

STATE	PROJECT NUMBER	SHEET NO.
MISSISSIPPI	NHPP-0010-01(162)	1

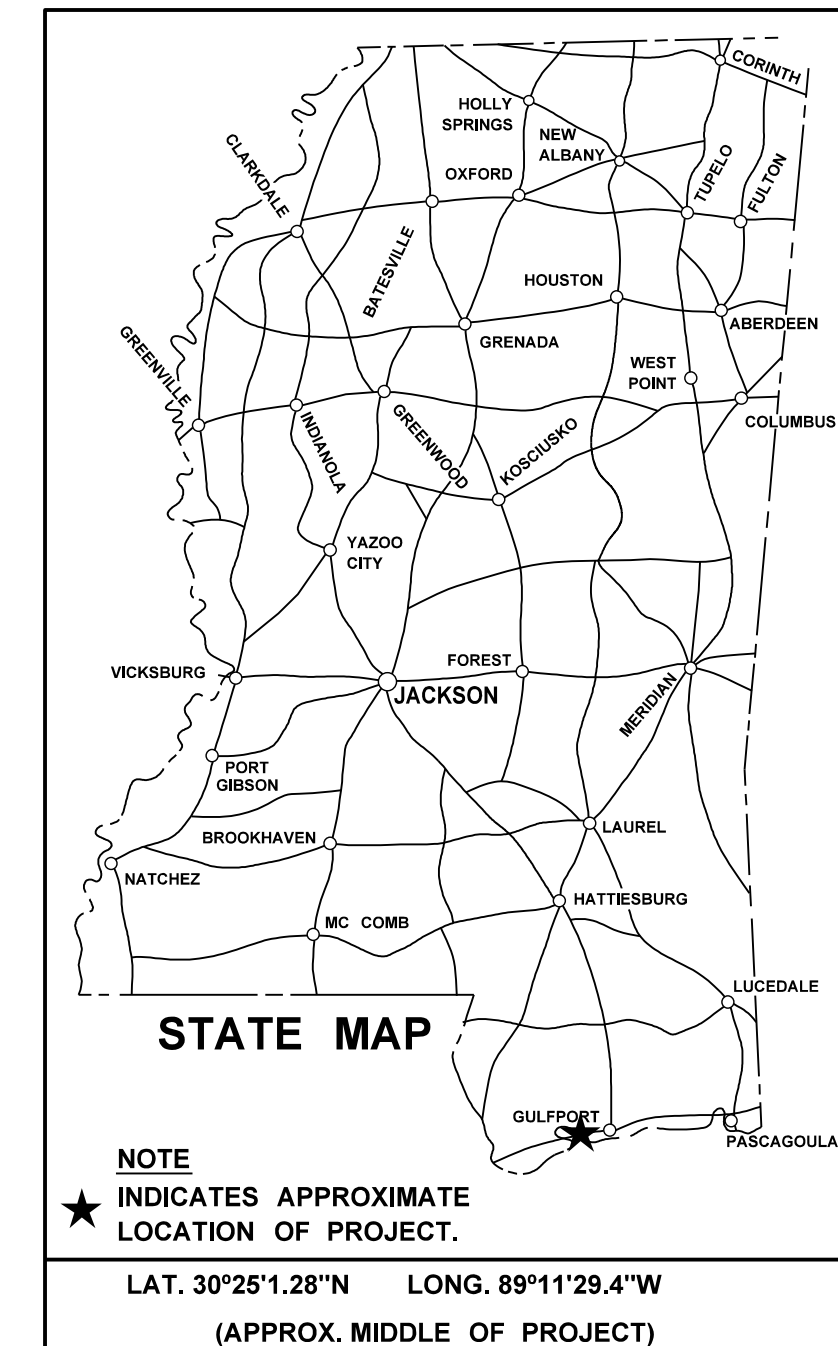
GENERAL INDEX

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 type="checkbox"/> BRIDGE	8001
<input checked="" type="checkbox"/> CROSS SECTIONS	9001

STATE OF MISSISSIPPI
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY FEDERAL AID PROJECT NO. NHPP-0010-01(162)

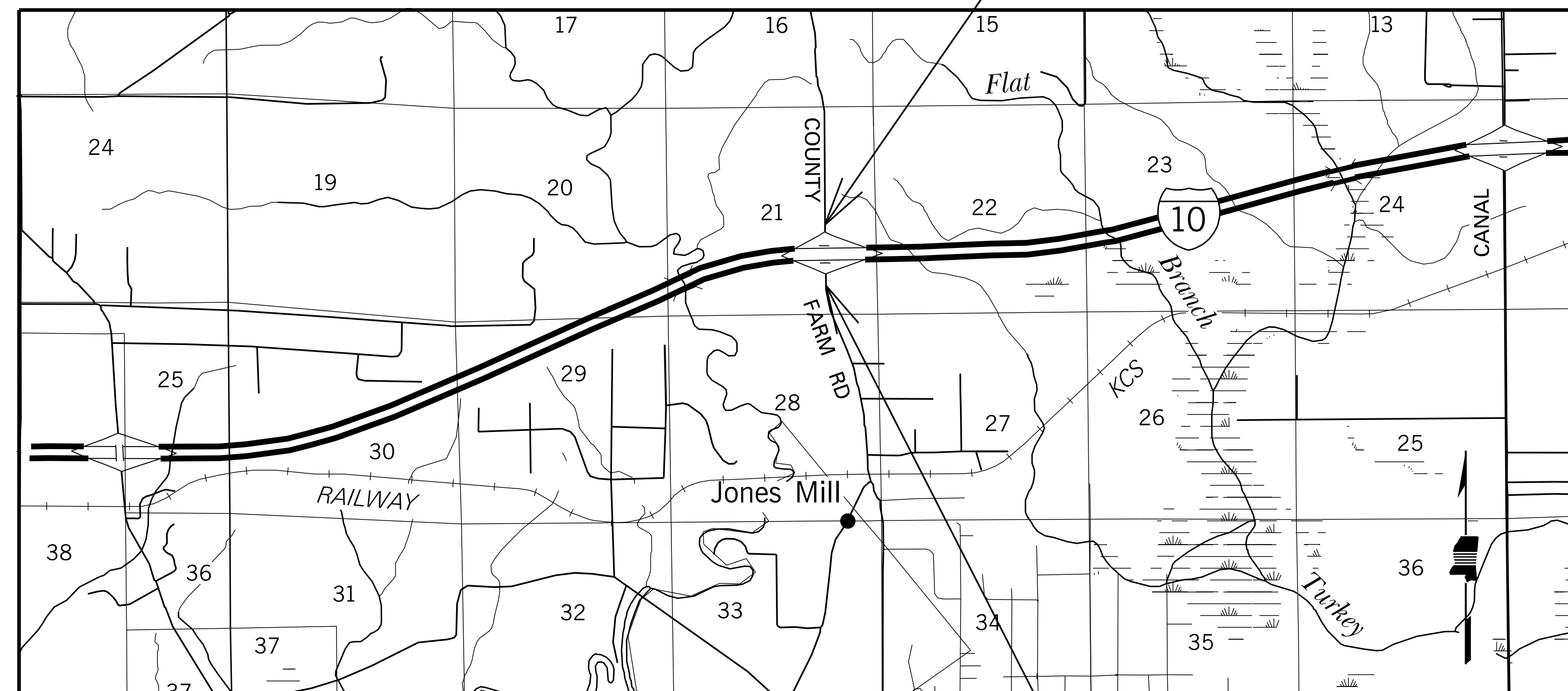
I-10 AT COUNTY FARM ROAD FMS CON. NO. 107876/301000



SCALES

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

E.O.P. 33 + 46.37



B.O.P. 15 + 94.54
EXCEPTIONS

CONVENTIONAL SYMBOLS

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

EQUATIONS

LENGTH DATA

LENGTH OF ROADWAY	1751.83 FT.	0.332 MI.
LENGTH OF BRIDGES	0 FT.	0 MI.
LENGTH OF PROJECT (NET)		0.332 MI.
LENGTH OF EXCEPTIONS	0 FT.	0 MI.
LENGTH OF PROJECT (GROSS)		0.332 MI.

DESIGN CONTROL		
70 MPH = V (SPEED DESIGN)		
ADT () = : ADT () =		
DHV = : D = % T = %		
PERMITS ACQUIRED BY MDOT		
WETLANDS AND WATERS PERMITS		
NATIONWIDE #14	<input type="checkbox"/> WATERS	<input type="checkbox"/> WETLANDS
NATIONWIDE (OTHER)*	<input type="checkbox"/>	<input type="checkbox"/>
GENERAL*	<input type="checkbox"/>	<input type="checkbox"/>
INDIVIDUAL (404)*	<input type="checkbox"/>	<input type="checkbox"/>
STORMWATER PERMIT <input checked="" type="checkbox"/>		
Y	REQUIRED, (NOI SUBMITTED BY MDOT (DISTURBED AREA = 5 ACRES))	
S	REQUIRED, (NOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES))	
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)	
APPROVED BY: _____		

P S & E DATE: 01/11/2019

APPROVED:	_____
DEPUTY EXECUTIVE DIRECTOR / CHIEF ENGINEER	_____
EXECUTIVE DIRECTOR	_____



1/11/2019 6:12 PM TITLE SHEET.DGN

1st O.REV.

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

DESCRIPTION OF SHEET

REVISION DATE WKG. NO. SH. NO.

TITLE SHEET (1)			1
DETAIL INDEX AND GENERAL NOTES (3)			
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DETAIL INDEX		DI-2	3
GENERAL NOTES		GN-1	4
TYPICAL SECTIONS (7)			
TYPICAL SECTION - EX. COUNTY FARM ROAD		TS-1	5
TYPICAL SECTION - COUNTY FARM ROAD - 16+94.54 TO 21+13.27 & 28+80.14 TO 30+81.55		TS-2	6
TYPICAL SECTION - COUNTY FARM ROAD - 21+13.27 TO 21+82.93 & 28+34.76 TO 28+80.14		TS-3	7
TYPICAL SECTION - COUNTY FARM ROAD - 21+82.93 TO 28+34.76		TS-4	8
TYPICAL SECTION - COUNTY FARM ROAD - 30+81.55 TO 33+46.37		TS-5	9
TYPICAL SECTION - NE RAMP		TS-6	10
TYPICAL SECTION - PAVING DETAILS		TS-7	11
QUANTITY SHEETS (5)			
SUMMARY OF QUANTITIES		SO-1	12
SUMMARY OF QUANTITIES		△ SO-2	13
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ESTIMATED QUANTITIES - PAVEMENT MARKING AND TRAFFIC CONTROL ITEMS		EO-2	15
ESTIMATED QUANTITIES - TRAFFIC CONTROL SIGNS		TCP-EO	16
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STA. 7+34.197 TO STA. 16+18.406 - NORTHEAST RAMP		WK4	18
PAVEMENT MARKING DETAILS (3)			
COUNTY FARM ROAD STA. 16+00 TO STA. 25+00		PMD-1	19
COUNTY FARM ROAD STA. 25+00 TO STA. 34+00		PMD-2	20
COUNTY FARM ROAD NORTHEAST RAMP STA. 9+00 TO 16+18.406		PMD-3	21
DETAIL SHEETS (8)			
INTERSECTION DETAILS-COUNTY FARM ROAD STA. 15+94.54 (BOP) TO 22+00		ID-1	22
INTERSECTION DETAILS-COUNTY FARM ROAD STA. 22+00 TO 27+00		ID-2	23
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REMOVAL DETAILS-COUNTY FARM ROAD STA. 28+00 TO 33+00		REM-3	28
REMOVAL DETAILS-NE RAMP STA. 10+00 TO 15+00		REM-4	29
TRAFFIC CONTROL ITEMS (9)			
TRAFFIC CONTROL PLAN - PHASE I		TC-1	30
TRAFFIC CONTROL PLAN - PHASE I		TC-2	31
TRAFFIC CONTROL PLAN - PHASE I		TC-3	32
TRAFFIC CONTROL PLAN - PHASE II A		TC-4	33
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EROSION CONTROL PLAN - NE RAMP		ECP-4	40
△ CONTROL POINT LAYOUT		CPL-1	41

PS & E PLANS-DATE 01/11/2019		
FMS CON. # 107876/301000		
REVISIONS		
DATE	SHEET NO.	BY
2/20/19	2, 6-10, 41	KRS
3/1/19	2-3, 13, 16, 38	KRS

3/1/2019 3:14 PM DI.DGN PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION	REVISION NUMBER 3/1/19 KRS 2/20/19 KRS	REVISION BY KRS KRS	MISSISSIPPI DEPARTMENT OF TRANSPORTATION DETAILED INDEX
	PROJECT NO.: NHPP-0010-01(162) COUNTY: HARRISON	WORKING NUMBER DI-1	SHEET NUMBER 2
FILENAME: _____ DESIGN TEAM _____ CHECKED _____ DATE _____			PROJECT NO.: NHPP-0010-01(162) COUNTY: HARRISON

3/1/2019 3:14 PM DI.DGN PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1st O.REV.

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

DESCRIPTION OF SHEET


REVISION DATE

WKG. NO.

SH. NO.

STANDARD DRAWINGS (31)			
CONCRETE ISLAND PAVEMENT DETAILS		CIP-1	6011
PAVEMENT MARKING DETAILS FOR 3,4 & 5 LAND UNDIVIDED ROADWAYS		PM-2	6052
PAVEMENT MARKING LEGEND DETAILS		PM-6	6056
4-LANE TO 2-LANE TRANSITION AT INTERCHANGE		PM-8	6058
TYPICAL TEMPORARY EROSION CONTROL/SEDIMENT CONTROL APPLICATIONS		ECD-1	6101
DETAILS OF SEDIMENT BARRIER APPLICATIONS		ECD-2	6102
DETAILS OF SILT FENCE INSTALLATION		ECD-3	6103
DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS		ECD-4	6104
TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES (SILT FENCE AND HAY BALE DITCH CHECKS)		ECD-5	6105
DETAILS OF EROSION CONTROL WATTLE DITCH CHECK		ECD-6	6106
DETAILS OF TYPICAL DITCH TREATMENTS		DT-1	6123
DITCH TREATMENT INSTALLATION DETAIL FOR SOIL REINFORCING MAT		DT-1A	6124
TYPICAL TEMPORARY EROSION CONTROL MEASURES (SLOPE DRAIN AND TYPE A SILT BASIN)		Δ BAS-A	6125
EROSION CONTROL BLANKET		ECB-1	6131
GUARDRAIL: "W" BEAM (STEEL POSTS)		GR-1B	6203
GUARDRAIL: TYPE 1 CABLE ANCHORAGE (FOUNDATION TUBE)		GR-3	6212
GUARDRAIL: TYPE 1 CABLE ANCHORAGE (CONCRETE FOOTING)		GR-3A	6213
GUARDRAIL: TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON 2-LANE, 2-WAY HIGHWAYS		GR-4C	6217 Δ
GUARDRAIL: MISCELLANEOUS HARDWARE		GR-HW	6221
TYPICAL GUARDRAIL DELINEATION		SN-8C	6317
TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)		TCP-1	6351
HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS		TCP-8	6358
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS		TCP-13	6363
TEMPORARY STRIPING FOR TRAFFIC CONTROL 4-LANE AND 5-LANE UNDIVIDED HIGHWAYS		TCP-14	6364
TRAFFIC CONTROL DETAILS DRUM PLACEMENT AND SHOULDER CLOSURE		TCP-16	6366
DRIVEWAYS, CURB AND GUTTER, & SIDEWALK		SD-1	6419
DETAILS OF PAVED FLUMES		PF-1	6426
PIPE CULVERT INSTALLATION		PI-1	6501
CONCRETE PIPE COLLAR		PC-1	6503
FLARED END SECTION FOR CONCRETE PIPE		FE-1	6530
FLARED END SECTION FOR CONCRETE ARCH PIPE		FE-1A	6531
Δ CROSS SECTIONS (14)			
Δ COUNTY FARM ROAD			9001-9010
Δ NE RAMP			9011-9014
TOTAL NUMBER OF SHEETS (86) Δ			

3/1/2019 3:02 PM DI.DGN


3/7/19	ADDED SHEETS, REV. SH. & WK. NUM. & REV. TOTAL SHEET NUMBER	KRS	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
				DETAILED INDEX	
				 PROJ. NO.: NHPP-0010-01(162) COUNTY: HARRISON WORKING NUMBER DI-2 SHEET NUMBER 3	
				FILENAME: _____ DESIGN TEAM _____ SIXTH _____ CHECKED _____ DATE _____	

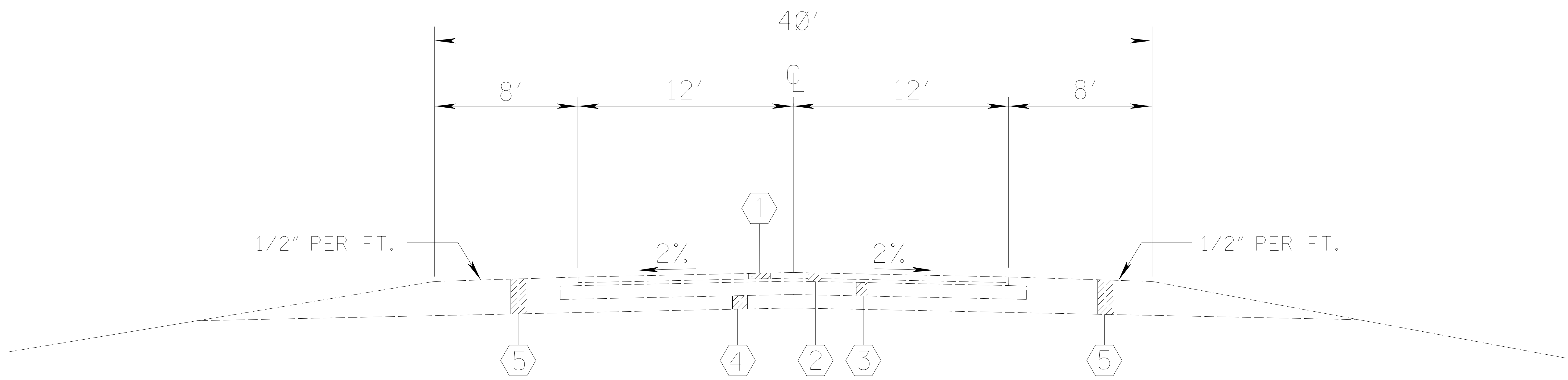
STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

GENERAL NOTES

1. THE LOCATION AND SPACING OF SIGNS SHOWN ON THE TRAFFIC CONTROL PLAN ARE APPROXIMATE AND MAY BE ADJUSTED TO SUIT FIELD CONDITIONS.
2. THE CONTRACTOR IS TO REMOVE AND RESET ANY SIGNS WHICH CONFLICT WITH CONSTRUCTION. (NOT A SEPARATE PAY ITEM)
3. TEMPORARY STRIPING SHALL CONFORM TO FINISHED STRIPE SPECIFICATIONS FOR ALIGNMENT, NEATNESS AND STRAIGHTNESS.
4. PRIOR TO PLACEMENT OF THE ASPHALT, ALL RAISED PAVEMENT MARKERS THROUGHOUT THE PROJECT SHALL BE REMOVED, PATCH SPALLING AT TRANSVERSE AND LONGITUDINAL PAVEMENT JOINTS, AND CLIP BULGING ASPHALT AT PAVEMENT JOINTS (COST ABSORBED).
5. THE CONTRACTOR SHALL PROVIDE 2 PORTABLE R16-3 SIGNS REQUIRED BY THE STANDARD DRAWINGS FOR LANE CLOSURES (THE COST IS TO BE INCLUDED IN THE PRICE BID FOR PAY ITEM NO. 618-A, MAINTENANCE OF TRAFFIC).
6. CONES SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF TEN (10) POUNDS. CONES USED IN SPEED ZONES EQUAL TO OR GREATER THAN 45 MPH SHALL BE NARROW PROFILE WITH A MINIMUM HEIGHT OF 28 INCHES AND A MINIMUM WEIGHT OF FIFTEEN (15) POUNDS. ALL CONES SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.
7. WHERE MILLING OF THE ROADWAY LANES IS REQUIRED, THE CONTRACTOR SHALL PROVIDE OUTLETS IN THE EXISTING SHOULDERS AT SUFFICIENT INTERVALS TO PREVENT POOLING OR STANDING WATER ON THE MILLED SURFACE (NOT A SEPARATE PAY ITEM).
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHALL BE EXERCISED IN UNDERCUT AREAS AND THE UNDERCUT DEPTH MAY BE ADJUSTED AT CROSS DRAINS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED STRUCTURES.
9. VOIDS CREATED BY THE REMOVAL OF POSTS, CONCRETE ANCHORS, FOOTINGS, ETC., SHALL BE BACKFILLED AND TAMPED IN ACCORDANCE WITH SECTION 203 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
10. ALL TRAFFIC CONTROL DEVICES ON THIS PROJECT SHOULD COMPLY WITH PART VI OF THE MUTCD (LATEST EDITION).
11. ALL PLASTIC DRUMS SHALL HAVE A BALLASTING COLLAR MADE FROM RECYCLED TRUCK TIRES OR OTHER SUITABLE MATERIAL.
12. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.
13. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING BRACING, SHORING, OR ANY GROUND SUPPORT SYSTEM REQUIRED TO PREVENT A FAILURE FROM OCCURRING DURING EXCAVATION. PROTECTIVE MEASURES INCLUDING THE MATERIALS AND LABOR FOR DESIGNING AND CONSTRUCTING THE FACILITY ARE NOT CONSIDERED A SEPARATE PAY ITEM.
14. ALL GUARDRAIL IS TO BE PAVED UNDER UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER.
15. REMOVAL OF OBJECT MARKERS IS NOT CONSIDERED A SEPARATE PAY ITEM.
16. WORK REQUIRING A LANE CLOSURE WILL ONLY BE PERMITTED BETWEEN THE HOURS OF 9:00 PM AND 5:00 AM, SUNDAY THROUGH THURSDAY.
17. IF COLORS ARE USED ON PLAN/PROFILE SHEETS, THEY ARE INTENDED TO VISUALLY EASE THE LOCATION OF ELEMENTS FOR USERS OF THESE DRAWINGS. ALTHOUGH THE INTENT IS TO CATEGORIZE EVERYTHING AS EITHER EXISTING OR PROPOSED, IT IS THE END USER'S RESPONSIBILITY TO ENSURE ALL ELEMENTS ARE INTERPRETED CORRECTLY REGARDLESS OF COLOR.
18. BIDDERS ARE ADVISED THAT HARD COPIES OF ANY ADDENDA FOR THIS PROJECT WILL NO LONGER BE MAILED. ALL ADDENDA FOR THIS PROJECT WILL BE POSTED TO WWW.MDOT.MS.GOV UNDER THE PROPOSAL ADDENDA COLUMN. IT IS THE BIDDER'S RESPONSIBILITY TO CHECK AND SEE IF ANY ADDENDA HAVE BEEN POSTED FOR THIS PROJECT. PLEASE CONTACT CONTRACT ADMINISTRATION DIVISION AT 601-359-7700 FOR ANY QUESTIONS REGARDING ELECTRONIC ADDENDA.

1/11/2019 5:59 PM GENERAL NOTES.DGN


		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
		GENERAL NOTES	
			
		PROJ. NO.: NHPP-0010-01(162) COUNTY: HARRISON	
		WORKING NUMBER GN-1	
		SHEET NUMBER 4	
REVISION	BY	DATE	FILENAME:
			DESIGN TEAM SIXTH CHECKED DATE

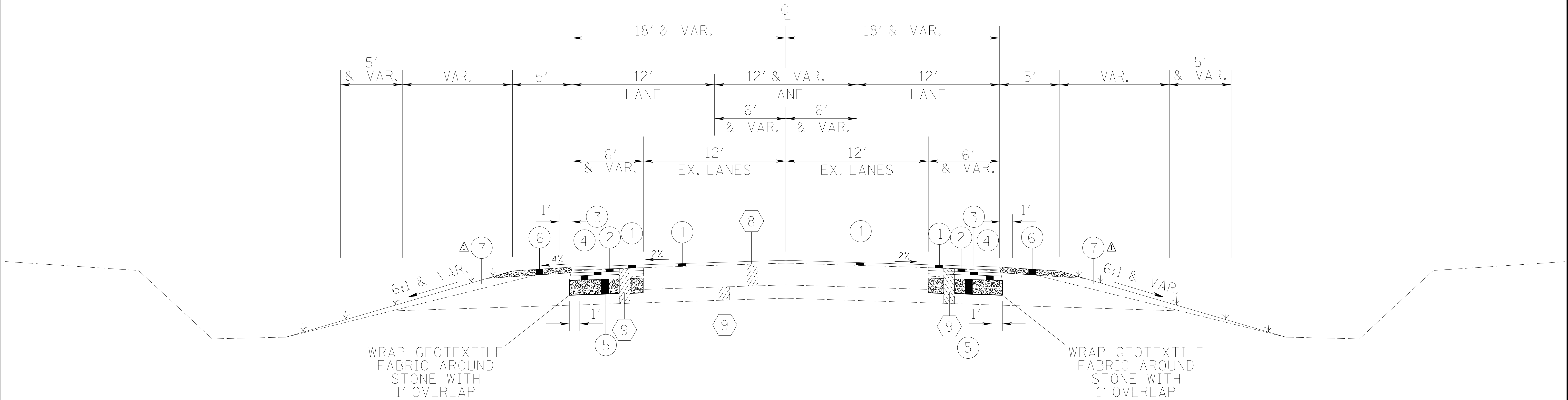


TYPICAL SECTION
EX. COUNTY FARM ROAD
B.O.P. STA. 15+94.54 TO E.O.P. STA. 33+46.37

- ① 1/2" DEPTH HMA ASPHALT IN PLACE
1@1/2" - (ST), 9.5mm MIX
- ② 2 1/2" & VAR. DEPTH H.P.M. IN PLACE
- ③ 5" BITUMINOUS BASE IN PLACE
- ④ 8" & VAR. GRANULAR MATERIAL SUBBASE IN PLACE
- ⑤ VAR. DEPTH GRANULAR MATERIAL IN PLACE

1/11/2019 5:59 PM TYPICALS.DGN

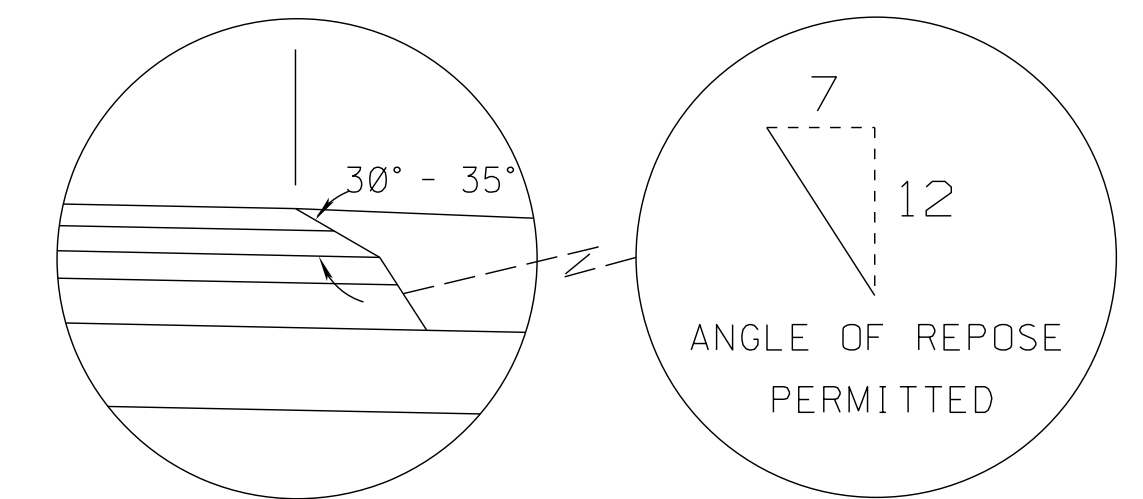
REVISION		BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DATE		DESIGN TEAM		TYPICALS.DGN	
SIXTH		CHECKED		DATE 8.31.18	
				MISSISSIPPI DEPARTMENT OF TRANSPORTATION TYPICAL SECTION EX. COUNTY FARM ROAD STA. 15+94 TO STA. 33+46 COUNTY: HARRISON PROJ. NUM.: NHPP-0010-01(162)	
				 WORKING NUMBER TS-1 SHEET NUMBER 5	



TYPICAL SECTION
 COUNTY FARM ROAD
 STA. 16+94.54 TO STA. 21+13.27
 STA. 28+80.14 TO STA. 30+81.55

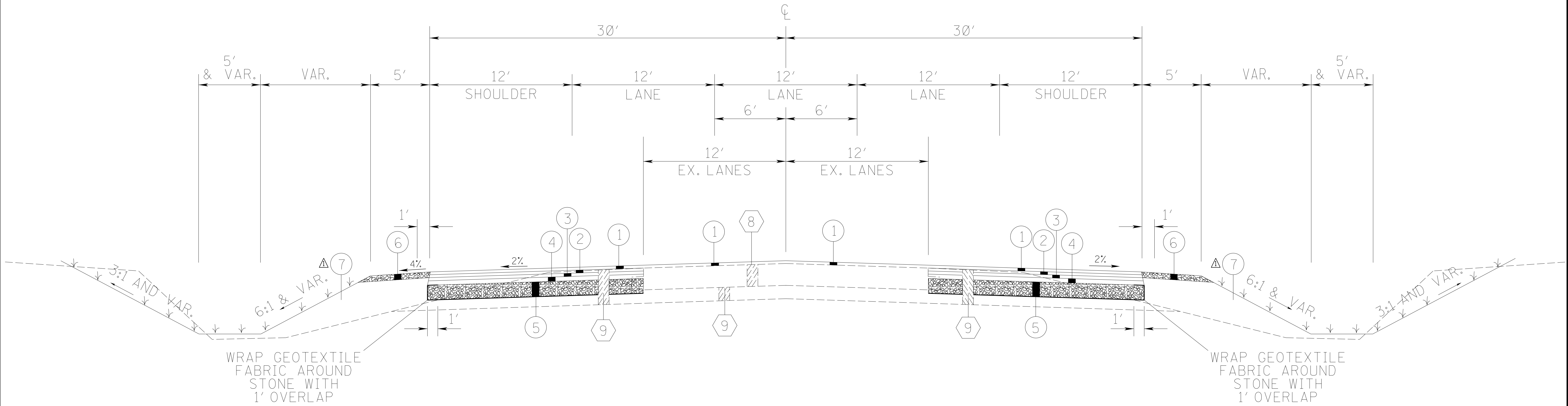
- ① 1.50" ASPHALT, MT (9.5MM MIXTURE)(1@1.5")
- ② 2.00" ASPHALT, MT (12.5MM MIXTURE)(1@2") REQUIRED
- ③ 3" ASPHALT, MT (19.0MM MIXTURE)(1@3") REQUIRED
- ④ 3" ASPHALT, ST (19.0MM MIXTURE)(1@3") REQUIRED
- ⑤ 8" CRUSHED STONE BASE W/ GEOTEXTILE FABRIC TYPE V (NON-WOVEN) REQUIRED
- ⑥ 3.5" AND VAR. DEPTH CRUSHED STONE BASE REQUIRED
- ⑦ UNCL. EXCAVATION OR BORROW MATERIAL (B7) REQUIRED Δ

- ⑧ 9" & VAR. DEPTH PAVEMENT IN PLACE
- ⑨ VAR. DEPTH GRANULAR MATERIAL IN PLACE



SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

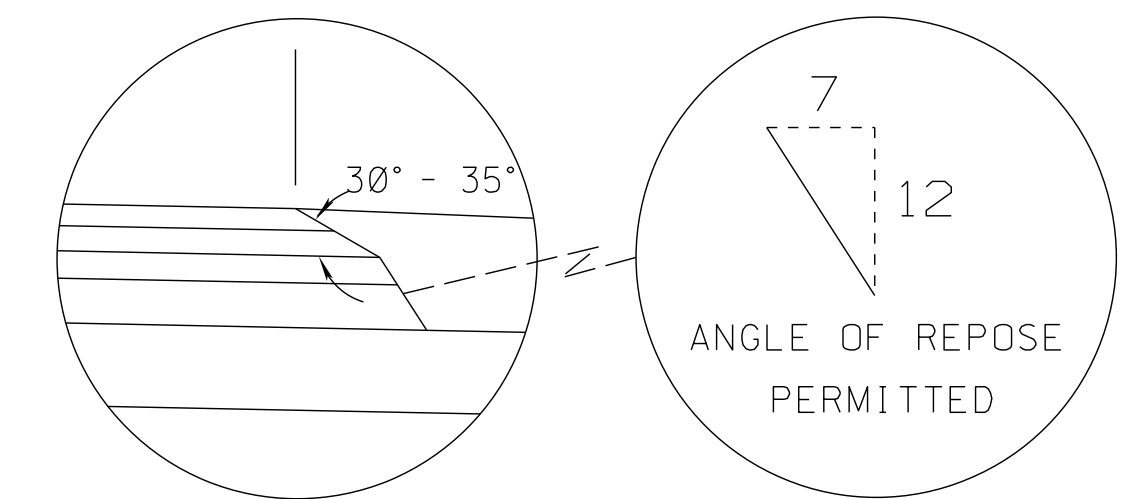
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REVISION		KRIS		TYPICAL SECTION	
REVISION		KRIS		COUNTY FARM ROAD	
REVISION		KRIS		STA. 16+94.54 TO STA. 21+13.27	
REVISION		KRIS		STA. 28+80.14 TO STA. 30+81.55	
REVISION		KRIS		COUNTY: HARRISON	
REVISION		KRIS		PROJ. NUM.: NHPP-0010-01(162)	
REVISION		KRIS		WORKING NUMBER	
REVISION		KRIS		TS-2	
REVISION		KRIS		SHEET NUMBER	
REVISION		KRIS		6	
REVISION		KRIS		FILENAME: TYPICALS.DGN	
REVISION		KRIS		DESIGN TEAM SIXTH CHECKED DATE 8.31.18	



TYPICAL SECTION
 COUNTY FARM ROAD
 STA. 21+13.27 TO STA. 21+82.93
 STA. 28+34.76 TO STA. 28+80.14

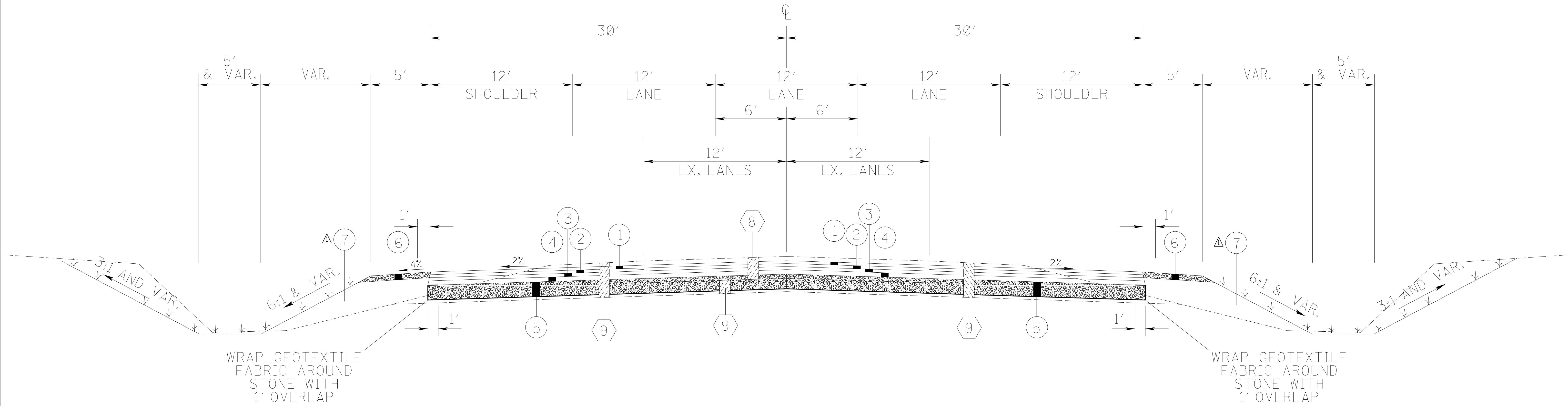
- ① 1.50" ASPHALT, MT (9.5MM MIXTURE)(1@1.5")
- ② 2.00" ASPHALT, MT (12.5MM MIXTURE)(1@2") REQUIRED
- ③ 3" ASPHALT, MT (19.0MM MIXTURE)(1@3") REQUIRED
- ④ 3" ASPHALT, ST (19.0MM MIXTURE)(1@3") REQUIRED
- ⑤ 8" CRUSHED STONE BASE W/ GEOTEXTILE FABRIC TYPE V (NON-WOVEN) REQUIRED
- ⑥ 3.5" AND VAR. DEPTH CRUSHED STONE BASE REQUIRED
- ⑦ UNCL. EXCAVATION OR BORROW MATERIAL (B7) REQUIRED Δ

- ⑧ 9" & VAR. DEPTH PAVEMENT IN PLACE
- ⑨ VAR. DEPTH GRANULAR MATERIAL IN PLACE



SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

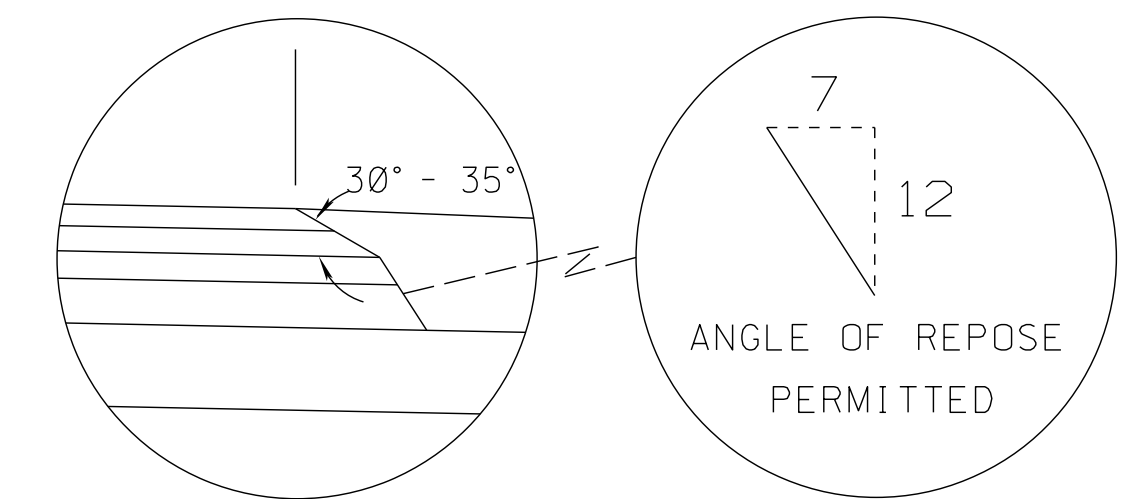
MISSISSIPPI DEPARTMENT OF TRANSPORTATION TYPICAL SECTION	
COUNTY FARM ROAD STA. 21+13.27 TO STA. 21+82.93 STA. 28+34.76 TO STA. 28+80.14 COUNTY: HARRISON PROJ. NUM.: NHPP-0010-01(162)	
REVISION DATE DESIGN TEAM	BY KRIS SIXTH CHECKED DATE 8.31.18
WORKING NUMBER TS-3	SHEET NUMBER 7



TYPICAL SECTION
 COUNTY FARM ROAD
 STA. 21+82.93 TO STA. 28+34.76

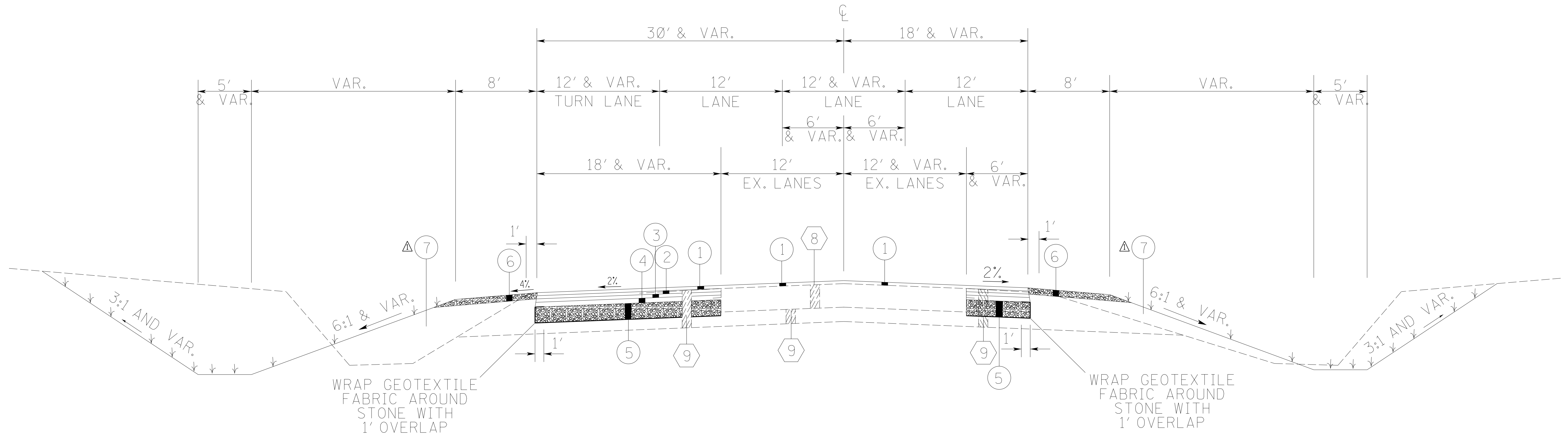
- ① 1.50" ASPHALT, MT (9.5MM MIXTURE)(1@1.5")
- ② 2.00" ASPHALT, MT (12.5MM MIXTURE)(1@2") REQUIRED
- ③ 3" ASPHALT, MT (19.0MM MIXTURE)(1@3") REQUIRED
- ④ 3" ASPHALT, ST (19.0MM MIXTURE)(1@3") REQUIRED
- ⑤ 8" CRUSHED STONE BASE W/ GEOTEXTILE FABRIC TYPE V (NON-WOVEN) REQUIRED
- ⑥ 3.5" AND VAR. DEPTH CRUSHED STONE BASE REQUIRED
- ⑦ UNCL. EXCAVATION OR BORROW MATERIAL (B7) REQUIRED Δ

- ⑧ 9" & VAR. DEPTH PAVEMENT IN PLACE
- ⑨ VAR. DEPTH GRANULAR MATERIAL IN PLACE



SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

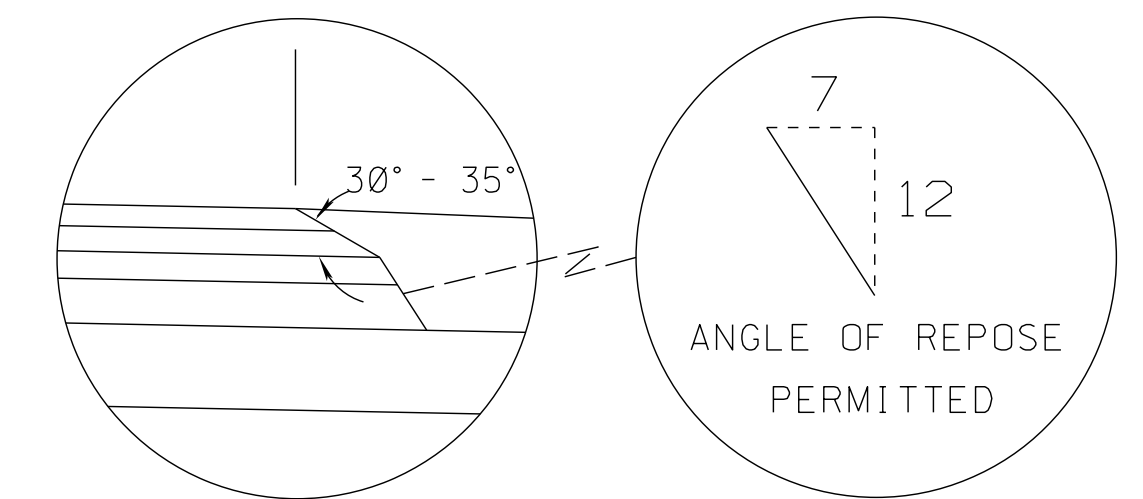
MISSISSIPPI DEPARTMENT OF TRANSPORTATION TYPICAL SECTION	
COUNTY FARM ROAD STA. 21+82.93 TO STA. 28+34.76	
COUNTY: HARRISON PROJ. NUM.: NHPP-0010-01(162)	
FILENAME: TYPICALS.DGN DESIGN TEAM SIXTH CHECKED DATE 8.31.18	
WORKING NUMBER TS-4	SHEET NUMBER 8



TYPICAL SECTION
 COUNTY FARM ROAD
 STA. 30+81.55 TO STA. 33+46.37

- ① 1.50" ASPHALT, MT (9.5MM MIXTURE)(1@1.5")
- ② 2.00" ASPHALT, MT (12.5MM MIXTURE)(1@2") REQUIRED
- ③ 3" ASPHALT, MT (19.0MM MIXTURE)(1@3") REQUIRED
- ④ 3" ASPHALT, ST (19.0MM MIXTURE)(1@3") REQUIRED
- ⑤ 8" CRUSHED STONE BASE W/ GEOTEXTILE FABRIC TYPE V (NON-WOVEN) REQUIRED
- ⑥ 3.5" AND VAR. DEPTH CRUSHED STONE BASE REQUIRED
- ⑦ UNCL. EXCAVATION OR BORROW MATERIAL (B7) REQUIRED Δ

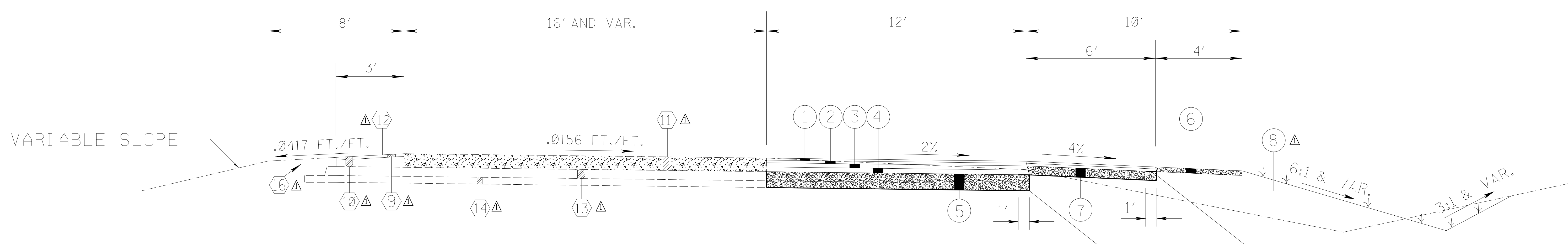
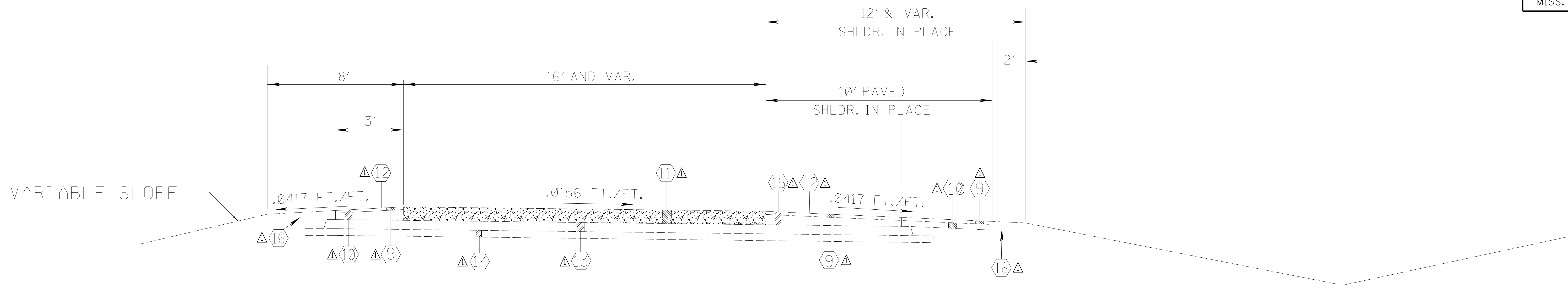
- ⑧ 9" & VAR. DEPTH PAVEMENT IN PLACE
- ⑨ VAR. DEPTH GRANULAR MATERIAL IN PLACE



SAFETY EDGE REQ'D TOP 2 LIFTS ONLY
 (NOT A PAY ITEM)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION TYPICAL SECTION	
COUNTY FARM ROAD STA. 30+81.55 TO STA. 33+46.37	
COUNTY: HARRISON PROJ. NUM.: NHPP-0010-01(162)	
FILENAME: TYPICALS.DGN	
DESIGN TEAM SIXTH	CHECKED DATE 8.31.18
WORKING NUMBER TS-5	SHEET NUMBER 9

2/20/2019 1:04:58 AM TYPICALS.DGN MISSISSIPPI DEPARTMENT OF TRANSPORTATION

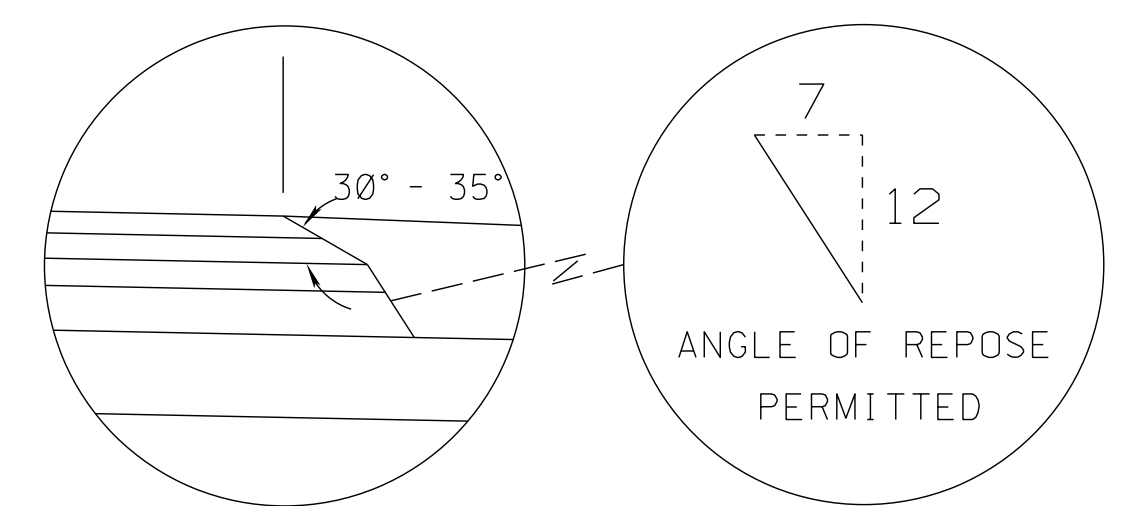


TYPICAL SECTION
NE RAMP

WRAP GEOTEXTILE FABRIC AROUND STONE WITH 1' OVERLAP

- ① 1.50" ASPHALT, MT (9.5MM MIXTURE)(1@1.5) REQUIRED
- ② 2.00" ASPHALT, MT (12.5MM MIXTURE)(1@2) REQUIRED
- ③ 3" ASPHALT, MT (19.0MM MIXTURE)(1@2.25) REQUIRED
- ④ 3" ASPHALT, ST (19.0MM MIXTURE)(1@2.25) REQUIRED
- ⑤ 8" CRUSHED STONE BASE W/ GEOTEXTILE FABRIC TYPE V (NON-WOVEN) REQUIRED
- ⑥ 3.5" CRUSHED STONE BASE REQUIRED
- ⑦ 6" CRUSHED STONE BASE W/ GEOTEXTILE FABRIC TYPE V (NON-WOVEN) REQUIRED
- △ ⑧ UNCL. EXCAVATION OR BORROW MATERIAL (B7) REQUIRED

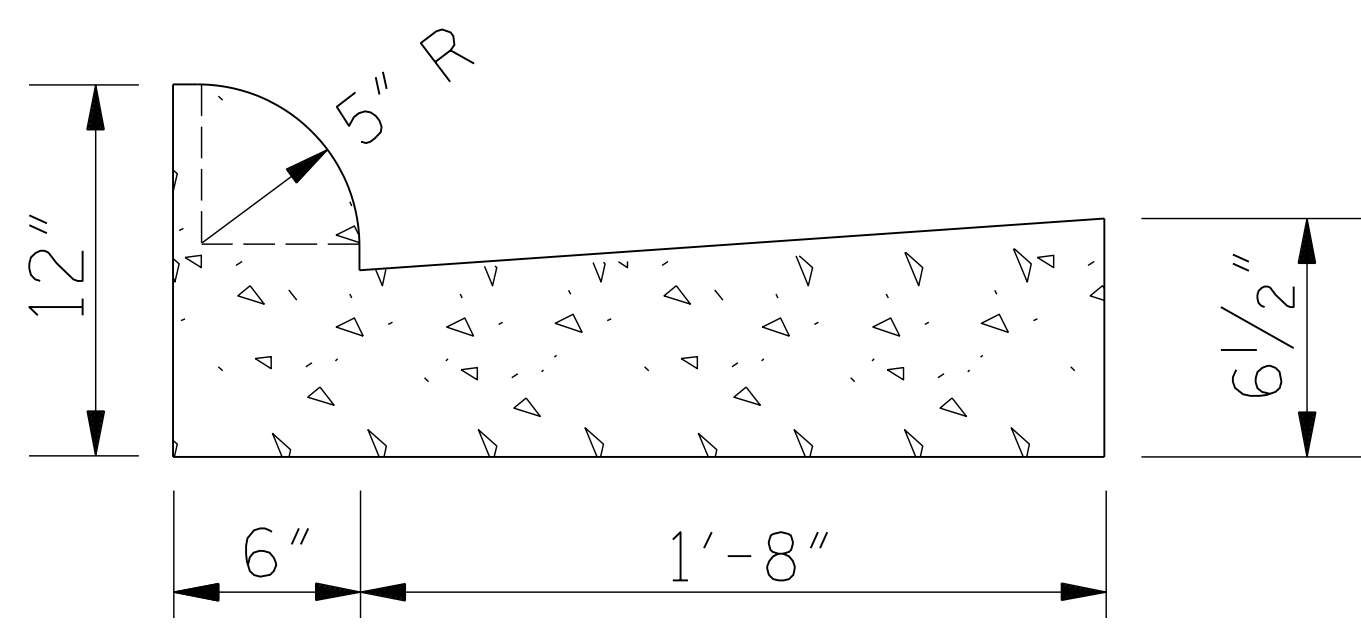
- △ ⑨ 1 1/2" DEPTH HMA ASPHALT IN PLACE 1@1 1/2" - (ST), 9.5mm MIX
- △ ⑩ 3" AND VAR. DEPTH HMA ASPHALT IN PLACE (2@1 1/2" AND VAR. DEPTH - (ST), 9.5MM MIX)
- △ ⑪ 8" CONTINUOUSLY REINFORCED CONC. PAVEMENT OR 9" REINFORCED CONCRETE PAVEMENT IN PLACE
- △ ⑫ DOUBLE BITUMINOUS SURFACE TREATMENT IN PLACE
- △ ⑬ 4" PLANT MIX BITUMINOUS BASE IN PLACE
- △ ⑭ GRANULAR MATERIAL BASE IN PLACE
- △ ⑮ 8" & VAR. DEPTH PLANT MIX BITUMINOUS BASE IN PLACE
- △ ⑯ VAR. DEPTH GRANULAR MATERIAL IN PLACE



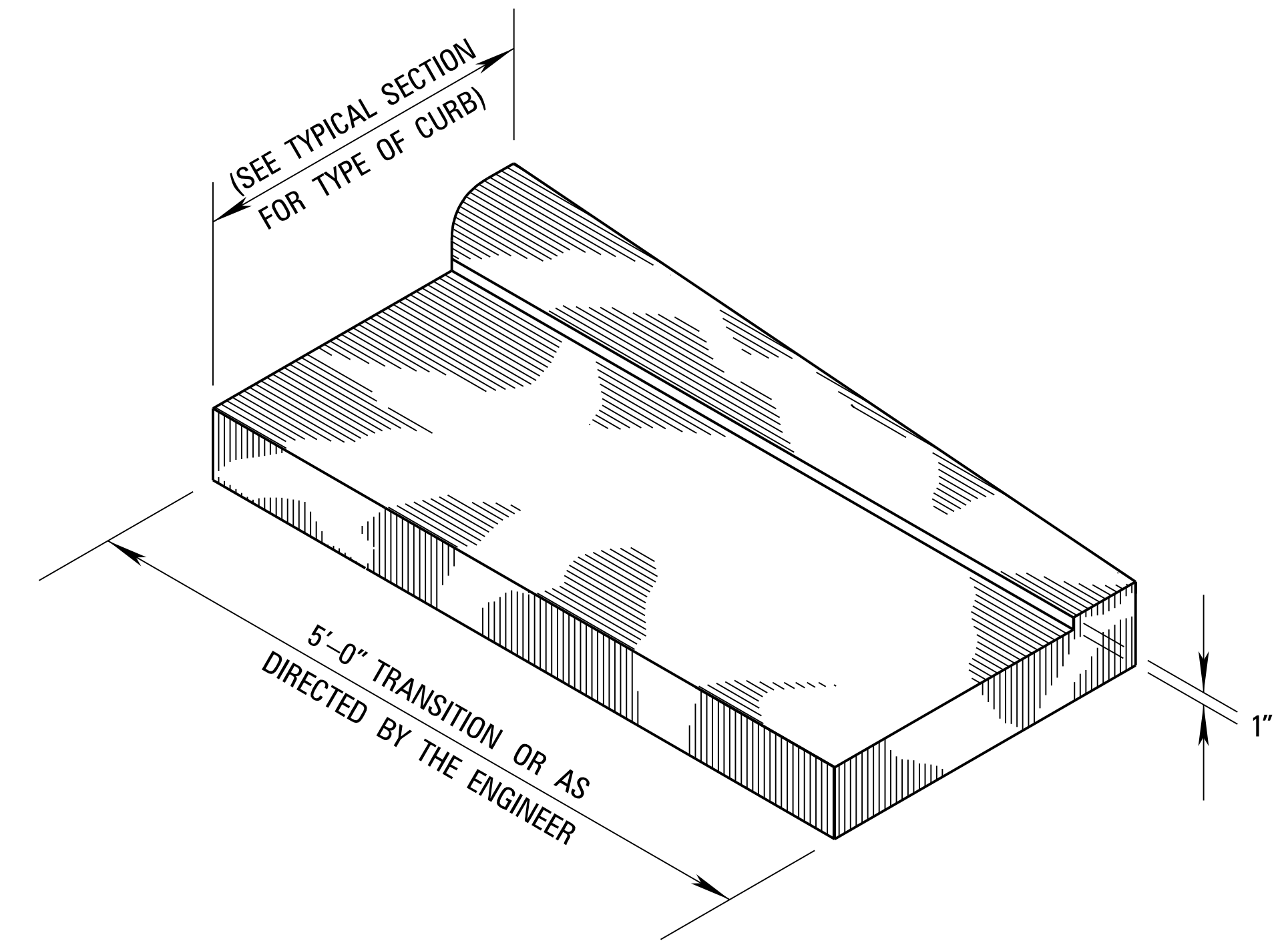
SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION TYPICAL SECTION NE RAMP		
COUNTY: HARRISON PROJ. NUM.: NHPP-0010-01(162)		
FILENAME: TYPICALS.DGN DESIGN TEAM: SIXTH CHECKED: _____ DATE: 8.31.18	WORKING NUMBER TS-6 SHEET NUMBER 10	DATE: 2/20/19 TIME: 10:58 AM TYPICALS.DGN

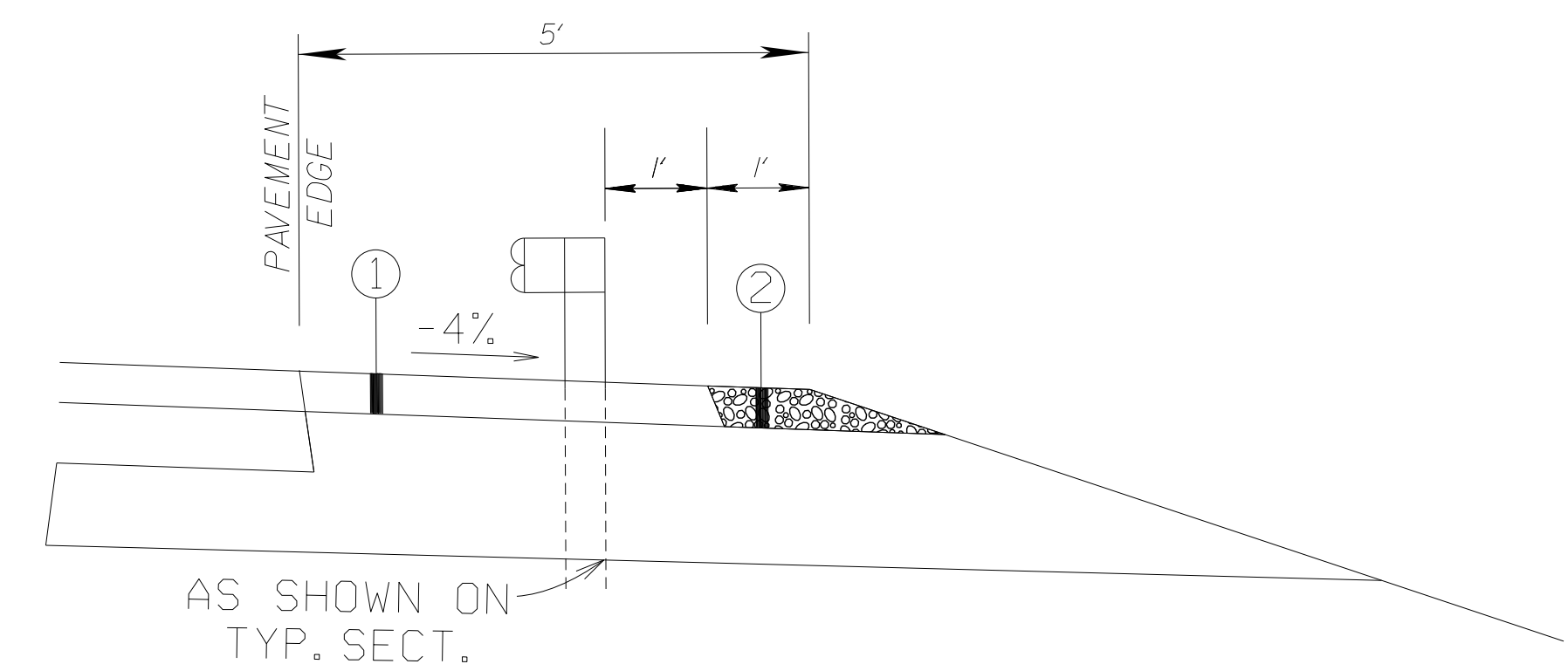
2/20/2019 10:58 AM TYPICALS.DGN MISSISSIPPI DEPARTMENT OF TRANSPORTATION



TYPE "3B" MOD.
DETAIL OF COMBINATION
CURB & GUTTER

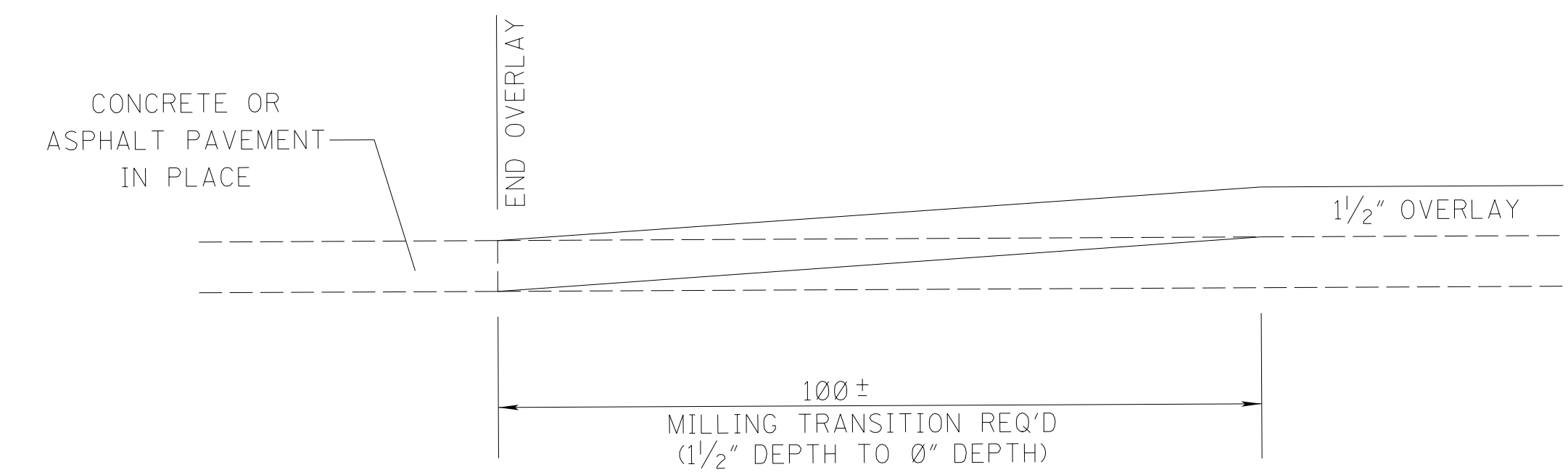


DETAIL OF CURB TRANSITION




PAVEMENT UNDER GUARDRAIL

- ① TOP 2 LIFTS OF ASPHALT AS SHOWN ON TYPICAL SECTION.
- ② CRUSHED STONE BASE



DETAIL FOR BEGINNING/ENDING OVERLAY

1/11/2019 5:59 PM TYPICALS.DGN


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTION	
PAVING DETAILS	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: TYPICALS.dgn
DESIGN TEAM	SIXTH
CHECKED	DATE
	
WORKING NUMBER	TS-7
SHEET NUMBER	11

STATE	PROJECT NO.
MISS	NHPP-0010-01(162)

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	HARRISON : 107876-301000	
			Prelim	Final
202-B059	Removal of Concrete Median & Island Pavement, All Depths	SY	189	
202-B088	Removal of Curb & Gutter, All Types	LF	802	
202-B129	Removal of Flared End Section, All Sizes	EA	3	
202-B188	Removal of Pavement, All Types and Depths	SY	2,539	
202-B213	Removal of Sign	EA	4	③
202-B240	Removal of Traffic Stripe	LF	650	
203-A001	Unclassified Excavation, FM, AH	CY	5,643	
203-EX037	Borrow Excavation, AH, LVM, Class B7	CY	100	①
206-A001	Structure Excavation	CY	8	
206-B001	Select Material for Undercuts, Contractor Furnished, FM	CY	8	
209-A005	Geotextile Stabilization, Type V, Non-Woven	SY	8,012	
221-A001	Concrete Paved Ditch	CY	20	①
223-A001	Mowing	ACRE	1	
225-A001	Grassing	ACRE	2	
234-A001	Temporary Silt Fence	LF	1,500	
237-A002	Wattles, 20"	LF	800	
907-240-A001	Interlocking Flexible Block Erosion Control System	SY	1,857	
304-F001	3/4" and Down Crushed Stone Base	TON	2,840	
	OR			
304-F002	Size 610 Crushed Stone Base	TON	2,840	
	OR			
304-F003	Size 825B Crushed Stone Base	TON	2,840	
403-A001	12.5-mm, HT, Asphalt Pavement	TON	97	
403-A002	12.5-mm, MT, Asphalt Pavement	TON	998	
403-A005	19-mm, MT, Asphalt Pavement	TON	1,075	
403-A006	19-mm, ST, Asphalt Pavement	TON	1,173	②
403-A013	9.5-mm, HT, Asphalt Pavement	TON	77	
403-A014	9.5-mm, MT, Asphalt Pavement	TON	1,038	
406-D001	Fine Milling of Bituminous Pavement, All Depths	SY	2,255	
407-A001	Asphalt for Tack Coat	GAL	1,315	
503-C010	Saw Cut, Full Depth	LF	685	
601-B001	Class "B" Structural Concrete, Minor Structures	CY	2	
603-CA027	24" Reinforced Concrete Pipe, Class III, Rubber Type Gaskets	LF	24	
603-CB004	24" Reinforced Concrete End Section	EA	2	
603-CE014	36" x 23" Concrete Arch Pipe, Class A III, Flexible Plastic Gaskets	LF	16	
603-CF004	36" x 23" Concrete Arch Pipe End Section	EA	1	
606-B003	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post	LF	775	④
606-C001	Guard Rail, Cable Anchor Type 1, Metal Post	EA	2	
606-E007	Guard Rail, Terminal End Section, Non-Flared	EA	2	
609-D003	Combination Concrete Curb and Gutter Type 2	LF	513	
609-D014	Combination Concrete Curb and Gutter Type 3B Modified	LF	1,121	
616-A001	Concrete Median and/or Island Pavement, 10-inch	SY	36	
616-A004	Concrete Median and/or Island Pavement, 4-inch	SY	297	
618-A001	Maintenance of Traffic	LS	1	

- ① TO BE USED AS DIRECTED BY THE PROJECT ENGINEER
- ② INCLUDES 62 TONS FOR BACKFILLING EXISTING MEDIAN ISLAND PAVEMENT
- ③ TO BE USED FOR STOP SIGNS AT RAMP INTERSECTIONS
- ④ ALL LENGTH OF GUARDRAIL IS BASED ON A 37.5' TERMINAL END SECTION BEING USED. FOR ANY OTHER LENGTH OF TERMINAL END SECTION, THE LENGTH OF NORMAL GUARDRAIL WILL BE ADJUSTED.

By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION		
	SUMMARY OF QUANTITIES		
Revision	Proj No: NHPP-0010-01(162)		 Working Number SQ-1
	County: HARRISON		
Date	FILENAME : SQS_107876		Sheet Number 12
	Design Team	Checked	


1st O.REV.

STATE	PROJECT NO.
MISS	NHPP-0010-01(162)

SUMMARY OF QUANTITIES (SHEET 2)

PAY ITEM NO.	PAY ITEM	UNIT	HARRISON : 107876-301000	
			Prelim	Final
619-A1002	Temporary Traffic Stripe, Continuous White	LF	7,329	
619-A2002	Temporary Traffic Stripe, Continuous Yellow	LF	3,991	
619-A5001	Temporary Traffic Stripe, Detail	LF	3,837	
619-A6002	Temporary Traffic Stripe, Legend	LF	463	
619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet	SF	32	
619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More	SF	240	
619-F1001	Concrete Median Barrier, Precast	LF	1,304	
619-F2001	Remove and Reset Concrete Median Barrier, Precast	LF	1,293	
619-G4001	Barricades, Type III, Double Faced	LF	24	
619-G5001	Free Standing Plastic Drums	EA	177	
619-J1001	Impact Attenuator, 40 MPH	EA	4	
619-J2001	Impact Attenuator, 40 MPH, Replacement Package	EA	2	
619-J3001	Remove and Reset Impact Attenuator	EA	4	
620-A001	Mobilization	LS	1	
626-B003	6" Thermoplastic Traffic Stripe, Continuous White	LF	1,198	
626-C001	6" Thermoplastic Double Drop Edge Stripe, Continuous White	LF	3,142	
626-E003	6" Thermoplastic Traffic Stripe, Continuous Yellow	LF	1,420	
626-F002	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow	LF	646	
626-G002	Thermoplastic Detail Stripe, White	LF	3,495	
626-G003	Thermoplastic Detail Stripe, Yellow	LF	4,996	
626-H004	Thermoplastic Legend, White	SF	484	
626-H005	Thermoplastic Legend, White	LF	463	
627-K001	Red-Clear Reflective High Performance Raised Markers	EA	163	
627-L001	Two-Way Yellow Reflective High Performance Raised Markers	EA	234	
630-F006	Delineators, Guard Rail, White	EA	30	
907-630-O004	Remove and Reset Sign, All Sizes	EA	14	
699-A001	Roadway Construction Stakes	LS	1	



KS	By	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
		SUMMARY OF QUANTITIES	
ADDED PAY ITEM	Revision	 PROJ NO: NHPP-0010-01(162) COUNTY: HARRISON	
03/01/2019	Date	FILENAME: SQS_107876	Sheet Number
	Design Team	Checked	Date
			13


GUARD RAIL REQUIRED											
WK. NO.	STATION	STATE STD. (INSTALL)	GUARD RAIL LENGTHS		CAST-IN-PLACE MEDIAN BARRIER TYPE IV MOD.	CABLE ANCHOR TYPE "1"	TERMINAL SECTION	BRIDGE END SECTION TYPE I	SINGLE DELINEATORS		REMARKS
				"W" BEAM					WHITE	YELLOW	
3	21+83.99 RT.	GR-1B,GR-4C		418.8		1	1		15		
3	23+53.50 LT.	GR-1B,GR-4C		418.8		1	1		15		
UNITS				L. F.	L. F.	EACH	EACH	EACH	EACH	EACH	
TOTALS				838		2	2		30		

DRAINAGE REMOVAL ITEMS					DRAINAGE REQUIRED ITEMS								
WK. SH. NO.	STATION	PIPE	FES	HEADWALL	PIPE CULVERTS		END SECTIONS		DRAWINGS REQ'D	CLASS "B" CONC.	STRUCTURE EXCAVATION		REMARKS
					24"	36"X23"	24"	36"X23"			CU YD EXCAV	EST. DEPTH	
3	28+01.79		2		24		2		PI-1, PC-1, FE-1	0.82	4.4	1	
3	31+00.67		1			16		1	PI-1, PC-1, FE-1A	0.490	3.6	1	
UNITS		L.F.	EA.	EA.	L.F.	L.F.	EA.	EA.		CU YD	CU YD		
TOTALS		0	3	0	24	16	2	1		1.310	8.000		

COMBINATION CONCRETE CURB AND GUTTER REQUIRED					
WK. NO.	TYPE "2"	TYPE "3B"	CONC. MEDIAN AND ISLAND PAV'T. (4" THICK.)	CONC. MEDIAN AND ISLAND PAV'T. (10" THICK.)	REMARKS
ID-1	166.6	500.1	51.5	18.2	
ID-3	345.7	620.7	244.6	17.1	
UNITS	L. F.	L. F.	SQ. YDS.	SQ. YDS.	
TOTALS	512.3	1120.8	296.1	35.3	

REMOVAL ITEMS					
WK. SH. NO.	PAVEMENT (ALL DEPTHS)	FLARED END SECTIONS	CURB & GUTTER (ALL TYPES)	MEDIAN ISLAND PAVEMENT	REMARKS
REM-1	68.3		495.0	65.0	
REM-2	1498.3				
REM-3	313.0	3	307.0	124.0	
REM-4	658.9				
UNITS	SQ. YDS.	EACH	LIN. FT.	LIN. FT.	
TOTALS	2539	3	802	189	

1/11/2019 5:59 PM EQS.dgn

MISSISSIPPI DEPARTMENT OF TRANSPORTATION		
ESTIMATED QUANTITIES		
REQUIRED AND REMOVAL ITEMS		WORKING NUMBER
PROJ. NO.: NHPP-0010-01(162)		EQ-1
COUNTY: HARRISON		SHEET NUMBER
FILENAME: EQS.dgn		14
DESIGN TEAM	DISTRICT 6	CHECKED KRS
DATE		DATE


STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

SUMMARY OF PAVEMENT MARKINGS																										
WK. SH. NO.	STATION TO STATION		THERMOPLASTIC										MARKERS				REMARKS									
			CONTINUOUS		EDGE		DETAIL		SKIP		LEGEND		RED-CLEAR	YELLOW		CLEAR										
			WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE (LF)	WHITE (SF)		1 WAY	2 WAY	2 WAY										
PMD-1	B.O.P.	25+00	295	718	1263	0	999	2364							237	101.4		50				114				
PMD-2	25+00	E.O.P.	463	702	1289	56	2496	2632							226	305.7		91				120				
PMD-3	9+00	14+90	440	0	590	590	0	0							0	76.8		22				0				
UNITS			L. F.	L. F.	L.F.	L.F.	L. F.	L. F.							L.F.	L. F.						EACH	EACH	EACH	EACH	EACH
TOTALS			1198	1420	3142	646	3495	4996							463	483.9		163				234	0			

SUMMARY OF TRAFFIC CONTROL ITEMS REQUIRED																																	
WORKING NUMBER	PHASE OF CONST.	TEMPORARY TRAFFIC STRIPE														CMS	ARROW PANEL TYPE "A"	CONCRETE BARRIER	BARRICADES		REFLECTIVE RAISED MARKERS		WARNING LIGHTS TYPE B	FREE STANDING PLASTIC DRUMS	SIGNS					REMARKS			
		PAINT OR TAPE							TAPE										SINGLE FACED	DOUBLE FACED	2-WAY YELLOW	RED-CLEAR			G20-4	W8-9	W20-1	W1-4aL	W1-4aR				
		CONTINUOUS		SKIP		DETAIL			LEGEND	CONTINUOUS		SKIP		DETAIL																	LEGEND		
		WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE		YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	WHITE	YELLOW	EA.	EA.		EA.	EA.
DCS-1																																	
UNITS		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	EACH	EACH	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EA.	EA.		
SUBTOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TC-1	I																																
TC-2	I																																
TC-3	I																																
UNITS		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	EACH	EACH	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EA.	EA.		
SUBTOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TC-4	II																			655													
TC-5	II																			638													
UNITS		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	EACH	EACH	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EA.	EA.		
SUBTOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1293	0	0	0	0	0	0	0	0	0	0	0	0	0
TC-6, TC-7, & TC-8	III									2989	1925									1304													
UNITS		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	EACH	EACH	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EA.	EA.		
SUBTOTAL		0	0	0	0	0	0	0	0	2989	1925	0	0	0	342	0	0	0	0	1304	0	0	0	0	0	0	0	0	0	0	0	0	0
UNITS		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EA.	EA.	EA.	EA.	EA.		
TOTAL		0	0	0	0	0	0	0	0	2989	1925	0	0	0	342	0	0	0	0	2597	0	0	0	0	0	0	0	0	0	0	0	0	0

1/11/2019 5:59 PM EQS.dgn

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
ESTIMATED QUANTITIES	
PAVEMENT MARKING AND TRAFFIC CONTROL ITEMS	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: EQS.dgn
DESIGN TEAM	DISTRICT 6 CHECKED KRS DATE
REVISION	WORKING NUMBER
	EQ-2
	SHEET NUMBER
	15



SIGNS REQUIRED

Table with 6 columns: SIGN NO., SIZE, UNIT AREA SQ.FT., QUAN. REQ'D., TOTAL SIGN AREA SQ.FT., REMARKS. Includes rows for G20, M1, M3, M4, and R1 signs.

SIGNS REQUIRED (CONT'D)

Table with 6 columns: SIGN NO., SIZE, UNIT AREA SQ.FT., QUAN. REQ'D., TOTAL SIGN AREA SQ.FT., REMARKS. Includes rows for R1-R12, R16, W1, and W20 signs.

SIGNS REQUIRED (CONT'D)

Table with 6 columns: SIGN NO., SIZE, UNIT AREA SQ.FT., QUAN. REQ'D., TOTAL SIGN AREA SQ.FT., REMARKS. Includes rows for W1-W21 signs.

SIGNS REQUIRED (CONT'D)

Table with 6 columns: SIGN NO., SIZE, UNIT AREA SQ.FT., QUAN. REQ'D., TOTAL SIGN AREA SQ.FT., REMARKS. Includes summary rows for TOTAL SIGN AREA and a list of notes.

NOTES

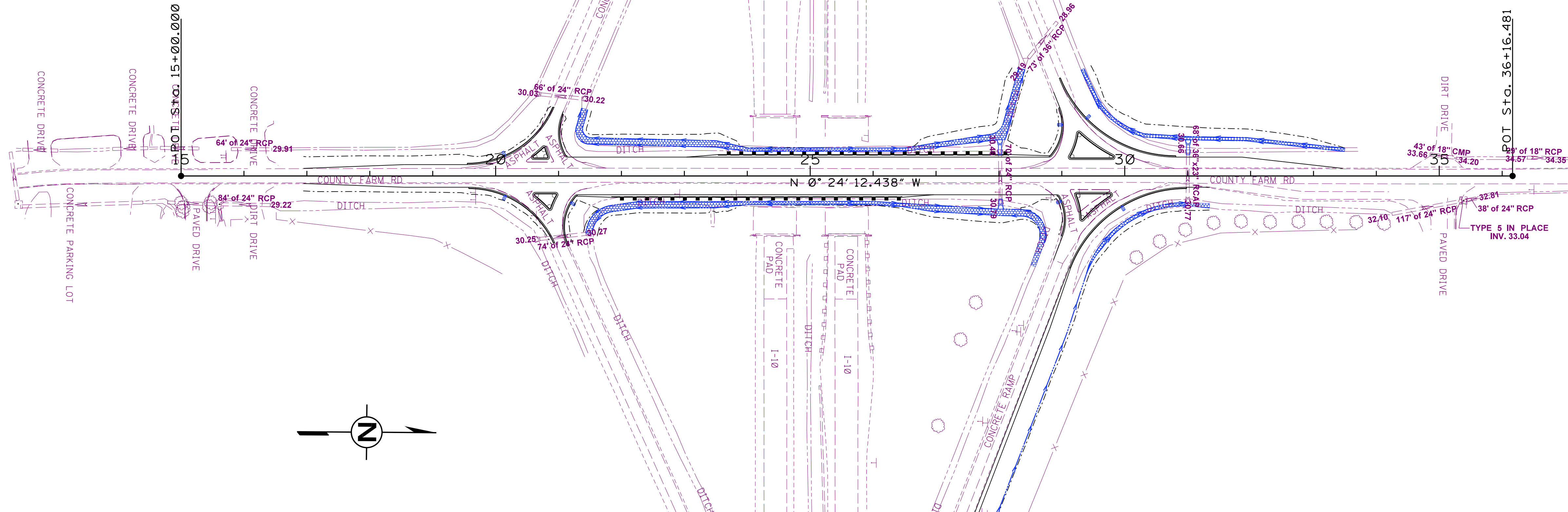
- 1 INTERSTATE ROUTE MARKER
2 UNITED STATES ROUTE MARKER
3 STATE ROUTE MARKER
4 COLORS OF CARDINAL DIRECTION MARKERS AND DIRECTIONAL ARROWS SHALL BE APPROPRIATE TO MATCH ACCOMPANYING ROUTE MARKERS.
5 BLACK STRIPES ON YELLOW BACKGROUND
6 INTERSTATE USE ONLY
7 TOP OF SIGN - BLACK LETTERING ON ORANGE BACKGROUND, BOTTOM OF SIGN - BLACK LETTERING ON WHITE BACKGROUND

THE BACKGROUND OF ALL WARNING SIGNS ("W" SERIES) EXCEPT W10-1 SHALL BE ORANGE. THE W10 - BACKGROUND SHALL BE YELLOW IN ALL CASES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ESTIMATED QUANTITIES TRAFFIC CONTROL SIGNS. Includes project details for COUNTY: HARRISON, PROJ. NUM.: NHPP-0010-01(162), and a revision table.

3/1/2019 3:02 PM TCP-EQ.DGN

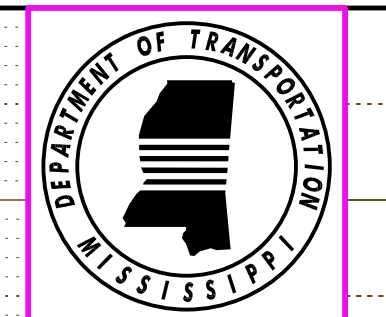
1/11/2019 1:01:00:24 WK3.dgn
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 ROADWAY DESIGN DIVISION
 L. LAURENCE

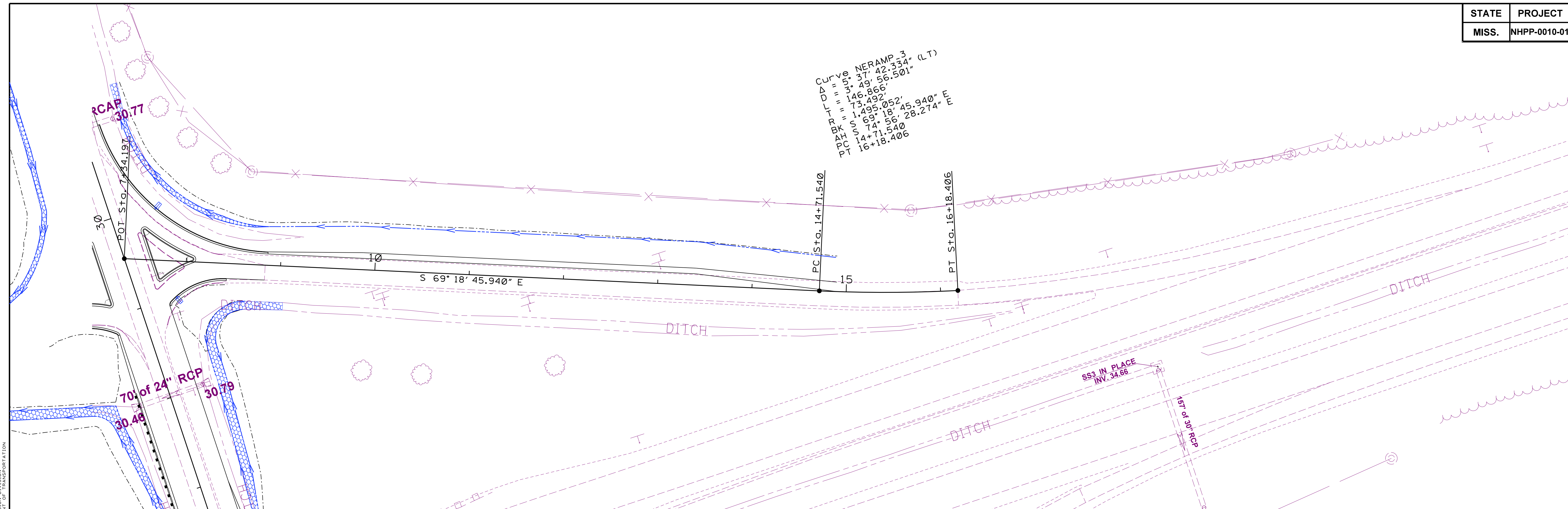


Station	Elevation	Notes
15	33.92	
16	34.00	
16	34.03	VPI 15 + 94.540 EL. 34.01
17	34.06	VPI 16 + 94.540 EL. 34.35
17	34.03	
18	34.04	
18	34.09	
18	34.17	
19	34.24	
19	34.29	
20	34.31	
20	34.38	
21	34.39	
21	34.43	
22	34.56	
22	34.65	
23	34.71	
23	34.75	
24	34.79	
24	34.88	
25	34.94	
25	34.96	
26	35.02	
26	35.21	
27	35.25	
27	35.31	
28	35.30	
28	35.35	
29	35.43	
29	35.53	
30	35.62	
30	35.69	
31	35.80	
31	35.99	
32	36.19	
32	36.26	
33	36.26	
33	36.29	
34		
34		
35		
35		
36		
36		

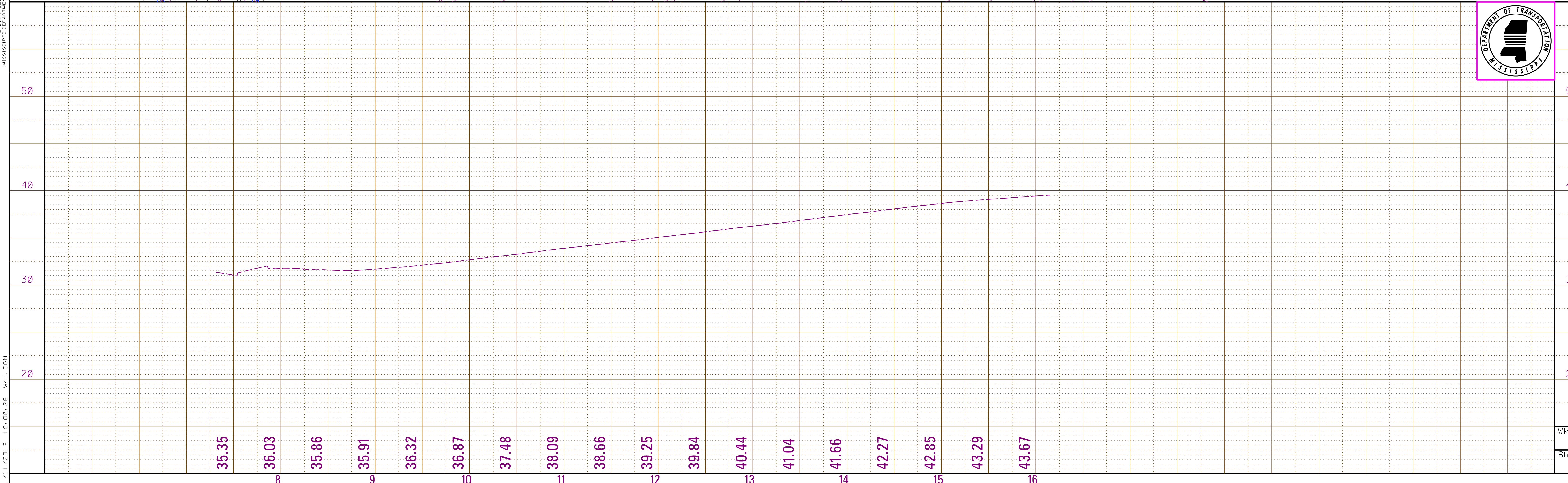
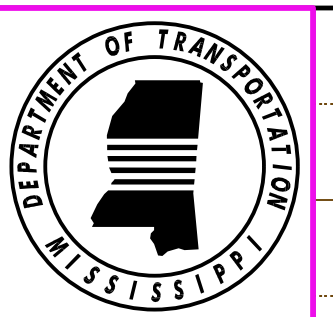
STA. 21+83.99 RT.	STA. 28+01.79	STA. 31+00.67
462.5 L.F. GUARDRAIL REQUIRED RT.	1-F.E.S. REMOVAL REQ'D LT.	1-F.E.S. REMOVAL REQ'D LT.
418.75 L.F. W-BEAM GUARDRAIL REQUIRED RT.	16'-24" RCP REQ'D LT.	16'-23"x36" RCAP REQ'D LT.
1 TYPE 1 CABLE ANCHOR REQUIRED RT.	1-24" F.E.S. REQ'D LT.	1-23"x36" F.E.S. REQ'D LT.
1 TERMINAL END SECTION REQUIRED RT.		
15 DELINEATORS (WHITE) REQUIRED RT.		
	1-F.E.S. REMOVAL REQ'D RT.	
STA. 23+53.50 LT.	8'-24" RCP REQ'D RT.	
462.5 L.F. GUARDRAIL REQUIRED LT.	1-24" F.E.S. REQ'D RT.	
418.75 L.F. W-BEAM GUARDRAIL REQUIRED LT.		
1 TYPE 1 CABLE ANCHOR REQUIRED LT.		
1 TERMINAL END SECTION REQUIRED LT.		
15 DELINEATORS (WHITE) REQUIRED LT.		

VPI 15 + 94.540 EL. 34.01	VPI 16 + 94.540 EL. 34.35	VPC 21 + 82.932 EL. 34.779	VPI 22 + 14.568 EL. 34.81	VPT 23 + 12.899 EL. 34.508	VPC 26 + 92.896 EL. 34.965	VPI 27 + 99.342 EL. 35.61	VPT 28 + 34.756 EL. 35.657	VPI 33 + 46.370 EL. 36.28
+0.08730%		-0.52118%		+0.12024%		+0.85319%		+0.12236%
		VPC/VPT 22 + 46.203 EL. 34.642	VPI 22 + 79.551 EL. 34.47	VPI 27 + 28.412 EL. 35.01	VPC/VPT 27 + 63.929 EL. 35.311			
		63.271' V.C.		71.032' V.C.				
		66.696' V.C.						





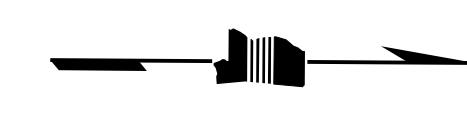
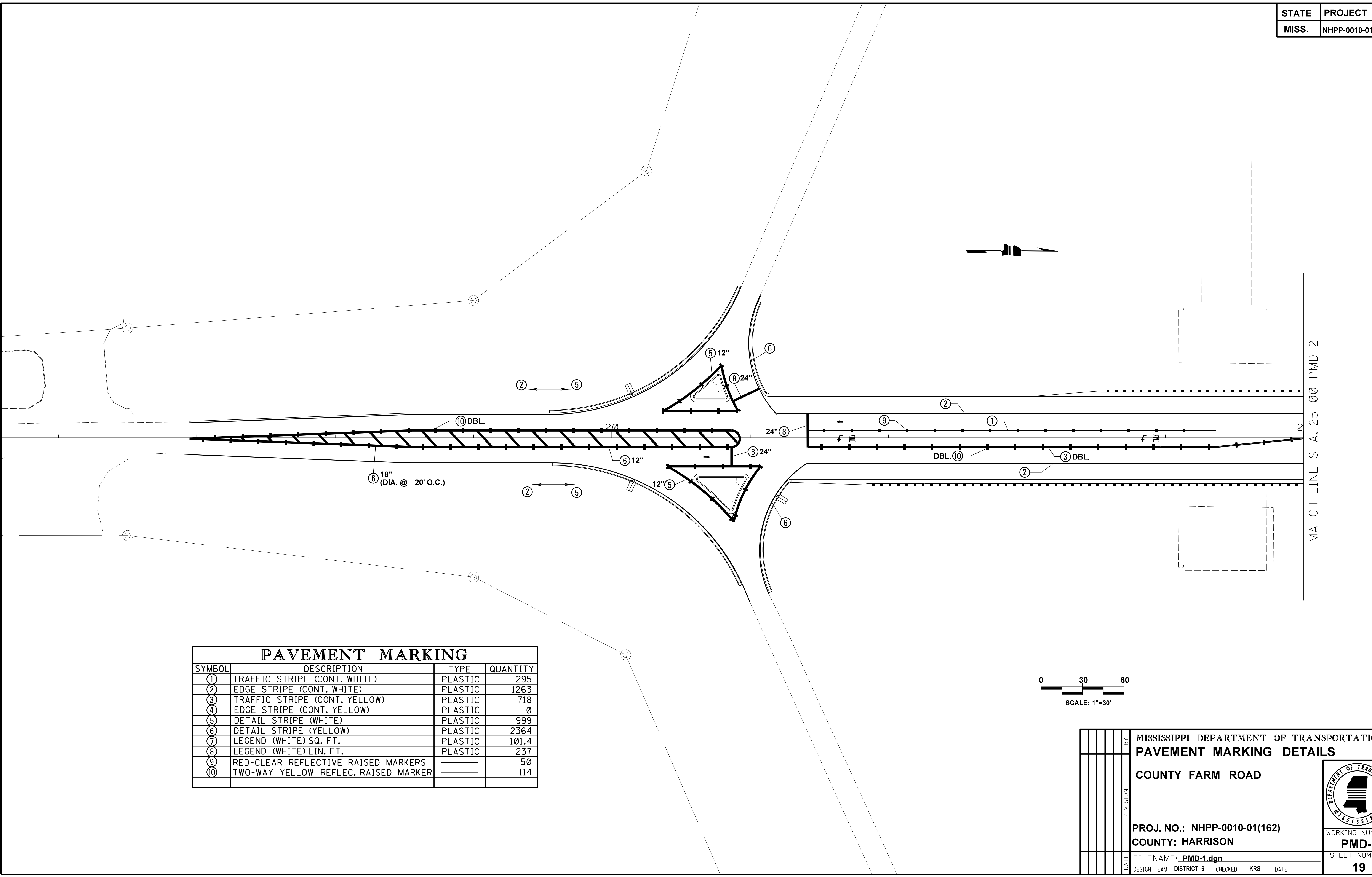
L. L. WENDEL
 ROADWAY DESIGN DIVISION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION



1/11/2019 1:51:00:26 WK4.DGN

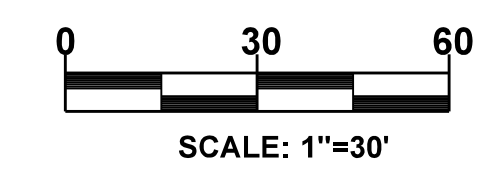
STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

1/11/2019 6:00 PM PMD-1.dgn



MATCH LINE STA. 25+00 PMD-2

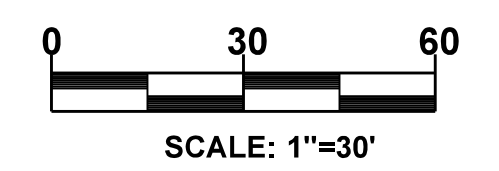
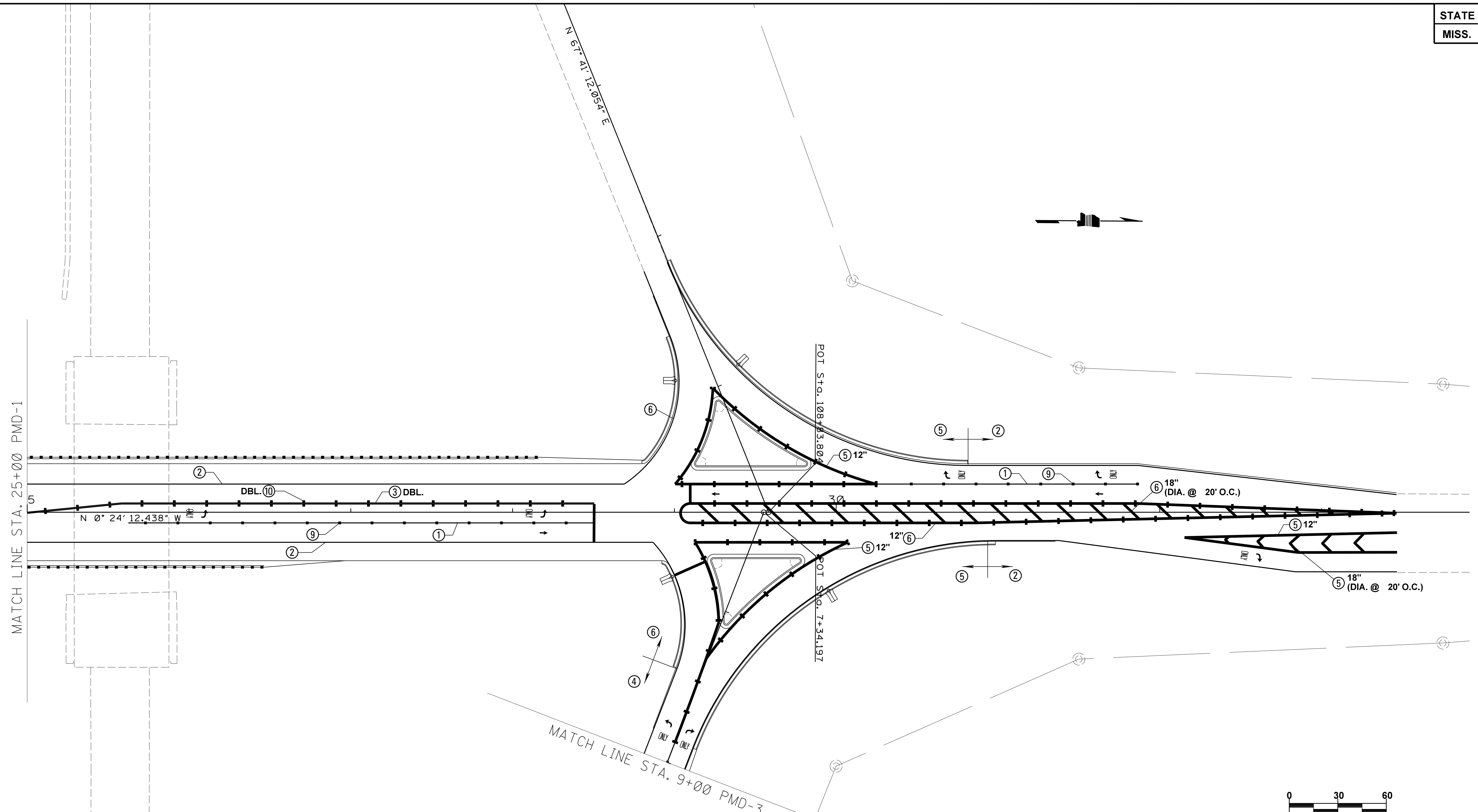
PAVEMENT MARKING			
SYMBOL	DESCRIPTION	TYPE	QUANTITY
(1)	TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	295
(2)	EDGE STRIPE (CONT. WHITE)	PLASTIC	1263
(3)	TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	718
(4)	EDGE STRIPE (CONT. YELLOW)	PLASTIC	0
(5)	DETAIL STRIPE (WHITE)	PLASTIC	999
(6)	DETAIL STRIPE (YELLOW)	PLASTIC	2364
(7)	LEGEND (WHITE) SQ. FT.	PLASTIC	101.4
(8)	LEGEND (WHITE) LIN. FT.	PLASTIC	237
(9)	RED-CLEAR REFLECTIVE RAISED MARKERS	---	50
(10)	TWO-WAY YELLOW REFLEC. RAISED MARKER	---	114



REVISION		BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DATE		DESIGN TEAM		PAVEMENT MARKING DETAILS	
DISTRICT 6		CHECKED		COUNTY FARM ROAD	
KRS		DATE		PROJ. NO.: NHPP-0010-01(162)	
				COUNTY: HARRISON	
				WORKING NUMBER	
				PMD-1	
				SHEET NUMBER	
				19	



STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



PAVEMENT MARKING			
SYMBOL	DESCRIPTION	TYPE	QUANTITY
(1)	TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	463
(2)	EDGE STRIPE (CONT. WHITE)	PLASTIC	1289
(3)	TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	702
(4)	EDGE STRIPE (CONT. YELLOW)	PLASTIC	56
(5)	DETAIL STRIPE (WHITE)	PLASTIC	2496
(6)	DETAIL STRIPE (YELLOW)	PLASTIC	2632
(7)	LEGEND (WHITE) SQ. FT.	PLASTIC	305.7
(8)	LEGEND (WHITE) LIN. FT.	PLASTIC	226
(9)	RED-CLEAR REFLECTIVE RAISED MARKERS		91
(10)	TWO-WAY YELLOW REFLEC. RAISED MARKER		120

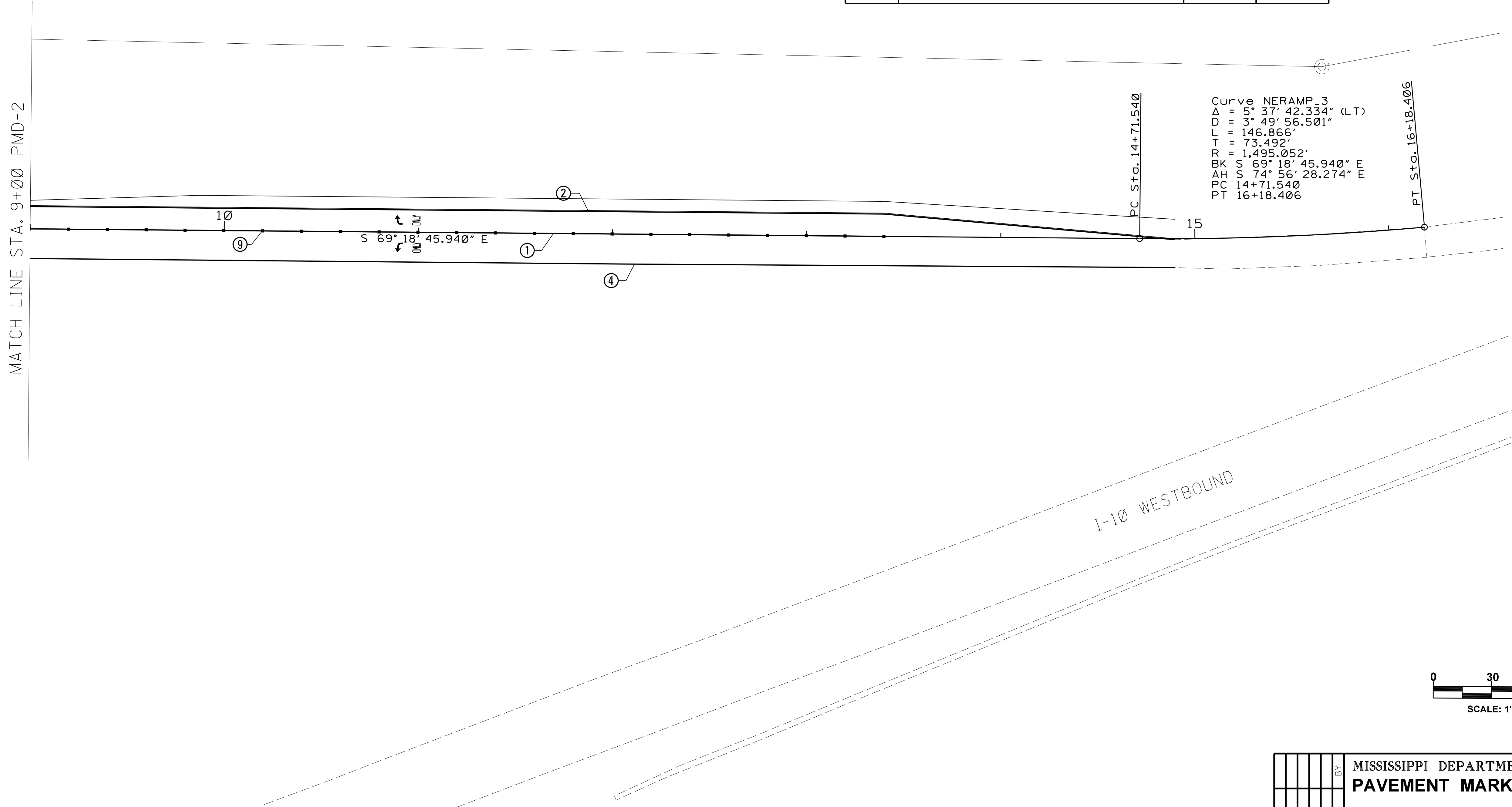
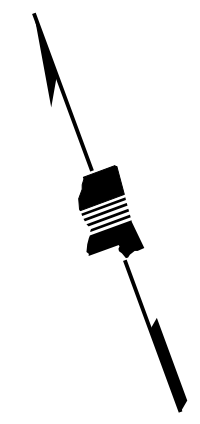
REVISION		MISSISSIPPI DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING DETAILS	
DATE		COUNTY FARM ROAD	
BY		PROJ. NO.: NHPP-0010-01(162) COUNTY: HARRISON	
DESIGN TEAM		FILENAME: PMD-2.dgn DESIGN TEAM DISTRICT 6 CHECKED KRS DATE _____	
SHEET NUMBER		WORKING NUMBER PMD-2 SHEET NUMBER 20	

1/11/2019 6:00 PM PMD-2.dgn

ROADWAY PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

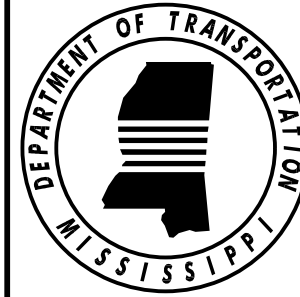
STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

PAVEMENT MARKING			
SYMBOL	DESCRIPTION	TYPE	QUANTITY
①	TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	440
②	EDGE STRIPE (CONT. WHITE)	PLASTIC	590
③	TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	0
④	EDGE STRIPE (CONT. YELLOW)	PLASTIC	590
⑤	DETAIL STRIPE (WHITE)	PLASTIC	0
⑥	DETAIL STRIPE (YELLOW)	PLASTIC	0
⑦	LEGEND (WHITE) SQ. FT.	PLASTIC	76.8
⑧	LEGEND (WHITE) LIN. FT.	PLASTIC	0
⑨	RED-CLEAR REFLECTIVE RAISED MARKERS	---	22
⑩	TWO-WAY YELLOW REFLEC. RAISED MARKER	---	0

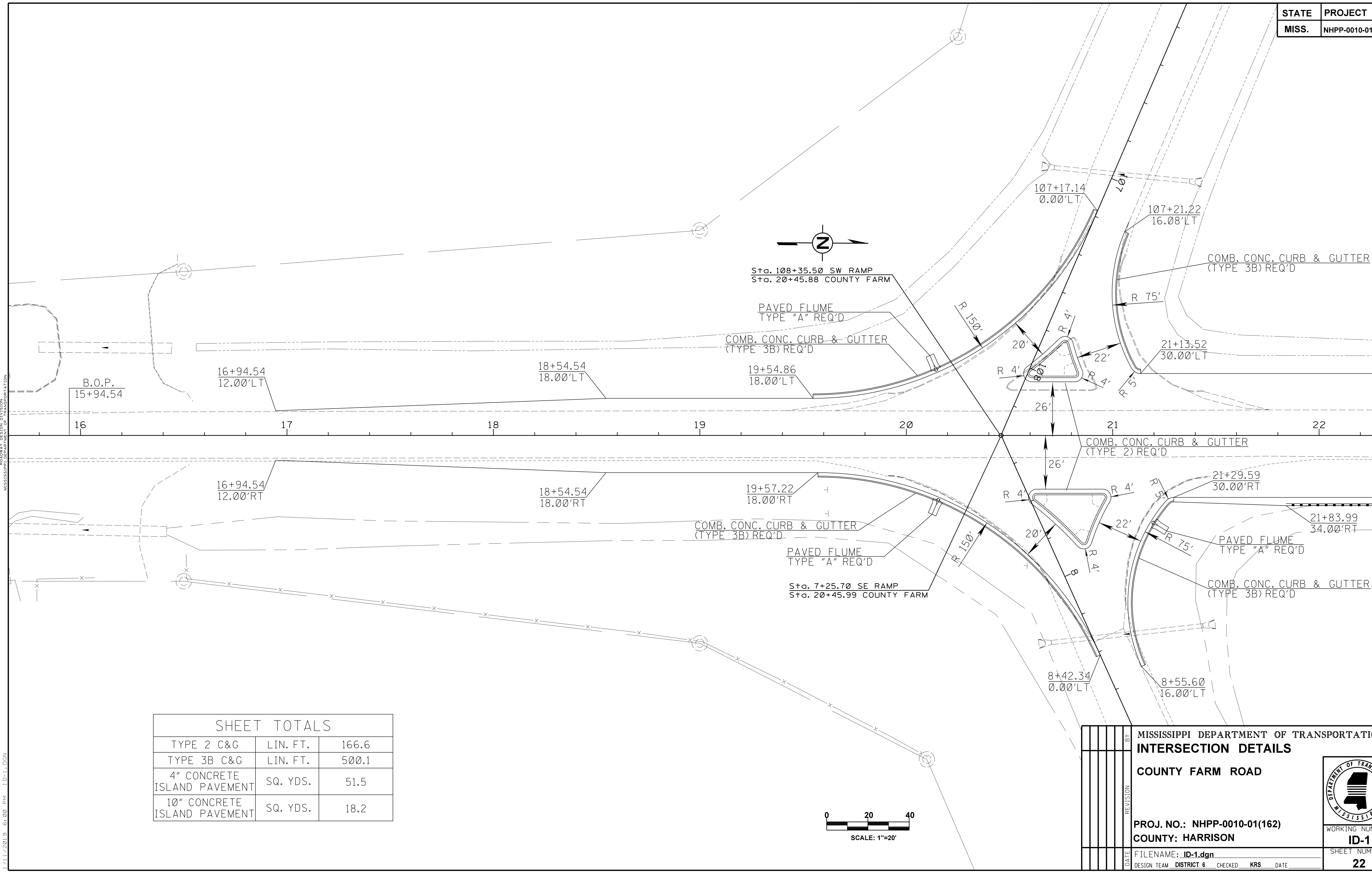


ROADWAY PLAN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

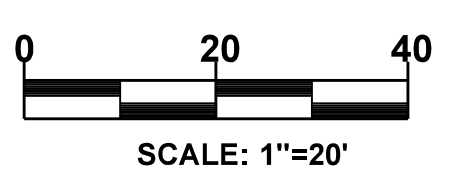
3/1/2019 3:22 PM PMD-3.dgn

MISSISSIPPI DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING DETAILS		 WORKING NUMBER PMD-3 SHEET NUMBER 21
NE RAMP PROJ. NO.: NHPP-0010-01(162) COUNTY: HARRISON		
DATE	DESIGN TEAM	FILENAME: PMD-3.dgn DISTRICT 6 CHECKED KRS DATE

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



SHEET TOTALS		
TYPE 2 C&G	LIN. FT.	166.6
TYPE 3B C&G	LIN. FT.	500.1
4" CONCRETE ISLAND PAVEMENT	SQ. YDS.	51.5
10" CONCRETE ISLAND PAVEMENT	SQ. YDS.	18.2

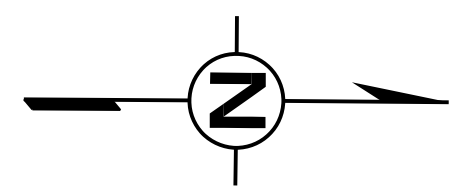
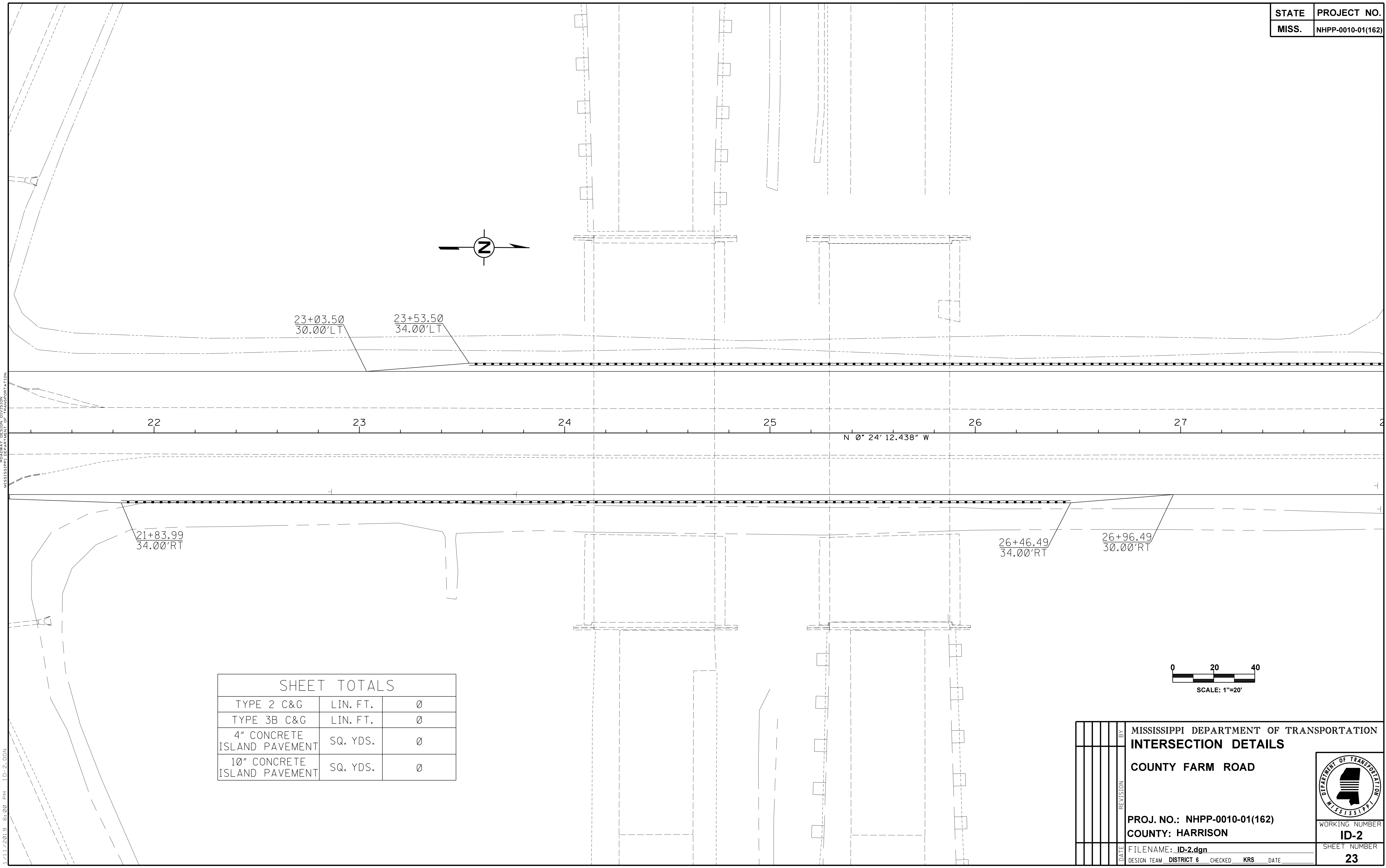


REVISION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
	DATE	INTERSECTION DETAILS	
DESIGN TEAM	DISTRICT	COUNTY FARM ROAD	
		PROJ. NO.: NHPP-0010-01(162) COUNTY: HARRISON	
FILENAME:	ID-1.dgn	WORKING NUMBER	ID-1
DESIGN TEAM	DISTRICT 6	CHECKED	KRS
		DATE	
			22



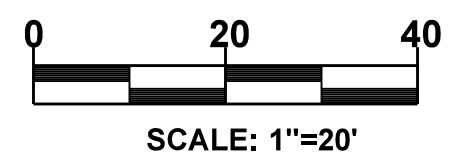
1/11/2019 6:00 PM ID-1.dgn

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)




N 0° 24' 12.438\" W

SHEET TOTALS		
TYPE 2 C&G	LIN. FT.	0
TYPE 3B C&G	LIN. FT.	0
4\" CONCRETE ISLAND PAVEMENT	SQ. YDS.	0
10\" CONCRETE ISLAND PAVEMENT	SQ. YDS.	0

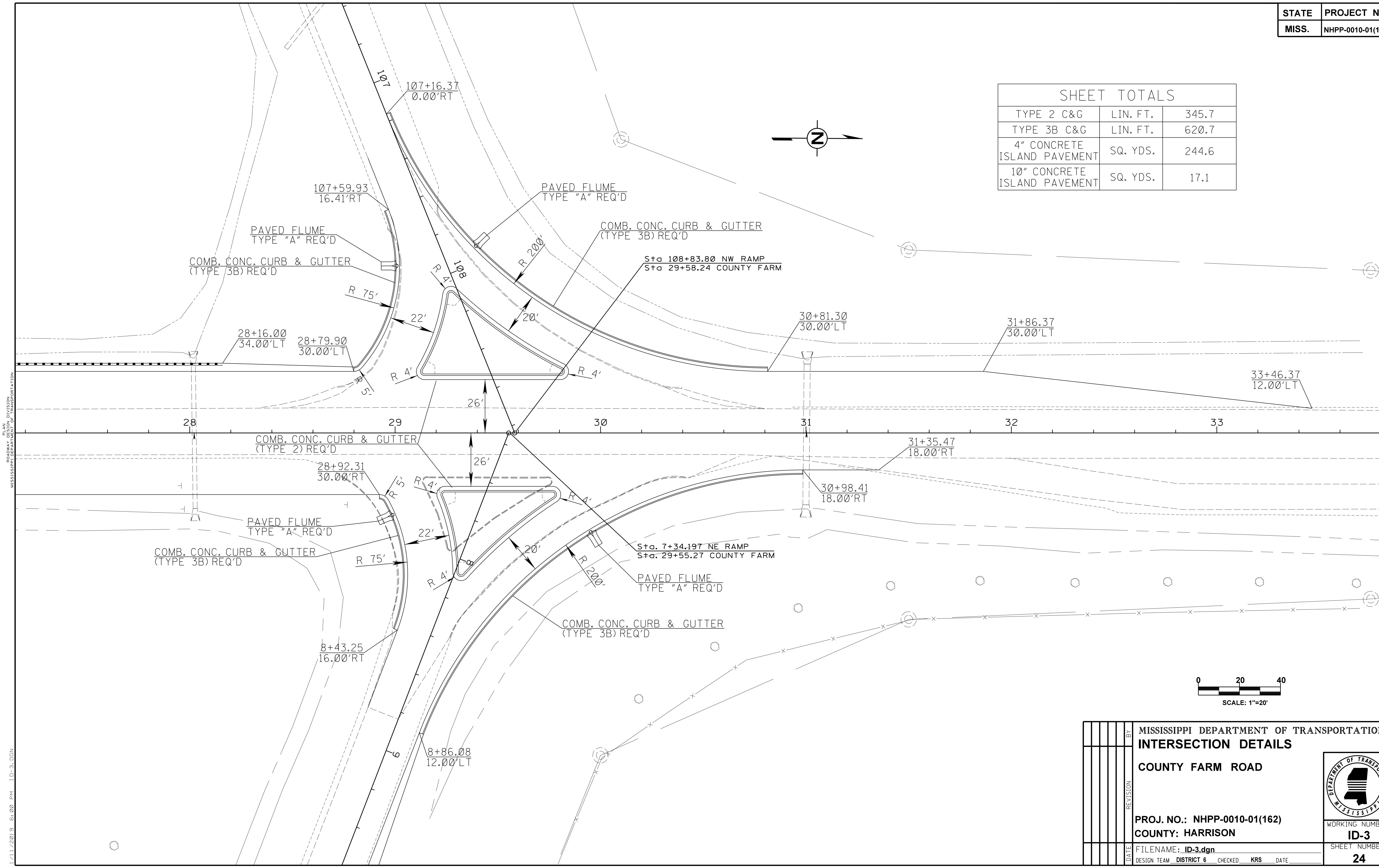
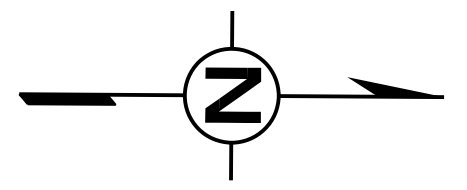


1/11/2019 6:00 PM ID-2.DGN

REVISION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
	DATE	INTERSECTION DETAILS	
		COUNTY FARM ROAD	
		PROJ. NO.: NHPP-0010-01(162) COUNTY: HARRISON	
		FILENAME: ID-2.dgn DESIGN TEAM DISTRICT 6 CHECKED KRS DATE	 WORKING NUMBER ID-2 SHEET NUMBER 23

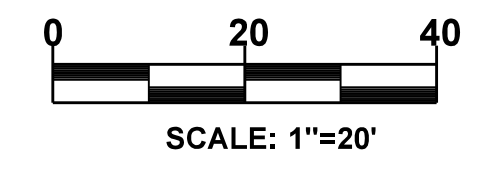
STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)


SHEET TOTALS		
TYPE 2 C&G	LIN. FT.	345.7
TYPE 3B C&G	LIN. FT.	620.7
4" CONCRETE ISLAND PAVEMENT	SQ. YDS.	244.6
10" CONCRETE ISLAND PAVEMENT	SQ. YDS.	17.1



ROADWAY PLAN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

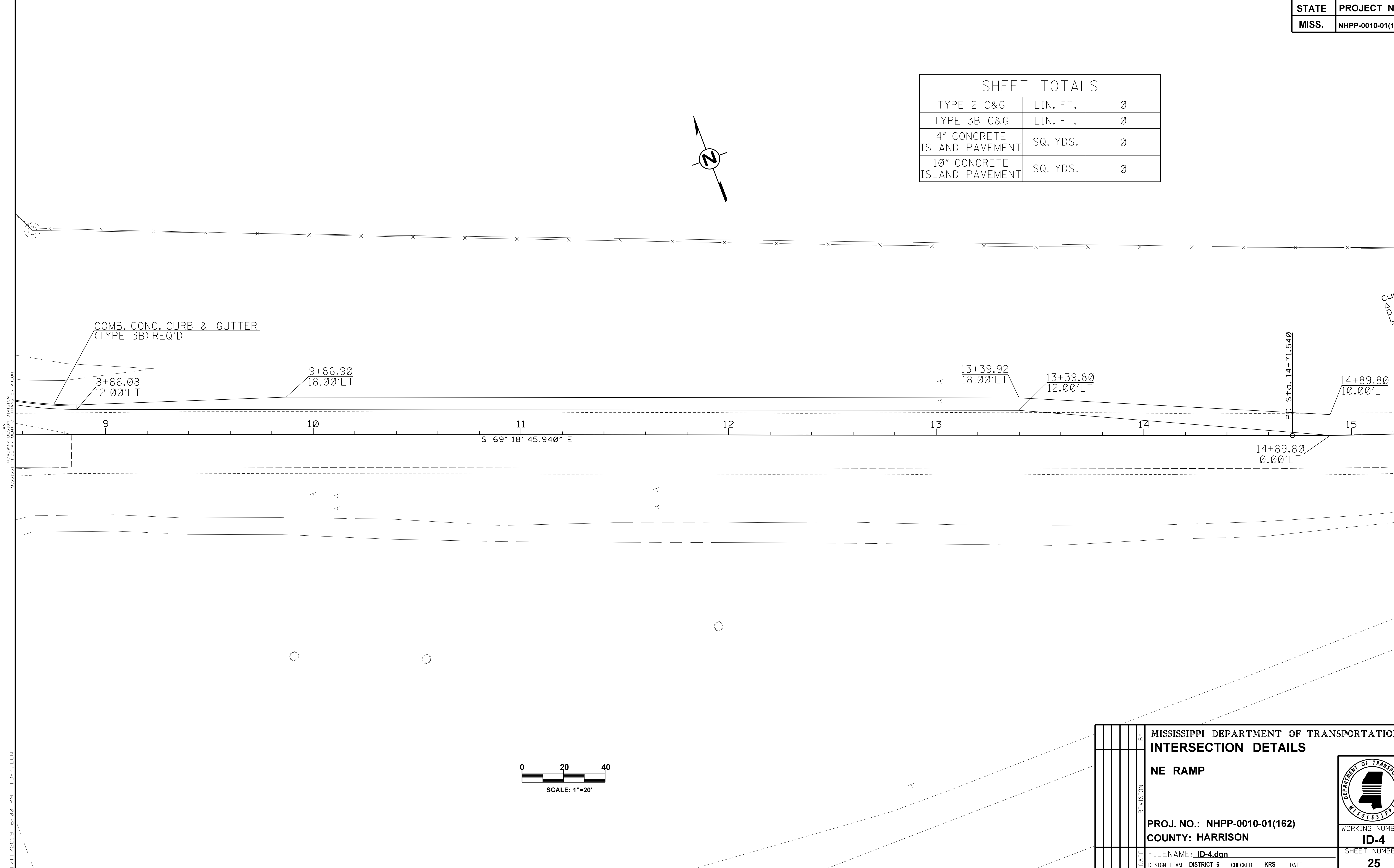
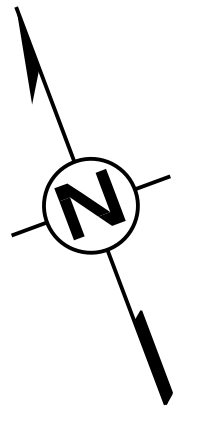
1/11/2019 6:00 PM ID-3.dgn



MISSISSIPPI DEPARTMENT OF TRANSPORTATION		
INTERSECTION DETAILS		
COUNTY FARM ROAD		WORKING NUMBER
PROJ. NO.: NHPP-0010-01(162)		ID-3
COUNTY: HARRISON		SHEET NUMBER
FILENAME: ID-3.dgn		24
DATE	DESIGN TEAM DISTRICT 6	CHECKED KRS
REVISION	BY	DATE

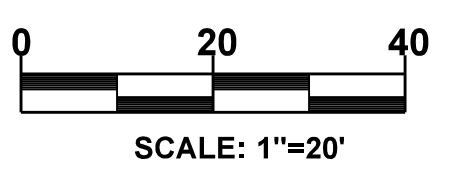
STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

SHEET TOTALS		
TYPE 2 C&G	LIN. FT.	0
TYPE 3B C&G	LIN. FT.	0
4" CONCRETE ISLAND PAVEMENT	SQ. YDS.	0
10" CONCRETE ISLAND PAVEMENT	SQ. YDS.	0



PLAN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

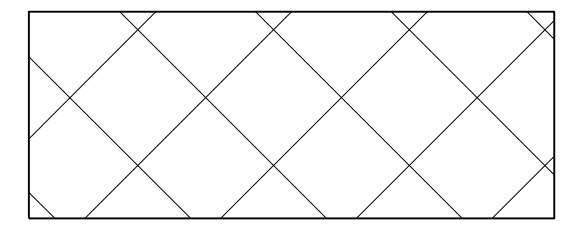
1/11/2019 6:00 PM ID-4.DGN



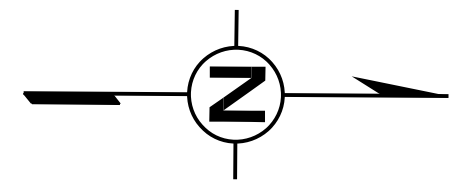
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
INTERSECTION DETAILS	
NE RAMP	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
FILENAME: ID-4.dgn	WORKING NUMBER
DESIGN TEAM DISTRICT 6	ID-4
CHECKED KRS	SHEET NUMBER
DATE	25



STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



INDICATES PAVEMENT
REMOVAL AREA

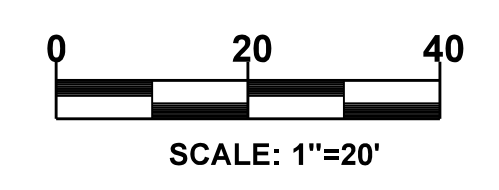


16 17 18 19 20 21

83 L.F. SAWCUT REQ'D
 56 L.F. SAWCUT REQ'D
 29 L.F. SAWCUT REQ'D
 113 L.F. C&G REMOVAL REQ'D
 114 L.F. C&G REMOVAL REQ'D
 90 L.F. C&G REMOVAL REQ'D
 40.5 SQ. YDS. PAVEMENT REMOVAL REQ'D
 65 SQ. YDS. CONC. ISLAND REMOVAL REQ'D

110 L.F. SAWCUT REQ'D
 96 L.F. C&G REMOVAL REQ'D
 42 L.F. SAWCUT REQ'D
 27.8 SQ. YDS. PAVEMENT REMOVAL REQ'D
 82 L.F. C&G REMOVAL REQ'D

SHEET TOTALS		
REMOVAL ITEMS		
PAVEMENT	SQ. YDS.	68.3
CURB & GUTTER	LIN. FT.	495.0
CONC. ISLAND	SQ. YDS.	65.0
F.E.S.	EACH	0
SAWCUT	LIN. FT.	320.0



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REMOVAL DETAILS	
COUNTY FARM ROAD	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: REM-1.dgn
DESIGN TEAM	DISTRICT 6
CHECKED	KRS
DATE	

REVISION	BY

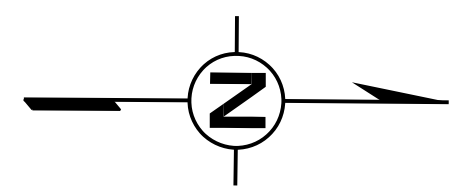
WORKING NUMBER
REM-1

SHEET NUMBER
26

1/11/2019 6:00 PM REM-1.dgn MISSISSIPPI DEPARTMENT OF TRANSPORTATION

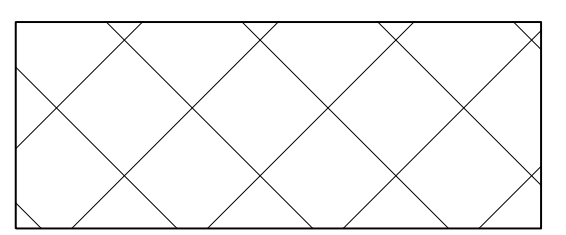
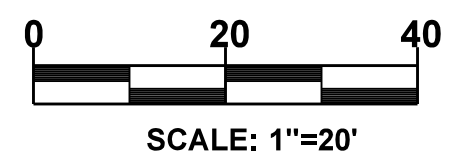
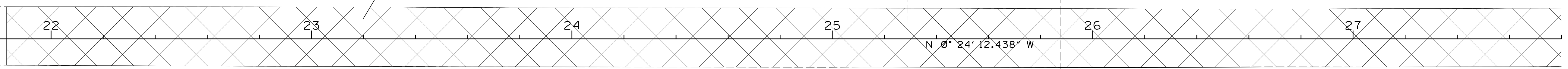
STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

SHEET TOTALS		
REMOVAL ITEMS		
PAVEMENT	SQ. YDS.	1498.3
CURB & GUTTER	LIN. FT.	0
CONC. ISLAND	SQ. YDS.	0
F.E.S.	EACH	0
SAWCUT	LIN. FT.	0



STA. 21+82.932

1498.3 SQ. YDS.
PAVEMENT REMOVAL REQ'D



INDICATES PAVEMENT
REMOVAL AREA

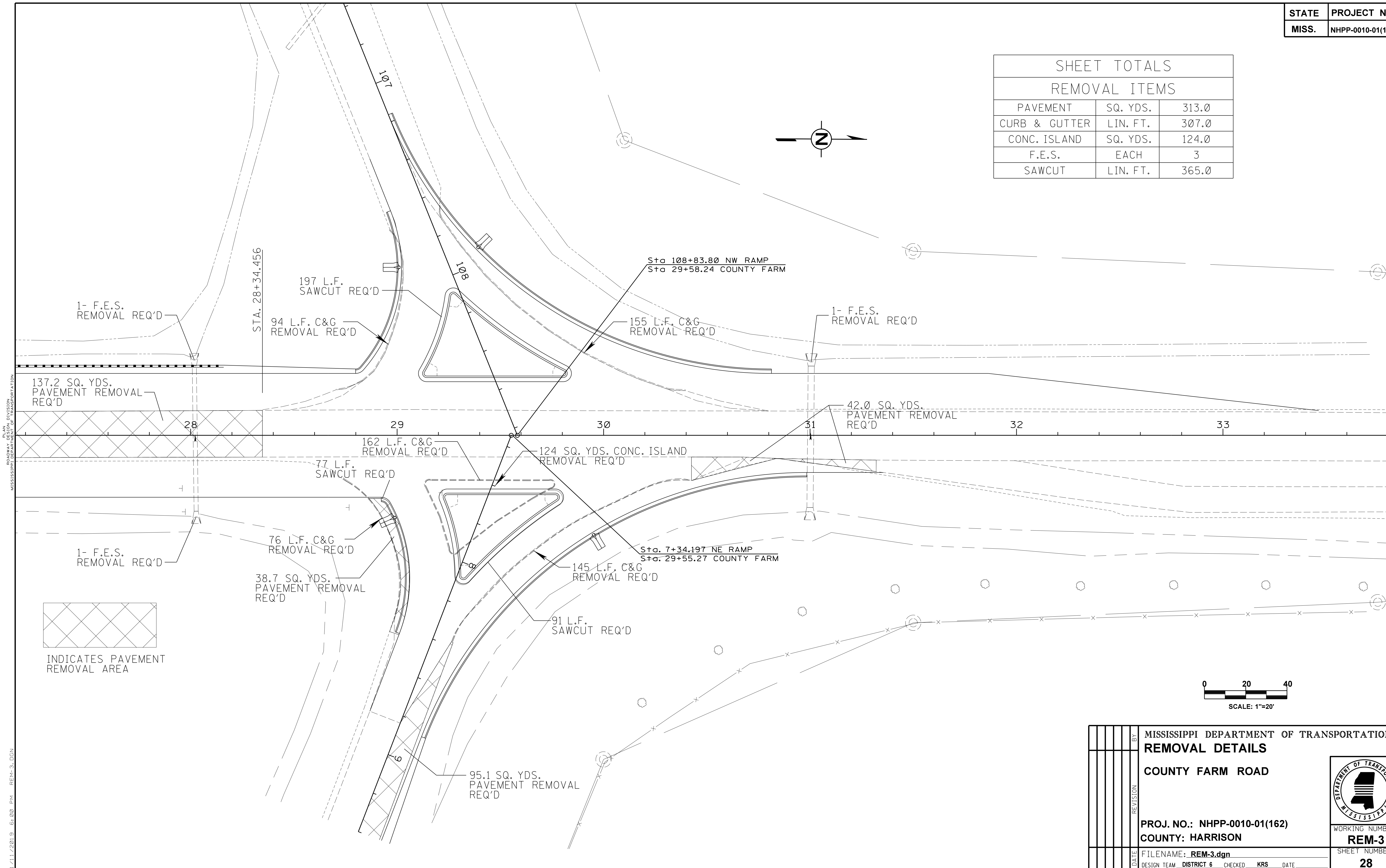
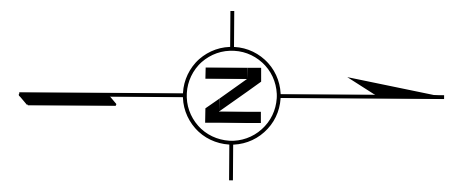
1/11/2019 6:00 PM REM-2.DGN MISSISSIPPI DEPARTMENT OF TRANSPORTATION

REVISION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
	DATE	REMOVAL DETAILS
DESIGN TEAM		COUNTY FARM ROAD
DISTRICT 6		PROJ. NO.: NHPP-0010-01(162)
CHECKED		COUNTY: HARRISON
KRS		WORKING NUMBER
DATE		REM-2
FILENAME: REM-2.dgn		SHEET NUMBER
27		27



STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

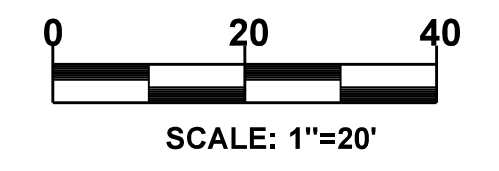
SHEET TOTALS		
REMOVAL ITEMS		
PAVEMENT	SQ. YDS.	313.0
CURB & GUTTER	LIN. FT.	307.0
CONC. ISLAND	SQ. YDS.	124.0
F.E.S.	EACH	3
SAWCUT	LIN. FT.	365.0



ROADWAY PLAN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1/11/2019 6:00 PM REM-3.dgn

INDICATES PAVEMENT
REMOVAL AREA

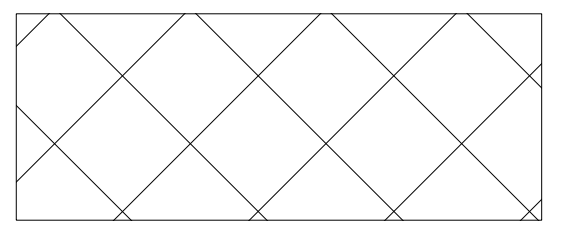


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REMOVAL DETAILS	
COUNTY FARM ROAD	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: REM-3.dgn
DESIGN TEAM	DISTRICT 6 CHECKED KRS DATE
WORKING NUMBER	REM-3
SHEET NUMBER	28

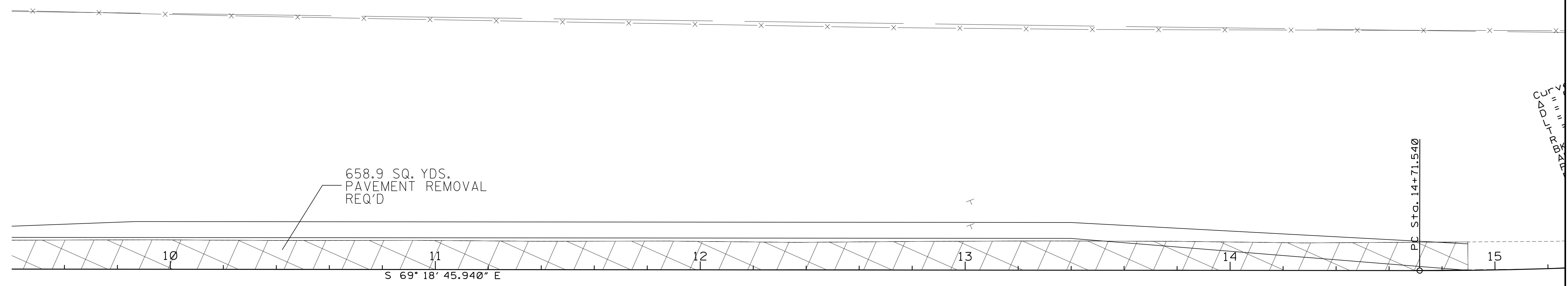
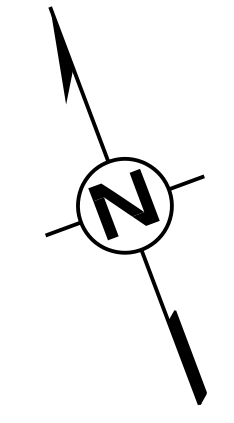


STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

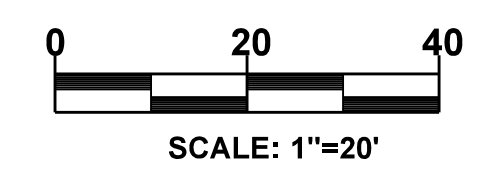
SHEET TOTALS		
REMOVAL ITEMS		
PAVEMENT	SQ. YDS.	658.9
CURB & GUTTER	LIN. FT.	0
CONC. ISLAND	SQ. YDS.	0
F.E.S.	EACH	0
SAWCUT	LIN. FT.	0




INDICATES PAVEMENT
REMOVAL AREA

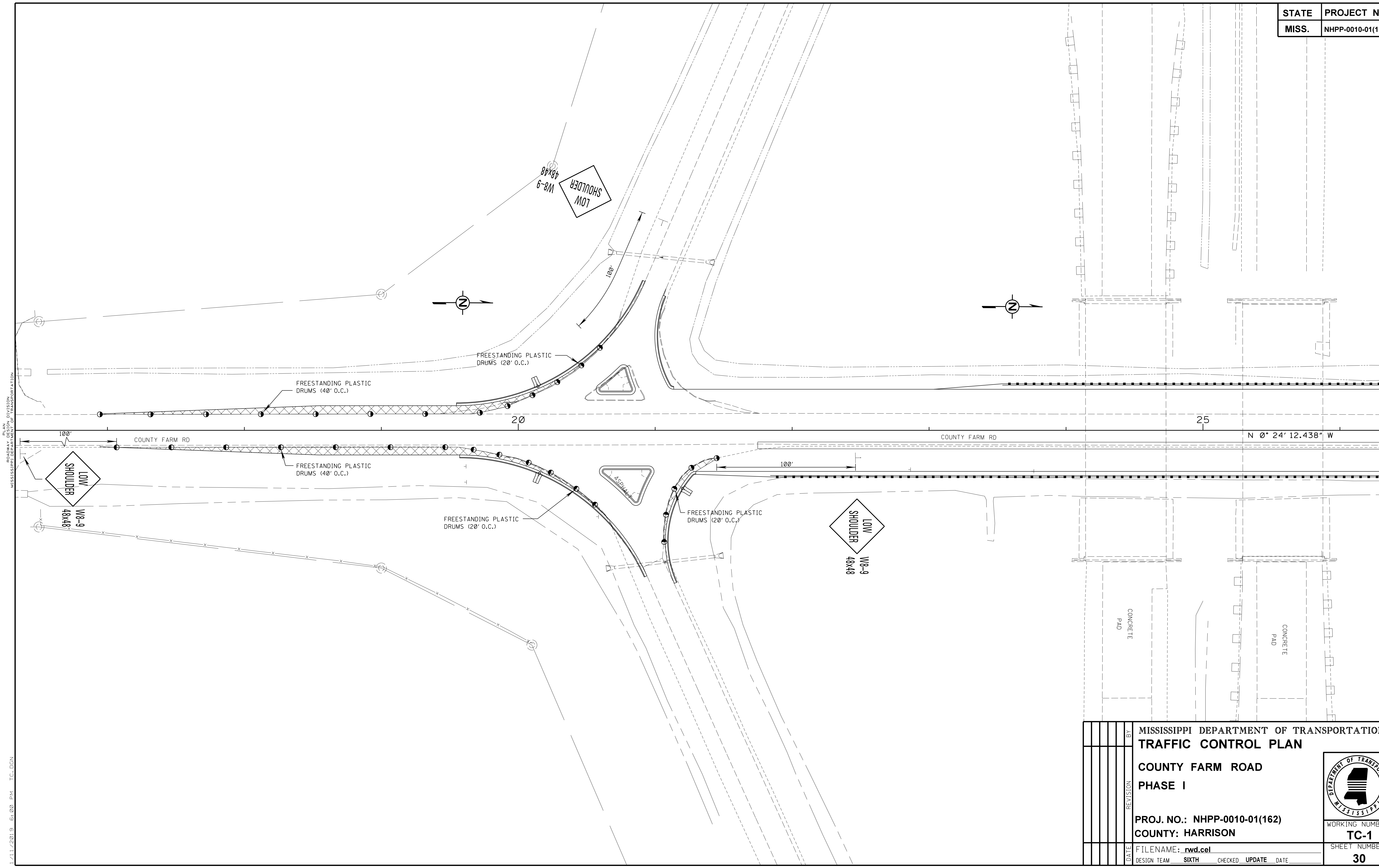


1/11/2019 6:00 PM REM-4.DGN



MISSISSIPPI DEPARTMENT OF TRANSPORTATION REMOVAL DETAILS NE RAMP		 WORKING NUMBER REM-4 SHEET NUMBER 29
PROJ. NO.: NHPP-0010-01(162) COUNTY: HARRISON		
REVISION DATE	FILENAME: REM-4.dgn DESIGN TEAM DISTRICT 6 CHECKED KRS DATE	

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



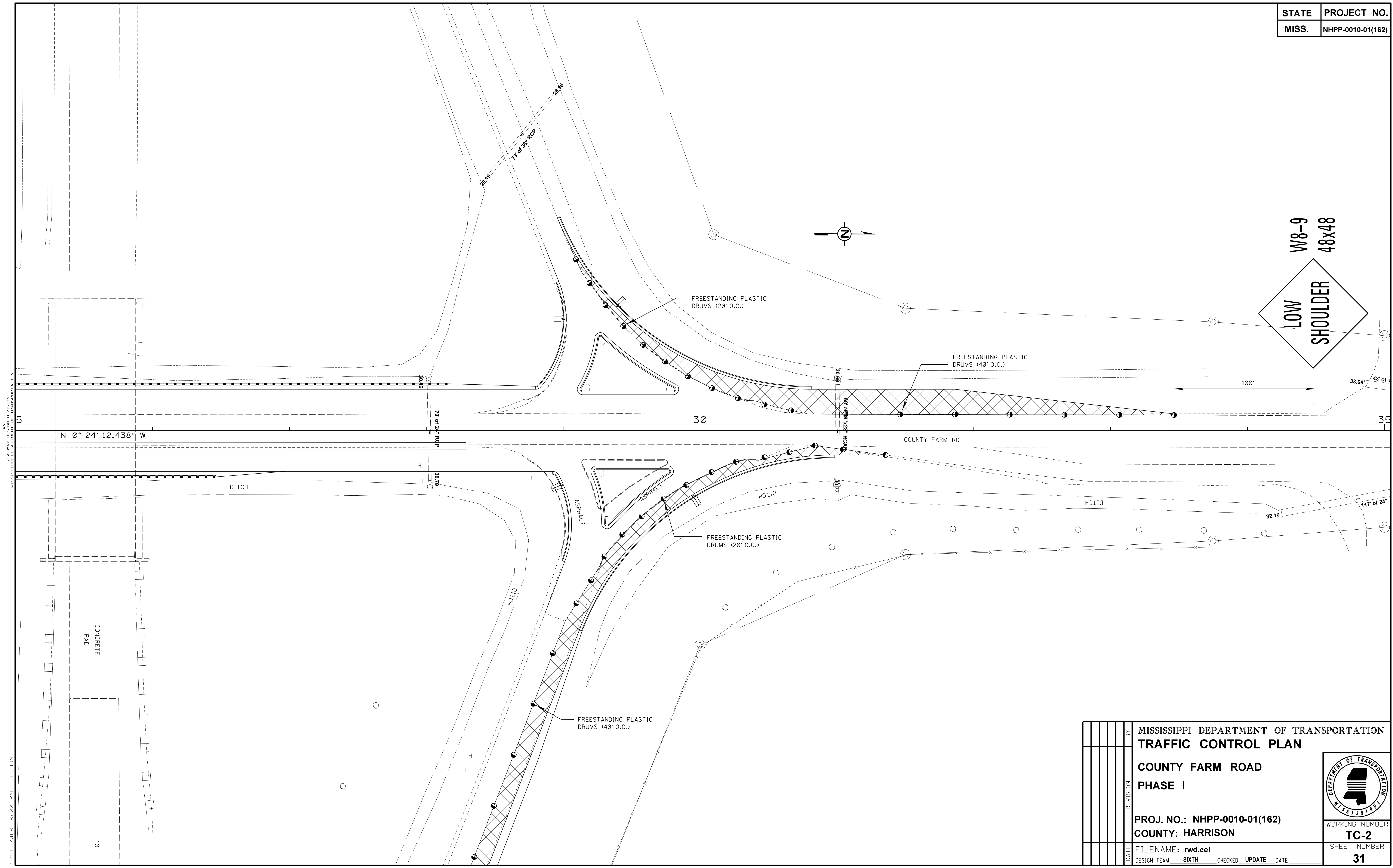
ROADWAY PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION 1/11/2019 6:00 PM TC.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
COUNTY FARM ROAD	
PHASE I	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: <u>rwd.cel</u>
DESIGN TEAM	SIXTH
CHECKED	UPDATE
DATE	

WORKING NUMBER	TC-1
SHEET NUMBER	30



STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



1/11/2019 6:00 PM TC.DGN

CONCRETE PAD
1-10

REVISION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
		TRAFFIC CONTROL PLAN
		COUNTY FARM ROAD
		PHASE I
		PROJ. NO.: NHPP-0010-01(162)
		COUNTY: HARRISON
		WORKING NUMBER
		TC-2
		SHEET NUMBER
		31

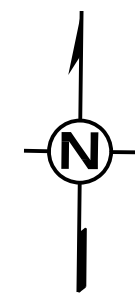
FILENAME: rwd.cel
 DESIGN TEAM SIXTH CHECKED UPDATE DATE _____



STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

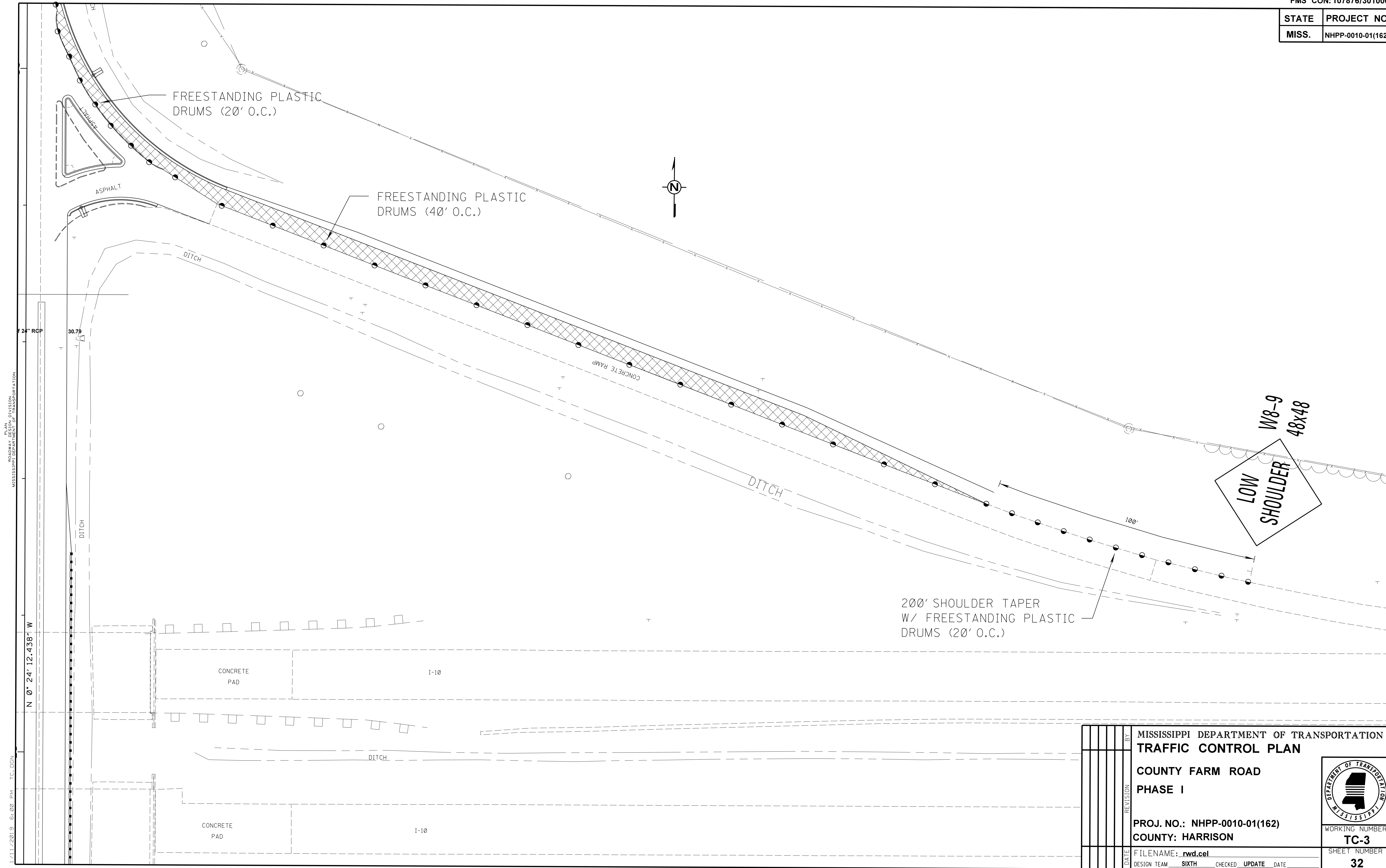
FREESTANDING PLASTIC DRUMS (20' O.C.)

FREESTANDING PLASTIC DRUMS (40' O.C.)



LOW SHOULDER
W/8-9
48x48

200' SHOULDER TAPER
W/ FREESTANDING PLASTIC
DRUMS (20' O.C.)




1/11/2019 6:00 PM TC.DGN

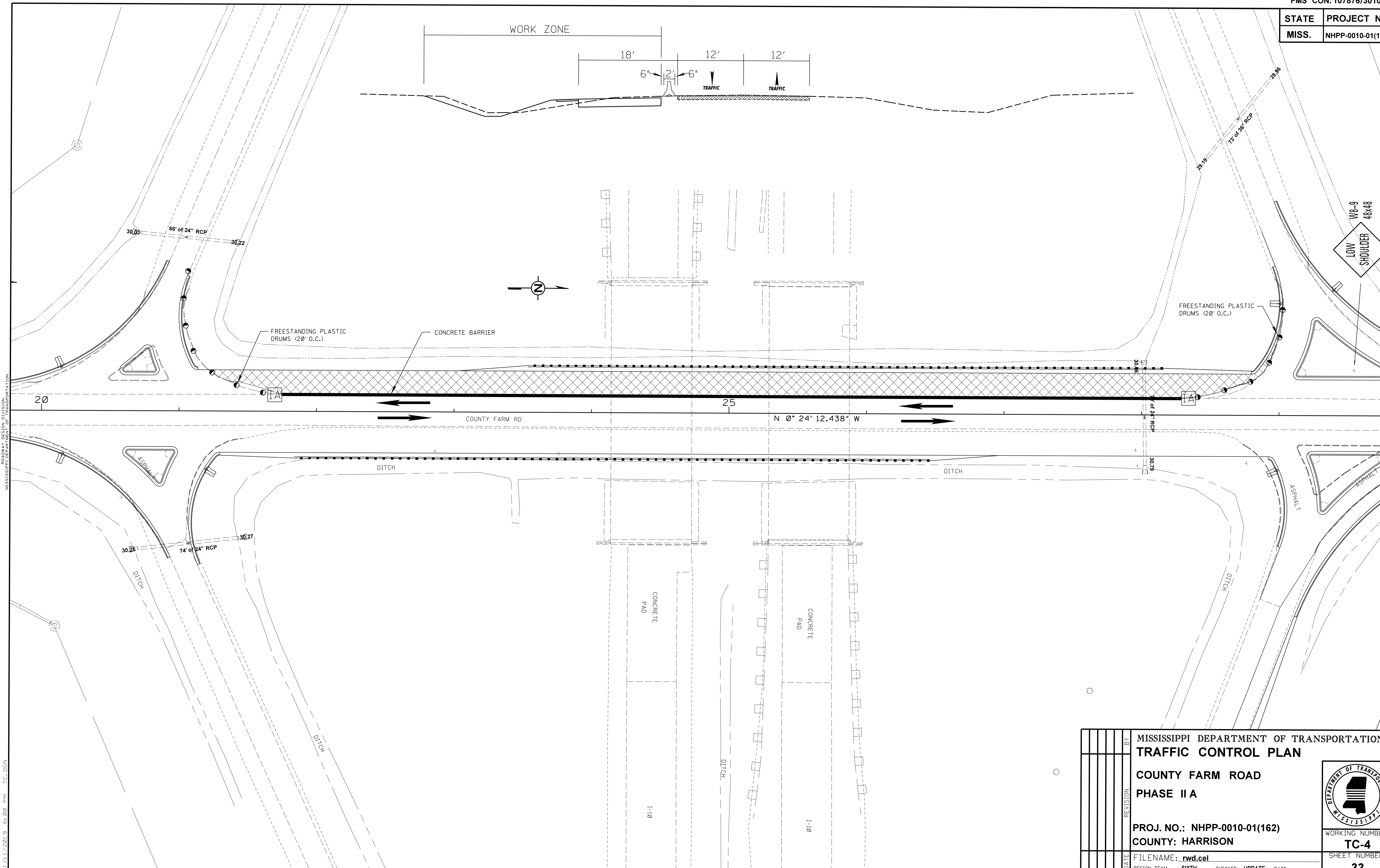
N 0° 24' 12.438" W

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
COUNTY FARM ROAD	
PHASE I	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: rwd.cel
DESIGN TEAM	SIXTH
CHECKED	UPDATE
DATE	

WORKING NUMBER	TC-3
SHEET NUMBER	32




STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



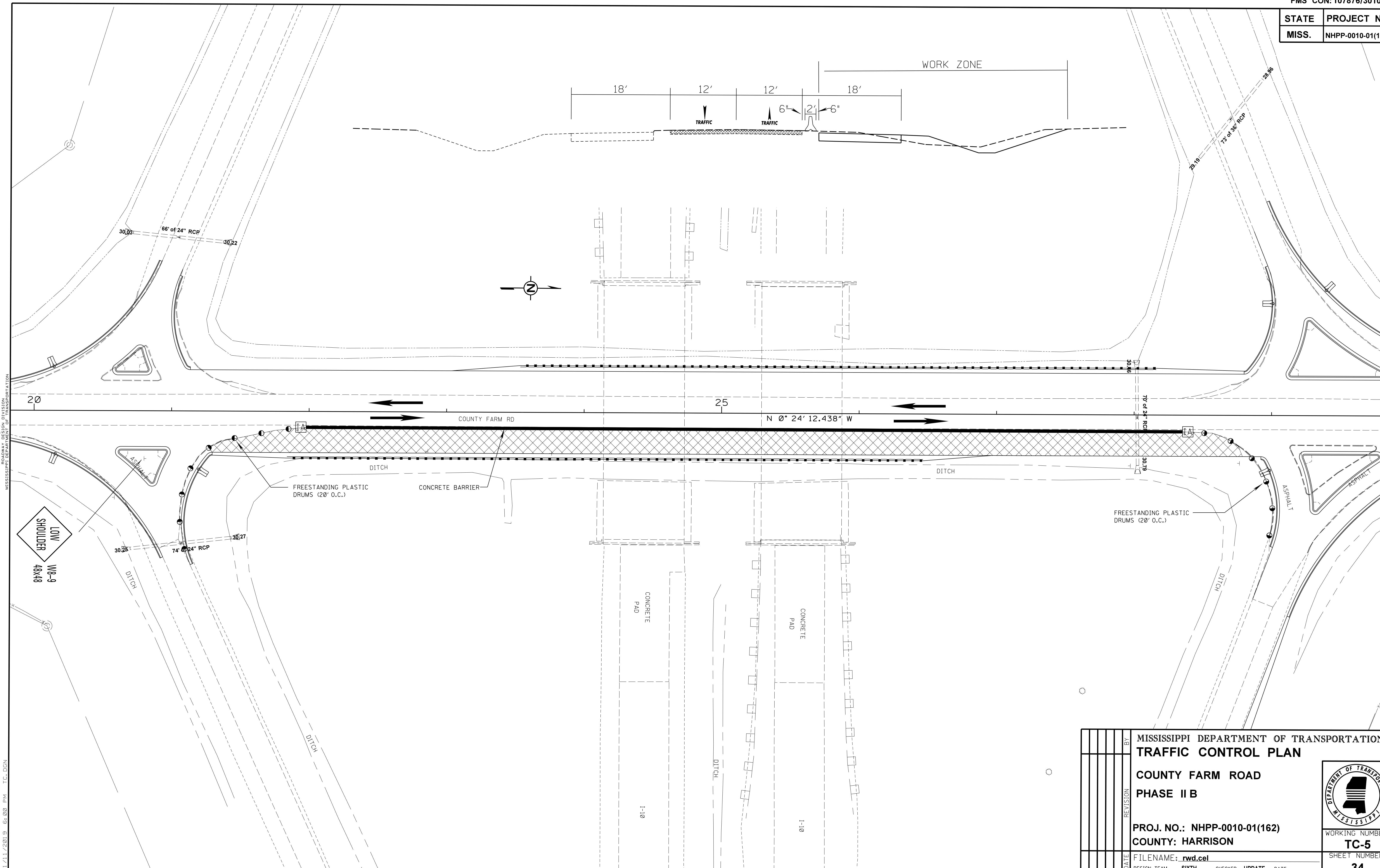
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1/11/2019 6:00 PM TC.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
COUNTY FARM ROAD	
PHASE II A	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: <u>rwd.cel</u>
DESIGN TEAM	SIXTH
CHECKED	UPDATE
DATE	

	
WORKING NUMBER	TC-4
SHEET NUMBER	33

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



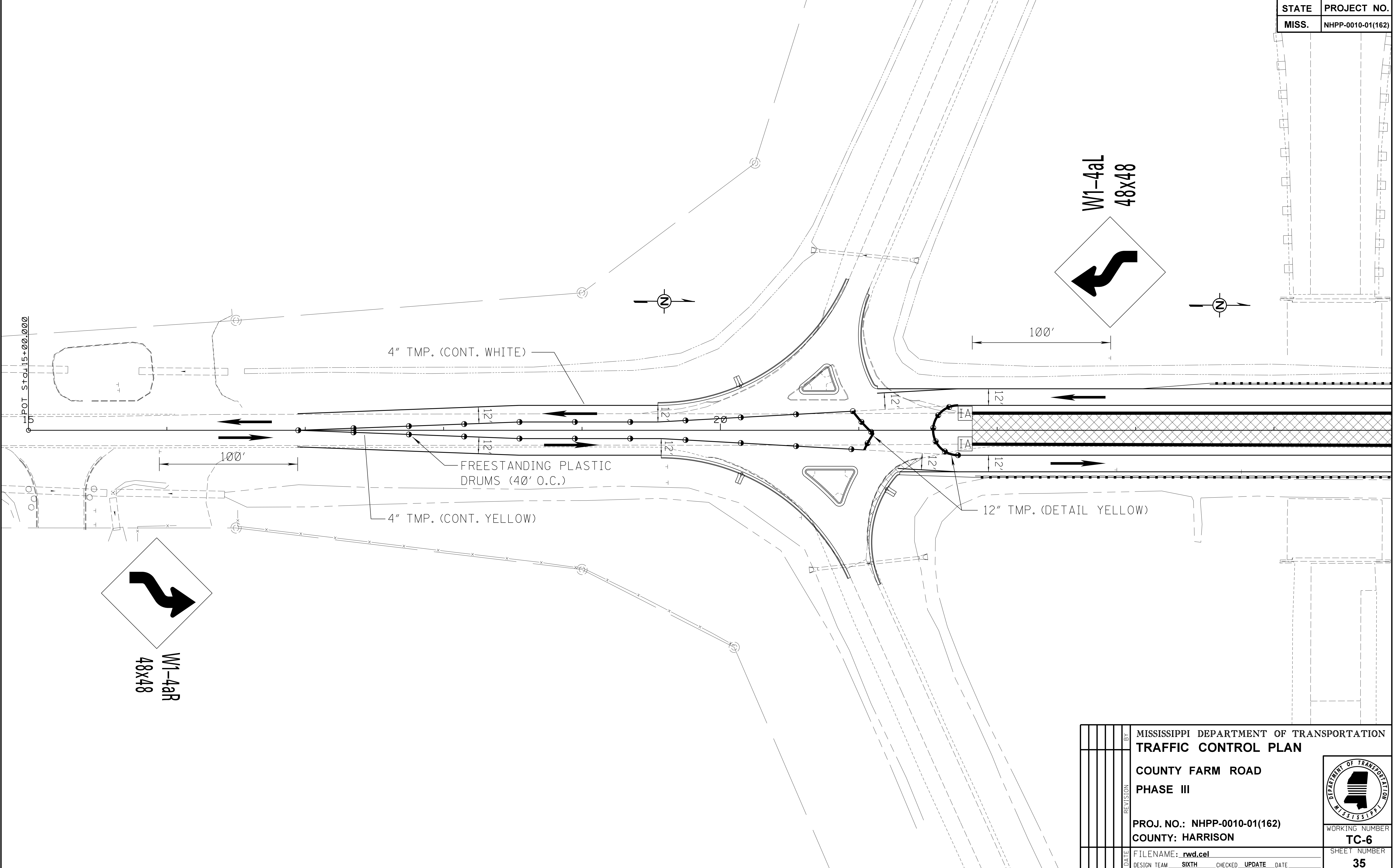
1/11/2019 6:00 PM TC.DGN MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
COUNTY FARM ROAD	
PHASE II B	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: rwd.cel
DESIGN TEAM	SIXTH
CHECKED	UPDATE
DATE	



WORKING NUMBER	TC-5
SHEET NUMBER	34

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

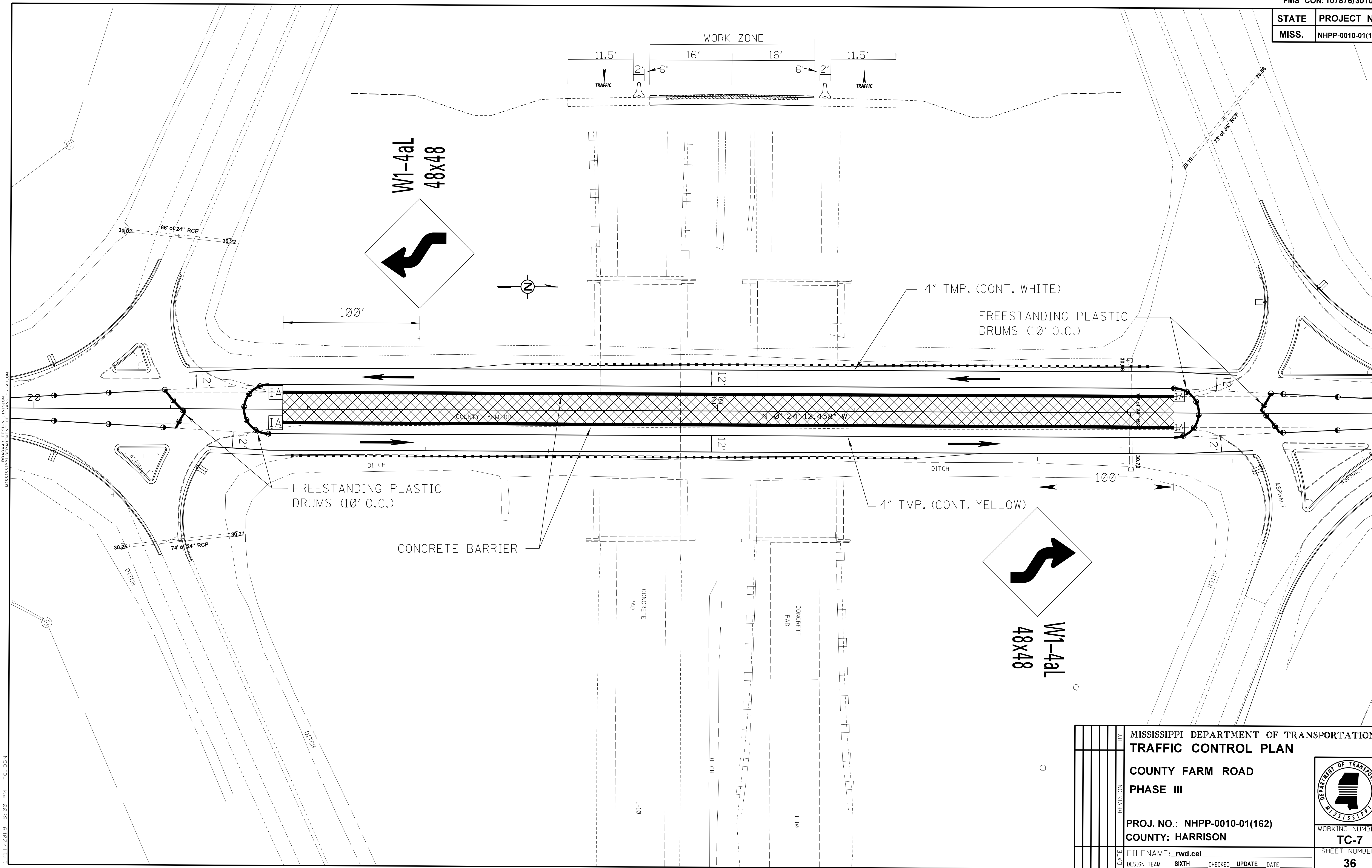


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
COUNTY FARM ROAD	
PHASE III	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: <u>rwd.cel</u>
DESIGN TEAM	SIXTH
CHECKED	UPDATE
DATE	
REVISION	BY




WORKING NUMBER	TC-6
SHEET NUMBER	35

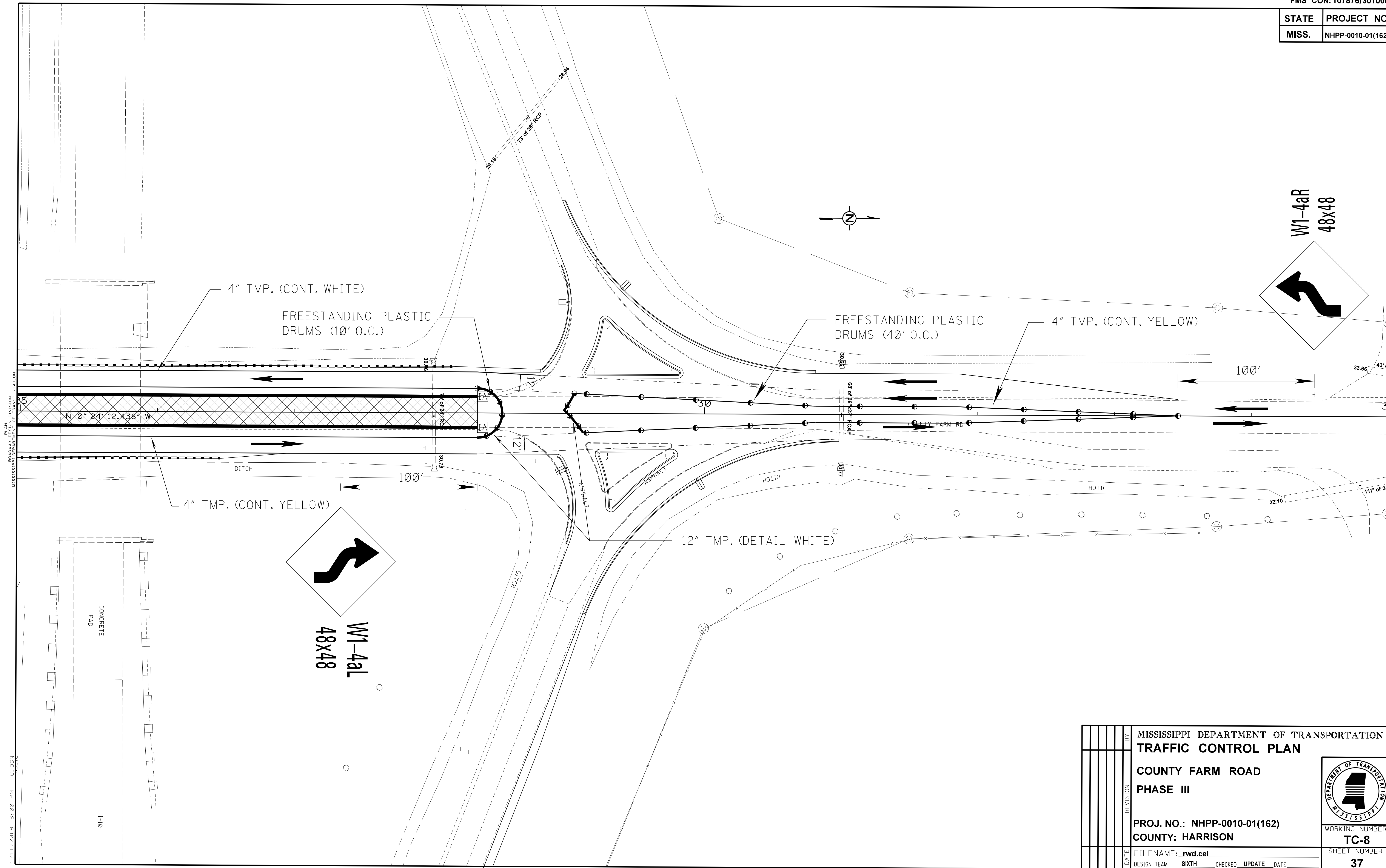
STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)



11/17/2019 6:00 PM TC.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
COUNTY FARM ROAD	
PHASE III	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: rwd.cel
DESIGN TEAM	SIXTH
CHECKED	UPDATE
DATE	

 DEPARTMENT OF TRANSPORTATION MISSISSIPPI	WORKING NUMBER
	TC-7
SHEET NUMBER	36



PLAN
ROADWAY DESIGN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1/11/2019 6:00 PM TC.DGN

CONCRETE PAD

1-10

4" TMP. (CONT. WHITE)

FREESTANDING PLASTIC DRUMS (10' O.C.)

FREESTANDING PLASTIC DRUMS (40' O.C.)

4" TMP. (CONT. YELLOW)

4" TMP. (CONT. YELLOW)

12" TMP. (DETAIL WHITE)

W1-4aR
48x48

W1-4aL
48x48

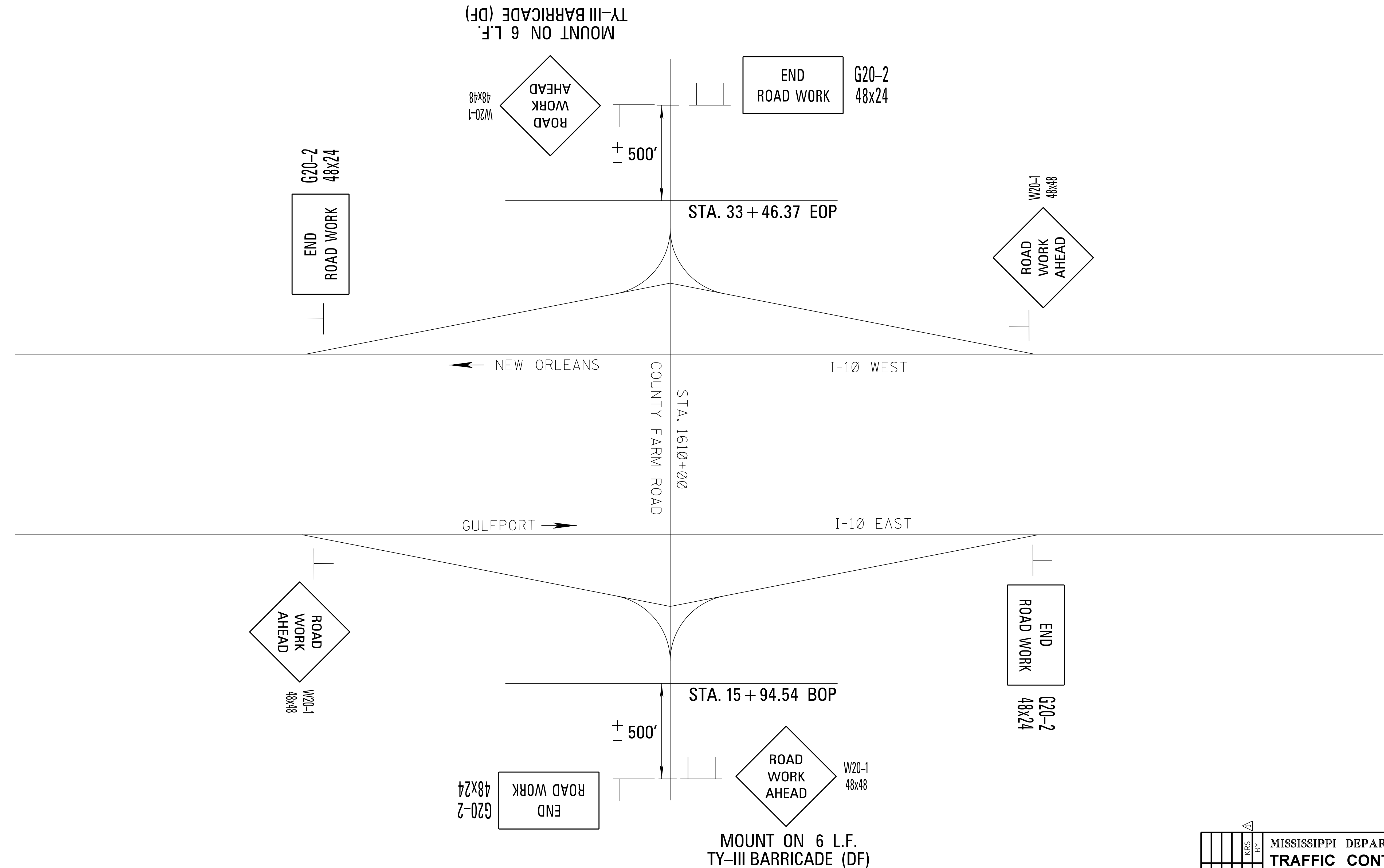
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLAN	
COUNTY FARM ROAD	
PHASE III	
PROJ. NO.: NHPP-0010-01(162)	
COUNTY: HARRISON	
DATE	FILENAME: rwd.cel
DESIGN TEAM	SIXTH
CHECKED	UPDATE
DATE	

WORKING NUMBER	TC-8
SHEET NUMBER	37



STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

1st O.REV.



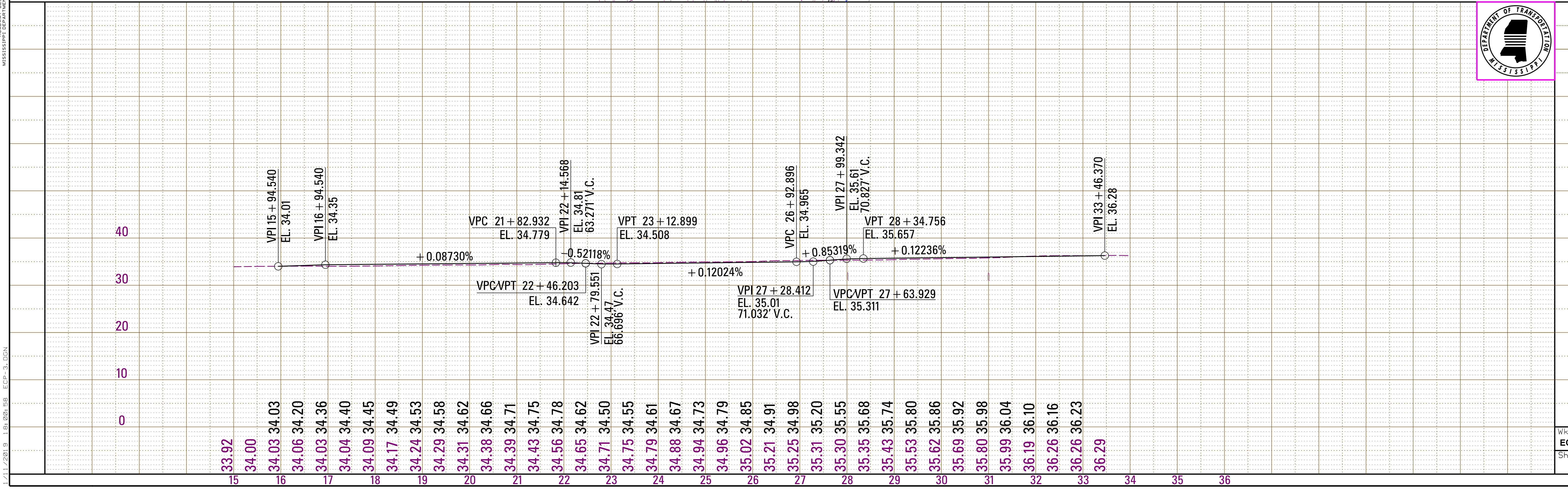
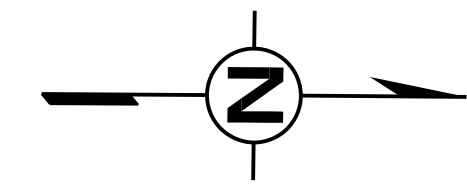
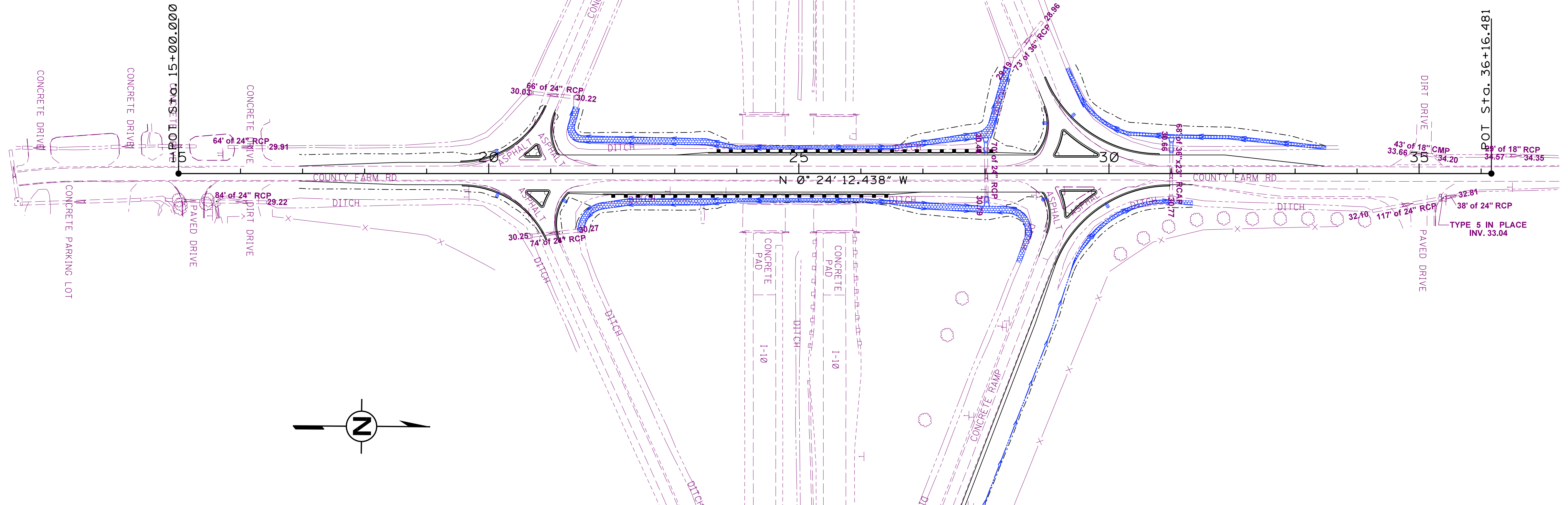
NOTE: LOCATIONS AND SPACING OF SIGNS MAY BE ADJUSTED TO MEET EXISTING FIELD CONDITIONS OR DIRECTED BY THE ENGINEER.

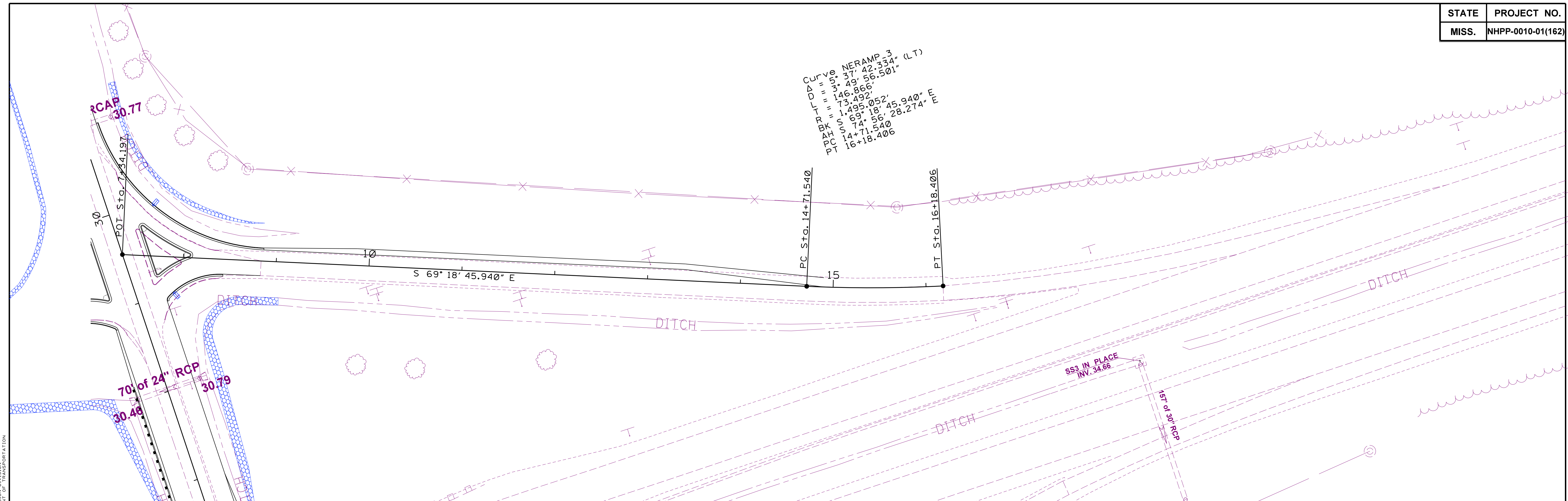
REVISION		BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		KRS		TRAFFIC CONTROL PLAN	
REVISION		KRS		DETAILS FOR CONSTRUCTION SIGNING	
REVISION		KRS		COUNTY: HARRISON	
REVISION		KRS		PROJ. NUM.: NHPP-0010-01(162)	
REVISION		KRS		WORKING NUMBER TC-9	
REVISION		KRS		SHEET NUMBER 38	
DATE		DESIGN TEAM		FILENAME: TCP-17.DGN	
DATE		SIXTH		DATE 12.6.18	



3/1/2019 3:08 PM TCP-17.DGN

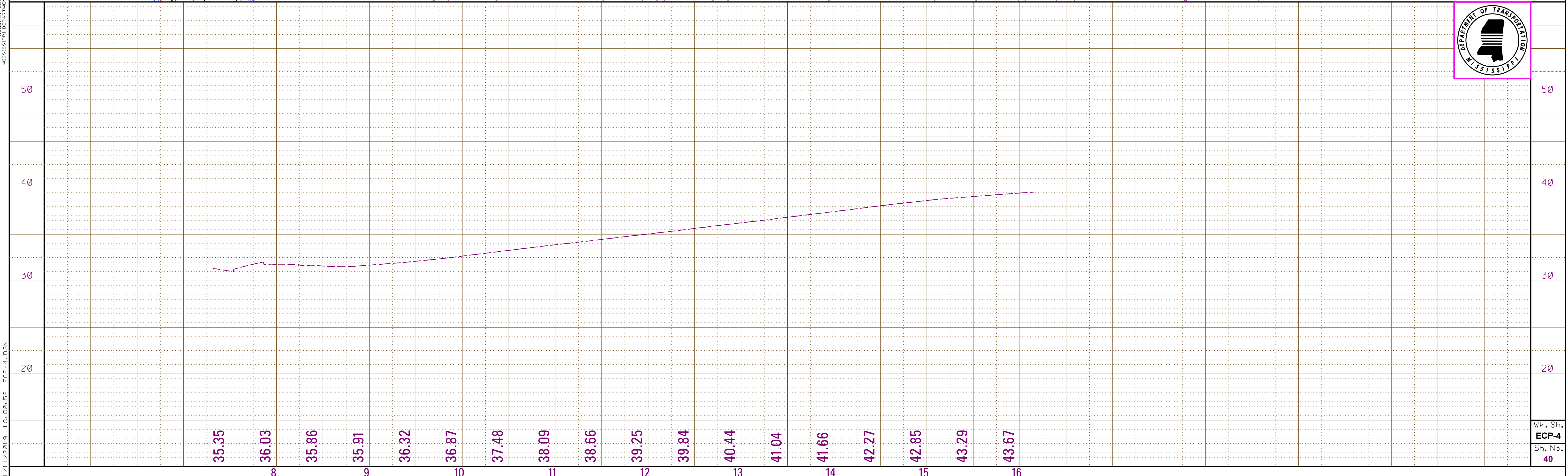
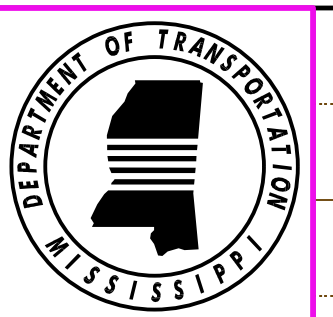
1/11/2019 1:04:58 ECP-3.DGN
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION
 ROADWAY DESIGN DIVISION





Curve: NERAMP 3
 $\Delta = 37.42.334''$ (LT)
 $D = 3.49' 56.501''$
 $TL = 146.866'$
 $TR = 73.492'$
 $BK = 1.495.052'$
 $S = 69.18' 45.940''$ E
 $PC = 14+71.540$
 $PT = 16+18.406$

L. L. BRYANT
 ROADWAY DESIGN DIVISION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION



1/11/2019 1:51:00:59 ECP-4.dgn

1st O.REV.

STATE	PROJECT NO.
MISS.	NHPP-0010-01(162)

GPS CONTROL NOTES

HORIZONTAL DATUM: NAD 83/2011 MS EAST ZONE (US SURVEY FEET)

HORIZONTAL MONUMENT	NORTH	EAST
V 364	318742.83	794461.59
U 376	339242.67	902357.78
E 368	303226.60	867296.02

VERTICAL DATUM: NAVD 88 (US SURVEY FEET)

VERTICAL MONUMENT	ELEVATION
V 364	14.93
E 368	25.23

ALL AZIMUTHS AND DISTANCES ARE GRID VALUES, US SURVEY FEET

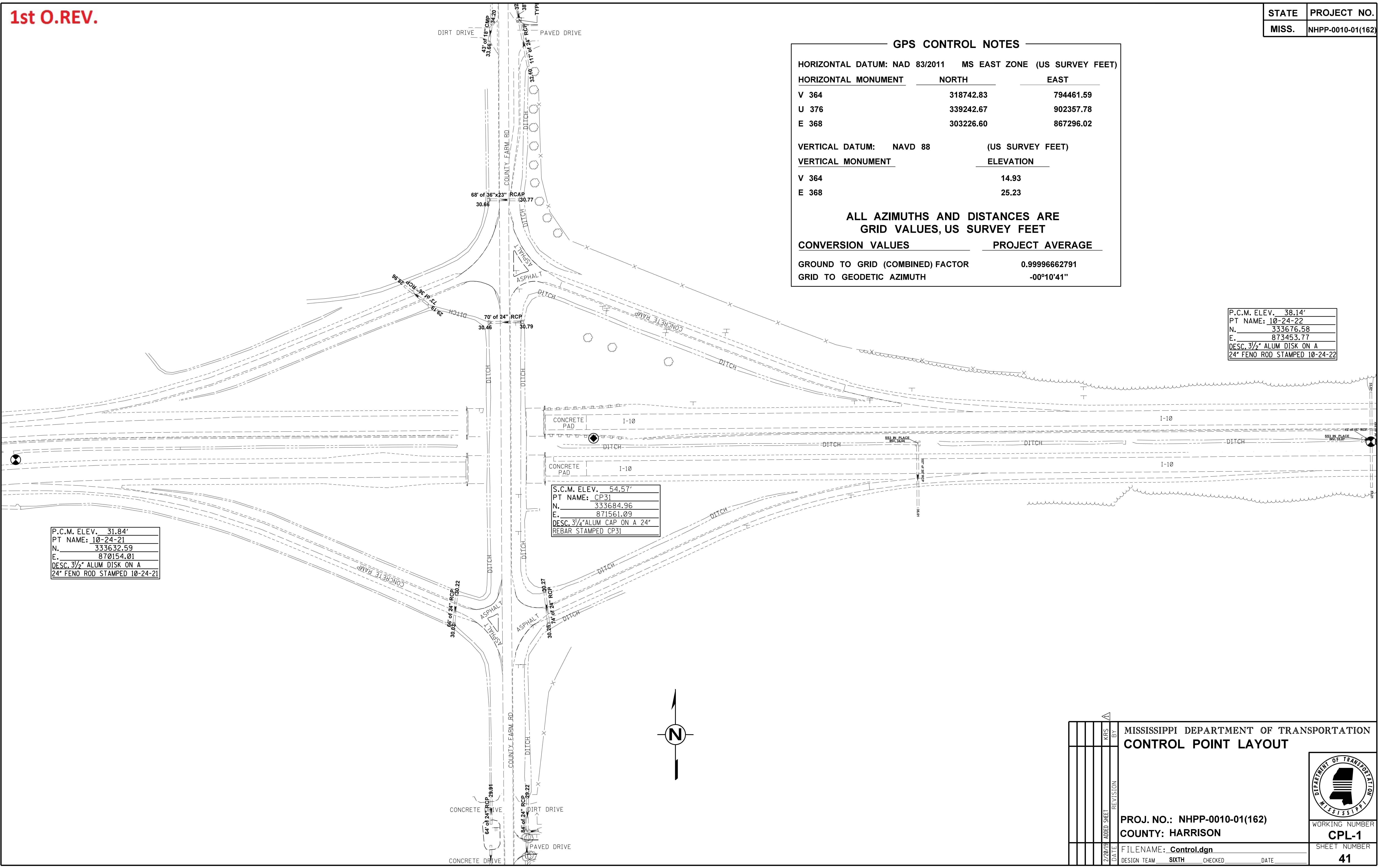
CONVERSION VALUES	PROJECT AVERAGE
GROUND TO GRID (COMBINED) FACTOR	0.99996662791
GRID TO GEODETIC AZIMUTH	-00°10'41"


P.C.M. ELEV.	38.14'
PT NAME:	10-24-22
N.	333676.58
E.	873453.77
DESC.	3/2" ALUM DISK ON A 24" FENO ROD STAMPED 10-24-22

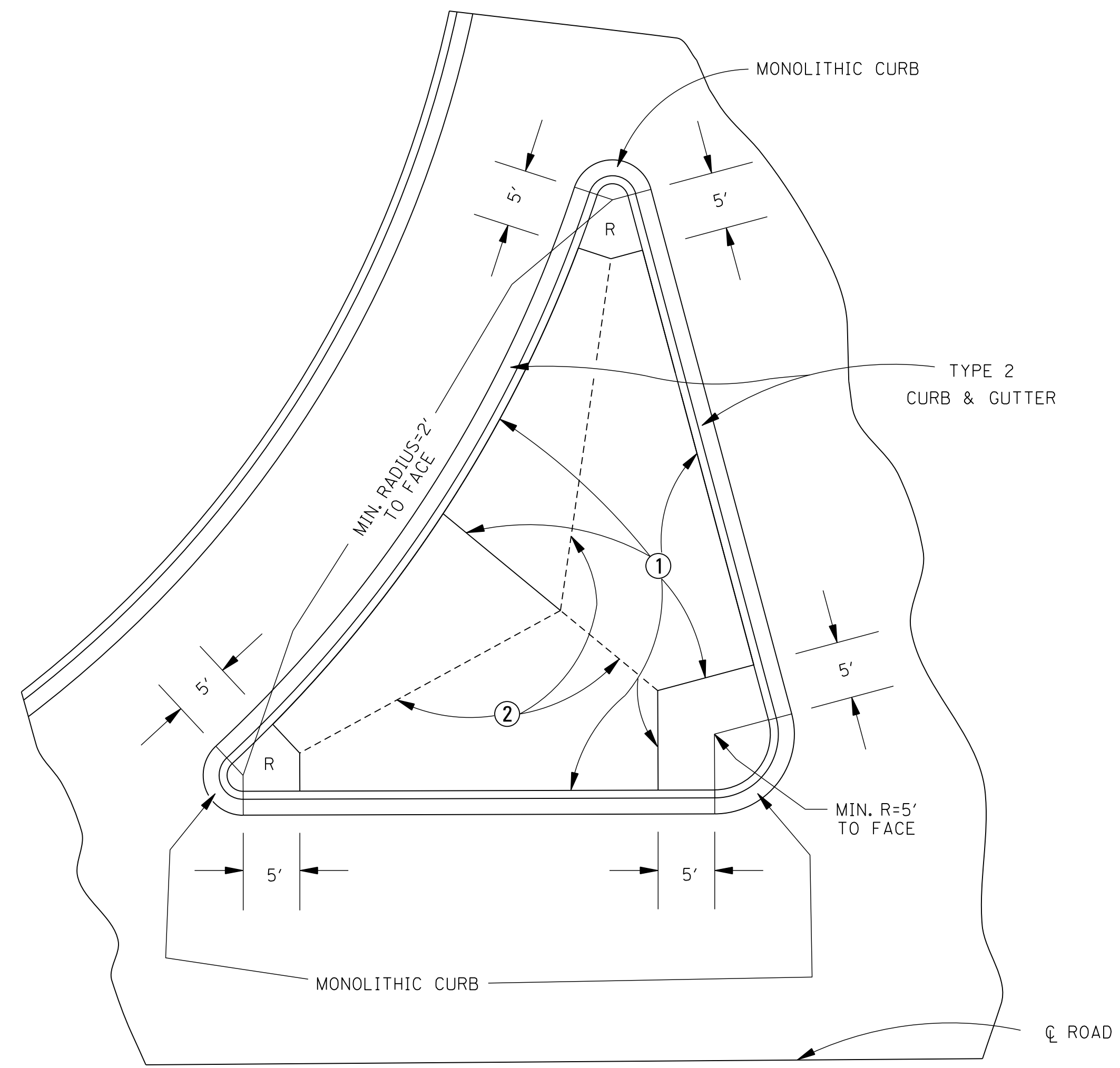
S.C.M. ELEV.	54.57'
PT NAME:	CP31
N.	333684.96
E.	871561.09
DESC.	3/4" ALUM CAP ON A 24" REBAR STAMPED CP31

P.C.M. ELEV.	31.84'
PT NAME:	10-24-21
N.	333632.59
E.	870154.01
DESC.	3/2" ALUM DISK ON A 24" FENO ROD STAMPED 10-24-21

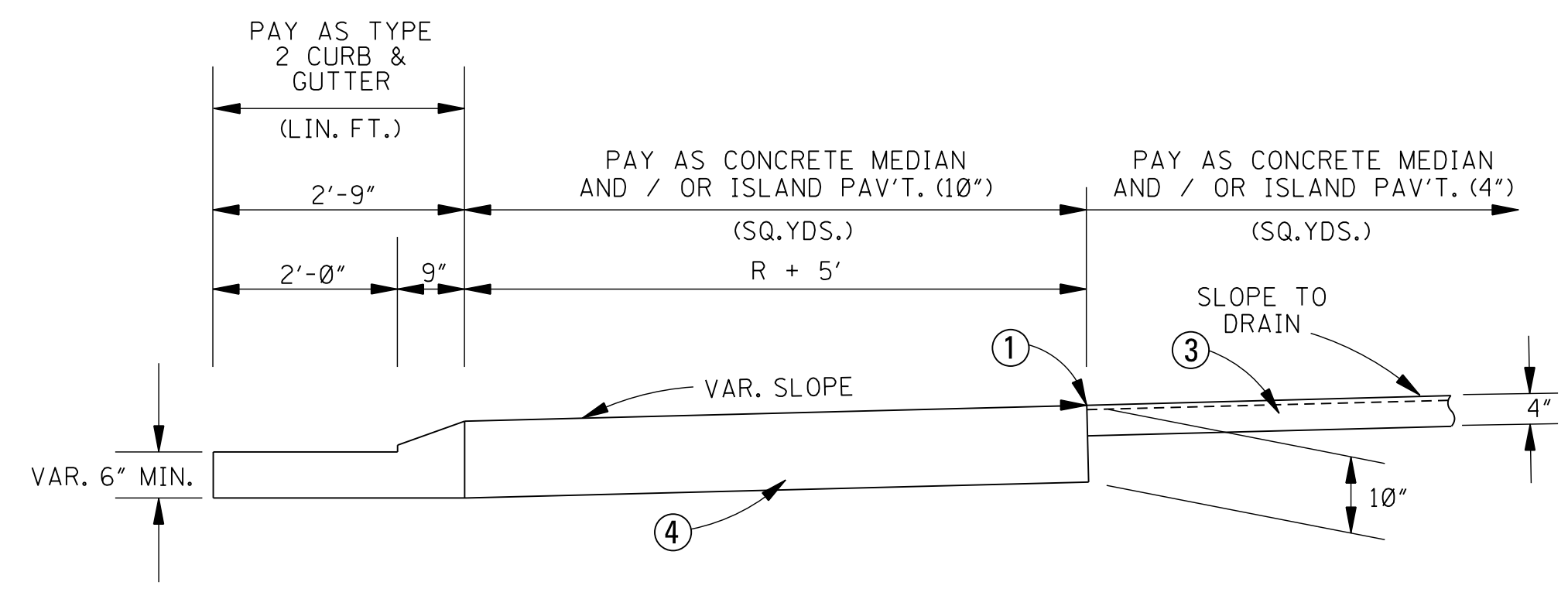
ROADWAY PLAN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION 3/1/2019 3:00 PM CONTROL.DGN



MISSISSIPPI DEPARTMENT OF TRANSPORTATION							
CONTROL POINT LAYOUT							
<table border="1"> <tr> <th>DATE</th> <th>REVISION</th> <th>BY</th> </tr> <tr> <td>2/20/19</td> <td>ADDED SHEET</td> <td>KRS</td> </tr> </table>	DATE	REVISION	BY	2/20/19	ADDED SHEET	KRS	<p>PROJ. NO.: NHPP-0010-01(162)</p> <p>COUNTY: HARRISON</p> <p>FILENAME: Control.dgn</p> <p>DESIGN TEAM: SIXTH</p> <p>CHECKED: _____ DATE: _____</p>
DATE	REVISION	BY					
2/20/19	ADDED SHEET	KRS					
							
<p>WORKING NUMBER</p> <p>CPL-1</p> <p>SHEET NUMBER</p> <p>41</p>							



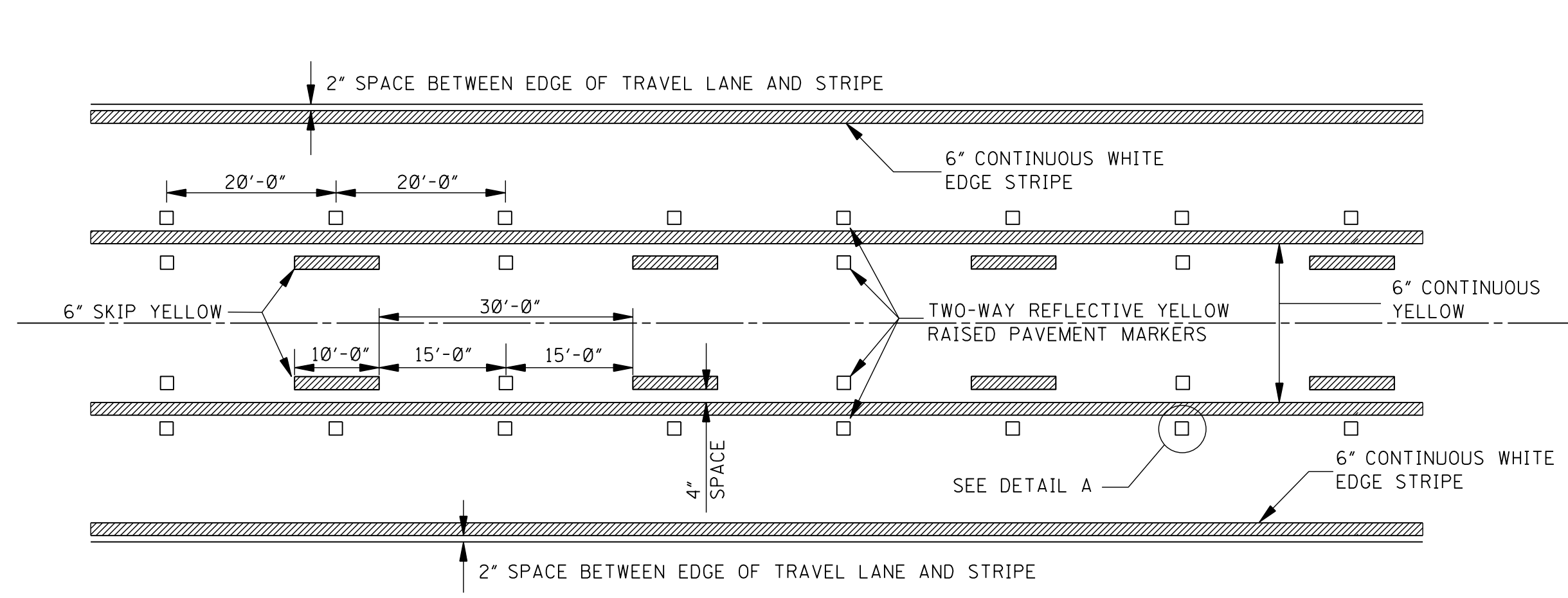
PLAN VIEW OF MONOLITHIC CURB & GUTTER AT ISLAND



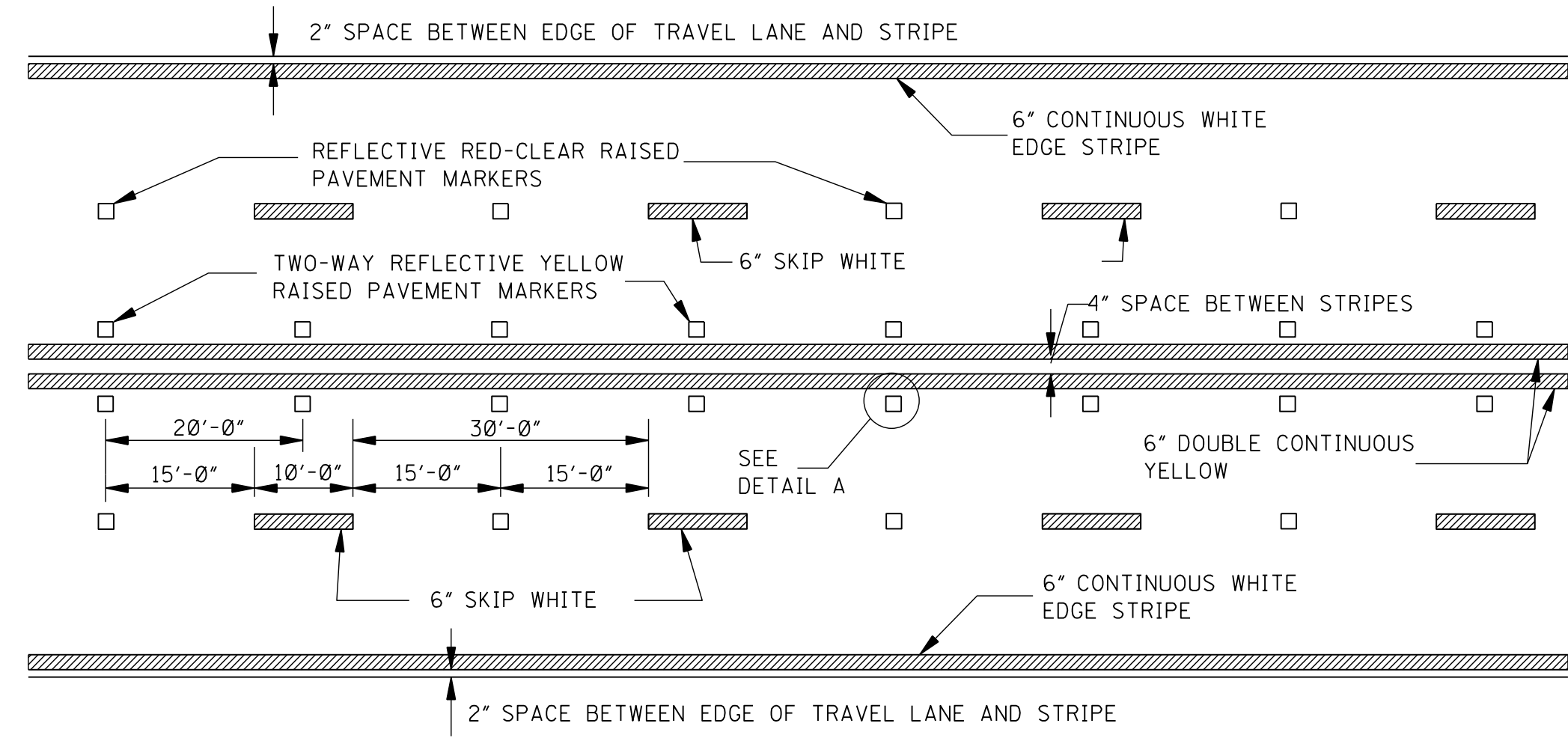
TYPICAL DETAIL OF MONOLITHIC CURB & GUTTER AT ISLAND

- ① 1/2" PREMOLDED EXPANSION JOINT (NOT A PAY ITEM) (SPACED AS PER SHEETS SD-1 OR SD-2)
- ② 1/2" TOOLED CONTRACTION JOINT OR 1/2" PREMOLDED EXPANSION JOINT (NOT A PAY ITEM) (SPACED AS PER SHEETS SD-1 OR SD-2) AS DIRECTED BY THE ENGINEER.
- ③ 4" CONCRETE MEDIAN AND/OR ISLAND PAVEMENT
- ④ 10" CONCRETE MEDIAN AND/OR ISLAND PAVEMENT

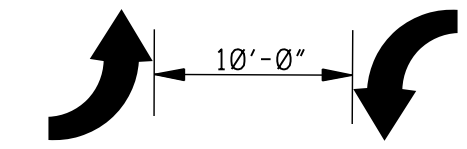
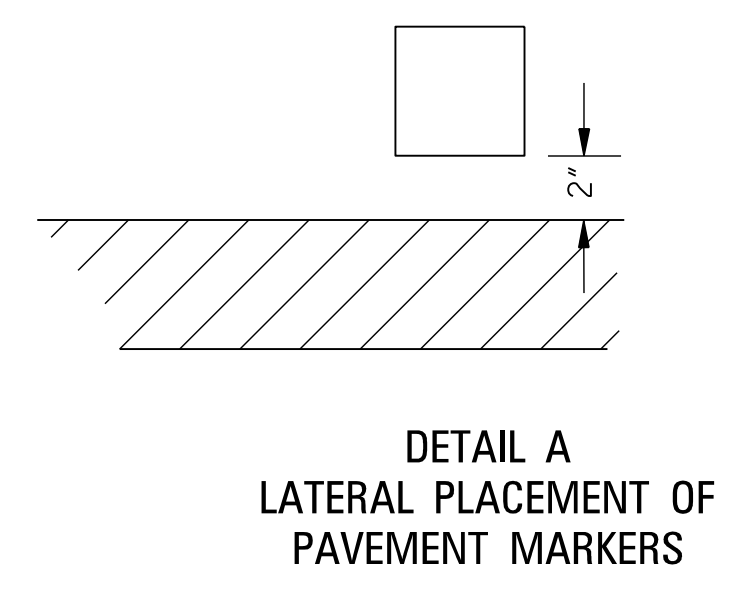
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		CONCRETE ISLAND PAVEMENT DETAILS	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
		 WORKING NUMBER CIP-1 SHEET NUMBER 6011	



TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 3-LANE SECTION

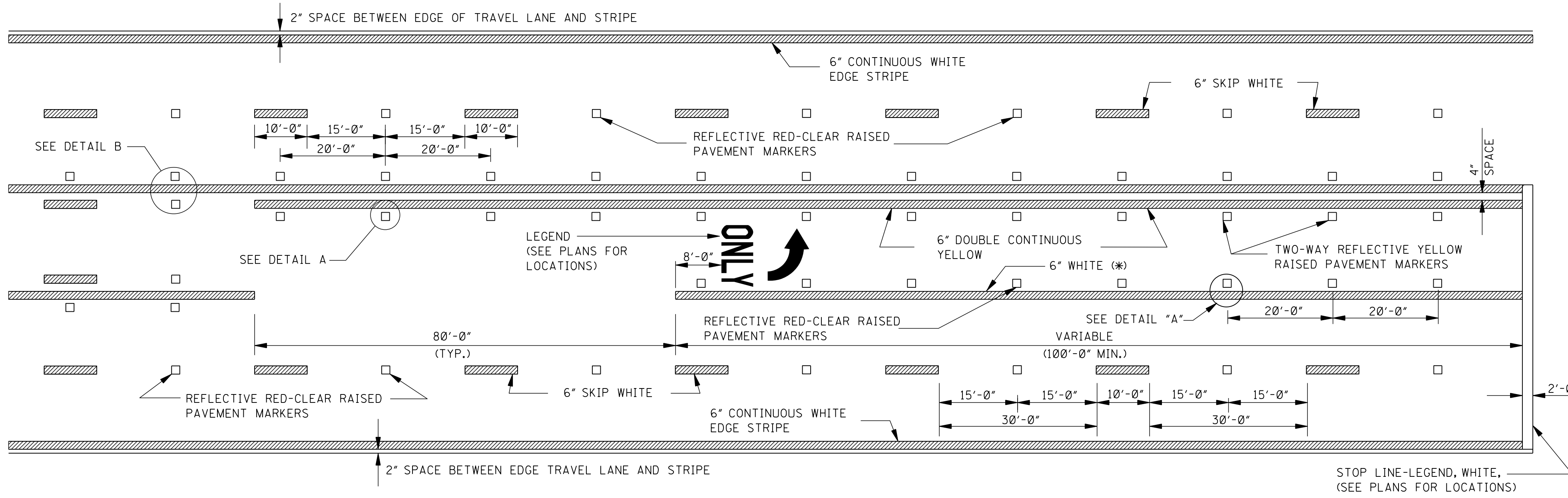


TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION



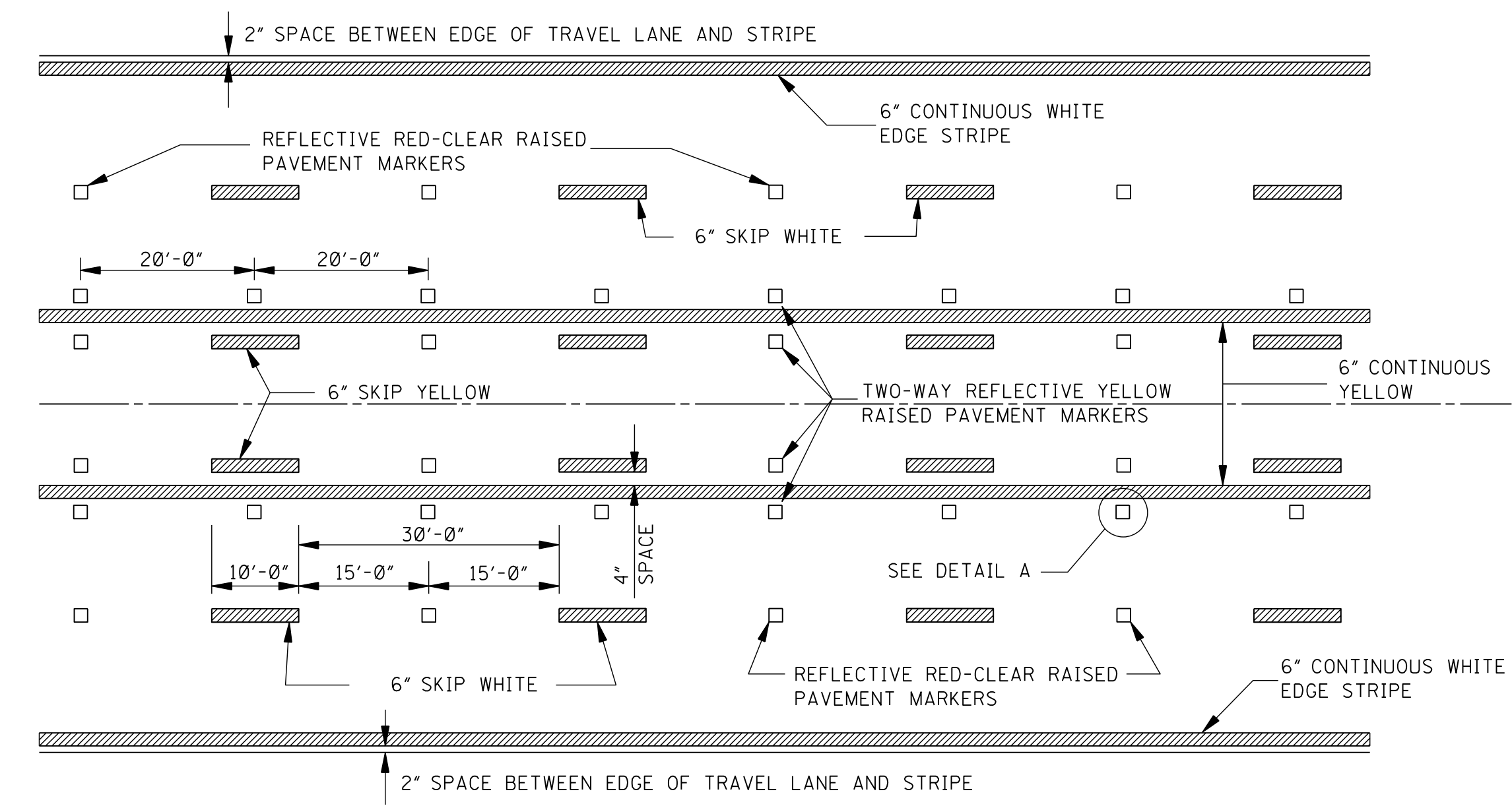
TYPICAL TWO-WAY ARROW INSTALLATION

NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
 2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
 3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).



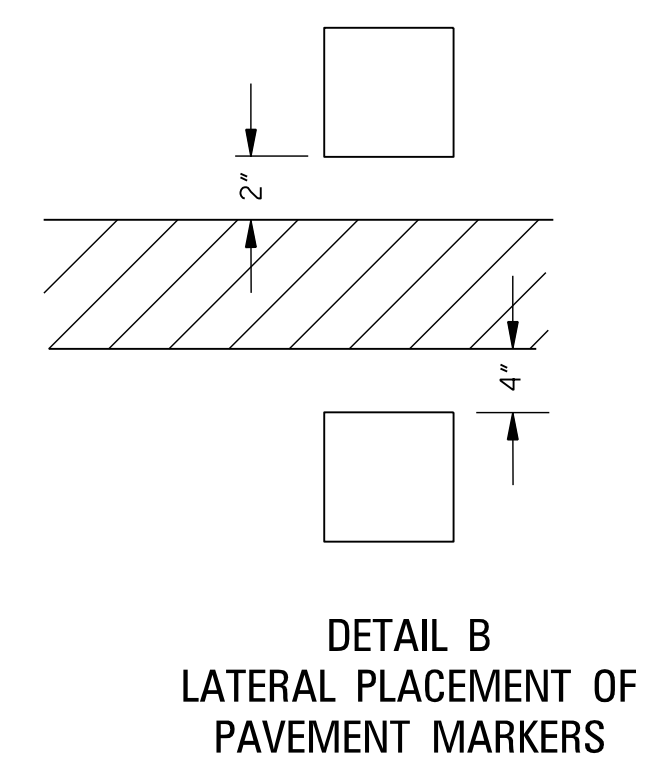
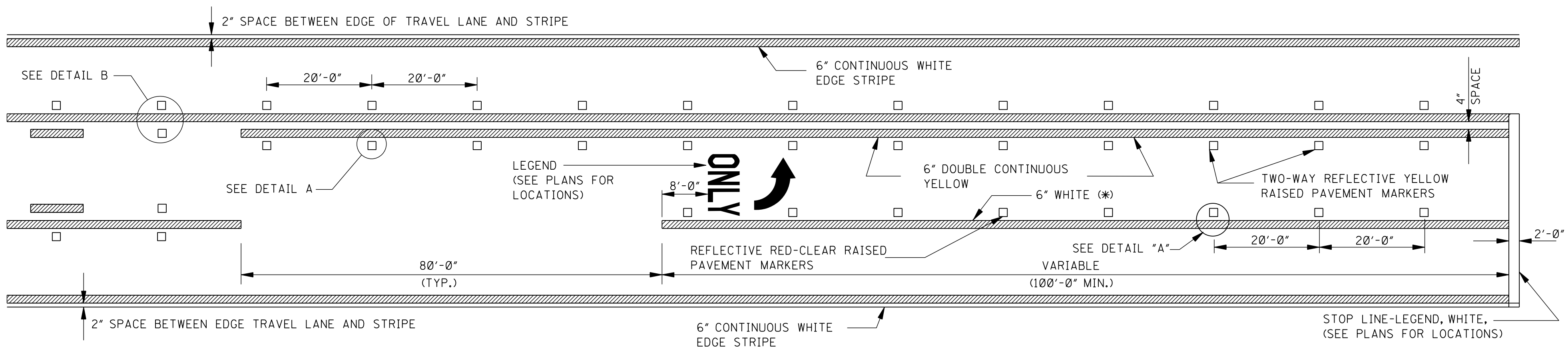
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES

* NOTE: USE DETAIL STRIPING IF LENGTH < 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.



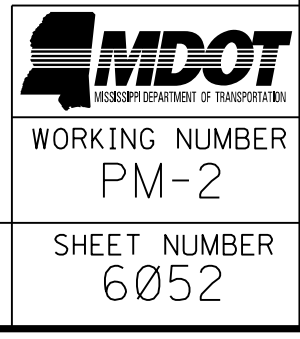
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION

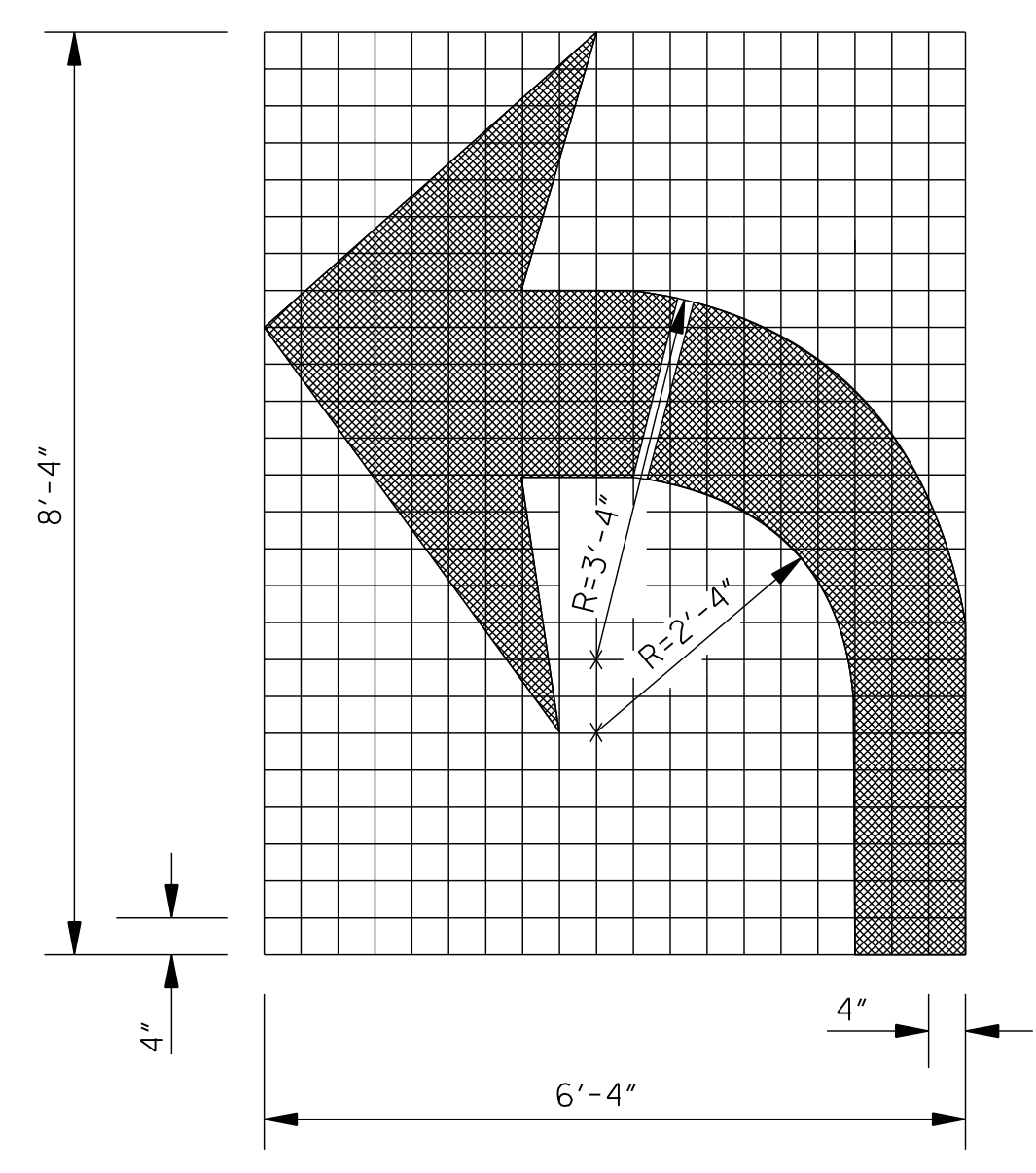
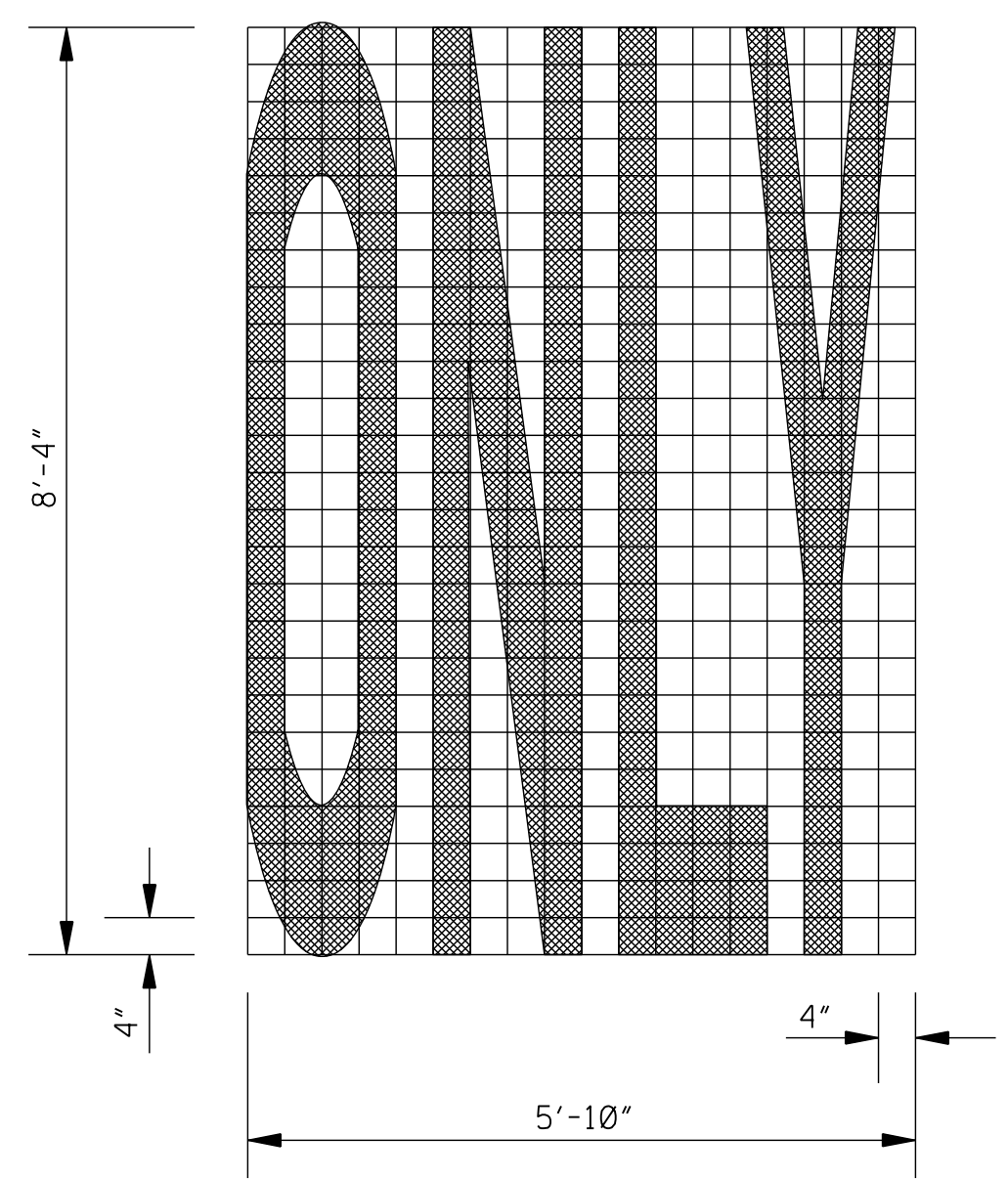
GENERAL NOTE:
 1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDT "APPROVED SOURCES OF MATERIALS".



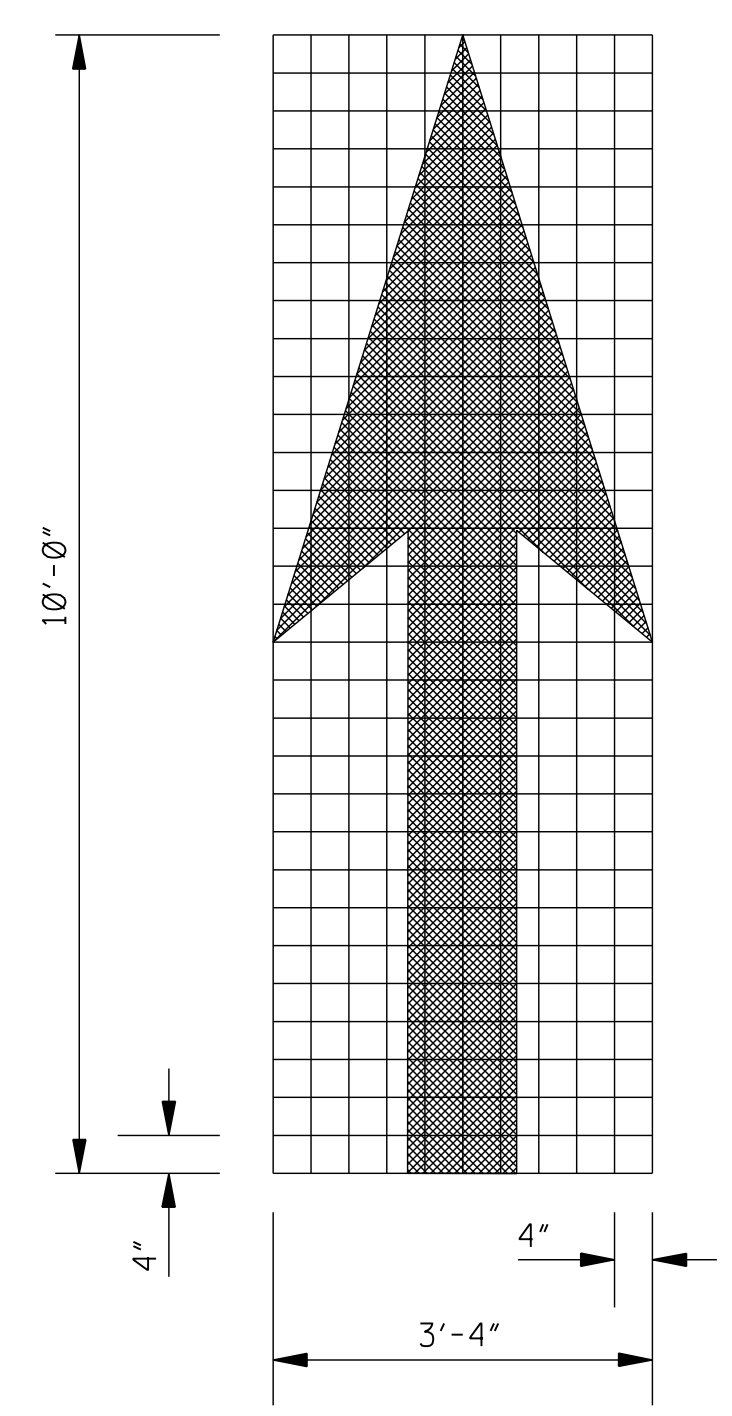
DETAIL B LATERAL PLACEMENT OF PAVEMENT MARKERS

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		
REVISION	PAVEMENT MARKING DETAILS FOR 3-LANE 4-LANE AND 5-LANE UNDIVIDED ROADWAYS		
DATE	ISSUE DATE:	AUGUST 01, 2017	
	WORKING NUMBER	PM-2	
	SHEET NUMBER	6052	

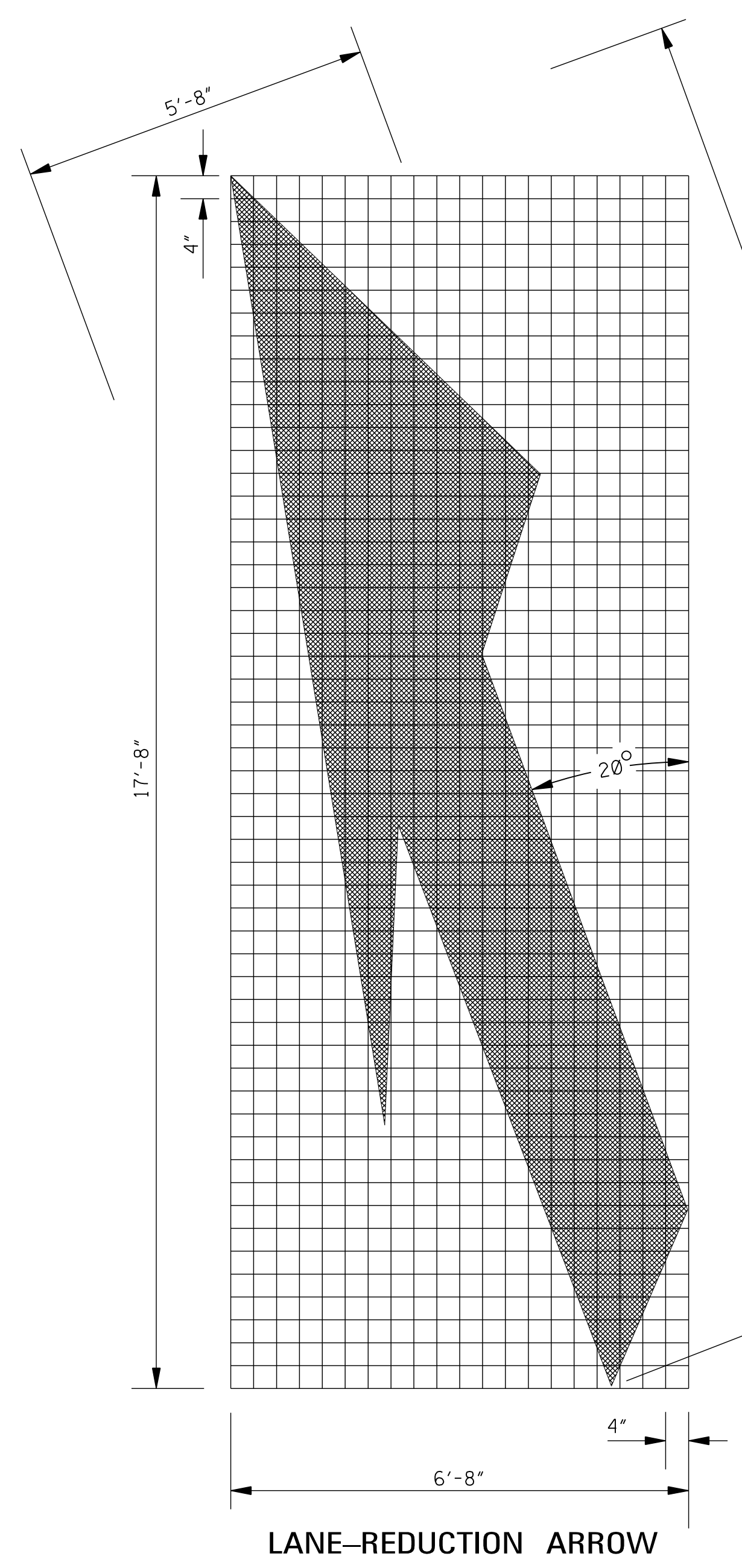




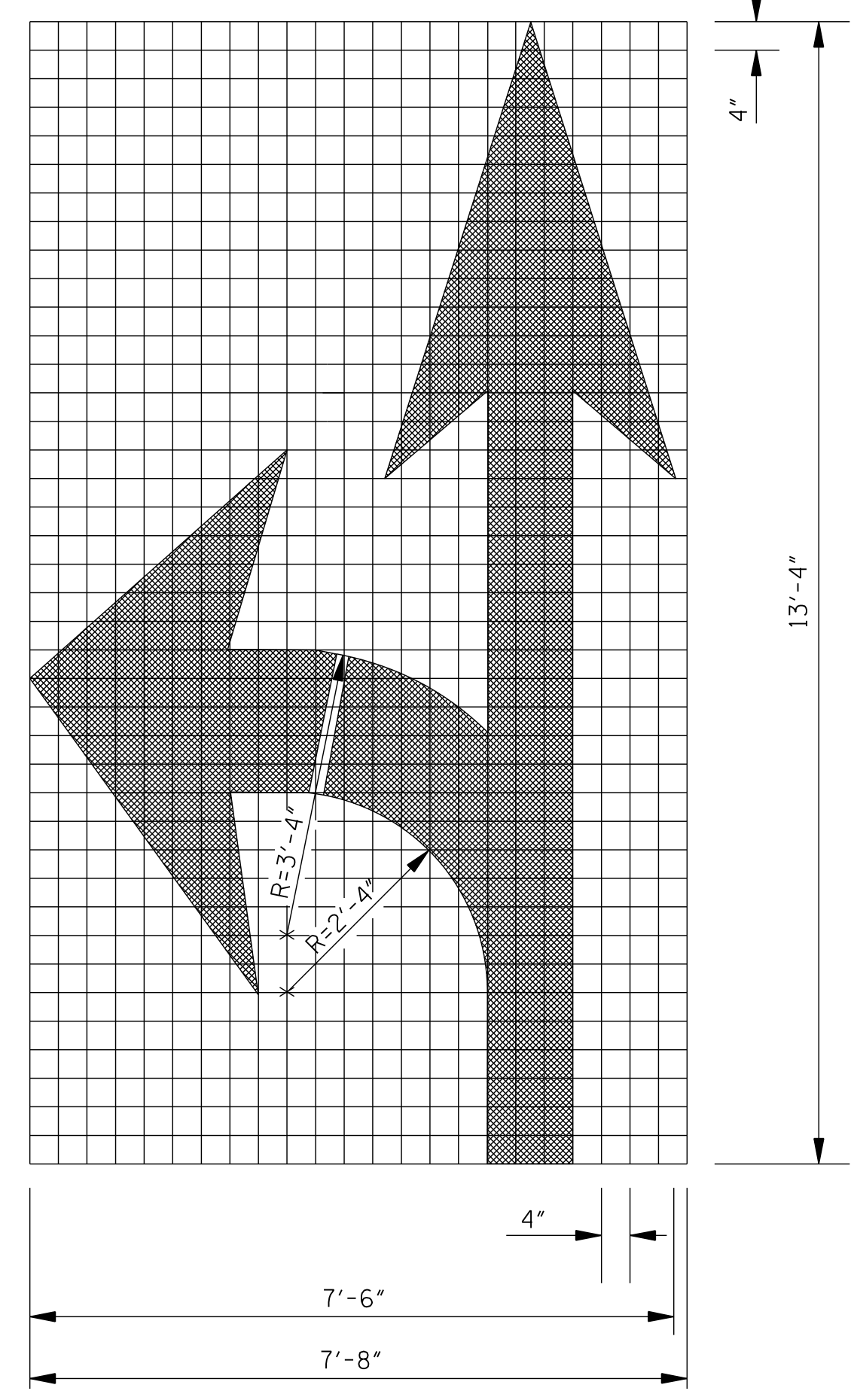
TURN ARROW



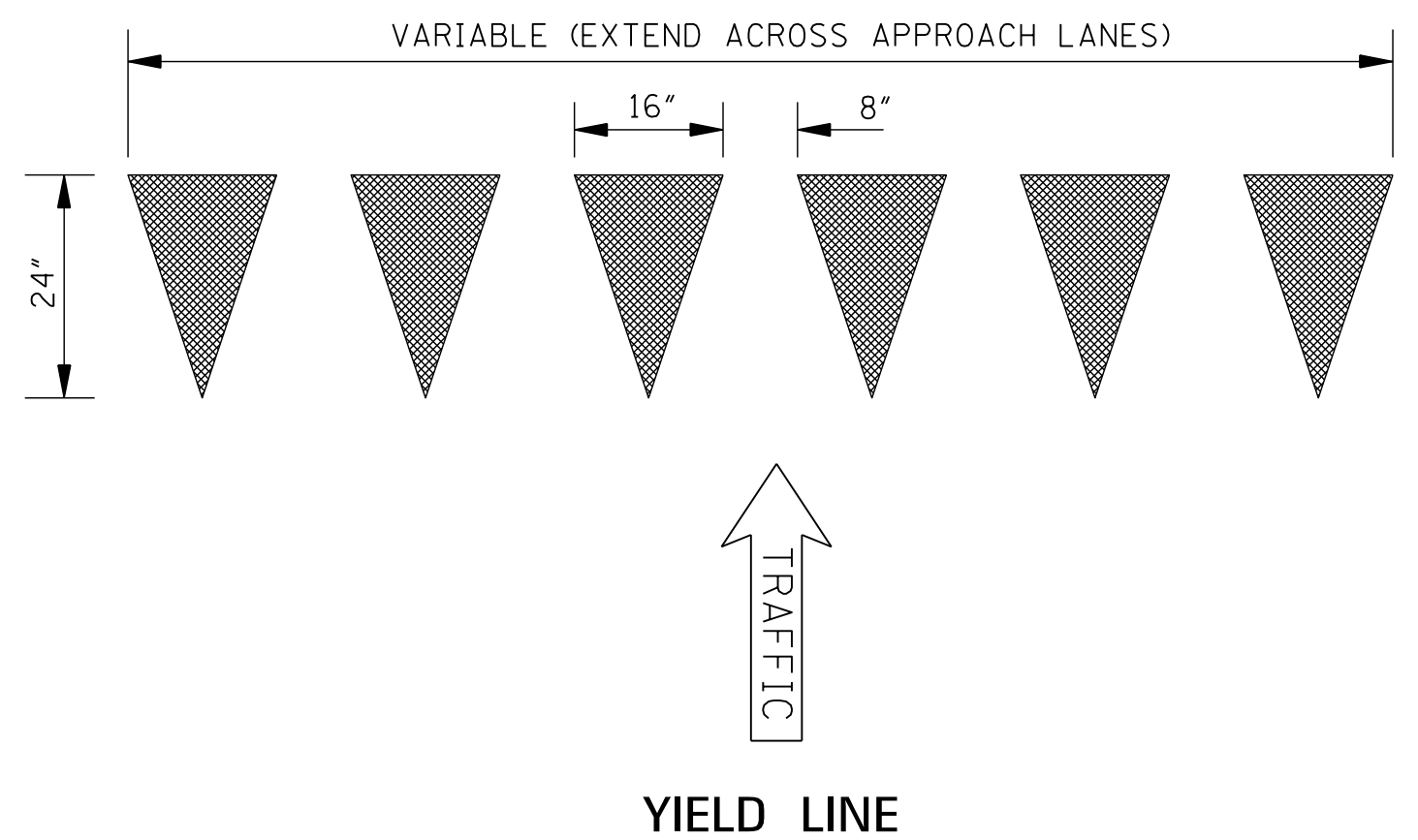
THRU ARROW



LANE-REDUCTION ARROW



COMBINATION ARROW

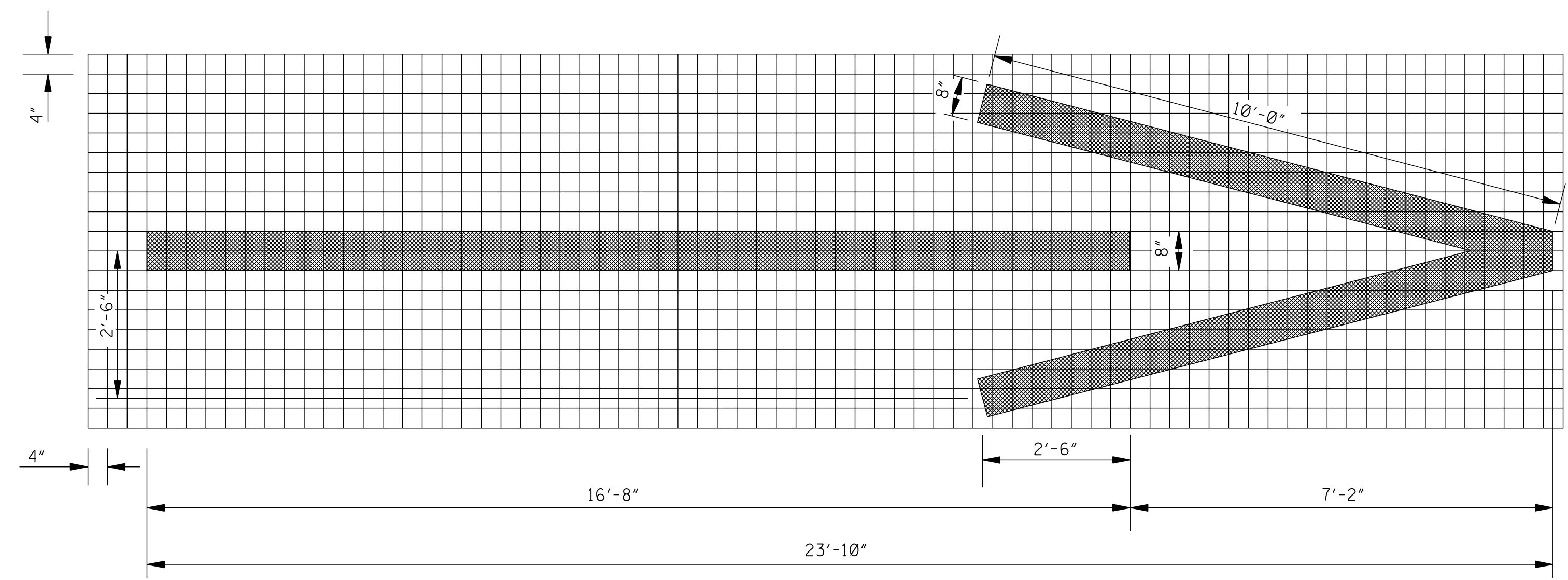


YIELD LINE

GENERAL NOTES:

1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

PAY QUANTITIES	
LEGEND/SYMBOL	AREA (ft ²)
ONLY	22.0
TURN ARROW	16.4
THRU ARROW	12.3
COMB. ARROW	27.5
1-WAY ARROW	24.3
LANE REDUCTION ARROW	40.0

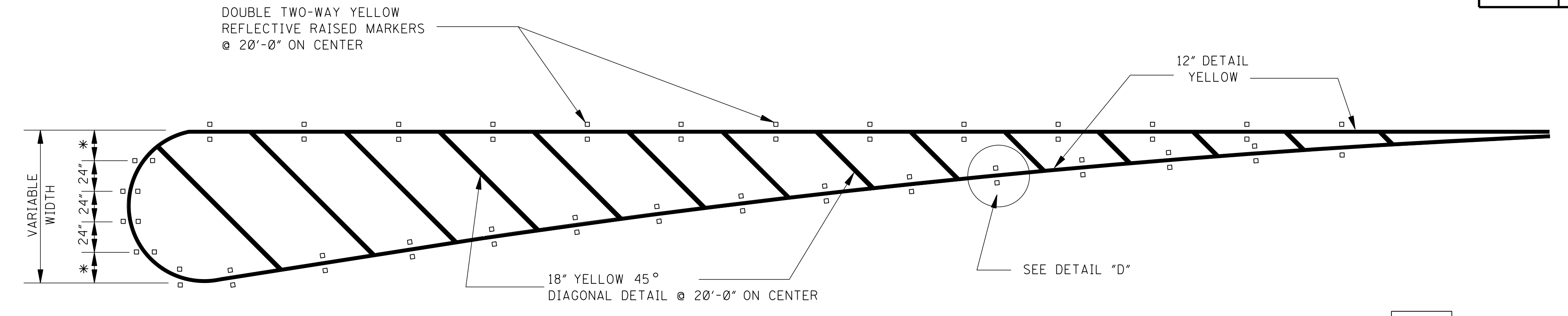
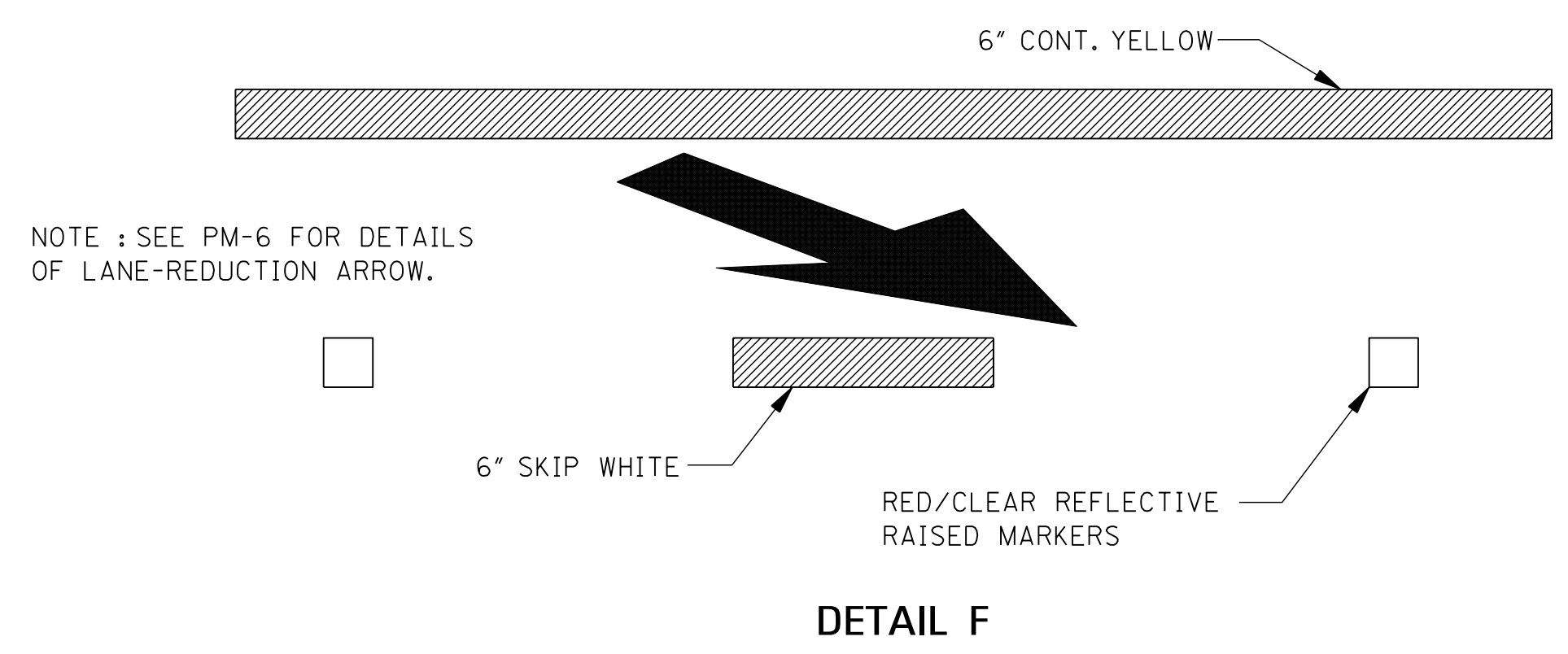


1-WAY ARROW

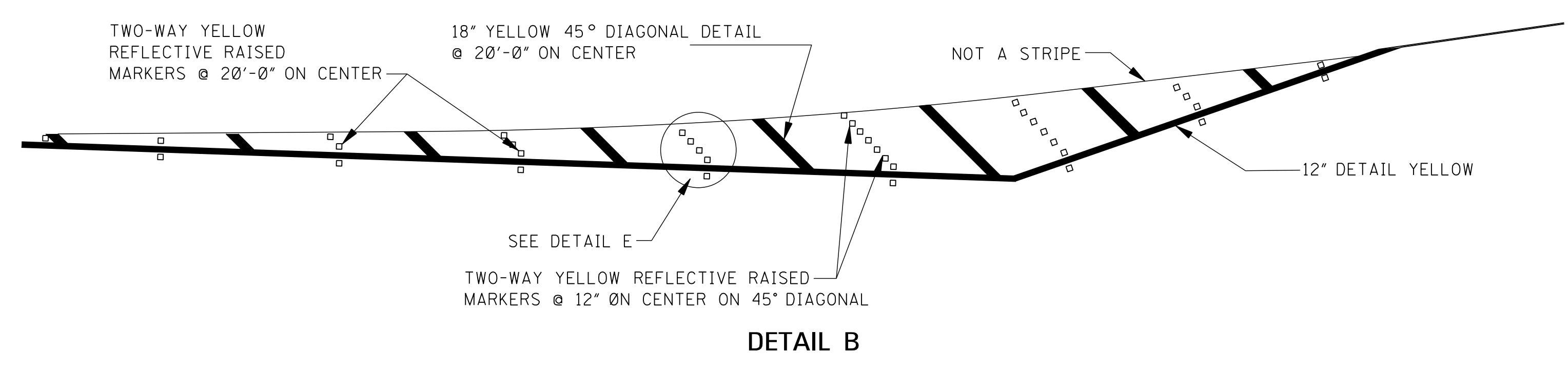
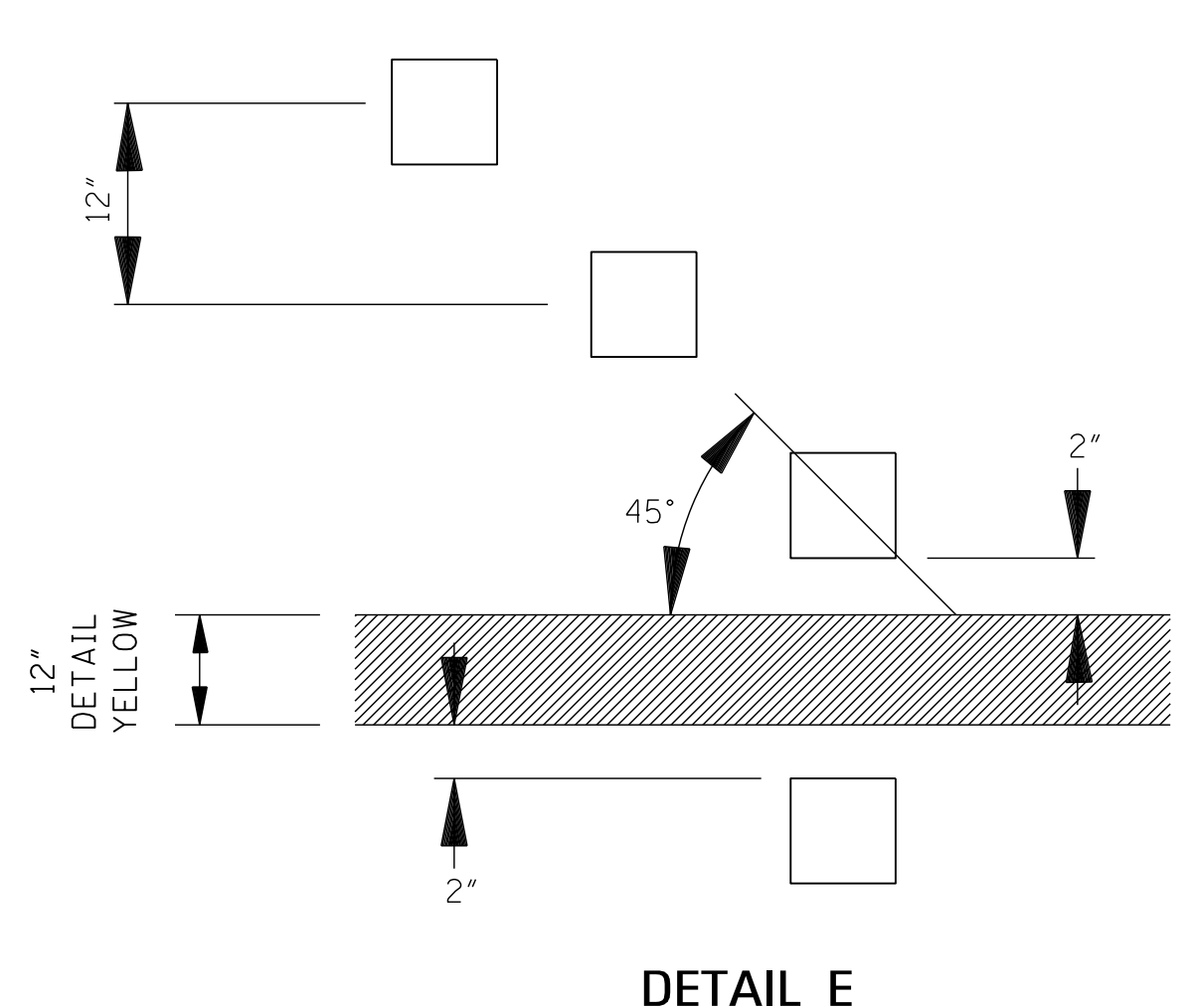
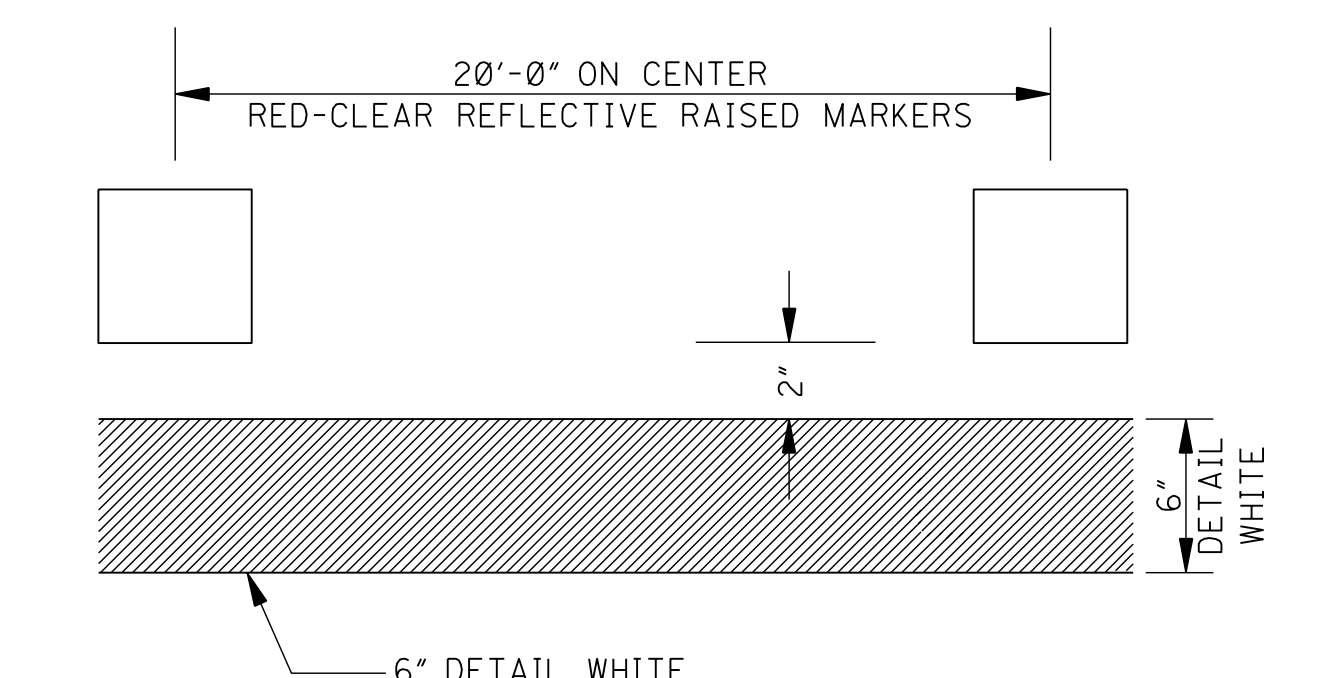
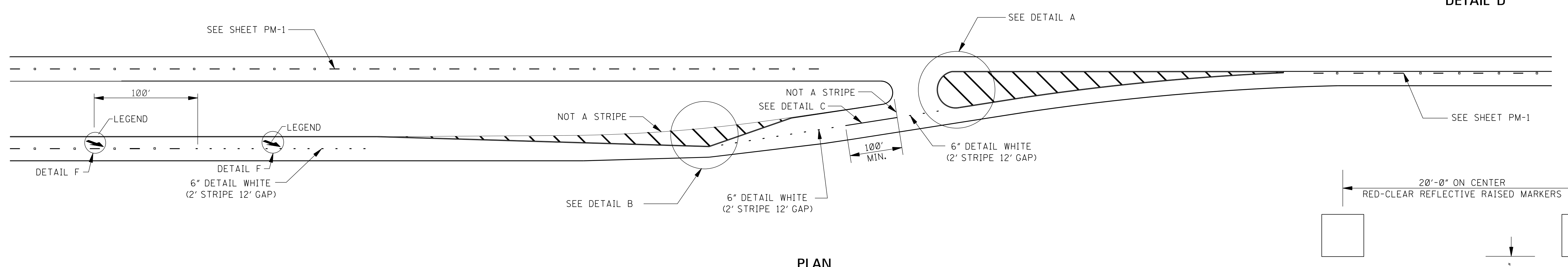
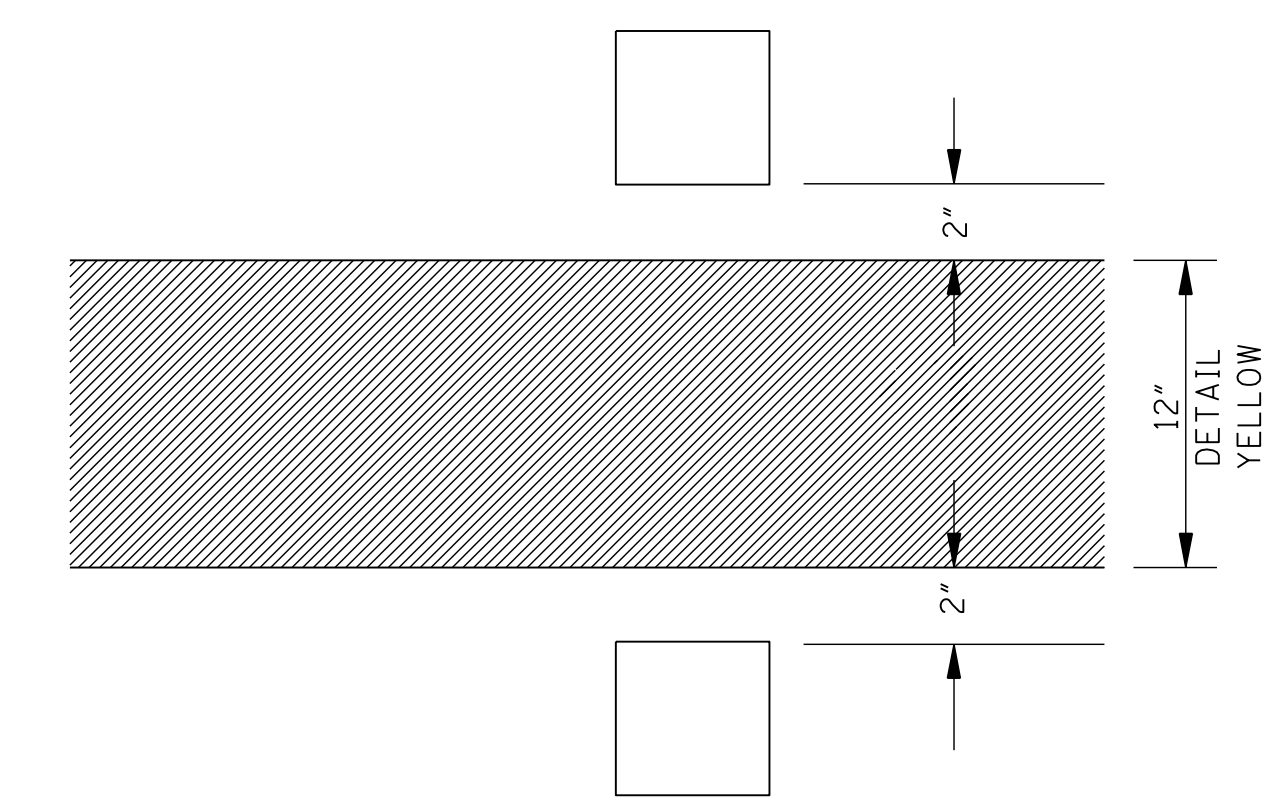
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017

**PAVEMENT MARKING
LEGEND DETAILS**


 WORKING NUMBER
 PM-6
 SHEET NUMBER
 6056



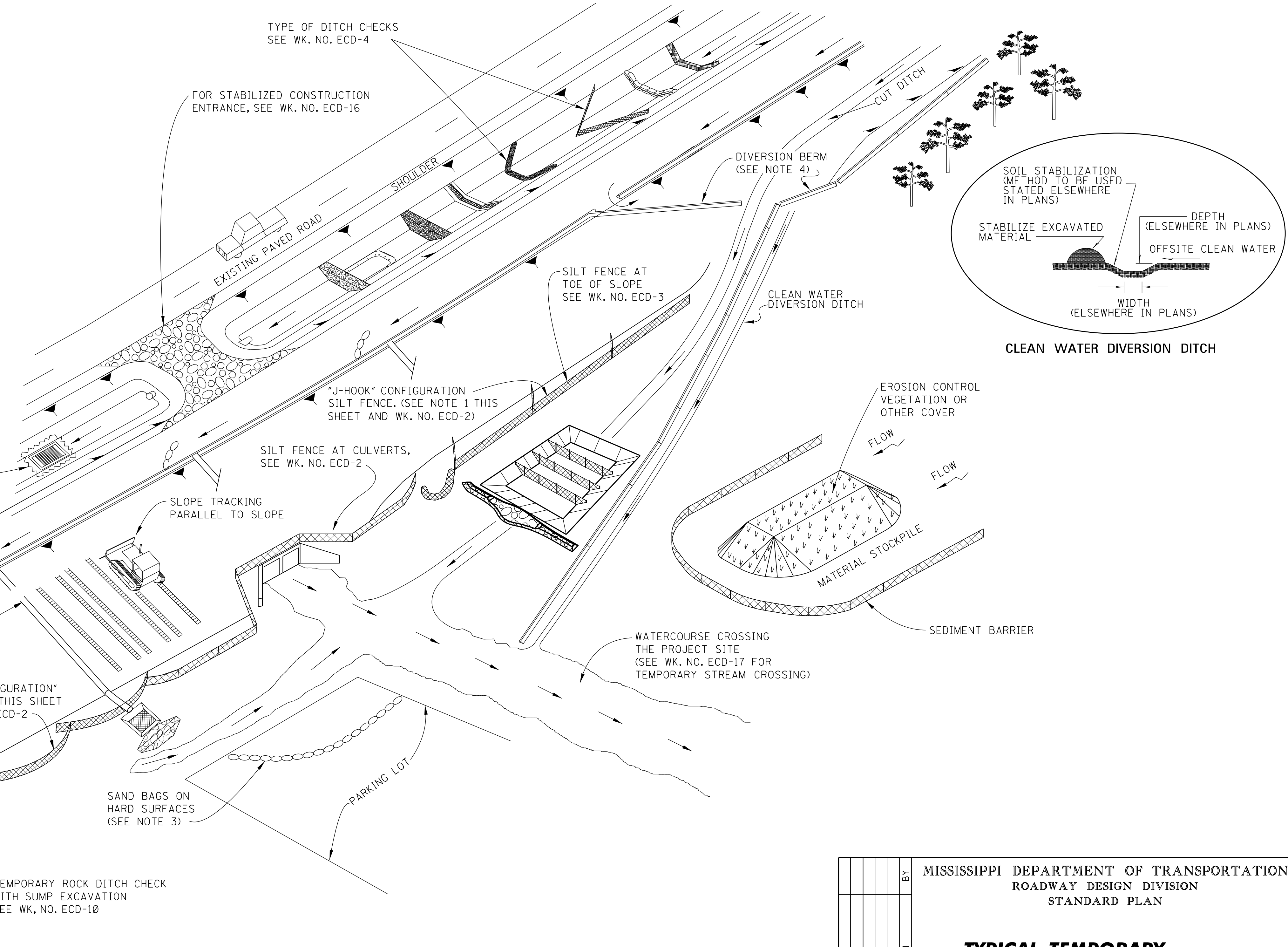
* NOTE: VARIABLE (24" MAXIMUM)



BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		ROADWAY DESIGN DIVISION	
DATE		STANDARD PLAN	
		4-LANE TO 2-LANE TRANSITION AT INTERCHANGE	
		 WORKING NUMBER PM-8 SHEET NUMBER 6058	
		ISSUE DATE: AUGUST 01, 2017	

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 DENUDEED 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

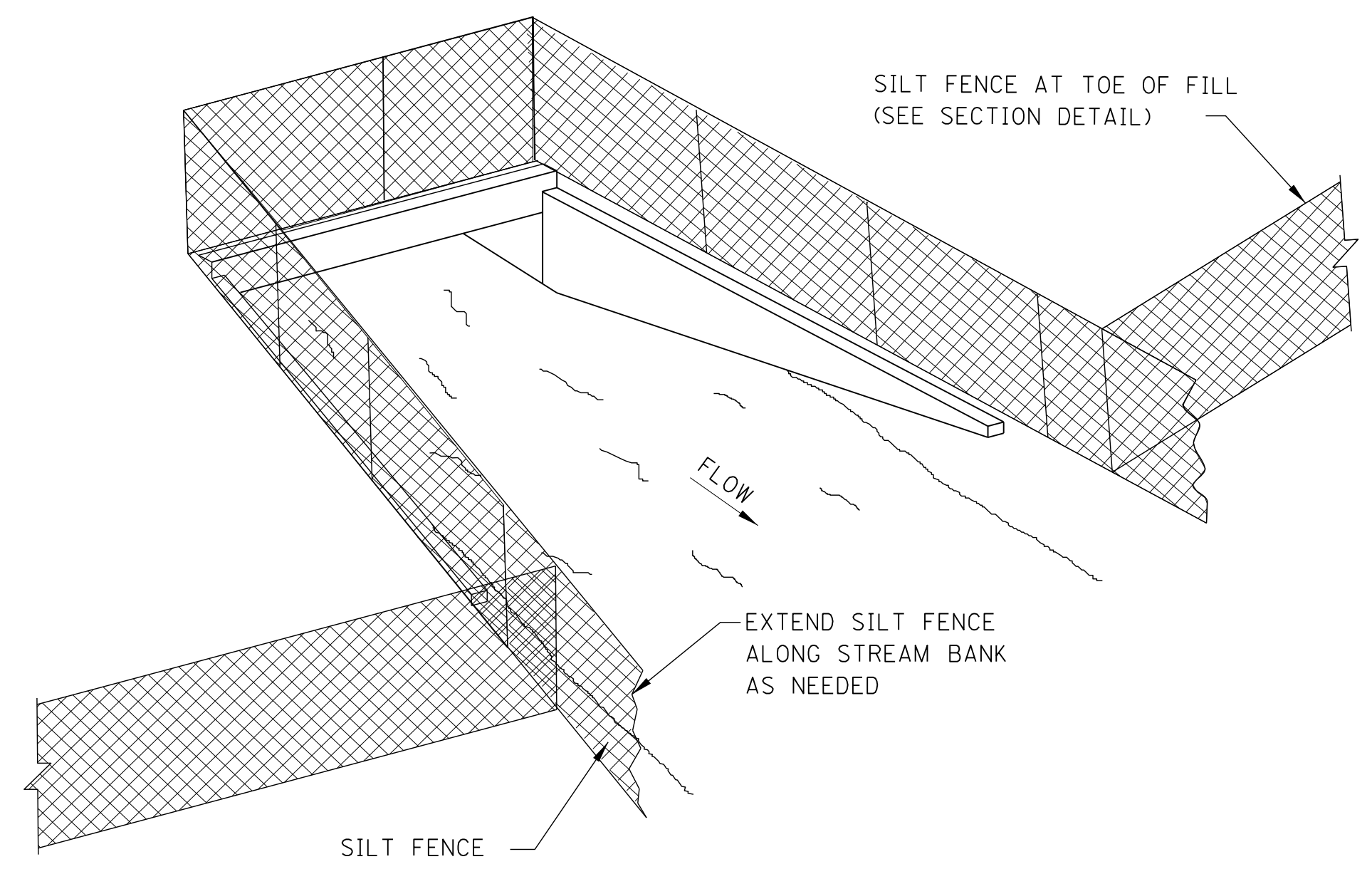
FOR TEMPORARY STREAM
CROSSING SEE WK.
NO. ECD-17.

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

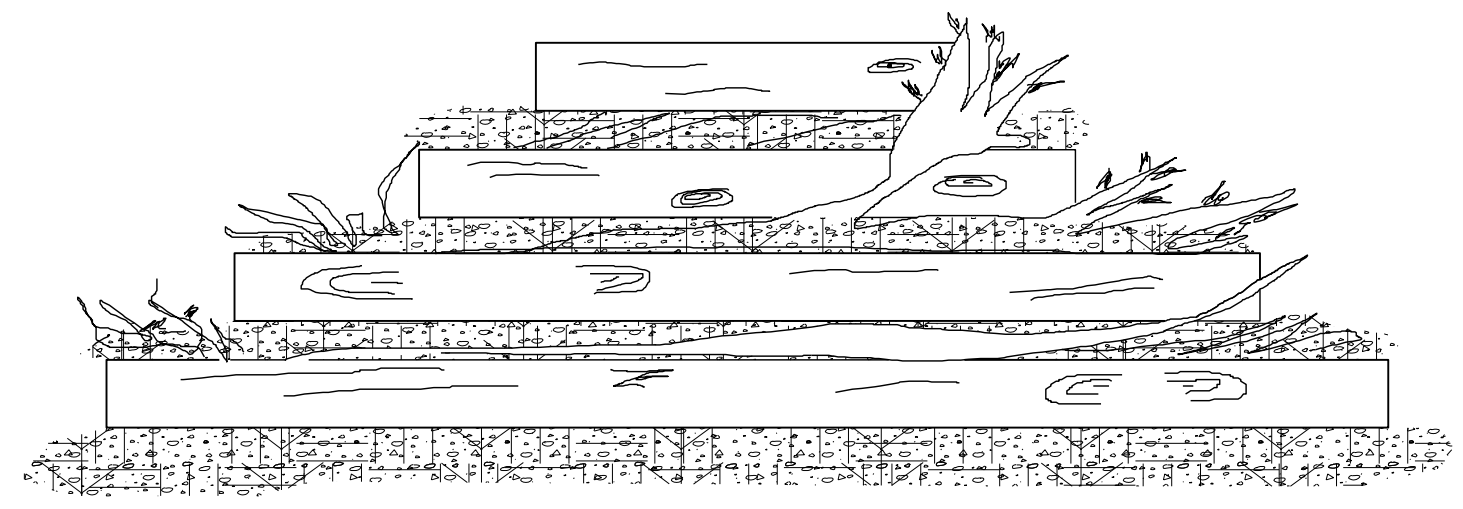
**TYPICAL TEMPORARY
EROSION / SEDIMENT
CONTROL APPLICATIONS**

MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

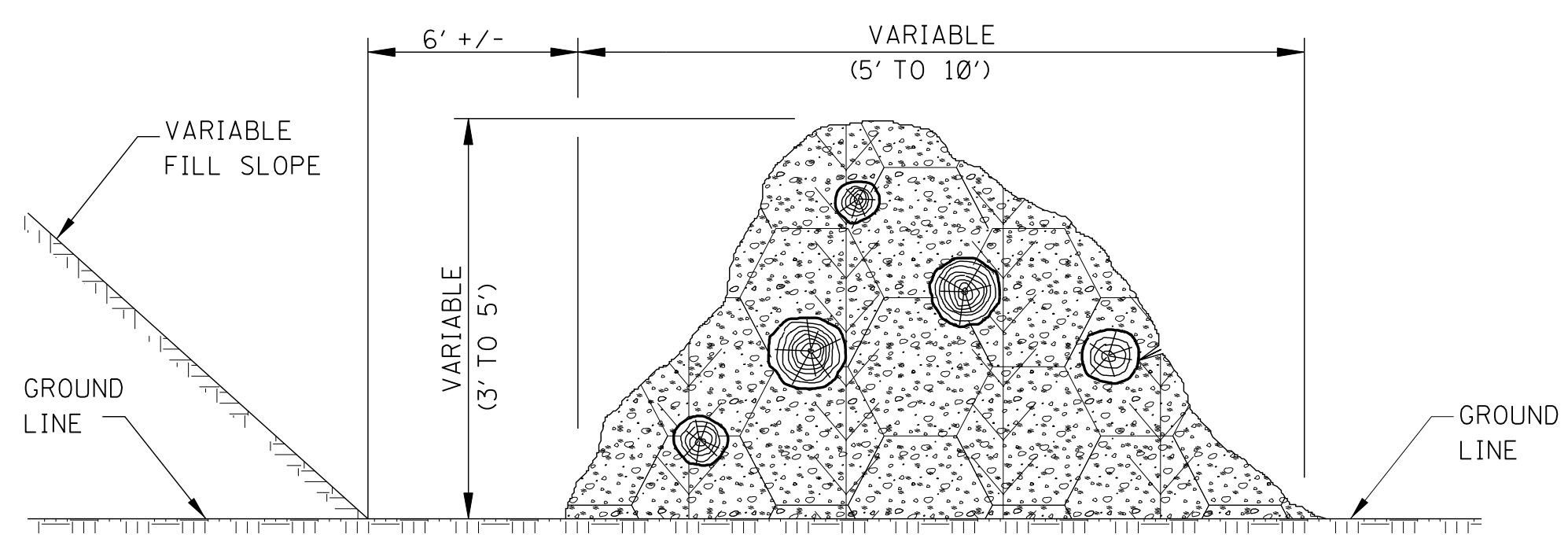
WORKING NUMBER
ECD-1
SHEET NUMBER
6101



SEDIMENT BARRIER AT CROSS DRAIN



FRONT ELEVATION



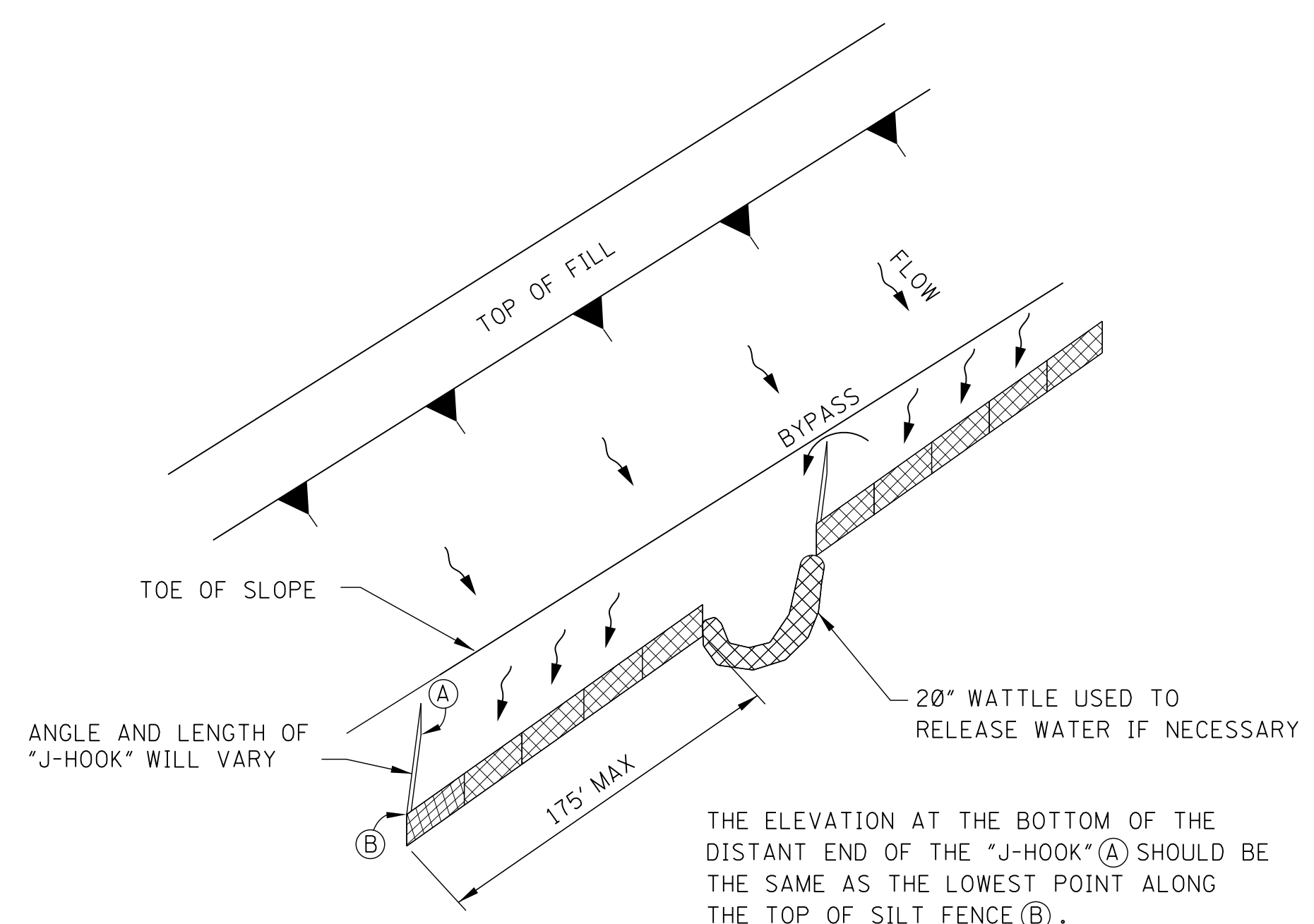
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

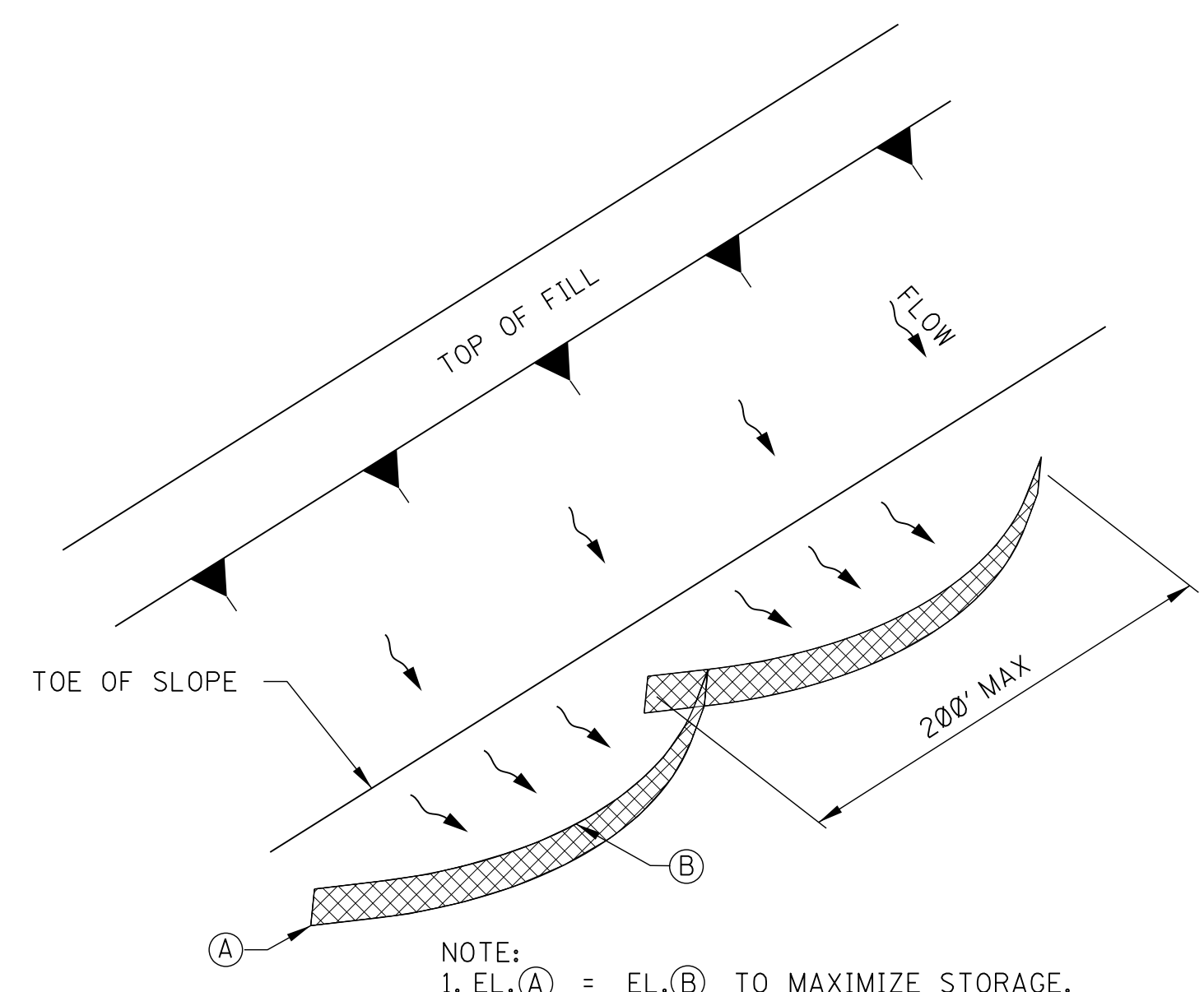
NOTES:

- 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.

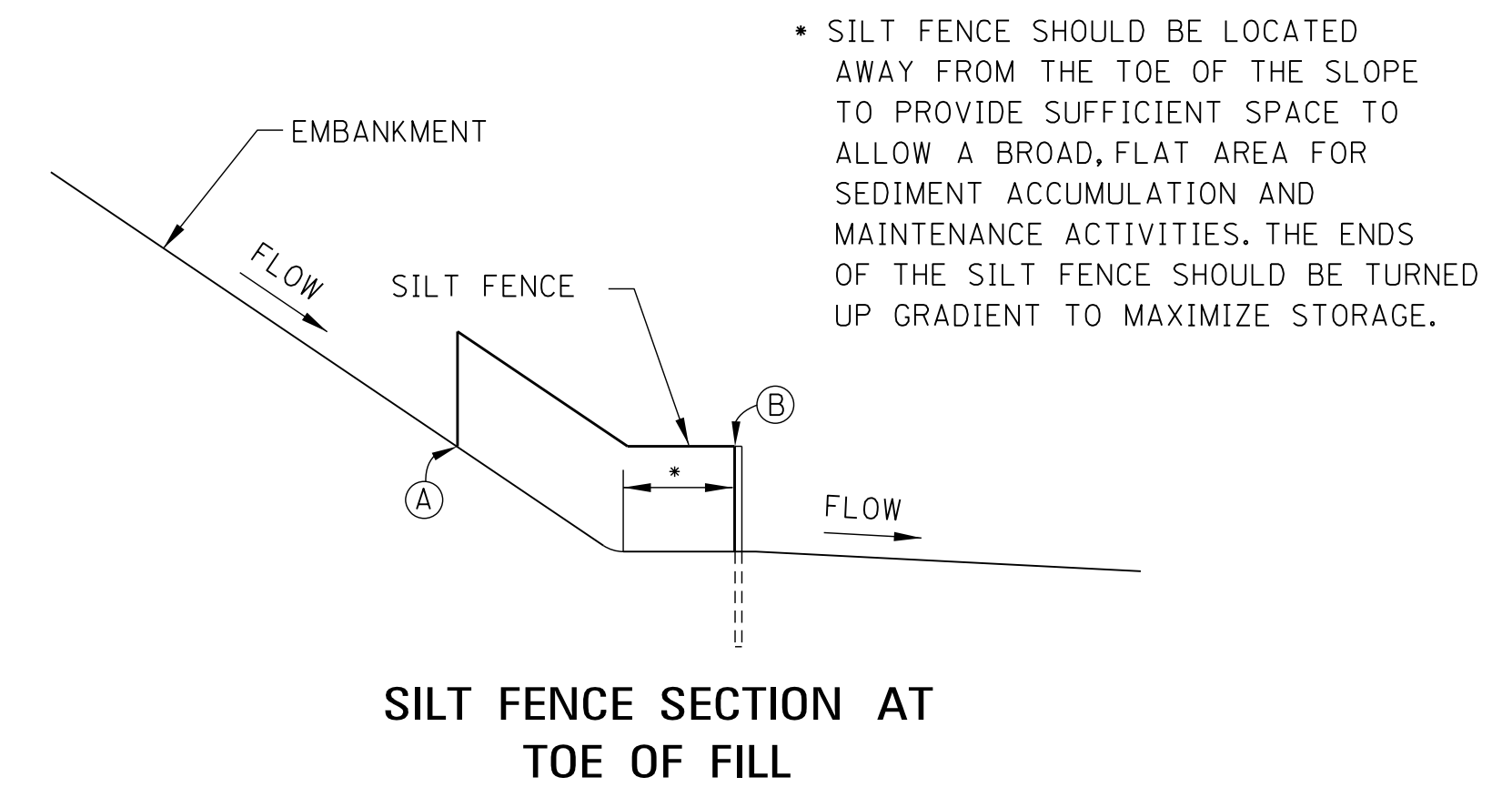
NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3




"J-HOOK" SILT FENCE APPLICATION

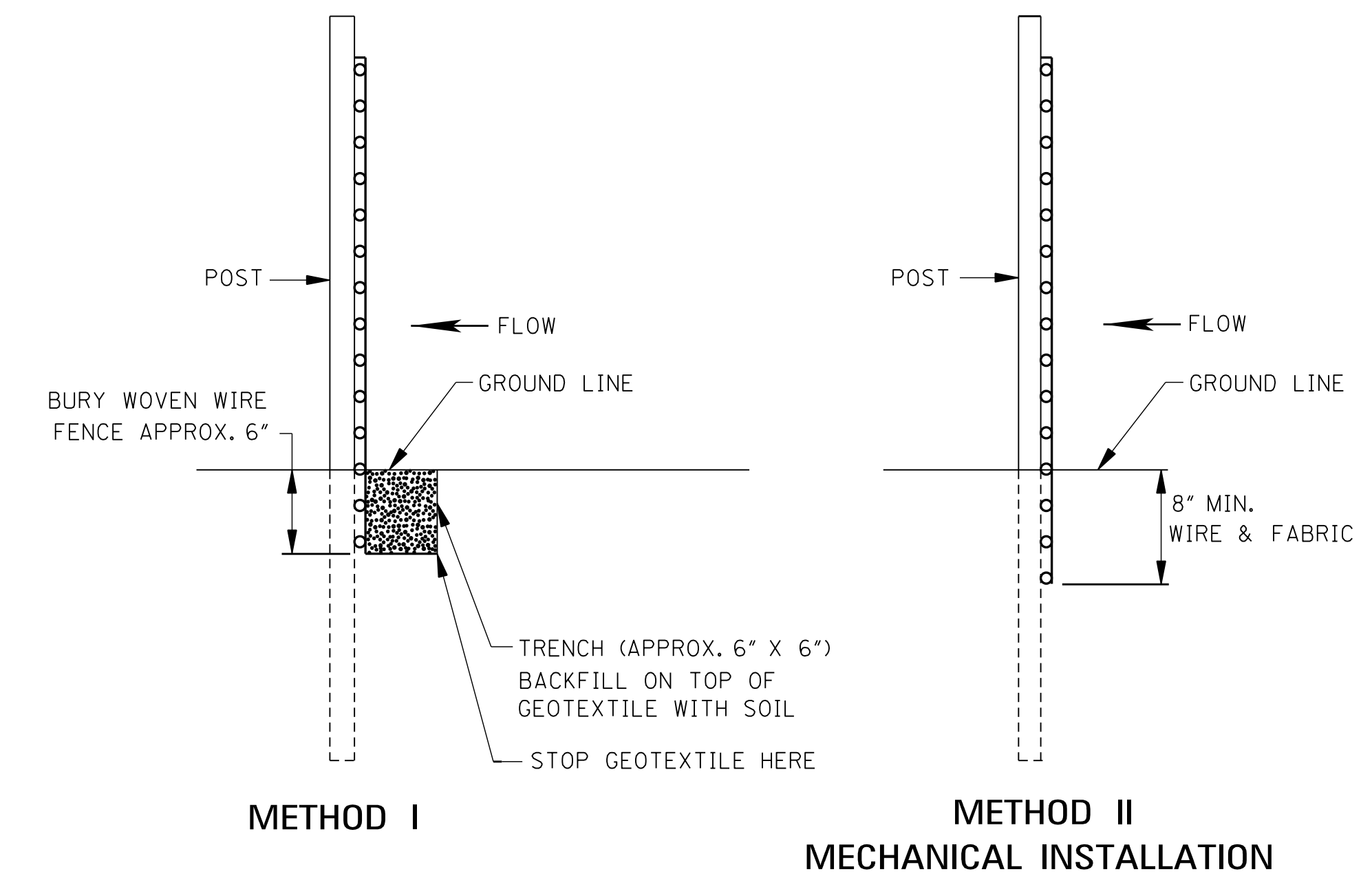
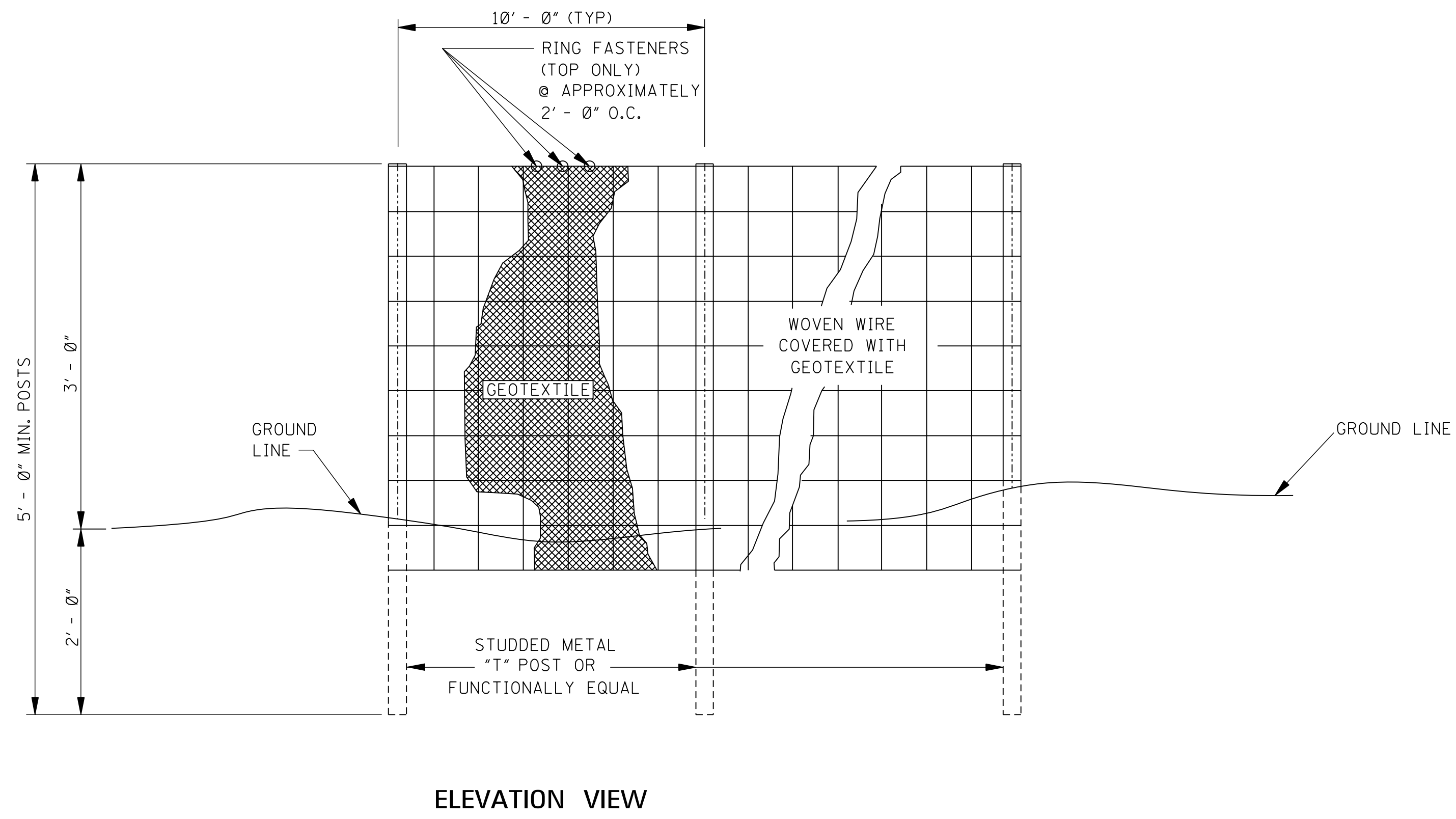


"SMILE-CONFIGURATION" SILT FENCE APPLICATION

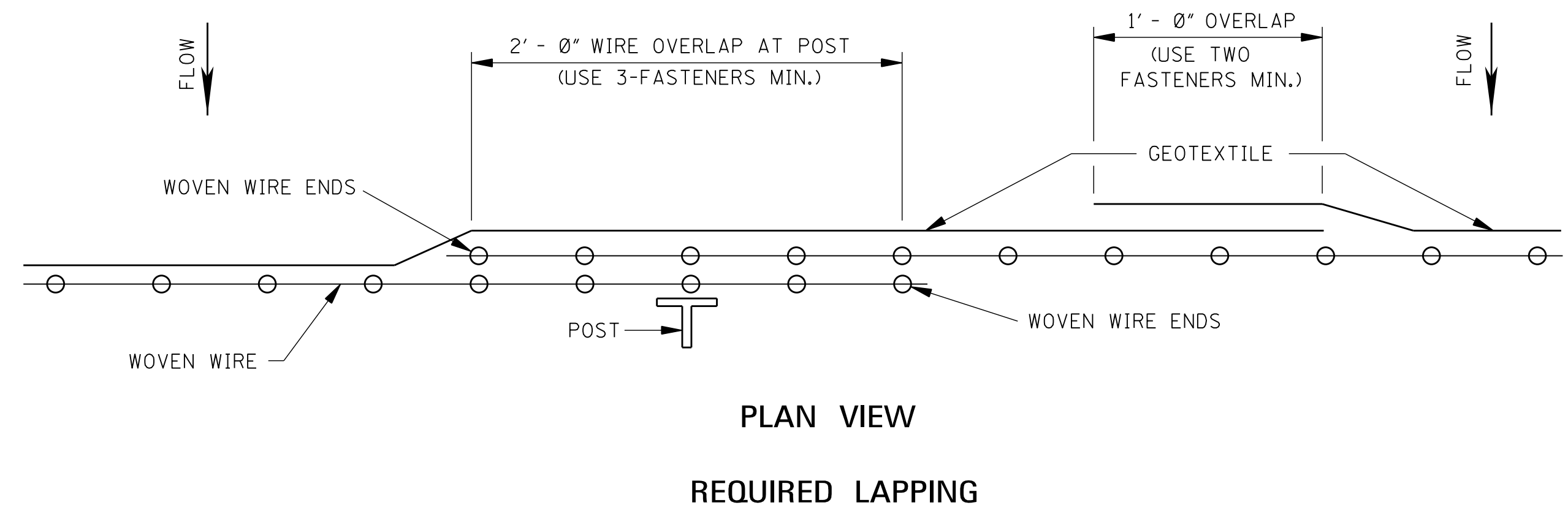


SILT FENCE SECTION AT TOE OF FILL

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



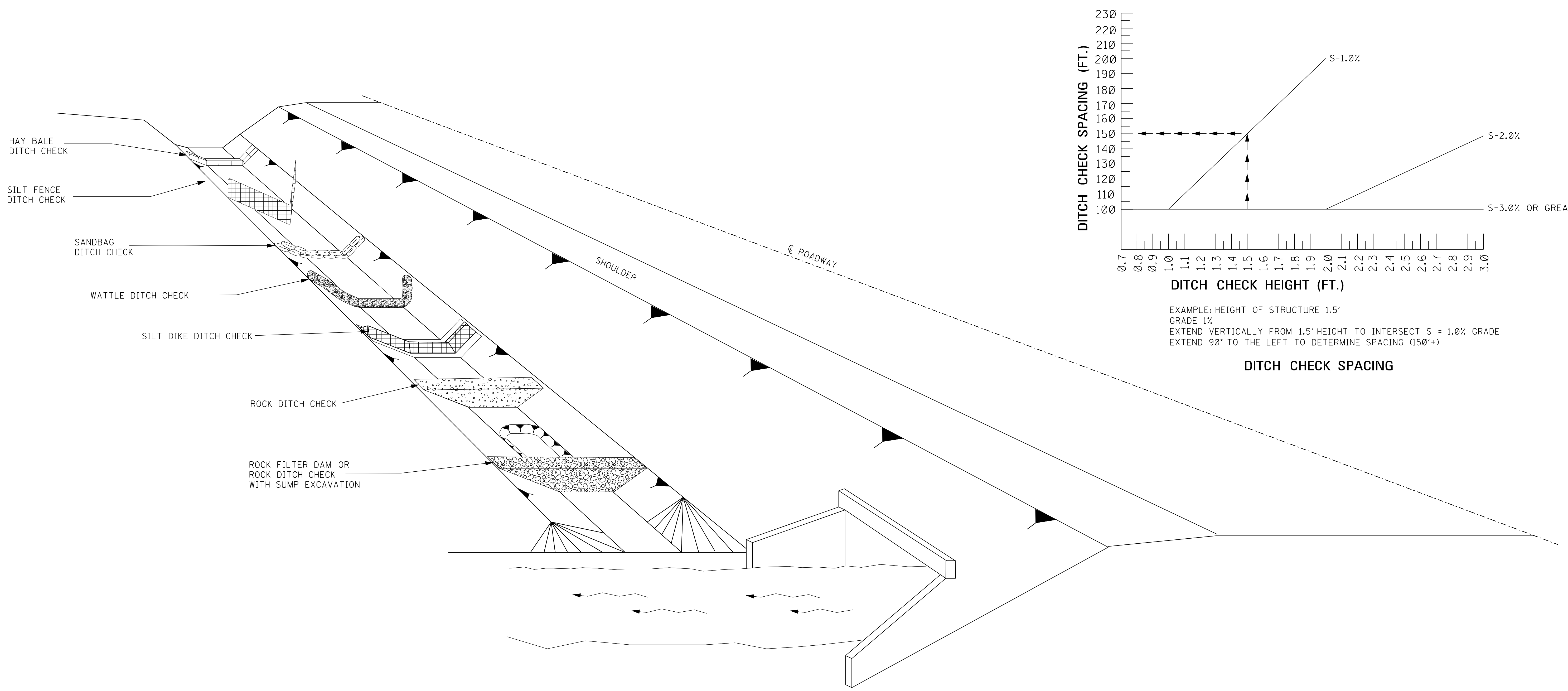
SIDE VIEW



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>DETAILS OF SILT FENCE INSTALLATION</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-3	
SHEET NUMBER		6103	

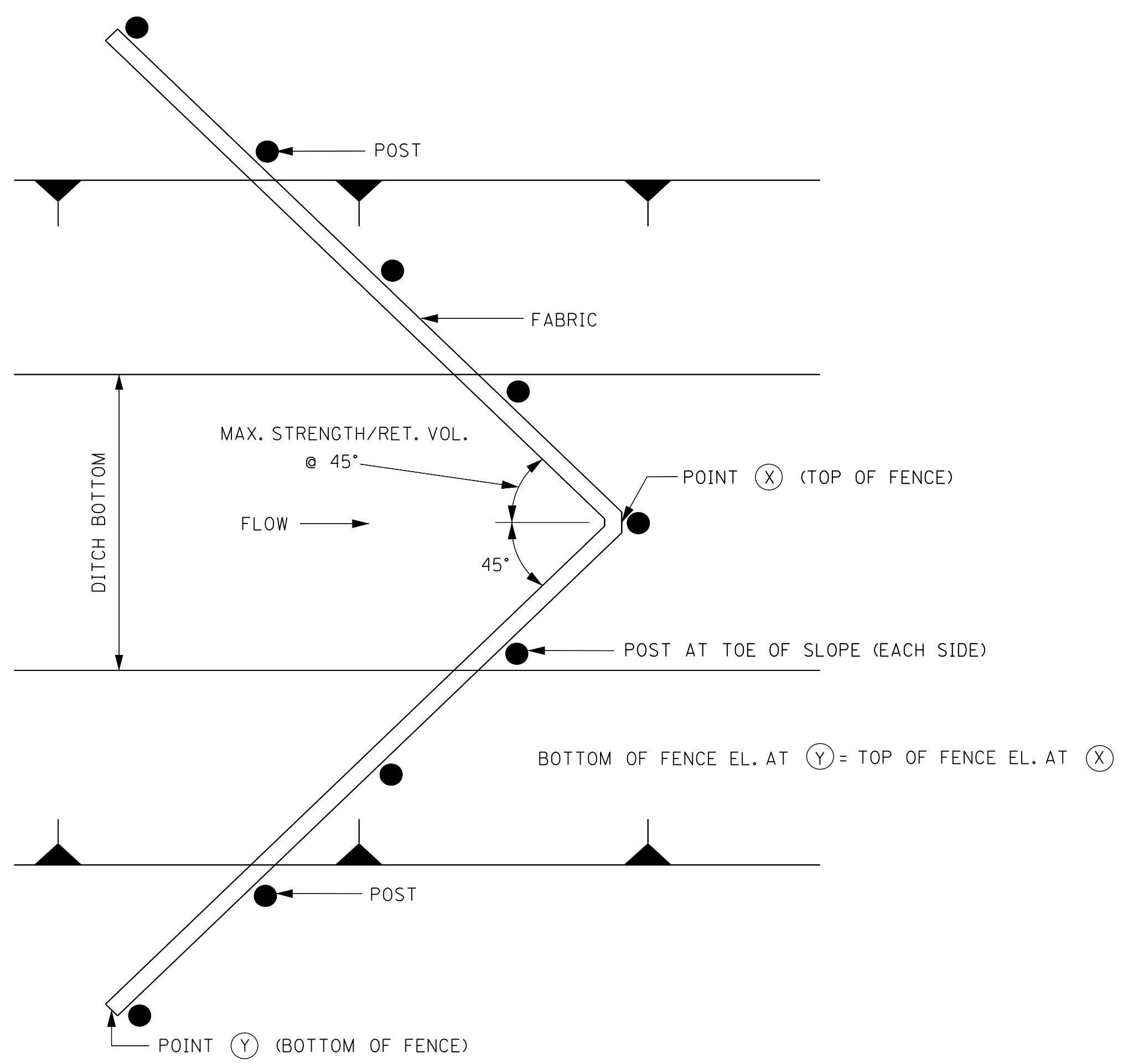


GENERAL NOTES:

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 $\frac{1}{3}$ THE CAPACITY OR HEIGHT OF THE STRUCTURE AND NEVER ALLOWING FOR SEDIMENT TO ACCUMULATE MORE THAN $\frac{1}{2}$ 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.

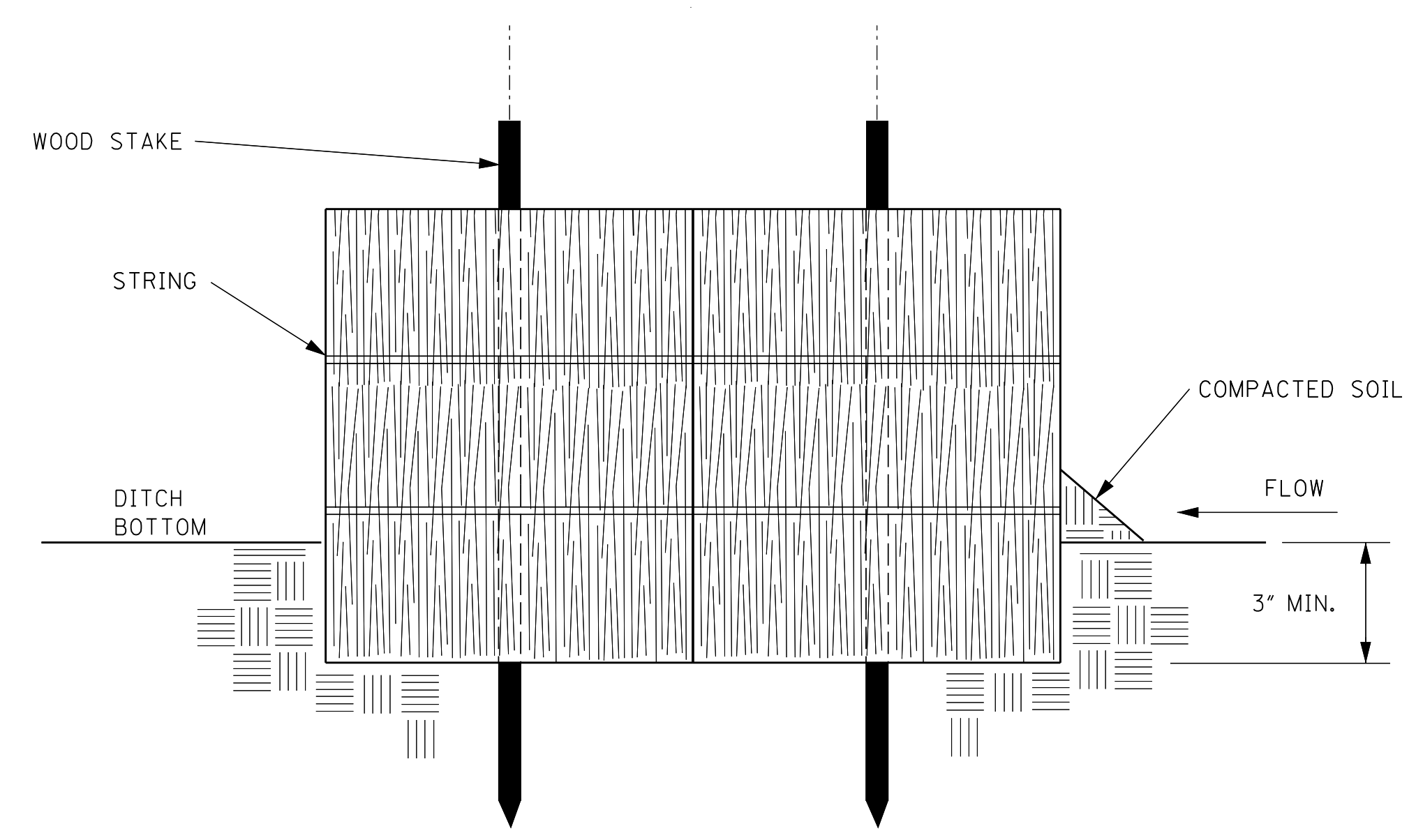
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS	
DATE	ISSUE DATE: AUGUST 01, 2017
REVISION	
BY	


 WORKING NUMBER
 ECD-4
 SHEET NUMBER
 6104

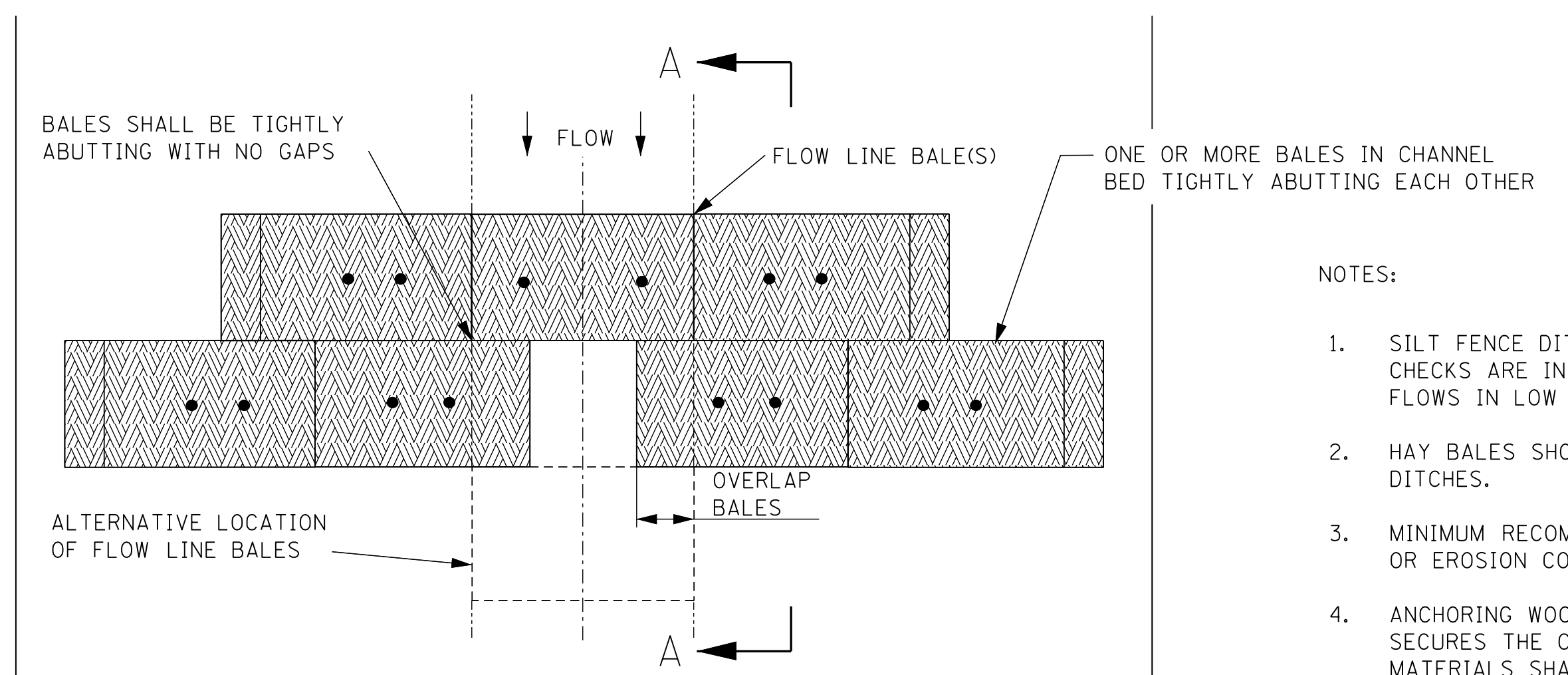


PLAN VIEW

- 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.



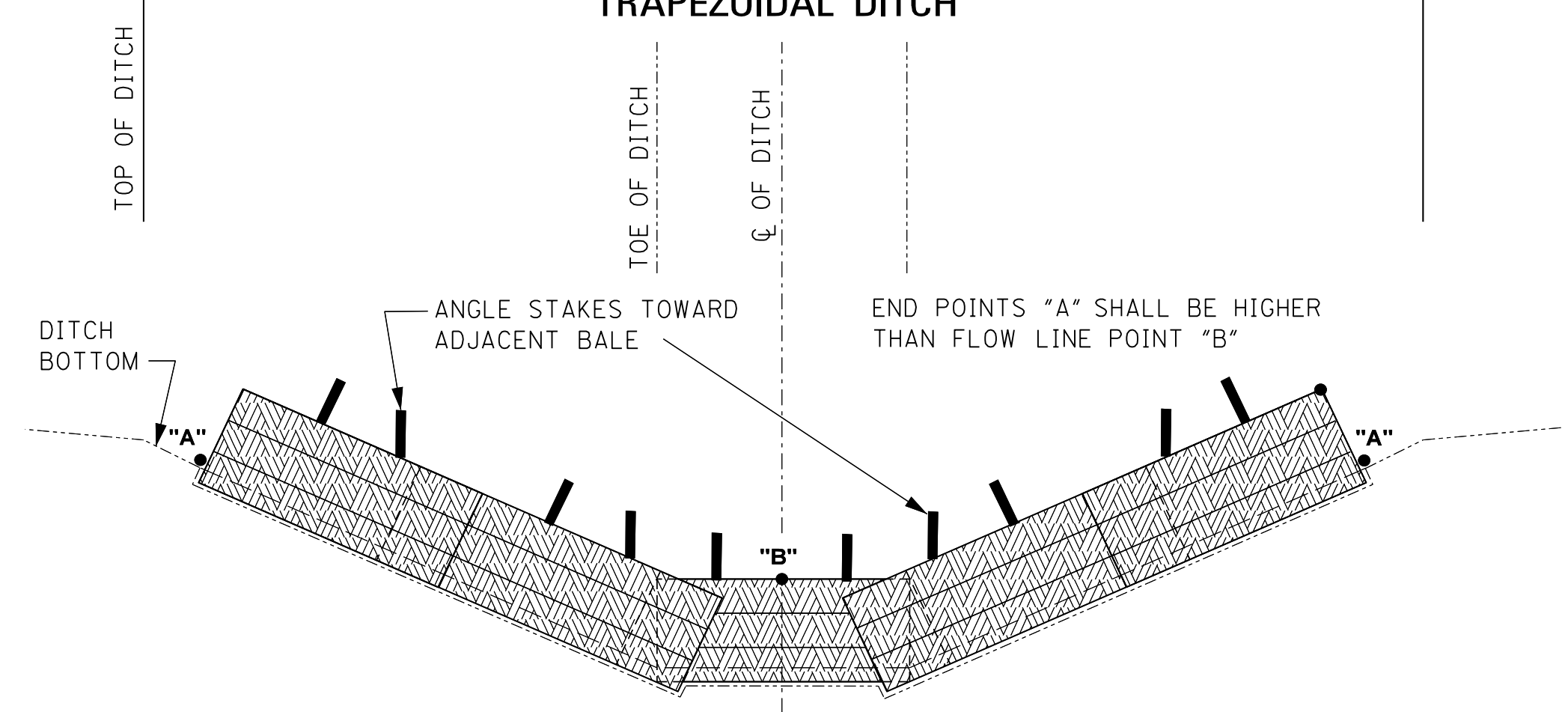
SECTION A-A



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.

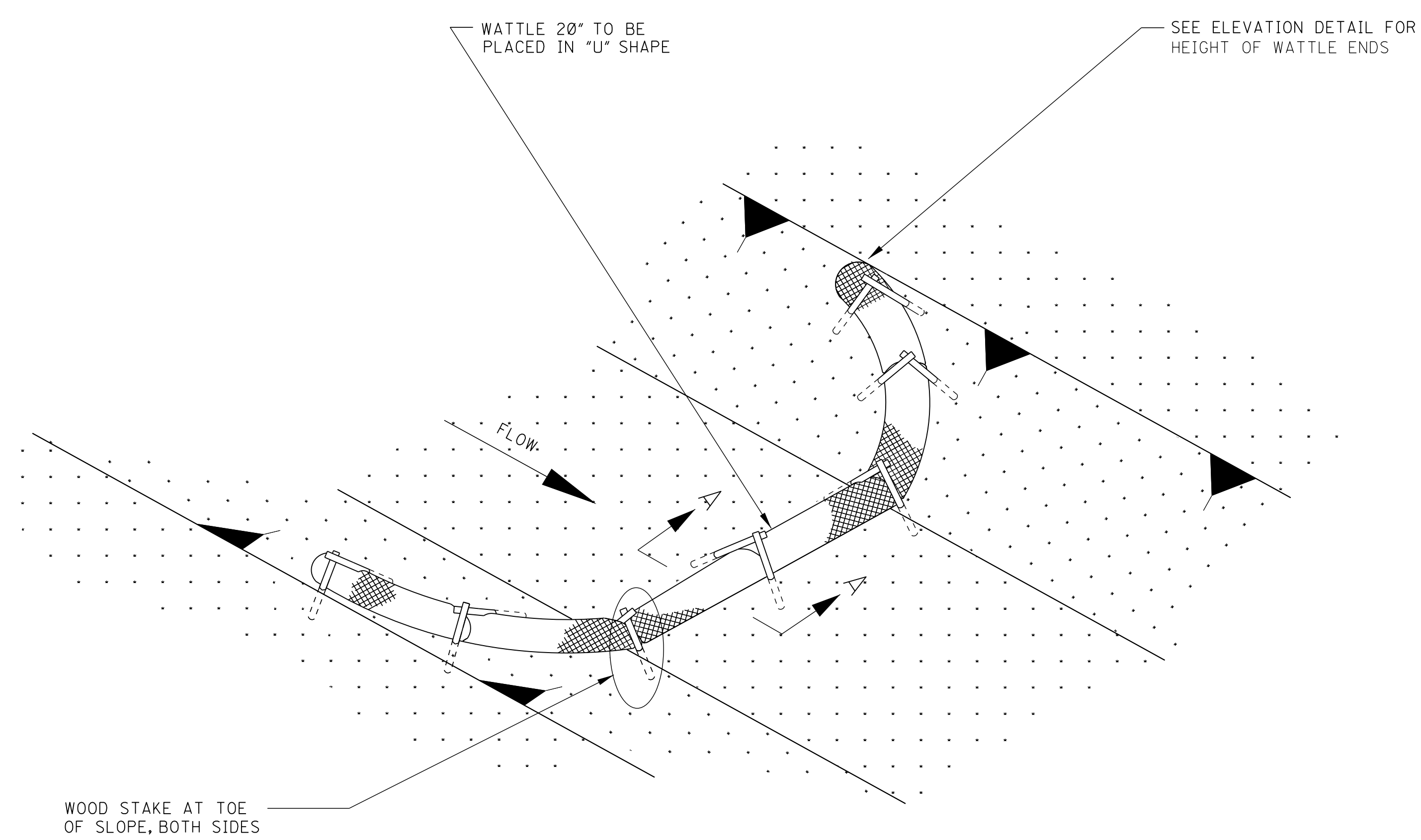


PROFILE VIEW
TRAPEZOIDAL DITCH

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES (SILT FENCE AND HAY BALE DITCH CHECKS)
DATE	ISSUE DATE: AUGUST 01, 2017



WORKING NUMBER
ECD-5
SHEET NUMBER
6105



DETAIL (DITCH CHECK)

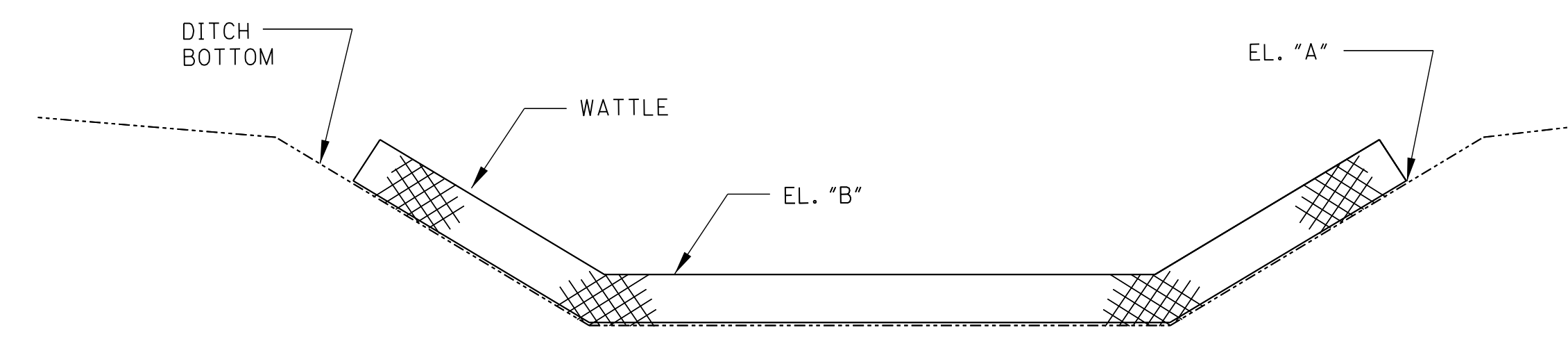
WOOD STAKE AT TOE OF SLOPE, BOTH SIDES

SEE ELEVATION DETAIL FOR HEIGHT OF WATTLE ENDS

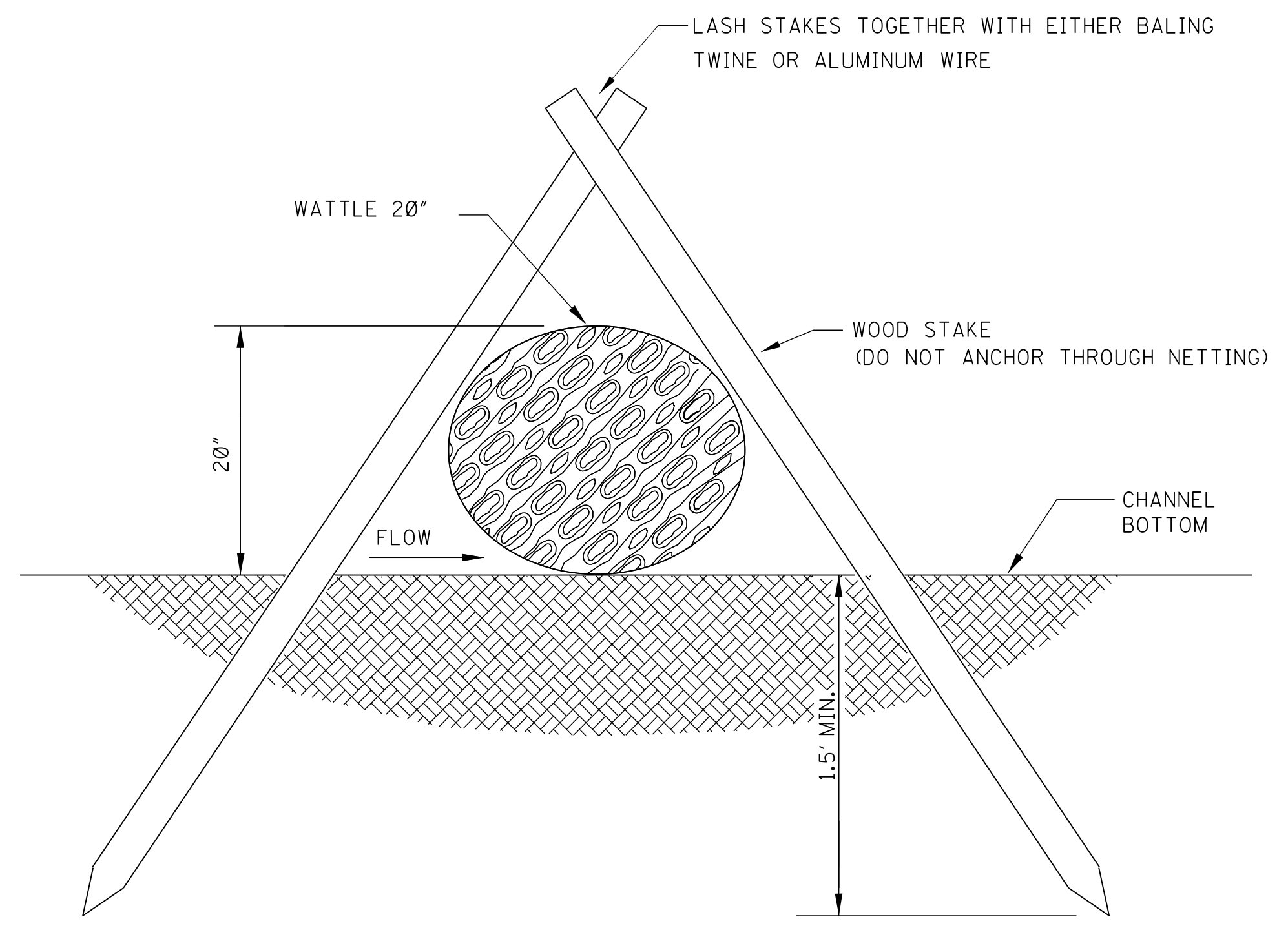
FLOW

WATTLE 20" TO BE PLACED IN "U" SHAPE

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



ELEVATION DETAIL

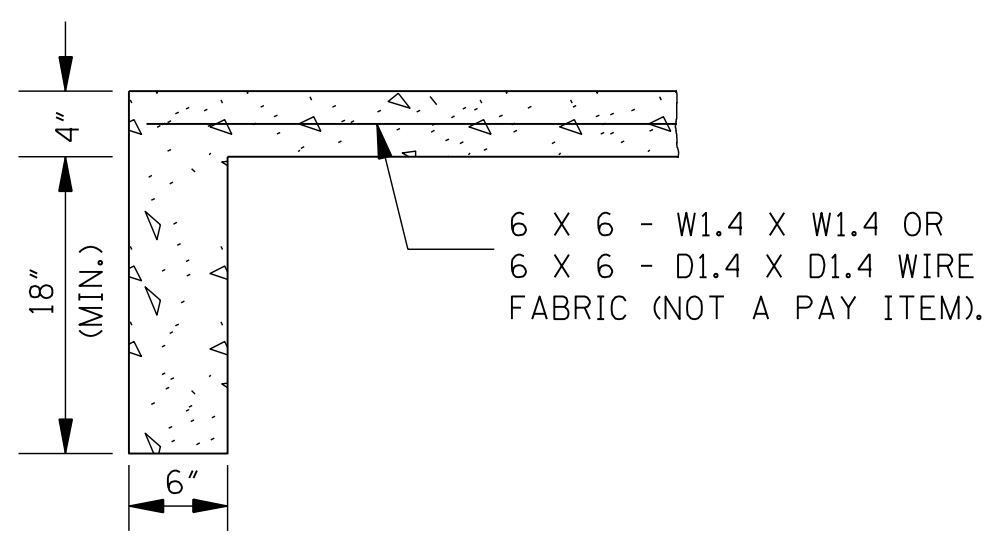
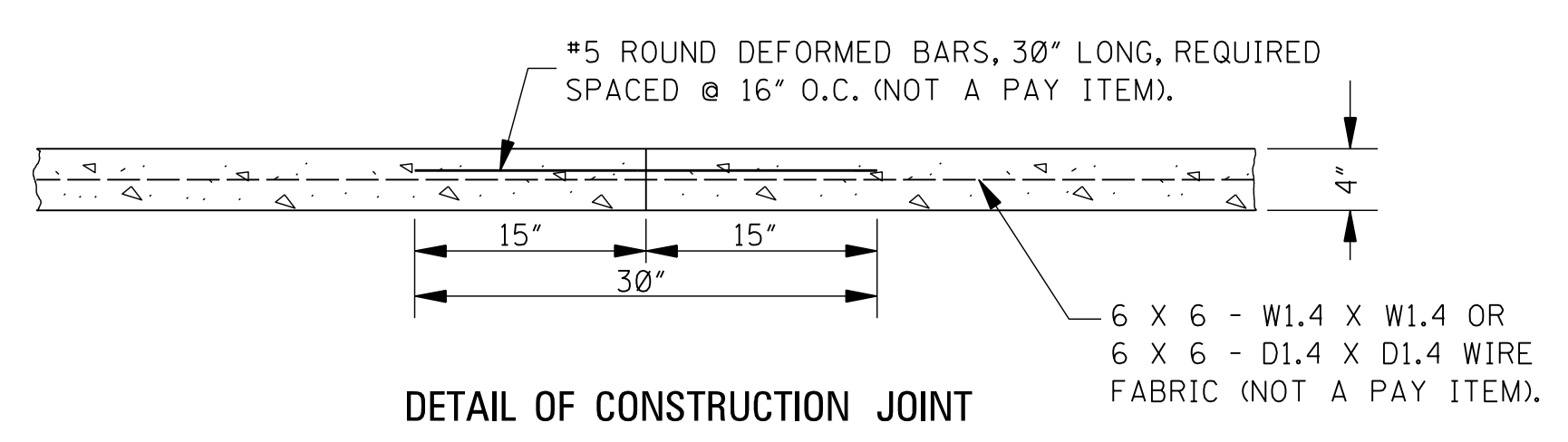
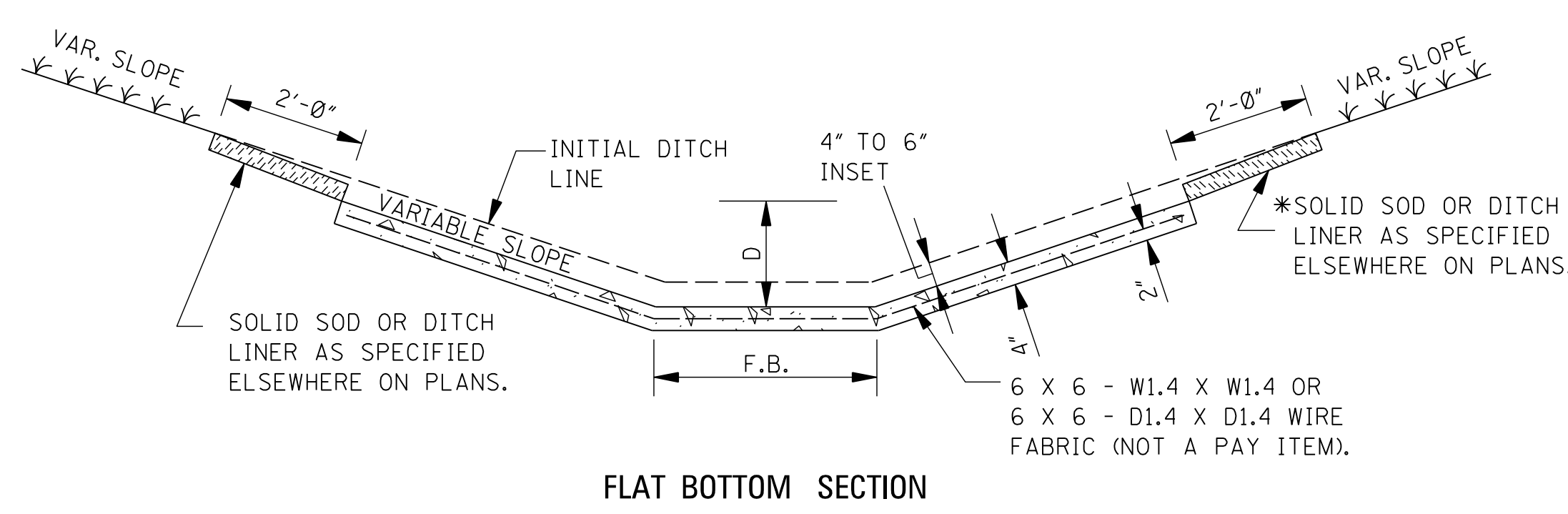
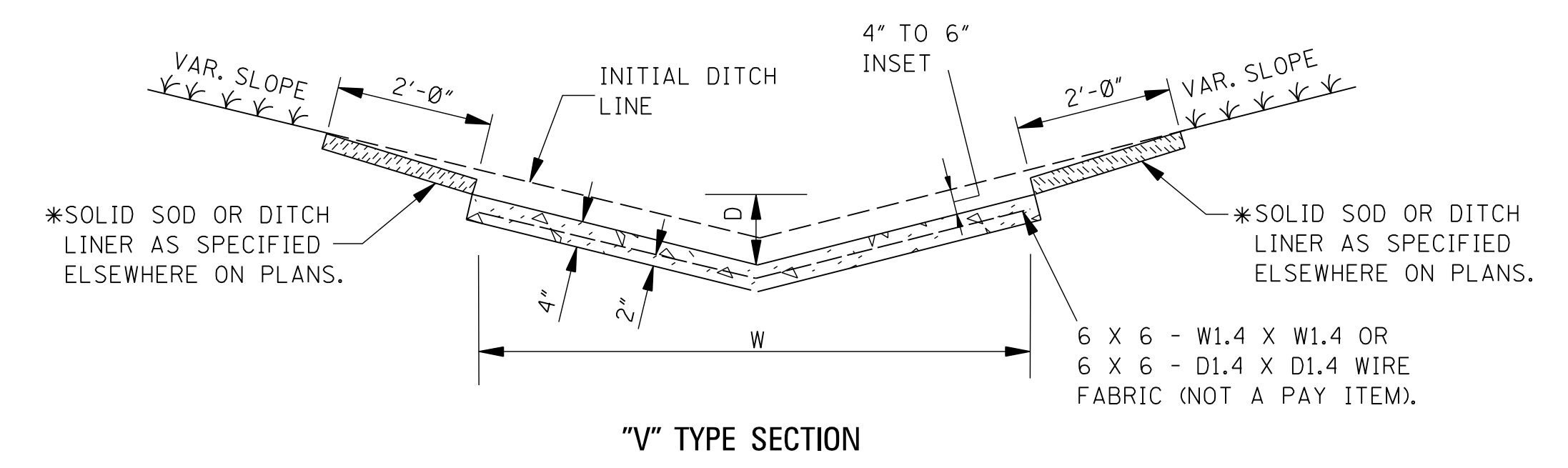


SECTION A-A

NOTES:

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

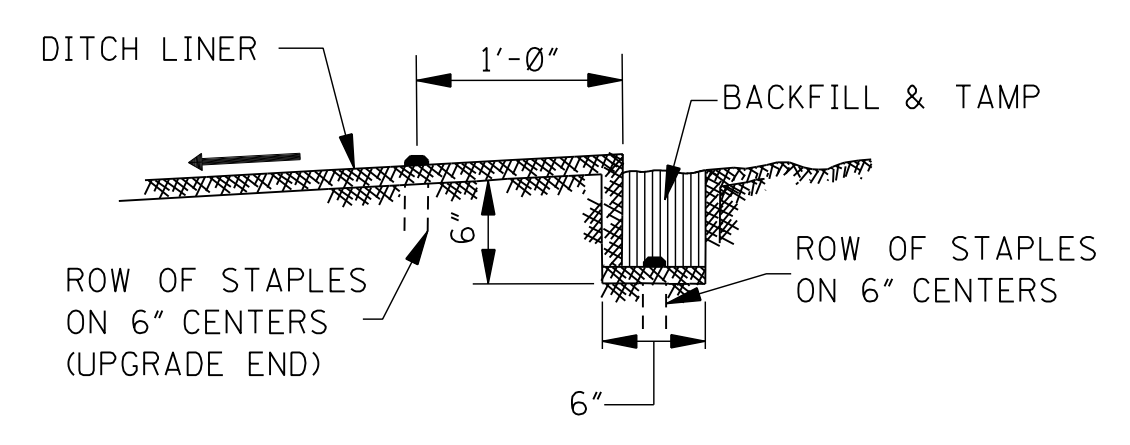
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">DETAILS OF EROSION CONTROL WATTLE DITCH CHECK</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		ECD-6	
SHEET NUMBER		6106	



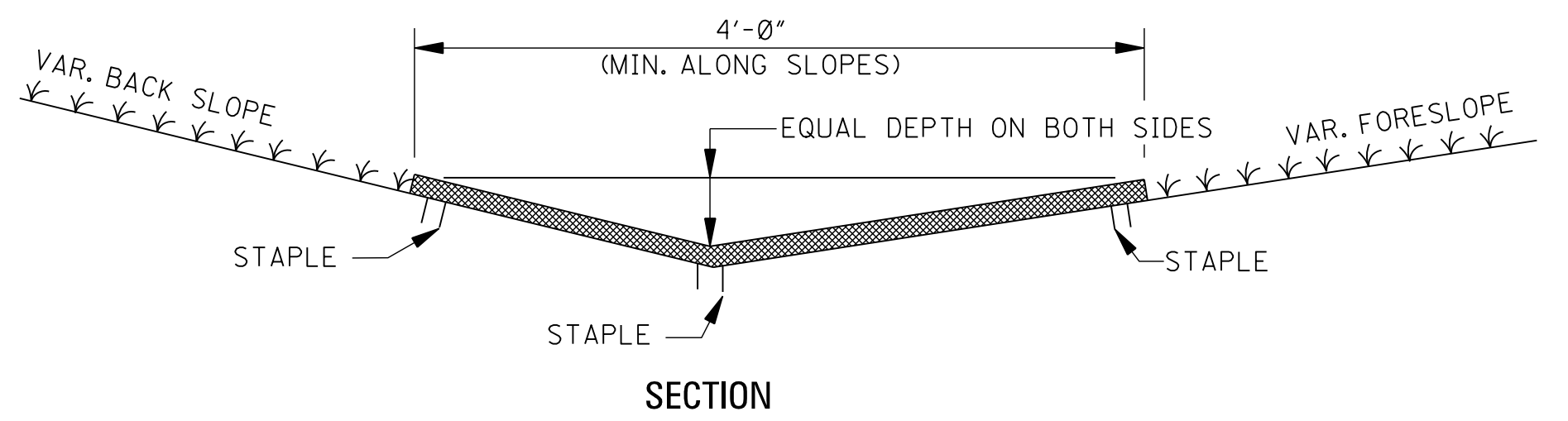
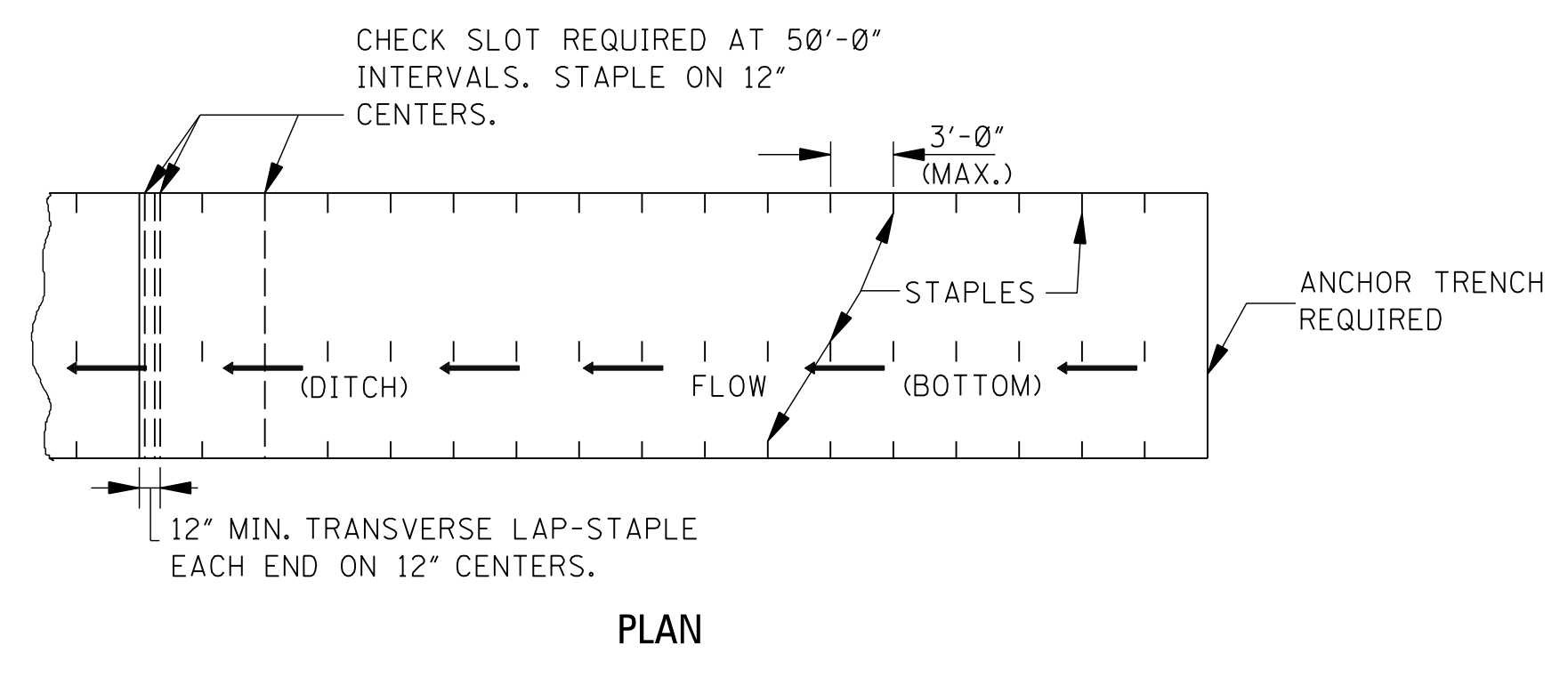
CONCRETE PAVED DITCH

NOTE: TOE WALL REQUIRED UPSTREAM AND DOWNSTREAM.

- NOTES:
- CONCRETE PAVED DITCHES SHALL BE GROOVED AT 20'-0" INTERVALS. THE GROOVES SHALL BE CUT TO A DEPTH OF NOT LESS THAN 1".
 - DIMENSIONS D & W ARE AS FOLLOWS:
 D(MINIMUM) = 6"
 D(NOMINAL) = 9"
 W(MINIMUM) = 24"
 - CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.
 - * CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

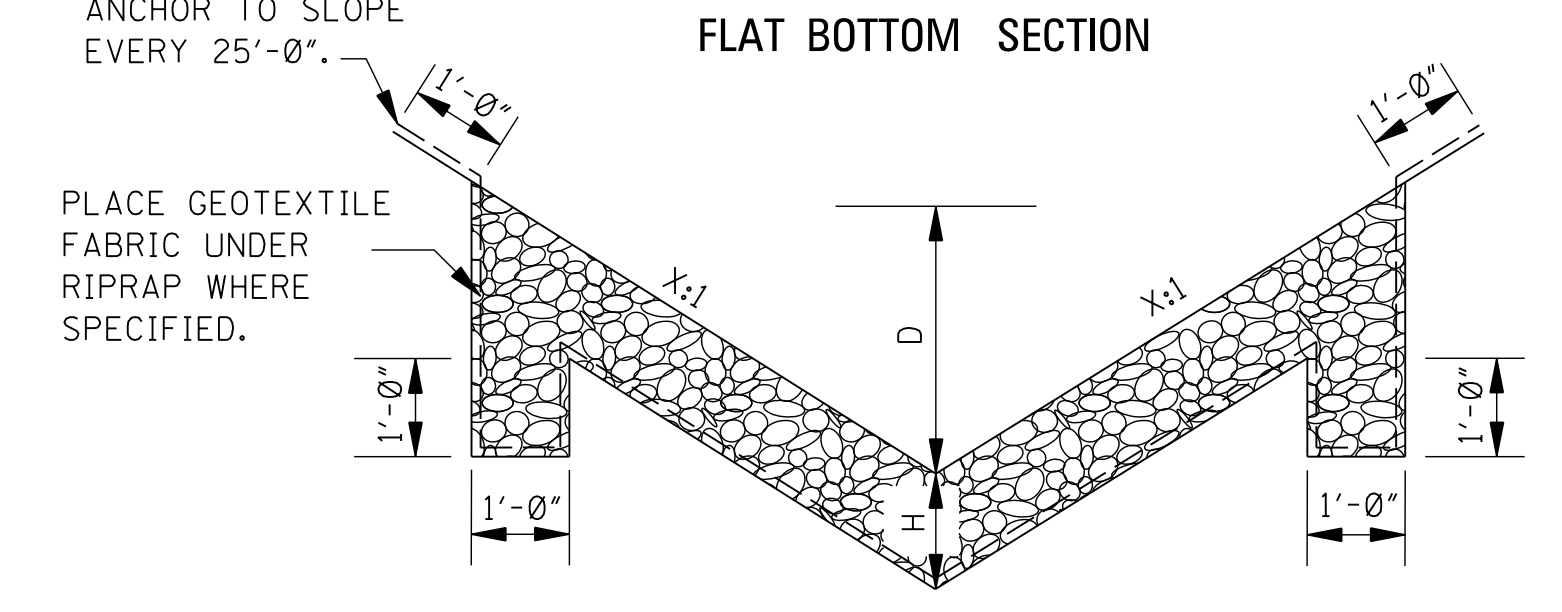
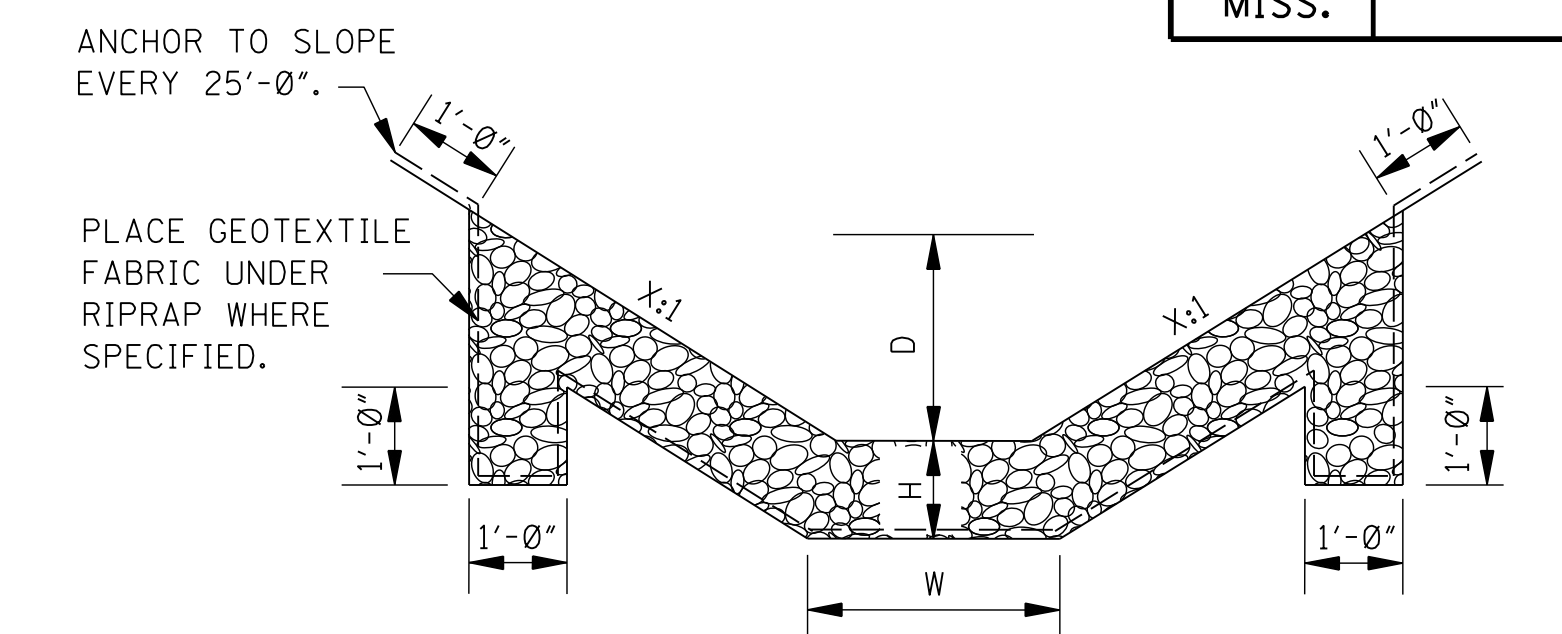


NOTE: ANCHOR TRENCH REQUIRED AT THE BEGINNING AND ENDING OF EACH AREA TO BE COVERED, EXCEPT DOWNSTREAM END ADJOINING A STRUCTURE.



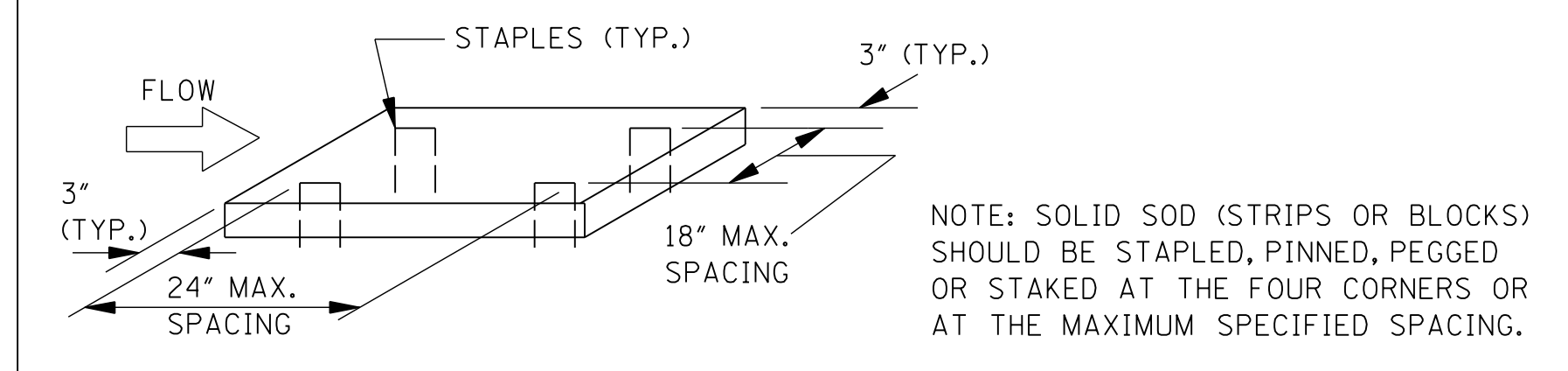
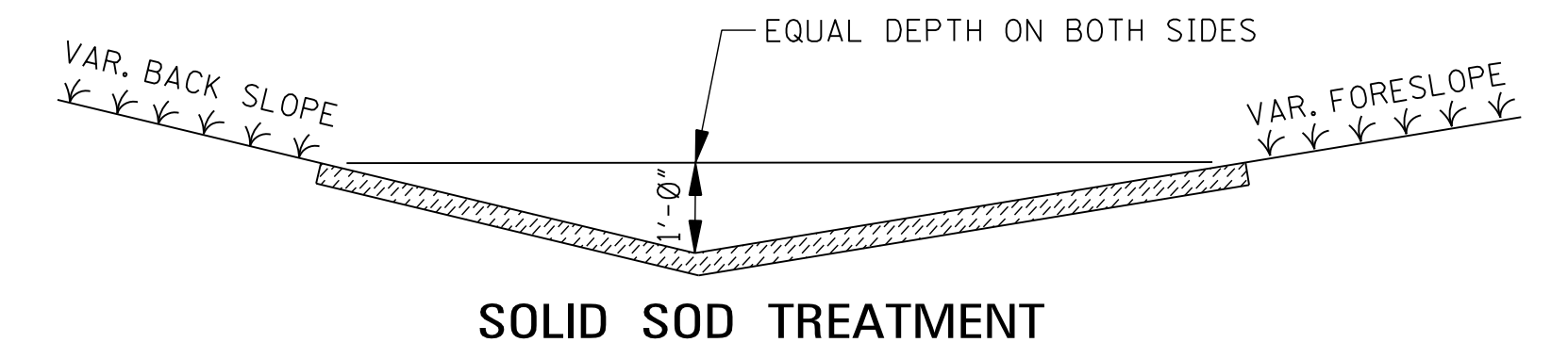
DITCH LINER TREATMENT
 (EXCELSIOR BLANKET, JUTE MESH OR EROSION CONTROL FABRIC)

NOTE: DITCHES TREATED WITH DITCH LINER WILL BE VEGETATED PRIOR TO TREATMENT, UNLESS OTHERWISE INDICATED.



- RIPRAP TREATMENT**
- NOTES:
- DIMENSIONS D, W AND X ARE VARIABLE AND ARE SHOWN ELSEWHERE ON THE PLANS.
 - THE RIPRAP SIZE AND MINIMUM DEPTH "H" FOR RIPRAP TREATMENT ARE AS FOLLOWS.

RIPRAP SIZE & MINIMUM DEPTH "H"	
H (in)	RIPRAP SIZE (lbs)
12"	100
18"	300

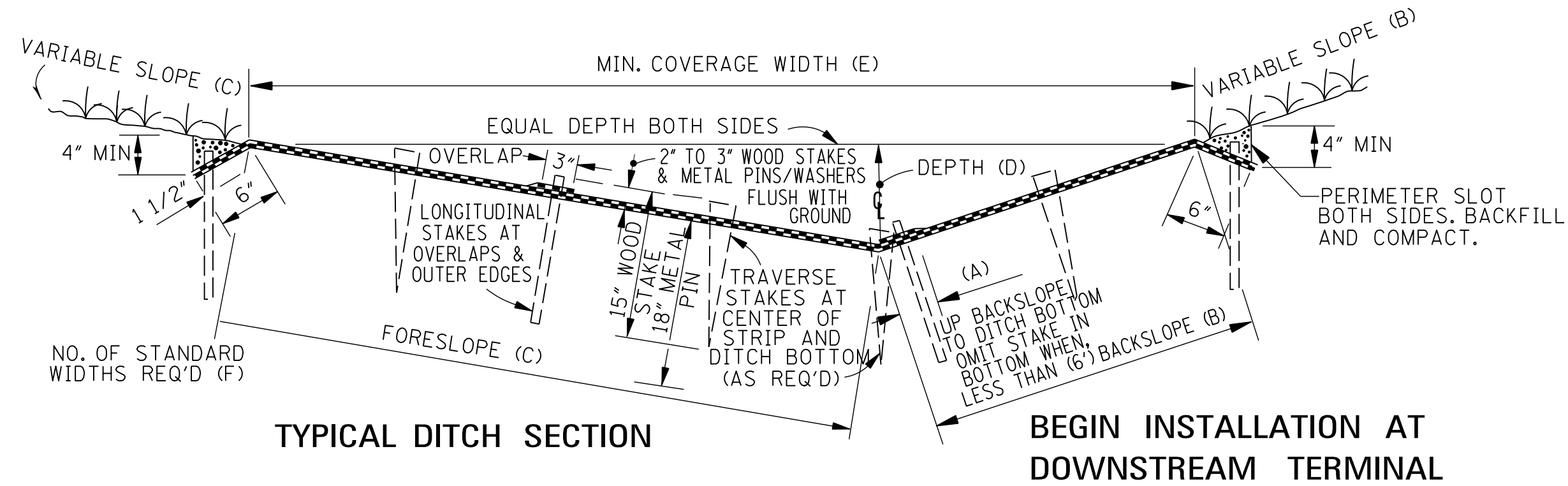


- GENERAL NOTE:
- FOR LOCATION OF APPROPRIATE DITCH TREATMENTS, SEE PLAN SHEETS AS DENOTED BY THE FOLLOWING LEGEND OR AS DIRECTED BY THE ENGINEER:
- DITCH LINER
 - SOLID SOD
 - CONCRETE PAVED DITCH
 - RIPRAP

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

DETAILS OF TYPICAL DITCH TREATMENTS

MDOT
WORKING NUMBER DT-1
SHEET NUMBER 6123

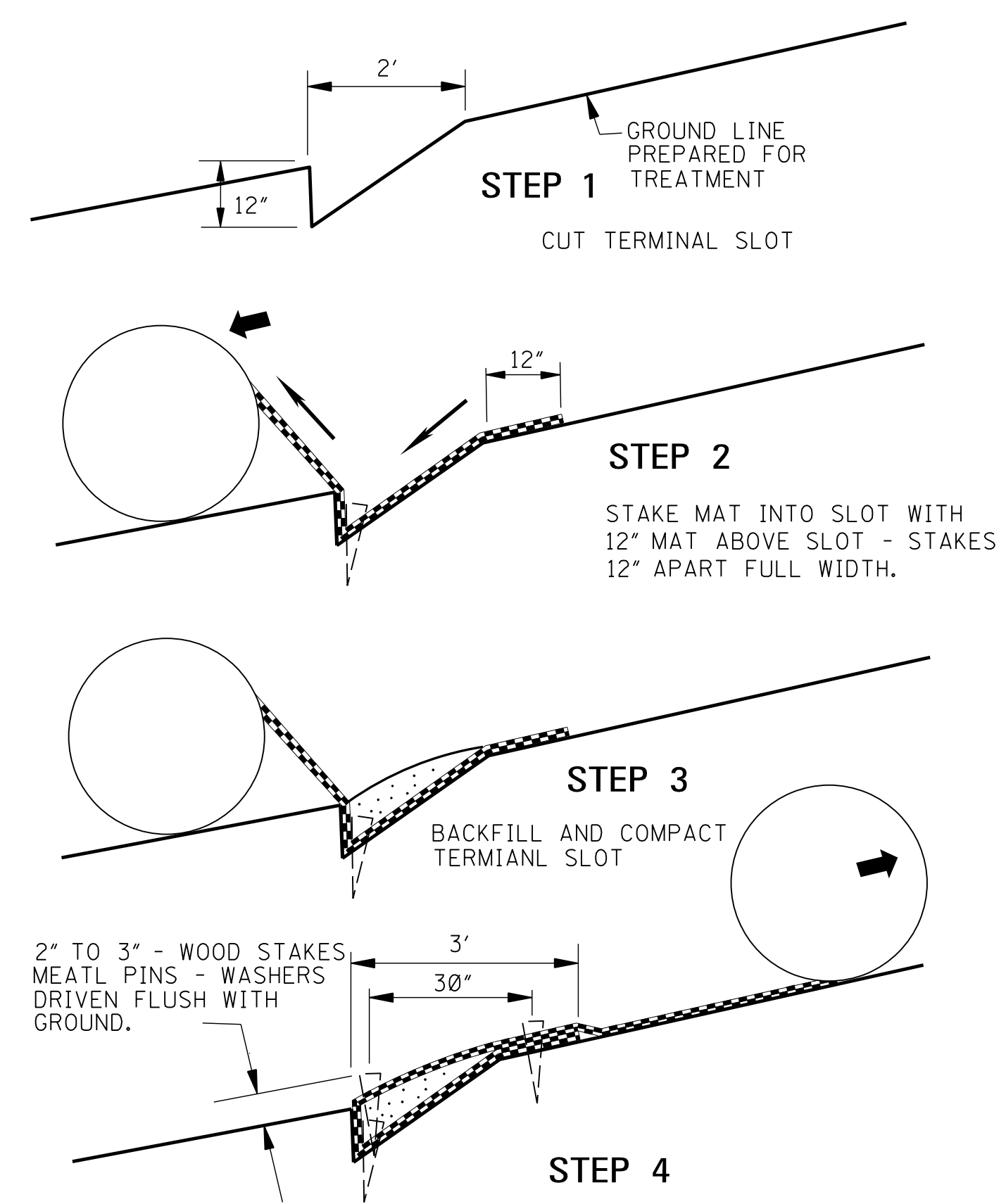


TYPICAL DITCH SECTION

MAT PLACEMENT TABLE

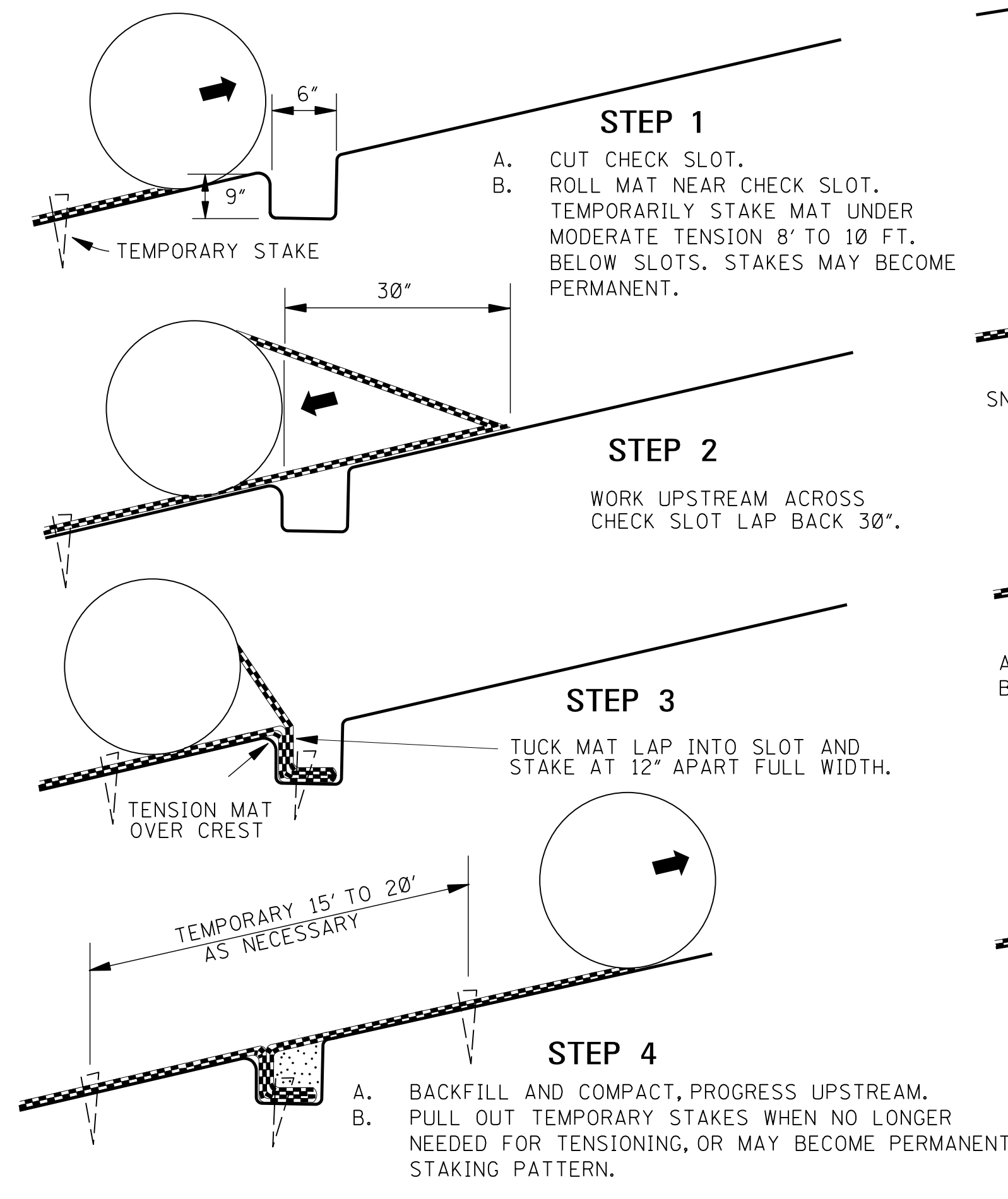
DIMENSIONS OF MAT PLACEMENT IN DITCH (INDIVIDUAL 38" WIDTH ROLLS)					
ELEMENTS OF MAT PLACEMENT	SIDE SLOPE COMBINATIONS FORESLOPE - BACKSLOPE				
	3:1 & 3:1	4:1 & 3:1	6:1 & 3:1	6:1 & 4:1	6:1 & 6:1
(A) UP BACKSLOPE TO DITCH BOTTOM	1' - 7"	1' - 1"	0' - 4"	0' - 10"	0' - 1 1/2"
(B) BACKSLOPE	4' - 0"	3' - 6"	2' - 9"	3' - 3"	3' - 5 1/2"
(C) FORESLOPE	4' - 0"	4' - 6"	5' - 3"	4' - 9"	5' - 5 1/2"
(D) DEPTH OF COVERAGE	1' - 3"	1' - 1"	0' - 10"	0' - 9"	0' - 11"
(E) WIDTH OF COVERAGE	7' - 7"	7' - 8"	7' - 9"	7' - 10"	10' - 9"
(F) MINIMUM NUMBER OF STAND WIDTH STRIPES	3	3	3	3	4
(B)+(C) TOTAL COVERAGE ON SLOPES	8' - 0"	8' - 0"	8' - 0"	8' - 0"	10' - 11"
SQ. YDS./LIN. FT.	0.89	0.89	0.89	0.89	1.22
MULTI-WIDTH WELDED SEAM MAT (WELDED 38" WIDTH STRIPS)					
(B)+(C) TOTAL COVERAGE MULTI-WIDTH ROLLS	8' - 3"	8' - 3"	8' - 3"	8' - 3"	11' - 3 1/2"
SQ. YDS./LIN. FT.	0.92	0.92	0.92	0.92	1.25

BEGIN INSTALLATION AT DOWNSTREAM TERMINAL



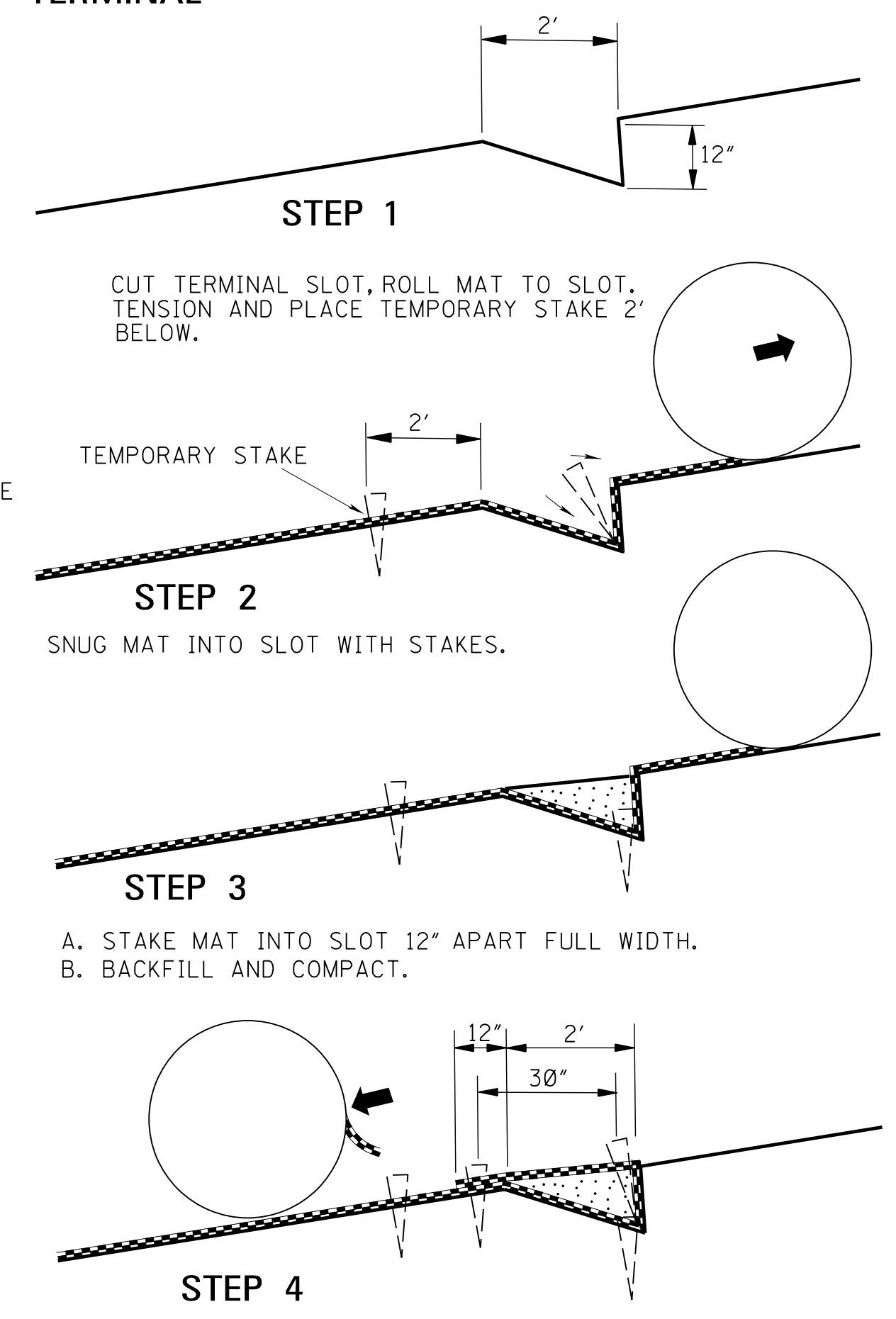
SEQUENTIAL ROLL RUN OUT IN DITCH WITH STAKING DETAIL

25 - FOOT INTERVAL TRANSVERSE CHECK SLOT (FOR INDIVIDUAL ROLLS*)



* WHEN MULTI-WIDTH (WELDED SEAM) ROLLS ARE USED, OMIT EXCAVATED CHECK SLOT AND REPLACE WITH A ROW OF STAKES ONE FOOT APART AT 25-FT. INTERVALS (SEE DETAILS). TEMPORARY STAKES NOT REQUIRED.

END INSTALLATION AT UPSTREAM TERMINAL

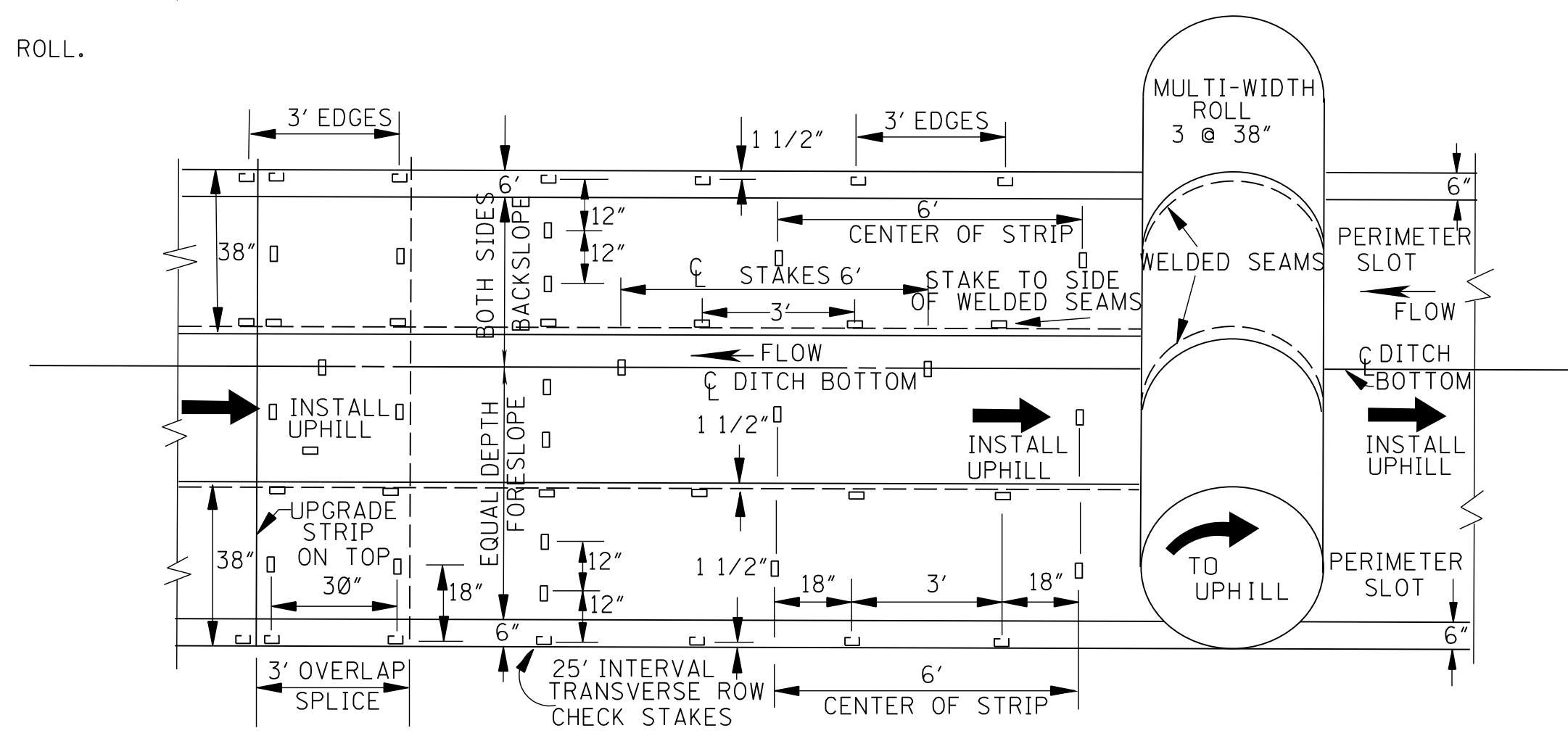


GENERAL NOTES:

- WHEN METAL PINS WITH WASHERS ARE PERMITTED IN PLACE OF WOOD STAKES, THE METAL PINS ARE DRIVEN TO ASSURE THAT THE WASHERS WITH MAT UNDERNEATH ARE FLUSH WITH THE GROUND LEAVING NO PROJECTION OF THE PINS ABOVE THE GROUND LINE.
- SOIL REINFORCING MAT SHALL BE USED WHERE SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

GENERAL INSTRUCTIONS:

- BEGIN INSTALLATION AT DOWNSTREAM TERMINAL AND PROGRESS UPSTREAM.
- FIRST ROLL IS ALIGNED FROM DITCH BOTTOM UP BACKSLOPE (SEE MAT PLACEMENT TABLE) AND UNDER MODERATE TENSION TEMPORARILY STAKED TO MAINTAIN PROPER DESIGN COVERAGE ALIGNMENT.
- WORKING OUTWARD FROM DITCH BOTTOM TO EDGES, SUBSEQUENT ADJACENT ROLLS FOLLOW IN STAGGERED SEQUENCE UNDER MODERATE TENSION.
- OVERLAP MAT SEAMS 3 INCHES AND STAKE AT 3-FT. INTERVALS WITH STAKES ALIGNED LONGITUDINALLY TO DITCH AND DIAGONAL EDGE OF STAKE TO THE UPSTREAM. OUTER EDGES (PERIMETER) OF MAT ARE STAKED SIMILARLY.
- STAKE THE CENTER OF EACH MAT STRIP AND WHEN REQUIRED ALONG THE DITCH BOTTOM AT 6-FT. INTERVALS STAGGERED BETWEEN THE 3-FT. SPACING OF OVERLAP AND OUTER EDGE STAKES WITH THE BROADSIDE TO THE FLOW DIRECTION AND DIAGONAL EDGE TOWARD THE SLOPE.
- USE 3-FT. OVERLAP AT END OF MAT ROLL SPLICES WITH UPGRADE STRIP ON TOP, STAKED IN TWO ROWS 30 INCHES APART, AND STAKES 18 INCHES APART FULL WIDTH.
- TRANSVERSE CHECK SLOTS 6 INCHES WIDE BY 9 INCHES DEEP ARE EXCAVATED AT 25-FT. INTERVALS WITH STAKES 12 INCHES APART FULL WIDTH OF TREATMENT. WELDED SEAM MULTI-WIDTH MAT WILL HAVE SIMILAR TRANSVERSE CHECKS OMITTING EXCAVATED SLOTS ONLY.
- END INSTALLATION AT UPSTREAM TERMINAL. TEMPORARY STAKING MAY BE PLACED TO BECOME PART OF PERMANENT STAKING PATTERN.

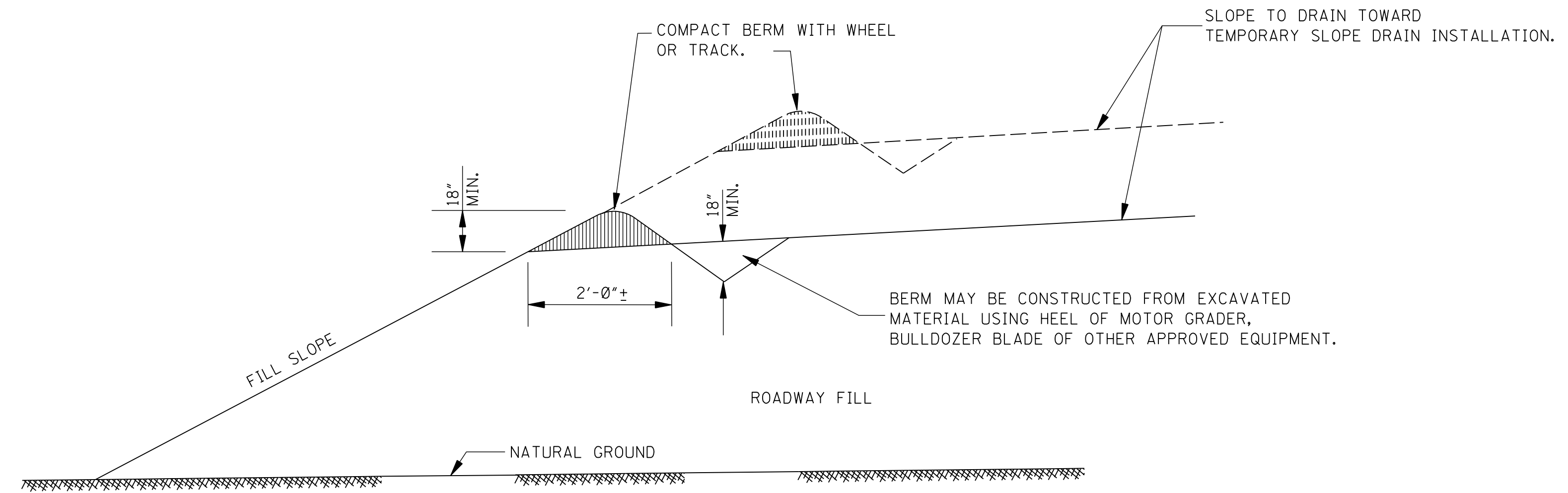


MULTI-WIDTH WELDED SEAM MAT RUN OUT IN DITCH WITH STAKING DETAIL

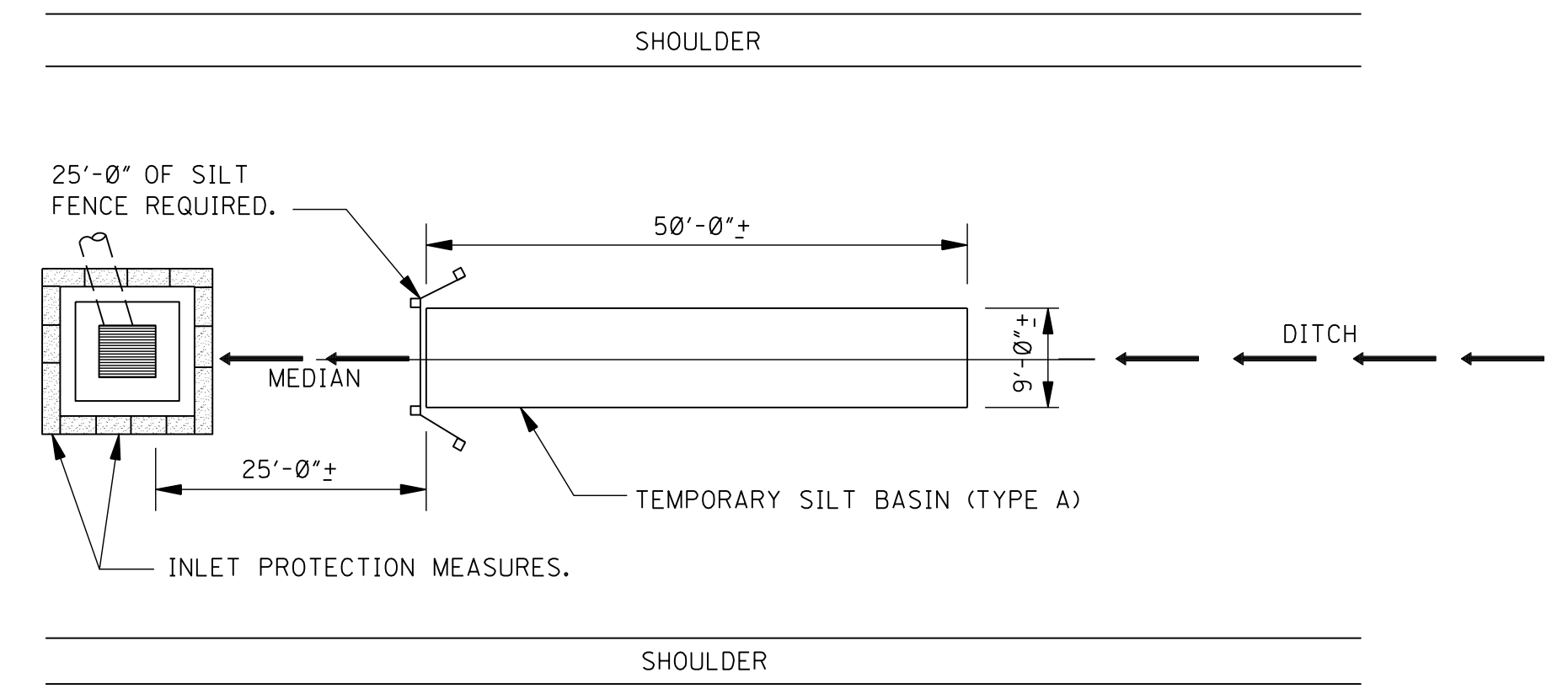
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	DITCH TREATMENT INSTALLATION DETAIL FOR SOIL REINFORCING MAT
DATE	ISSUE DATE: AUGUST 01, 2017



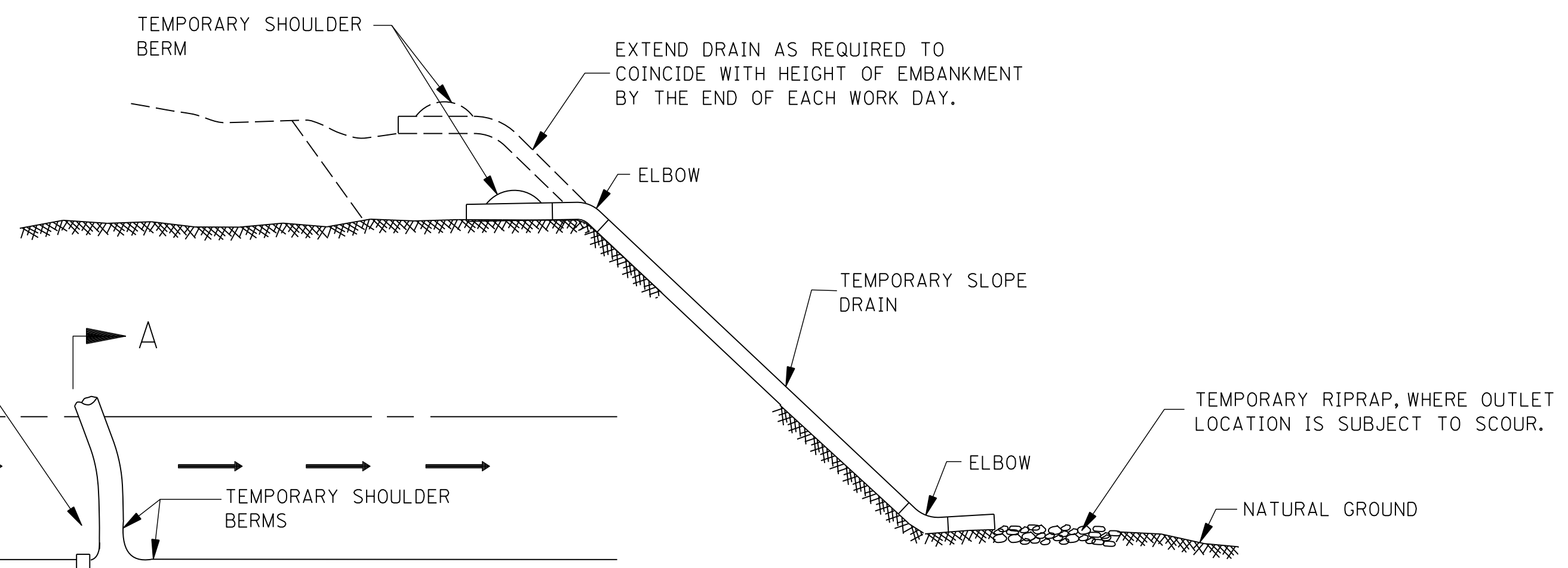
WORKING NUMBER
DT-1A
SHEET NUMBER
6124



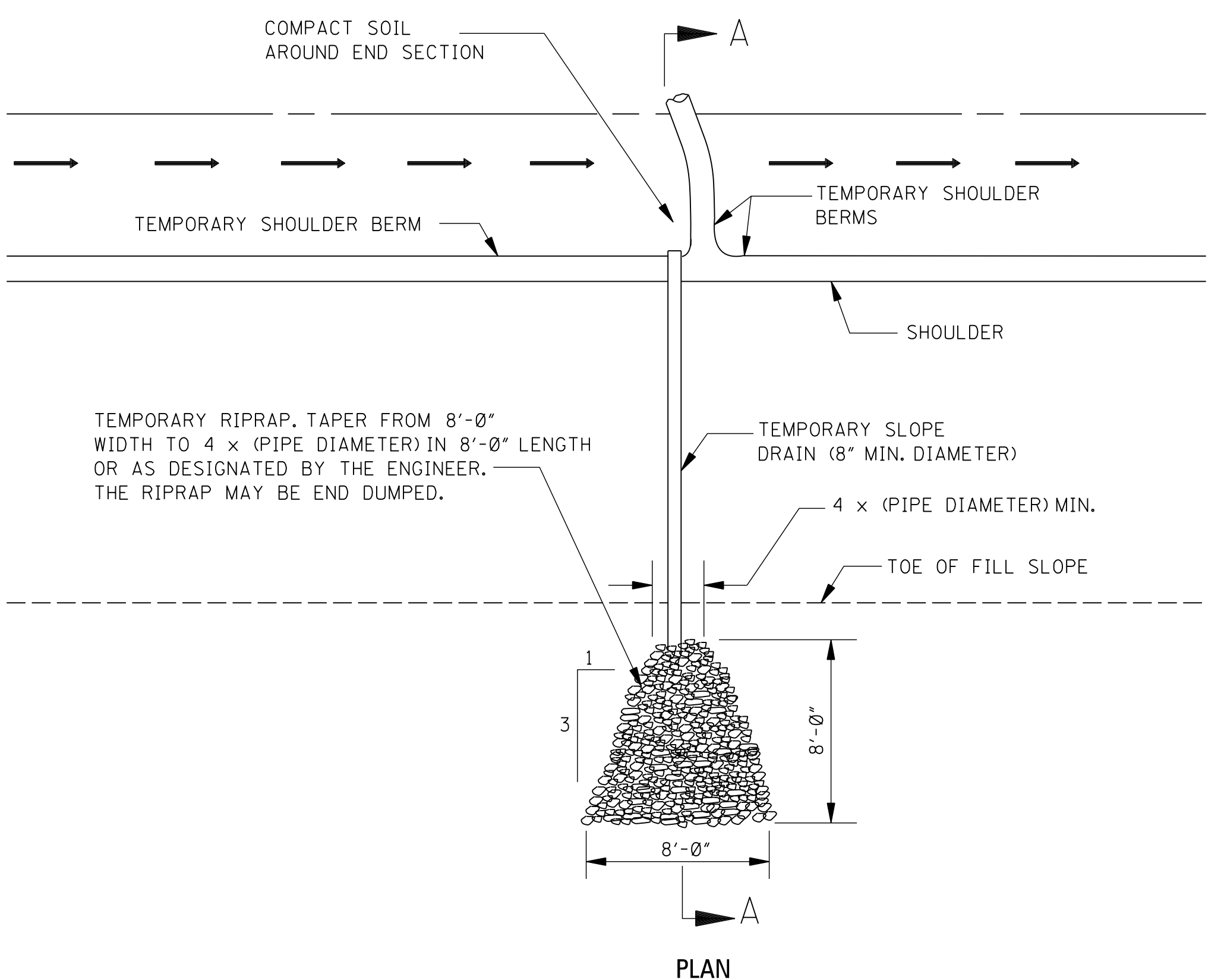
TEMPORARY SHOULDER BERM



TEMPORARY MEDIAN SILT BASIN (TYPE A)



SECTION A-A

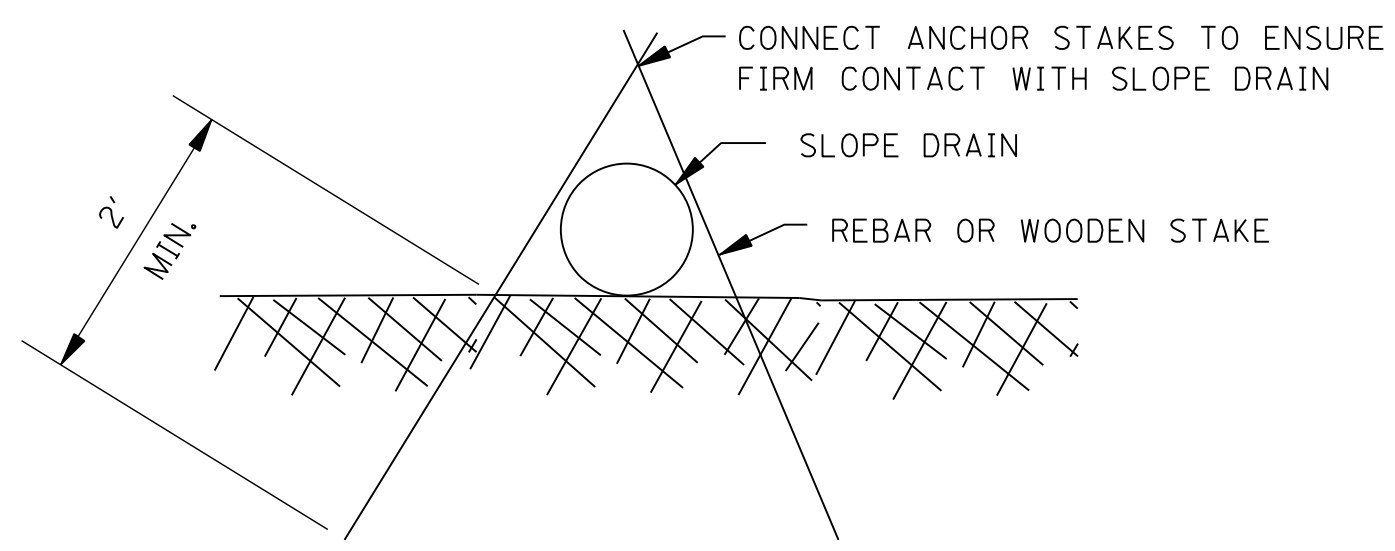


PLAN

TEMPORARY SLOPE DRAIN

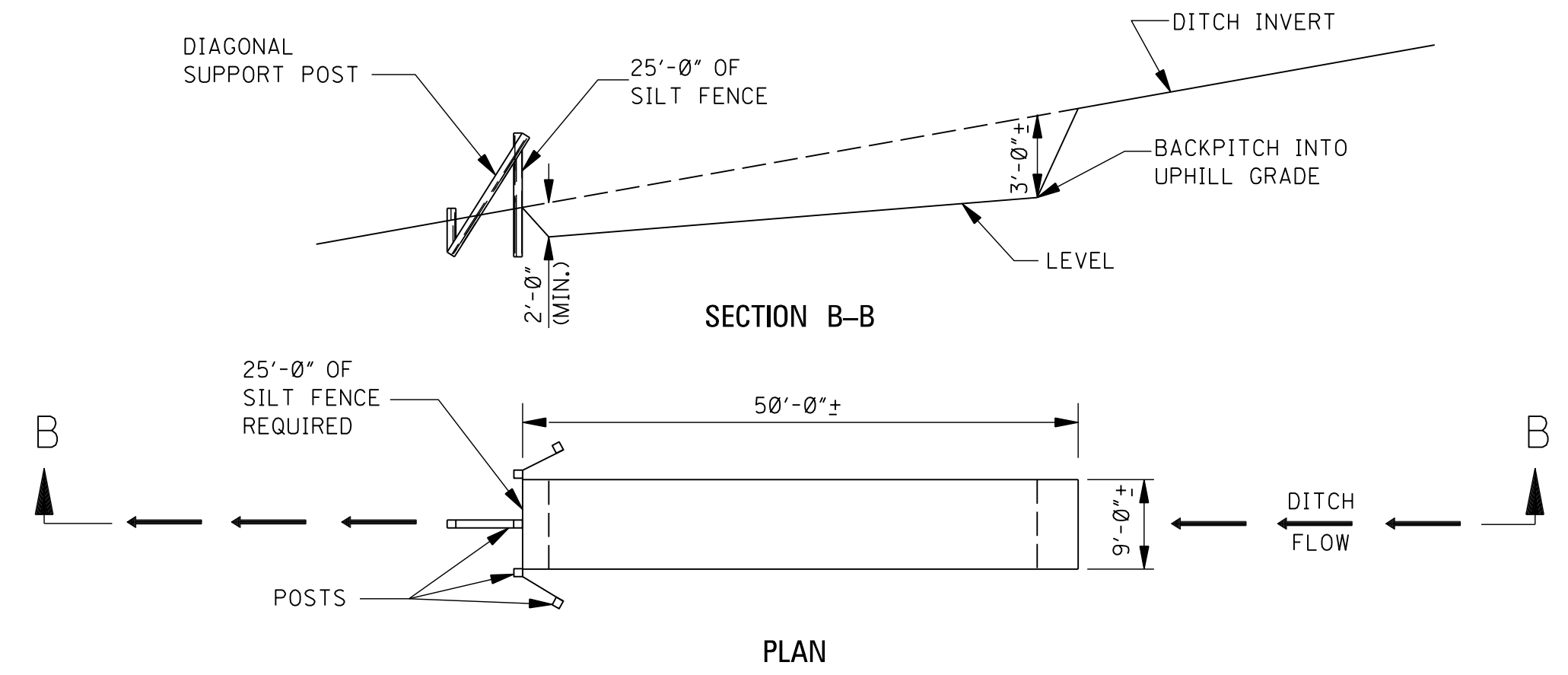
NOTE: TEMPORARY SLOPE DRAINS TO BE PLACED AT LOW POINT OF ALL SAG VERTICAL CURVES. INTERMEDIATE LOCATIONS TO BE PLACED AS DESIGNATED OR DEEMED APPROPRIATE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

THE COST OF SHOULDER BERM, STAKING, AND OUTFLOW PROTECTION SHALL BE INCLUDED IN OTHER ITEMS BID.



RECOMMENDED ANCHOR DETAIL

NOTE: CONTRACTOR MAY PROPOSE ALTERNATE ANCHORING DETAIL. ENGINEER'S APPROVAL WILL BE BASED ON PERFORMANCE



SECTION B-B

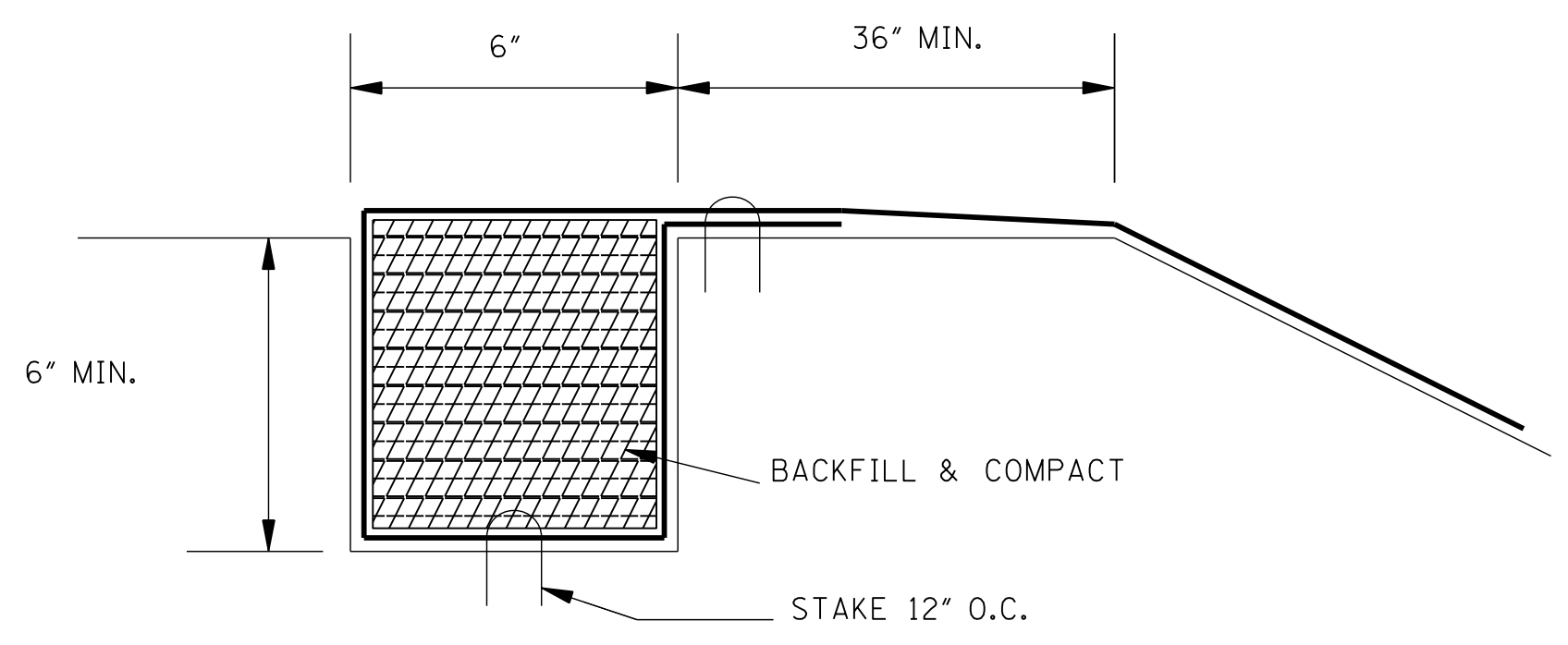
PLAN

TEMPORARY SILT BASIN (TYPE A)

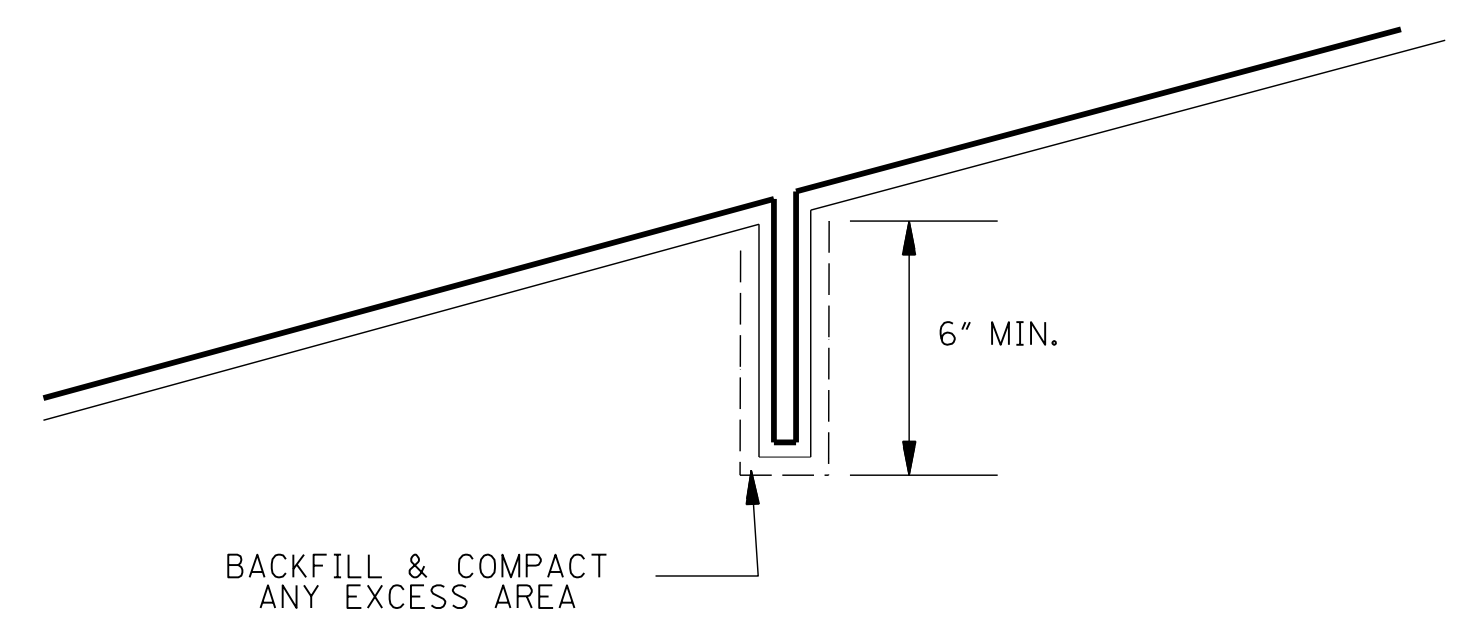
NOTE: TEMPORARY SILT BASIN (TYPE A) CAN BE USED IN SURFACE DRAIN DITCHES AND SIDE DITCHES AT THE END OF CUT SECTIONS, IMMEDIATELY PRECEDING DITCH INLETS AND JUST BEFORE THE WATER (RUNOFF) LEAVES THE RIGHT-OF-WAY OR ENTERS A WATER COURSE. TYPE A SILT BASINS WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
TYPICAL TEMPORARY EROSION CONTROL MEASURES (SLOPE DRAIN AND TYPE A SILT BASIN)	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017

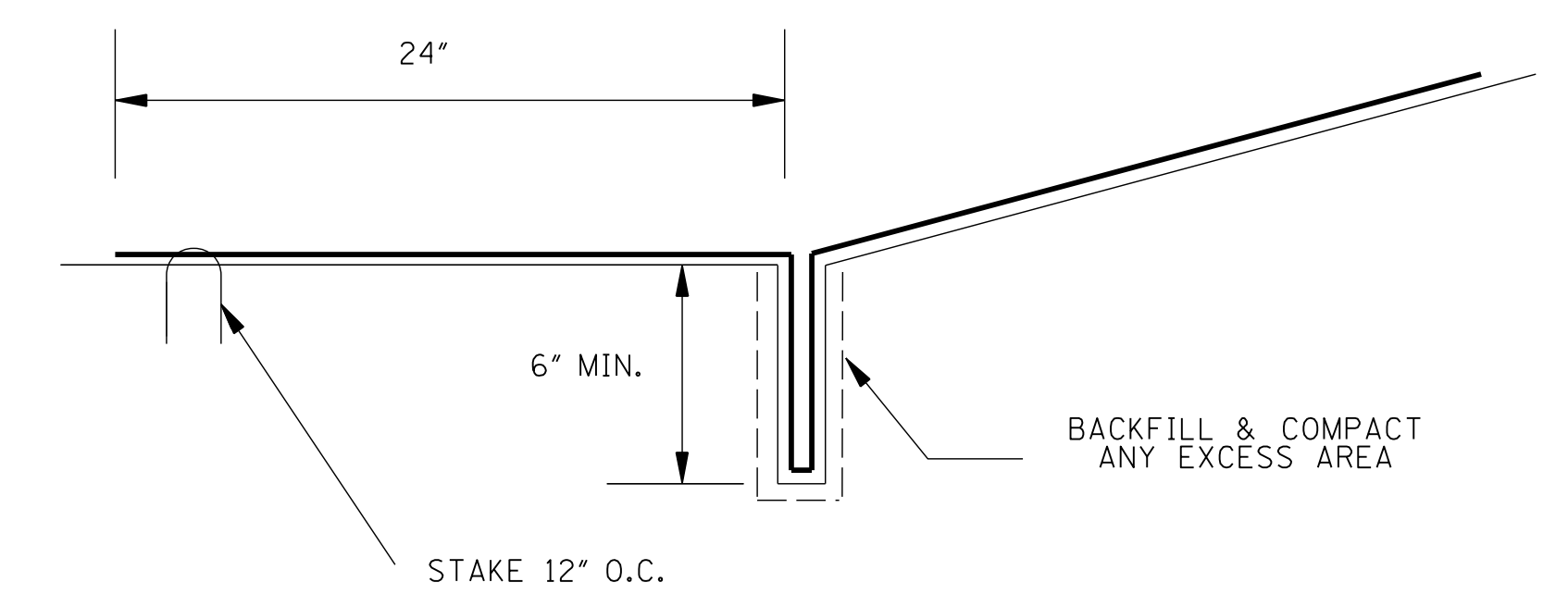
WORKING NUMBER BAS-A
SHEET NUMBER 6125



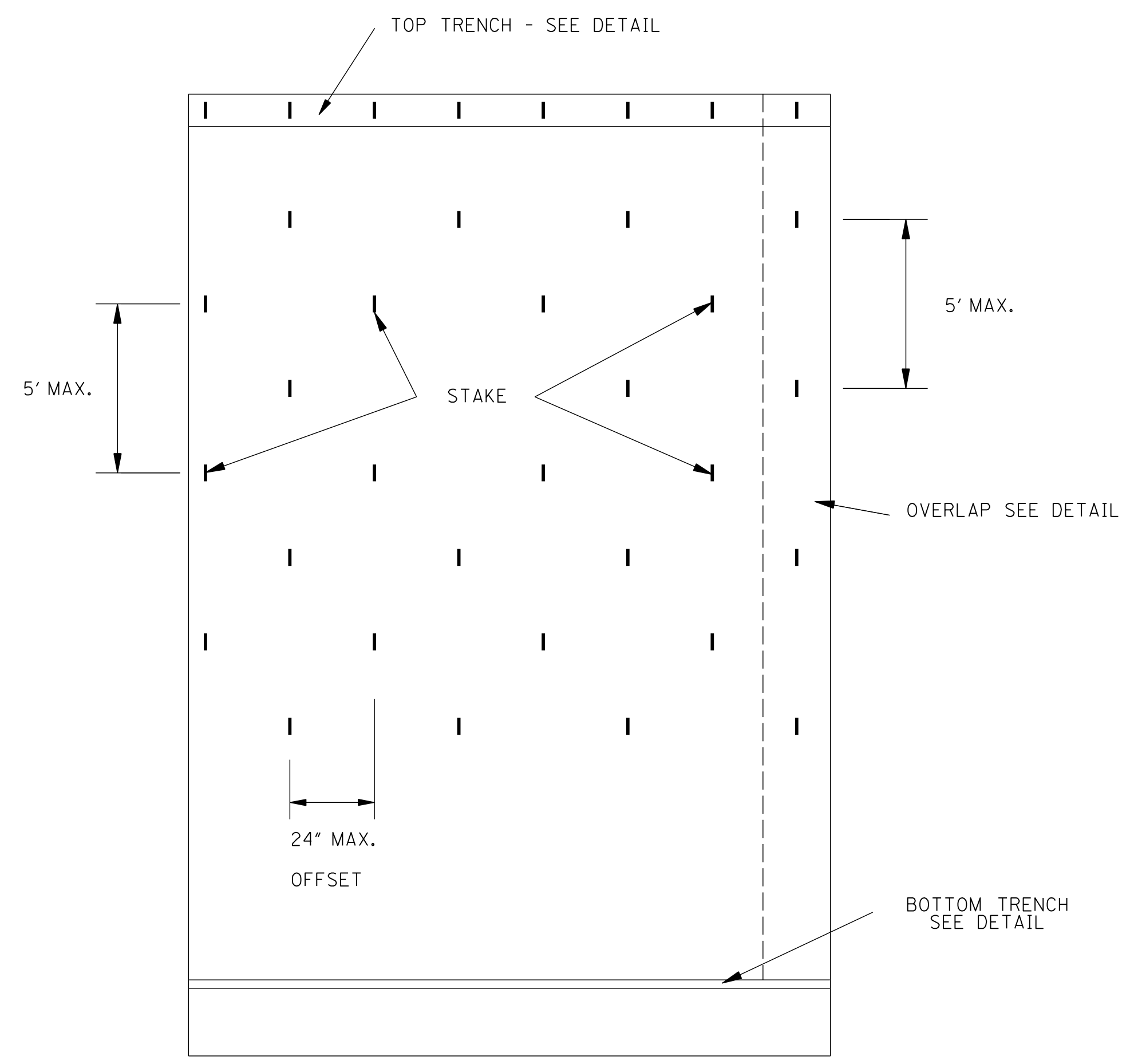
DETAIL OF TOP TRENCH



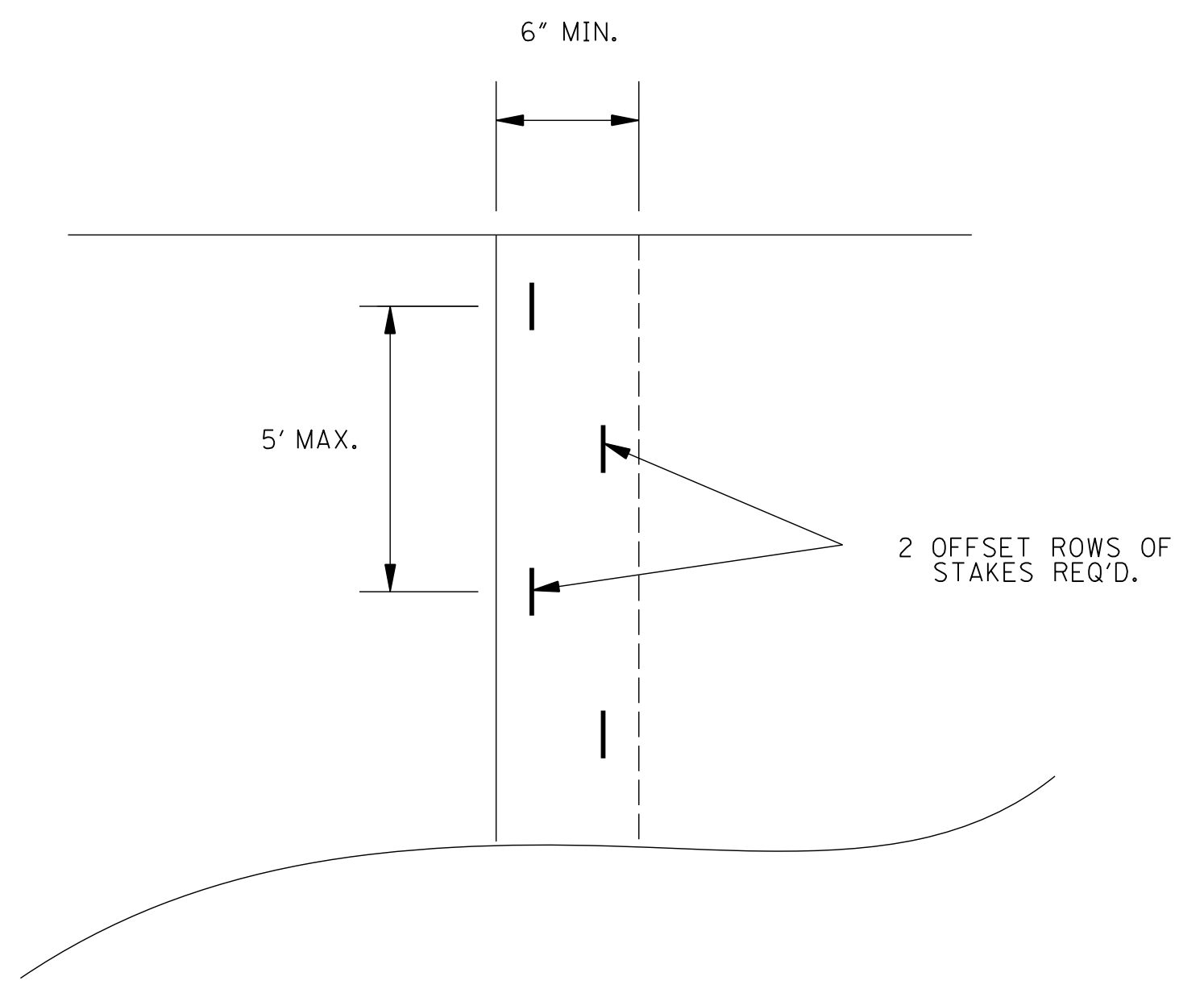
DETAIL OF INTERMEDIATE TRENCH



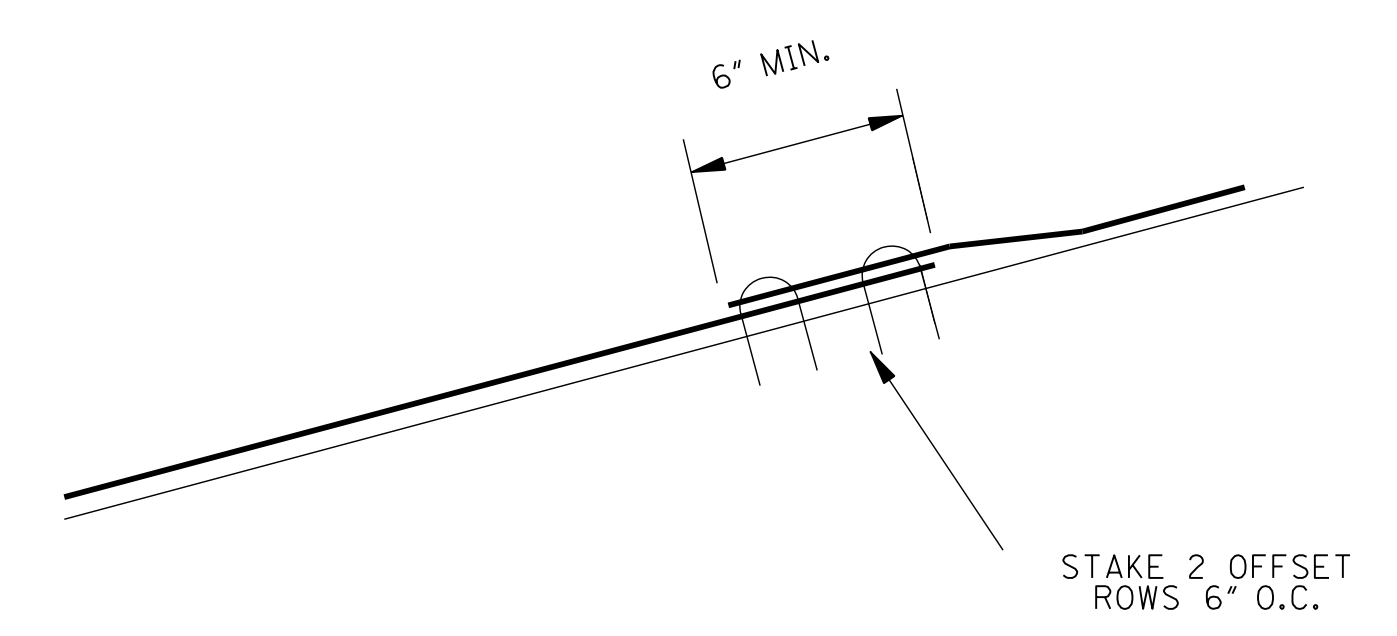
DETAIL OF BOTTOM TRENCH



DETAIL OF EROSION CONTROL BLANKET



DETAIL OF LONGITUDINAL OVERLAP

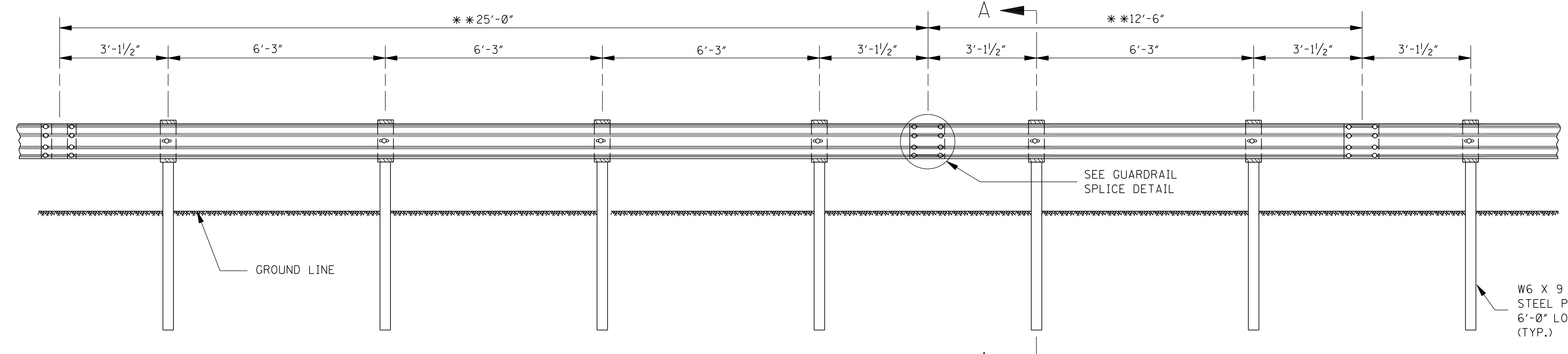


DETAIL OF TRANSVERSE OVERLAP

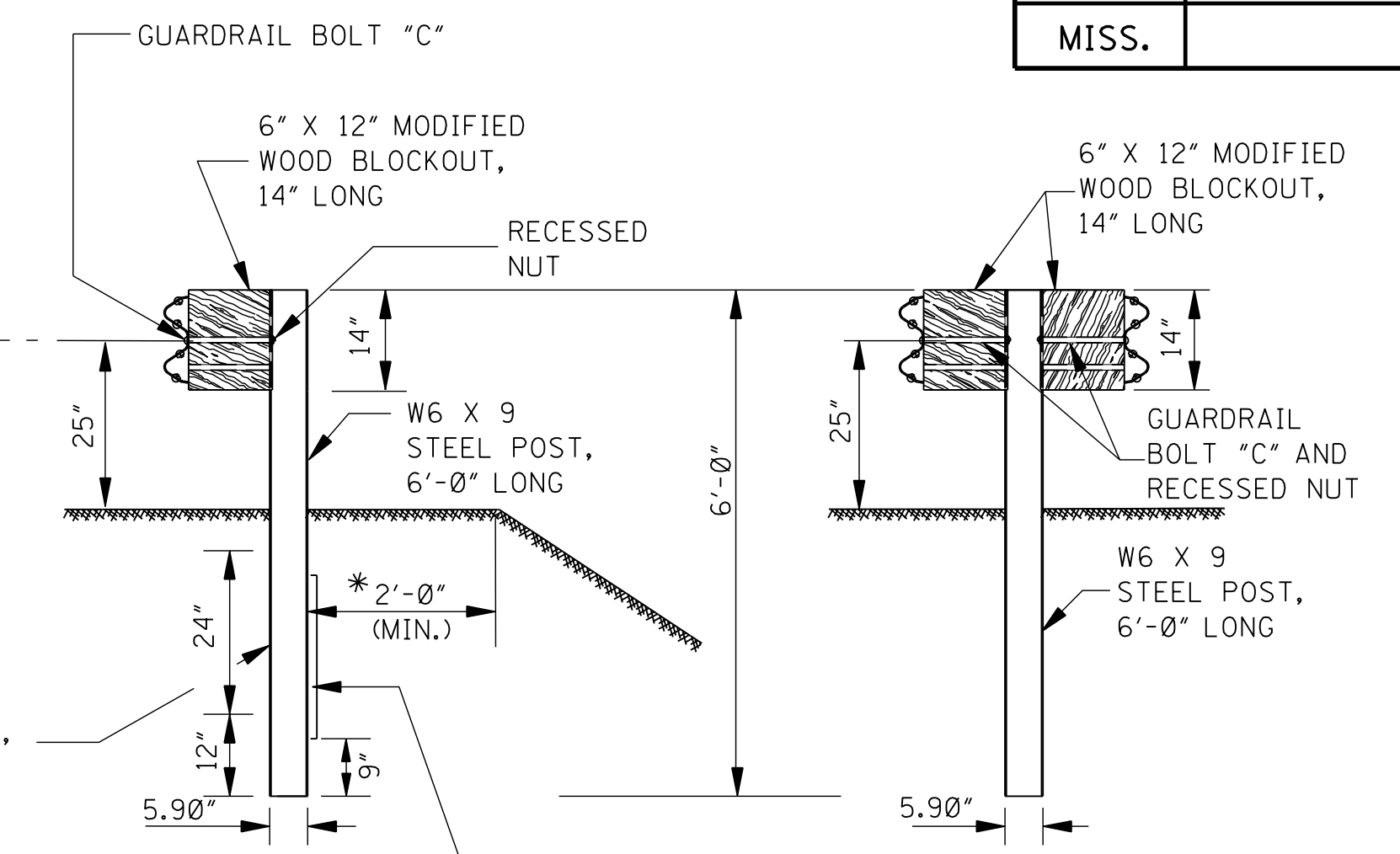
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		EROSION CONTROL BLANKET	
DATE			
ISSUE DATE:		AUGUST 01, 2017	



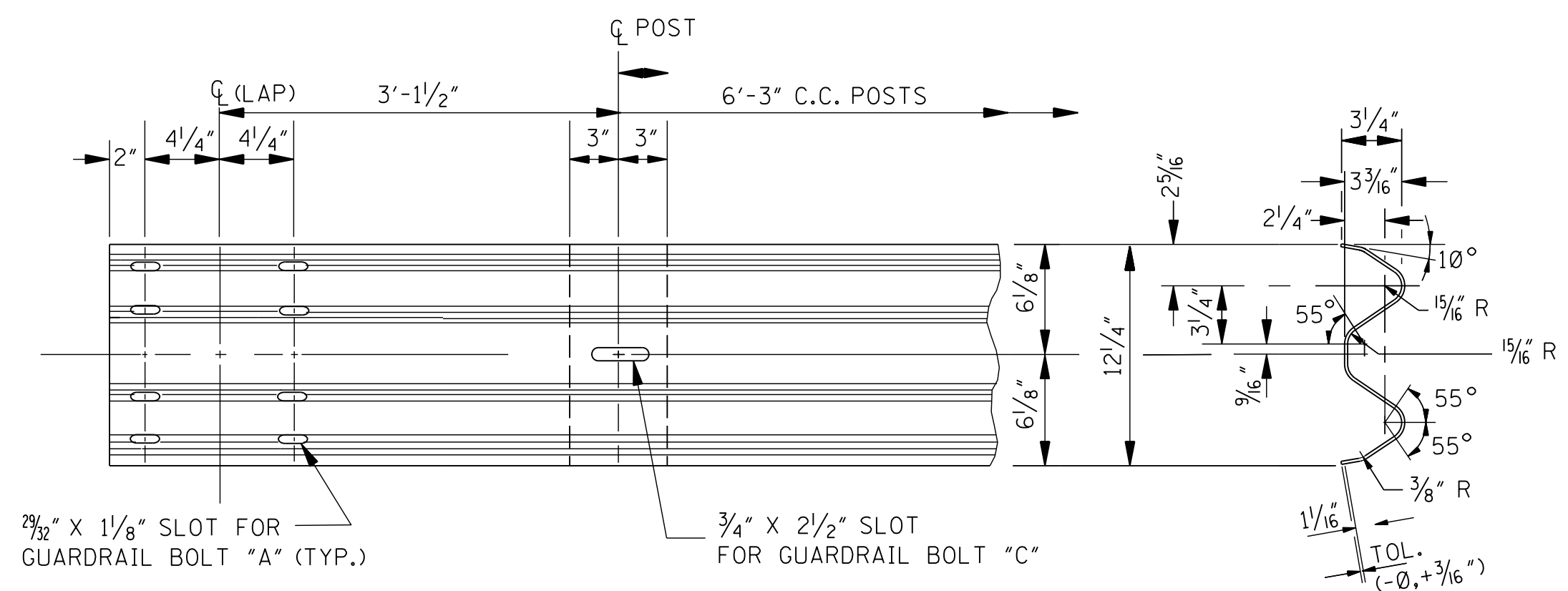
WORKING NUMBER
ECB-1
SHEET NUMBER
6131



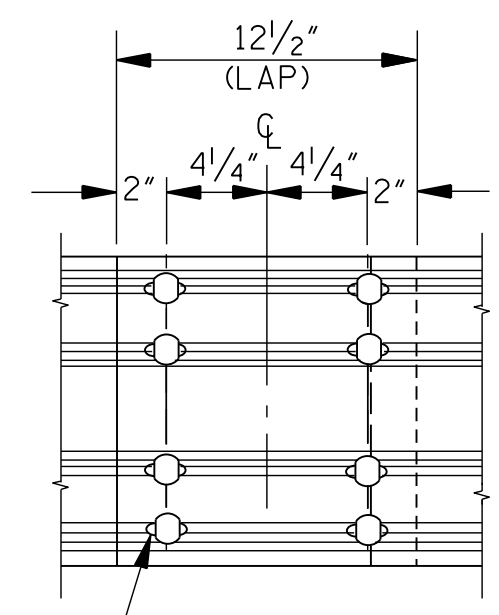
ELEVATION FROM ϕ ROADWAY
 ** NOTE: OPTIONAL BEAM LENGTHS.



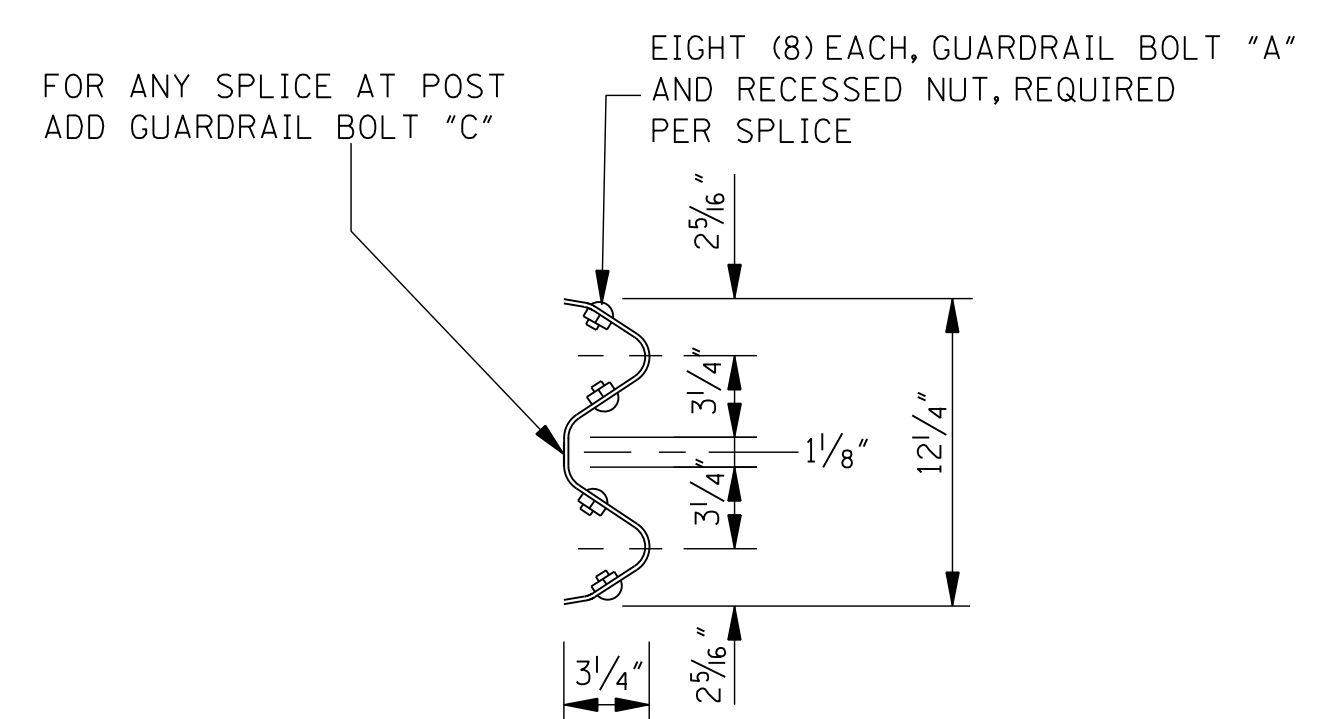
SINGLE-FACED BARRIER DOUBLE-FACED BARRIER
 SECTION A-A
 * NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.



TYPICAL GUARDRAIL SECTION

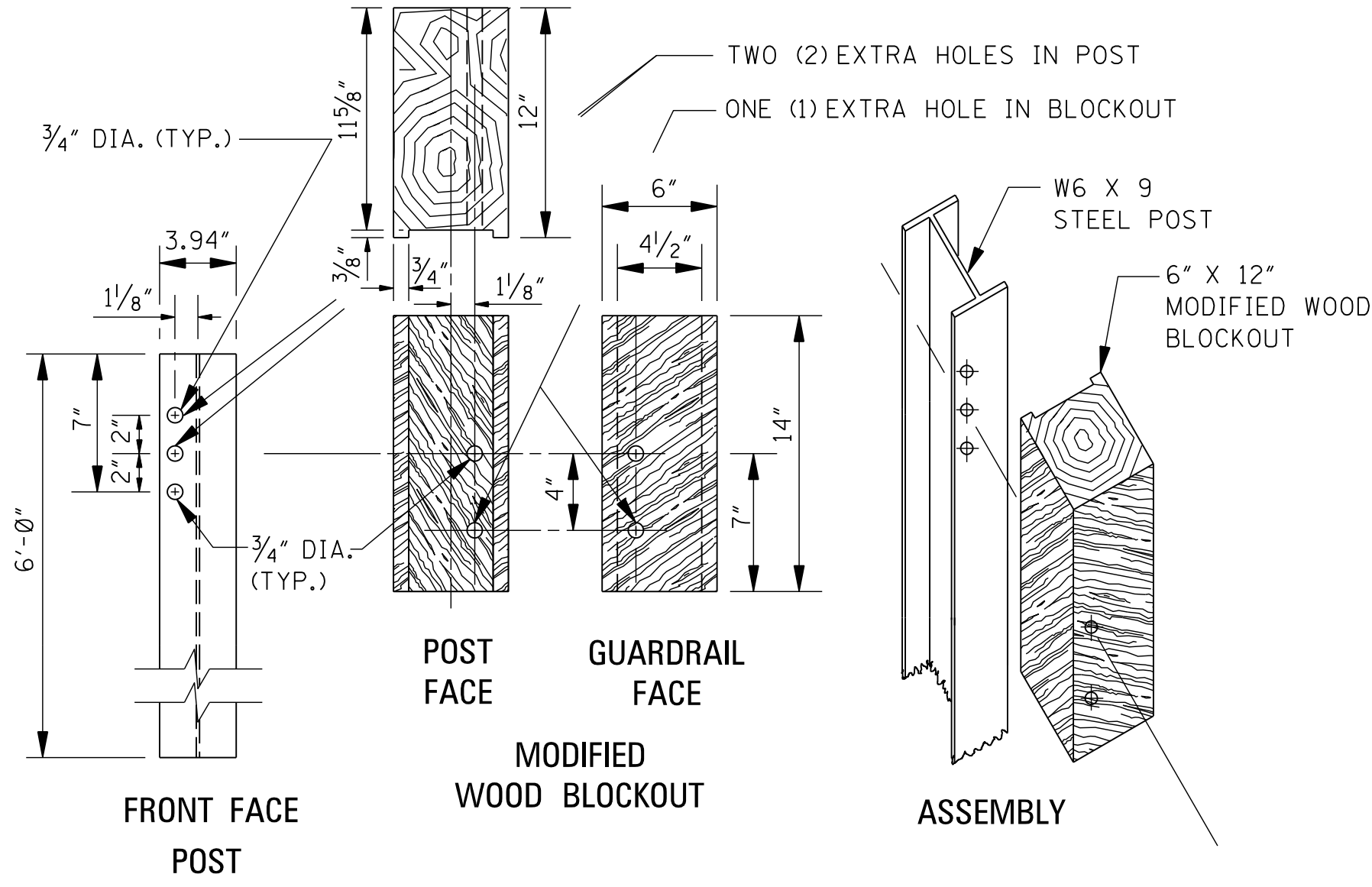


ELEVATION

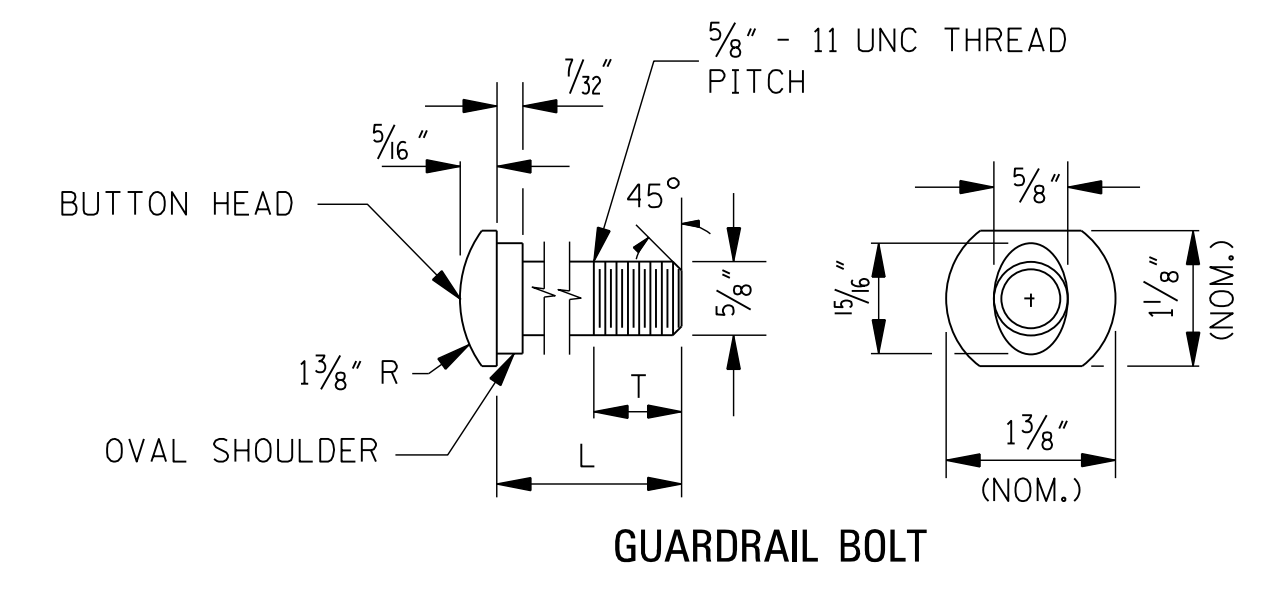


SECTION

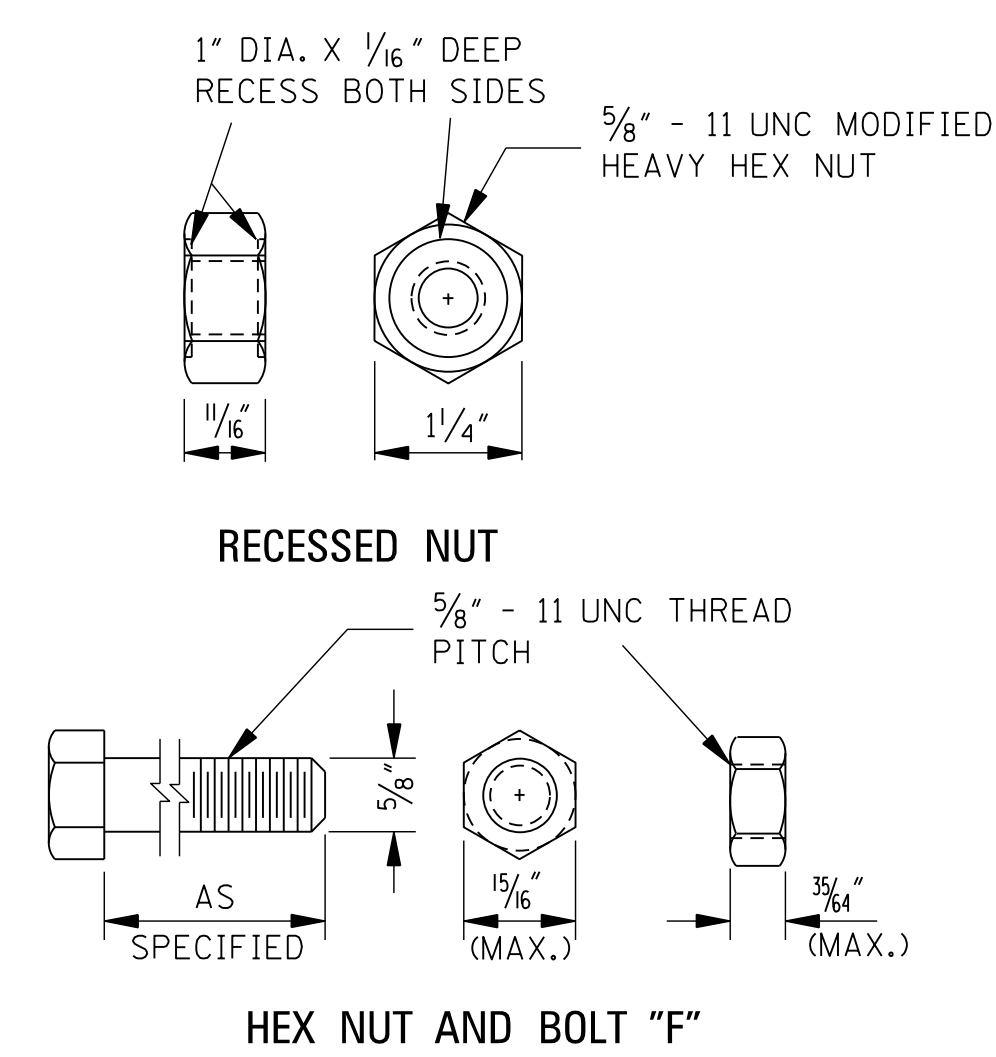
GUARDRAIL SPLICE DETAIL



DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY



GUARDRAIL BOLTS		
BOLT	L	T (MIN.)
"A"	1 1/4"	1"
"B"	12"	4"
"C"	14"	4"



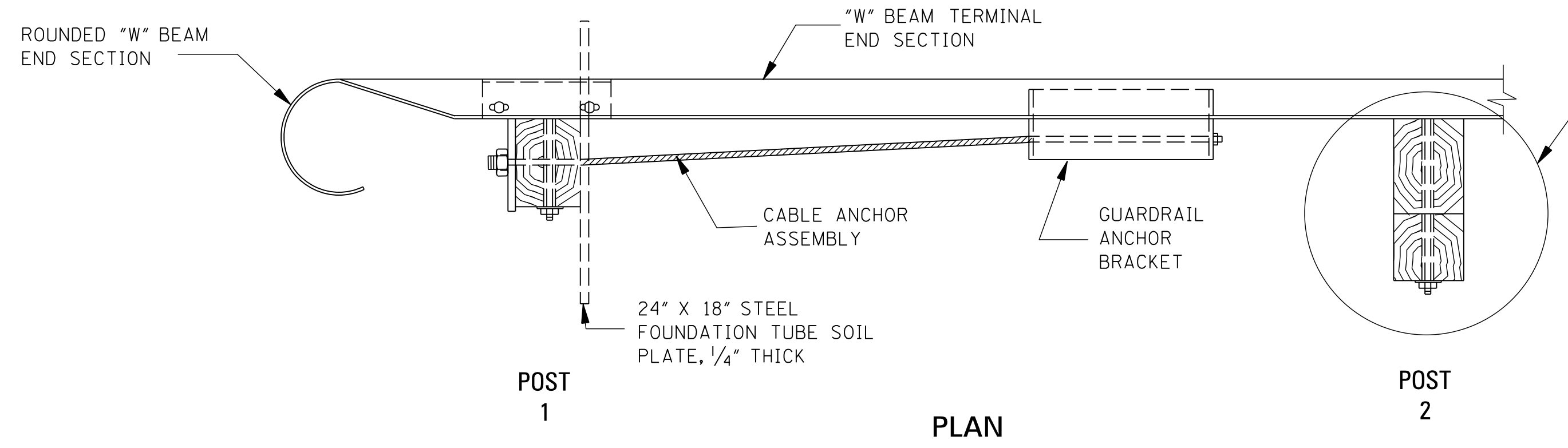
FASTENER DETAILS

- GENERAL NOTES:
- GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
 - GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
 - GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
 - STEEL POSTS SHALL CONFORM TO ASTM A36 (EXCEPT ULTRASONIC TESTING). THEY SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 EXCEPT WHEN CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE POSTS SHALL CONFORM TO AASHTO SPECIFICATIONS FOR CORROSION RESISTANCE AND SHALL NOT BE PAINTED OR GALVANIZED. NO PUNCHING, DRILLING OR CUTTING WILL BE PERMITTED AFTER GALVANIZING EXCEPT FOR HOLES TO MOUNT GUARDRAIL DELINEATORS.
 - ALL MODIFIED WOOD BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
 - FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

- NOTES:
- ALL GUARDRAIL BOLTS ARE 5/8" - 11 UNC THREAD PITCH.
 - IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.

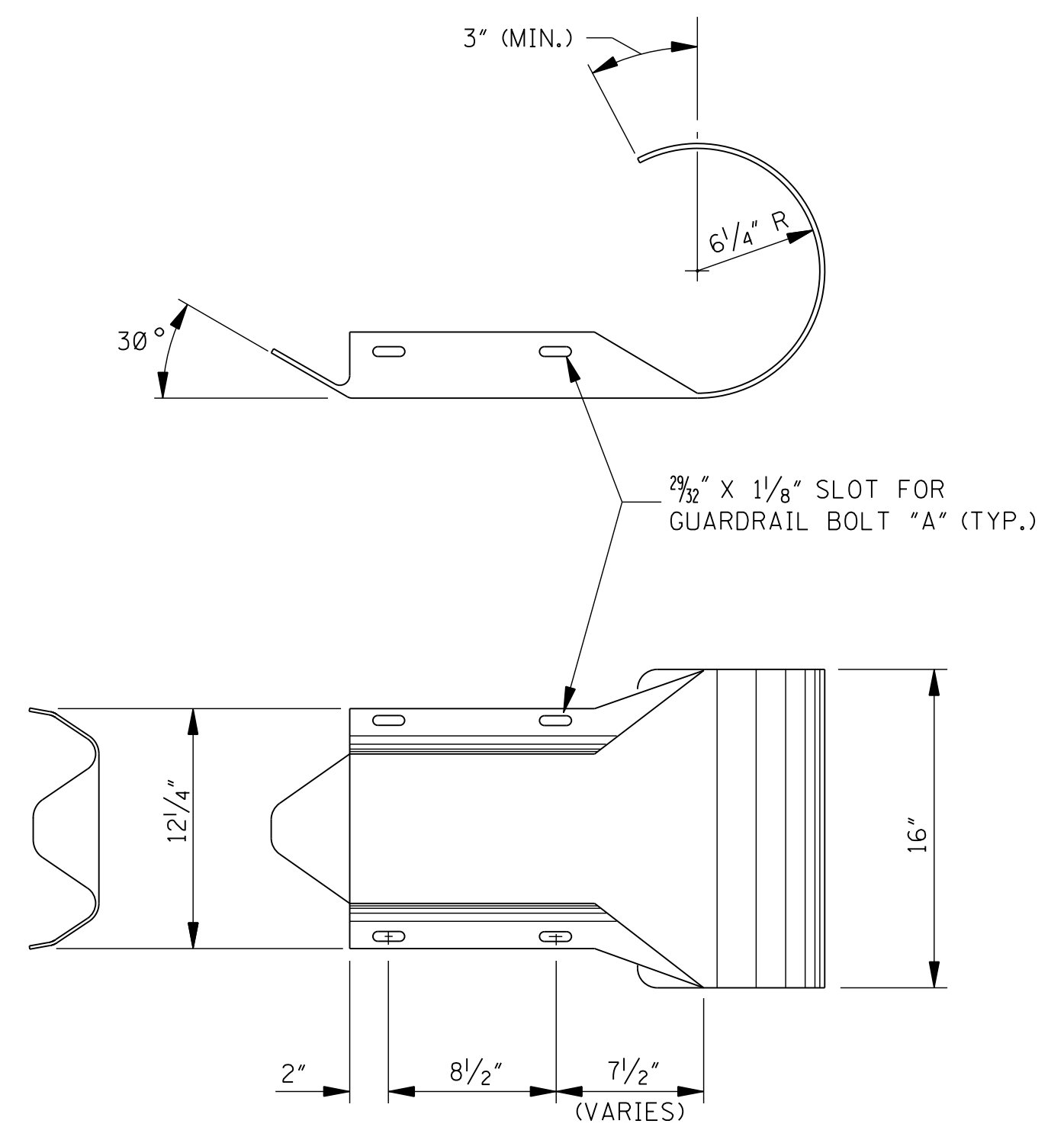
- NOTES:
- ON INITIAL INSTALLATION, THE MODIFIED WOOD BLOCKOUT SHALL BE FASTENED TO THE BOTTOM HOLE IN THE STEEL POST. OTHER HOLES IN THE STEEL POST AND THE MODIFIED WOOD BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
 - AN ADDITIONAL GUARDRAIL BOLT "C" AND RECESSED NUT IS REQUIRED FOR THE SECOND HEIGHT ADJUSTMENT.
 - HOLE DETAILS ARE REQUIRED ON ALL STEEL POSTS AND MODIFIED WOOD BLOCKOUTS.
 - STEEL POSTS ARE FABRICATED FROM W6 X 9 STRUCTURAL STEEL SHAPES.
 - MODIFIED WOOD BLOCKOUTS ARE FABRICATED FROM 6" X 12" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
 - ALL HOLES IN BOTH STEEL POSTS AND MODIFIED WOOD BLOCKOUTS ARE 3/4" IN DIAMETER.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>GUARDRAIL: "W" BEAM (STEEL POSTS)</p>	
DATE			
ISSUE DATE: AUGUST 01, 2017		WORKING NUMBER GR-1B	SHEET NUMBER 6203



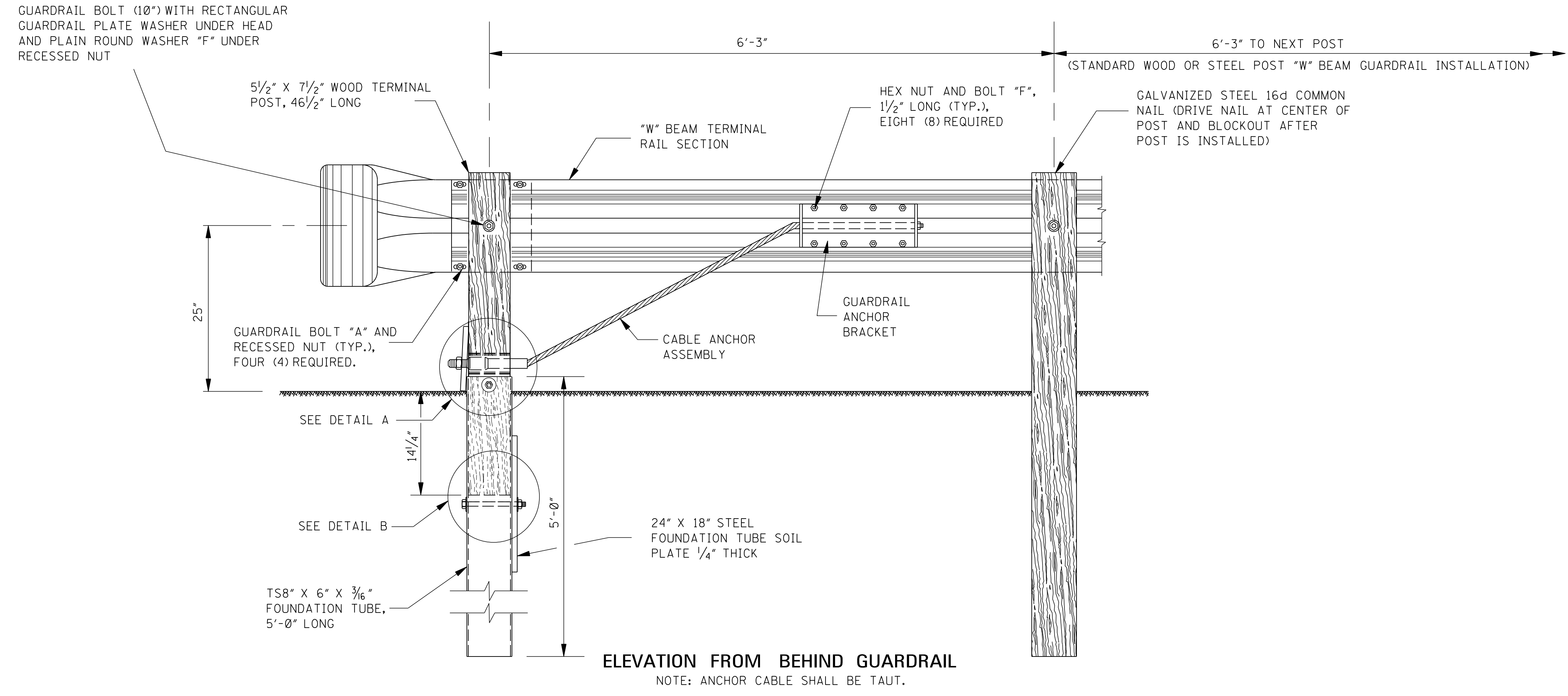
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:

- WOOD POST INSTALLATION (SHOWN)**
 "W" BEAM TERMINAL RAIL SECTION, 6" X 12" WOOD BLOCKOUT, 14" LONG, AND 6" X 8" WOOD POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
- STEEL POST INSTALLATION**
 "W" BEAM TERMINAL RAIL SECTION, 6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.



ROUNDED "W" BEAM END SECTION

NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.

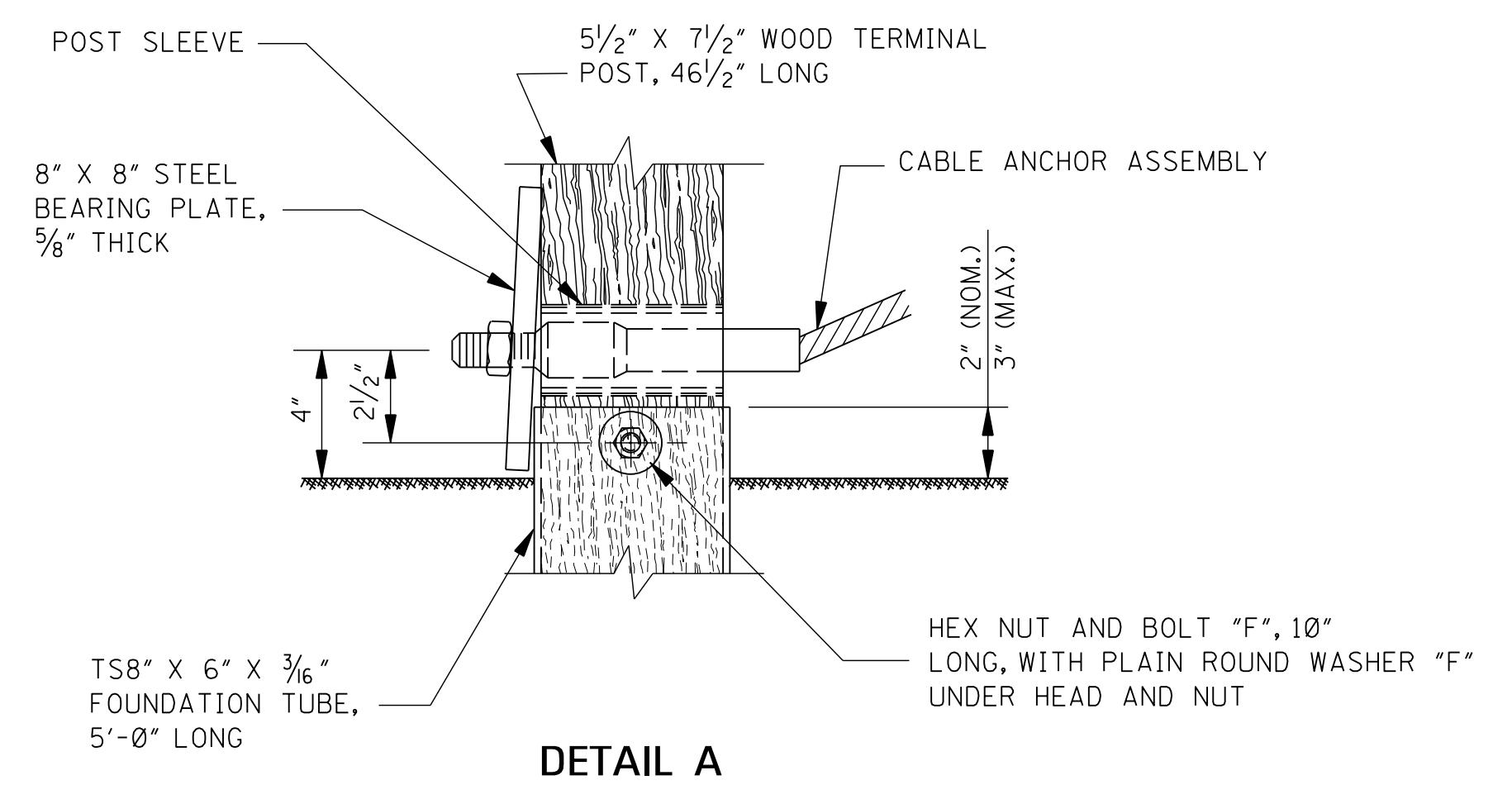


ELEVATION FROM BEHIND GUARDRAIL

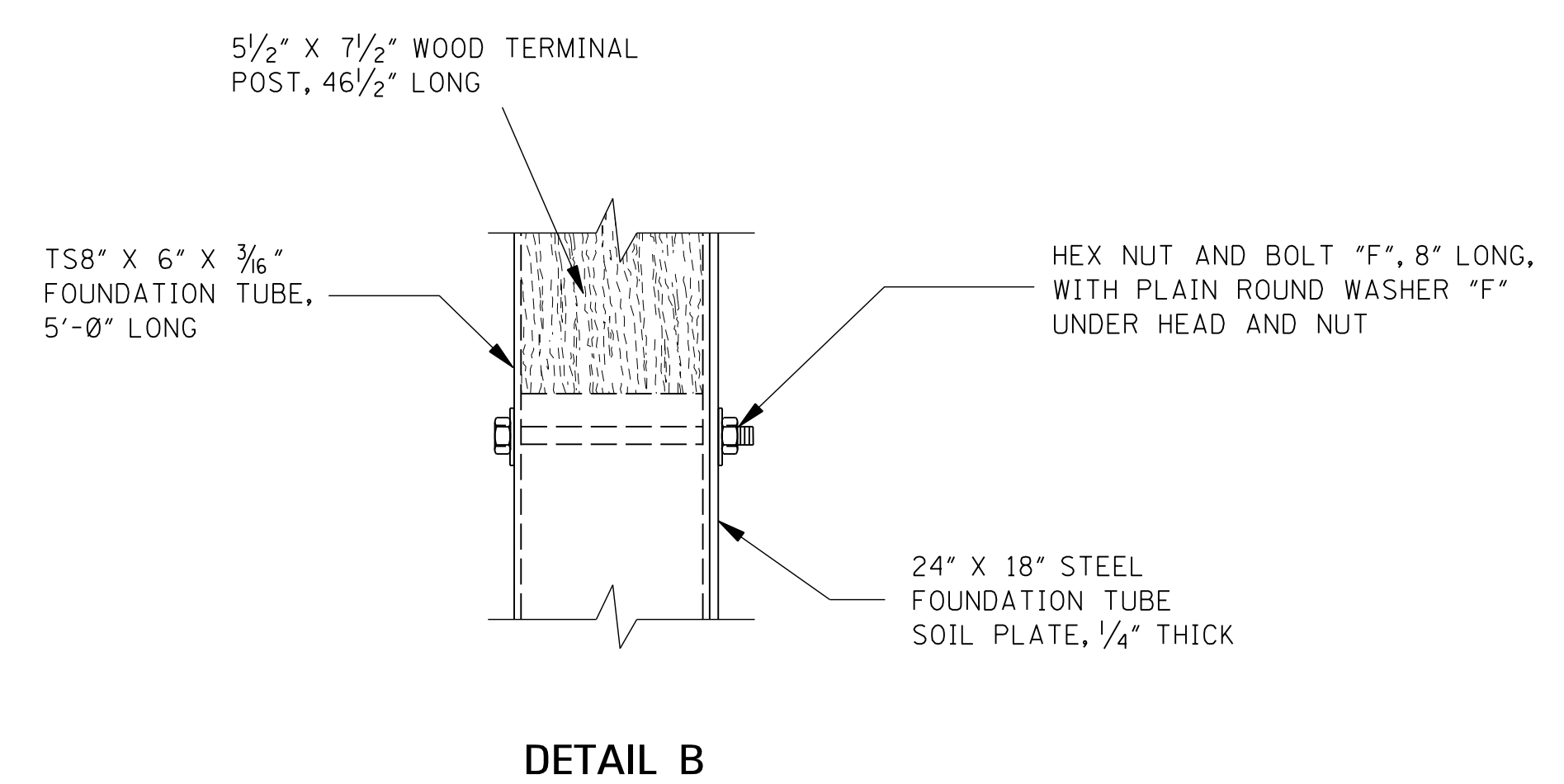
NOTE: ANCHOR CABLE SHALL BE TAUT.

GENERAL NOTES:

- THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
- GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
- ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
- DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
- FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.



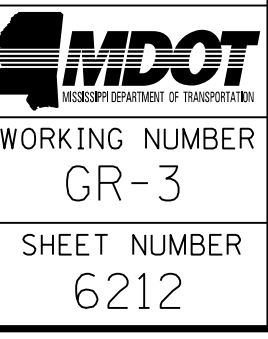
DETAIL A

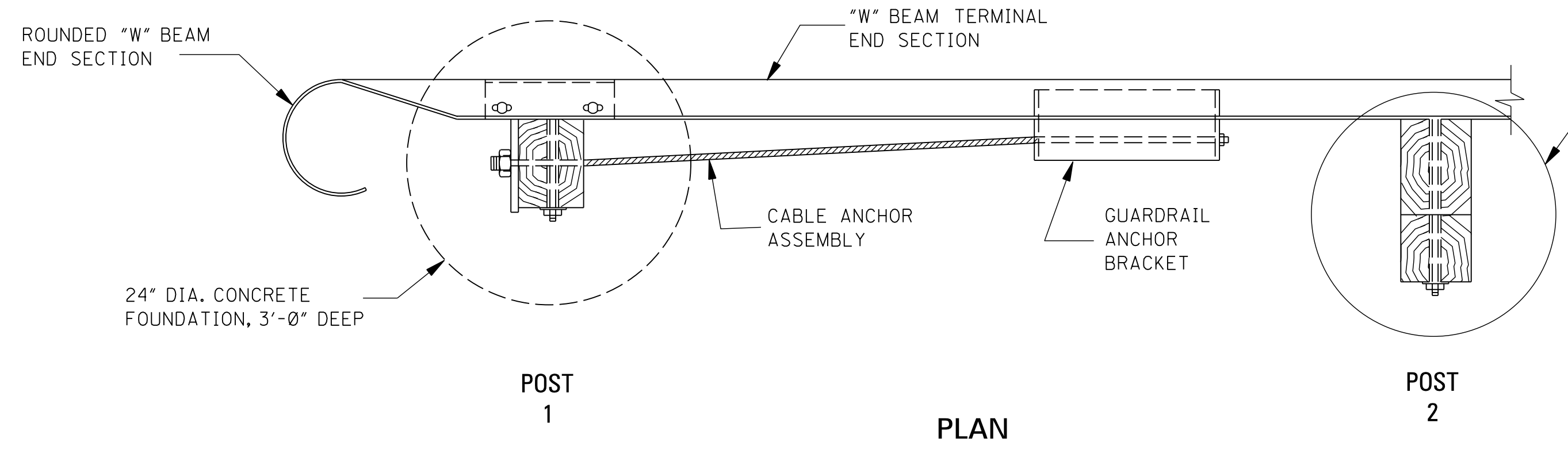


DETAIL B

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

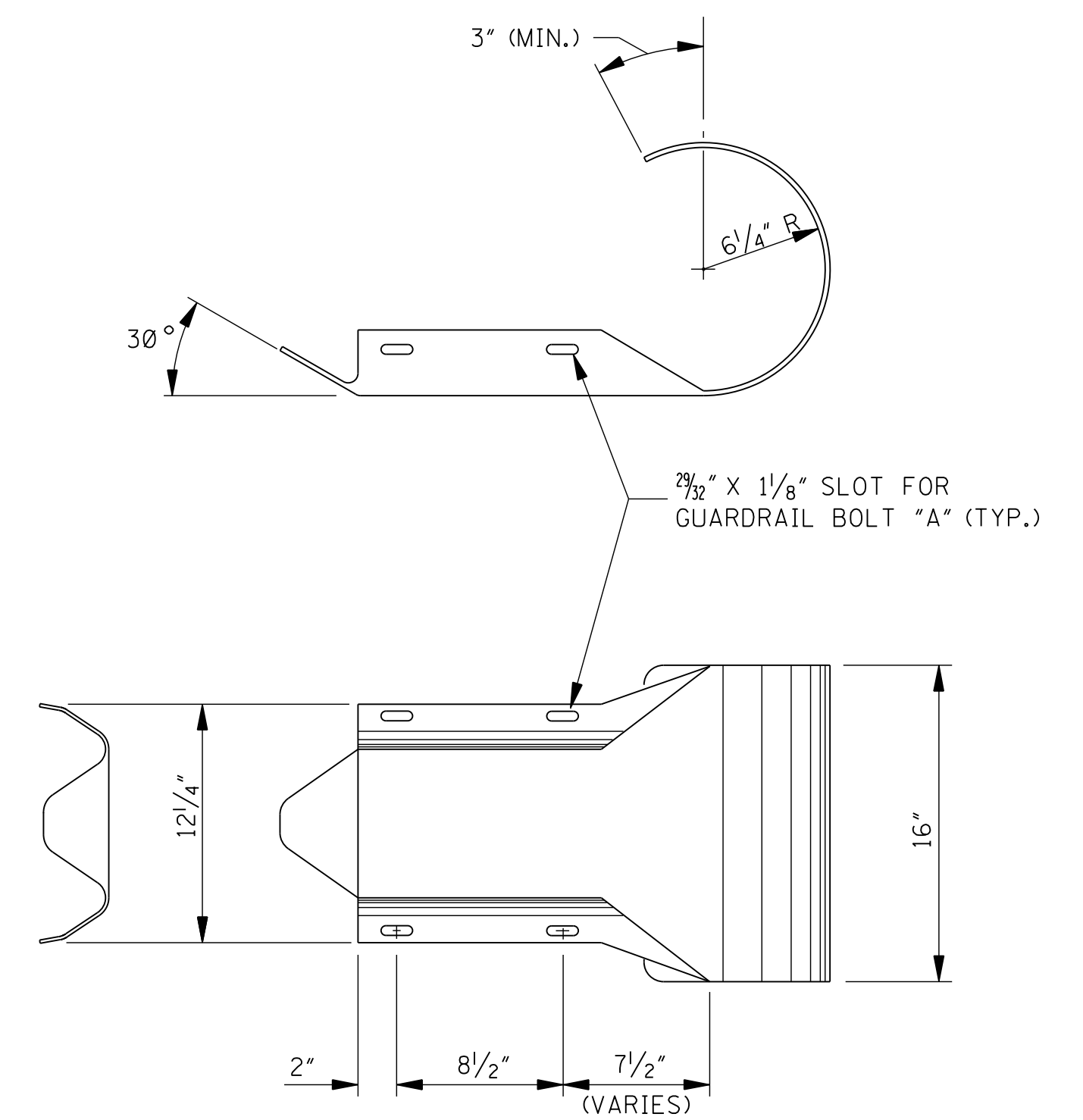
WORKING NUMBER	GR-3
SHEET NUMBER	6212





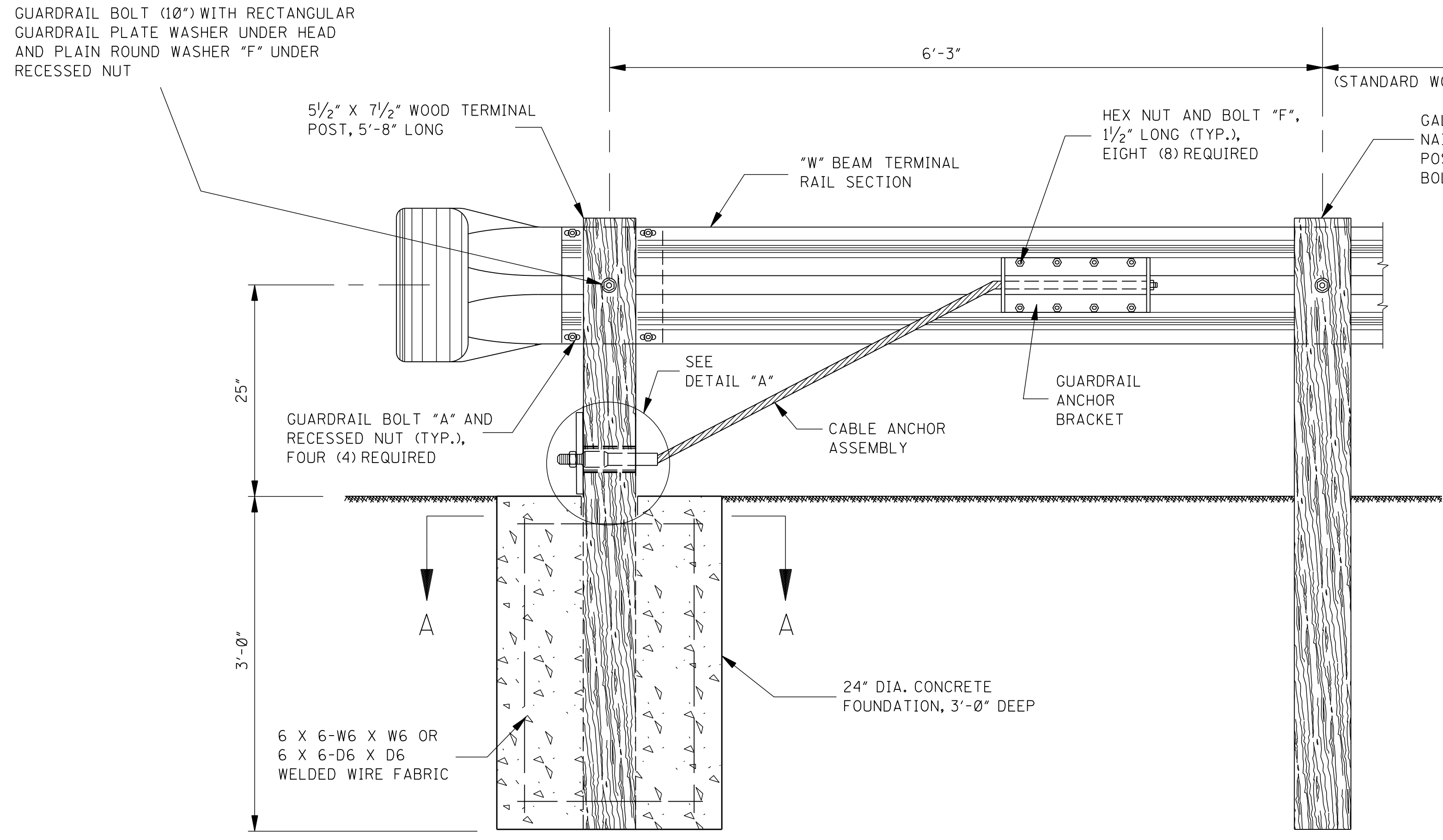
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:

- 1. WOOD POST INSTALLATION (SHOWN)**
 "W" BEAM TERMINAL RAIL SECTION, 6" X 12" WOOD BLOCKOUT, 14" LONG, AND 6" X 8" WOOD POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
- 2. STEEL POST INSTALLATION**
 "W" BEAM TERMINAL RAIL SECTION, 6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.



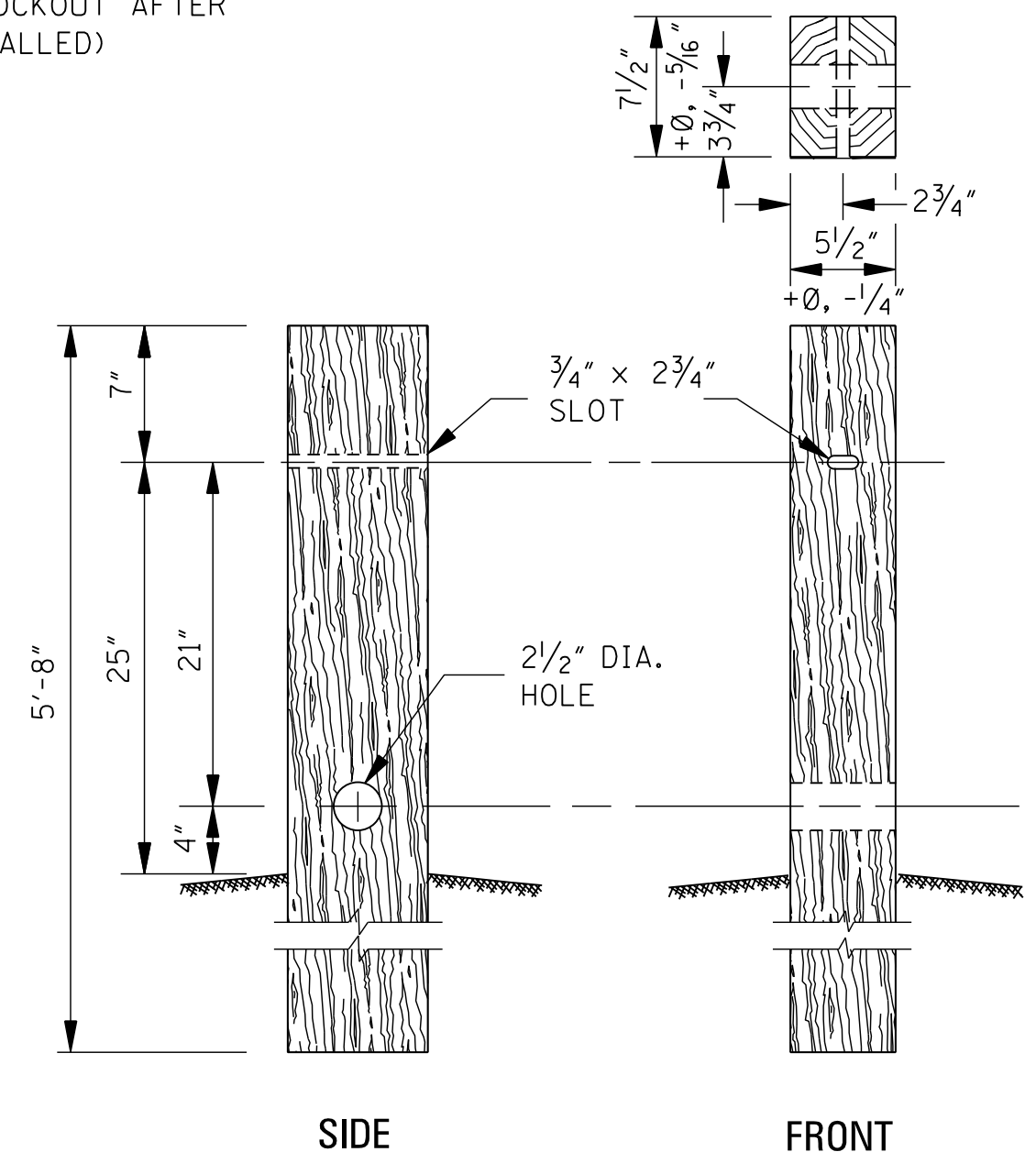
ROUNDED "W" BEAM END SECTION

NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.



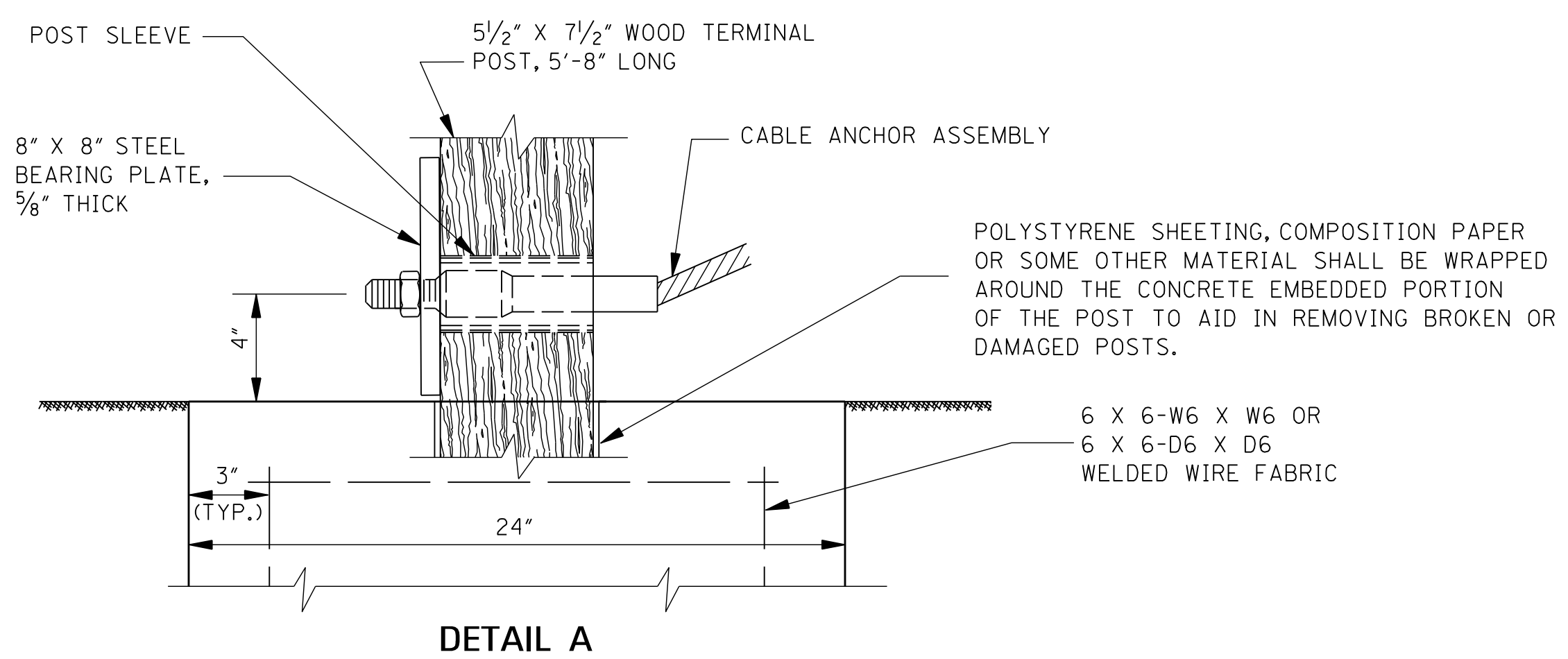
ELEVATION FROM BEHIND GUARDRAIL

NOTE: ANCHOR CABLE SHALL BE TAUT.

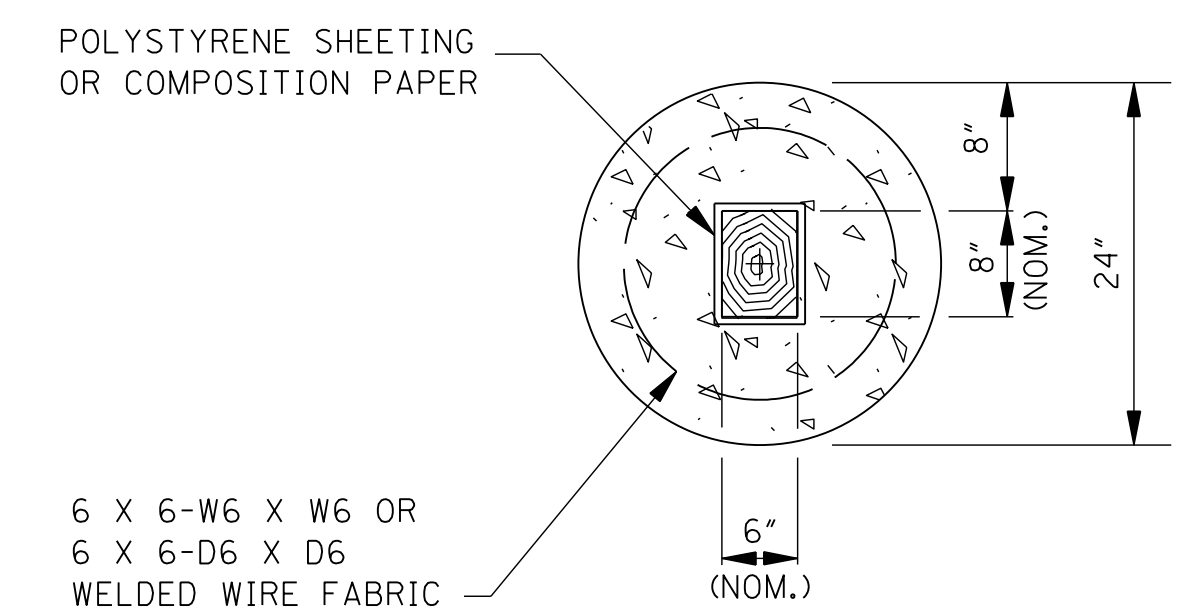


WOOD TIMBER POST

NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 lb/in².



DETAIL A




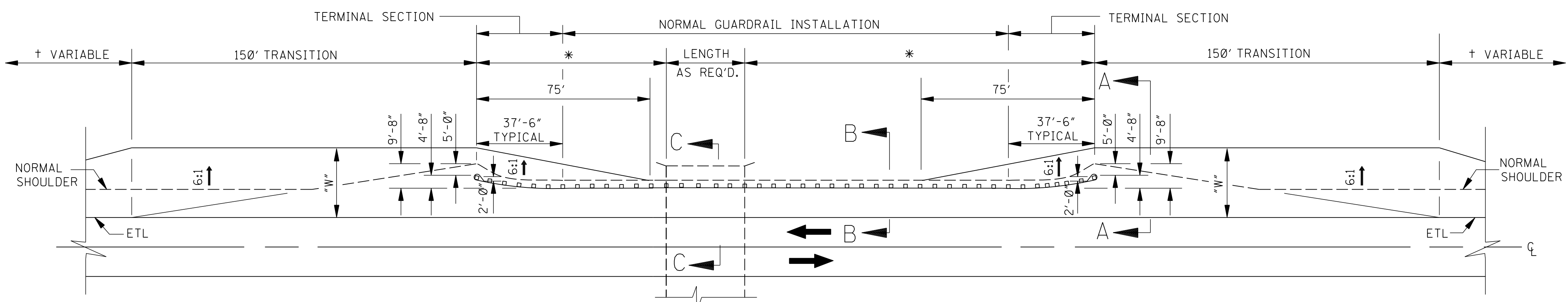
SECTION A-A

NOTE: FORM A NOMINAL 6" X 8" SOCKET IN THE FOUNDATION TO RECEIVE THE 5 1/2" X 7 1/2" TIMBER POST. FORM HOLE WITH 1/2" THICK POLYSTYRENE FOAM SHEETING OR WRAP THE TIMBER POST IN A DOUBLE LAYER OF COMPOSITION PAPER. THE LAYER OF SHEETING OR PAPER WILL AID IN REMOVING A DAMAGED POST.

GENERAL NOTES:

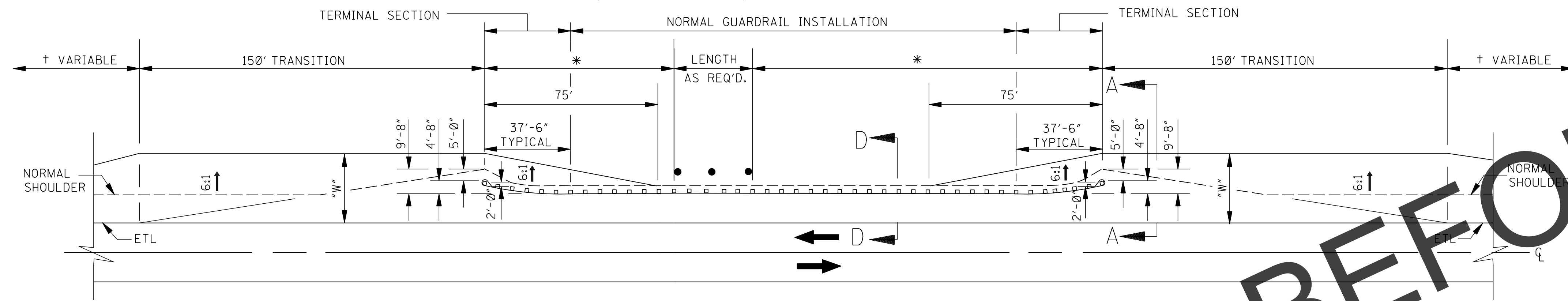
- THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
- GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
- ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- CONCRETE FOR THE CONCRETE FOUNDATION MAY BE EITHER CLASS "B" STRUCTURAL CONCRETE OR AN APPROVED COMMERCIAL PRE-MIXED BAG CONCRETE. THE WELDED WIRE FABRIC FOR THE CONCRETE FOUNDATION SHALL CONFORM TO AASHTO M 221/M 221M AND AASHTO M 55M/M 55.
- FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
- DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
- FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">GUARDRAIL: TYPE 1 CABLE ANCHORAGE (CONCRETE FOOTING)</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		GR-3A	
SHEET NUMBER		6213	



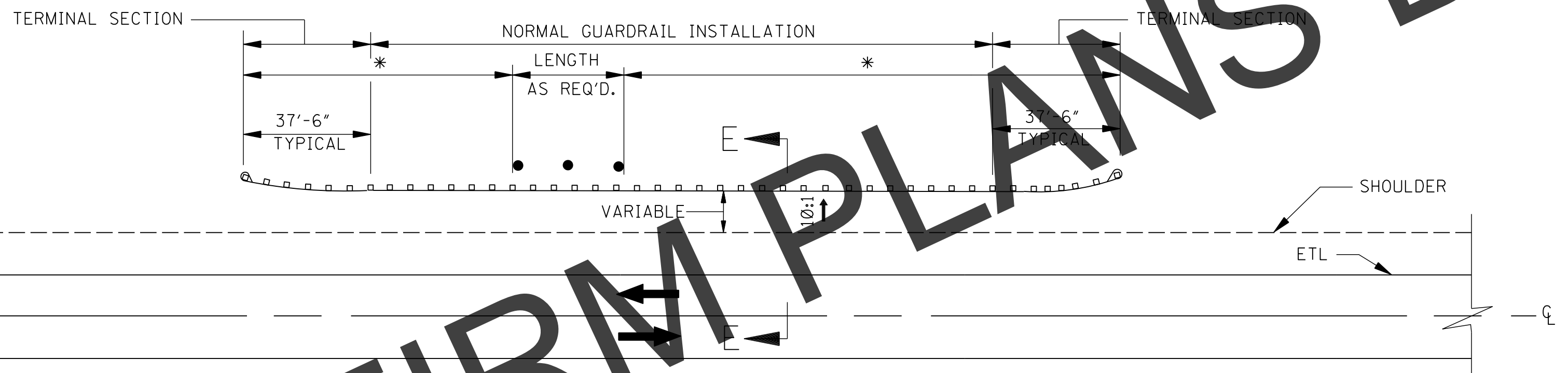
TYPICAL INSTALLATION FOR CULVERT

* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



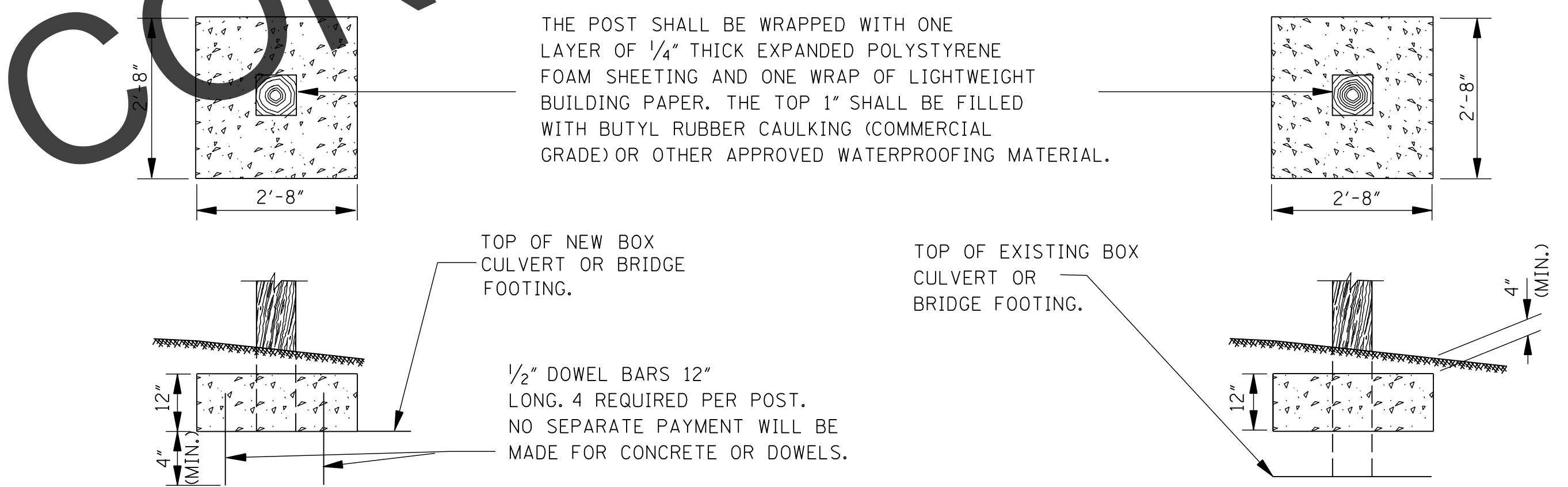
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE STEEPER THAN 10:1

* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.

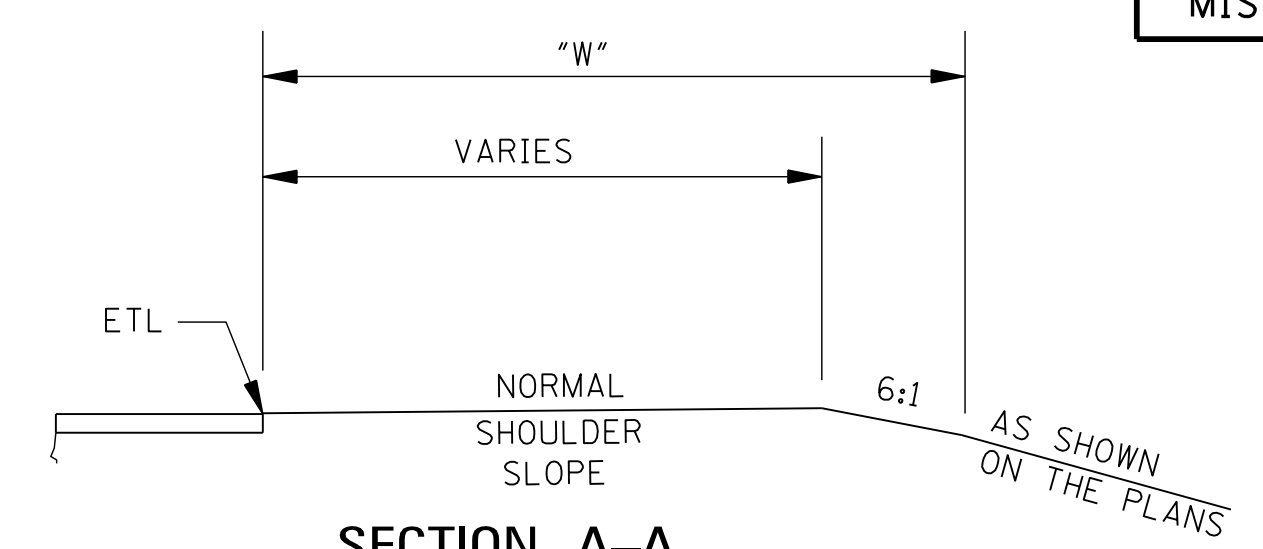


TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE 10:1 OR FLATTER

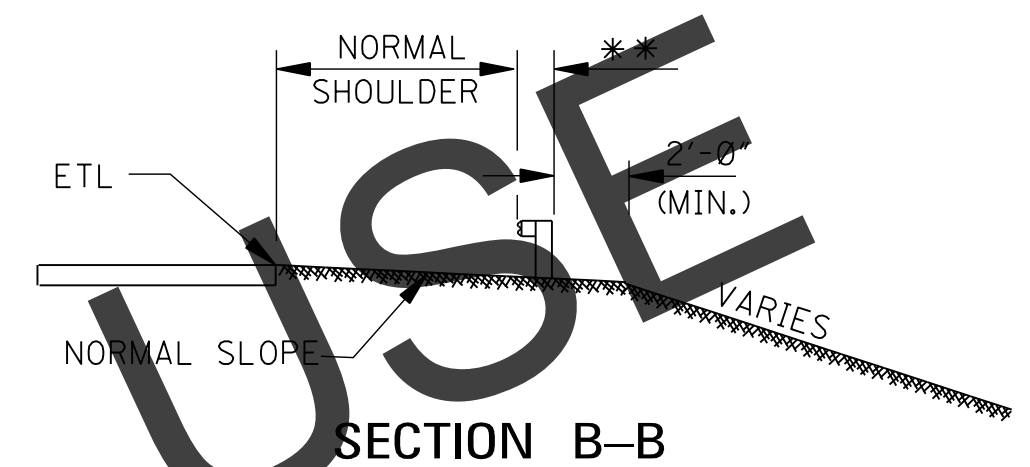
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



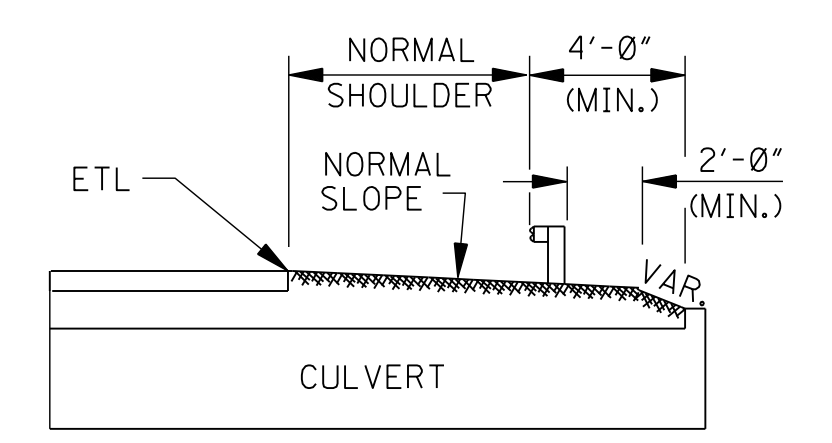
DETAIL OF POST INSTALLATION WITH COVER LESS THAN NORMAL POST LENGTH



SECTION A-A

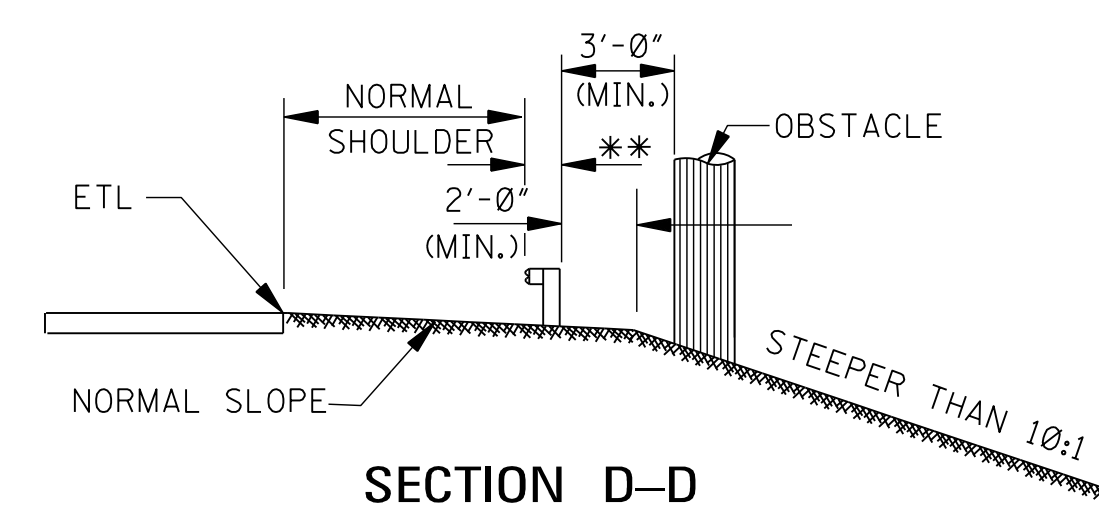


SECTION B-B

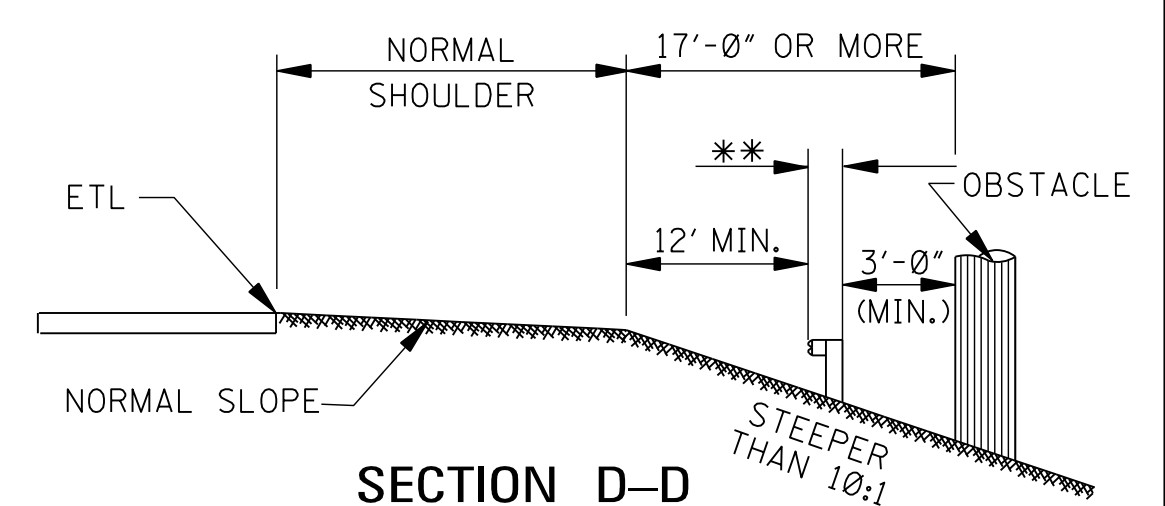


SECTION C-C

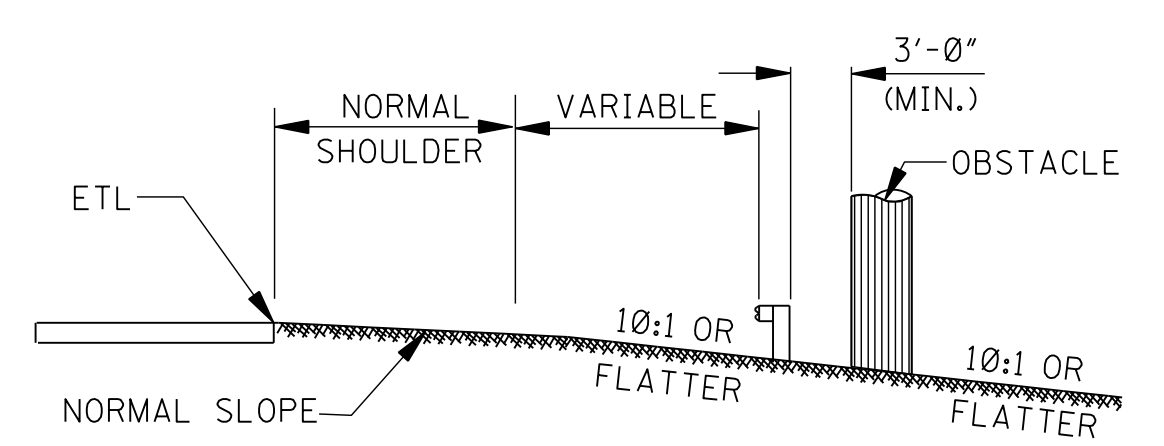
** NOTE: FOR STEEL POST AND MODIFIED WOOD BLOCKOUT, 20.78". FOR WOOD POST AND WOOD BLOCKOUT, 23.25".



SECTION D-D FOR OBSTACLES 5' TO 17' FROM NORMAL SHOULDER



SECTION D-D FOR OBSTACLES 17' OR MORE FROM NORMAL SHOULDER




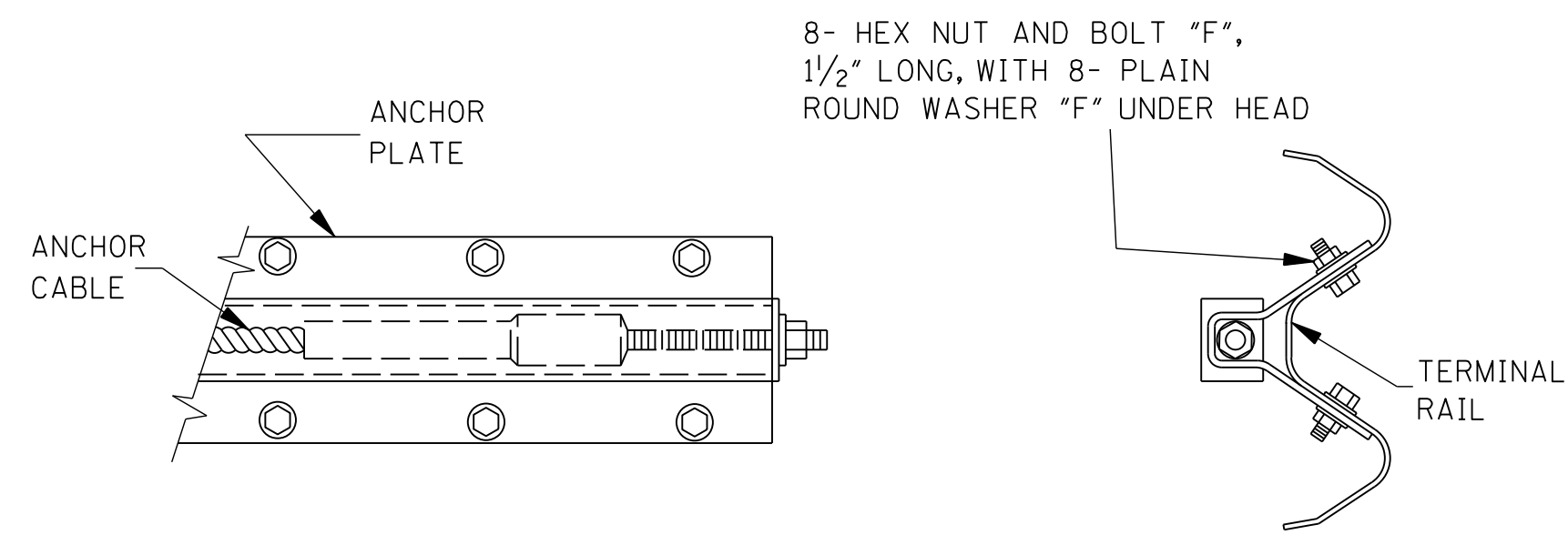
SECTION E-E

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

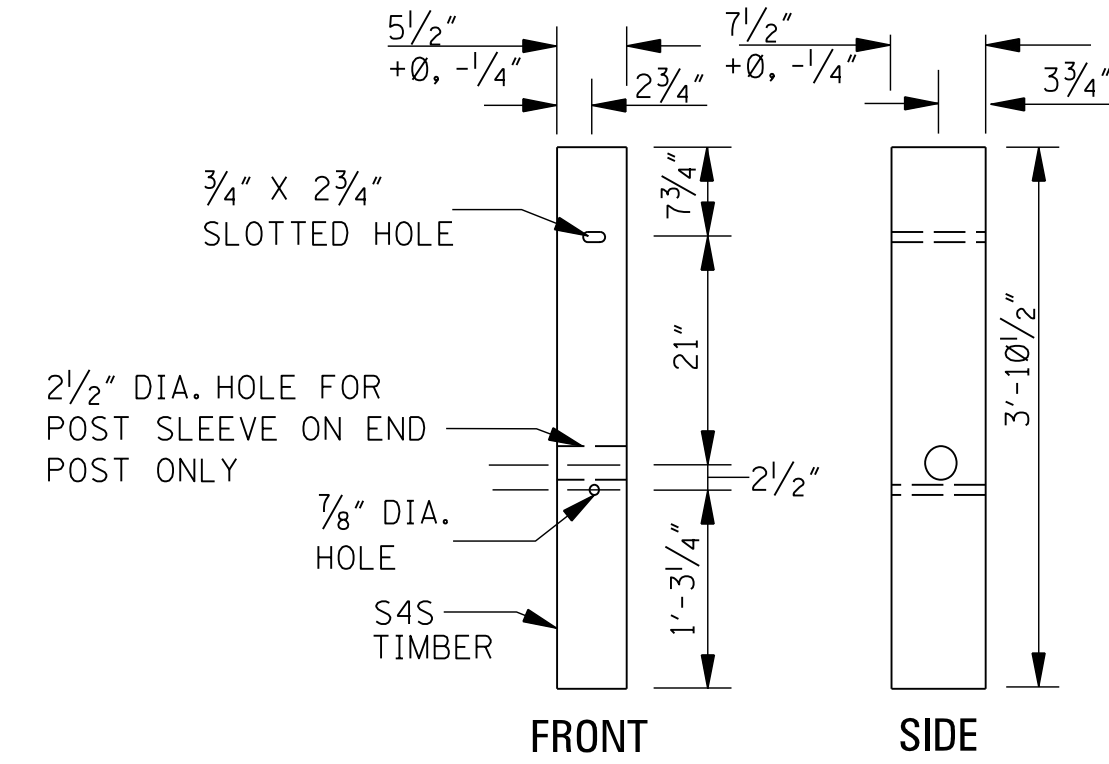
GENERAL NOTES:

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

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">GUARDRAIL: TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON 2-LANE, 2-WAY HIGHWAYS</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		GR-4C	
SHEET NUMBER		6217	

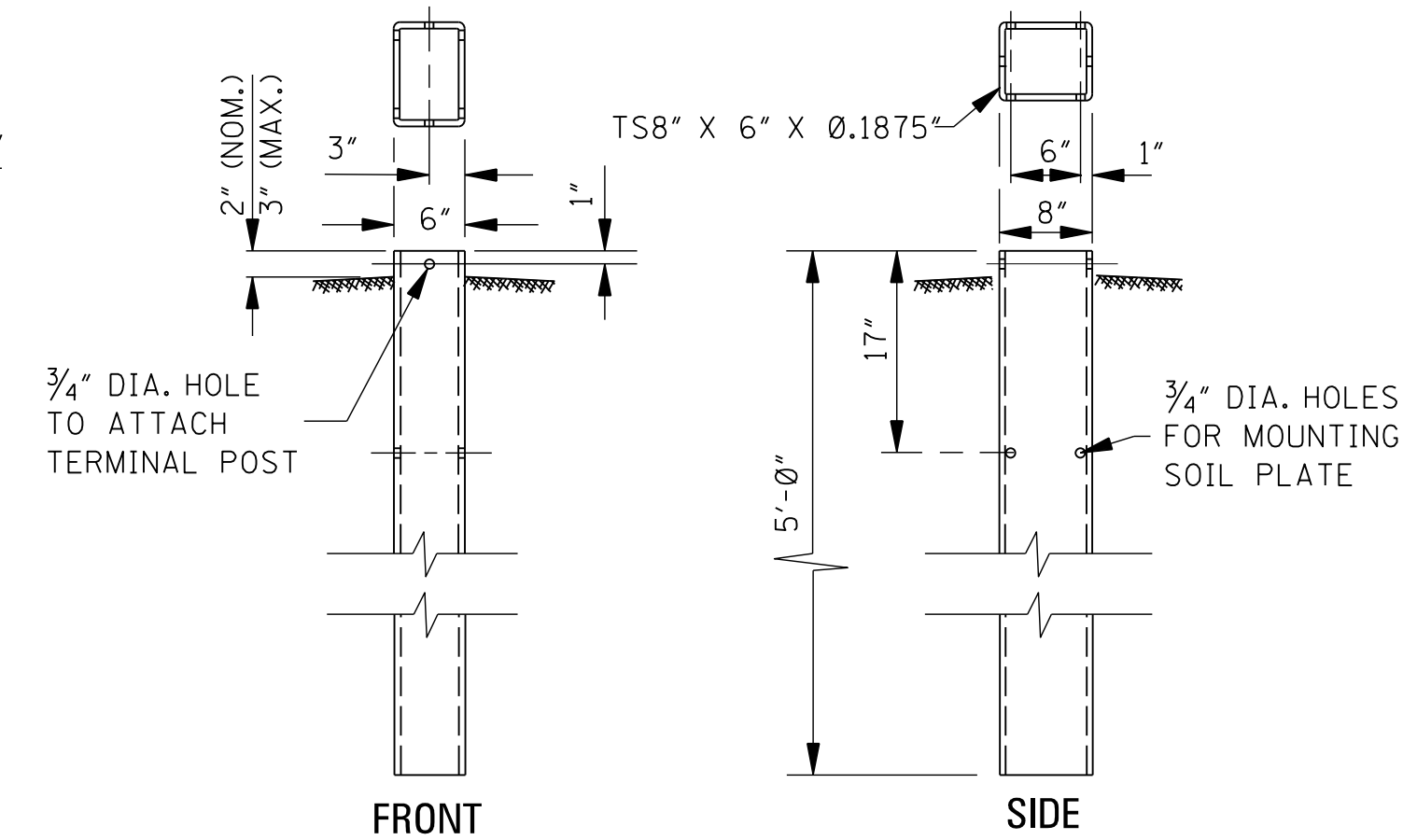


ANCHOR PLATE ASSEMBLY DETAILS



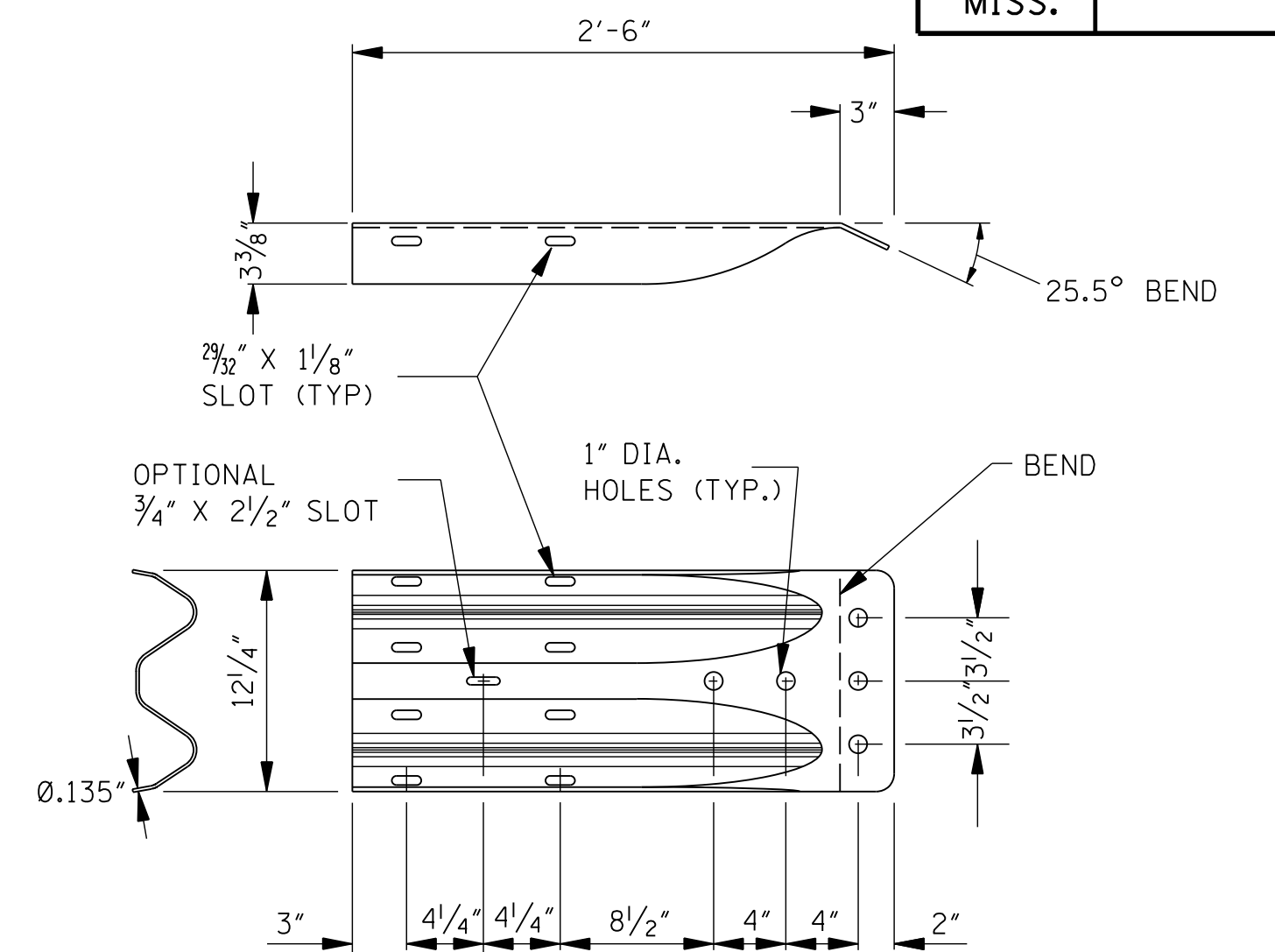
TERMINAL POST FOR FOUNDATION TUBE INSTALLATION

NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH 2 STRESS GRADE OF 1200 lbs/in.



STEEL TUBE ANCHOR

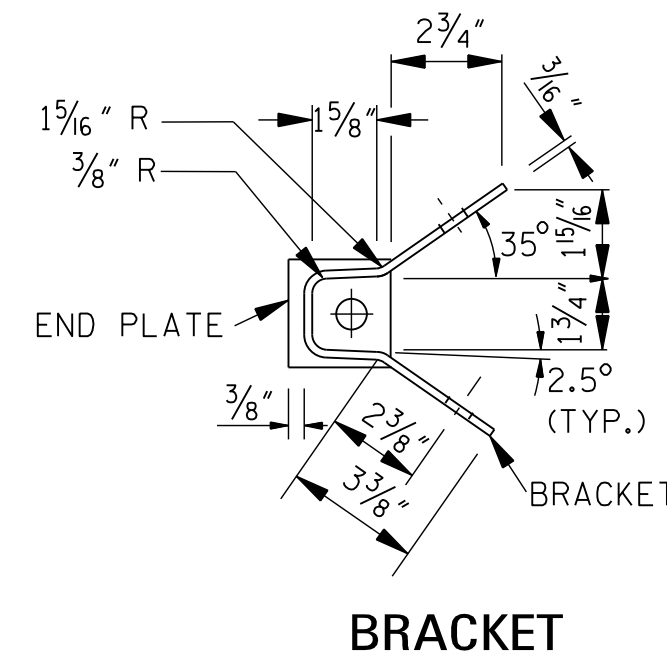
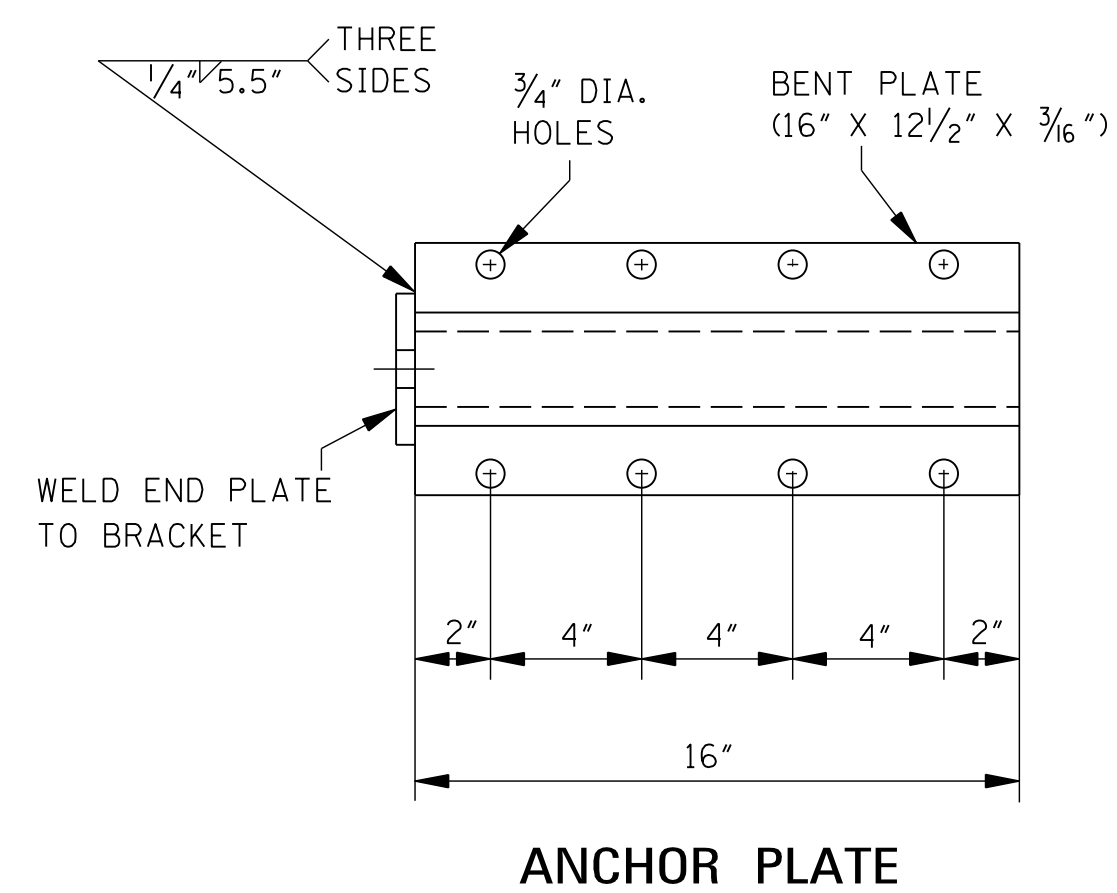
NOTE: TERMINAL POST SHALL BE ABLE TO SLIDE INTO THE TOP OF THIS SECTION SO THE ACTUAL INSIDE DIMENSIONS OF THIS GALVANIZED TUBE CANNOT BE LESS THAN 7 1/2" X 5 1/2".



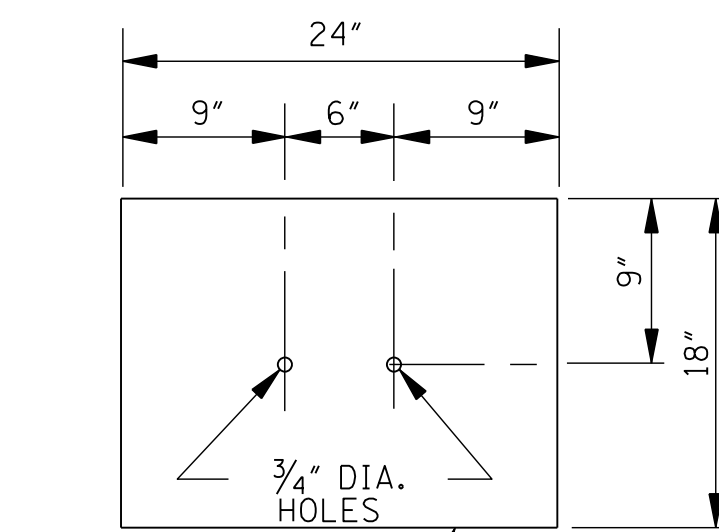
"W" BEAM TERMINAL CONNECTOR PLATE

NOTES:

1. THE "W" BEAM TERMINAL CONNECTOR SHALL BE AASHTO M 180 CORRUGATED SHEET STEEL, CLASS B, TYPE 1.
2. SPLICE-BOLT SLOTS MAY ALSO BE ORIENTED AT 50° (ON THE FLAT) INSTEAD OF 0° AS SHOWN.

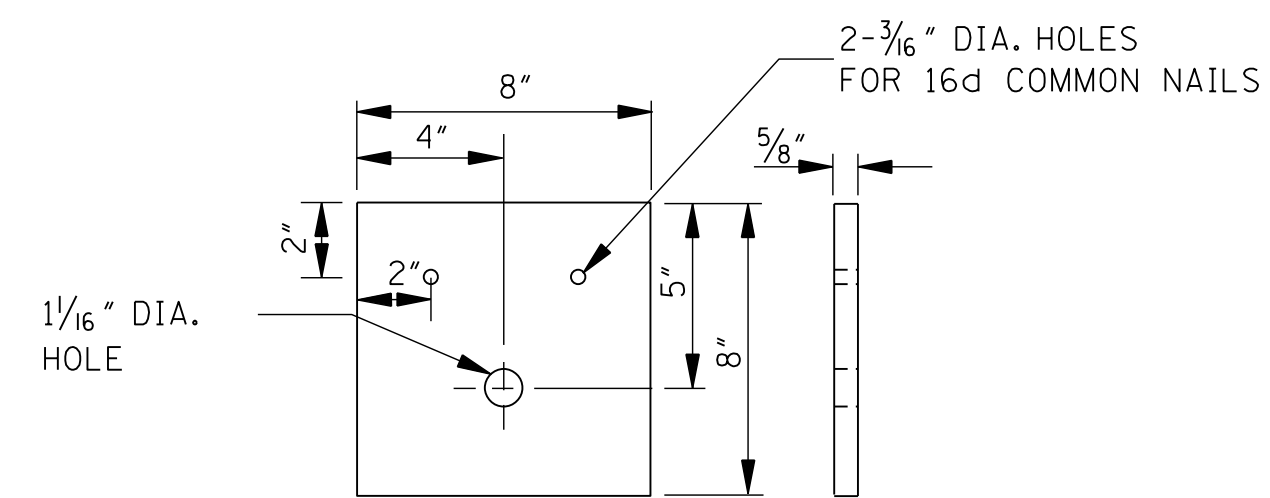


BRACKET

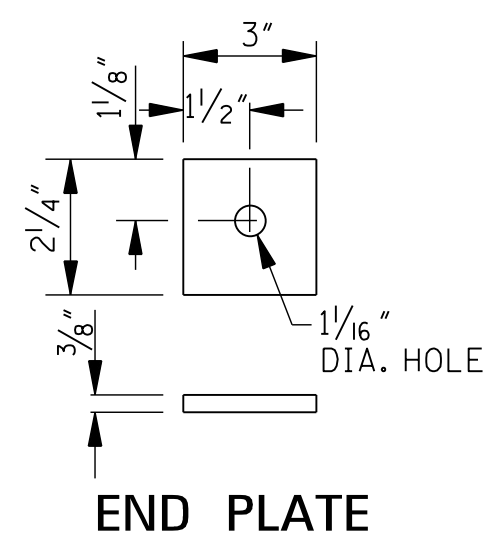


SOIL PLATE

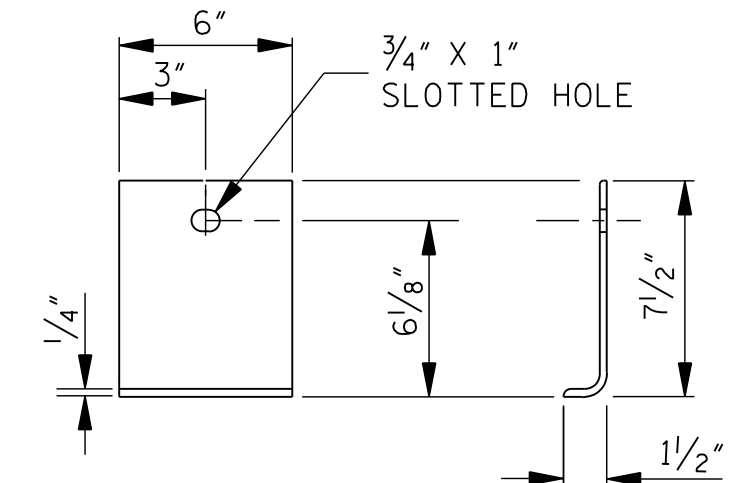
NOTE: 2 REQUIRED



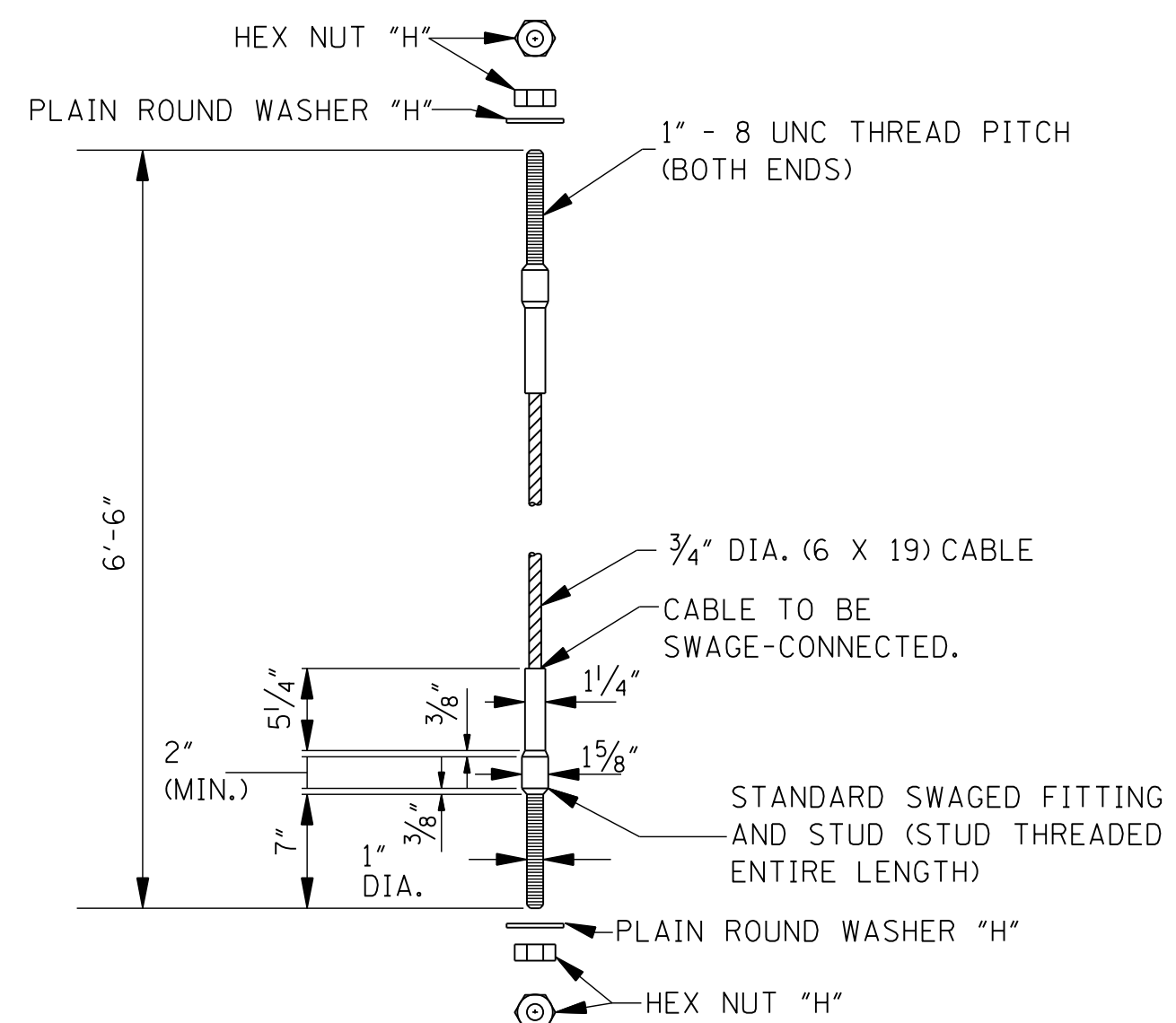
BEARING PLATE



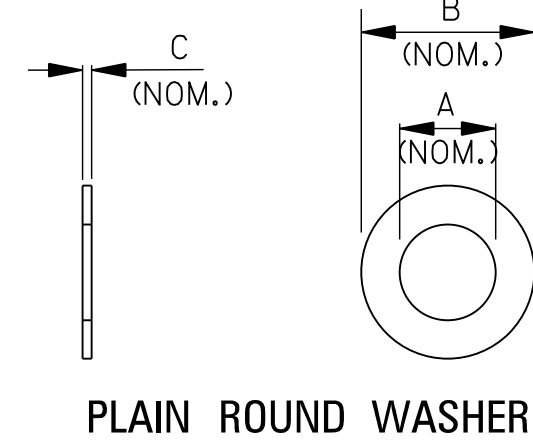
END PLATE



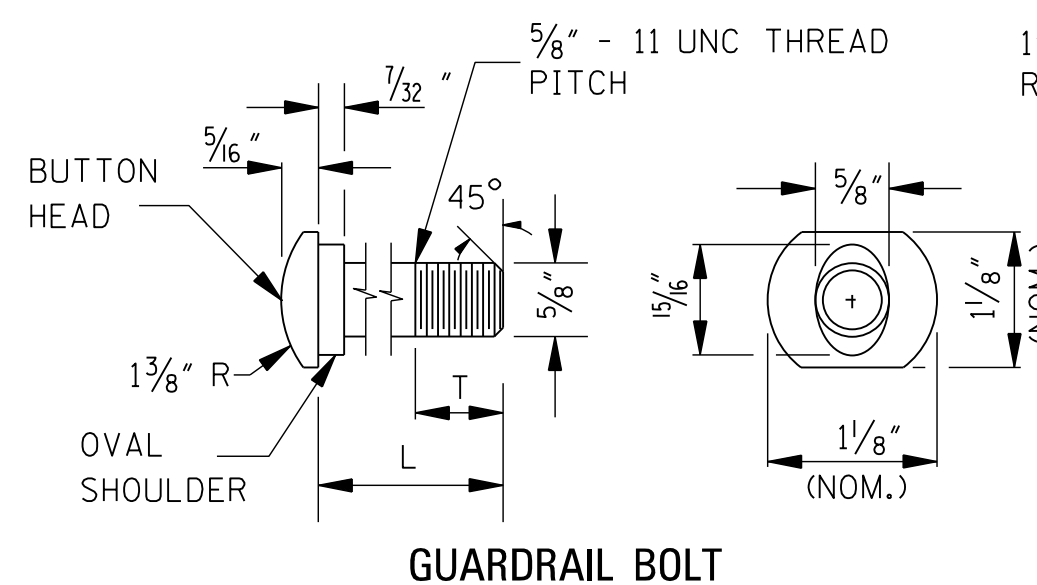
SHELF ANGLE BRACKET



CABLE ANCHOR ASSEMBLY



PLAIN ROUND WASHERS			
WASHER	A (NOM.)	B (NOM.)	C (NOM.)
"F"	1 1/16"	1 3/4"	3/64"
"H"	1 1/16"	2"	3/64"



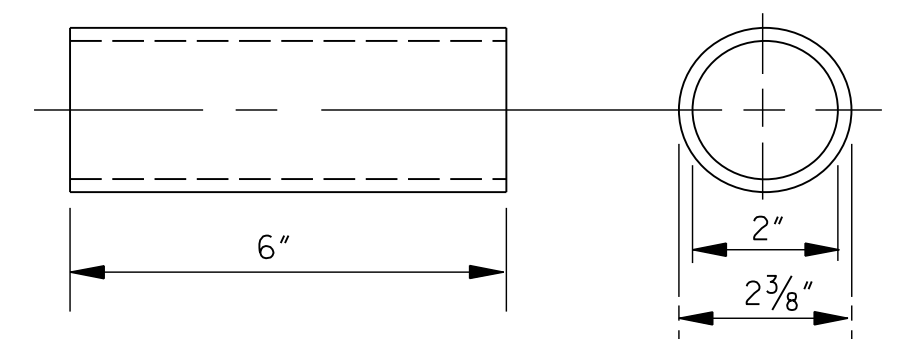
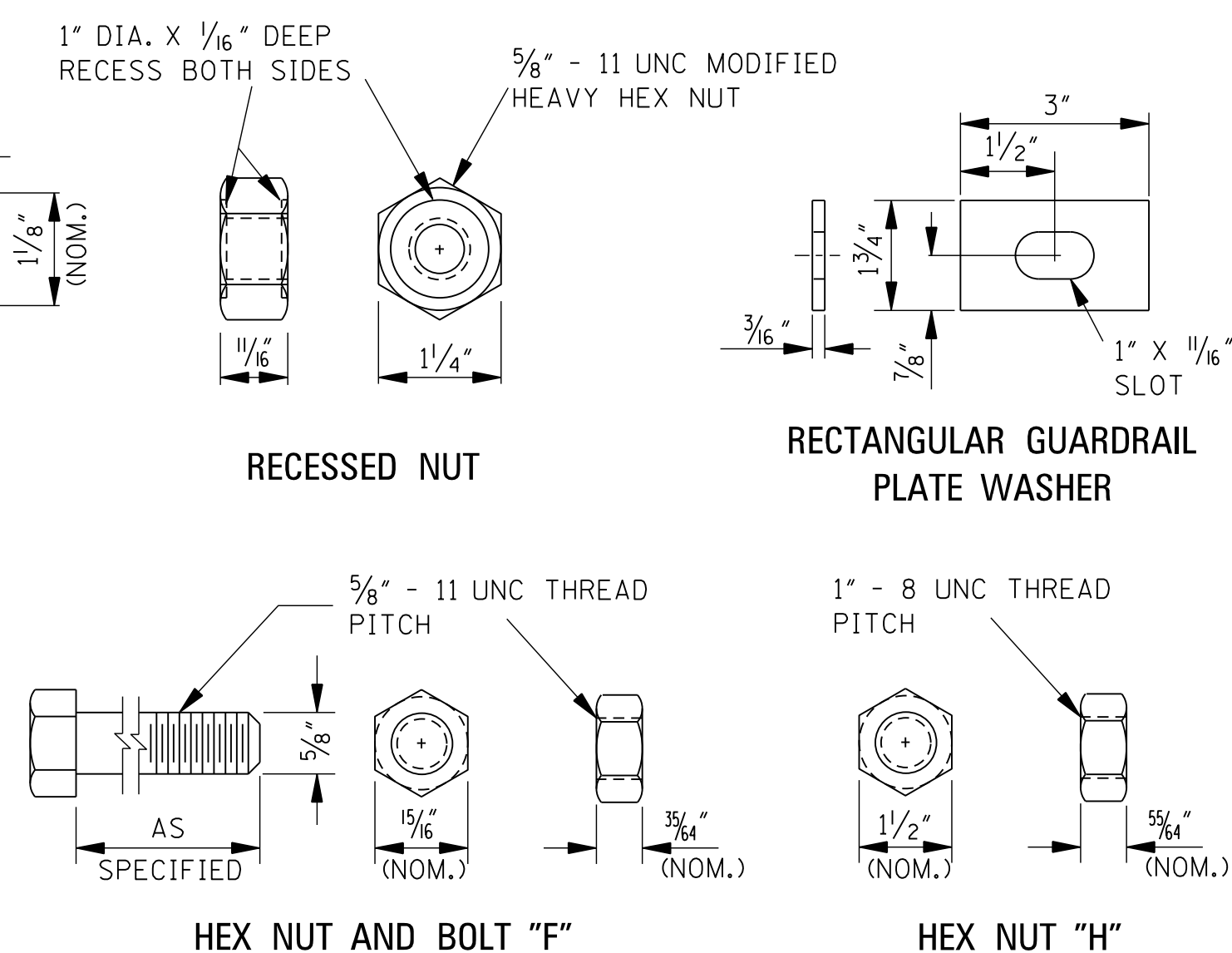
GUARDRAIL BOLT

GUARDRAIL BOLTS		
BOLT	L	T (MIN.)
"A"	1 1/4"	1"
"B"	12"	4"
"C"	14"	4"
"D"	22"	4"
"E"	24"	4"
"F"	33"	4"
	2"	1 3/4"
	10"	4"
	25"	4"

NOTES:

1. ALL GUARDRAIL BOLTS ARE 5/8" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.

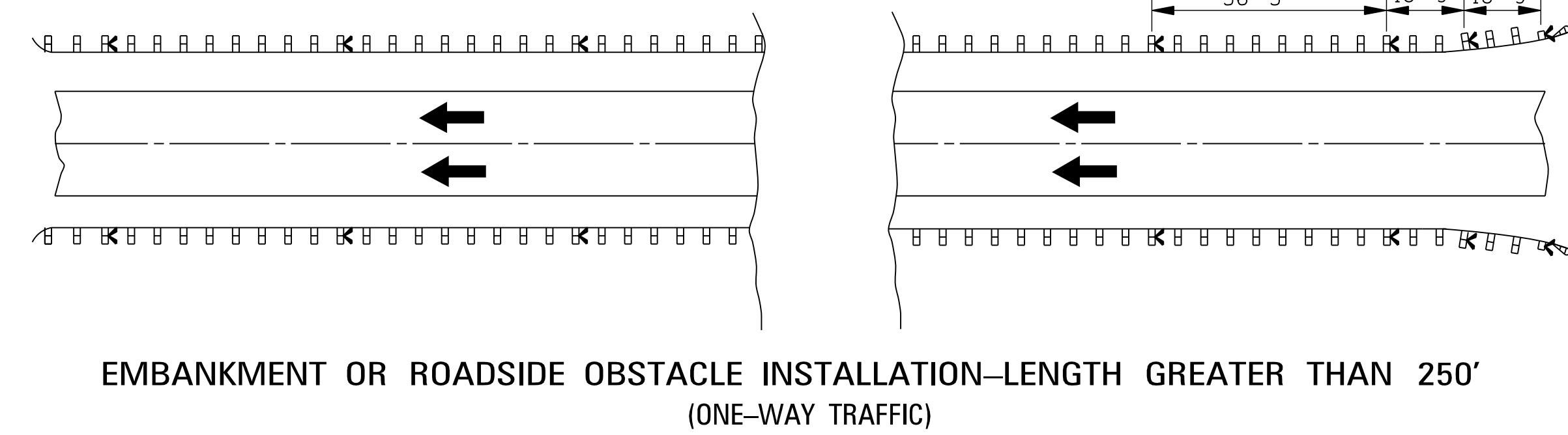
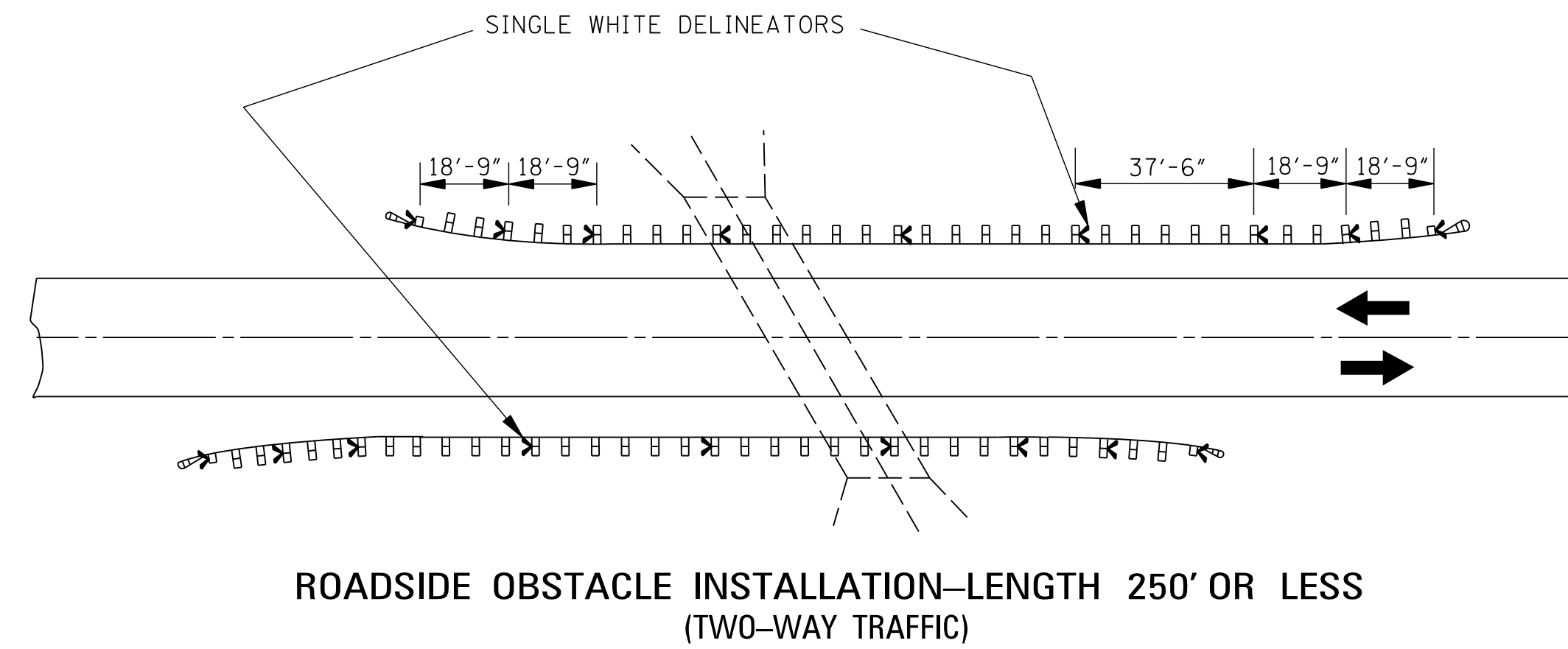
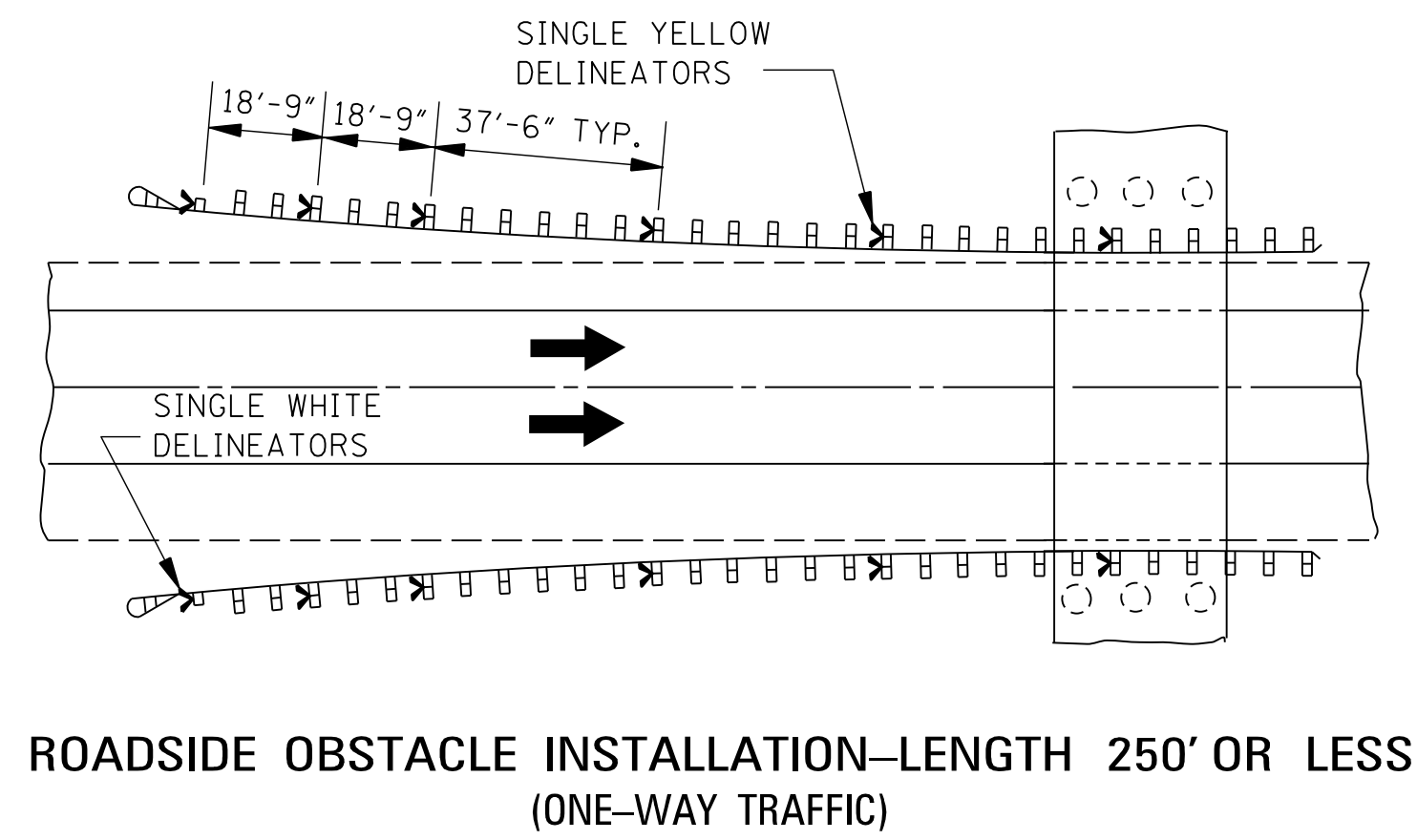
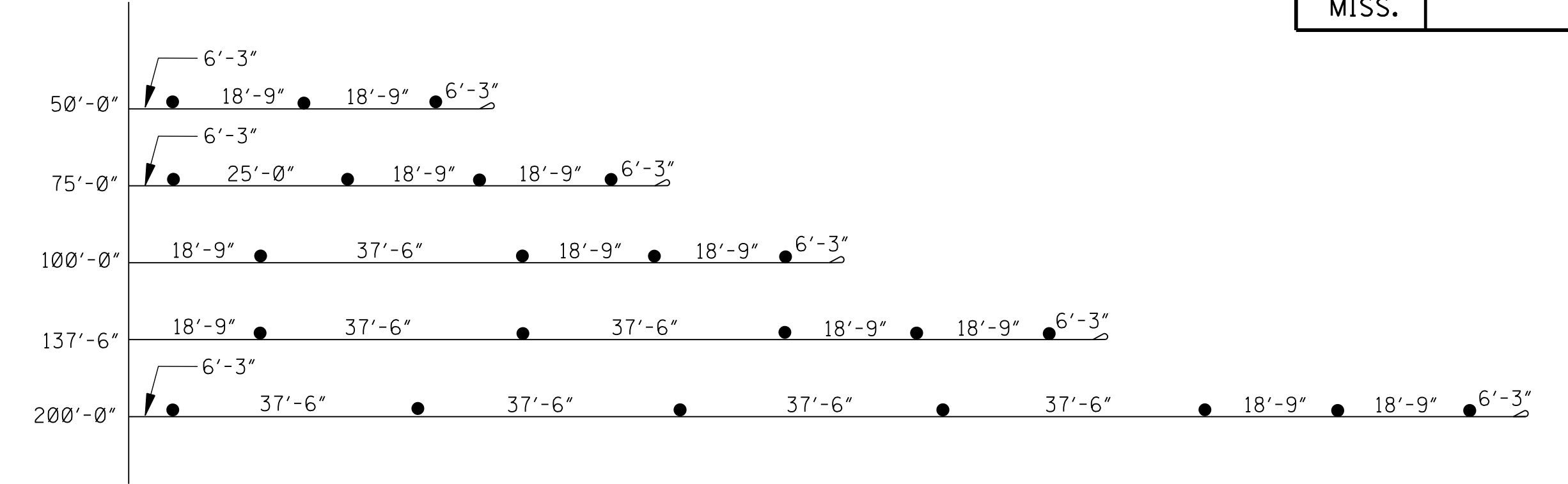
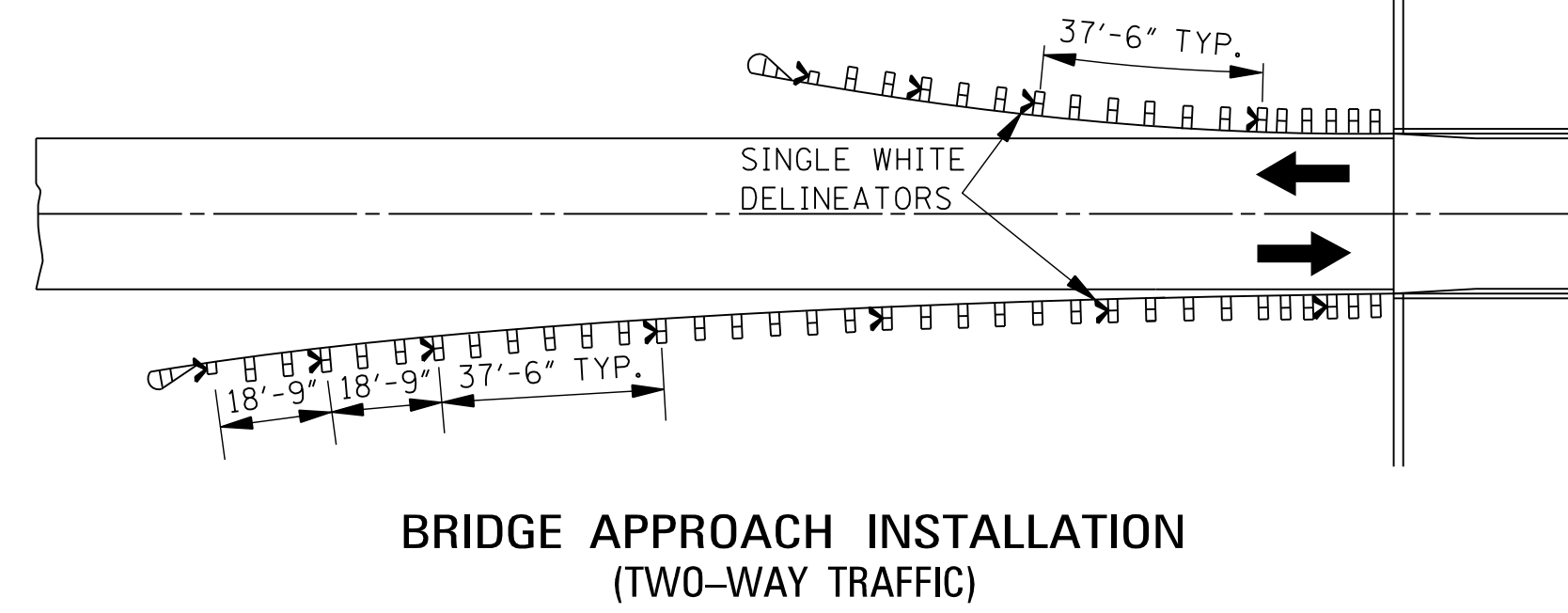
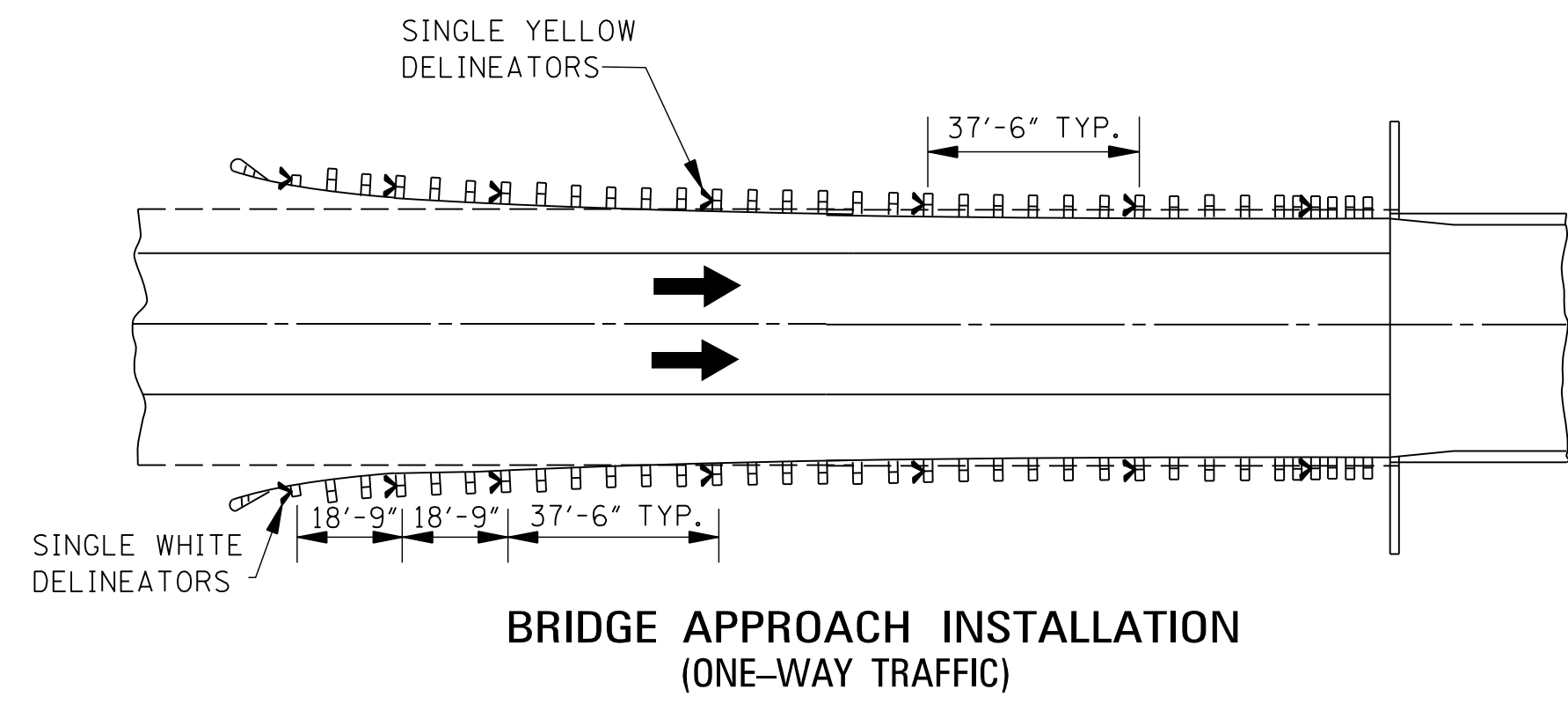
FASTENER DETAILS



BREAKAWAY TERMINAL POST SLEEVE

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

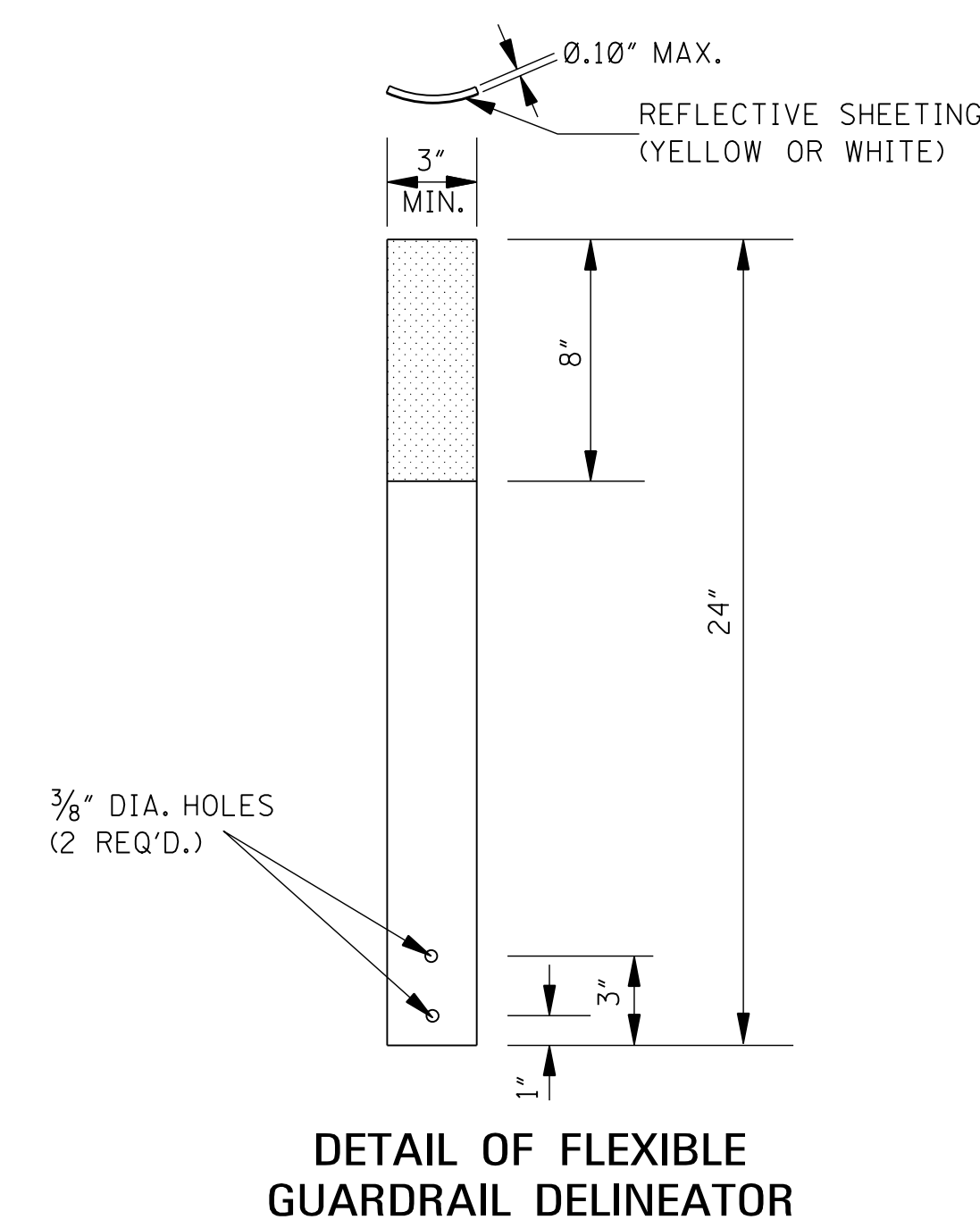
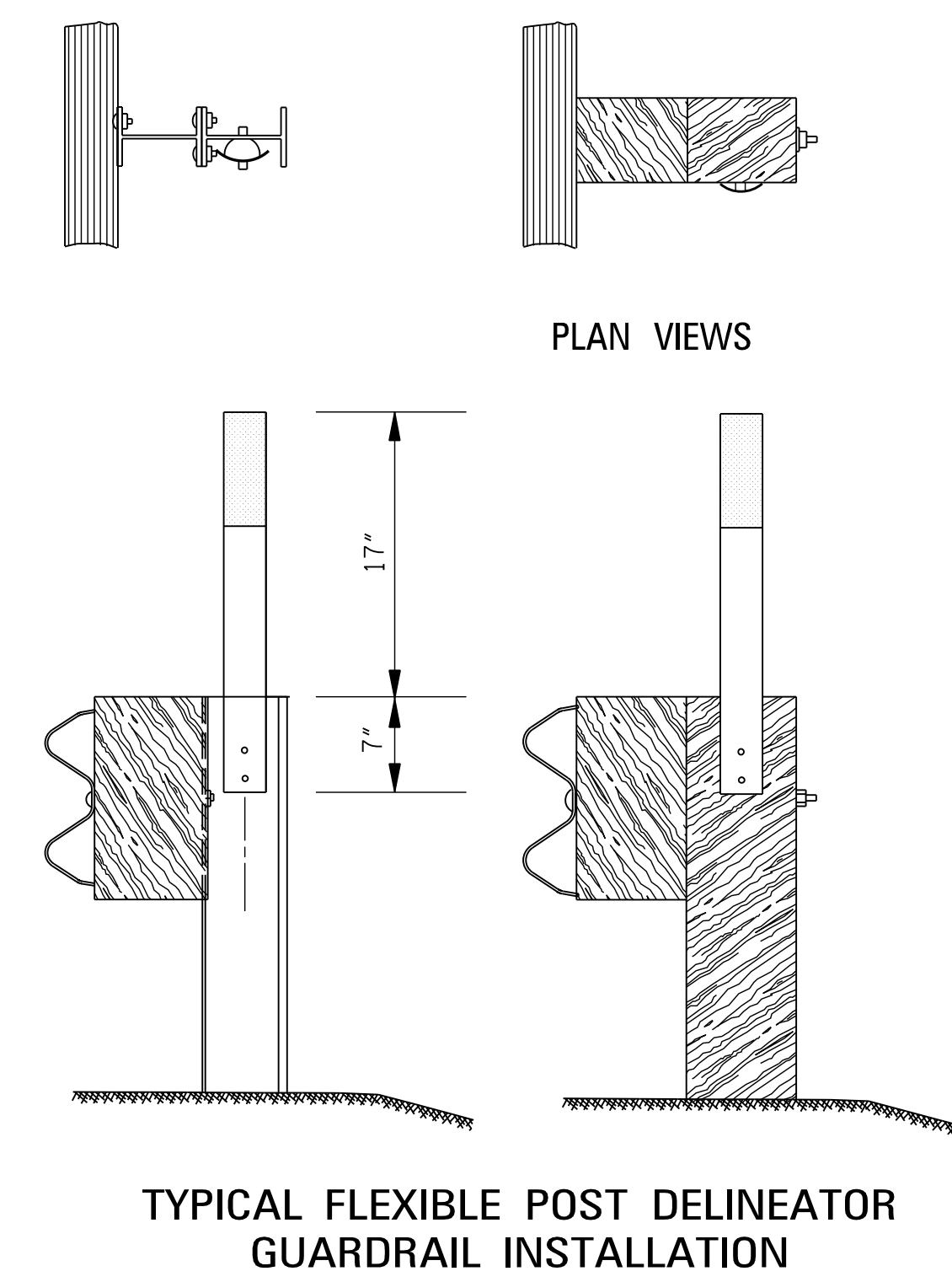
WORKING NUMBER GR-HW
 SHEET NUMBER 6221



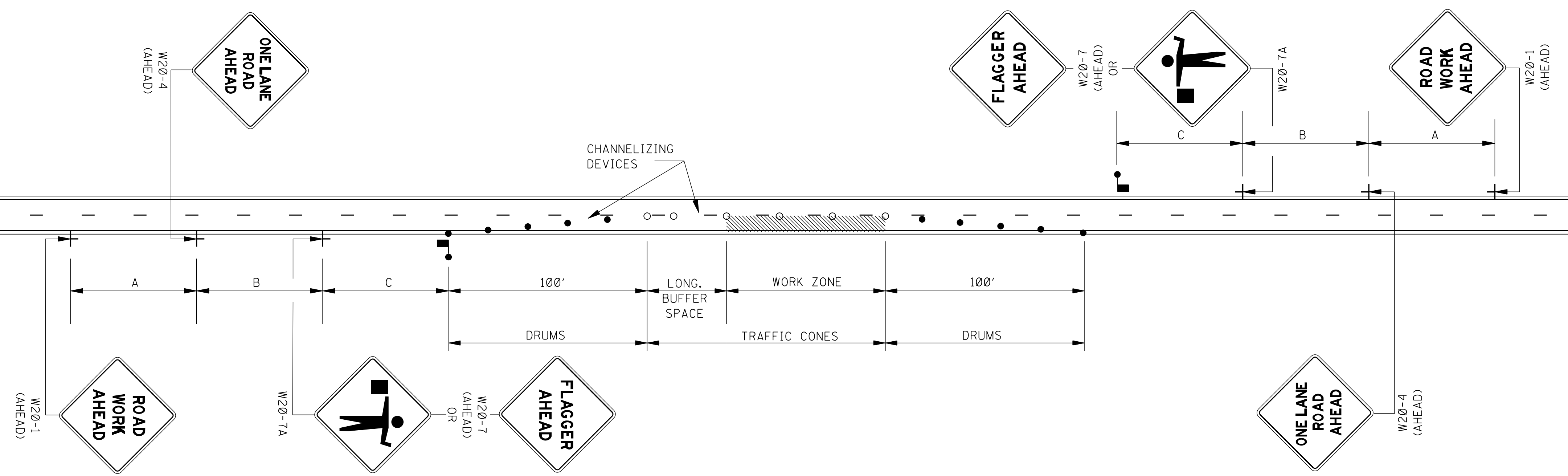
NOTE: ONE-WAY TRAFFIC SHOWN. DELINEATOR SPACING FOR TWO-WAY TRAFFIC SIMILAR. DELINEATOR COLOR WILL BE THE SAME AS THE ADJACENT PAVEMENT EDGE MARKING. THE FIRST THREE (3) MARKERS WILL FACE TRAFFIC IN OFF LANE FOR TWO-WAY TRAFFIC AS SHOWN IN DRAWING FOR OBSTACLE INSTALLATION FOR TWO-WAY TRAFFIC.

GENERAL NOTES:

1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
3. DELINEATORS FOR GUARDRAIL SHALL BE MOUNTED ON FLEXIBLE POSTS AS FOLLOWS: THE DELINEATOR POSTS WILL BE FROM THE DEPARTMENTS "APPROVED SOURCE OF MATERIALS" AND WILL BE FASTENED TO GUARDRAIL POST IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.



BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		TYPICAL GUARDRAIL DELINEATION	
DATE		ISSUE DATE: AUGUST 01, 2017	
		WORKING NUMBER SN-8C SHEET NUMBER 6317	



- 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.

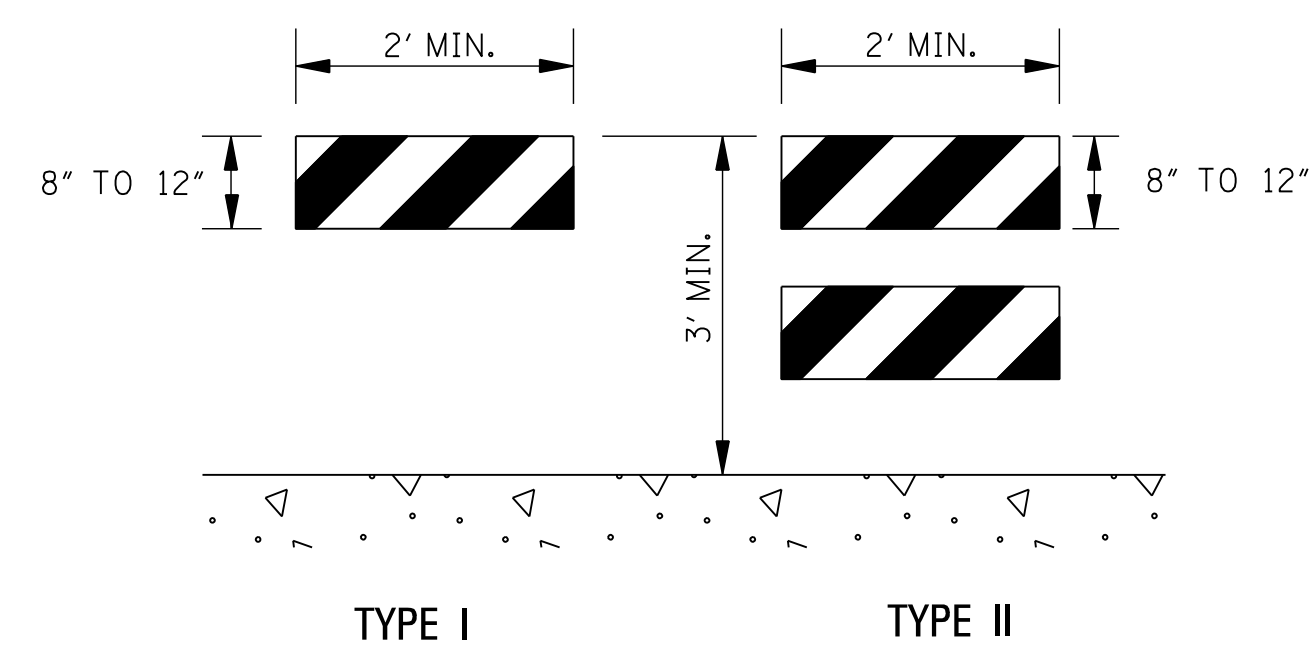
POSTED SPEED AND/OR DESIGN SPEED mph	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft) [†]	STOPPING SIGHT DISTANCE
	TAPER	ALONG LANE LINE & WORK ZONE		
25	20	50	55	155
30	20	60	85	200
35	20	70	120	250
40	20	80	170	305
45	20	90	220	360
50	20	100	280	425
55	20	110	335	495
60	20	120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

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

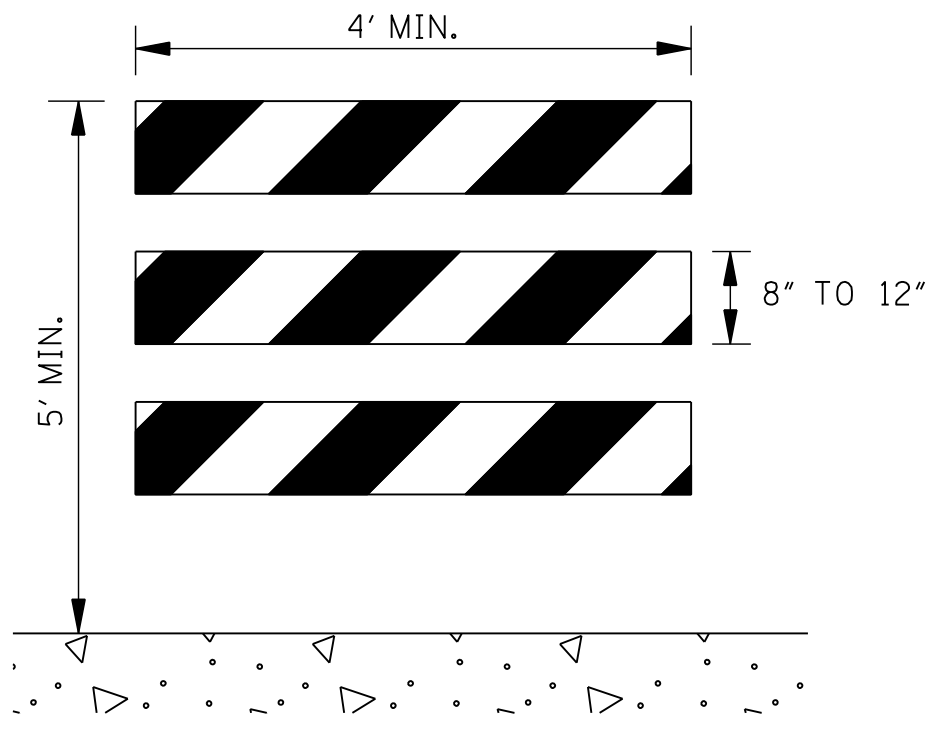
2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED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

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;">TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)</p>	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		TCP-1	
SHEET NUMBER		6351	



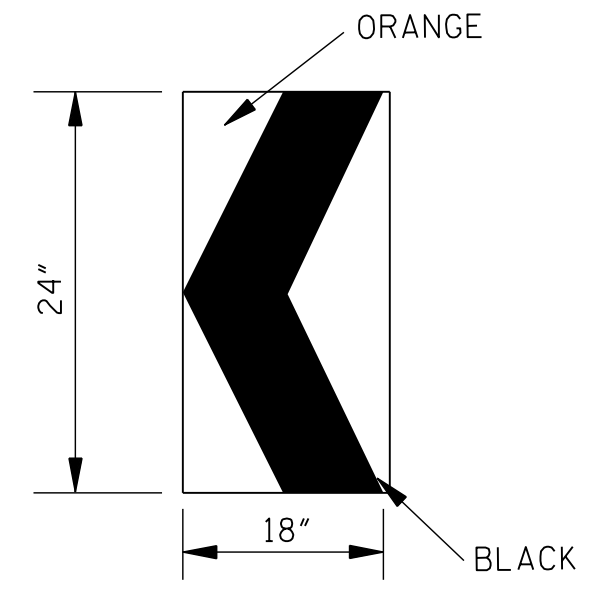
TYPE I TYPE II



TYPE III

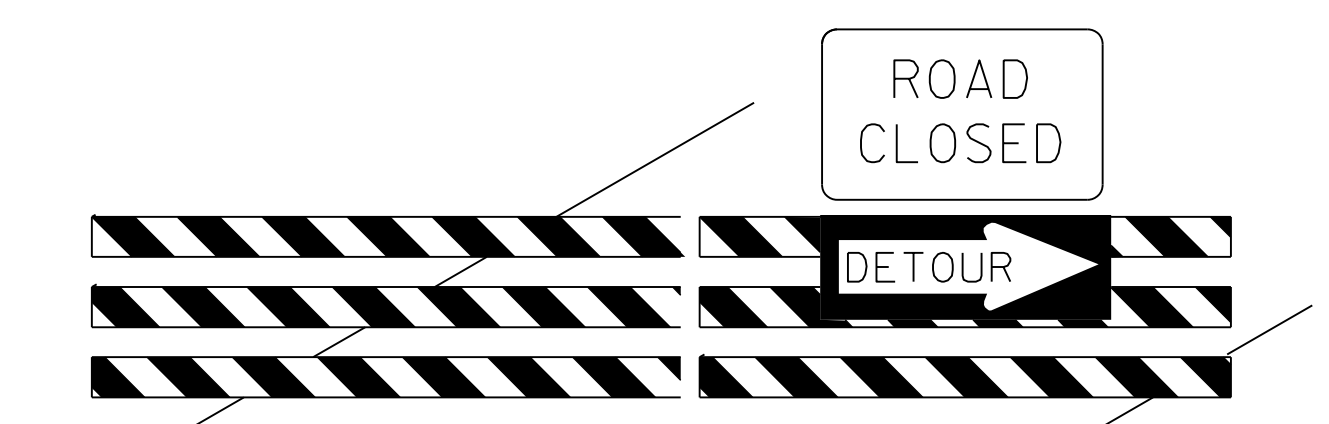
STANDARD BARRICADES

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



**CHEVRON SIGN
DETAIL**

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

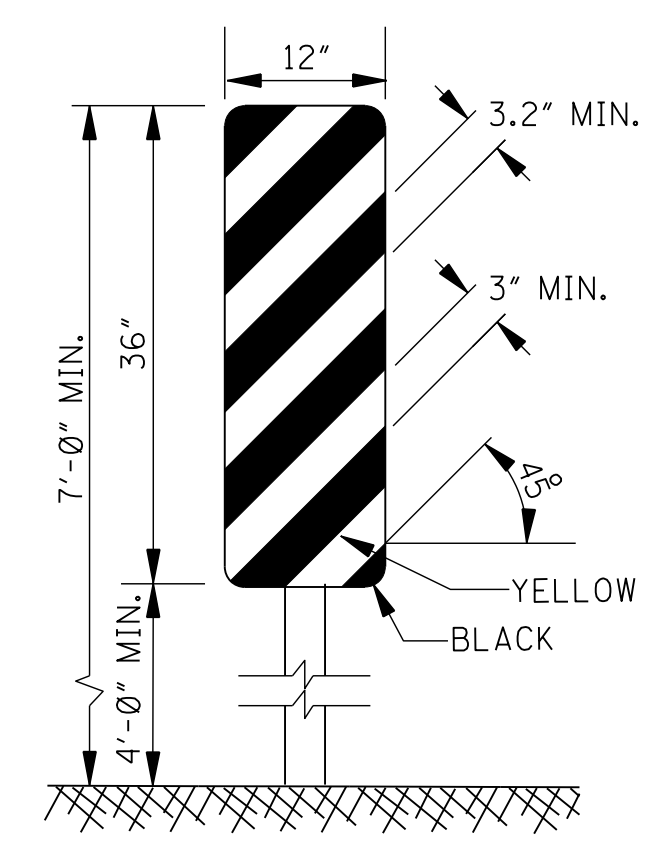


BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

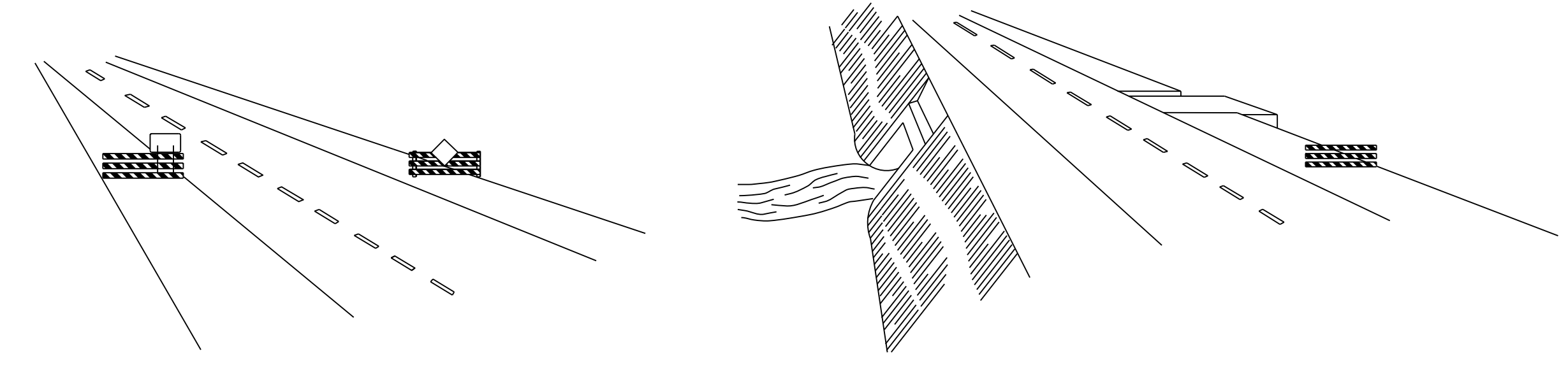
	I	II	III
WIDTH OF RAIL **	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL **	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE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

- * 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.
- ** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in² OF REFLECTIVE AREA FACING TRAFFIC.



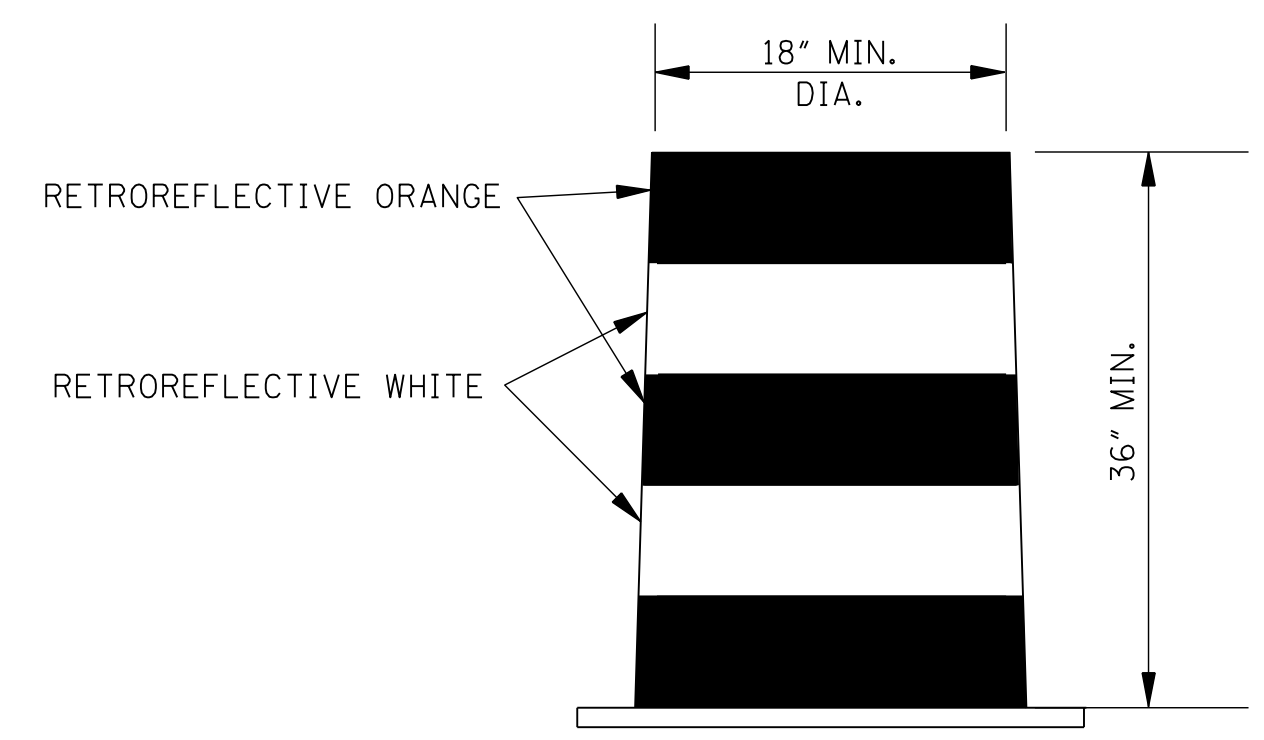
**TYPE 3 OBJECT MARKER
(OM-3R)**

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



WING BARRICADES

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



PLASTIC DRUM STRIPING DETAIL

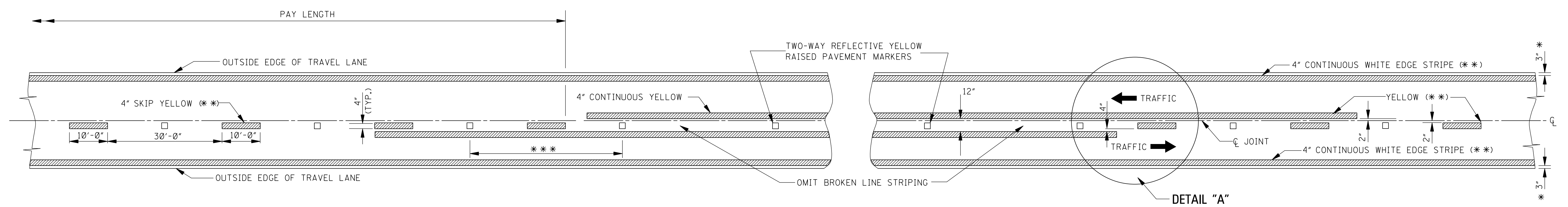
1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017

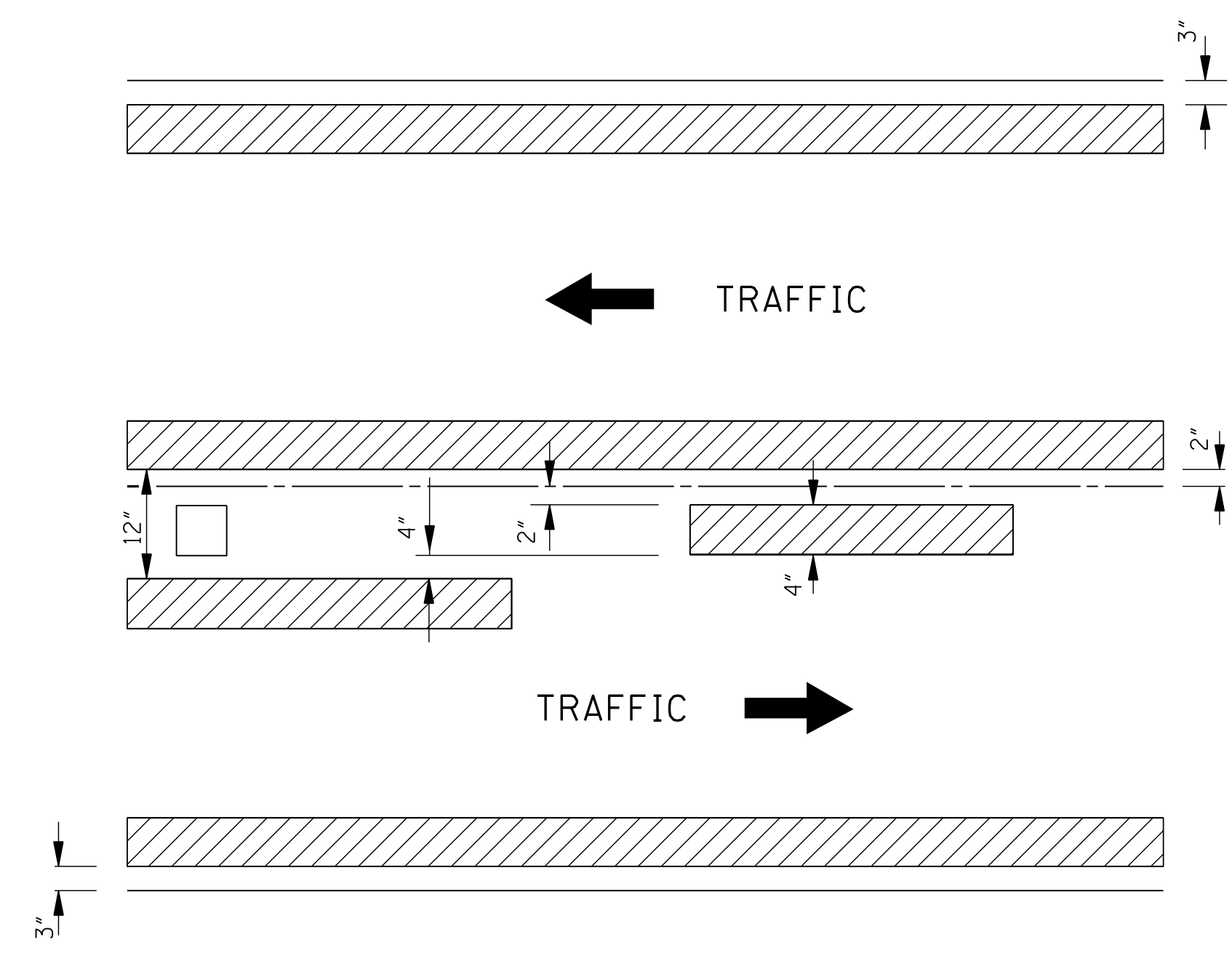
MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WORKING NUMBER
TCP-8

SHEET NUMBER
6358



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



DETAIL "A"



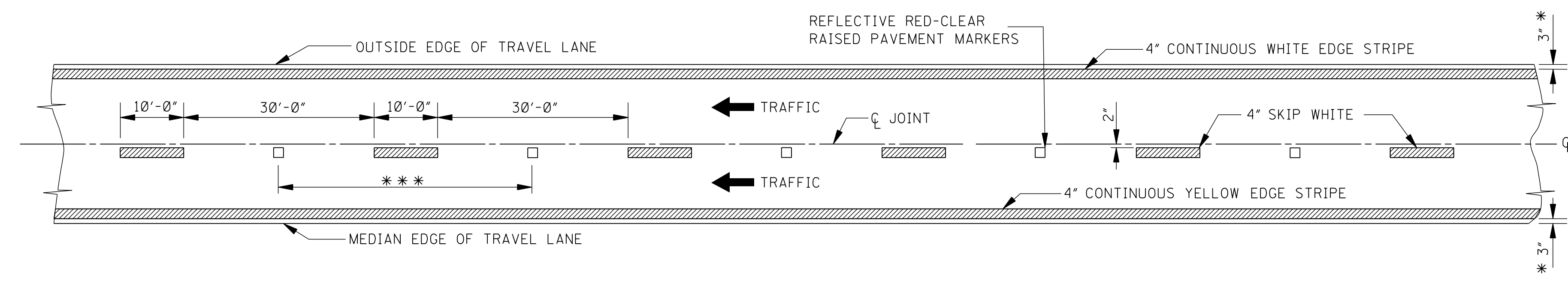
GENERAL NOTES:

- * 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."

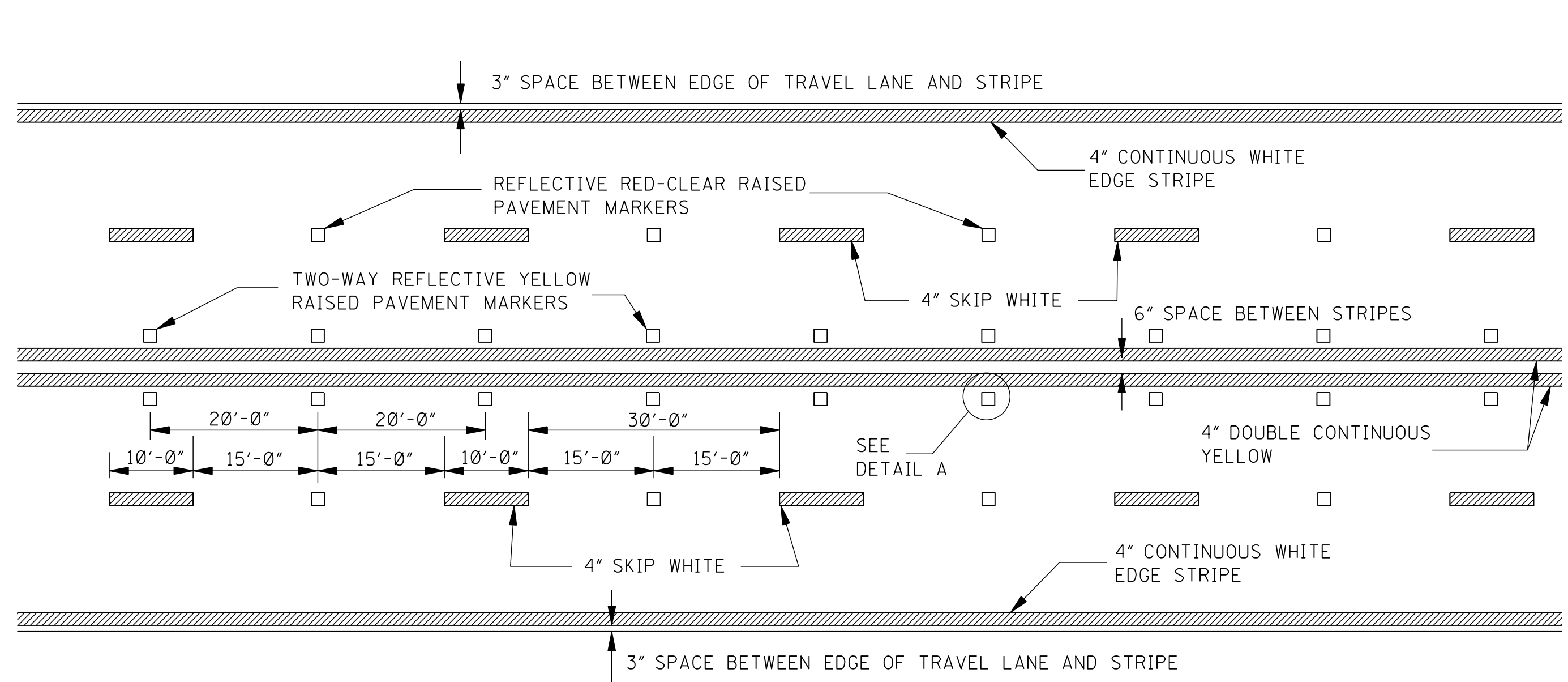


4-LANE WITH ONE-WAY TRAFFIC

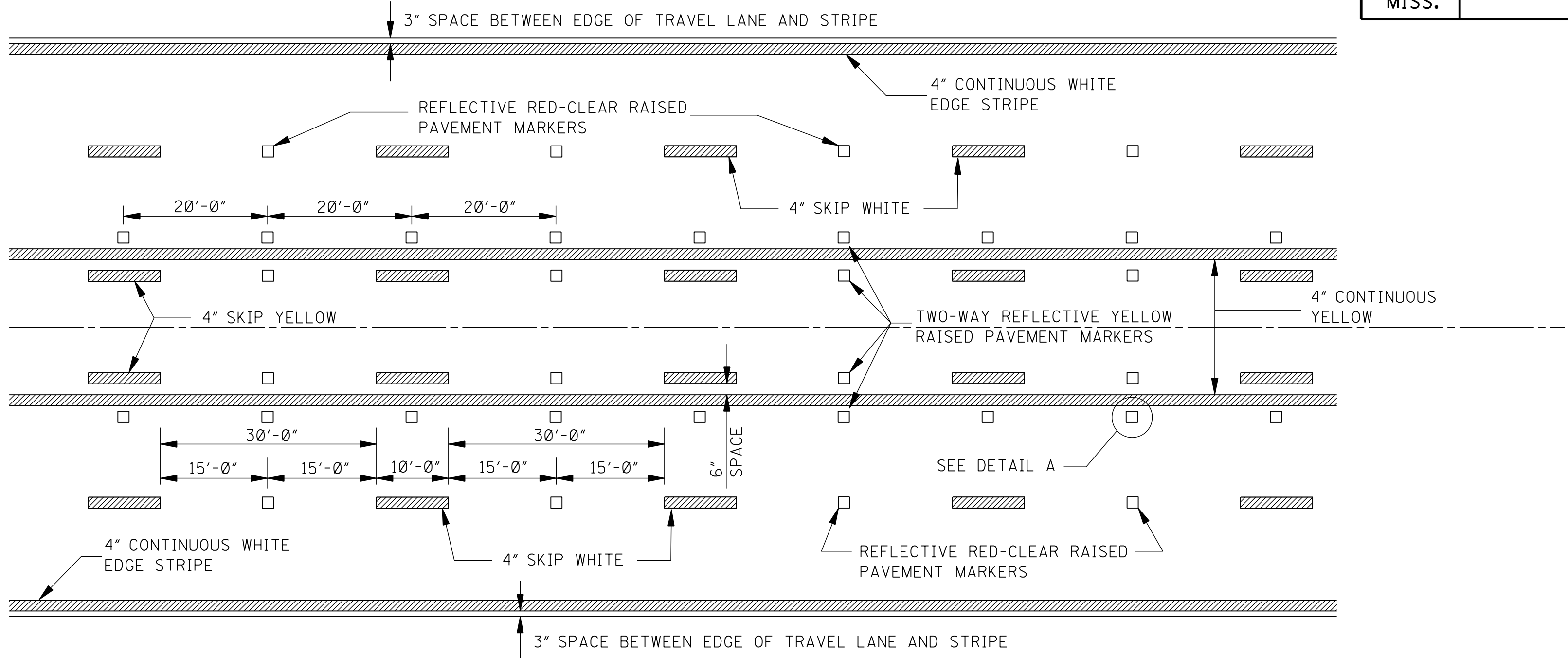
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS
DATE	ISSUE DATE: AUGUST 01, 2017



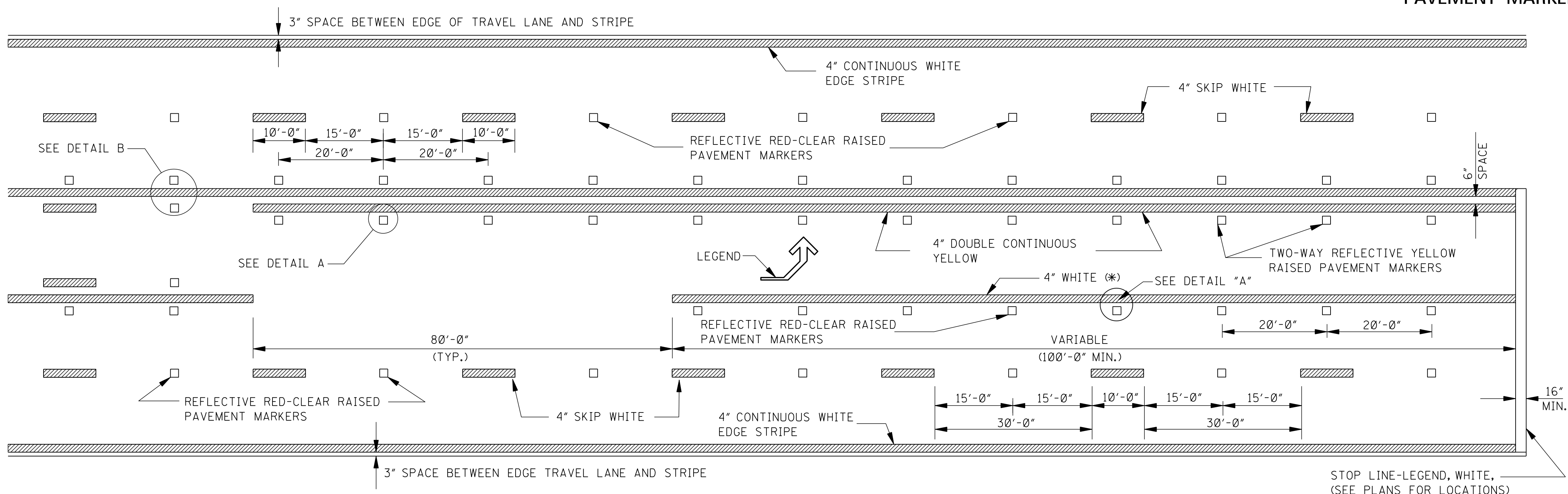
WORKING NUMBER
TCP-13
SHEET NUMBER
6363



TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION

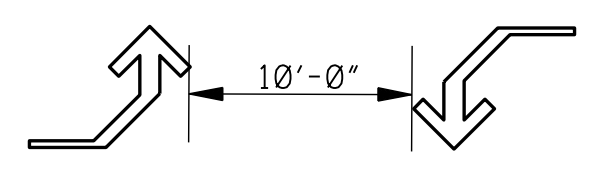


TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION



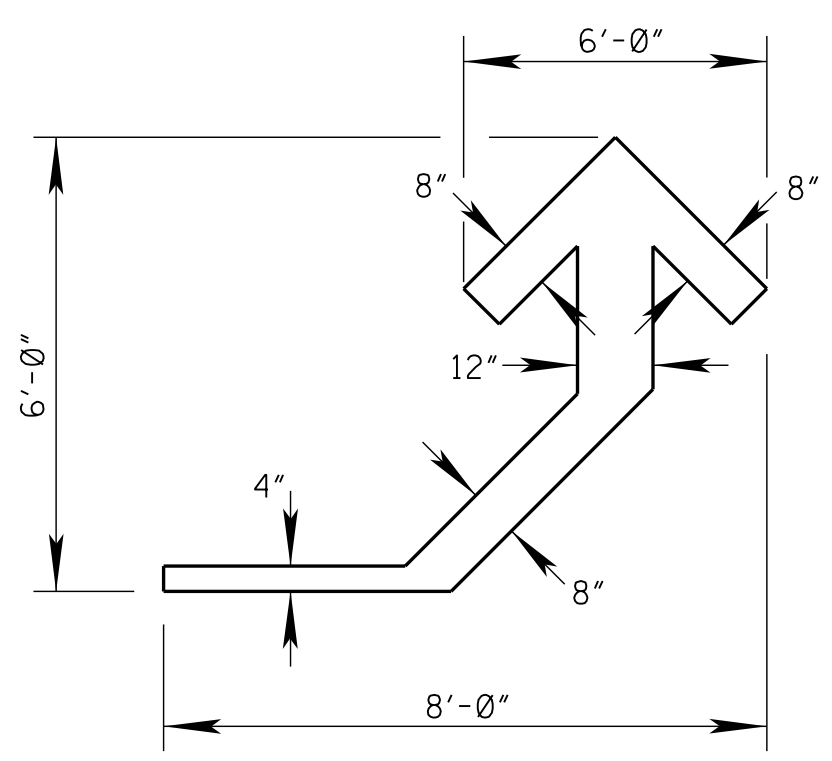
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES

*NOTE: USE DETAIL STRIPING IF LENGTH ≤ 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.

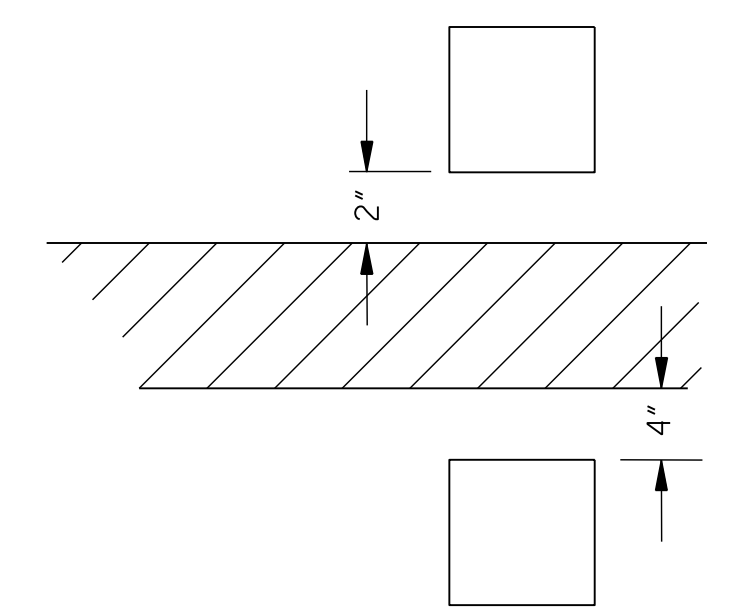


TYPICAL TWO-WAY ARROW INSTALLATION

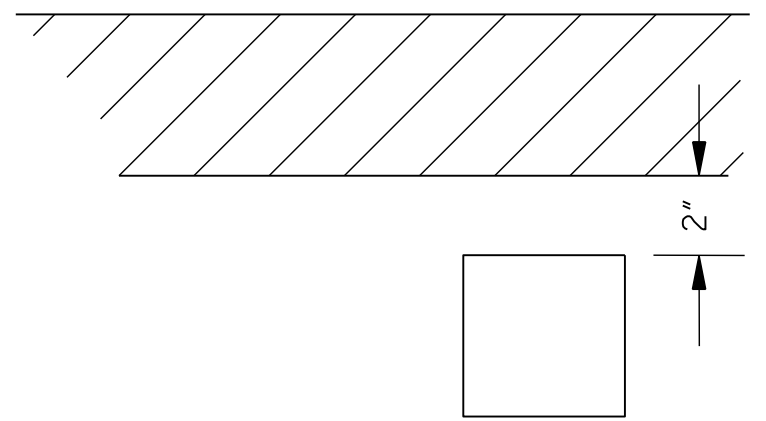
- NOTES:
1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
 2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
 3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).



DETAIL OF TEMPORARY TURN ARROW



DETAIL B LATERAL PLACEMENT OF PAVEMENT MARKERS

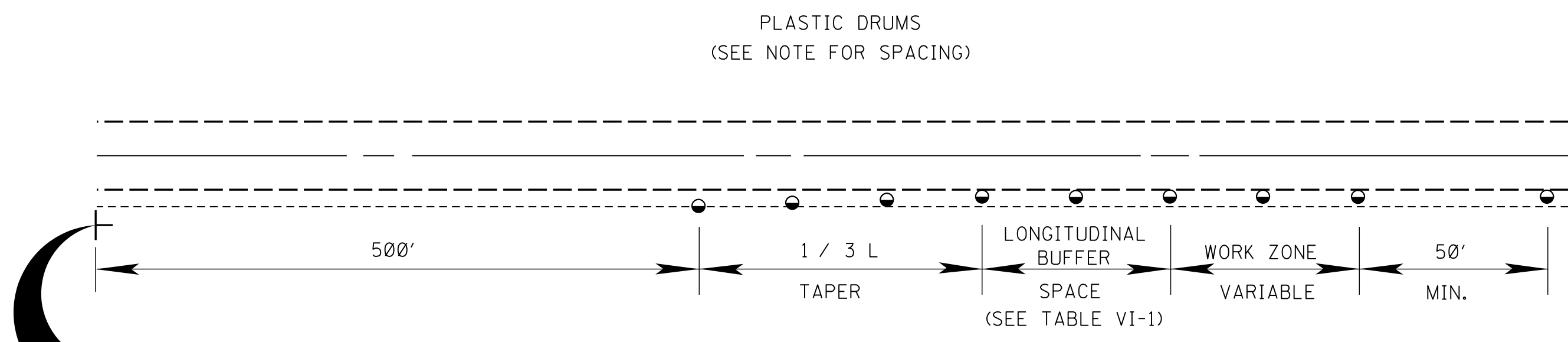


DETAIL A LATERAL PLACEMENT OF PAVEMENT MARKERS

GENERAL NOTE:

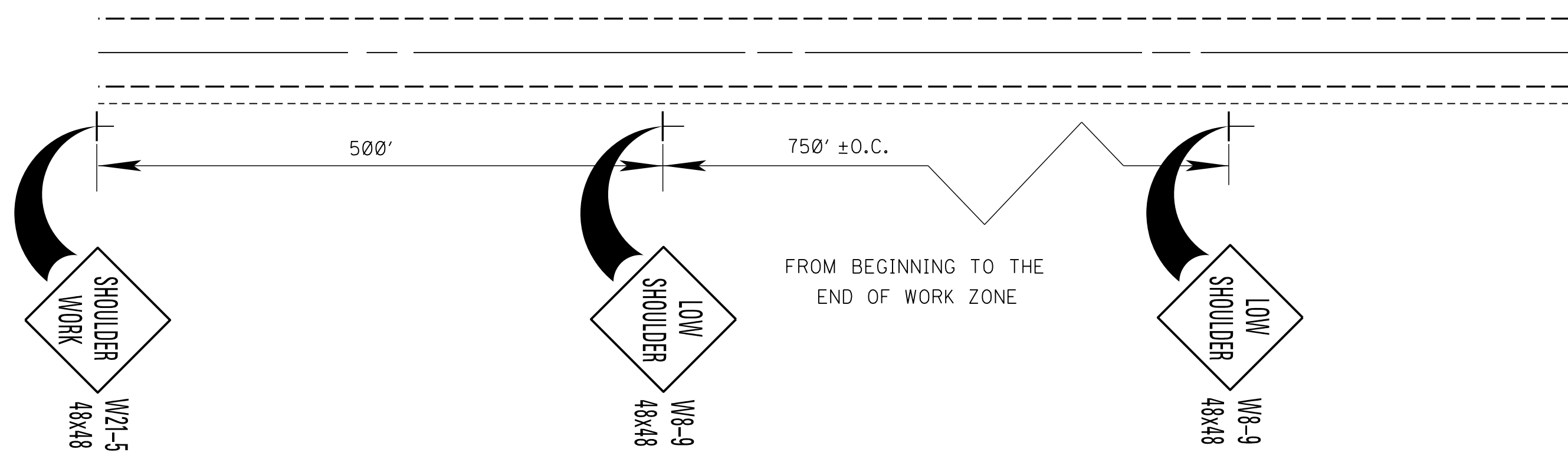
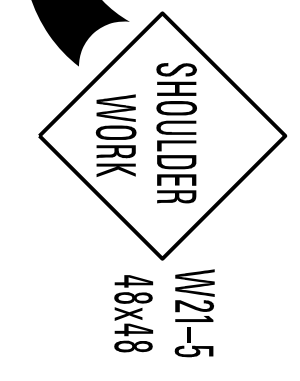
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDT "APPROVED SOURCES OF MATERIALS".
2. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
3. TEMPORARY TURN ARROW TO BE PAID FOR AS TEMPORARY TRAFFIC STRIPE (LEGEND), ESTIMATED AT 10.9 SQ. FT. PER ARROW

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		TEMPORARY STRIPING FOR TRAFFIC CONTROL 4-LANE AND 5-LANE UNDIVIDED ROADWAYS	
DATE		ISSUE DATE: AUGUST 01, 2017	
		 WORKING NUMBER TCP-14 SHEET NUMBER 6364	

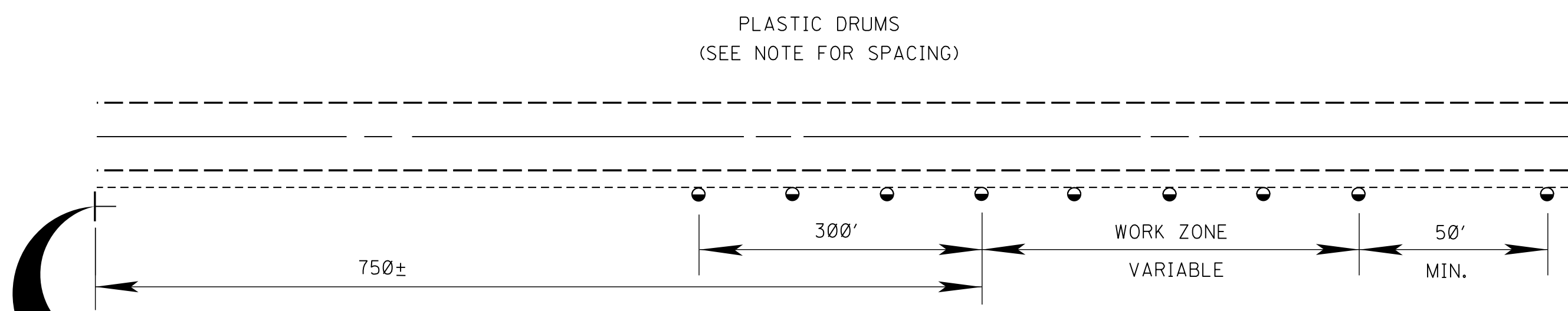
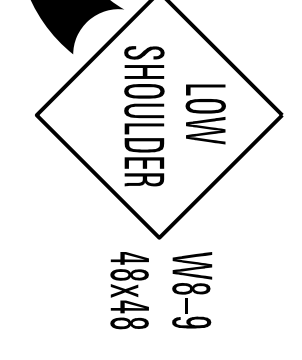
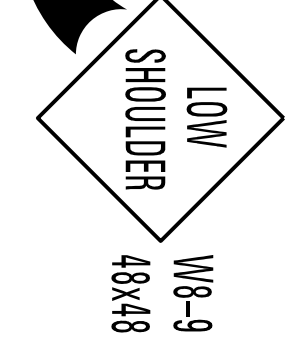
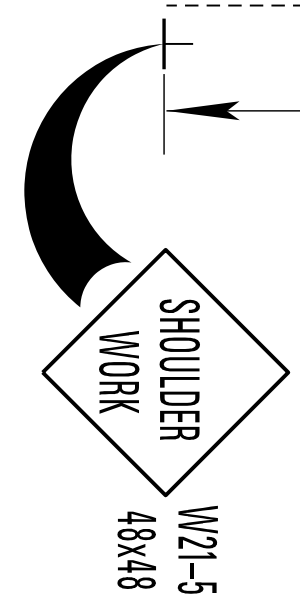


TYPICAL SHOULDER CLOSURE

- (1) TO BE USED WITH EIGHT (8) FOOT OR GREATER WIDTH IMPROVED SHOULDER.
- (2) TO BE USED WHEN CONSTRUCTION VEHICLES (EQUIPMENT) ENCROACHES ON OR WITHIN TWO (2) FEET OF THE SHOULDER BREAK.

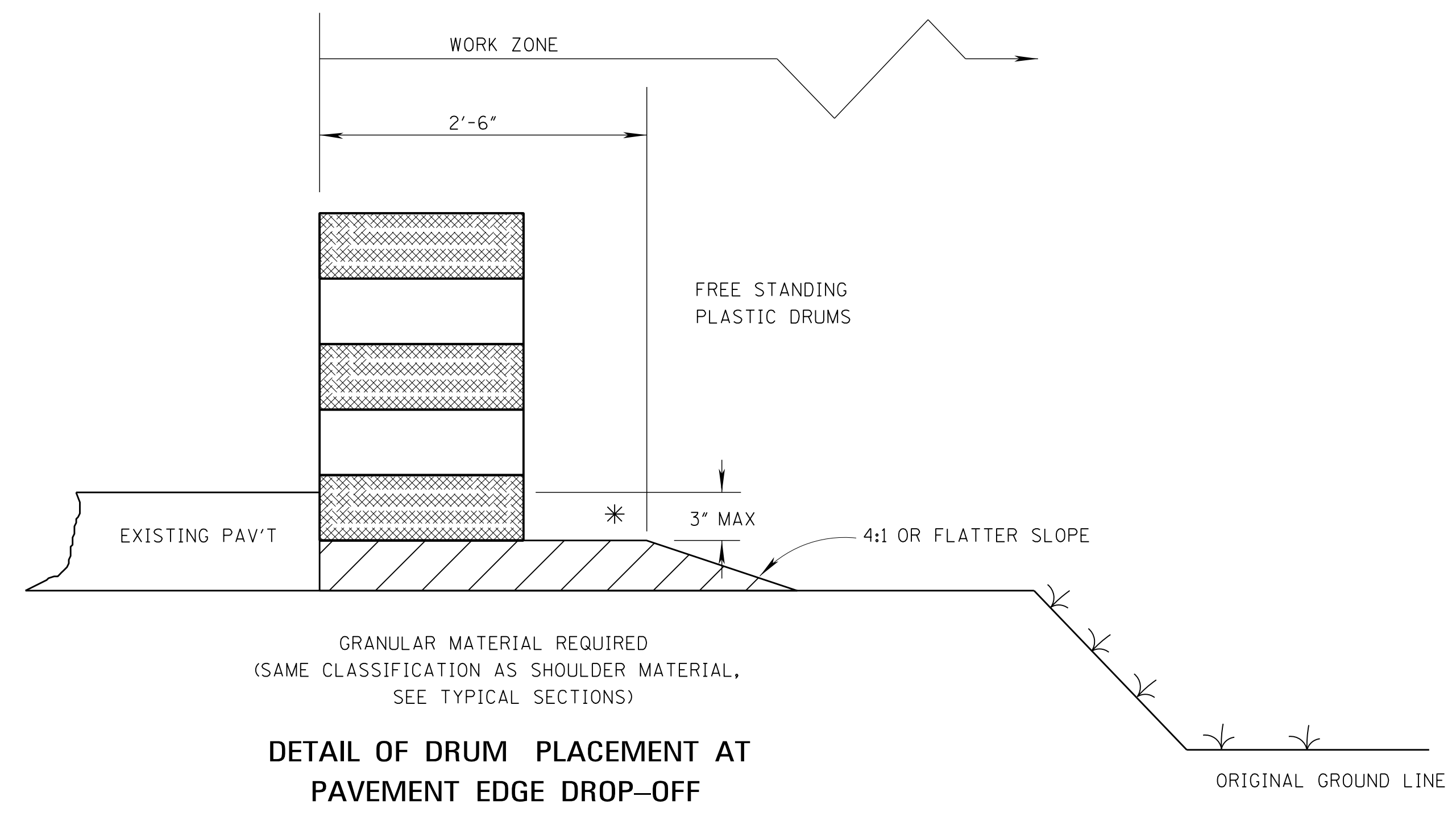
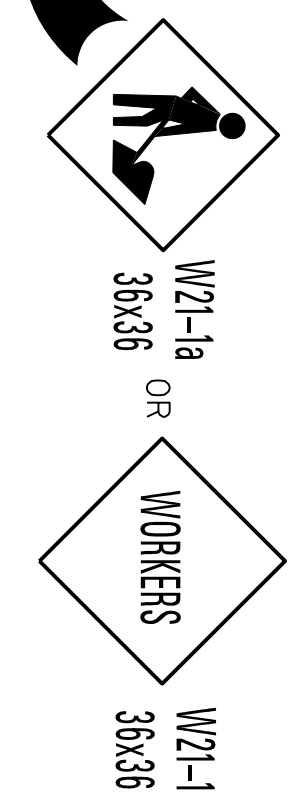


**TYPICAL SHOULDER WORK #1
(SEE NOTE A-1 THIS SHEET)**



TYPICAL SHOULDER WORK #2

NOTE:
WORK OUTSIDE TWO (2) FOOT AND WITHIN TEN (10) FEET OF THE SHOULDER BREAK MAY BE PROTECTED BY PLACING DRUMS ALONG THE SHOULDER EDGE, 300 FEET PRIOR TO AND 50 FEET BEYOND THE WORK AREA, OR SEE NOTE A-3 THIS SHEET.



DETAIL OF DRUM PLACEMENT AT PAVEMENT EDGE DROP-OFF

NOTES:

- * A. PAVEMENT EDGE DROP-OFF
 1. IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (750'±O.C.).
 2. TWO AND ONE QUARTER TO THREE INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE M.U.T.C.D. (1 / 3 L, WHERE L IS THE TAPER LENGTH IN FEET.)
 3. GREATER THAN THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED.
 4. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
 5. LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.
- B. DRUM SPACING
 1. TANGENTS = 2 X S
 2. TAPERS = L / 3

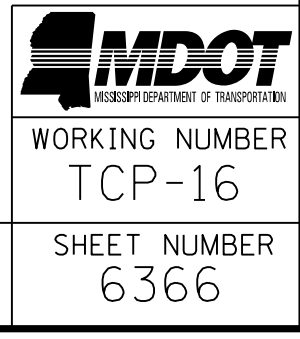
WHERE L = S X W
L = TAPER LENGTH IN FEET
S = SPEED IN MPH (POSTED OR 85 PERCENTILE)
W = WIDTH OF OFFSET IN FEET
- C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

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

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

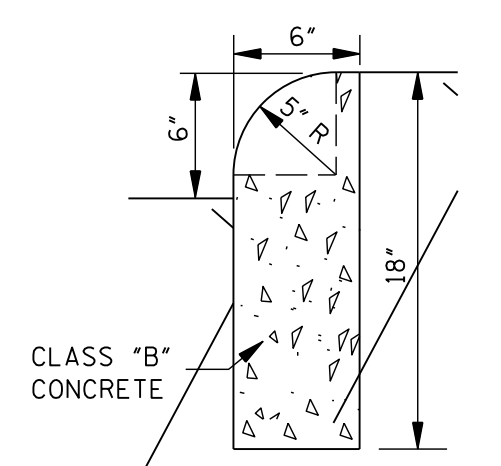
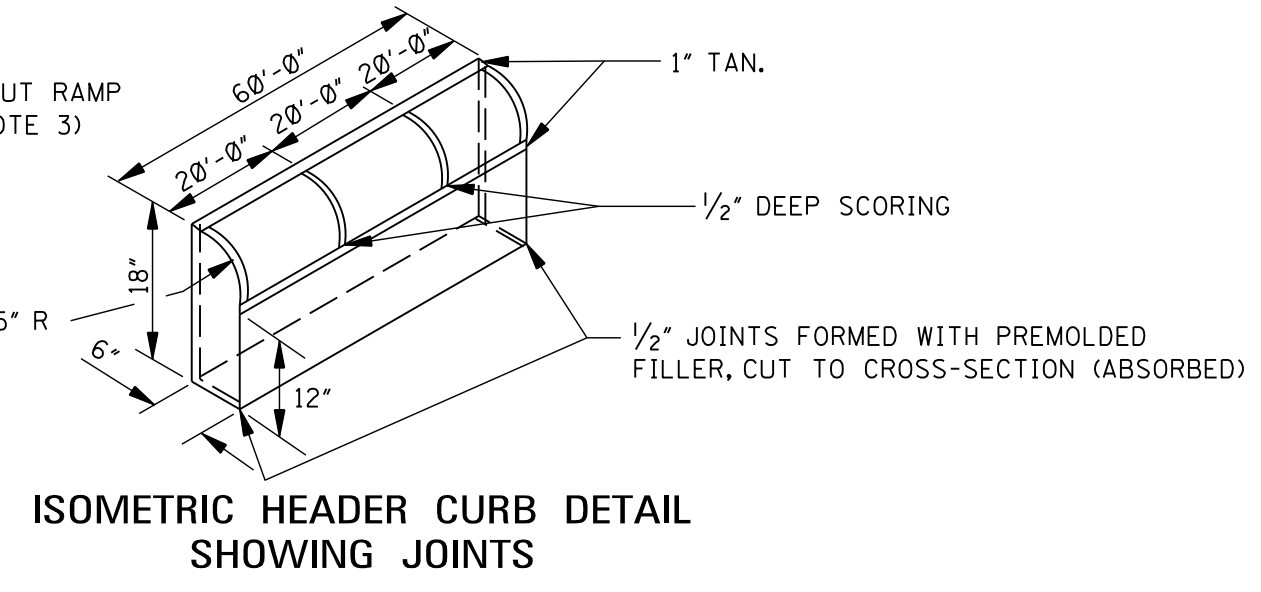
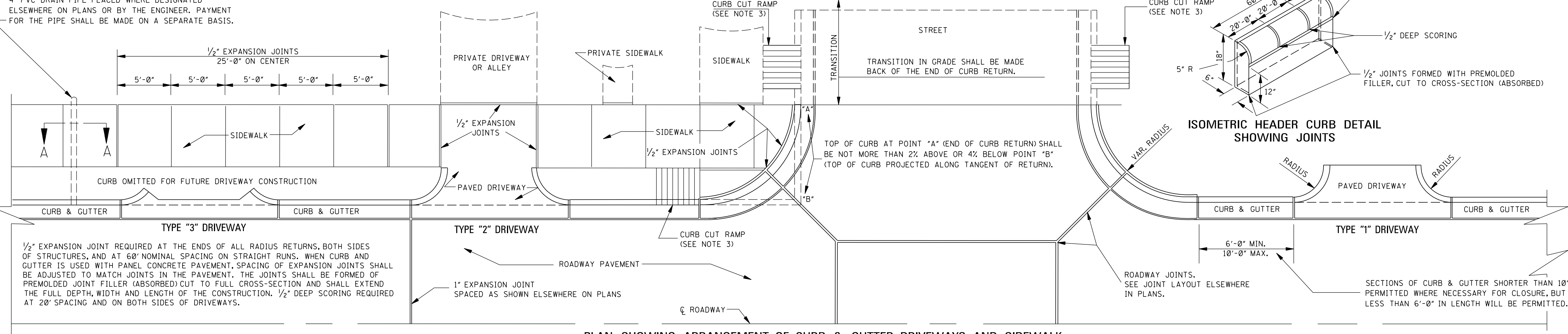
** POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
TRAFFIC CONTROL DETAILS DRUM PLACEMENT AND SHOULDER CLOSURE	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER	TCP-16
SHEET NUMBER	6366



4" PVC DRAIN PIPE PLACED WHERE DESIGNATED ELSEWHERE ON PLANS OR BY THE ENGINEER. PAYMENT FOR THE PIPE SHALL BE MADE ON A SEPARATE BASIS.

NOTE: DRIVEWAY REINFORCEMENT SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - D1.4 X D1.4 WIRE MESH WHERE REQUIRED.



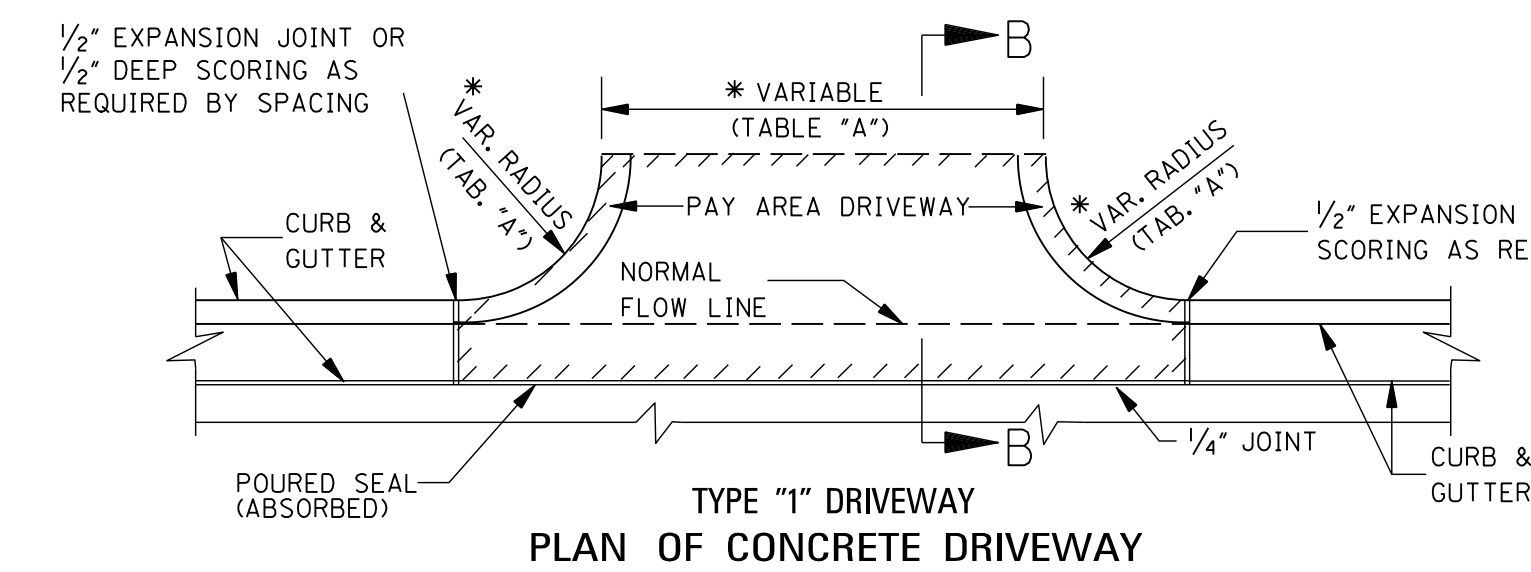
DETAIL OF HEADER CURB
 1/2" CONTRACTION JOINTS REQUIRED AT 20' O.C.
 EXPANSION JOINTS REQUIRED AT 60' O.C.
 UNLESS OTHERWISE DIRECTED BY ENGINEER.

1/2" EXPANSION JOINT REQUIRED AT THE ENDS OF ALL RADIUS RETURNS, BOTH SIDES OF STRUCTURES, AND AT 60' NOMINAL SPACING ON STRAIGHT RUNS. WHEN CURB AND GUTTER IS USED WITH PANEL CONCRETE PAVEMENT, SPACING OF EXPANSION JOINTS SHALL BE ADJUSTED TO MATCH JOINTS IN THE PAVEMENT. THE JOINTS SHALL BE FORMED OF PREMOLDED JOINT FILLER (ABSORBED) CUT TO FULL CROSS-SECTION AND SHALL EXTEND THE FULL DEPTH, WIDTH AND LENGTH OF THE CONSTRUCTION. 1/2" DEEP SCORING REQUIRED AT 20' SPACING AND ON BOTH SIDES OF DRIVEWAYS.

TOP OF CURB AT POINT "A" (END OF CURB RETURN) SHALL BE NOT MORE THAN 2% ABOVE OR 4% BELOW POINT "B" (TOP OF CURB PROJECTED ALONG TANGENT OF RETURN).

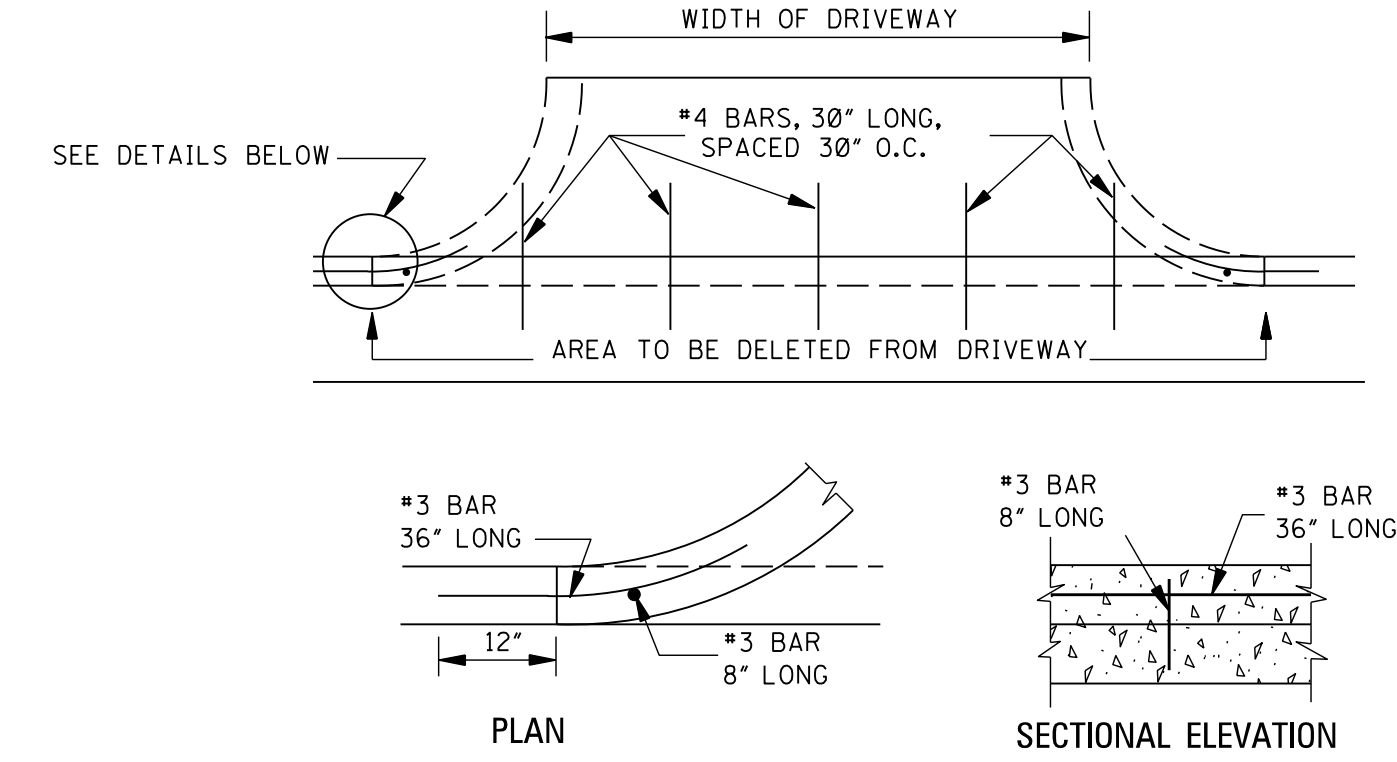
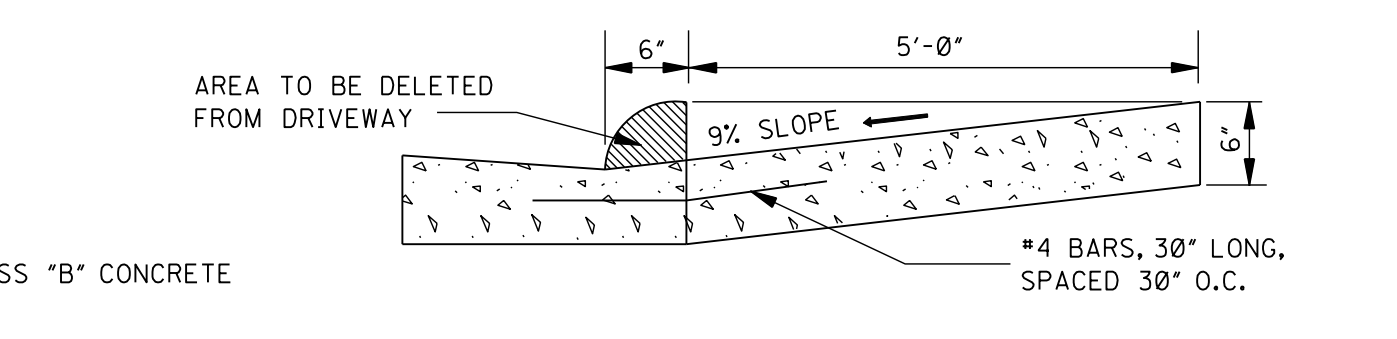
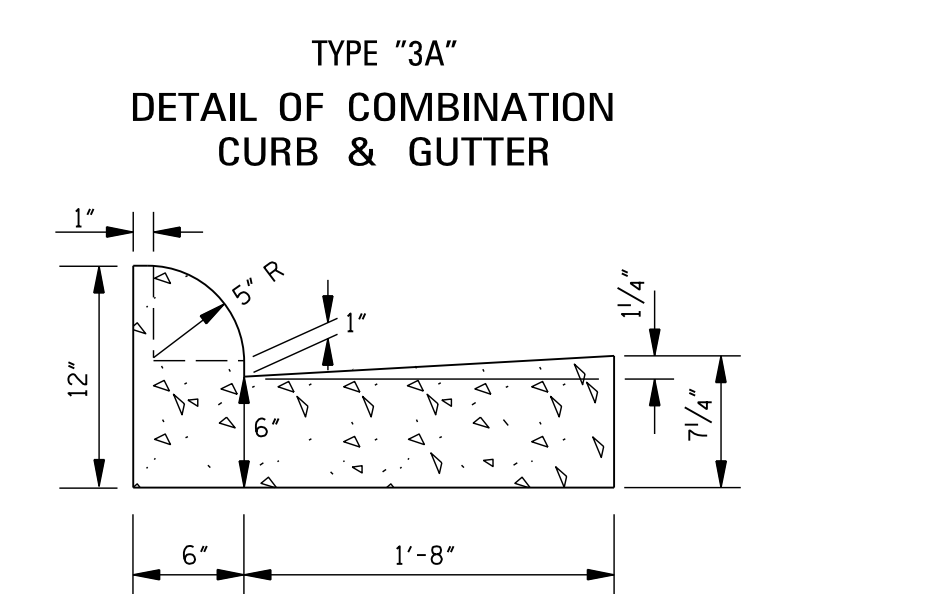
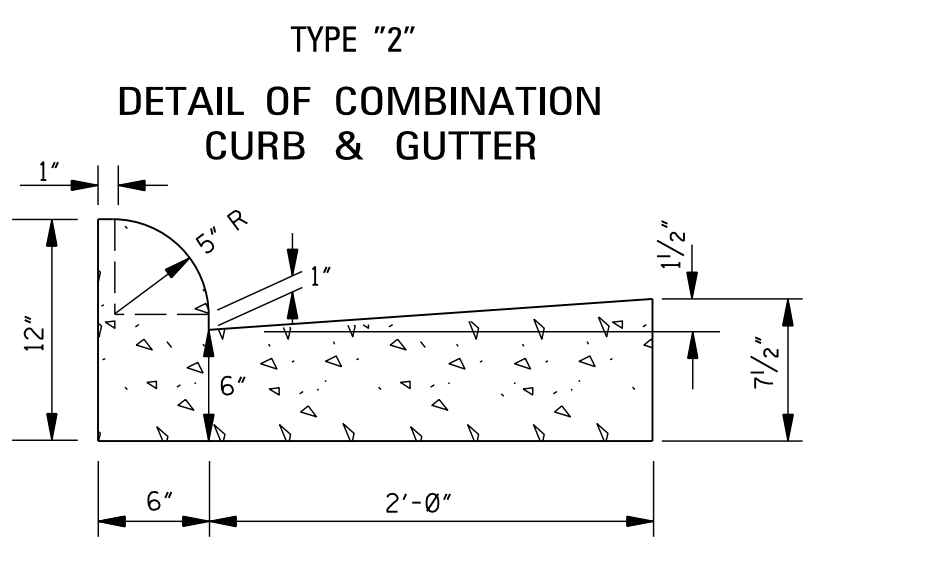
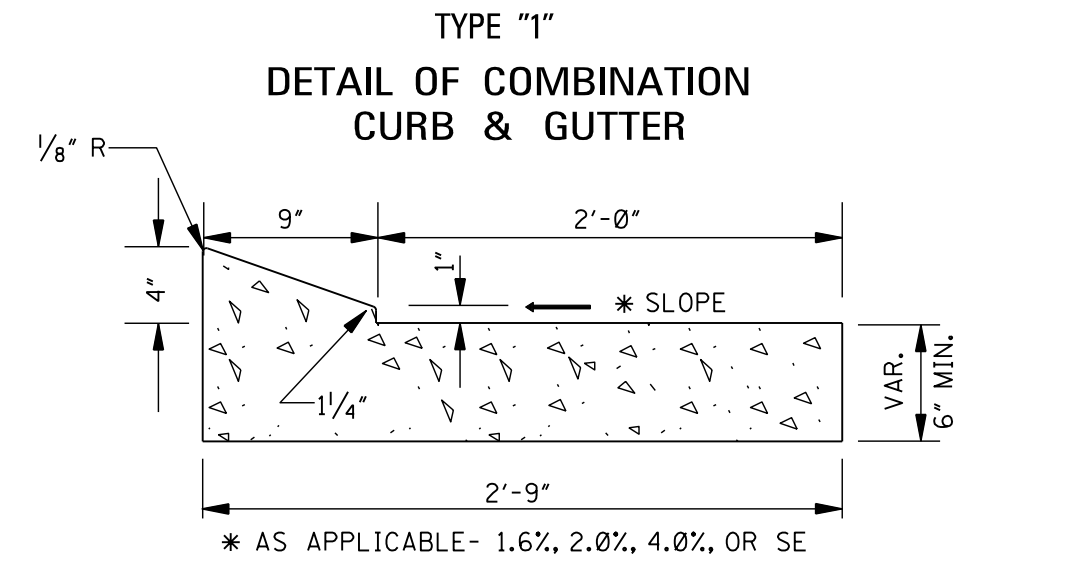
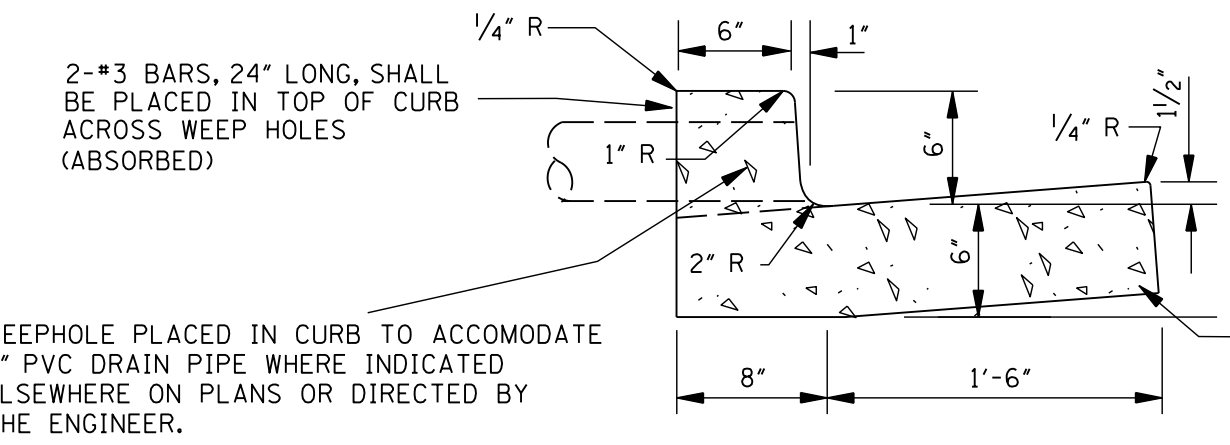
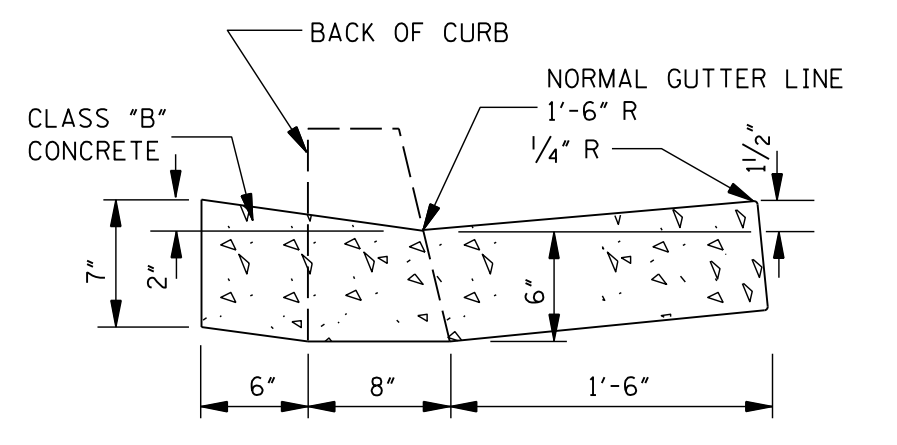
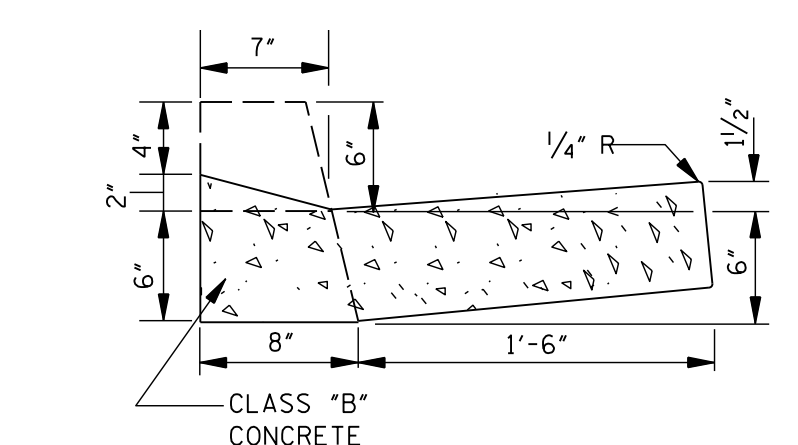
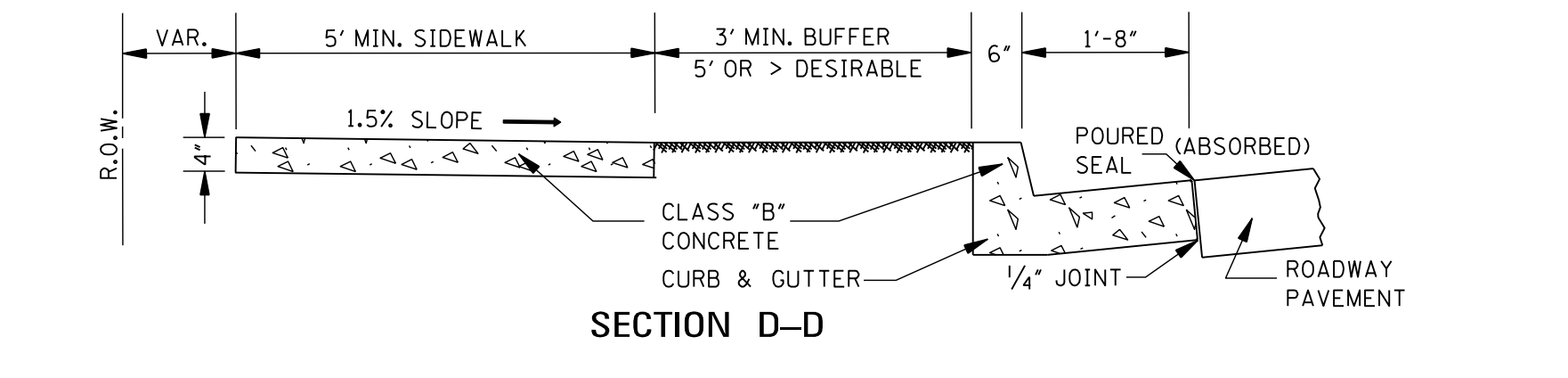
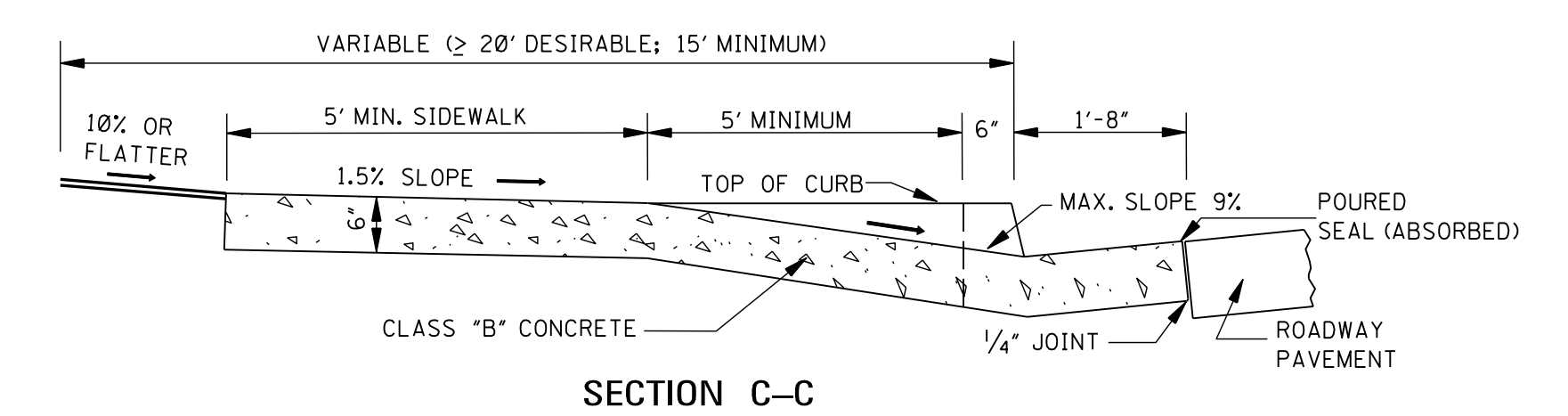
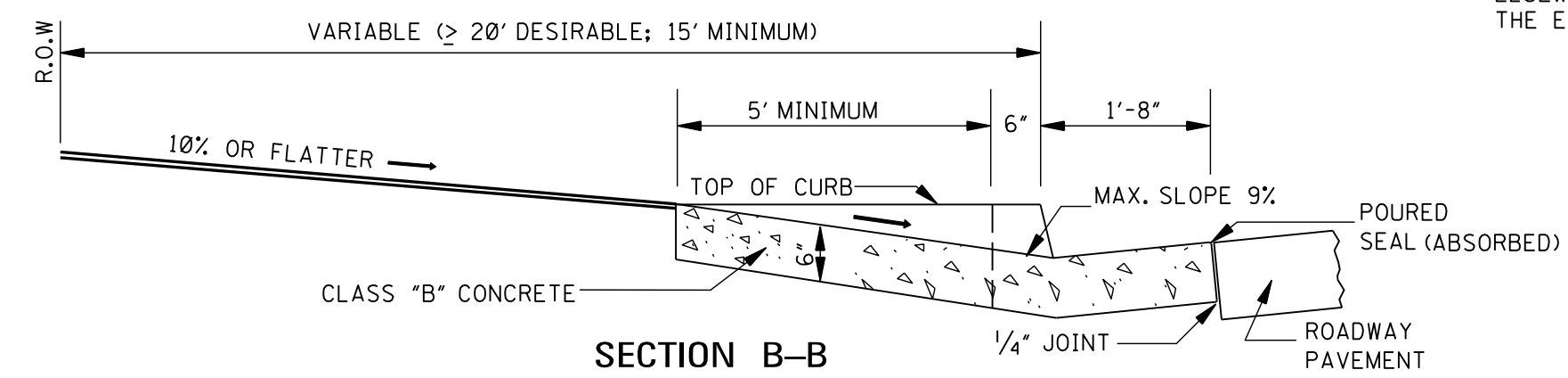
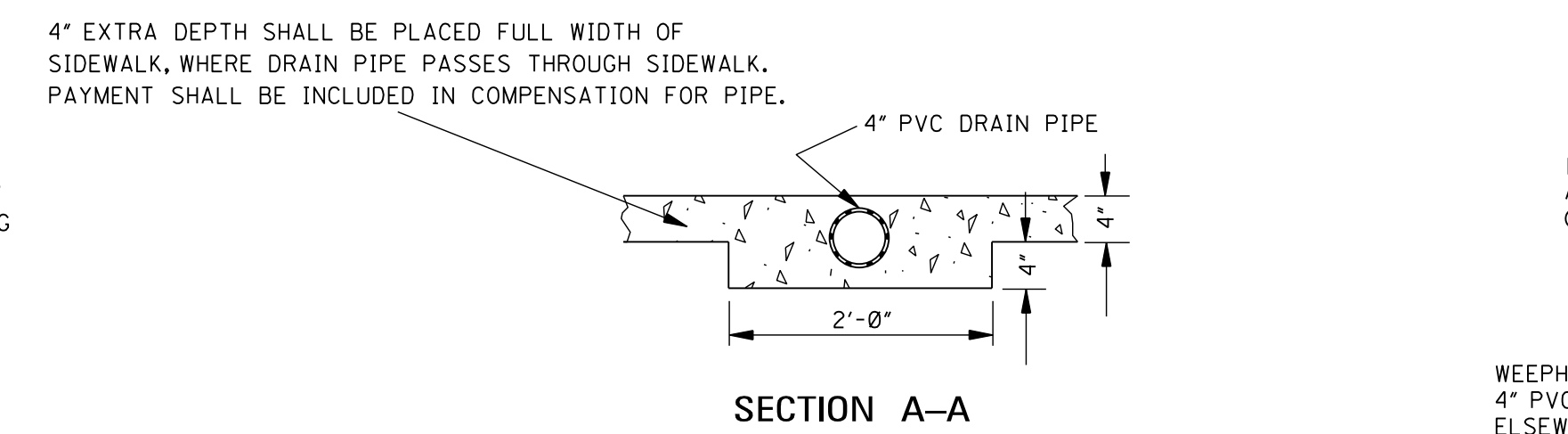
SECTIONS OF CURB & GUTTER SHORTER THAN 10'-0" WILL BE PERMITTED WHERE NECESSARY FOR CLOSURE, BUT NO SECTION LESS THAN 6'-0" IN LENGTH WILL BE PERMITTED.

PLAN SHOWING ARRANGEMENT OF CURB & GUTTER, DRIVEWAYS AND SIDEWALK



11.058 yd² FOR DRIVEWAY 16'-0" IN WIDTH.
 0.574 yd² FOR EACH ADDED OR SUBTRACTED FOOT OF WIDTH.
 NOTE: THIS DRIVEWAY AREA EXAMPLE IS COMPUTED ON THE BASIS OF 3'-0" RADIUS. PAYMENT FOR CURB RADIUS SHALL BE INCLUDED IN COMPENSATION FOR DRIVEWAY.

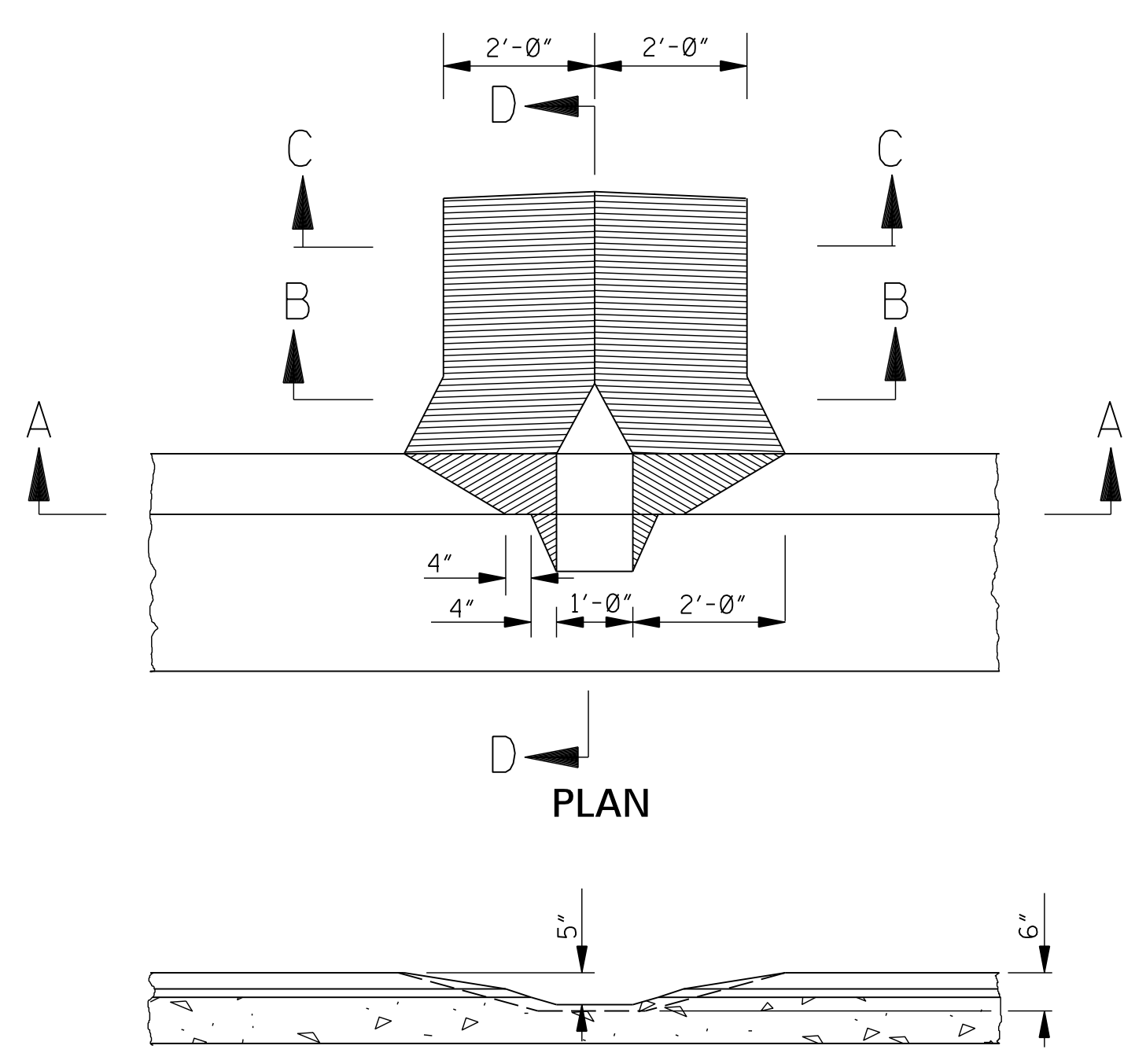
* TABLE "A"		
DRIVEWAY TYPE	DRIVEWAY WIDTH	CURB RETURN RADIUS
RESIDENTIAL	16'	5' - 10'
COMMERCIAL/ INDUSTRIAL	30' - 50'	10' - 30'



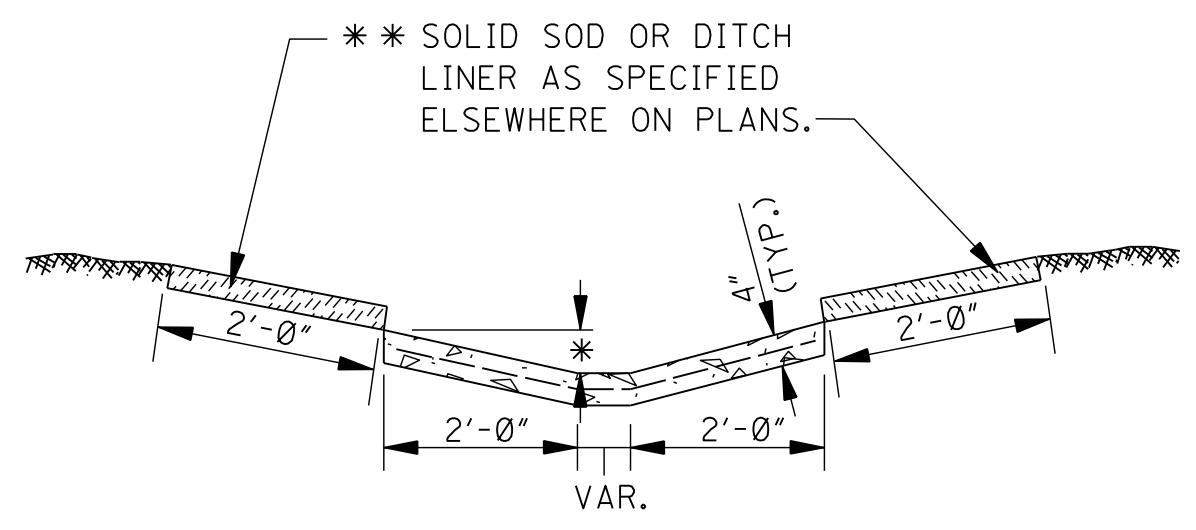
- GENERAL NOTES:
1. TRAVERSE CONTRACTION JOINTS ARE REQUIRED AT 20' ON CENTER FOR ALL CONCRETE DRIVEWAYS THAT EXTEND PAST THE END OF THE CURB RETURN. A 1/2" WIDE EXPANSION JOINT IS REQUIRED AT THE END OF THE CURB RETURN AND AT 60' ON CENTER THROUGHOUT THE LENGTH OF THE DRIVEWAY. A LONGITUDINAL CONTRACTION JOINT IS REQUIRED FOR ALL DRIVEWAYS EXCEEDING 20' IN WIDTH.
 2. SEE WK. NOS. CR-1, CR-2, CR-3 & CR-4 FOR DETAILS OF CURB-CUT RAMPS.
 3. MAXIMUM 2% CROSS-SLOPE ON SIDEWALKS.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>DRIVEWAYS, CURB & GUTTER, & SIDEWALK</p> 	
DATE			
ISSUE DATE: AUGUST 01, 2017		WORKING NUMBER SD-1	SHEET NUMBER 6419

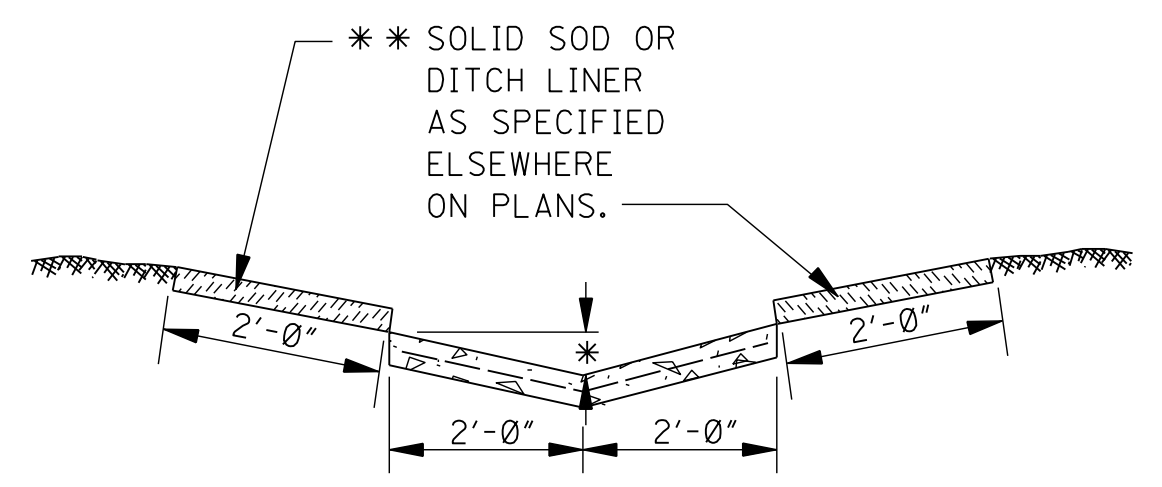
FLUME – TYPE "A" (INTERMEDIATE RUNOFF THROUGH CURB & GUTTER)



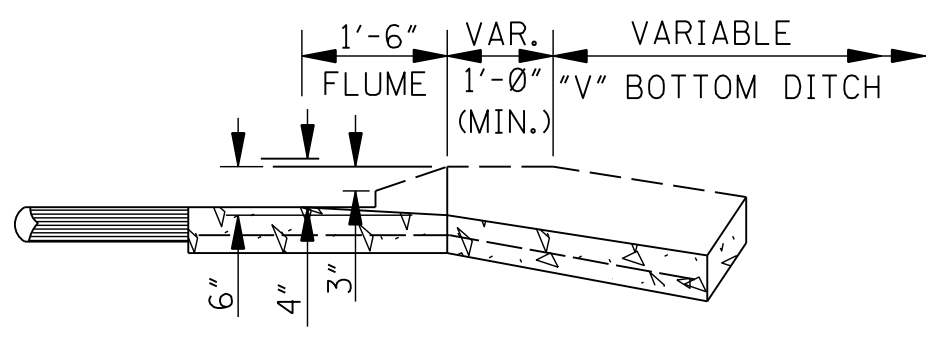
SECTION A-A



SECTION B-B
(TRANSITION SECTION)

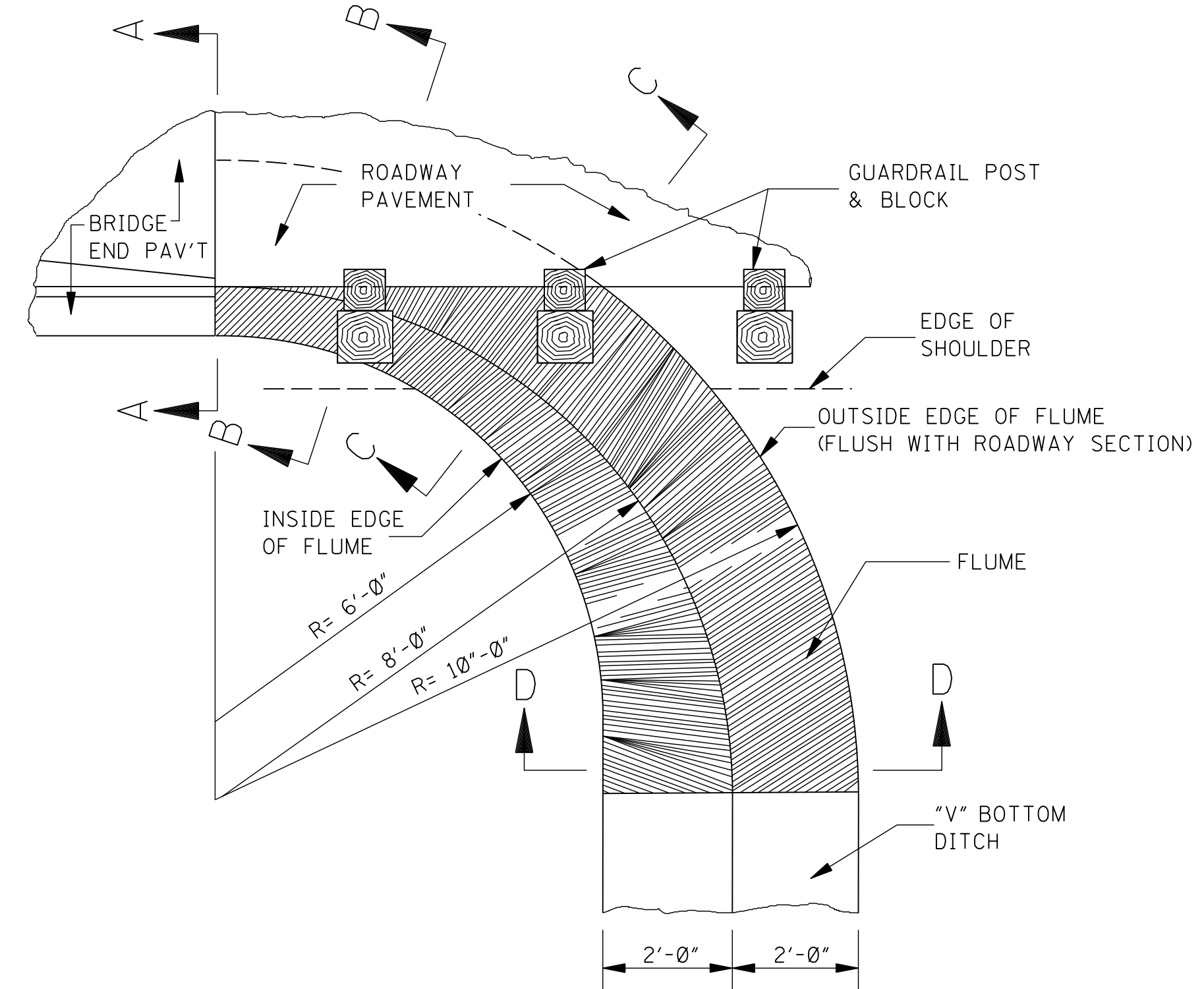


SECTION C-C
(DITCH SECTION)

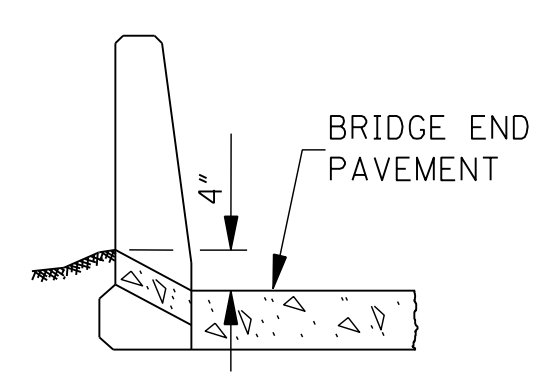


SECTION D-D

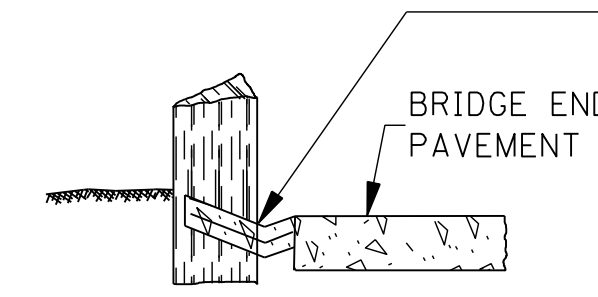
FLUME – TYPE "B" (AT END OF BRIDGE)



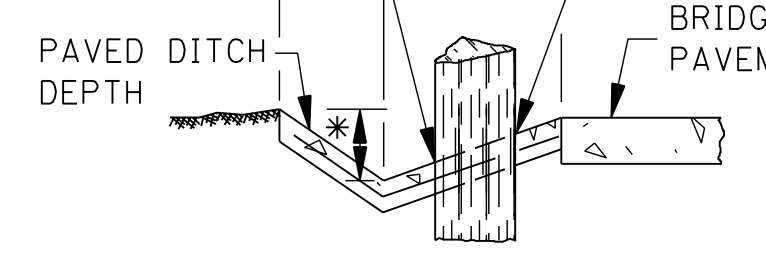
PLAN



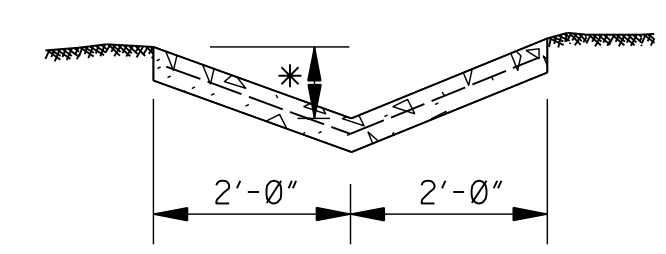
SECTION A-A
(AT BRIDGE END)



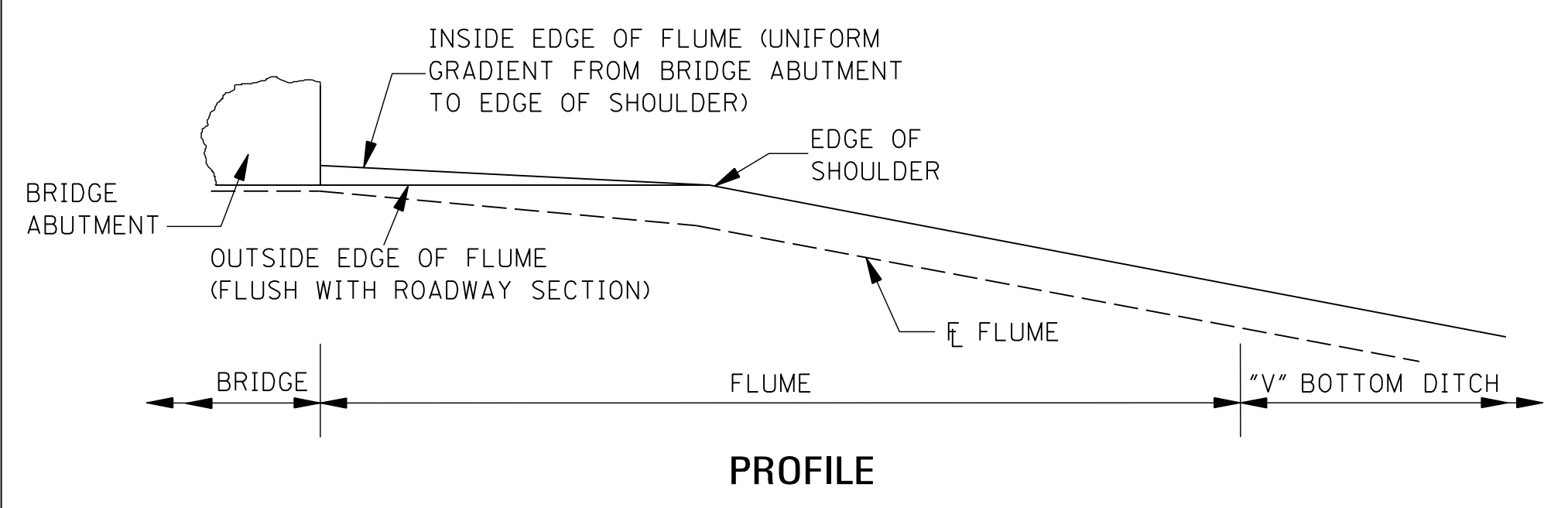
SECTION B-B



SECTION C-C
(AT EDGE OF SHOULDER)

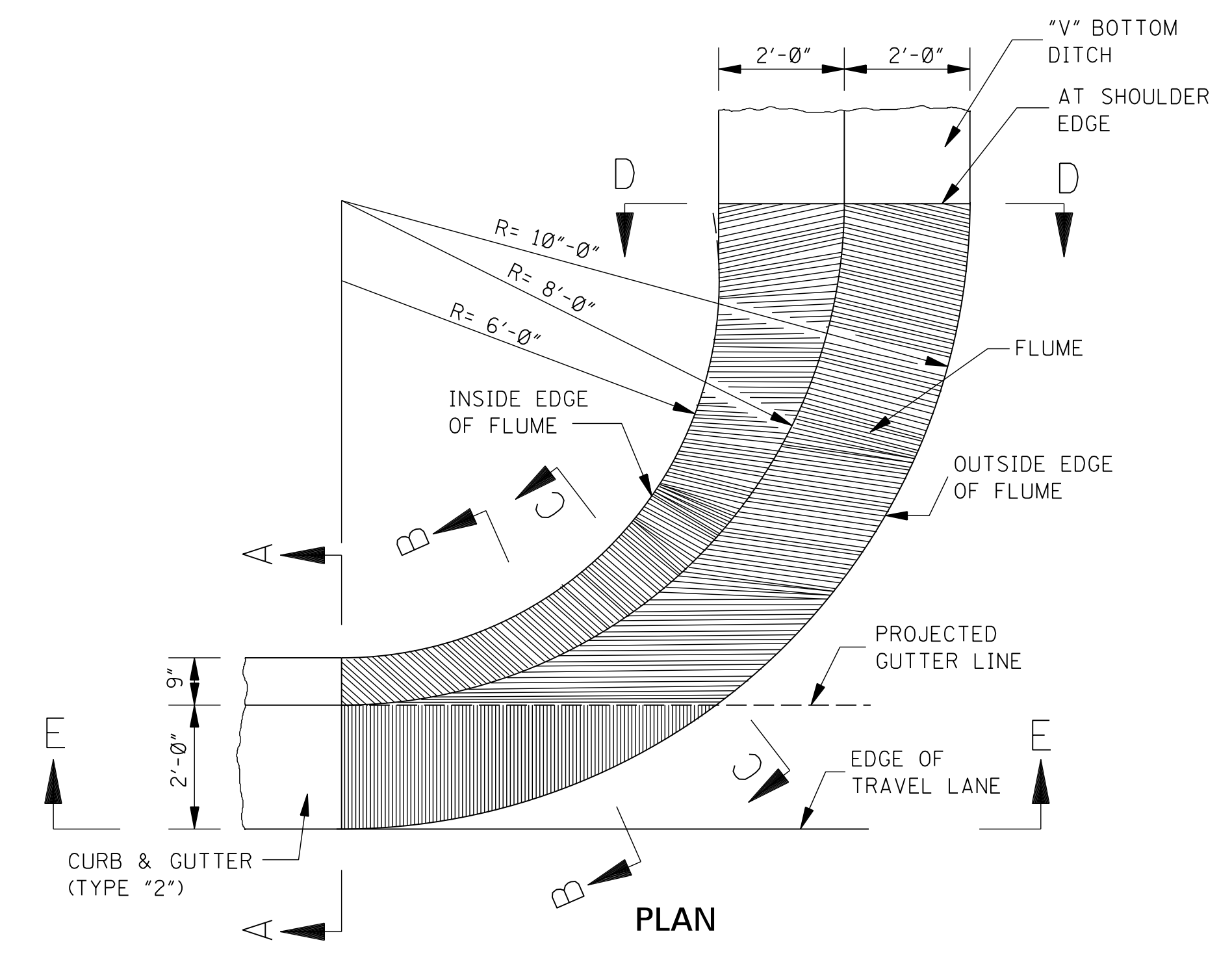


SECTION D-D
(AT "V" BOTTOM DITCH)

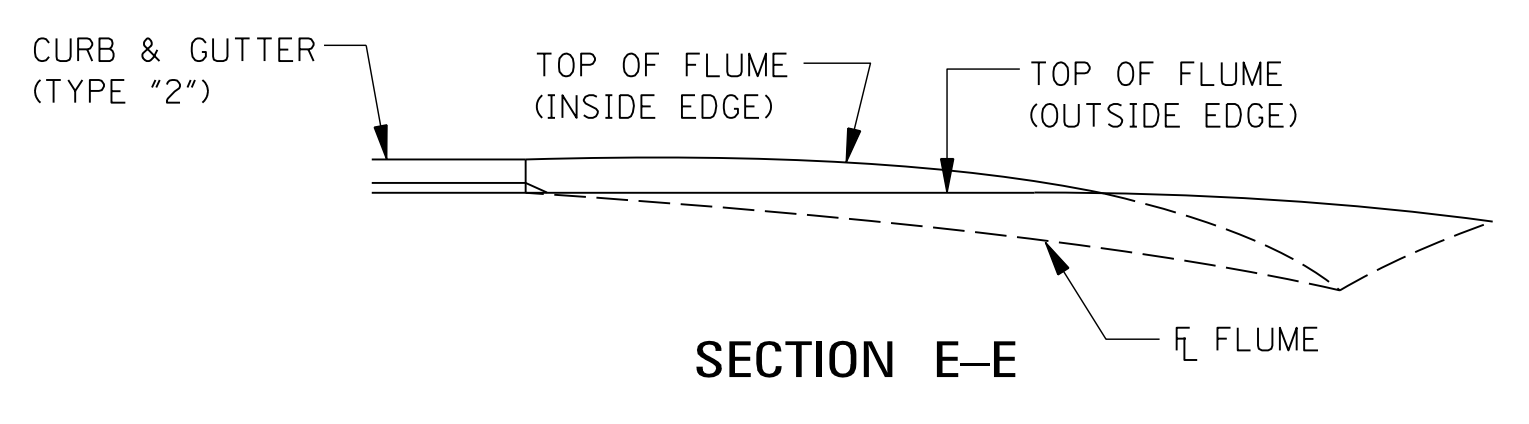


PROFILE

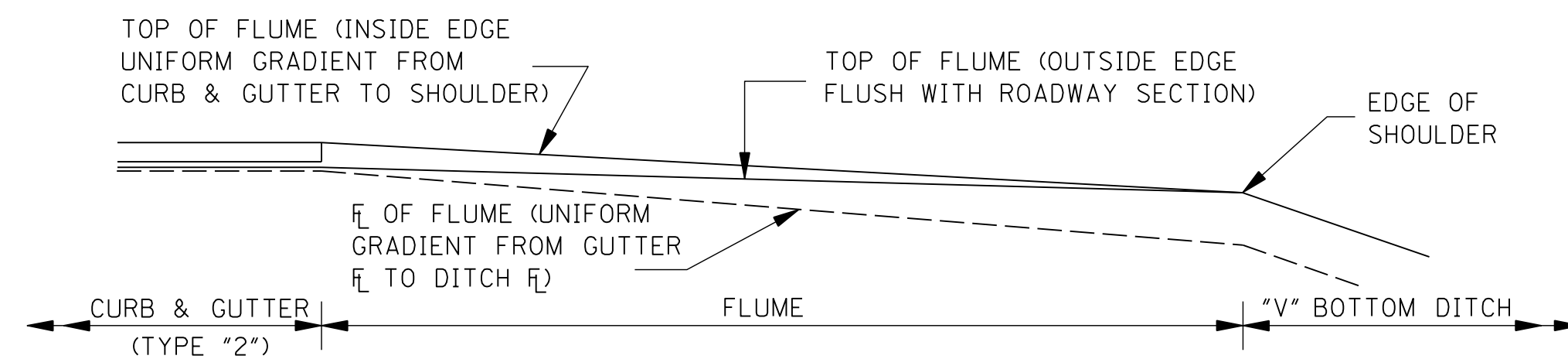
FLUME – TYPE "C" (AT END OF CURB & GUTTER)



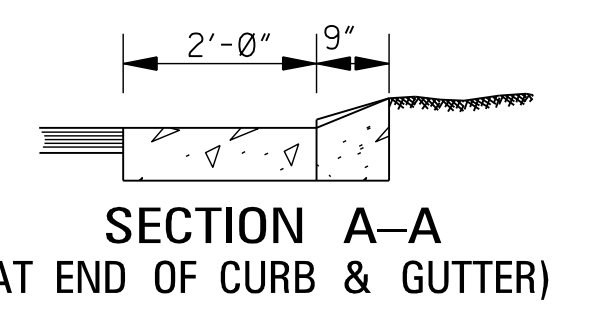
PLAN



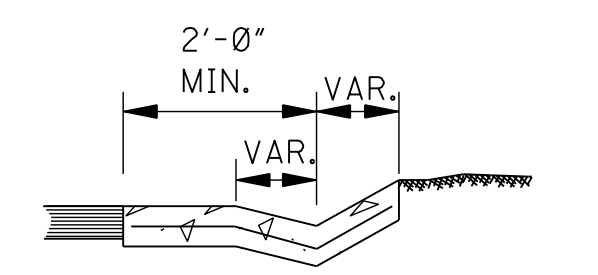
SECTION E-E



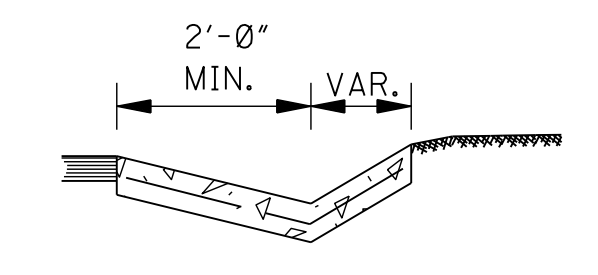
PROFILE



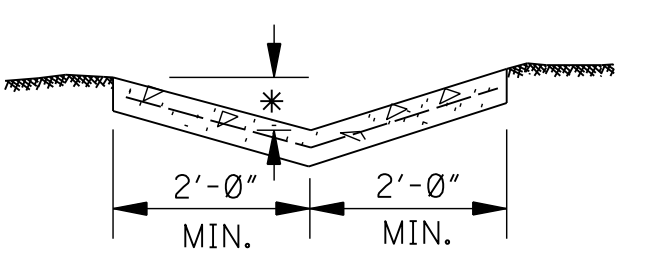
SECTION A-A
(AT END OF CURB & GUTTER)



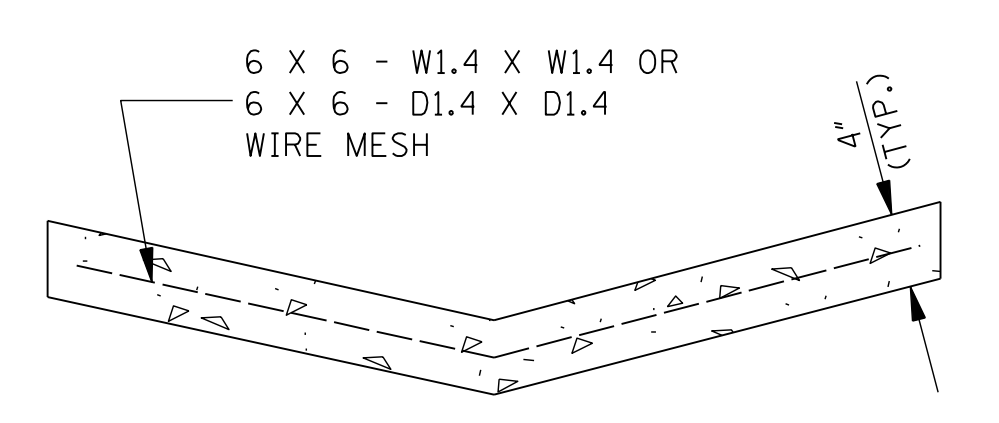
SECTION B-B



SECTION C-C
(AT EDGE OF PROJECTED GUTTER LINE)



SECTION D-D
(AT EDGE OF SHOULDER)



TYPICAL SECTION
(WIRE MESH REQUIREMENTS OF PAVED FLUME)

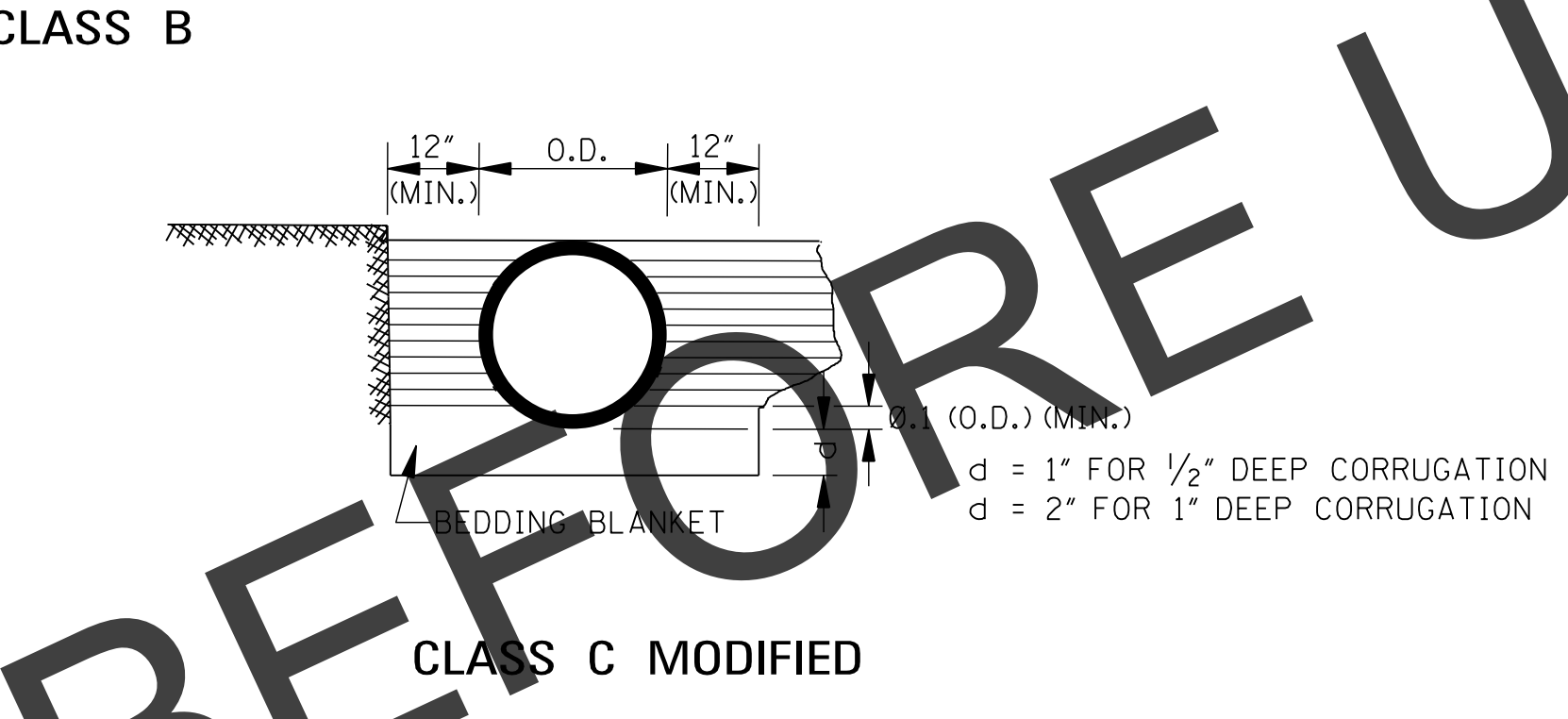
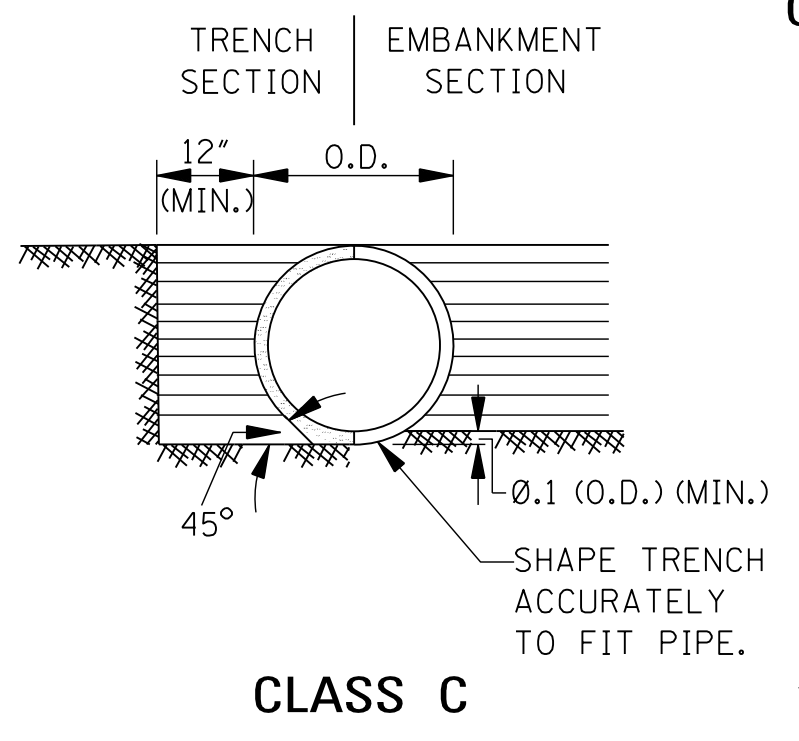
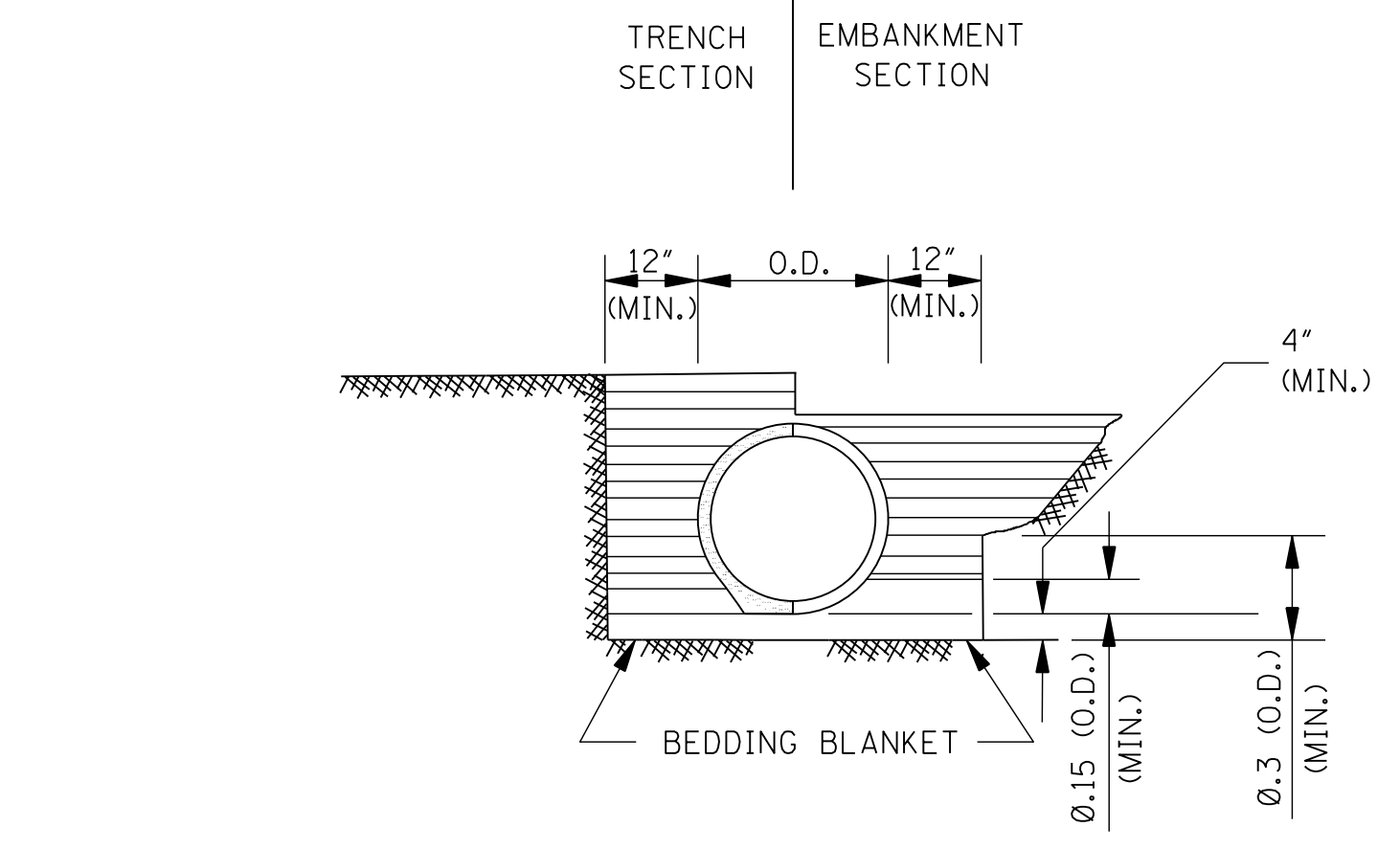
NOTES:

- * 1. THIS DIMENSION IS 6" FOR 4:1 SLOPES AND 8" FOR 3:1 SLOPES (VARIABLE).
- * * 2. CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
DETAILS OF PAVED FLUMES	
BY	
REVISION	
DATE	ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER	PF-1
SHEET NUMBER	6426

CORRUGATED STEEL AND ALUMINUM PIPE (ROUND)						
PIPE DIAMETER (in)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft)				
		SHEET THICKNESS (in)				
		0.064 STEEL 0.060 ALUM. 16 GAGE	0.079 STEEL 0.075 ALUM. 14 GAGE	0.109 STEEL 0.105 ALUM. 12 GAGE	0.138 STEEL 0.135 ALUM. 10 GAGE	0.168 STEEL 0.164 ALUM. 8 GAGE
		2 3/8" X 1/2" CORRUGATED STEEL HELICAL	3" X 1" OR 5" X 1" CORRUGATED STEEL HELICAL	2 3/8" X 1/2" CORRUGATED ALUMINUM HELICAL		
12"	12"	207' / - / 125'	259' / - / 157'	- / - / -	- / - / -	- / - / -
15"	12"	165' / - / 100'	207' / - / 125'	- / - / -	- / - / -	- / - / -
18"	12"	138' / - / 83'	172' / - / 104'	242' / - / -	- / - / -	- / - / -
24"	12"	103' / - / 62'	129' / - / 78'	181' / - / 109'	- / - / -	- / - / -
30"	12"	82' / - / -	103' / - / 69'	145' / - / 97'	- / - / -	- / - / -
36"	12"	68' / - / -	86' / - / 62'	120' / - / 87'	155' / - / 94'	- / - / -
42"	12"	58' / - / -	73' / - / 51'	103' / - / 73'	133' / - / 80'	163' / - / -
48"	12"	51' / - / -	64' / - / -	90' / - / 62'	116' / - / 70'	142' / - / 85'
54"	12"	- / 46' / -	57' / 58' / -	80' / 82' / 54'	103' / 106' / 62'	126' / 129' / 76'
60"	12"	- / 42' / -	- / 52' / -	72' / 74' / 48'	93' / 95' / 52'	114' / 116' / 64'
66"	12"	- / 38' / -	- / 47' / -	- / 66' / -	84' / 86' / -	103' / 106' / 52'
72"	12"	- / 35' / -	- / 43' / -	- / 61' / -	77' / 79' / -	94' / 97' / 43'
78"	12"	- / 32' / -	- / 40' / -	- / 56' / -	- / 73' / -	84' / 89' / -
84"	12"	- / 29' / -	- / 37' / -	- / 52' / -	- / 68' / -	72' / 83' / -
90"	12"	- / 27' / -	- / 34' / -	- / 49' / -	- / 63' / -	- / 77' / -
96"	12"	- / - / -	- / 32' / -	- / 46' / -	- / 59' / -	- / 72' / -
102"	24"	- / - / -	- / 30' / -	- / 43' / -	- / 55' / -	- / 68' / -
108"	24"	- / - / -	- / - / -	- / 40' / -	- / 52' / -	- / 64' / -
114"	24"	- / - / -	- / - / -	- / 38' / -	- / 50' / -	- / 61' / -
120"	24"	- / - / -	- / - / -	- / 36' / -	- / 47' / -	- / 58' / -

NOTE: THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).



CLASS OF PIPE	MAXIMUM HEIGHT OF FILL OVER REINFORCED CONCRETE PIPE	
	CLASS "C" BEDDING	CLASS "B" BEDDING
III	12'	19'
IV	18'	30'
V	28'	48'
SPECIAL DESIGN	>28'	>48'


NOTE: CLASS OF PIPE AND BEDDING TO BE CONSISTENT THROUGHOUT THE PIPE LENGTH.

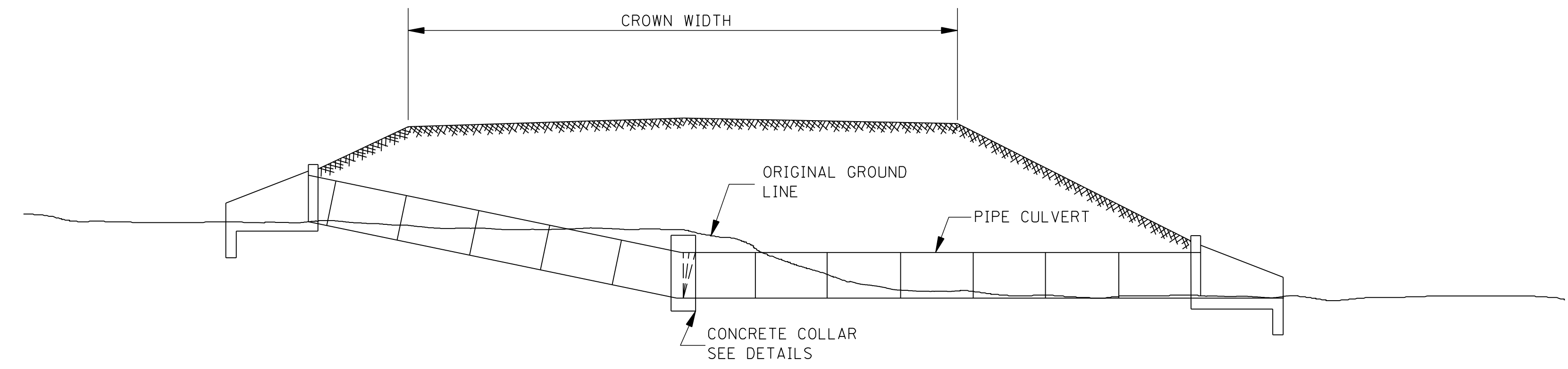
CORRUGATED METAL PIPE ARCHES						
EQUIV. DIAMETER (in)	PIPE DIMENSION (SPAN X RISE) (in)	MINIMUM COVER	STEEL		ALUMINUM	
			MINIMUM THICKNESS REQUIRED (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft ²)	MINIMUM THICKNESS REQUIRED (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft ²)
				+ 4 tons/ft ²		+ 4 tons/ft ²
			2 3/8" X 1/2" CORRUGATION HELICAL		2 3/8" X 1/2" CORRUGATION RIVETED OR HELICAL	
15"	17" X 13"	12"	0.064"	13'	0.060"	13'
18"	21" X 15"	12"	0.064"	12'	0.060"	12'
24"	28" X 20"	12"	0.064"	12'	0.075"	12'
30"	35" X 24"	12"	0.064"	12'	0.075"	12'
36"	42" X 29"	12"	0.064"	12'	0.105"	12'
42"	49" X 33"	12"	0.079"	12'	0.105"	12'
48"	57" X 38"	12"	0.109"	12'	0.135"	12'
54"	64" X 43"	12"	0.109"	12'	0.135"	12'
60"	71" X 47"	12"	0.138"	12'	0.164"	12'
66"	77" X 52"	12"	0.168"	12'		
72"	83" X 57"	12"	0.168"	12'		
			3" X 1" CORRUGATION HELICAL		5" X 1" CORRUGATION HELICAL	
48"	53" X 41"	12"	0.079"	12'		
54"	60" X 46"	15"	0.079"	20'		
60"	66" X 51"	15"	0.079"	20'		
66"	73" X 55"	18"	0.079"	20'		
72"	81" X 59"	18" / 18"	0.079" / 0.109"	17' / 17'		
78"	87" X 63"	18" / 18"	0.079" / 0.109"	16' / 16'		
84"	95" X 67"	18" / 18"	0.079" / 0.109"	16' / 16'		
90"	103" X 71"	18" / 18"	0.109" / 0.109"	16' / 16'		
96"	112" X 75"	21" / 21"	0.109" / 0.109"	16' / 16'		
102"	117" X 79"	21" / 21"	0.109" / 0.109"	16' / 16'		
108"	128" X 83"	24" / 24"	0.138" / 0.138"	16' / 16'		
114"	137" X 87"	24" / 24"	0.138" / 0.138"	16' / 16'		
120"	142" X 91"	27" / 27"	0.168" / 0.168"	16' / 16'		

NOTES:
1. THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS. (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).

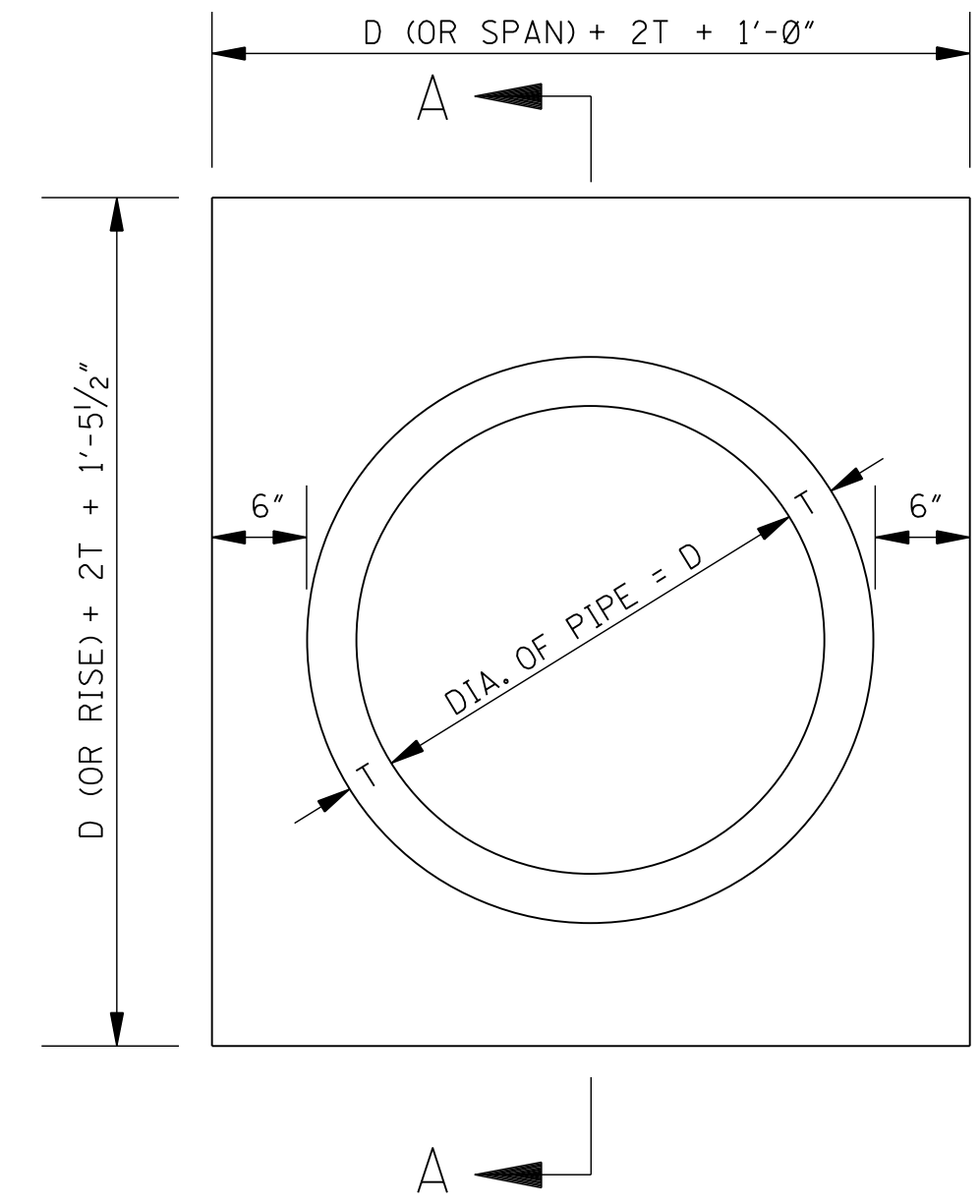
† 2. BEARING PRESSURES FOR GIVEN FILL HEIGHT SHALL HAVE FOUNDATION MATERIALS INVESTIGATED TO DETERMINE BEARING CAPACITY.

- GENERAL NOTES:
1. MINIMUM SPACING BETWEEN MULTIPLE LINES OF PARALLEL PIPE SHALL BE THE DISTANCE REQUIRED FOR INSTALLING THE ADJACENT FLARED END SECTIONS OR AS SHOWN ON THE HEADWALL DRAWINGS FOR CONDUITS REQUIRING HEADWALLS.
 2. UNLESS OTHERWISE INDICATED, THE TOP OF THE PIPE SHALL BE BELOW THE TOP OF THE SUBGRADE, AND A MINIMUM OF 12" OF COVER OVER THE TOP OF THE PIPE SHALL BE MAINTAINED BETWEEN THE SHOULDER LINES.
 3. WHERE PRE-BED PIPE IS INSTALLED, FLARED END SECTIONS FROM OTHER MANUFACTURERS MAY BE JOINED TO PRE-BED PIPE PROVIDED A CONCRETE COLLAR IS PLACED AT THE CONTRACTOR'S EXPENSE AND A DEFORMATION TO THE PIPE'S FLOWLINE IS NOT EVIDENT ON FINAL PLACEMENT.
 4. THE BACKFILL SHALL BE EITHER CLASS "B", CLASS "C", OR CLASS "C" MODIFIED. A MINIMUM COMPACTION LEVEL OF 95% STANDARD PROCTOR DENSITY PER AASHTO T99 SHALL BE ACHIEVED BY USE OF VIBRATORY PLATE. HYDROHAMMER TYPE COMPACTION SHALL NOT BE USED OVER THE PIPE. ALL COMPACTION EQUIPMENT USED SHALL BE APPROVED BY THE ENGINEER.

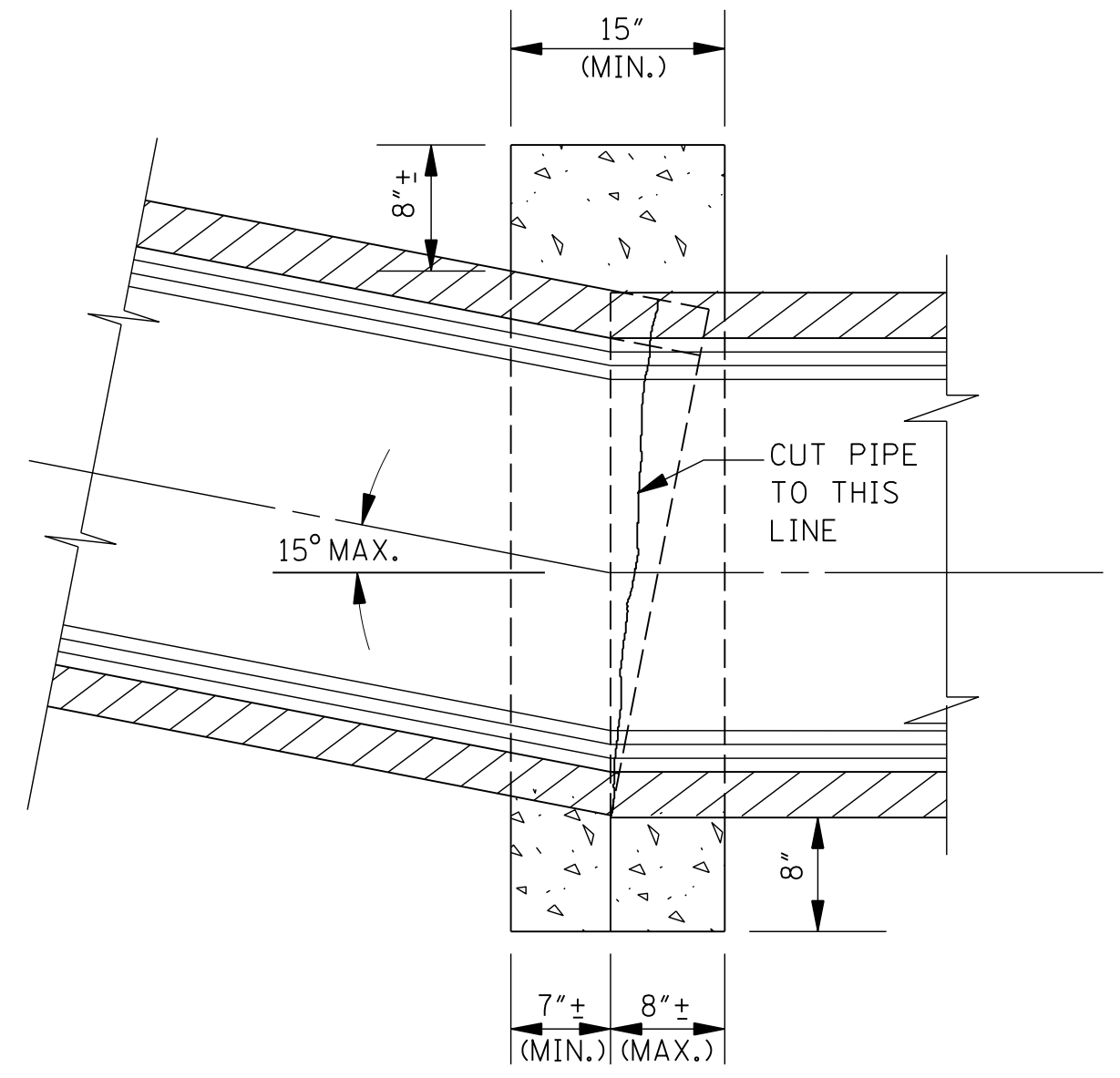
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">PIPE CULVERT INSTALLATION</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		PI-1	
SHEET NUMBER		6501	



TYPICAL INSTALLATION FOR PIPE CULVERT WITH BROKEN FLOW LINE



ELEVATION OF CONCRETE COLLAR
NOTE: CIRCULAR PIPE IS SHOWN, ARCH PIPE IS SIMILAR.



SECTION A-A

GENERAL NOTES:

1. THE MAXIMUM BEND ANGLE IS 15 DEGREES.
2. THE FOLLOWING QUANTITIES SHALL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE:

QUANTITIES FOR CONCRETE COLLAR FOR PIPE CULVERTS			
CIRCULAR PIPE		ARCH PIPE	
DIA. OF PIPE	CLASS "B" CONCRETE (yd ³)	SIZE OF PIPE	CLASS "B" CONCRETE (yd ³)
12"	0.240		
15"	0.260	18 x 11	0.280
18"	0.320	22 x 13	0.310
24"	0.410	29 x 18	0.410
30"	0.510	36 x 23	0.490
36"	0.620	44 x 27	0.600
42"	0.730	51 x 31	0.690
48"	0.850	58 x 36	0.820
54"	0.980	65 x 40	0.920
60"	1.110	73 x 45	1.070
66"	1.248	88 x 54	1.366
72"	1.393		

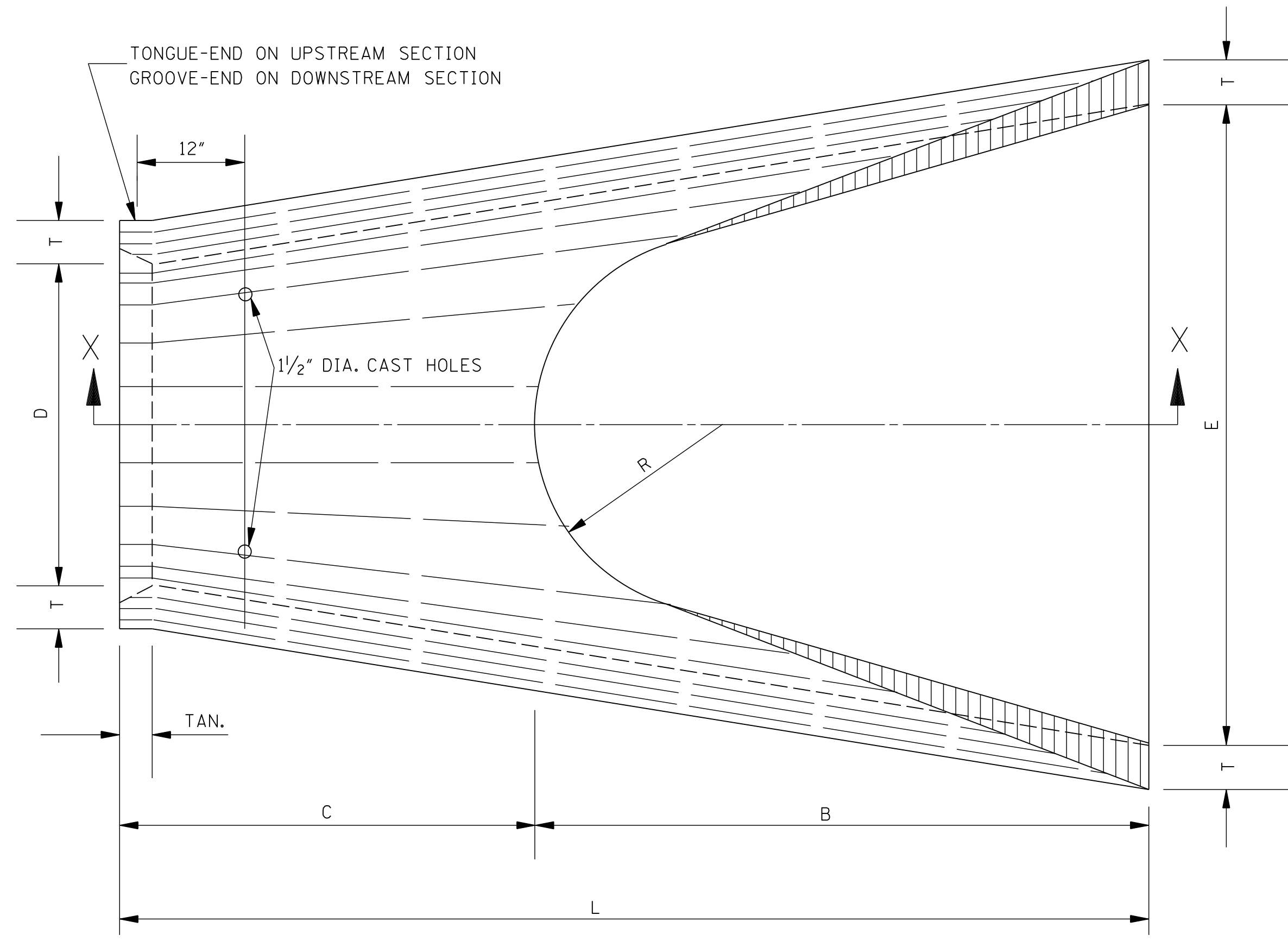
BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	CONCRETE PIPE COLLAR
DATE	ISSUE DATE: AUGUST 01, 2017



WORKING NUMBER
PC-1
SHEET NUMBER
6503

BELL AND SPIGOT END OPTION

NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

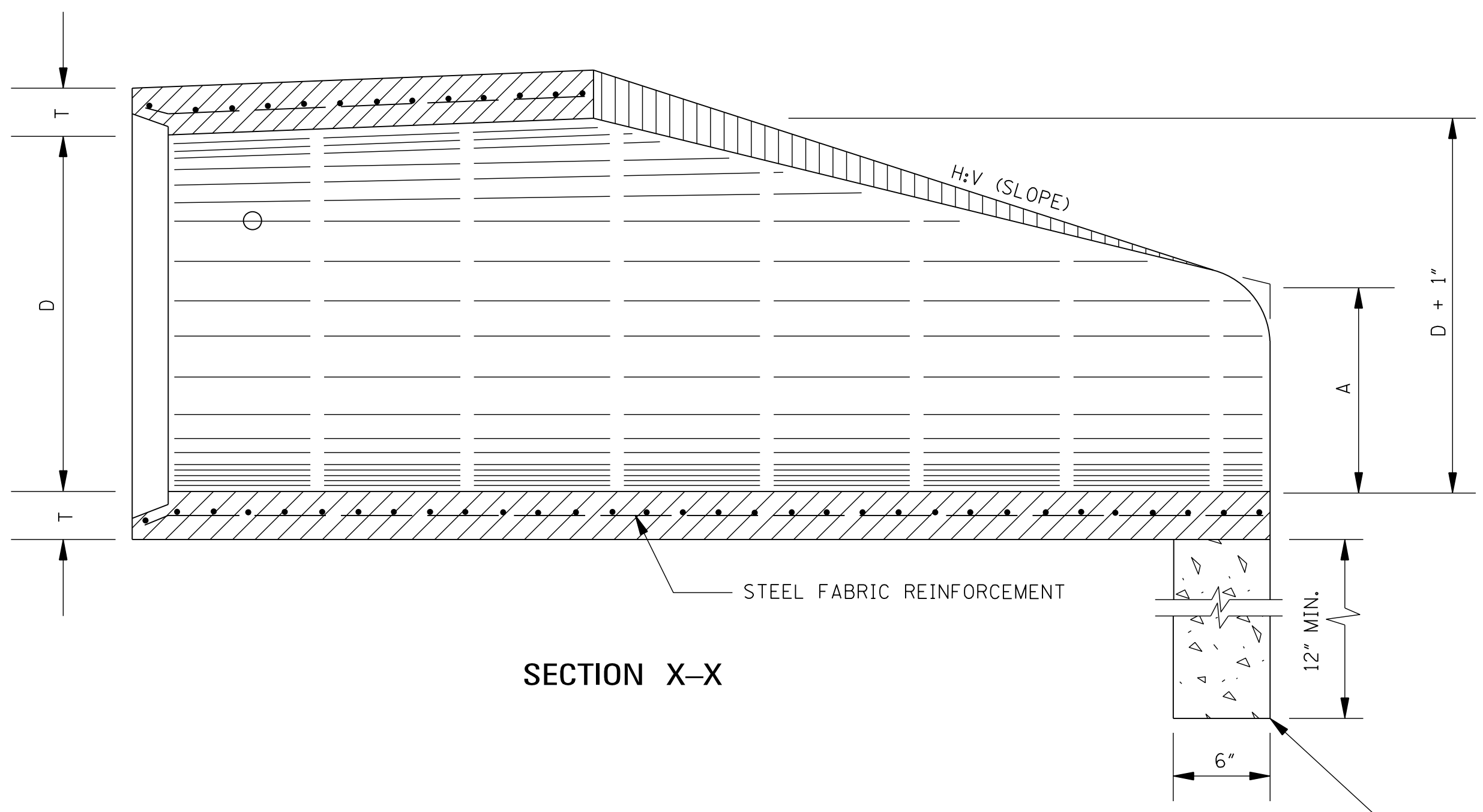


PLAN OF DOWNSTREAM END

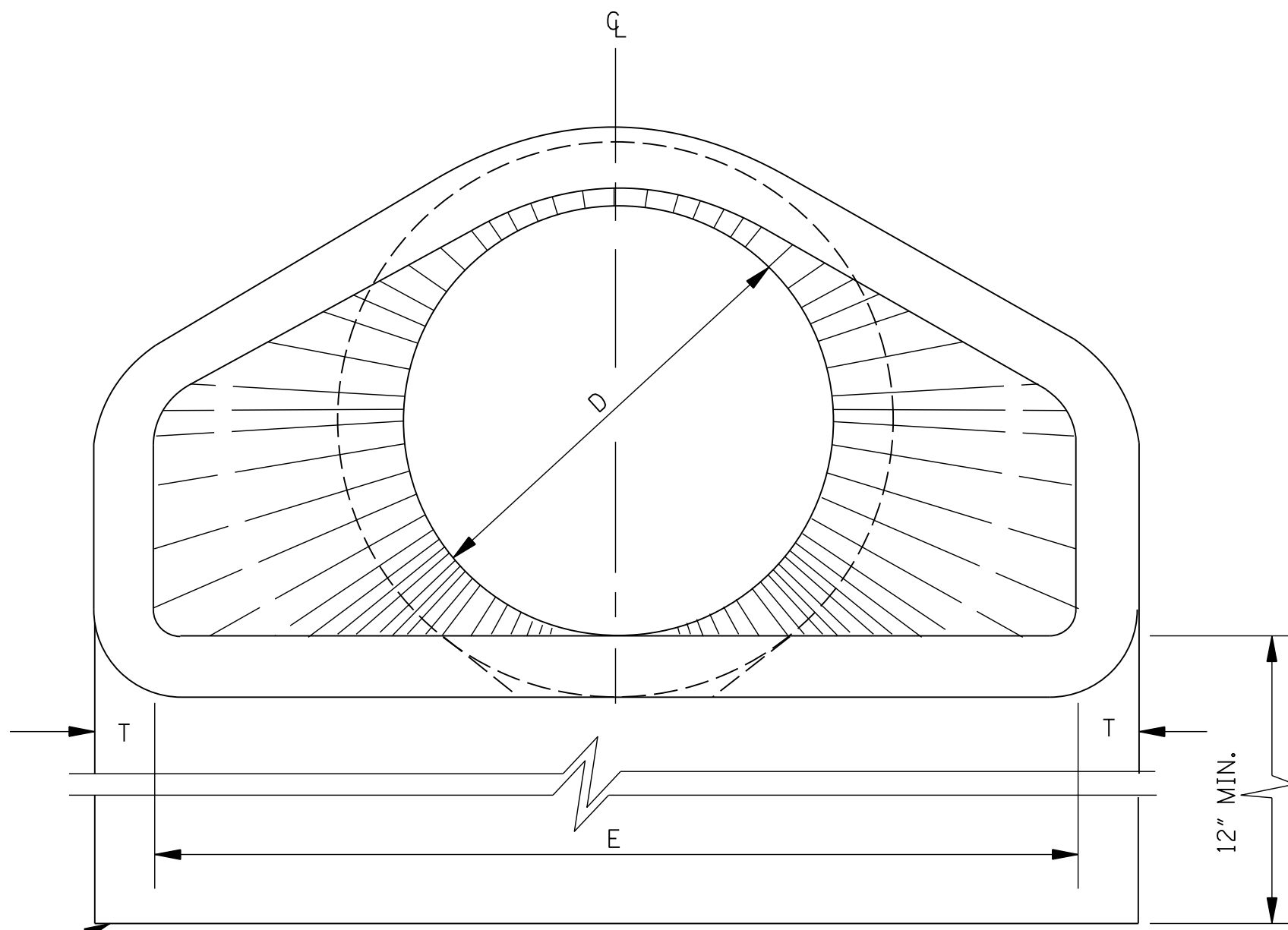
TABLE OF DIMENSIONS							
D	T	H:V	A	B	C	E	L
15"	2 1/4"	3:1	6"	2'-3"	4'-1"	2'-8"	6'-1"
18"	2 1/2"	3:1	9"	2'-3"	3'-10"	3'-0"	6'-1"
24"	3"	3:1	10"	3'-8"	2'-6"	4'-0"	6'-2"
30"	3 1/2"	3:1	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"
36"	4"	3:1	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"
42"	4 1/2"	3:1	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"
48"	5"	3:1	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"
54"	5 1/2"	3:1	2'-4"	6'-6"	1'-10"	7'-6"	8'-4"
* 60"	6"	3:1	2'-10"	6'-6"	1'-10"	8'-0"	8'-4"
* 66"	6 1/2"	3:1	3'-4"	6'-6"	1'-10"	8'-6"	8'-4"
* 72"	7"	3:1	3'-10"	6'-6"	1'-10"	9'-0"	8'-4"

TOE WALL CONC. QUANTITY (yd ³)
0.056
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167
0.177
0.188

* NOTE: SEE GENERAL NOTE 2.



SECTION X-X




END ELEVATION

TOE WALL REQUIRED ON ALL FLARED END SECTIONS. TO BE PAID FOR AS CLASS "B" STRUCTURAL CONCRETE - MINOR STRUCTURES.

GENERAL NOTES:

- REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M 170, TABLE 2, WALL B.
- 2 - 1/2" DIA. CAST HOLES REQUIRED AS SHOWN TO ACCOMMODATE 2 - 1" DIA. TIE BOLTS, USED IN TIEING SECTION TO PIPE CULVERT.
- LENGTH (L) OF A BELL-END OPTION MAY VARY BY A NOMINAL EXTENSION ON THE BELL END.
- FLARED END SECTIONS SHOULD BE REGARDED AS OBSTACLES UNDER THE BELOW CONDITIONS AND AS SUCH SHOULD BE LOCATED OUTSIDE OF THE CLEAR ZONE:
 - CROSS DRAINS WITH SINGLE ROUND PIPES OF DIAMETER GREATER THAN 36" OR EQUIVALENT FOR ARCH PIPES.
 - CROSS DRAINS WITH MULTIPLE ROUND PIPES OF DIAMETER GREATER THAN 30" OR EQUIVALENT FOR ARCH PIPES.
 - PARALLEL SIDE DRAINS WITH SINGLE ROUND PIPES OF DIAMETER GREATER THAN 24" OR EQUIVALENT FOR ARCH PIPES.
- ALL SIZES OF FLARED END SECTIONS FOR CIRCULAR CONCRETE PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.

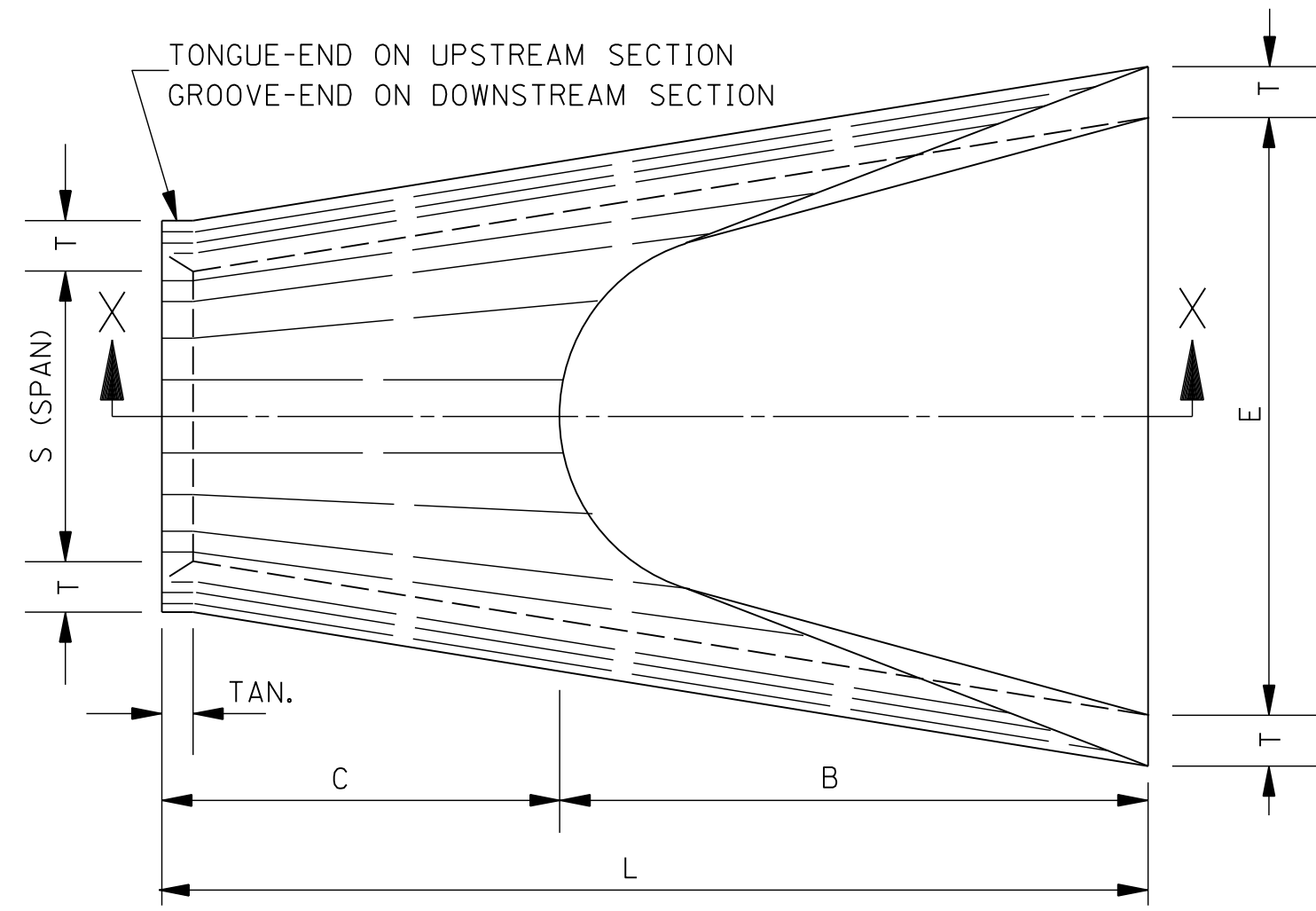
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p align="center">FLARED END SECTION FOR CONCRETE PIPE</p> 	
DATE			
ISSUE DATE:		AUGUST 01, 2017	
WORKING NUMBER		FE-1	
SHEET NUMBER		6530	

BELL AND SPIGOT END OPTION TYPE I

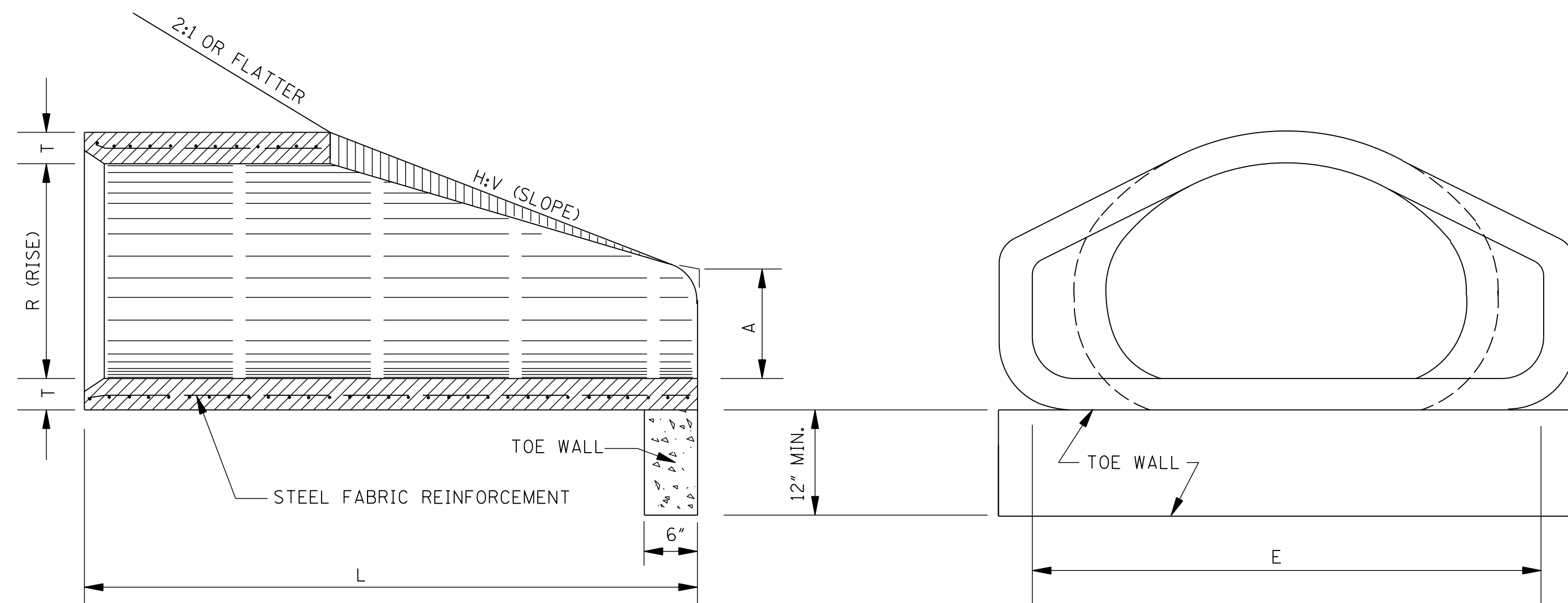
NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

FLARED END SECTION FOR CONCRETE ARCH PIPE									
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L
18"	13 1/2"	22"	2 1/2"	3:1	7"	2'-3"	3'-9"	3'-0"	6'-0"
24"	18"	28 1/2"	3"	3:1	8"	3'-3"	2'-9"	4'-0"	6'-0"
30"	22 1/2"	36 1/4"	3 1/2"	3:1	10"	4'-0"	2'-0"	5'-0"	6'-0"
36"	26 5/8"	43 3/4"	4"	3:1	10 5/8"	5'-0"	3'-0"	6'-0"	8'-0"
42"	31 5/16"	51 1/8"	4 1/2"	3:1	1'-3 3/16"	5'-0"	3'-0"	6'-6"	8'-0"
48"	36"	58 1/2"	5"	3:1	1'-9"	5'-0"	3'-0"	7'-0"	8'-0"
54"	40"	65"	5 1/2"	3:1	2'-1 1/2"	5'-0"	3'-0"	7'-6"	8'-0"
60"	45"	73"	6"	3:1	2'-2"	6'-3"	1'-9"	8'-0"	8'-0"
72"	54"	88"	7"	3:1	2'-11"	6'-6"	1'-10"	10'-0"	8'-4"

TOE WALL CONC. QUANTITY (yd ³)
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167
0.207



PLAN OF DOWNSTREAM END



SECTION X-X

FRONT ELEVATION

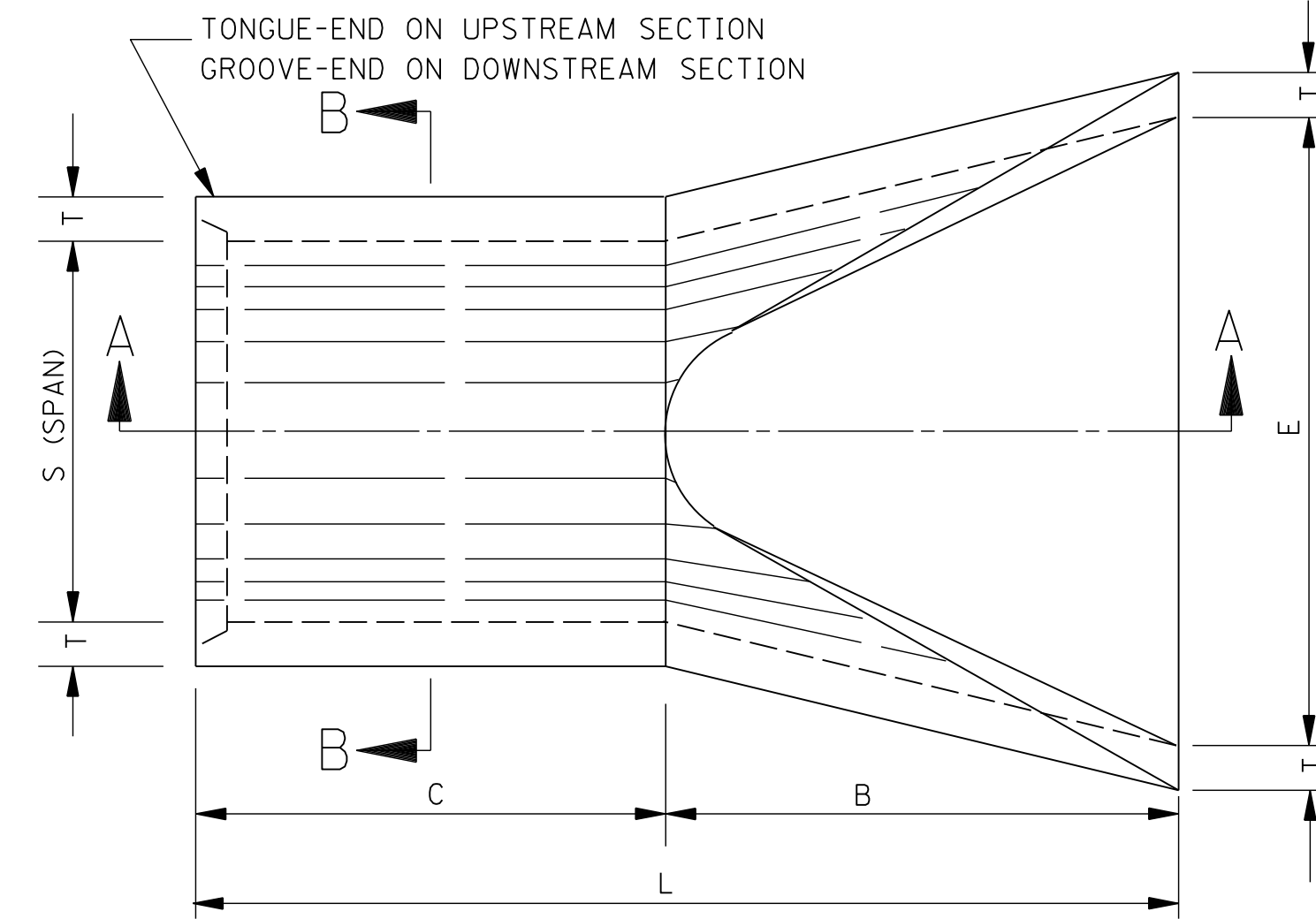
BELL AND SPIGOT END OPTION TYPE II

NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

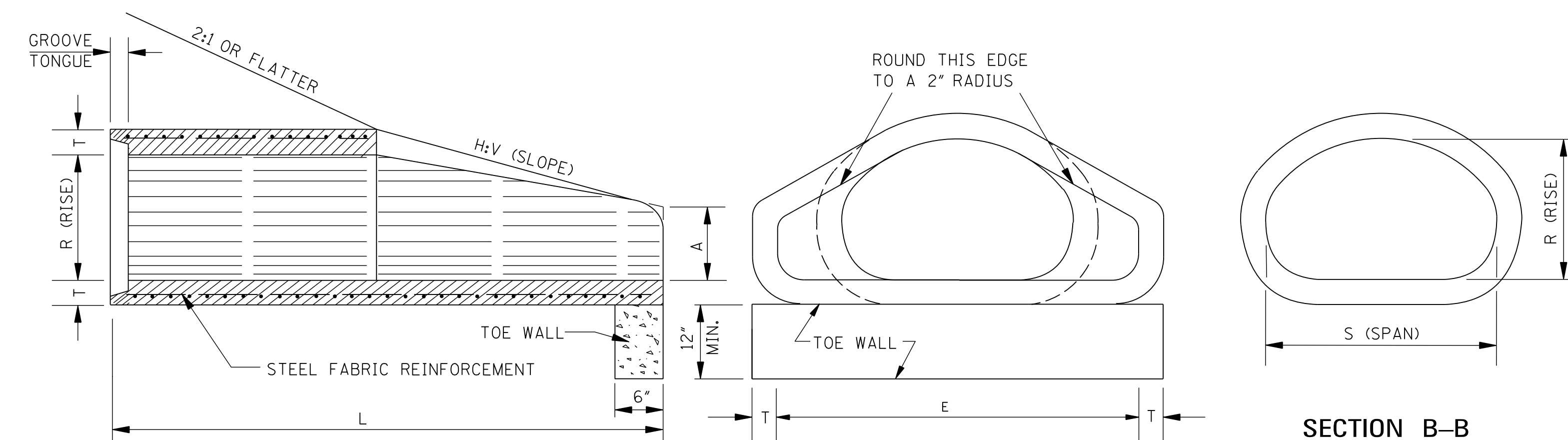
FLARED END SECTION FOR CONC. ARCH PIPE-SHORT FLARE										
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L	GROOVE TONGUE
18"	13 1/2"	22"	2 1/2"	3:1	7"	2'-3"	3'-9"	3'-0"	6'-0"	2 1/4"
24"	18"	28 1/2"	3 1/2"	3.12:1	9"	3'-3"	2'-9 1/2"	4'-0"	6'-0 1/2"	3"
30"	22 1/2"	36 1/4"	4"	2.94:1	9 1/2"	4'-2"	3'-10 1/2"	5'-0"	8'-0 1/2"	3 1/2"
36"	26 5/8"	43 3/4"	4 1/2"	3.08:1	11 5/8"	5'-0"	3'-0 1/2"	6'-0"	8'-0 1/2"	4"
42"	31 5/16"	51 1/8"	4 1/2"	3.08:1	1'-4 5/16"	5'-0"	3'-0 1/2"	6'-6"	8'-0 1/2"	4"
48"	36"	58 1/2"	5"	3.16:1	1'-10"	5'-0"	3'-0 1/2"	7'-0"	8'-0 1/2"	5"
54"	40"	65"	5 1/2"	3.24:1	2'-3"	5'-0"	3'-0 5/8"	7'-6"	8'-0 5/8"	5"
60"	45"	73"	6"	3.33:1	2'-9"	5'-0"	3'-0 5/8"	8'-0"	8'-0 5/8"	5"

TOE WALL CONC. QUANTITY (yd ³)
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167

NOTES: *1. EQUIVALENT 18" FLARED END SECTION SIMILAR TO TYPE I.
2. DIMENSIONS A, B, C, E AND L MAY VARY 1"±.



PLAN OF DOWNSTREAM END



SECTION A-A

FRONT ELEVATION

SECTION B-B

GENERAL NOTES:

- FLARED END SECTIONS SHOULD BE REGARDED AS OBSTACLES UNDER THE BELOW CONDITIONS AND AS SUCH SHOULD BE LOCATED OUTSIDE OF THE CLEAR ZONE.
 - CROSS DRAINS WITH SINGLE ROUND PIPES OF DIAMETER GREATER THAN 36" OR EQUIVALENT FOR ARCH PIPES.
 - CROSS DRAINS WITH MULTIPLE ROUND PIPES OF DIAMETER GREATER THAN 30" OR EQUIVALENT FOR ARCH PIPES.
 - PARALLEL SIDE DRAINS WITH SINGLE ROUND PIPES OF DIAMETER GREATER THAN 24" OR EQUIVALENT FOR ARCH PIPES.
- UNLESS OTHERWISE DESIGNATED, EITHER TYPE I OR TYPE II MAY BE USED, PROVIDED THE SELECTED TYPE IS COMPATIBLE WITH THE CONFIGURATION OF THE PIPE TO WHICH IT SHALL BE ATTACHED.
- ALL SIZES OF TYPE I AND TYPE II FLARED END SECTIONS FOR CONCRETE ARCH PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.
- REINFORCEMENT (SINGLE LINE) FOR FLARED END SECTION SHALL CONFORM TO REQUIREMENTS OF AASHTO M 206 FOR CLASS II ARCH PIPE.
- TOE WALL REQUIRED ON ALL FLARED END SECTIONS. TO BE PAID FOR AS CLASS "B" STRUCTURAL CONCRETE - MINOR STRUCTURES.
- FLARED END SECTIONS MUST MEET THE REQUIREMENTS FOR ARCH PIPE OF EITHER AASHTO M 206 OR ASTM C 506.

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

**FLARED END SECTION
FOR CONCRETE ARCH PIPE**


 WORKING NUMBER
 FE-1A
 SHEET NUMBER
 6531