

# **MISSOURI HIGHWAYS and TRANSPORTATION COMMISSION**

**JEFFERSON CITY, MISSOURI**

**SUPPLEMENTAL PLANS TO  
JULY 2025 MISSOURI STANDARD PLANS  
FOR HIGHWAY CONSTRUCTION**

**EFFECTIVE April 1, 2026**

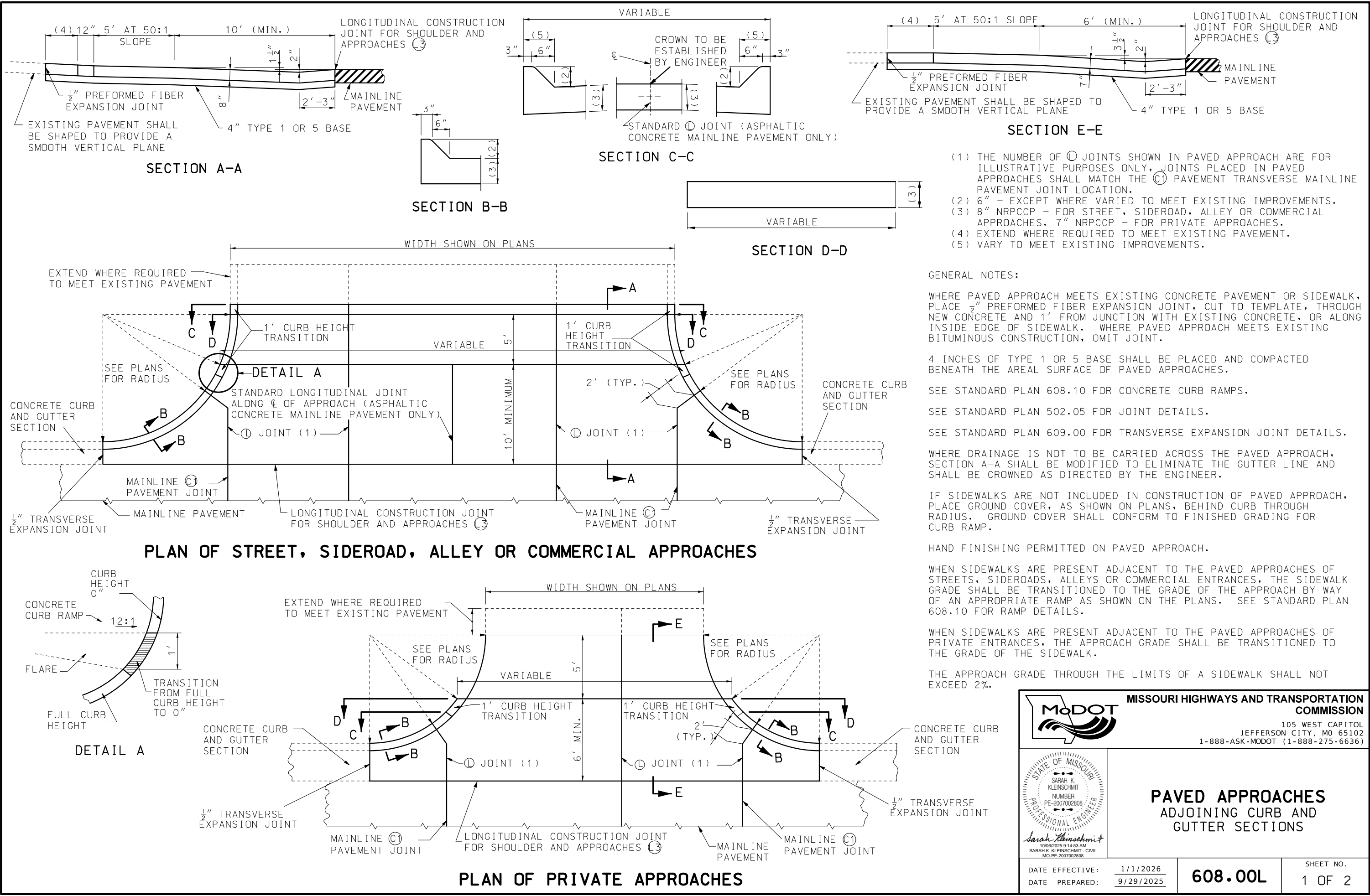
## EFFECTIVE: 04/01/2026

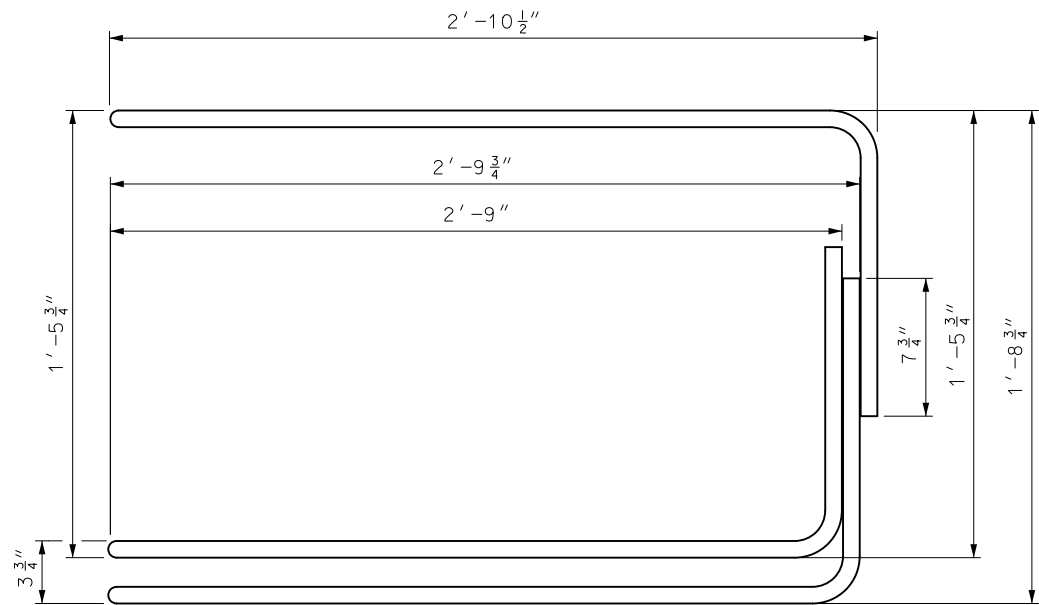
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SHEET 1 OF 2

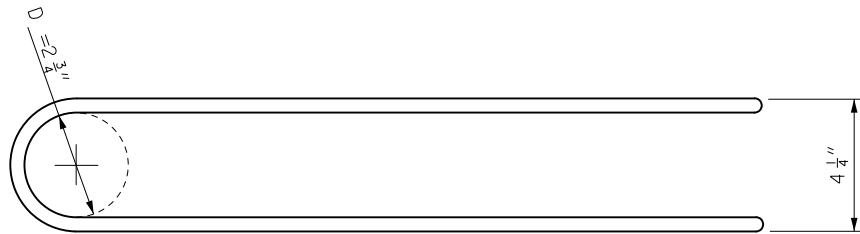
## EFFECTIVE: 04/01/2026

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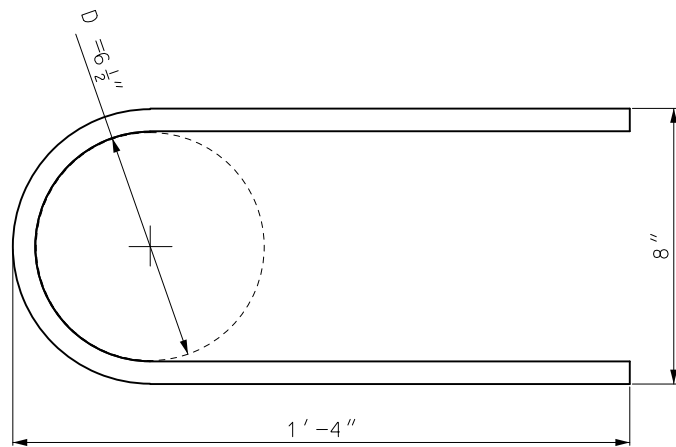




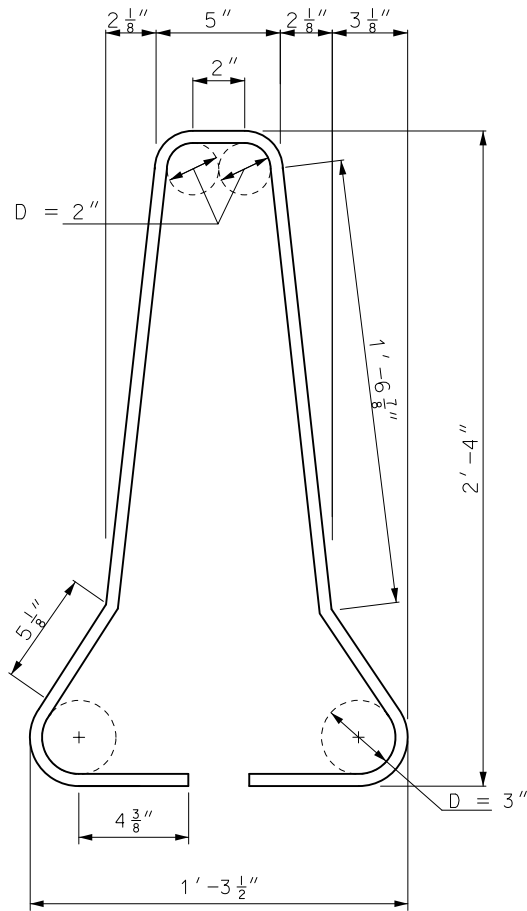
#6 B BAR ELEVATION



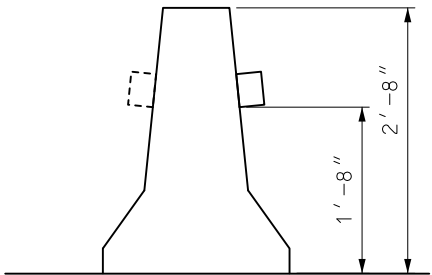
#6 B BAR PLAN



#6 E BAR

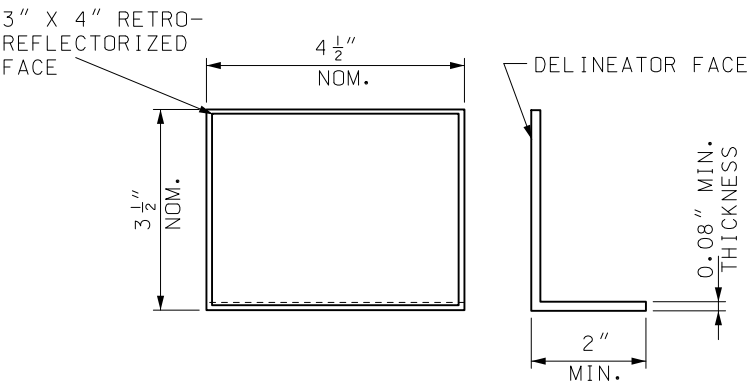


#4 A BARS



TRAFFIC BARRIER  
DELINEATORS

REFLECTIVE SHEETING APPLIED TO TRAFFIC  
BARRIER DELINEATORS SHALL BE IN ACCORDANCE  
WITH SEC 1042.2.7.5.



DELINEATOR

REINFORCING BARS					
PER 12'- 6" BARRIER SECTION					
MARK	BAR SIZE	NO. OF BARS	SHAPE OF EACH	LENGTH EACH (NOM. )	WEIGHT
A	4	14		6'-5"	60.8 lbs
C	5	3		12'-2"	38.1 lbs
D	4	2		12'-2"	16.3 lbs
E	6	6		2'-11"	26.3 lbs
LOOP ASSEMBLY					
B	6	6		7'-10"	70.5 lbs

CONCRETE VOLUME 1.3 CU YDS APPROXIMATE WEIGHT 5601 LBS.

GENERAL NOTE:  
BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED.

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

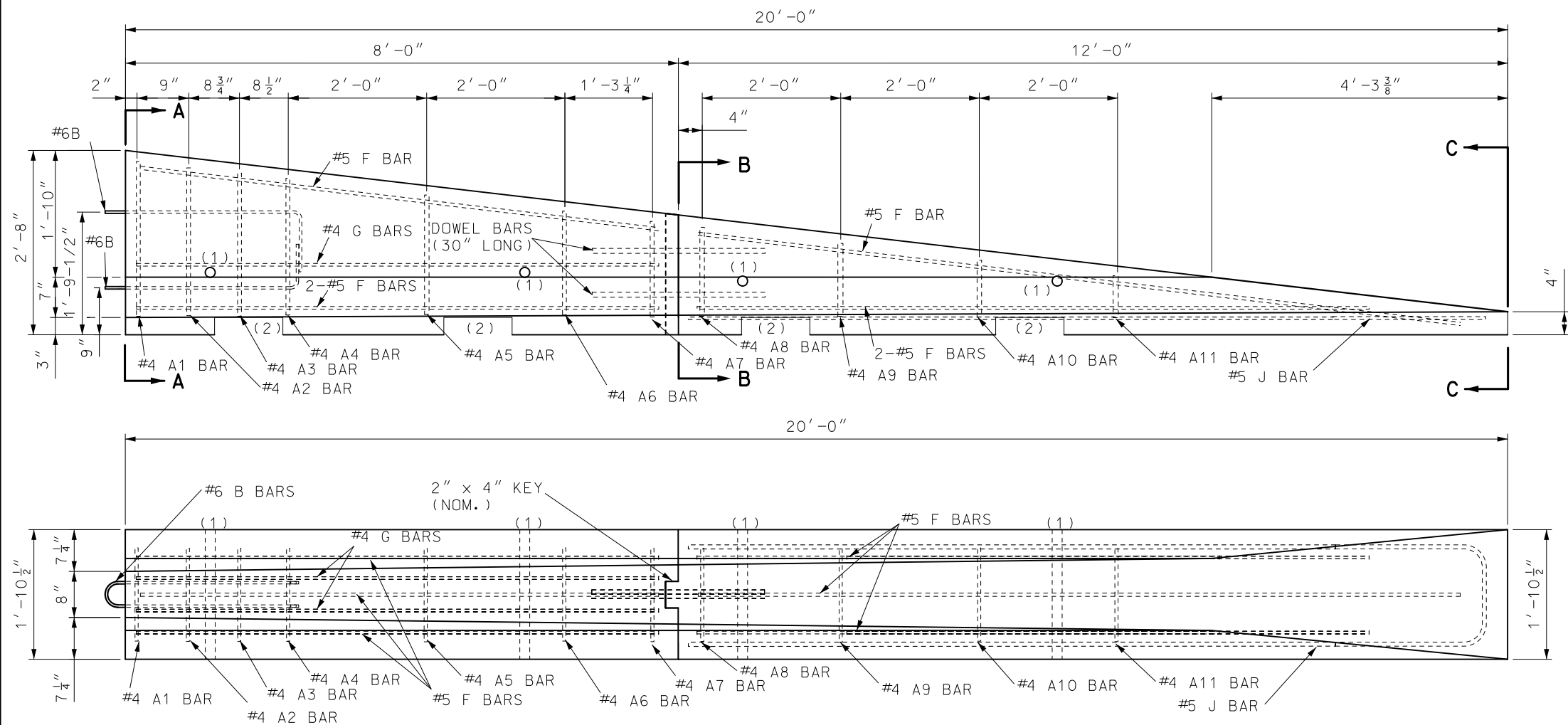
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

TEMPORARY CONCRETE  
TRAFFIC BARRIER  
TYPE F

DATE EFFECTIVE: 4/1/2026  
DATE PREPARED: 12/22/2025

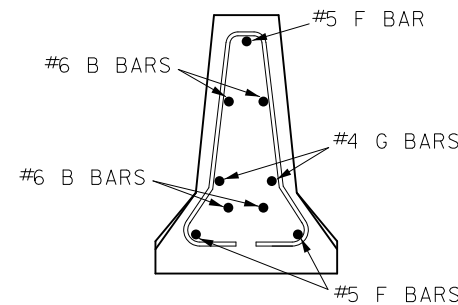
617.20G

SHEET NO.  
2 OF 8

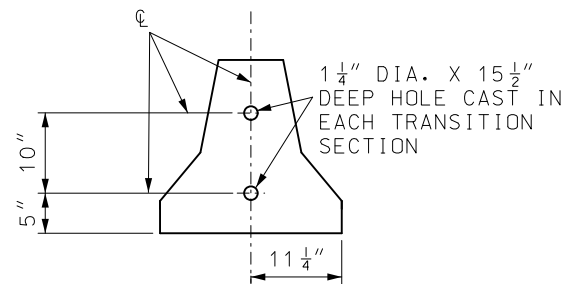


# PRECAST BARRIER HEIGHT TRANSITION (TEMPORARY INSTALLATIONS ONLY)

- (1) OPTIONAL 4 INCH DIAMETER, 11 GAUGE STEEL ROUND MECHANICAL TUBING SLEEVE FOR LIFT HOLE ALLOWED. THE LOCATION OF THE HOLE MAY VARY TO ACCOMMODATE THE DIFFERING WEIGHT DISTRIBUTIONS OF TRANSITION SECTIONS.
- (2) 3" X 1'-0" SLOTS FOR LIFTING - TWO PER SECTION. LOCATION TO BE DETERMINED BY CONTRACTOR.

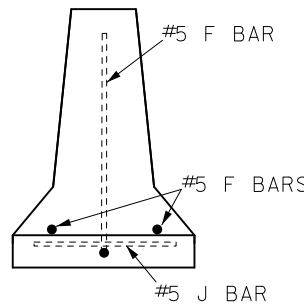


SECTION A-A



SECTION B-B

NOTE: SECTIONS TO BE CONNECTED WITH TWO- 1" DIA. BARS OR #8 REINFORCING BARS 30" LONG IN 1 1/4" DIA. HOLES AS SHOWN.



SECTION C-C

## GENERAL NOTES:



REINFORCING STEEL CLEARANCE TO EDGE OF CONCRETE SHALL BE 1 3/4" UNLESS OTHERWISE SHOWN.

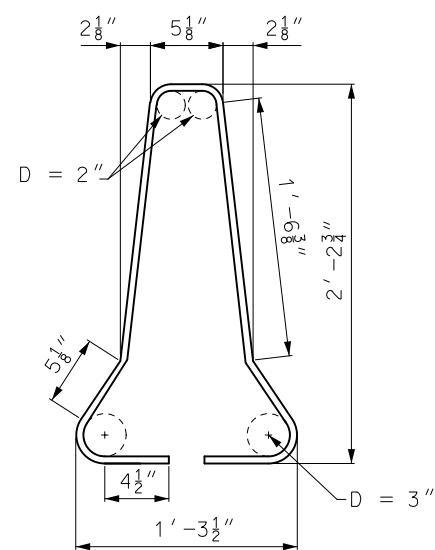
HEIGHT TRANSITIONS SHALL NOT BE USED ON INTERSTATE ROUTES OR IN LOCATIONS WHERE THE POSTED SPEED PRIOR TO CONSTRUCTION IS GREATER THAN 35 MPH.

AT NO TIME SHALL THE BARRIERS BE LIFTED OR MOVED BY USE OF THE LOOP BARS.

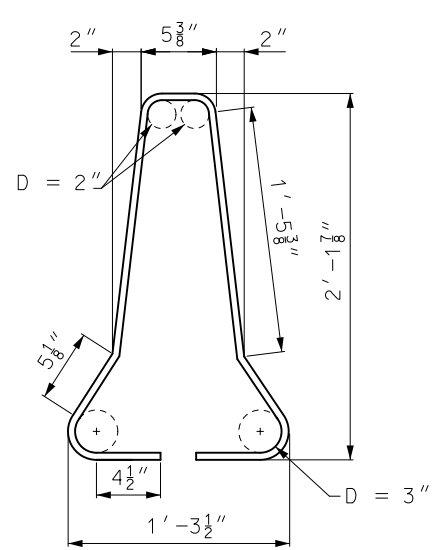
RETAINER BOLT AND NUT MUST BE USED WITH TRANSITION BARRIER.

AT THE OPTION OF THE CONTRACTOR, HEIGHT TRANSITIONS MAY BE MANUFACTURED IN ONE SECTION. THE PLANS FOR REINFORCEMENT ACROSS JOINT SHALL BE APPROVED BY THE ENGINEER PRIOR TO MANUFACTURE.

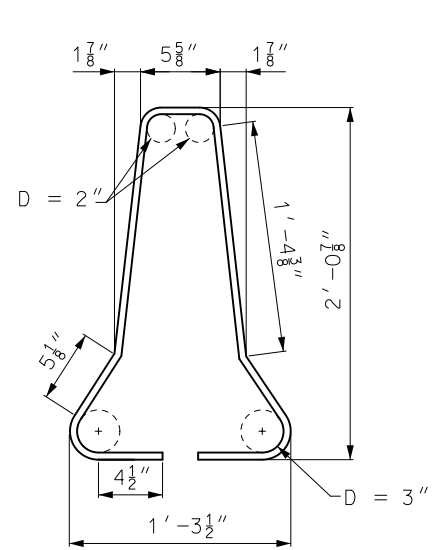
 <b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	<b>TEMPORARY CONCRETE TRAFFIC BARRIER</b> TYPE F HEIGHT TRANSITIONS
DATE EFFECTIVE: 4/1/2026 DATE PREPARED: 12/22/2025	<b>617.20G</b>
SHEET NO. 3 OF 8	



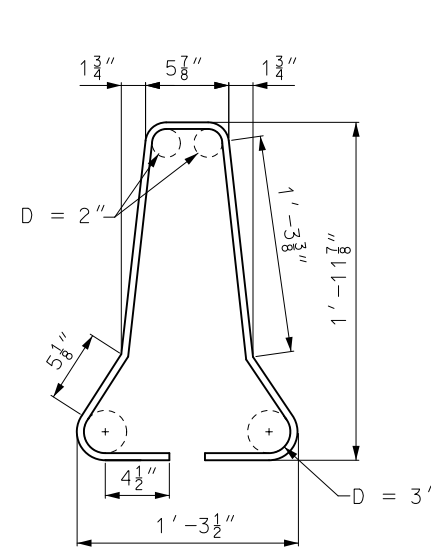
#4 A1 BAR



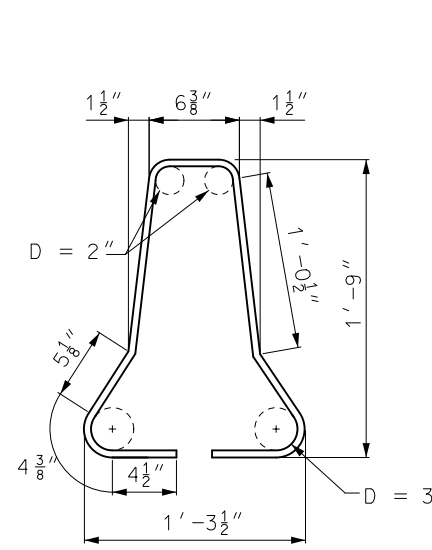
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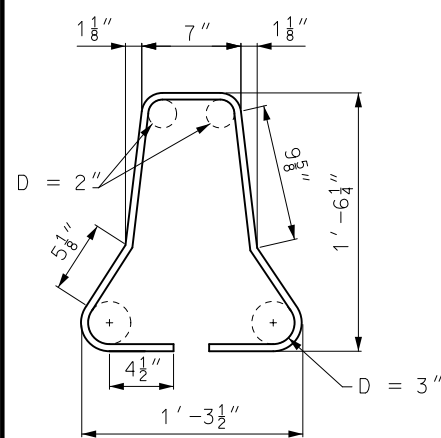
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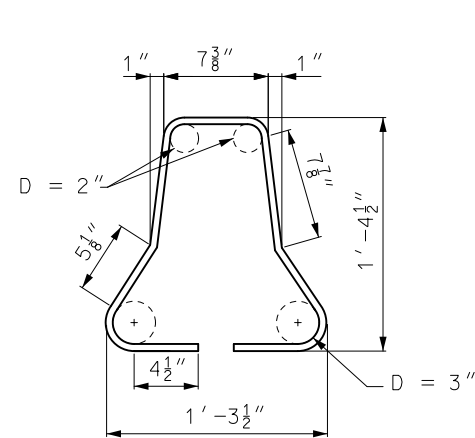
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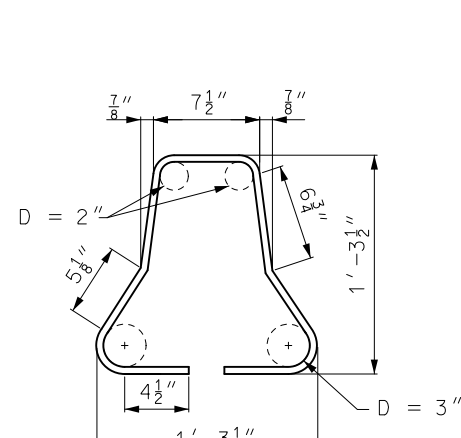
#4 A5 BAR



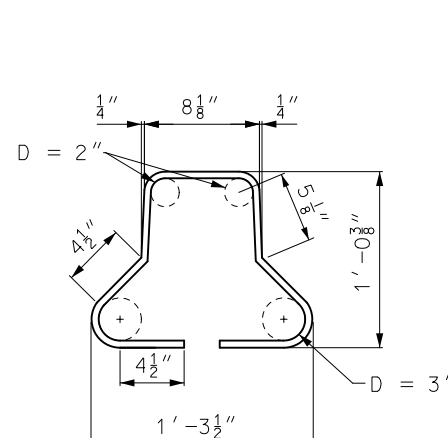
#4 A6 BAR



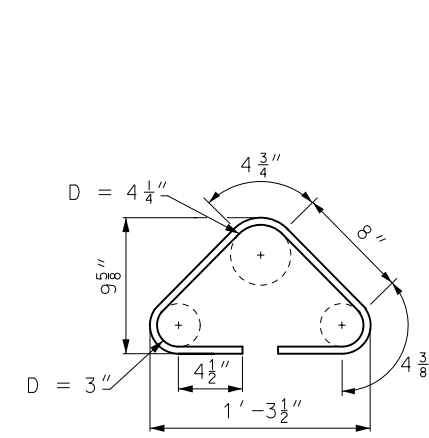
#4 A7 BAR



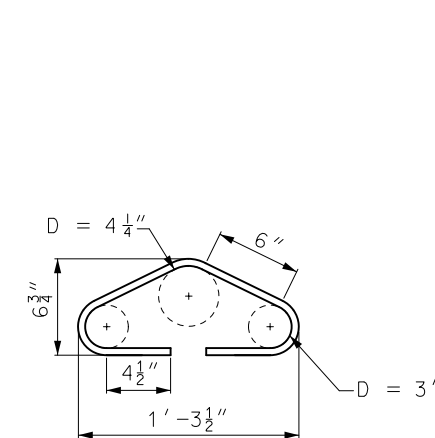
#4 A8 BAR



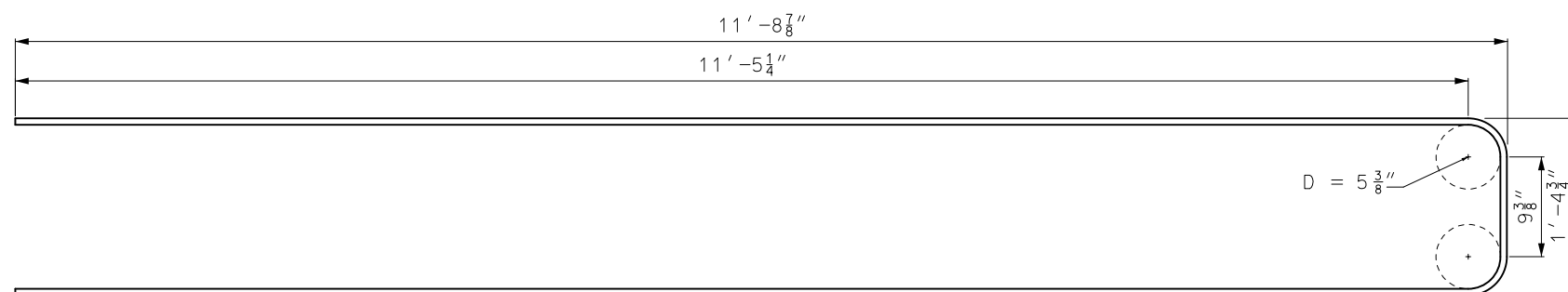
#4 A9 BAR



#4 A10 BAR



#4 A11 BAR





#5 J BAR

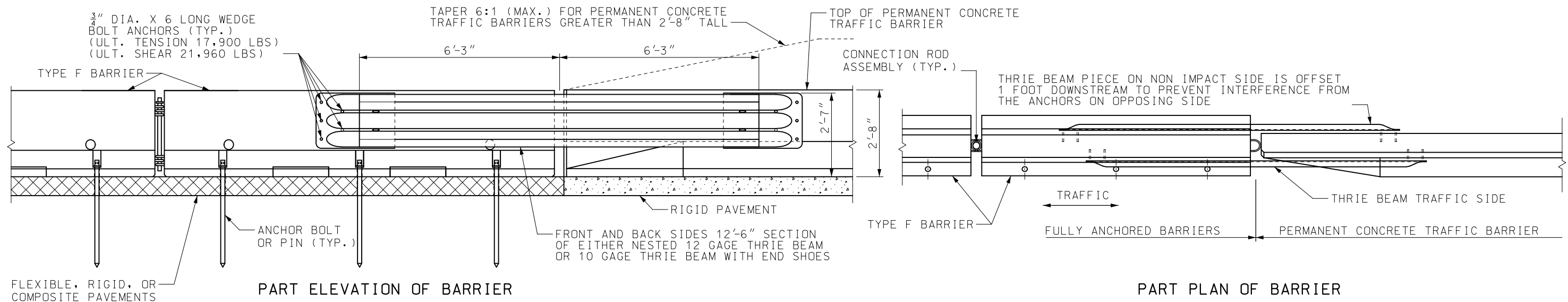
NOTE: FOR DETAILS OF B BARS, SEE SHEET 2.

GENERAL NOTES:

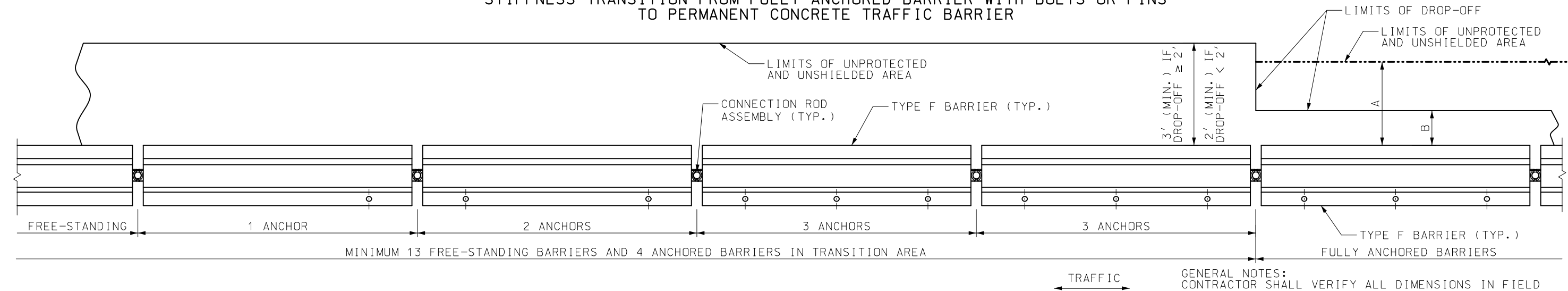
BAR DIMENSIONS ARE OUT TO OUT UNLESS OTHERWISE NOTED.

 <b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	<b>TEMPORARY CONCRETE TRAFFIC BARRIER</b> TYPE F HEIGHT TRANSITIONS
DATE EFFECTIVE: 4/1/2026 DATE PREPARED: 12/22/2025	<b>617.20G</b>
SHEET NO. 4 OF 8	

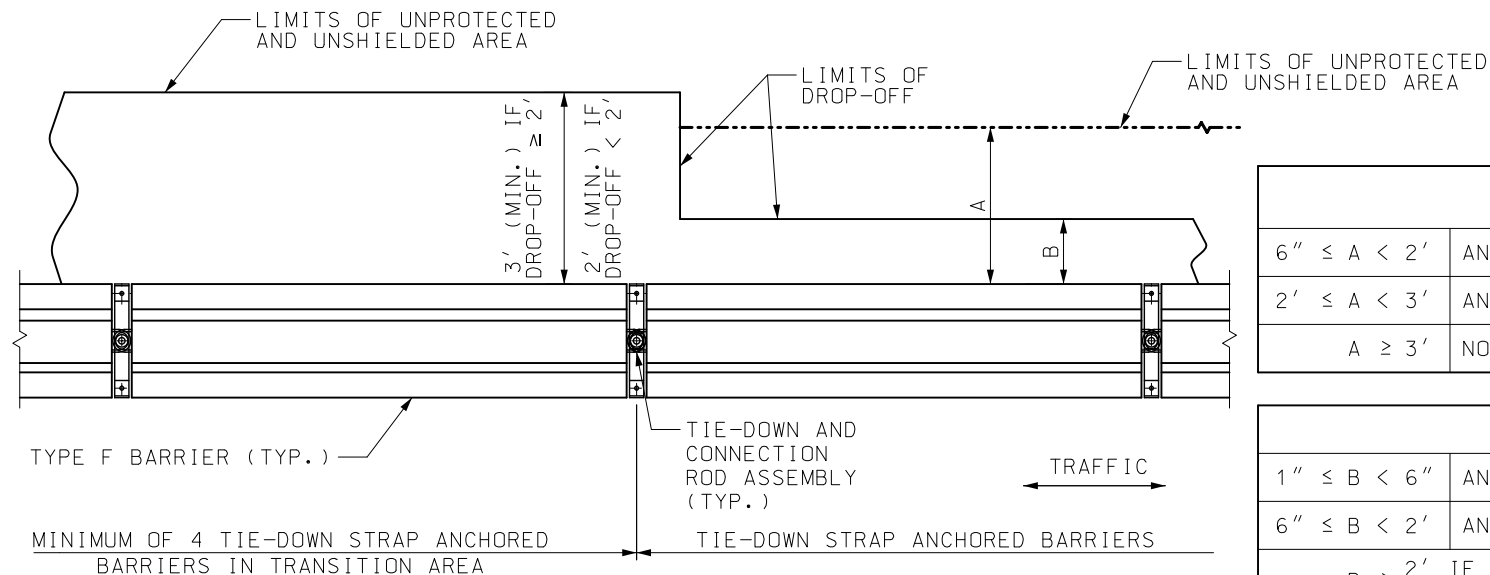




STIFFNESS TRANSITION FROM FULLY ANCHORED BARRIER WITH BOLTS OR PINS TO PERMANENT CONCRETE TRAFFIC BARRIER



PLAN OF STIFFNESS TRANSITION FROM FREE-STANDING BARRIERS TO FULLY ANCHORED BARRIER WITH BOLTS OR PINS



STIFFNESS TRANSITION FOR BARRIER ANCHORED WITH TIE-DOWN STRAPS  
(13 FREE-STANDING BARRIERS NOT REQUIRED)

GENERAL NOTES:  
CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD BEFORE ORDERING NEW MATERIAL.

COST OF FURNISHING AND INSTALLING THE ANCHOR BOLT SYSTEM, ANCHOR PINS SYSTEM, TIE-DOWN STRAP SYSTEM AND THRIE BEAM COMPLETE-IN-PLACE WILL BE CONSIDERED INCIDENTAL TO OTHER PAY ITEMS.

ALL TYPE F BARRIERS SHALL BE CONNECTED TO ADJACENT TYPE F BARRIERS WITH CONNECTION ROD ASSEMBLY, AND PULLED TIGHT DURING INSTALLATION TO REMOVE SLACK TO PROVIDE LONGITUDINAL TENSION DURING IMPACT.

AFTER REMOVAL OF ANCHORS HOLES SHALL BE FILLED WITH QUALIFIED SPECIAL MORTAR IN ACCORDANCE WITH SEC 704.

SEE OTHER SHEETS FOR DETAILS NOT SHOWN.

LIMITS OF UNPROTECTED AND UNSHIELDED AREA	
$6'' \leq A < 2'$	ANCHOR EACH BARRIER WITH 3 ANCHOR BOLTS OR PINS
$2' \leq A < 3'$	ANCHOR WITH BOLTS, PINS, OR TIE-DOWN STRAPS
$A \geq 3'$	NO ANCHORAGE REQUIRED UNLESS SHOWN ON PLANS

EDGE OF DROP-OFF	
$1'' \leq B < 6''$	ANCHOR EACH BARRIER WITH 3 ANCHOR BOLTS OR PINS
$6'' \leq B < 2'$	ANCHOR WITH BOLTS, PINS, OR TIE-DOWN STRAPS
$B \geq 2'$ IF DROP-OFF $< 2'$ , $3'$ IF DROP-OFF $\geq 2'$	NO ANCHORAGE REQUIRED UNLESS SHOWN ON PLANS

NOTE: TEMPORARY CONCRETE TRAFFIC BARRIER MUST MEET BOTH A & B DIMENSIONS, UNLESS OTHERWISE SHOWN ON PLANS.

**MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION**

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JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

**TEMPORARY CONCRETE TRAFFIC BARRIER**  
**STIFFNESS TRANSITION**

DATE EFFECTIVE: 4/1/2026	<b>617.20G</b>	SHEET NO. 8 OF 8
DATE PREPARED: 12/22/2025		



CROSS SECTION		CONDITION		TREATMENT	SIGN	
		DIFFERENTIAL	TIME		MAINLINE (1)	SIDE ROAD (2)
EDGE DROP-OFF		PAVEMENT EDGE DIFFERENTIAL > 2" TO ≤ 3"	NON-WORKING HOURS	WEDGE SLOPE TO 1V:1H OR FLATTER	 W08-17 (3)(4) W08-17p (6)	NO SIGNS REQUIRED
	WORKING HOURS		NO EDGE TREATMENT REQUIRED			
		PAVEMENT EDGE DIFFERENTIAL > 3"	NON-WORKING HOURS	WEDGE SLOPE TO 1V:3H OR FLATTER	 W08-17 (3)(4) W08-17p (6)	 W08-1 (3)
	WORKING HOURS		DELINEATE DIFFERENTIAL WITH CHANNELIZERS			
		ANY PAVEMENT EDGE OR LANE LINE DIFFERENTIAL	NON-WORKING AND WORKING HOURS WHERE PLANS REQUIRE ADJACENT LANE CLOSURE WITH CHANNELIZATION OR PARTIAL LANE CLOSURE WITH BARRIER.	NO EDGE TREATMENT REQUIRED	NO SIGNS REQUIRED	NO SIGNS REQUIRED
GENERAL NOTES:						
SIGNS SHALL BE VISIBLE TO TRAFFIC ONLY WHEN AND WHERE CONDITIONS EXIST.						
FOR ADDITIONAL SIGN SPACING AND DETAILS, SEE STANDARD PLAN 620.10.						
LANE DIFFERENTIAL		LANE LINE DIFFERENTIAL ≤ 2"	NON-WORKING AND WORKING HOURS	NO EDGE TREATMENT REQUIRED	 W08-11 (5)	NO SIGNS REQUIRED
		LANE LINE DIFFERENTIAL > 2"	NON-WORKING AND WORKING HOURS WHERE LANES OPEN TO TRAFFIC	WEDGE SLOPE TO 1V:3H OR FLATTER	 W08-11 (5)	 W08-1
			NON-WORKING AND WORKING HOURS WHERE LANE CLOSED TO TRAFFIC	DELINEATE DIFFERENTIAL WITH CHANNELIZERS		

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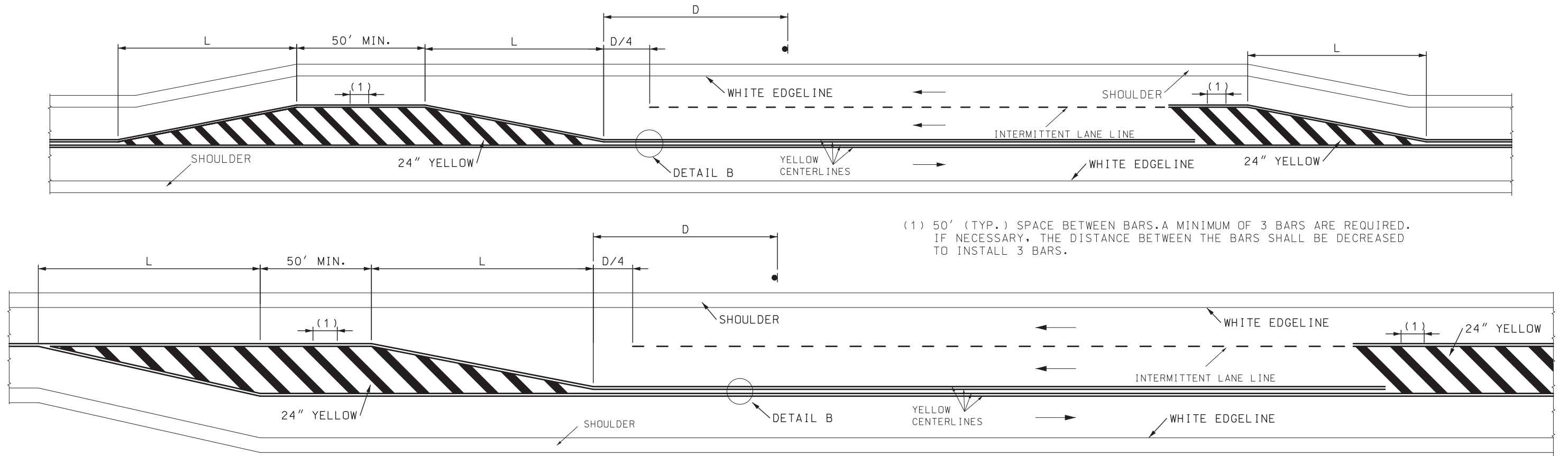
PAVEMENT EDGE TREATMENT

DATE EFFECTIVE: 1/1/2026

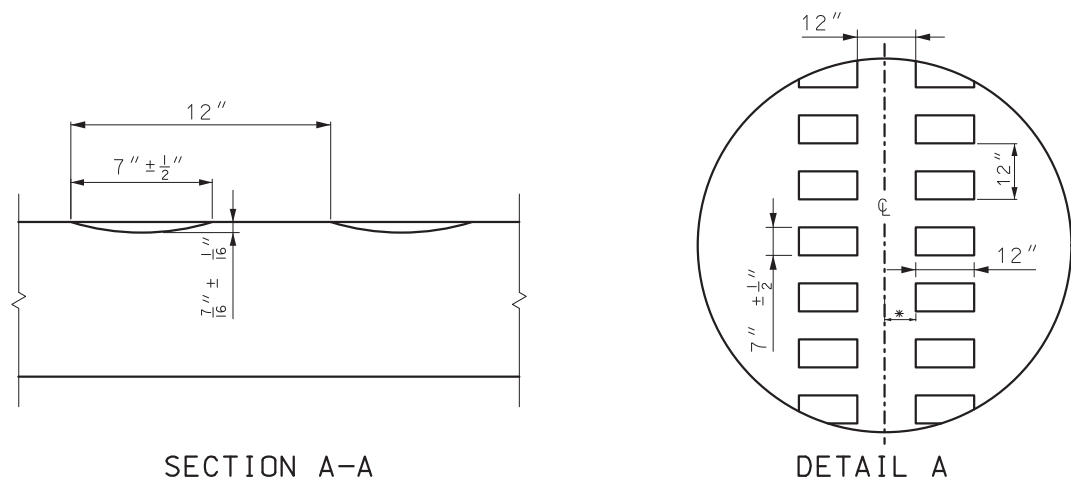
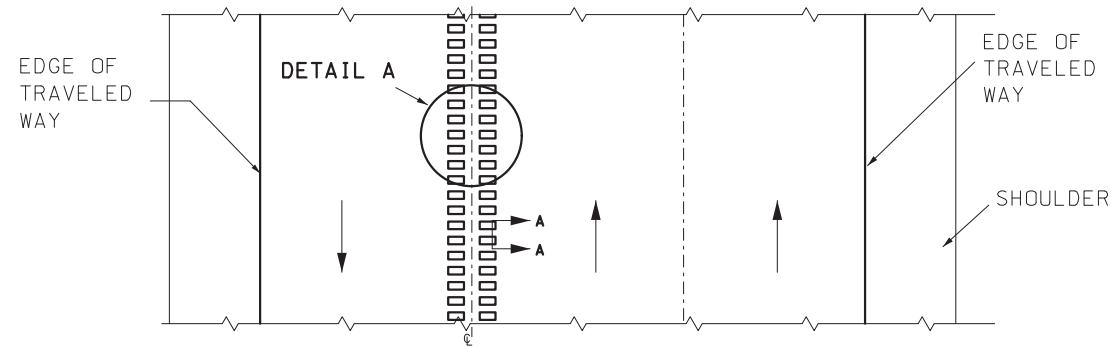
DATE PREPARED: 9/29/2025

619.10K

SHEET NO.  
1 OF 1



(1) 50' (TYP.) SPACE BETWEEN BARS. A MINIMUM OF 3 BARS ARE REQUIRED. IF NECESSARY, THE DISTANCE BETWEEN THE BARS SHALL BE DECREASED TO INSTALL 3 BARS.



SECTION A-A

DETAIL A

\* = LATERAL DEVIATION SHALL NOT EXCEED ONE INCH IN 100 FEET.

$L = S \times W$  WHEN POSTED SPEED 45 MPH OR GREATER OR  $WS^2 / 60$  WHEN POSTED SPEED IS 40 MPH OR LESS. EXTEND DISTANCE (L) AS REQUIRED BY SIGHT DISTANCE CONDITIONS.

$L$  = LENGTH OF TAPER IN FEET.

$S$  = POSTED OR 85 PERCENTILE SPEED IN MPH.

$W$  = OFFSET DISTANCE IN FEET.

$D$  = WARNING SIGN SPACING MEASURED FROM BEGINNING OF THE TAPER TO WARNING SIGN "LANE ENDS MERGE RIGHT"



DETAIL B

GENERAL NOTES:

INTERMITTENT LINES SHALL BE 10 FEET IN LENGTH SEPARATED BY 30 FOOT GAPS.

RIGHT SIDE EDGELINES SHALL BE SOLID WHITE. EDGELINES SHALL BE CONTINUOUS ACROSS DRIVEWAYS AND MINOR INTERSECTING ROADS.


CENTERLINE RUMBLE STRIPS ON PASSING ROADWAYS SHALL FOLLOW PAVEMENT STRIPING THROUGH TRANSITIONS. SEE CONTRACT PLANS FOR STRIPING DETAILS.

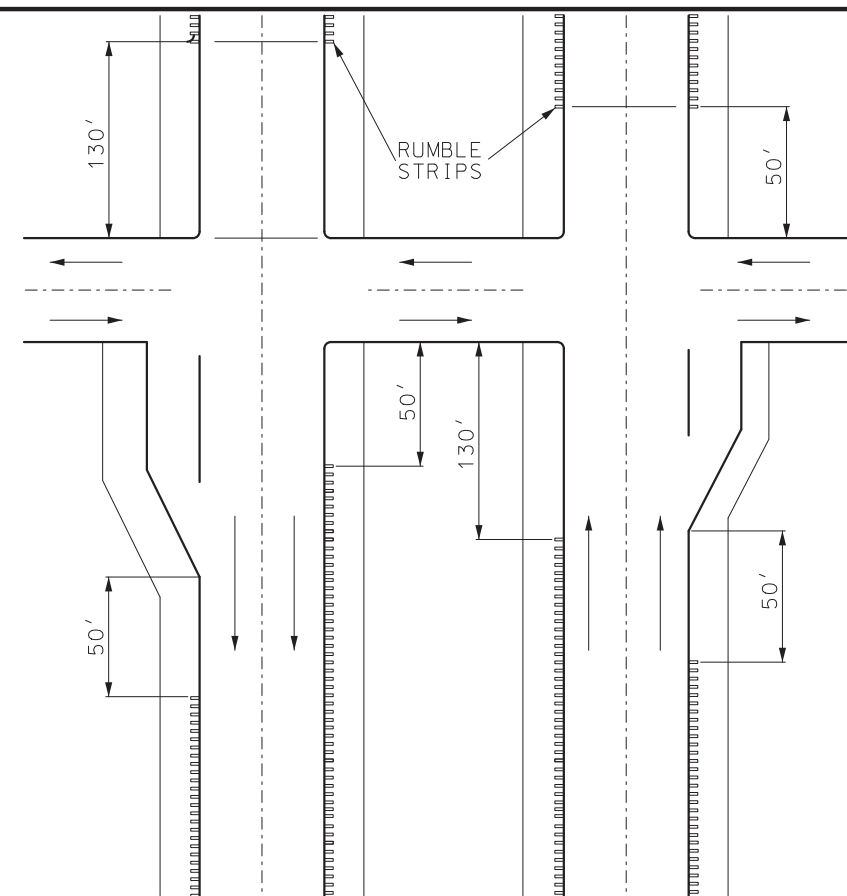
RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

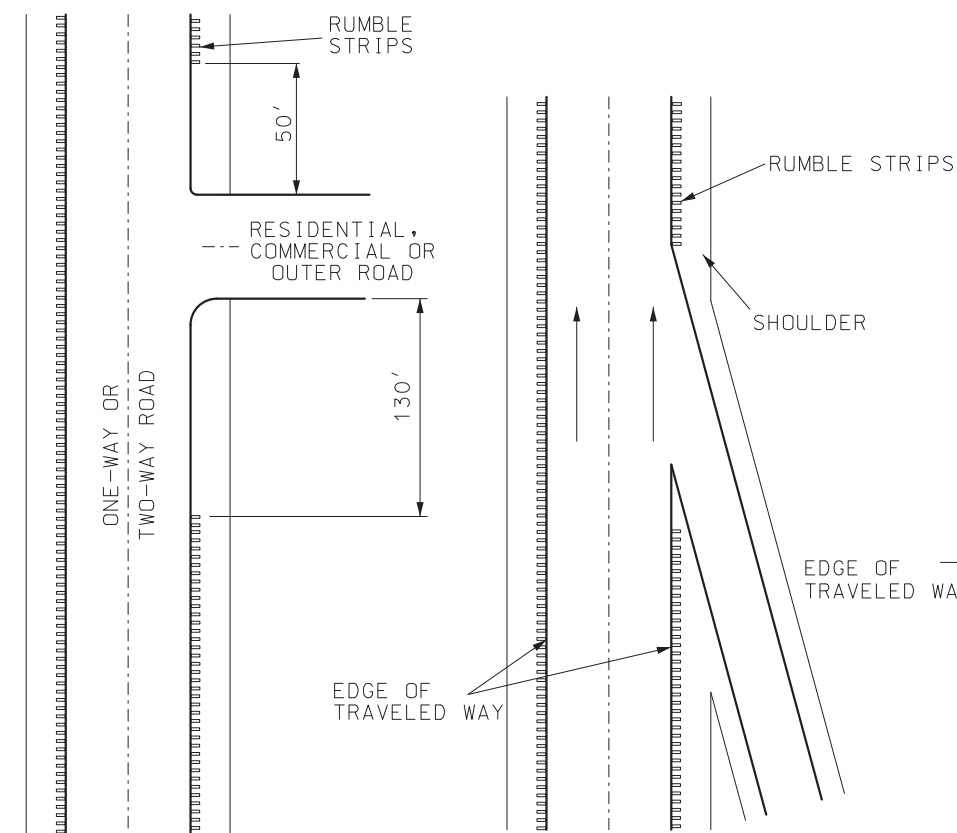
CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.

DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES. INCLUDING ANY LANE TAPER SECTIONS.

 <b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)		
 Mark E. Croarkin 07/03/2025 2:42:47 PM MARK E. CROARKIN - CIVIL MO-PE-2002016640	<b>PAVEMENT MARKING</b>  <b>ALTERNATE PASSING LANE</b>	
	DATE EFFECTIVE: 10/1/2025 DATE PREPARED: 7/2/2025	620.00P



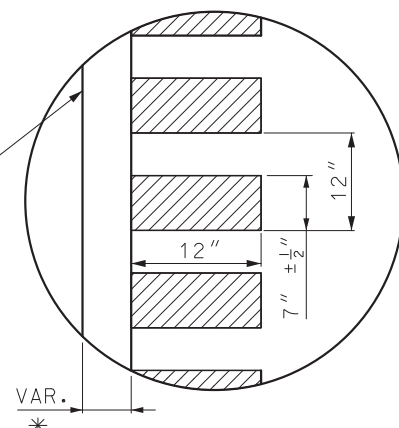
EXPRESSWAY DIVIDED



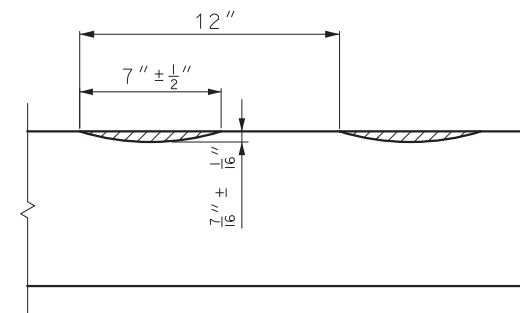
INTERSECTIONS

ACCELERATION LANE SHOWN  
ACCELERATION OR DECELERATION LANE

## RUMBLE STRIP LAYOUTS

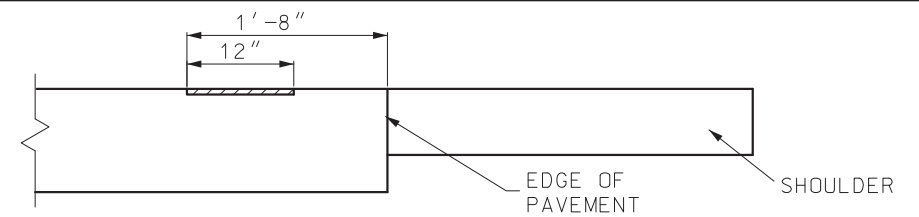


RUMBLE STRIP  
PLAN VIEW

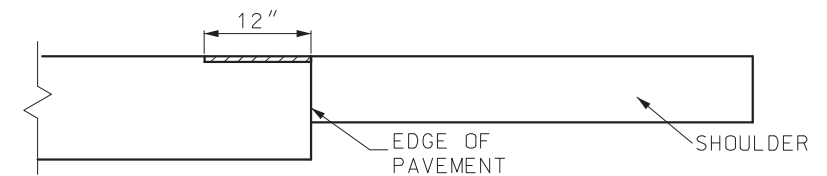


RUMBLE STRIP CROSS SECTION VIEW

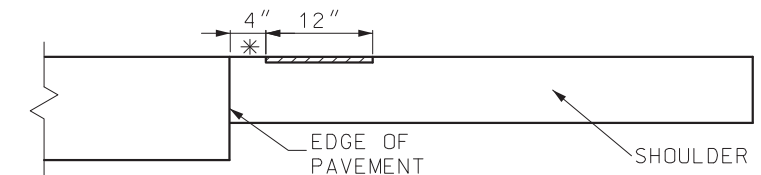
14' PAVEMENT  
STRUCTURES,  
ALL SHOULDER TYPES



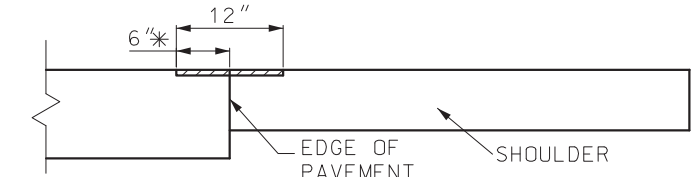
13' PAVEMENT  
STRUCTURES,  
ALL SHOULDER TYPES



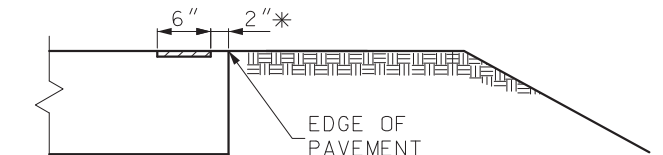
PAVEMENT  
STRUCTURES ≤ 12'  
WITH A2 SHOULDER



PAVEMENT  
STRUCTURES ≤ 12'  
WITH A3 SHOULDER



PAVEMENT  
STRUCTURES ≤ 12'  
WITH EARTH OR  
AGGREGATE SHOULDER



\* = LATERAL DEVIATION SHALL NOT  
EXCEED ONE INCH IN 100 FEET.

### GENERAL NOTES:

SEE STANDARD PLAN 620.00 FOR PAVEMENT MARKING.

RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

RUMBLE STRIPS SHALL NOT BE MILLED ONTO TRANSVERSE  
JOINTS.

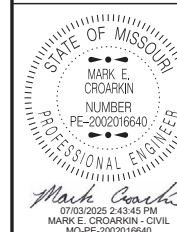
FOR CONCRETE PAVEMENT WITH 15' JOINT SPACING, AT  
LEAST TWELVE RUMBLE STRIPS SHALL BE MILLED PER PANEL.

RUMBLE STRIPS SHALL BE OMITTED IF SHOULDERS ARE LESS  
THAN 2' WIDE.



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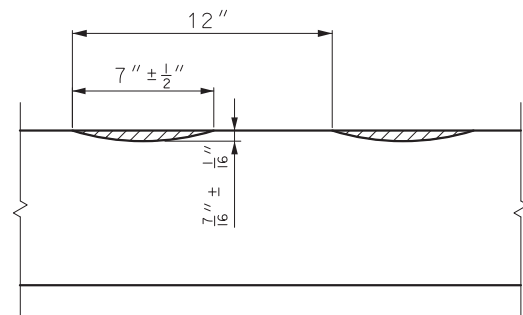


## RUMBLE STRIPS SHOULDER

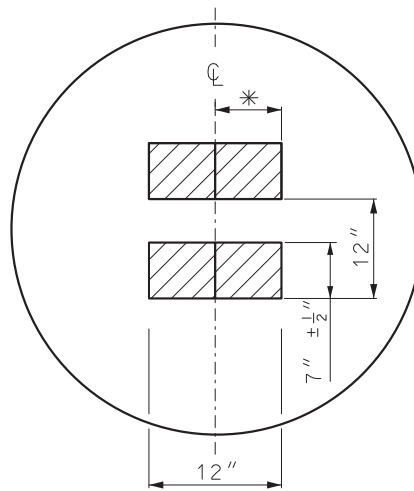
DATE EFFECTIVE: 10/1/2025  
DATE PREPARED: 7/2/2025

626.00J

SHEET NO.  
1 OF 2

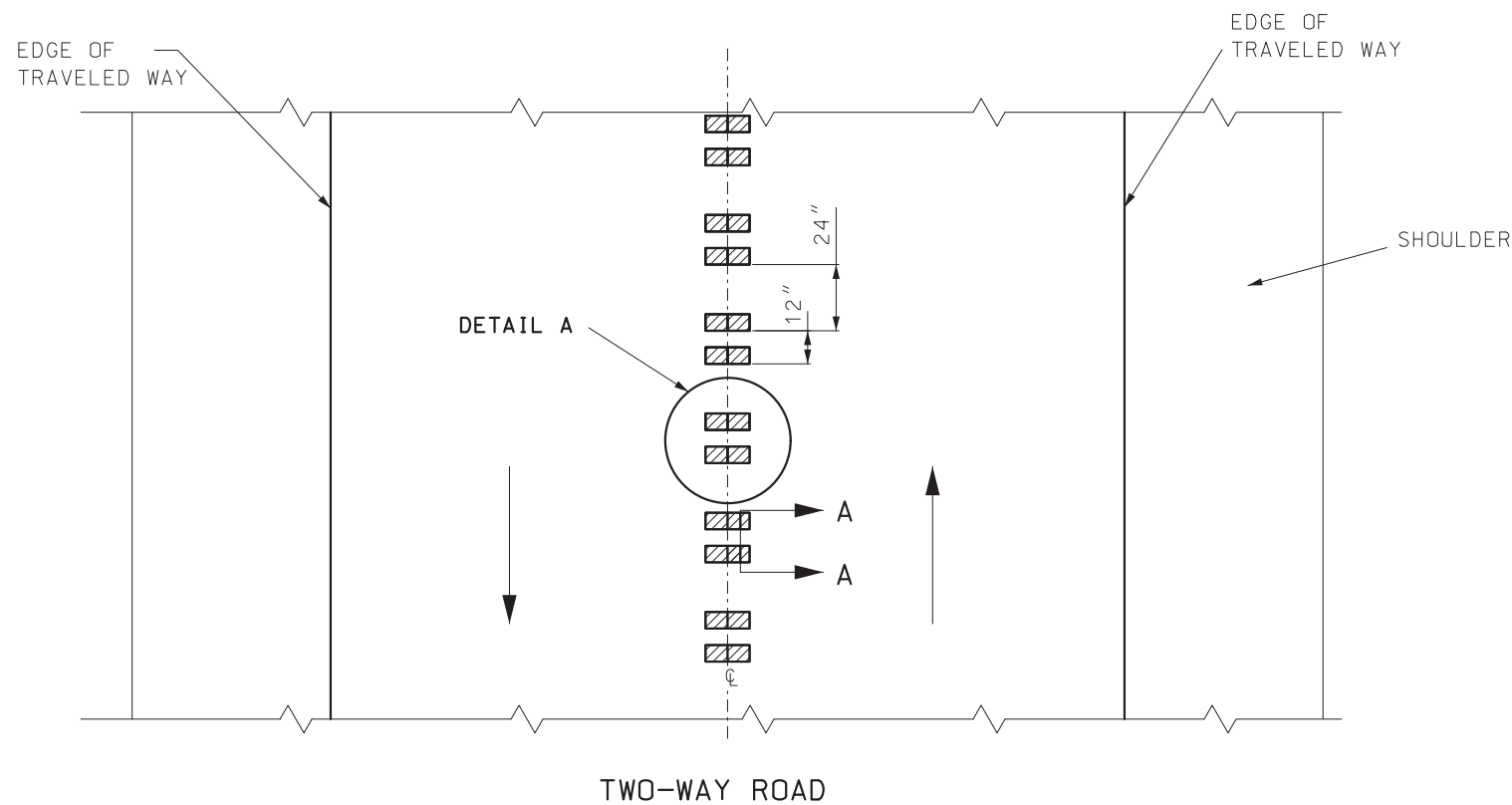


SECTION A-A



DETAIL A

\* = LATERAL DEVIATION SHALL NOT EXCEED ONE INCH IN 100 FEET.



GENERAL NOTES:

SEE STANDARD PLAN 620.00 FOR PAVEMENT MARKING.

RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

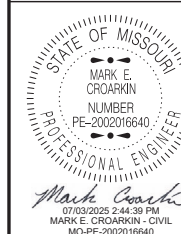
CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT TURN LANES.

DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.



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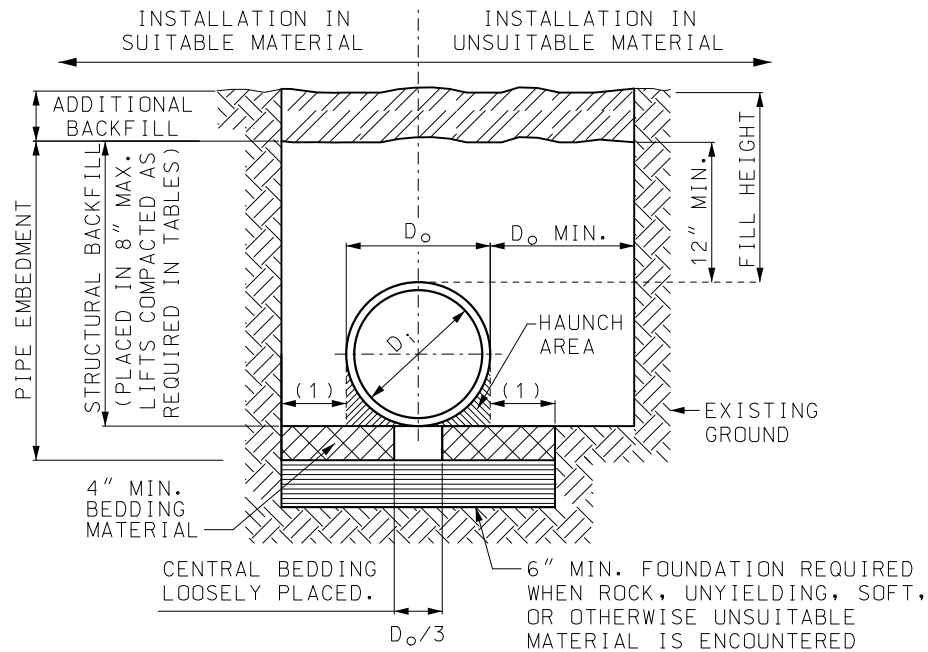


RUMBLE STRIPS  
CENTERLINE

DATE EFFECTIVE: 10/1/2025  
DATE PREPARED: 7/2/2025

626.00J

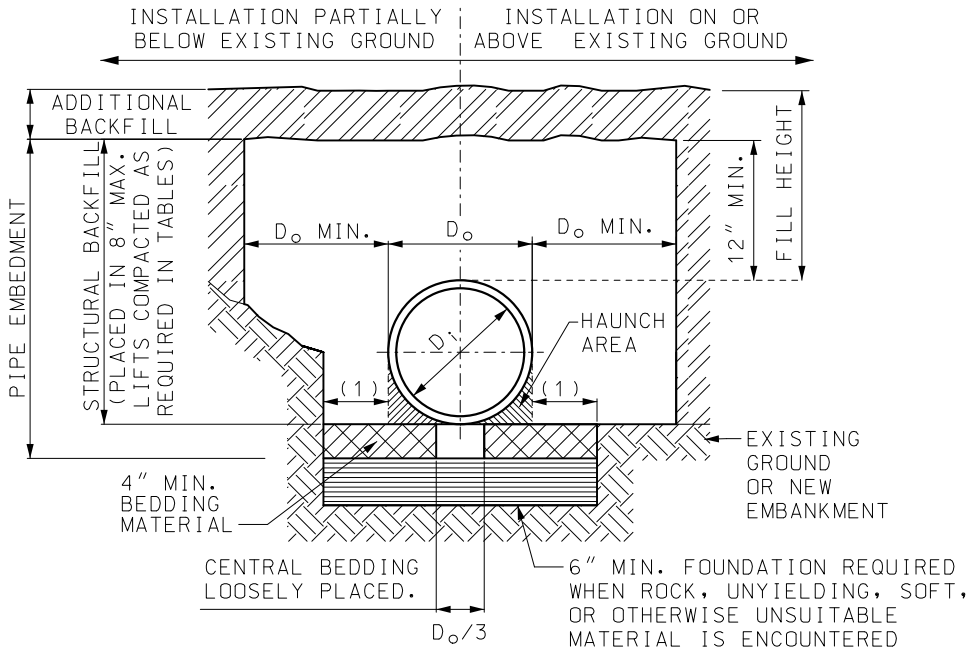
SHEET NO.  
2 OF 2



TRENCH INSTALLATION

**LEGEND**  
D<sub>i</sub> = INSIDE DIAMETER OF PIPE.  
D<sub>o</sub> = OUTSIDE DIAMETER OF PIPE.  
(1) = (D<sub>o</sub>/4)+6" (MIN.)

**NOTE:**  
MULTIPLE PIPE SHALL BE INSTALLED WITH A MINIMUM CLEARANCE BETWEEN PIPES OF 1/2 D<sub>o</sub> OR 12", WHICHEVER IS GREATER, BUT NOT TO EXCEED 36".



EMBANKMENT INSTALLATION

CONSTRUCTION SEQUENCE

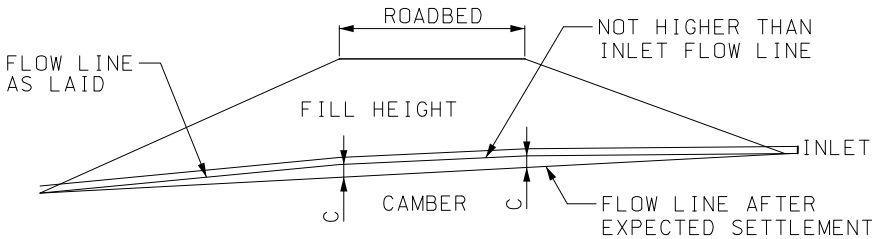
- 1. PLACE BEDDING MATERIAL TO GRADE.
- 2. COMPACT BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
- 3. INSTALL PIPE TO GRADE.
- 4. COMPLETE STRUCTURAL BACKFILL ACCORDING TO SPECIFICATIONS.

FILL HEIGHT LIMITS																			
STRUCTURAL BACKFILL	SPECIFIED NOMINAL DIA OF PIPE (IN.)	DOUBLE WALL POLYETHYLENE				STEEL REINFORCED POLYETHYLENE		POLYVINYL CHLORIDE				DOUBLE WALL POLYPROPYLENE				TRIPLE WALL POLYPROPYLENE			
		COMPACTION 90% SPD		COMPACTION 95% SPD		COMPACTION 90% SPD		COMPACTION 90% SPD		COMPACTION 95% SPD		COMPACTION 90% SPD		COMPACTION 95% SPD		COMPACTION 90% SPD		COMPACTION 95% SPD	
		MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
GRAVEL (AASHTO M145 SOIL TYPE A1 & A3)	12	2'	19'	2'	26'	--	--	2'	32'	2'	61'	2'	21'	2'	29'	--	--	--	--
	15	2'	19'	2'	27'	--	--	2'	32'	2'	55'	2'	22'	2'	31'	--	--	--	--
	18	2'	17'	2'	25'	--	--	2'	31'	2'	60'	2'	19'	2'	27'	--	--	--	--
	24	2'	15'	2'	21'	2'	50'	2'	30'	2'	54'	2'	16'	2'	22'	--	--	--	--
	30	2'	17'	2'	24'	2'	50'	2'	31'	2'	52'	2'	11'	2'	15'	2'	17'	2'	23'
	36	2'	13'	2'	19'	2'	50'	2'	30'	2'	53'	--	--	--	--	2'	15'	2'	21'
	42	2'	13'	2'	19'	2'	50'	--	--	--	--	--	--	--	--	2'	19'	2'	27'
	48	2'	12'	2'	18'	2'	30'	--	--	--	--	--	--	--	--	2'	12'	2'	17'
60	2'	13'	2'	20'	2'	30'	--	--	--	--	--	--	--	--	2'	16'	2'	23'	
COURSE SAND (AASHTO M145 SOIL TYPE A-1-b)	12	2'	17'	2'	23'	--	--	2'	32'	2'	55'	2'	18'	2'	24'	--	--	--	--
	15	2'	16'	2'	22'	--	--	2'	32'	2'	49'	2'	22'	2'	31'	--	--	--	--
	18	2'	15'	2'	21'	--	--	2'	31'	2'	53'	2'	16'	2'	21'	--	--	--	--
	24	2'	14'	2'	20'	2'	50'	2'	30'	2'	48'	2'	13'	2'	17'	--	--	--	--
	30	2'	13'	2'	19'	2'	50'	2'	31'	2'	46'	2'	7'	2'	10'	2'	17'	2'	23'
	36	2'	12'	2'	17'	2'	50'	2'	30'	2'	46'	--	--	--	--	2'	15'	2'	21'
	42	2'	13'	2'	18'	2'	50'	--	--	--	--	--	--	--	--	2'	19'	2'	27'
	48	2'	12'	2'	17'	2'	30'	--	--	--	--	--	--	--	--	2'	12'	2'	17'
60	2'	13'	2'	20'	2'	30'	--	--	--	--	--	--	--	--	2'	16'	2'	23'	
SILTY SAND OR SILTY GRAVEL (AASHTO M145 SOIL TYPES A-2-4 & A-2-5)	12	3.3'	10'	2'	17'	--	--	2.7'	16'	2'	33'	2.8'	11'	2'	19'	--	--	--	--
	15	3.4'	10'	2'	16'	--	--	2.7'	16'	2'	33'	2.8'	11'	2'	23'	--	--	--	--
	18	3.6'	10'	2'	15'	--	--	2.7'	15'	2'	32'	3'	11'	2'	16'	--	--	--	--
	24	3.8'	9'	2'	14'	2'	50'	2.7'	15'	2'	31'	3.3'	10'	2'	13'	--	--	--	--
	30	3.7'	10'	2'	14'	2'	50'	2.8'	15'	2'	31'	3.4'	6'	2'	7'	3'	10'	2'	17'
	36	4.2'	7'	2'	12'	2'	50'	2.8'	14'	2'	31'	--	--	--	--	3.3'	10'	2'	15'
	42	4.2'	7'	2'	13'	2'	50'	--	--	--	--	--	--	--	--	3.2'	11'	2'	20'
	48	4.5'	6'	2'	12'	2'	30'	--	--	--	--	--	--	--	--	3.1'	9'	2'	13'
60	3.3'	7'	2'	14'	2'	30'	--	--	--	--	--	--	--	--	2'	10'	2'	17'	

MINIMUM COVER FOR CONSTRUCTION LOADS

NOMINAL PIPE DIA. (IN.)	MINIMUM COVER (FT) FOR INDICATED AXLE LOADS (THOUSANDS OF POUNDS)			
	18-50	50-75	75-110	110-150
12-36	2.0	2.5	3.0	3.0
42-60	3.0	3.0	3.5	4.0

MINIMUM COVER LIMITS ARE NOT SUFFICIENT FOR SILTY SAND OR SILTY GRAVEL STRUCTURAL BACKFILL COMPACTED TO 90% STANDARD PROCTOR DENSITY. THE CONTRACTOR SHALL PROVIDE MINIMUM COVER PLUS ANY ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. IN UNPAVED SITUATIONS, THE SURFACE MUST BE MAINTAINED TO A LEVEL AND NON-RUTTED CONDITION.



**NOTE:**  
ON YIELDING SOIL, PIPE CULVERTS SHALL BE PLACED ON A CAMBERED FLOW LINE. THE AMOUNT OF CAMBER WILL VARY WITH SOIL CONDITION AND WILL BE SPECIFIED ON THE DESIGN PLANS.

TYPICAL CAMBERED FLOW LINE

**NOTE:**  
SPD = STANDARD PROCTOR DENSITY.  
  
FILL HEIGHT MEASURED FROM THE TOP OF PIPE TO SURFACE.  
  
LIMITS ACCOUNT FOR SHORT-TERM TEMPORARY WATER TABLE DEPTHS OF FIVE FEET ABOVE SPRINGLINE. TABLES ARE NOT APPLICABLE FOR LONG-TERM PERMANENT WATER TABLE DEPTHS ABOVE SPRINGLINE.  
  
WHEN PIPES ARE USED AS GROUP A, FILL HEIGHTS ARE LIMITED TO SHADED VALUES.

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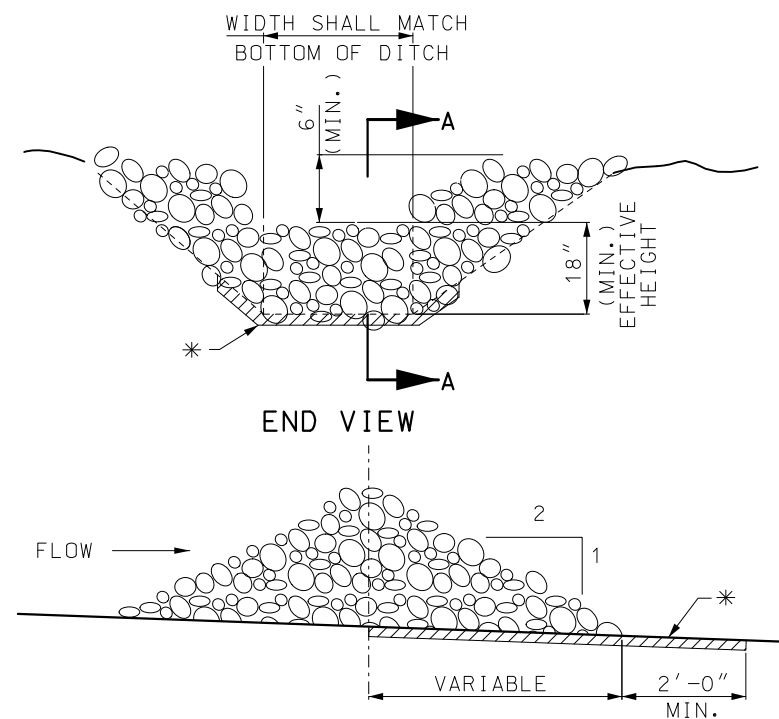
**THERMOPLASTIC PIPE INSTALLATION METHODS**

DATE EFFECTIVE: 4/1/2026  
DATE PREPARED: 12/22/2025

730.00F

SHEET NO.  
1 OF 1

ROCK DITCH CHECK



SECTION A-A

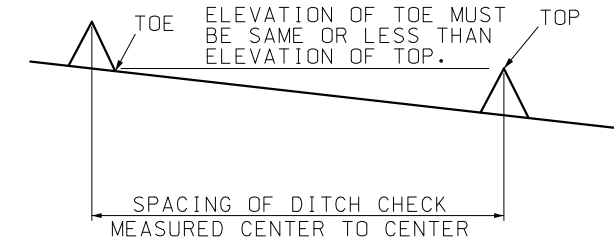
\* GEOTEXTILE LINING MAY BE INSTALLED AS REQUIRED BY THE ENGINEER.

NOTE:

ROCK DITCH CHECK IN THE CLEAR ZONE SHALL BE REMOVED OR LEVELED (IF ALLOWABLE) AFTER THE VEGETATION HAS SUFFICIENTLY MATURED TO PROTECT THE DITCH OR SWALE.

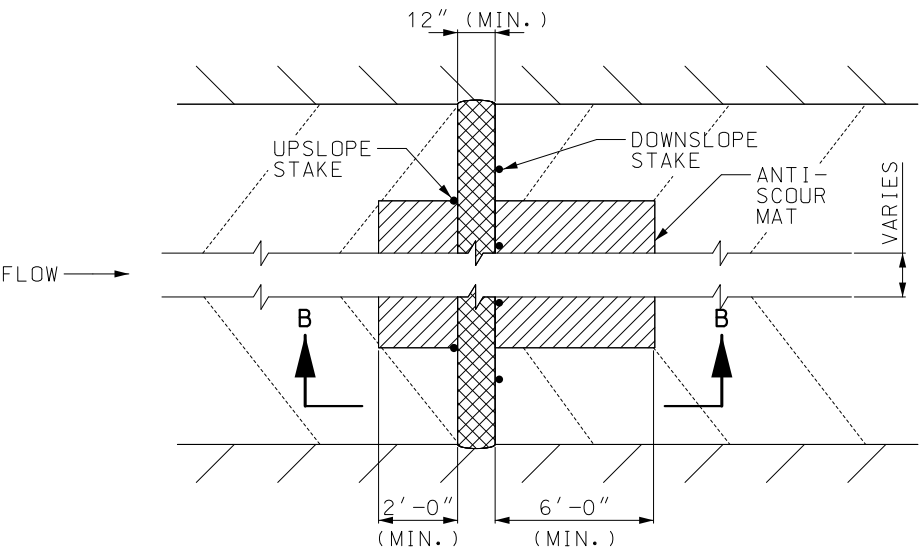
EXAMPLE  
DITCH CHECK SPACING  
FOR STANDARD HEIGHTS  
(FT.)

DITCH & SLOPE %	SPACING FOR 9" EFF. HEIGHT	SPACING FOR 18" EFF. HEIGHT
0.5	150	300
1.0	75	150
1.5	50	100
2.0	37	75
2.5	30	60
3.0	25	50
3.5	21	43
4.0	19	38
4.5	16	33
5.0	15	30
5.5	13	27
6.0	12	25
6.5	11	23
7.0	10	21
7.5	10	20
8.0	9	19
8.5	9	18
9.0	8	17
9.5	8	16
10.0	7	15



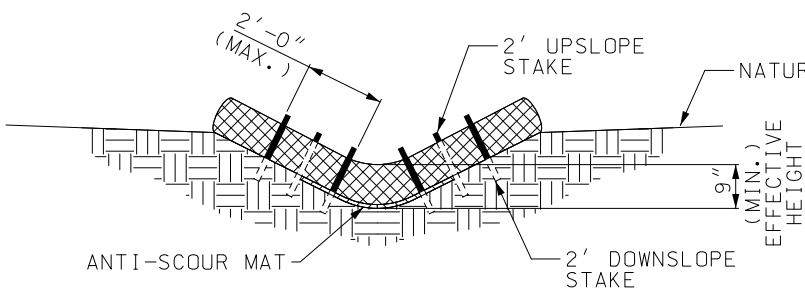
MINIMUM DITCH CHECK SPACING

ALTERNATE DITCH CHECK

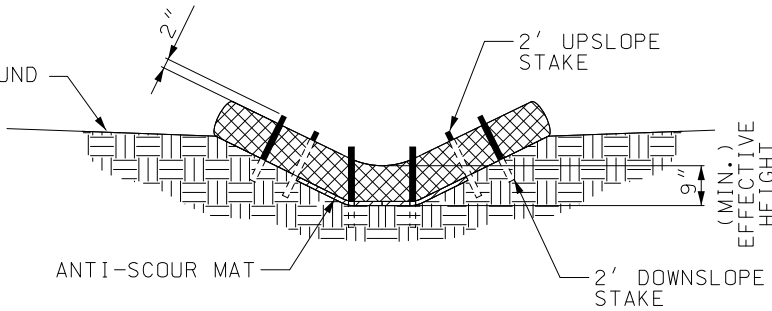


PLAN VIEW

SECTION B-B



TYPICAL SECTION  
VEE DITCH



TYPICAL SECTION  
TRAPEZOIDAL DITCH

NOTES:

THE INITIAL HEIGHT OR DIAMETER OF ANY ALTERNATE DITCH CHECK SHALL ACCOUNT FOR SAGGING TO ENSURE THAT THE MINIMUM EFFECTIVE HEIGHT OF 9" IS MAINTAINED THROUGHOUT THE LIFE OF THE DEVICE. ANY DEVICES THAT FALL BELOW THE 9" EFFECTIVE HEIGHT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. LOGS, ROLLS AND SOCKS SHALL HAVE AN INITIAL HEIGHT NO LESS THAN 12" OR AS NEEDED TO MAINTAIN THE MINIMUM REQUIRED EFFECTIVE HEIGHT.

USE 2' WOODEN STAKES WITH A 2" x 2" NOMINAL CROSS SECTION.

INSTALL LOG/SOCK TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND LOG/SOCK AND SCOUR DITCH SLOPES OR AS DIRECTED BY ENGINEER.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE LOG/SOCK TO BOTTOM OF DITCH.

ANTI-SCOUR MAT FOR ALTERNATE DITCH CHECKS, WHEN REQUIRED PER THE SWPPP, MAY BE ANY ALLOWABLE TYPE OF EROSION CONTROL BLANKET OR TURF REINFORCEMENT MAT. STAKING SHALL BE SUFFICIENT TO HOLD MAT IN PLACE. THE COST OF THE MAT IS CONSIDERED INCIDENTAL TO THE ALTERNATE DITCH CHECK.

GENERAL NOTES:

OTHER PROPRIETARY DITCH CHECKS MAY BE SUBSTITUTED IN ACCORDANCE WITH SEC 806 OR AS DIRECTED BY THE ENGINEER.

INSTALLATION OF PROPRIETARY DITCH CHECKS SHALL BE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

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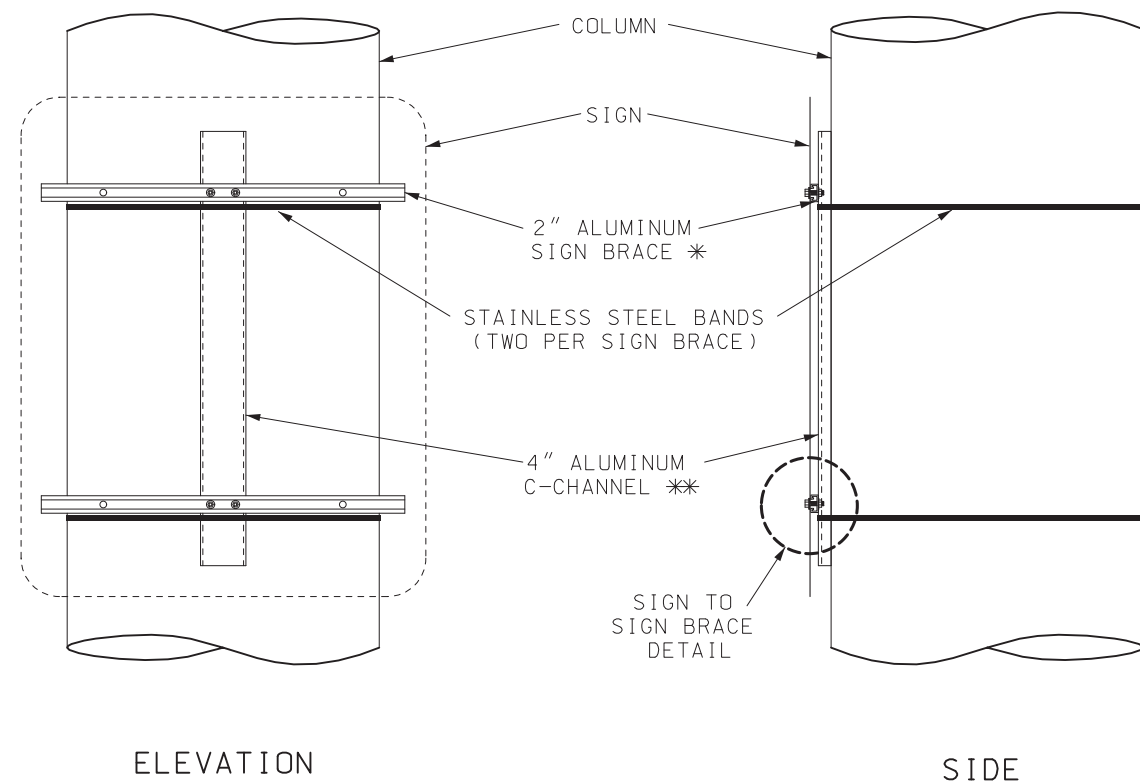
SARAH K. KLEINSCHMIT  
NUMBER PE-2007002808  
PROFESSIONAL ENGINEER  
Sarah K. Kleinschmit  
12/23/2025 12:35:33 PM  
SARAH K. KLEINSCHMIT - CIVIL  
MO-PE-2007002808

**TEMPORARY EROSION CONTROL MEASURES**  
TEMPORARY DITCH CHECKS

DATE EFFECTIVE: 4/1/2026  
DATE PREPARED: 12/22/2025

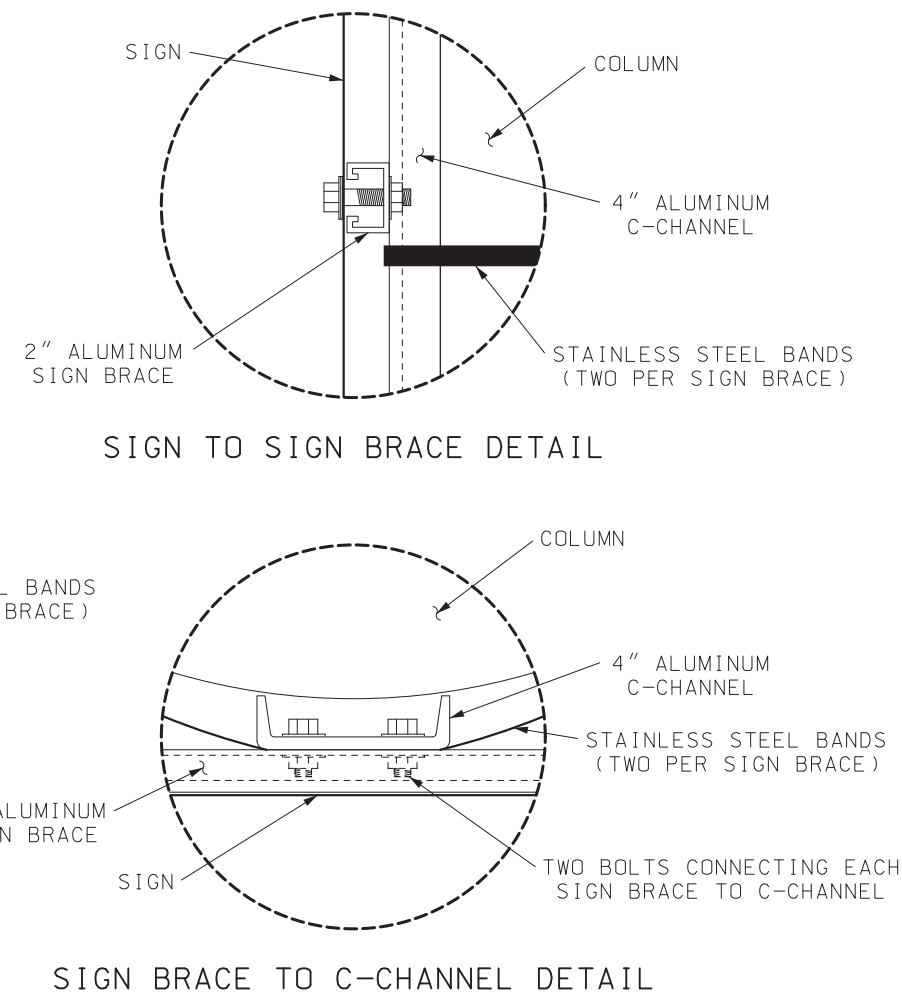
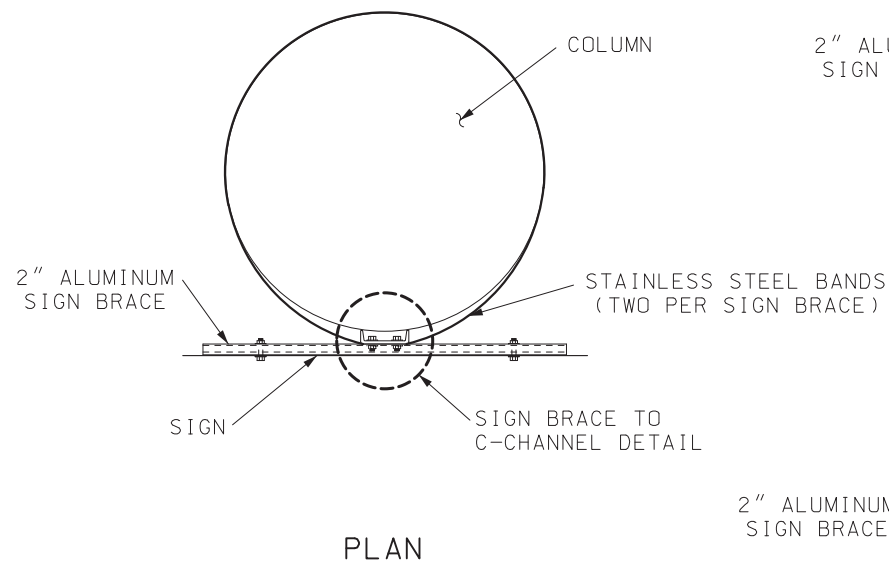
**806.10L**

SHEET NO.  
1 OF 6

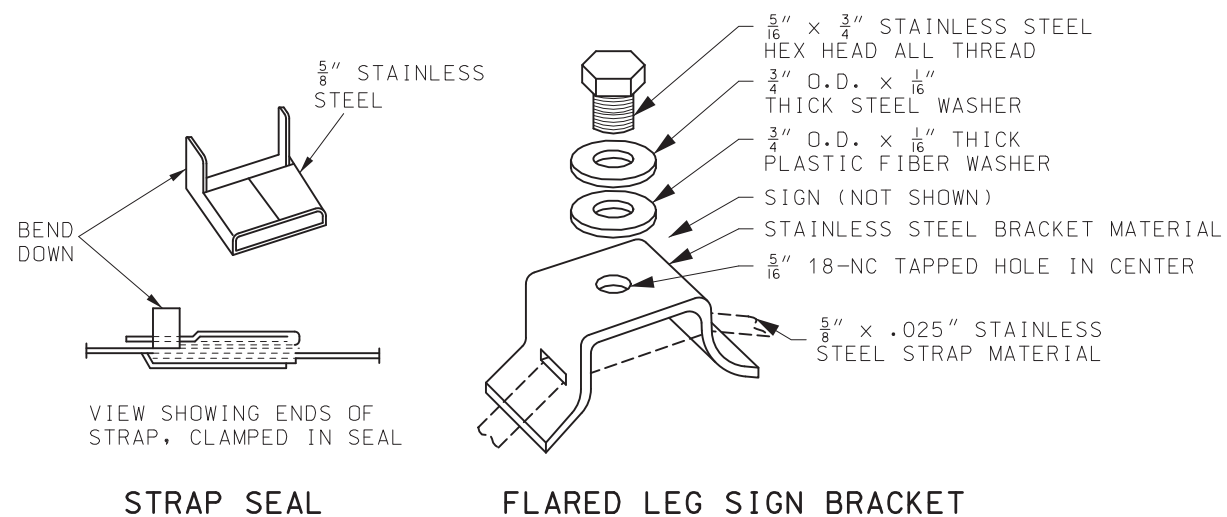


\* MAY BE PERFORATED.  
NUMBER OF SIGN BRACES DETERMINED BY  
HOLE PUNCHING ON STD PLAN 903.02.

\*\* STRUCTURAL 6061T6, MIN. 2.50 LBS/FT



**SPECIAL MOUNTING FOR FLAT SHEET  $\geq 36"$  WIDE  
ON ROUND STRUCTURES LOCATED ON FREEWAYS**





**MOUNTING DETAILS FOR FLAT SHEET  
ON ROUND STRUCTURES**

**NOTES:**

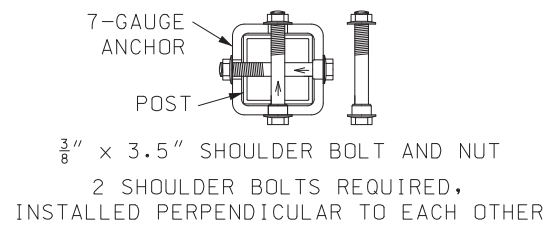
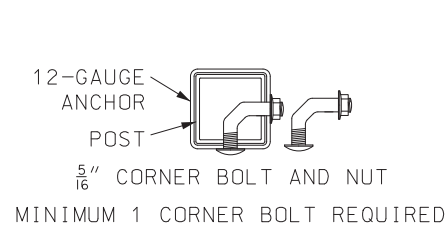
FOR GENERAL NOTES, SEE SHEET 1.

FOR MOUNTING HEIGHT AND OFFSET DETAILS,  
SEE SHEET 11.

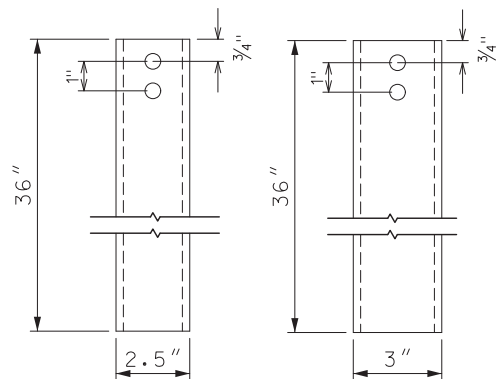
SPECIAL MOUNTING BASED ON SIGN WIDTH  
IN CONJUNCTION WITH ROADWAY TYPE.

 <b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	<b>SIGN MOUNTING DETAILS ROUND STRUCTURES</b>
DATE EFFECTIVE: 10/1/2025 DATE PREPARED: 7/7/2025	<b>903.03BU</b>
SHEET NO. <b>7 OF 12</b>	





12-GAUGE ANCHOR  
7-GAUGE ANCHOR  
ANCHOR BOLT DETAIL



FOR 2" POST      FOR 2.5" POST

BOLT HOLE DIAMETER -  $1\frac{7}{32}$ "  
2 PER SIDE ON ALL 4 SIDES

7-GAUGE ANCHOR  
FABRICATION DETAIL

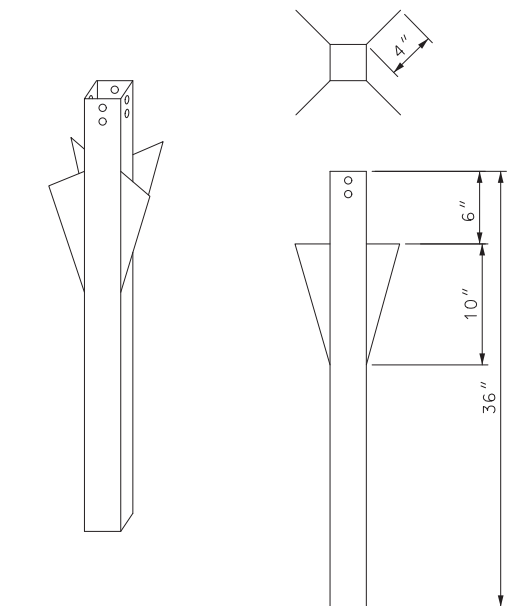
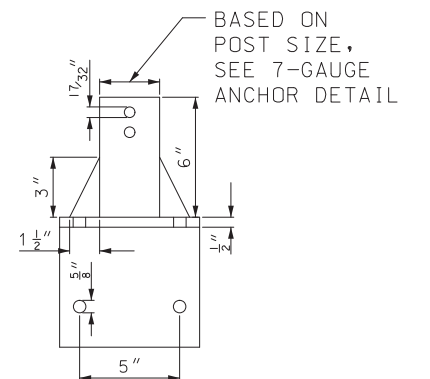
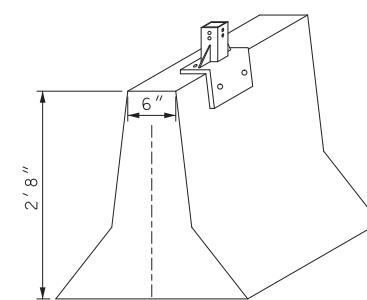
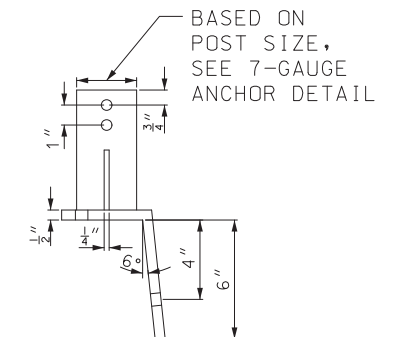
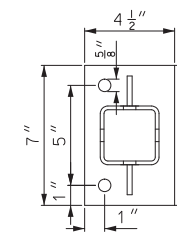
ANCHOR TUBE SHALL BE 7-GAUGE

$1\frac{1}{2}$ " X  $4\frac{1}{2}$ " GALVANIZED MECHANICAL FASTENERS SHALL BE USED TO ATTACH ANCHOR TO BARRIER WALL

SHOULDER BOLTS SHALL BE USED TO ATTACH PSST POST TO ANCHOR (SEE ANCHOR BOLT DETAIL)

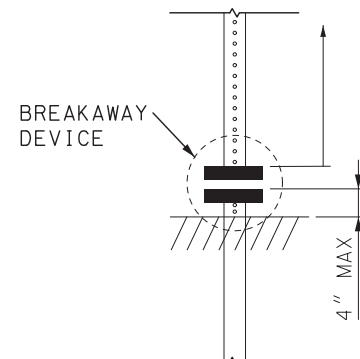
ANCHOR SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION PER SECTION 1080

FURNISHING AND INSTALLATION OF BARRIER WALL POST ANCHOR FOR PSST SHALL BE PAID PER EACH AS CONCRETE POST ANCHOR



12-GAUGE (NOT SHOWN) OR 7-GAUGE

OMNIDIRECTIONAL/STABILIZED  
DRIVEN ANCHOR DETAIL



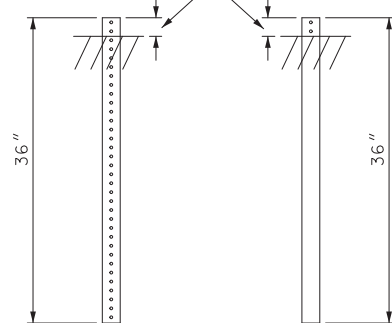
2.5" + 2.25" POST COMPRISED OF 2.5" PSST WITH 6-FT INSERT OF 2.25" PSST THAT RUNS UP FROM THE BREAKAWAY DEVICE

THE BREAKAWAY DEVICE PORTION FIXED TO THE GROUND ANCHOR SHALL BE NO HIGHER THAN 4" ABOVE THE FINISHED GRADE

BREAKAWAY AND 2.5" + 2.25" POST DETAIL

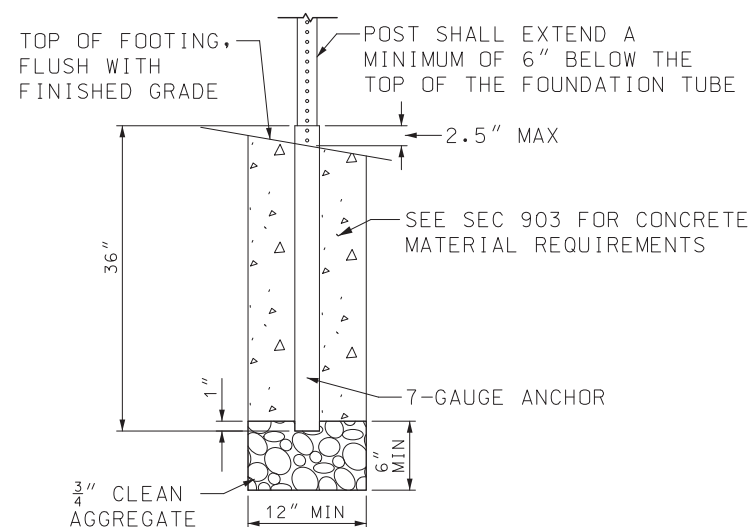
BARRIER WALL MOUNTING DETAIL

THE ANCHOR SHOULD BE A MAXIMUM OF 2.5" ABOVE THE GROUND LEVEL

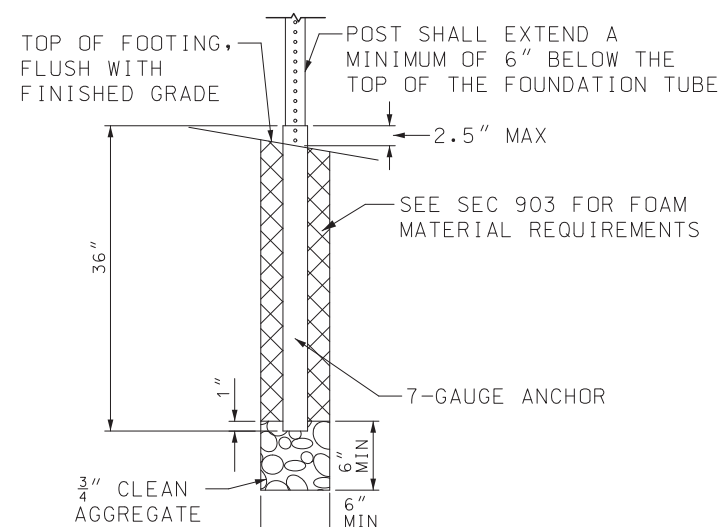


12-GAUGE      7-GAUGE

DRIVEN ANCHOR  
INSTALLATION DETAIL



CONCRETE FOOTING DETAIL




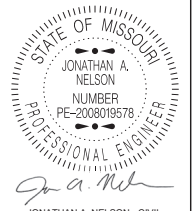
POLYURETHANE FOAM FOOTING DETAIL

NOTES:

FOR GENERAL NOTES, SEE SHEET 1.

FOR MOUNTING HEIGHT AND OFFSET DETAILS, SEE SHEET 11.

ALL BREAKAWAY DEVICES USED ON AN INSTALLATION SHALL BE CERTIFIED NCHRP 350 COMPLIANT.

 <b>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</b> 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)		
 JONATHAN A. NELSON - CIVIL MO-PE-2008019578	<b>POST INSTALLATION DETAILS</b> <b>PERFORATED SQUARE STEEL TUBE (PSST)</b>	
	DATE EFFECTIVE: 10/1/2025 DATE PREPARED: 7/7/2025	903.03BU

