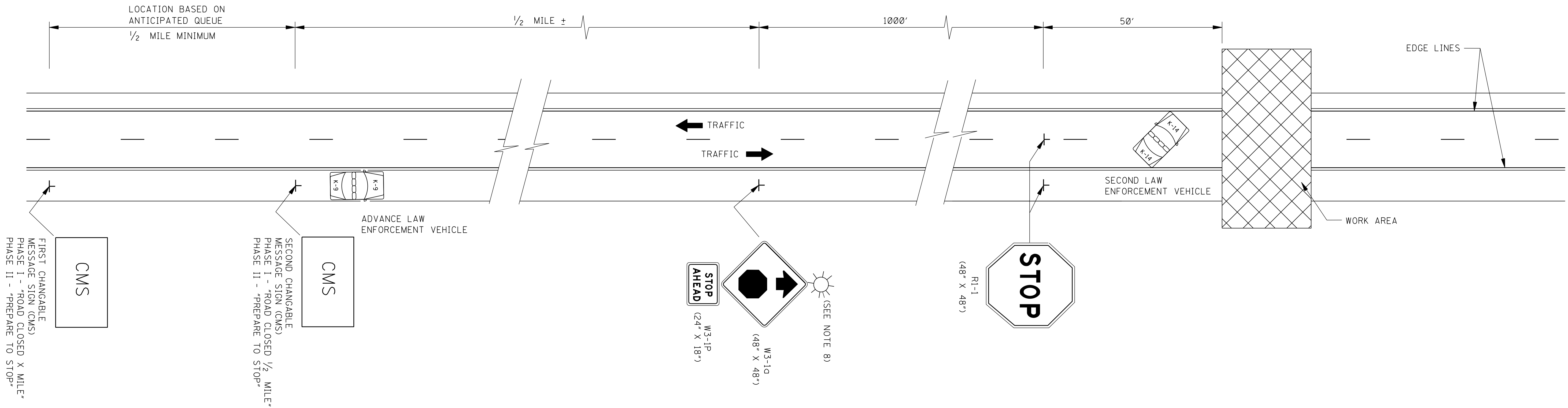
POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft) †	STOPPING SIGHT DISTANCE
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
25	20	50	55	155
30	20	60	85	200
35	20	70	120	250
40	20	80	170	305
45	20	90	220	360
50	20	100	280	425
55	20	110	335	495
60	20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

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

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

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		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p style="text-align: center;"><b>TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)</b></p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
		 WORKING NUMBER TCP-1 SHEET NUMBER 6351	



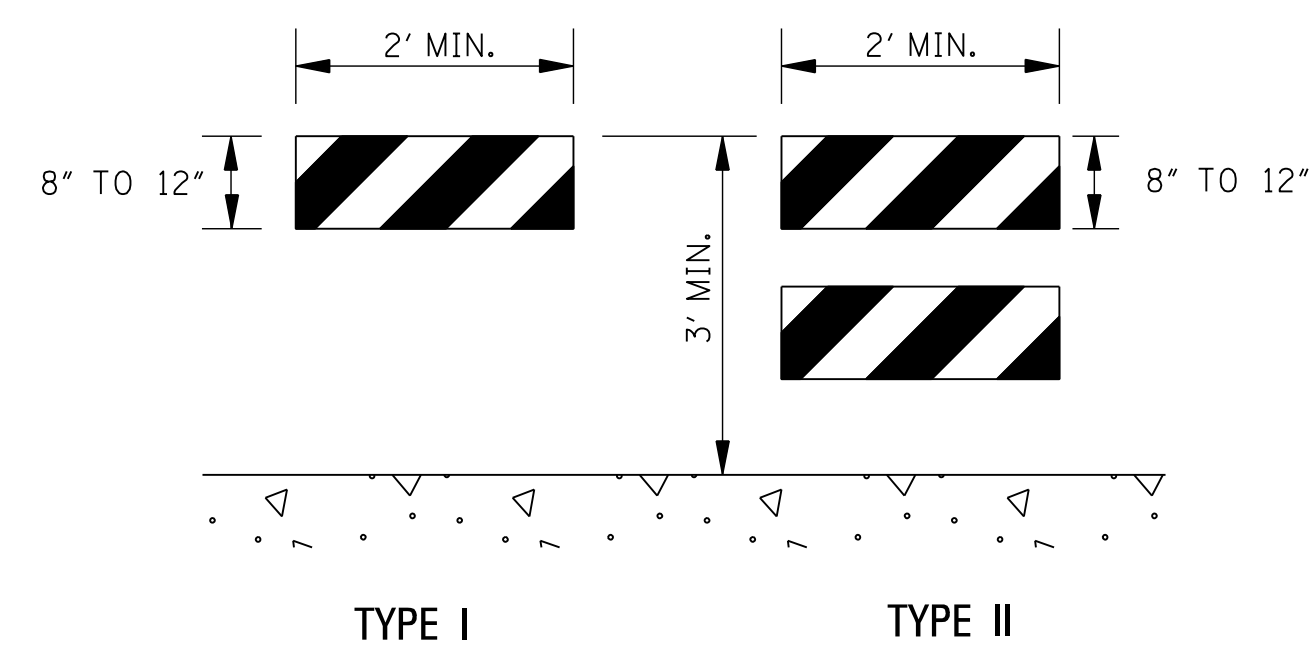
FIRST CHANGABLE MESSAGE SIGN (CMS)  
 PHASE I - "ROAD CLOSED X MILE"  
 PHASE II - "PREPARE TO STOP"

SECOND CHANGABLE MESSAGE SIGN (CMS)  
 PHASE I - "ROAD CLOSED 1/2 MILE"  
 PHASE II - "PREPARE TO STOP"

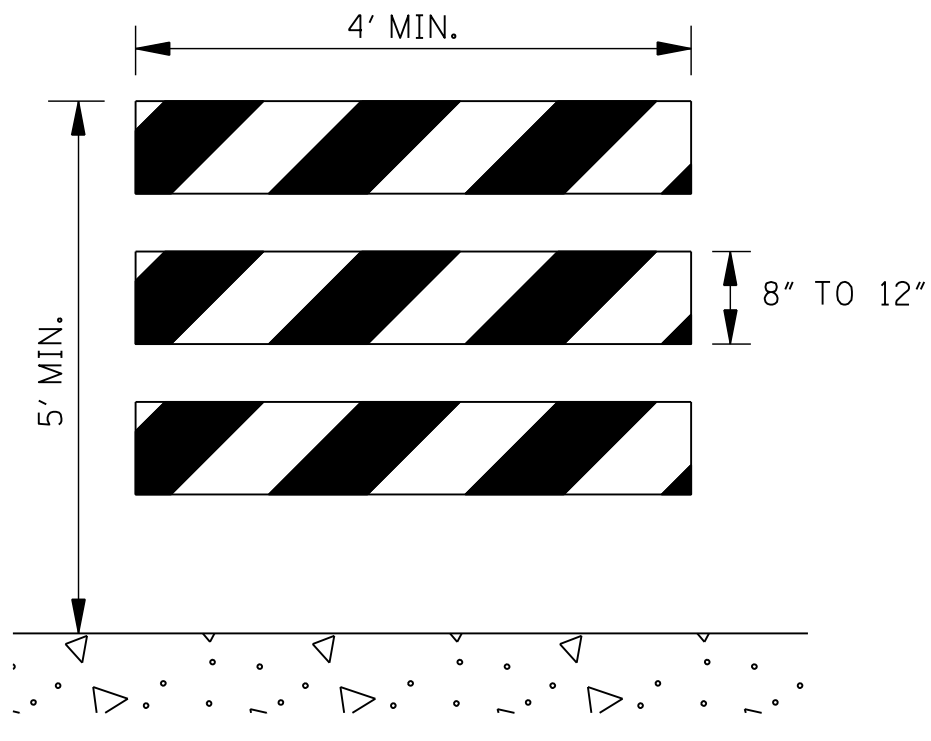
GENERAL NOTES:

- 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.
- 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.
- RESTRICTIONS ON ROAD CLOSURES ARE SPECIFIED IN THE CONTRACT DOCUMENT.
- THE ADVANCE LAW ENFORCEMENT VEHICLE SHOULD BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.
- 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.
- TRAFFIC CONTROL FOR THE CLOSURE SHOULD BE ACCOMPLISHED IN THE FOLLOWING ORDER:
  - FIRST CHANGABLE MESSAGE SIGN (CMS)
  - SECOND CHANGEABLE MESSAGE SIGN (CMS)
  - ADVANCE LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
  - "W3-1a (48" X 48")" AND "W3-1P (24" X 18")" SIGNS ERECTED.
  - "R1-1 (48" X 48")" SIGNS ERECTED TO STOP TRAFFIC. THE ORDER OF ERECTION SHOULD BE IN THE FOLLOWING ORDER: RIGHT SHOULDER THEN CENTER.
  - SECOND LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
- TRAFFIC CONTROL SHOULD BE REMOVED IN THE FOLLOWING ORDER:
  - 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.
  - AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1a (48" X 48")" AND "W3-1P (24" X 18")" SIGNS SHOULD BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
  - AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGABLE MESSAGE SIGNS TURNED OFF.
- 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.
- 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.
- THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.
- ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING LAW ENFORCEMENT SERVICES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
<b>SHORT DURATION CLOSING OF TWO-LANE TWO-WAY HIGHWAYS</b>	
WORKING NUMBER TCP-6	SHEET NUMBER 6356
ISSUE DATE: AUGUST 01, 2017	



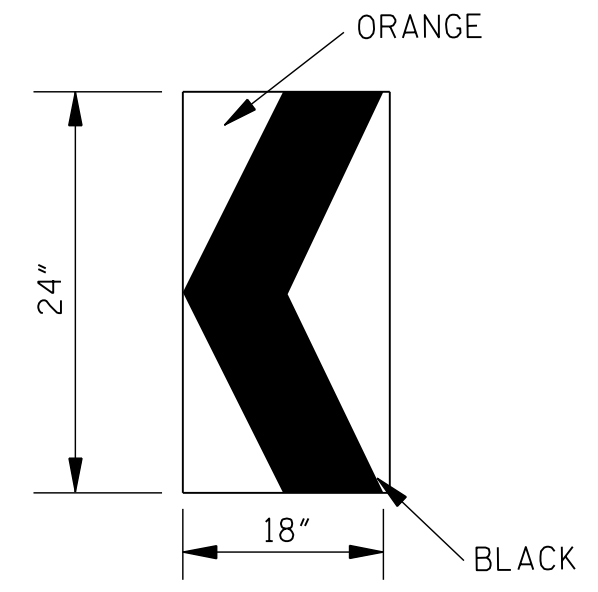
TYPE I                      TYPE II



TYPE III

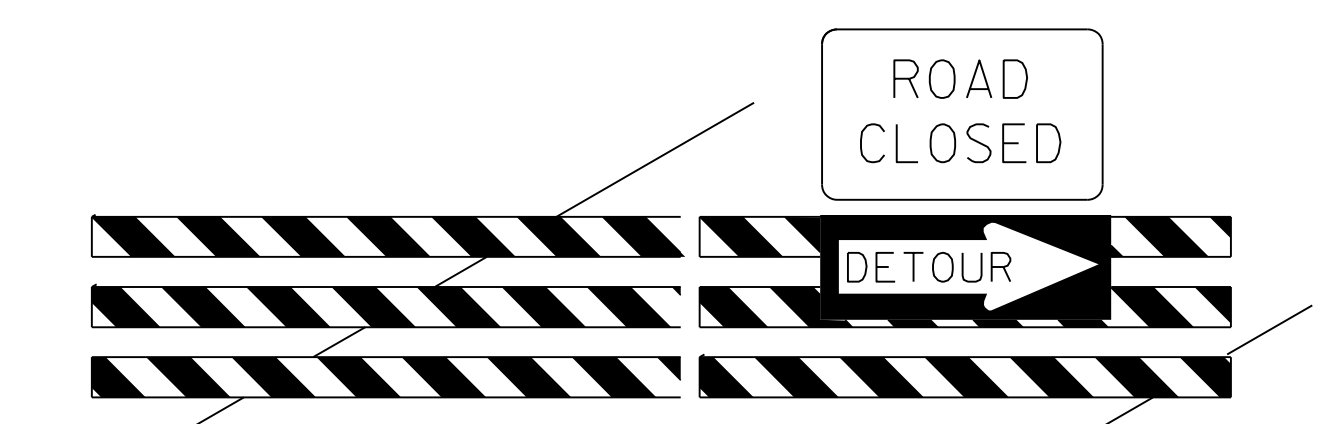
**STANDARD BARRICADES**

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 CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE:  
[http://safety.fhwa.dot.gov/roadway\\_dept/policy\\_guide/road\\_hardware/cat2.cfm](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.

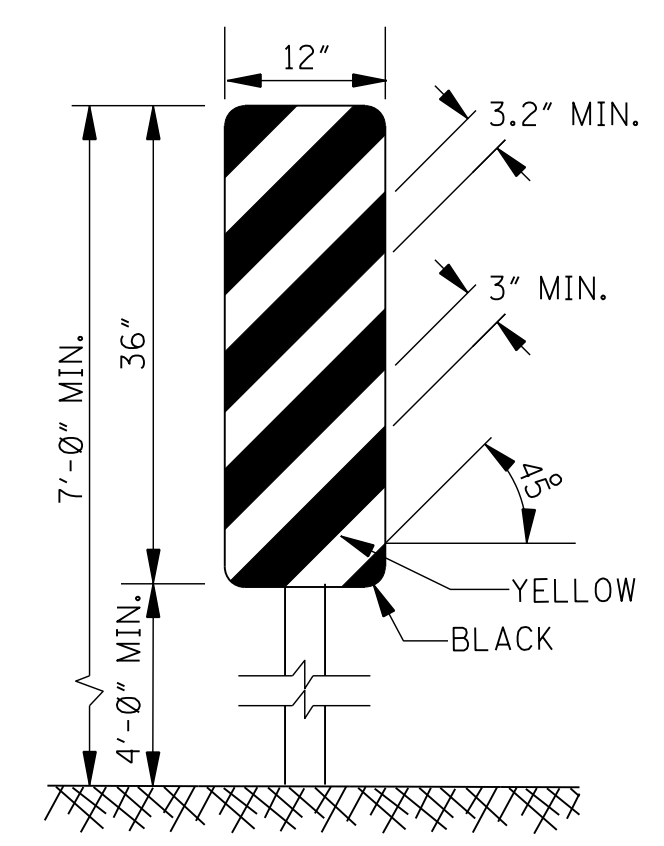


**BARRICADE CLOSING A ROAD**

**BARRICADE CHARACTERISTICS**

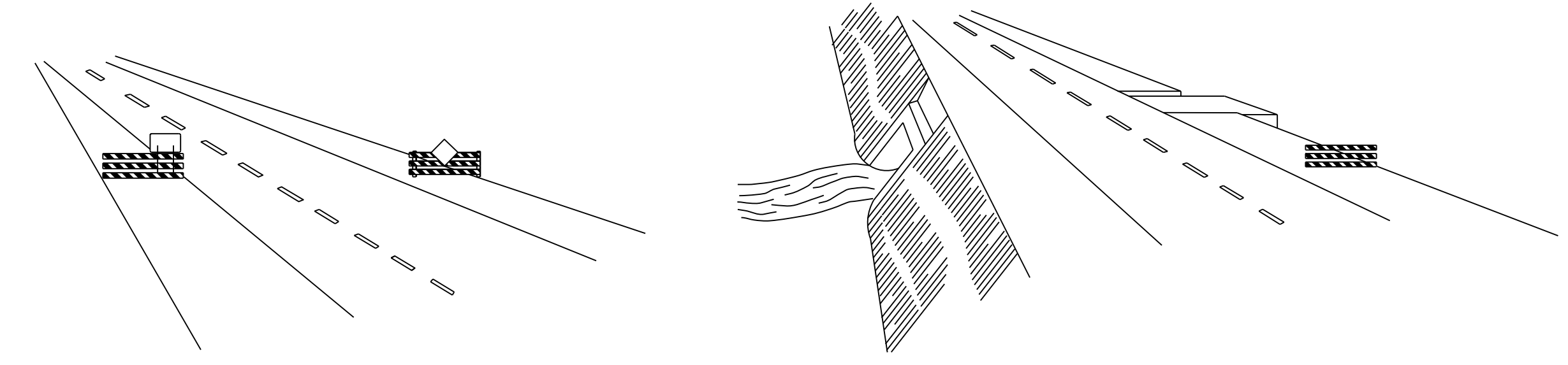
	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE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



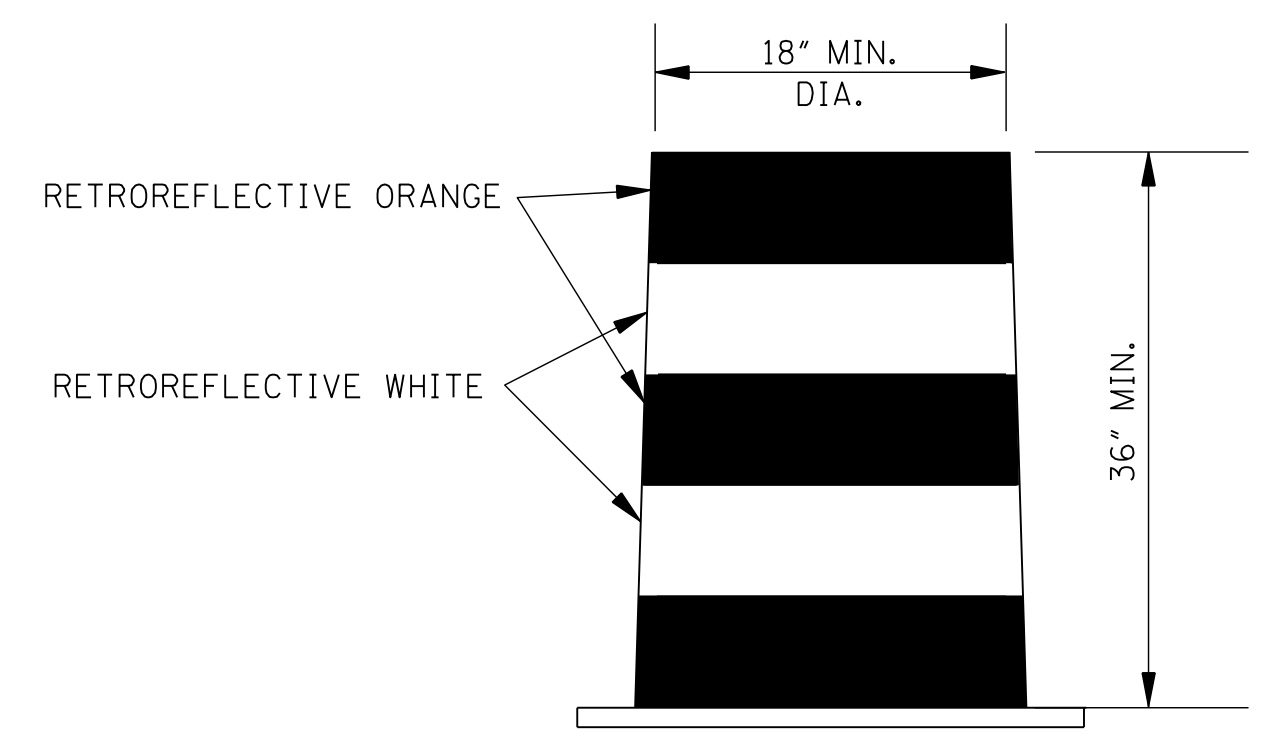
**TYPE 3 OBJECT MARKER  
(OM-3R)**

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**

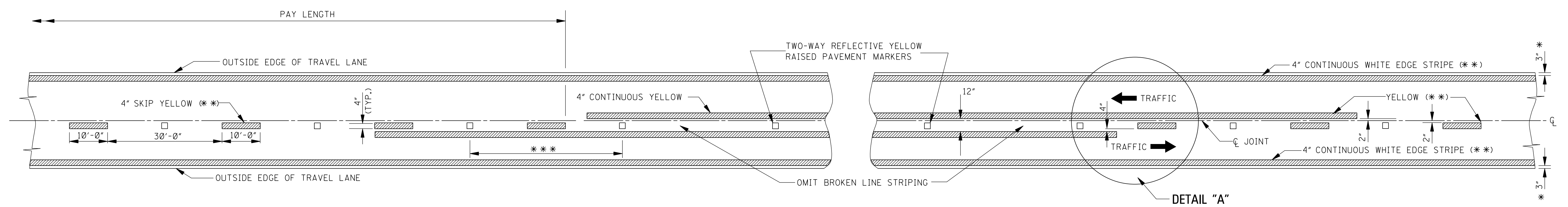
1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 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		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p><b>HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS</b></p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	

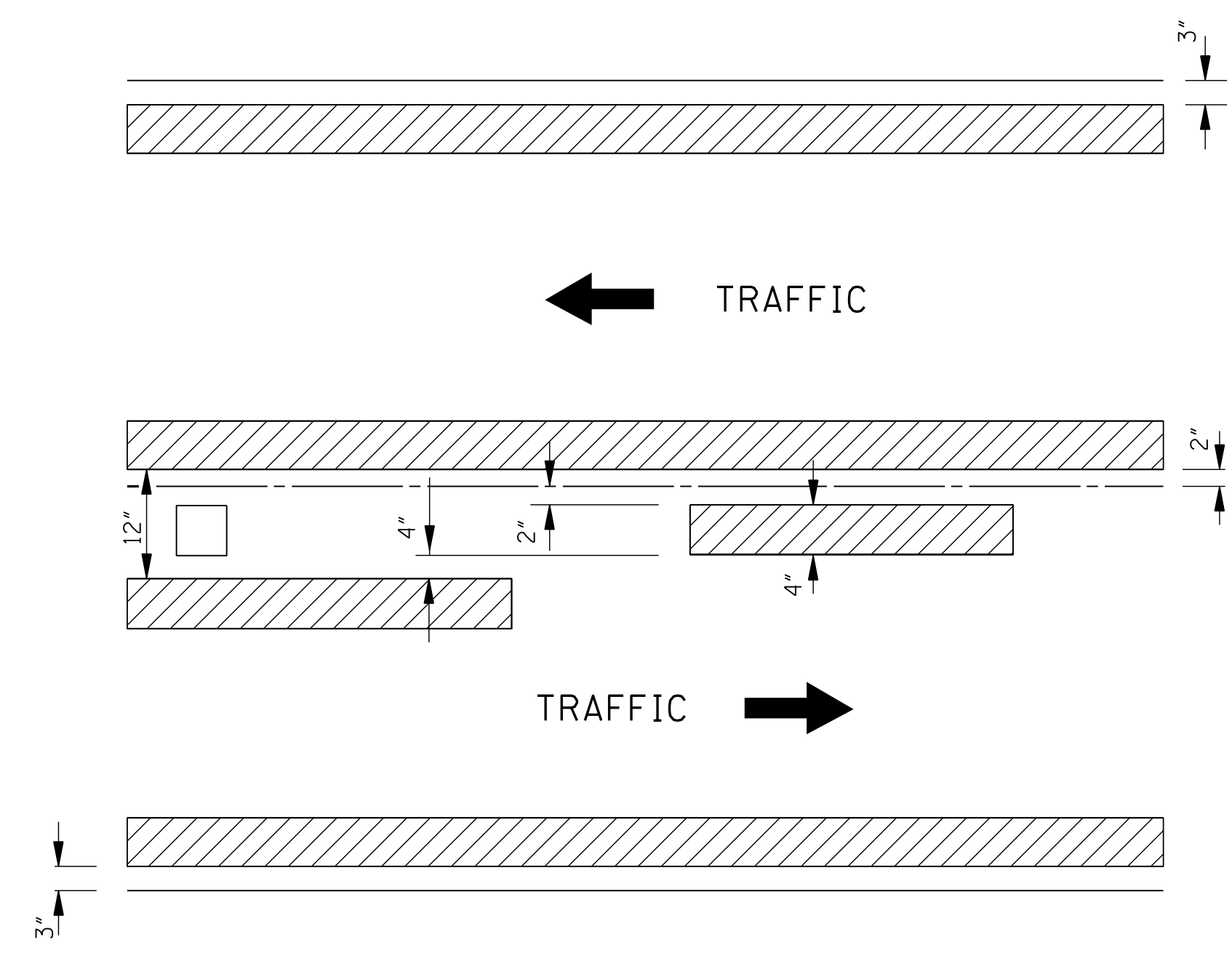


WORKING NUMBER  
TCP-8  
SHEET NUMBER  
6358





**TWO-WAY TRAFFIC**  
(ASPHALT OR CONCRETE PAVEMENT)



**DETAIL "A"**



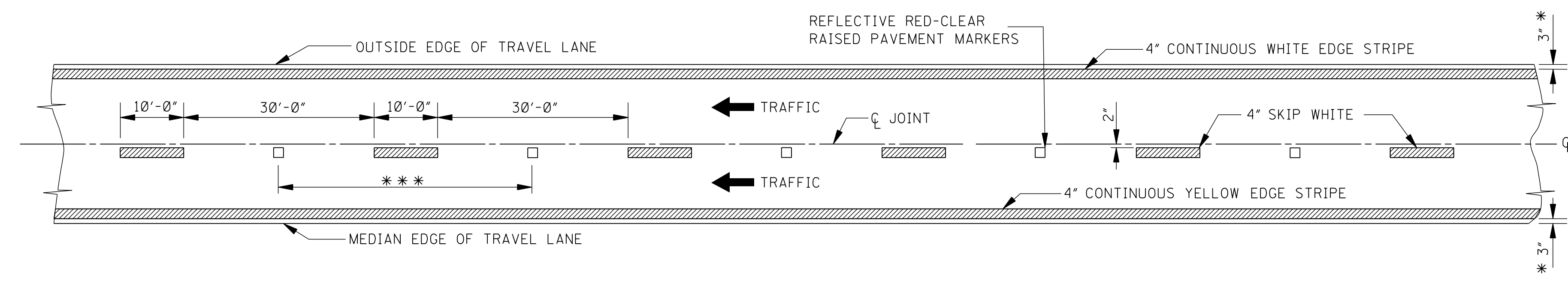
GENERAL NOTES:

- \* 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 MDT "APPROVED SOURCES OF MATERIALS."



**4-LANE WITH ONE-WAY TRAFFIC**

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	<b>TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS</b>
DATE	ISSUE DATE: AUGUST 01, 2017



WORKING NUMBER  
TCP-13  
SHEET NUMBER  
6363



*DESCRIPTION OF SHEETS  
SPECIAL DESIGN SHEETS ~ BRIDGE DRAWINGS*

*DETAILED INDEX (BRIDGE)  
BRIDGE AT STATION 1151+55 - SR 50 OVER CHUQUATONCHEE CREEK - BRIDGE REPAIR  
RISER REPAIR PLATE DETAILS  
BEARING PLATE REPLACEMENT DETAILS  
GIRDER SUPPORT PLATE AND STEEL PILE CONNECTING ANGLE DETAILS  
JOINT REPAIR DETAILS  
RIPRAP PLACEMENT PLAN  
BRIDGE EROSION CONTROL*

<i>WORKING NUMBER</i>	<i>SHEET NUMBER</i>
<i>DI-BR-1</i>	<i>8001</i>
<i>1 OF 7</i>	<i>8002</i>
<i>2 OF 7</i>	<i>8003</i>
<i>3 OF 7</i>	<i>8004</i>
<i>4 OF 7</i>	<i>8005</i>
<i>5 OF 7</i>	<i>8006</i>
<i>6 OF 7</i>	<i>8007</i>
<i>7 OF 7</i>	<i>8008</i>

*SPECIAL DESIGN SHEETS  
INFORMATION PLANS*

*INFORMATION ONLY PLAN  
INFORMATION ONLY PLAN  
INFORMATION ONLY PLAN  
INFORMATION ONLY PLAN  
INFORMATION ONLY PLAN  
INFORMATION ONLY PLAN  
INFORMATION ONLY PLAN*

<i>WORKING NUMBER</i>	<i>SHEET NUMBER</i>
	<i>8009</i>
	<i>8010</i>
	<i>8011</i>
	<i>8012</i>
	<i>8013</i>
	<i>8014</i>
	<i>8015</i>

<i>BRIDGE DIVISION</i>		
<i>REVISIONS</i>		
<i>DATE</i>	<i>SHEET NO.</i>	<i>BY</i>
<i>02/18/2019</i>	<i>8002</i>	<i>DAC</i>
<i>02/18/2019</i>	<i>8007</i>	<i>DAC</i>

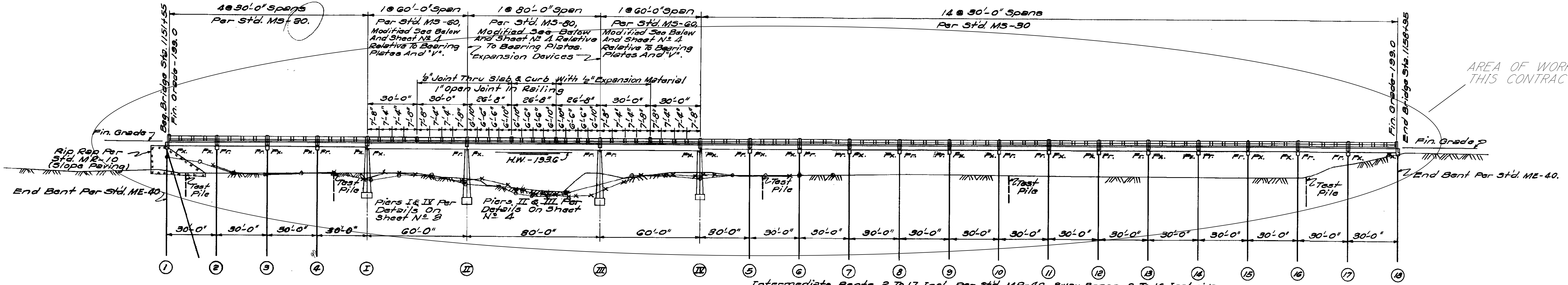
001: 00 AHPM.DGN FILE NAME MISSISSIPPI DEPARTMENT OF TRANSPORTATION



MISSISSIPPI DEPARTMENT OF TRANSPORTATION DETAILED INDEX (BRIDGE)		FMS: 107860 / 301000 COUNTY: CLAY PROJECT NUMBER: BR-0058-01(037)	WORKING NUMBER <b>DI-BR-1</b>
		DESIGNER: Aaron Cagle DETAILER: Aaron Cagle CHECKER: Chris Duncan ISSUE DATE: 11/28/2018	SHEET NUMBER <b>8001</b>

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

4 @ 30'-0", 1 @ 60'-0", 1 @ 80'-0", 1 @ 60'-0", 14 @ 30'-0" spans  
 Total Length Of Bridge = 740'-0"  
 Railing Per Std. MR-20  
 0.00% Grade



AREA OF WORK THIS CONTRACT

SEQUENCE OF CONSTRUCTION AND SCOPE OF WORK:

1. Jack the bridge at Piers I and IV, and install riser repair plates as indicated on sheet no. 8003. Work shall be paid for per each plate under pay item 907-824-PP006, Bridge Repair, Riser Repair Plates, Per Plans.
2. Remove and replace the existing bearing plates of the existing bearing assemblies at Piers I and IV. For bearing plate and anchor bolt details see sheet no. 8004. Work shall be paid for per each bearing under pay item 907-824-PP006, Bridge Repair, Bearing Plate Replacement, Per Plans.
3. Remove unsound concrete from steel pile encasements as directed by the Project Engineer. Work for this item shall be absorbed under pay item 907-824-PP005, Bridge Repair, Epoxy Repair, Per Plans. However, they shall not be restored with epoxy mortar until the exposed steel has been abrasive blasted, inspected for section loss, and painted as per scope of work item numbers 4 and 8.
4. Abrasive blast all structural steel members for the superstructure and substructure in accordance with these plans and special provisions. This item of work shall be included as part of lump sum pay item 907-845-A001. Once abrasive blasting is complete, the prime coat shall be applied in accordance with these plans and special provisions. After applying the prime coat, the Contractor and Project Engineer shall inspect all primed components for section loss, including portions of the steel piles that were exposed after removal of unsound encasements. See notes on this sheet regarding repair of members with section loss.
5. Install interior girder support plates as per the details on sheet no. 8005. Work shall be paid for per each girder repaired under pay item 907-824-PP006, Bridge Repair, Interior Girder Support Plates, Per Plans.
6. Install exterior girder support plates as per the details on sheet no. 8005. Work shall be paid for per each girder repaired under pay item 907-824-PP006, Bridge Repair, Exterior Girder Support Plates, Per Plans.
7. Install steel pile connecting angles as per the details on sheet no. 8005. Work shall be paid for per steel angle installed under pay item 907-824-PP006, Bridge Repair, Steel Pile Connecting Angles, Per Plans.
8. Apply the final two coats of paint to 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.
9. Remove all damaged or unsound concrete and repair concrete spalled areas using epoxy mortar at the locations indicated by the Project Engineer. Work for epoxy repair shall be performed as per the notes and details on this sheet and shall be paid for in cubic feet under pay item 907-824-PP005.
10. 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.
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.
12. Install erosion control measures and place riprap as per the details on sheet nos. 8007 and 8008. Work shall be paid for under pay items nos. 234-C001, 234-F001, 815-A007, and 815-E001.

ABRASIVE BLASTING AND PAINTING NOTE:

All structural steel members of the superstructure and substructure shall be abrasive blasted, as referenced in 907-845.03.7.6 of the required special provision and repainted. The square footage of 28,000 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, the concrete risers at Piers I and IV, and the steel pile encasements at the ground level. 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, Per Plans.

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.

SPECIAL PROVISIONS REQUIRED:

- 907-808: Joint Repair
- 907-823: Preformed Joint Seal
- 907-845: Coating Existing Structural Steel

INFORMATION PLANS:

Original proj. no. S.P.10-1509(1).  
 See sheet nos. 8009-8015 of these plans.

MAINTENANCE OF TRAFFIC NOTE:

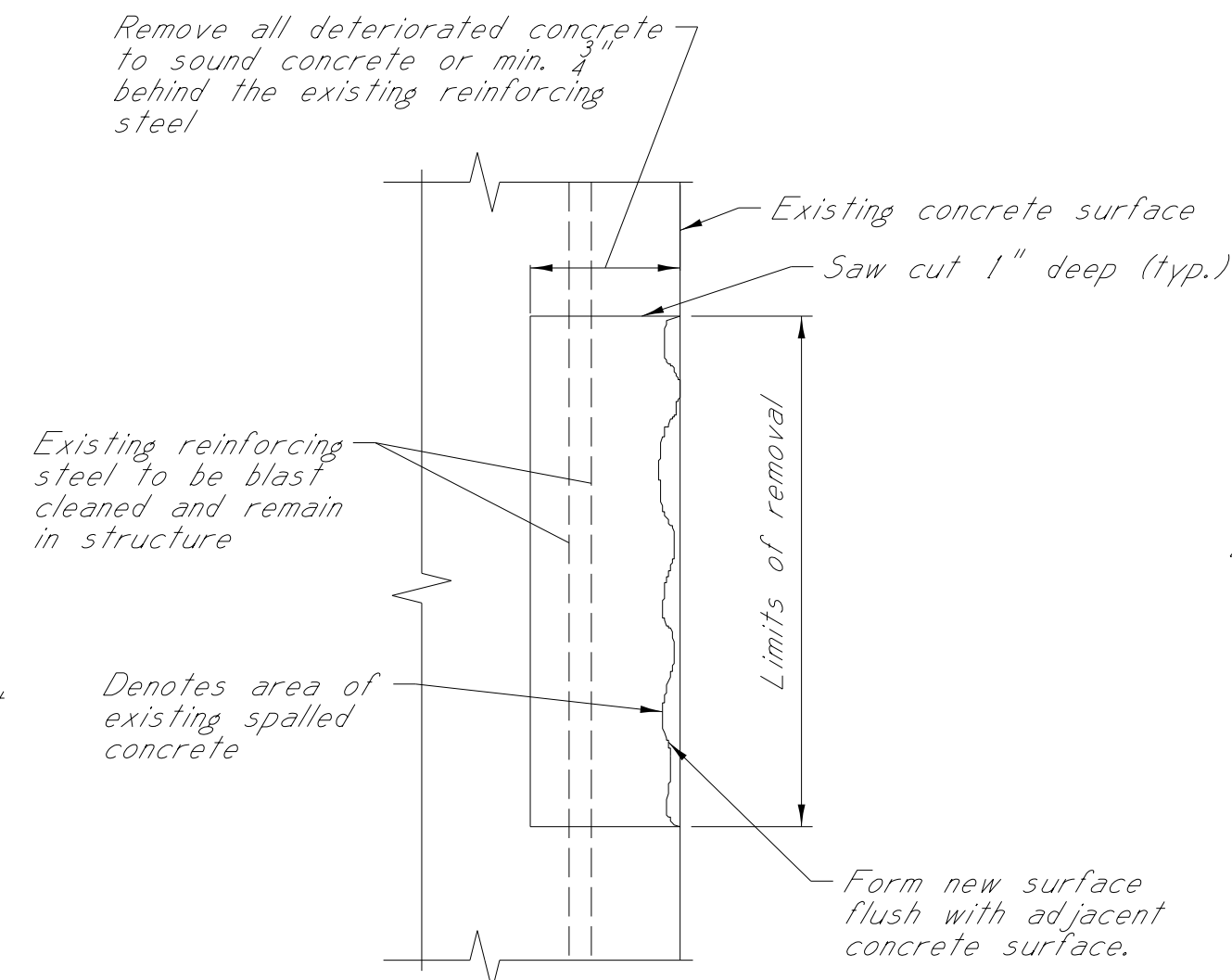
Maintain traffic in accordance with section 618 of the Standard Specifications of Road and Bridge Construction, 2017 Edition, the latest edition of the Manual on Uniform Traffic Control Devices, and the traffic control sheets included in these plans.

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 hydraulic crossing 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.

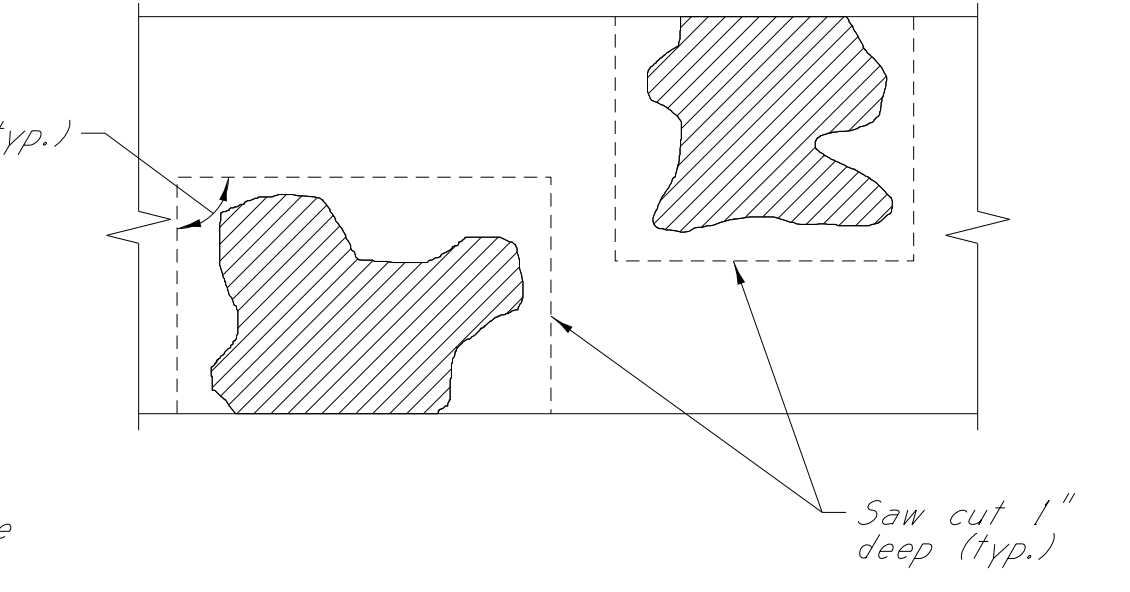
1" SAWCUT NOTES:

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.



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 nos. 907-824-PP006, Bridge Repair, Bearing Plate Replacement, Per Plans, 907-824-PP006, Exterior Girder Support Plates, Per Plans, 907-824-PP006, Interior Girder Support Plates, Per Plans, 907-824-PP006, Riser Repair Plates, Per Plans, and 907-824-PP006, Steel Pile Connecting Angles, Per Plans, to the Director of Structures, State Bridge Engineer for approval. Notes on these items of work can be found on sheet nos. 8003, 8004, and 8005.

NOTES ON REPAIRING MEMBERS WITH SECTION LOSS

It should be noted that areas where the steel pile encasements are cracked and separated from the piles shall have all unsound concrete removed. Prior to restoring these elements to their original dimensions, the exposed steel shall be abrasive blasted, as referenced in 907-845.03.7.6 of the required special provision and painted.

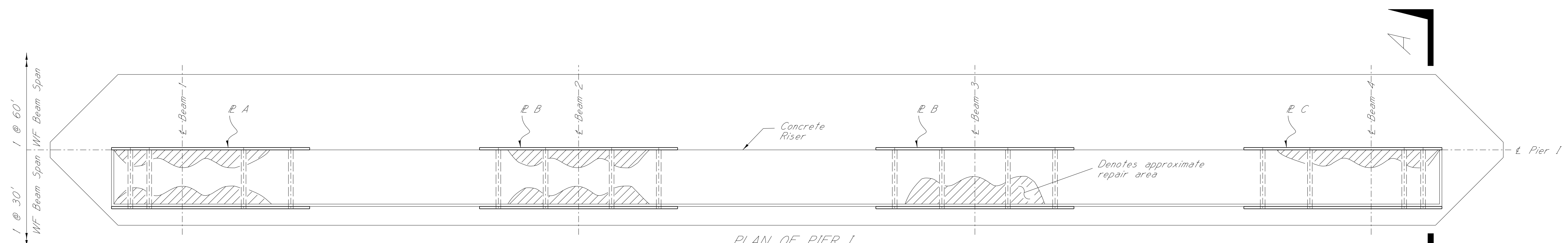
Upon exposure of the steel piles, any section loss that is observed after abrasive blasting and applying a prime coat shall be reported to the Project Engineer. The Project Engineer shall then notify the Director of Structures, State Bridge Engineer, who will develop a plan of action for addressing the section loss prior to applying the final two coats of paint.

Similarly, any section loss that is observed after abrasive blasting and applying a prime coat for any other structural steel member shall be reported to the Project Engineer. The Project Engineer shall then notify the Director of Structures, State Bridge Engineer, who will develop a plan of action for addressing the section loss prior to applying the final two coats of paint.

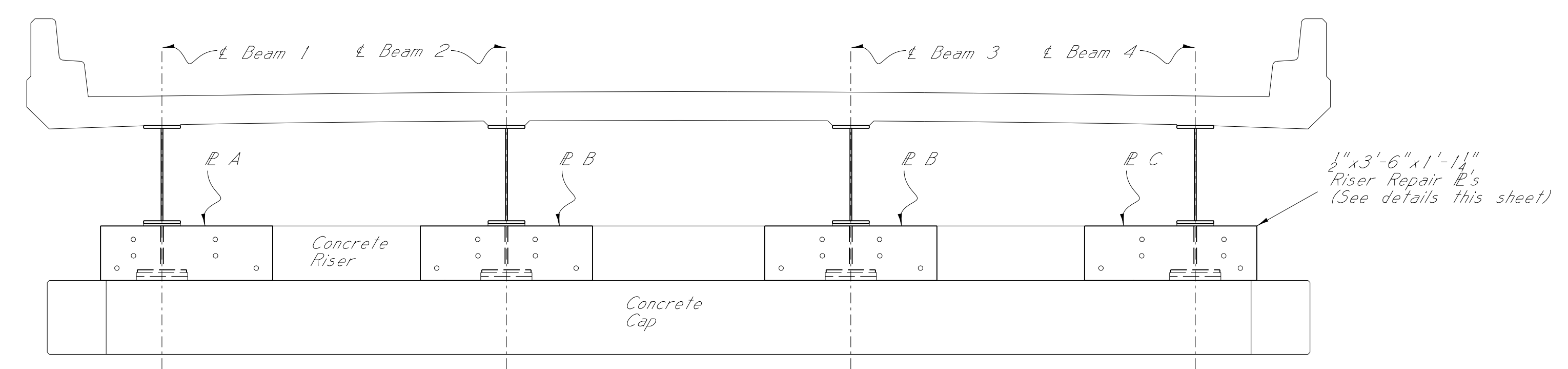
ESTIMATED BRIDGE QUANTITIES			
PAY ITEM CODE	DESCRIPTION	UNIT	QUANTITY
234-A001	Temporary Silt Fence	LF	180
815-A007	Loose Riprap, Size 300	TON	730
815-E001	Geotextile under Riprap	SY	540
907-808-A002	Joint Repair	LF	1108
907-823-A001	Preformed Joint Seal, Type I	LF	554
907-823-B001	Saw Cut, Type I	LF	1108
907-824-PP006	Bridge Repair, Bearing Plate Replacement, Per Plans	EACH	8
907-824-PP006	Bridge Repair, Cap Cleaning, Per Plans	EACH	22
907-824-PP005	Bridge Repair, Epoxy Repair, Per Plans	CF	35
907-824-PP006	Bridge Repair, Exterior Girder Support Plates, Per Plans	EACH	7
907-824-PP006	Bridge Repair, Interior Girder Support Plates, Per Plans	EACH	6
907-824-PP006	Bridge Repair, Riser Repair Plates, Per Plans	EACH	14
907-824-PP006	Bridge Repair, Steel Pile Connecting Angles, Per Plans	EACH	104
907-845-A001	Coating Existing Structural Steel	LS	1

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 1151+55	
SR 50 OVER CHUQUATONCHEE CREEK BRIDGE REPAIR	
FMS: 107860 / 301000	COUNTY: CLAY
PROJECT NUMBER: BR-0058-01(037)	WORKING NUMBER: 1 OF 7
DESIGNER: Aaron Cagle	CHECKER: Chris Duncan
DATE: 2/18/19	ISSUE DATE: 11/28/2018
SHEET NUMBER: 8002	
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E. DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	



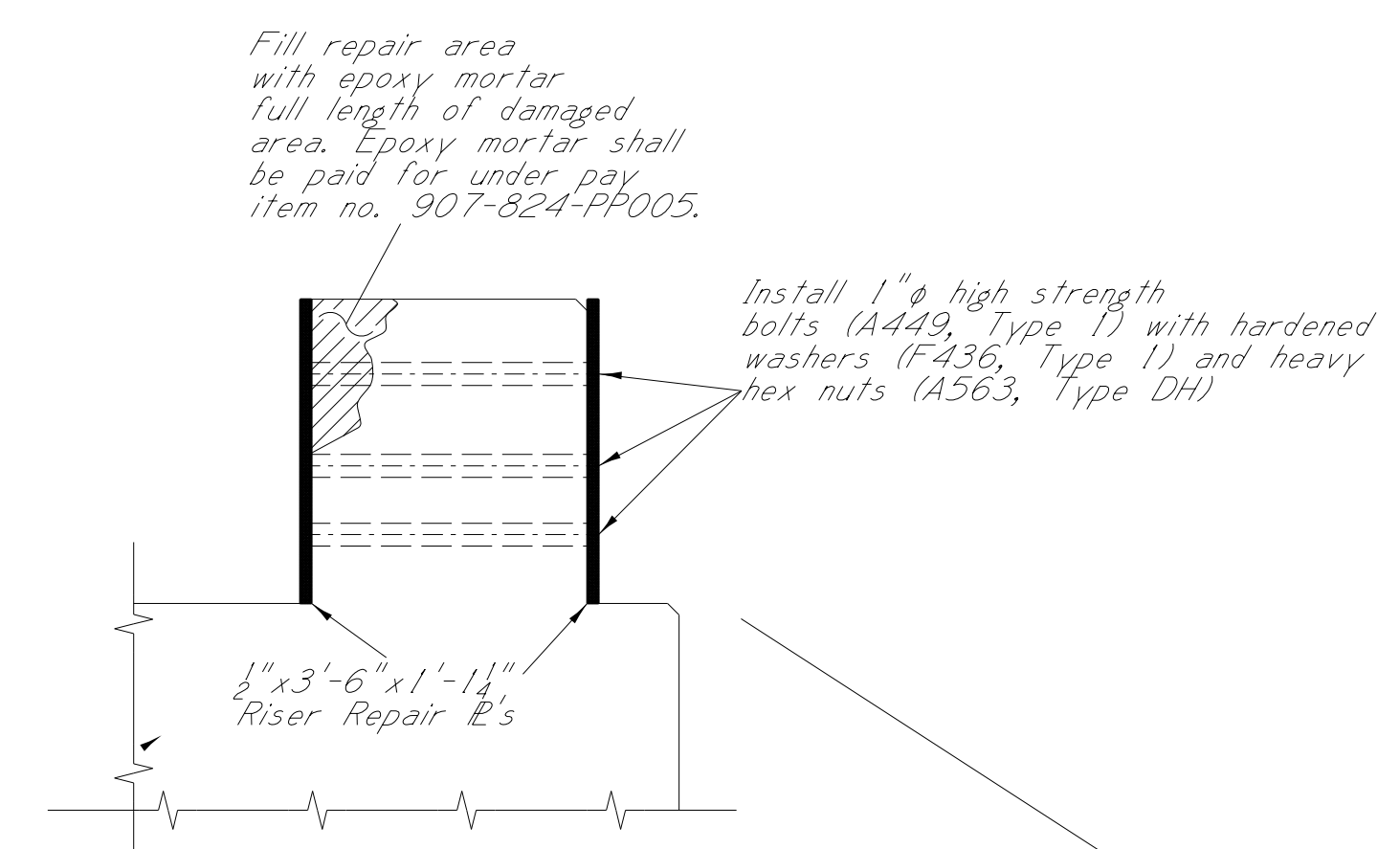


PLAN OF PIER I  
Showing Approximate Repair Areas

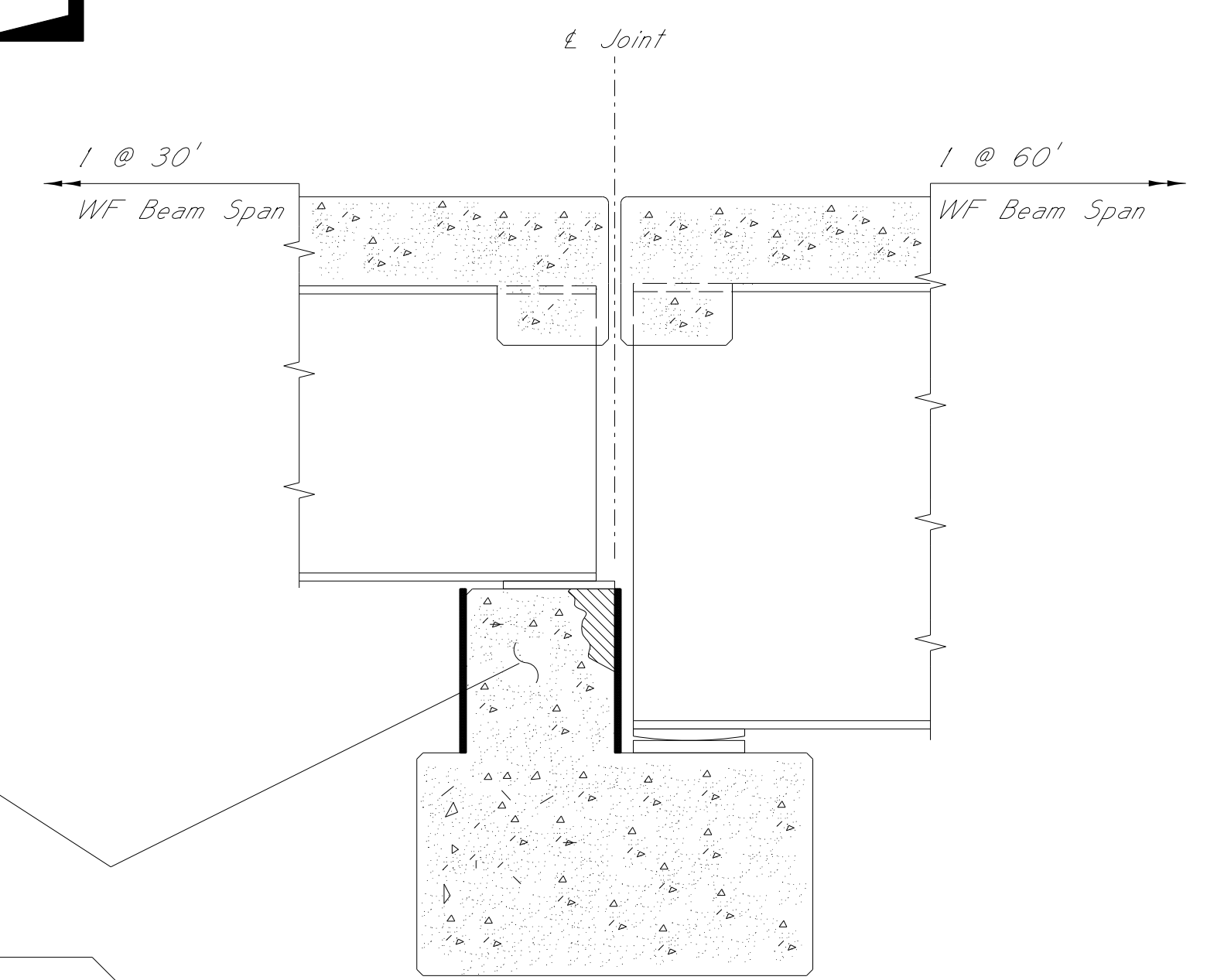


ELEVATION OF CAP & RISER REPAIR PLATE AT PIER I

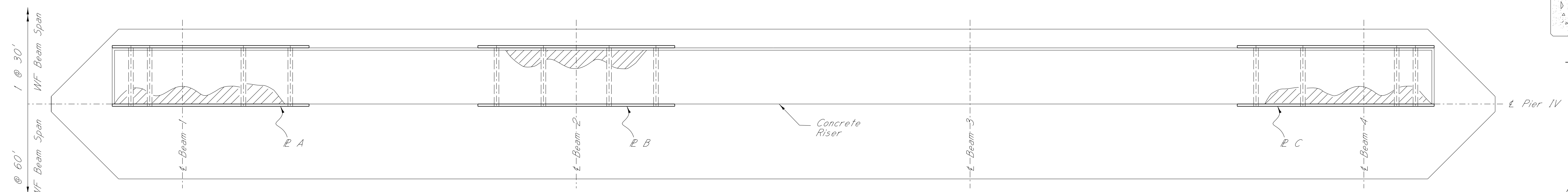
At span 4 looking towards Pier I. Pier IV is similar by orientation, but no riser repair plate is needed at beam 3. See the Plan of Pier IV detail on this sheet for clarification.



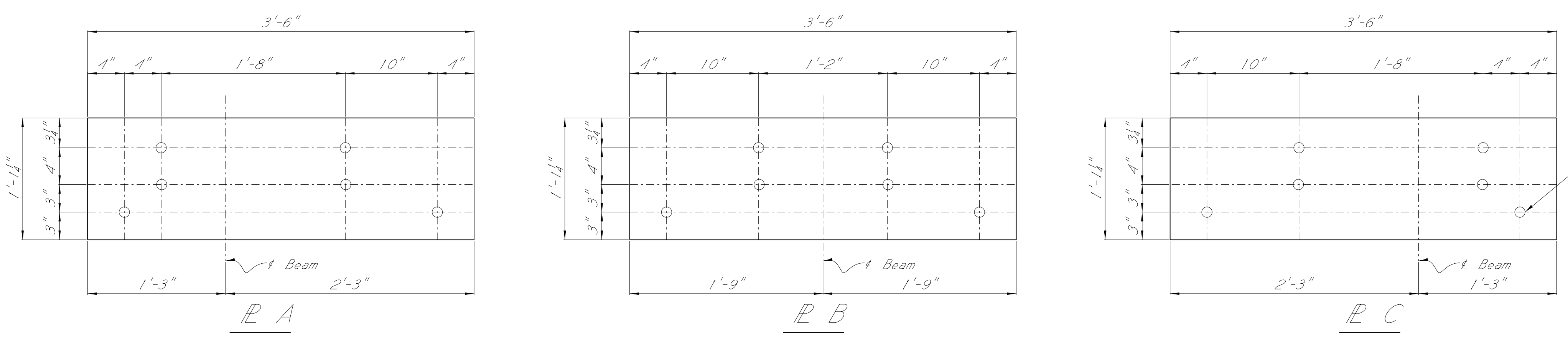
SECTION OF REPAIR PLATE  
Showing Riser Repair Plate Installation



SECTION A-A



PLAN OF PIER IV  
Showing Approximate Repair Areas



ELEVATION OF RISER REPAIR PLATES  
Showing Plate Dimensions & Locations of High Strength Bolts

1 1/2" HOLE (Typ.)  
For 1" high strength bolts (A449, Type 1) with hardened washers (F436, Type 1) and heavy hex nuts (A563, Type DH)

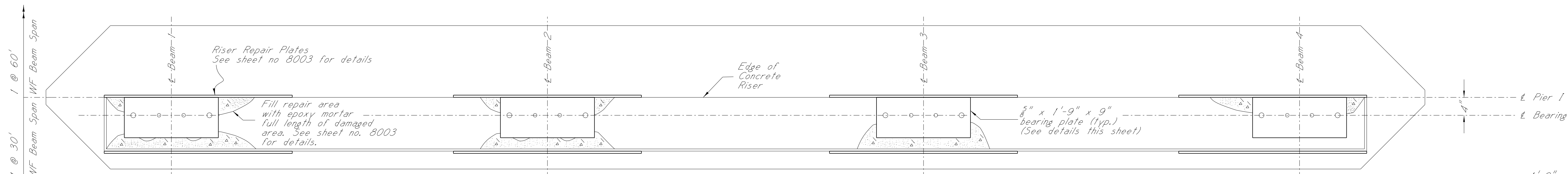
- NOTES:
- For riser repair plate and bolt notes, see sheet no. 8004.
  - Work will require jacking. For notes, see sheet no. 8004.
  - All materials and labor associated with this item of work shall be paid for under pay item no. 907-824-PP006, Bridge Repair, Riser Repair Plates, Per Plans



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 1151+55	
RISER REPAIR PLATE DETAILS	
DATE	REVISION
DESIGNER Aaron Cagle	CHECKER Chris Duncan
DETAILER Aaron Cagle	ISSUE DATE 11/28/2018
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
FMS: 107860 / 301000	WORKING NUMBER
COUNTY: CLAY	2 OF 7
PROJECT NUMBER: BR-0058-01(037)	SHEET NUMBER
	8003

001: 00 ANPM DGN FILE NAME

PROJECT PLAN SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION



PLAN OF PIER I  
Showing Approximate Repair Areas

VERTICAL JACKING NOTES:

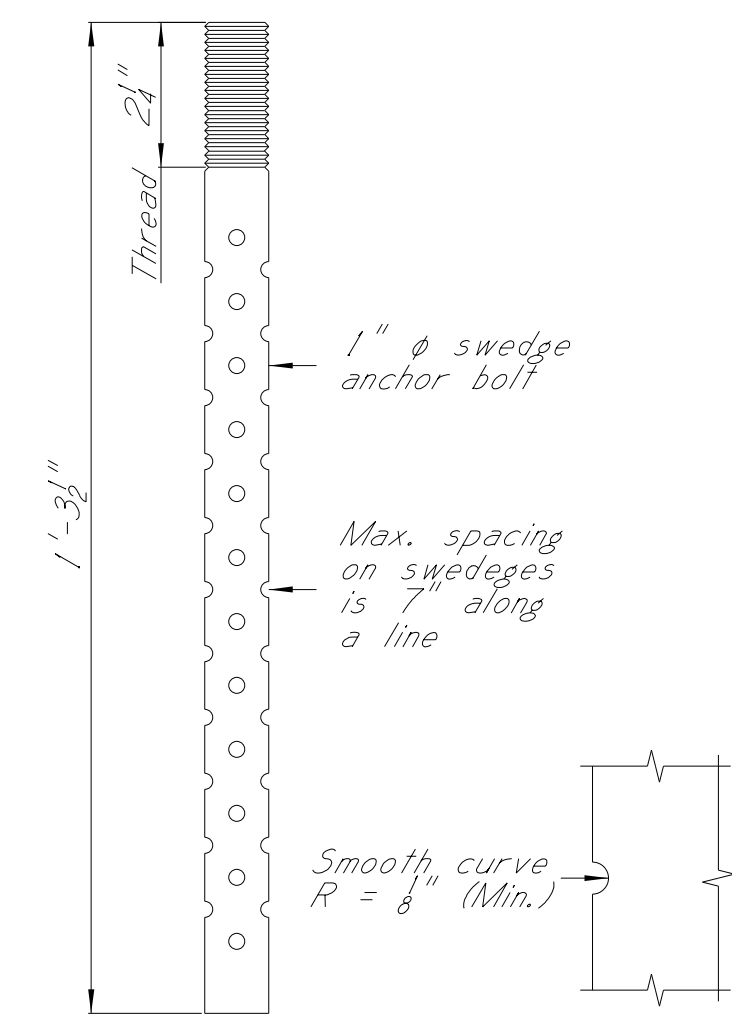
- The Contractor shall provide adequate bracing and jacking arrangements as required to install riser repair plates at Piers I and IV and replace the existing bearing plates at Piers I and IV as outlined on sheets 8003 and 8004.
- Traffic shall be maintained on the bridge for the duration of the repair.
- 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.
- Jacks at each bent shall be coupled to a common manifold and the bridge span raised uniformly.
- 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.
- 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.
- 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.
- Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

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

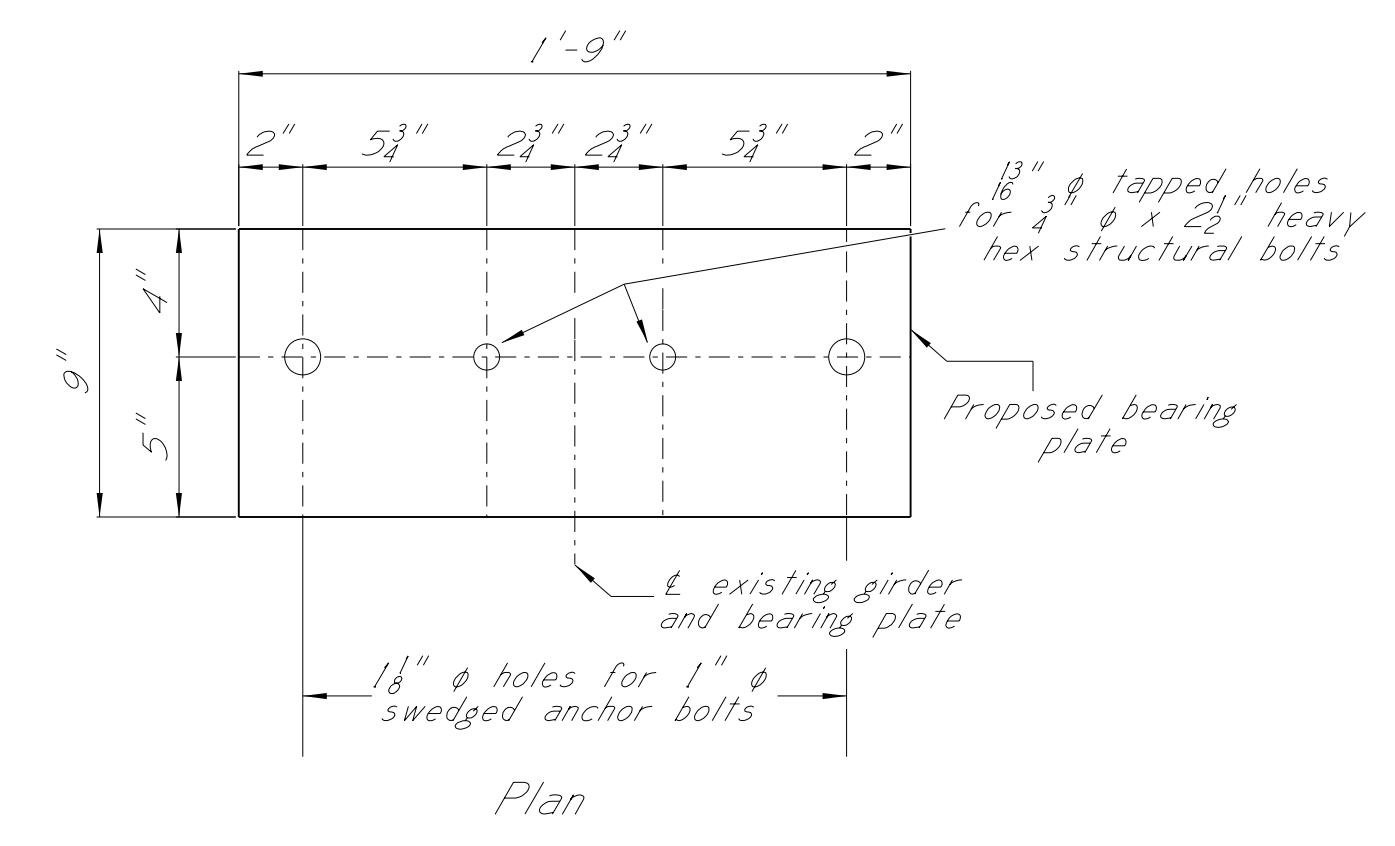
- Swedged bolt anchoring system shall be one of the following products:
  - "HIT RE 500-V3 Epoxy Adhesive Anchor" shall be as manufactured by Hilti, Inc. [www.us.hilti.com](http://www.us.hilti.com)
  - "EPCON C6+" shall be as manufactured by ITW Ramset/Red Head. [www.itwredhead.com](http://www.itwredhead.com)
  - "Ultrabond 1300" shall be as manufactured by Adhesives Technology Corp. [www.atcepoxy.com](http://www.atcepoxy.com)
- Installation of the anchoring system shall be performed in accordance with the Manufacturer's recommendations.
- 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.

RISER REPAIR PLATE, BEARING PLATE, & BOLT NOTES

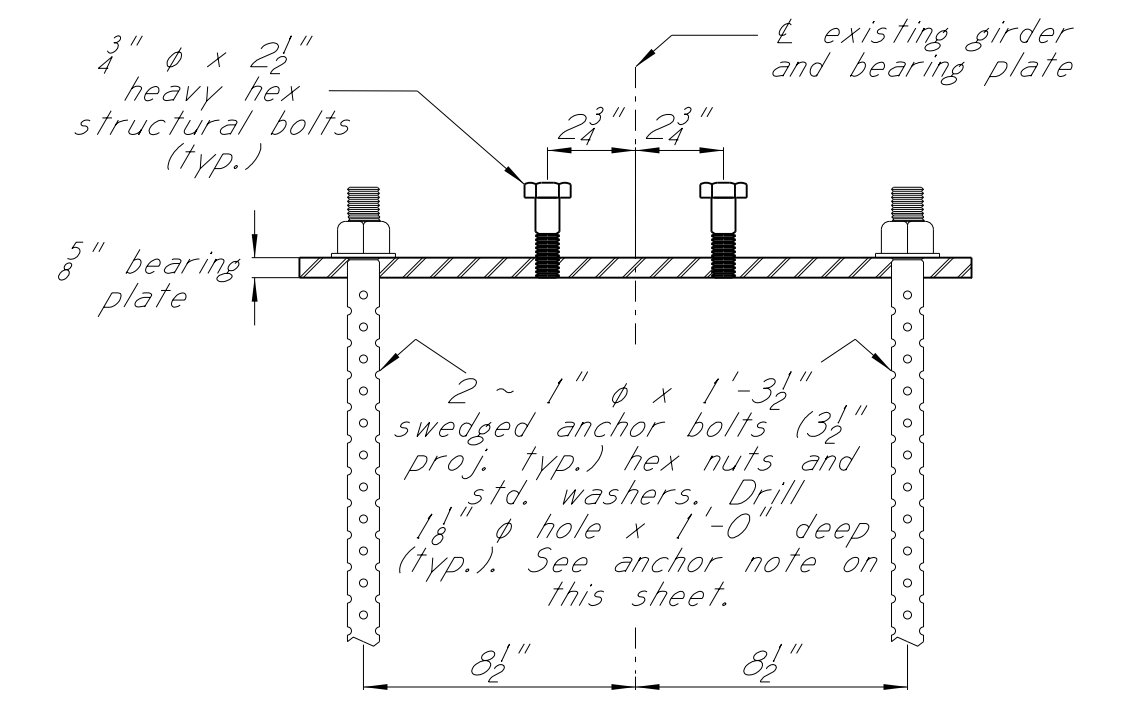
- Prior to fabrication of the riser repair plate assemblies, bearing plate assemblies, and swedged anchor bolts, all dimensions of the existing structure and clearances shall be field verified by the Contractor. The Contractor shall be responsible for adjusting the element of the new construction to ensure proper fit with existing structure.
- Prior to fabrication and construction, the Contractor shall submit verification of the existing bridge elements that are associated with these items of work to the Director of Structures, State Bridge Engineer for approval.
- All steel plates shall conform to A.S.T.M. designation A709, grade 50.
- Existing anchor bolts shall be ground to 1/4" below the concrete surface and finished smoothed with epoxy mortar such that the new bearing plates will bear on a flat surface of the cap. The epoxy mortar for this activity shall be considered an absorbed item of work.
- Swedged anchor bolts shall meet or exceed designation A.S.T.M. F3125, Grade A325 and shall be galvanized in accordance with A.S.T.M. A153.
- Heavy hex structural bolts for bearing plates shall meet or exceed designation A.S.T.M. F3125, Grade A490. Heavy hex structural bolts shall be coated with a zinc/aluminum coating in accordance with A.S.T.M. F1136. Nuts and washers for heavy hex structural bolts shall conform to A.S.T.M. A194, Grade 2H and A.S.T.M. F436 and shall be galvanized in accordance with A.S.T.M. A153.
- High strength bolts for riser repair plates shall meet or exceed designation A.S.T.M. A449, Type 1. Nuts and washers for riser repair plate bolts shall conform to A.S.T.M. A563, Type DH, and A.S.T.M. F436. All bolts, nuts and washers for riser repair plates shall be galvanized by the mechanical process meeting the requirements of A.S.T.M. B695, class 50, coating.
- All steel plates and shapes shall be new.
- Nuts shall be heavy hex.
- Nuts shall be tapped oversize the minimum amount required for proper assembly.
- Structural bolts, swedged anchor bolts, nuts, and washers shall not be reused after tightening.
- All bearing 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)



SWEDGE ANCHOR BOLT DETAIL



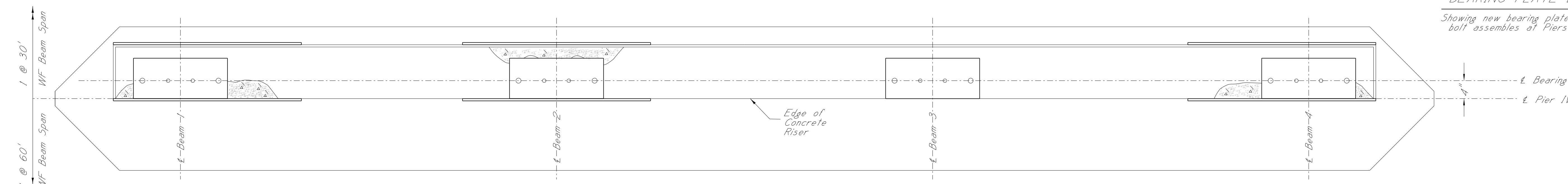
Plan



Elevation from front

BEARING PLATE DETAILS

Showing new bearing plate and anchor bolt assemblies at Piers I and IV



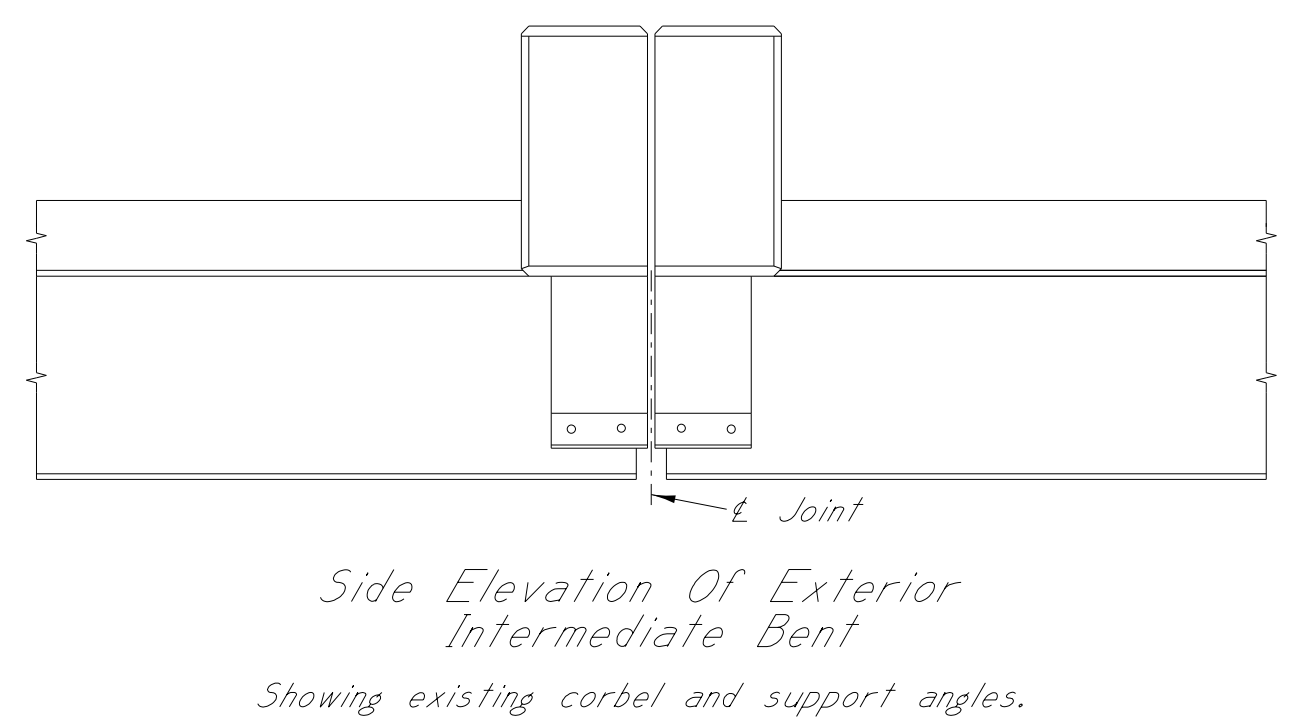
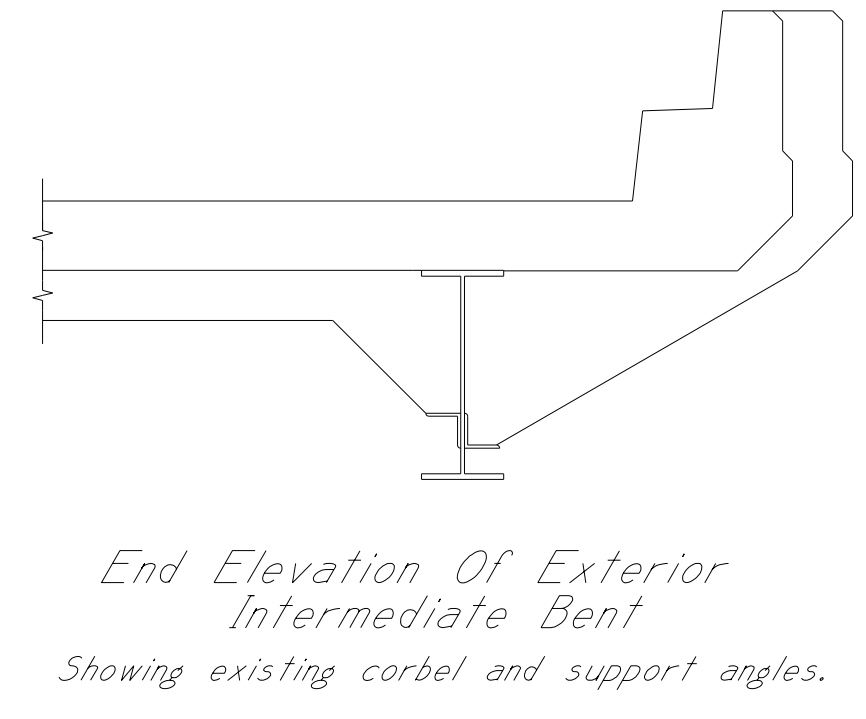
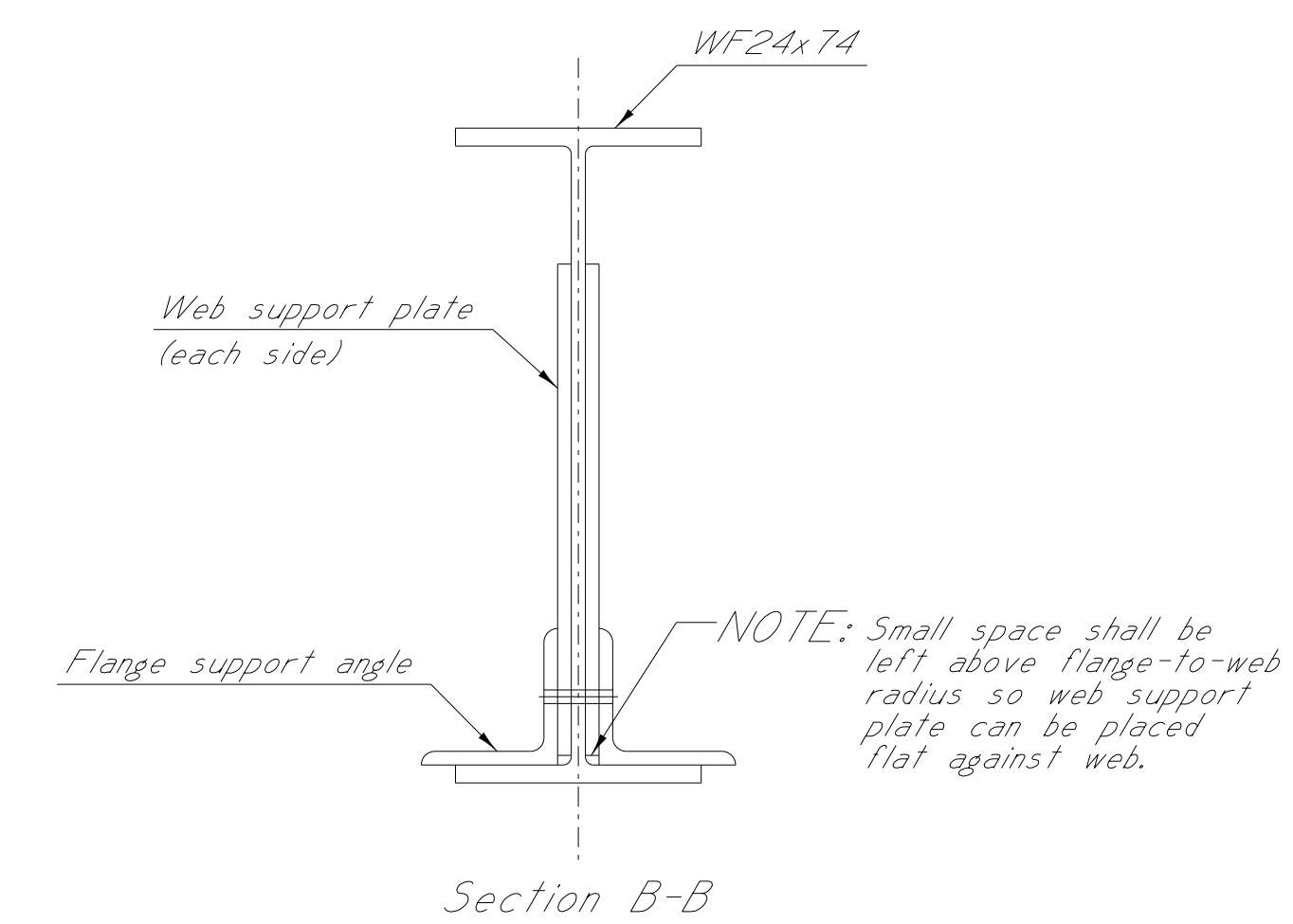
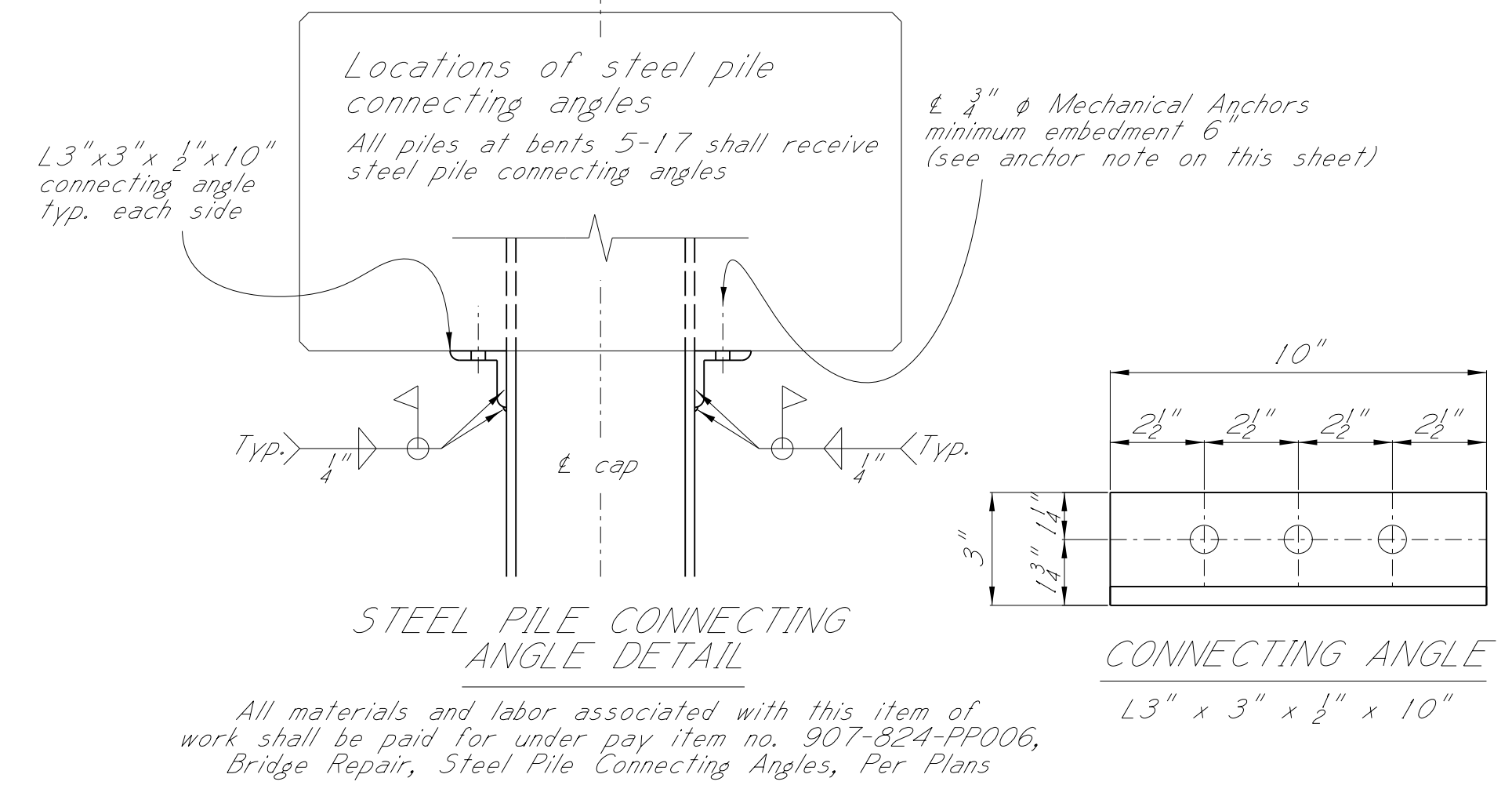
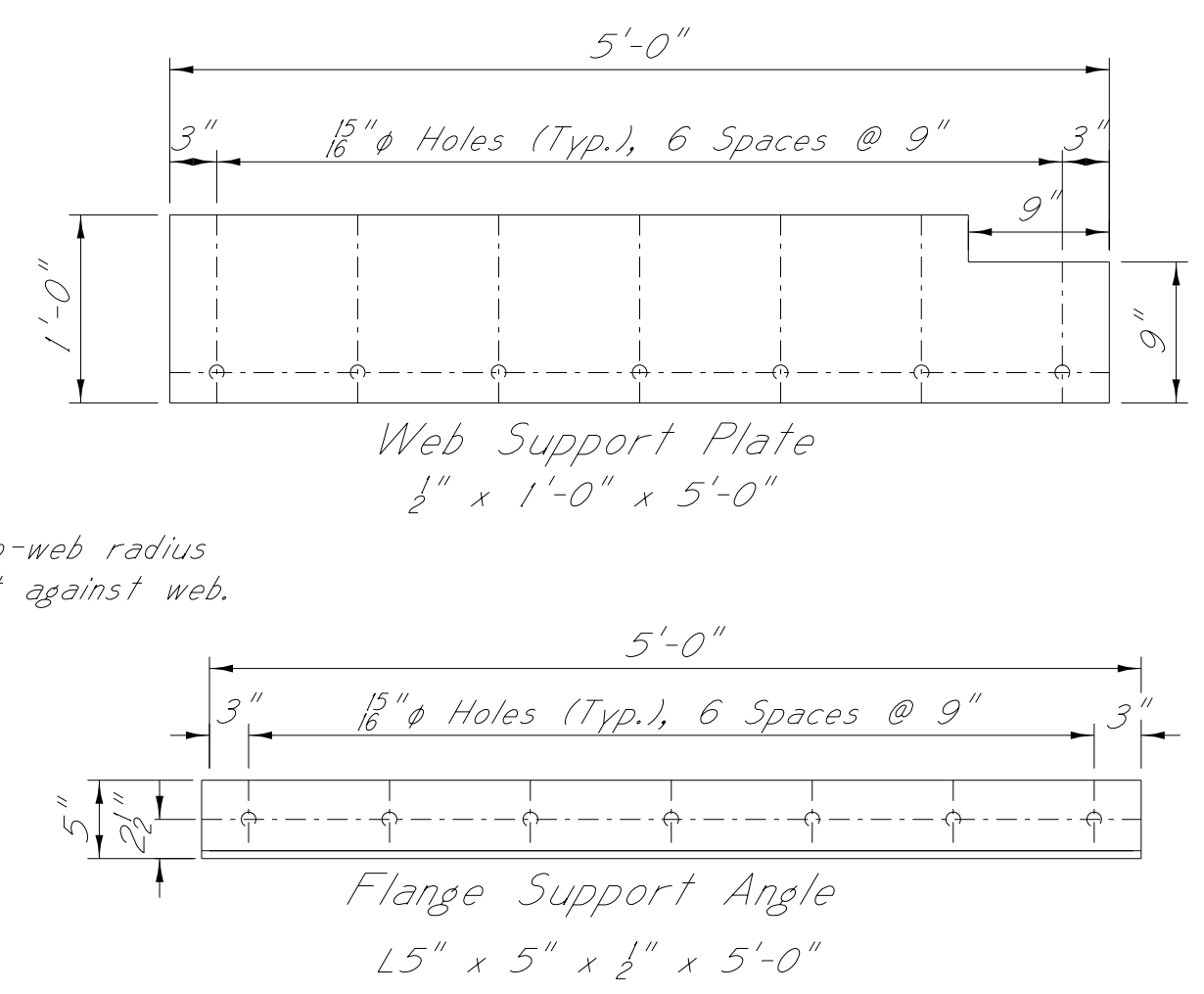
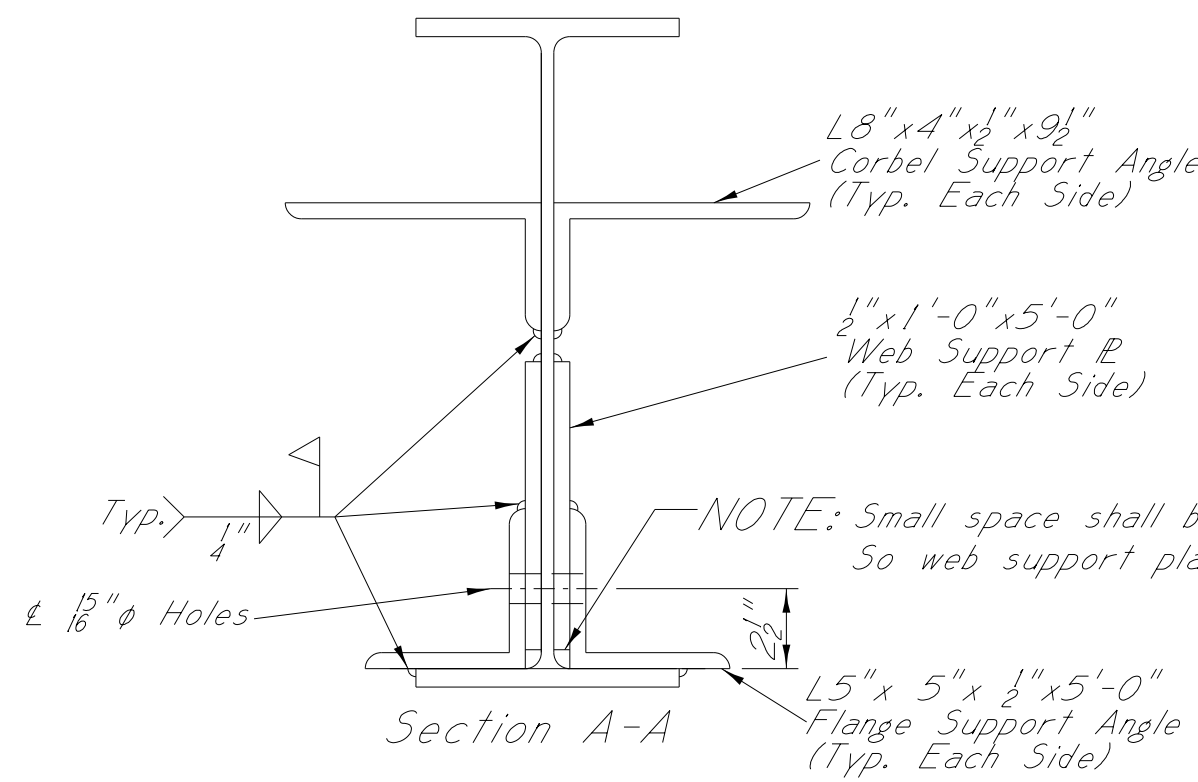
PLAN OF PIER IV  
Showing Approximate Repair Areas

NOTE:  
All materials and labor associated with this item of work shall be paid for under pay item no. 907-824-PP006, Bridge Repair, Bearing Plate Replacement, Per Plans



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 1151+55	
BEARING PLATE REPLACEMENT DETAILS	
FMS: 107860 / 301000	
COUNTY: CLAY	
PROJECT NUMBER: BR-0058-01(037)	
DATE	DESIGNER Aaron Cagle
DATE	CHECKER Chris Duncan
DATE	DETAILER Aaron Cagle
DATE	ISSUE DATE 11/28/2018
DATE	DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DATE	DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.
REVISION	BY
WORKING NUMBER	3 OF 7
SHEET NUMBER	8004

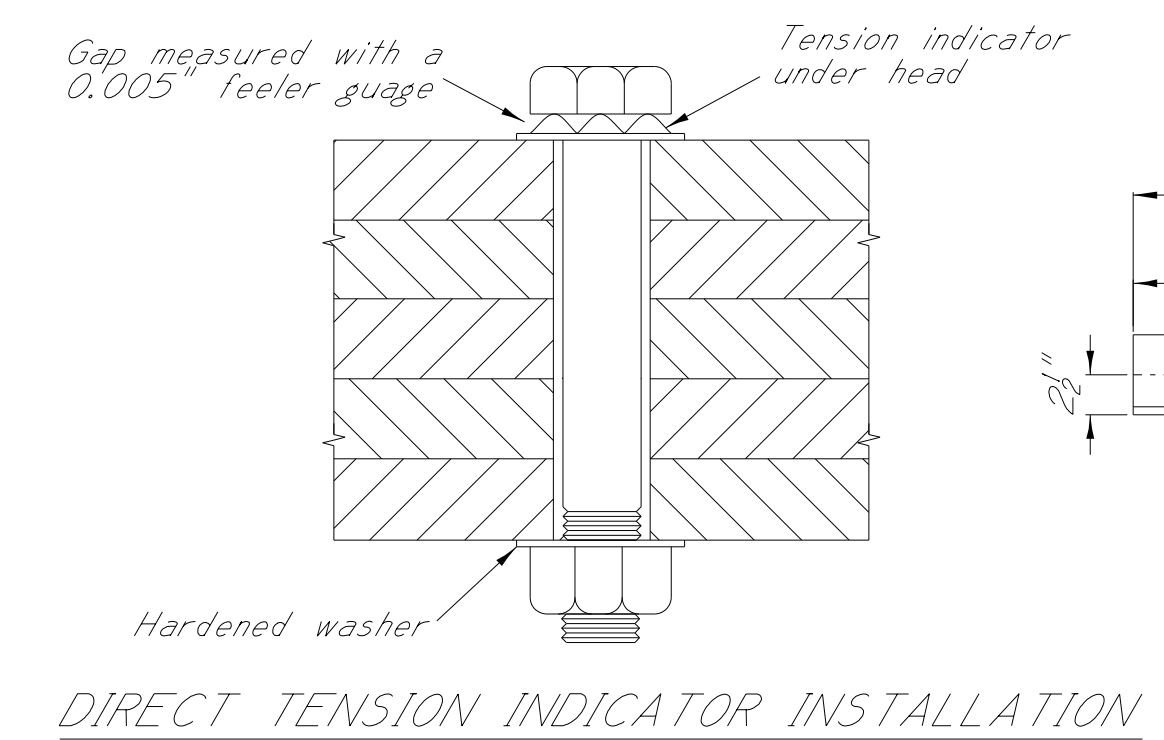
001: 00 ANPM DGN FILE NAME MISSISSIPPI DEPARTMENT OF TRANSPORTATION PROJECT PLAN



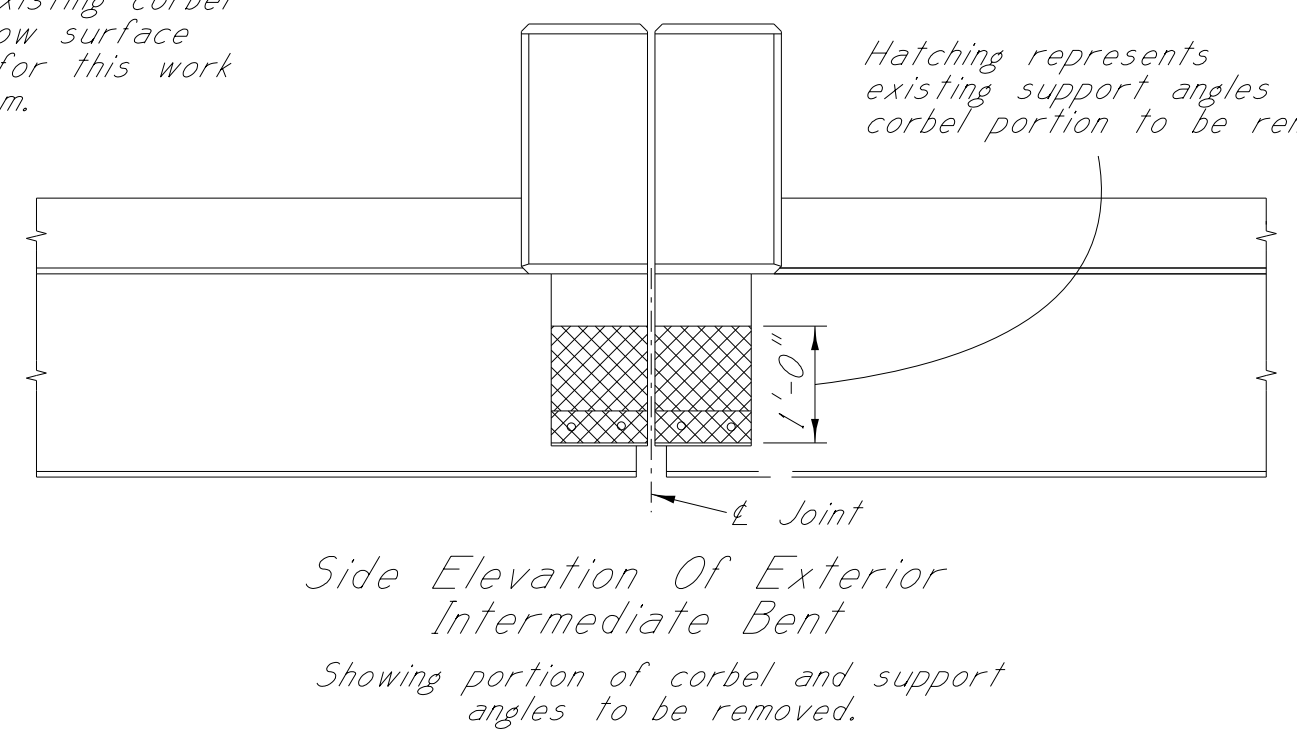
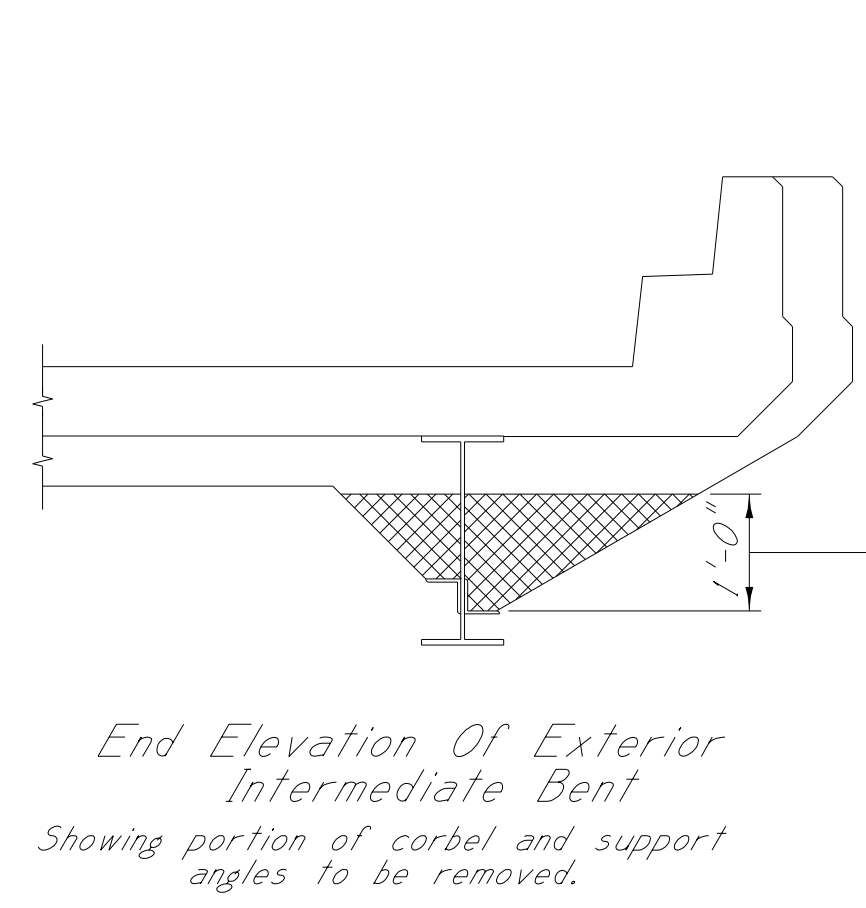
- MECHANICAL ANCHORING NOTE:**  
(not a separate pay item)
- Mechanical anchor shall be one of the following products:
    - KWIK HUS (KH) Carbon Steel Screw Anchors shall be as manufactured by Hilli, Inc. Tulsa, Oklahoma.
    - Titen HD shall be as manufactured by Simpson Strong-Tie Company, Inc. Edenton, North Carolina.
    - WEDGE-BOLT+ shall be as manufactured by Powers Fasteners Brewster, New York.
  - All components of the mechanical anchoring system shall be installed in strict accordance with the Manufacturer's directions.
  - A representative of the Manufacturer must be present for sufficient time to assure that the Contractor is properly schooled in the mechanical anchors.

- Locations of Exterior Girder Support Plates**
- Beam #1, Span #4 at Pier 1
  - Beam #4, Span #4 at Pier 1
  - Beam #1, Span #8 at Pier IV
  - Beam #4, Span #8 at Pier IV
  - Beam #1, Span #9 at Bent #5
  - Beam #4, Span #9 at Bent #5
  - Beam #1, Span #10 at Bent #10

- Locations of Interior Girder Support Plates**
- Beam #3, Span #1 at Bent #2
  - Beam #2, Span #2 at Bent #3
  - Beam #3, Span #13 at Bent #13
  - Beam #2, Span #13 at Bent #13
  - Beam #3, Span #16 at Bent #12
  - Beam #3, Span #18 at Bent #14

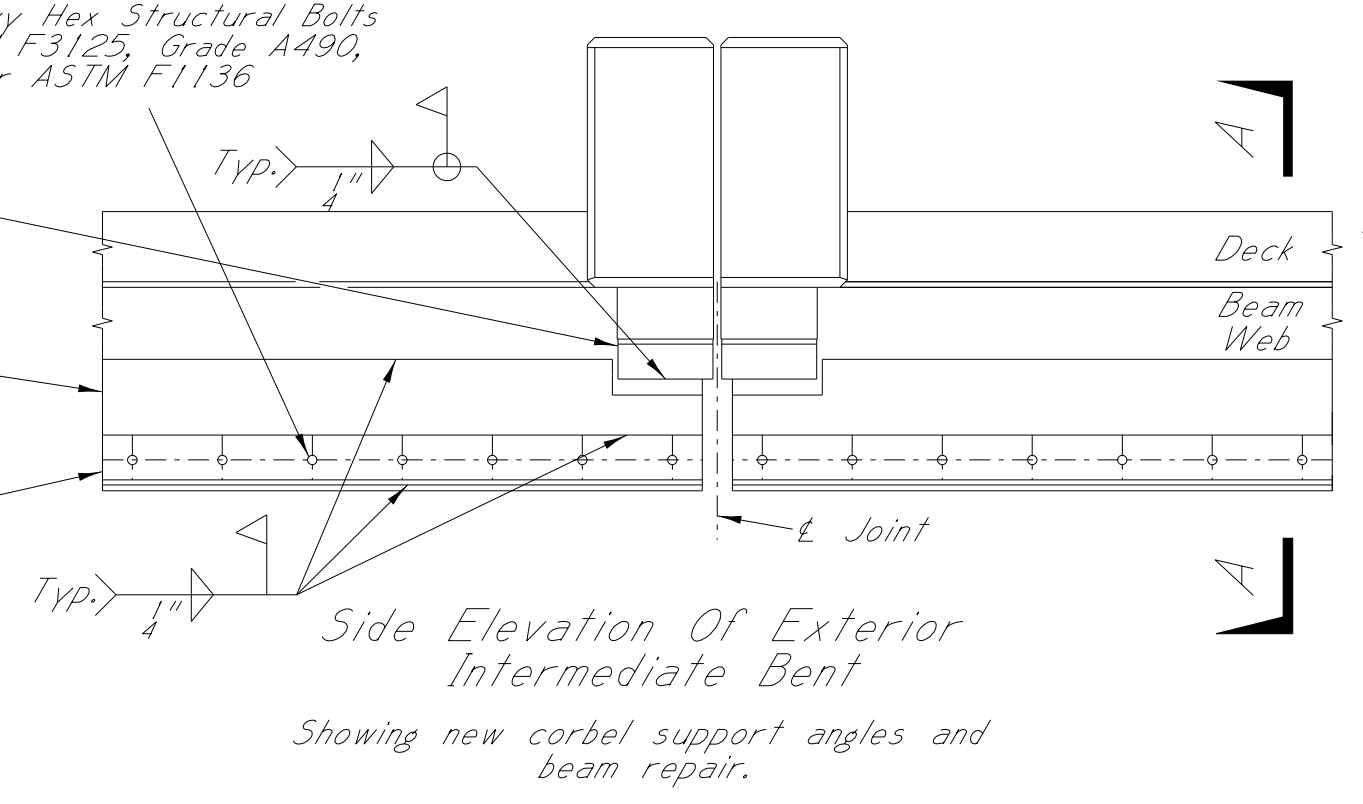
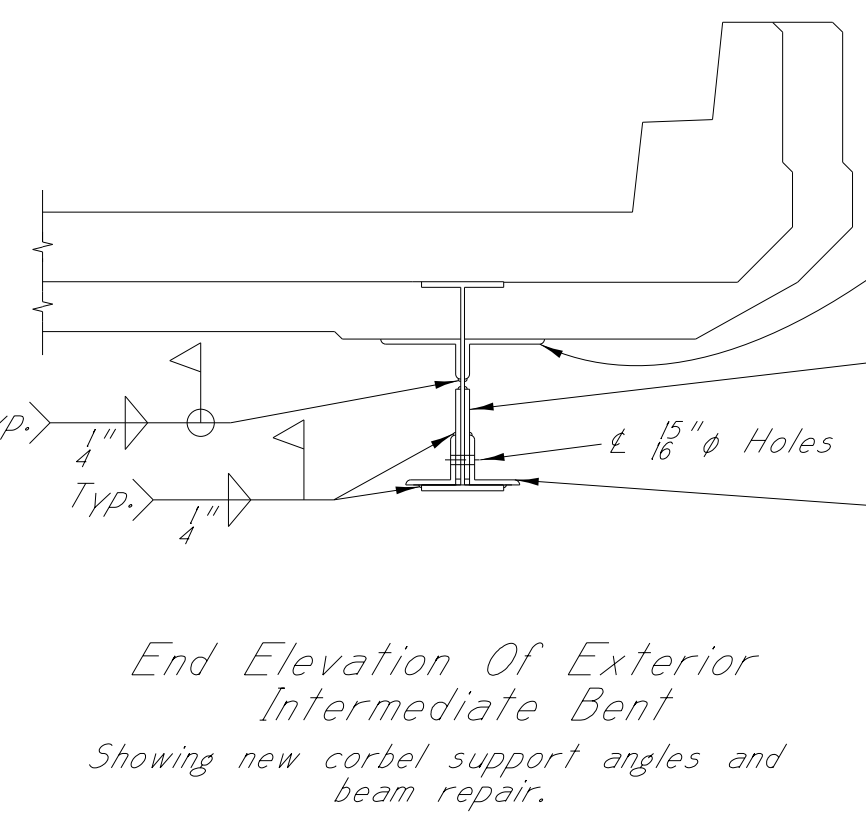


- STEEL PLATE AND BOLT NOTES:**
- Prior to fabrication all dimensions of the existing structure and clearances shall be field verified by the Contractor. The Contractor shall be responsible for adjusting the element of the new construction to ensure proper fit with existing structure.
  - Prior to fabrication and construction, the Contractor shall submit verification of the existing bridge elements that are associated with installing girder support plates and steel pile connecting angles to the Director of Structures, State Bridge Engineer for approval.
  - All steel plates shall conform to A.S.T.M. designation A709, grade 50.
  - 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/aluminum coating in accordance with A.S.T.M. F1136.
  - All steel plates and shapes shall be new.
  - Nuts and washers shall conform to A.S.T.M. A194, Grade 2H and A.S.T.M. F436.
  - Nuts shall be heavy hex.
  - Nuts shall be tapped oversize the minimum amount required for proper assembly.
  - All nuts and washers shall be galvanized in accordance with A.S.T.M. A153.
  - 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.
  - Heavy hex structural bolts, nuts, or direct tension indicators shall not be reused after tightening.
  - Prior to construction, certification for all welders and a procedure for storage and handling of welding electrodes to be used on this project shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for approval.
  - Prior to any fabrication, the fabricator shall have shop drawings, welding procedures, a procedure for storage and handling of welding electrodes, wire and flux and a flux recovery procedure (if applicable) that have been approved by the Director of Structures, State Bridge Engineer.
  - All welding shall be done by the electric arc process and shall conform to the ANSI/AASHTO/AWS D1.5 bridge welding code, the latest edition of the AASHTO Guide Specification for Highway Bridge Fabrication with high performance steel, when applicable, and as directed herein.
  - The fabricator shall have a Certified Welding Inspector (CWI) on each work shift where welding or other significant work is performed.
  - All welds shall be discontinued 1/4" or 3/8" from ends of angles.
  - All existing girder supports plates that are not installed in an equivalent configuration and condition as specified in these plans shall be removed and replaced by the Contractor. The cost associated with this work shall be considered as an absorbed item.

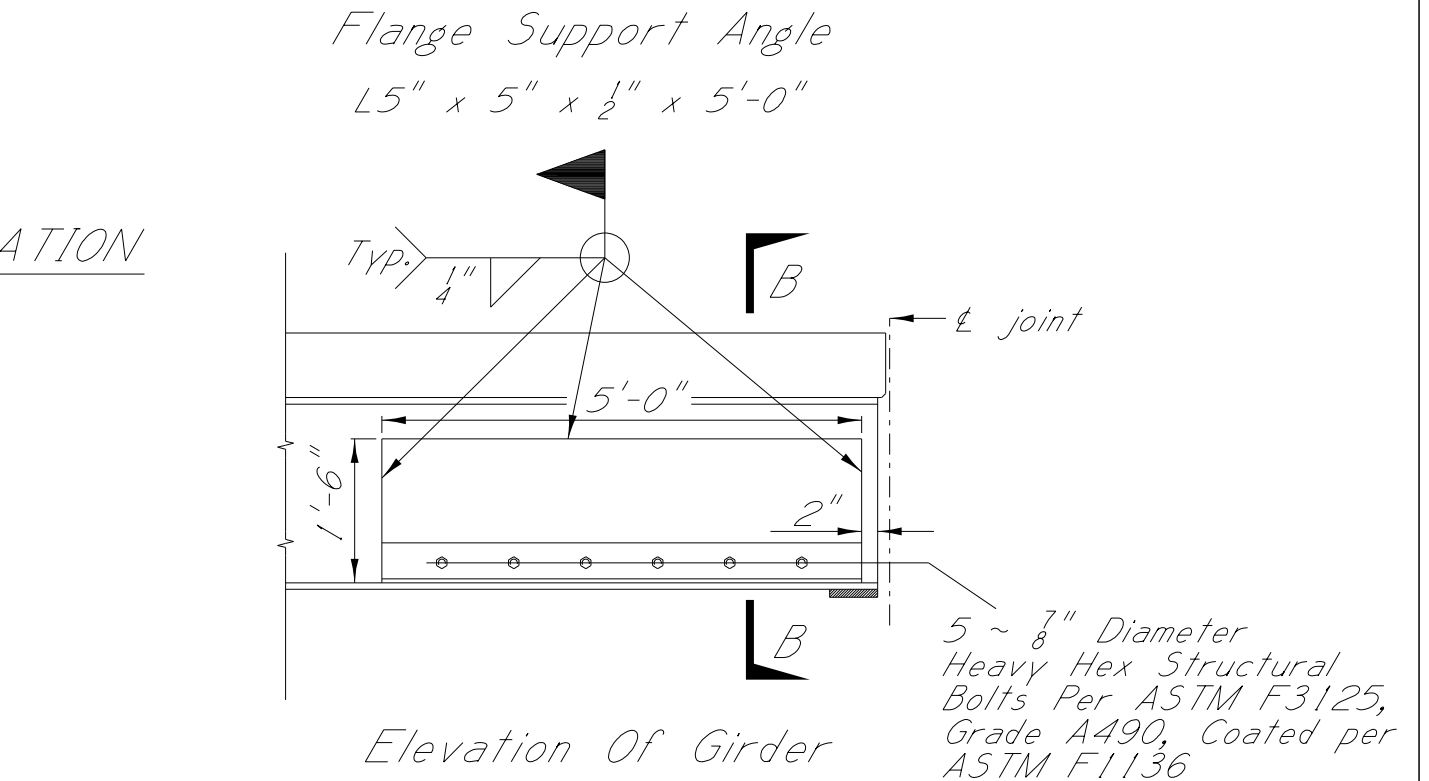
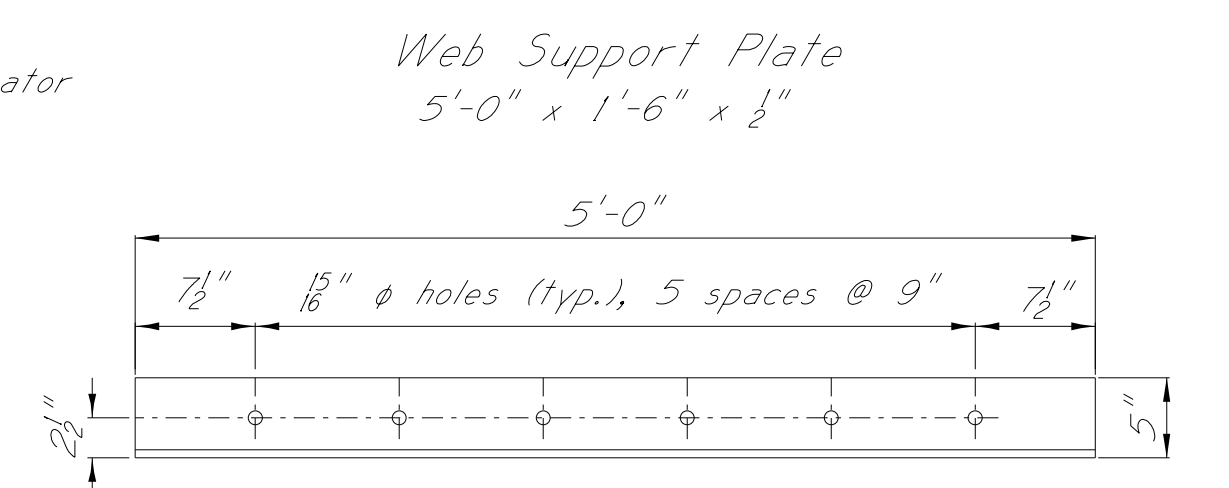
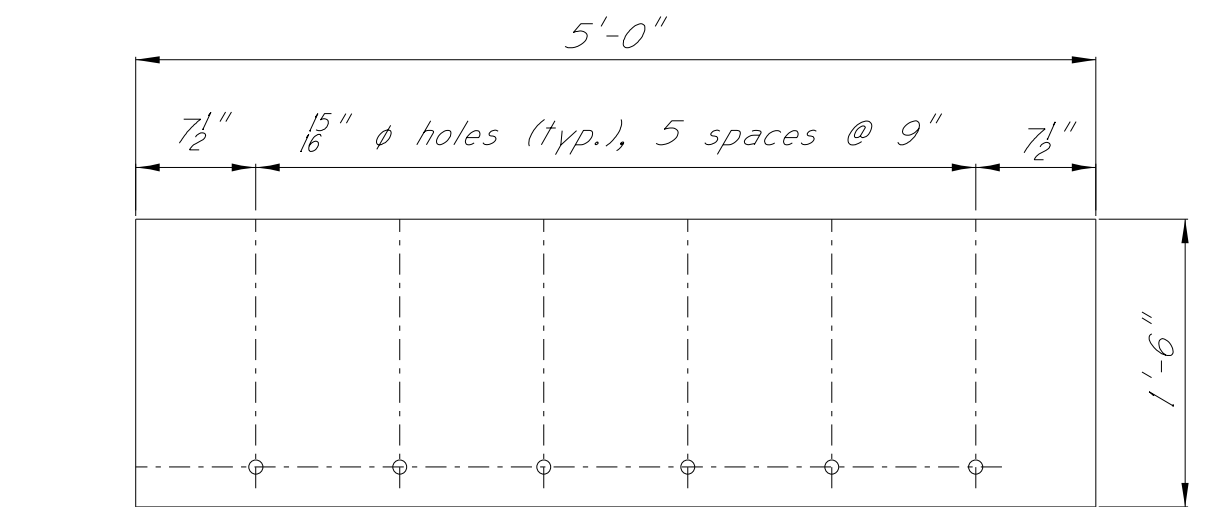


**NOTE:**  
Prior to installing corbel support angles, the roughened bottom surface of the corbel shall be smoothed and sealed with epoxy mortar. All reinforcement protruding from existing corbel shall be cut off and ground 1/4" below surface of concrete. Epoxy mortar used for this work shall be considered an absorbed item.

Hatching represents existing support angles & corbel portion to be removed



**EXTERIOR GIRDER SUPPORT PLATES**  
All materials and labor associated with this item of work shall be paid for under pay item no. 907-824-PP006, Bridge Repair, Exterior Girder Support Plates, Per Plans

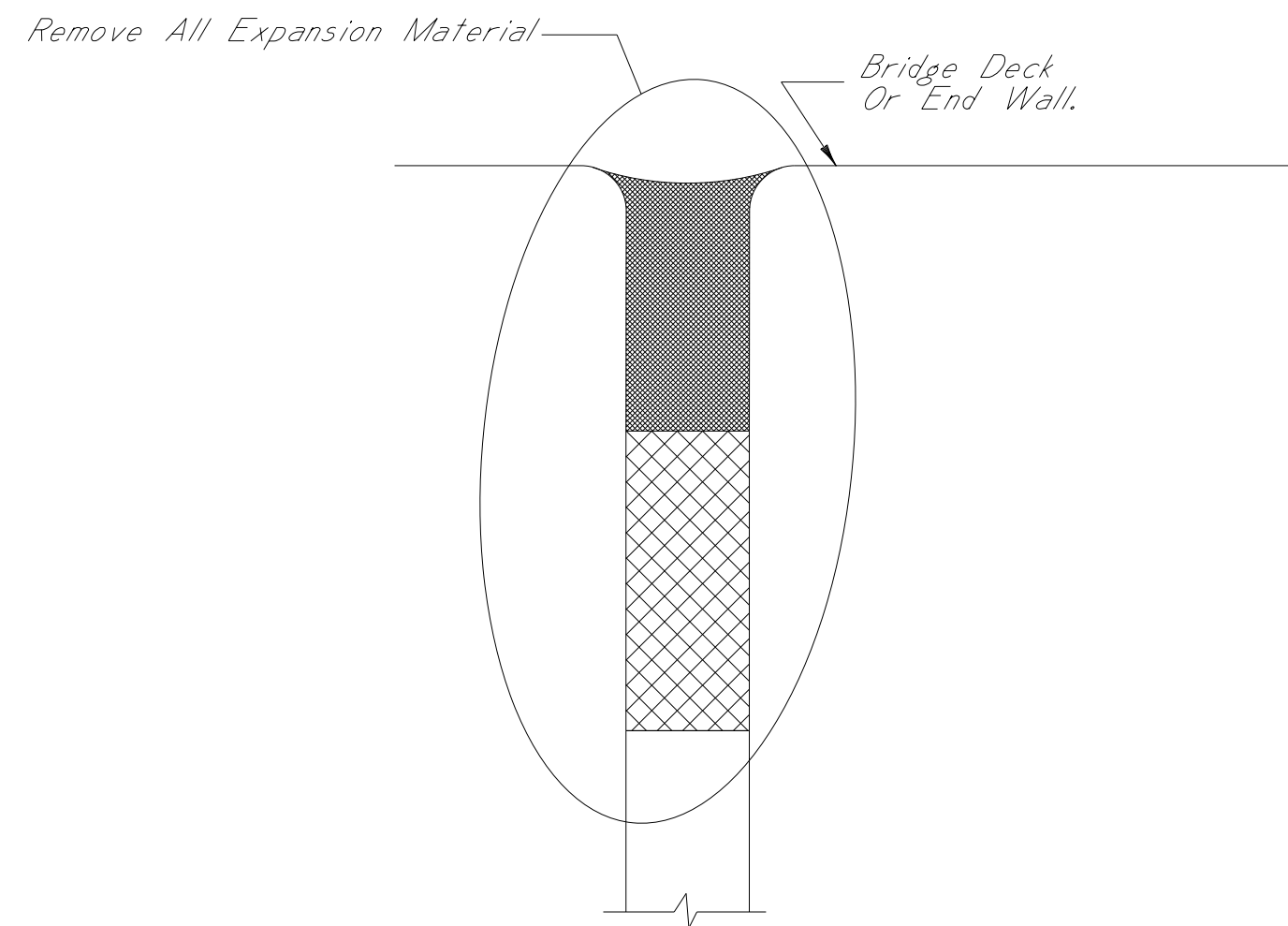


**INTERIOR GIRDER SUPPORT PLATES**  
All materials and labor associated with this item of work shall be paid for under pay item no. 907-824-PP006, Bridge Repair, Interior Girder Support Plates, Per Plans

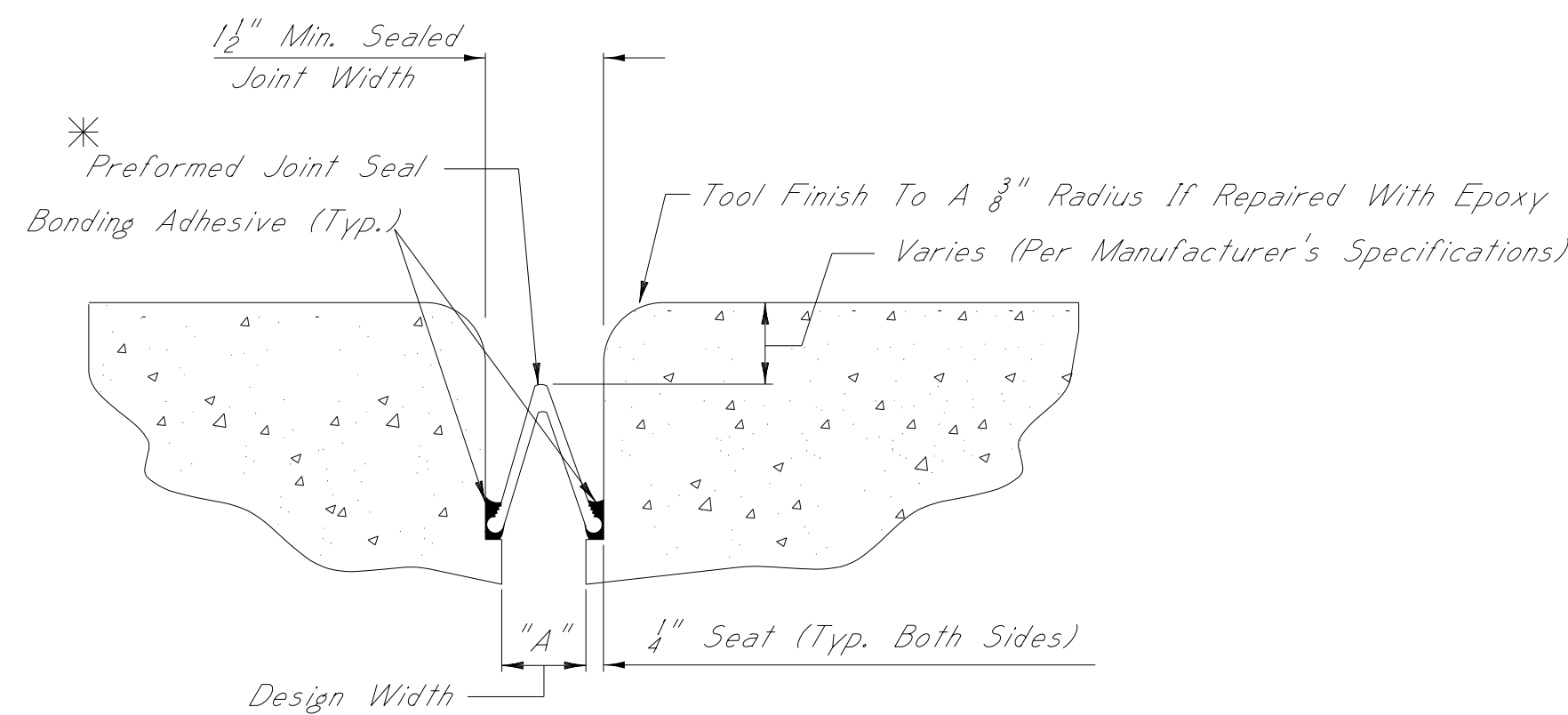


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 1151+55	
GIRDER SUPPORT PLATE AND STEEL PILE CONNECTING ANGLE DETAILS	
FMS: 107860 / 301000	
COUNTY: CLAY	
PROJECT NUMBER: BR-0058-01(037)	
DATE	REVISION
DESIGNER: Aaron Cagle	CHECKER: Chris Duncan
DETAILER: Aaron Cagle	ISSUE DATE: 11/28/2018
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
WORKING NUMBER	SHEET NUMBER
4 OF 7	8005

001.00 AN/PM DGN/FL/EN/NAME MISSISSIPPI DEPARTMENT OF TRANSPORTATION PROJECT PLAN



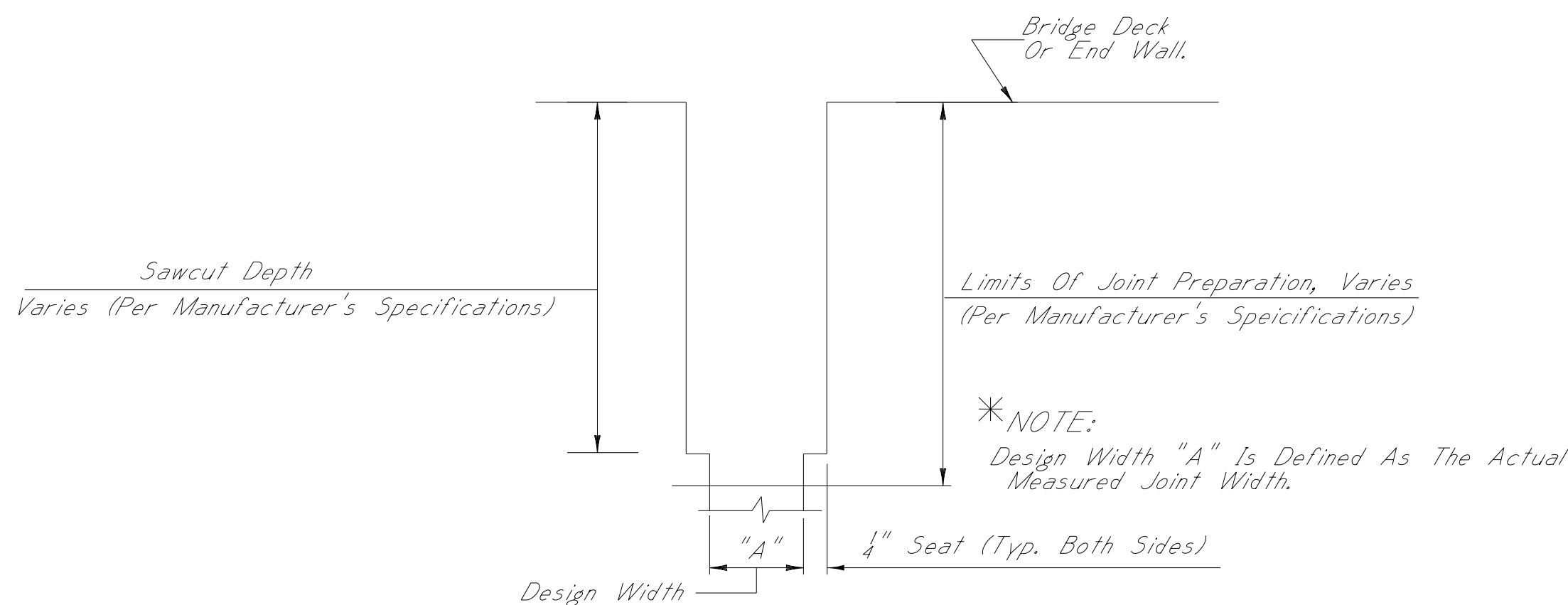
**TYPICAL SECTION AT EXISTING JOINT**  
Showing Existing Expansion Material To Be Removed And Replaced With Preformed Joint Seal



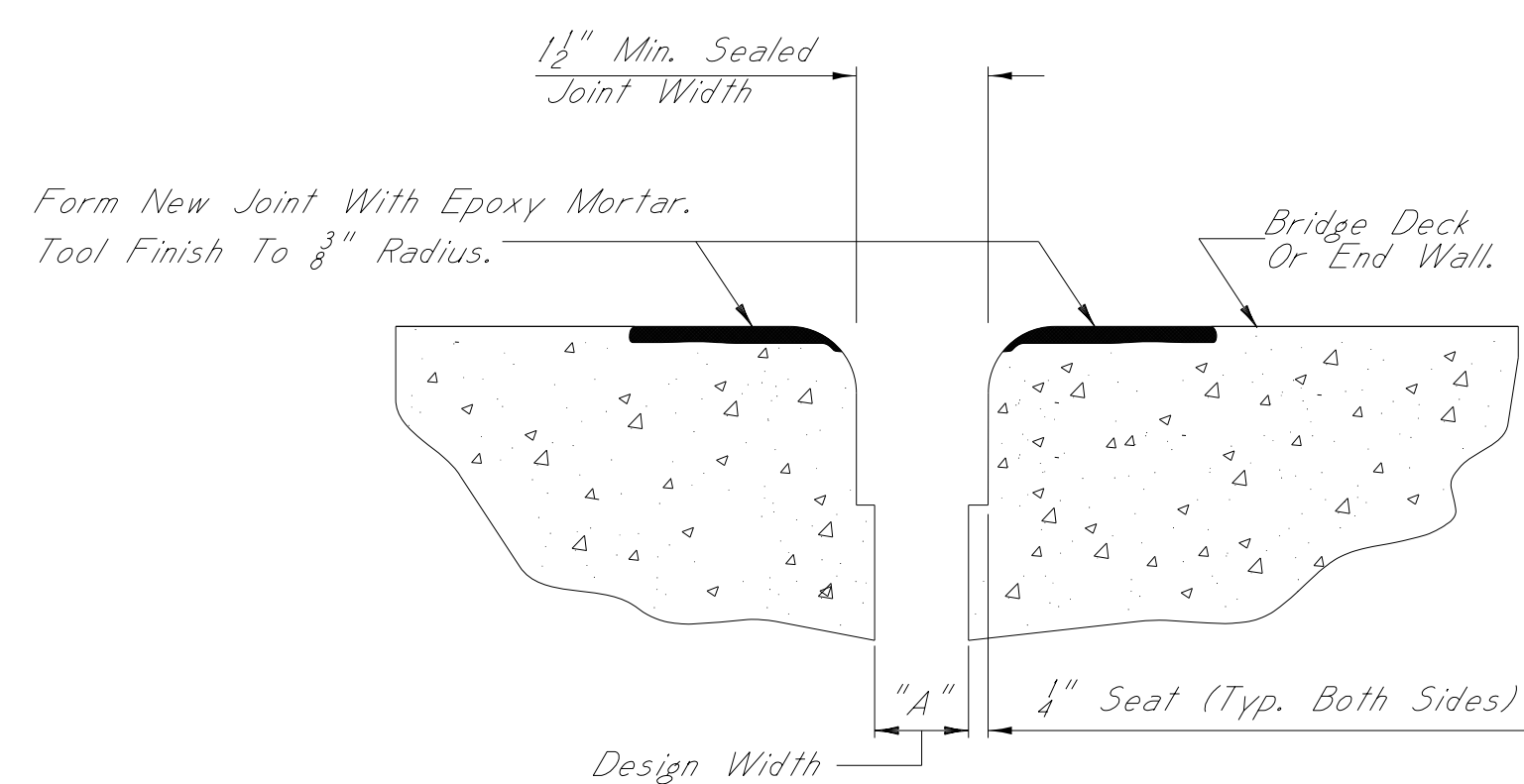
**TYPICAL SECTION AT SAWCUT & SEALED JOINT**  
Showing Sealed Joint After Sawcut And Repair With Epoxy Mortar

**\*NOTES:**

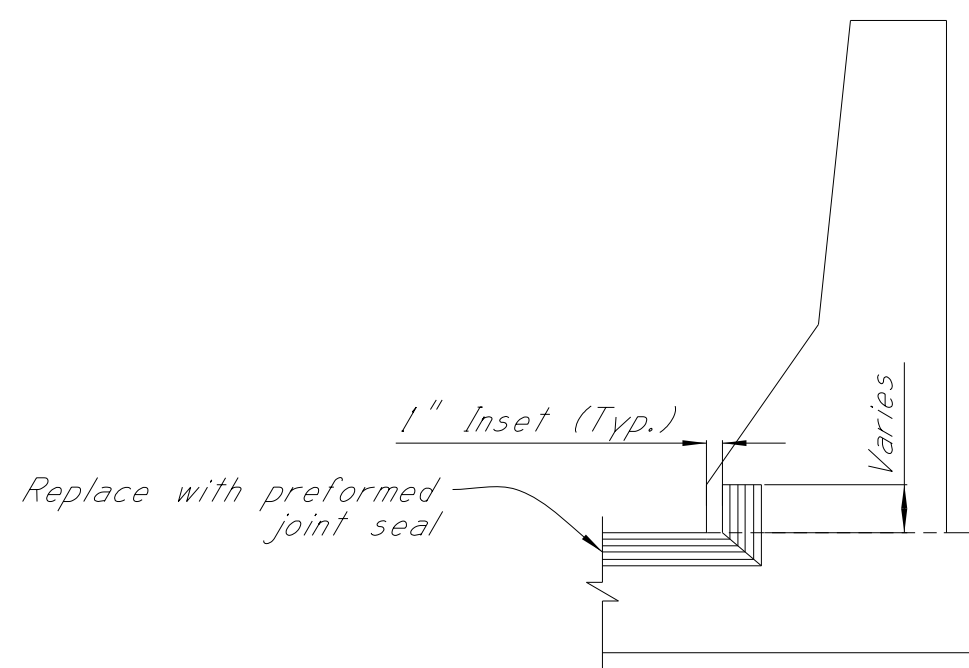
- The Preformed Joint Seal Shall Be One Of The Following, Installed According To The Manufacturer's Specifications:
  - A. Silicoflex Joint Sealing System  
Manufactured By R.J. Watson, Inc. In Alden, NY  
www.rjwatson.com
  - B. Wabo SPS Joint System  
Manufactured By Watson Bowman Acme Corporation In Amherst, NY  
www.wbacorp.com
  - C. Silspec SSS Silicone Strip Seal  
Manufactured By SSI Commercial & Highway Construction Materials  
www.ssicm.com
- 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.
- Joints Shall Be Sealed At Their Design Widths, Dimension "A", Which Is Defined As, "The Actual Width Of The Joint Opening. This Width Does Not Account For The 1/4" 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 28". In Cases Where Design Widths Are Greater Than 28", Another Type Of Expansion Material Shall Be Required As Directed By The Director Of Structures, State Bridge Engineer. It Is The Contractor's Responsibility To Ensure That The Size Selected Is Appropriate For The Width Of The Joint.



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



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



**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".

**END SPAN JOINTS:**

It should be noted that the joint between the approach pavement and the end span of the bridge shall be left as is. No work shall be performed on these bridge elements.

**SLIDING PLATE JOINTS:**

It should be noted that the sliding plate joints on this bridge shall be left as is. No work shall be performed 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 Recommendations.

**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:**

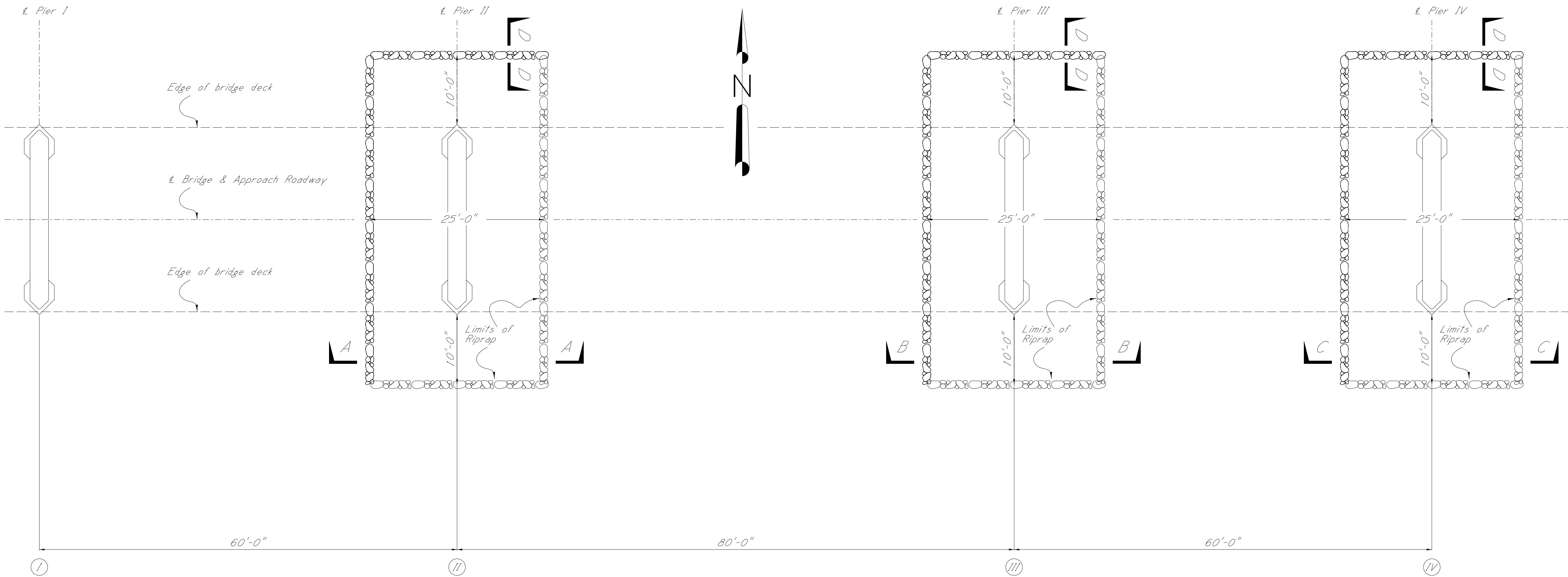
Either Epoxy Mortar Or Polymer Concrete May Be Used. Guidelines For Selection Of Materials Can Be Found In Section 808 of The Specifications.

**GENERAL NOTES:**

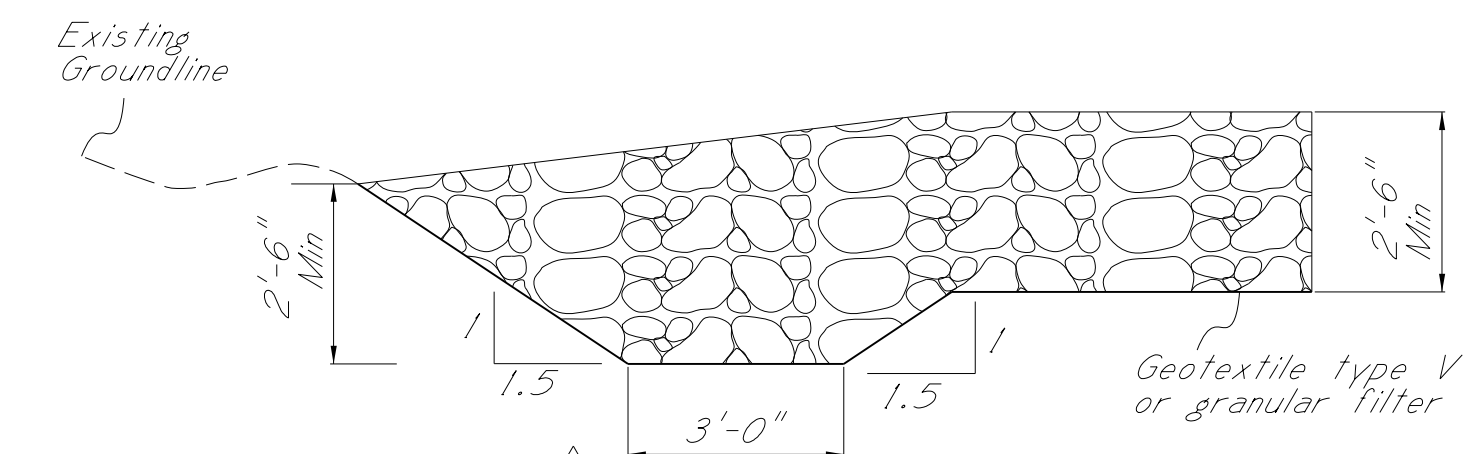
- Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 2017.
- No Change Of Plans Will Be Permitted Except By Written Approval Of The Director Of Structures, State Bridge Engineer. Minor Changes To Detail Of Design Or Construction Procedure May Be Authorized By The Bridge Engineer Provided Such Changes Will Not Be Cause For Contract Price Adjustment.
- 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.



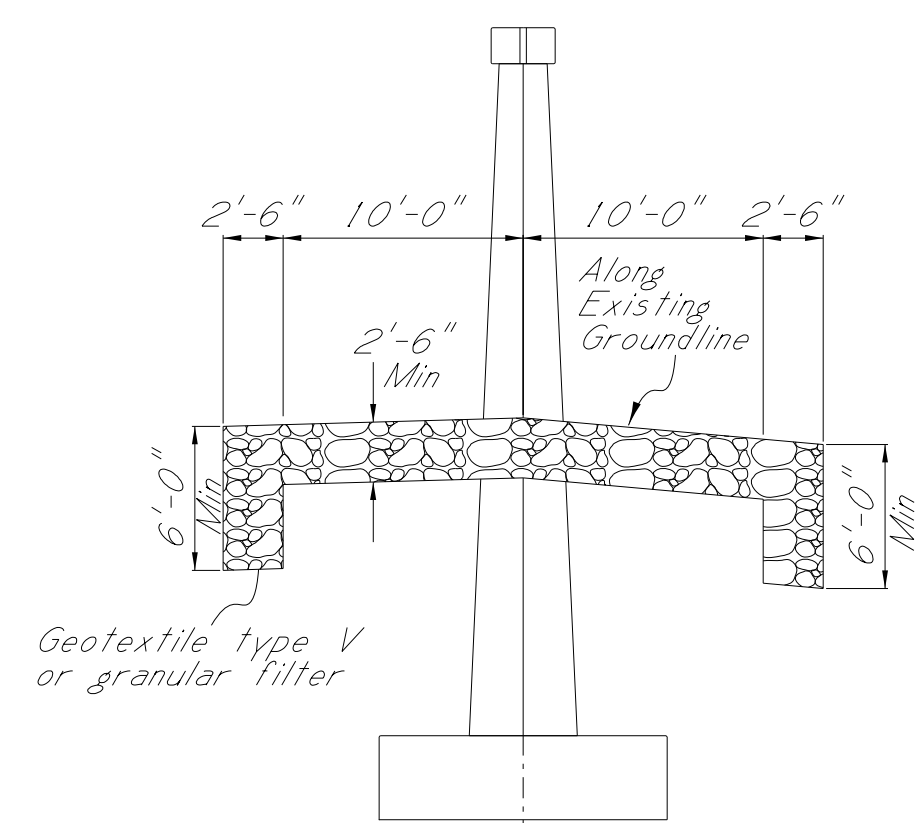
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 1151+55	
JOINT REPAIR DETAILS	
REVISION	FMS: 107860 / 301000
BY	COUNTY: CLAY
DATE	PROJECT NUMBER: BR-0058-01(037)
DESIGNER Aaron Cagle	CHECKER Chris Duncan
DETAILER Aaron Cagle	ISSUE DATE 11/28/2018
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
WORKING NUMBER	5 OF 7
SHEET NUMBER	8006



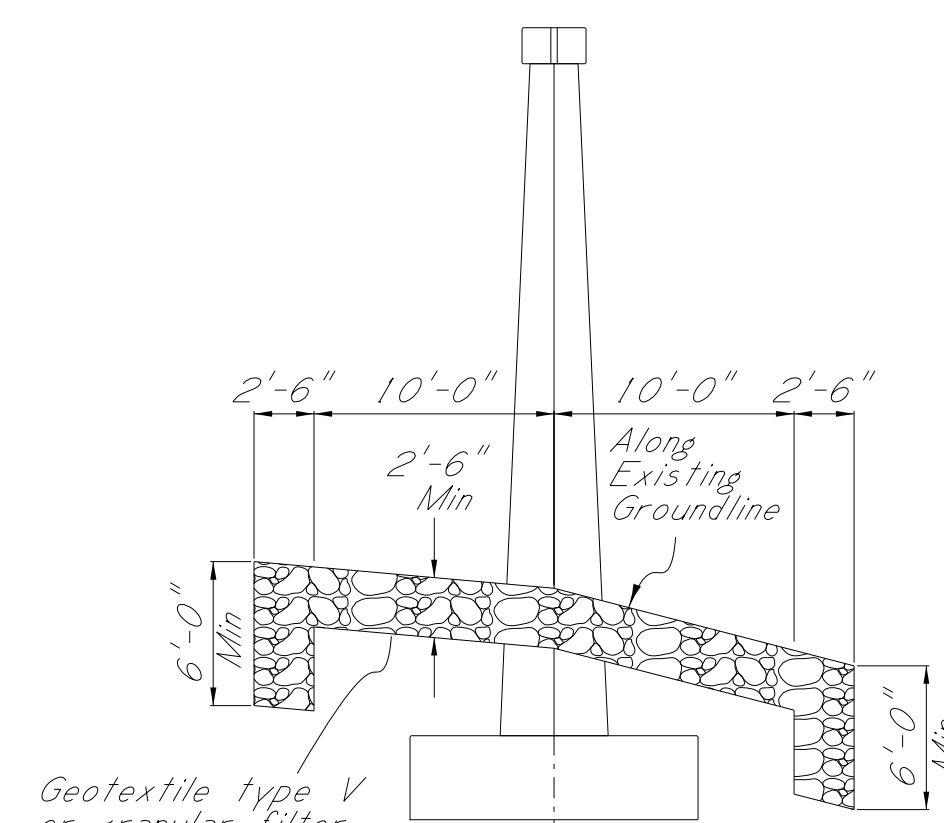
RIPRAP PLACEMENT PLAN  
Showing limits of riprap placement



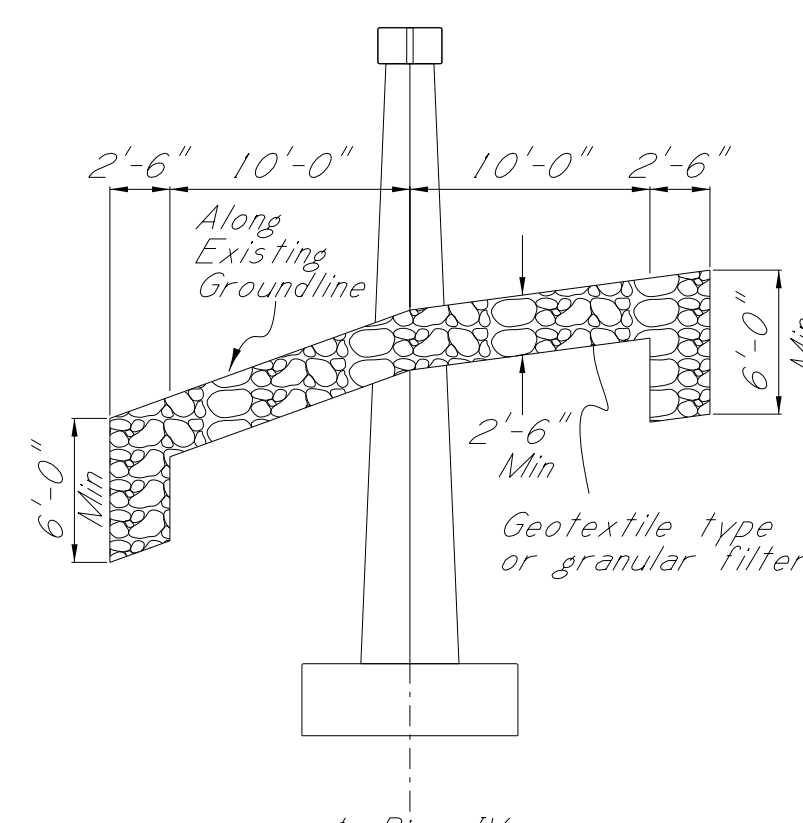
SECTION D-D  
Revetment riprap showing key trench at upstream and downstream termination



SECTION A-A  
Showing riprap placement details at Pier II



SECTION B-B  
Showing riprap placement details at Pier III



SECTION C-C  
Showing riprap placement details at Pier IV

NOTE

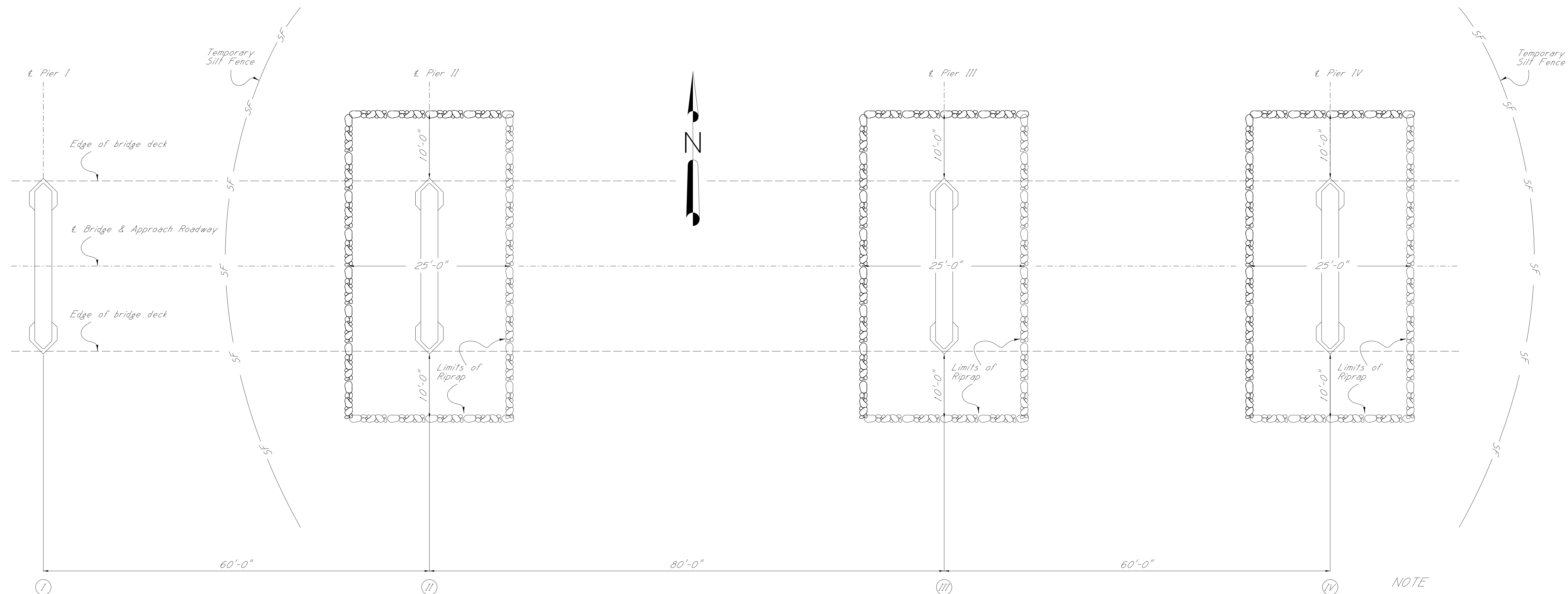
- Scour areas will be filled in with riprap so reshaping of existing bank is not required.
- Any vegetation that will interfere with the placement of riprap shall be removed and is the responsibility of the Contractor. Removal of vegetation will be an absorbed item.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 1151+55	
RIPRAP PLACEMENT PLAN	
DESIGNER Aaron Cagle	CHECKER Chris Duncan
DATE 2/28/19	ISSUE DATE 11/28/2018
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.	
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.	
REVISION	BY
1	DAC
FMS: 107860 / 301000	
COUNTY: CLAY	
PROJECT NUMBER: BR-0058-01(037)	
WORKING NUMBER	6 OF 7
SHEET NUMBER	8007

001: 00 ANPM DGN FILE NAME MISSISSIPPI DEPARTMENT OF TRANSPORTATION PROJECT PLAN

PLAN EROSION CONTROL MISSISSIPPI DEPARTMENT OF TRANSPORTATION



**EROSION CONTROL PLAN**  
Showing limits of erosion control measures

- NOTE**
1. No dirt can be pushed into the creek.
  2. If a platform for working is needed, then riprap may be used.
  3. Minimize disturbance to existing banks.

IMPAIRED WATER BODY  
CHUQUATONCHEE CREEK IS IMPAIRED  
DUE TO DDT, SEDIMENT, TOTAL N&P, AND TOXAPHENE

001: 00 AHPM DGNFILENAME



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
BRIDGE AT STA. 1151+55	
BRIDGE EROSION CONTROL	
DATE	DESIGNER Aaron Cagle
DATE	CHECKER Chris Duncan
DATE	DETAILER Aaron Cagle
DATE	DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DATE	DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.
REVISION	FMS: 107860 / 301000
REVISION	COUNTY: CLAY
REVISION	PROJECT NUMBER: BR-0058-01(037)
REVISION	WORKING NUMBER
REVISION	7 OF 7
REVISION	SHEET NUMBER
REVISION	8008



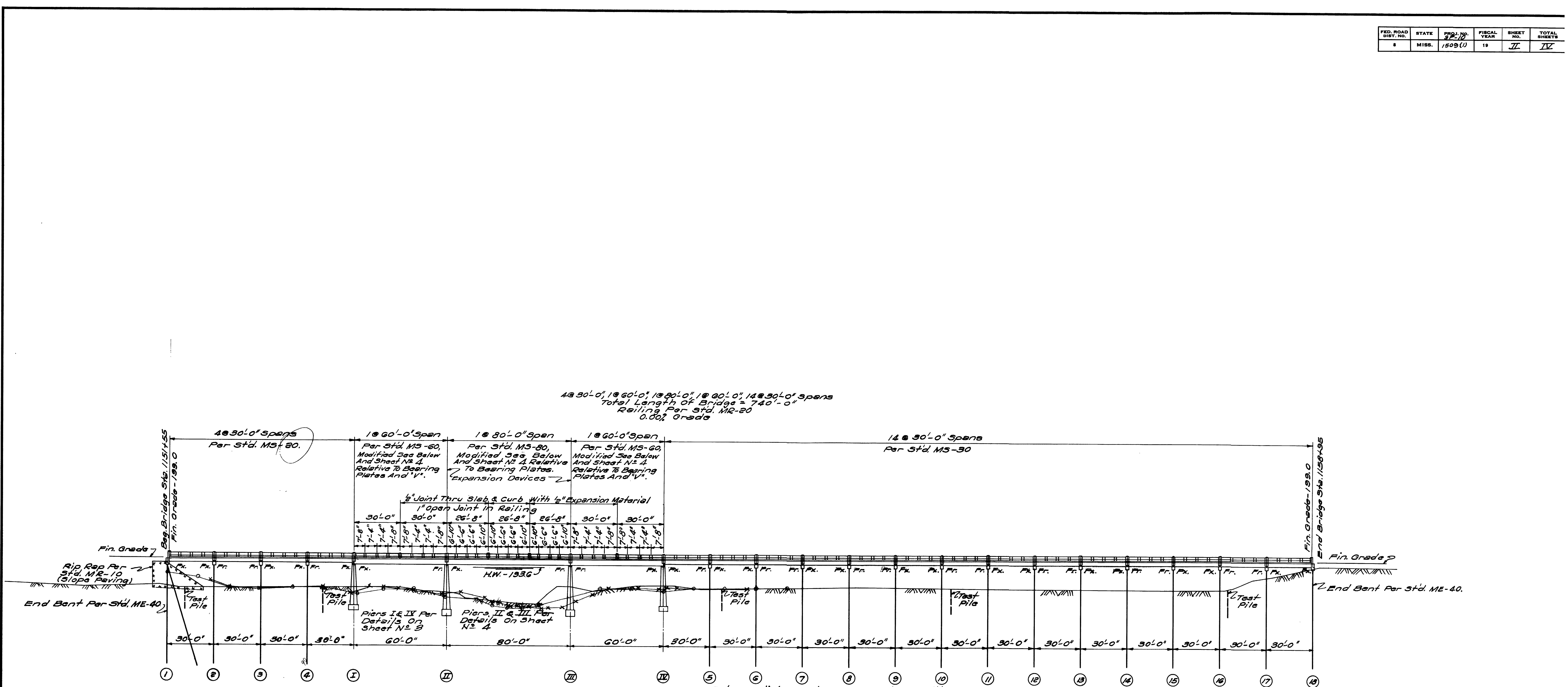
STATE	PROJECT NO.
MISS.	

10740  
10741

		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
		NO SUMMARY OF QUANTITY NOR RECAP SHEETS	
		WORKING NUMBER	
		SHEET NUMBER	
DESIGNED _____	DETAILED _____	TRACED _____	
CHECKED _____	ISSUED _____	DATE _____	

Civil Building, Inc. 2/11/17 Form 1112B

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS.	1509 (1)	19	II	IV



ELEVATION WITH PROFILE ON ROADWAY  
Scale: 1" = 30'-0"

LEGEND  
 \* \* \* \* \* 2-5-57  
 - - - - - 11-16-57

Item Location	ESTIMATED QUANTITIES							
	Class "B" Bridge Conc. Cu. Yds.	Class "C" Bridge Conc. Cu. Yds.	Reinforcing Steel Lbs.	Structural Steel Lbs.	Steel Piling Lin. Ft.	Conc. Rip Rap Slope Facing Cu. Yds.	Bridge Railings Lin. Ft.	Test Pile Units
30' spans	390.20		99,190	162,760			1080	
60' spans	85.00		22,000	40,050			240	
80' spans	57.40		14,550	82,270			160	
Int. Bents	64.80		6,930	10,950	2112			5
Piers I & IV		106.00	9,680					
Piers II & III		148.25	14,250					
End Bents	11.20		1,780		562	50		
Totals	608.60	254.25	164,530	296,030	2674	50	1480	5

GENERAL NOTES:  
 Specifications: Mississippi State Highway Department.  
 No unauthorized change of plan will be permitted.  
 Test piles shall be driven to a minimum bearing capacity of 20 tons each and a minimum penetration of 45 feet each.  
 Test pile data and recommended pile lengths shall be submitted to the Bridge Department prior to placing order for steel piling.  
 Complete and permanent pile driving data shall be kept for submission to the Bridge Department on completion of driving.  
 Expansion joint filler shall be cork or rubber.  
 Foundation elevations of piers are subject to change and shall be determined in the field prior to placing order for pier reinforcing.  
 Bar lists of reinforcing steel for piers shall be submitted to the Bridge Department prior to fabrication.

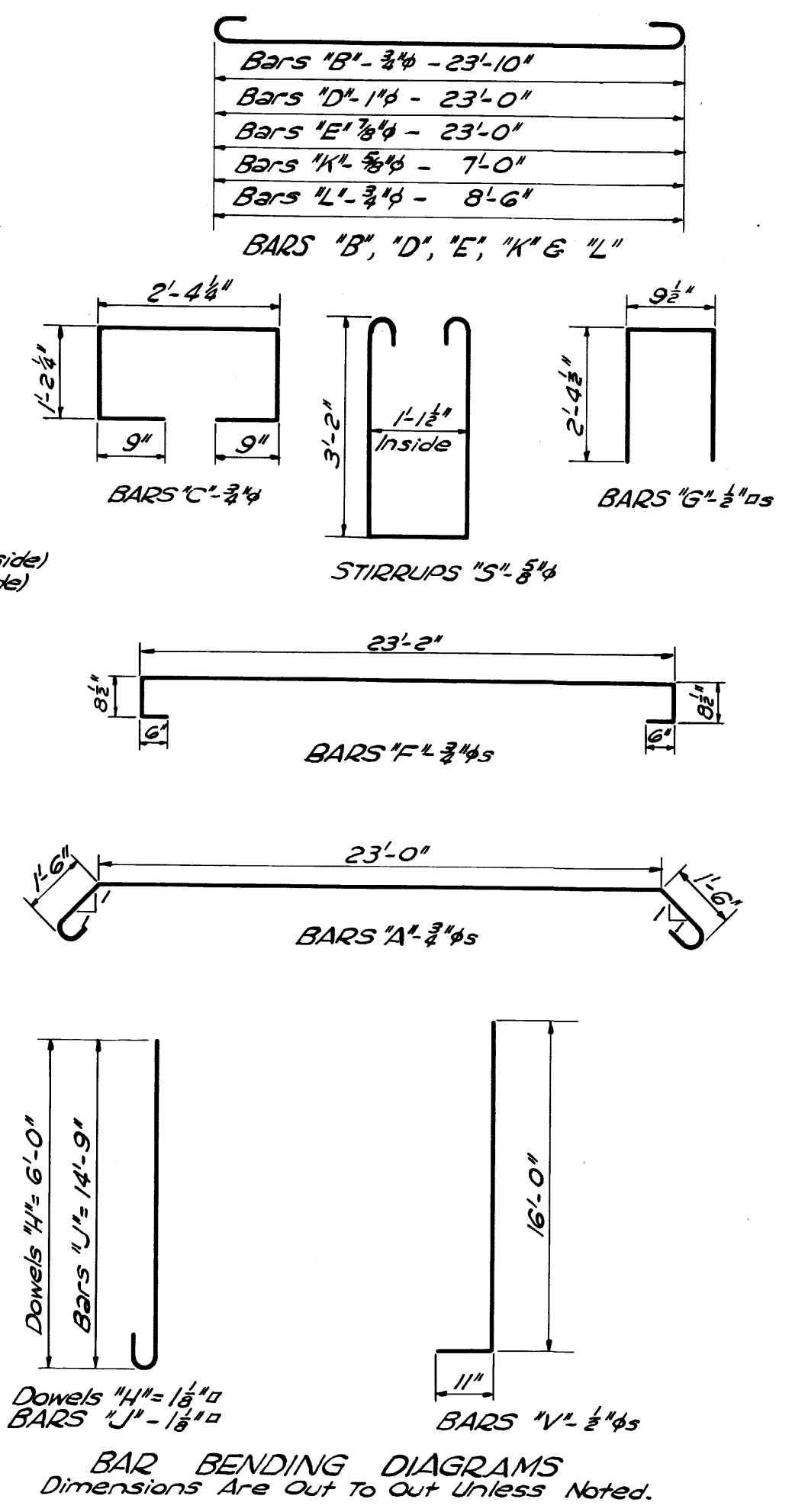
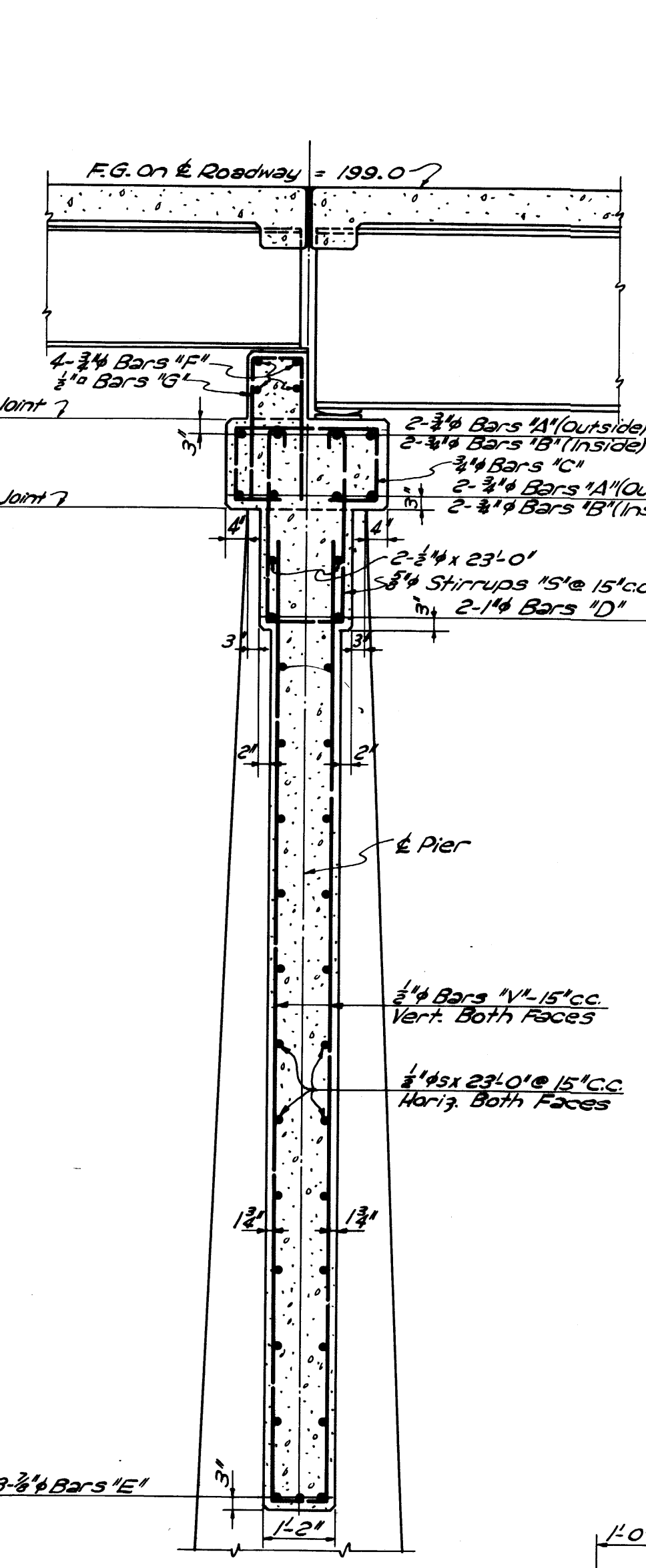
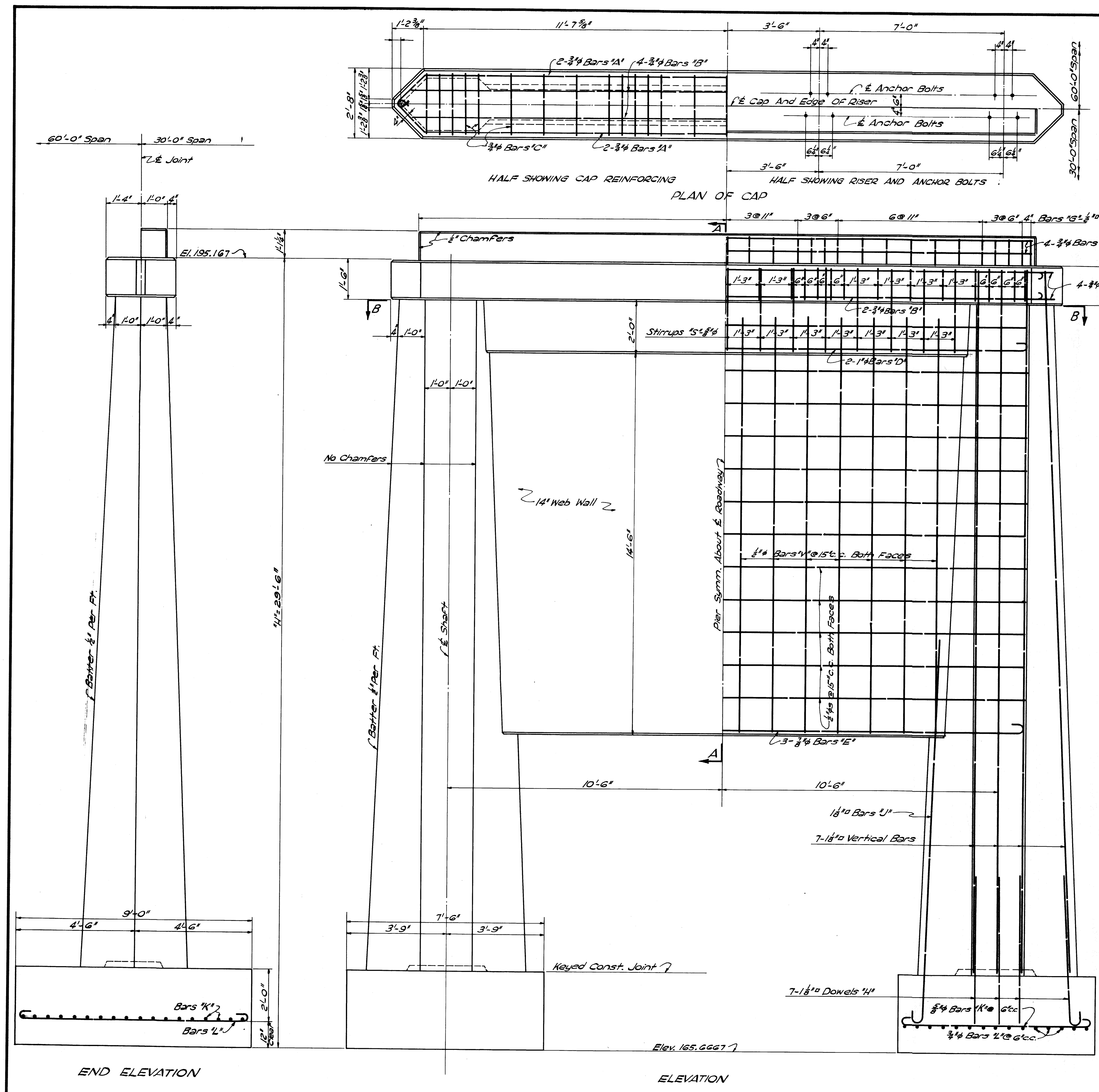
Standard Plans Required: MS-30, MS-60, MS-80, MR-20, ME-40, MP-40, MR-10, MP-20

BY		MISSISSIPPI STATE HIGHWAY DEPARTMENT	
REVISIONS		BRIDGE "B" AT STA. 1151 + 55	
DATE		CHAUCATOCVILLE, MISS.	
CHANGED		SP. 10-1509 (1)	
BY		CLAY COUNTY	
DATE		SUBMITTED BY _____ BRIDGE ENGINEER	
DATE		DETAILED J.L.H.	
DATE		CHECKED _____	
DATE		ISSUED _____	
DATE		SHEET NUMBER	
DATE		2 OF 4	

10741

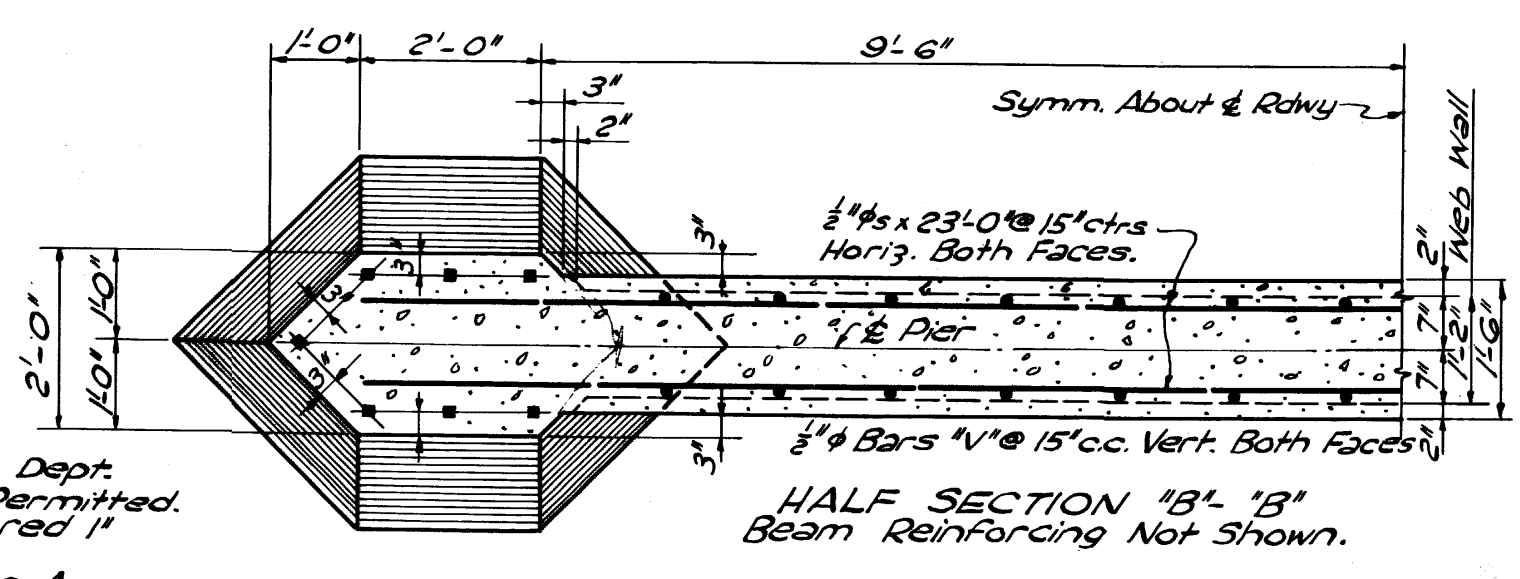
3 Prints

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



**GENERAL NOTES -**

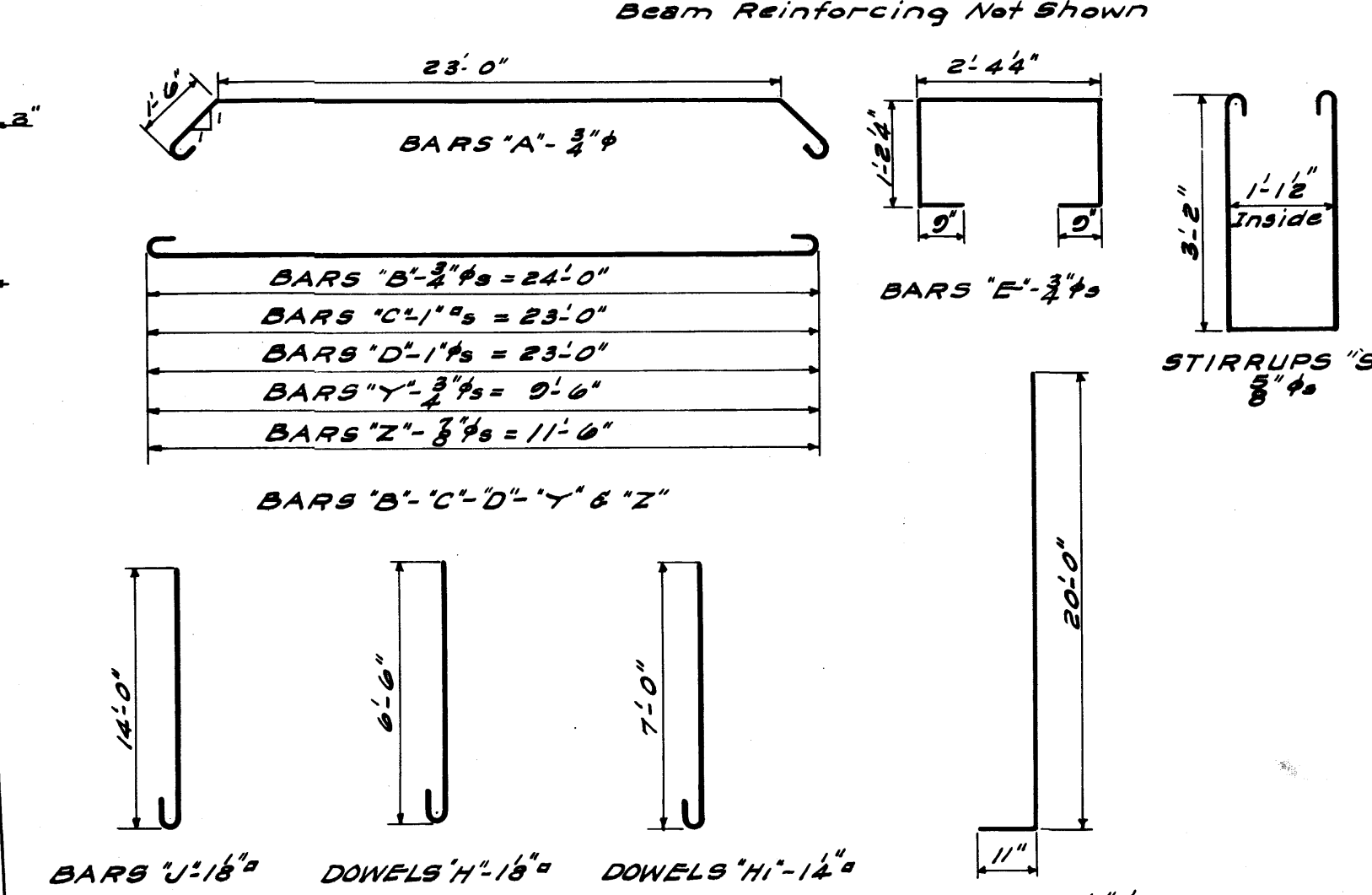
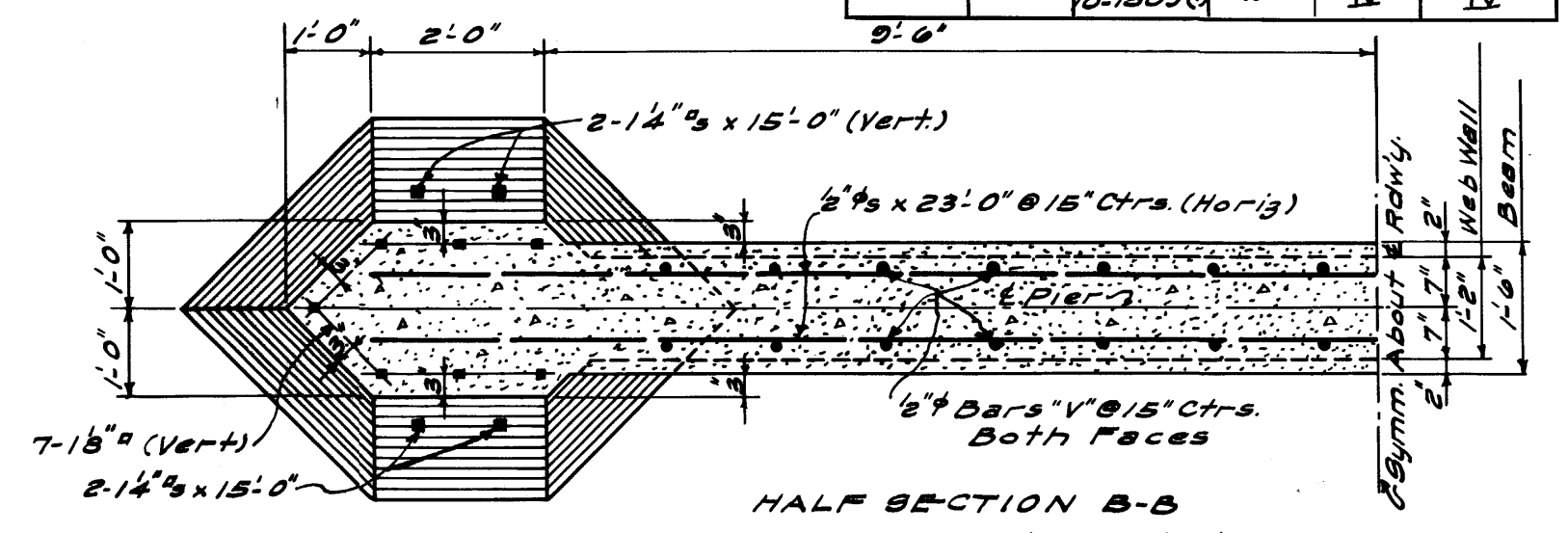
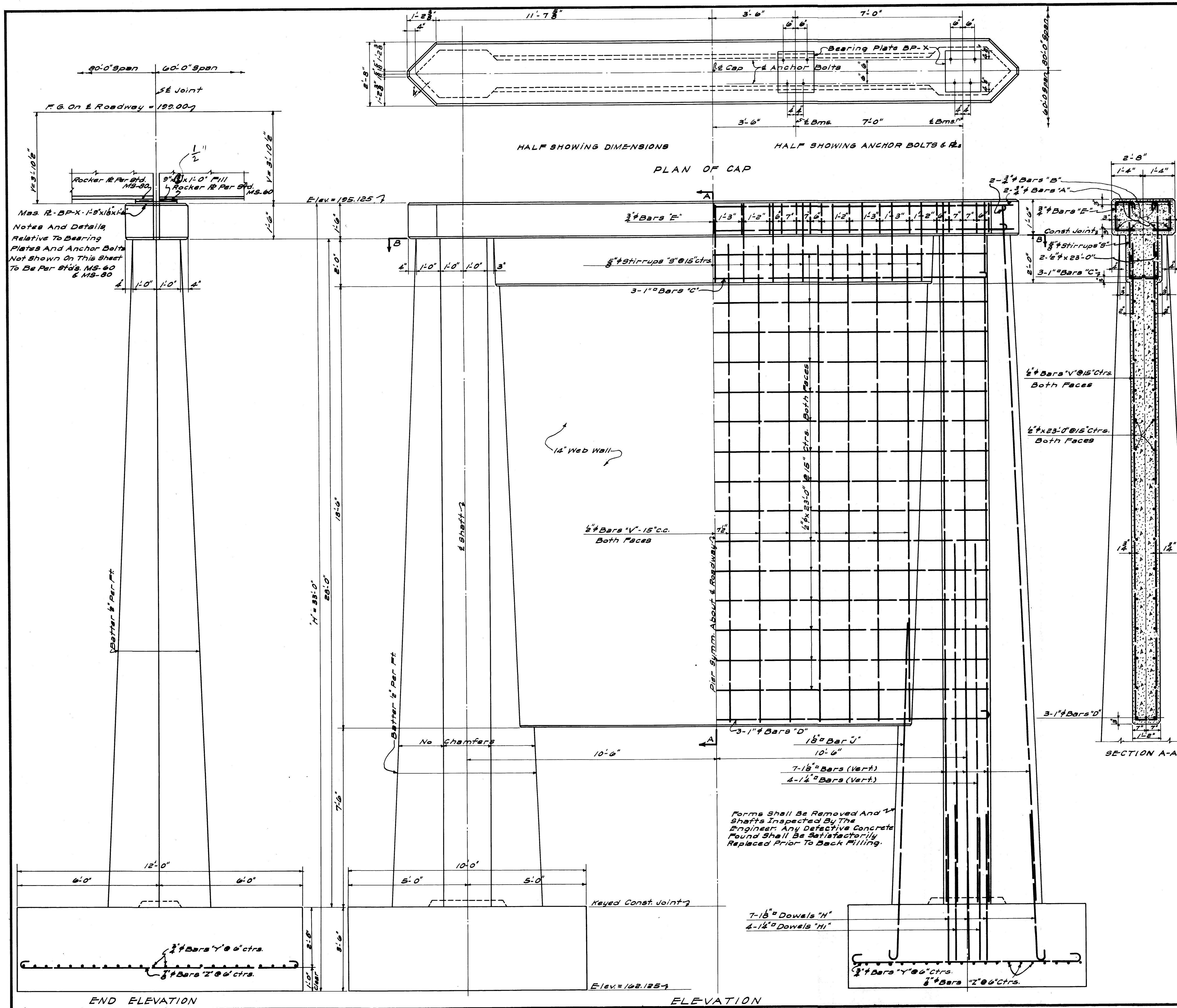
Specifications - Mississippi State Highway Dept.  
 No Unauthorized Change of Plans Will Be Permitted.  
 All Exposed Concrete Edges To Be Chamfered 1/2"  
 Unless Otherwise Noted.  
 All Exposed Concrete Surfaces To Receive A  
 Uniform Rubbed Finish.  
 All Concrete Shall Be Class 'C', Min. Cement Factor - 147  
 Bottom Of Web Wall And Footing Elevation Shall  
 Be Determined By The Engineer Prior To Placing  
 Order For Reinforcing Steel.



MISSISSIPPI STATE HIGHWAY DEPARTMENT			
BRIDGE B AT STA 1151 + 55			
PIERS I & IV			
S.P. 10 - 1509 (I)			
CLAY COUNTY			
SUBMITTED BY		BRIDGE ENGINEER	
DATE	Detailed	Checked	Issued
8-23-59	TRACED	DATE	DATE
			SHEET NUMBER
			3 of 4

10741

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	MISS.	10-1509(0)	19	IV	IV



**BAR BENDING DIAGRAMS**  
Dimensions Are Out To Out Unless Noted

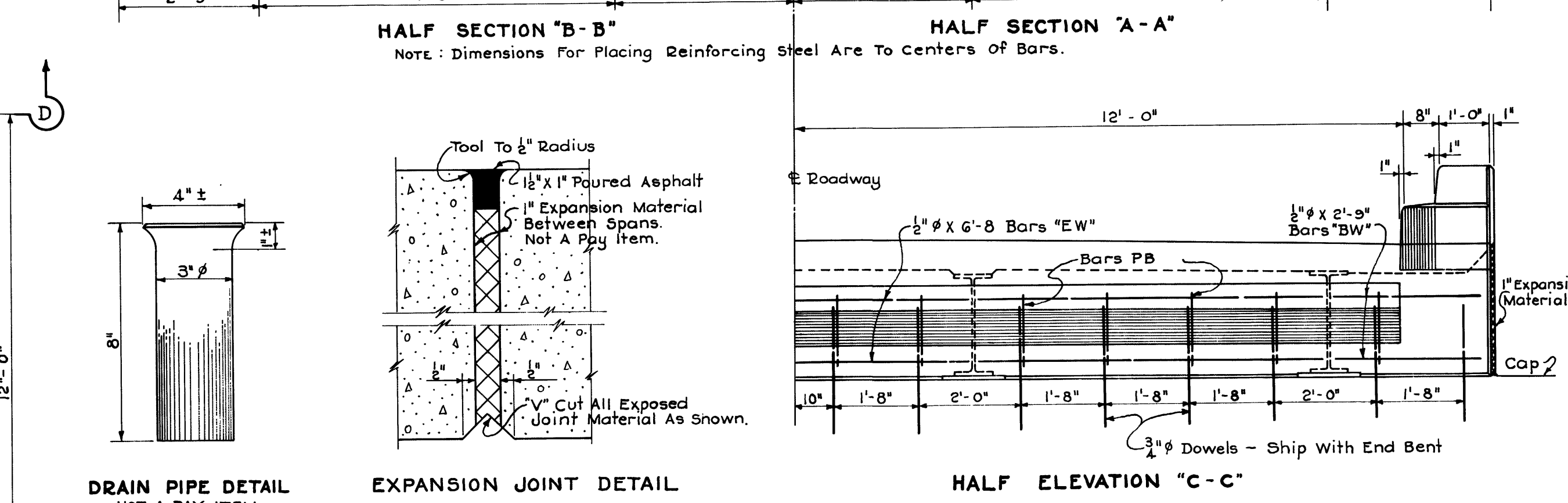
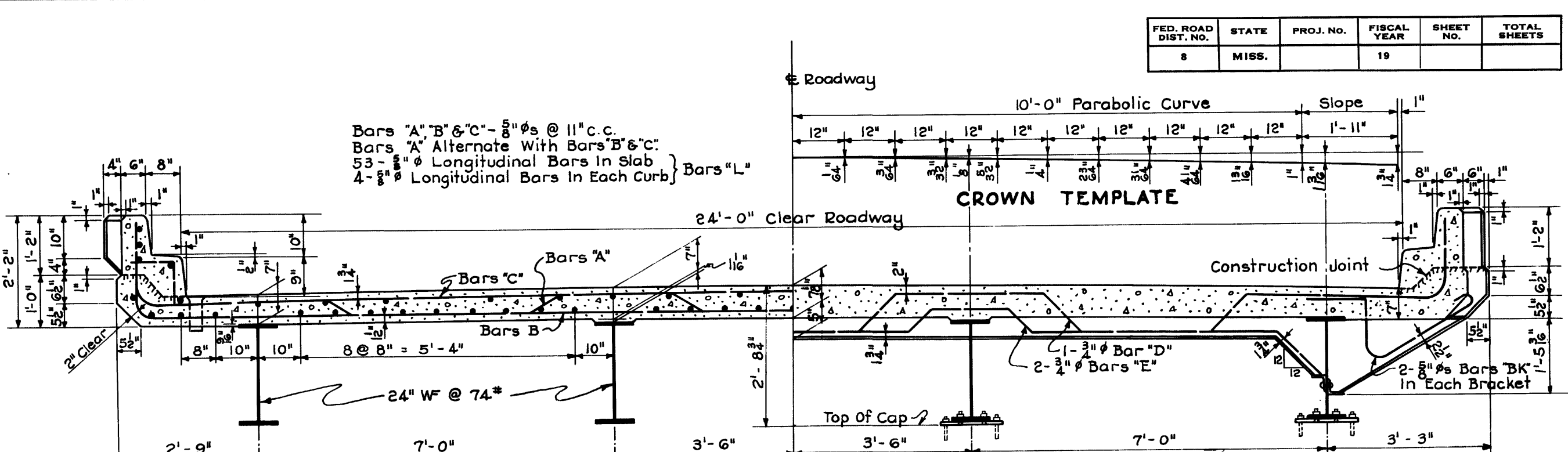
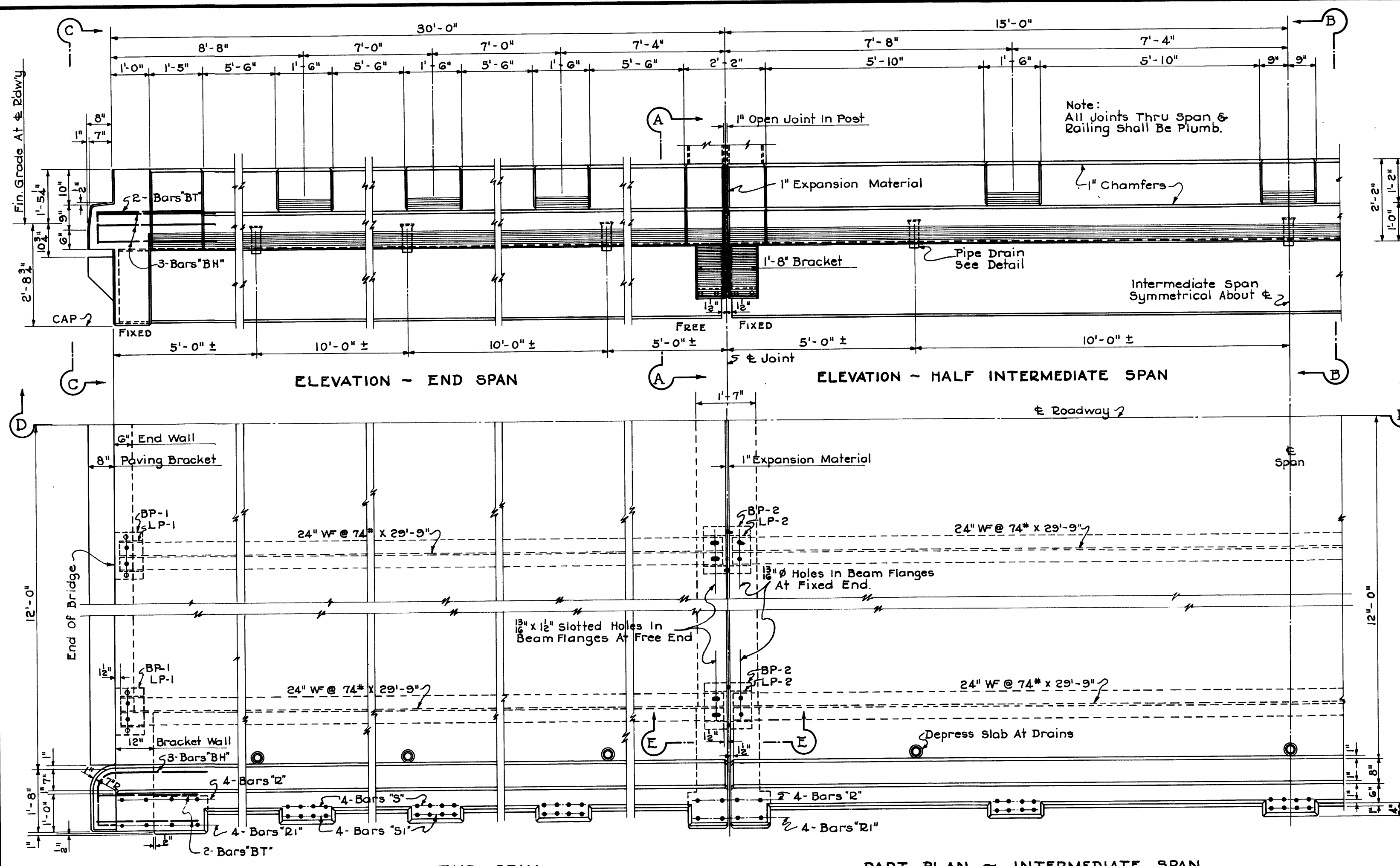
**GENERAL NOTES**  
Specifications: Mississippi State Highway Department  
No Unauthorized Change Of Plans Will Be Permitted.  
All Concrete Shall Be Class "C" Minimum Cement Factor 147.  
All Exposed Concrete Edges To Be Chamfered Unless Noted.  
All Exposed Concrete Surfaces Shall Be Given A Uniform Rubbed Finish.  
All Reinforcing Steel Shall Be New Billet Intermediate Grade.  
Foundation Elevations And Bottom Of Web Wall Elevations Are Subject To Change And Shall Be Accurately Determined In The Field By The Engineer Prior To Placing Order For Reinforcing Steel.  
Construction Joints Permitted Only At Planes Shown On The Plans.  
Dimensions For Placing Reinforcing Steel Are To Centers Of Bars.

Forms Shall Be Removed And Shafts Inspected By The Engineer. Any Defective Concrete Found Shall Be Satisfactorily Replaced Prior To Back Filling.

BY		MISSISSIPPI STATE HIGHWAY DEPARTMENT			
DATE		BRIDGE "B" AT STA. 1151+55			
REVISIONS		PIERS II & III			
5-23-38		S.P. 10-1509(0)			
Cap Elevation Corrected		CLAY COUNTY			
DATE		SUBMITTED BY		BRIDGE ENGINEER	
5-23-38		L.H.P.		SHEET NUMBER	
DATE		CHECKED		4 OF 4	
DATE		ISSUED		DATE	

10741

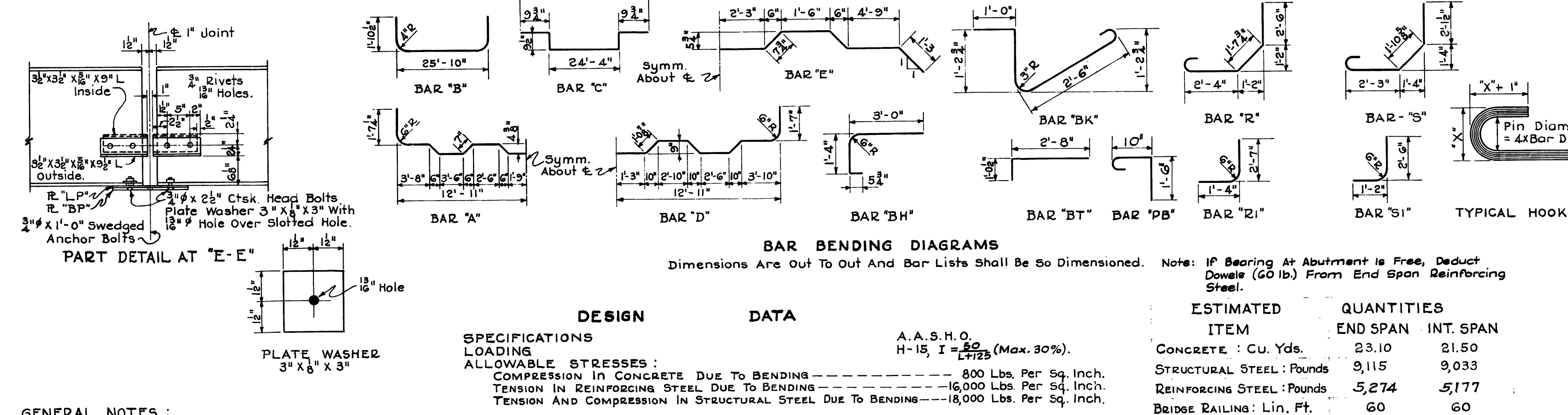
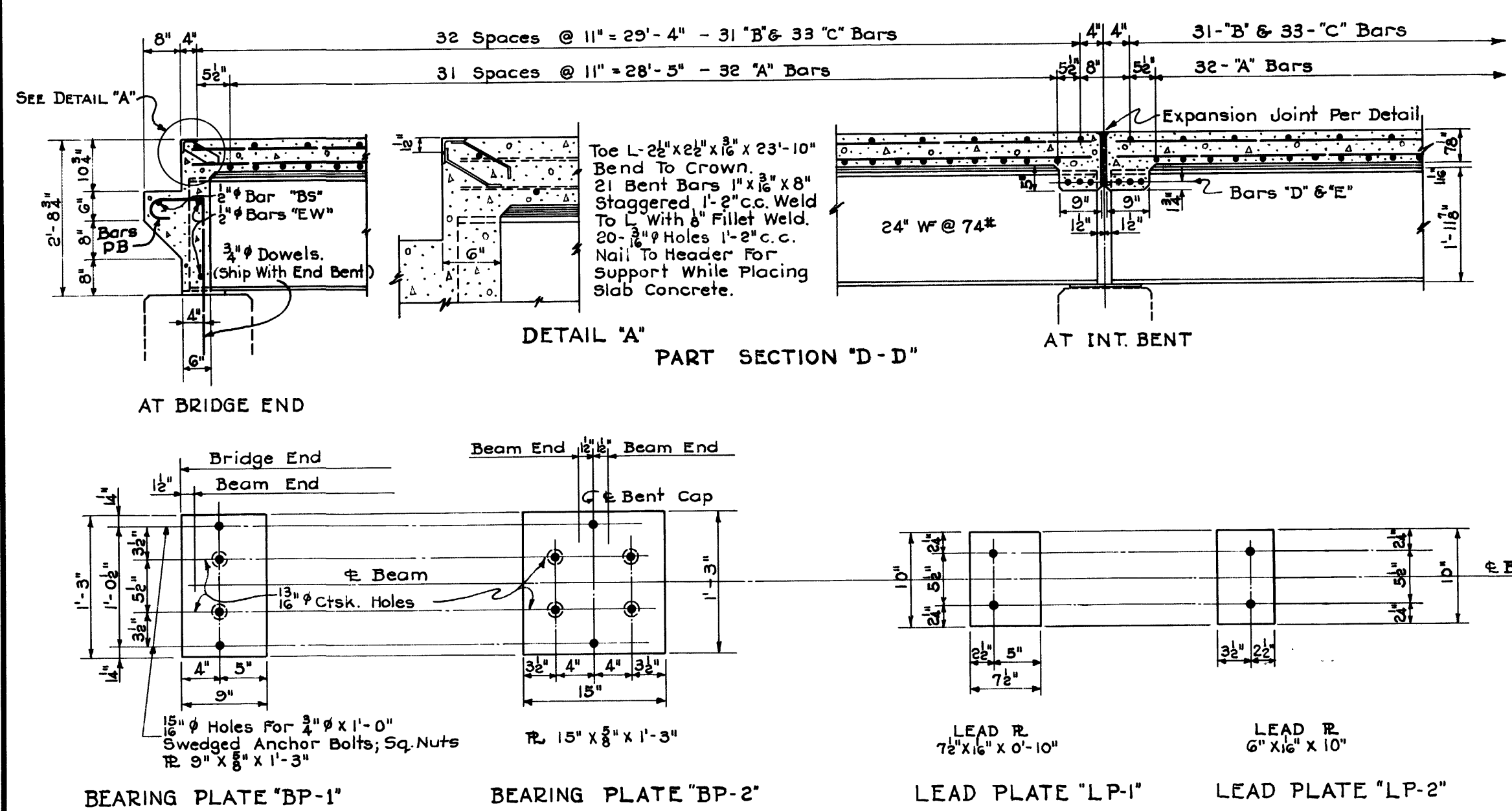
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MISS.	19	19		



**REINFORCING BAR SCHEDULE**

MARKS	A-8"	B-8"	C-8"	D-2"	E-2"	BK-8"	BH-1"	BT-1"	R-8"	R1-8"	S-8"	SI-1"	BS-1"	EW-1"	BW-2"	L-8"	RL-8"	BP-1"	BP-2"	LP-1"	LP-2"																		
LOCATION	SLAB	SLAB	SLAB	SLAB	SLAB	BRACKET	BUMPER	BUMPER	END RAIL	END RAIL	INT. RAIL	INT. RAIL	PAVING	END	BRACKET	LONG CURB	LONG	PAV. BR.	PAV. BR.	END	END																		
NO.	29-0	31	29-2	33	27-4	1	29-10	2	22-1	4	5-0	6	4-6	4	3-8	12	7-0	12	3-8	24	6-8	24	3-5	1	23-6	6	6-8	4	2-9	61	29-8	8	29-8	14	2-10	16	2-8		
END SPAN	32	29-0	31	29-2	33	27-4	1	29-10	2	22-1	4	5-0	6	4-6	4	3-8	12	7-0	12	3-8	24	6-8	24	3-5	1	23-6	6	6-8	4	2-9	61	29-8	8	29-8	14	2-10	16	2-8	
INT. SPAN	32	29-0	31	29-2	33	27-4	2	29-10	4	22-1	8	5-0																											

Note: Bars for which no bending details are shown are straight. Location of Bars R, R1, S & SI is shown on Railing Standard MR-20.



**DESIGN DATA**

**SPECIFICATIONS**

LOADING: A.A.S.H.O. H-15, I-20, L-12.5 (Max. 30%)

ALLOWABLE STRESSES:

- COMPRESSION IN CONCRETE DUE TO BENDING: 800 Lbs. Per Sq. Inch.
- TENSION IN REINFORCING STEEL DUE TO BENDING: 16,000 Lbs. Per Sq. Inch.
- TENSION AND COMPRESSION IN STRUCTURAL STEEL DUE TO BENDING: 18,000 Lbs. Per Sq. Inch.

**GENERAL NOTES:**

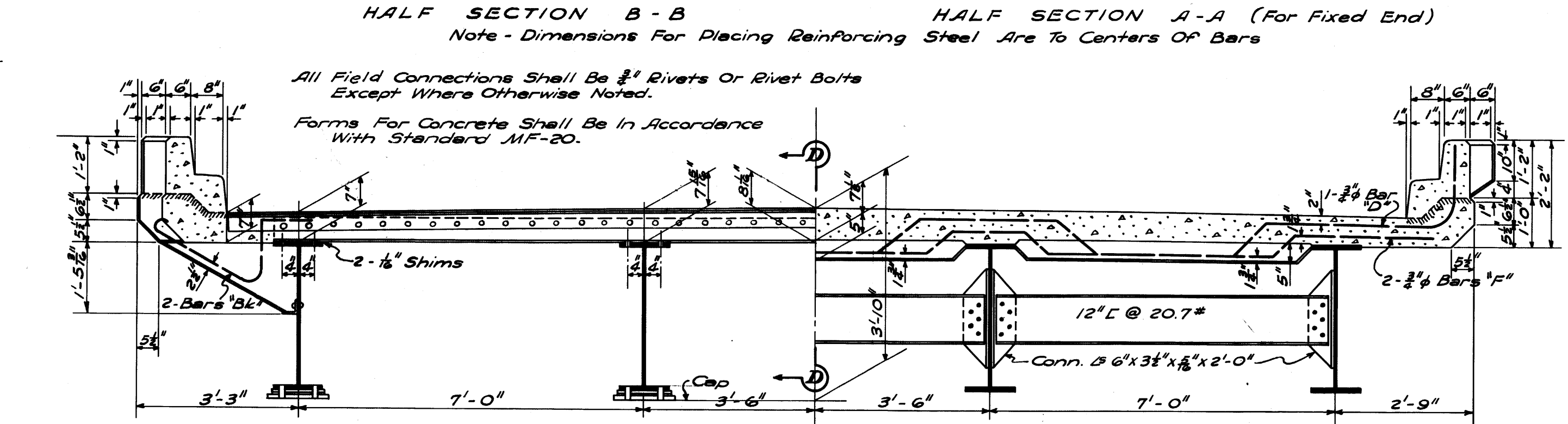
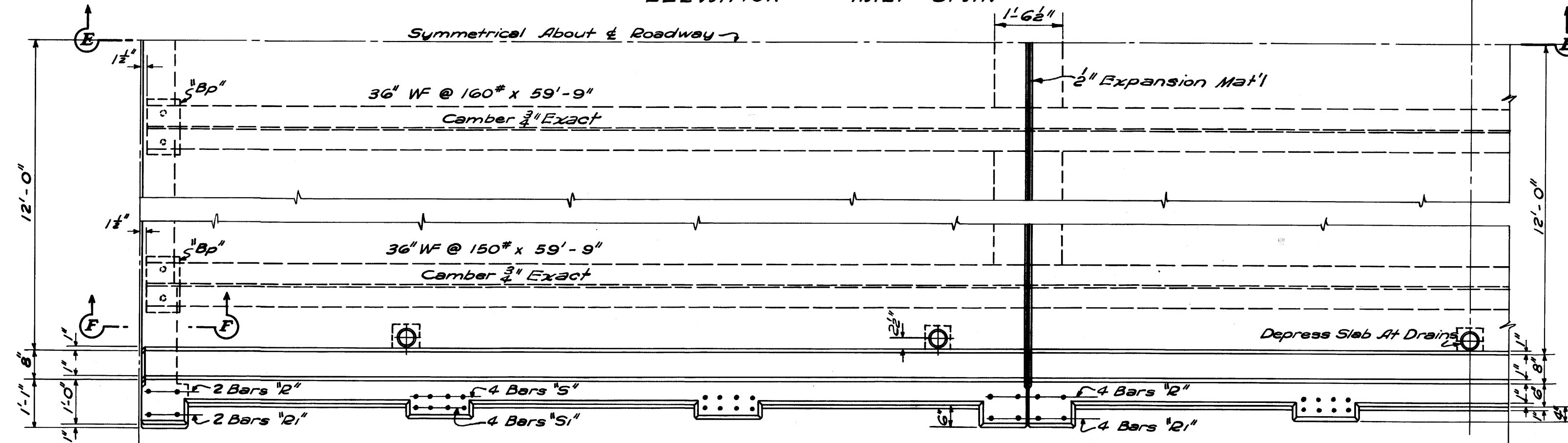
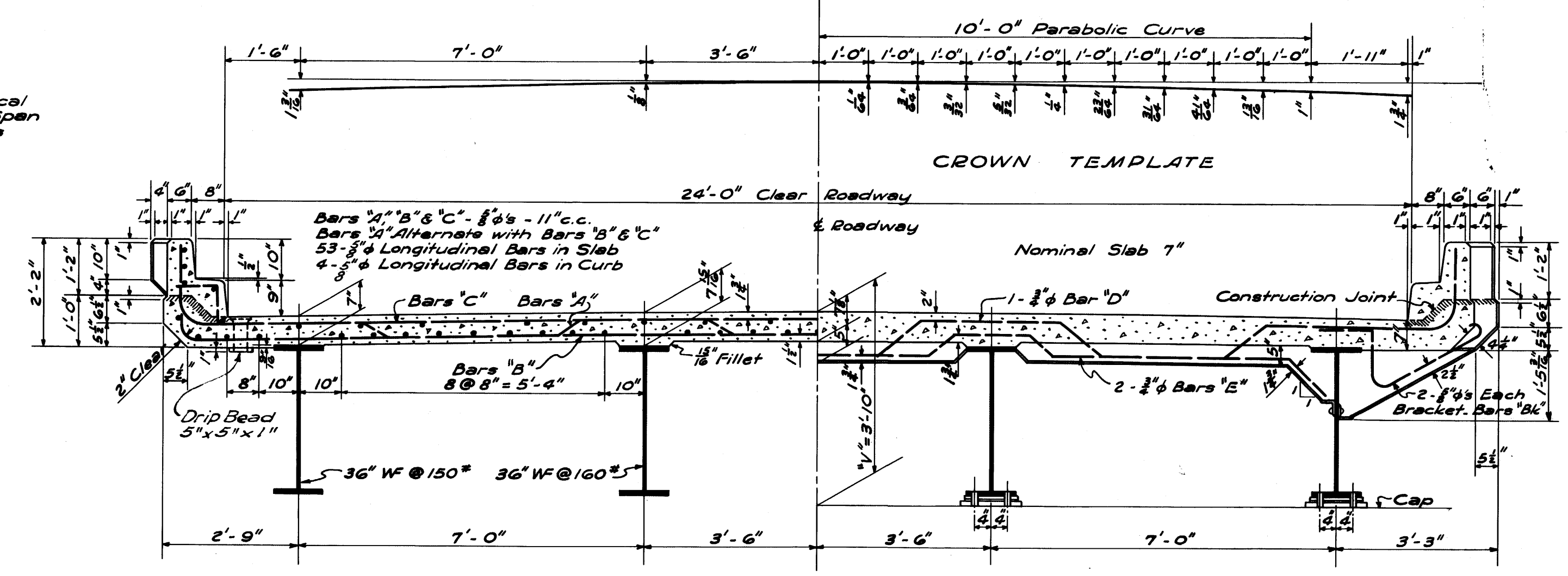
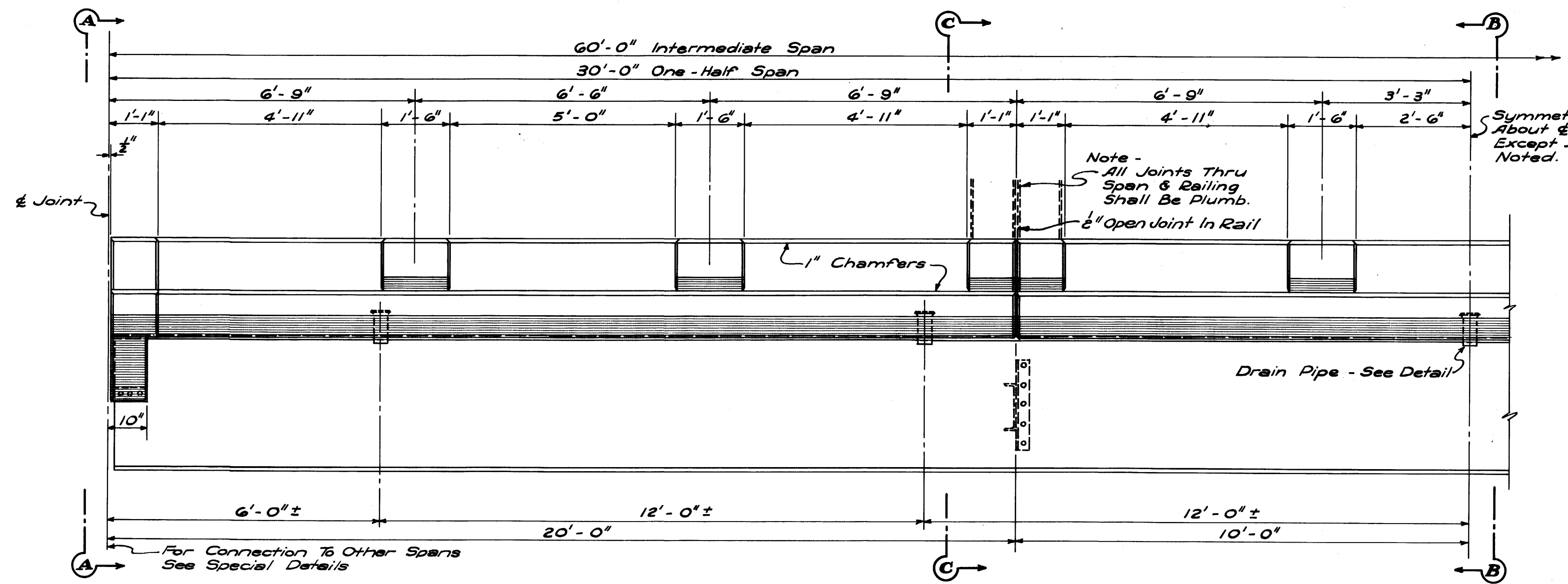
- Standard Specifications of The Mississippi State Highway Department shall Apply.
- All Concrete shall be Class "B" Cement Factor 1.50. All Exposed Concrete Surfaces shall be Given a Uniform Rubbed Finish. All Concrete Corners shall be Chamfered 1/2" Unless Otherwise Noted.
- Forms for concrete shall be supported on the I-Beams which shall be swung free of falsework before placing concrete. Curbs shall not be formed until end of curing period for slab; and rails shall not be formed until end of curing period for curbs.
- Shop drawings for structural steel shall be submitted to the Bridge Engineer for approval before ordering material. No mill inspection will be made but (5) Certified Copies of Mill Test Reports are required.
- Shop inspection will be made. The Bridge Engineer shall be given advance notice as to when fabrication will commence.
- All structural steel shall be given a shop coat of red lead paint per code R-L, which shall be allowed to dry a minimum period of four (4) days prior to shipment.
- All structural steel shall be given three (3) field coats of paint. First coat shall be red lead per code R-L; second and third coats shall be aluminum per code B-A. The first of aluminum shall be tinted by adding four (4) ounces of Prussian Blue Paste to each gallon of paint.
- Reinforcing steel shall be accurately supported from forms by approved devices and shall be securely wired at each intersection before placing concrete.
- Drains shall be standard boiler tubing, 12 gauge minimum thickness. Form neat flare and galvanize after flare has been made. No painting required.
- Forms shall be constructed in accordance with Std. Plan MF-20.
- All rivets 3/8"; Holes 1/2" unless noted.

**ESTIMATED QUANTITIES**

ITEM	END SPAN	INT. SPAN
CONCRETE: Cu. Yds.	23.10	21.50
STRUCTURAL STEEL: Pounds	9,115	9,033
REINFORCING STEEL: Pounds	5,274	5,177
BRIDGE RAILING: Lin. Ft.	60	60

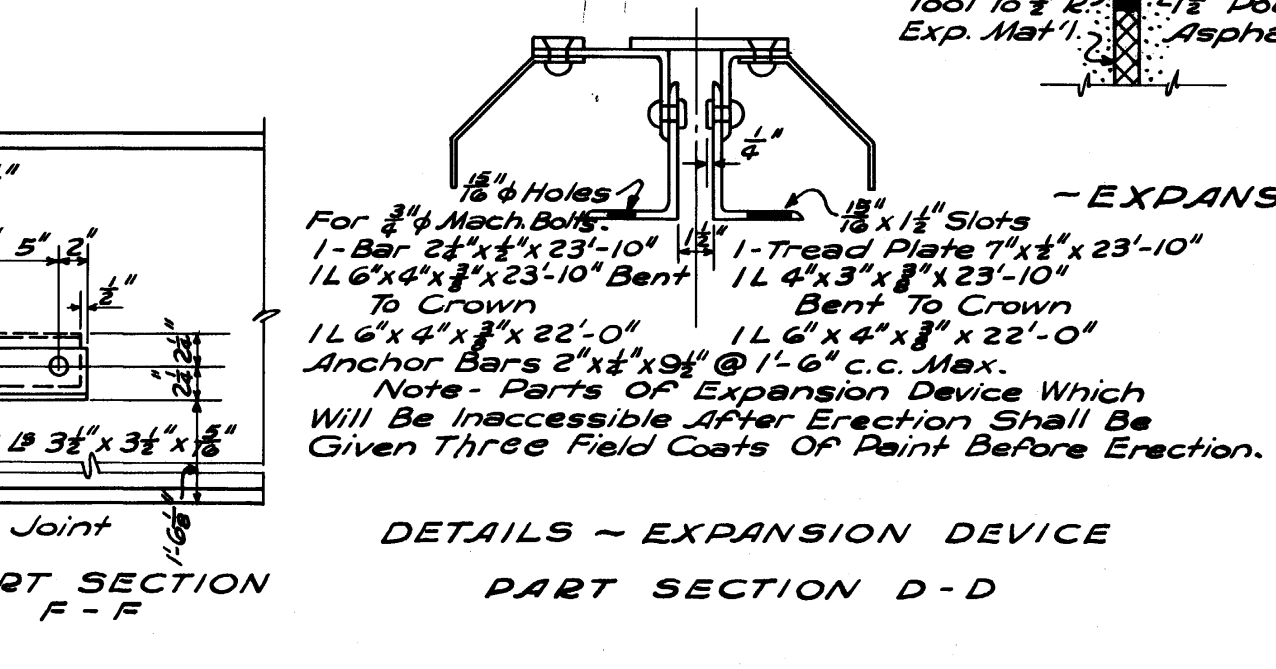
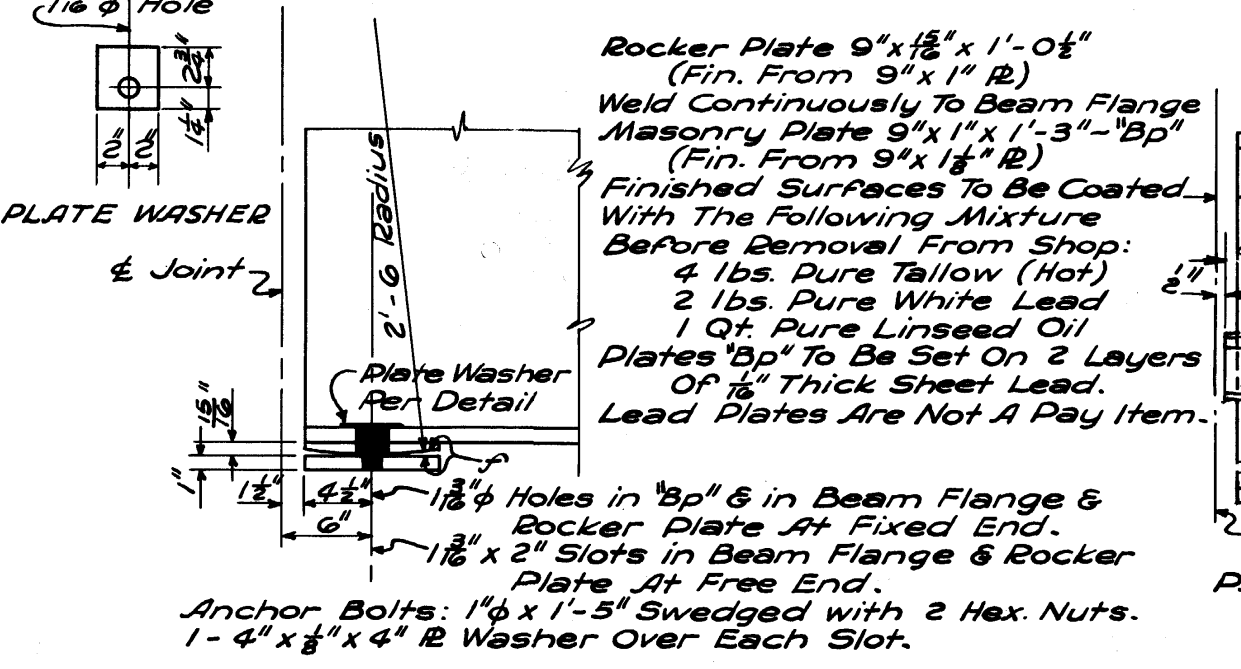
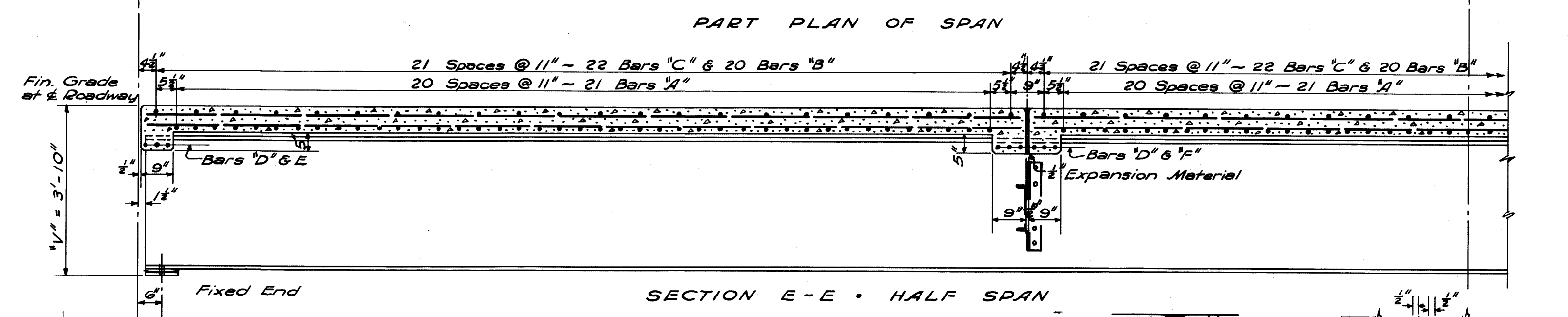
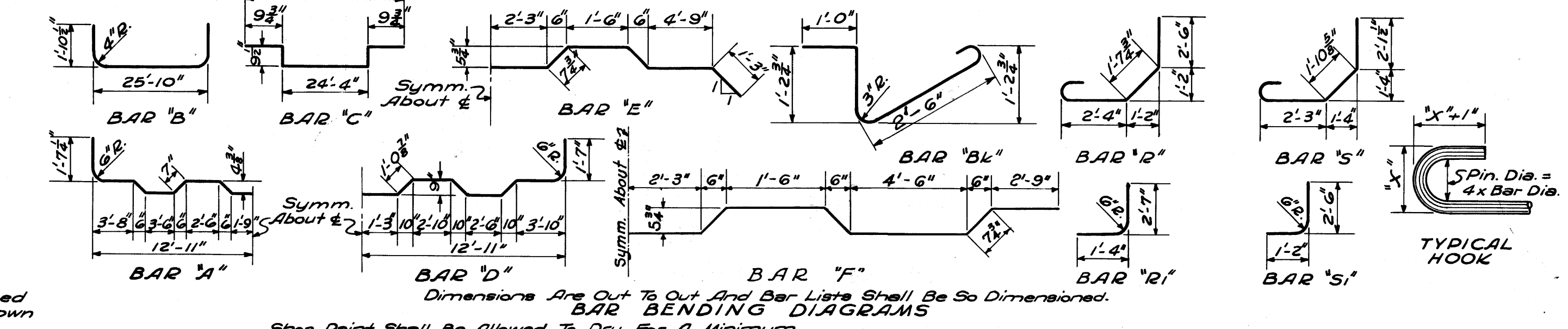
Note: Payment will be made on the basis of the quantities shown unless this plan is modified.

BY		MISSISSIPPI STATE HIGHWAY DEPARTMENT	
REVISIONS		BRIDGE STANDARD	
DATE		30 FT. WF BEAM SPAN	
L-2-41		CONCRETE DECK	
Revised per 8-30 Specifications		24 FT. ROADWAY	
DATE		SUBMITTED BY	
L-2-41		C. J. L. BRIDGE ENGINEER	
DATE		CHECKED	
L-2-41		E. L. E.	
DATE		ISSUED	
L-2-41		DATE	
L-2-41		MS-30	



Marks	Bars A	Bars B	Bars C	Bars D	Bars E	Bars F	Bars G	Bars H	Bars I	Bars J	Bars K	Bars L	Bars M	Bars N	Bars O	Bars P	Bars Q	Bars R	Bars S	Bars T	Bars U	Bars V	Bars W	Bars X	Bars Y	Bars Z											
Location	Slab	Slab	Slab	Drop Slab	Drop Slab	Drop Slab	Bracket	Rail Posts	Rail Posts	Rail Posts	Rail Posts	Rail Posts	Long. Curb	Long. Rail																							
No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length	No. Length											
One Span	63	29	0	60	29	2	66	27	4	29	10	22	1	8	25	10	8	5	0	24	7	0	24	3	8	48	6	8	48	3	5	183	19	8	24	15	8

Note - Bars For Which No Bending Details Are Shown Are Straight. Location of Bars R, R<sub>1</sub>, S & S<sub>1</sub> Is Shown 25'-10" on Railing Standard MR-20.



GENERAL NOTES:

Standard Specifications of the Mississippi State Highway Department Are To Apply.

All Concrete Shall Be Class "B" Cement Factor 1.60. All Exposed Concrete Surfaces Shall Be Given A Uniform Rubbed Finish. All Concrete Corners To Be Chamfered 1/4" Unless Otherwise Noted.

Forms For Concrete Shall Be Supported On The I-Beams Which Shall Be Swung Free Of Falsework Before Placing Concrete. Curbs Shall Not Be Formed Until End Of Curing Period For Slab, and Rails Shall Not Be Formed Until End Of Curing Period For Curbs.

Shop Drawings For Structural Steel Shall Be Submitted To The Bridge Engineer For Approval Before Ordering Material. Five (5) Certified Copies Of Mill Test Reports Are Required. The Bridge Engineer Shall Be Given Advance Notice As To When Fabrication Will Begin. All Structural Steel, Except Finished Bearing Surfaces, Shall Receive 1 Shop Coat Of Paint Per Code B-1. All Structural Steel Shall Be Given Three Field Coats Of Paint. First Coat Shall Be Red Lead Per Code G-4. Second Coat Shall Be Gray Lead Per Code B-2. Third Coat Shall Be Gray Lead Per Code B-3.

Shop Paint Shall Be Allowed To Dry For A Minimum Period Of Four (4) Days Prior To Shipping.

Reinforcing Steel Shall Be Accurately Supported From Forms By Approved Devices and Shall Be Securely Wired at Each Intersection Before Placing Concrete.

Drains Shall Be Formed With 3" O.D. Fibre Conduit With 5"x5"x1/4" Concrete Drip Bead.

All Rivets Shall Be 3/8". All Holes 1/2" Unless Otherwise Noted. Holes In Material Over 1/2" Thick Shall Be Sub-Punched & Reamed Or Drilled From The Solid.

ITEM	ESTIMATED QUANTITIES	
	SPAN WITH DROPPED SLABS	SPAN WITHOUT DROPPED SLABS
CONCRETE - CU YDS.	42.89	42.63
STRUCTURAL STEEL - LBS.	38,804	38,793
REINFORCING STEEL - LBS.	10,424	10,313
BRIDGE RAILING - LIN. FT.	120	120

Quantities Shown Will Be Used As The Basis For Final Payment Unless This Plan Is Modified.

MISSISSIPPI STATE HIGHWAY DEPARTMENT  
BRIDGE STANDARD

60 FT. WF BEAM SPAN  
CONCRETE DECK  
24 FT. ROADWAY

SUBMITTED BY: C. J. [Signature] BRIDGE ENGINEER

DATE: 5-19-39  
REVISIONS: 1-1-41  
2-1-41  
3-1-41  
4-1-41  
5-1-41  
6-1-41  
7-1-41  
8-1-41  
9-1-41  
10-1-41  
11-1-41  
12-1-41

DETAILED: J. G. [Signature] CHECKED: W. A. R. [Signature] ISSUED: [Signature]

TRACED: C. H. D. DATE: May 11-38 DATE: May 11-38

MS-60

