

A.A.D.T. - 2023 = 1,412
A.A.D.T. - 2043 = 1,680
D.H.V. = 7.3%
T = 12.0%
V = 55 M.P.H.

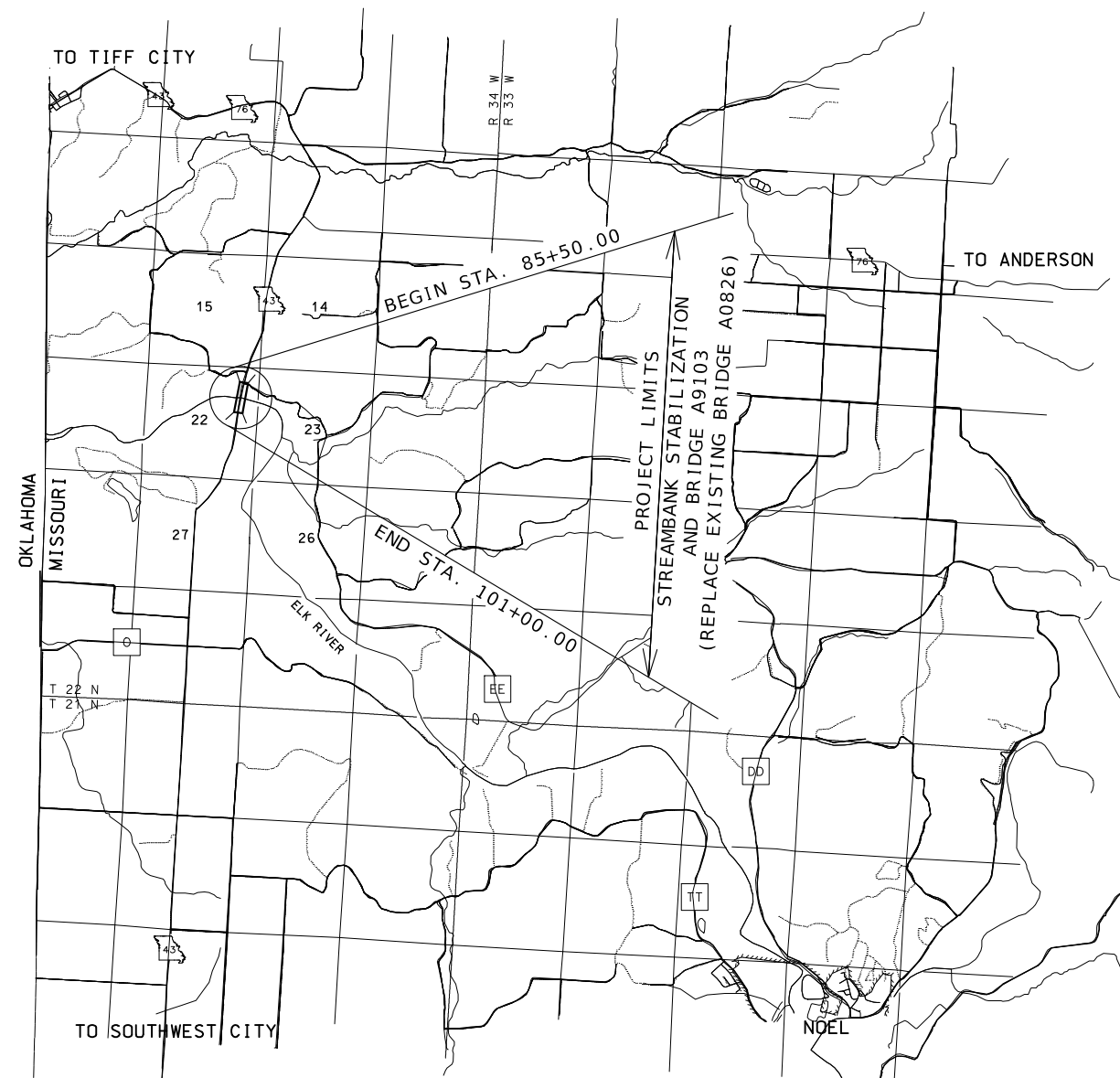
PERMANENT EASEMENT LIMITS FOR THIS PROJECT
EXTEND FROM STATION 85+63.66 TO STATION
94+22.02, A DISTANCE OF 0.163 MILES.

TEMPORARY EASEMENT LIMITS FOR THIS PROJECT
EXTEND FROM STATION 85+50.00 TO STATION
99+65.10, A DISTANCE OF 0.268 MILES.

	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
GUARD CABLE		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	—FO—	—FO—
OVERHEAD CABLE TV	—OTV—	—OTV—
UNDERGROUND CABLE TV	—UTV—	—UTV—
OVERHEAD TELEPHONE	—OT—	—OT—
UNDERGROUND TELEPHONE	—UT—	—UT—
OVERHEAD POWER	—OE—	—OE—
UNDERGROUND POWER	—UE—	—UE—
SANITARY SEWER	—S—	—S—
STORM SEWER	—SS—	—SS—
GAS	—G—	—G—
WATER	—W—	—W—
MANHOLE		
FIRE HYDRANT		
WATER VALVE		
WATER METER		
DROP INLET		
DITCH BLOCK		
GROUND MOUNTED SIGN		
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL		
FENCE		
CHAIN LINK	—V—	—V—
WOVEN WIRE	—X—	—X—
GATE POST		
BENCHMARK		

NOTE: DASHED OR OPEN SYMBOLS INDICATE
EXISTING FEATURES

KEY MAP 
LOCATION OF MCDONALD COUNTY
SECTION 22 T22N R34W



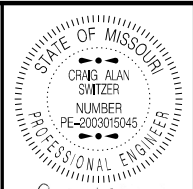
NOT TO SCALE

THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION. IT IS, THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND STATUS OF ANY FACILITY. SUCH VERIFICATION INCLUDES DIRECT CONTACT WITH THE LISTED UTILITIES.

DESCRIPTION	NUMBER
TITLE SHEET -----	1
TYPICAL SECTIONS (TS) (2 SHEETS)-----	2
QUANTITIES (QU) (4 SHEETS)-----	3
PLAN-PROFILE SHEETS (PP)-----	4-8
RIGHT OF WAY (RW)-----	9
CORDINATE POINTS (CP)-----	10
SPECIAL SHEETS (SS)-----	11-23
TRAFFIC CONTROL SHEETS (TC)-----	24-28
EROSION CONTROL SHEETS (EC)-----	29
PAVEMENT MARKING (PM)-----	30
BRIDGE DRAWINGS (B)	
A9103-----	1-30
CROSS SECTIONS (XS)-----	1-36

BEGINNING OF PROJECT	STA.	85+50.00
END OF PROJECT	STA.	101+00.00
APPARENT LENGTH		1550.00 FEET
EQUATIONS AND EXCEPTIONS:		NONE

TOTAL CORRECTIONS	NONE	
NET LENGTH OF PROJECT	1550.00	FEET
STATE LENGTH	0.294	MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	4.6	ACRES



DATE PREPARED	
9/17/2025	
ROUTE	STATE
43	MO
DISTRICT	SHEET NO.
SW	1
COUNTY	
MCDONALD	
JOB NO.	
J7S3379	
CONTRACT ID.	

PROJECT NO.
BRIDGE NO.

[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

REVISÉD: 2/19/2025

28'-0"

CL

20'-0"

TRAVELWAY

4'-0" 10'-0" 10'-0" 4'-0"

PROFILE GRADE

2.0% 2.0%

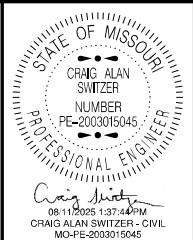
MO 43 (BRIDGE A9103)

STA. 91+30.60 TO STA. 95+70.10

NOT TO SCALE

TYPICAL SECTIONS

SHEET 2 OF 2



DATE PREPARED
8/6/2025

ROUTE 43	STATE MO
-------------	-------------

DISTRICT	SHEET NO.
SW	2

COUNTY
MCDONALD

JOB NO.
J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

REMOVAL OF IMPROVEMENTS							
SHEET	BEGIN STATION	END STATION	LOCATION	DESCRIPTION	UNITS	TOTAL	REMARKS
4	87+35.60	87+35.60	℄	SAW CUT	LF	20.0	ALONG EXIST. PAVEMENT
4	87+35.60	91+10.60	℄	EXIST. PAVEMENT	SY	1009.6	ROADWAY APPROACH PAVEMENT
4	90+90.82	91+35.54	LT/RT	EXIST. SIGN	EA	6.0	TYPE III OBJECT MARKERS
4	91+10.60	91+30.60	℄	EXIST. PAVEMENT	SY	32.0	BRIDGE APPROACH SLAB
4	95+47.33	95+90.76	LT/RT	EXIST. SIGN	EA	6.0	TYPE III OBJECT MARKERS
4	95+70.10	95+90.10	℄	EXIST. PAVEMENT	SY	44.0	BRIDGE APPROACH SLAB
4	95+90.10	99+65.10	℄	EXIST. PAVEMENT	SY	995.4	ROADWAY APPROACH PAVEMENT
4	99+65.10	99+65.10	℄	SAWCUT	LF	20.0	ALONG EXIST. PAVEMENT
*ALL STATIONS ARE MO 43							
TOTAL						1	LUMP SUM

EARTHWORK			
BEGIN STATION	END STATION	UNCLASSIFIED EXCAVATION	COMPACTING EMBANKMENT
		CY	CY
87+35.60	99+65.10	4728.6	1600.1
TOTAL		4728.6	1600.1
USE		SEE EXCAVATION TABLE	
		1601	

RIVER GRAVEL SKIMMING
1798 CY

ROCK FILL AND ROCK BLANKET											
SHEET	BEGIN STA	END STA	LOCATION	ROCK FILL		FWHA TYPE VI ROCK BLANKET **		RIVER GRAVEL**	UNCLASSIFIED EXCAVATION	PERMANENT EROSION CONTROL GEOTEXTILE	REMARKS
				FURNISHING	PLACING	FURNISHING	PLACING	PLACING			
				CY	CY	CY	CY	CY			
4	87+35.60	91+00.60	LT/RT	5337.0	5337.0						
4	90+63.22	91+30.60	LT/RT			895.6	895.6				
4	91+30.60	91+96.47	LT/RT			1030.2	1030.2			4147.3	NORTH END BENT
4	94+78.30	95+70.10	LT/RT			2191.2	2191.2			2723.6	SOUTH END BENT
4	95+70.10	96+00.10	LT/RT			536.7	536.7				
4-5	95+90.10	99+65.10	LT/RT	3102.7	3102.7						
15	90+75.07	91+43.73	WEIR 1			297.2	297.2		119.6		
12	90+19.16	90+00.22	BEFORE WEIR 2			257.8	257.8				BANK PROTECTION
15	90+00.22	90+81.91	WEIR 2			161.4	161.4				
12	90+00.22	89+00.89	WEIR 2 TO WEIR 3			800.1	800.1	406.9			BANK PROTECTION
16	89+00.89	90+38.22	WEIR 3			191.8	191.8				
12	89+00.89	88+88.59	WEIR 3 TO WEIR 4			1115.8	1115.8	621.7			BANK PROTECTION
16	88+88.59	90+23.24	WEIR 4			338.8	338.8				
12	88+88.59	89+60.89	WEIR 4 TO WEIR 5			1330.0	1330.0	530.0			BANK PROTECTION
16	89+60.89	90+47.03	WEIR 5			261.8	261.8				
12	89+60.89	90+45.58	WEIR 5 TO WEIR 6			1067.6	1067.6	238.7			BANK PROTECTION
17	90+45.58	90+91.58	WEIR 6			168.4	168.4				
12	90+45.58	91+14.62	WEIR 6 TO WEIR 7			837.3	837.3				BANK PROTECTION
17	91+14.62	91+35.64	WEIR 7			109.5	109.5				
12	91+14.62	91+71.41	AFTER WEIR 7			824.6	824.6				BANK PROTECTION
*ALL STATIONS ARE MO 43											
TOTAL				8439.7	8439.7	11591.2	11591.2	1797.3	119.6	6870.9	
USE				8440.0	8440.0	11592.0	11592.0	1798.0	SEE EXCAVATION TABLE	6871.0	

** QUANTITIES MAY VARY. SEE JOB SPECIAL PROVISIONS

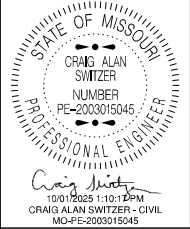
UNCLASSIFIED EXCAVATION	
TABLE	CY
ROCK FILL AND ROCK BLANKET	119.6
EARTHWORK	4728.6
TOTAL	4848.2
USE	4849

CLEARING AND GRUBBING
1 ACRE

MOBILIZATION
1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING & STAKING
1 LUMP SUM

SUMMARY OF QUANTITIES
SHEET 1 OF 4



DATE PREPARED	
10/1/2025	
ROUTE	STATE
43	MO
DISTRICT	SHEET NO.
SW	3
COUNTY	
MCDONALD	
JOB NO.	
J7S3379	
CONTRACT ID.	

PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE								

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



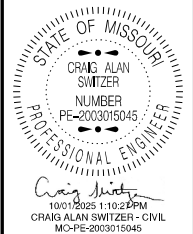
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



PAVEMENT MARKING						
	BEGIN STATION	END STATION	LOCATION	CLASS 1		
				4" SOLID WHITE LF	4" INT YELLOW LF	4" SOLID YELLOW LF
23	87+35.60	89+95.44	℄			520
23	89+95.44	99+65.10	℄		250	970
23	87+35.60	99+65.10	LT & RT	2459		
*ALL STATIONS ARE MO 43						
TOTALS				2459	1740	
USE				2459	1740	

PAVING/GRADING								
SHEET	BEGIN STATION	END STATION	LENGTH	LOCATION	WIDTH	OPTIONAL PAVEMENT	6" TYPE 1 AGGREGATE FOR BASE	LINEAR GRADING CLASS 2
			LF		LF	SY	SY	STA
4	87+35.60	91+10.60	375	MO 43	24.0	1010.0	1010.0	3.75
4	95+90.10	99+65.10	375	MO 43	24.0	995.0	995.0	3.75
*ALL STATIONS ARE MO 43								
					TOTAL	2005.0	2005.0	7.50
					USE	2005	2005	7.5

MGS GUARDRAIL									
ROUTE	BEGIN STA.	TO	END STA.	OFFSET	NET LENGTH	MGS BRIDGE APPR TRANSITION	MGS GUARDRAIL	TYPE A CRASHWORTHY MASH	SHAPING SLOPES CL III
					FT	EACH	LF	EACH	100 FT
MO 43	88+30.30	-	91+30.60	RT	300.0	1	212.5	1	0.3
MO 43	90+04.52	-	91+30.60	LT	125.0	1	37.5	1	0.3
MO 43	95+70.00	-	96+96.13	RT	125.0	1	37.5	1	0.3
MO 43	95+70.00	-	97+71.32	LT	200.0	1	112.5	1	0.3
TOTAL						4	400.0	4	1.2
USE						4	400	4	2



DATE PREPARED
9/17/2025

ROUTE
43

STATE
MO

DISTRICT
SW

SHEET NO.
3

COUNTY
MCDONALD

JOB NO.
J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



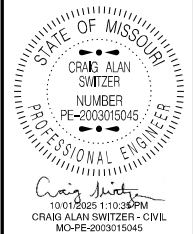
TEMPORARY EROSION CONTROL								
SHEET	BEGIN STATION	END STATION	LOCATION	SILT FENCE	ROCK DITCH CHECK	TYPE C BERM	SEDIMENT REMOVAL	TEMPORARY SEEDING
				LF	LF	LF	CY	ACRES
22	87+35.60	91+36.07	RT	405.0			4.1	
22	87+35.60	90+73.07	LT	332.0			3.3	
22	95+99.21	99+65.10	LT	367.0			3.7	
22	96+02.65	99+65.10	RT	363.0			3.6	
22	95+97.40		RT		14.0		1.0	
22	96+35.74		RT		14.0		1.0	
22	96+77.96		RT		14.0		1.0	
22	95+95.40		LT		14.0		1.0	
22	96+73.67		LT		14.0		1.0	
22	97+53.63		LT		14.0		1.0	
22	90+85.23	91+55.90	LT/RT			200.0	2.0	
22	91+01.33	91+41.14	LT/RT			100.0	1.0	
22	95+22.08	95+93.21	LT/RT			200.0	2.0	
22			LT/RT					0.36
*ALL STATIONS ARE MO 43								
TOTAL				1467.0	84.0	500.0	25.7	0.36
USE				1467	84	500	26	0.4

TELEPHONE CONDUIT							
SHEET	BEGIN STATION	OFFSET	END STATION	OFFSET	4" RIGID CONDUIT	TRENCHING, TYPE I	INSTALLING TIER 22 VAULT
					LF	LF	EA
23	91+18.60	15					1
23	95+79.16	14					1
23	90+58.64	65	91+18.60	14	76	76	
23	91+18.60	14	95+79.16	15	461	461	
23	95+79.16	15	96+46.56	60	73	73	
*ALL STATIONS ARE MO 43							
TOTAL					610	610	2
USE					610	610	2

MULCHING	
TEMPORARY SEEDING AREA	0.4 ACRES
PERMANENT SEEDING AREA	3.6 ACRES
TOTAL	4.0 ACRES

SEEDING - COOL SEASON MIXTURE
3.6 ACRES

ADDITIONAL MOBILIZATION FOR SEEDING
5 EA



DATE PREPARED 9/17/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 3
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

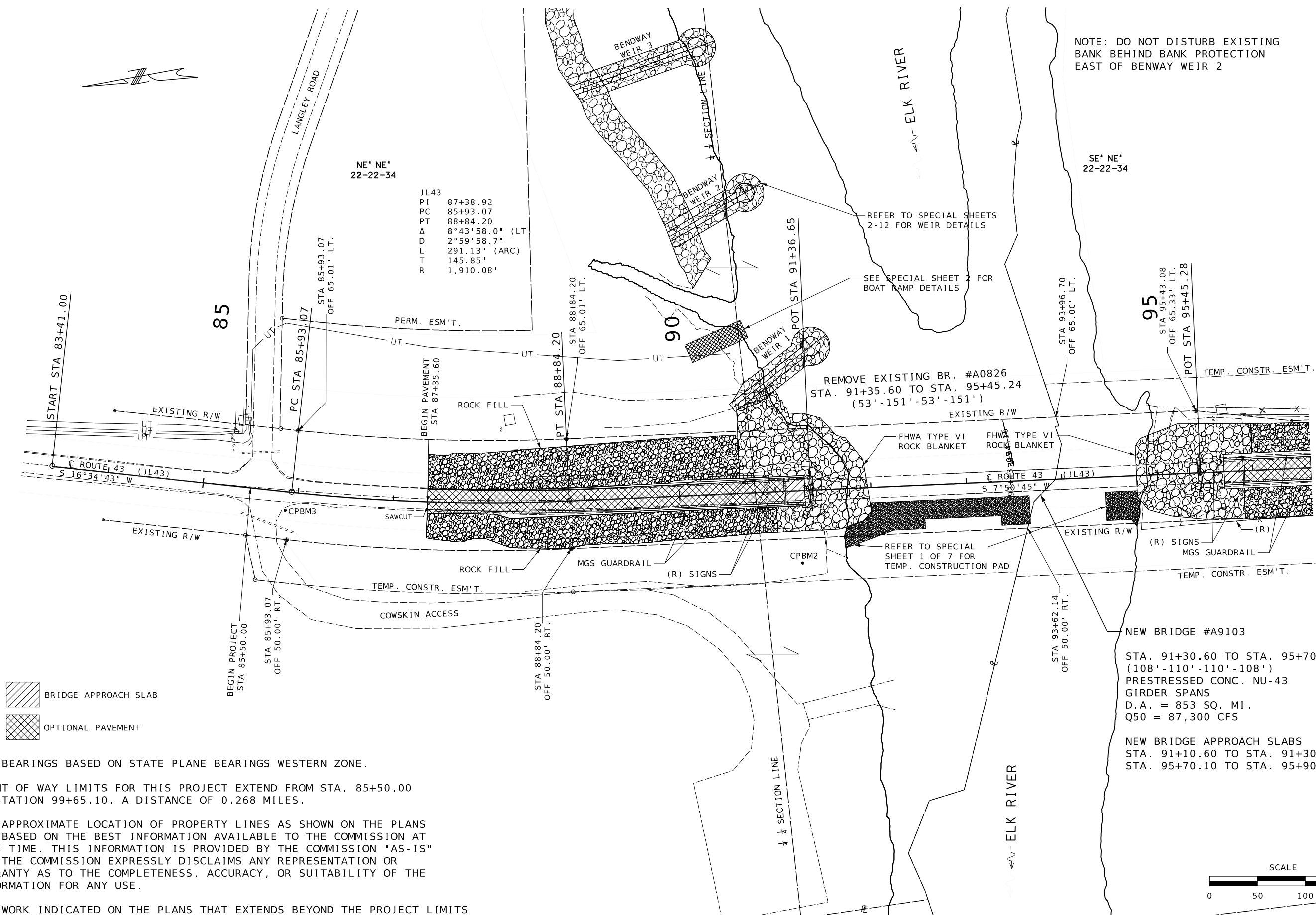
DESCRIPTION	DATE						

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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

SIGN	SIZE	AREA	QTY	TOTAL	QTY	TOTAL	SIGN	DESCRIPTION	SIGN	SIZE	AREA	QTY	TOTAL	QTY	TOTAL	SIGN	DESCRIPTION	ITEM	TOTAL	EFFECTIVE: 07-01-2025	
IN.	SQ. FT.	EACH	SQ. FT.	EACH	SQ. FT.	NO.	IN.		SQ. FT.	EACH	SQ. FT.	EACH	SQ. FT.	NO.	NUMBER	QTY		DESCRIPTION			
WARNING SIGNS									GUIDE SIGNS												
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)	E05-1	36X48	12.00						GORE EXIT	6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)	
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)	E05-2	48X36	12.00						EXIT OPEN	6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)	
WO1-2L	48X48	16.00						CURVE (SYMBOL LEFT)	E05-2a	48X36	12.00						EXIT CLOSED	6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)	
WO1-2R	48X48	16.00						CURVE (SYMBOL RIGHT)	GO20-1	60X24	10.00						ROAD WORK NEXT XX MILES	6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)	
WO1-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)	GO20-2	48X24	8.00	2	16.00			26	END ROAD WORK	6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)	
WO1-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)	GO20-4	36X18	4.50						PILOT CAR FOLLOW ME	6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)	
WO1-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT)	GO20-4a	42X30	8.75						PILOT CAR IN USE WAIT & FOLLOW	6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)	
WO1-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT)	GO20-4a	18X12	1.50						PILOT CAR IN USE WAIT & FOLLOW	6122020		REPLACEMENT SAND BARREL	
WO1-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)	GO20-5aP	36X24	6.00						WORK ZONE (PLAQUE)	6122030		IMPACT ATTENUATOR (RELOCATION)	
WO1-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-8a	24X18	3.00	2	6.00			52	END DETOUR	6122040		WORK ZONE CRASH CUSHION (NARROW)	
WO1-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)	MO4-9L	48X36	12.00						DETOUR (LEFT)	6122041		WORK ZONE CRASH CUSHION (RELOCATION)	
WO1-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-9R	48X36	12.00						DETOUR (RIGHT)	6123001		TRUCK MOUNTED ATTENUATOR (TMA)	
WO1-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)	MO4-9P	48X12	4.00						STREET NAME (PLAQUE)	6161012	8	BUOYS (BOATS KEEP OUT)	
WO1-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)	MO4-10L	48X18	6.00						DETOUR ARROW (LEFT)	6161013	8	BUOYS (NO WAKE)	
WO1-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)	MO4-10R	48X18	6.00						DETOUR ARROW (RIGHT)	6161014	4	SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)	
WO1-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)	REGULATORY SIGNS									6161020		CHANNELIZER (DRUM-LIKE)	
WO1-8	18X24	3.00						CHEVRON (SYMBOL)	R1-1	48X48	13.25						STOP	6161022		CHANNELIZER (CONE)	
WO1-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)	R1-2	48TRI.	6.93						YIELD	6161025	50	CHANNELIZER (TRIM-LINE)	
WO3-1	48X48	16.00						STOP AHEAD (SYMBOL)	R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)	6161026		CHANNELIZER (VERTICAL PANEL)	
WO3-2	48X48	16.00						YIELD AHEAD (SYMBOL)	R1-3P	30X12	2.50						ALL WAY (PLAQUE)	6161030	8	TYPE 3 MOVEABLE BARRICADE	
WO3-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)	R2-1	36X48	12.00						SPEED LIMIT XX	6161033		DIRECTION INDICATOR BARRICADE	
WO3-4	48X48	16.00						BE PREPARED TO STOP	R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)	6161040		FLASHING ARROW PANEL	
WO3-5	48X48	16.00						SPEED LIMIT AHEAD	R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)	6161047		TYPE 3 OBJECT MARKER	
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)	R3-3	36X36	9.00						NO TURNS	6161055		SEQUENTIAL FLASHING WARNING LIGHT	
WO4-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)	R3-4	48X48	16.00						NO U-TURN (SYMBOL)	6161070		TUBULAR MARKER	
WO4-1aL	48X48	16.00						MERGE (LEFT)	R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT	6161095		RADAR SPEED ADVISORY SYSTEM	
WO4-1aR	48X48	16.00						MERGE (RIGHT)	R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT	6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED	
WO5-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS	R4-1	36X48	12.00						DO NOT PASS	6161098A	4	CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED	
WO5-3	48X48	16.00						ONE LANE BRIDGE	R4-2	36X48	12.00						PASS WITH CARE			CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED	
WO5-5	48X48	16.00						NARROW LANES	R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)	6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED	
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)	R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)			WORK ZONE TRAFFIC SIGNAL SYSTEM	
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)	R5-1	30X30	6.25						DO NOT ENTER	6162000A		TEMPORARY LONG-TERM RUMBLE STRIPS	
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)	R5-1a	36X24	6.00						WRONG WAY	6162002		TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED	
WO7-3a	30X24	5.00						NEXT XX MILES (PLAQUE)	R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)	6173600D		TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED	
WO8-1	48X48	16.00						BUMP	R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)			TEMP. TRAFFIC BARRIER ANCHORED, CONTRACTOR FURNISHED/RETAINED	
WO8-2	48X48	16.00						DIP	R6-2L	24X30	5.00						ONE WAY (LEFT)	6173700B		TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION, CONTRACTOR FURNISHED/RETAINED	
WO8-3	48X48	16.00						PAVEMENT ENDS	R6-2R	24X30	5.00						ONE WAY (RIGHT)			CONTRACTOR FURNISHED/RETAINED	
WO8-4	48X48	16.00						SOFT SHOULDER	R9-9	24X12	2.00						SIDEWALK CLOSED	6173706		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED	
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)	R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE			RELOCATING TEMPORARY TRAFFIC BARRIER	
WO8-6	48X48	16.00						TRUCK CROSSING	R9-11R	24X18	3.00						(ARROW RIGHT) CROSS HERE	6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED	
WO8-6c	48X48	16.00						TRUCK ENTRANCE	R10-6	24X36	6.00						STOP HERE ON RED (45° ARROW)	6175010A		RELOCATING TEMP. TRAFFIC BARRIER ANCHORED	
WO8-7	36X36	9.00						LOOSE GRAVEL	R11-2	48X30	10.00	2	20.00			29	ROAD CLOSED	6175011B		RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS	
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL	R11-3a	60X30	12.50	2	25.00			55B1	ROAD CLOSED XX MILES AHEAD	6175020A		RELOCATING TEMP. TRAFFIC BARRIER HEIGHT	
WO8-9	48X48	16.00						LOW SHOULDER	R11-4	60X30	12.50	1	12.50			55B2	LOCAL TRAFFIC ONLY	6208064A		TEMPORARY RAISED PAVEMENT MARKER	
WO8-11	48X48	16.00						UNEVEN LANES	CONST-3A	60X48	20.00						ROAD CLOSED TO THRU TRAFFIC	9029400		TEMPORARY TRAFFIC SIGNALS	
WO8-12	48X48	16.00						NO CENTER LINE	CONST-3X	56X12	4.67						FINE SIGN	9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING	
WO8-15	48X48	16.00						GROOVED PAVEMENT	MISCELLANEOUS SIGNS												
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)	CONST-5	48X36	12.00						POINT OF PRESENCE				
WO8-17L	48X48	16.00						SHOULDER DROP-OFF (SYMBOL LEFT)	CONST-5	96X48	32.00	2	64.00			60	POINT OF PRESENCE				
WO8-17R	48X48	16.00						SHOULDER DROP-OFF (SYMBOL RIGHT)	CONST-8	48X36	12.00	2	24.00			59	WORK ZONE NO PHONE ZONE				
WO8-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)	MO4-11	36X78	19.50	5	97.5			50A	DETOUR ASSEMBLY				
W10-1	42RND.	9.62						RAILROAD CROSSING	MO4-11	36X78	19.50	3	58.5			50B	DETOUR ASSEMBLY				
WO12-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)	MO4-11	36X78	19.50	3	58.5			50C	DETOUR ASSEMBLY				
WO12-2	48X48	16.00						LOW CLEARANCE (SYMBOL)	MO4-11	36X78	19.50	1	19.5			50D	DETOUR ASSEMBLY				
WO12-2x	24X18	3.00						LOW CLEARANCE (PLAQUE)	MO4-11	36X78	19.50	1	19.5			50E	DETOUR ASSEMBLY				
WO12-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)	MO4-11	36X78	19.50	4	78			50F	DETOUR ASSEMBLY				



ALL BEARINGS BASED ON STATE PLANE BEARINGS WESTERN ZONE.

RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STA. 85+50.00 TO STATION 99+65.10. A DISTANCE OF 0.268 MILES.

THE APPROXIMATE LOCATION OF PROPERTY LINES AS SHOWN ON THE PLANS ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE.

ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS
IS CONSIDERED INCIDENTAL TO AND PART OF THE CONSTRUCTION OF THIS PROJECT.

NOTE: DO NOT DISTURB EXISTING
BANK BEHIND BANK PROTECTION
EAST OF BENWAY WEIR 2

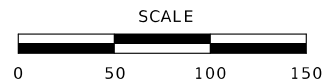
SE' NE'
22-22-34

REMOVE EXISTING BR. #A0826
STA. 91+35.60 TO STA. 95+45.24
(53' - 151' - 53' - 151')

NEW BRIDGE #A9103

STA. 91+30.60 TO STA. 95+70.10
(108' - 110' - 110' - 108')
PRESTRESSED CONC. NU-43
GIRDER SPANS
D.A. = 853 SQ. MI.
Q50 = 87,300 CFS

NEW BRIDGE APPROACH SLABS
STA. 91+10.60 TO STA. 91+30.60
STA. 95+70.10 TO STA. 95+90.10



PLAN-PROFILE SHEET
SHEET 1 OF 5

 STATE OF MISSOURI CRAIG ALAN SWITZER NUMBER PE-2003015045 PROFESSIONAL ENGINEER	
Craig Switzer 08/11/2025 1:38:49PM CRAIG ALAN SWITZER - CIVIL MO-PE-2003015045	
DATE PREPARED 8/6/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 4
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	
 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	

ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES MULTIPLY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION

COORDINATE SYSTEM

MODIFIED STATE PLANE

HORIZONTAL DATUM

NAD1983

VERTICAL DATUM

NAVD88

GEOID MODEL

GEOID12A

ELEVATIONS DETERMINED BY

GPS

PROJECT PROJECTION FACTOR

0.99990920

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM

MISSOURI STATE PLANE

CONTROL STATION

MODOT GNSS

DESIGNATION

MODOT ANDRSON CORS ARP

CORS_ID

MOA2

PID

DN6071

LATITUDE

364103.3942

LONGITUDE

942618.2477

NORTHING (M)

57435.9160

EASTING (M)

855505.1930

ZONE

2403 (MO-WEST)

PROJECT AVERAGE GRID FACTOR

0.99989925

EXAMPLE OF PROJECT COORDINATE TO S.P.C.

PROJECT NORTHING X AVERAGE GRID FACTOR
= STATE PLANE NORTHING

PROJECT EASTING X AVERAGE GRID FACTOR
= STATE PLANE EASTING

EXAMPLE: CONTROL POINT #___
N 12345.123 X 0.99989925 = N 12343.879
E 123456.123 X 0.99989925 = E 123443.685

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING								
SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION	GPK POINT ID
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)		
PROJECT CONTROL POINTS								
	109+21.51	RTE 43 RT	35.04	167,324.41	2,763,217.93	778.72	CP1 - SET 8" SPIKE	
8	91+25.20	RTE 43 RT	75.86	169,109.48	2,763,422.71	770.27	CP2 - SET 8" SPIKE	
8	85+88.41	RTE 43 RT	19.71	169,632.22	2,763,574.72	779.84	CP3 - SET 8" SPIKE	
ALIGNMENTS								
8	83+41.00	RTE 43 𐀀	0	169,863.72	2,763,664.20	782.80	START	
8	85+93.07	RTE 43 𐀀	0	169,622.13	2,763,592.28	782.80	PC	
8	87+38.92	RTE 43	0	169,482.35	2,763,550.66		HP I	
8	88+84.20	RTE 43 𐀀	0	169,337.87	2,763,530.75	784.09	PT	
8	91+36.65	RTE 43	0	169,087.78	2,763,496.29		HP I	
8	95+45.28	RTE 43	0	168,682.98	2,763,440.51		HP I	
8	103+41.00	RTE 43 𐀀	0	167,894.70	2,763,331.89	782.76	END	

STATE OF MISSOURI

CRAIG ALAN SWITZER

NUMBER

PE-2003015045

PROFESSIONAL ENGINEER

08/11/2025 1:43:28PM

CRAIG ALAN SWITZER - CIVIL

MO-PE-2003015045

DATE PREPARED

8/6/2025

ROUTE

43

STATE

MO

DISTRICT

SW

SHEET NO.

10

COUNTY

MCDONALD

JOB NO.

J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

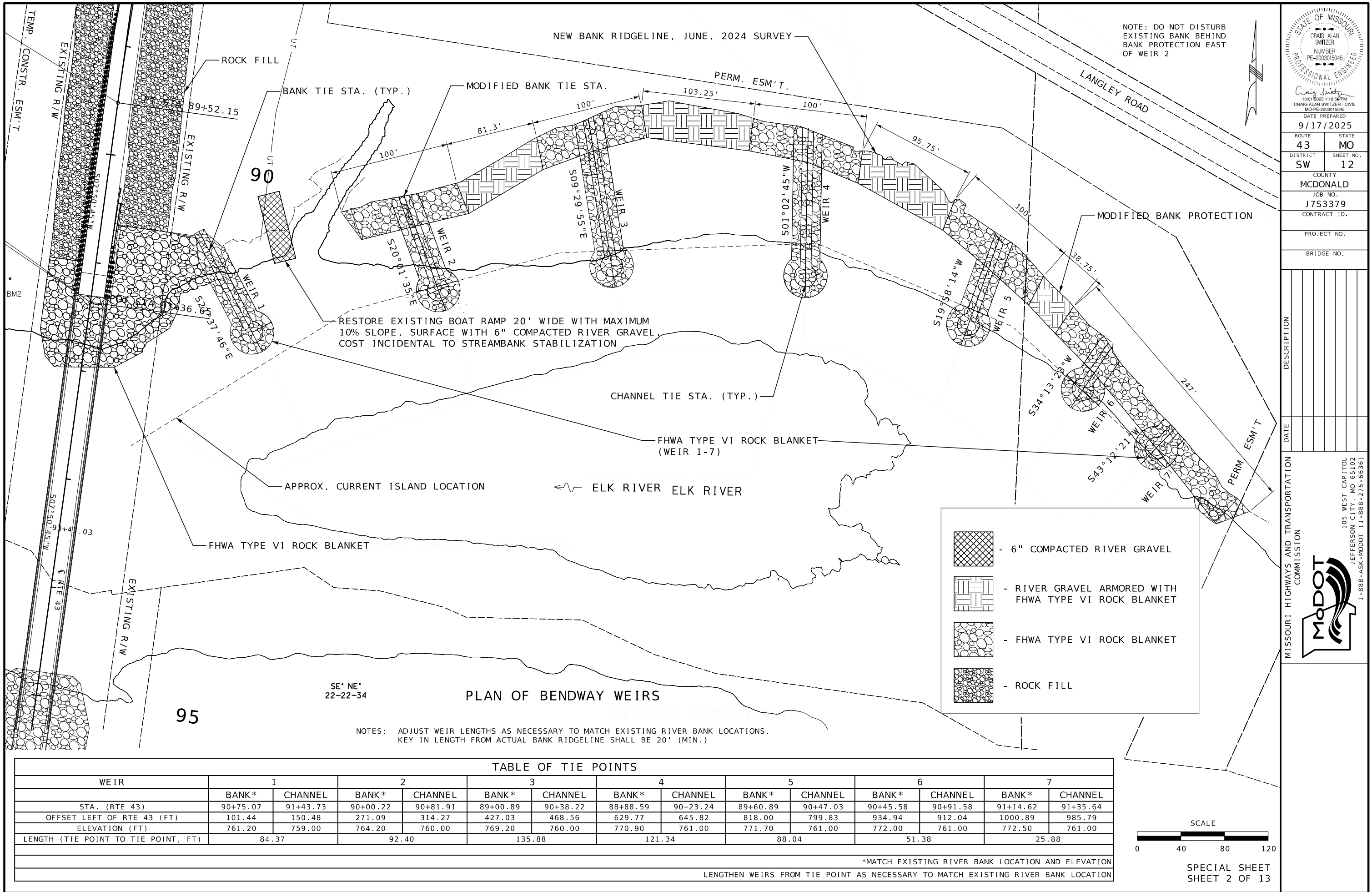
JEFFERSON CITY, MO 65102

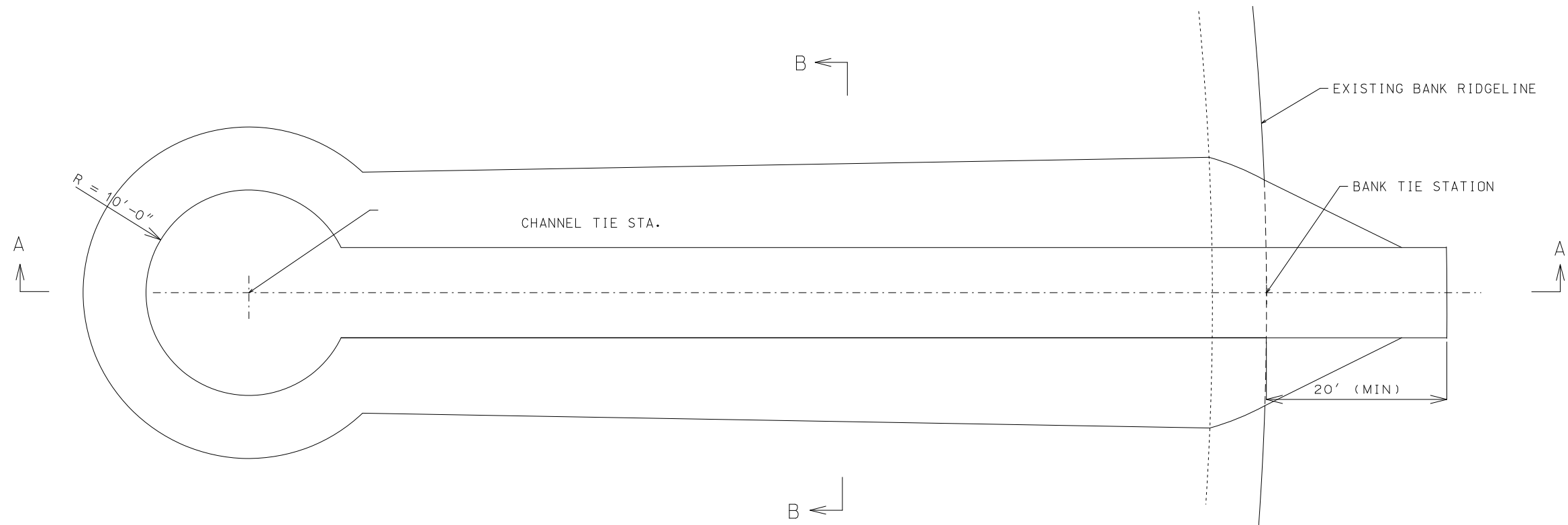
1-888-ASK-MODOT (1-888-273-6636)

MODOT

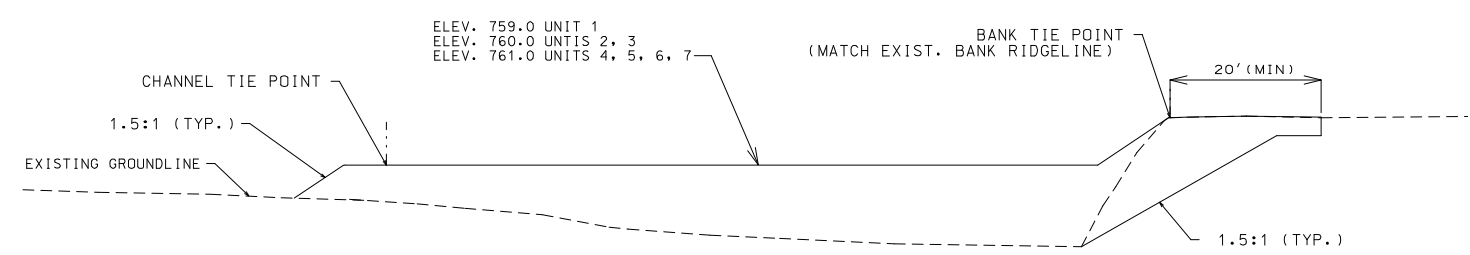
COORDINATE POINT SHEET

SHEET 1 OF 1



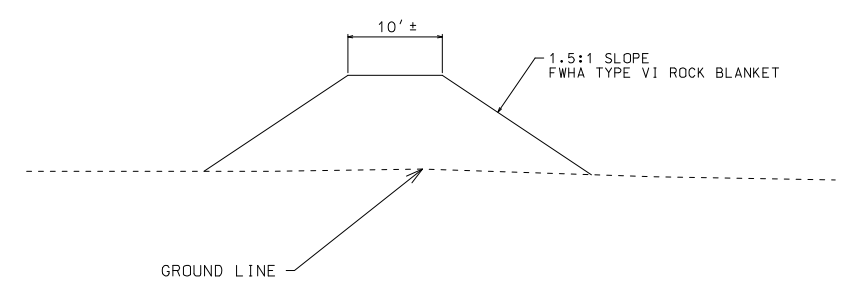


PLAN OF ROCK WEIR (TYPICAL)



SECTION A-A

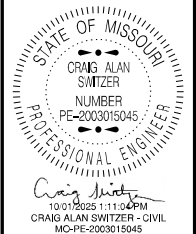
NOTE:
ALL SLOPES ON WEIR SHALL BE 1.5:1,
UNLESS OTHERWISE SHOWN
MINIMUM HEIGHT OF WEIR SHALL BE 42
INCHES. EXCAVATE INTO STREAMBED AS
NEEDED TO MAINTAIN 42" MINIMUM
HEIGHT.



SECTION B-B

DETAILS OF WEIRS FOR UNIT 1
(FWHA TYPE VI ROCK BLANKET)

NOT TO SCALE
SPECIAL SHEET
SHEET 3 OF 13



DATE PREPARED 9/17/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 13
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

MoDOT

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



PLAN OF ROCK WEIR (TYPICAL)



10' ±

1.5:1 SLOPE
FWHA TYPE VI ROCK BLANKET

GROUND LINE

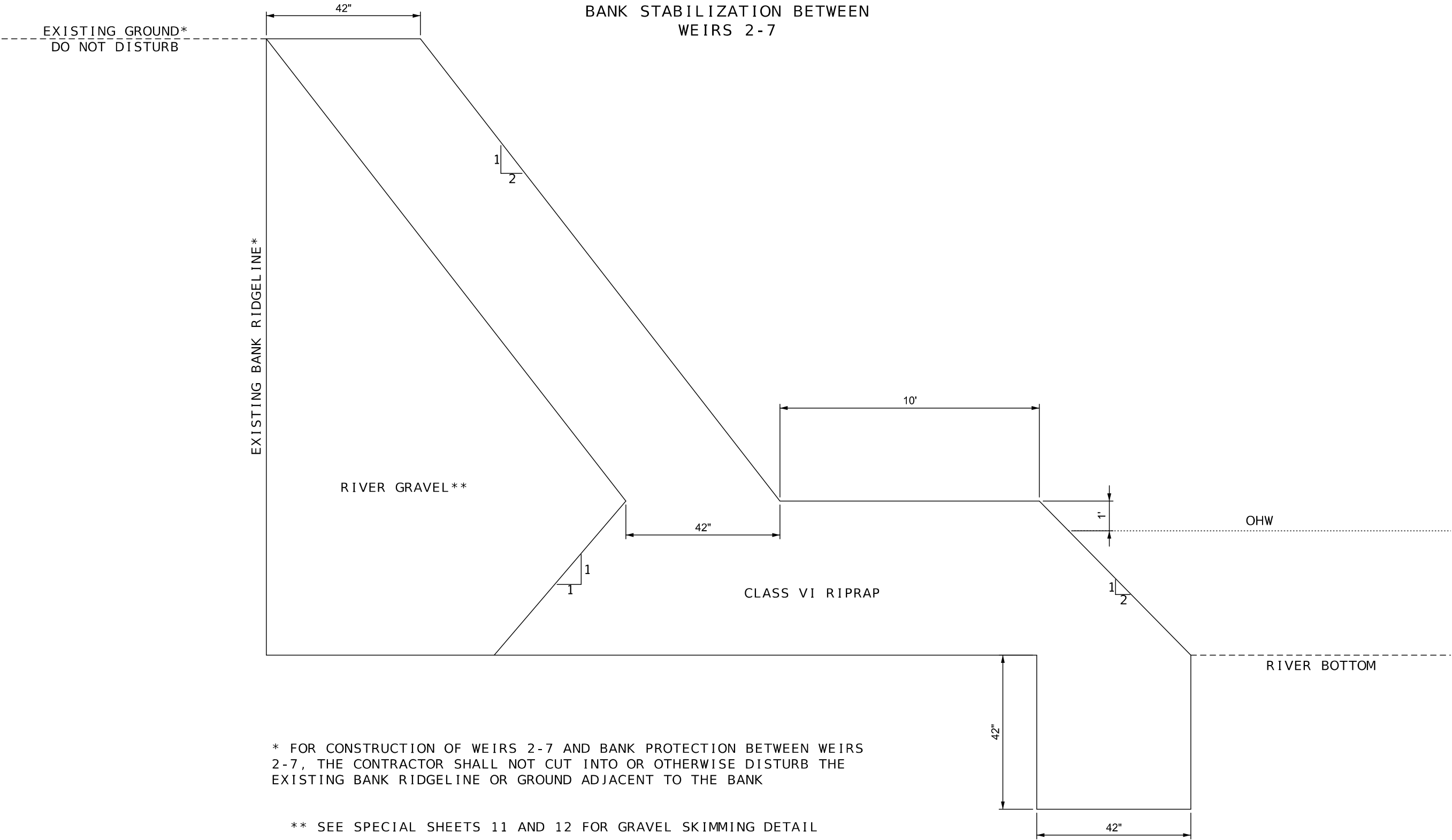
SECTION B-B

NOT TO SCALE

SPECIAL SHEET
SHEET 4 OF 13



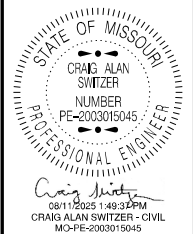
MODIFIED SECTION OF STREAM
BANK STABILIZATION BETWEEN
WEIRS 2-7



* FOR CONSTRUCTION OF WEIRS 2-7 AND BANK PROTECTION BETWEEN WEIRS 2-7, THE CONTRACTOR SHALL NOT CUT INTO OR OTHERWISE DISTURB THE EXISTING BANK RIDGELINE OR GROUND ADJACENT TO THE BANK

** SEE SPECIAL SHEETS 11 AND 12 FOR GRAVEL SKIMMING DETAIL

NOT TO SCALE
SPECIAL SHEETS
SHEET 8 OF 13



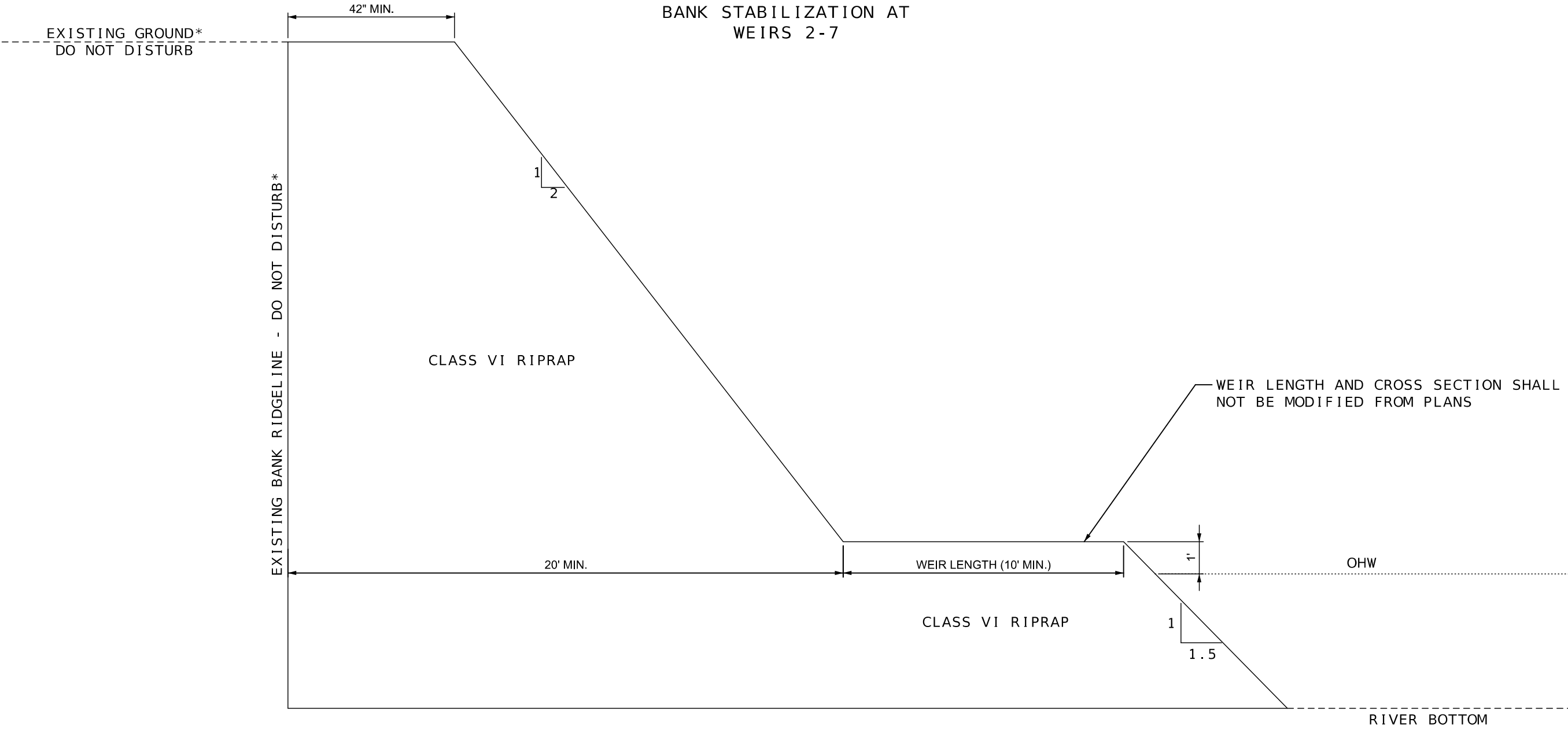
DATE PREPARED 8/6/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 18
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

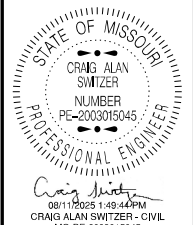
MODIFIED SECTION OF STREAM
BANK STABILIZATION AT
WEIRS 2-7



* FOR CONTRUCTION OF WEIRS 2-7 AND BANK PROTECTION
BETWEEN WEIRS 2-7, THE CONTRACTOR SHALL NOT CUT INTO OR
OTHERWISE DISTURB THE EXISTING BANK RIDGELINE OR GROUND
ADJACENT TO THE BANK

** SEE SPECIAL SHEET 3 FOR WEIR 1 DETAIL

NOT TO SCALE
SPECIAL SHEETS
SHEET 9 OF 13



DATE PREPARED 8/6/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 19
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

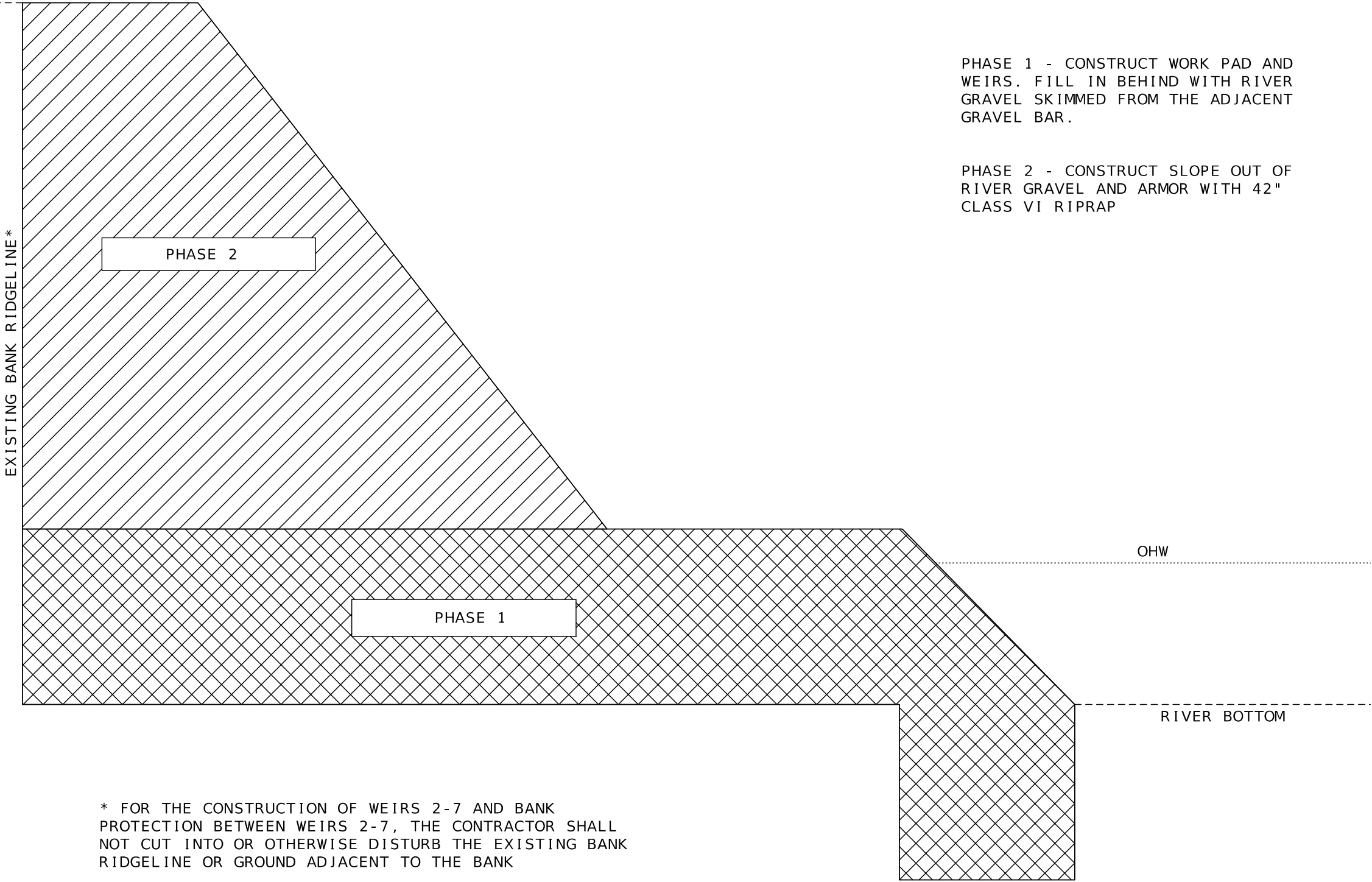
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

CONSTRUCTION PHASES OF
STREAM BANK STABILIZATION

-----EXISTING GROUND*
DO NOT DISTURB

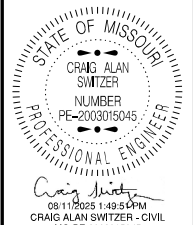


PHASE 1 - CONSTRUCT WORK PAD AND
WEIRS. FILL IN BEHIND WITH RIVER
GRAVEL SKIMMED FROM THE ADJACENT
GRAVEL BAR.

PHASE 2 - CONSTRUCT SLOPE OUT OF
RIVER GRAVEL AND ARMOR WITH 42"
CLASS VI RIPRAP

* FOR THE CONSTRUCTION OF WEIRS 2-7 AND BANK
PROTECTION BETWEEN WEIRS 2-7, THE CONTRACTOR SHALL
NOT CUT INTO OR OTHERWISE DISTURB THE EXISTING BANK
RIDGELINE OR GROUND ADJACENT TO THE BANK

NOT TO SCALE
SPECIAL SHEETS
SHEET 10 OF 13

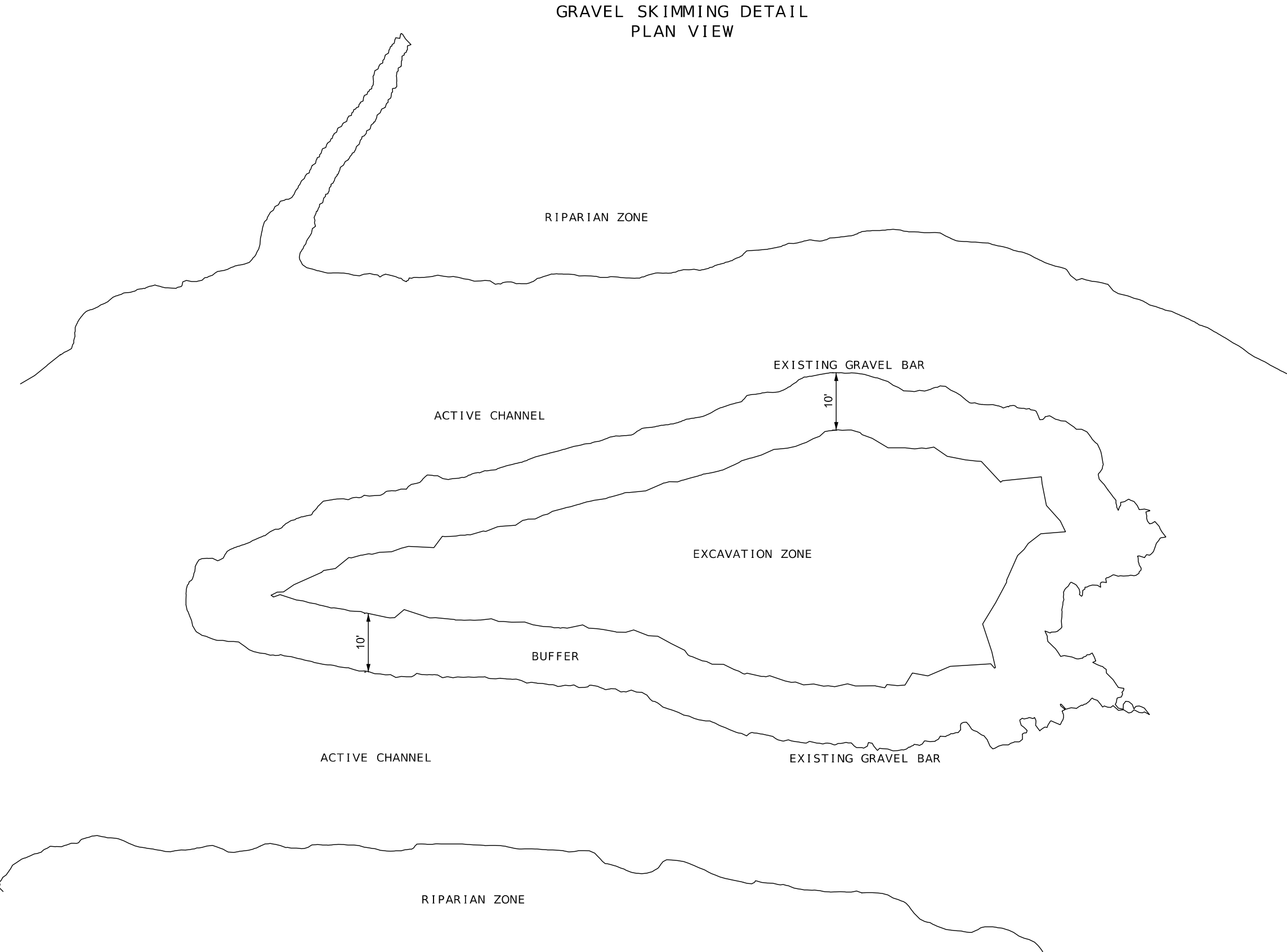


DATE PREPARED 8/6/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 20
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

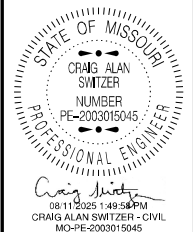
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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



GRAVEL SKIMMING DETAIL
PLAN VIEW



DATE PREPARED
8/6/2025

ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 21

COUNTY
MCDONALD

JOB NO.
J7S3379

CONTRACT ID.

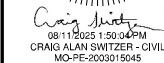
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

[illegible]

DATE PREPARED
8/6/2025

ROUTE	STATE
43	MO

DISTRICT	SHEET NO.
SW	22

COUNTY
MCDONALD

JOB NO.
J7S3379

CONTRACT ID.

PROJECT NO.

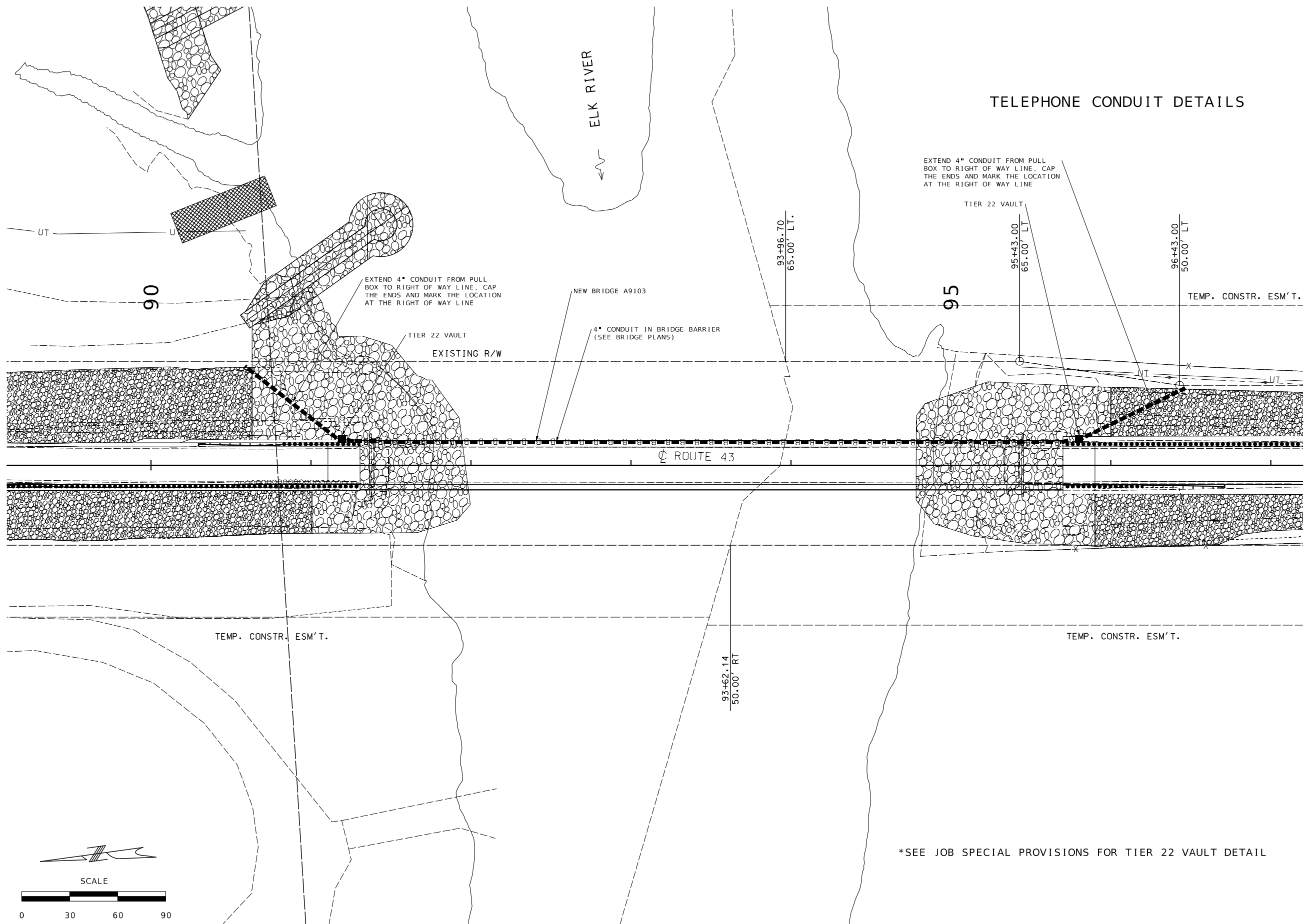
BRIDGE NO.

[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO. 65102

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TELEPHONE CONDUIT DETAILS

EXTEND 4" CONDUIT FROM PULL BOX TO RIGHT OF WAY LINE, CAP THE ENDS AND MARK THE LOCATION AT THE RIGHT OF WAY LINE

EXTEND 4" CONDUIT FROM PULL BOX TO RIGHT OF WAY LINE, CAP THE ENDS AND MARK THE LOCATION AT THE RIGHT OF WAY LINE

NEW BRIDGE A9103

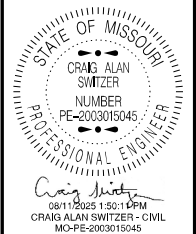
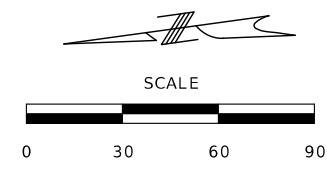
4" CONDUIT IN BRIDGE BARRIER (SEE BRIDGE PLANS)

TIER 22 VAULT

TEMP. CONSTR. ESM'T.

TEMP. CONSTR. ESM'T.

*SEE JOB SPECIAL PROVISIONS FOR TIER 22 VAULT DETAIL



DATE PREPARED 8/6/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 23
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

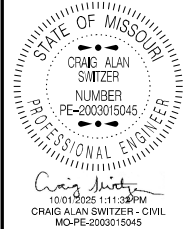
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

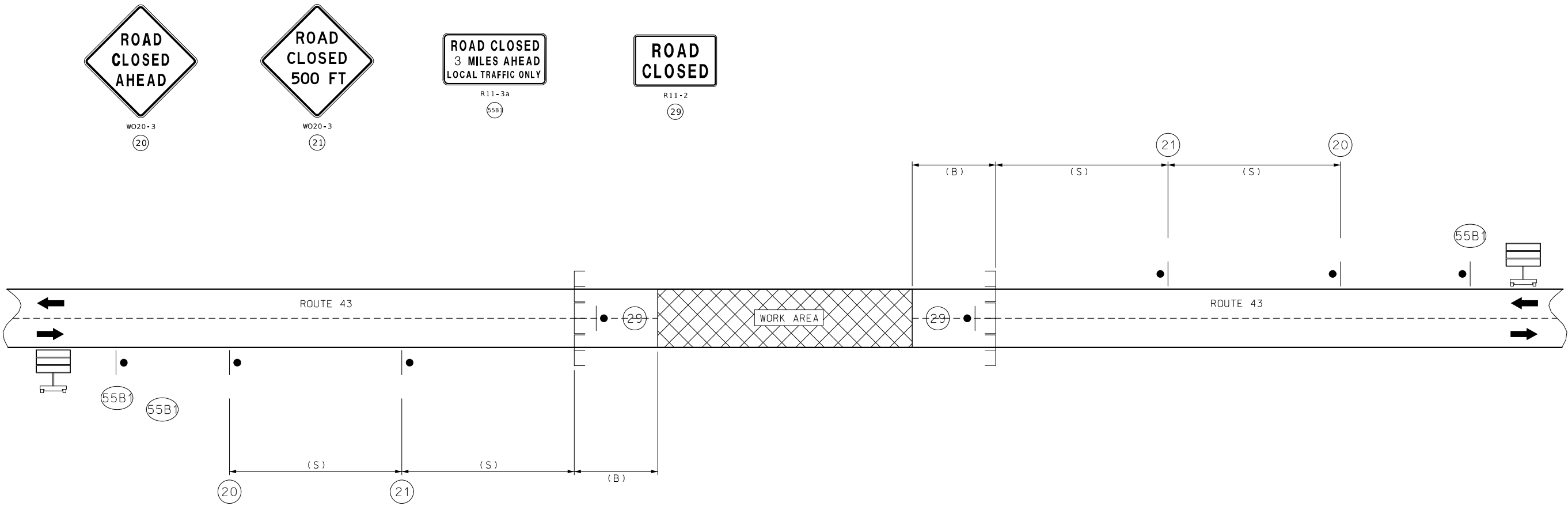


105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL PLAN
ROAD CLOSURE FOR BRIDGE REPLACEMENT



DATE PREPARED 10/1/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 25
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- TYPE III MOVEABLE BARRICADE
- CHANGEABLE MESSAGE SIGN (CMS)

NOTES:
CHANGEABLE MESSAGE SIGNS TO BE LOCATED AS APPROVED BY THE ENGINEER.

SPEED	SIGN SPACING (FT) (1)		OPTIONAL
PERMANENT POSTED (MPH)	UNDIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)	BUFFER SPACE LENGTH (FT) (B)
0-35	200	200	280
40-45	350	500	400
50-55	500	1000	560
60-70	1000	(SA)-1000 (SB)-1500 (SC)-2640	840

SPACING NOTES:
(1) SPACING BETWEEN SIGNS, BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER OR SIGNED CONDITION.

SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS, AS APPROVED BY ENGINEER.

NOT TO SCALE

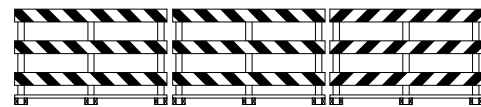
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
MO4 - 8	MO4 - 8	MO4 - 8	MO4 - 8	MO4 - 8
NORTH	NORTH	NORTH	NORTH	NORTH
M3 - 3	M3 - 3	M3 - 3	M3 - 4	M3 - 4
				
M1 - 5	M1 - 5	M1 - 5	M1 - 5	M1 - 5
				
M6 - 3	M5 - 1L	M6 - 1	M5 - 1R	M6 - 1
(50A)	(50B)	(50C)	(50D)	(50E)
DETOUR	DETOUR	DETOUR	DETOUR	DETOUR
MO4 - 8	MO4 - 8	MO4 - 8	MO4 - 8	MO4 - 8
SOUTH	SOUTH	SOUTH	SOUTH	SOUTH
M3 - 3	M3 - 3	M3 - 3	M3 - 4	M3 - 4
				
M1 - 5	M1 - 5	M1 - 5	M1 - 5	M1 - 5
				
M6 - 3	M5 - 1L	M6 - 1	M5 - 1R	M6 - 1
(50F)	(50G)	(50H)	(50I)	(50J)

SIGNS MAY BE PRODUCED BY EITHER PROCESSES: APPROPRIATE CARDINAL DIRECTIONS, ROUTE SHIELDS, AND DIRECTIONAL ARROWS MAY BE SHEETED ON THE SIGN BLANKS AS ONE HOMOGENOUS PRODUCT OR APPROPRIATE CARDINAL DIRECTIONS, ROUTE SHIELDS, AND DIRECTIONAL ARROWS PLATES MAY BE CONSTRUCTED AND MAY BE BOLTED ON THE DETOUR BLANK SIGNS.



GENERAL NOTES:

- 1) SIGN LOCATIONS TO BE APPROVED BY ENGINEER.
- 2) DISTANCE MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS WITH PERMISSION OF THE ENGINEER.
- 3) NO DIRECT PAY WILL BE MADE FOR RELOCATION OF TCP SIGNS AND DEVICES.
- 4) ANY EXISTING SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE COVERED OR REMOVED.
- 5) ALL TRAFFIC CONTROL ITEMS WHICH ARE NOT INCLUDED IN THE PAY ITEM ARE TO BE CONSIDERED INCIDENTAL.
- 6) MAINTAIN ACCESS TO ALL ENTRANCES AT ALL TIMES.
- 7) CHANGEABLE MESSAGE SIGNS TO BE PLACED AT LOCATIONS DETERMINED BY ENGINEER.



61



18



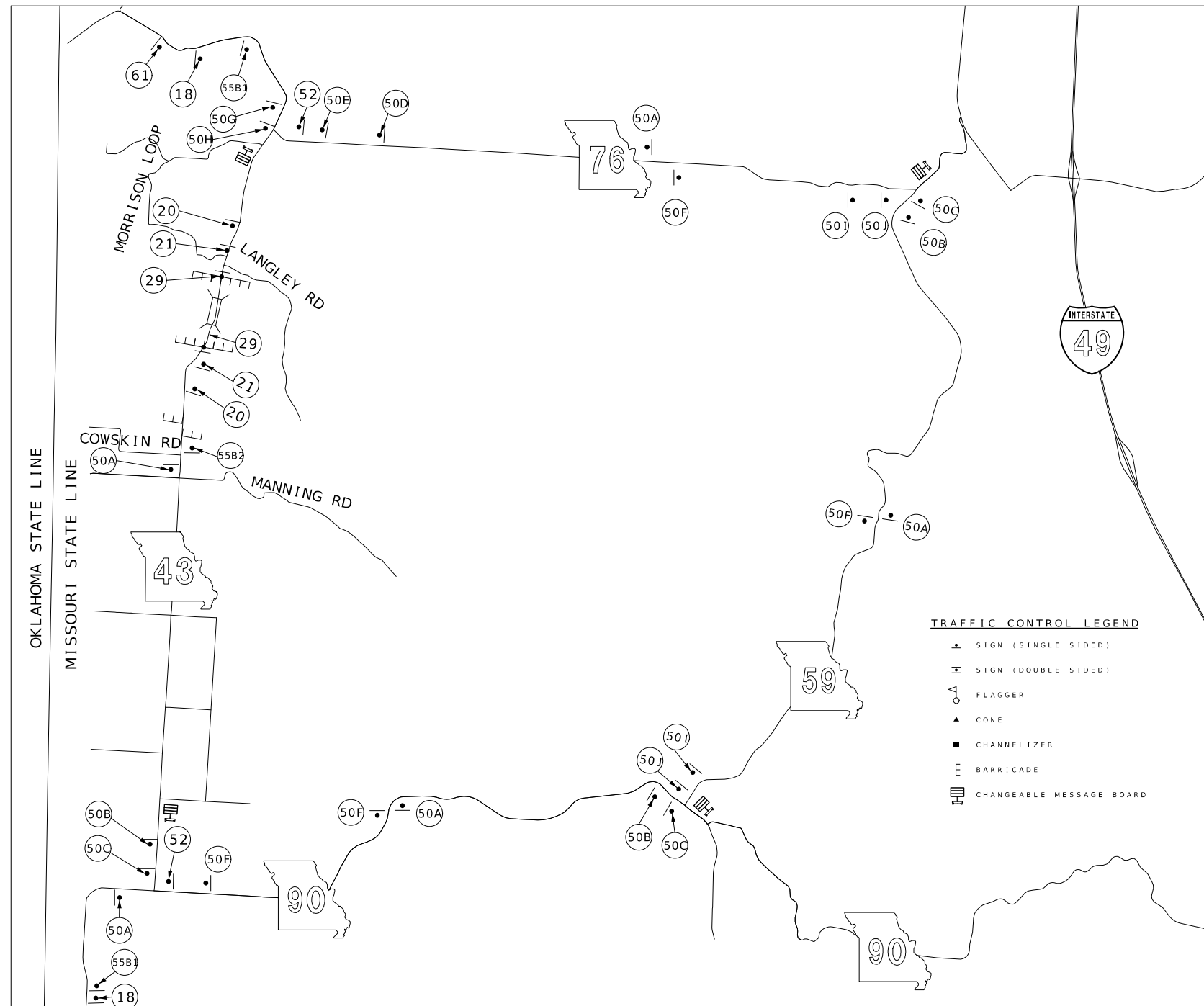
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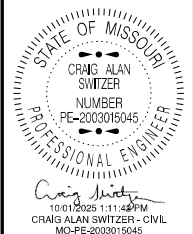
(21)



52



TRAFFIC CONTROL
SHEET 3 OF 5



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DESCRIPTION

DATE _____

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

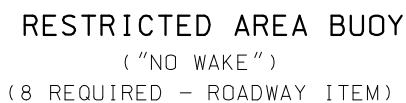
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



RADIUS = 6"
BORDER = 2"

VERTICAL SPACING

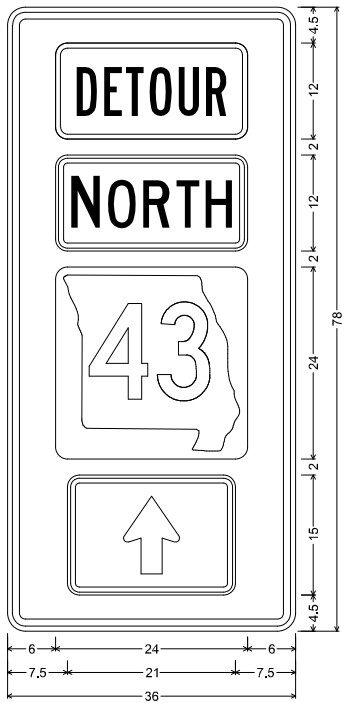
16.00" SPACE AND BORDER
16.00" LINE 1
13.00" SPACE
16.50" LINE 2
16.00" SPACE AND BORDER



TRAFFIC CONTROL
SHEET 4 OF 5

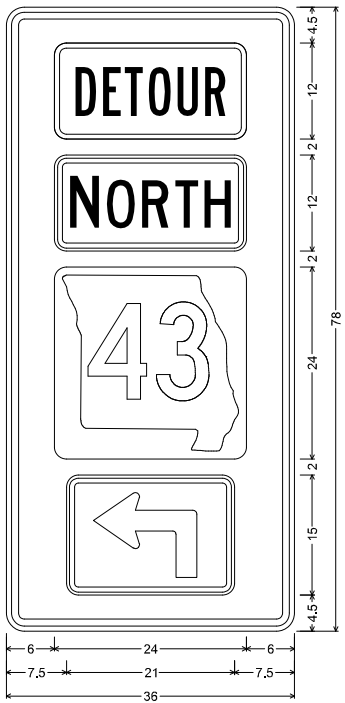
COLOR:
BACKGROUND - WHITE
LEGEND - BLACK
2" REFLECTIVE BAND AND SYMBOL - INTERNATIONAL ORANGE





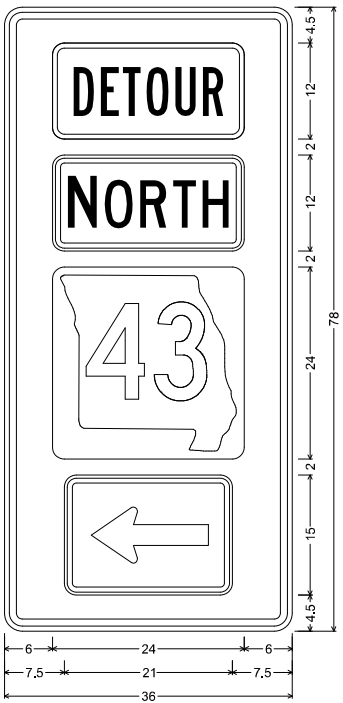
MO4-11 SHF-FLAT SHEET FLUORESCENT;
2,250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

6,000	SIGN NO.	50A
6,000	STATION	
6,000	ROADWAY	
7,500		



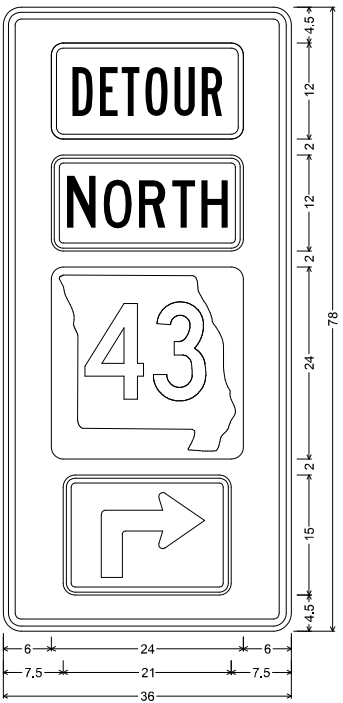
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Table of letter and object lefts

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6,000	ROADWAY	
7,500		



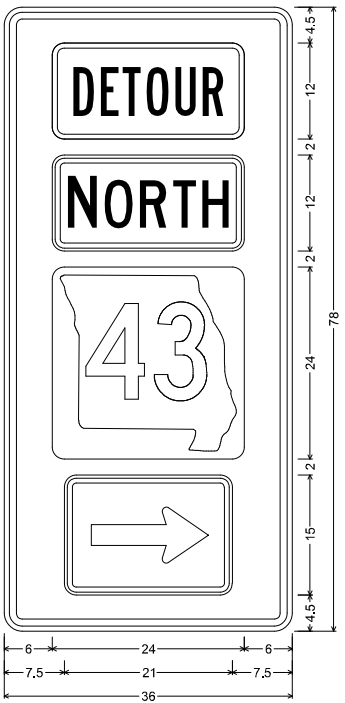
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6,000	ROADWAY	
7,500		



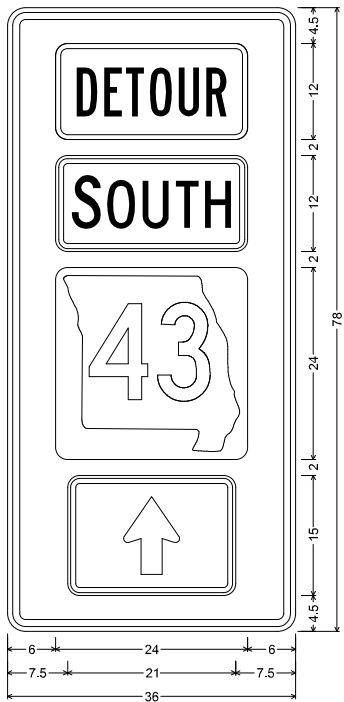
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6,000	ROADWAY	
7,500		



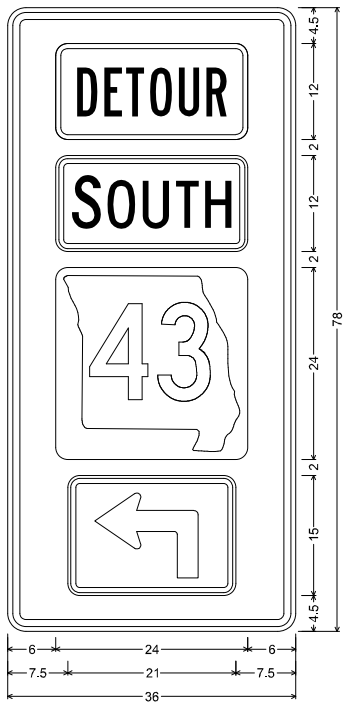
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Table of letter and object lefts

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6,000	STATION	
6,000	ROADWAY	
7,500		



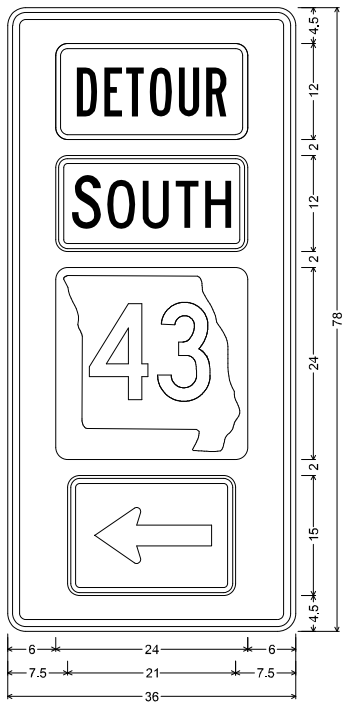
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Table of letter and object lefts

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6,000	ROADWAY	
7,500		



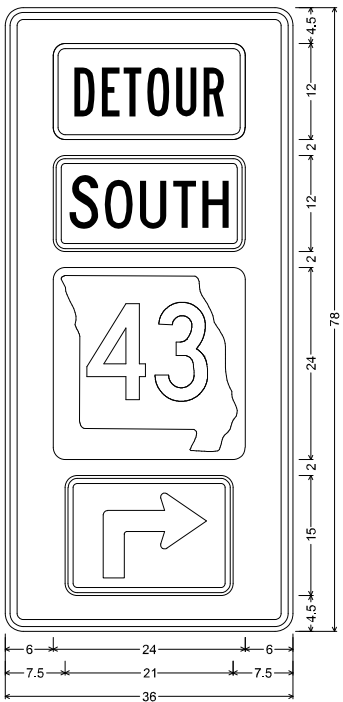
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Table of letter and object lefts

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6,000	STATION	
6,000	ROADWAY	
7,500		



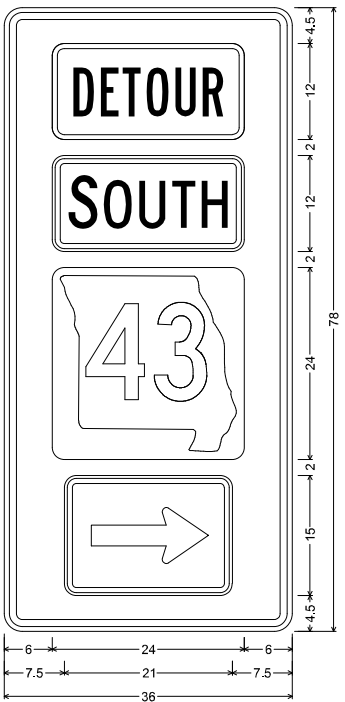
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2,250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

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6,000	STATION	
6,000	ROADWAY	
7,500		



MO4-11 SHF-FLAT SHEET FLUORESCENT;
2,250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

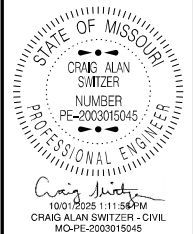
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6,000	ROADWAY	
7,500		



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Table of letter and object lefts

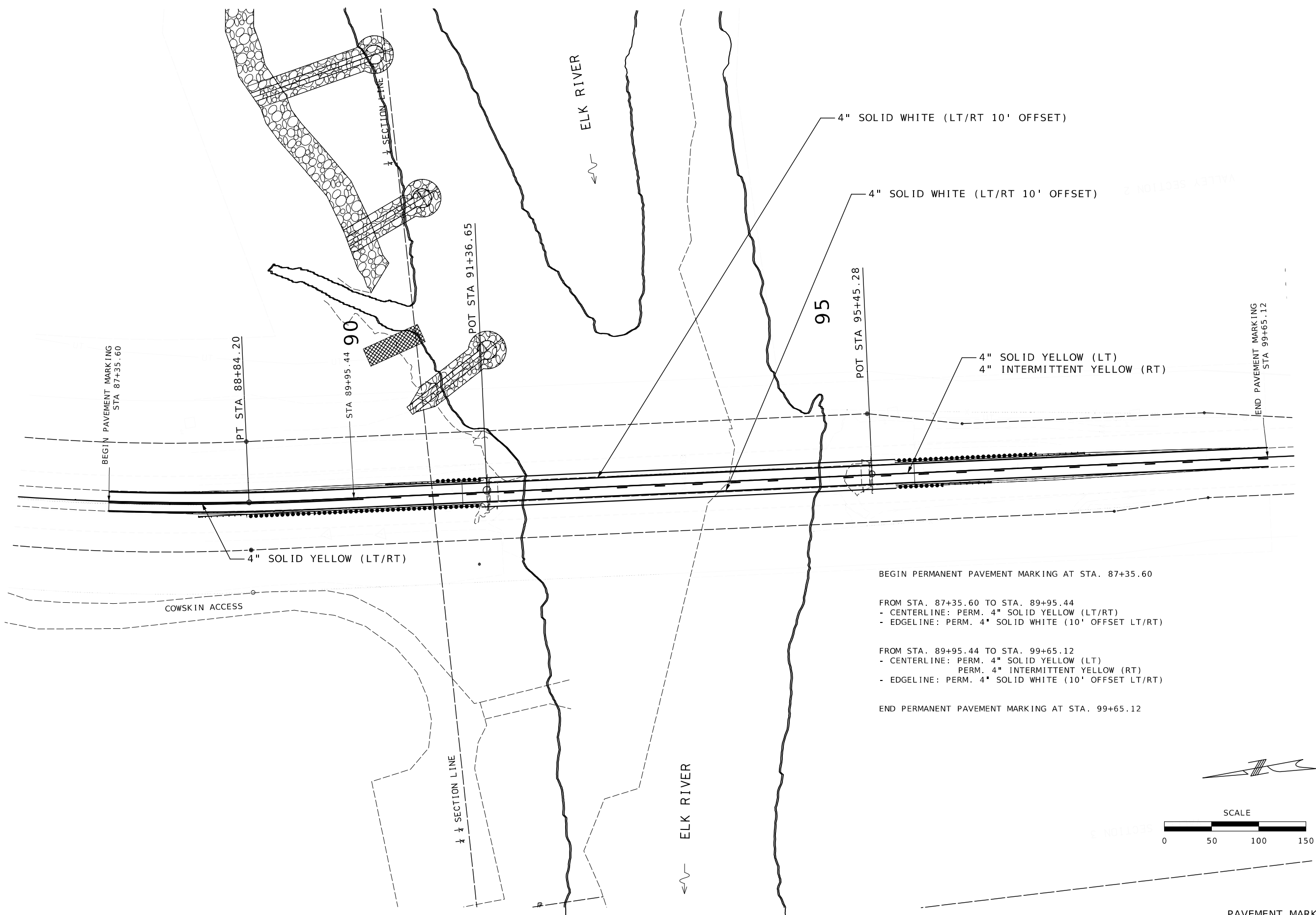
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6,000	STATION	
6,000	ROADWAY	
7,500		

TRAFFIC CONTROL SHEET
SHEET 5 OF 5



DATE PREPARED 10/1/2025	
ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 28
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE



BEGIN PERMANENT PAVEMENT MARKING AT STA. 87+35.60

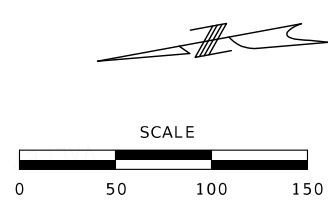
FROM STA. 87+35.60 TO STA. 89+95.44

- CENTERLINE: PERM. 4" SOLID YELLOW (LT/RT)
- EDGELINE: PERM. 4" SOLID WHITE (10' OFFSET LT/RT)

FROM STA. 89+95.44 TO STA. 99+65.12

- CENTERLINE: PERM. 4" SOLID YELLOW (LT)
- PERM. 4" INTERMITTENT YELLOW (RT)
- EDGELINE: PERM. 4" SOLID WHITE (10' OFFSET LT/RT)

END PERMANENT PAVEMENT MARKING AT STA. 99+65.12

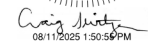


STATE OF MISSOURI

CRAIG ALAN SWITZER

NUMBER
PE-2003015045

PROFESSIONAL ENGINEER



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CRAIG ALAN SWITZER - CIVIL
MO-PE-2003015045

DATE PREPARED
8/6/2025

ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 29

COUNTY
MCDONALD

JOB NO.
J753379

CONTRACT ID.

PROJECT NO.

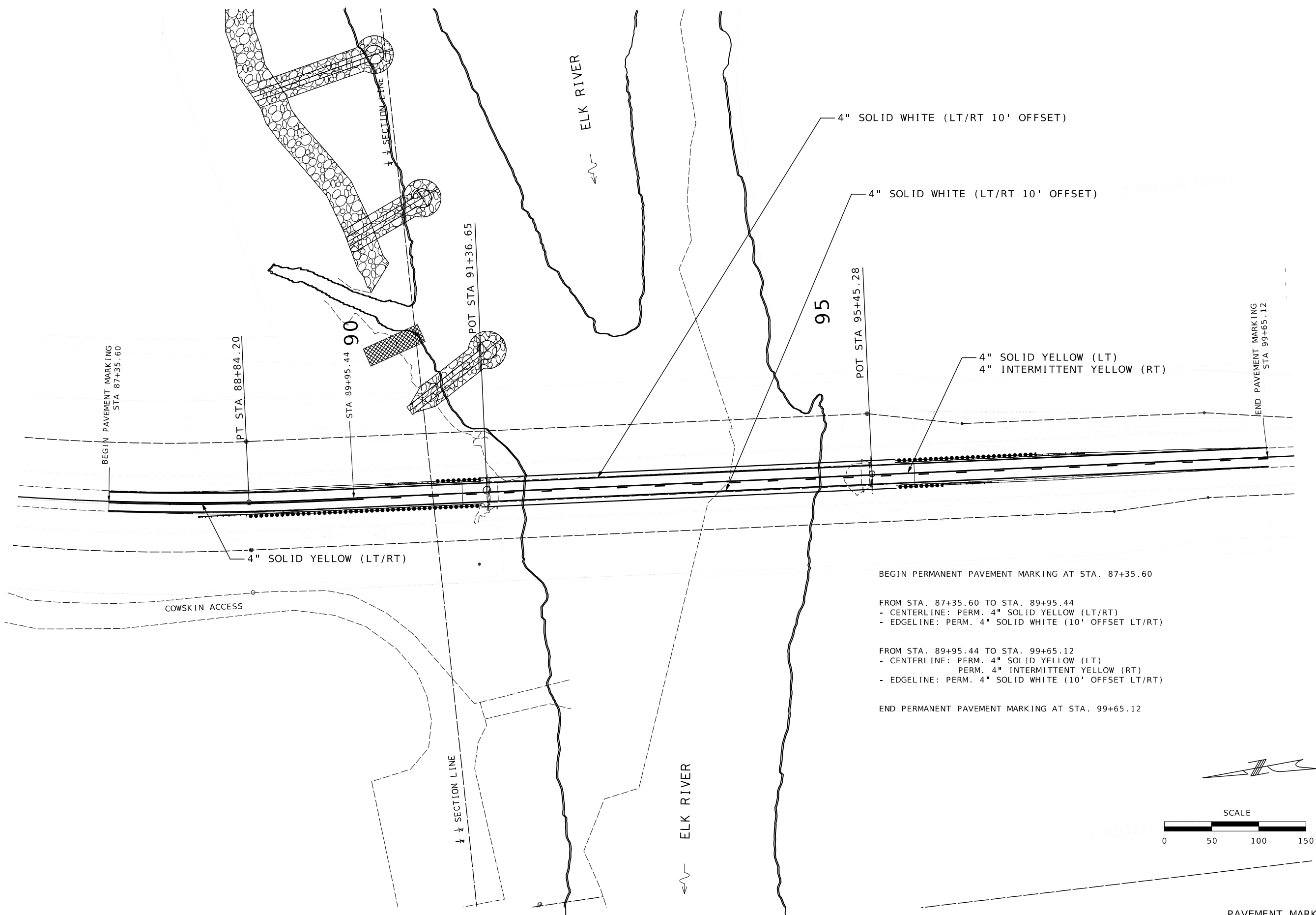
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



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



BEGIN PERMANENT PAVEMENT MARKING AT STA. 87+35.60

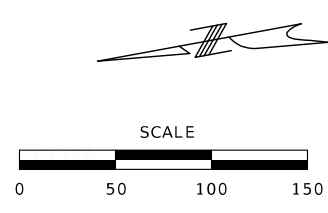
FROM STA. 87+35.60 TO STA. 89+95.44

- CENTERLINE: PERM. 4" SOLID YELLOW (LT/RT)
- EDGELINE: PERM. 4" SOLID WHITE (10' OFFSET LT/RT)

FROM STA. 89+95.44 TO STA. 99+65.12

- CENTERLINE: PERM. 4" SOLID YELLOW (LT)
- PERM. 4" INTERMITTENT YELLOW (RT)
- EDGELINE: PERM. 4" SOLID WHITE (10' OFFSET LT/RT)

END PERMANENT PAVEMENT MARKING AT STA. 99+65.12

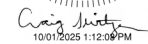


STATE OF MISSOURI

CRAIG ALAN SWITZER

NUMBER
PE-2003015045

PROFESSIONAL ENGINEER



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CRAIG ALAN SWITZER - CIVIL
MO-PE-2003015045

DATE PREPARED
9/16/2025

ROUTE 43	STATE MO
DISTRICT SW	SHEET NO. 30

COUNTY
MCDONALD

JOB NO.
J753379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

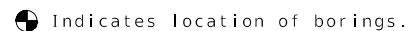
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

GENERAL ELEVATION



The locations of all subsurface borings for this structure are shown on the plan sheet(s) for this structure. The boring data for all locations indicated, as well as any other boring logs or other factual records of subsurface data and investigations performed by the department for the design of the project, are shown on Sheet No. 30 and may be included in the Electronic Bridge Deliverables. They will also be available from the Project Contact upon written request. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the district or elsewhere.

The Commission does not represent or warrant that any such boring data accurately depicts the conditions to be encountered in constructing this project. A contractor assumes all risks it may encounter in basing its bid prices, time or schedule of performance on the boring data depicted here or those available from the district, or on any other documentation not expressly warranted, which the contractor may obtain from the Commission.

For General Notes, Hydrologic Data, Foundation Data, Estimated Quantities, Estimated Quantities for Slab on Concrete NU-Girder and Location Sketch, see Sheet No. 2.

Roadway fill shall be completed to the final roadway section and up to the elevation of the bottom of the concrete beam within the limits of the structure and for not less than 25 feet in back of the fill face of the end bents before any piles are driven for any bents falling within the embankment section.

Bendway weirs not shown for clarity (Roadway Item).

Extend the upstream rock blanket 50' (min.) behind the front face of end bents (Roadway Item).

Incorporate rock blanket at End Bent No. 1 into Weir No. 1 of the streambank stabilization. See Roadway Plans.

B.M. #1: Approximately 18 feet north of first entrance south of bridge A0836. Sta. 109+21.51; 35.04 RT; Elev. 788.72

B.M. #2: Approximately 60 feet west of north end of bridge A0836. Sta. 91+25.20; 75.86 RT; Elev. 770.27

ROUTE 43 FROM ROUTE 76 TO ROUTE O
ABOUT 1.7 MILES SOUTH OF ROUTE 76
BEGINNING STATION 91+30.60

GENERAL NOTES:

Design Specifications:

2020 AASHTO LRFD Bridge Design Specifications (9th Ed.)
2011 AASHTO Guide Specifications for LRFD Seismic Bridge Design (2nd Ed.)
and 2014 Interim Revisions (Seismic Details)

Seismic Design Category = A

Design Loading:

Vehicular = HL-93
Future Wearing Surface = 35 lb/sf
Earth = 120 lb/cf
Equivalent Fluid Pressure = 45 lb/cf (Min.)
Superstructure: Non-Composite for dead load.
Continuous Composite for live load.

Design Unit Stresses:

Class B Concrete (Substructure) f'c = 3,000 psi
Class B-2 Concrete (Drilled Shafts & Rock Sockets) f'c = 4,000 psi
Class B-1 Concrete (Barrier) f'c = 4,000 psi
Class B-2 Concrete (Superstructure except
Prestressed Girders and Barrier) f'c = 4,000 psi
Reinforcing Steel (Grade 60) fy = 60,000 psi
Structural Steel HP Pile (ASTM A709 Grade 50) fy = 50,000 psi

For precast prestressed panel stresses, see Sheet No. 18.
For prestressed girder stresses, see Sheets No. 13 thru 16.

Neoprene Pads:

Neoprene bearing pads shall be 60 durometer and shall be in
accordance with Sec 716.

Joint Filler:

All joint filler shall be in accordance with Sec 1057 for
preformed sponge rubber expansion and partition joint filler,
except as noted.

Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1 1/2", unless
otherwise shown.

Traffic Handling:

Structure to be closed during construction. Traffic to be
maintained on other routes during construction. See Roadway plans
for traffic control.

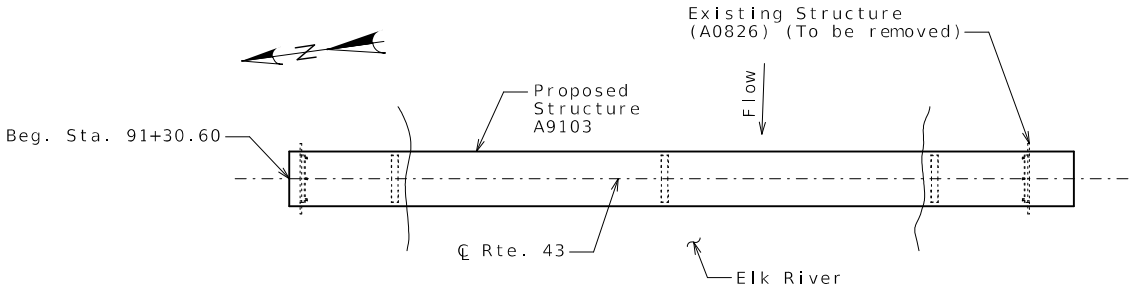
Estimated Quantities for Slab on Concrete NU-Girder		
Item		Total
Class B-2 Concrete	cu. yard	395
Reinforcing Steel (Epoxy Coated)	pound	144,930

The table of Estimated Quantities for Slab on Concrete NU-Girder
represents the quantities used by the State in preparing the cost
estimate for concrete slabs. The area of the concrete slab will
be measured to the nearest square yard longitudinally from end of
slab to end of slab and transversely from out to out of bridge
slab (or with the horizontal dimensions as shown on the plan of
slab). Payment for prestressed panels, conventional forms, all
concrete and epoxy coated reinforcing steel will be considered
completely covered by the contract unit price for the slab.
Variations may be encountered in the estimated quantities but the
variations cannot be used for an adjustment in the contract unit
price.

Method of forming the slab shall be as shown on the plans and in
accordance with Sec 703. All hardware for forming the slab to be
left in place as a permanent part of the structure shall be
coated in accordance with ASTM A123 or ASTM B633 with a thickness
class SC 4 and a finish type I, II or III.

Class B-2 Concrete quantity is based on minimum top flange
thickness and minimum joint material thickness.

The prestressed panel quantities are not included in the table of
Estimated Quantities for Slab on Concrete NU-Girder.



LOCATION SKETCH

Bendway weirs not shown for clarity.

Estimated Quantities				
Item		Substr.	Superstr.	Total
Class 1 Excavation	cu. yard	80		80
Removal of Bridges (A0826)	lump sum			1
Bridge Approach Slab (Minor)	sq. yard		126	126
Drilled Shafts (4 ft. 6 in. Dia.)	linear foot	56.0		56.0
Rock Sockets (4 ft. 0 in. Dia.)	linear foot	72.0		72.0
Video Camera Inspection	each	6		6
Foundation Inspection Holes	linear foot	132.0		132.0
Sonic Logging Testing	each	6		6
Galvanized Structural Steel Piles (12 in.)	linear foot	300		300
Pile Point Reinforcement	each	10		10
Class B Concrete (Substructure)	cu. yard	138.8		138.8
Type D Barrier	linear foot		919	919
Slab on Concrete NU-Girder	sq. yard		1494	1494
NU 43, Prestressed Concrete NU-Girder	linear foot		1740	1740
Reinforcing Steel (Bridges)	pound	39,900		39,900
Conduit System on Structure	lump sum			1
Slab Drain	each		80	80
Vertical Drain at End Bents	each	2		2
Plain Neoprene Bearing Pad	each		8	8
Laminated Neoprene Bearing Pad	each		24	24

All concrete above the construction joint in the end bents is included in the
Estimated Quantities for Slab on Concrete NU-Girder.

All reinforcement in the end bents is included in the Estimated Quantities for
Slab on Concrete NU-Girder.

All reinforcement in the intermediate bent concrete diaphragms except
reinforcement embedded in the beam cap is included in the Estimated Quantities
for Slab on Concrete NU-Girder.

All concrete above the intermediate beam cap is included in the Estimated
Quantities for Slab on Concrete NU-Girder.

Foundation Data						
Type	Design Data	Bent Number				
		1	2	3	4	5
Load Bearing Pile	Pile Type and Size	HP 12x53	-	-	-	HP 12x53
	Number	5	-	-	-	5
	Approximate Length Per Each	ft 35	-	-	-	25
	Pile Point Reinforcement	ea All	-	-	-	All
	Min. Galvanized Penetration (Elev.)	ft Full Length	-	-	-	Full Length
	Pile Driving Verification Method	DF	-	-	-	DF
	Resistance Factor	0.4	-	-	-	0.4
	Minimum Nominal Axial Compressive Resistance	kip 578	-	-	-	578
Rock Socket	Number	ea -	2	2	2	-
	Foundation Material	-	Strong Rock	Strong Rock	Strong Rock	-
	Elevation Range	ft -	748.5-718.5	748-721	749.5-722.5	-
	Minimum Nominal Axial Compressive Resistance (Side Resistance)	ksf -	22.7	21.6	22.8	-
	Minimum Nominal Axial Compressive Resistance (Tip Resistance)	ksf -	-	-	-	-

DF = FHWA-modified Gates Dynamic Pile Formula

Minimum Nominal Axial Compressive Resistance = $\frac{\text{Maximum Factored Loads}}{\text{Resistance Factor}}$
(Side Resistance + Tip Resistance)

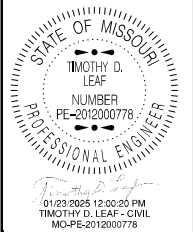
All piles shall be galvanized down to the minimum galvanized penetration (elevation).

Pile point reinforcement need not be galvanized. Shop drawings will not be required for pile point
reinforcement.

The contractor shall make every effort to achieve the minimum galvanized penetration (elevation)
shown on the plans for all piles. Deviations in penetration less than 5 feet of the minimum will be
considered acceptable provided the contractor makes the necessary corrections to ensure the minimum
penetration is achieved on subsequent piles.

HP piles are anticipated to be driven to refusal on rock. Review all borings for depth of rock and
restrict driving as appropriate to comply with hard rock driving criteria in accordance with Sec 702.
When pile refusal on rock occurs, as approved by the engineer, the minimum nominal axial compressive
resistance is verified and no additional pile driving verification method is required.

Hydrologic Data
Drainage Area = 853 mi ²
Design Flood Frequency = 50 years
Design Flood Discharge = 87,300 cfs
Design Flood (D.F.) Elevation = 779.6
Base Flood (100-year)
Base Flood Elevation = 781.2
Base Flood Discharge = 102,000 cfs
Estimated Backwater = 1.8 ft
Average Velocity thru Opening = 9.7 ft/s
Freeboard (50-year)
Freeboard = 2.1 ft
Roadway Overtopping
Overtopping Flood Discharge = 98,500 cfs
Overtopping Flood Frequency = 88 years
Overtopping Flood Elevation = 781.3



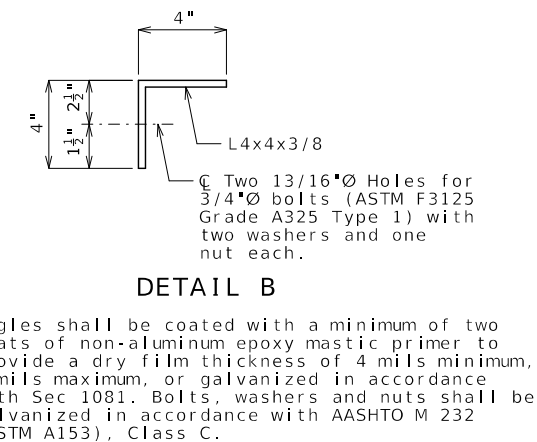
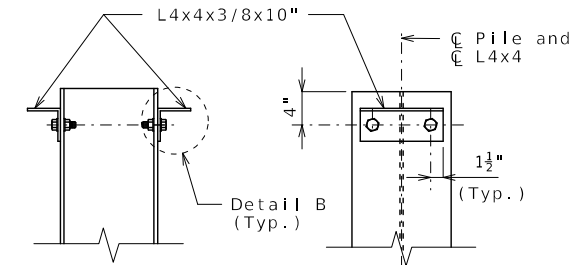
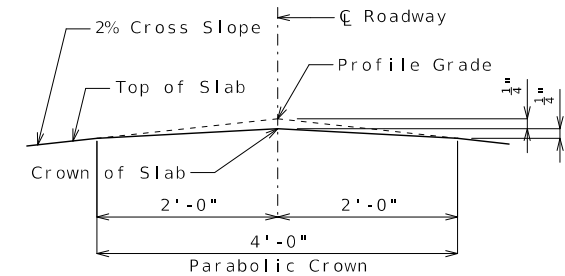
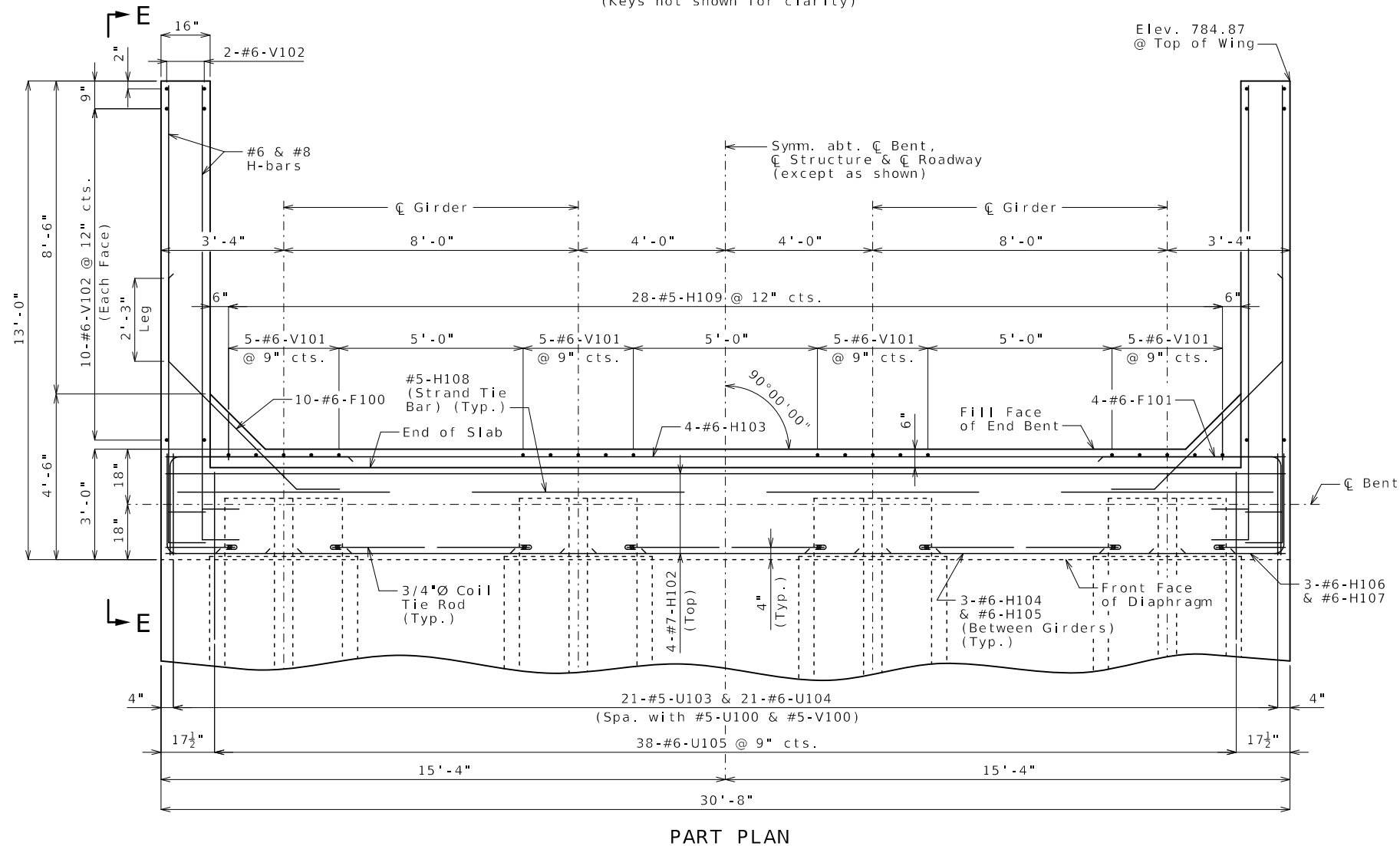
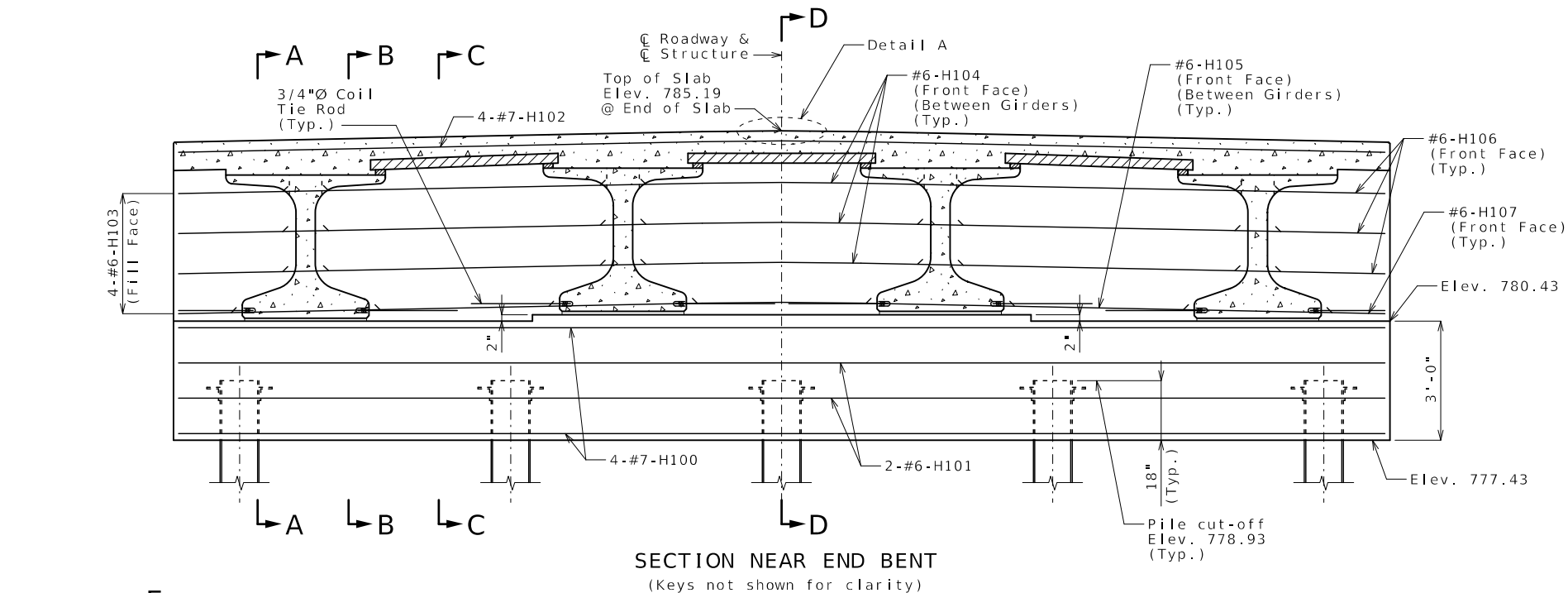
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ROUTE 43	STATE MO
DISTRICT BR	SHEET NO. 2
COUNTY MCDONALD	
JOB NO. J7S3379	
CONTRACT ID.	
PROJECT NO.	

BRIDGE NO. A9103

DESCRIPTION	DATE					

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)



Notes:

For Sections A-A, B-B, C-C & D-D and Elevation E-E, see
Sheet No. 5.

For details of End Bents No. 1 & 5 not shown, see Sheets No. 3 & 5.

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

Strands at end of girders shall be field bent or, if necessary, cut in field to maintain 1 1/2" minimum clearance to fill face of end bent.

For location of Coil Ties & #5-H108 Strand Tie Bars, see
Sheets No. 13 & 14.

The U bars and #5-H109 shall be placed parallel to C Roadway.

The #6-F100 bars shall be bent in field to clear girders.



01/23/2025 12:00:47 PM
TIMOTHY D. LEAF - CIVIL
MO-PE-2012000778

DATE PREPARED

1 / 23 / 2025

ROUTE	STATE
12	10

43	MO
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DISTRICT SHEET NO.

BR	4
COUNTY	

COUNTY
MCDONALD

MCDONALD	
JOB NO.	

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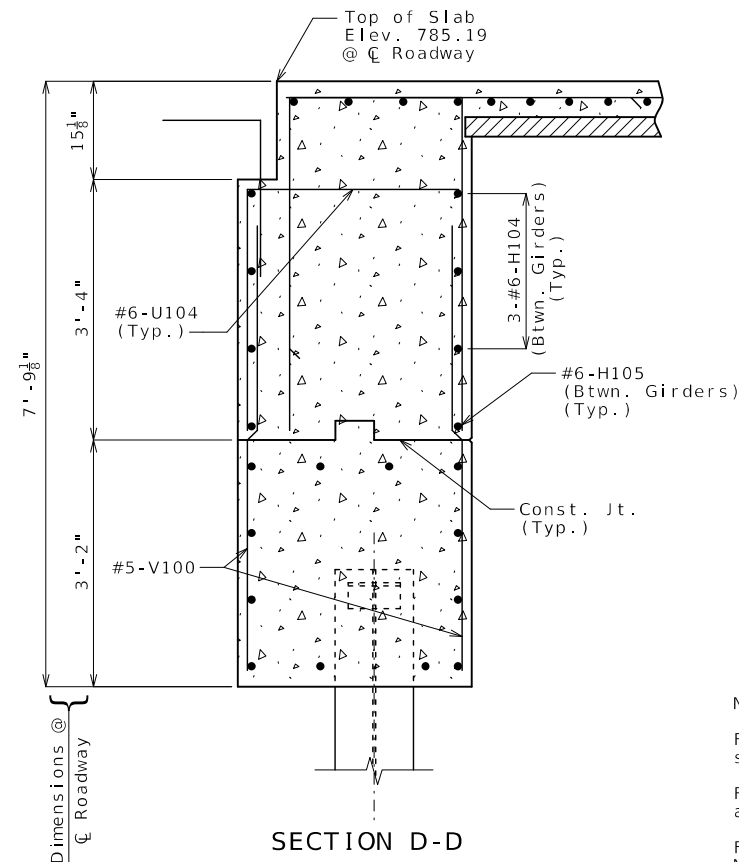
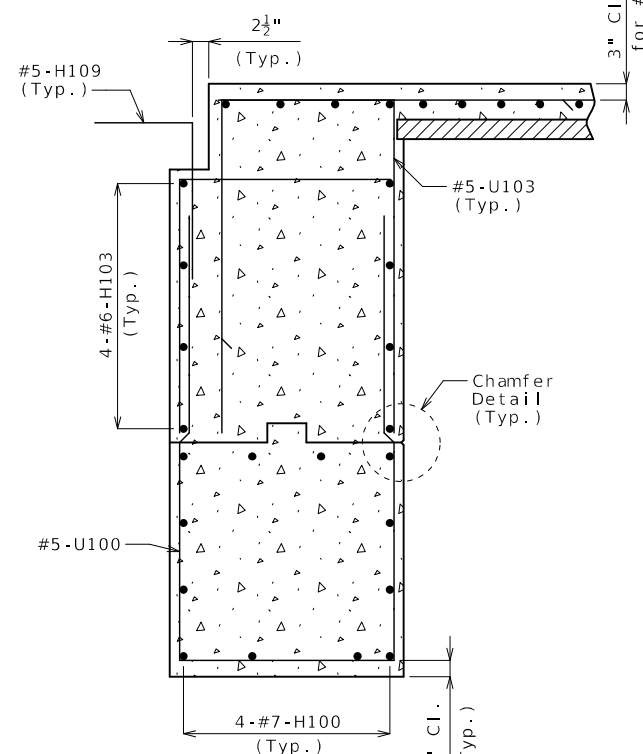
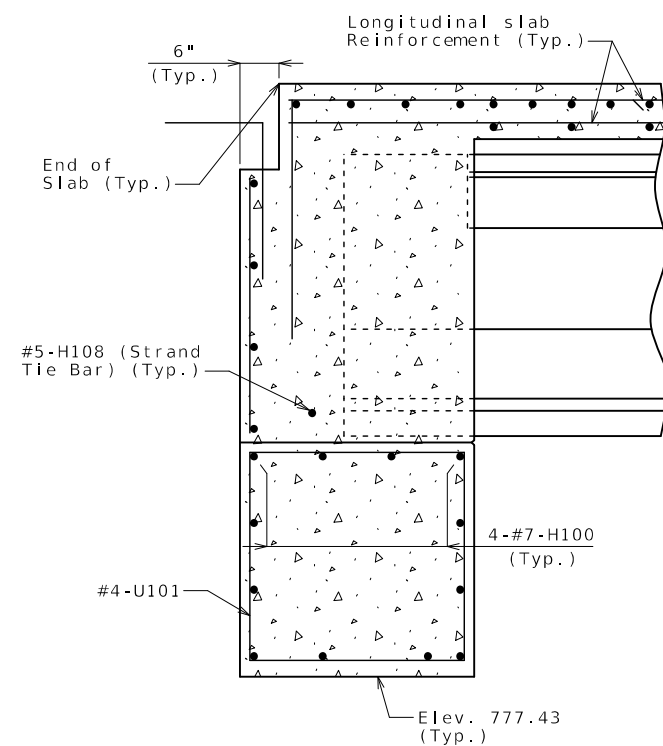
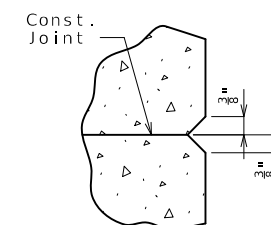
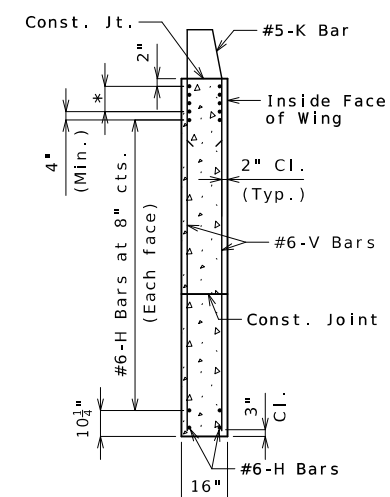
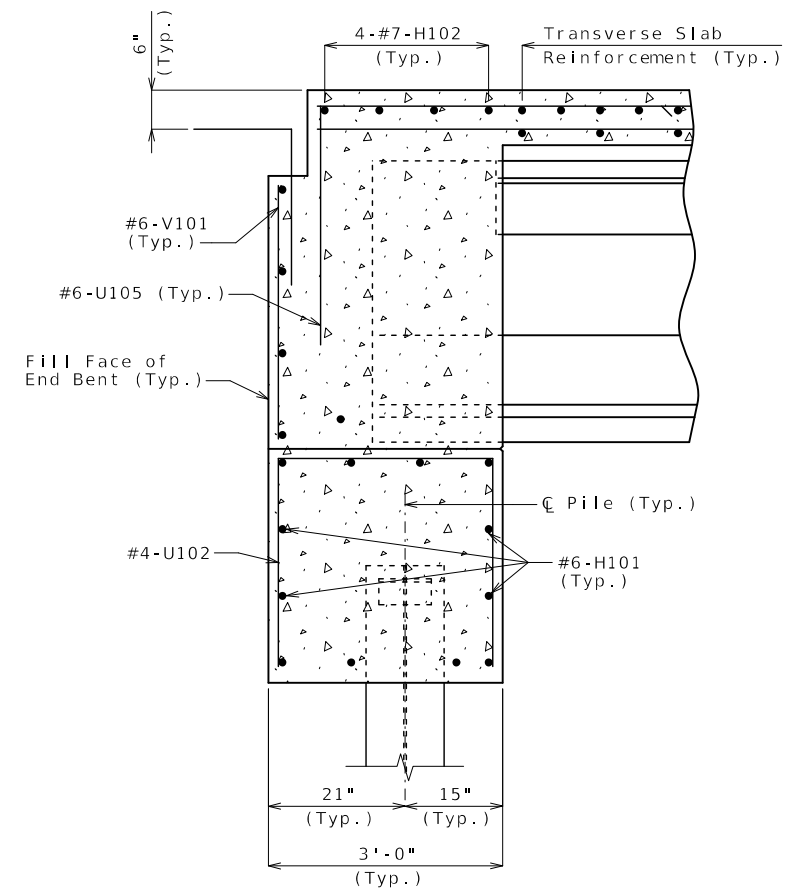
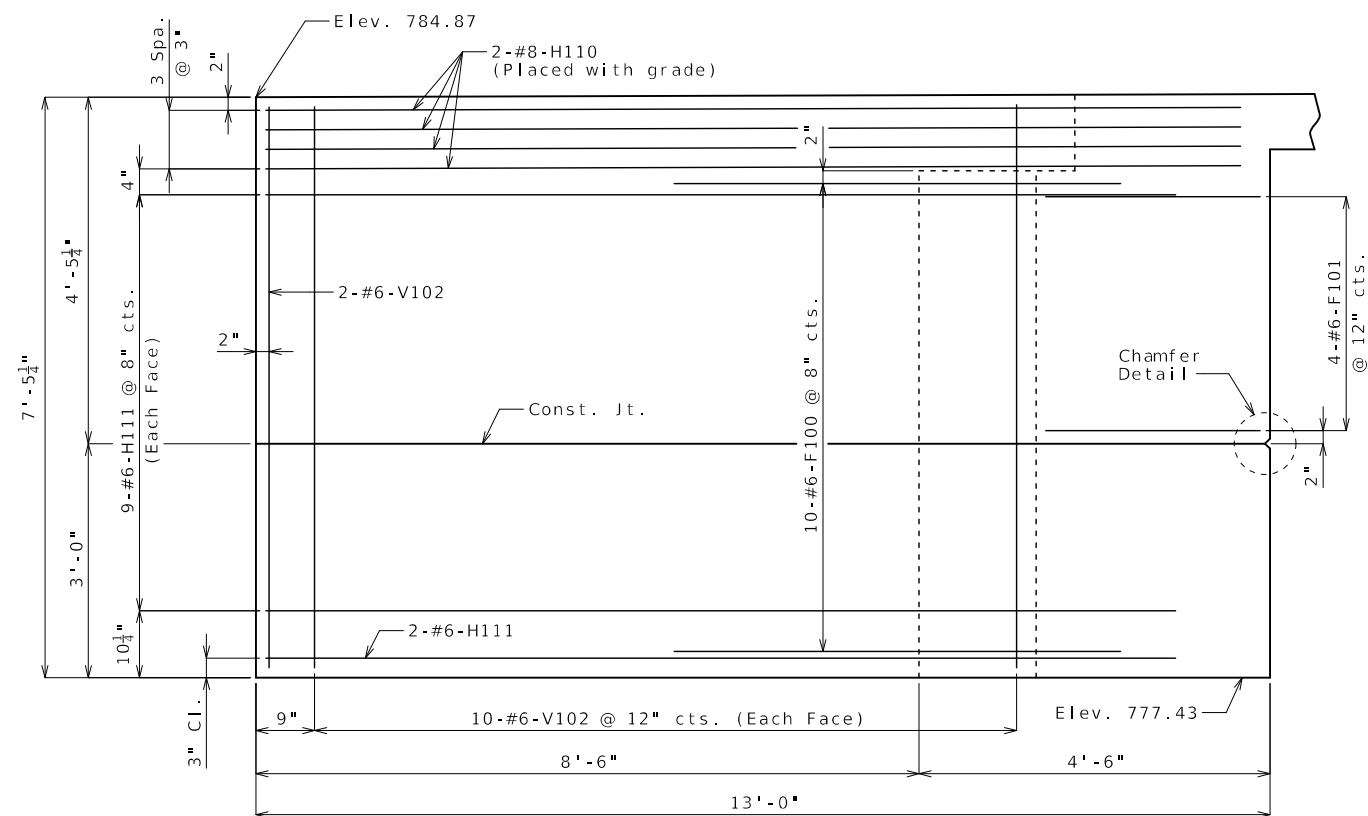
**MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION**

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JEFFERSON CITY, MO 65102
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MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

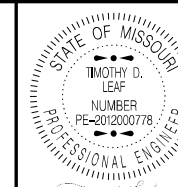


Notes:

For details of End Bents No. 1 & 5 not shown,
see Sheets No. 3 & 4.

For locations of Sections A-A, B-B, C-C & D-D
and Elevation E-E, see Sheet No. 4.

For reinforcement of the barrier, see Sheet
No. 24.



TIMOTHY D.
LEAF
NUMBER
PE-201200077

PROFESSIONAL E

01/23/2025 12:00:5
TIMOTHY D. LEAF -
MO-PE-20120007

DATE PREPARED
1/23/20

ROUTE	
43	

DISTRICT	SH
BR	

COUNTY
MCDONALD

JOB NO.
J7S337

CONTRACT

PROJECT N

BRIDGE NO.
A9103

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[illegible]

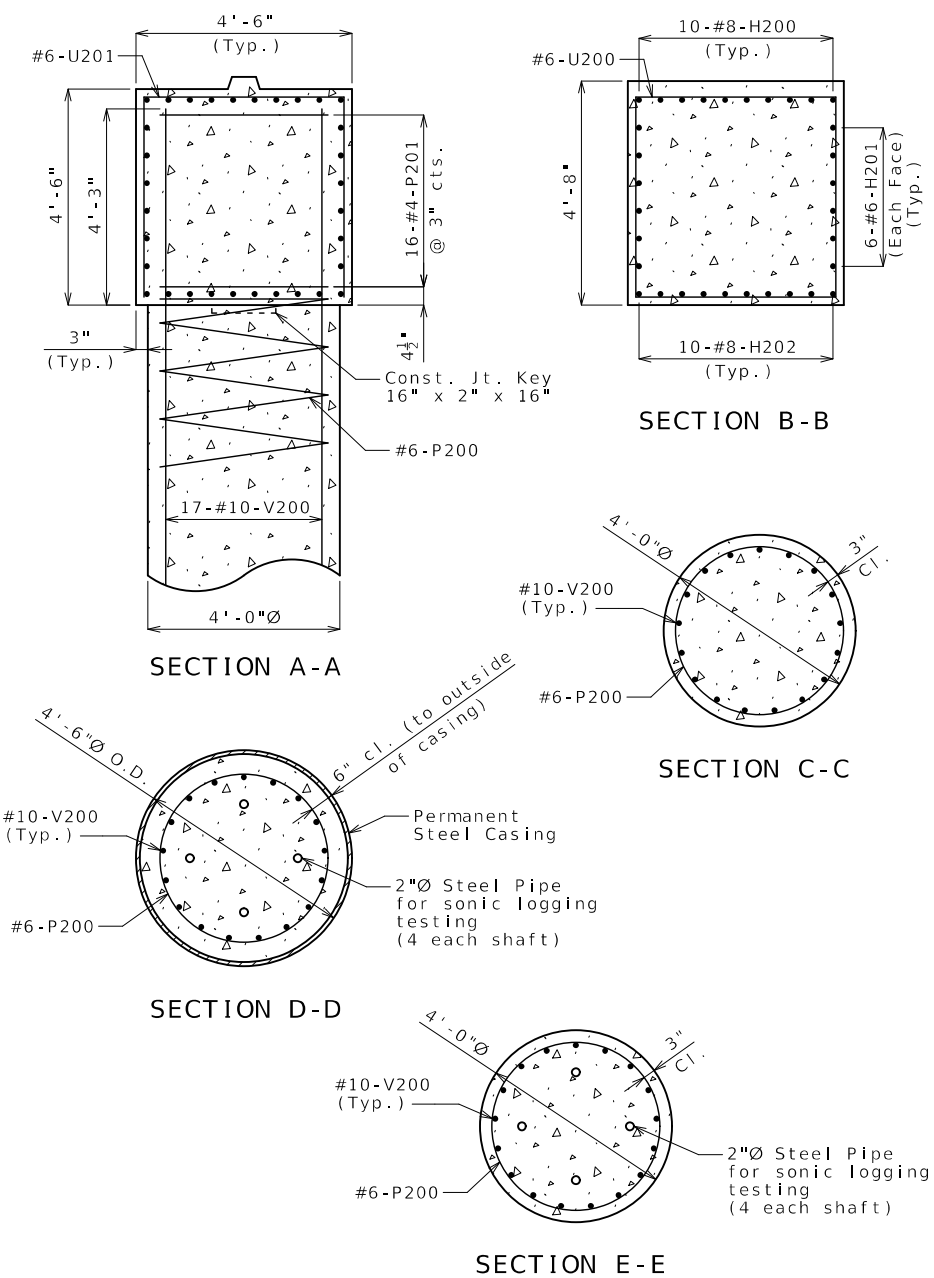
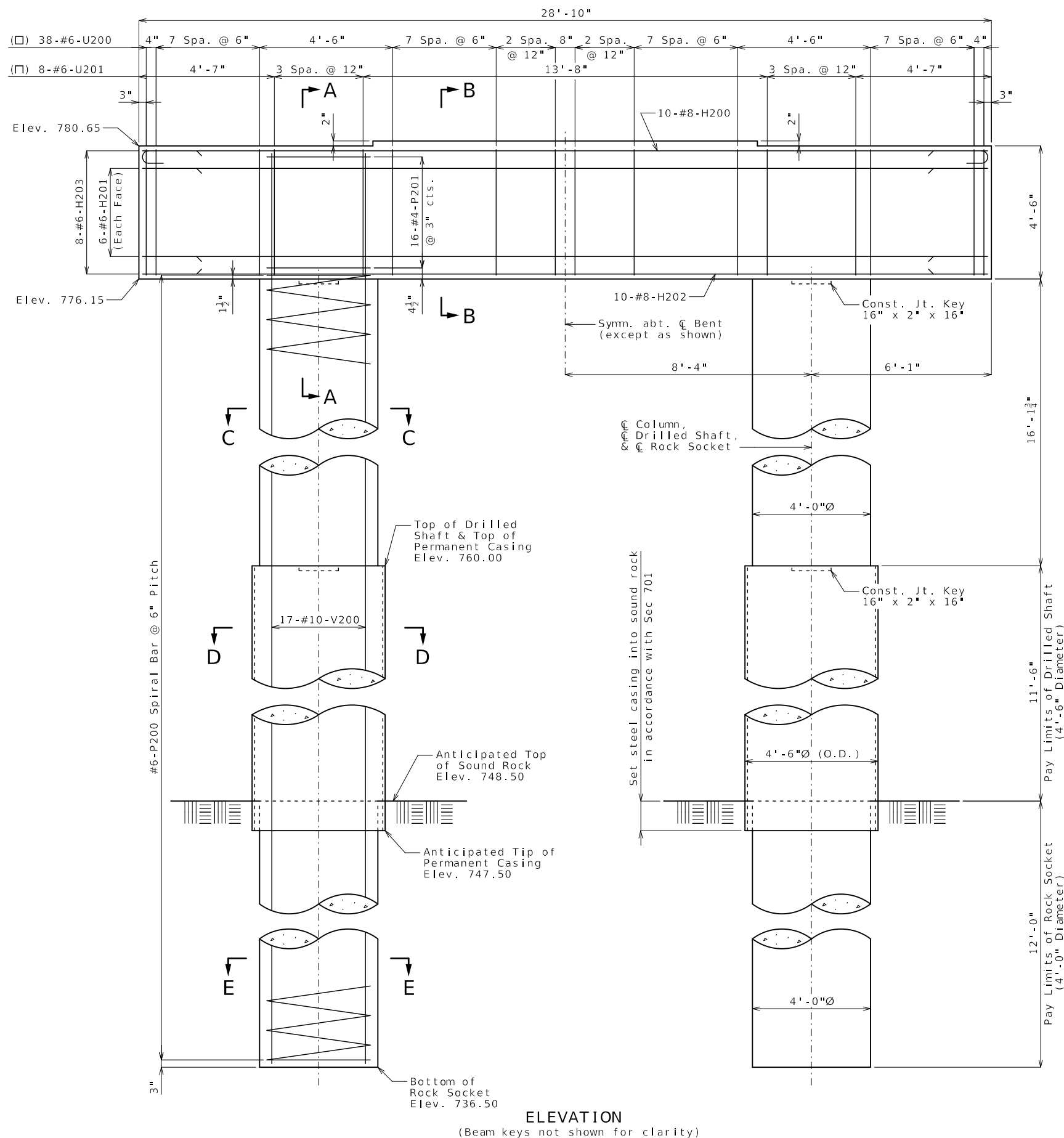
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

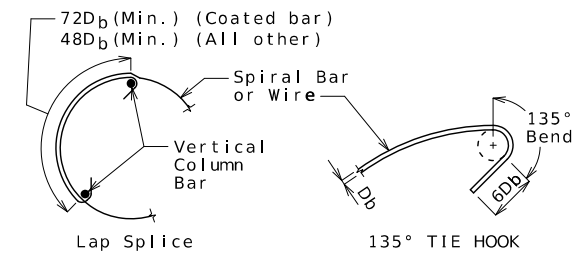


Thickness of permanent steel casing shall be in accordance with Sec 701.

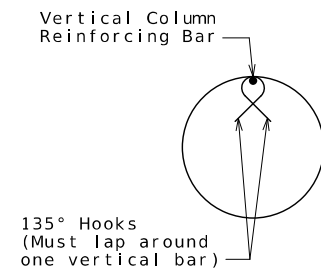
An additional 4 feet has been added to V-bar lengths and spiral bar heights and have been added in the quantities, if required, for possible change in drilled shaft or rock socket length. The additional V-bar length shall be cut off or included in the reinforcement lap if not required. The additional spiral bar height shall be cut off if not required.

Sonic logging testing shall be performed on all drilled shafts and rock sockets.

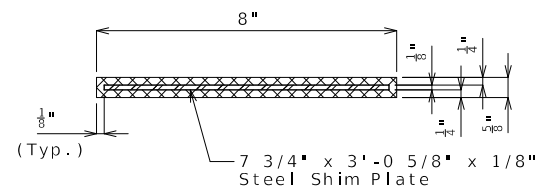
All reinforcement in drilled shaft and rock socket is included in the substructure quantities.



Standard 135-degree tie hooks that engage vertical column reinforcing bars shall be provided at each end of splice.



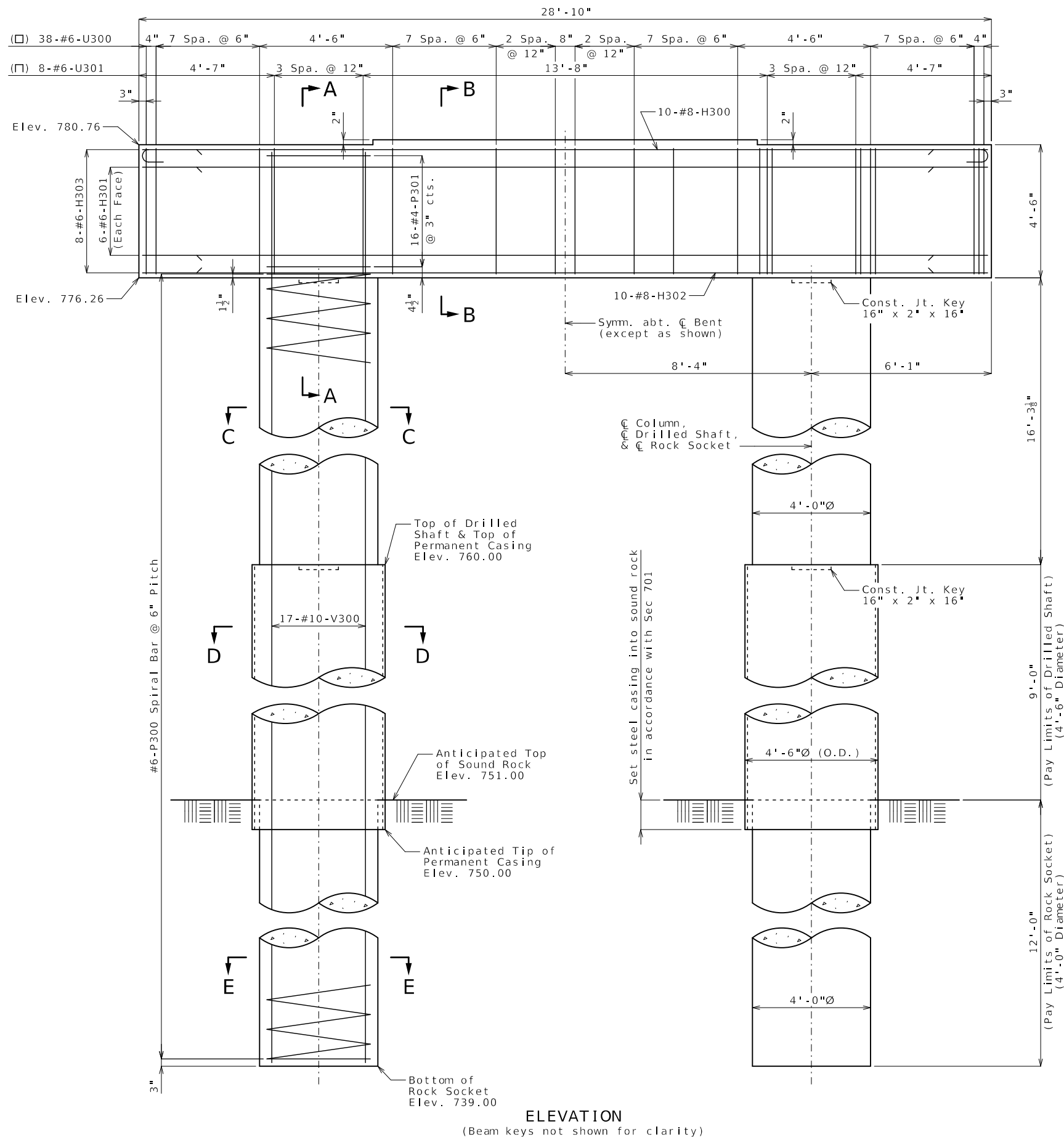
SECTION THRU KEY



TYPICAL SECTION THRU
LAMINATED NEOPRENE BEARING PAD

These quantities are included in the Estimated Quantities table on Sheet No. 2.

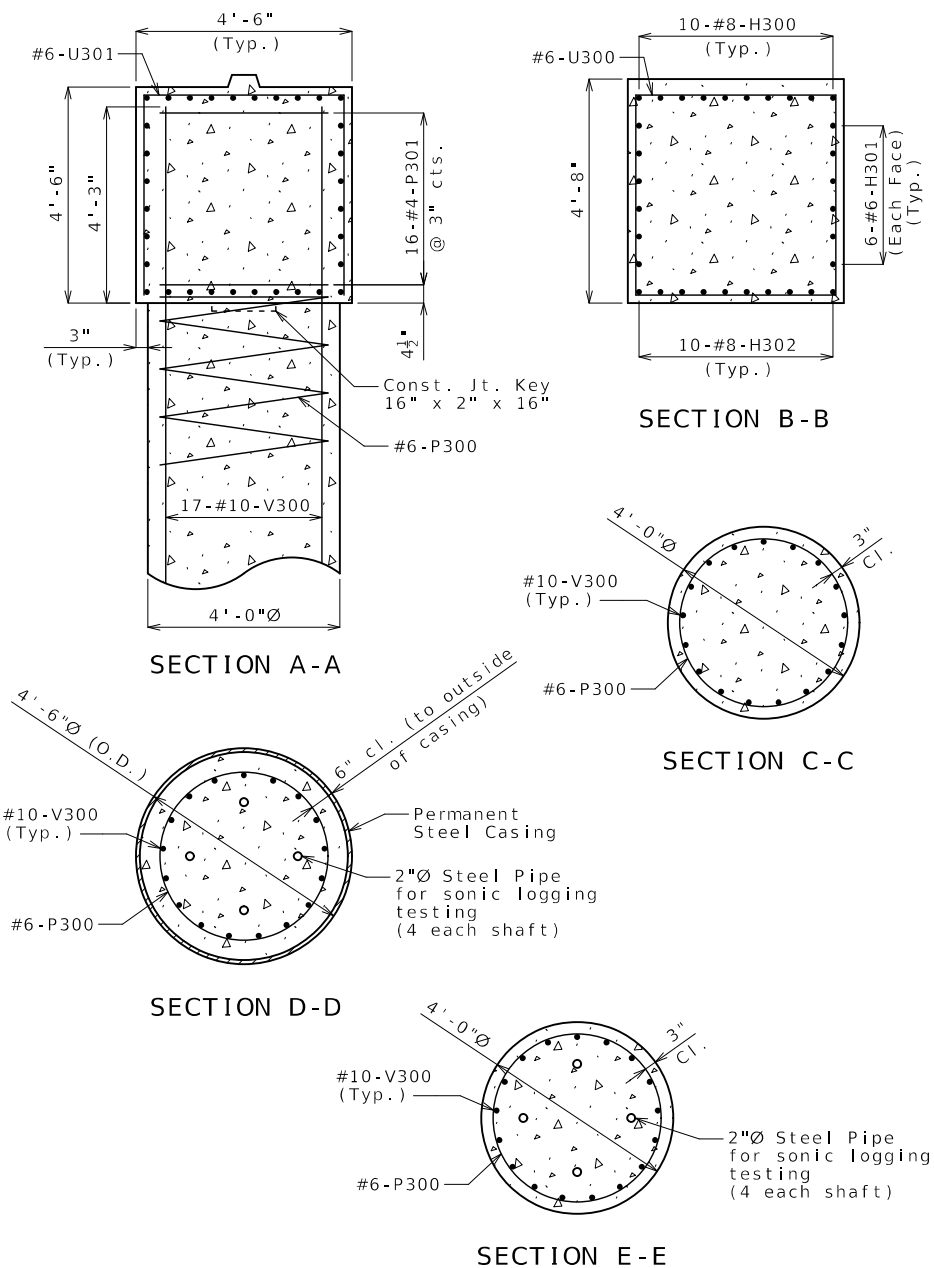
Sheet No. 8 of 30



DETAILS OF INTERMEDIATE BENT NO. 3

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 9 of 30



Notes:

Work this sheet with Sheet No. 10.

Thickness of permanent steel casing shall be in accordance with Sec 701.

An additional 4 feet has been added to V-bar lengths and spiral bar heights and have been added in the quantities, if required, for possible change in drilled shaft or rock socket length. The additional V-bar length shall be cut off or included in the reinforcement lap if not required. The additional spiral bar height shall be cut off if not required.

Sonic logging testing shall be performed on all drilled shafts and rock sockets.

All reinforcement in drilled shaft and rock socket is included in the substructure quantities.



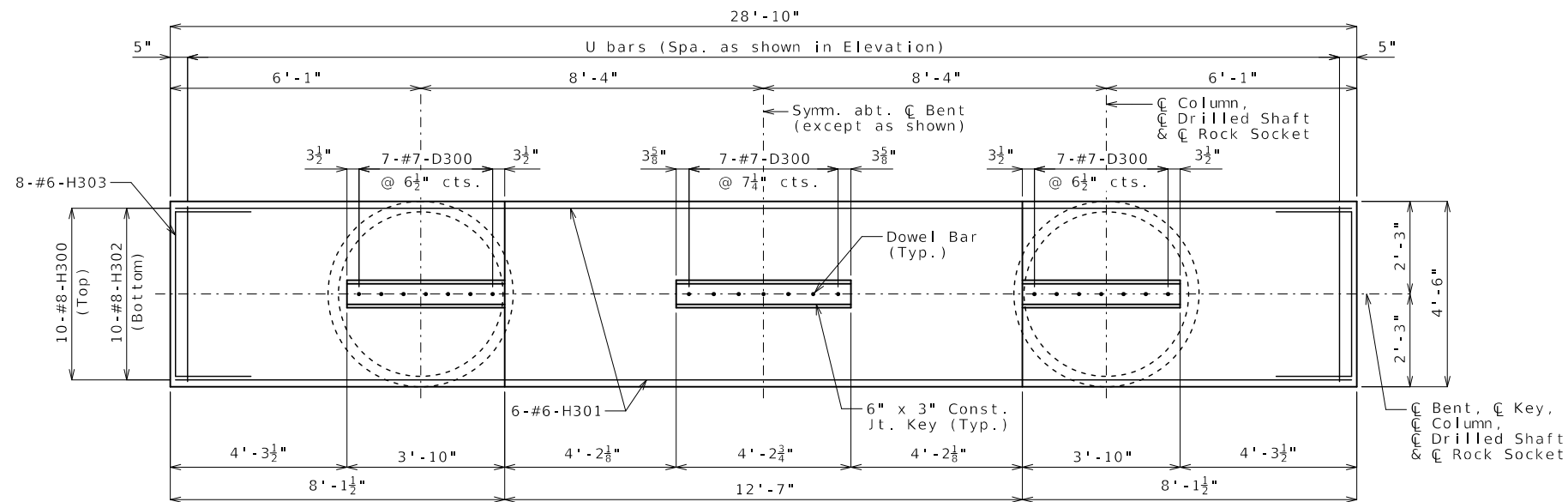
DATE PREPARED
1/23/2025
ROUTE **43** STATE **MO**
DISTRICT **BR** SHEET NO. **9**
COUNTY
MCDONALD
JOB NO.
J753379
CONTRACT ID.

PROJECT NO.
BRIDGE NO.
A9103

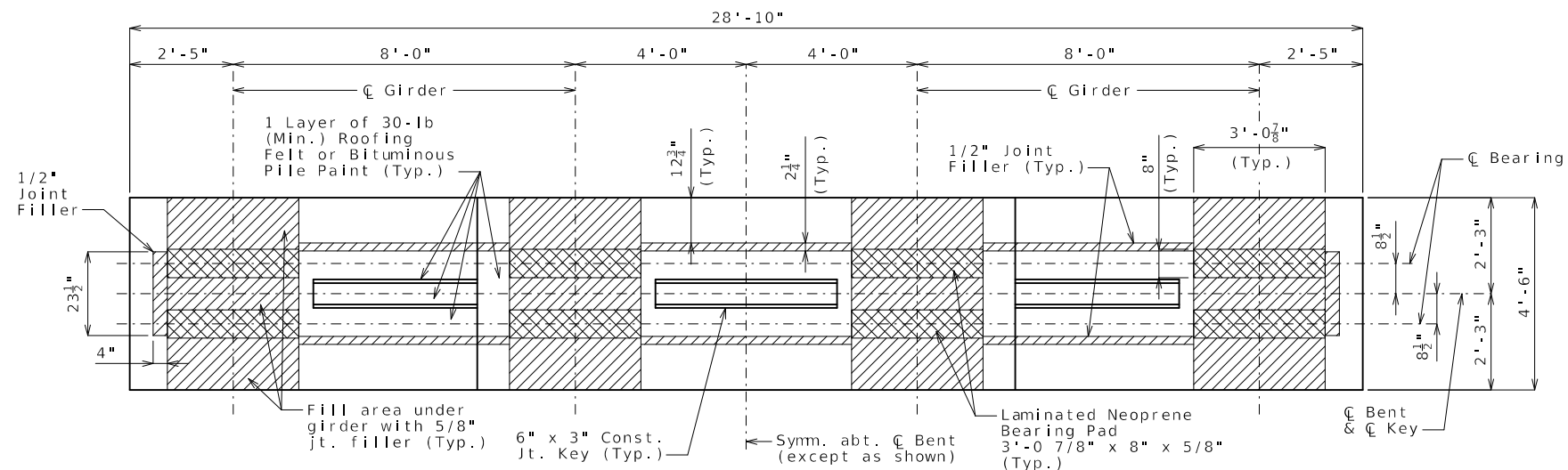
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)





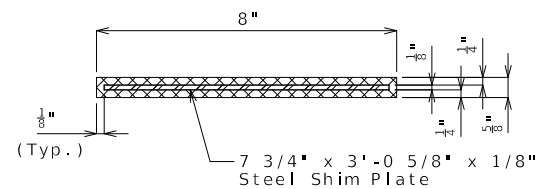
PLAN OF BEAM SHOWING REINFORCEMENT



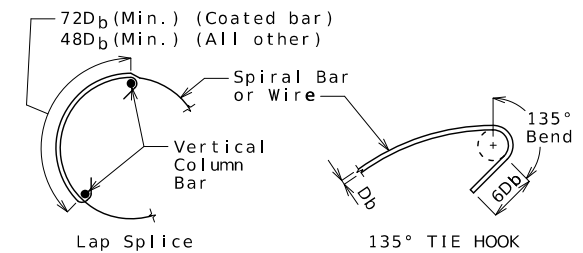
PLAN OF BEAM

Substructure Quantity Table for Bent No. 3		
Item		Quantity
Drilled Shafts (4 ft. 6 in. Dia.)	linear foot	18.0
Rock Sockets (4 ft. 0 in. Dia.)	linear foot	24.0
Video Camera Inspection	each	2
Foundation Inspection Holes	linear foot	44.0
Sonic Logging Testing	each	2
Class B Concrete (Substructure)	cu. yard	37.2
Reinforcing Steel (Bridges)	pound	13,240

These quantities are included in the Estimated Quantities table on Sheet No. 2.

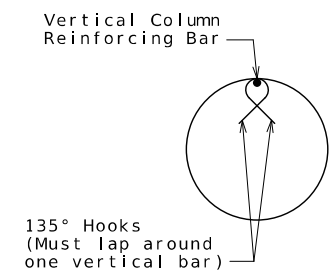


TYPICAL SECTION THRU LAMINATED NEOPRENE BEARING PAD

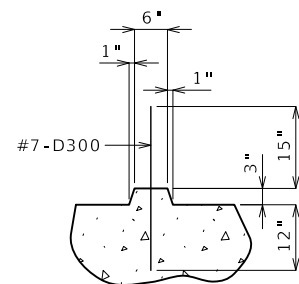


INTERMEDIATE SPLICE OF SPIRALS

Standard 135-degree tie hooks that engage vertical column reinforcing bars shall be provided at each end of splice.



SEISMIC STIRRUP BAR



SECTION THRU KEY

Note:
Work this sheet with Sheet No. 9.

DETAILS OF INTERMEDIATE BENT NO. 3

Detailed Mar. 2023
Checked Apr. 2023

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 10 of 30

STATE OF MISSOURI

TIMOTHY D. LEAF

NUMBER PE-2012000778

PROFESSIONAL ENGINEER

DATE PREPARED

1/23/2025

ROUTE

43

STATE

MO

DISTRICT

BR

SHEET NO.

10

COUNTY

MCDONALD

JOB NO.

J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9103

DESCRIPTION

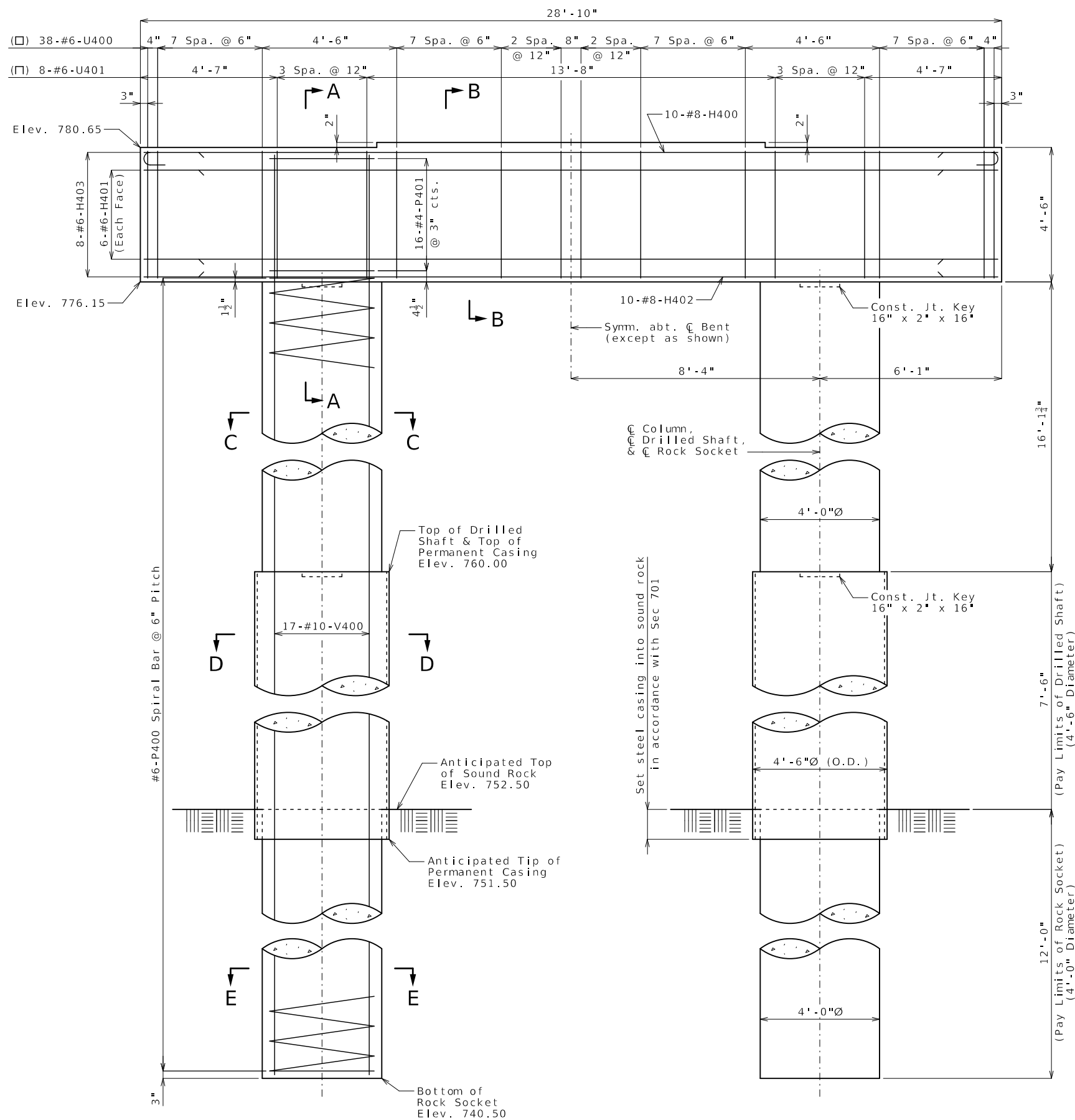
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

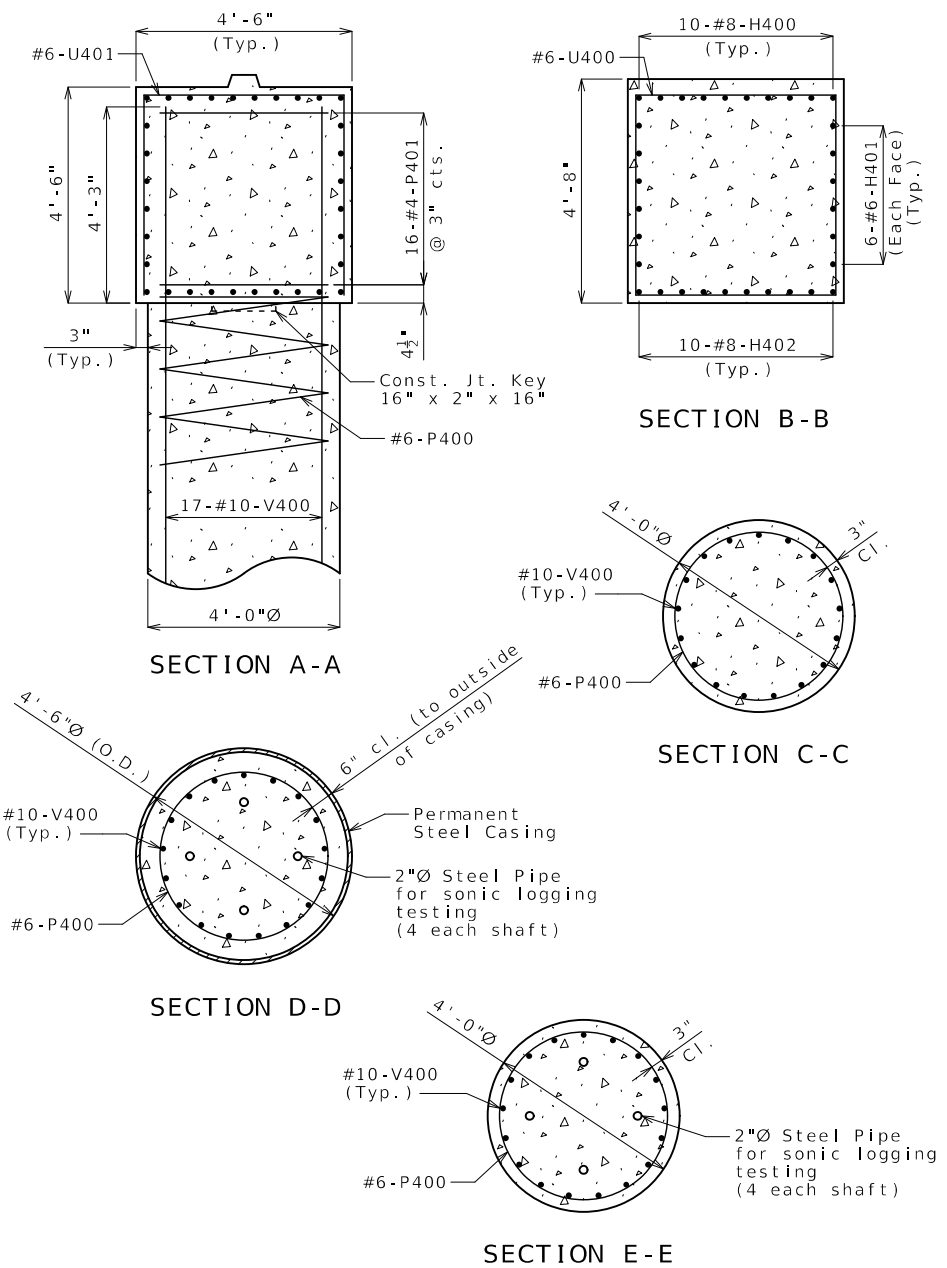
1-888-ASK-MODOT (1-888-273-6636)

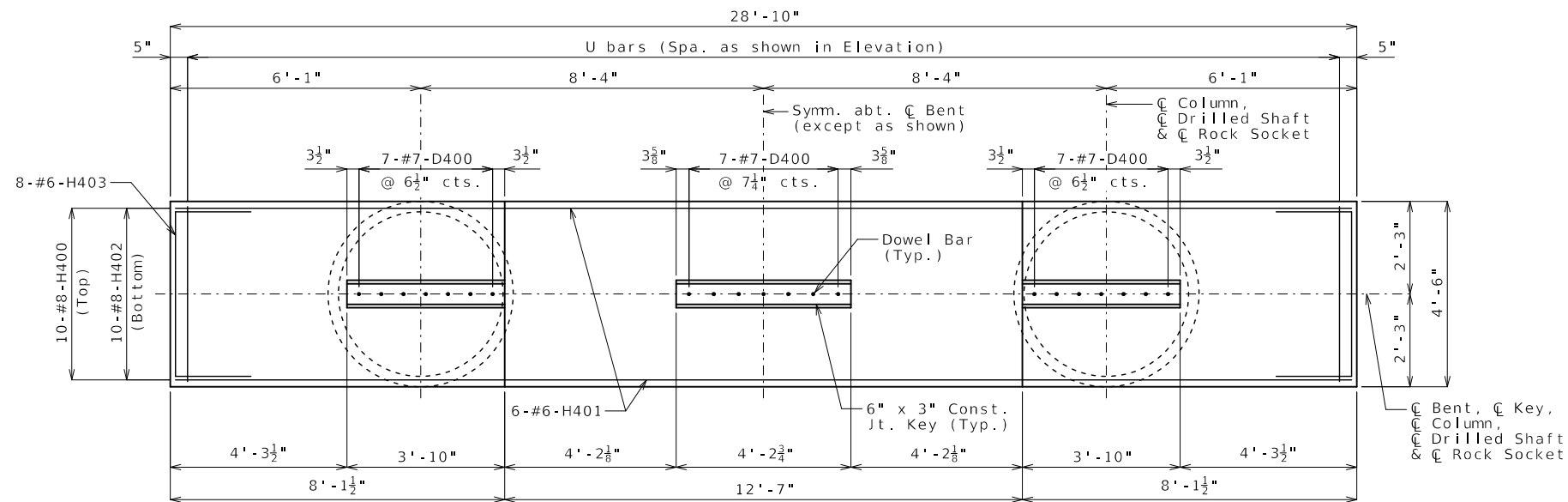


ELEVATION

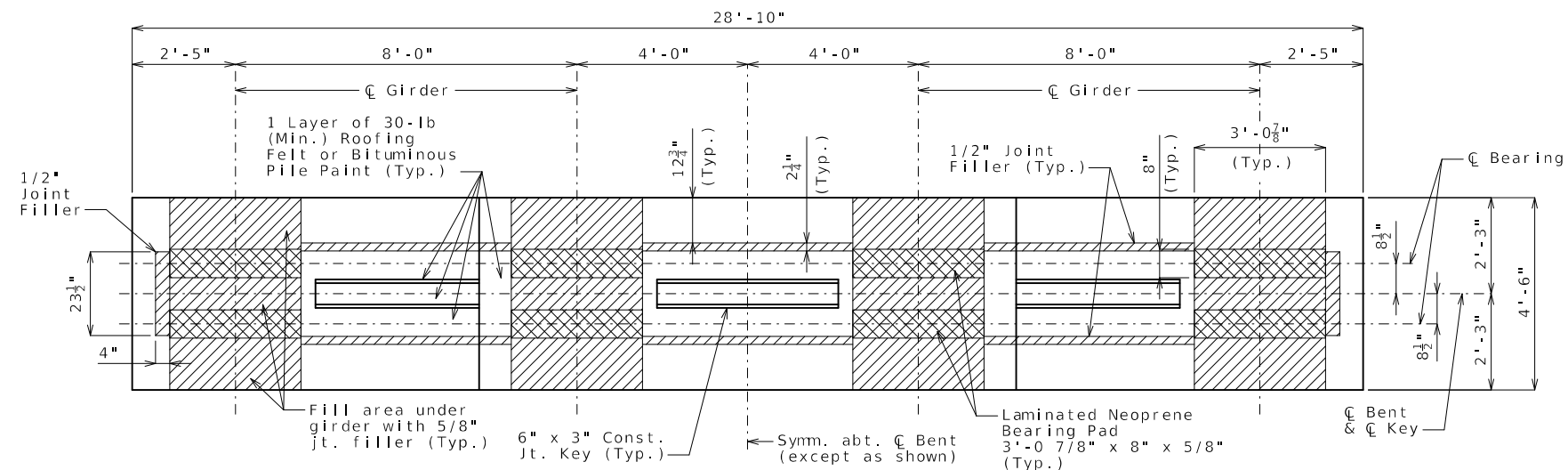
(Beam keys not shown for clarity)

DETAILS OF INTERMEDIATE BENT NO. 4





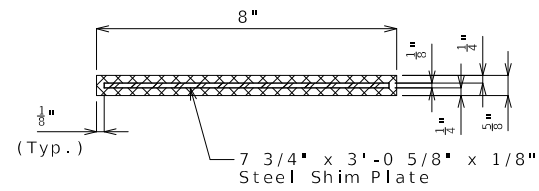
PLAN OF BEAM SHOWING REINFORCEMENT



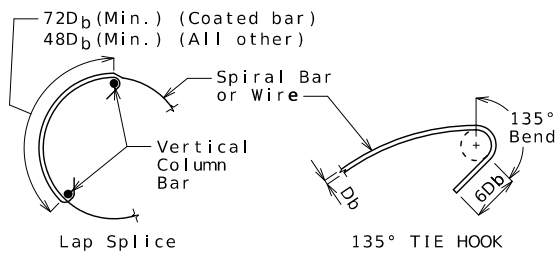
PLAN OF BEAM

Substructure Quantity Table for Bent No. 4		
Item		Quantity
Drilled Shafts (4 ft. 6 in. Dia.)	linear foot	15.0
Rock Sockets (4 ft. 0 in. Dia.)	linear foot	24.0
Video Camera Inspection	each	2
Foundation Inspection Holes	linear foot	44.0
Sonic Logging Testing	each	2
Class B Concrete (Substructure)	cu. yard	37.1
Reinforcing Steel (Bridges)	pound	12,910

These quantities are included in the Estimated Quantities table on Sheet No. 2.

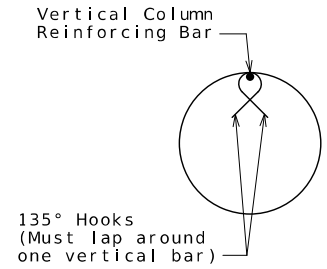


TYPICAL SECTION THRU LAMINATED NEOPRENE BEARING PAD

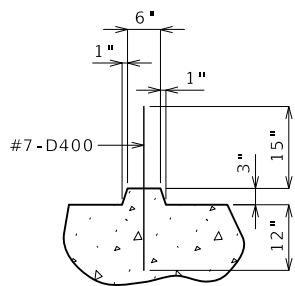


INTERMEDIATE SPLICE OF SPIRALS

Standard 135-degree tie hooks that engage vertical column reinforcing bars shall be provided at each end of splice.



SEISMIC STIRRUP BAR



SECTION THRU KEY

Note:
Work this sheet with Sheet No. 11.
For steps 2 inches or more, use 2 1/4 x 1/2 inch joint filler up vertical face.

DETAILS OF INTERMEDIATE BENT NO. 4

Detailed Mar. 2023
Checked Apr. 2023

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 12 of 30

STATE OF MISSOURI

TIMOTHY D. LEAF

NUMBER

PE-2012000778

PROFESSIONAL ENGINEER

DATE PREPARED

1/23/2025

ROUTE

43

STATE

MO

DISTRICT

BR

SHEET NO.

12

COUNTY

MCDONALD

JOB NO.

J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9103

DESCRIPTION

DATE

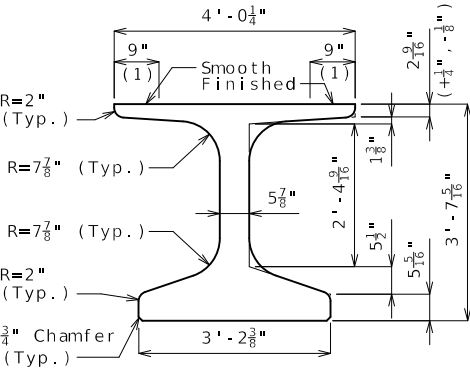
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

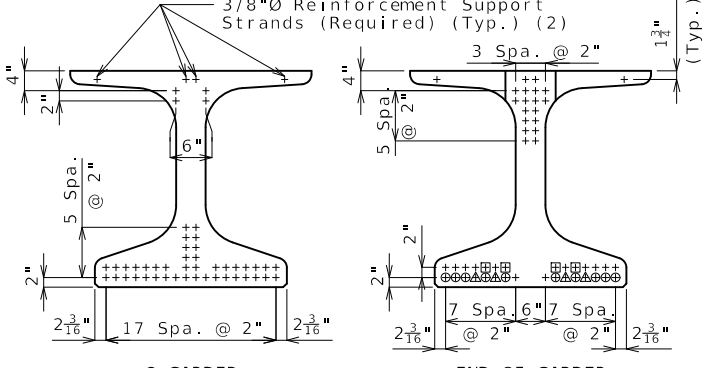
1-888-ASK-MODOT (1-888-273-6636)

(1) Fabricator shall apply a bond breaker to this region excluding where joint filler will be applied.



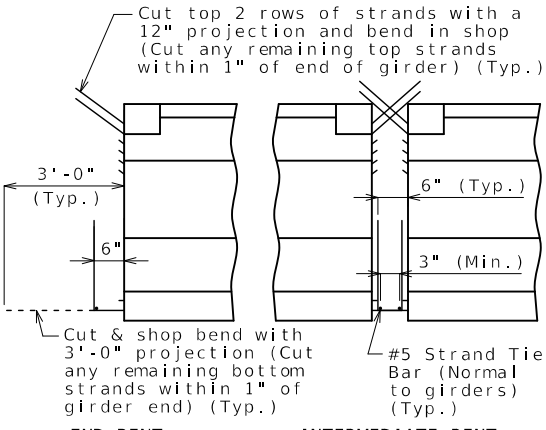
DIMENSIONS

(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about C Girder. May be moved laterally in pairs.

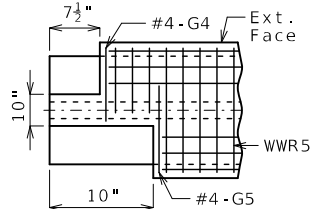


STRAND ARRANGEMENT

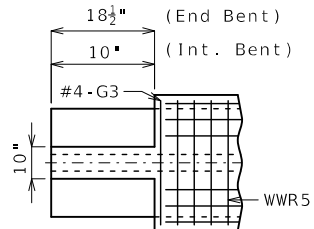
- + Indicates prestressing strand.
- o Indicates cut & shop bend with 3'-0" projection.
- Δ Indicates debonded for 4'-0" from end of girder
- Indicates debonded for 6'-0" from end of girder



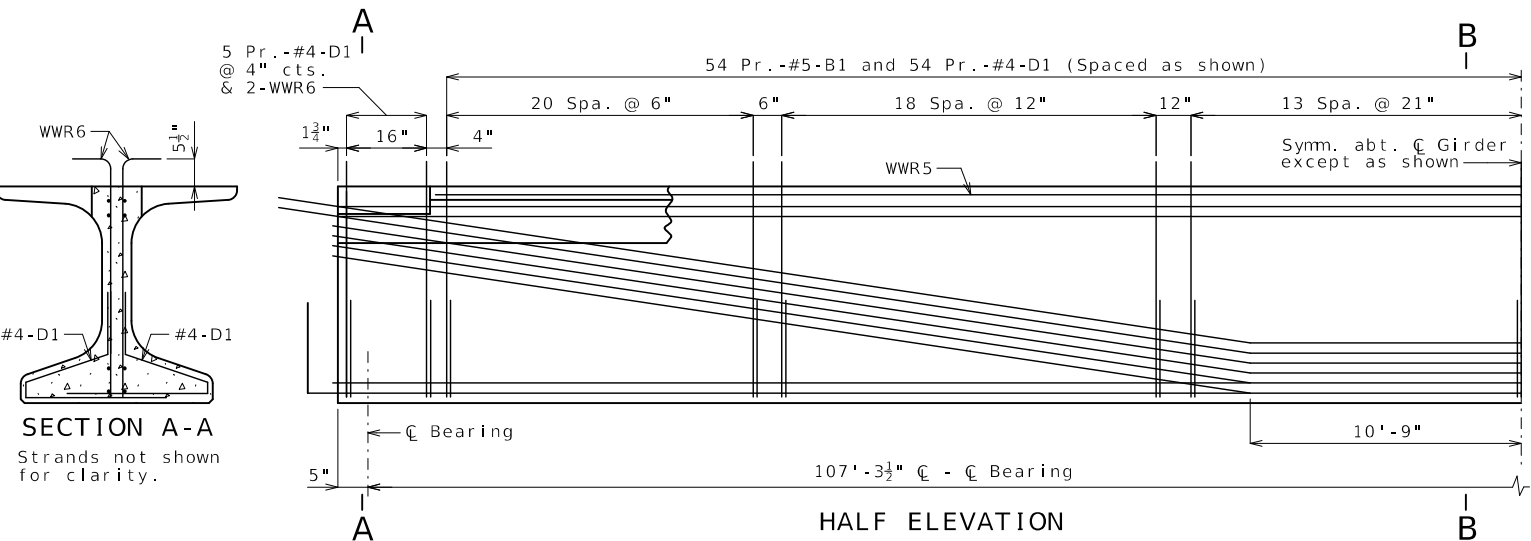
STRANDS AT GIRDER ENDS



LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT
Rotate 180° for right ext.

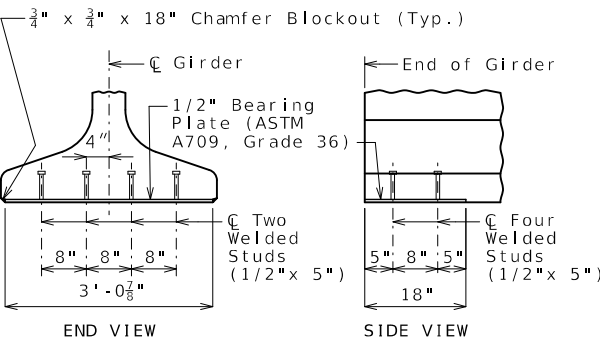


INTERIOR GIRDER AT ALL BENTS & EXTERIOR GIRDER AT END BENT
TOP FLANGE BLOCKOUT

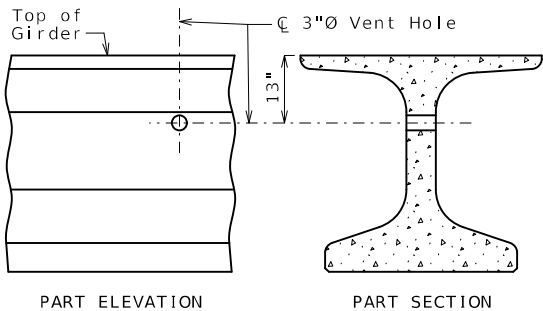


HALF ELEVATION

Reinforcement support strands not shown for clarity.

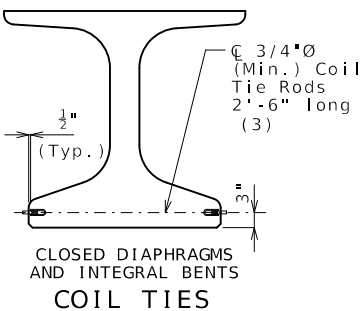


BEARING PLATE



VENT HOLE

Place vent holes at or near upgrade 1/3 point of girders and clear reinforcing steel or strands by 1 1/2" minimum.



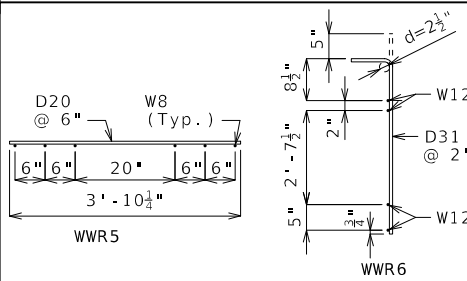
COIL TIES

Exclude coil tie at exterior face of exterior girders except at integral end bents.

(3) 19" at exterior face of exterior girders at end bents

Bill of Reinforcing Steel - Each Girder					Bending Diagrams
No.	Size/Mark	Length	Shape		
214	5 B1	5'-0"	11		
234	4 D1	4'-0"	9		
2	4 G3	3'-10"	20		
2	4 G4	2'-3"	20		
2	4 G5	2'-8"	20		
					Shape 95 Shape 115

Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be 1".

All bar reinforcement shall be Grade 60.

The two D1 bars may be furnished as one bar at the fabricator's option.

All B1 bars shall be epoxy coated.

G4 and G5 not required for interior girders. Half no. of G3, G4, G5 and G6 not required for ext. girders of end spans.

General Notes:

Concrete for prestressed girders shall be Class A-1 with $f'c = 8500$ psi and $f'ci = 6500$ psi.

Use 46 strands, 0.6"Ø Grade 270, with an initial prestress force of 2021 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior girders are the same except: coil ties, top flange blockout, coil inserts for slab drains and application of bond breaker.

The contractor shall provide bracing necessary for lateral and torsional stability of the girders during construction of the concrete slab and remove the bracing after the slab has attained 75% design strength. Contractor shall not drill holes in the girders.

For Girder Camber Diagram, see Sheet No. 20.

For location of coil inserts at slab drains, see Sheet No. 19.

For location of coil ties at concrete diaphragms and integral bents, see Sheets No. 4 & 17.

Alternate bar reinforcing steel details are provided and may be used. The same type of reinforcing steel shall be used for all girders in all spans.



DATE PREPARED
1/23/2025

ROUTE
43

STATE
MO

DISTRICT
BR

SHEET NO.
14

COUNTY
MCDONALD

JOB NO.
J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9103

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

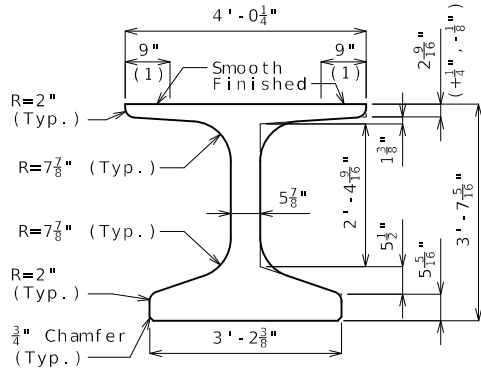
105 WEST CAPITOL

JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)

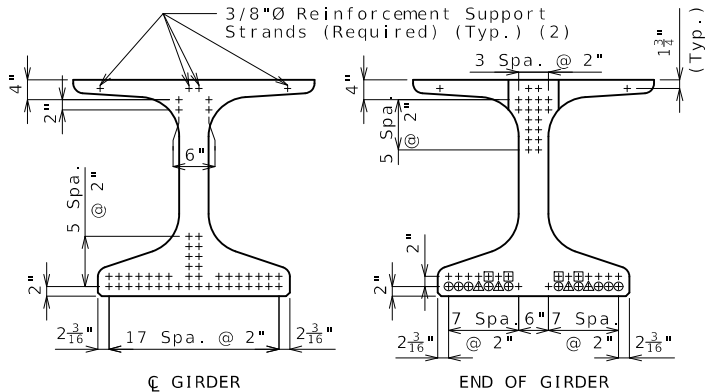
MoDOT

(1) Fabricator shall apply a bond breaker to this region excluding where joint filler will be applied.



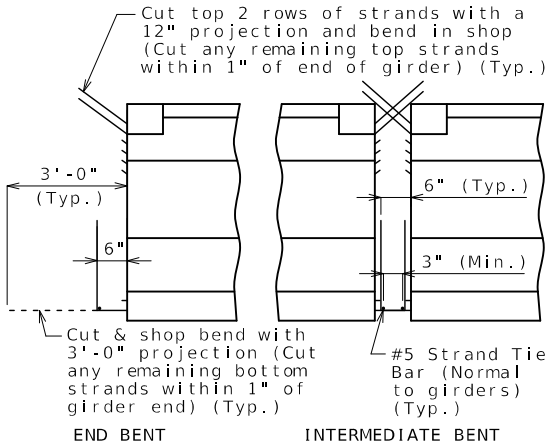
DIMENSIONS

(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about $\bar{C}$ Girder. May be moved laterally in pairs.

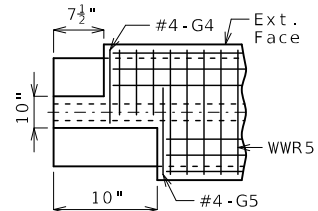


STRAND ARRANGEMENT

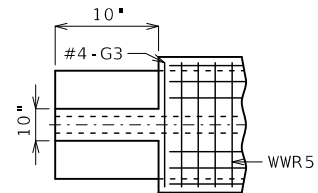
- + Indicates prestressing strand.
- o Indicates cut & shop bend with 3'-0" projection.
- Δ Indicates debonded for 4'-0" from end of girder
- Indicates debonded for 6'-0" from end of girder



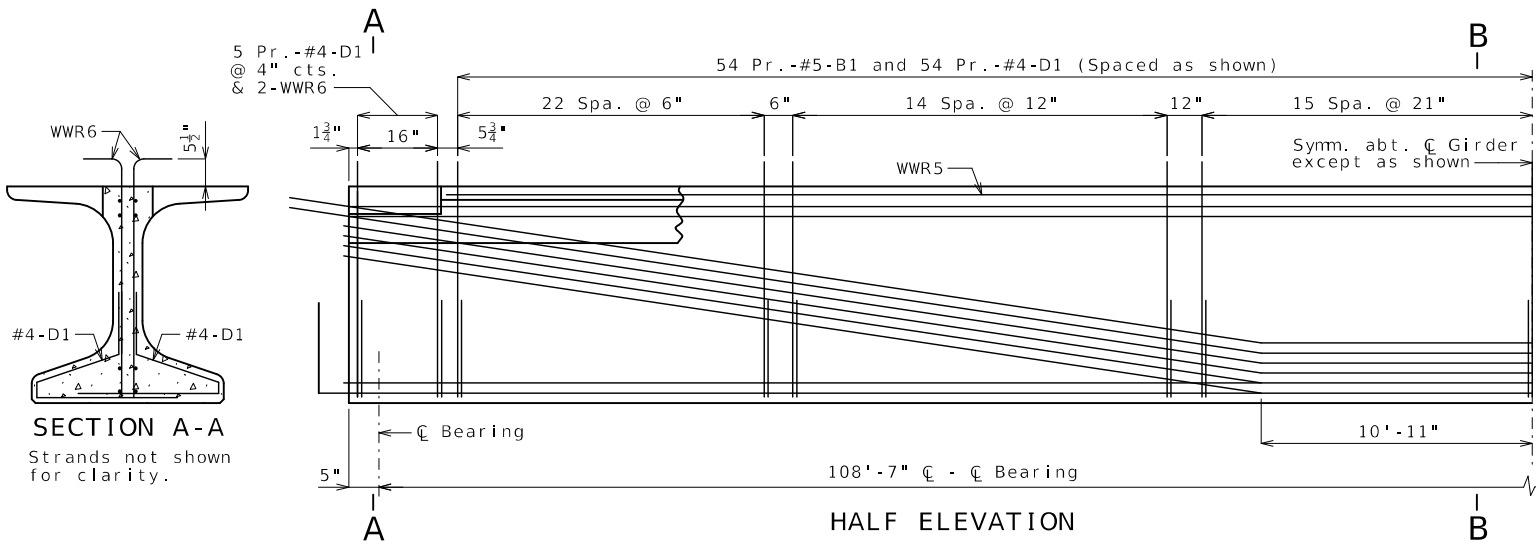
STRANDS AT GIRDER ENDS



LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT
Rotate 180° for right ext.

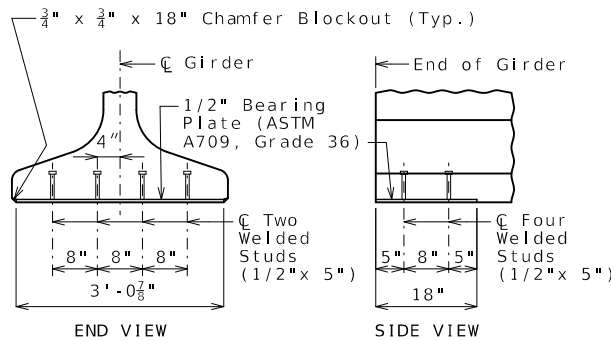


INTERIOR GIRDER AT ALL BENTS
TOP FLANGE BLOCKOUT

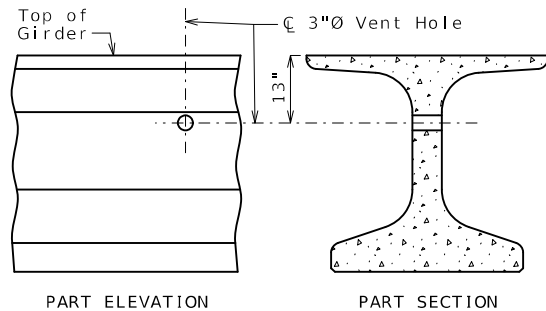


HALF ELEVATION

Reinforcement support strands not shown for clarity.

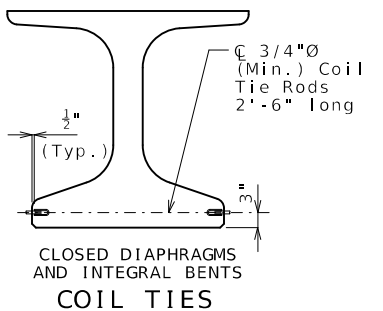


BEARING PLATE



VENT HOLE

Place vent holes at or near upgrade 1/3 point of girders and clear reinforcing steel or strands by 1 1/2" minimum.

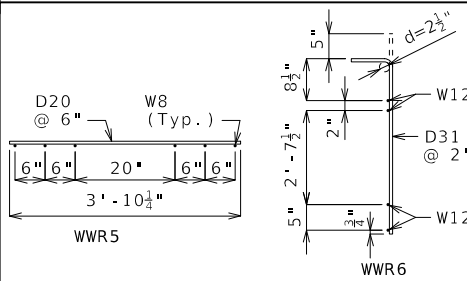


COIL TIES

Exclude coil tie at exterior face of exterior girders except at integral end bents.

Bill of Reinforcing Steel - Each Girder					Bending Diagrams
No.	Size/Mark	Length	Shape		
214	5 B1	5'-0"	11		Shape 20
234	4 D1	4'-0"	9		
2	4 G3	3'-10"	20		Shape 95 Shape 115
2	4 G4	2'-3"	20		
2	4 G5	2'-8"	20		

Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be 1".

All bar reinforcement shall be Grade 60.

The two D1 bars may be furnished as one bar at the fabricator's option.

All B1 bars shall be epoxy coated.

G4 and G5 not required for interior girders. G3 not required for exterior girders of intermediate spans.

General Notes:

Concrete for prestressed girders shall be Class A-1 with $f'c = 8500$ psi and $f'ci = 6500$ psi.

Use 46 strands, 0.6"Ø Grade 270, with an initial prestress force of 2021 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior girders are the same except: coil ties, top flange blockout, coil inserts for slab drains and application of bond breaker.

The contractor shall provide bracing necessary for lateral and torsional stability of the girders during construction of the concrete slab and remove the bracing after the slab has attained 75% design strength. Contractor shall not drill holes in the girders.

For Girder Camber Diagram, see Sheet No. 20.

For location of coil inserts at slab drains, see Sheet No. 19.

For location of coil ties at concrete diaphragms, see Sheet No. 17.

Alternate bar reinforcing steel details are provided and may be used. The same type of reinforcing steel shall be used for all girders in all spans.



DATE PREPARED

1/23/2025

ROUTE 43

STATE MO

DISTRICT BR

SHEET NO. 16

COUNTY

MCDONALD

JOB NO. J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9103

DESCRIPTION

DATE

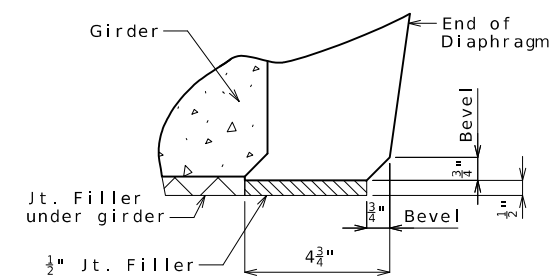
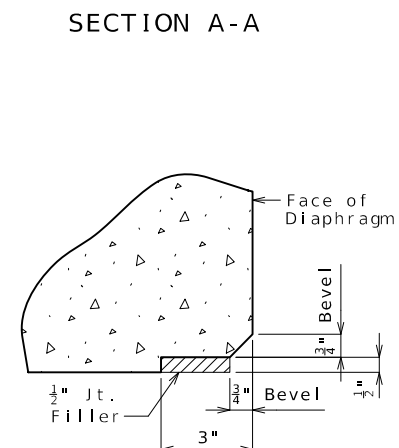
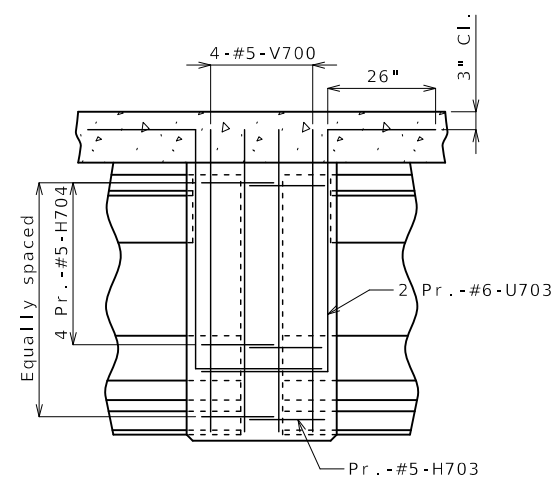
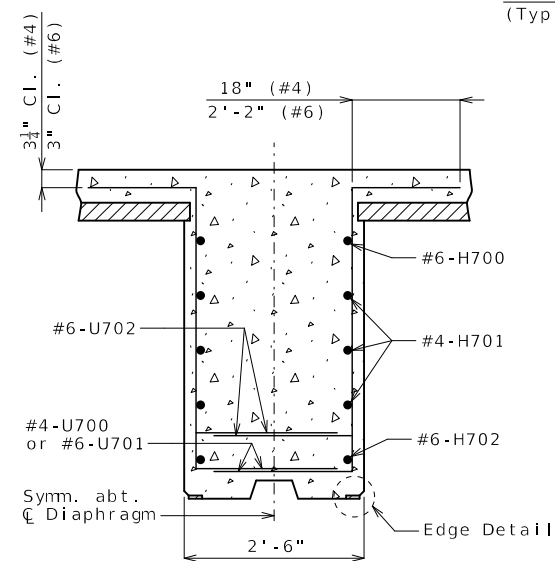
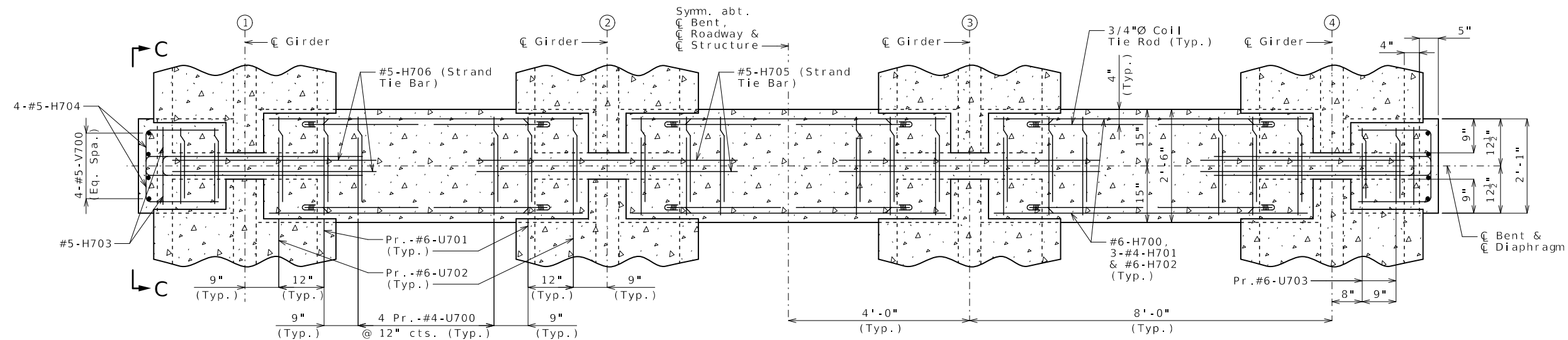
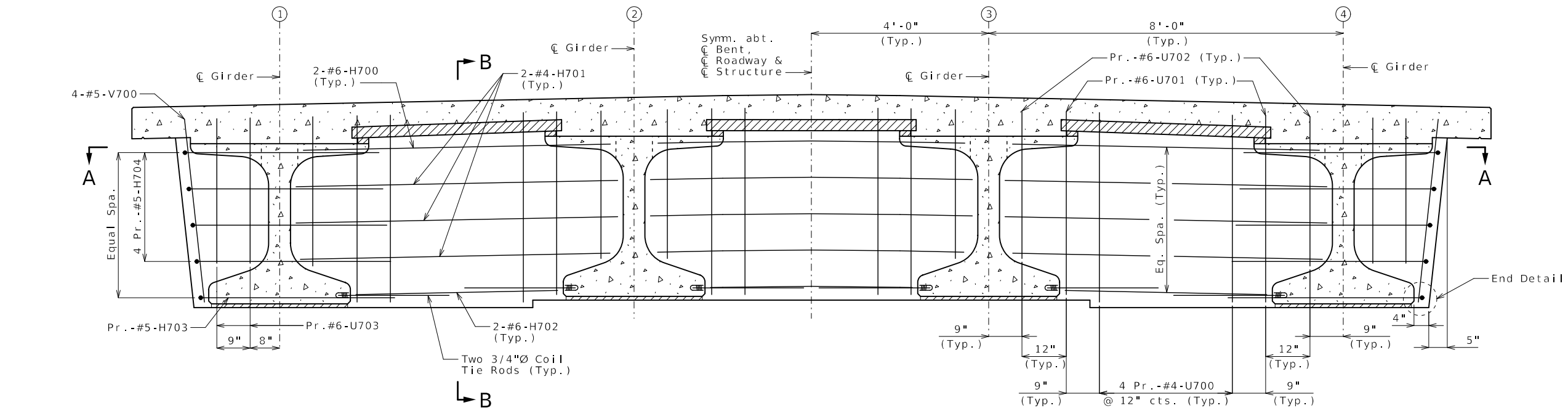
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)

MoDOT

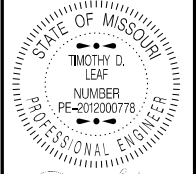


Notes:

Diaphragm at intermediate bent shall be built vertical.

For location of #5-H705 & #5-H706 (strand tie bars) and coil tie rods, see Sheets No. 13 thru 16.

All U bars in diaphragm shall be placed parallel to centerline of roadway.



01/23/2025 12:02:46 PM
TIMOTHY D. LEAF - CIVIL
MO-PE-2012000778

DATE PREPARED
1/23/2025

17/23/2023	
ROUTE	STATE

43	MO
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DISTRICT	SHEET NO.
BB	17

DR	17
COUNTY	

MCDONALD

JOB NO.
1753379

[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

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TIMOTHY D. LEAF - CIVIL
MO-PE-2012000778

1 / 23 / 2025

COUNTY

JOB NO.

CONTRACT ID.

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10. *Journal of the American Medical Association*, 2000; 283: 2689-2695.

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Table 1

10. *Journal of the American Medical Association*, 2000; 283: 2689-2695.

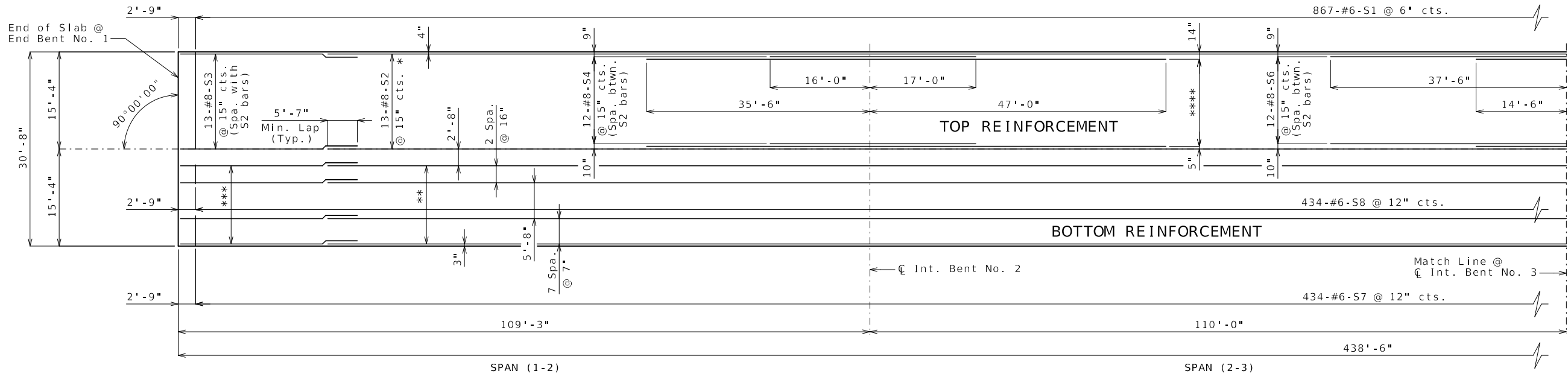
[illegible]

Table 1

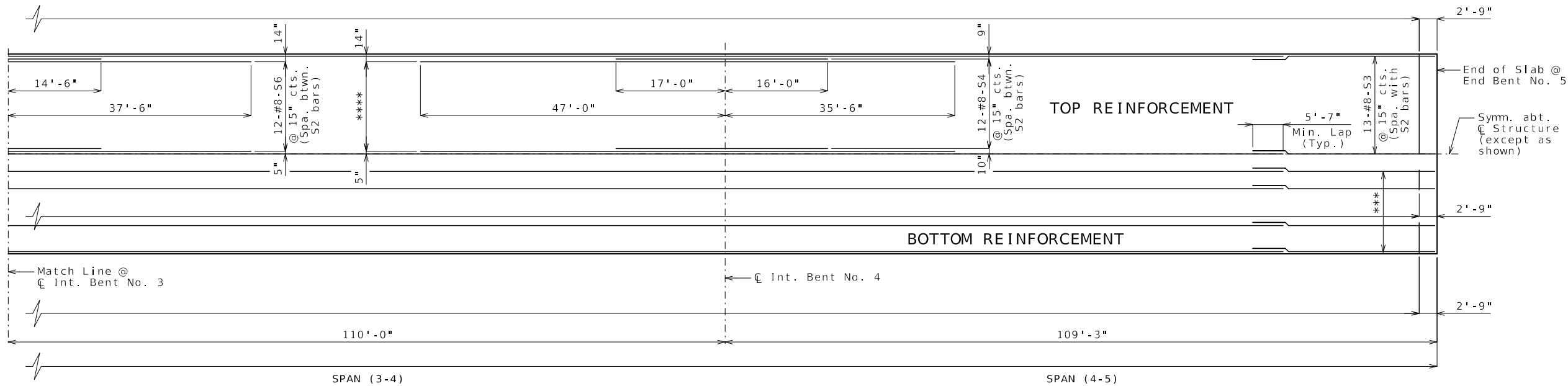
10. *Journal of the American Medical Association*, 2000; 283: 2689-2695.



Elevations are based on a constant slab thickness of 8 1/2" and include allowance for theoretical dead load deflections due to weight of slab (including precast panel) and barrier.



- * (7 Units @ 60'-0")
(5'-7" Min. Lap)
- ** 11-#8-S2 (spa. as shown)
(7 Units @ 60'-0")
(5'-7" Min. Lap)
- *** 11-#8-S3 (Spa. with S2)
- **** 12-#8-S5 @ 15" cts.
(Spa. btwn. S2 bars)
(2 Units @ 44'-1")
(5'-7" Min. Lap)



Note: Lap splices of S2 & S5 bars not shown for clarity.

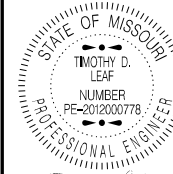
- Notes:
- Longitudinal dimensions are horizontal.
- For Slab Details, see Sheet No. 22.
- For Theoretical Slab Haunching Diagram and Theoretical Bottom of Slab Elevations, see Sheet No. 20.
- For details and reinforcement of Type D Barrier, see Sheets No. 23 & 24.
- For Details of Prestressed Panels, see Sheet No. 18.

PLAN OF SLAB SHOWING REINFORCEMENT

Detailed Mar. 2023
Checked Apr. 2023

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 21 of 30



DATE PREPARED
1/23/2025

ROUTE 43 STATE MO

DISTRICT BR SHEET NO. 21

COUNTY MCDONALD

JOB NO. J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9103

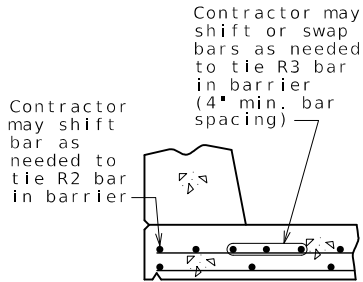
DESCRIPTION

DATE

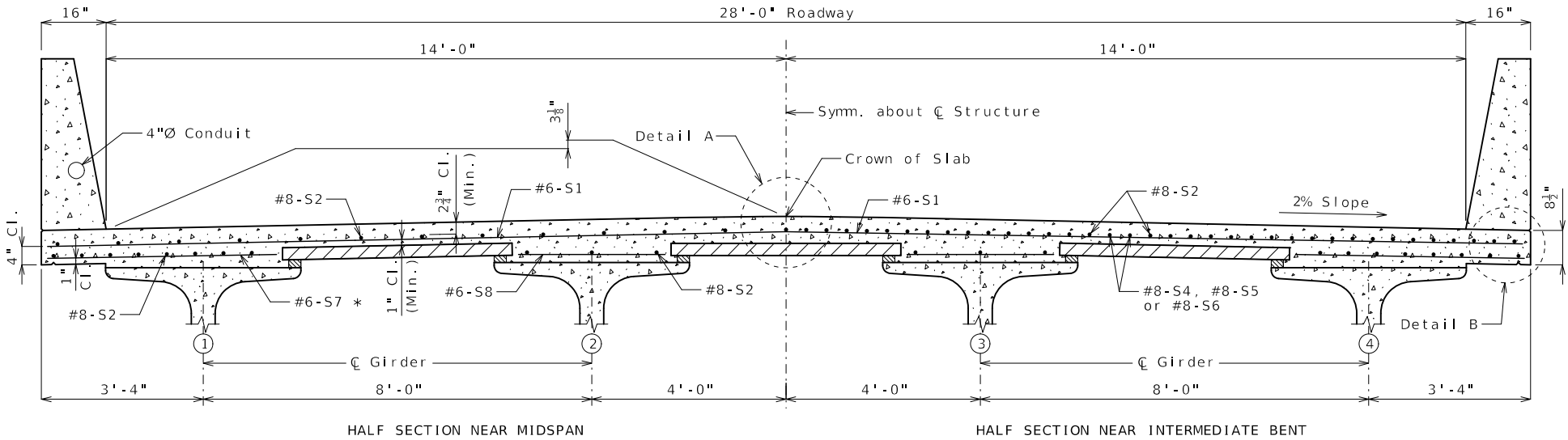
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

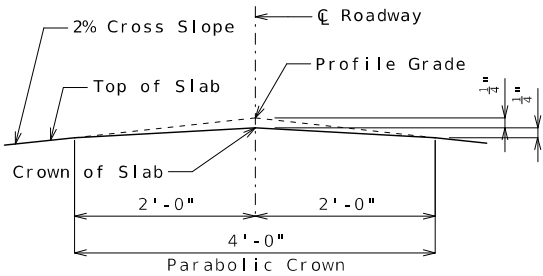
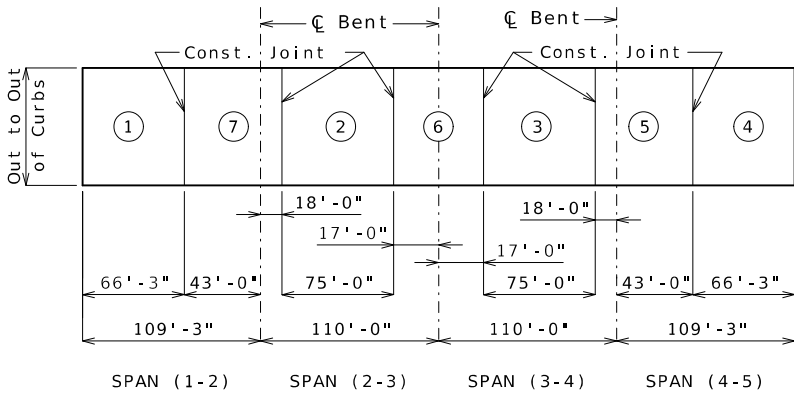
MoDOT



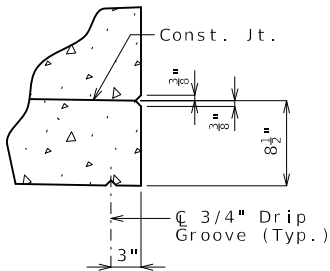
OPTIONAL SHIFTING TOP BARS AT BARRIER



* Alternate bar shape available, see barrier sheet.



DETAIL A

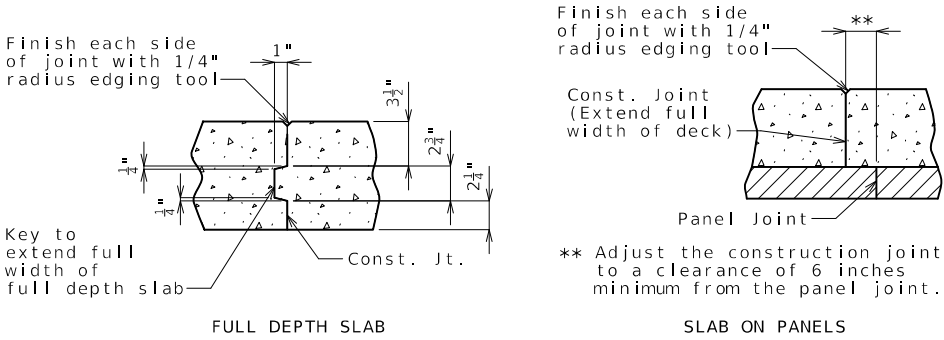


DETAIL B

	Sequence of Pours							Min. Rate of Pour Cu. Yds./Hr.
	Direction							With Retarder
Basic Sequence	1	2	3	4	5	6	7	25
	Either Direction							
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.								
Alternate A Pours	1	7 + 2		6 + 3		5 + 4		25
	End to 7	1 to 6		2 to 5		3 to End		
Alternate B Pours	1 + 7 + 2		6 + 3			5 + 4		25
	End to 6		2 to 5			3 to End		
Alternate C Pours	1 + 7 + 2			6 + 3 + 5 + 4				25
	End to 6			2 to End				
Alternate D Pours	1 + 7 + 2 + 6 + 3 + 5 + 4							25
	End to End							

The contractor shall furnish an approved retarder to retard the set of the concrete to 2.5 hours and shall pour and satisfactorily finish the slab pours at the rate given.

SLAB POURING SEQUENCE



SLAB CONSTRUCTION JOINT

- Notes:
- For Details of Precast Prestressed Panels, see Sheet No. 18.
 - For details and reinforcement of Type D Barrier not shown, see Sheets No. 23 & 24.
 - For Theoretical Bottom of Slab Elevations, Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 20.
 - For Plan of Slab Showing Reinforcement, see Sheet No. 21.
 - For details and location of slab drains, see Sheet No. 19.
 - For details of conduit not shown, see Sheet No. 25.

STATE OF MISSOURI

TIMOTHY D. LEAF

NUMBER
PE-2012000778

PROFESSIONAL ENGINEER

01/23/2025 12:32:27 PM

TIMOTHY D. LEAF - CIVIL

MO-PE-2012000778

DATE PREPARED

1/23/2025

ROUTE

43

STATE

MO

DISTRICT

BR

SHEET NO.

22

COUNTY

MCDONALD

JOB NO.

J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9103

DESCRIPTION

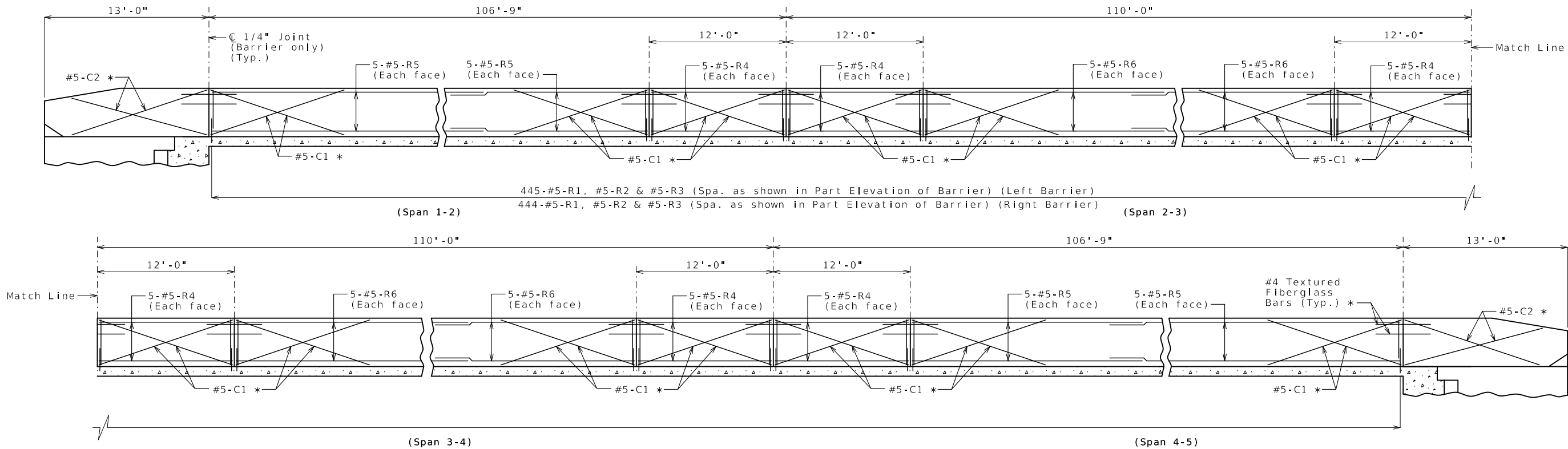
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

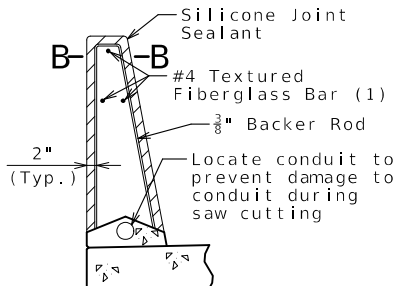
105 WEST CAPITOL

JEFFERSON CITY, MO 65102

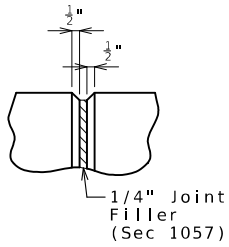
1-888-ASK-MODOT (1-888-273-6636)



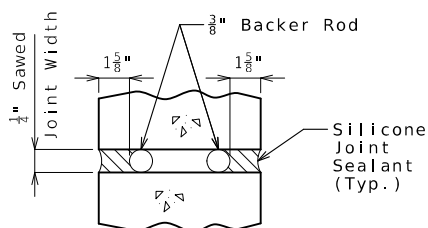
ELEVATION OF BARRIER
(Conduit not shown for clarity.)
(Left barrier shown, right barrier similar)
Longitudinal dimensions are horizontal.



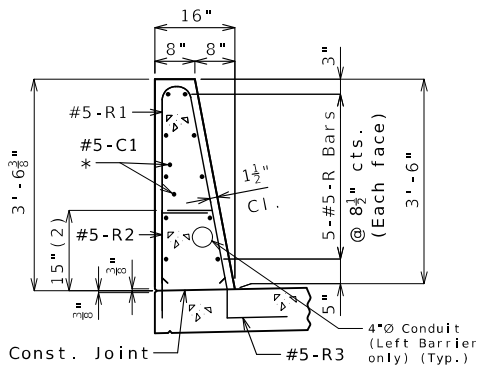
SECTION THRU SAW CUT JOINT



PART ELEVATION AT FORMED JOINT



SECTION B-B

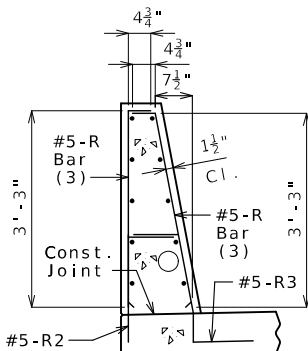


SECTION A-A

Use a minimum lap of 3'-1" for #5 horizontal barrier bars.

The cross-sectional area above the slab is 3.52 square feet.

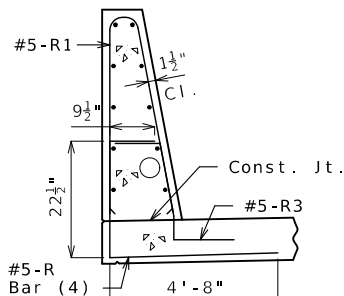
(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

(3) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)

(4) The R2 bar and #5 bottom transverse slab bar in cantilever (prestressed panels only) combination may be furnished as one bar as shown, at the contractor's option.



General Notes:

* Slip-formed option only.

Conventional forming or slip forming may be used. Saw cut joints may be used with conventional forming.

Top of barrier shall be built parallel to grade and barrier joints (except at end bents) normal to grade.

All exposed edges of barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Type D Barrier per linear foot.

Concrete in barrier shall be Class B-1.

Measurement of barrier is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

Joint sealant and backer rods shall be in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

For slip-formed option, both sides of barrier shall have a vertically broomed finish and the top shall have a transversely broomed finish.

For details of conduit system on structure, see Sheet No. 25.

STATE OF MISSOURI

TIMOTHY D. LEAF

NUMBER

PE-201200778

PROFESSIONAL ENGINEER

01/23/2025 12:03:36 PM

TIMOTHY D. LEAF - CIVIL

MO-PE-201200778

DATE PREPARED

1/23/2025

ROUTE

43

DISTRICT

BR

STATE

MO

SHEET NO.

23

COUNTY

MCDONALD

JOB NO.

I7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9103

DESCRIPTION

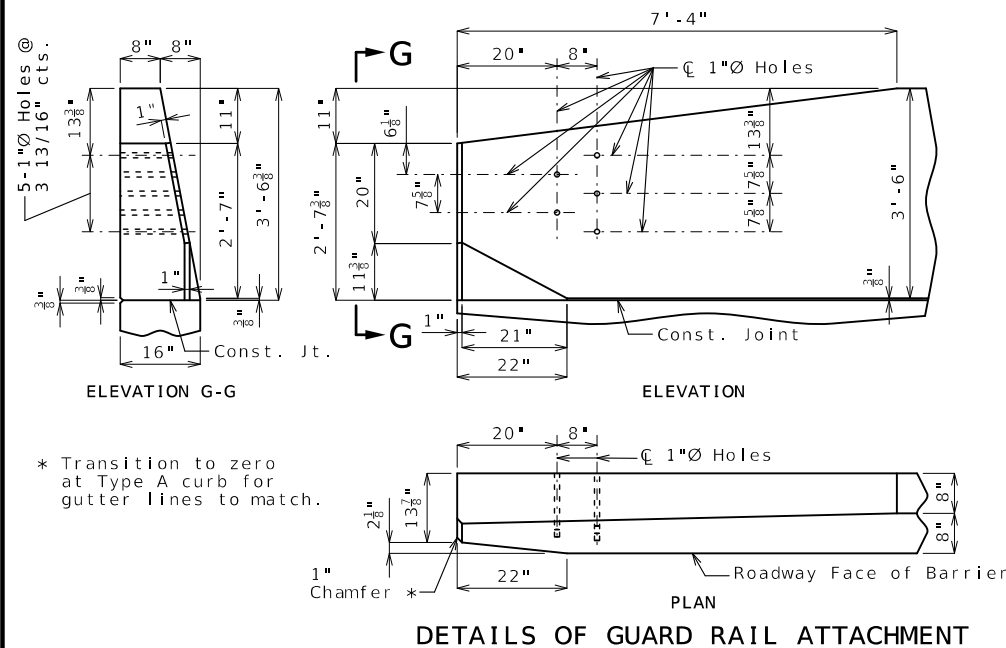
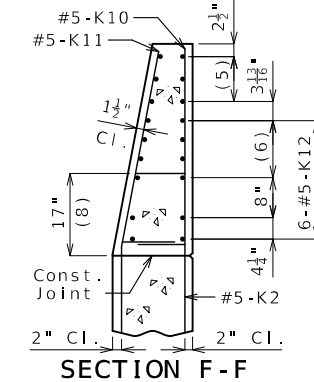
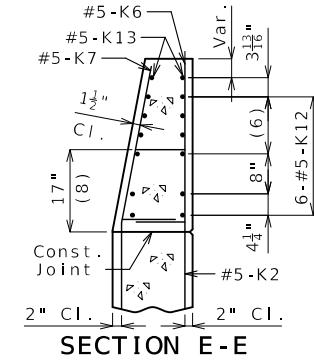
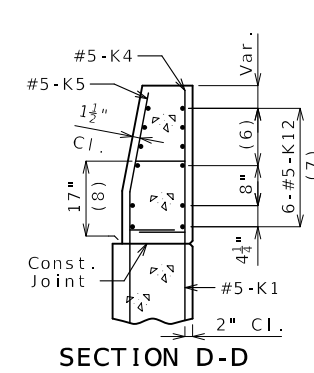
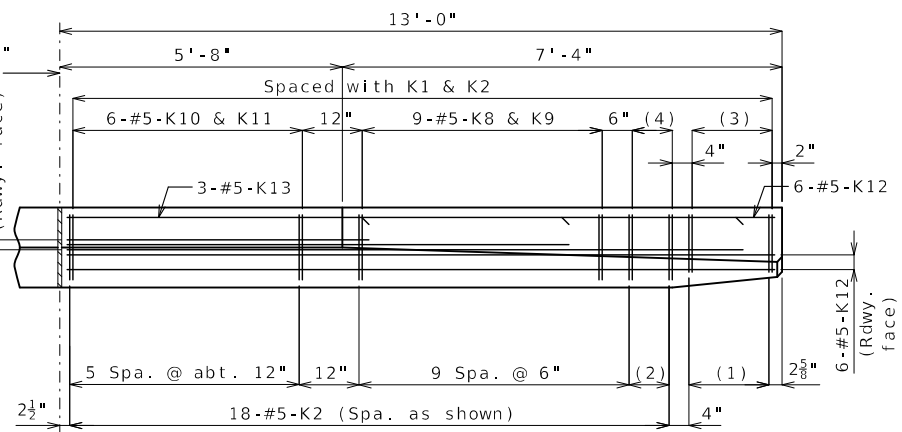
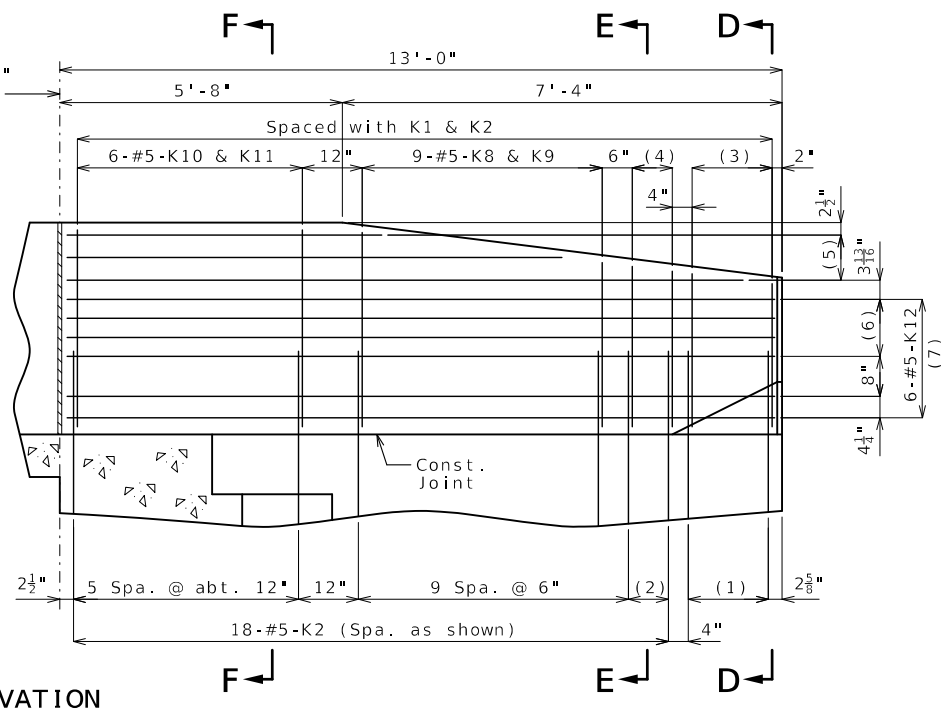
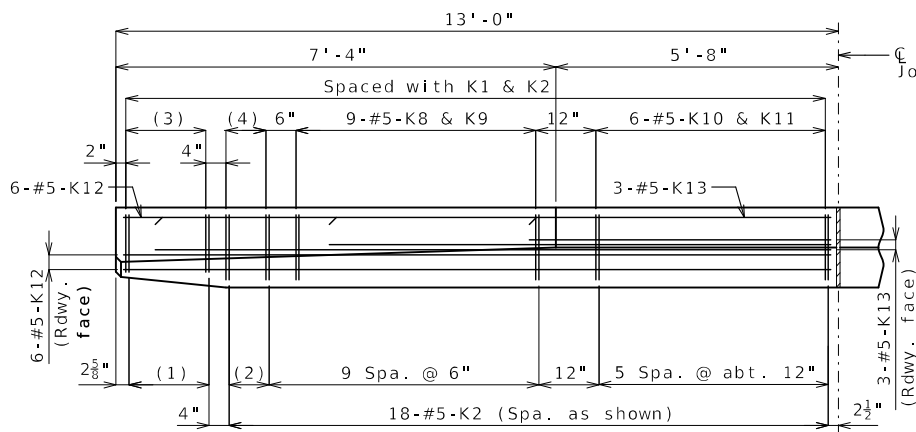
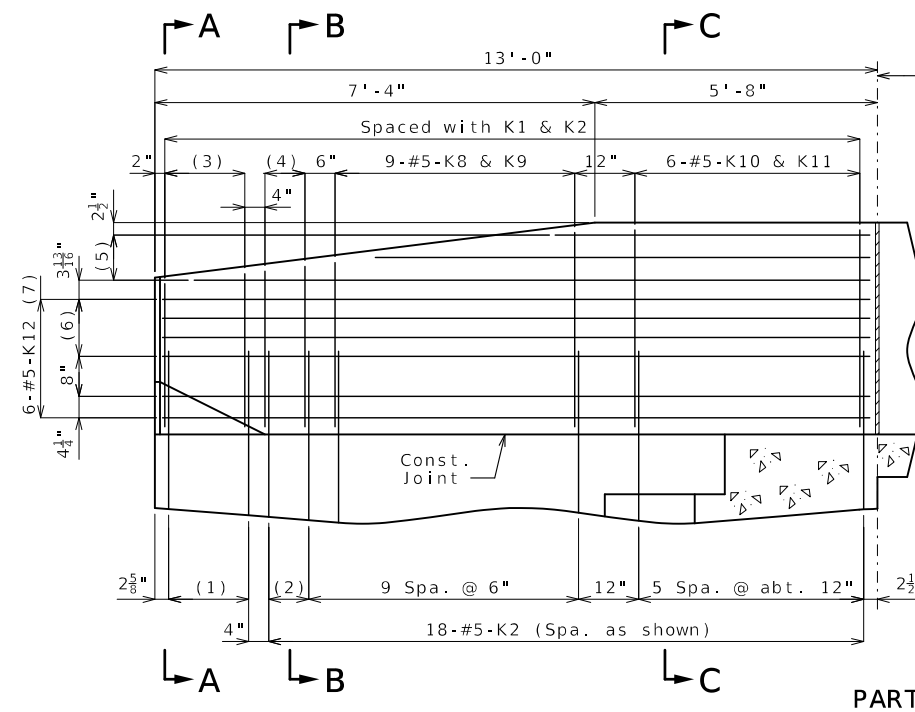
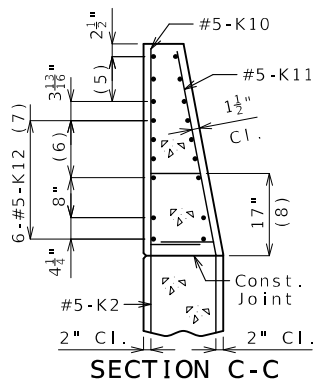
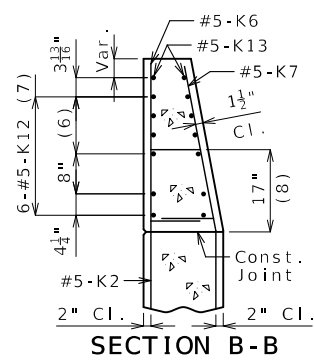
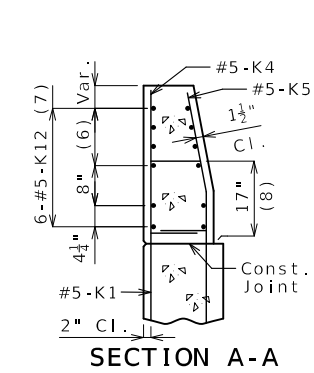
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)



- (1) 5-#5-K1 @ 4" cts.
- (2) 2 spaces @ 4"
- (3) 5-#5-K4 & K5
- (4) 3-#5-K6 & K7
- (5) 3-#5-K13 @ $4\frac{1}{2}$ " cts., each face
- (6) 3 spaces @ $3\frac{3}{8}$ "
- (7) Spaced as shown, each face
- (8) To top of bar

General Notes:

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

For details of conduit system on structure, see Sheet No. 25.

Conduit not shown for clarity.

Reinforcing Steel:

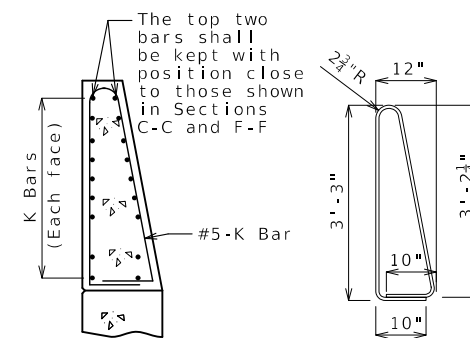
Minimum clearance to reinforcing steel shall be 1 1/2" except as shown for bars embedded into end bent.

TYPE D BARRIER AT END BENTS

(Left barrier shown, right barrier similar)

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 24 of 30

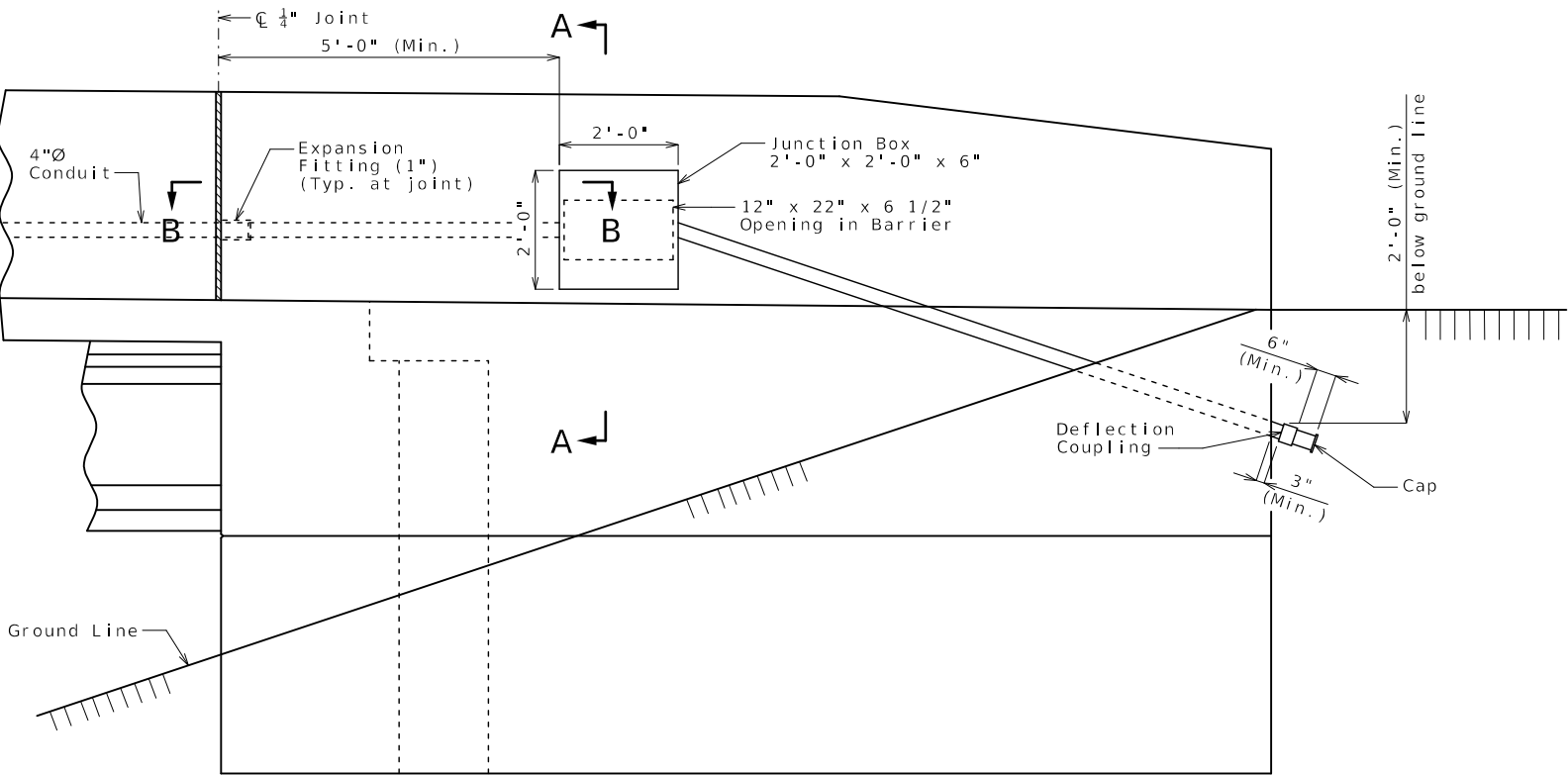


K10-K11 BAR PERMISSIBLE
ALTERNATE SHAPE

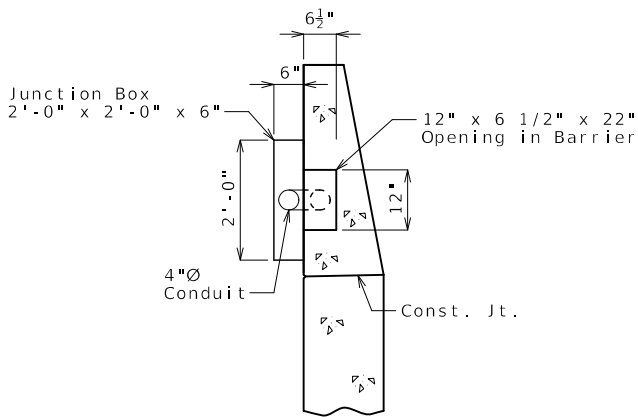
(Other K bars not shown for clarity)

The K10-K11 bar combination may be furnished as one bar as shown, at the contractor's option.

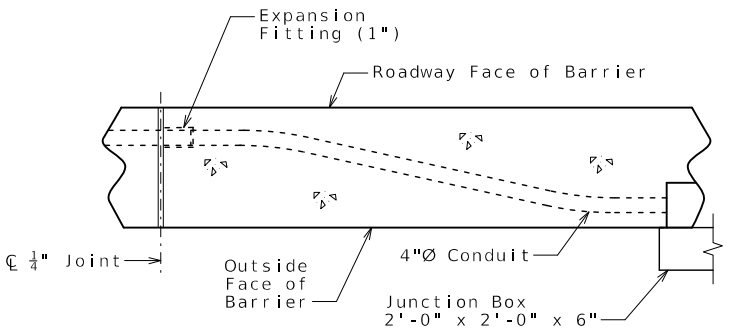
All dimensions are out to out.



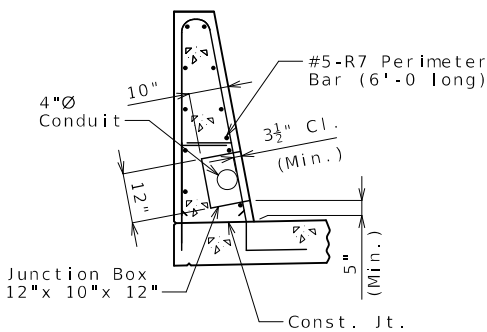
PART ELEVATION SHOWING JUNCTION BOX AT END BENTS
 (End Bent No. 1 shown, End Bent No. 4 similar)
 (Left Barrier only)



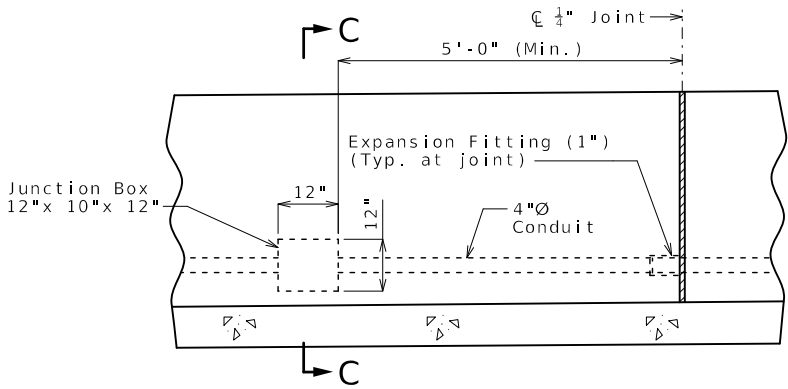
SECTION A-A



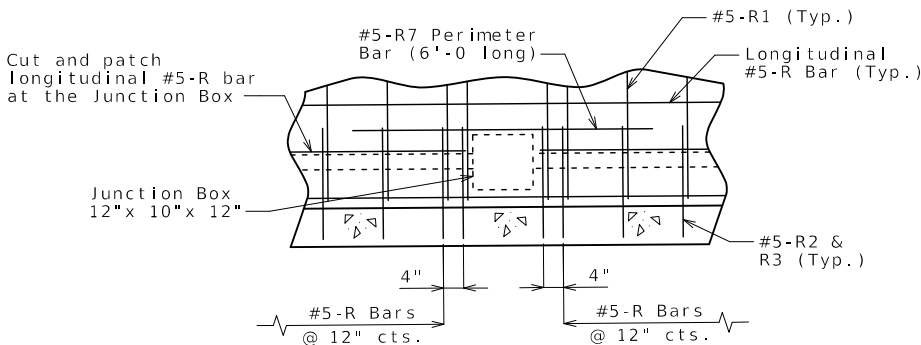
SECTION B-B



SECTION C-C



PART ELEVATION AT INT. BENT
 NO. 3 SHOWING JUNCTION BOX



PART ELEVATION OF BARRIER OVER
 SLAB SHOWING PERIMETER STEEL

Notes:

All conduits shall be rigid nonmetallic schedule 40 heavy wall polyvinyl chloride (PVC) with 3 1/2-inch minimum cover in barrier and 4 1/2-inch minimum cover in abutment wing. Each section of conduit shall bear the Underwriters Laboratories (UL) label.

Shift reinforcing steel in field where necessary to clear conduit and junction boxes.

Expansion fittings shall be placed as shown and set in accordance with the manufacturer's requirements and based on the air temperature at the time of setting given an estimated total expansion movement of one inch at filled joints using a maximum temperature range of 120°F and a maximum temperature of 110°F.

All end bent and barrier junction boxes shall be PVC molded in accordance with Sec 1062 and designed for flush mounting. The conduit terminations shall be permanent or separable. The terminations and covers shall be of watertight construction and shall meet requirements for NEMA 4 or NEMA 4X enclosure.

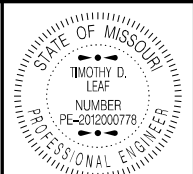
Placement of junction boxes and covers, complete in place, shall be flush with the roadway face of barrier. Junction boxes and covers may be recessed up to 1/4 inch.

Drainage shall be provided at low points or other critical locations of all conduits and all junction boxes in accordance with Sec 707. All conduits shall be sloped to drain where possible.

Junction box size shown on plan may require special order. Smaller junction box may be substituted if junction box meets conduit installation, clearance and project requirements.

MoDOT Construction Personnel: Indicate in field and on bridge plans for future work the exact location of buried conduit at ends of bridge that are capped and not immediately used.

Payment for furnishing and installing Conduit System, complete in place, will be considered completely covered by the contract lump sum price for Conduit System on Structure.



DATE PREPARED
 7/31/2025

ROUTE 43 STATE MO

DISTRICT BR SHEET NO. 25

COUNTY MCDONALD

JOB NO. J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9103

DESCRIPTION

DATE

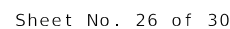
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

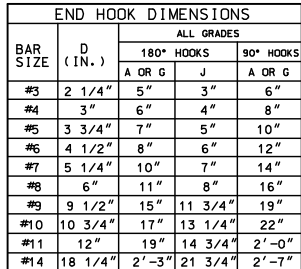
JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)

MoDOT



NO.	REQ'D.	MARK NO. SIZE MARK	LOCATION	EPOXY (E)	SHAPE NO. STIRRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS								NOMINAL LENGTH FT. IN.	ACTUAL LENGTH FT. IN.	WEIGHT LBS.					
									B		C		D		E					F		H		K
									FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.				FT.	IN.	FT.	IN.	FT.
			SUBSTRUCTURE																					
			INT BENT 2																					
21	7	D200	BEAM		20	X			2	6.000						2	6	2	6	107				
10	8	H200	BEAM		18	X			28	7.000						30	5	30	5	812				
12	6	H201	BEAM		20	X			28	7.000						28	7	28	7	515				
10	8	H202	BEAM		20	X			28	7.000						28	7	28	7	763				
16	6	H203	BEAM		10	S	X			22.000	4	1.000				7	9	7	5	178				
2	6	P200	COL/SOCKET		35	X			3	6.000	6.000	43	7.000			974	9	974	9	2928				
32	4	P201	BEAM		16	X			3	6.000	2	5.000				13	3	13	3	283				
38	6	U200	BEAM		13	S	X		4	3.000	4	3.000	4	3.000		18	4	17	10	1018				
8	6	U201	BEAM		10	S	X			4	3.000	4	3.000			12	9	12	5	149				
34	10	V200	COL/SOCKET		20	X			47	10.000						47	10	47	10	6998				
			INT BENT 3																					
21	7	D300	BEAM		20	X			2	6.000						2	6	2	6	107				
10	8	H300	BEAM		18	X			28	7.000						30	5	30	5	812				
12	6	H301	BEAM		20	X			28	7.000						28	7	28	7	515				
10	8	H302	BEAM		20	X			28	7.000						28	7	28	7	763				
16	6	H303	BEAM		10	S	X			22.000	4	1.000				7	9	7	5	178				
2	6	P300	COL/SOCKET		35	X			3	6.000	6.000	41	2.000			922	6	922	6	2771				
32	4	P301	BEAM		16	X			3	6.000	2	5.000				13	3	13	3	283				
38	6	U300	BEAM		13	S	X		4	3.000	4	3.000	4	3.000		18	4	17	10	1018				
8	6	U301	BEAM		10	S	X			4	3.000	4	3.000			12	9	12	5	149				
34	10	V300	COL/SOCKET		20	X			45	5.000						45	5	45	5	6645				
			INT BENT 4																					
21	7	D400	BEAM		20	X			2	6.000						2	6	2	6	107				
10	8	H400	BEAM		18	X			28	7.000						30	5	30	5	812				
12	6	H401	BEAM		20	X			28	7.000						28	7	28	7	515				
10	8	H402	BEAM		20	X			28	7.000						28	7	28	7	763				
16	6	H403	BEAM		10	S	X			22.000	4	1.000				7	9	7	5	178				
2	6	P400	COL/SOCKET		35	X			3	6.000	6.000	39	7.000			888								

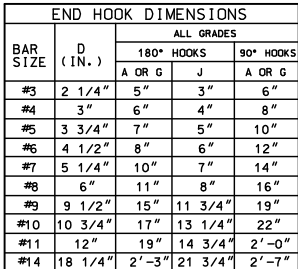


REINFORCING STEEL (GRADE 60) $F_Y = 60,000$ PSI.

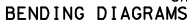
NO.	REQ'D.	MARK NO.	SIZE	MARK	LOCATION	EPOXY	(E)	SHAPE NO.	STIRUP (S)	SUBSTR. (X)	VARIES (V)	NO. EACH	DIMENSIONS												NOMINAL LENGTH	ACTUAL LENGTH	WEIGHT				
													B		C		D		E		F		H					K			
													FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.	FT.	IN.				FT.	IN.	FT.	IN.
40	6	F100	WING BRACE	E	15	S							14	0.000	4	10.875	2	3.000		19.125		19.000		10.000		9.875	8	4	8	3	496
16	6	F101	DIAPHRAGM	E	19	S							5	0.000	2	8.000										7	8	7	6	180	
16	7	H100	BEAM	E	20								30	5.000												30	5	30	5	995	
8	6	H101	BEAM	E	20								30	5.000												30	5	30	5	365	
8	7	H102	DIAPHRAGM	E	20								30	5.000												30	5	30	5	497	
8	6	H103	DIAPHRAGM	E	20								30	5.000												30	5	30	5	365	
18	6	H104	DIAPHRAGM	E	20								7	3.000												7	3	7	3	196	
6	6	H105	DIAPHRAGM	E	20								4	6.000												4	6	4	6	41	
12	6	H106	DIAPHRAGM	E	20								2	10.000												2	10	2	10	51	
4	6	H107	DIAPHRAGM	E	19	S							2	8.000		17.750										4	2	4	0	24	
8	5	H108	STRAND TIE	E	20								5	9.000													5	9	5	9	48
56	5	H109	APPROACH TIE	E	19	S							2	0.000		15.000										3	3	3	2	185	
32	8	H110	WING	E	19								12	6.000		12.000										13	6	13	4	1139	
80	6	H111	WING	E	19	S							11	8.000		12.000											12	8	12	6	1502
32	5	U100	BEAM	E	10	S									6	0.000	2	9.000									14	9	14	7	487
52	4	U101	BEAM	E	13	S							2	9.000	2	8.000	2	9.000	2	8.000							11	7	11	4	394
4	4	U102	BEAM	E	10	S									2	8.000	2	9.000									8	1	7	11	21
42	5	U103	DIAPHRAGM	E	10	S									4	2.000	2	3.000									10	7	10	5	456
42	6	U104	DIAPHRAGM	E	19	S							3	1.000	2	9.000											5	10	5	8	357
76	6	U105	DIAPHRAGM	E	19	S							3	2.000	4	7.000											7	9	7	7	866
20	5	V100	BEAM	E	20								6	0.000													6	0	6	0	125



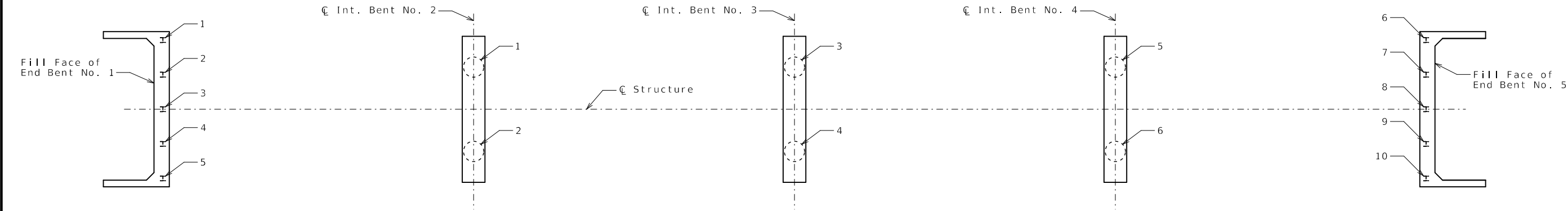
Sheet No. 27 of 30

[illegible]

REINFORCING STEEL (GRADE 60) $F_y = 60,000$ PSI.

[illegible]

Sheet No. 28 of 30



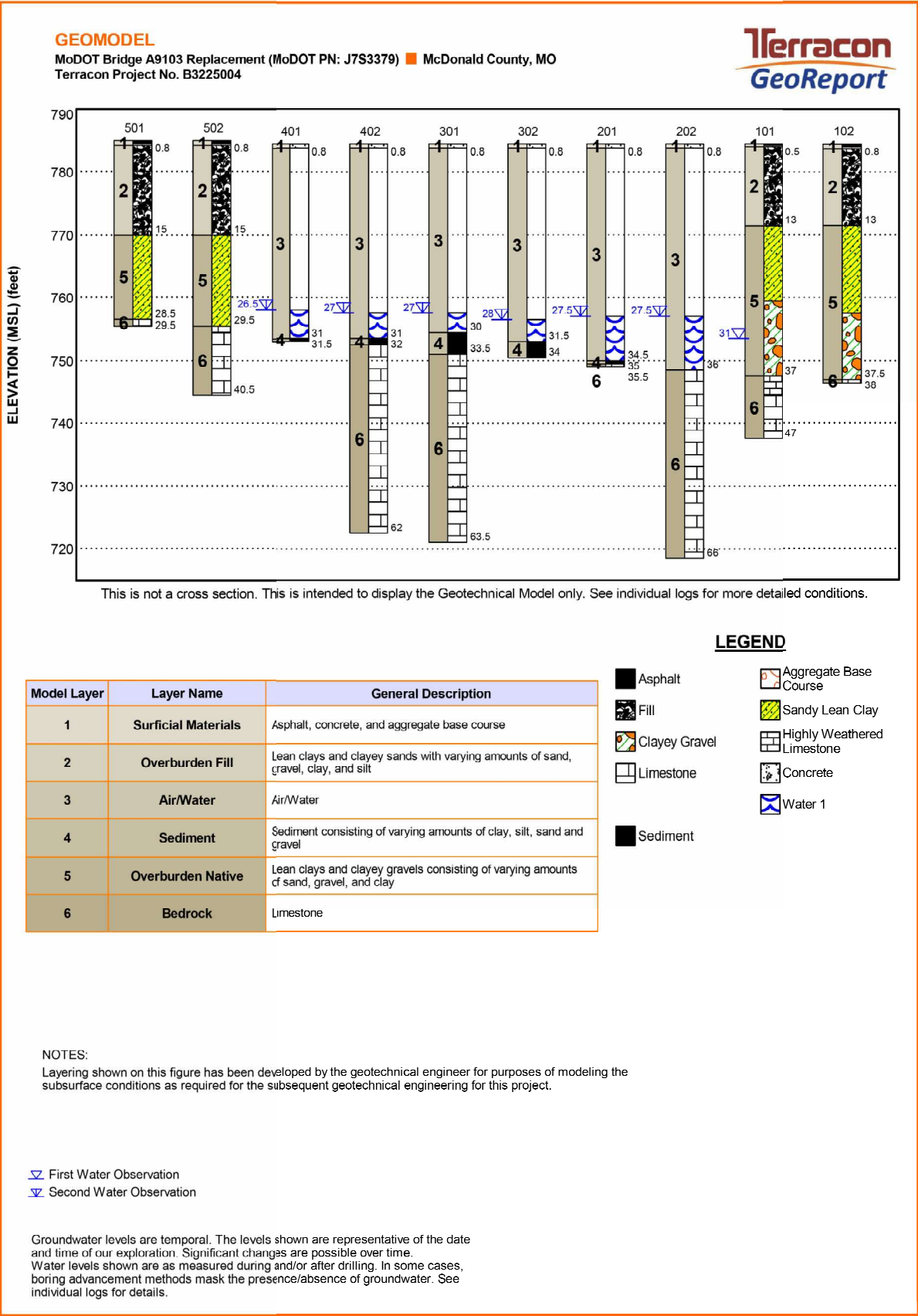
PART PLAN SHOWING PILE NUMBERING FOR RECORDING
AS-BUILT PILE DATA & AS BUILT DRILLED SHAFT DATA

As-Built Pile Data			
Pile No.	Length in Place (ft)	Computed Nominal Axial Compressive Resistance (kips)	Remarks
End Bent No. 1			
1			
2			
3			
4			
5			
End Bent No. 5			
6			
7			
8			
9			
10			

As-Built Drilled Shaft Data				
Shaft No.	Top of Sound Rock (Elev.)	Tip of Casing (Elev.)	Bottom of Rock Socket (Elev.)	Remarks
Int. Bent No. 2				
1				
2				
Int. Bent No. 3				
3				
4				
Int. Bent No. 4				
5				
6				

Note:
Indicate in remarks column:
A. Pile type and grade
B. Batter
C. Driven to practical refusal

This sheet to be completed by MoDOT construction personnel.



BORING DATA

Note: For locations of borings, see Sheet No. 1.

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 30 of 30

Detailed Mar. 2023
Checked Apr. 2023

STATE OF MISSOURI

TIMOTHY D. LEAF

NUMBER

PE-2012000778

PROFESSIONAL ENGINEER

01/23/2025 12:04:08 PM

TIMOTHY D. LEAF - CIVIL

MO-PE-2012000778

DATE PREPARED

1/23/2025

ROUTE

43

STATE

MO

DISTRICT

BR

SHEET NO.

30

COUNTY

MCDONALD

JOB NO.

J7S3379

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9103

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)

A.A.D.T. - 2024 = 2,799
A.A.D.T. - 2044 = 3,092
D.H.V. = 9.51%
T = 9.5%
V = 45 M.P.H.
D (N/S) = 50.1% / 49.9%

	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
GUARD CABLE		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	— FO —	— FO —
OVERHEAD CABLE TV	— OTV —	— OTV —
UNDERGROUND CABLE TV	— UTV —	— UTV —
OVERHEAD TELEPHONE	— OT —	— OT —
UNDERGROUND TELEPHONE	— UT —	— UT —
OVERHEAD POWER	— OE —	— OE —
UNDERGROUND POWER	— UE —	— UE —
SANITARY SEWER	— S —	— S —
STORM SEWER	— SS —	— SS —
GAS	— G —	— G —
WATER	— W —	— W —
MANHOLE	SAN 	
FIRE HYDRANT	HYD 	
WATER VALVE	WV 	
WATER METER	WM 	
DROP INLET	DI 	
DITCH BLOCK		
GROUND MOUNTED SIGN	SIGN 	
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL	PED 	
FENCE		
CHAIN LINK	— V —	— V —
WOVEN WIRE	— X —	— X —
GATE POST		
BENCHMARK	BM 	



DESCRIPTION	NUMBER
-------------	--------

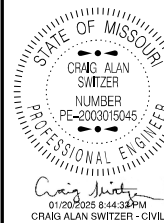
BEGINNING OF PROJECT	STA.	238 + 36.33
END OF PROJECT	STA.	249 + 73.27

APPARENT LENGTH	1136.94 FEE
-----------------	-------------

EQUATIONS AND EXCEPTIONS: NON

TOTAL CORRECTIONS	0	FEE
NET LENGTH OF PROJECT	1136.94	FEE
STATE LENGTH	0.215	MIL

FOR INFORMATION ONLY
ESTIMATED DISTURBED ACRES 0.4 ACR



DATE PREPARED
1/16/2025

ROUTE 59	STATE MO
-------------	-------------

DISTRICT	SHEET NO.
SW	1

COUNTY
MCDONALD

JOB NO.
JSR0172

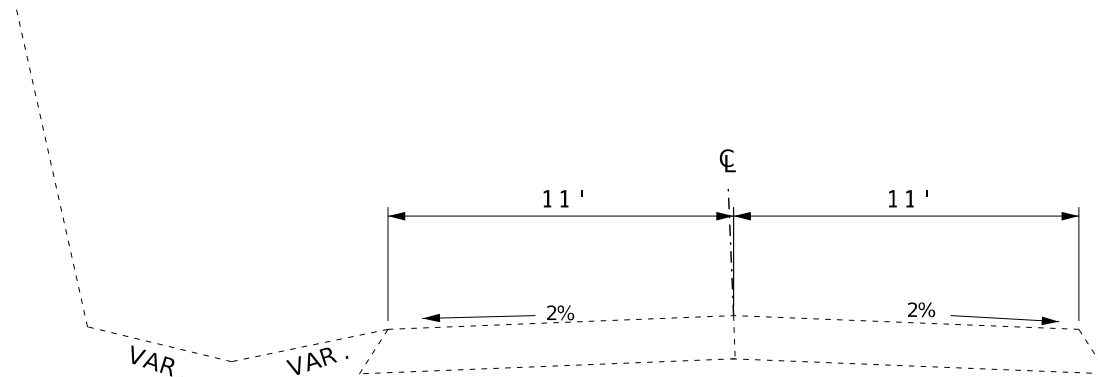
CONTRACT ID.

PROJECT NO.

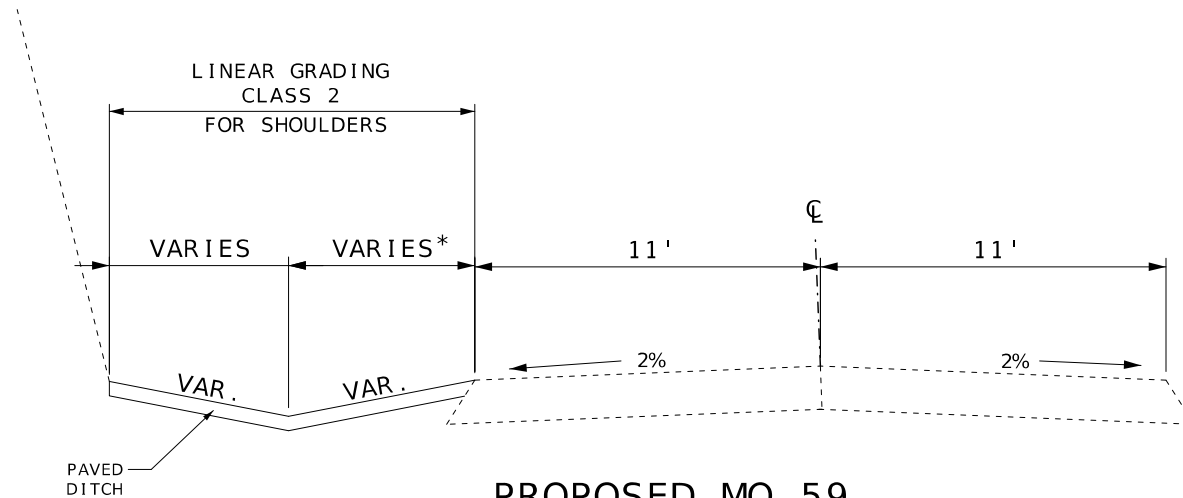
BRIDGE NO.

[illegible][illegible]TRANSPORTATION
105 WEST CAPITOL
N CITY MO 65101

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EXISTING MO 59
FROM STA 238+36.33 TO 249+73.27



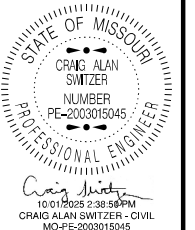
PROPOSED MO 59
FROM STA 238+36.33 TO 249+73.27

* FOLLOW EXISTING f_L

REPLACE DRIVEWAY CULVERT LT.
FROM STA 249+41.37 TO 249+73.27

NOT TO SCALE

TYPICAL SECTIONS
SHEET 1 OF 1



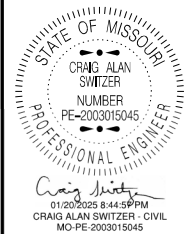
DATE PREPARED 8/29/2025	
ROUTE 59	STATE MO
DISTRICT SW	SHEET NO. 2
COUNTY MCDONALD	
JOB NO. JSR0172	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)



DATE PREPARED 1/16/2025	
ROUTE 59	STATE MO
DISTRICT SW	SHEET NO. 4
COUNTY MCDONALD	
JOB NO. JSR0172	
CONTRACT ID.	

PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

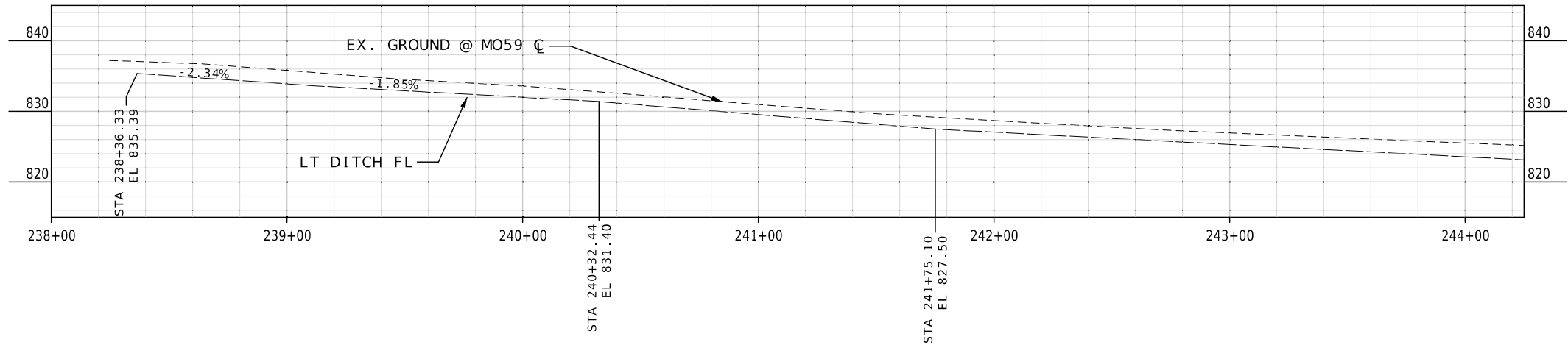
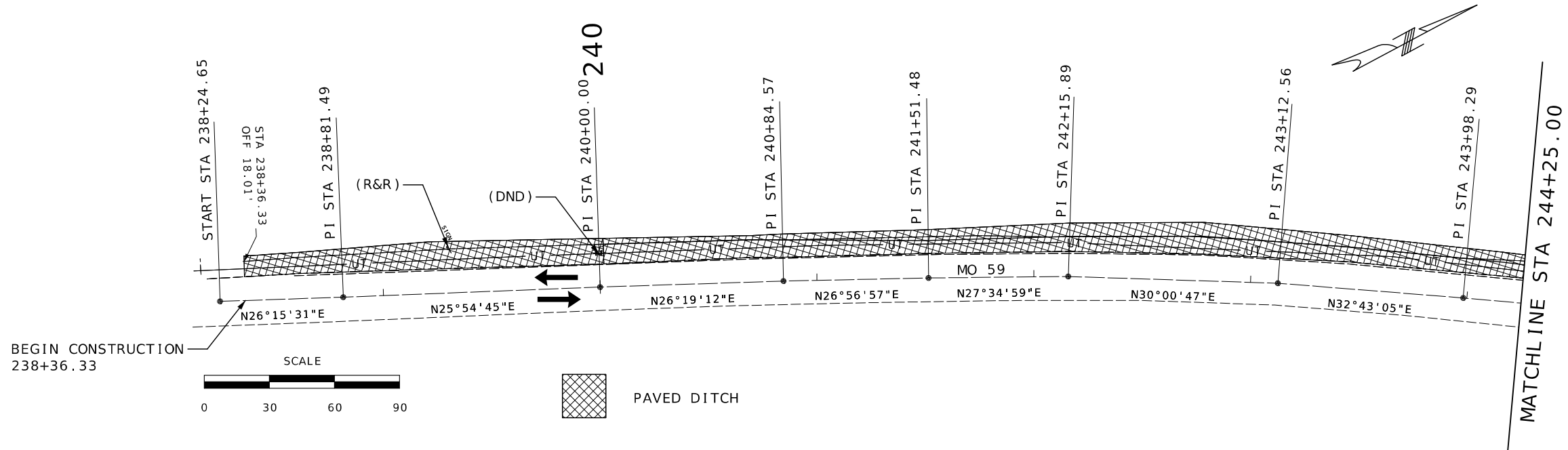
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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

ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

ALL BEARINGS BASED ON STATE PLANE BEARINGS WESTERN ZONE



ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES MULTIPLY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION

COORDINATE SYSTEM	MISSOURI STATE PLANE	
HORIZONTAL DATUM	NAD83	
VERTICAL DATUM	NAVD88	
GEOID MODEL	GEOID 18	
ELEVATIONS DETERMINED BY	GPS	
PROJECT PROJECTION FACTOR	1.00009376	

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM	MODIFIED STATE PLANE	
CONTROL STATION	MODOT GNSS	
DESIGNATION	MODOT ANDERSON CORS ARP	
CORS_ID	MOA2	
PID	DN6071	
LATITUDE	364103.3941	
LONGITUDE	942618.2475	
NORTHING (M)	57435.916	
EASTING (M)	855505.193	
ZONE	WEST ZONE	
PROJECT AVERAGE GRID FACTOR	0.99990625	

EXAMPLE OF PROJECT COORDINATE TO S.P.C.

PROJECT NORTHING X AVERAGE GRID FACTOR
= STATE PLANE NORTHING
PROJECT EASTING X AVERAGE GRID FACTOR
= STATE PLANE EASTING

EXAMPLE: CONTROL POINT #1
N 140472.115 X 0.99990625 = N 140458.946
E 2793260.134 X 0.99990625 = E 2792998.266

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING								
SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION	GPK POINT ID
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)		
PROJECT CONTROL POINTS								
-	-	MO 59	-	140472.115	2793260.134	823.319	CONTROL POINT 1	CP1
-	-	MO 59	-	141097.113	2794107.128	838.570	CONTROL POINT 2	CP2
-	-	MO 59	-	140836.944	2793957.985	842.016	CONTROL POINT 3	CP3
-	-	MO 59	-	142138.905	2794679.939	819.909	CONTROL POINT 4	CP4
-	-	MO 59	-	141112.720	2794114.600	838.300	BENCHMARK 1	BM1
ALIGNMENTS								
4	238+24.65	☒ MO 59	0	141193.268	2794133.293	-	START MO 59	N/A
4	238+81.49	☒ MO 59	0	141244.243	2794158.441	-	PI MO 59	N/A
4	240+00.00	☒ MO 59	0	141350.836	2794210.229	-	PI MO 59	N/A
4	240+84.57	☒ MO 59	0	141426.640	2794247.726	-	PI MO 59	N/A
4	241+51.48	☒ MO 59	0	141486.287	2794278.051	-	PI MO 59	N/A
4	242+15.89	☒ MO 59	0	141543.378	2794307.876	-	PI MO 59	N/A
4	243+12.56	☒ MO 59	0	141627.086	2794356.230	-	PI MO 59	N/A
4	243+98.29	☒ MO 59	0	141699.211	2794402.566	-	PI MO 59	N/A
5	245+99.86	☒ MO 59	0	141867.698	2794513.206	-	PI MO 59	N/A
5	246+87.79	☒ MO 59	0	141942.167	2794559.965	-	PI MO 59	N/A
5	247+65.91	☒ MO 59	0	142008.239	2794601.645	-	PI MO 59	N/A
5	248+27.95	☒ MO 59	0	142059.480	2794636.626	-	PI MO 59	N/A
5	248+89.43	☒ MO 59	0	142107.697	2794674.767	-	PI MO 59	N/A
5	249+35.09	☒ MO 59	0	142141.906	2794705.013	-	PI MO 59	N/A
5	250+04.47	☒ MO 59	0	142189.705	2794755.294	-	END MO 59	N/A

GENERAL NOTES:

1. ANY EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
2. TEMPORARY SIGNING SHOWN IS FOR WORK ON ONE SIDE OF THE ROAD. FOR WORK ON THE OTHER SIDE, REVERSE ORDER OF THE SIGNS AND CHANNELIZERS.
3. SIGNING SHOWN SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
4. ALTERNATE TRAFFIC CONTROL MAY BE USED AS NEEDED AT THE APPROVAL OF THE ENGINEER.
5. REFER TO STANDARD DRAWING 616.10, 619.10, AND 620.10 FOR ADDITIONAL DETAILS AND 903.03 FOR SIGN AND SIGN MOUNTING REQUIREMENTS.
6. SPEED LIMIT SIGNS INDICATING THE NORMAL SPEED LIMIT SHALL BE INSTALLED AT THE END OF THE WORK ZONE, PROVIDED NO FURTHER WORK ZONES WILL BE ENCOUNTERED WITHIN THE NEXT 1/2 MILE.
7. TEMPORARY SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED WHEN THE CONDITIONS REQUIRING REDUCED SPEEDS DO NOT EXIST.
8. NO DIRECT PAYMENT WILL BE MADE FOR THE RELOCATION OF CHANNELIZERS, CONSTRUCTION SIGNS, OR FLASHING ARROW PANEL.
9. ALL SIGNS SHALL BE PORTABLE MOUNT AND ARE TO BE MOVED AS WORK PROGRESSES, UNLESS OTHERWISE NOTED. ALL TRAFFIC CONTROL ITEMS SHALL BE REMOVED FROM THE ROADWAY DURING NON-WORKING HOURS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING PROPER TRAFFIC CONTROL SETUPS THROUGHOUT CONSTRUCTION AS DESCRIBED IN THESE PLANS OR AS APPROVED BY THE ENGINEER.
11. WHERE MINIMUM LANE WIDTHS CANNOT BE ACHIEVED ON THE SIDE STREETS, THE CONTRACTOR SHALL CLOSE HALF OF THE APPROACH AND POSITION A FLAGGER AT EACH END OF THE WORK AREA. LOCATION TO BE DETERMINED BY THE ENGINEER. ADVANCE FLAGGER SIGNING SHALL BE INSTALLED AS OUTLINED IN THE MUTCD.
12. THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS TO ALL BUSINESSES AND STREETS. NO STREET OR ENTRANCE SHALL BE COMPLETELY BLOCKED.
13. SPACING & DISTANCES OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD & APPROVED BY THE ENGINEER.
14. TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
15. ADJUST ADVANCE WARNING SIGN SPACING TO AVOID SIGN PLACEMENT WITHIN THE LIMITS OF THE RAILROAD RIGHT OF WAY.

REVISED: 5/29/2025



DATE PREPARED
8/29/2025

ROUTE
59

STATE
MO

DISTRICT
SW

SHEET NO.
8

COUNTY
MCDONALD

JOB NO.
JSR0172

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

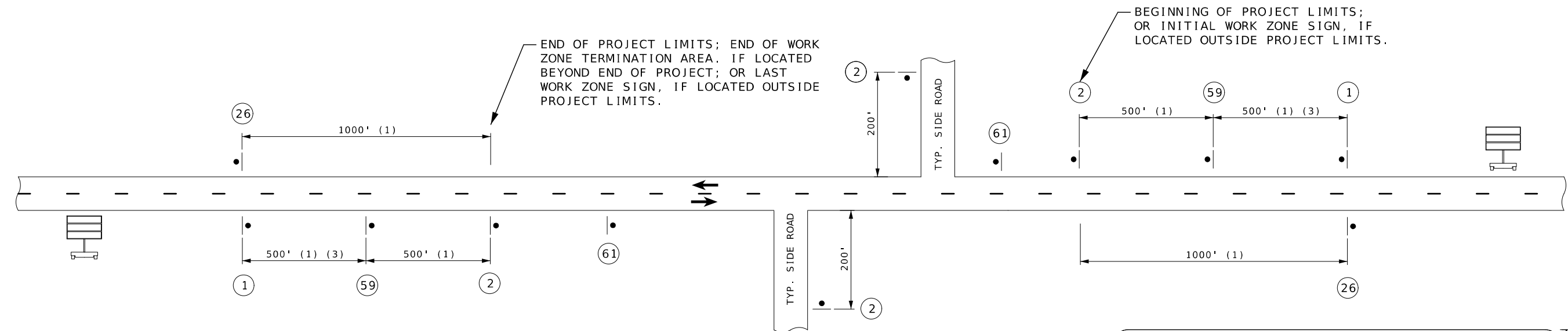
105 WEST CAPITOL
JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

MODOT

NOT TO SCALE

TRAFFIC CONTROL SHEET 1 OF 3



(1) DISTANCE MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS. WHERE TRAFFIC BACKUPS ARE EXPECTED BEYOND THE ADVANCE WARNING AREA, ADDITIONAL SIGNING MAY BE NEEDED.

(2) CONST-5-96 SIGN IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS. IF A VISIBLE LOCATION WITHIN THE PROJECT IS NOT AVAILABLE, THE SIGN MAY BE PLACED 500 FEET BEFORE SIGN CONST-7-72.

(3) THE "WORK ZONE NO PHONE ZONE" SIGN IS PLACED A MINIMUM OF 500 FEET BEFORE THE ROAD WORK AHEAD SIGN.

(4) CMS PLACEMENT SHALL BE APPROVED BY THE ENGINEER.

TYPICAL BEGINNING AND END OF PROJECT
(UNDIVIDED HIGHWAY)

END
ROAD WORK

GO20-2

26



WO20-1

2

ROAD WORK
NEXT 1 MILES

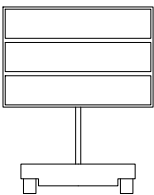
GO20-1

1

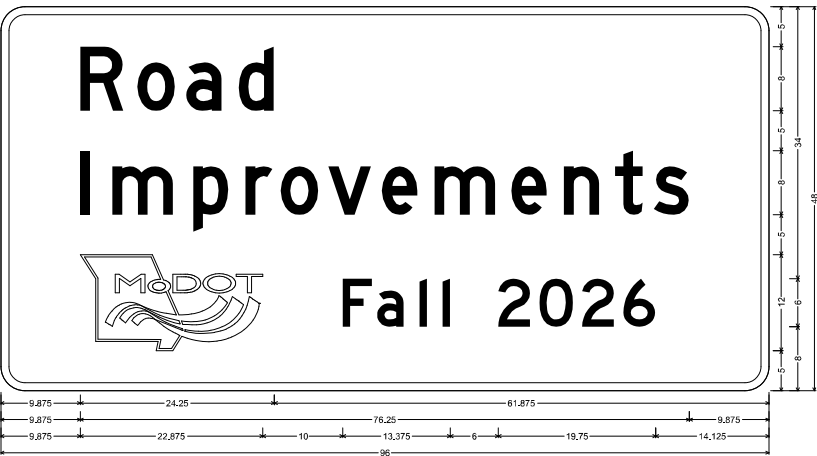
WORK ZONE
NO PHONE
ZONE

CONST-8

59 (3)



(4)



CONST-5-96

61 (2)

Completed as Promised

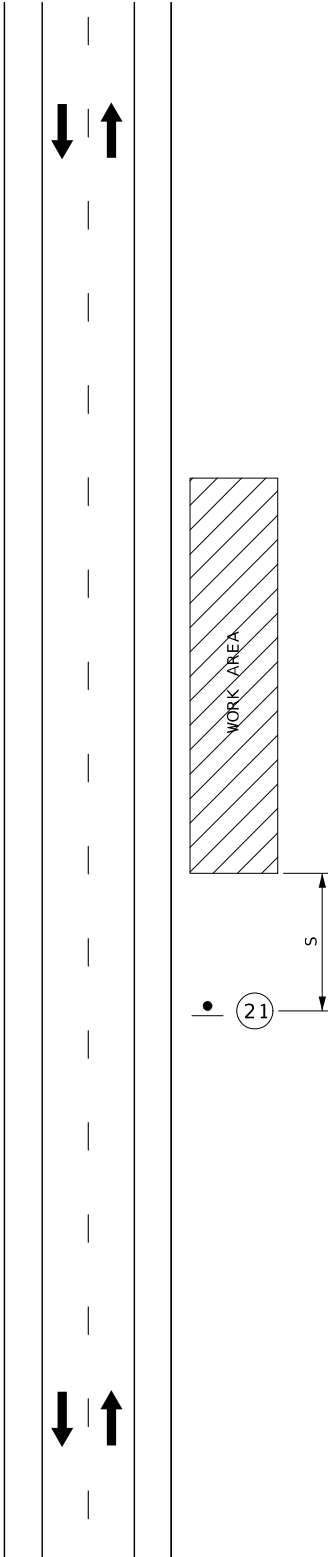
CONST-6P480 SHF-FLAT SHEET FLUORESCENT:
1.500" Radius, No border, Yellow:
"Completed as Promised" Black, D 66% spacing:
Table of letter and object lifts

C	1.500	4.875	7.875	12.375	15.375	16.625	19.375	21.500	24.250	26.000	31.875
P	36.625	39.875	41.875	44.875	49.500	50.750	53.500	56.250			

NOT TO SCALE

TRAFFIC CONTROL
SHEET 1 OF 3

WORK BEYOND THE SHOULDER
(UNDIVIDED HIGHWAY)



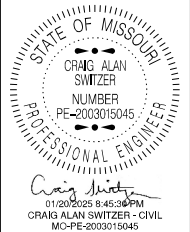
SPEED	SIGN SPACING (FT) (1)
PERMANENT POSTED (MPH)	UNDIVIDED HIGHWAYS (S)
0-35	200
40-45	350
50-55	500
60-70	1000

SPACING NOTES:
(1) SPACING BETWEEN SIGNS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS, AS APPROVED BY ENGINEER.



WO21 - 5
(21)

NOT TO SCALE



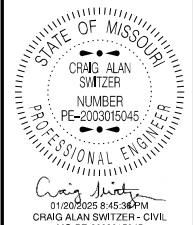
DATE PREPARED 1/16/2025	
ROUTE 59	STATE MO
DISTRICT SW	SHEET NO. 10
COUNTY MCDONALD	
JOB NO. JSR0172	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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



DATE PREPARED
1/16/2025
ROUTE 59 STATE MO
DISTRICT SW SHEET NO. 11
COUNTY MCDONALD
JOB NO. JSR0172
CONTRACT ID.

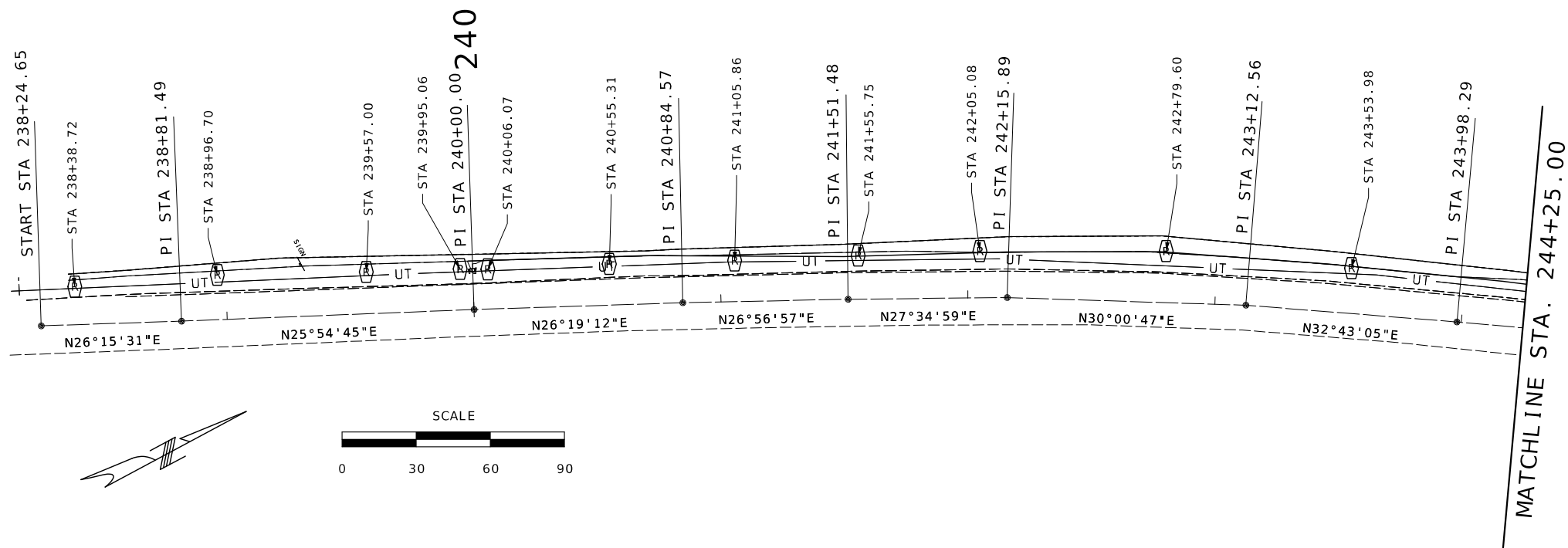
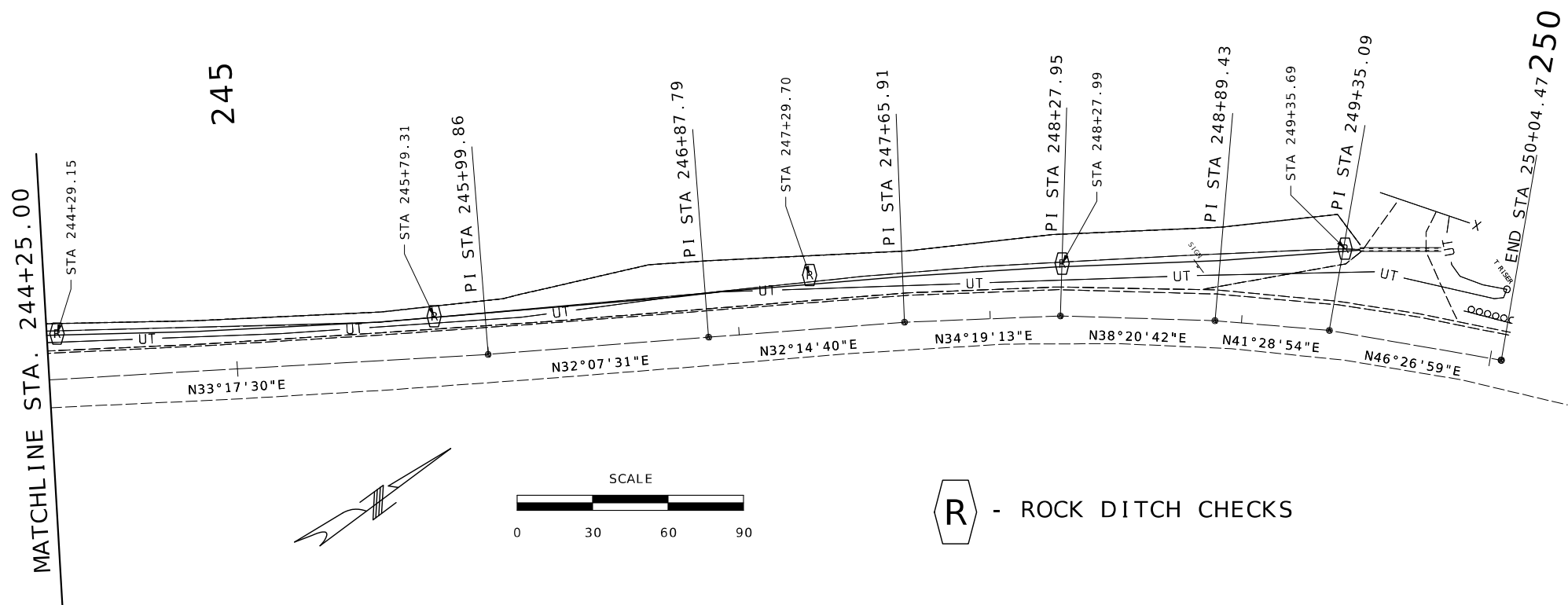
PROJECT NO.
BRIDGE NO.

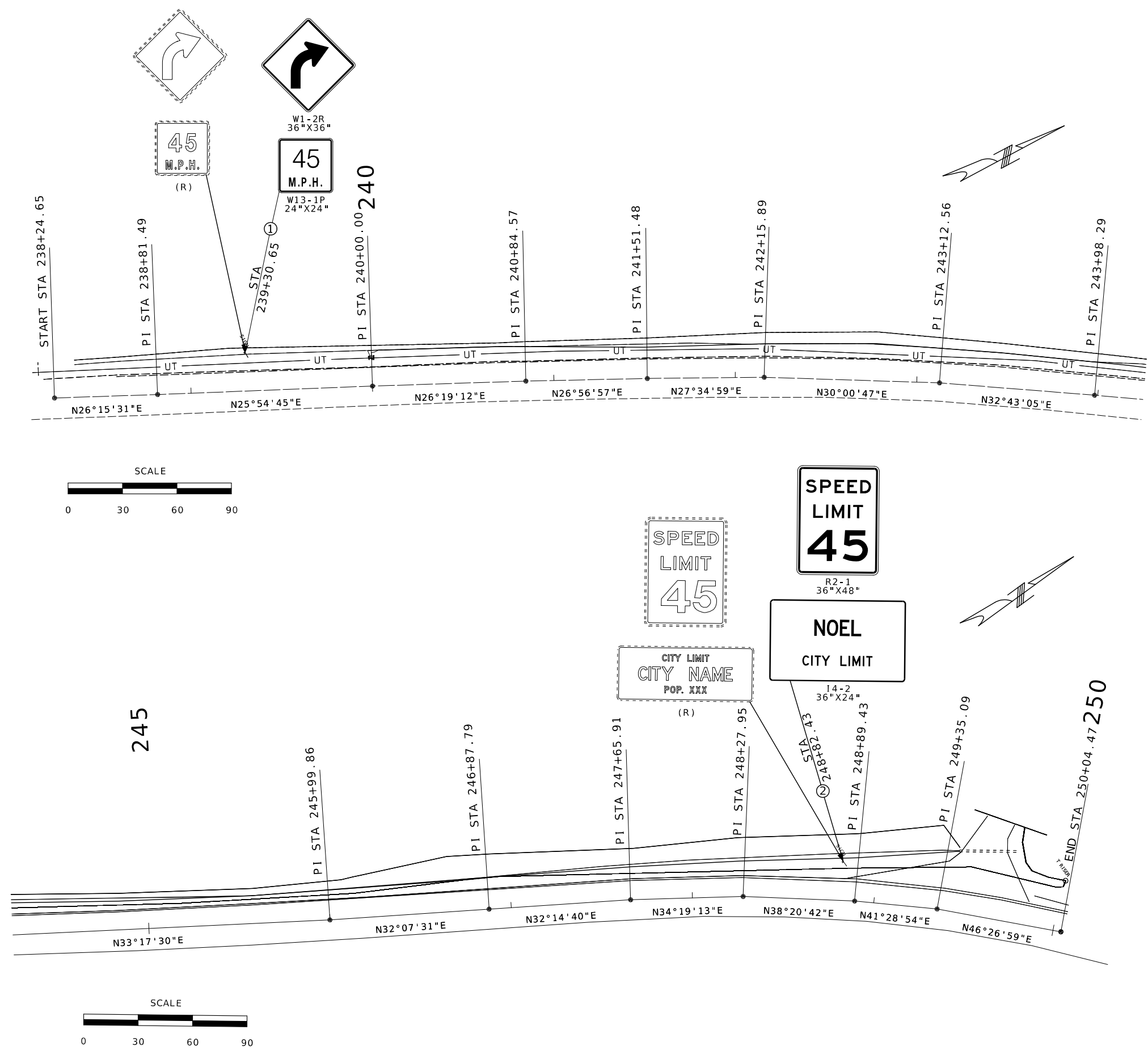
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

EROSION CONTROL
SHEET 1 OF 1





STATE OF MISSOURI
CRAIG ALAN SWITZER
NUMBER
PE-2003015045
PROFESSIONAL ENGINEER

01/20/2025 8:45:48 PM
CRAIG ALAN SWITZER - CIVIL
MO-PE-2003015045

DATE PREPARED
1/16/2025

ROUTE
59

STATE
MO

DISTRICT
SW

SHEET NO.
12

COUNTY
MCDONALD

JOB NO.
JSR0172

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

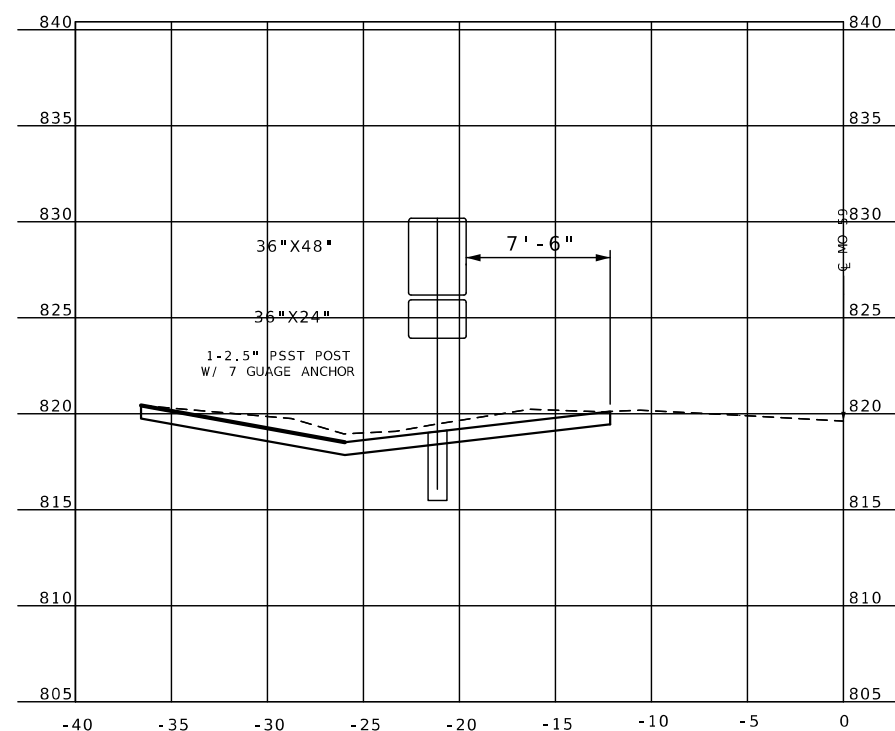
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

DATE PREPARED	
2/19/2025	
ROUTE	STATE
59	MO
DISTRICT	SHEET NO.
SW	13
COUNTY	
MCDONALD	
JOB NO.	
JSR0172	
CONTRACT ID.	

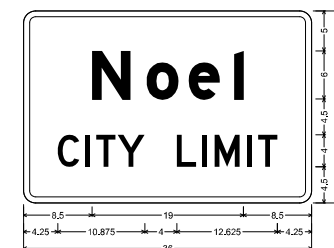
STRUCTURAL STEEL POST AND FOOTING DATA TABLE													
		POST			FOOTING								
POST DES. NO.	NOM. SIZE	WEIGHT		STUB LENGTH	DIA.	LEVEL GROUND		6:1 GRADE		4:1 GRADE		3:1 OR 2:1 GRADE	
		LBS/FT	LBS/IN			DEPTH	C.Y.	DEPTH	C.Y.	DEPTH	C.Y.	DEPTH	C.Y.
1	W6	9.0	0.75	3' 0"	15"	3' 6"	0.14	3' 2"	0.15	3' 0"	0.16	3' 0"	0.17
2	W6	15.0	1.25	4' 0"	24"	4' 0"	0.47	4' 2"	0.50	4' 3"	0.61	4' 6"	0.54
3	W8	18.0	1.50	4' 6"	28"	4' 6"	0.71	4' 8"	0.73	4' 9"	0.74	5' 0"	0.78
4	W10	22.0	1.83	5' 0"	36"	5' 0"	1.31	5' 2"	1.36	5' 3"	1.39	5' 6"	1.45
5	W10	26.0	2.17	5' 0"	36"	5' 0"	1.31	5' 3"	1.37	5' 5"	1.43	5' 9"	1.52
6	W12	35.0	2.92	5' 6"	36"	5' 6"	1.44	5' 9"	1.52	5' 11"	1.56	6' 3"	1.65

ROUND PIPE POST AND FOOTING DATA TABLE						
NOM. SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	
2½	5.79	0.48	4' - 3½"	12"	4-6"	0.13
4	10.79	0.90	5' - 3¾"	18"	5-6"	0.36

EFFECTIVE: 10-01-2016



* ORANGE, YELLOW & YELLOW/GREEN



14-1 SH-FLAT SHEET;
1.500" Radius, 0.750" Border, White on, Green;
"Noel", E Mod; "CITY LIMIT", D;
Table of letter and object lists

N	5	15.375	e	20.625	26.375	
C	2.50	I	7.750	T	9.125	
				Y	11.750	
L	19.125			M	23.875	
				I	27.875	
					T	29.250