DESIGN DESIGNATION

ROUTE 370 EASTBOUND & WESTBOUND
A.A.D.T. - 2026 = 24,138 (EB+WB)
A.A.D.T. - 2046 = 26,671 (EB+WB)
D.H.V. = 22.4% (PEAK DIRECTION - EB+WB)
T = 7%
V = 60 M.P.H.
D = 65/35 PEAK DIRECTION/NON-PEAK DIRECTION
FUNCTIONAL CLASSIFICATION - INTERSTATE

NO RIGHT OF WAY ACQUISITION

CONVENTIONAL SYMBOLS
(USED IN PLANS)

	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	D	
DITCH BLOCK		
GROUND MOUNTED SIGN	SIGN	
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL	PED	
FENCE		
CHAIN LINK	-V-	
WOVEN WIRE	-X-	
GATE POST		
BENCHMARK	BM	

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED

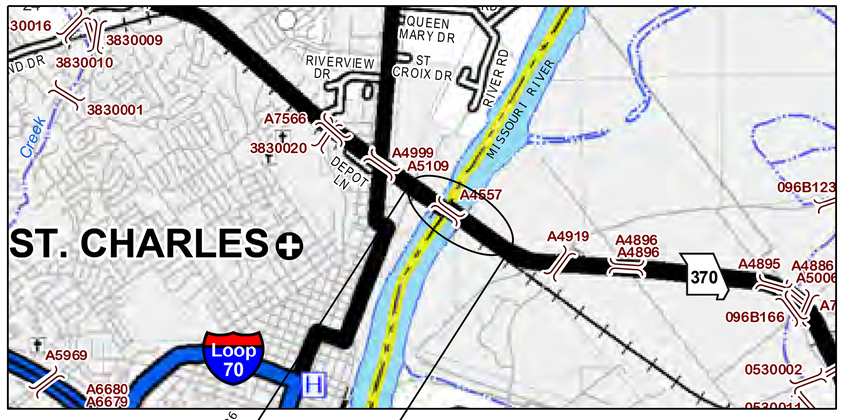
STATE HIGHWAY 370

SAINT LOUIS COUNTY AND SAINT CHARLES COUNTY

KEY MAP
LOCATION OF SAINT LOUIS COUNTY

KEY MAP
LOCATION OF SAINT CHARLES COUNTY

R05E



T47N

T47N

R05E

EXIST. BEGIN PROJECT ROUTE 370 LOG MILE 7.926 STA 501+87.50

EXIST. END PROJECT ROUTE 370 LOG MILE 10.071 STA 560+41.86

DRAINAGE, BRIDGE REHABILITATION, PAVEMENT MARKINGS, GUARDRAIL
TOTAL LENGTH = 5,854.36 FT

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.

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS) (3 SHEETS)	2
QUANTITIES (QU) (5 SHEETS)	3
PLAN SHEETS (PL)	4 - 5
REFERENCE POINTS (RP)	6
COORDINATE POINTS (CP)	7
SPECIAL SHEETS (SS)	8 - 11
TRAFFIC CONTROL SHEETS (TC)	12 - 54
PAVEMENT MARKING (PM)	55 - 66
BRIDGE DRAWINGS (B)	
A45576	1-40
A45577	1-43

LENGTH OF PROJECT

BEGINNING OF PROJECT	STA.	501+87.50
END OF PROJECT	STA.	560+41.86
APPARENT LENGTH		5,854.36 FEET
EQUATIONS AND EXCEPTIONS:		NONE
TOTAL CORRECTIONS		0 FEET
NET LENGTH OF PROJECT		5,854.36 FEET
STATE LENGTH		1.109 MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES		0 ACRES

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 1
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

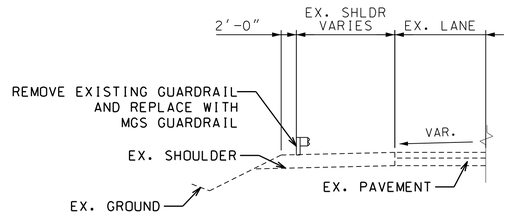
NOTES:

(1) ALL MO-370 STATIONING AND OFFSETS ARE FROM MO-370 ALIGNMENT.

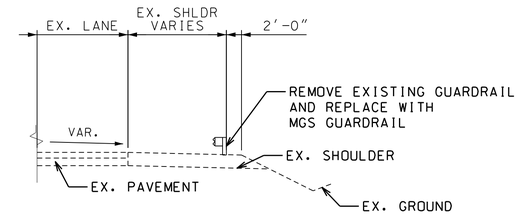
(2) NEW CROSS SLOPE TO BE DETERMINED BY THE ENGINEER.

(3) TEMPORARY CROSS SLOPE TO ALLOW FOR FLOW TO TRENCH DRAIN MAX SLOPE OF 2%

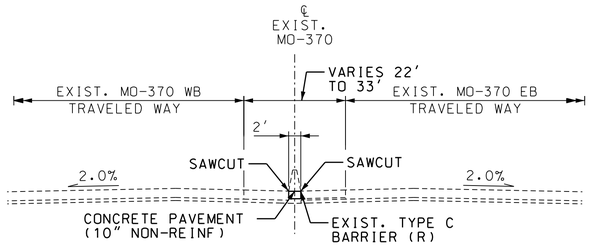
(4) WORK IS ON NORTH SIDE OF MO-370 WESTBOUND UTILIZING MO-370 EASTBOUND STATIONING.



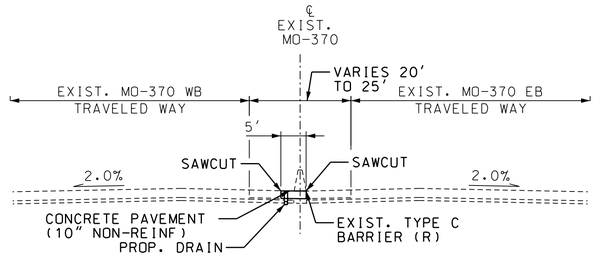
TYPICAL SECTION MO 370 WESTBOUND
GUARDRAIL FROM STA. 547+99 TO STA. 550+25



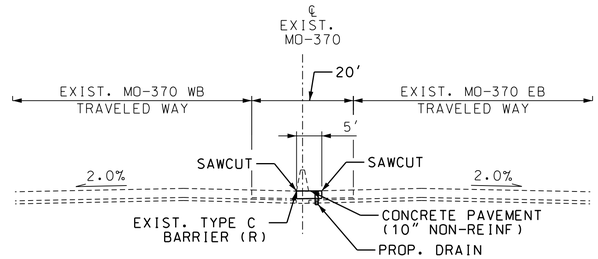
TYPICAL SECTION MO 370 EASTBOUND
GUARDRAIL FROM STA. 548+06 TO STA. 548+93



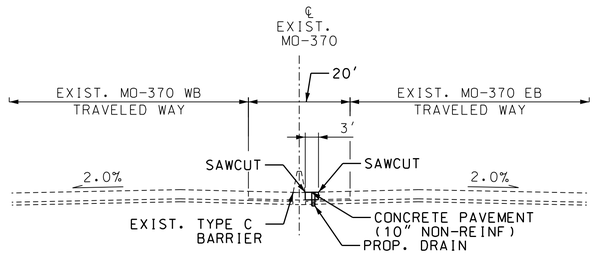
STA. 504+00 TO STA. 508+57
N.T.S.



STA. 550+54 TO STA. 553+54
N.T.S.



STA. 553+54 TO STA. 554+72
N.T.S.



STA. 554+72 TO STA. 560+42
N.T.S.

TYPICAL SECTIONS
SHEET 1 OF 3

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
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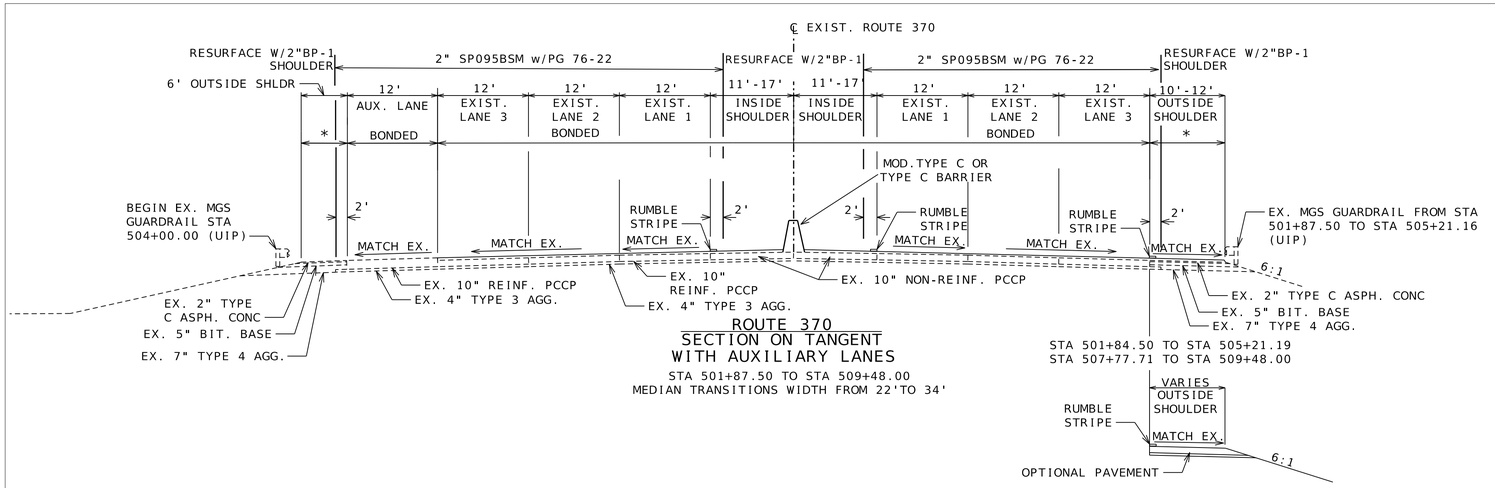
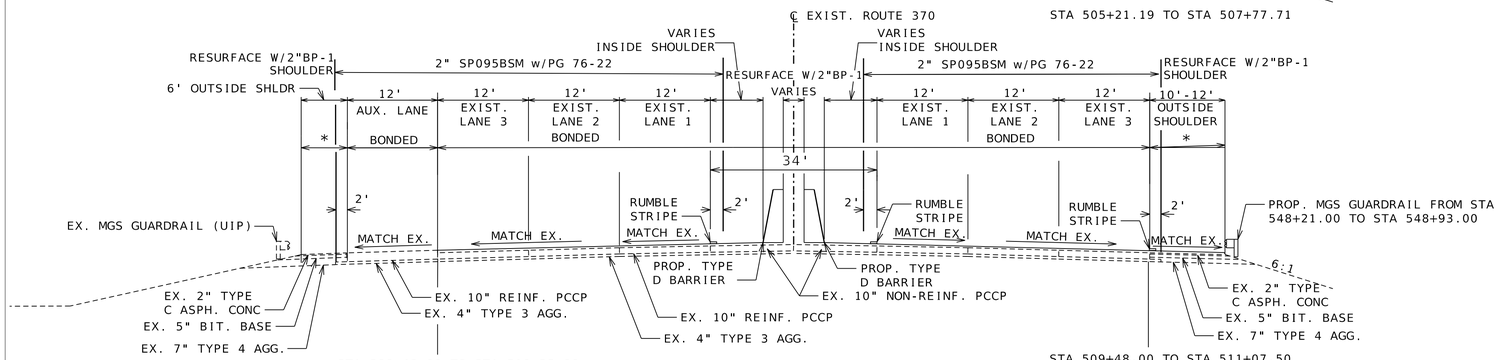


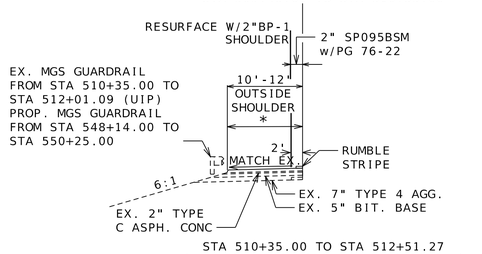
ROUTE 370
SECTION ON TANGENT WITH AUXILIARY LANES

STA 501+87.50 TO STA 509+48.00
MEDIAN TRANSITIONS WIDTH FROM 22'TO 34'

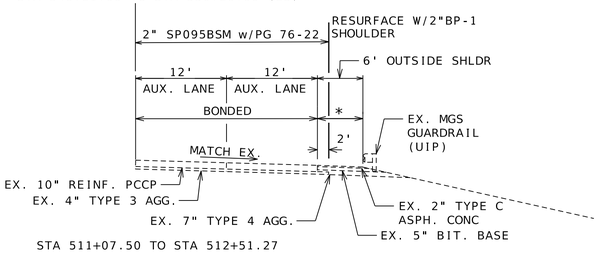


ROUTE 370
SECTION ON TANGENT

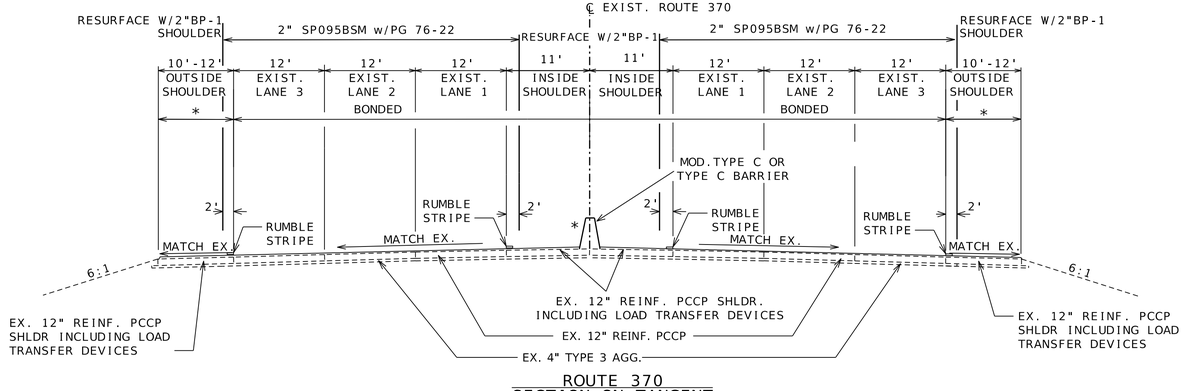
STA 509+48.00 TO STA 512+51.27 (EB & WB)
STA 548+14.00 TO STA 550+26.00 (WB)
STA 548+21.00 TO STA 550+26.00 (EB)



STA 510+35.00 TO STA 512+51.27
STA 548+14.00 TO STA 550+26.00 (WB)

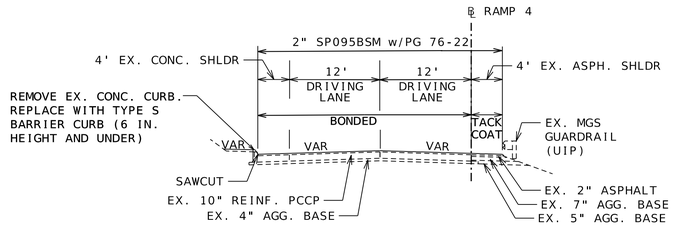


STA 511+07.50 TO STA 512+51.27



ROUTE 370
SECTION ON TANGENT

STA 550+26.00 TO STA 560+41.86



RAMP 4
RTE 370 @ RTE 94 INTERCHANGE
ST.CHARLES COUNTY
(SHOWING 2-LANE SECTION)

NOTES:
WARM MIX WILL NEED TO BE UTILIZED INSTEAD OF THE TYPICAL HOT MIX DUE TO EXISTING HOT APPLIED POLYMER PATCHES ON MAINLINE PAVEMENT.

ASPHALT UNDERSEALING SHOULD BE PERFORMED IN THE DRIVING LANES ONLY.

ASPHALT SHOULDER THAT WILL ONLY BE OVERLAYED WILL USE 2'X 2" MILL/FILL TO REMOVE EXISTING RUMBLE STRIPE PRIOR TO OVERLAY.

* ASPHALT SHOULDERS & SURFACES ARE TO USE TACK COAT
CONCRETE SHOULDERS & SURFACES ARE TO BE BONDED

DISCLAIMER

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411 RSMO) SPECIFICATION, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

OPTIONAL PAVEMENT DESIGN	
ROUTE 370	
ASPHALT OPTION	CONCRETE OPTION
15.5" HMA 2" SP125BSM w/ PG 76-22 OVER 2" SP125B w/ PG 76-22 OVER 10.5" SP190C w/ PG 64-22 12" ROCK BASE	10" PCCP WIDEN SLAB 15 FT. JOINT SPACING, 1 ½ DOWELS 12" ROCK BASE

APPLICATION RATES:

SP095BSM (PG76-22) = 1.900 TONS PER CUYD
BP-1 (PG64-22) = 1.987 TONS PER CUYD

TACK COAT = 0.10 GAL/SQYD (OVER COLDMILLED SURF.)
TACK COAT = 0.08 GAL/SQYD (OVER EX.ASPH. OR CONC SURF.)
MODIFIED TACK COAT = 0.20 GAL/SQYD

TYPICAL SECTIONS
SHEET 2 OF 3

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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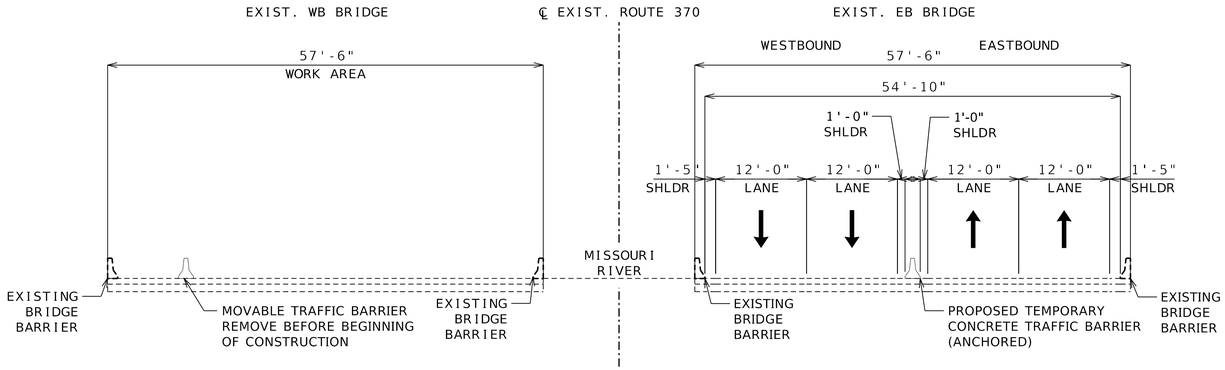
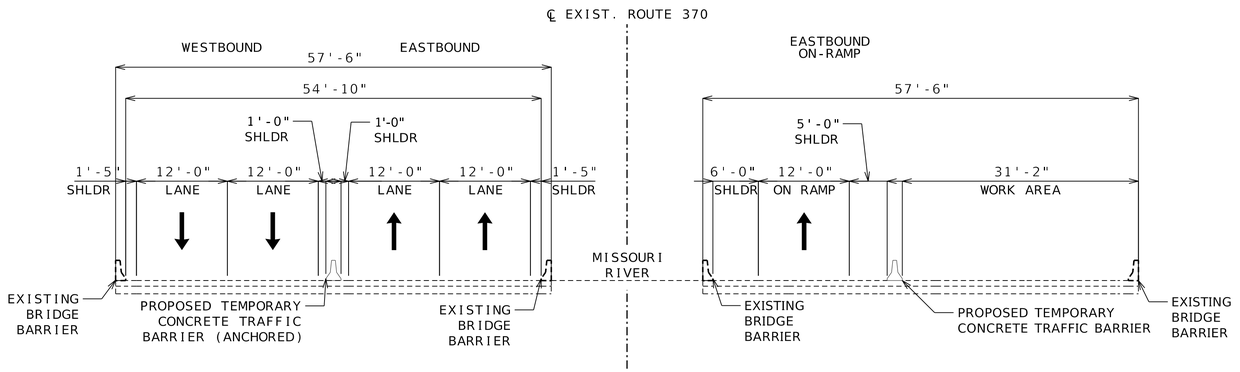
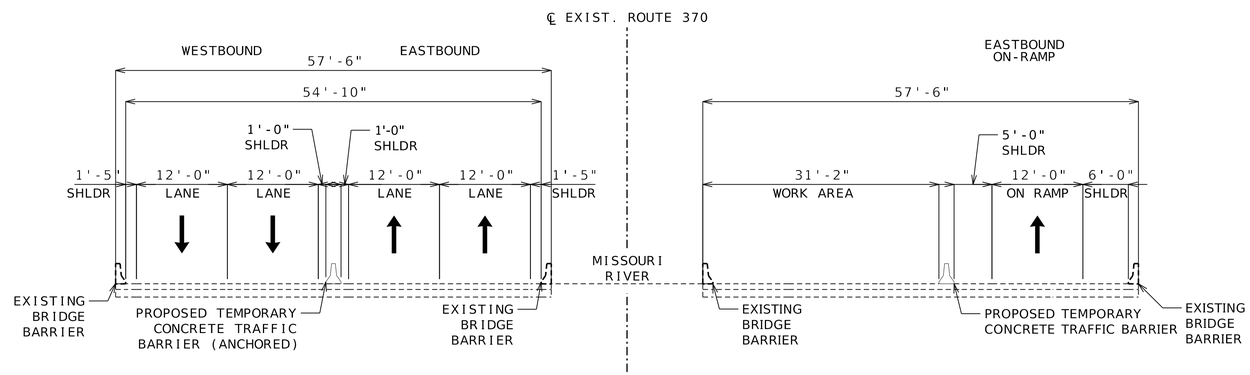


STAGE 1 - MOT PHASE ALL TRAFFIC ON EB BRIDGE



STAGE 2A - MOT PHASE ALL TRAFFIC ON WB BRIDGE
RTE 94 EB RAMP CONTINUE ON EB BRIDGE, INSIDE LANE



STAGE 2B - MOT PHASE ALL TRAFFIC ON WB BRIDGE
RTE 94 EB RAMP CONTINUE ON EB BRIDGE, OUTSIDE LANE

MOT TYPICAL SECTIONS
SHEET 3 OF 3

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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REMOVAL OF IMPROVEMENTS

S NO.	FROM STA	TO STA	ROADWAY	LOCATION	DESCRIPTION	REMARKS
1	504+00	508+57	ROUTE 370	CL	TYPE C BARRIER	457 LF
2	508+57	509+48	ROUTE 370	CL	TYPE C MODIFIED BARRIER	91 LF
3	509+48	513+26	ROUTE 370	RT	TYPE D BARRIER	303 LF
4	509+48	513+26	ROUTE 370	LT	TYPE D BARRIER	303 LF
5	547+87	550+26	ROUTE 370	LT	TYPE D BARRIER	212 LF
6	547+87	550+26	ROUTE 370	RT	TYPE D BARRIER	205 LF
7	550+26	550+50	ROUTE 370	CL	TYPE C MODIFIED BARRIER	24 LF
8	550+50	554+72	ROUTE 370	CL	TYPE C BARRIER	422 LF
9	509+33	555+33	ROUTE 370	LT	MOVEABLE BARRIER	4600 LF, REMOVE AND REPLACE
10	548+45	550+43	ROUTE 370	LT	GUARDRAIL	198 LF
11	548+36	548+79	ROUTE 370	RT	GUARDRAIL	43 LF
12	512+51	512+66	ROUTE 370	LT	APPROACH SLAB	96.2 SY
13	512+51	512+66	ROUTE 370	RT	APPROACH SLAB	116.7 SY
14	547+99	548+14	ROUTE 370	LT	APPROACH SLAB	94.2 SY
15	548+06	548+21	ROUTE 370	RT	APPROACH SLAB	96.2 SY
16	554+72		ROUTE 370	LT	IMPACT ATTENUATOR	
17	-	-	RAMP 4	LT	CONCRETE CURB	455 LF
18	-	-	RAMP 4	LT	SAWCUT	455 LF

LUMP SUM = 1

RUMBLE STRIPS REMOVALS

FROM STA	TO STA	ROADWAY	DIRECTION	LOCATION	PARTIAL DEPTH CONCRETE PAVEMENT REPAIR USING HYBRID POLYMER MATERIAL CY	REMOVE PRIOR TO TRAFFIC CONTROL PHASE
502+55	508+70	ROUTE 370	EB	INSIDE	3.8	STAGE 1
503+00	509+02	ROUTE 370	WB	INSIDE	3.7	STAGE 1
504+49	509+44	ROUTE 370	EB	OUTSIDE	3.1	STAGE 1
548+21	556+74	ROUTE 370	EB	OUTSIDE	5.3	STAGE 1
549+15	555+57	ROUTE 370	WB	INSIDE	4.0	STAGE 1
550+08	555+98	ROUTE 370	EB	INSIDE	3.6	STAGE 1
				SUBTOTAL	23.5	
				PAY TOTAL	23.5	

RUMBLE STRIPS

FROM STA	TO STA	ROADWAY	DIRECTION	LOCATION	BITUMINOUS SHOULDER RUMBLE STRIP STA
501+88	507+77	ROUTE 370	EB	OUTSIDE	5.9
501+88	512+91	ROUTE 370	EB	INSIDE	11.0
504+00	512+91	ROUTE 370	WB	OUTSIDE	8.9
504+00	512+91	ROUTE 370	WB	INSIDE	8.9
510+28	512+91	ROUTE 370	EB	OUTSIDE	2.6
548+22	560+42	ROUTE 370	WB	INSIDE	12.2
548+22	560+42	ROUTE 370	WB	OUTSIDE	12.2
548+22	560+42	ROUTE 370	EB	INSIDE	12.2
548+22	560+42	ROUTE 370	EB	OUTSIDE	12.2
				SUBTOTAL	86.1
				PAY TOTAL	86.1

MISC. VEGETATION, REMOVAL AND TRIMMING

LUMP SUM = 1

MISC. RTS REPLACEMENT

LUMP SUM = 1

MOBILIZATION

LUMP SUM = 1

MISC. LUMP SUM DRIFT MAT REMOVAL

LUMP SUM = 1

MISC. RTS REMOVAL, STORAGE, REINSTALLATION

LUMP SUM = 1

CONTRACTOR FURNISHED SURVEYING & STAKING

LUMP SUM = 1

SUMMARY OF QUANTITIES
SHEET 1 OF 5

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	3

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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Suite 300
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Certificate of Authority: 000856

GUARDRAIL

SHEET NO.	FROM STA	TO STA	LOCATION	ROADWAY	MGS GUARDRAIL LF	MGS VERTICAL HEIGHT AND BLOCK TRANSITION EA	TYPE A CRASHWORTHY END TERMINAL (MASH) EA	MGS END ANCHOR EA	SHAPING SLOPES, CLASS III 100F
5	548+45	550+33	LT	ROUTE 370	112.5	1	1		2
5	548+36	548+86	RT	ROUTE 370	12.5	1		1	1
				SUBTOTAL	125	2	1	1	3
				PAY TOTAL	125	2	1	1	3

CONCRETE TRAFFIC BARRIER

SHEET NO.	FROM STA	TO STA	LOCATION	ROADWAY	CONCRETE TRAFFIC BARRIER, TYPE C LF	CONCRETE TRAFFIC BARRIER, TYPE C MODIFIED LF	CONCRETE TRAFFIC BARRIER, TYPE D LF	CONCRETE TRAFFIC BARRIER, TYPE D MODIFIED LF	REMARKS
4	504+00	504+20	CL	ROUTE 370		20			HEIGHT TRANSITION
4	504+20	508+57	CL	ROUTE 370	437				
4	508+57	509+48	CL	ROUTE 370		91			WIDTH TRANSITION
4	509+48	513+06	RT	ROUTE 370			358		
4	509+48	513+06	LT	ROUTE 370			358		
4	513+06	513+26	RT	ROUTE 370				20	
4	513+06	513+26	LT	ROUTE 370				20	
5	547+87	548+07	RT	ROUTE 370				20	
5	547+87	548+07	LT	ROUTE 370				20	
5	548+07	550+26	LT	ROUTE 370			219		
5	548+07	550+26	RT	ROUTE 370			219		
5	550+26	550+54	CL	ROUTE 370		28			
5	550+54	560+42	CL	ROUTE 370	988				
				SUBTOTAL	1425	139	1154	80	
				PAY TOTAL	1425	139	1154	80	

TRENCH DRAIN

SHEET NO.	FROM STA	TO STA	LOCATION	ROADWAY	6" TRENCH DRAIN LF	REMOVABLE GRATE (FYI) LF	NON-REMOVABLE GRATE (FYI) LF
5	550+54	553+54	LT	ROUTE 370	300	20	280
5	553+54	560+42	RT	ROUTE 370	688	638	50
				SUBTOTAL	988	658	330
				PAY TOTAL	988		

GRATE TYPE IS FOR INFORMATION ONLY, COST IS INCIDENTAL TO 6" TRENCH DRAIN

OPTIONAL PAVEMENT

SHEET NO.	FROM STA	TO STA	ROADWAY	LOCATION	OPTIONAL PAVEMENT SY	FURNISHING ROCK BASE (12 INCH) SY	PLACING ROCK BASE (12 INCH) SY	REMARKS
4	504+00	508+57	ROUTE 370	CL	111.9			PAVEMENT PATCHING
4	505+21	507+78	ROUTE 370	RT	279.0	279	279	FULL DEPTH PAVEMENT FOR GORE
5	550+26	560+42	ROUTE 370	CL	575.5			PAVEMENT PATCHING
				SUBTOTAL	966.4	279	279	
				PAY TOTAL	966.4	279	279	

CONCRETE CURB

SHEET NO.	FROM STA	TO STA	LOCATION	ROADWAY	CONCRETE CURB (6 IN. HEIGHT AND UNDER) TYPE S LF
4	-	-	LT	RAMP 4	455
				SUBTOTAL	455
				PAY TOTAL	455

DRAINAGE EROSION CONTROL

SHEET NO.	FROM STA	TO STA	LOCATION	ROADWAY	SILT FENCE LF
5	548+07	550+24	LT	ROUTE 370	217
5	548+07	549+07	RT	ROUTE 370	100
				SUBTOTAL	317
				PAY TOTAL	317

DRAINAGE STRUCTURES

SHEET NO.	STA	LOCATION	ROADWAY	GRATE AND BEARING PLATE, 4' X 2' EA	* REMOVE AND REPLACE EX. INLET TOP EA
4	509+17	RT	ROUTE 370	1	1
4	509+17	LT	ROUTE 370	1	1
5	553+53	CL	ROUTE 370	1	1
			SUBTOTAL	FOR INFO ONLY	3
			PAY TOTAL		3

* SEE JOB SPECIAL PROVISIONS

WELDING OF GRATES ON DROP INLETS

SHEET NO.	STA	LOCATION	ROADWAY	WELDING OF GRATES ON DROP INLETS EA
5	553+53	LT	ROUTE 370	1
			SUBTOTAL	1
			PAY TOTAL	1

SUMMARY OF QUANTITIES
SHEET 2 OF 5

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025
ROUTE 370 | STATE MO
DISTRICT SL | SHEET NO. 3
COUNTY ST. LOUIS/ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

CONSTANT DEPTH RESURFACING

SHEET NO.	FROM STA	TO STA	ROADWAY	LOCATION	AREA SF FYI	SP095BSM (PG76-22) TON	BP-1 (PG64-22) TON	MAINLINE TACK COAT GAL	MAINLINE MODIFIED TACK COAT GAL	REMARKS
4	-	-	RAMP 4	RT/LT	10917.4514	128.0		243		RAMP
4	504+00	511+47	ROUTE 370	RT	39651.6184	465.0			881	MAINLINE - BONDED
4	506+01	511+47	ROUTE 370	LT	25813.0253	302.7			574	MAINLINE - BONDED
4	504+00	505+21	ROUTE 370	RT	790.6482		9.7	18		OUTSIDE SHOULDER
4	507+72	511+47	ROUTE 370	RT	1552.3936		19.0	34		OUTSIDE SHOULDER
4	504+00	511+47	ROUTE 370	RT	6692.8391		82.1	149		INSIDE SHOULDER
4	506+00	511+47	ROUTE 370	LT	4533.7182		55.6	101		OUTSIDE SHOULDER
4	506+01	511+47	ROUTE 370	LT	7844.0313		96.2	174		INSIDE SHOULDER
5	550+36	555+50	ROUTE 370	RT	40565.0848	475.8			901	MAINLINE - BONDED
5	550+36	555+50	ROUTE 370	LT	39641.5101	464.9			881	MAINLINE - BONDED
5	550+36	555+50	ROUTE 370	RT	19960.9823		244.8	444		OUTSIDE SHOULDER
5	550+36	555+50	ROUTE 370	RT	8437.1467		103.5	187		INSIDE SHOULDER
5	550+36	555+50	ROUTE 370	LT	20533.4264		251.9	456		OUTSIDE SHOULDER
5	550+36	555+50	ROUTE 370	LT	6884.6556		84.4	153		INSIDE SHOULDER
					SUBTOTAL	1836.4	947.2	1959	3237	
					PAY TOTAL					

PAY TOTALS SUMMED ON MILL & OVERLAY TABLE

CONCRETE APPROACH PAVEMENT

SHEET NO.	FROM STA	TO STA	LOCATION	ROADWAY	CONCRETE APPROACH PAVEMENT SY
4	512+91	513+06	LT	ROUTE 370	94.8
4	512+91	513+06	RT	ROUTE 370	120.5
5	548+07	548+22	LT	ROUTE 370	96.3
5	548+07	548+22	RT	ROUTE 370	92.2
				SUBTOTAL	403.8
				PAY TOTAL	403.8

VARIABLE DEPTH MILL & OVERLAY AND TOTALS FROM CONSTANT DEPTH RESURFACING

SHEET NO.	FROM STA	TO STA	ROADWAY	LOCATION	AREA SF FYI	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS) SY	VARIABLE DEPTH SP095BSM (PG76-22) TON	VARIABLE DEPTH BP-1 (PG64-22) TON	TACK COAT GAL	MAINLINE MODIFIED TACK COAT GAL	ALT A ASPHALT UNDERSEALING GAL	ALT B HIGH DENSITY POLYURETHANE LBS	REMARKS
4	-	-	RAMP 4	RT/LT	6348.3397	705	74.4		71				RAMP
4	501+88	502+65	ROUTE 370	RT	3038.4556	338	35.7			68			MAINLINE, ASPHALT
4	501+88	502+65	ROUTE 370	RT	579.3175	64		7.1	6				MAINLINE-BONDED
4	501+88	504+00	ROUTE 370	RT	1833.1132	204		22.5	20				INSIDE SHOULDER
4	502+65	504+00	ROUTE 370	RT	5236.2048	582	61.4			116			MAINLINE-BONDED
4	502+65	504+00	ROUTE 370	RT	994.7519	111		12.3	11				OUTSIDE SHOULDER
4	504+00	504+93	ROUTE 370	LT	4688.3612	521	55		52				MAINLINE-BONDED
4	504+00	506+00	ROUTE 370	LT	1624.3148	180		19.9	18				OUTSIDE SHOULDER
4	504+00	506+00	ROUTE 370	LT	2073.0847	230		25.4	23				INSIDE SHOULDER
4	504+93	506+00	ROUTE 370	LT	5469.8287	608	64.2		61	122			MAINLINE-BONDED
4	511+47	512+91	ROUTE 370	RT	9100.9244	1011	106.7		101	202			MAINLINE-BONDED
4	511+47	512+91	ROUTE 370	RT	660.3058	73		8.1	7				OUTSIDE SHOULDER
4	511+47	512+91	ROUTE 370	RT	787.1195	87		9.6	9				INSIDE SHOULDER
4	511+47	512+91	ROUTE 370	LT	5364.4516	596	62.9			119			MAINLINE-BONDED
4	511+47	512+91	ROUTE 370	LT	2888.4644	321		35.4	32				OUTSIDE SHOULDER
4	511+47	512+91	ROUTE 370	LT	1461.11	162		17.9	16				INSIDE SHOULDER
5	548+22	550+36	ROUTE 370	LT	7843.2017	871	91.9			174			MAINLINE-BONDED
5	548+22	550+36	ROUTE 370	LT	4006.5676	445		49.1	45				OUTSIDE SHOULDER
5	548+22	550+36	ROUTE 370	LT	1524.9731	169		18.7	17				INSIDE SHOULDER
5	548+22	550+36	ROUTE 370	RT	8824.3847	980	103.4			196			MAINLINE-BONDED
5	548+22	550+36	ROUTE 370	RT	2392.1593	266		29.4	27				OUTSIDE SHOULDER
5	548+22	550+36	ROUTE 370	RT	1935.2728	215		23.7	22				INSIDE SHOULDER
VARIOUS	ST. CHARLES CO SIDE		EB/WB 370	RT/LT							17600	26400	1100'L/15' HOLE SPACING * 8 LANES (4EB&4WB) * 30 GAL/HOLE OR 45 LBS/HOLE FOR POLY
VARIOUS	ST. CHARLES CO SIDE		RAMP	RT							11200	16800	700'L/15' HOLE SPACING * 1 LANES (4EB&4WB) * 30 GAL/HOLE OR 45 LBS/HOLE FOR POLY
VARIOUS	ST. LOUIS CO SIDE		EB/WB 370	RT/LT							11680	17520	730'L/15'HOLE SPACING * 6 LANES (3EB&3WB) * 30 GAL/HOLE OR 45 LBS/HOLE FOR POLY
					SUBTOTAL	8739	655.6	279.1	538	997	40480	60720	
					RESURFACING SUBTOTAL	0	1836.4	947.2	1959	3237	0	0	
					PAY TOTAL	8739	2492.0	1226.3	2497	4234	40480	60720	

SUMMARY OF QUANTITIES
SHEET 3 OF 5

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

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DATE PREPARED 6/25/2025
ROUTE 370 | STATE MO
DISTRICT SL | SHEET NO. 3
COUNTY ST. LOUIS/ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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Certificate of Authority: 000856

PERMANENT STRIPING

SHEET NO.	ROADWAY	6" WHITE TYPE L BEADS SOLID LF	6" WHITE TYPE L BEADS DOTTED LF	6" WHITE TYPE L BEADS INTER LF	6" YELLOW TYPE L BEADS SOLID LF	24" WHITE TYPE P BEADS SOLID LF	SPRAY THERMOPLASTIC PAVEMENT MARKING 12" SOLID WHITE LF	PREFORMED THERMOPLASTIC SYMBOL 2 FOR BIKE LANES EA	PREFORMED THERMOPLASTIC STRAIGHT ARROW FOR BIKE LANES EA	REMARKS
55	ROUTE 370	2549		5098	2549					
56	ROUTE 370	2493	1553	5400	2700		129			
57	ROUTE 370	3028	129	6010	2700		591			
57	RAMP RTE 94 TO EB RTE 370	109		111	113					
58	ROUTE 370	2946	966	6069	2700	168	344	1	1	
58	RAMP RTE 94 TO EB RTE 370	608		751	338		260			
59	ROUTE 370	4050	255	5517	2700	270		3	3	
60	ROUTE 370	4050		5400	2700	270		2	2	
61	ROUTE 370	3458		5400	2700	157		1	1	
62	ROUTE 370	2153	843	5400	2700		750			
63	ROUTE 370	2524	565	5400	2700		112			
64	ROUTE 370	2148	887	5400	2700		688			
65	ROUTE 370	2700		5400	2700					
66	ROUTE 370	1672		3344	1672					
	ROUTE 370	15325	2884	31800	15606		2052			WINTERIZATION PHASE
	TOTAL LENGTH	49813	8082	96500	47278	865	4926	7	7	
	ADJUSTMENT FACTOR	1	0.25	0.25	1	1	1	1	1	
	SUBTOTAL	49813	2021	24125	47278	865	4926	7	7	
	PAY TOTAL	75959			47278	865	4926	7	7	

PAVEMENT MARKING REMOVAL

SHEET NO.	PRIOR TO PHASE	ROADWAY	PAVEMENT MARKING REMOVAL 24" SOLID LF	12" SOLID LF	6" DOTTED LF	6" SOLID LF	6" INTER LF	4" SOLID LF
ALL	PHASE 1	ROUTE 370	5,178	8,622	7,759	99,079	97,061	41,032
ALL	PHASE 2A	ROUTE 370		6,156	4,326	46,397	47,700	9,336
ALL	PHASE 2B	ROUTE 370						43,630
		TOTAL LENGTH	5,178	14,778	12,085	145,476	144,761	93,998
		ADJUSTMENT FACTOR	1	1	0.25	1	0.25	1
		SUBTOTAL	5,178	14,778	3,021	145,476	36,190	93,998
		PAY TOTAL	298,641					

PAVEMENT MARKING REMOVAL LENGTHS ARE FACTORED TO ACCOUNT FOR INTERMITTENT MARKINGS AND DASHED MARKINGS AND ALL ARE CONVERTED TO 4 INCH WIDTH.

WINTERIZATION

LUMP SUM = 1

4 IN. TEMPORARY PAVEMENT MARKING PAINT

SHEET NO.	PHASE	ROADWAY	4 IN. TEMPORARY PAVEMENT MARKING PAINT 4" SOLID LF
ALL	PHASE 1	ROUTE 370	41,032
ALL	PHASE 2A	ROUTE 370	45,680
ALL	PHASE 2B	ROUTE 370	9,732
		TOTAL LENGTH	96,444
		ADJUSTMENT FACTOR	1
		SUBTOTAL	96,444
		PAY TOTAL	96,444

SUMMARY OF QUANTITIES
SHEET 4 OF 5

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

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DATE PREPARED 6/25/2025
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SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NO.	DESCRIPTION
WARNING SIGNS								
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)
WO1-2L	48X48	16.00						CURVE (SYMBOL LEFT)
WO1-2R	48X48	16.00						CURVE (SYMBOL RIGHT)
WO1-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)
WO1-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)
WO1-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT)
WO1-4R	48X48	16.00	1	16	1	16	15	REVERSE CURVE (SYMBOL RIGHT)
WO1-4bL	48X48	16.00	3	48	2	32	32	DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4bR	48X48	16.00	3	48	2	32	32	DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)
WO1-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)
WO1-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
WO1-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)
WO1-8	18X24	3.00						CHEVRON (SYMBOL)
WO1-8a	30X36	7.50	7	52.5	4	30	16A	CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
WO3-1	48X48	16.00						STOP AHEAD (SYMBOL)
WO3-2	48X48	16.00						YIELD AHEAD (SYMBOL)
WO3-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)
WO3-4	48X48	16.00						BE PREPARED TO STOP
WO3-5	48X48	16.00						SPEED LIMIT AHEAD
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)
WO4-1R	48X48	16.00	7	112			55	MERGE (SYMBOL FROM RIGHT)
WO4-1aL	48X48	16.00	1	16	1	16	6A	MERGE (LEFT)
WO4-1aR	48X48	16.00	1	16	1	16	6B	MERGE (RIGHT)
WO5-1	48X48	16.00	2	32			43	ROAD/BRIDGE/RAMP NARROWS
WO5-3	48X48	16.00						ONE LANE BRIDGE
WO5-5	48X48	16.00						NARROW LANES
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)
WO7-3a	30X24	5.00	2	10			44A	NEXT XX MILES (PLAQUE)
WO8-1	48X48	16.00						BUMP
WO8-2	48X48	16.00						DIP
WO8-3	48X48	16.00						PAVEMENT ENDS
WO8-4	48X48	16.00						SOFT SHOULDER
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)
WO8-6	48X48	16.00						TRUCK CROSSING
WO8-6c	48X48	16.00						TRUCK ENTRANCE
WO8-7	36X36	9.00						LOOSE GRAVEL
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL
WO8-9	48X48	16.00						LOW SHOULDER
WO8-11	48X48	16.00						UNEVEN LANES
WO8-12	48X48	16.00						NO CENTER LINE
WO8-15	48X48	16.00						GROOVED PAVEMENT
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)
WO8-17L	48X48	16.00						SHOULDER DROP-OFF (SYMBOL LEFT)
WO8-17R	48X48	16.00						SHOULDER DROP-OFF (SYMBOL RIGHT)
WO8-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)
W10-1	42RND.	9.62						RAILROAD CROSSING
WO12-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)
WO12-2	48X48	16.00						LOW CLEARANCE (SYMBOL)
WO12-2x	24X18	3.00						LOW CLEARANCE (PLAQUE)
WO12-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)
WO12-4	120X60	50.00						LOW CLEARANCE XX FT XX IN XX MILES AHEAD
WO12-5	120X60	50.00						WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD
WO13-1	30X30	6.25	2	12.5			34	ADVISORY SPEED (PLAQUE)
WO16-2	30X24	5.00						XXX FEET (PLAQUE)
WO16-3	30X24	5.00						X MILE (PLAQUE)
WO20-1	48X48	16.00	8	128	6	96	2	ROAD/BRIDGE/RAMP WORK AHEAD
WO20-2	48X48	16.00						DETOUR AHEAD
WO20-3	48X48	16.00						ROAD CLOSED AHEAD
WO20-4	48X48	16.00						ONE LANE ROAD AHEAD
WO20-5	48X48	16.00	6	96	6	96	5/5L/ 5R	RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00	2	32	2	32	6L/6R	RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00						FLAGGER (SYMBOL)
WO21-2	36X36	9.00						FRESH OIL
WO21-5	48X48	16.00	2	32			21	SHOULDER WORK / SHOULDER WORK AHEAD
WO21-5a	48X48	16.00	4	64			21A	RIGHT/LEFT SHOULDER CLOSED
WO21-5b	48X48	16.00	4	64			21B	RIGHT/LEFT SHOULDER CLOSED AHEAD
WO22-1	48X48	16.00						BLASTING ZONE AHEAD
WO22-2	42X36	10.50						TURN OFF 2-WAY RADIO AND PHONE
WO22-3	42X36	10.50						END BLASTING ZONE
GO22-1	21X15	2.19	2	4.38			65	WET PAINT (ARROW PIVOTS)

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NO.	DESCRIPTION
GUIDE SIGNS								
E05-1	36X48	12.00	1	12	1	12	49	GORE EXIT
E05-2	48X36	12.00						EXIT OPEN
E05-2a	48X36	12.00						EXIT CLOSED
GO20-1	60X24	10.00	4	40			1	ROAD WORK NEXT XX MILES
GO20-2	48X24	8.00	4	32	2	16	26	END ROAD WORK
GO20-4	36X18	4.50						PILOT CAR FOLLOW ME
GO20-4a	42X30	8.75						PILOT CAR IN USE WAIT & FOLLOW
GO20-4a	18X12	1.50						PILOT CAR IN USE WAIT & FOLLOW
GO20-5aP	36X24	6.00	8	48	4	24	54	WORK ZONE (PLAQUE)
MO4-8a	24X18	3.00						END DETOUR
MO4-9L	48X36	12.00						DETOUR (LEFT)
MO4-9R	48X36	12.00						DETOUR (RIGHT)
MO4-9P	48X12	4.00						STREET NAME (PLAQUE)
MO4-10L	48X18	6.00						DETOUR ARROW (LEFT)
MO4-10R	48X18	6.00						DETOUR ARROW (RIGHT)
REGULATORY SIGNS								
R1-1	48X48	13.25						STOP
R1-2	48TRI.	6.93						YIELD
R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)
R1-3P	30X12	2.50						ALL WAY (PLAQUE)
R2-1	36X48	12.00	8	96	4	48	4	SPEED LIMIT 50
R2-1	36X48	12.00	2	24			25	SPEED LIMIT 60
R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00						NO TURNS
R3-4	48X48	16.00						NO U-TURN (SYMBOL)
R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00	6	72	6	72	46	DO NOT PASS
R4-2	36X48	12.00						PASS WITH CARE
R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)
R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)
R5-1	30X30	6.25						DO NOT ENTER
R5-1a	36X24	6.00						WRONG WAY
R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)
R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)
R6-2L	24X30	5.00						ONE WAY (LEFT)
R6-2R	24X30	5.00						ONE WAY (RIGHT)
R9-9	24X12	2.00	4	8			56	SIDEWALK CLOSED
R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE
R9-11R	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE
R10-6	24X36	6.00						STOP HERE ON RED (45^ ARROW)
R11-2	48X30	10.00	2	20	1	10	29	ROAD CLOSED
R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50						ROAD CLOSED TO THRU TRAFFIC
CONST-3A	60X48	20.00						FINE SIGN
CONST-3X	56X12	4.67						SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS								
CONST-5	48X36	12.00						POINT OF PRESENCE
CONST-5	96X48	32.00	2	64			67	POINT OF PRESENCE
CONST-8	48X36	12.00	4	48			60	WORK ZONE NO PHONE ZONE
SPECIAL-1	48X48	16.00	3	48	1	16	57	TWO LEFT ONE RIGHT LANES MERGING
SPECIAL-2	36X36	19.50	5	97.5	3	58.5	70	NON-INJURY CRASHES MOVE OFF BRIDGE
SPECIAL-3	84X72	19.50	3	58.5	2	39	71	STEER IT - CLEAR IT
SPECIAL-4	48X48	16.00	4	64	4	64	72	RUMBLE STRIPS AHEAD

616-10.05 CONSTRUCTION SIGNS	TOTAL
	1516

616-10.10 RELOCATED SIGNS	TOTAL
	**

ITEM NUMBER	TOTAL QTY	EFFECTIVE: 07-01-2025 DESCRIPTION
6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)
6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)
6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
6122014	1	* IMPACT ATTENUATOR 60 MPH (SAND BARRELS)
6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)
6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)
6122020	2	* REPLACEMENT SAND BARREL
6122030	3	* IMPACT ATTENUATOR (RELOCATION)
6122040		WORK ZONE CRASH CUSHION (NARROW)
6122041		WORK ZONE CRASH CUSHION (RELOCATION)
6123001	1	* TRUCK MOUNTED ATTENUATOR (TMA)
6161012		BUOYS (BOATS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161020		CHANNELIZER (DRUM-LIKE)
6161022		CHANNELIZER (CONE)
6161025	190	CHANNELIZER (TRIM-LINE)
6161026		CHANNELIZER (VERTICAL PANEL)
6161030	27	TYPE 3 MOVEABLE BARRICADE
6161033	46	DIRECTION INDICATOR BARRICADE
6161040	3	FLASHING ARROW PANEL
6161047		TYPE 3 OBJECT MARKER
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A	3	* CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002	13	* TEMPORARY LONG-TERM RUMBLE STRIPS
6173600D	3790	* TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED
6173700B	10290	* TEMP. TRAFFIC BARRIER ANCHORED, CONTRACTOR FURNISHED/RETAINED
6173706		TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION CONTRACTOR FURNISHED/RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED
6175010A	6190	* RELOCATING TEMPORARY TRAFFIC BARRIER
6175011B		RELOCATING TEMP. TRAFFIC BARRIER ANCHORED
6175013		RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS
6175020A		RELOCATING TEMP. TRAFFIC BARRIER HEIGHT
6208064A		TEMPORARY RAISED PAVEMENT MARKER
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING

NOTE: COST OF FLAG ASSEMBLY IS INCLUDED IN SIGN COST

* ITEMS NOT INCLUDED IN LUMP SUM TEMPORARY TRAFFIC CONTROL

** NO DIRECT PAY FOR RELOCATING TEMPORARY TRAFFIC CONTROL DEVICES

TEMPORARY TRAFFIC CONTROL
PAY TOTAL: 1 LUMP SUM

SUMMARY OF QUANTITIES
SHEET 5 OF 5

STATE OF MISSOURI
EUGENE LOUIS KUEKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025

ROUTE	STATE
370	MO

DISTRICT	SHEET NO.
SL	3

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

c:\pwworking\central01\d4316431\003_QU05_2BS_J6P3554_Rte_370.dgn 3:00:28 PM 6/25/2025

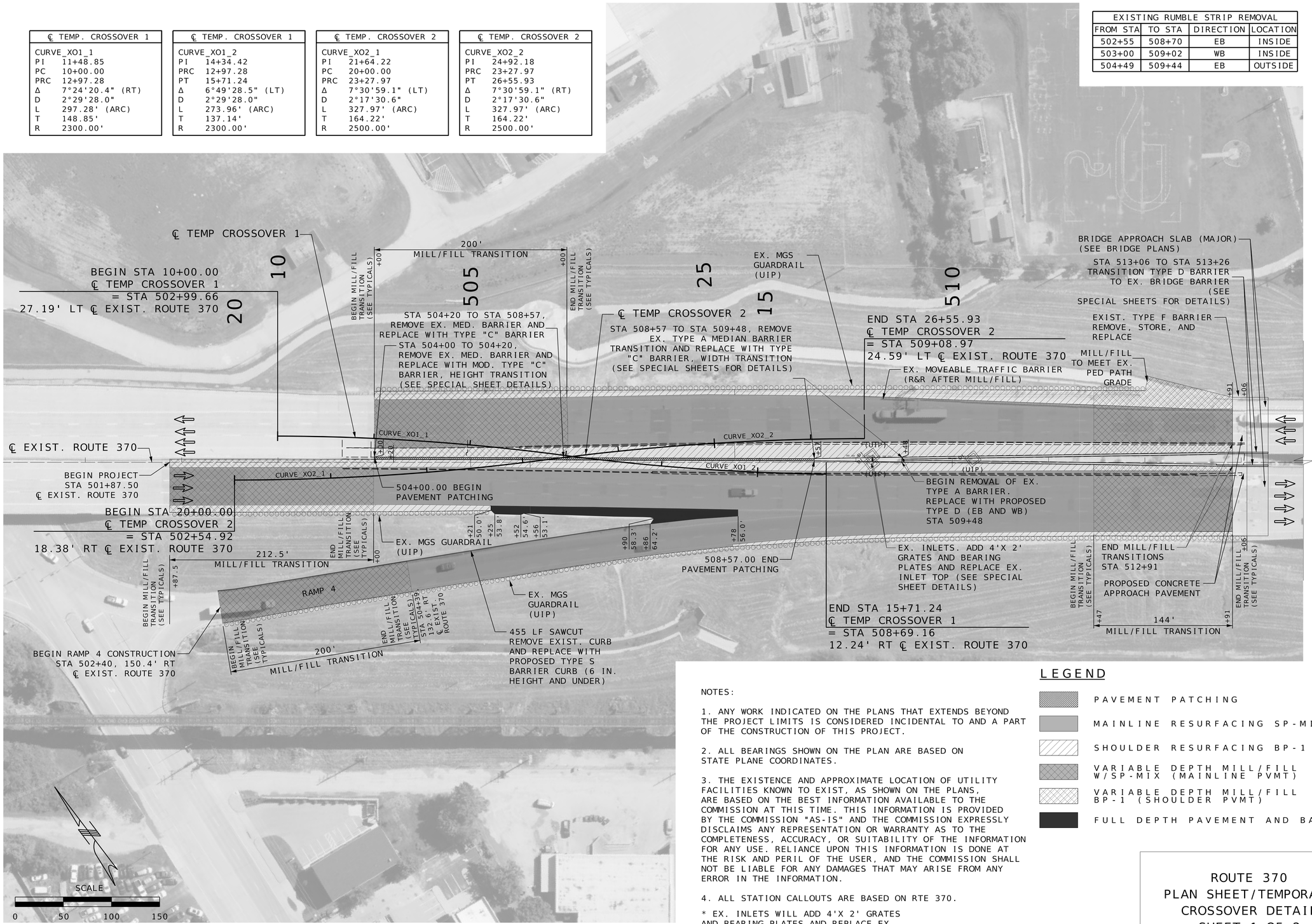
℄ TEMP. CROSSOVER 1
CURVE_XO1_1
PI 11+48.85
PC 10+00.00
PRC 12+97.28
PT 15+71.24
Δ 7°24'20.4" (RT)
D 2°29'28.0"
L 297.28' (ARC)
T 148.85'
R 2300.00'

℄ TEMP. CROSSOVER 1
CURVE_XO1_2
PI 14+34.42
PRC 12+97.28
PT 15+71.24
Δ 6°49'28.5" (LT)
D 2°29'28.0"
L 273.96' (ARC)
T 137.14'
R 2300.00'

℄ TEMP. CROSSOVER 2
CURVE_XO2_1
PI 21+64.22
PC 20+00.00
PRC 23+27.97
PT 26+55.93
Δ 7°30'59.1" (LT)
D 2°17'30.6"
L 327.97' (ARC)
T 164.22'
R 2500.00'

℄ TEMP. CROSSOVER 2
CURVE_XO2_2
PI 24+92.18
PRC 23+27.97
PT 26+55.93
Δ 7°30'59.1" (RT)
D 2°17'30.6"
L 327.97' (ARC)
T 164.22'
R 2500.00'

EXISTING RUMBLE STRIP REMOVAL			
FROM STA	TO STA	DIRECTION	LOCATION
502+55	508+70	EB	INSIDE
503+00	509+02	WB	INSIDE
504+49	509+44	EB	OUTSIDE



NOTES:

1. 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.

2. ALL BEARINGS SHOWN ON THE PLAN ARE BASED ON STATE PLANE COORDINATES.

3. 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.

4. ALL STATION CALLOUTS ARE BASED ON RTE 370.

* EX. INLETS WILL ADD 4'X 2' GRATES AND BEARING PLATES AND REPLACE EX. INLET TOP (SEE SPEICAL SHEET DETAILS)

LEGEND

- PAVEMENT PATCHING
- MAINLINE RESURFACING SP-MIX
- SHOULDER RESURFACING BP-1 MIX
- VARIABLE DEPTH MILL/FILL W/SP-MIX (MAINLINE PVMT)
- VARIABLE DEPTH MILL/FILL BP-1 (SHOULDER PVMT)
- FULL DEPTH PAVEMENT AND BASE

ROUTE 370
PLAN SHEET/TEMPORARY CROSSOVER DETAIL
SHEET 1 OF 2

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 4
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

℄ TEMP. CROSSOVER 3	
CURVE_XO3_1	
PI	11+37.04
PC	10+00.00
PRC	12+73.56
Δ	8°42'27.8" (LT)
D	3°10'59.2"
L	273.56' (ARC)
T	137.04'
R	1800.00'

℄ TEMP. CROSSOVER 3	
CURVE_XO3_2	
PI	14+10.61
PRC	12+73.56
PT	15+47.12
Δ	8°42'27.8" (RT)
D	3°10'59.2"
L	273.56' (ARC)
T	137.04'
R	1800.00'

℄ TEMP. CROSSOVER 4	
CURVE_XO4_1	
PI	21+64.38
PC	20+00.00
PRC	23+28.28
Δ	7°31'24.9" (RT)
D	2°17'30.6"
L	328.28' (ARC)
T	164.38'
R	2500.00'

℄ TEMP. CROSSOVER 4	
CURVE_XO4_2	
PI	24+92.65
PRC	23+28.28
PT	26+56.56
Δ	7°31'24.9" (LT)
D	2°17'30.6"
L	328.28' (ARC)
T	164.38'
R	2500.00'

℄ EXIST. ROUTE 370	
CURVE_RTE_370_EXIST_2	
PI	563+80.30
PC	555+58.84
PT	571+58.84
Δ	32°00'00" (LT)
D	2°00'00"
L	1600.000' (ARC)
T	821.465'
R	2864.79'

EXISTING RUMBLE STRIP REMOVAL			
FROM STA	TO STA	DIRECTION	LOCATION
548+21	556+74	EB	OUTSIDE
549+15	555+57	WB	INSIDE
550+08	555+98	EB	INSIDE

STA 548+45 TO STA 550+33
REMOVE EX. GUARDRAIL AND END TERMINAL, UIP EX. VERTICAL BARRIER TRANSITION, EX. VERTICAL HEIGHT TRANSITION, AND EX. BRIDGE ANCHOR SECTION
INSTALL APPROX. 112.5' OF MGS GUARDRAIL, MGS VERTICAL HEIGHT TRANSITION AND TYPE A CET (MASH)

BRIDGE APPROACH SLAB (MAJOR) (SEE BRIDGE PLANS)

PROPOSED CONCRETE APPROACH PAVEMENT

SILT FENCE 217 LF SEE NOTE 2

END TYPE D BARRIER. BEGIN REMOVE EX. TYPE A BARRIER AND REPLACE PAVEMENT PATCHING AND MODIFIED TYPE C BARRIER STA 550+26

END 6" TRENCH DRAIN STA 553+54 3.16' LT (CENTER OF DRAIN) END NON-REMOVABLE GRATE

℄ TEMP. CROSSOVER 4

END MODIFIED TYPE C BARRIER. BEGIN TYPE C BARRIER STA 550+54

BEGIN 6" TRENCH DRAIN, STA. 550+54 3.11' LT (CENTER OF DRAIN) BEGIN REMOVABLE GRATE

END REMOVABLE GRATE BEGIN NON-REMOVABLE GRATE STA. 550+75

WELD GRATE PRIOR TO DIVERTING TRAFFIC TO CROSSOVER. BREAK WELD WHILE REINSTALLING PERMANENT CONCRETE BARRIER

EX. MOVEABLE TRAFFIC BARRIER (R&R AFTER MILL/FILL)

℄ TEMP. CROSSOVER 3

END STA 15+47.12
℄ TEMP CROSSOVER 3
= STA 555+53.00
21.77' LT ℄ EXIST. ROUTE 370

PC STA 555+58.84

INSTALL 688 LF OF 6" TRENCH DRAIN
50 LF OF NON-REMOVABLE DUCTILE IRON GRATE
638 LF OF REMOVABLE DUCTILE IRON GRATE

END PROJECT STA 560+41.86 ℄ EXIST. ROUTE 370

APPROXIMATE

CURVE XO4 1

CURVE XO3 2

CURVE XO3 1

CURVE XO4 2

CURVE RTE 370 EXIST 2

℄ EXIST. ROUTE 370

+07 +22 +36 +42

STA 547+87 TO STA 548+07 TRANSITION EX. BRIDGE BARRIER TO TYPE D BARRIER (SEE SPECIAL SHEETS FOR DETAILS)

REMOVE EX. TYPE A BARRIER, BEGIN PROP. TYPE D BARRIER STA 548+21

BEGIN MILL/FILL TRANSITION (SEE TYPICALS)

SILT FENCE 100 LF SEE NOTE 2

EX. CCTV POLE(DND)

214' MILL/FILL TRANSITION

END MILL/FILL TRANSITION (SEE TYPICALS)

BEGIN STA 10+00.00
℄ TEMP CROSSOVER 3
= STA 550+07.99
19.73' RT ℄ EXIST. ROUTE 370

INSTALL 300 LF OF 6" TRENCH DRAIN
280 LF OF NON-REMOVABLE DUCTILE IRON GRATE
20 LF OF REMOVABLE DUCTILE IRON GRATE

BEGIN STA 20+00.00
℄ TEMP CROSSOVER 4
= STA 549+15.42
21.43' LT ℄ EXIST. ROUTE 370

STA 548+36 TO STA 548+86
REMOVE EX.GUARDRAIL AND END ANCHOR
UIP EX. MGS BRIDGE APPROACH TRANSITION
INSTALL APPROX. 12.5' OF MGS GUARDRAIL, MGS HEIGHT AND BLOCK TRANSITION, AND MGS END ANCHOR

END NON-REMOVABLE GRATE BEGIN REMOVABLE GRATE STA. 554+04

BEGIN 6" TRENCH DRAIN STA. 553+54 2.96' RT (CENTER OF DRAIN) BEGIN NON-REMOVABLE GRATE

END STA 26+56.56
℄ TEMP CROSSOVER 4
= STA 555+69.61
21.63' RT ℄ EXIST. ROUTE 370

END 560+41.86 REMOVE AND REPLACE TYPE C BARRIER PAVEMENT PATCHING

END 6" TRENCH DRAIN STA 560+41.86, 3.09' RT (CENTER OF DRAIN) END REMOVABLE GRATE PAVEMENT PATCHING

LEGEND

- PAVEMENT PATCHING
- MAINLINE RESURFACING SP-MIX
- SHOULDER RESURFACING BP-1 MIX
- VARIABLE DEPTH MILL/FILL W/SP-MIX (MAINLINE PVMT)
- VARIABLE DEPTH MILL/FILL BP-1 (SHOULDER PVMT)

NOTES:

1. TRENCH DRAINS TO REMAIN IN PLACE AFTER CONSTRUCTION.

2. IF GRADING IS REQUIRED, IT SHALL BE CONSIDERED INCIDENTAL TO THE UNIT COST OF GUARDRAIL. INSTALL SILT FENCE PRIOR TO GRADING. REMOVE ONCE SEEDING IS ESTABLISHED.

* WELD GRATE PRIOR TO DIVERTING TRAFFIC TO CROSSOVER. ONCE CROSSOVER IS NO LONGER IN USE, REPLACE. EX. INLETS WILL ADD 4'X 2' GRATES AND BEARING PLATES AND REPLACE EX. INLET TOP (SEE SPECIAL SHEET DETAILS)

SCALE
0 50 100 150

ROUTE 370
PLAN SHEET/TEMPORARY CROSSOVER DETAIL
SHEET 2 OF 2

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

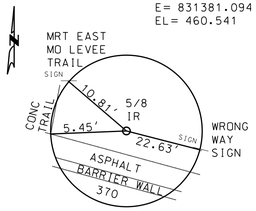
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370
STATE: MO
DISTRICT: SL
SHEET NO.: 5
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

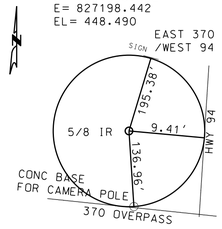
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



ABNA #200



ABNA #201

REFERENCE POINTS
SHEET 1 OF 1

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
6/25/2025

ROUTE	STATE
370	MO

DISTRICT	SHEET NO.
SL	6

COUNTY
ST. LOUIS/ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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	MO83-EF
HORIZONTAL DATUM	
VERTICAL DATUM	
GEOID MODEL	GEOID18 (CONUS)
ELEVATIONS DETERMINED BY	GPS OBSERVATIONS
PROJECT PROJECTION FACTOR	

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM	MO83-EF
CONTROL STATION	
DESIGNATION	MoDOT Bellefont
CORS_ID	MOBF
PID	
LATITUDE	38.7643109°
LONGITUDE	090.2465802°
NORTHING (M)	325298.4220
EASTING (M)	272024.0361
ZONE	MISSOURI EAST
PROJECT AVERAGE GRID FACTOR	1.000000

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 #3
N 1083739.801 X 1.000000 = N 1083739.801
E 713463.461 X 1.000000 = E 713463.461

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
	467+98.02	℄ EXIST. ROUTE 370	0.0'	1083282.9595	824716.8268	N/A	P.C. CURVE_RTE_370_EXIST_1	
	473+18.37	℄ EXIST. ROUTE 370	13.86' LT	1082927.3990	825096.7520	N/A	P.I. CURVE_RTE_370_EXIST_1	
	478+37.74	℄ EXIST. ROUTE 370	0.0'	1082614.2459	825512.3247	N/A	P.T. CURVE_RTE_370_EXIST_1	
5	555+58.84	℄ EXIST. ROUTE 370	0.0'	1077947.0664	831663.1637	N/A	P.C. CURVE_RTE_370_EXIST_2	
5	563+80.30	℄ EXIST. ROUTE 370	115.45' LT	1077450.5150	832317.5650	N/A	P.I. CURVE_RTE_370_EXIST_2	
5	571+58.84	℄ EXIST. ROUTE 370	0.0'	1077376.1950	833135.6609	N/A	P.T. CURVE_RTE_370_EXIST_2	
	605+90.68	℄ EXIST. ROUTE 370	0.0'	1077065.7075	836553.4307	N/A	P.C. CURVE_RTE_370_EXIST_3	
	609+65.51	℄ EXIST. ROUTE 370	4.07' RT	1077031.7960	836926.7230	N/A	P.I. CURVE_RTE_370_EXIST_3	
	613+40.22	℄ EXIST. ROUTE 370	0.0'	1076981.7291	837298.1934	N/A	P.T. CURVE_RTE_370_EXIST_3	
	627+25.00	℄ EXIST. ROUTE 370	0.0'	1076796.7617	838670.5634	N/A	END OF CENTERLINE	
4	10+00.00	℄ TEMP CROSSOVER 1	0.0'	1081147.7468	827489.9899	N/A	P.C. CURVE XO1_1	
4	11+48.85	℄ TEMP CROSSOVER 1	4.81' LT	1081057.528	827608.3812	N/A	P.I. CURVE XO1_1	
4	12+97.28	℄ TEMP CROSSOVER 1	0.0'	1080952.802	827714.1562	N/A	P.T. CURVE XO1_1	
4	14+34.42	℄ TEMP CROSSOVER 1	4.09' RT	1080856.314	827811.6114	N/A	P.I. CURVE XO1_2	
4	15+71.24	℄ TEMP CROSSOVER 1	0.0'	1080772.09	827919.8417	N/A	P.T. CURVE XO1_2	
4	20+00.00	℄ TEMP CROSSOVER 2	0.0'	1081138.4893	827426.8118	N/A	P.C. CURVE XO2_1	
4	21+64.22	℄ TEMP CROSSOVER 2	5.39' RT	1081039.2242	827557.6325	N/A	P.I. CURVE XO2_1	
4	23+27.97	℄ TEMP CROSSOVER 2	0.0'	1080957.9247	827700.3140	N/A	P.T. CURVE XO2_1	
4	24+92.18	℄ TEMP CROSSOVER 2	5.39' LT	1080876.6252	827842.9955	N/A	P.I. CURVE XO2_2	
4	26+55.93	℄ TEMP CROSSOVER 2	0.0'	1080777.3601	827973.8161	N/A	P.T. CURVE XO2_2	
5	10+00.00	℄ TEMP CROSSOVER 3	0.0'	1078264.3262	831212.4177	N/A	P.C. CURVE XO3_1	
5	11+37.04	℄ TEMP CROSSOVER 3	5.20' LT	1078181.4869	831321.5910	N/A	P.I. CURVE XO3_1	
5	12+73.56	℄ TEMP CROSSOVER 3	0.0'	1078116.1306	831442.0473	N/A	P.T. CURVE XO3_1	
5	14+10.61	℄ TEMP CROSSOVER 3	5.20' RT	1078050.7743	831562.5037	N/A	P.I. CURVE XO3_2	
5	15+47.12	℄ TEMP CROSSOVER 3	0.0'	1077967.9349	831671.6770	N/A	P.T. CURVE XO3_2	
5	20+00.00	℄ TEMP CROSSOVER 4	0.0'	1078353.3109	831163.2345	N/A	P.C. CURVE XO4_1	
5	21+64.38	℄ TEMP CROSSOVER 4	5.40' RT	1078253.9508	831294.1804	N/A	P.I. CURVE XO4_1	
5	23+28.28	℄ TEMP CROSSOVER 4	0.0'	1078138.3008	831410.9893	N/A	P.T. CURVE XO4_1	
5	24+92.65	℄ TEMP CROSSOVER 4	5.40' LT	1078022.6508	831527.7982	N/A	P.I. CURVE XO4_2	
5	26+56.56	℄ TEMP CROSSOVER 4	0.0'	1077923.2908	831658.7441	N/A	P.T. CURVE XO4_2	

℄ EXIST. ROUTE 370

CURVE_RTE_370_EXIST_1
PI 473+18.37
PC 467+98.02
PT 478+37.74
Δ 6°6'10.6" (LT)
D 0°35'13.1"
L 1039.72' (ARC)
T 520.35'
R 9761.13'

℄ EXIST. ROUTE 370

CURVE_RTE_370_EXIST_2
PI 563+80.30
PC 555+58.84
PT 571+58.84
Δ 32°00'00" (LT)
D 2°00'00"
L 1600.000' (ARC)
T 821.465'
R 2864.79'

℄ EXIST. ROUTE 370

CURVE_RTE_370_EXIST_3
PI 609+65.51
PC 605+90.68
PT 613+40.22
Δ 2°29'6.9" (LT)
D 0°19'53.7"
L 749.54' (ARC)
T 374.83'
R 17280.16'

℄ TEMP. CROSSOVER 1

CURVE_XO1_1
PI 11+48.85
PC 10+00.00
PRC 12+97.28
Δ 7°24'20.4" (RT)
D 2°29'28.0"
L 297.28' (ARC)
T 148.85'
R 2300.00'

℄ TEMP. CROSSOVER 1

CURVE_XO1_2
PI 14+34.42
PRC 12+97.28
PT 15+71.24
Δ 6°49'28.5" (LT)
D 2°29'28.0"
L 273.96' (ARC)
T 137.14'
R 2300.00'

℄ TEMP. CROSSOVER 2

CURVE_XO2_1
PI 21+64.22
PC 20+00.00
PRC 23+27.97
Δ 7°30'59.1" (LT)
D 2°17'30.6"
L 327.97' (ARC)
T 164.22'
R 2500.00'

℄ TEMP. CROSSOVER 2

CURVE_XO2_2
PI 24+92.18
PRC 23+27.97
PT 26+55.93
Δ 7°30'59.1" (RT)
D 2°17'30.6"
L 327.97' (ARC)
T 164.22'
R 2500.00'

℄ TEMP. CROSSOVER 3

CURVE_XO3_1
PI 11+37.04
PC 10+00.00
PRC 12+73.56
Δ 8°42'27.8" (LT)
D 3°10'59.2"
L 273.56' (ARC)
T 137.04'
R 1800.00'

℄ TEMP. CROSSOVER 3

CURVE_XO3_2
PI 14+10.61
PRC 12+73.56
PT 15+47.12
Δ 8°42'27.8" (RT)
D 3°10'59.2"
L 273.56' (ARC)
T 137.04'
R 1800.00'

℄ TEMP. CROSSOVER 4

CURVE_XO4_1
PI 21+64.38
PC 20+00.00
PRC 23+28.28
Δ 7°31'24.9" (RT)
D 2°17'30.6"
L 328.28' (ARC)
T 164.38'
R 2500.00'

℄ TEMP. CROSSOVER 4

CURVE_XO4_2
PI 24+92.65
PRC 23+28.28
PT 26+56.56
Δ 7°31'24.9" (LT)
D 2°17'30.6"
L 328.28' (ARC)
T 164.38'
R 2500.00'

COORDINATE POINTS
SHEET 1 OF 1

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

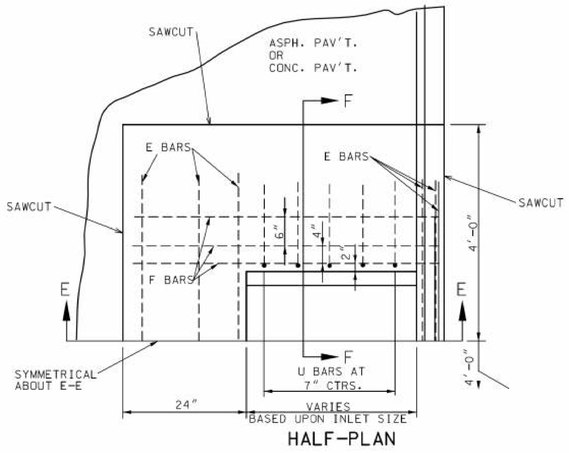
DATE PREPARED 6/25/2025
ROUTE 370 | STATE MO
DISTRICT SL | SHEET NO. 7
COUNTY ST. LOUIS/ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



HALF-PLAN

REPLACING INLET TOPS

NOT TO SCALE

GENERAL NOTES:

1. THE CONFIGURATION DETAILS SHOWN ARE DESCRIPTIVE ONLY AND MAY BE VARIED TO CONFORM WITH ESTABLISHED MANUFACTURING PROCEDURES.

2. TOP OF DROP INLET WALLS SHALL BE CONSTRUCTED TO THE ELEVATION OF BOTTOM OF PAVEMENT AT THE EDGE OF PAVEMENT OR BOTTOM OF CURB AND GUTTER AT DROP INLET.

3. ALL CONCRETE ABOVE THE TAR PAPER SEPARATION JOINT IS TO BE CONSTRUCTED PRIOR TO PAVING OPERATIONS.

4. REINFORCING BARS IN PAVEMENT SHALL BE EPOXY COATED AND SECURELY TIED TOGETHER AND FASTENED TO AVOID ANY POSSIBLE DISPLACEMENT DURING THE PLACING OF CONCRETE.

5. NO DIRECT PAYMENT WILL BE MADE FOR PROVIDING, CUTTING, OR BENDING REINFORCING STEEL.

6. NO DIRECT PAYMENT WILL BE MADE FOR SAWCUTTING EXISTING PAVEMENT AROUND INLET AND REMOVING DAMAGED CONCRETE.

7. NO DIRECT PAYMENT WILL BE MADE FOR FORMING OR PROVIDING NEW GRATE AND BEARING PLATE.

8. THE REINFORCEMENT SHOWN IS THE MINIMUM REQUIRED. AT THE CONTRACTOR'S OPTION, ADDITIONAL REINFORCEMENT MAY BE USED.

9. MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1-1/2" UNLESS OTHERWISE SPECIFIED.

10. ALL CAST-IN-PLACE CONCRETE SHALL MEET THE SPECIFICATIONS OF MODOT CLASS B-1 CONCRETE.

11. ALL WORK INCLUDING REMOVALS AND NEW STEEL, CONCRETE, REINFORCING BARS, TAR PAPER, AND BACKFILL NECESSARY TO COMPLETE THE CONSTRUCTION OF REPLACING THE INLET TOP AND ADJUSTING TO GRADE IF NECESSARY SHALL BE CONSIDERED COMPLETELY COVERED BY THE CONTRACT UNIT PRICE FOR SPECIAL INLET (EACH).

12. SEE STANDARD PLAN 731.10 FOR ADDITIONAL INLET DETAILS.

13. SEE SPECIAL SHEET INCLUDED IN PLANS REGARDING PARALLEL BAR GRATE & BEARING PLATE.

DISCLAIMER

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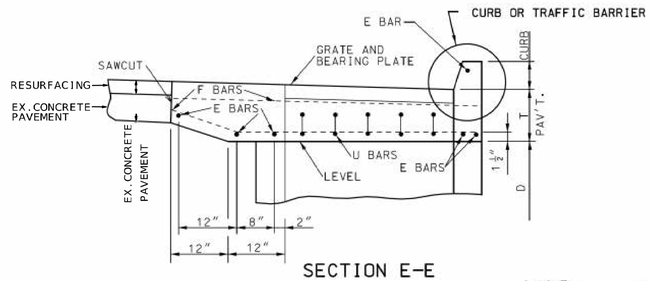
PAV'T THICKNESS	"T" DIMENSION
LESS THAN OR EQUAL TO 11"	11"
12"	12"
13"	13"
GREATER THAN OR EQUAL TO 14"	14"

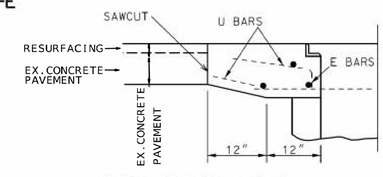
PAVEMENT BAR BILL

TYPE	LENGTH	WIDTH	MARK	NO.	LENGTH
A	2'	2'	E	6	6'-0"
			F	6	4'-6"
			U	8	2'-9"
	3'	2'	E	6	6'-0"
			F	6	5'-6"
			U	10	2'-9"
	4'	2'	E	6	6'-0"
			F	6	6'-6"
			U	14	2'-9"

BARS E, F, & U #4



SECTION E-E



HALF SECTION F-F

SPECIAL DETAIL
SHEET 1 OF 4

STATE OF MISSOURI
EUGENE LOUIS KUEKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

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DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	8

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.: .
PROJECT NO.: .
BRIDGE NO.: .

DESCRIPTION	DATE
.	.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
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Certificate of Authority: 000656

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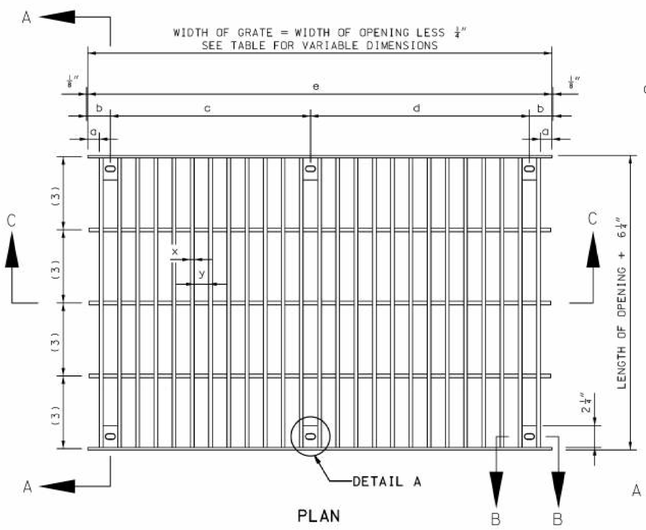
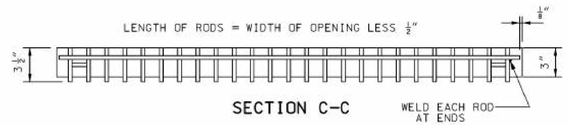
(3) (ON CAST-IN-PLACE INLETS B, C, G & X AND PRECAST INLETS A, B, C & D ONLY.)
THREE ¾" ROUND STEEL RODS - 4 EQUAL SPACES.

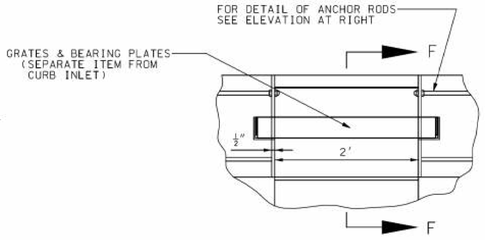


PLAN

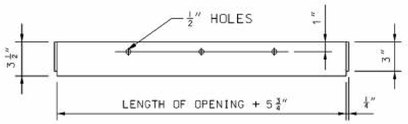


SECTION C-C

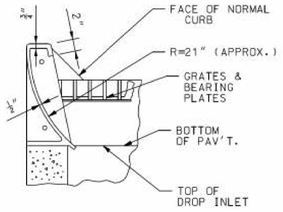
GRATE



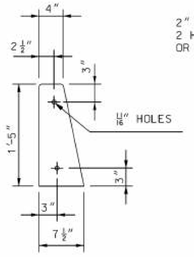
FRONT ELEVATION



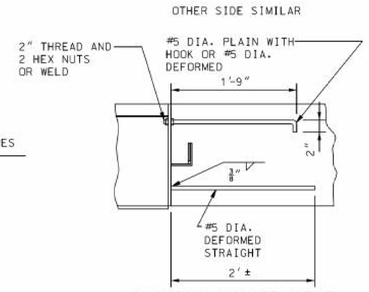
END VIEW OF BEARING BAR



SECTION F-F



END ELEVATION



SHOWING ANCHOR RODS HALF ELEVATION

CURB INLET

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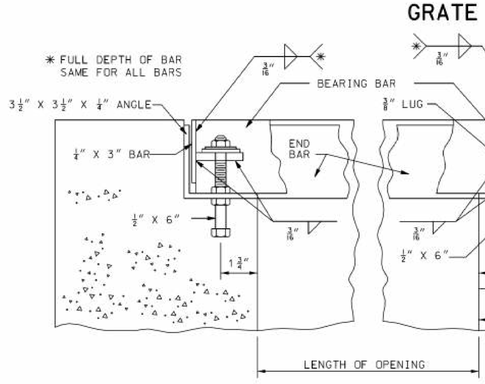
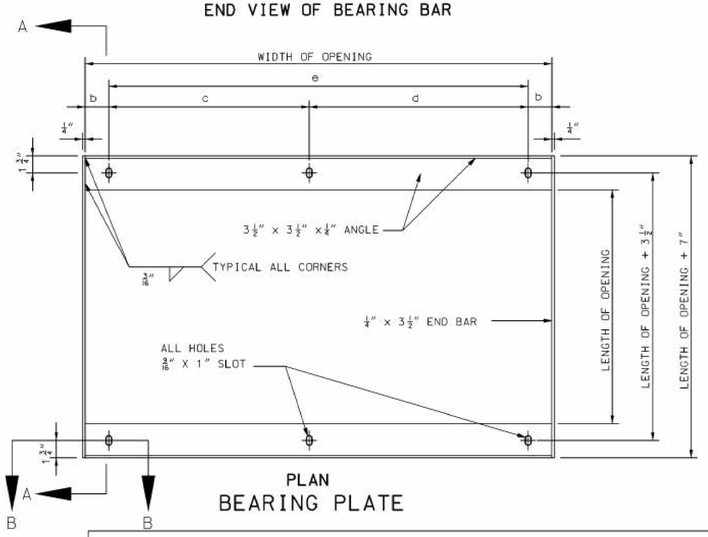
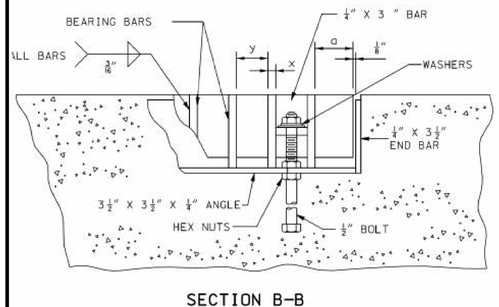


SECTION A-A

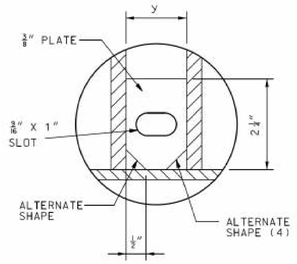


PLAN

BEARING PLATE



SECTION B-B



DETAIL A

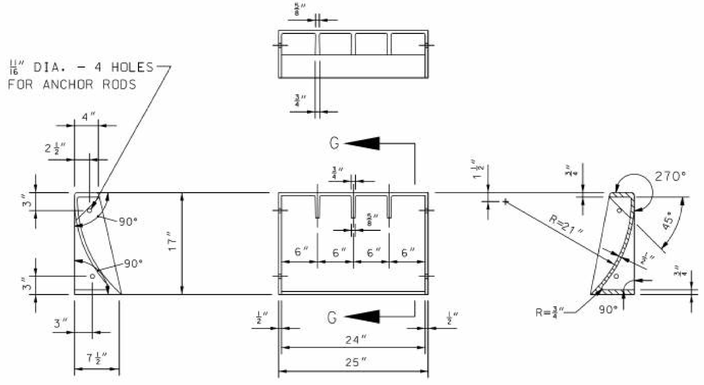
(4) OTHER ALTERNATE SHAPES ARE ALLOWED, UPON APPROVAL, PROVIDED 4 LINEAR INCHES OF WELD IS MAINTAINED SYMETRICALLY AROUND THE PLATE AND THE NOMINAL DIMENSIONS OF THE PLATE AND SLOT ARE MAINTAINED.

WEIGHT AND DIMENSIONS DATA

OPENING			BEARING BARS				DIMENSIONS					
WIDTH	LENGTH	WEIGHT (1) LBS.	x	y	LENGTH	NUMBER	a	b	c	d	e	REMARKS
2'-0"	2'-0"	190	⅜"	1½"	2'-5¾"	12	1¾"	2⅝"			1'-6¾"	(2) USE WITH
3'-0"	2'-0"	280	⅜"	1½"	2'-5¾"	19	1⅝"	2 1/16"			2'-7⅞"	TYPES B,C,G &
4'-0"	2'-0"	370	⅜"	1½"	2'-5¾"	25	1¾"	2⅜"	1'-8⅜"	1'-10½"		X INLETS
3'-0"	2'-0"	190	⅜"	3"	2'-5¾"	11	1⅝"	2 1/16"			2'-6⅜"	USE WITH
3'-0"	3'-0"	330	⅝"	3"	3'-5¾"	10	1¼"	3½"			2'-5"	TYPE S-1 INLETS
5'-0"	2'-0"	300	⅜"	3"	2'-5¾"	18	1"	3"	2'-3"	2'-3"		AND TYPE S
5'-0"	3'-0"	550	⅝"	3"	3'-5¾"	17	⅞"	2 1/16"	2'-1⅛"	2'-5"		HEADWALLS
3'-1"	2'-1"	200	⅜"	3"	2'-6¾"	11	1⅛"	3⅛"			2'-6⅜"	USE WITH
3'-1"	3'-1"	340	⅝"	3"	3'-6¾"	10	1¾"	4"			2'-5"	TYPE S-2
5'-1"	2'-1"	310	⅜"	3"	2'-6¾"	18	1½"	3½"	2'-3"	2'-3"		AND S-3
5'-1"	3'-1"	560	⅝"	3"	3'-6¾"	17	1 1/16"	3⅜"	2'-1⅛"	2'-5"		INLETS ONLY

(1) THE WEIGHT OF THE GRATE AND BEARING PLATE INCLUDES THE BOLTS, NUTS, AND WASHERS AND SHALL BE AS SHOWN WITH A TOLERANCE OF 5 PERCENT.

(2) USE INCLUDES PRECAST TYPES A, B, C & D INLETS.



ALTERNATE SHAPE

SECTION G-G

GENERAL NOTES:

WHEN BOLTS ARE CUT IN THE FIELD, THREADS MUST BE CLEANED TO PERMIT THE FINAL NUT TO RUN FREELY ON THE BOLT.

NO DIRECT PAYMENT WILL BE MADE FOR DRILLED HOLES, ANCHOR RODS IN PLACE, OR OTHER WORK INCIDENTAL TO PLACING CURB INLETS.

THE CONTRACTOR SHALL USE EITHER PLAIN RODS WITH HOOK OR DEFORMED RODS WITHOUT HOOK, AND SHALL ATTACH RODS TO THE CURB INLET EITHER WITH TWO NUTS OR BY WELDING.

THE WELDING REQUIREMENTS SHOWN ON THIS DRAWING ARE FOR PAINTED GRATES AND BEARING PLATES. IF GALVANIZED, ALL TIGHTLY CONTACTING SURFACES SHALL BE COMPLETELY SEALED, ON ALL SIDES BY WELDING, PRIOR TO GALVANIZING.

SPECIAL DETAIL
SHEET 2 OF 4

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025
ROUTE 370 | STATE MO
DISTRICT SL | SHEET NO. 9
COUNTY ST. LOUIS/ST. CHARLES
JOB NO. J6P3554
CONTRACT ID. .
PROJECT NO. .
BRIDGE NO. .

DESCRIPTION	DATE
.	.

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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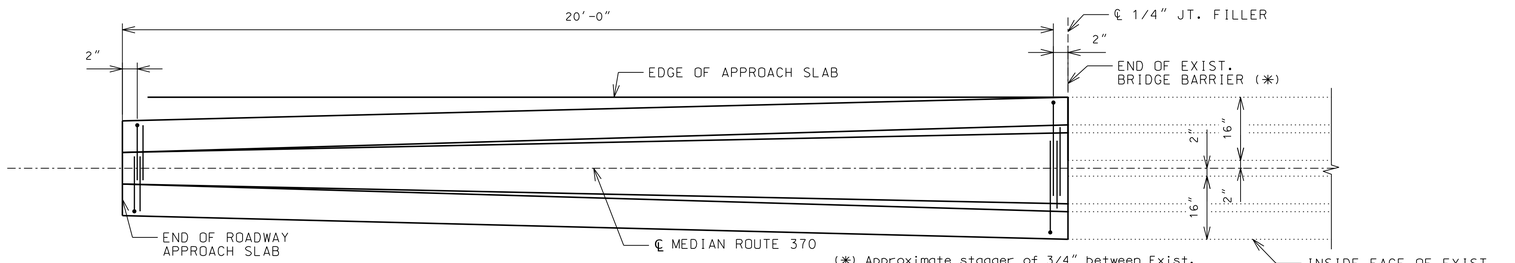
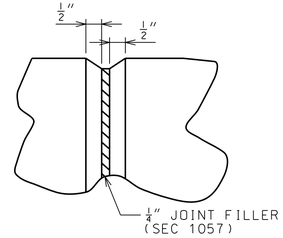


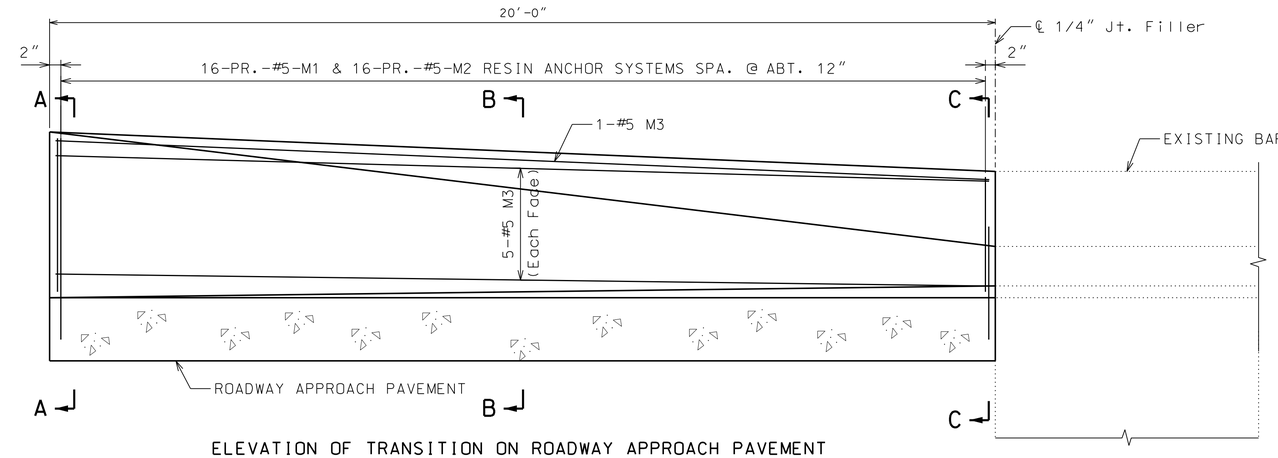
PLAN OF TRANSITION ON APPROACH SLAB

(*) Approximate stagger of 3/4" between Exist. Bridge Barrier along A43202 and A43232 at End Bent. No. 4. Remove staggered portion and cut rebar at removal line so barrier ends are flush for installation of proposed median barrier. Cost of staggered barrier end removal will be considered completely covered by contract unit price for Type C Barrier Transition.

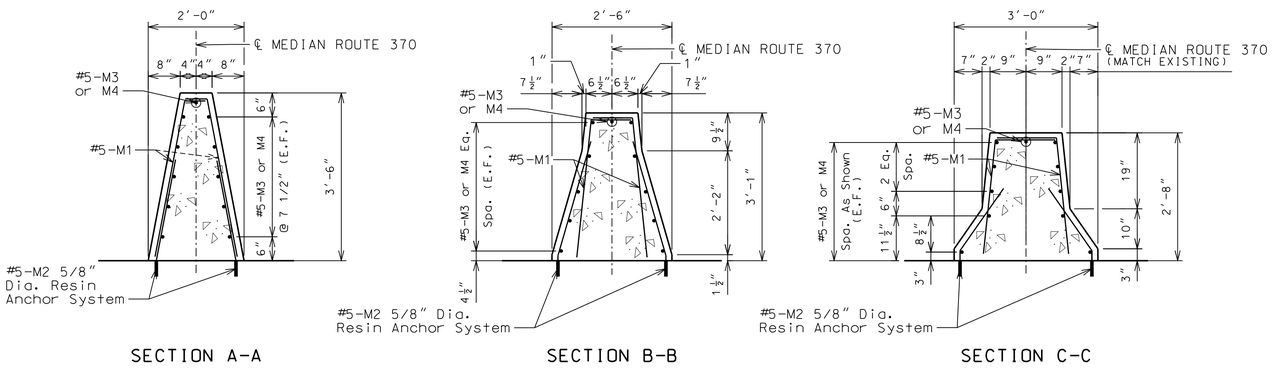
Standard width shown. Match the existing width if different.



FILLED JOINT DETAIL



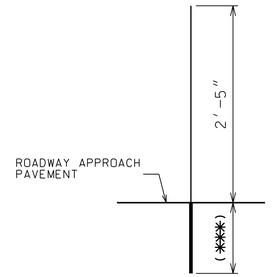
ELEVATION OF TRANSITION ON ROADWAY APPROACH PAVEMENT



SECTION A-A SECTION B-B SECTION C-C

DETAILS OF TYPE C MEDIAN BARRIER WIDTH TRANSITION

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.



RESIN ANCHOR SYSTEM

(32 REQUIRED PER EACH

128 TOTAL)

(***) MANUFACTURER'S EMBEDMENT LENGTH (5" MINIMUM)

GENERAL NOTES:

ALL REINFORCEMENT SHALL BE GRADE 60 EPOXY COATED.

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 THE BARRIER SHALL BE CLASS B-1.

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 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 TRANSITION.

THE CONTRACTOR SHALL USE ONE OF THE QUALIFIED RESIN ANCHOR SYSTEMS IN ACCORDANCE WITH SEC 1039.

COST OF FURNISHING AND INSTALLING RESIN ANCHOR SYSTEMS, COMPLETE IN PLACE, WILL BE CONSIDERED INCIDENTAL AND COMPLETELY COVERED BY THE CONTRACT UNIT PRICE FOR TYPE D BARRIER.

THE MINIMUM EMBEDMENT DEPTH IN CONCRETE WITH F'C = 4000PSI FOR THE RESIN ANCHOR SYSTEM SHALL BE THAT REQUIRED TO MEET THE MINIMUM ULTIMATE PULLOUT STRENGTH IN ACCORDANCE WITH SEC 1039 BUT SHALL NOT BE LESS THAN 5".
FIELD BEND #5-M2 BARS AS NEEDED TO FIT BARRIER TRANSITIONS.

SPECIAL DETAIL
SHEET 3 OF 4

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

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DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	10

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

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Certificate of Authority: 000856

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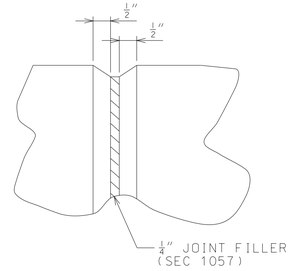
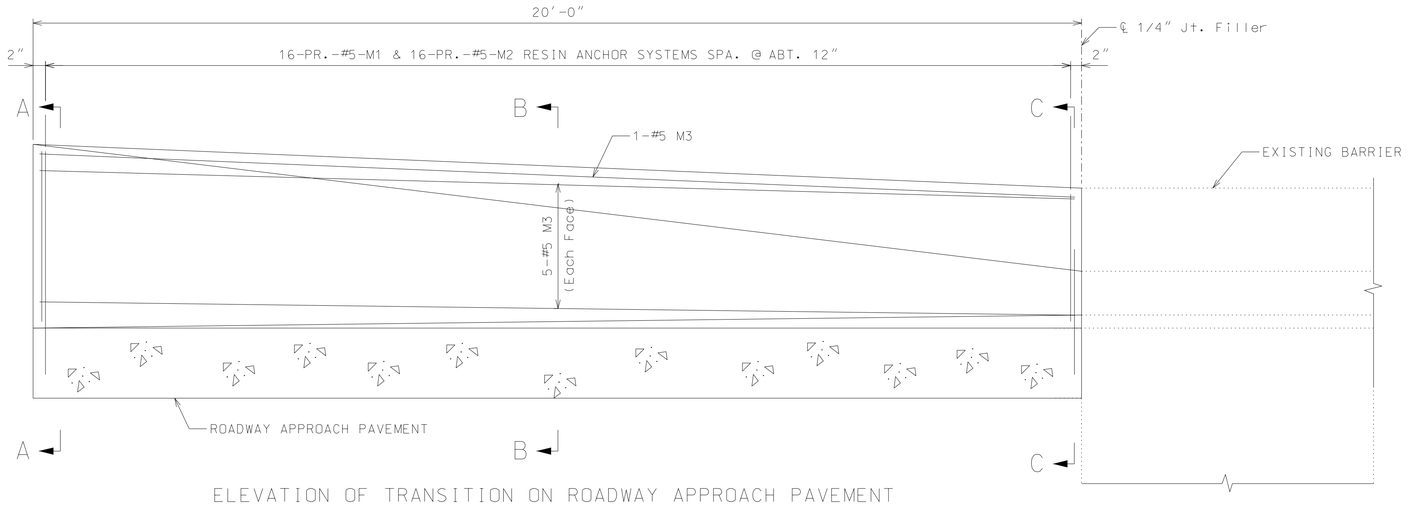
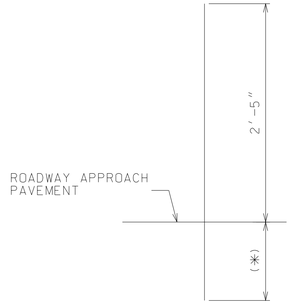
PLAN OF TRANSITION ON ROADWAY APPROACH PAVEMENT



FILLED JOINT DETAIL



ELEVATION OF TRANSITION ON ROADWAY APPROACH PAVEMENT

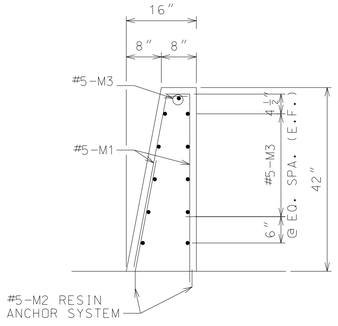


RESIN ANCHOR
SYSTEM

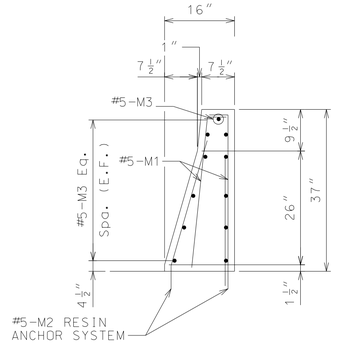
(32 REQUIRED PER EACH

128 TOTAL)

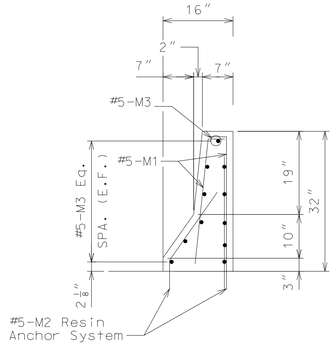
(*) MANUFACTURER'S
EMBEDMENT LENGTH
(5" MINIMUM)



SECTION A-A



SECTION B-B



SECTION C-C

DETAILS OF TYPE D MEDIAN BARRIER TRANSITION ON ROADWAY APPROACH PAVEMENT

LOCATED AT FOUR INSIDE QUADRANTS AT BRIDGE ENDS

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

GENERAL NOTES:

ALL REINFORCEMENT SHALL BE GRADE 60 EPOXY COATED.

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 THE BARRIER SHALL BE CLASS B-1.

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 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 TRANSITION.

THE CONTRACTOR SHALL USE ONE OF THE QUALIFIED RESIN ANCHOR SYSTEMS IN ACCORDANCE WITH SEC 1039.

COST OF FURNISHING AND INSTALLING RESIN ANCHOR SYSTEMS, COMPLETE IN PLACE, WILL BE CONSIDERED INCIDENTAL AND COMPLETELY COVERED BY THE CONTRACT UNIT PRICE FOR TYPE D BARRIER.

THE MINIMUM EMBEDMENT DEPTH IN CONCRETE WITH F'C = 4000PSI FOR THE RESIN ANCHOR SYSTEM SHALL BE THAT REQUIRED TO MEET THE MINIMUM ULTIMATE PULLOUT STRENGTH IN ACCORDANCE WITH SEC 1039 BUT SHALL NOT BE LESS THAN 5".
FIELD BEND #5-M2 BARS AS NEEDED TO FIT BARRIER TRANSITIONS.

SPECIAL DETAIL
SHEET 4 OF 4

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	11

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

NOTES:

1. EXISTING GUIDE, WARNING, AND REGULATORY SIGNS WITHIN THE WORK ZONE SHALL NOT CONFLICT WITH THE CONSTRUCTION SIGNING (SUCH AS SPEED LIMIT, BRIDGE CLEARANCE, ETC.) AND SHALL BE COVERED, REMOVED, OR RELOCATED WITH NO DIRECT PAYMENT. CONSTRUCTION SIGNS SHALL NOT OBSTRUCT EXISTING SIGNS REMAINING IN PLACE.

2. ALL SPACING AND DISTANCES ARE APPROXIMATE. THEY MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

3. SEE STANDARD PLAN 616.10BE FOR TEMPORARY TRAFFIC CONTROL DEVICES DETAILS.

4. SEE STANDARD PLAN 620.10G FOR TEMPORARY PAVEMENT MARKING DETAILS.

5. CONSTRUCTION SIGNS NOTED AS POST-MOUNTED (POST) SHALL BE MOUNTED PER STANDARD PLAN 616.10BE.

6. THE SPEED LIMIT DURING ACTIVE CONSTRUCTION SHALL BE 50 M.P.H. UNLESS OTHERWISE NOTED IN THE TRAFFIC CONTROL PLAN.

7. CONFLICTING STRIPING SHALL BE REMOVED PRIOR TO GUIDING TRAFFIC THROUGH WORK ZONES. ANY STRIPING WHICH IS DAMAGED DURING A DAYS WORK SHALL BE RE-STRIPED NO LATER THAN THE END OF THE SAME DAY.

8. ALL WARNING SIGNS SHALL HAVE A FLUORESCENT SHEETING.

9. WORDING FOR CHANGEABLE MESSAGE SIGNS SHALL BE AS APPROVED OR DIRECTED BY THE ENGINEER.

10. EXACT LOCATIONS FOR CHANGEABLE MESSAGE SIGNS SHALL BE AS DIRECTED BY THE ENGINEER.

11. MISSOURI ONE CALL (800 DIG RITE) SHALL BE CONTACTED FOR LOCATES (800-344-7483 OR 811) BEFORE BEGINNING ANY EXCAVATION OR BORING ACTIVITIES.

12. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHOWN ON PLANS HAVE BEEN DRAFTED FROM FIELD NOTES AND AERIAL PHOTOGRAPHY; THE COMMISSION DOES NOT WARRANT THE LOCATIONS OF THESE FACILITIES AS PRECISE. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXISTENCE AND PRECISE LOCATION OF ALL FACILITIES AND TO AVOID DAMAGE TO THEM. SEE THE JOB SPECIAL PROVISIONS FOR A LIST OF UTILITY COMPANIES ON OR WITHIN THE VICINITY OF THE PROJECT LIMITS.

13. FOR BEGIN/END OF PROJECT SIGNING, SEE "TRAFFIC CONTROL PLAN TYPICAL APPLICATIONS SHEET 3 OF 7.

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS NOTES:

1. REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKINGS AS NEEDED.

2. WHEN WORK IS BEING PERFORMED WITHIN THE MEDIAN, TA-5 "LONG-TERM SHOULDER CLOSURE WITH TEMPORARY TRAFFIC BARRIER" SHALL BE UTILIZED. SEE "TRAFFIC CONTROL PLAN TYPICAL APPLICATIONS SHEET 1 OF 7" FOR FURTHER DETAILS.

3. A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE FREEWAY LANE IS CLOSED, A SEPARATE ARROW BOARD SHALL BE USED FOR EACH LANE.

4. ALTERNATIVE TEMPORARY TRAFFIC CONTROL SET-UPS SHOULD BE CONSIDERED WHEN REDUCTION IN CAPACITY CANNOT BE TOLERATED. SET-UPS MUST BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTATION.

5. UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PROVIDE ADDITIONAL PROTECTIVE TRUCKS EQUIPPED WITH PROPER WARNING DEVICES.

6. TRUCK MOUNTED ATTENUATOR WITH FLASHING ARROW PANEL SHALL BE USED IN PROTECTED WORK ZONES WHEN WORKERS ARE PRESENT.

7. PROTECTIVE TRUCK AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

8. VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING OR STROBE LIGHTS.

9. FLASHING ARROW PANELS SHALL, AS A MINIMUM, BE TYPE B, WITH A SIZE OF 60 X 30 INCHES.

SUGGESTED SEQUENCE OF CONSTRUCTION:

PRIOR TO PERFORMING BRIDGE WORK, THE FOLLOWING ACTIVITIES WILL NEED TO OCCUR. TYPICAL APPLICATIONS AS SHOWN ON "TRAFFIC CONTROL PLAN TYPICAL APPLICATIONS SHEET 1 OF 7" WILL BE USED TO PERFORM THE WORK FOR TRAFFIC CONTROL:

1. INSTALL ADVANCE SIGNING AND CHANGEABLE MESSAGE SIGNS.

2. PLACE BARRICADES AND SIGNAGE AT TRAIL CONNECTIONS WITH RTE 370 AS SHOWN ON THE PHASE 1 TRAFFIC CONTROL PLANS PRIOR TO REMOVAL OF TEMPORARY MOVABLE BARRIER. REMOVE MOVABLE TEMPORARY BARRIER AND END TERMINAL CURRENTLY PROTECTING THE BIKE LANE ON THE WESTBOUND LANES OF RTE 370. BARRIER SHALL BE REMOVED IN ONE WORKING DAY AND TA-6 SHALL BE UTILIZED. IF REMOVAL OCCURS OVER MULTIPLE DAYS BLUNT ENDS MUST BE PROTECTED BY MoDOT APPROVED DEVICE. ANY WORK OR MATERIAL NEEDED TO PROVIDE END PROTECTION DEVICE SHALL BE CONSIDERED INCIDENTAL TO THE REMOVAL, STORAGE, AND REINSTALLATION OF TEMPORARY BARRIER AND END TERMINAL.

3. REMOVE MEDIAN BARRIER AND PATCH PAVEMENT FOR WEST CROSSOVER. UTILIZE TA-5 "SHOULDER CLOSURE DETAIL WITH TEMPORARY TRAFFIC BARRIER" AS SHOWN ON TYPICAL APPLICATIONS 1 OF 7 TO CLOSE BOTH THE WESTBOUND AND EASTBOUND INSIDE SHOULDER TO PERFORM THIS WORK.

4. REMOVE MEDIAN BARRIER,WELD EXISTING INLET GRATES, INSTALL TRENCH DRAIN, AND PATCH PAVEMENT FOR EAST CROSSOVER. UTILIZE TA-5 "SHOULDER CLOSURE DETAIL WITH TEMPORARY TRAFFIC BARRIER" AS SHOWN ON TYPICAL APPLICATIONS 1 OF 7 TO CLOSE BOTH THE WESTBOUND AND EASTBOUND INSIDE SHOULDER TO PERFORM THIS WORK.

5. FILL IN RUMBLE STRIPS WHERE PROPOSED TEMPORARY TRAFFIC LANES OVERLAP WITH EXISTING RUMBLE STRIPS.

6. REMOVE EXISTING SHOULDER AND REPLACE WITH FULL DEPTH PAVEMENT AS SHOWN ON PLANS.

PHASE 1

1. MAINTAIN ADVANCED SIGNING.

2. INSTALL CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES FOR PHASE 1.

3. CROSSOVER WESTBOUND LANES OF RTE 370 TO EASTBOUND RTE 370.

4. COMPLETE PROPOSED BRIDGE IMPROVEMENTS ON WESTBOUND LANES.

5. ONCE BRIDGE IMPROVEMENTS ARE COMPLETED, INSTALL MGS GUARDRAIL AT EAST APPROACH ON WESTBOUND DIRECTION.

6. FOLLOWING COMPLETION OF PHASE 1, INSTALL BARRIER TO CENTER OF CROSS OVER LOCATIONS AND RESTRIPE WESTBOUND DIRECTION WITH EXCEPTION OF THE BIKE LANE. All COSTS ASSOCIATED WITH MOVING THE BARRIER IS COVERED UNDER THE BID ITEM 6169901 {1} "WINTERIZATION", ALL COSTS ASSOCIATED WITH REMOVING THE STRIPING FROM PHASE 1 IS COVERED UNDER BID ITEM 6207001 "PAVEMENT MARKING REMOVAL" AND ALL COSTS ASSOCIATED RESTORING THE WESTBOUND STRIPING SHALL BE COVERED UNDER THE BID ITEM 6208076 "4 IN. TEMPORARY PAVEMENT MARKING PAINT".

PHASE 2A

1. REINSTALL ADVANCED SIGNING.

2. COMPLETE INSTALLATION OF CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES FOR PHASE 2A.

3. CROSSOVER EASTBOUND LANES OF RTE 370 TO WESTBOUND RTE 370.

4. ON RAMP FROM RTE 94 TO EASTBOUND RTE 370 WILL CONTINUE TO RUN ON THE EASTBOUND INSIDE LANES. SEE TRAFFIC CONTROL PLANS FOR FURTHER DETAILS.

5. COMPLETE PHASE 2A BRIDGE IMPROVEMENTS.

6. INSTALL MGS GUARDRAIL AT EAST APPROACH ON EASTBOUND DIRECTION.

PHASE 2B

1. MAINTAIN ADVANCE SIGNING AND CROSSOVER TRAFFIC. INSTALL CONSTRUCTION SIGNING AND TRAFFIC CONTROL DEVICES FOR PHASE 2B.

2. SHIFT ON RAMP FROM RTE 94 TO EASTBOUND RTE 370 TO OUTSIDE LANES AS SHOWN IN THE TRAFFIC CONTROL PLANS.

3. COMPLETE PROPOSED BRIDGE IMPROVEMENTS ON REMAINING EASTBOUND LANES.

FOLLOWING THE COMPLETION OF THE BRIDGE IMPROVEMENTS PERFORM THE FOLLOWING ACTIVITIES UTILIZING THE TYPICAL APPLICATIONS AS SHOWN ON "TRAFFIC CONTROL PLAN TYPICAL APPLICATIONS".

1. PLACE TEMPORARY BARRIER TO PROTECT GAPS AT CROSSOVER. INSTALL PERMANENT PAVEMENT STRIPING.

2. COMPLETE PAVEMENT RESURFACING AND MILL & OVERLAY ON RTE 370 IN AREAS SPECIFIED ON THE PLANS AS SHOWN ON TYPICAL APPLICATIONS SHEET 4 OF 7.

3. REINSTALL TEMPORARY BARRIER AND END TERMINAL TO PROTECT BIKE LANE ON THE WESTBOUND LANES OF RTE 370. BARRIER SHALL BE PLACED IN ONE WORKING DAY AND TA-6, AS SHOWN ON TYPICAL APPLICATION SHEET 1 OF 7, SHALL BE UTILIZED. IF INSTALLATION OCCURS OVER MULTIPLE DAYS BLUNT ENDS MUST BE PROTECTED BY MoDOT APPROVED DEVICE. ANY WORK OR MATERIAL NEEDED TO PROVIDE END PROTECTION DEVICE SHALL BE CONSIDERED INCIDENTAL TO THE REMOVAL, STORAGE, AND REINSTALLATION OF TEMPORARY BARRIER AND END TERMINAL.

TRAFFIC CONTROL LEGEND

•	SIGN (SINGLE SIDED)
	FLASHING ARROW PANEL
■	CHANNELIZER
▲	DIRECTIONAL INDICATOR BARRICADE
	TYPE III MOVEABLE BARRICADE
	CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)
	WORK AREA
	IMPACT ATTENUATOR
	TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
	TRAFFIC USAGE
TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE
TSY	TEMPORARY SOLID YELLOW
UIP	USE IN PLACE
R	REMOVE

SUGGESTED SEQUENCE OF CONSTRUCTION CONTINUED:

4. INSTALL PERMANENT MEDIAN BARRIER THROUGH LIMITS THAT WERE REMOVED FOR THE WEST CROSSOVER. UTILIZE TA-5 "SHOULDER CLOSURE DETAIL WITH TEMPORARY TRAFFIC BARRIER" AS SHOWN ON TYPICAL APPLICATIONS 1 OF 7 TO CLOSE BOTH THE WESTBOUND AND EASTBOUND INSIDE SHOULDER TO PERFORM THIS WORK.

5. INSTALL PERMANENT MEDIAN BARRIER THROUGH LIMITS THAT WERE REMOVED FOR THE EAST CROSSOVER. UTILIZE TA-5 "SHOULDER CLOSURE DETAIL WITH TEMPORARY TRAFFIC BARRIER" AS SHOWN ON TYPICAL APPLICATIONS 1 OF 7 TO CLOSE BOTH THE WESTBOUND AND EASTBOUND INSIDE SHOULDER TO PERFORM THIS WORK.

6. INSTALL ANY REMAINING PERMANENT STRIPING USING TA-35 "MULTI-LANE DIVIDED HIGHWAY MOVING OPERATION ON HIGHWAY OPEN TO TRAFFIC" AS SHOWN ON TYPICAL APPLICATIONS 2 OF 7.

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED	6/25/2025
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	12
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
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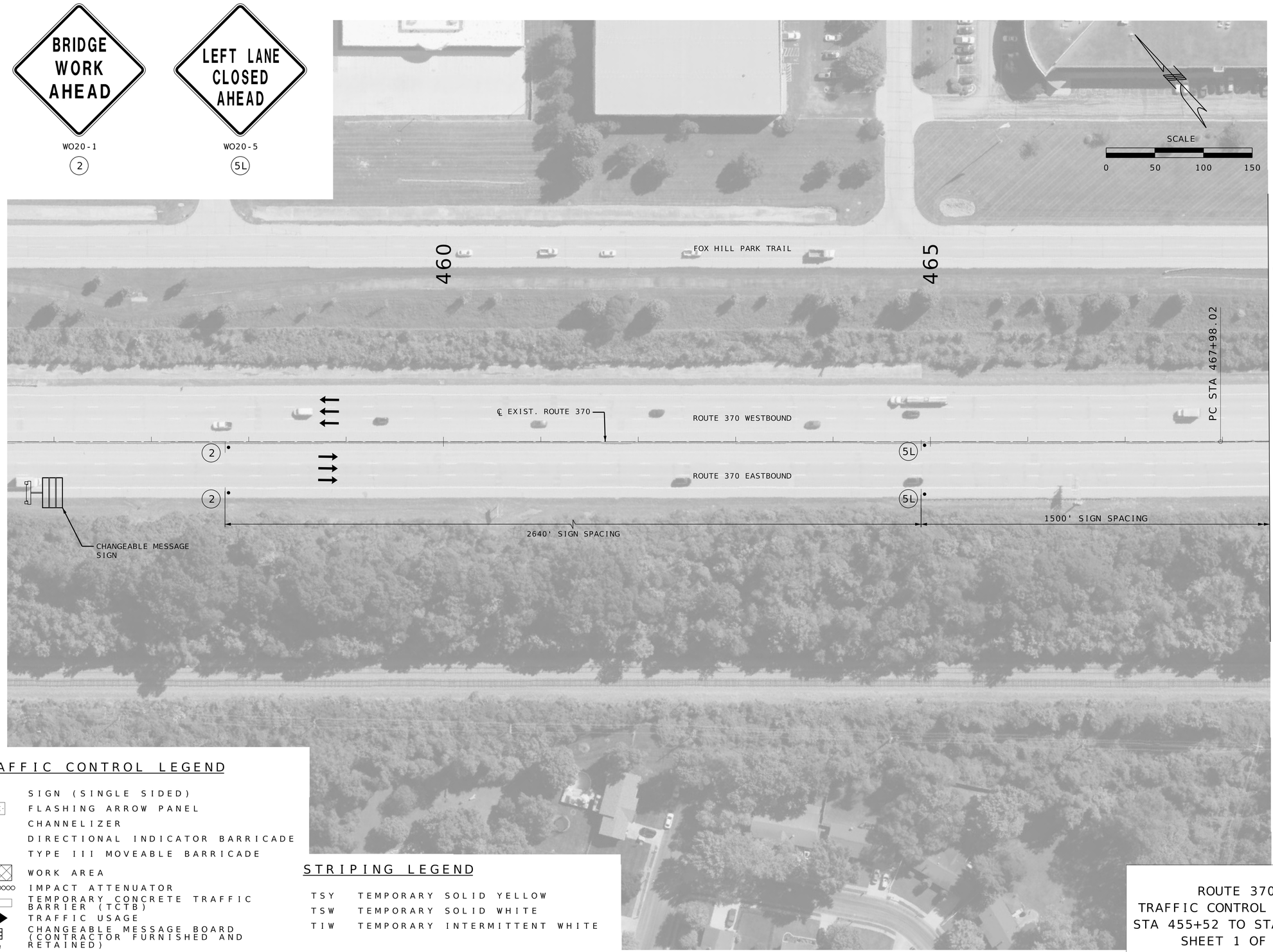
TRAFFIC CONTROL GENERAL NOTES AND LEGEND SHEET 1 OF 1



BRIDGE WORK AHEAD

WO20-1

2

LEFT LANE CLOSED AHEAD

WO20-5

5L

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 455+52 TO STA 468+48
SHEET 1 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370
STATE: MO
DISTRICT: SL
SHEET NO.: 13
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 468+48 TO STA 482+00
SHEET 2 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	14
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
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314-425-8300
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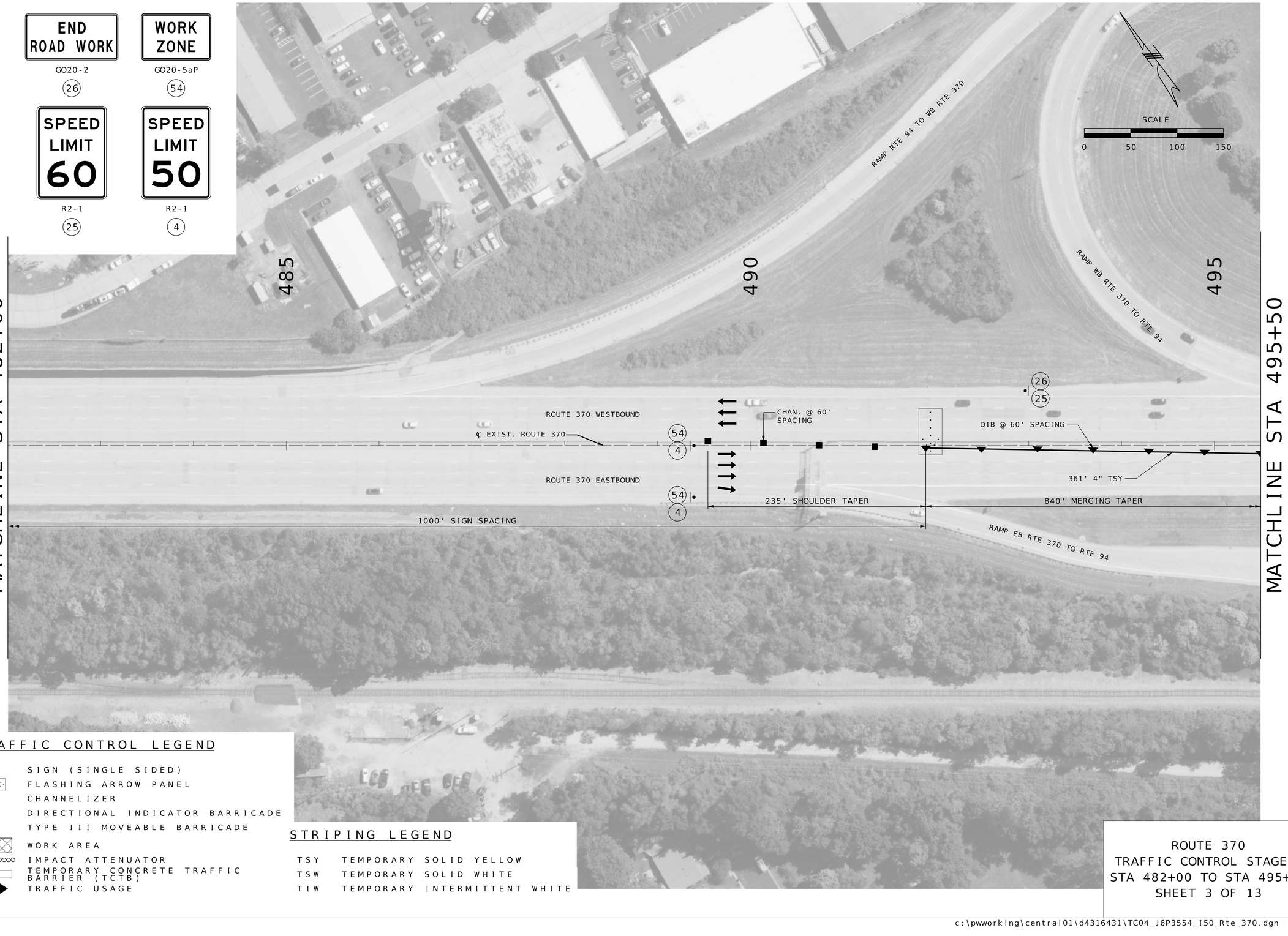

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 482+00 TO STA 495+50
SHEET 3 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 15
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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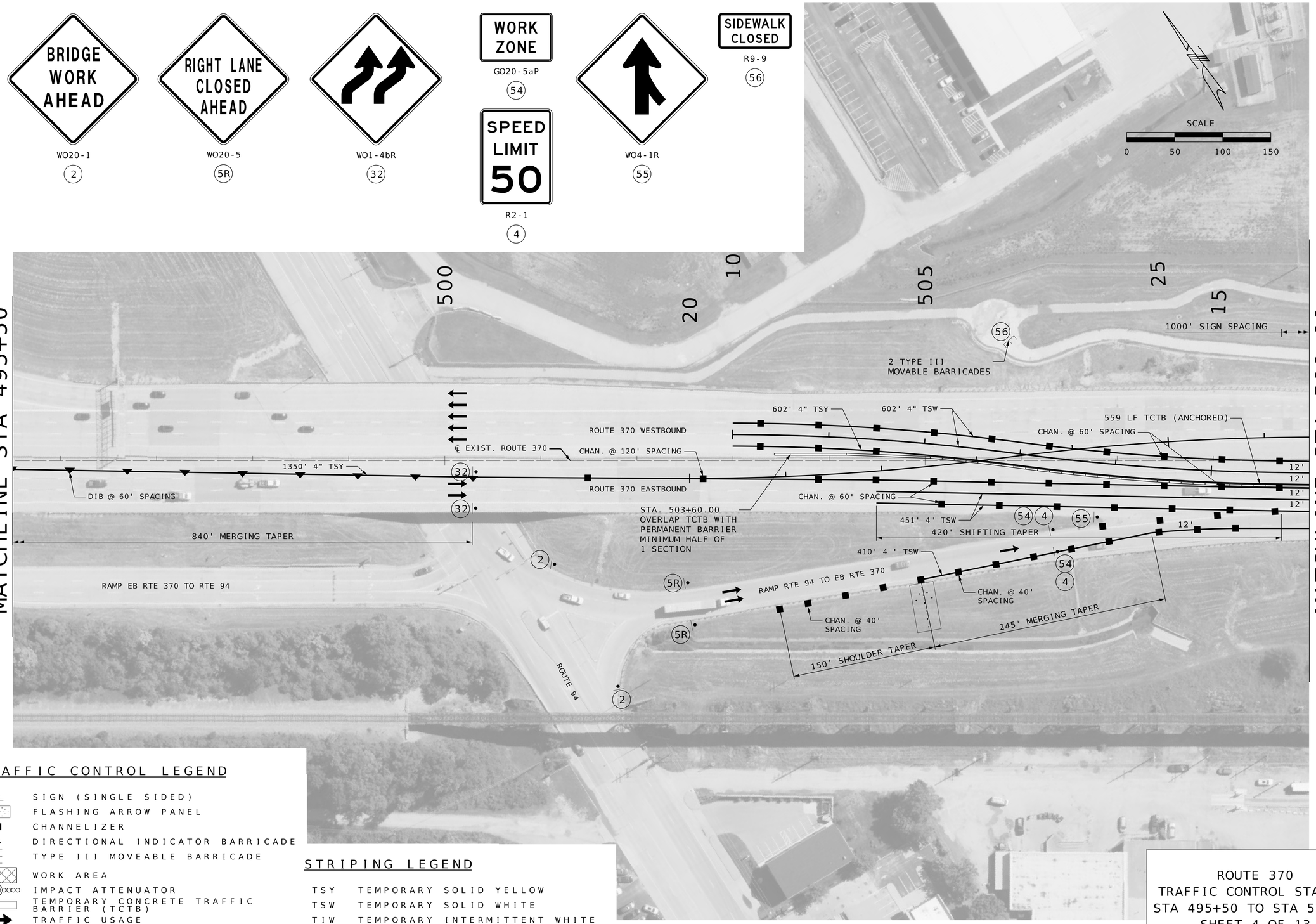

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 495+50 TO STA 509+00
SHEET 4 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	16

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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JEFFERSON CITY, MO 65102
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WO1-4bR

(32)

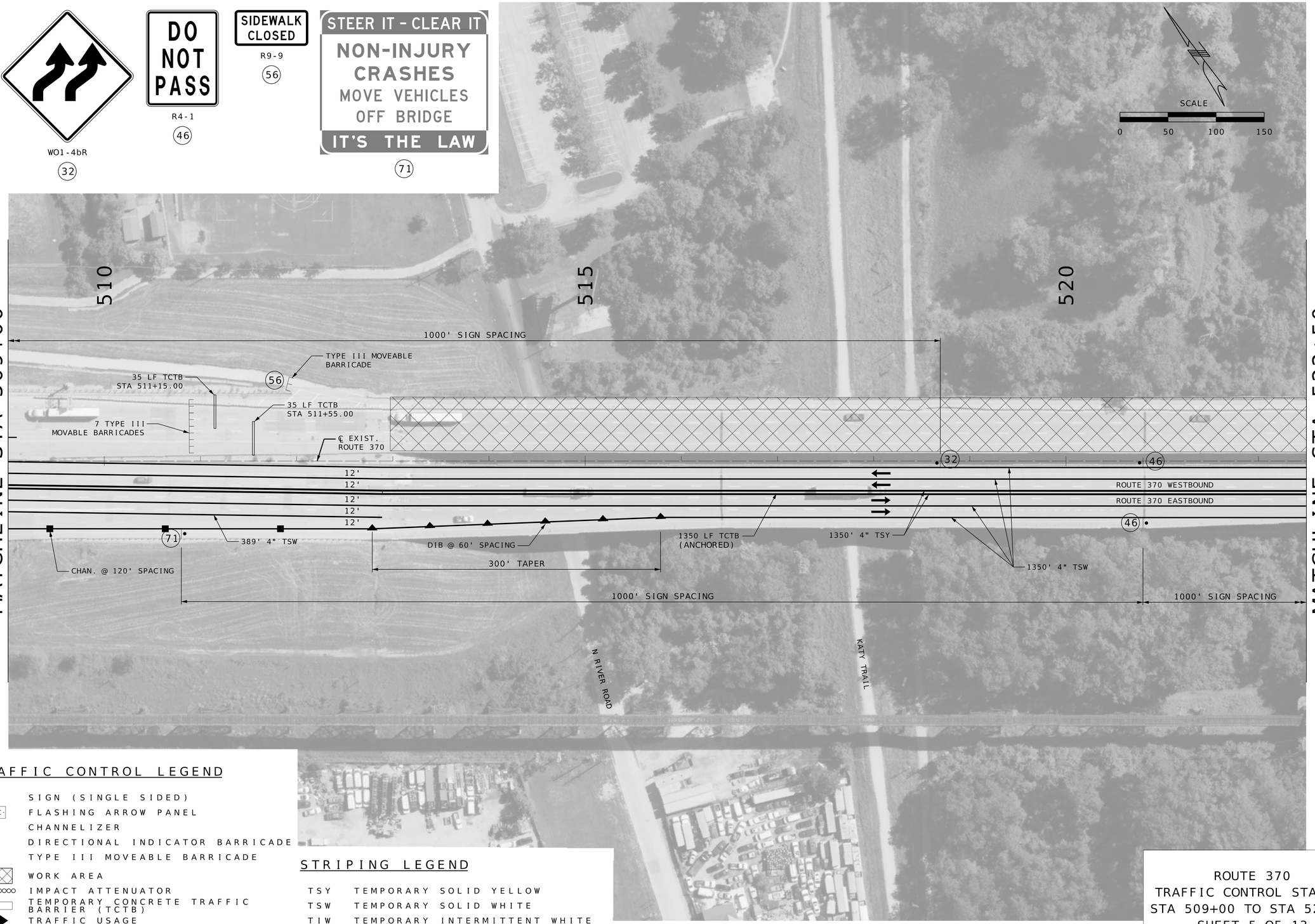
R4-1

(46)

R9-9

(56)

(71)



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 509+00 TO STA 522+50
SHEET 5 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	17
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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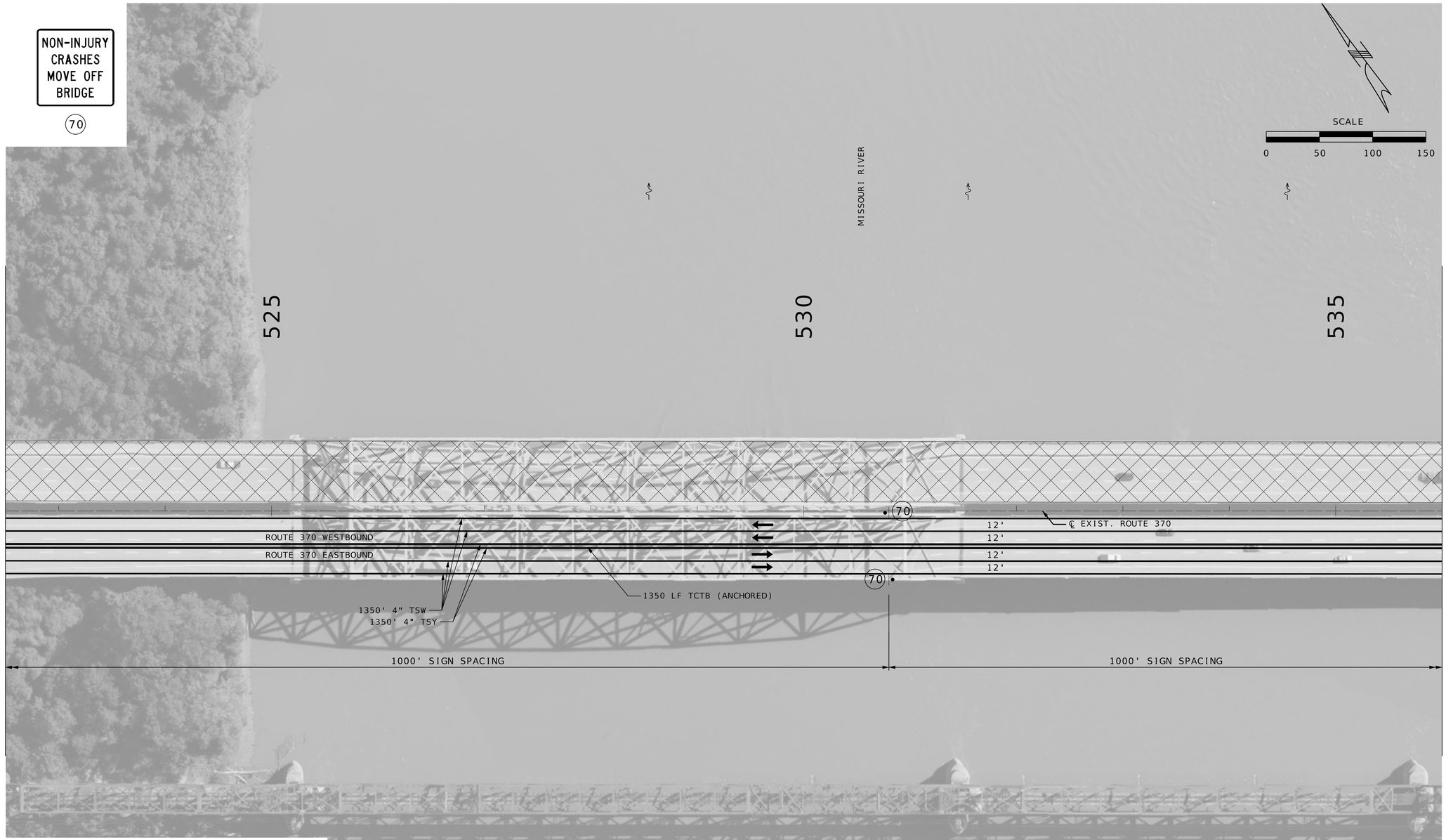

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 522+50 TO STA 536+00
SHEET 6 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 18
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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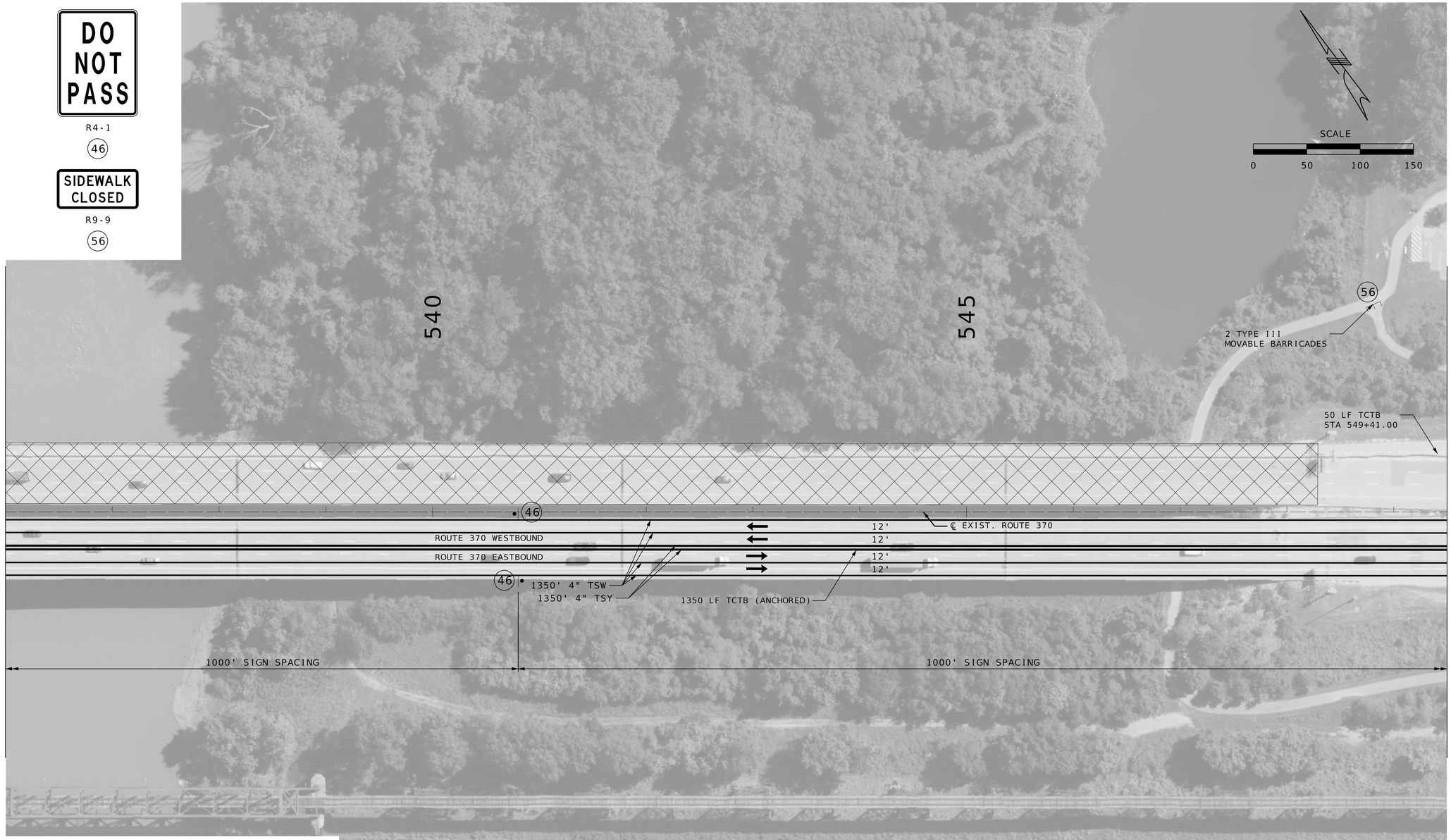


TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 536+00 TO STA 549+50
SHEET 7 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	19

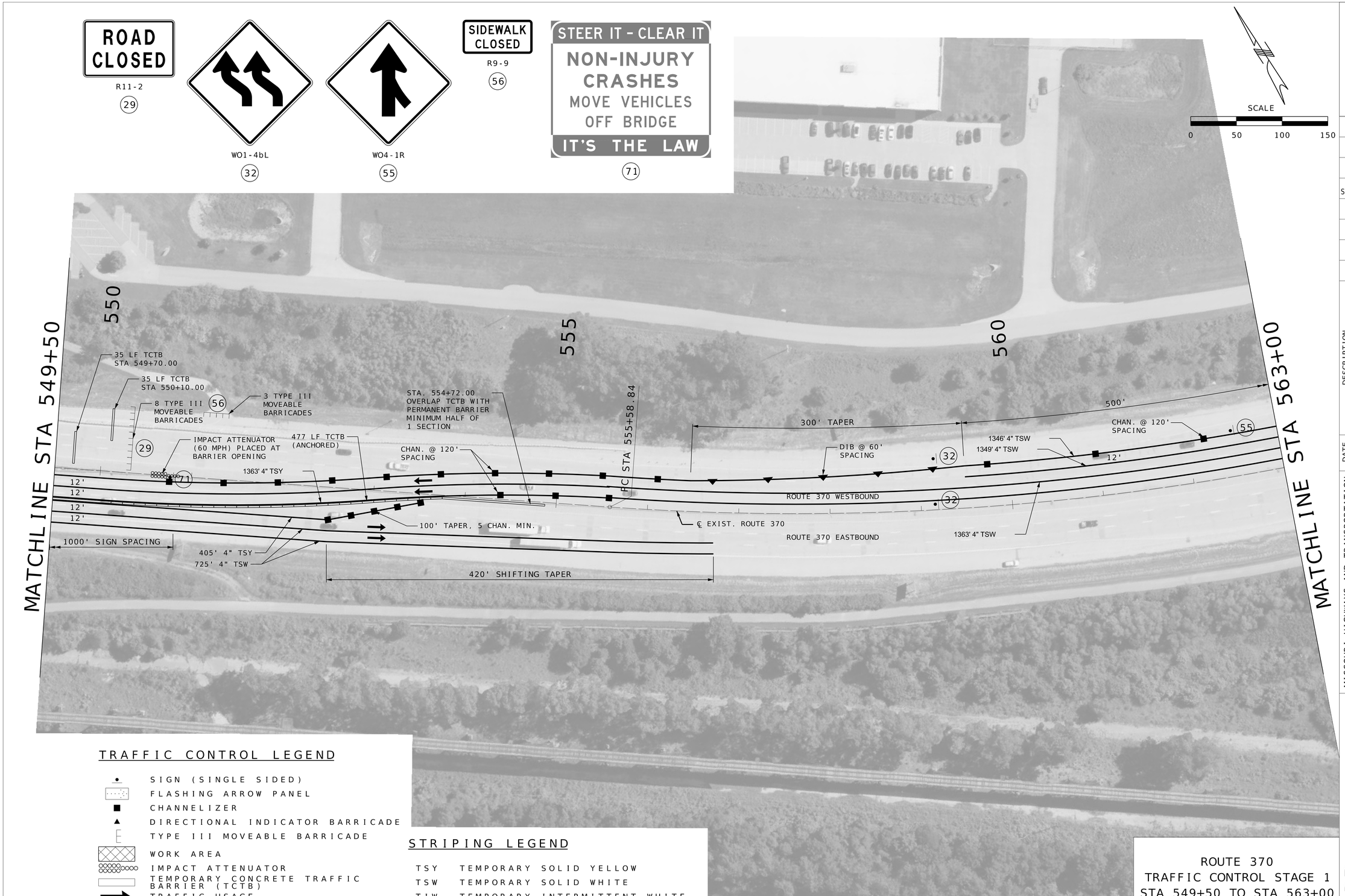
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 549+50 TO STA 563+00
SHEET 8 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	20
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
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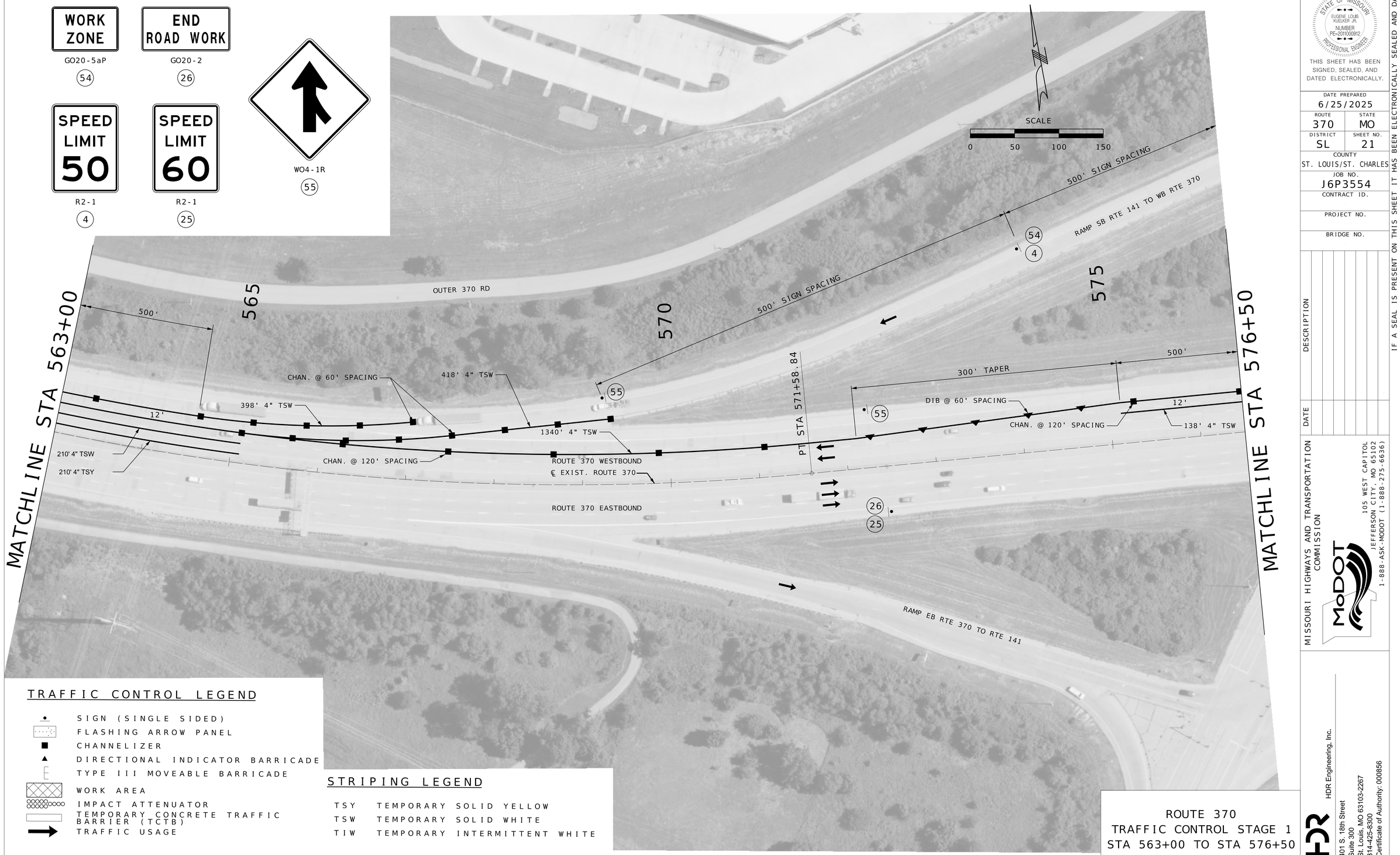

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 563+00 TO STA 576+50
SHEET 9 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	21
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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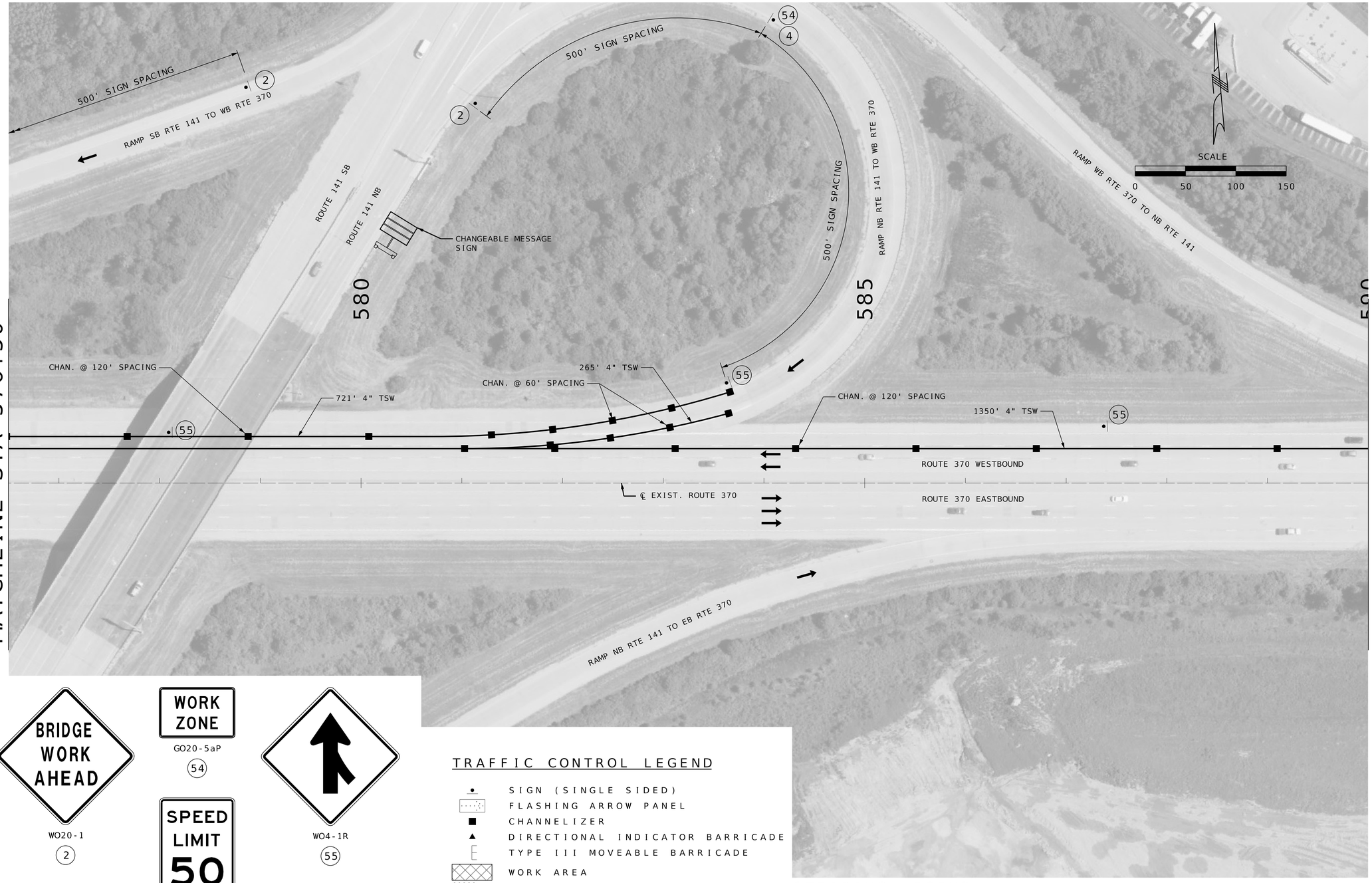

WO20-1

(2)

GO20-5aP

(54)

R2-1

(4)

WO4-1R

(55)

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 576+50 TO STA 590+00
SHEET 10 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	22

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

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)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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EXIT

E05-1

49

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 590+00 TO STA 603+50
SHEET 11 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	23

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO. J6P3554

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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 603+50 TO STA 617+00
SHEET 12 OF 13

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	24

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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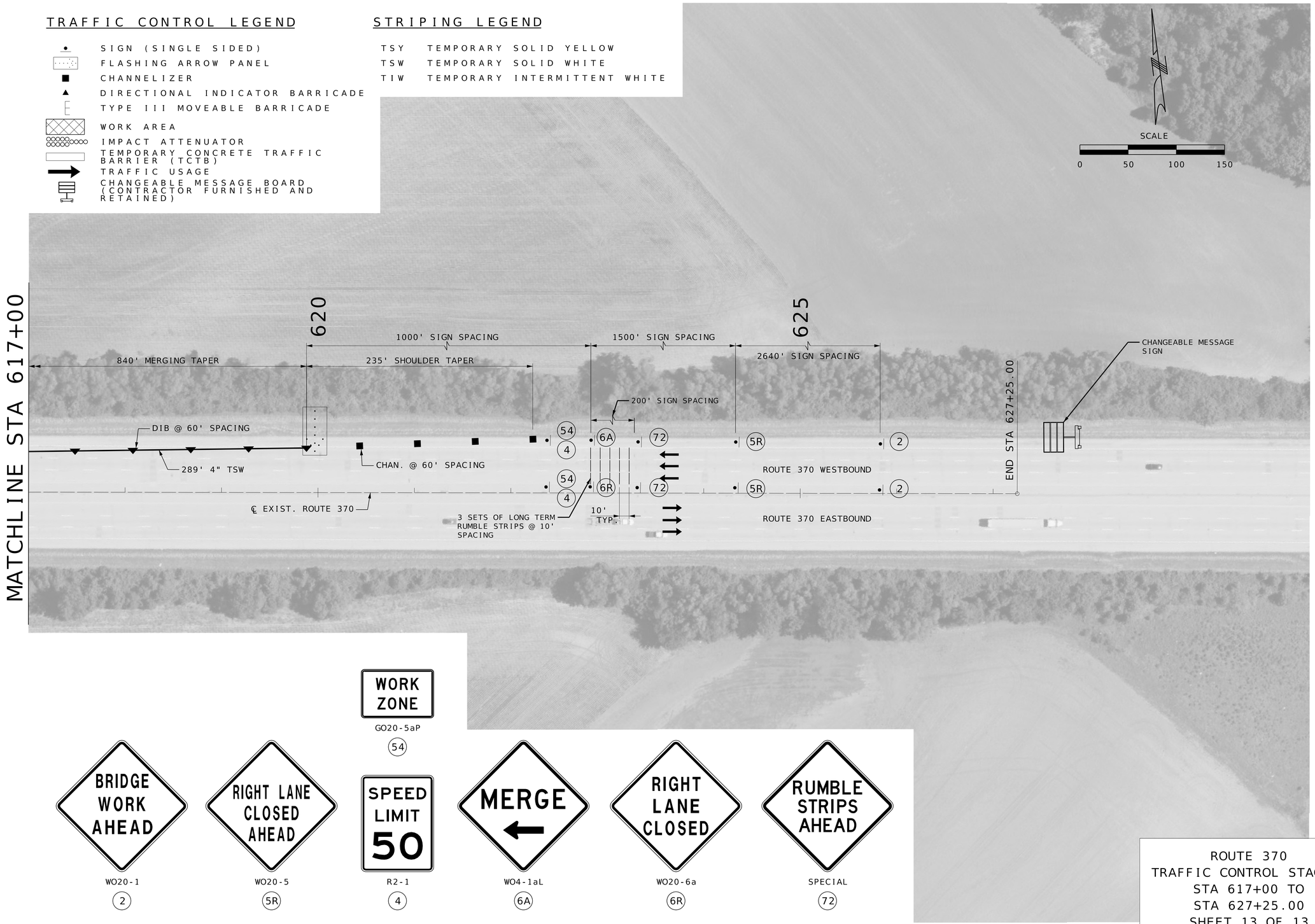
TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE



ROUTE 370
TRAFFIC CONTROL STAGE 1
STA 617+00 TO
STA 627+25.00
SHEET 13 OF 13

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	25

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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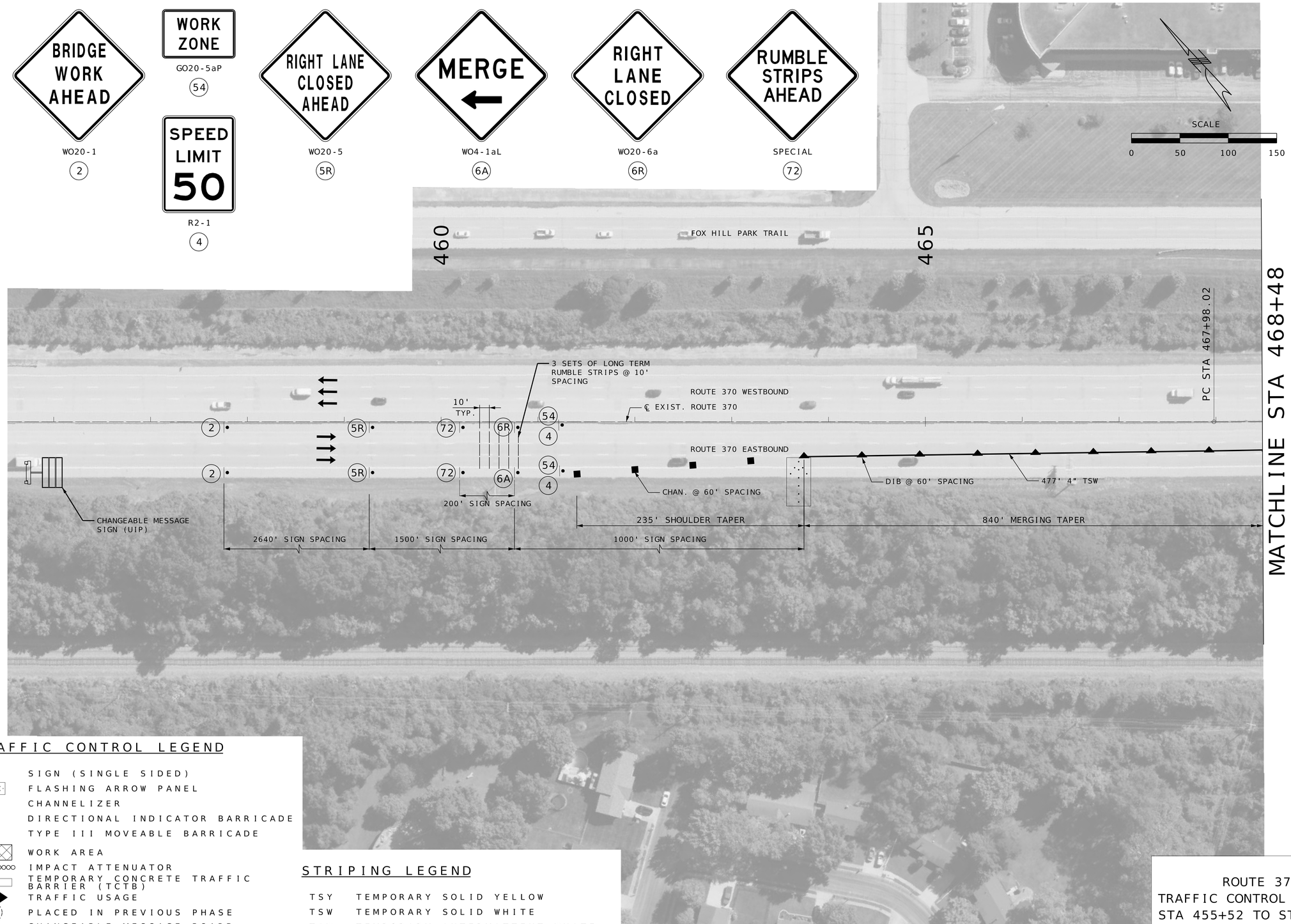

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE
- CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 455+52 TO STA 468+48
SHEET 1 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370
STATE: MO
DISTRICT: SL
SHEET NO.: 26
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
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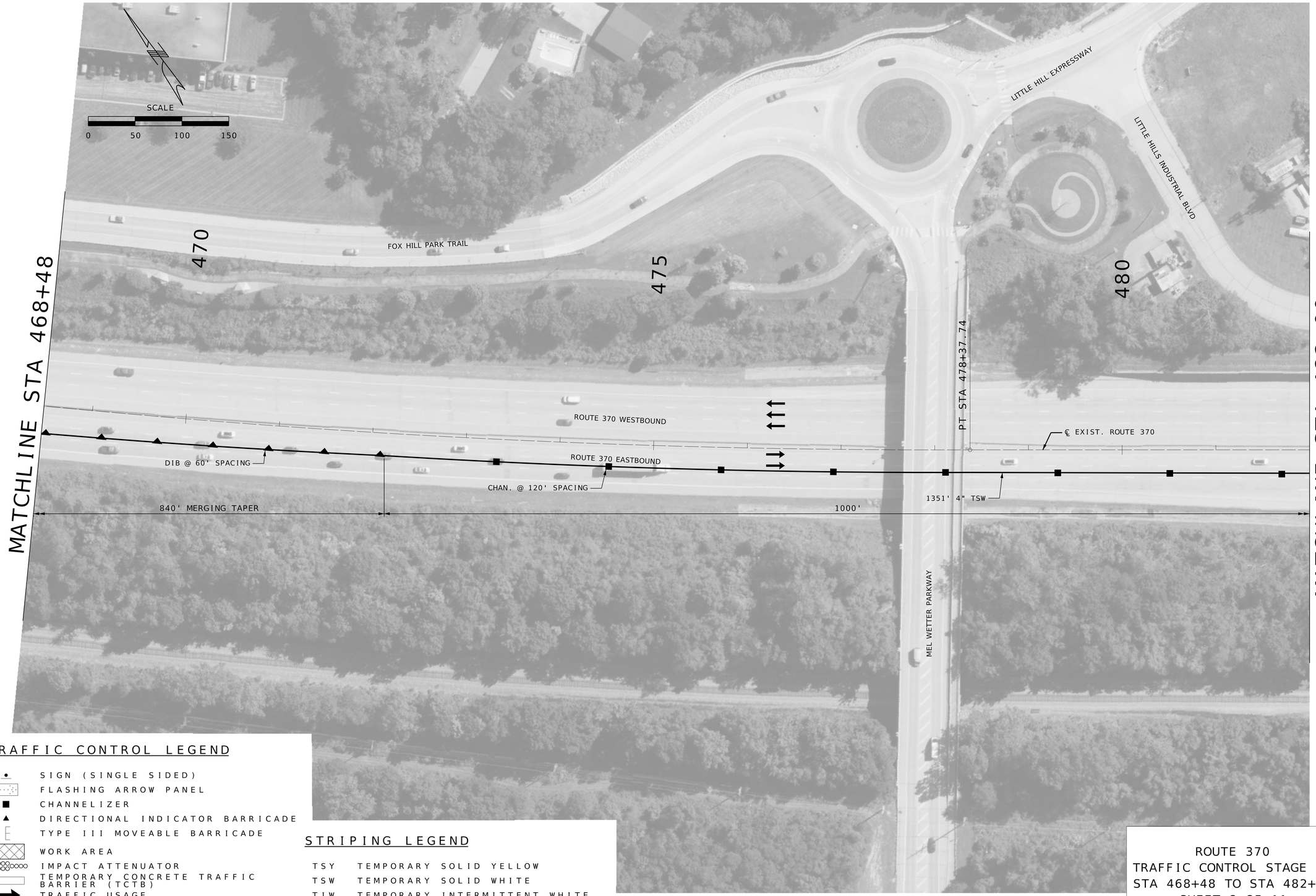
314-425-8300
Certificate of Authority: 000856



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 468+48 TO STA 482+00
SHEET 2 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	
6/25/2025	
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	27
COUNTY	
ST. LOUIS/ST. CHARLES	
JOB NO.	
J6P3554	
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)

HDR Engineering, Inc.
401 S. 18th Street
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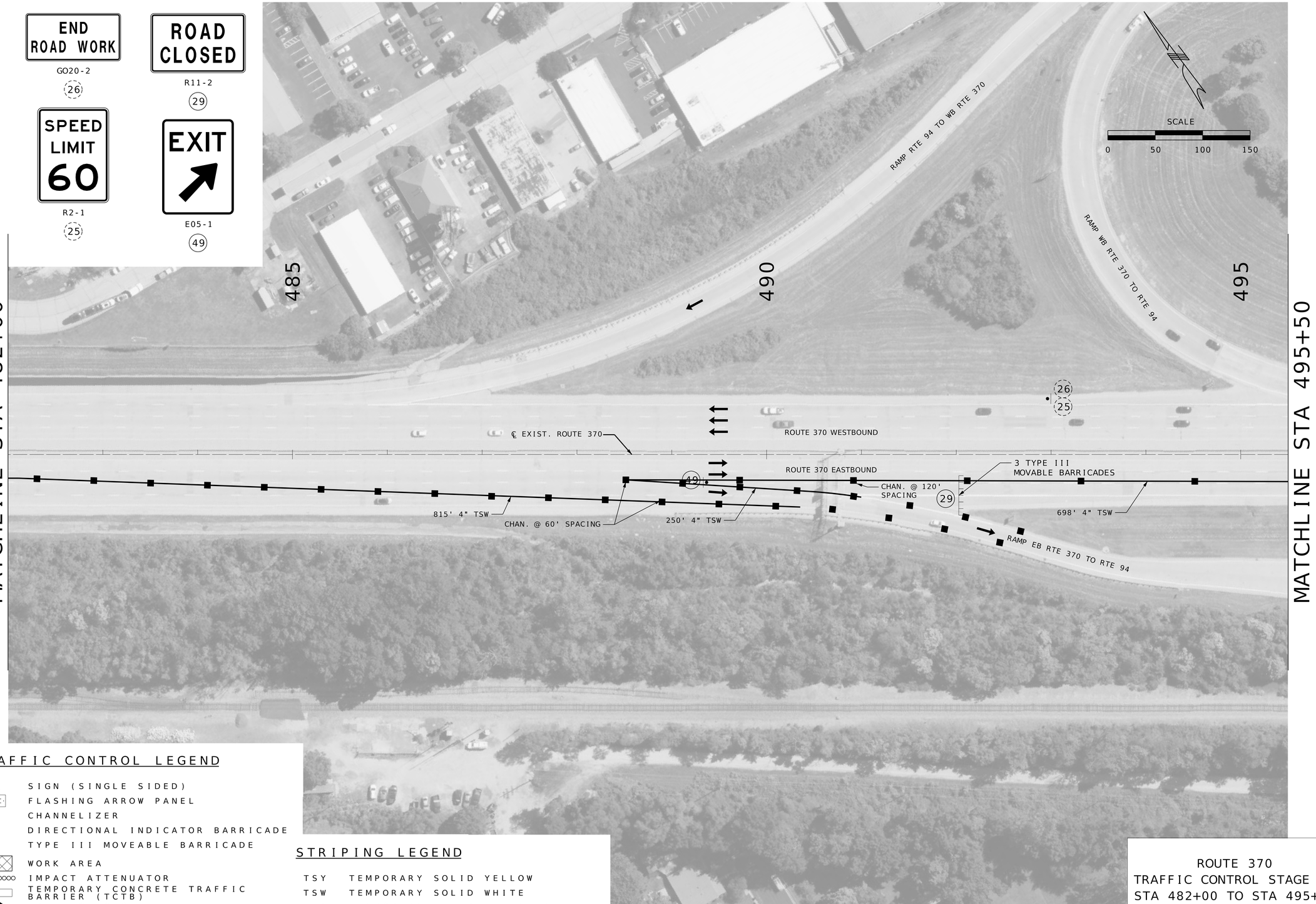

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 482+00 TO STA 495+50
SHEET 3 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	370
STATE	MO
DISTRICT	SL
SHEET NO.	28
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

NO.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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WO20-1

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WO20-5

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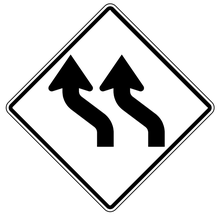
WO1-8a

(16A)

R11-2

(29)



WO1-4bL

(32)

GO20-5aP

(54)

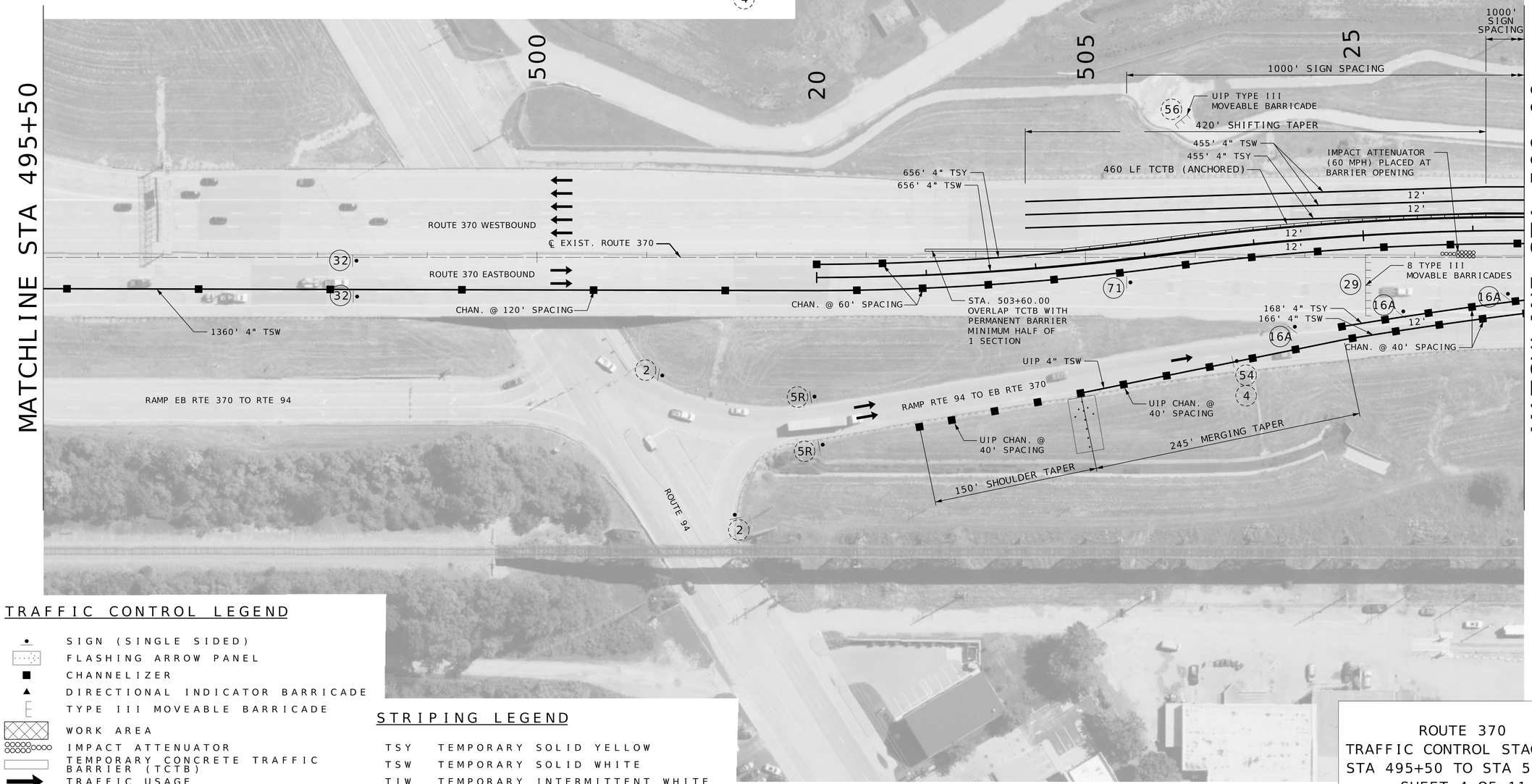
R9-9

(56)

R2-1

(4)

(71)



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 495+50 TO STA 509+00
SHEET 4 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	29

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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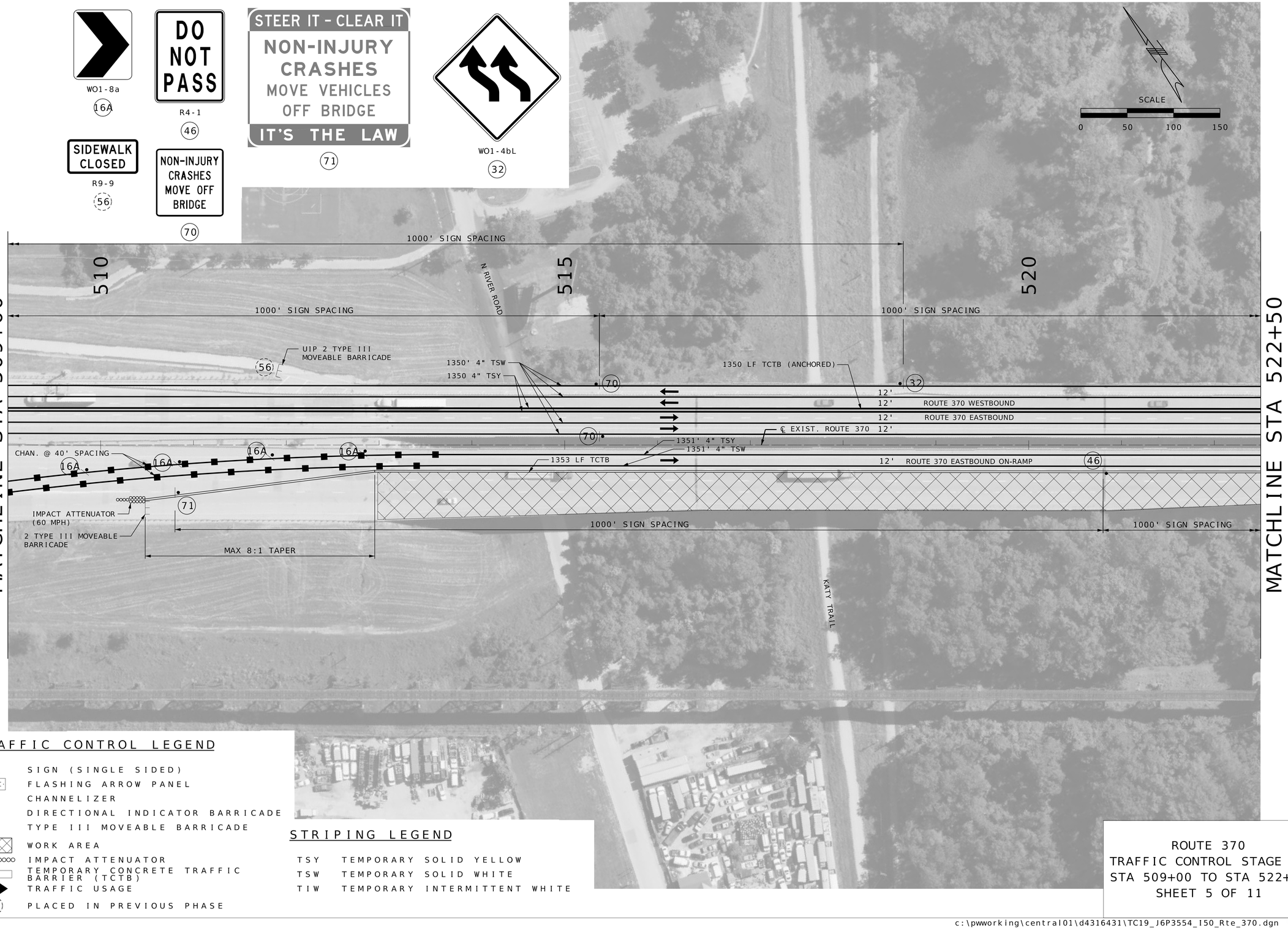


TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- XX PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 509+00 TO STA 522+50
SHEET 5 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	30

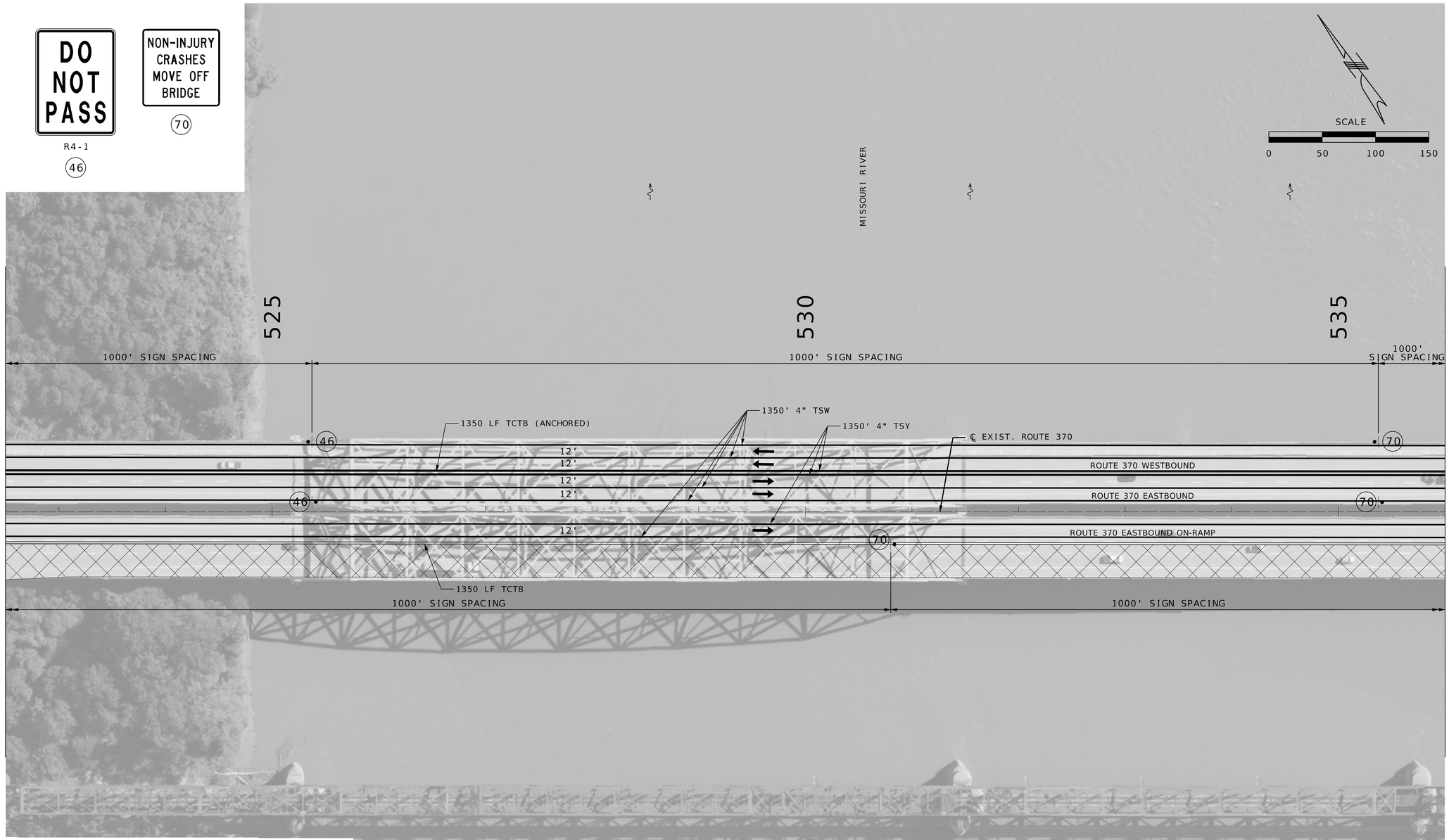
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 522+50 TO STA 536+00
SHEET 6 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

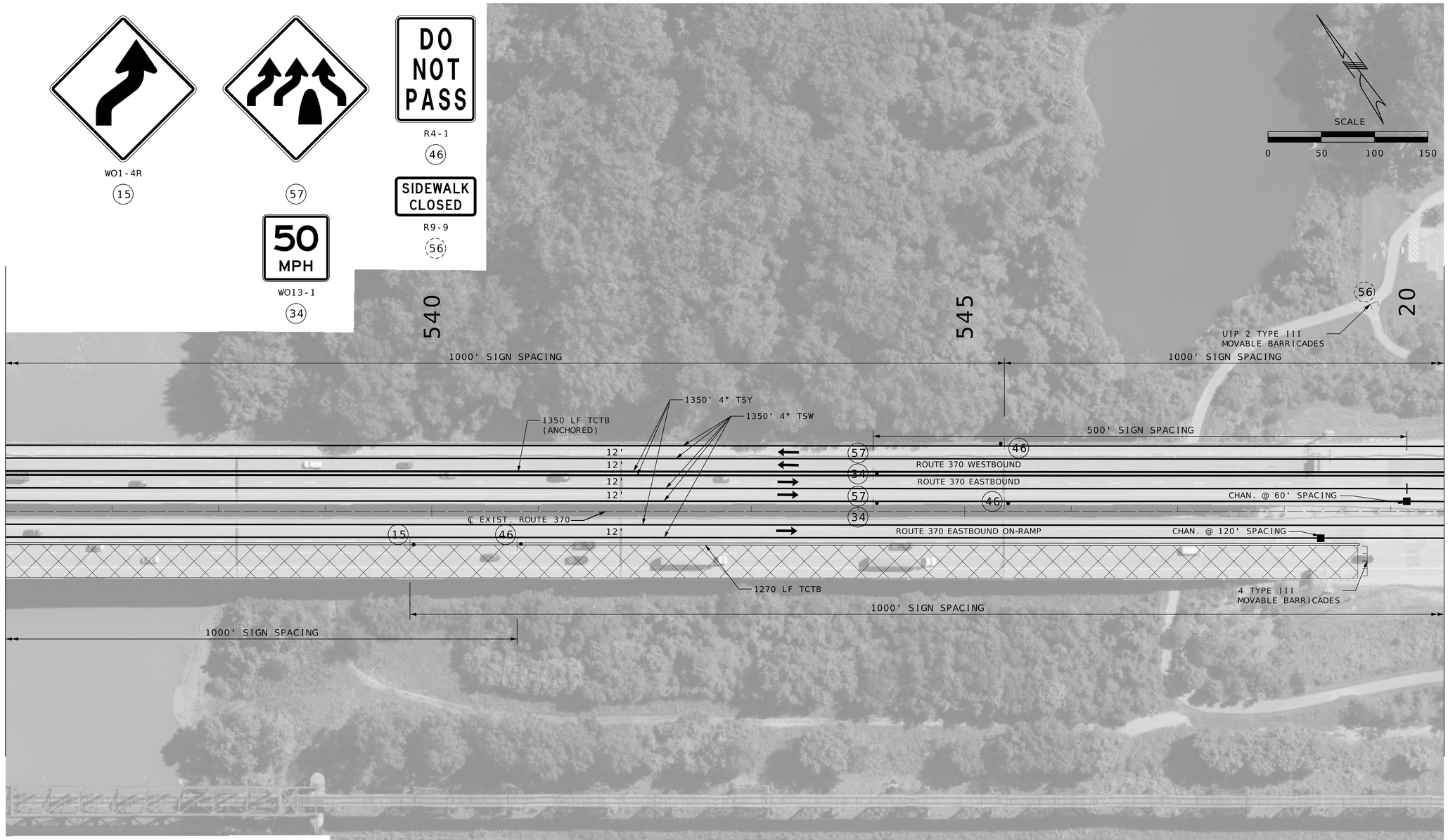
DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 31
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (xx) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 536+00 TO STA 549+50
SHEET 7 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025
ROUTE 370 | STATE MO
DISTRICT SL | SHEET NO. 32
COUNTY ST. LOUIS/ST. CHARLES
JOB NO. J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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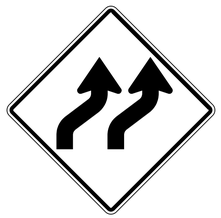


WO1-4bR

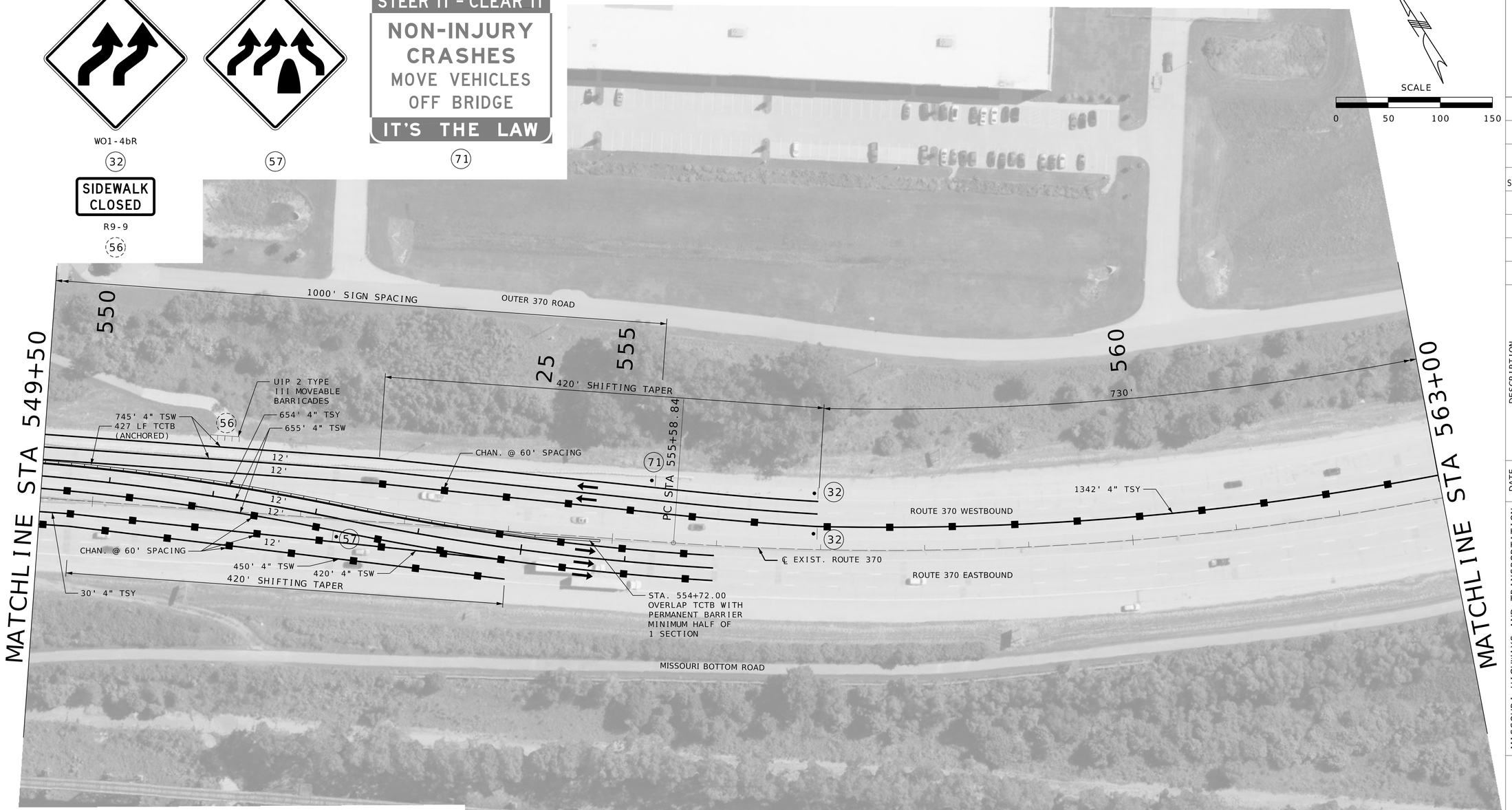
32

57

71

R9-9

56



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 549+50 TO STA 563+00
SHEET 8 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	370
STATE	MO
DISTRICT	SL
SHEET NO.	33
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
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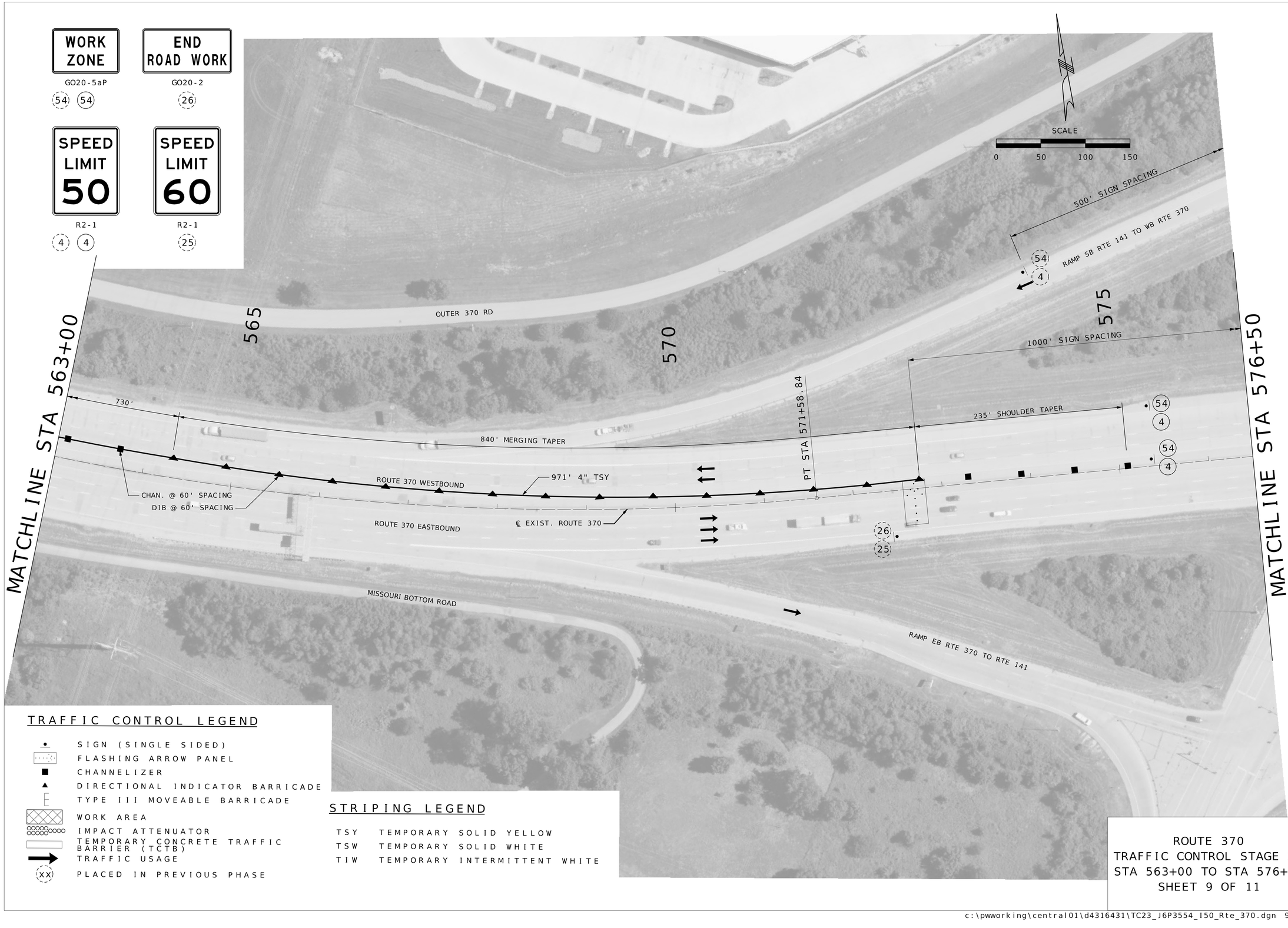

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 563+00 TO STA 576+50
SHEET 9 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	370
STATE	MO
DISTRICT	SL
SHEET NO.	34
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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314-425-8300
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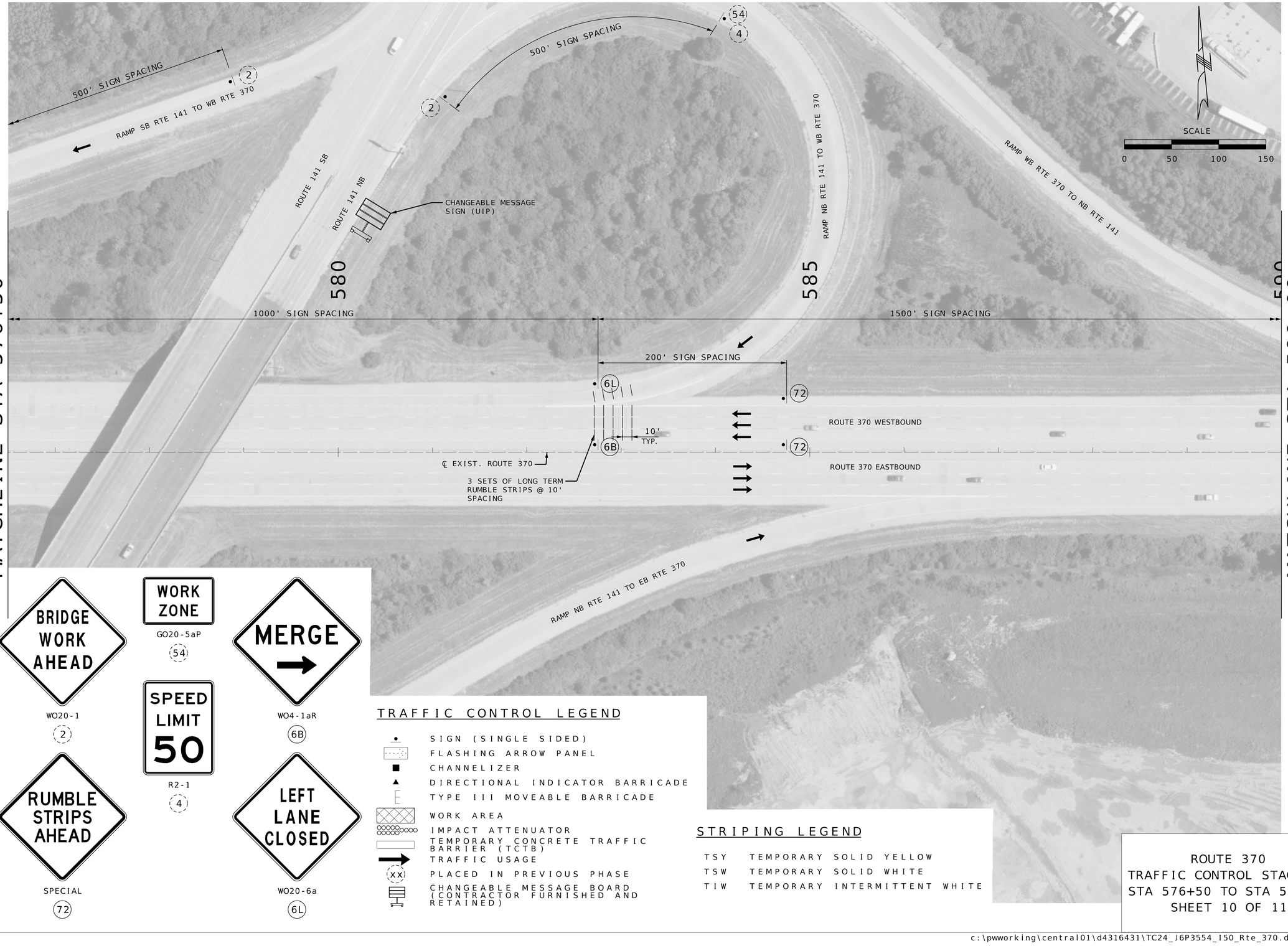

WO20-1

(2)

GO20-5aP

(54)

R2-1

(4)

WO4-1aR

(6B)

SPECIAL

(72)

WO20-6a

(6L)

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE
- CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 576+50 TO STA 590+00
SHEET 10 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	370
STATE	MO
DISTRICT	SL
SHEET NO.	35
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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WO20-1

(2)

WO20-5

(5L)

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2A
STA 590+00 TO STA 603+50
SHEET 11 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	36

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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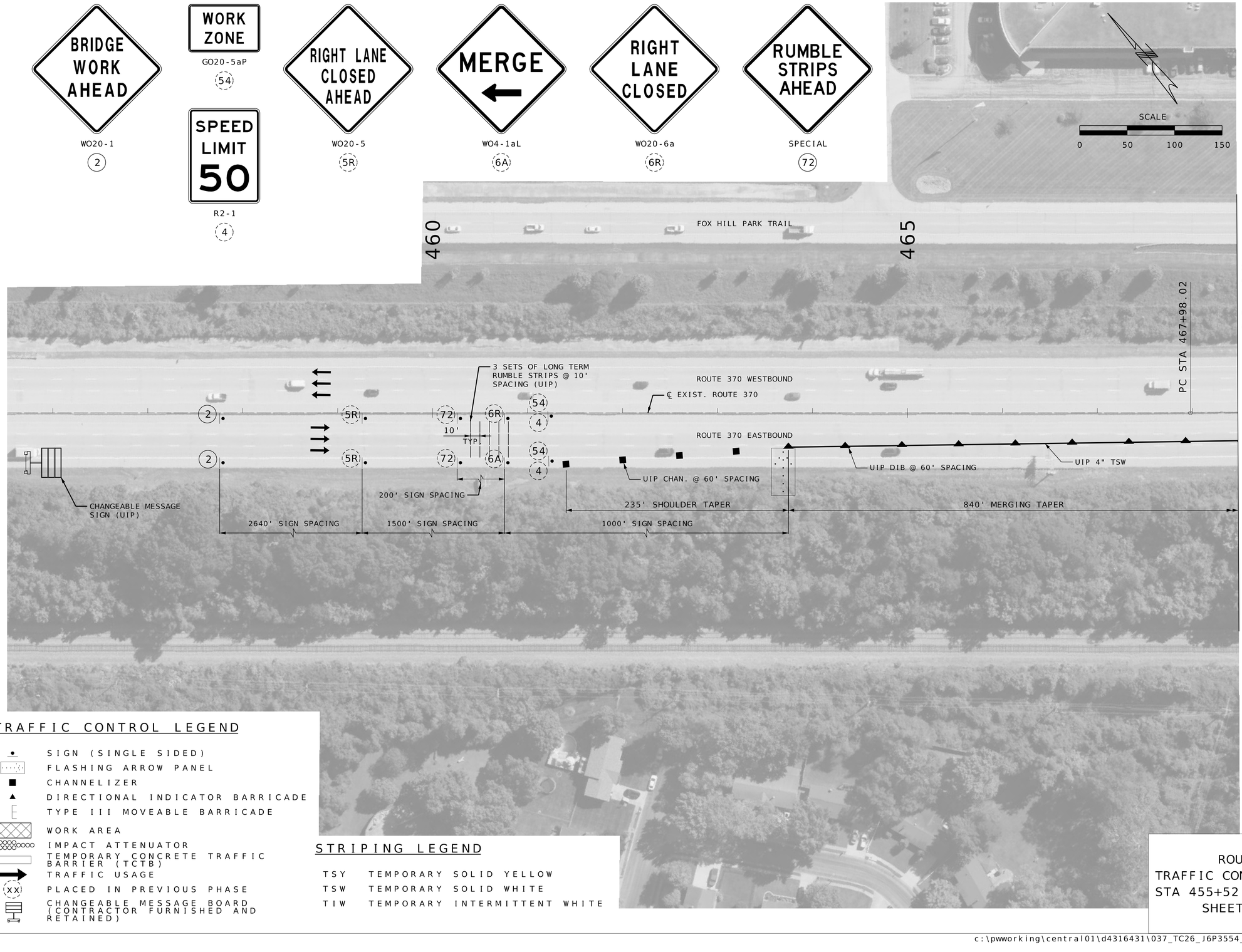

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE
- CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 455+52 TO STA 468+48
SHEET 1 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	370
STATE	MO
DISTRICT	SL
SHEET NO.	37
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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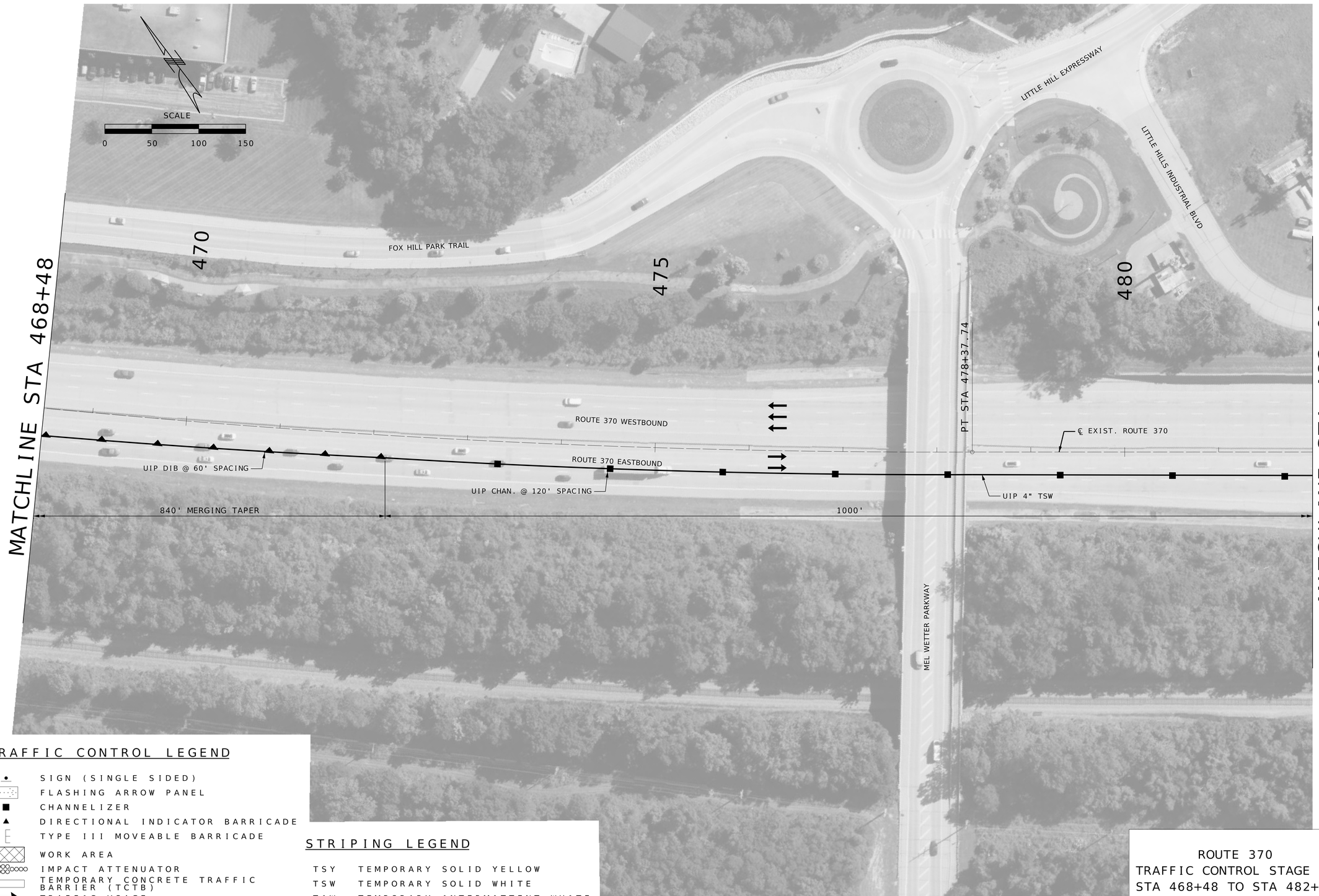


TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 468+48 TO STA 482+00
SHEET 2 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

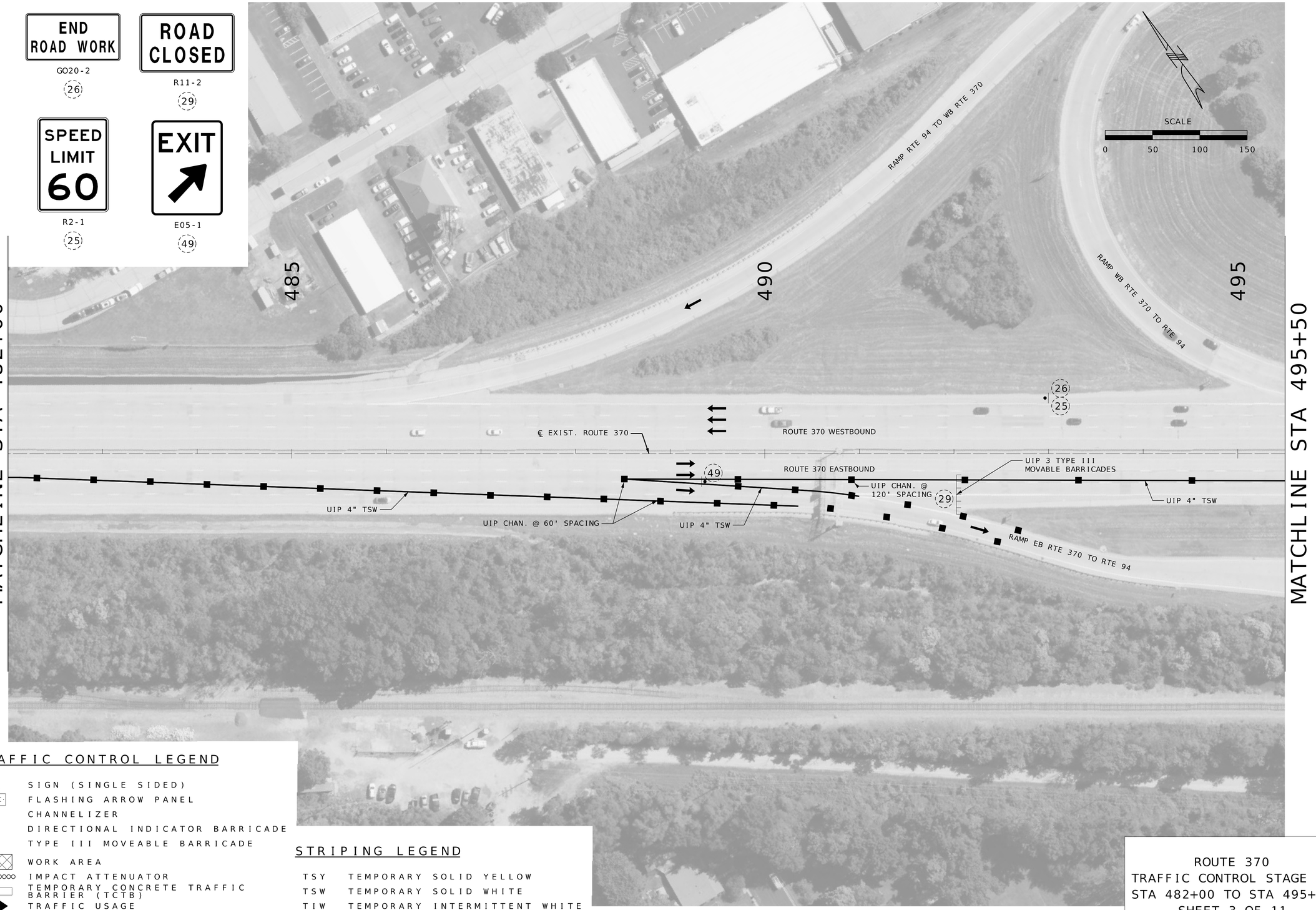
DATE PREPARED	6/25/2025
ROUTE	370
STATE	MO
DISTRICT	SL
SHEET NO.	38
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (xx) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 482+00 TO STA 495+50
SHEET 3 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	6/25/2025
ROUTE	370
STATE	MO
DISTRICT	SL
SHEET NO.	39
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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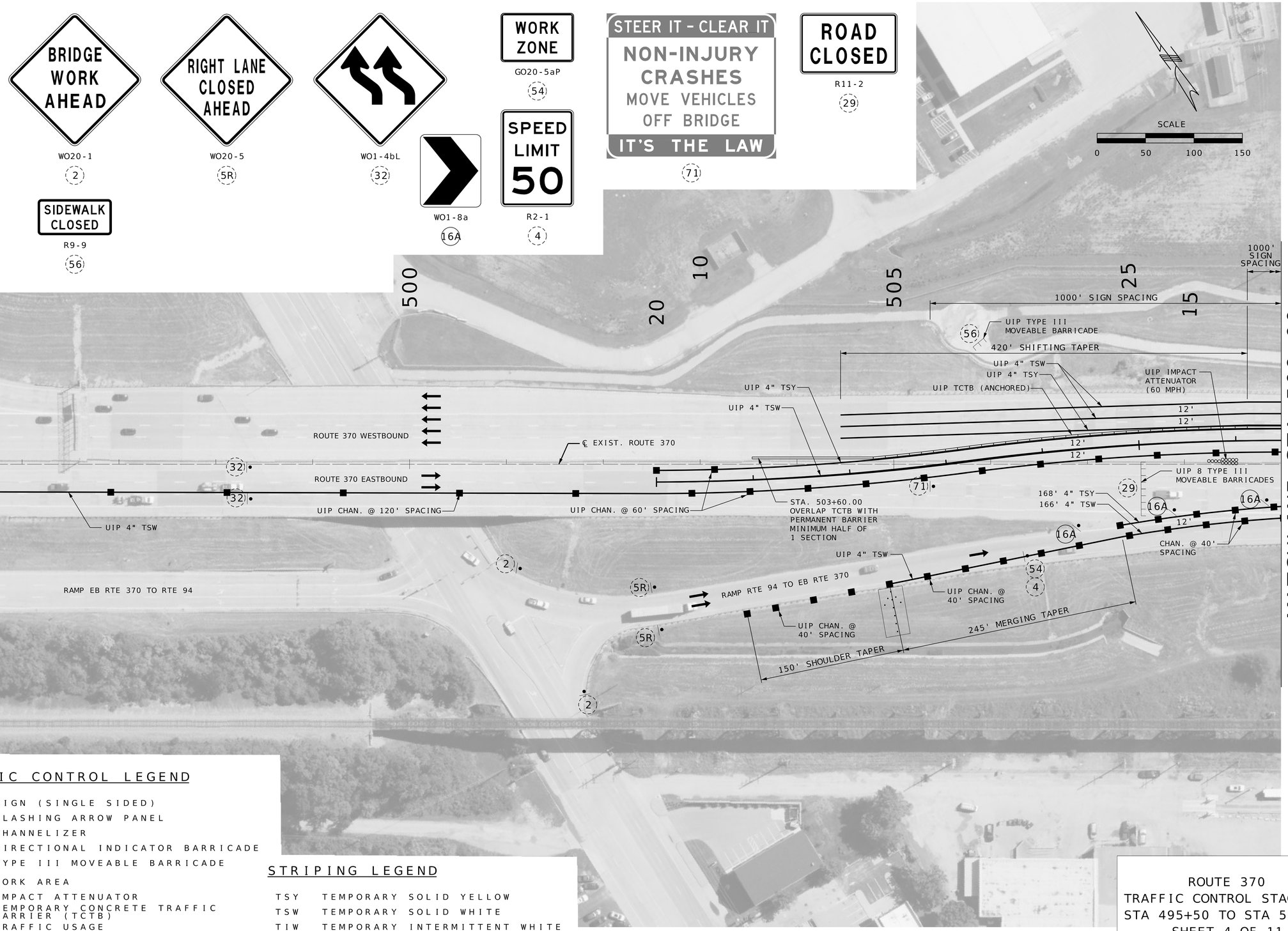

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 495+50 TO STA 509+00
SHEET 4 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	40

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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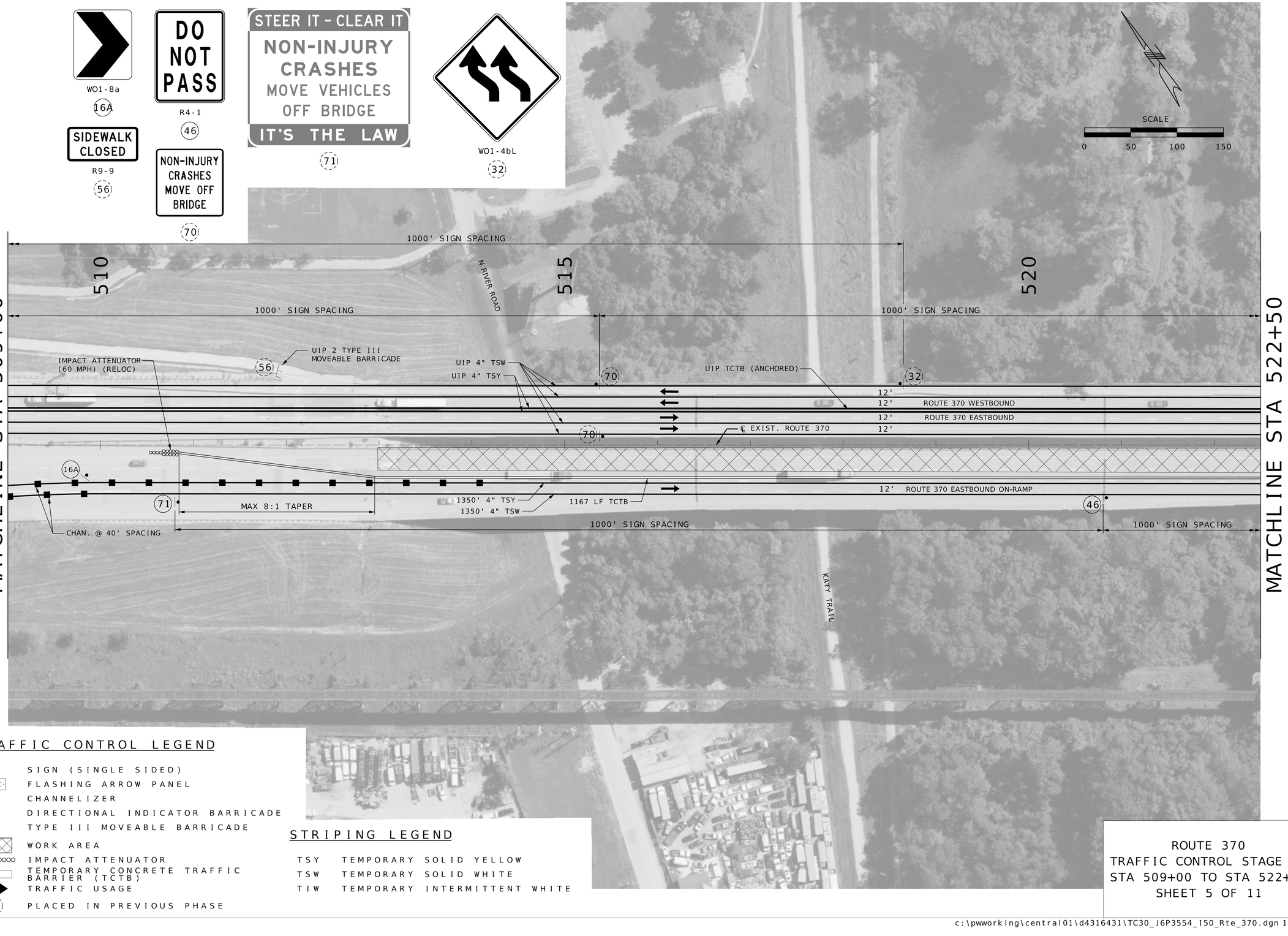


TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 509+00 TO STA 522+50
SHEET 5 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	41

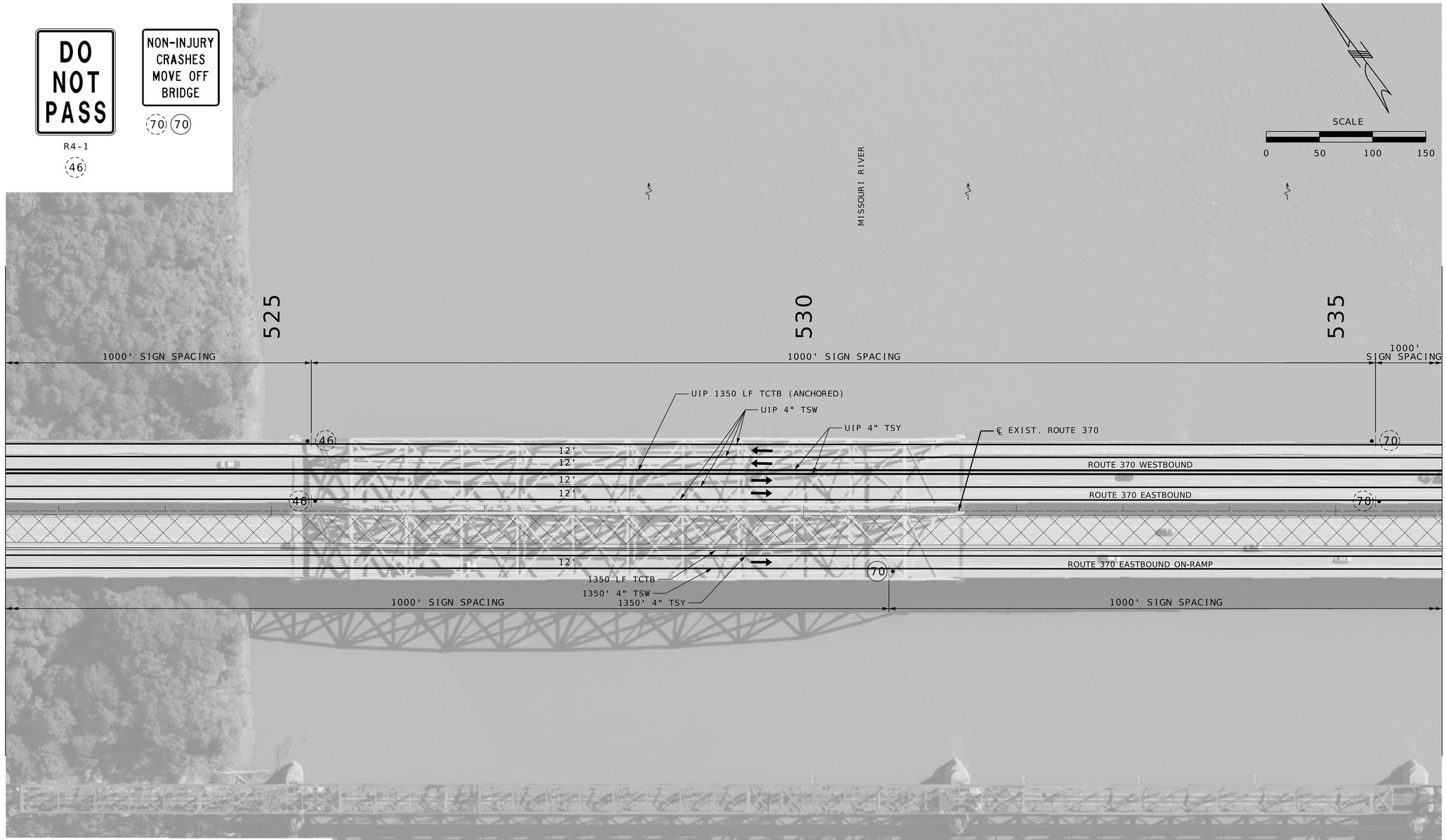
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 522+50 TO STA 536+00
SHEET 6 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

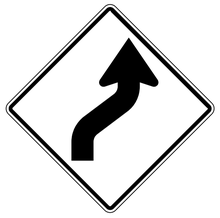
DATE PREPARED 6/25/2025
ROUTE 370 | STATE MO
DISTRICT SL | SHEET NO. 42
COUNTY ST. LOUIS/ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



WO1-4R

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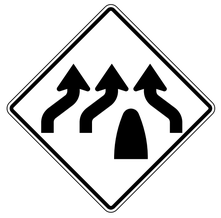


(57)

WO13-1

(34)

R4-1

(46) (46)

R9-9

(56)

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 536+00 TO STA 549+50
SHEET 7 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	43

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

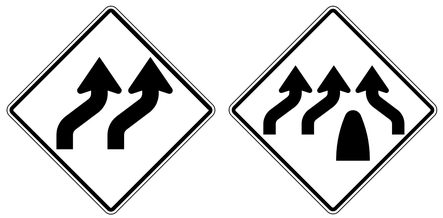
DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



WO1-4bR

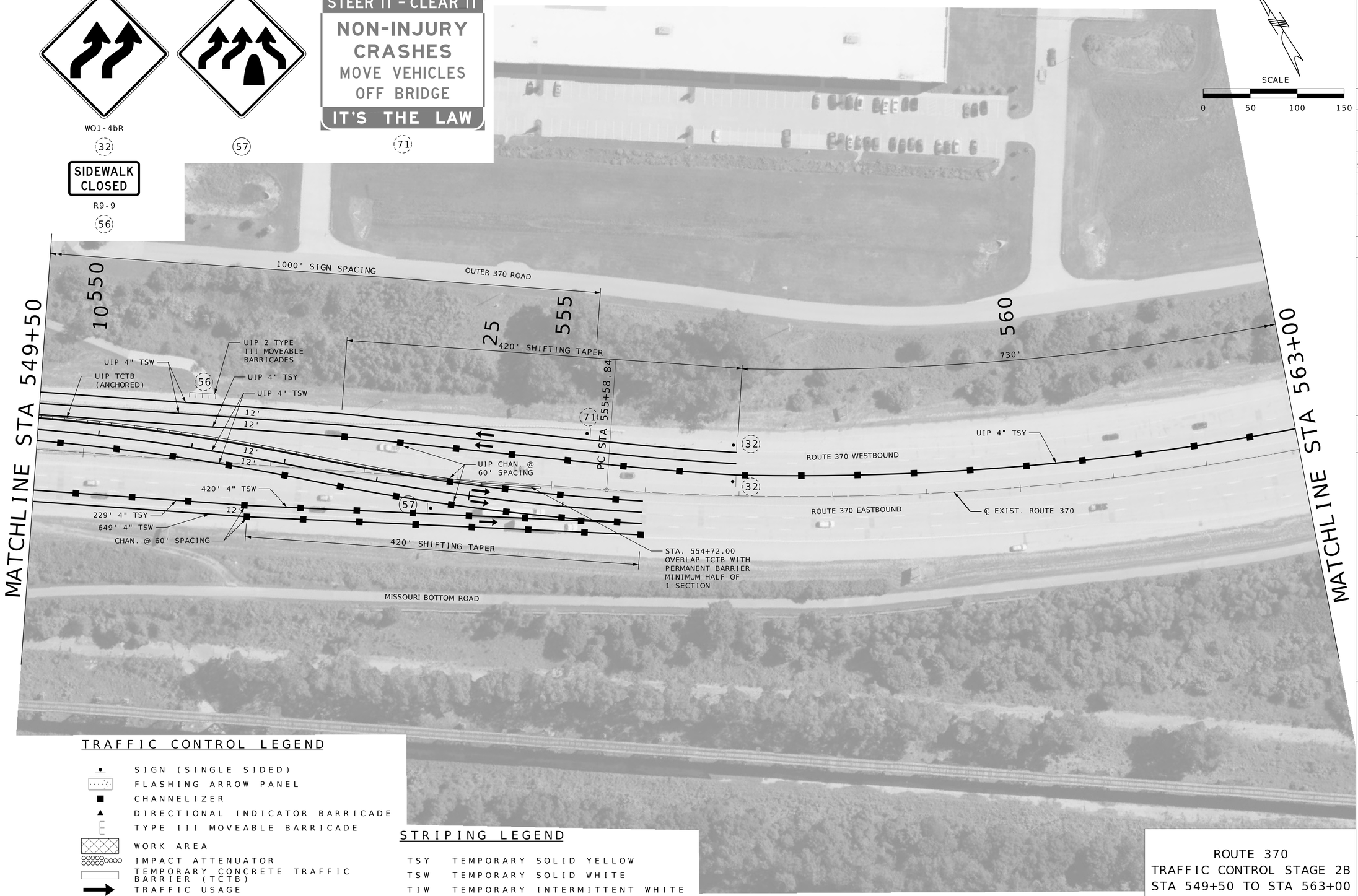
32

57

71

R9-9

56



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 549+50 TO STA 563+00
SHEET 8 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED	6/25/2025
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	44
COUNTY	ST. LOUIS/ST. CHARLES
JOB NO.	J6P3554
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

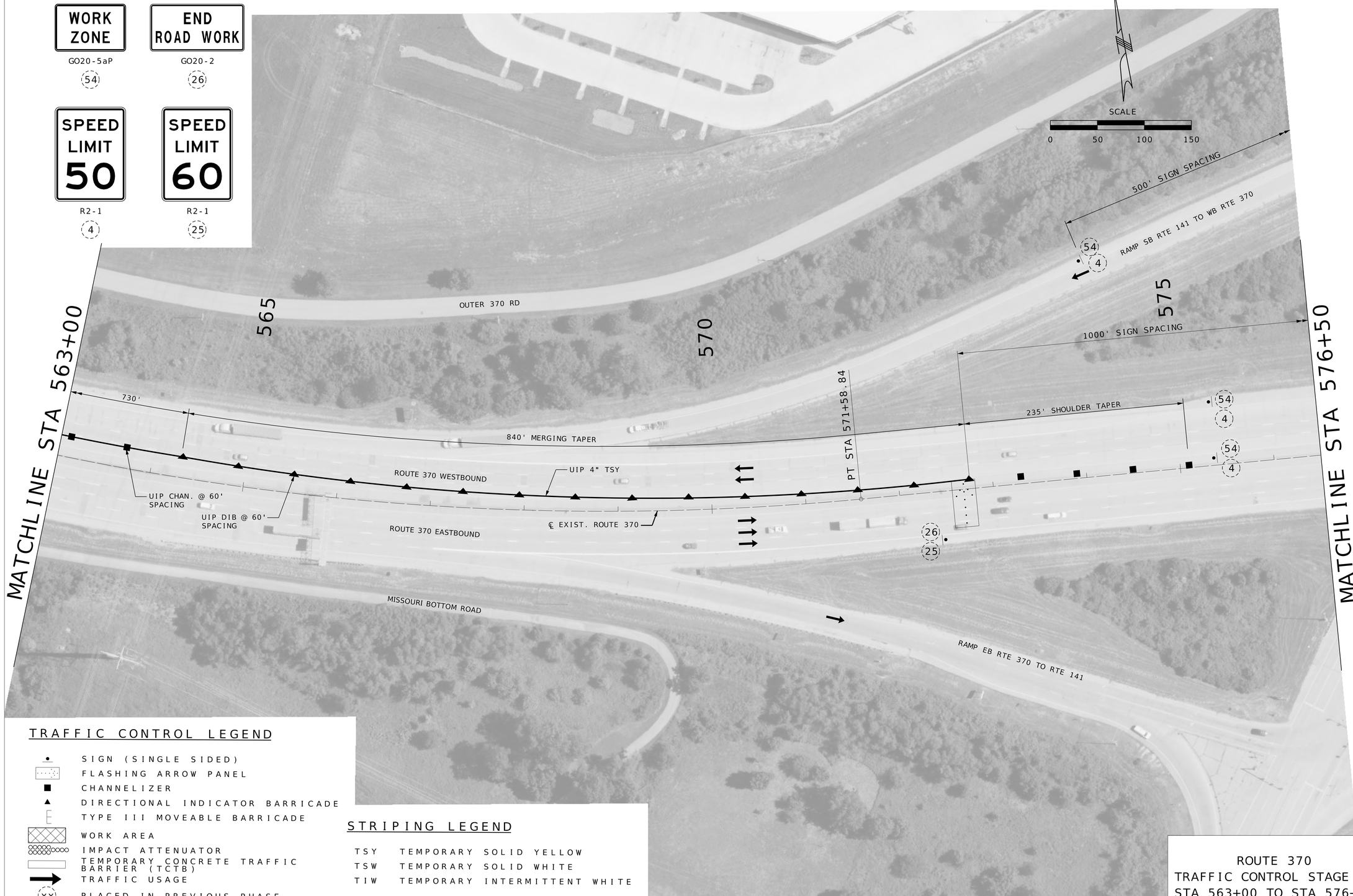
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 563+00 TO STA 576+50
SHEET 9 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 45
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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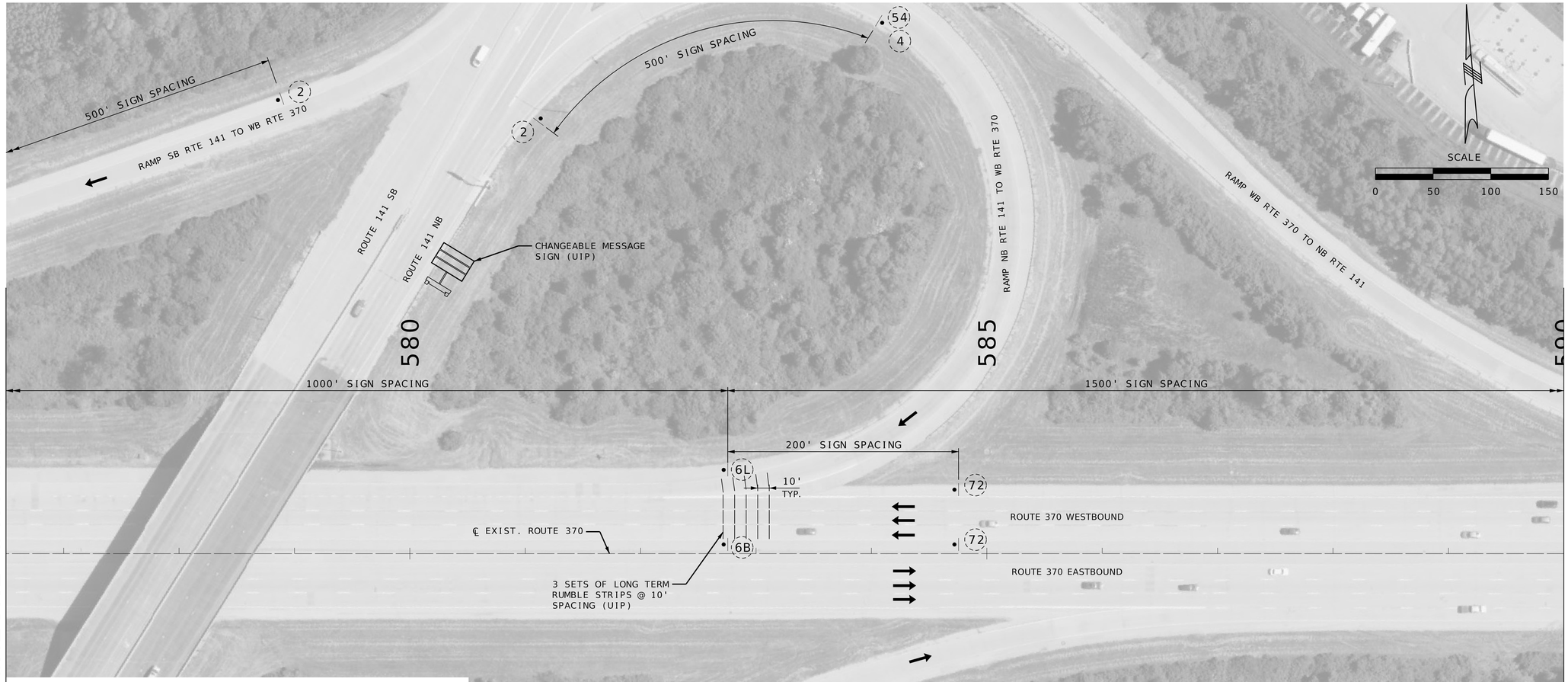

WO20-1

(2)

GO20-5aP

(54)

R2-1

(4)

SPECIAL

(72)

WO4-1aR

(6B)

WO20-6a

(6L)

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE
- CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED AND RETAINED)

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 576+50 TO STA 590+00
SHEET 10 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370
STATE: MO
DISTRICT: SL
SHEET NO.: 46
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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WO20-1

(2)

WO20-5

(5L)

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- DIRECTIONAL INDICATOR BARRICADE
- TYPE III MOVEABLE BARRICADE
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE TRAFFIC BARRIER (TCTB)
- TRAFFIC USAGE
- (XX) PLACED IN PREVIOUS PHASE

STRIPING LEGEND

TSY	TEMPORARY SOLID YELLOW
TSW	TEMPORARY SOLID WHITE
TIW	TEMPORARY INTERMITTENT WHITE

ROUTE 370
TRAFFIC CONTROL STAGE 2B
STA 590+00 TO STA 603+50
SHEET 11 OF 11

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	47

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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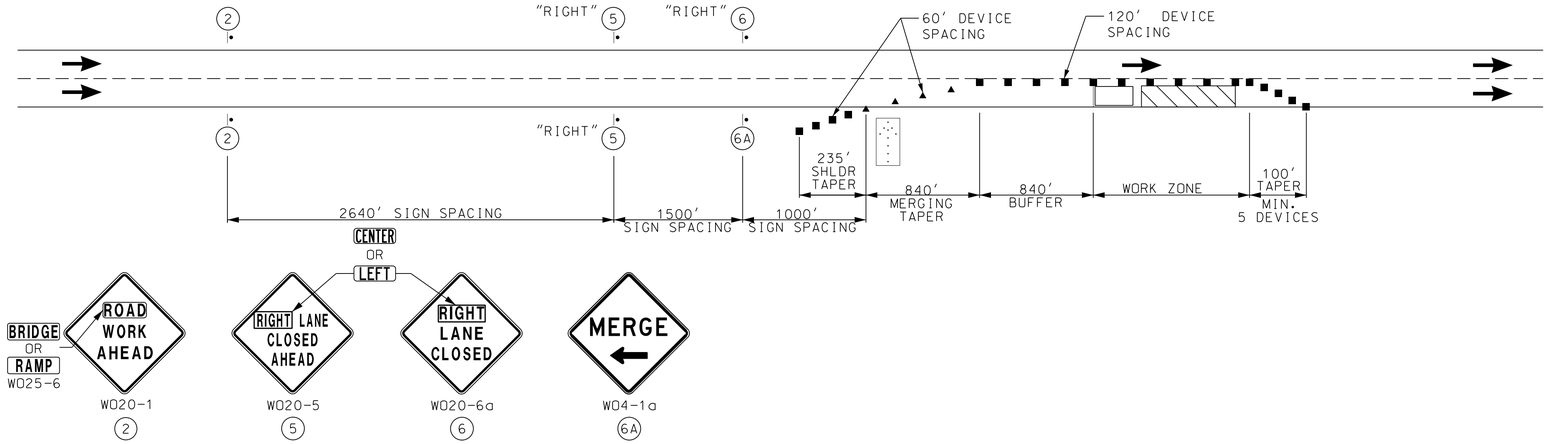
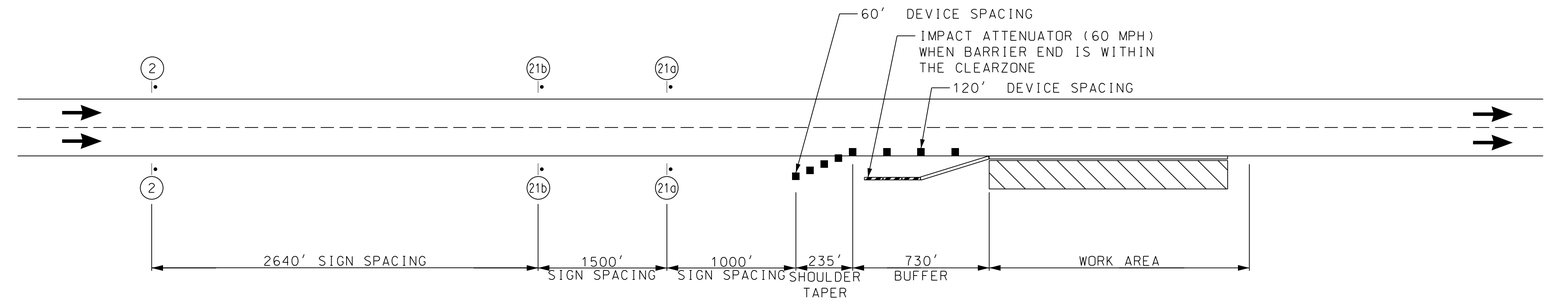
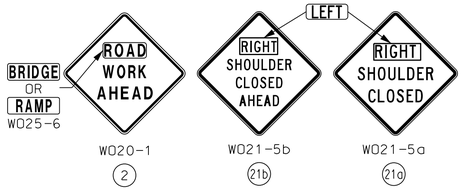
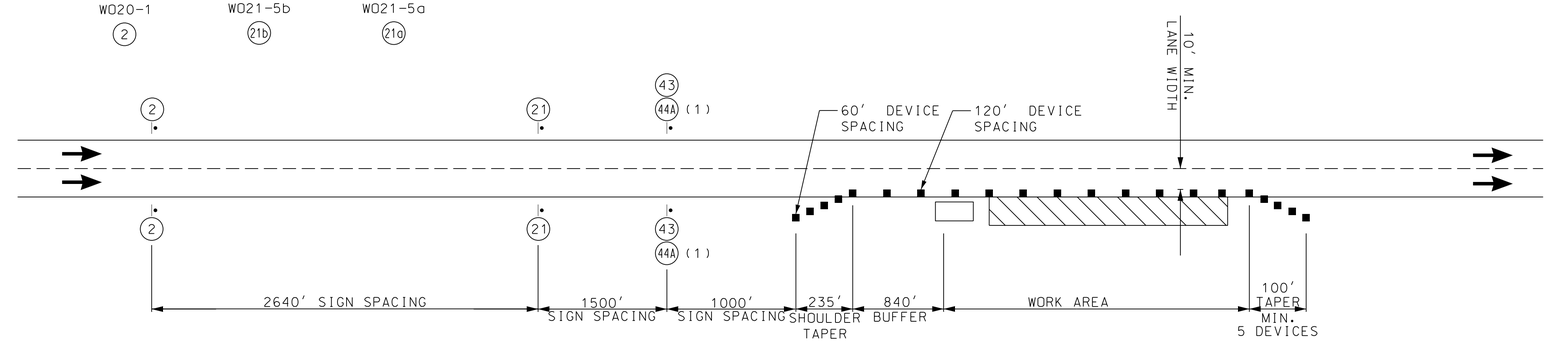
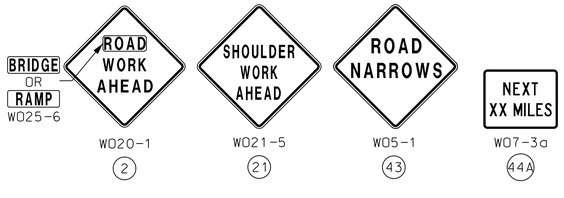










TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL BARRICADE
- CHANNELIZER (TRIM-LINE)
- BARRICADE (MOVABLE)
- FLASHING ARROW PANEL
- WARNING LIGHT, TYPE B

N.T.S.

TRAFFIC CONTROL PLAN
TYPICAL APPLICATIONS
SHEET 1 OF 7

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	
6/25/2025	
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	48
COUNTY	
ST. LOUIS/ST. CHARLES	
JOB NO.	
J6P3554	
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

NOTES:

SEE EPG.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PROVIDE ADDITIONAL PROTECTIVE TRUCKS EQUIPPED WITH PROPER WARNING DEVICES.

PROTECTIVE TRUCK AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING OR STROBE LIGHTS.

VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

(1) WET PAINT SIGNS ARE INSTALLED TO INDICATE THE SIDE IN WHICH THE PAVEMENT MARKING MATERIAL IS BEING APPLIED. AT THE CONTRACTOR'S OPTION, A FRONT FACING WET PAINT SIGN MAY BE INSTALLED ON THE LEFT SIDE OF THE PAVEMENT MARKING EQUIPMENT.

(2) ADVANCE WARNING TRUCK IS POSITIONED AT THE NO TRACK POINT OF THE PAVEMENT MARKING MATERIAL OR SPACING SHOWN, WHICHEVER IS GREATER.

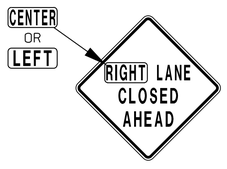
FLASHING ARROW PANELS SHALL, AS A MINIMUM, BE TYPE B, WITH A SIZE OF 60 X 30 INCHES.

VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED IN A MANNER SUCH THAT THEY ARE NOT OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGEND ON VEHICLE-MOUNTED SIGNS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.

A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE LANE IS CLOSED, A SEPARATE FLASHING ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

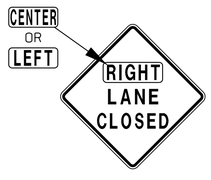
W020-1

(2)



W020-5

(5)



W020-6a

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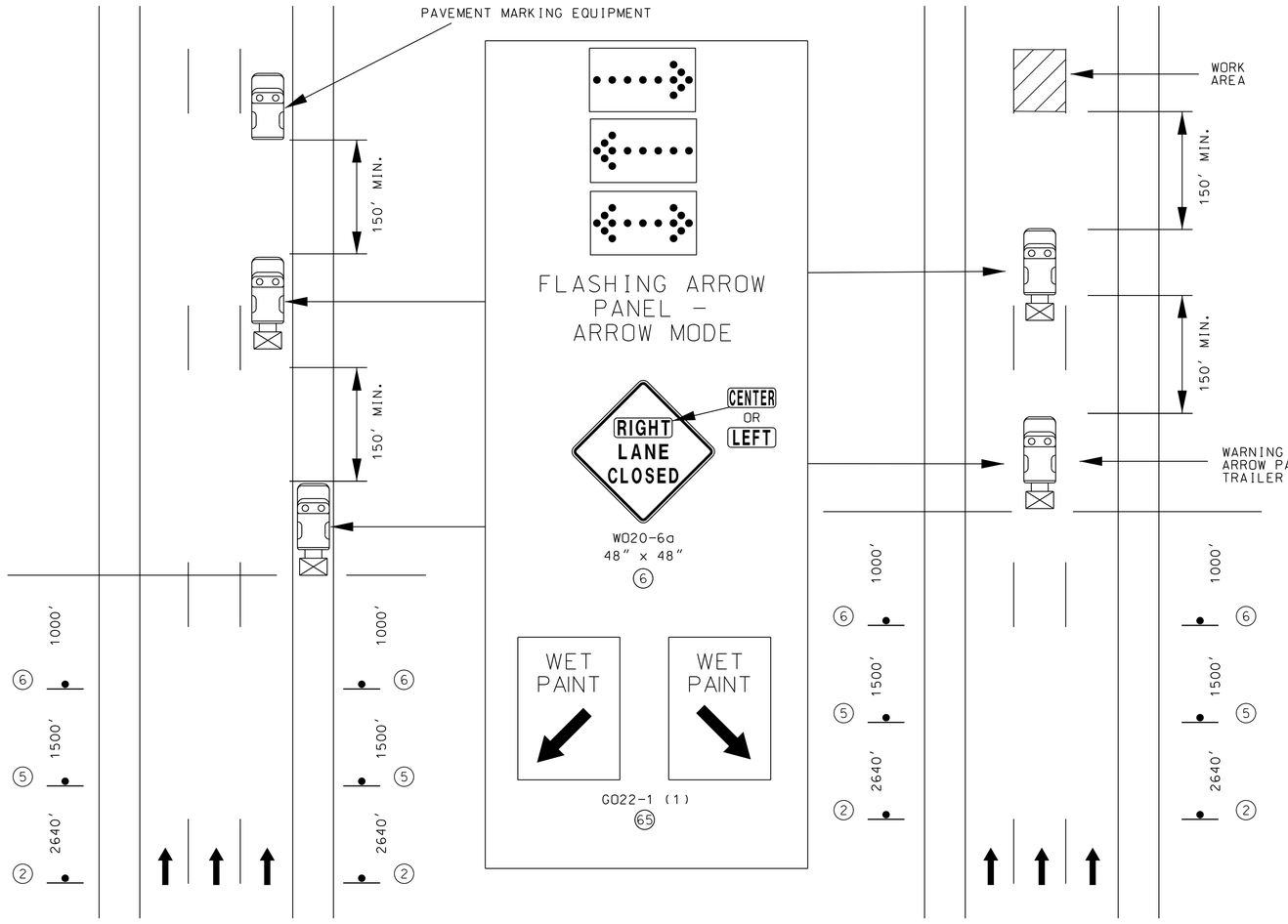


TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLAGGER
- CONE
- CHANNELIZER
- BARRICADE
- CHANGEABLE MESSAGE BOARD

MULTI-LANE DIVIDED HIGHWAY
MOVING OPERATION ON HIGHWAY OPEN TO TRAFFIC
TA-35

N.T.S.

TRAFFIC CONTROL PLAN
TYPICAL APPLICATIONS
SHEET 2 OF 7

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370
STATE: MO
DISTRICT: SL
SHEET NO.: 49
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

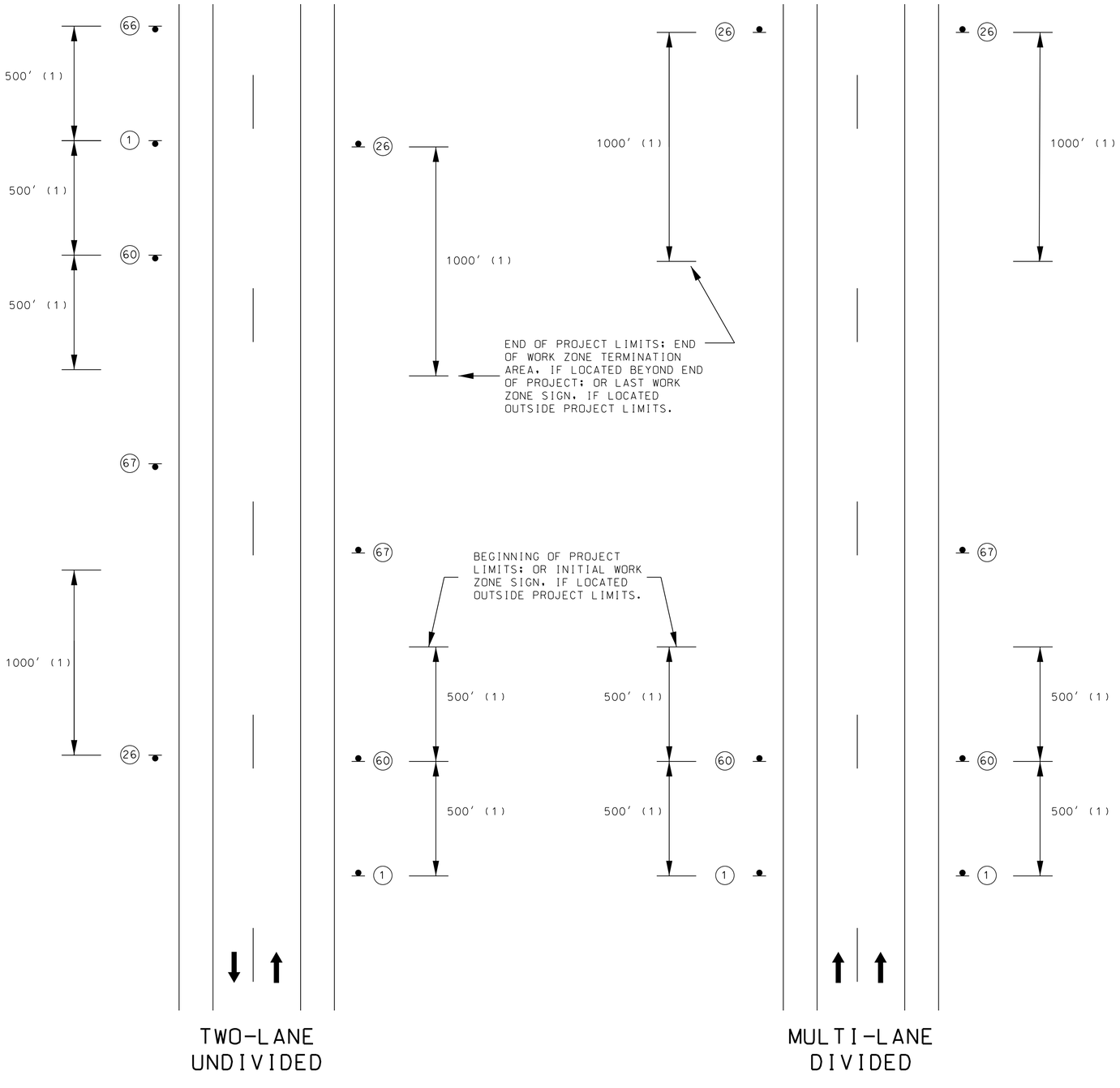
DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

BEGIN/END OF PROJECT SIGNING
TA-50



G020-1

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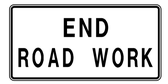
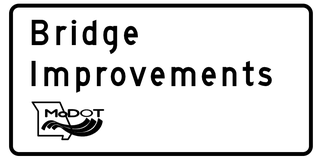


G020-2

(26)

CONST-8 (6)

(60)



CONST-5

(67)

NOTES:

SIGN G020-1 IS REQUIRED PER EPG 616.6.56.

SIGN G020-2 IS USED ON ALL PROJECTS WHERE SIGN G020-1 IS USED.

OTHER SIGNS SUCH AS DETOUR OR ALTERNATE ROUTE SIGNING MAY BE USED OUTSIDE THE PROJECT LIMITS.

ANY EXISTING SIGNING THAT CONFLICTS WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.

(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) SIGN CONST-7-72 OR CONST-7-48 IS PLACED 500 FEET BEFORE THE BEGINNING OF PROJECT LIMITS OR THE ROAD WORK AHEAD SIGN OR ROAD WORK NEXT XX MILES SIGN. IF USED, WHEN THESE SIGNS ARE LOCATED OUTSIDE THE PROJECT LIMITS.

3) CONST-5-96 OR CONST-5-48 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 OR CONST-7-48.

(4) THE "RATE OUR WORK ZONE" SIGN IS AVAILABLE IN TWO SIZES DEPENDING ON ROADWAY CONDITIONS. THE 48 IN. X 24 IN. SIGN IS USED ON LOW VOLUME ROUTES THAT CARRY 400 AADT OR LESS, ON PROJECTS THAT HAVE A DURATION OF 4 WEEKS OR LESS OR IN URBAN AREAS WHERE THERE IS INSUFFICIENT LIGHTS OF WAY FOR A SIX FOOT WIDE SIGN. THE 72 IN. X 36 IN. VERSION OF THE SIGN IS USED IN ALL OTHER APPLICATIONS, BUT CAN ALSO BE USED IN PLACE OF THE 48 IN. x 24 IN. SIGN IF ADDED EMPHASIS IS DEEMED NECESSARY.

(5) THE "POINT OF PRESENCE" SIGN IS AVAILABLE IN TWO SIZES DEPENDING ON ROADWAY CONDITIONS. THE 48 IN. X 36 IN. SIGN IS USED ON LOW VOLUME ROUTES THAT CARRY 400 AADT OR LESS, ON PROJECTS THAT HAVE A DURATION OF 4 WEEKS OR LESS OR IN URBAN AREAS WHERE THERE IS INSUFFICIENT RIGHTS OF WAY FOR AN EIGHT FOOT WIDE SIGN. THE 96 IN. X 48 IN. VERSION OF THE SIGN IS USED IN ALL OTHER APPLICATIONS, BUT CAN ALSO BE USED IN PLACE OF THE 48 IN. X 36 IN. SIGN IF ADDED EMPHASIS IS DEEMED NECESSARY.

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

CONST-5-48 (5)

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL BARRICADE
- CHANNELIZER (TRIM-LINE)
- BARRICADE (MOVABLE)
- FLASHING ARROW PANEL
- WARNING LIGHT, TYPE B
- FLAGGER

N.T.S.

TRAFFIC CONTROL PLAN
TYPICAL APPLICATIONS
SHEET 3 OF 7

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	50

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

CONTRACT ID.:

PROJECT NO.:

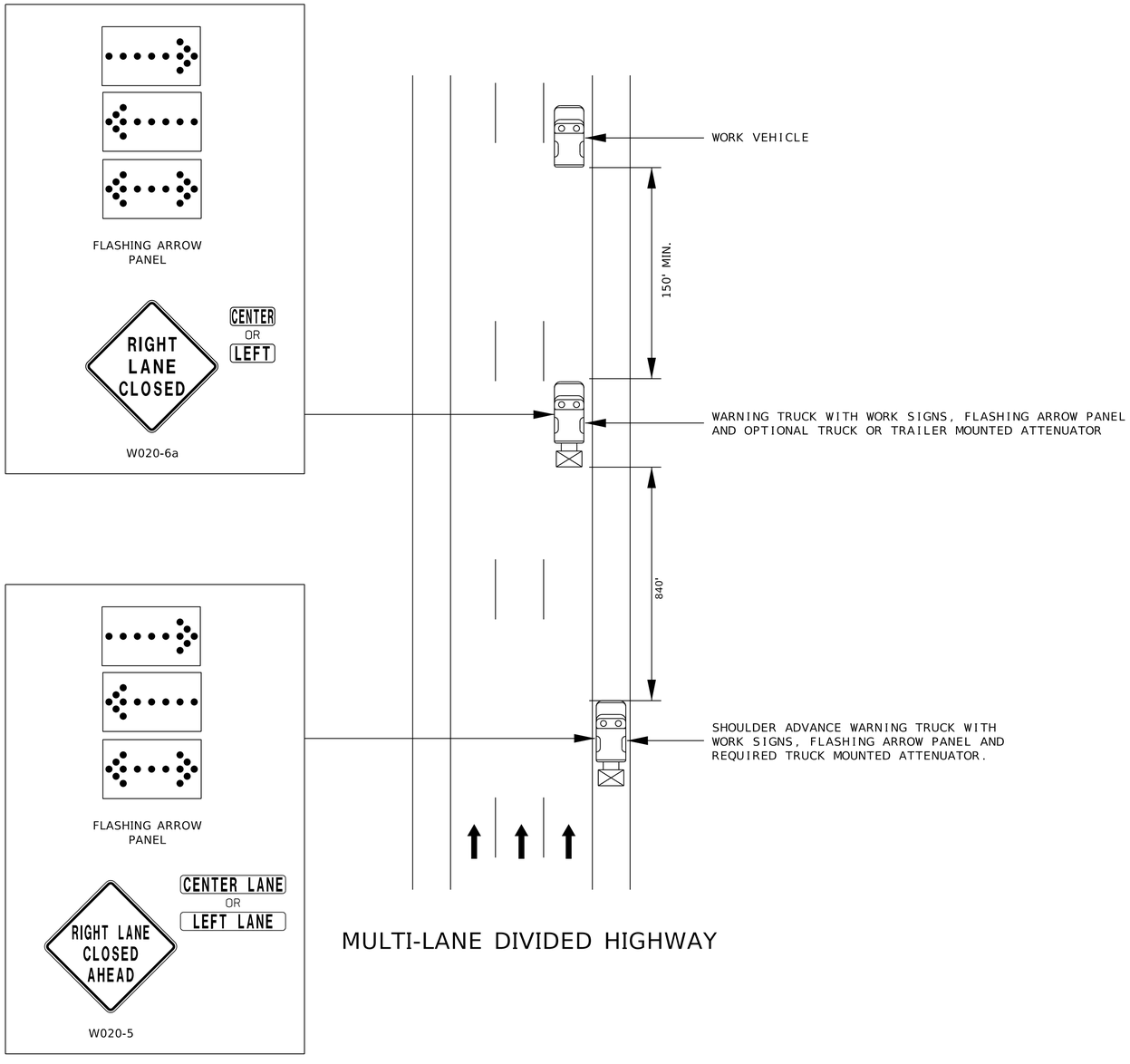
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



MULTI-LANE DIVIDED HIGHWAY

NOTES:

UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PROVIDE ADDITIONAL PROTECTIVE TRUCKS EQUIPPED WITH PROPER WARNING DEVICES.

PROTECTIVE TRUCKS AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, AND OSCILLATING, OR STROBE LIGHTS.

VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED IN A MANNER SUCH THAT THEY ARE NOT OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS ON VEHICLE - MOUNTED SIGNS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.

FLASHING ARROW PANELS SHALL NOT BE INCIDENTAL TO TRUCK MOUNTED ATTENUATORS, WHEREVER USED. NO ADDITIONAL PAYMENT WILL BE MADE.

FLASHING ARROW PANELS SHALL, AS A MINIMUM, BE TYPE B, WITH A SIZE OF 60 X 30 INCHES.

A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE LANE CLOSED, A SEPARATE FLASHING ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL BARRICADE
- CHANNELIZER (TRIM-LINE)
- BARRICADE (MOVABLE)
- FLASHING ARROW PANEL
- WARNING LIGHT, TYPE B
- FLAGGER

N.T.S.

MOBILE ON MULTI-LANE HIGHWAY

TRAFFIC CONTROL PLAN
TYPICAL APPLICATIONS
SHEET 4 OF 7

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

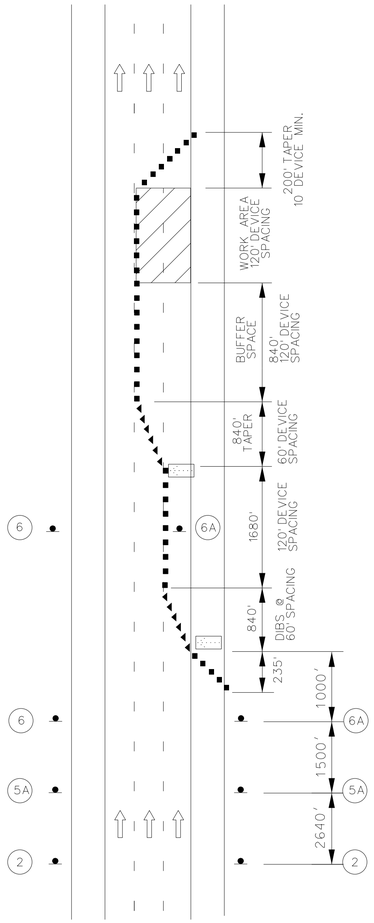
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	
6/25/2025	
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	51
COUNTY	
ST. LOUIS/ST. CHARLES	
JOB NO.	
J6P3554	
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



DOUBLE LANE CLOSURE
ON A FREEWAY

W04-1a
6A

W020-1
2

W020-6a
6

W020-5a
5A

NOTES:

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

ALTERNATIVE TEMPORARY TRAFFIC CONTROL SET-UPS SHOULD BE CONSIDERED WHEN REDUCTION IN CAPACITY CANNOT BE TOLERATED.

FOR NIGHTTIME OPERATIONS, REVIEW EPG 616.6.83 WARNING LIGHTS FOR USE OF SEQUENTIAL LIGHTS.

REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES.

A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE FREEWAY LANE IS CLOSED, A SEPARATE FLASHING ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL BARRICADE
- CHANNELIZER (TRIM-LINE)
- BARRICADE (MOVABLE)
- FLASHING ARROW PANEL
- WARNING LIGHT, TYPE B
- FLAGGER

N.T.S.

DOUBLE LANE CLOSURE ON A FREEWAY

TA-37

TRAFFIC CONTROL PLAN
TYPICAL APPLICATIONS
SHEET 5 OF 7

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025
ROUTE 370 | STATE MO
DISTRICT SL | SHEET NO. 52
COUNTY ST. LOUIS/ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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401 S. 18th Street
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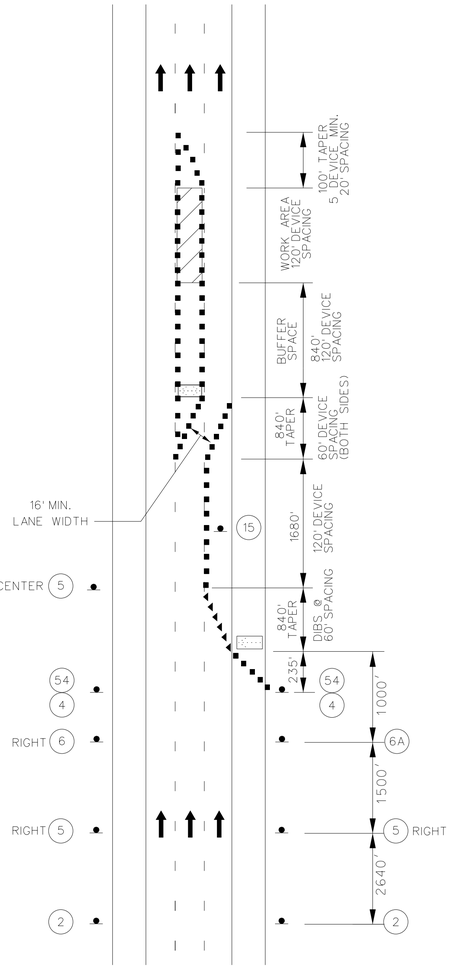
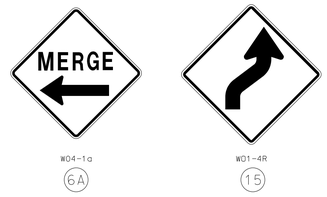
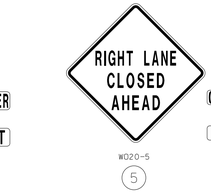
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856







NOTES:

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

ALTERNATIVE TEMPORARY TRAFFIC CONTROL SET-UPS SHOULD BE CONSIDERED WHEN REDUCTION IN CAPACITY CANNOT BE TOLERATED.

FOR NIGHTTIME OPERATIONS, REVIEW EPG 616.6.83 WARNING LIGHTS FOR USE OF SEQUENTIAL LIGHTS.

REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES.

A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE FREEWAY LANE IS CLOSED, A SEPARATE FLASHING ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL BARRICADE
- CHANNELIZER (TRIM-LINE)
- BARRICADE (MOVABLE)
- FLASHING ARROW PANEL
- WARNING LIGHT, TYPE B
- FLAGGER

N.T.S.

INTERIOR LANE CLOSURE ON MULTI-LANE HIGHWAY

TA-37

TRAFFIC CONTROL PLAN
TYPICAL APPLICATIONS
SHEET 6 OF 7

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	53

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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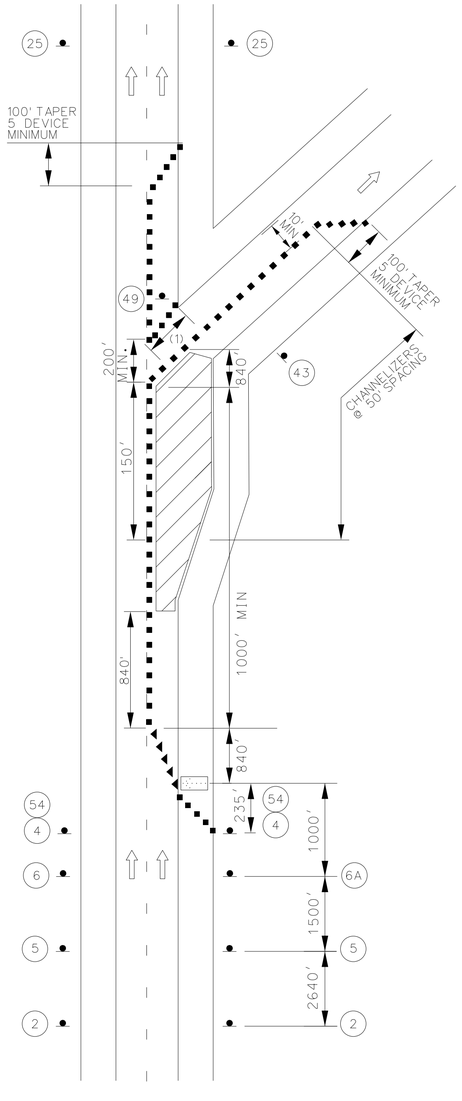
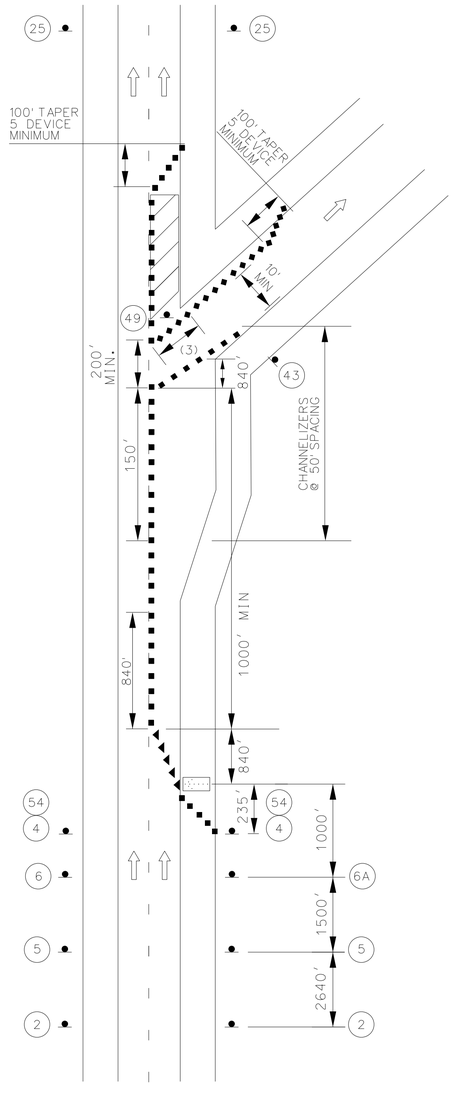
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856





W04-1a
6A

W020-1
2

W020-6a
6

W020-5
5

G020-5aP
54

R2-1
4

W05-1
43

E05-1
49

R2-1
(NORMAL SPEED)
25

NOTES:

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

RAMP NARROWS SIGN IS REQUIRED WHEN RAMP WIDTH IS REDUCED

(3) 5 CHANNELIZER DEVICES MINIMUM

IF RUMBLE STRIPS ARE USED, REVIEW EPG 616.6.87 RUMBLE STRIPS.

FOR NIGHTTIME OPERATIONS, REVIEW EPG 616.6.83 WARNING LIGHTS FOR USE OF SEQUENTIAL LIGHTS.

REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL BARRICADE
- CHANNELIZER (TRIM-LINE)
- BARRICADE (MOVABLE)
- FLASHING ARROW PANEL
- WARNING LIGHT, TYPE B
- FLAGGER

N.T.S.

WORK IN THE VICINITY OF AN ENTRANCE RAMP

TA-42

TRAFFIC CONTROL PLAN
TYPICAL APPLICATIONS
SHEET 7 OF 7

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	54

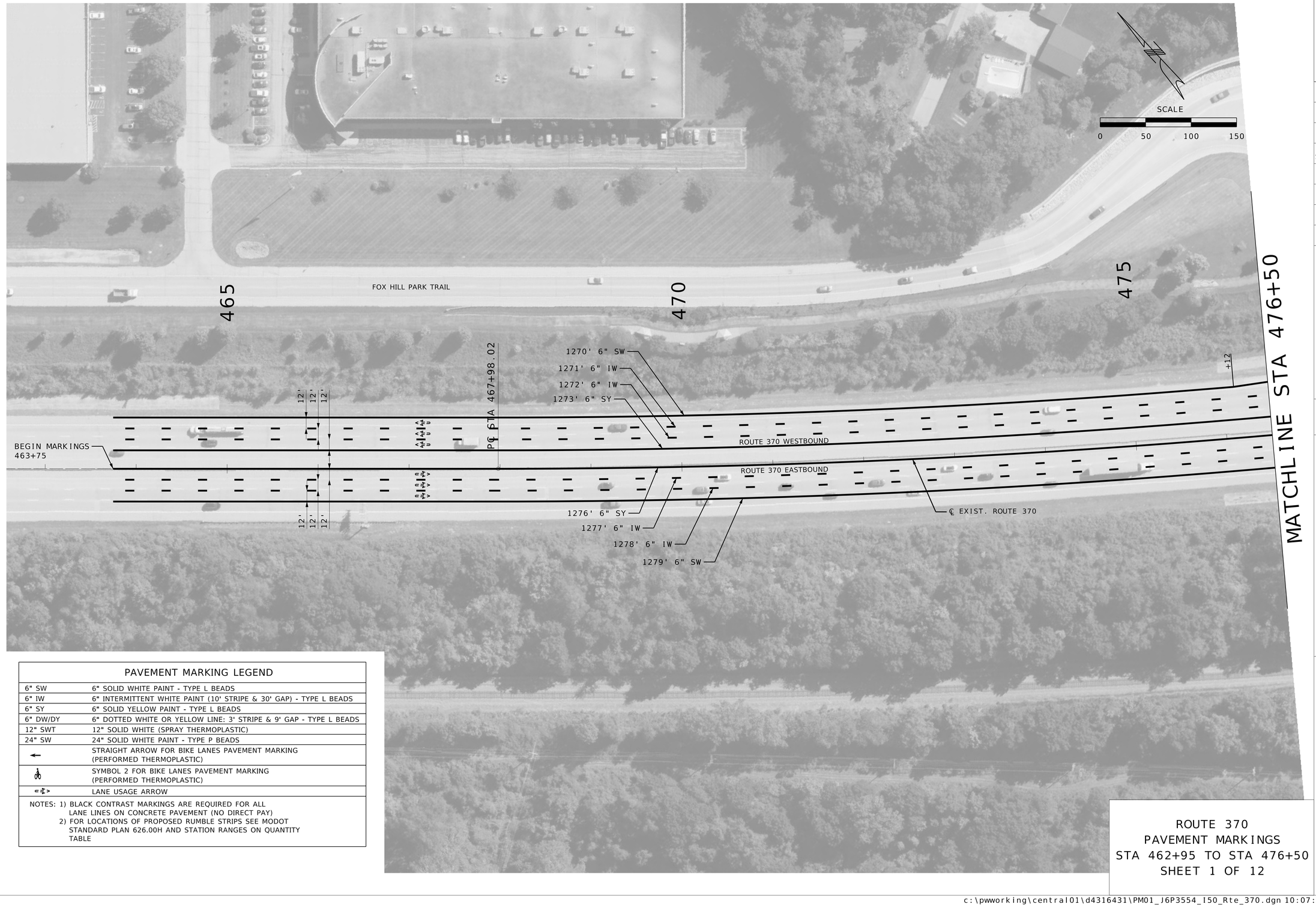
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



PAVEMENT MARKING LEGEND

6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
<≑>	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE

ROUTE 370
PAVEMENT MARKINGS
STA 462+95 TO STA 476+50
SHEET 1 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 55
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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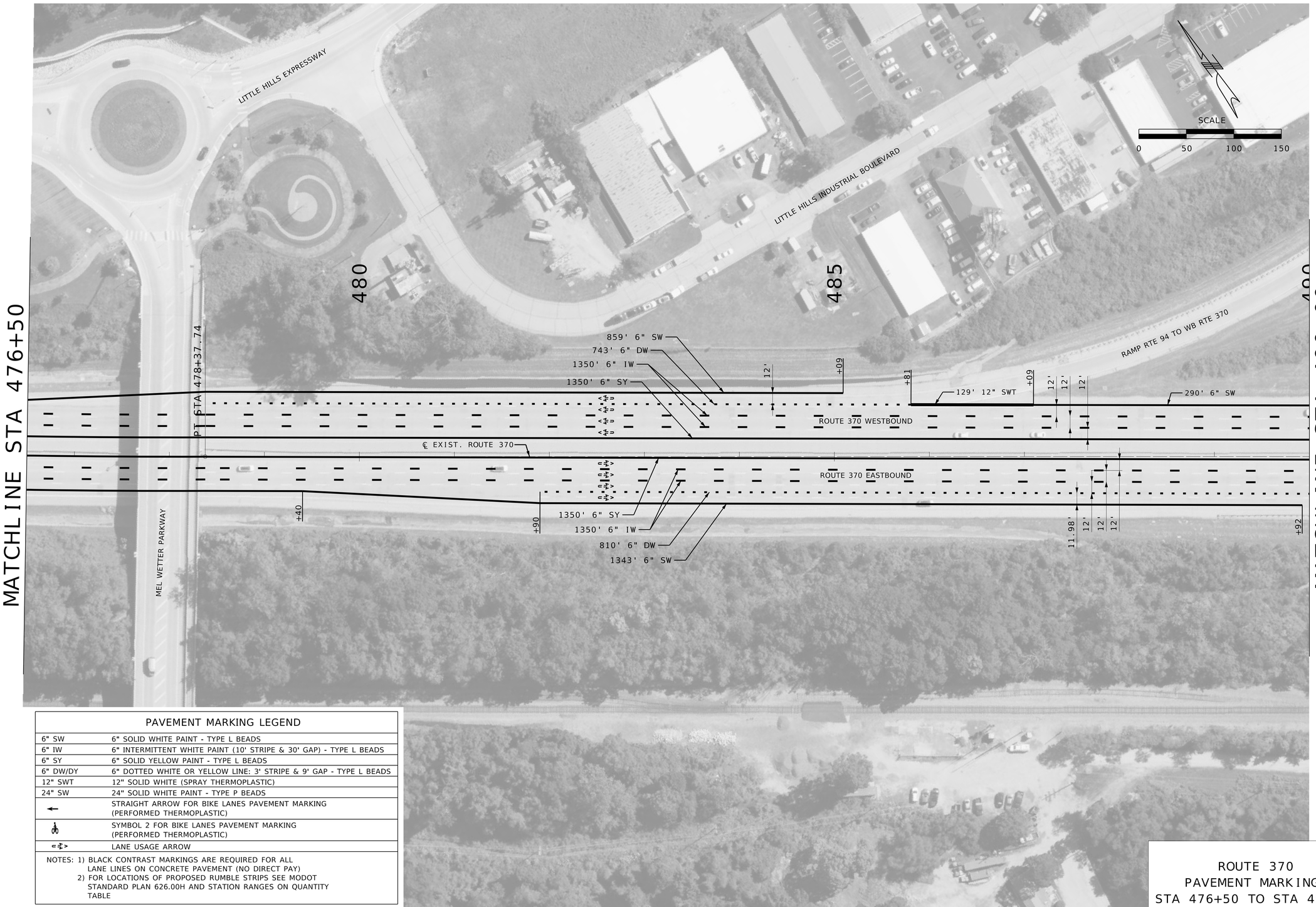

PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE

ROUTE 370
PAVEMENT MARKINGS
STA 476+50 TO STA 490+00
SHEET 2 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 56
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
314-425-8300
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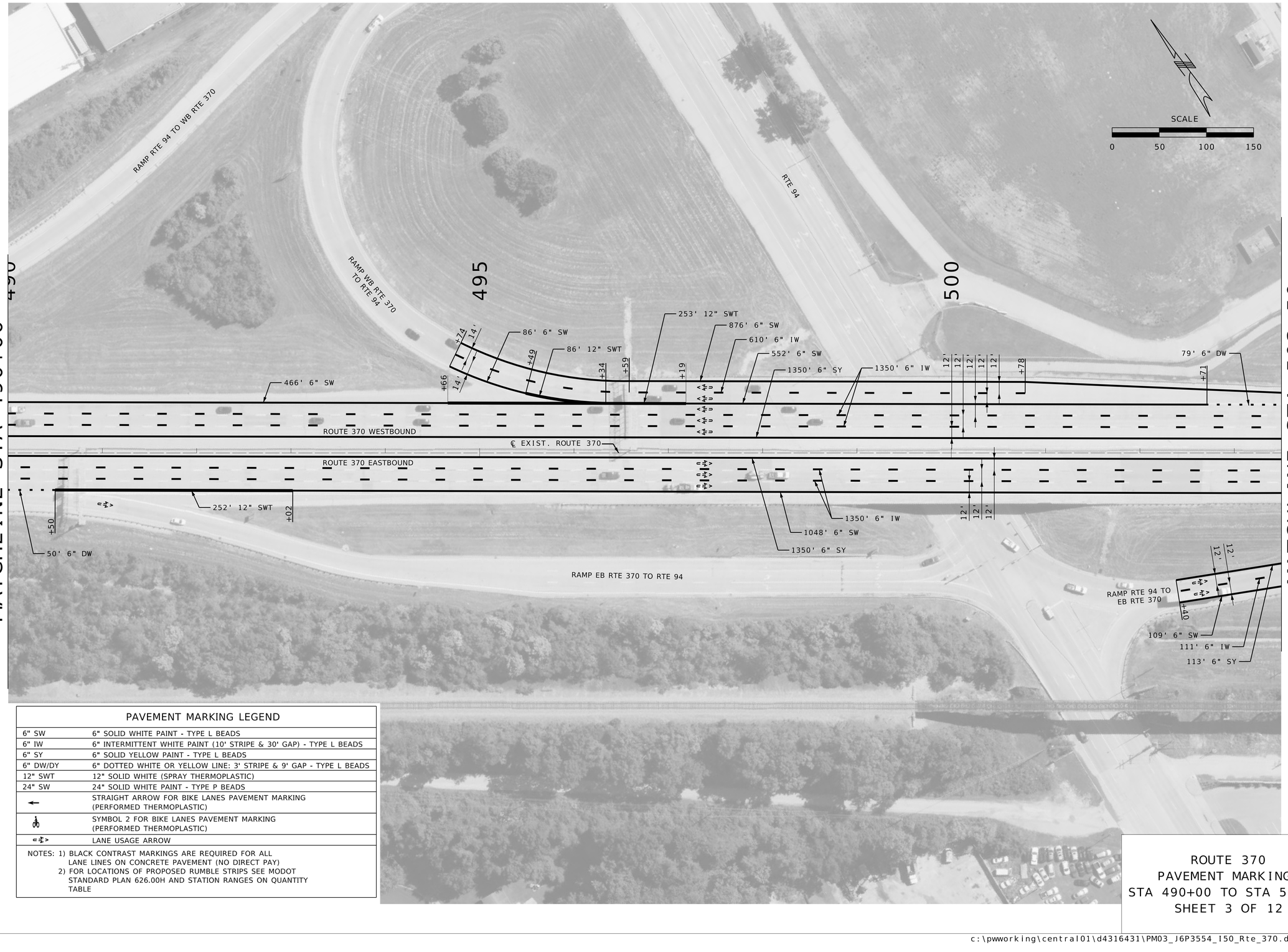


PAVEMENT MARKING LEGEND

6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
🚲	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
⇄	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE

ROUTE 370
PAVEMENT MARKINGS
STA 490+00 TO STA 503+50
SHEET 3 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

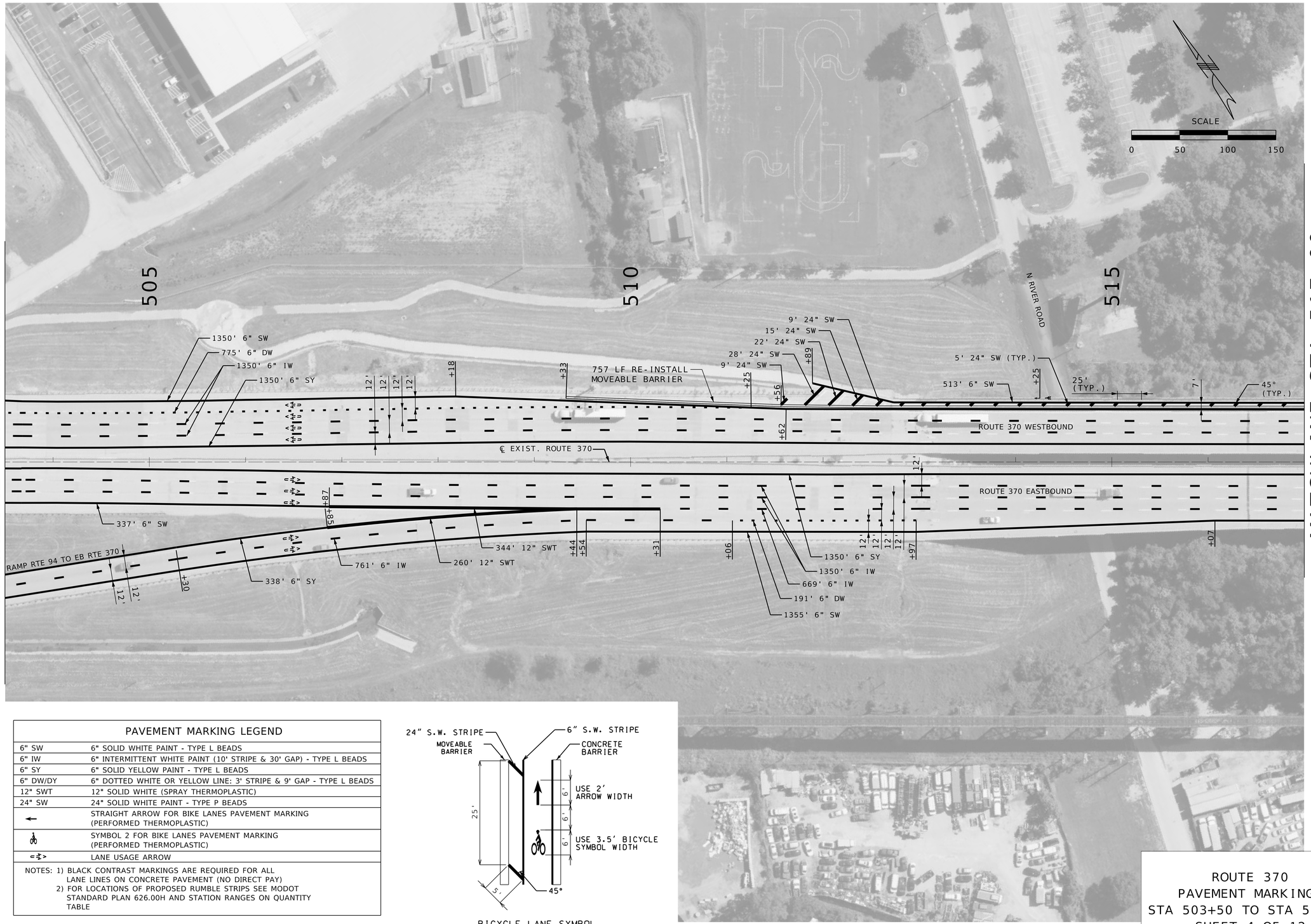
DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 57
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
🚲	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
≤ ≛ >	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE

BICYCLE LANE SYMBOL
DETAIL AT SHOULDERS

ROUTE 370
PAVEMENT MARKINGS
STA 503+50 TO STA 517+00
SHEET 4 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	58

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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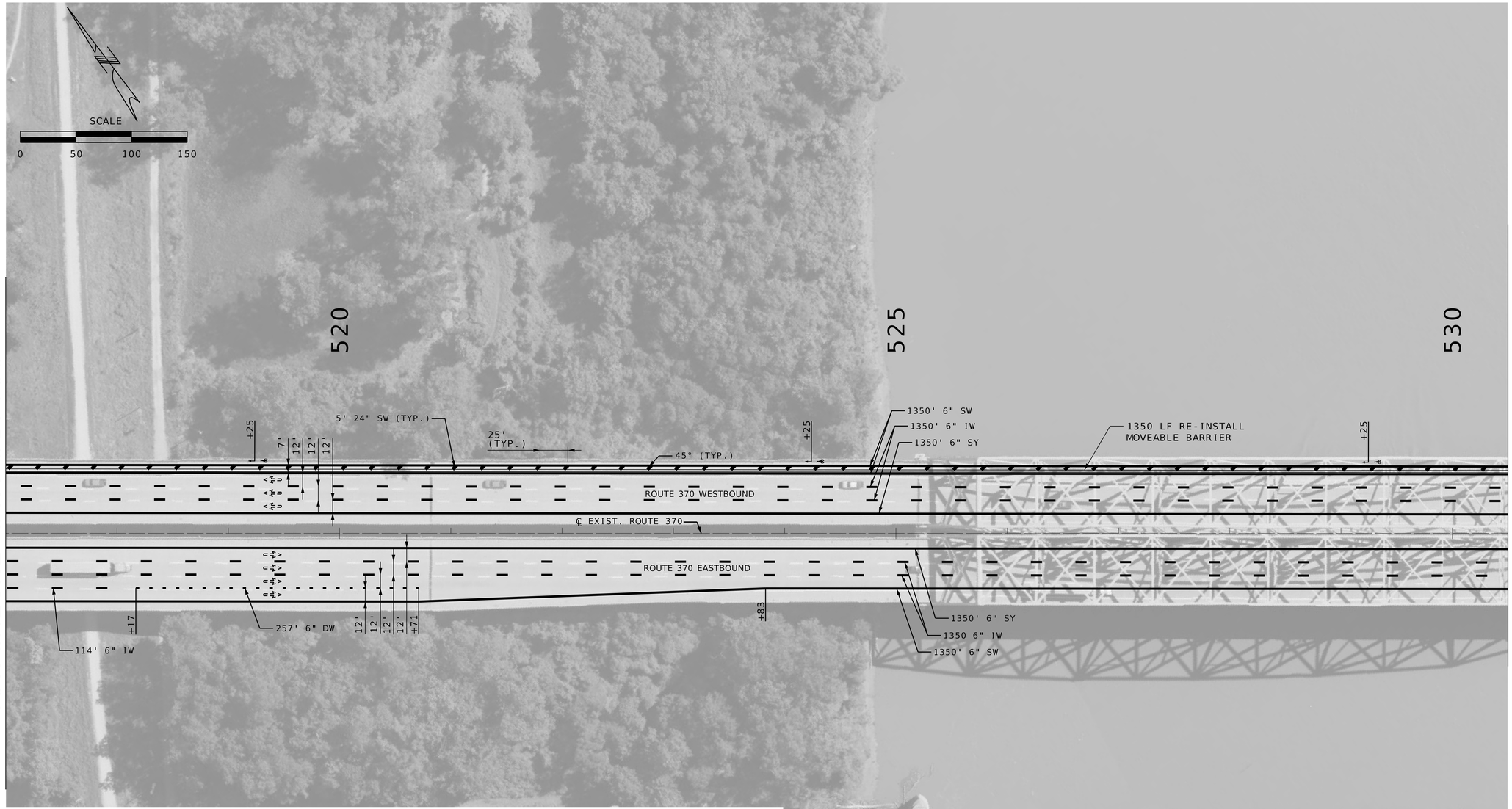
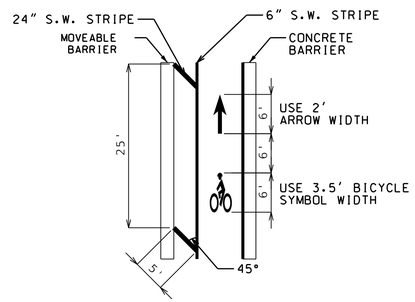


PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
🚲	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
⇐⇑⇒	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE



BICYCLE LANE SYMBOL DETAIL AT SHOULDERS

ROUTE 370
PAVEMENT MARKINGS
STA 517+00 TO STA 530+50
SHEET 5 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

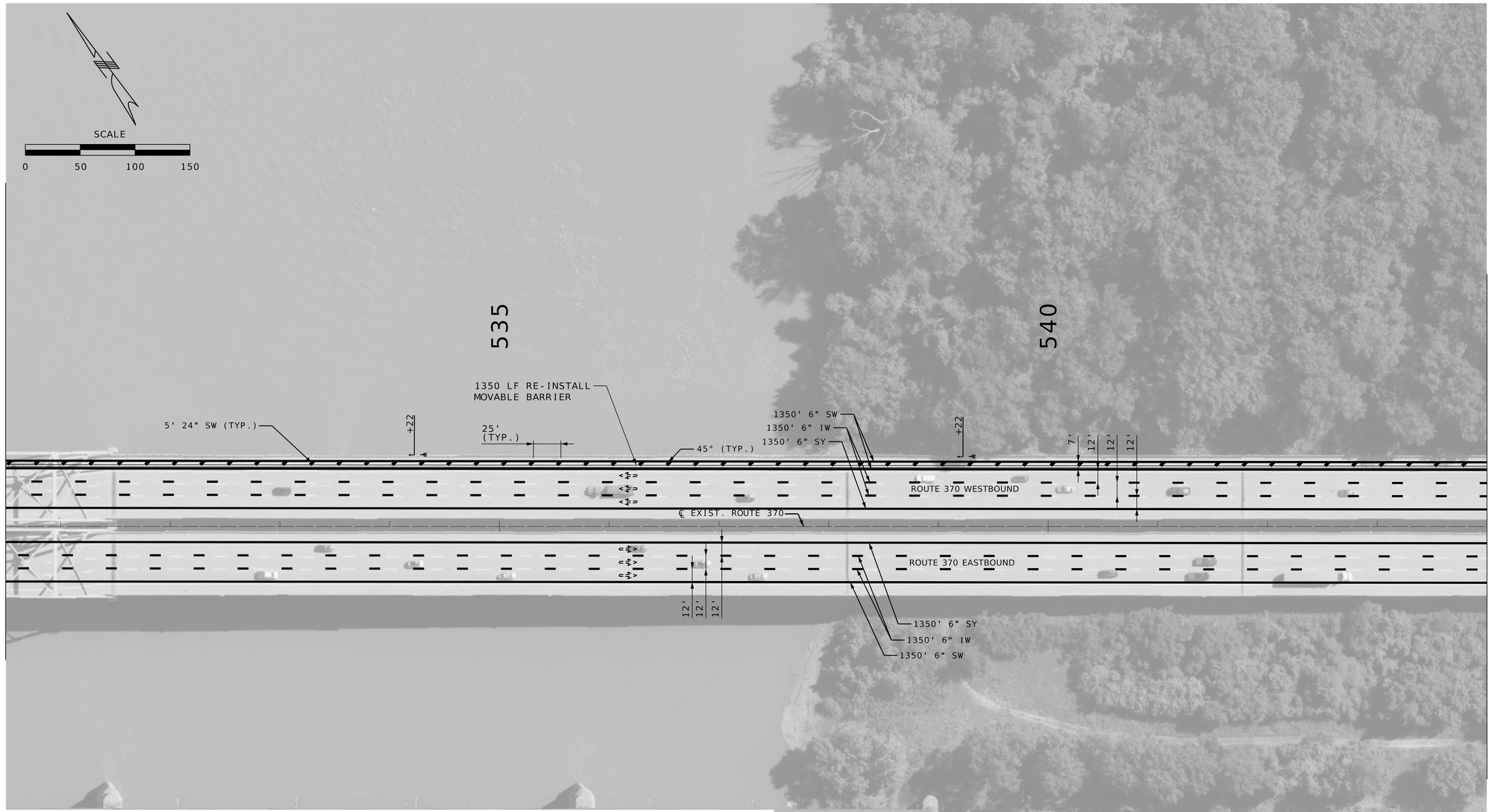
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 59
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

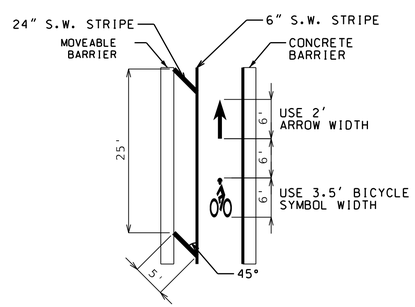
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
🚲	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
⇔	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE



BICYCLE LANE SYMBOL DETAIL AT SHOULDERS

ROUTE 370 PAVEMENT MARKINGS STA 530+50 TO STA 544+00 SHEET 6 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

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DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	60

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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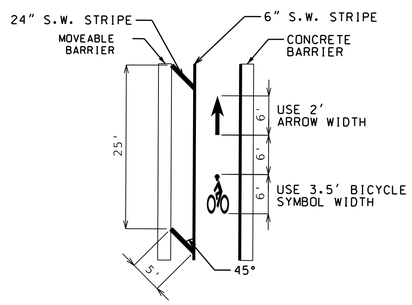
PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
🚲	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
≤⇕≥	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE



BICYCLE LANE SYMBOL DETAIL AT SHOULDERS

ROUTE 370
PAVEMENT MARKINGS
STA 544+00 TO STA 557+50
SHEET 7 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 61
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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HDR Engineering, Inc.
401 S. 18th Street
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314-425-8300
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SCALE

0 50 100 150

MATCHLINE STA 557+50

MATCHLINE STA 571+00

560

565

570

OUTER 370 ROAD

1012' 6" SW
1334' 6" IW
1340' 6" IW
1345' 6" SY

12'
12'
12'
+56
+06
+56
12'
+01

302' 6" DW

ROUTE 370 WESTBOUND

℄ EXIST. ROUTE 370

ROUTE 370 EASTBOUND

1355' 6" SY
1360' 6" IW
1366' 6" IW
942' 6" SW

12'
12'
12'
+78
+73

541' 6" DW

12'

118' 12" SWT
+63
+76
17'
283' 12" SWT
+51
147' 6" SW

RAMP SB RTE 141 TO WB RTE 370

+49
52' 6" SW

RAMP EB RTE 370 TO RTE 141

+75
+06
349' 12" SWT

MISSOURI BOTTOM ROAD

PAVEMENT MARKING LEGEND

6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
<≒>	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
2) FOR LOCATIONS OF PROPOSED RUMBLE STRIPS SEE MODOT STANDARD PLAN 626.00H AND STATION RANGES ON QUANTITY TABLE

ROUTE 370
PAVEMENT MARKINGS
STA 557+50 TO STA 571+00
SHEET 8 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	62

COUNTY
ST. LOUIS/ST. CHARLES

JOB NO.
J6P3554

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)

HDR Engineering, Inc.
401 S. 18th Street
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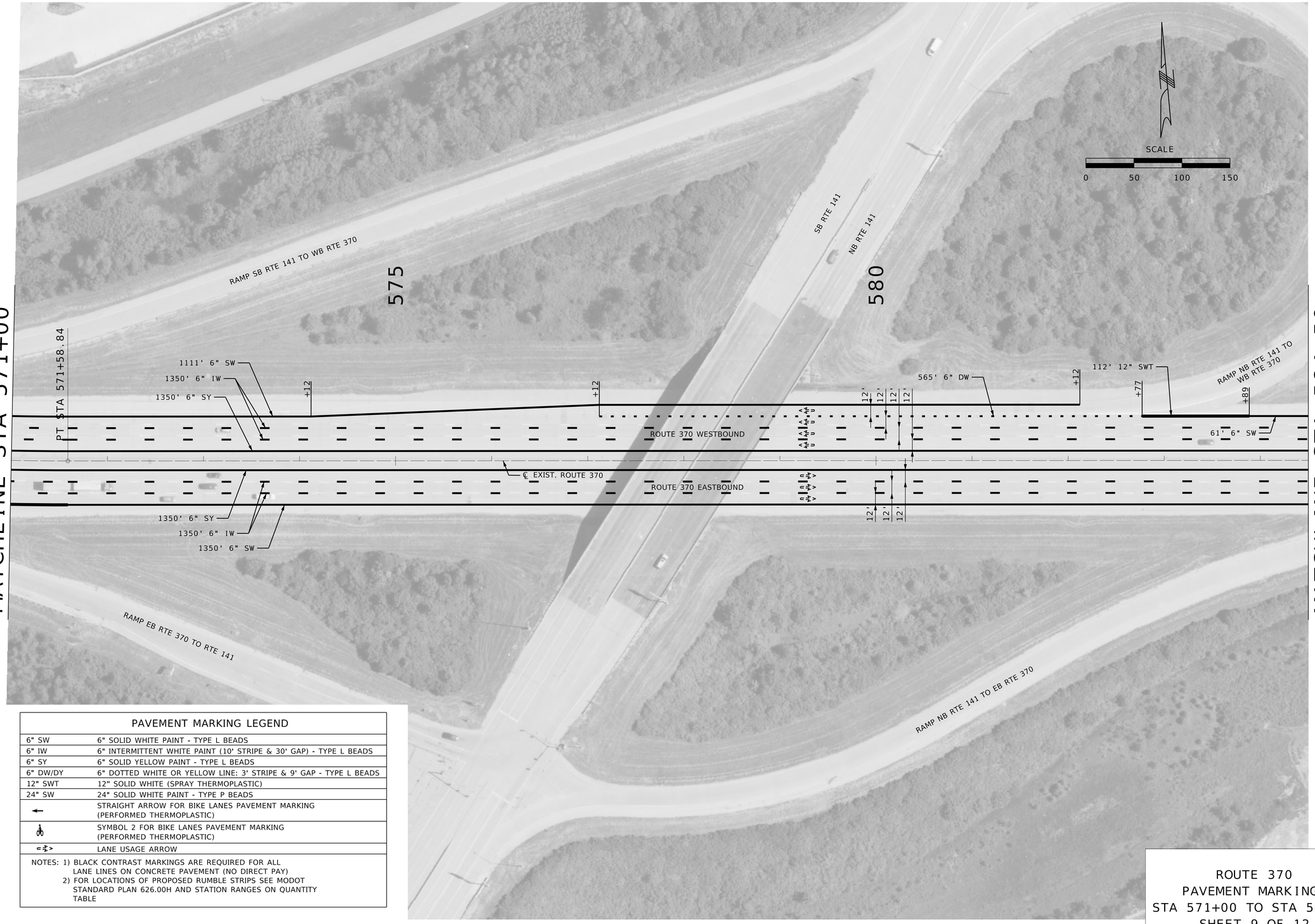
314-425-8300
Certificate of Authority: 000856



PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
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12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
<>	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
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ROUTE 370
PAVEMENT MARKINGS
STA 571+00 TO STA 584+50
SHEET 9 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010000912
PROFESSIONAL ENGINEER

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DATE PREPARED
6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	63

COUNTY
ST. LOUIS/ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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Certificate of Authority: 000856

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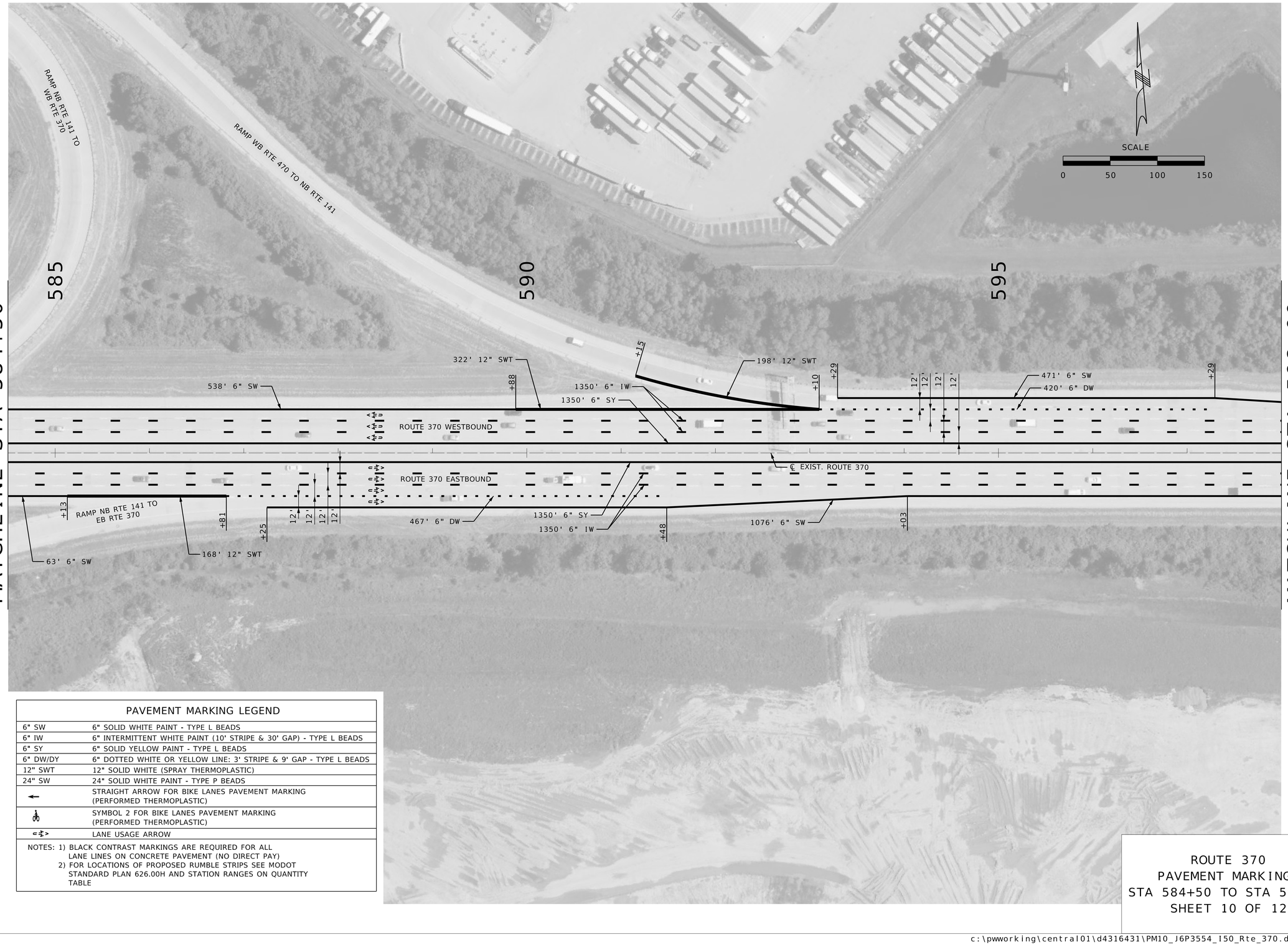

PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
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24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
<+>	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
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ROUTE 370
PAVEMENT MARKINGS
STA 584+50 TO STA 598+00
SHEET 10 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

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DATE PREPARED 6/25/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
SL	64

COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
314-425-8300
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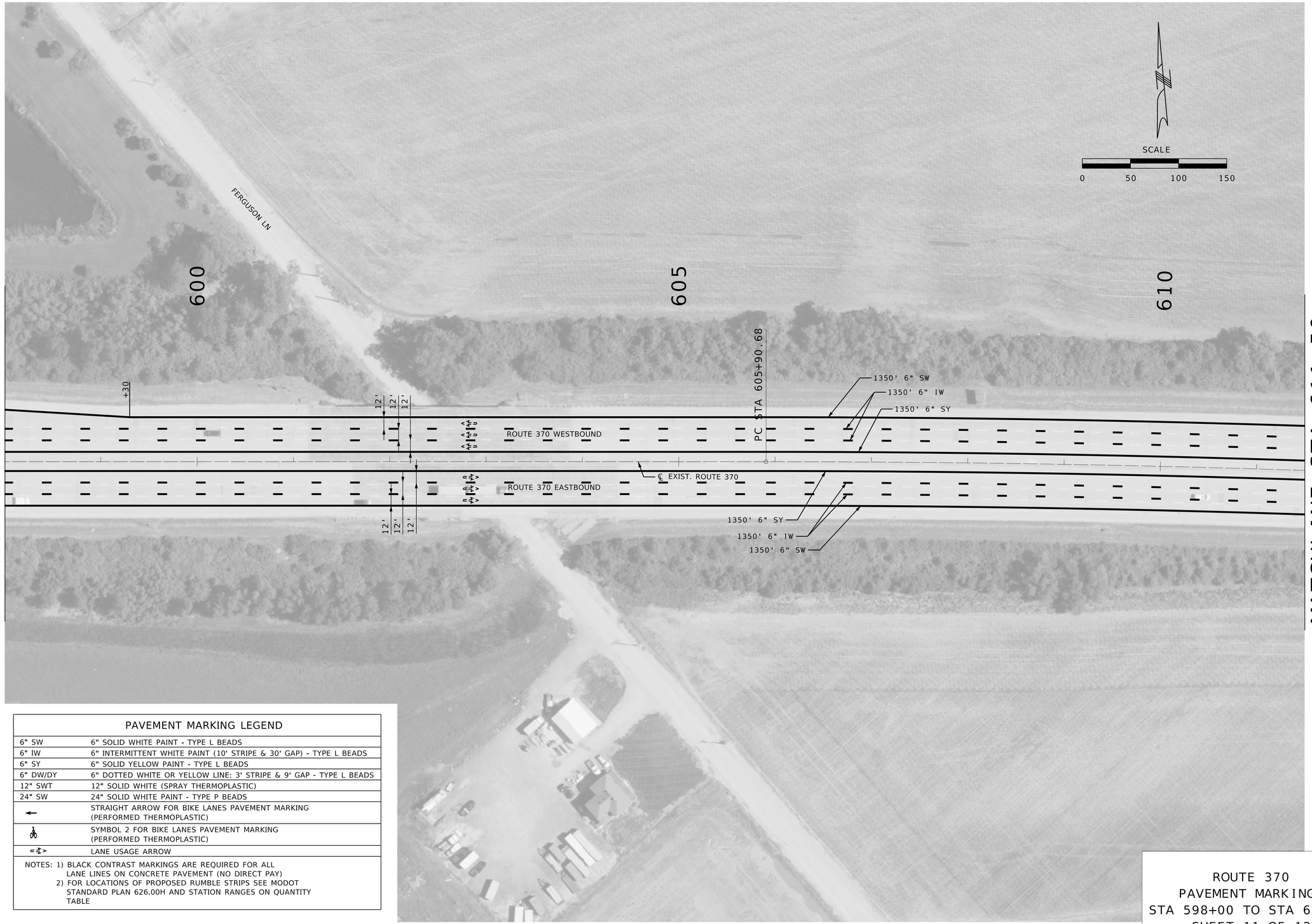

PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
🚲	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
⇄	LANE USAGE ARROW

NOTES: 1) BLACK CONTRAST MARKINGS ARE REQUIRED FOR ALL LANE LINES ON CONCRETE PAVEMENT (NO DIRECT PAY)
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ROUTE 370
PAVEMENT MARKINGS
STA 598+00 TO STA 611+50
SHEET 11 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2010009912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025
ROUTE: 370 | STATE: MO
DISTRICT: SL | SHEET NO.: 65
COUNTY: ST. LOUIS/ST. CHARLES
JOB NO.: J6P3554
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)

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401 S. 18th Street
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PAVEMENT MARKING LEGEND	
6" SW	6" SOLID WHITE PAINT - TYPE L BEADS
6" IW	6" INTERMITTENT WHITE PAINT (10' STRIPE & 30' GAP) - TYPE L BEADS
6" SY	6" SOLID YELLOW PAINT - TYPE L BEADS
6" DW/DY	6" DOTTED WHITE OR YELLOW LINE: 3' STRIPE & 9' GAP - TYPE L BEADS
12" SWT	12" SOLID WHITE (SPRAY THERMOPLASTIC)
24" SW	24" SOLID WHITE PAINT - TYPE P BEADS
←	STRAIGHT ARROW FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	SYMBOL 2 FOR BIKE LANES PAVEMENT MARKING (PERFORMED THERMOPLASTIC)
	LANE USAGE ARROW

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ROUTE 370
PAVEMENT MARKINGS
STA 611+50 TO STA 619+88
SHEET 12 OF 12

STATE OF MISSOURI
EUGENE LOUIS KUELKER JR.
NUMBER PE-2011000912
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 6/25/2025

ROUTE	STATE
370	MO

DISTRICT	SHEET NO.
SL	66

COUNTY: ST. LOUIS/ST. CHARLES

JOB NO.: J6P3554

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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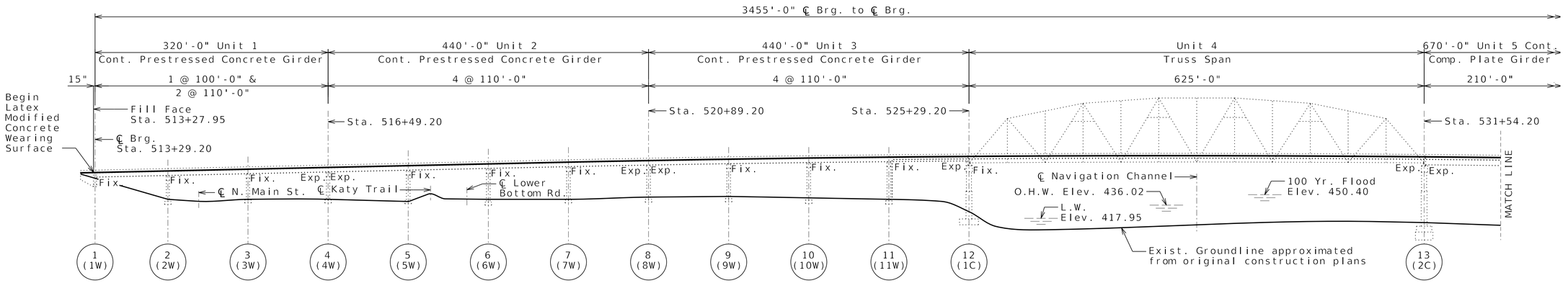
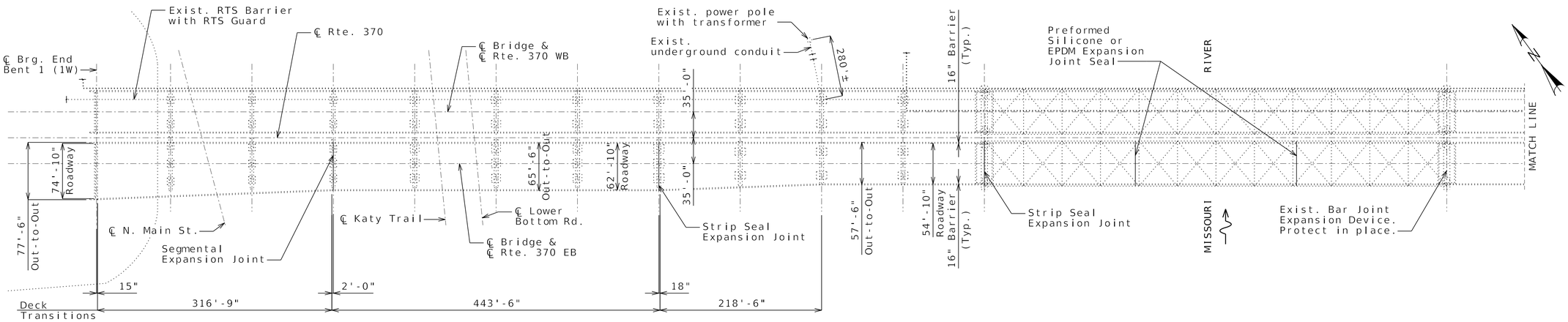
SEC/SUR 32 TWP 47N RGE 5E

U.I.P. AND REHABILITATE
EXISTING (100'-110'-110'), (4@110'), (4@110') CONT. PRESTRESSED CONCRETE BULB-TEE GIRDER SPANS, (625') SIMPLE THRU TRUSS SPAN, (210'-250'-210') CONT. COMPOSITE PLATE GIRDER SPANS, (3@120'), (3@120'), (2@120') CONT. PRESTRESSED CONCRETE BULB-TEE GIRDER SPANS



GENERAL ELEVATION



PLAN

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6. Substructure Repair & Concrete Protective Coating Details
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39. Median Lighting Details
40. Miscellaneous Details

Designed May 2025
Detailed May 2025
Checked May 2025

GENERAL ELEVATION AND PLAN

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

REPAIRS TO BRIDGE:
ROUTE 370 EB OVER MISSOURI RIVER
ROUTE 370 FROM ROUTE 94 TO ROUTE 141
ABOUT 0.2 MILE EAST OF ROUTE 94
STA. 513+27.95± (MATCH EXISTING)

AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
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Certificate of Authority: 000856

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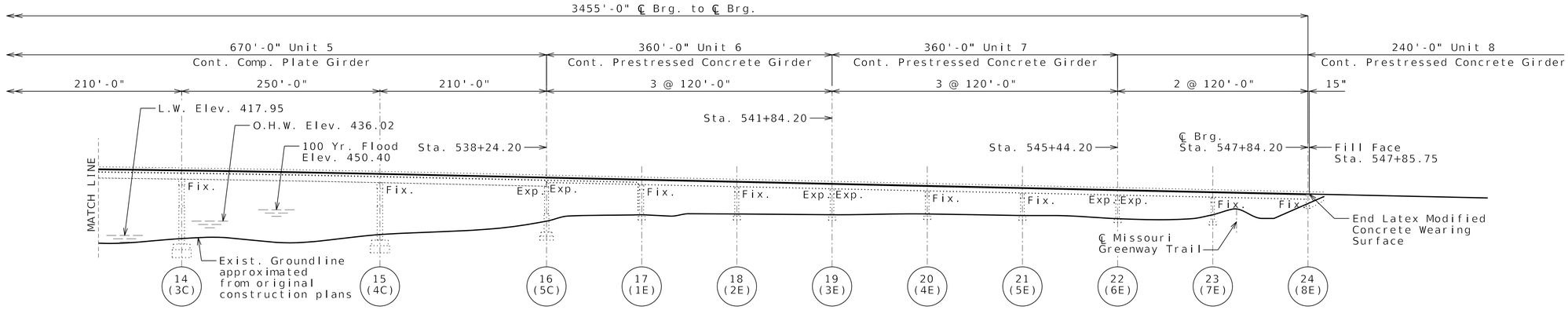
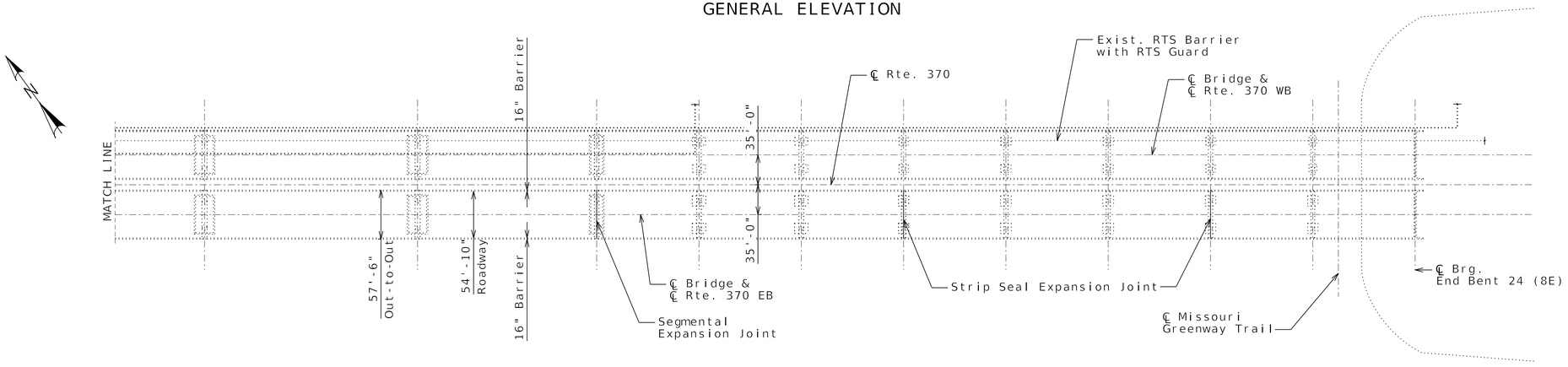


GENERAL ELEVATION



PLAN

GENERAL ELEVATION AND PLAN

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	2

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45576

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

ESTIMATED QUANTITIES				
Item	Unit	Substr.	Superstr.	Total
Total Surface Hydro Demolition	SY		21,735	21,735
Removal of Concrete Wearing Surface	SF		195,613	195,613
Removal of Existing Expansion Joint & Adjacent Concrete	LF		345	345
Removal of Existing Expansion Joint Seal or Sealant	LF		110	110
Removal of Existing Bearings	EA		32	32
Remove and Replace Barrier Curb	LF		86	86
Bridge Approach Slab (Major)	SY		316	316
Supplementary Wearing Surface Material	CY		100	100
Latex Modified Concrete Wearing Surface	SY		21,735	21,735
Diamond Grinding	SY		21,735	21,735
Class B-2 Concrete	CY		80.5	80.5
Substructure Repair (Formed)	SF	30		30
Substructure Repair (Unformed)	SF	714		714
Fiber Reinforced Polymer Wrap	SF	997		997
Barrier Repair	LF		124	124
Concrete Diaphragm Repair (Formed)	SF		15	15
Cleaning and Protective Coating (Epoxy)	SF		11,943	11,943
Mechanical Bar Splice	EA		156	156
Reinforcing Steel (Galvanized)	LB	160	14,460	14,620
Protective Coating - Concrete Bents and Piers (Urethane)	LS	1		1
Repaint River Gauge Markings	LS	1		1
✳ Surface Preparation for Recoating Structural Steel - Unit 4	LS		1	1
✳ Field Application of Inorganic Zinc Primer - Unit 4	LS		1	1
✳✳ Surface Preparation for Recoating Structural Steel - Unit 5	SF		84,900	84,900
✳✳ Field Application of Inorganic Zinc Primer - Unit 5	SF		84,900	84,900
Drainage Modifications	LS			1
Gusset Plate L0 Retrofit	EA		4	4
Miscellaneous Bolt Replacement	EA		16	16
Extend Slab Drain	EA		12	12
Truss Access Hole Cover Replacement	EA		3	3
Type N PTFE Bearing	EA		24	24
High Load Multi-Rotational (HLMR) Disc Bearing Assembly	EA		8	8
Bearing Retainer Retrofit	EA		65	65
Strip Seal Expansion Joint System	LF		227	227
Preformed Silicone or EPDM Expansion Joint Seal	LF		110	110
Segmental Expansion Joint System	LF		118	118
Navigation Lighting System	LS			1
Median Solar Light System	LS			1
Navigation Placard Replacement	EA			2
PAINT ALTERNATE 1				
✳ Finish Field Coat (System I) - Unit 4	LS		1	1
✳✳ Finish Field Coat (System I) - Unit 5	SF		21,400	21,400
PAINT ALTERNATE 2				
✳ Finish Field Coat (System L) - Unit 4	LS		1	1
✳✳ Finish Field Coat (System L) - Unit 5	SF		21,400	21,400

✳ Includes steel to be recoated within Unit 4 truss span (12-13) including the floor system, per limits shown on Sheet No. 13, to be paid by lump sum. See Special Provisions for total steel weight of truss span including floor system.

✳✳ Includes steel to be recoated within Unit 5 approach girder spans (13-14), (14-15) and (15-16), per limits shown on Sheet No. 13, to be paid per square foot of surface area.

GENERAL NOTES:

DESIGN SPECIFICATIONS:
2020 - AASHTO LRFD Bridge Design Specifications (9th Edition) (New construction)
Seismic Design Category = (Nonseismic Details)

DESIGN LOADING:
Vehicular = HS20-44 (1988) (Existing Construction), HL-93 (New construction)
No Future Wearing Surface

DESIGN UNIT STRESSES:

Class B-2 Concrete (Superstructure except Barrier)	f'c = 4,000 psi.
Class B-1 Concrete (Substructure and Barrier)	f'c = 4,000 psi.
Reinforcing Steel (ASTM A615 Grade 60)	fy = 60,000 psi.
Structural Carbon Steel (ASTM A709 Grade 36)	fy = 36,000 psi.
Structural Steel (ASTM A709 Grade 50)	fy = 50,000 psi.

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.

MBS refers to mechanical bar splices. Mechanical bar splices shall be in accordance with Sec 706 or 710.

TRAFFIC HANDLING:
Traffic to be maintained on structure during construction. See roadway plans for traffic control and Sheet No. 4 for staged construction details.

RECOATING EXISTING STEEL:
At the contractor's option, Paint Alternate 1 - Finish Field Coat (System I) or Paint Alternate 2 - Finish Field Coat (System L) may be used, see Special Provisions. Only one paint system shall be used for the entirety of the bridge.

Protective Coating: System I in accordance with Sec 1081 or System L in accordance with Special Provisions, and limits shown on plans.

Surface Preparation: Surface Preparation of the existing steel shall be in accordance with Sec 1081 for Recoating of Structural Steel (System I) or in accordance with Special Provisions (System L), with inorganic zinc primer. The cost of surface preparation will be considered completely covered by the contract lump sum price or price per sq. foot for Surface Preparation for Recoating Structural Steel.

Prime Coat: Inorganic zinc primer will be required. Organic zinc primer will not be allowed. The cost of the prime coat will be considered completely covered by the contract lump sum price or price per sq. foot for Field Application of Inorganic Zinc Primer.

Field Coats: The color of the field coats shall be Gray (Federal Standard #26373). The cost of the finish field coat will be considered completely covered by the lump sum price or price per sq. foot for Finish Field Coat (System I) or Finish Field Coat (System L).

For the duration of the cleaning and recoating the truss spans, the truss span superstructure in any span shall not be draped with an impermeable surface subject to wind loads for a length any longer than 1/4 the span length at any one time regardless of height of coverage. Simultaneous work in adjacent spans is permissible using the specified limits in each span.

COATING NEW STEEL:
The same Finish Field Coat system for recoating existing steel shall be used for new steel.

Protective Coating: System I in accordance with Sec 1081 or System L in accordance with Special Provisions.

Prime Coat: Inorganic zinc primer will be required. Organic zinc primer will not be allowed. The cost of the prime coat shall be considered completely covered by the contract unit price for other items.

Field Coats: The color of the field coats shall be Gray (Federal Standard #26373). The cost of the finish field coat will be considered completely covered by the contract unit price for other items.

CONCRETE PROTECTIVE COATINGS:
Protective coating for concrete bents and piers (Urethane) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Protective coating for concrete diaphragms and girders (Epoxy) shall be applied as shown on the bridge plans and in accordance with the Special Provisions.

MISCELLANEOUS:
Roadway surfacing adjacent to bridge ends shall match new bridge slab surface wearing surface (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

High strength bolts, nuts and washers will be sampled for quality assurance as specified in Sec 106.

All existing dimensions shown were taken from as-built drawings, shop drawings or limited field measurements. All dimensions measuring existing components to have +/- tolerance.

Finish each side of the construction joints with a 1/4" radius edging tool.

Longitudinal dimensions are based on original design plans.

VERIFY DIMENSIONS
Contractor shall verify all dimensions in field before finalizing the shop drawings.

BARS BONDED IN EXISTING CONCRETE:
Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available existing bars shall extend into new concrete at least 40 diameters for plain bars and 30 diameters for deformed bars, unless otherwise noted.

REMOVAL, STORAGE AND RE-SETTING OF EXISTING RTS BARRIER:
The existing RTS Barrier with RTS Guard shall be removed, stored, and re-set per the Roadway Special Provisions.

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/1/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	3

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45576

DATE	DESCRIPTION

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

GENERAL NOTES AND QUANTITIES

Detailed May 2025
Checked May 2025

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

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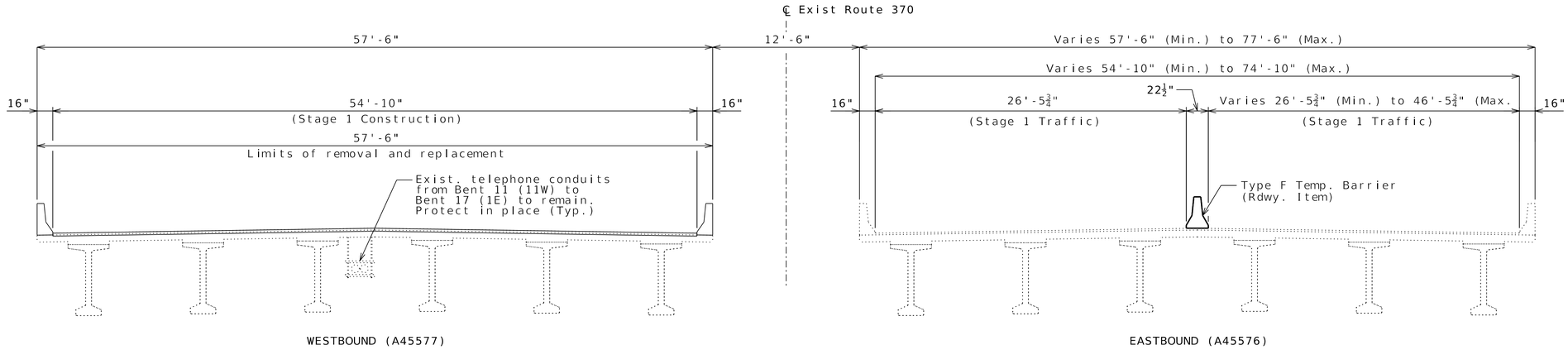
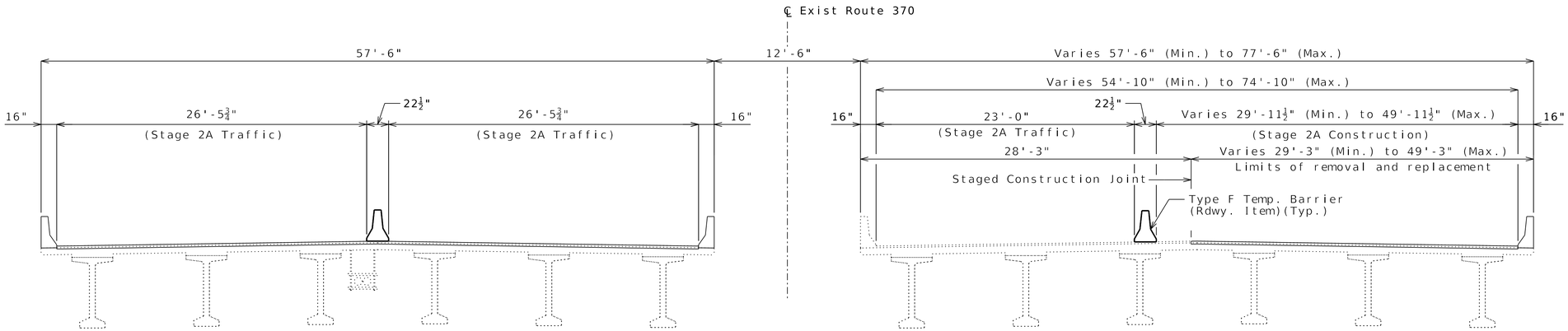
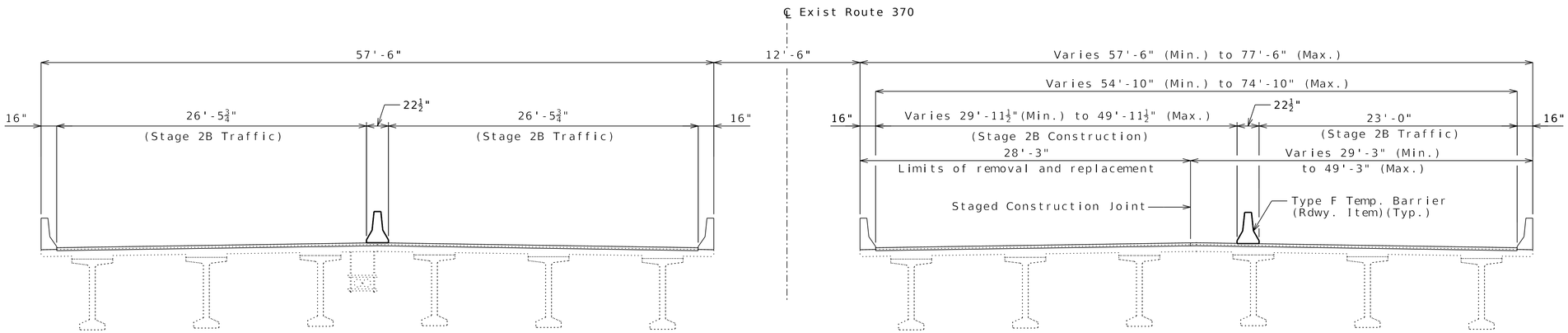


STAGE 1 CONSTRUCTION



STAGE 2A CONSTRUCTION



STAGE 2B CONSTRUCTION

CONSTRUCTION STAGING

Notes:

Limits of removal and replacement includes removal of existing wearing surface, hydro demolition, new latex modified concrete wearing surface, and expansion joint replacements with adjacent slab and barrier replacement.

Notes: (Cont.)

For details of deck repair, see Sheet No. 6.

For details of expansion joint replacements, see Sheets No. 21-25.

Notes: (Cont.)

For details of slab and barrier replacement, see Sheets No. 27-31.

Temporary barrier shall not be attached to the bridge.

Detailed May 2025
Checked May 2025

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AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 6/30/2025
ROUTE: 370
STATE: MO
DISTRICT: BR
SHEET NO.: 4
COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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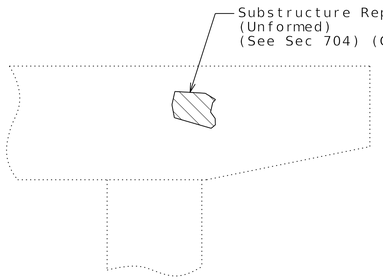
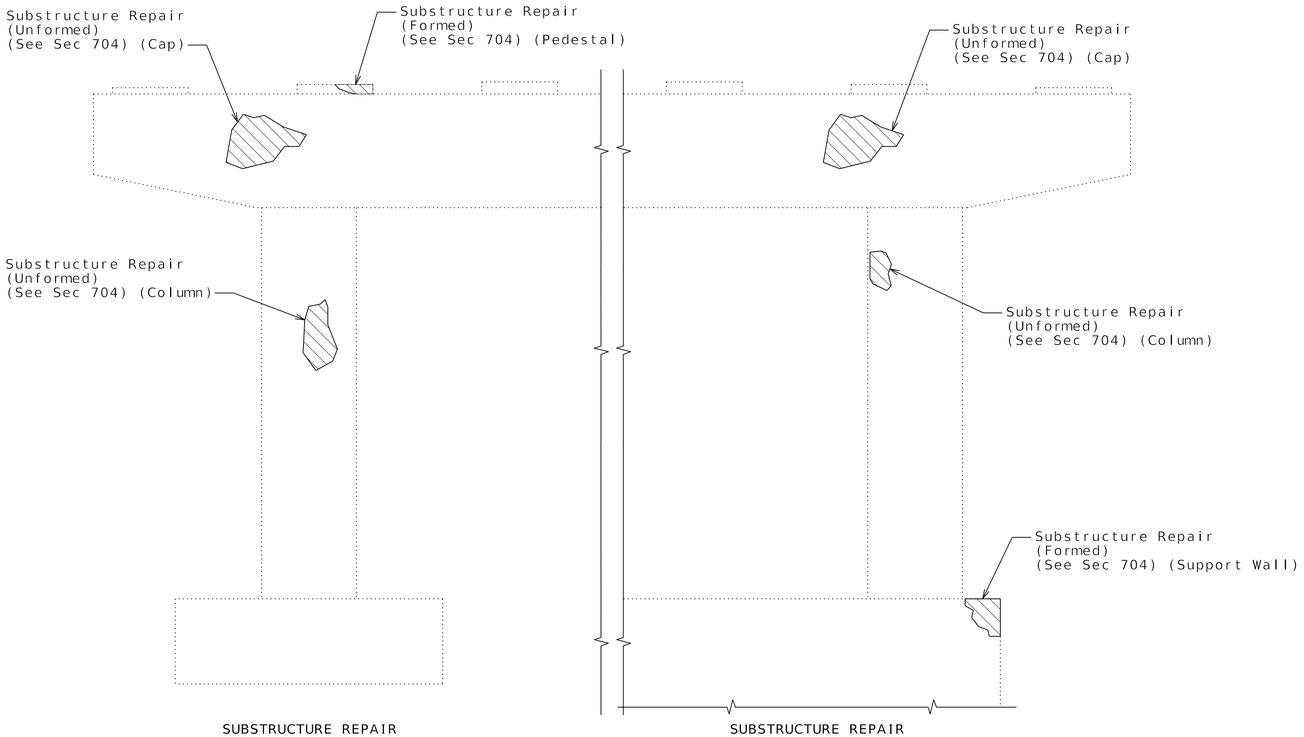


SUBSTRUCTURE REPAIR (CAP)
(Bents 1 (1W), 7 (7W), 10 (10W),
15 (4C), 20 (4E), 21 (5E), and 23 (7E))

SUBSTRUCTURE REPAIR (UNFORMED)		
BENT	CAP	QUANTITY SQ. FT.
1 (1W)	East Face	3
7 (7W)	West Face	1
10 (10W)	South Face & underside	3
15 (4C)	North Face	2
20 (4E)	North Face	2
21 (5E)	North Face	3
23 (7E)	North Face	3



SUBSTRUCTURE REPAIR
(Bents 4 (4W), 8 (8W), 19 (3E),
and 22 (6E))

SUBSTRUCTURE REPAIR
(Bent 16 (5C))

SUBSTRUCTURE REPAIR (UNFORMED)			
BENT	LOCATION		QUANTITY SQ. FT.
	CAP	COLUMNS	
4 (4W)	East face, west face, & underside	East & west face @ Center Col.	97
8 (8W)	Underside	East & west face @ Center Col. East face @ South Col.	120
12 (1C)	West face	South face of South Col.	8
13 (2C)	East face, west face, & underside	Northwest Face of South Col.	25
16 (5C)	Underside	North & west face of North Col. South & west face of South Col.	264
19 (3E)	Underside	Southwest face of South Col.	103
22 (6E)	East face, west face, & underside	West face of South Col.	80

SUBSTRUCTURE REPAIR (FORMED)			
BENT	LOCATION		QUANTITY SQ. FT.
	PEDESTALS	SUPPORT WALL	
4 (4W)	East face at Girder B, D, E, F & H	---	10
8 (8W)	East face at Girder A, B & H; West face at Girder F	---	4
16 (5C)	---	South face & top of wall	16

Notes:

Unformed substructure repairs shall utilize shotcrete concrete repair method. See Special Provisions.

Formed substructure repairs may utilize shotcrete concrete repair method. See Special Provisions.

Work this sheet with Sheet No. 6.

SUBSTRUCTURE REPAIR & CONCRETE PROTECTIVE COATING DETAILS

Detailed May 2025
Checked May 2025

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STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
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DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 5
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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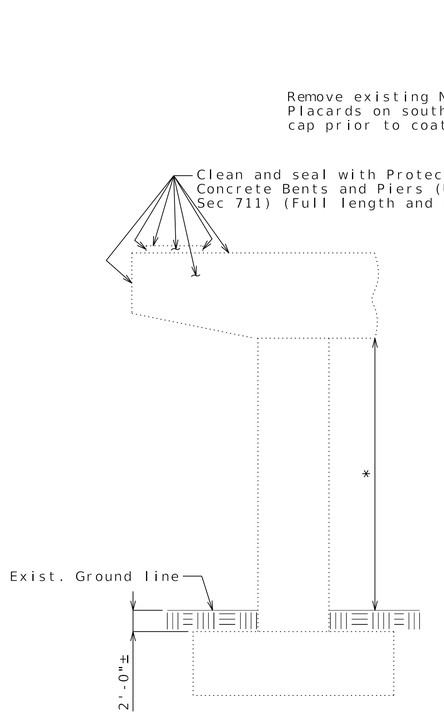
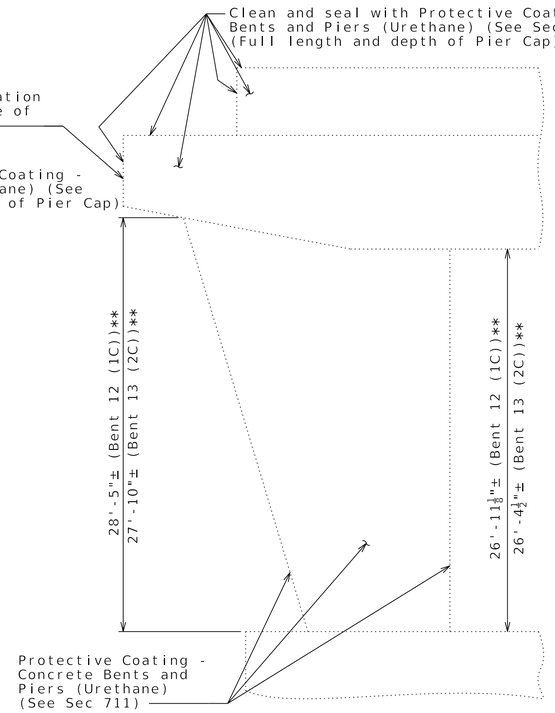
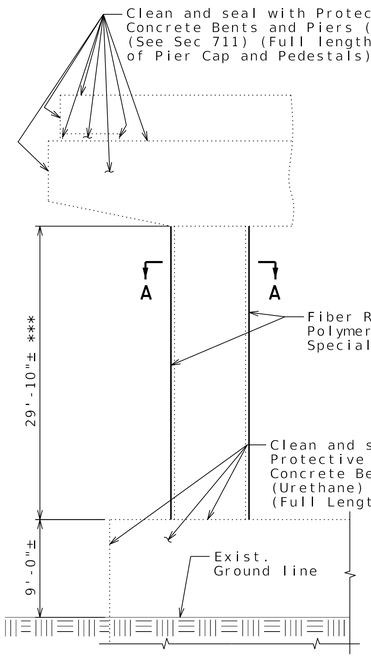


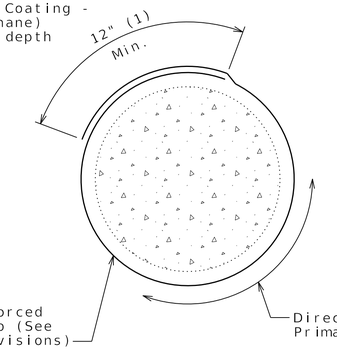
PROTECTIVE COATING
(Bents 4 (4W), 8 (8W), 19 (3E)
and 22 (6E))



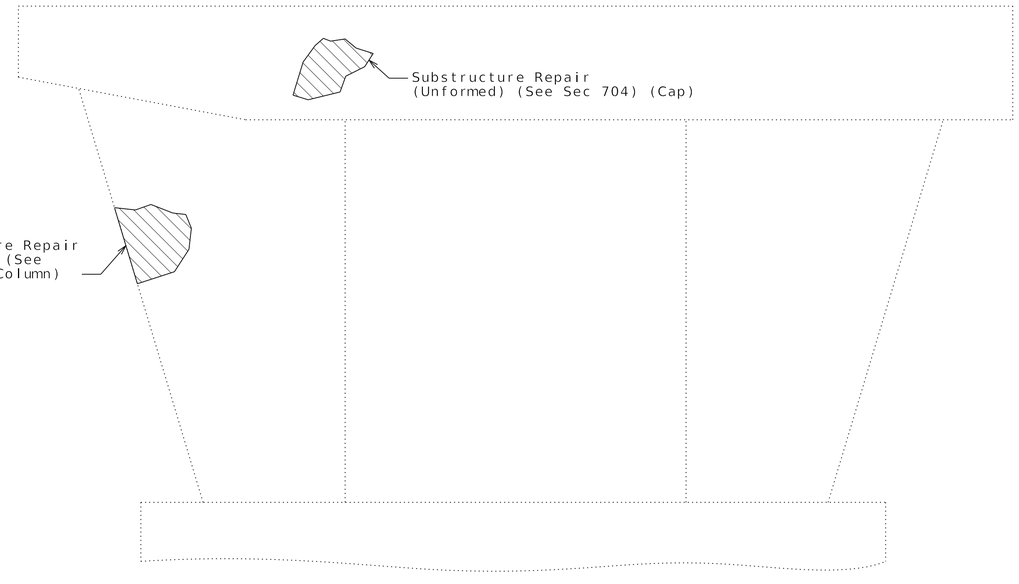
PROTECTIVE COATING
(Bents 12 (1C) and 13 (2C))



PROTECTIVE COATING & FIBER WRAP
(Bent 16 (5C))



SECTION A-A
(1) Fiber Reinforced Polymer Wrap shall be overlapped per the manufacturer's recommendations (12" min.)



SUBSTRUCTURE REPAIR
(Bents 12 (1C) and 13 (2C))

* Limits of Protective Coating-
Concrete Bents and Piers
(Urethane) (Typ. @ each column)
31'-2"± (Bent 4 (4W))
39'-8"± (Bent 8 (8W))
28'-7"± (Bent 19 (3E))
23'-8"± (Bent 22 (6E))

** Limits of Protective Coating-
Concrete Bents and Piers
(Urethane) (Typ. @ each column)

*** Limits of Fiber Reinforced
Polymer Wrap (see Special Provisions)
(Typ. @ each column)

Notes:

Work this sheet with Sheet No. 5.

Protective Coating - Concrete Bents and Piers (Urethane) shall not be applied on the FRP system.

SUBSTRUCTURE REPAIR & CONCRETE PROTECTIVE COATING DETAILS

Detailed May 2025
Checked May 2025

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

AMY E. SMITH
NUMBER
PE-2021015056
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	6

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45576

DESCRIPTION	DATE

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

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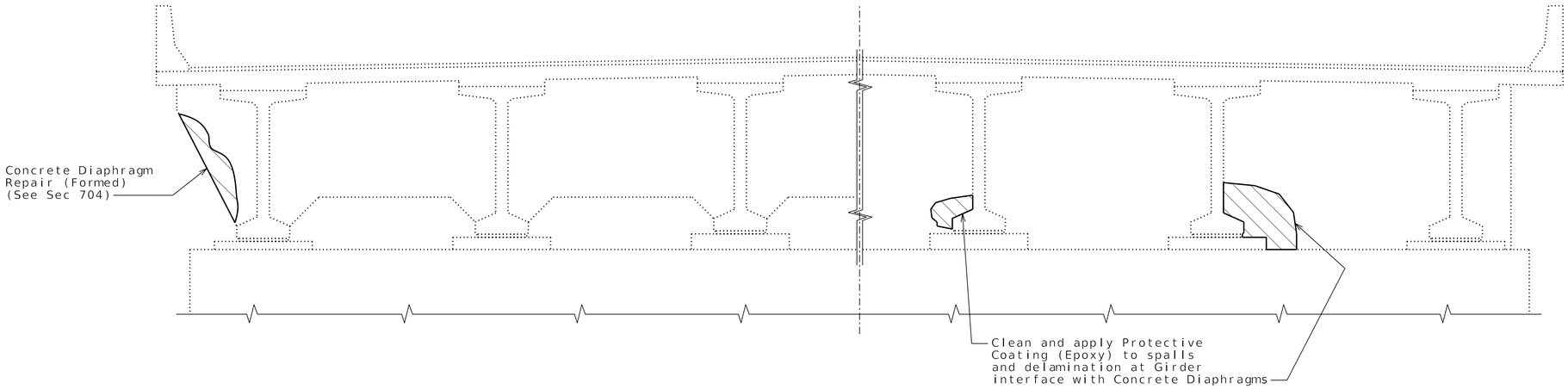
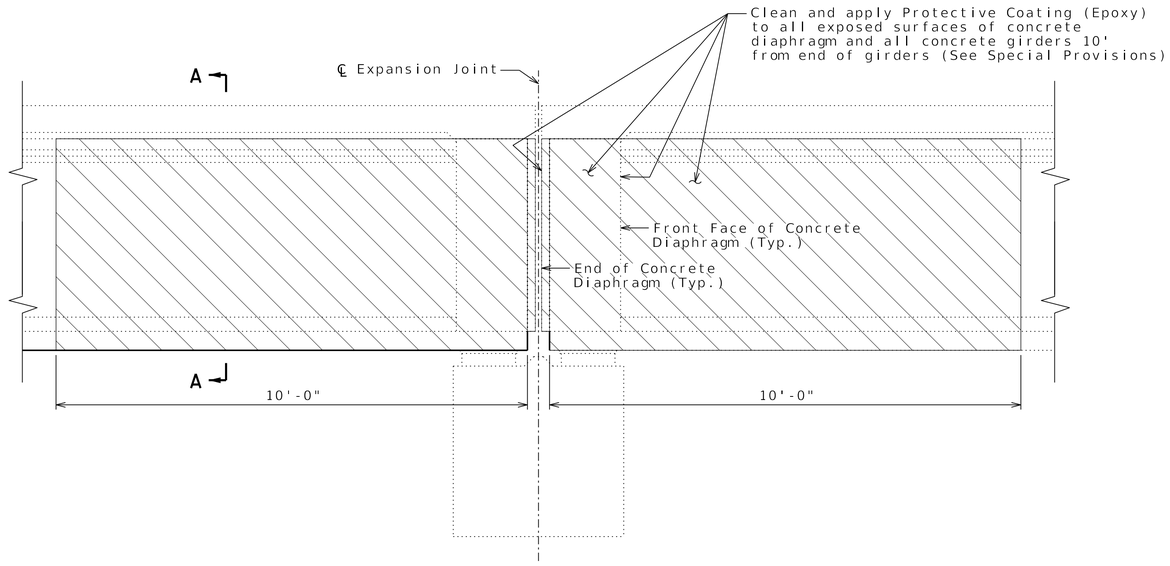


CONCRETE DIAPHRAGM REPAIR (FORMED)

(Bent 3 (3W) and Bent 4 (4W))

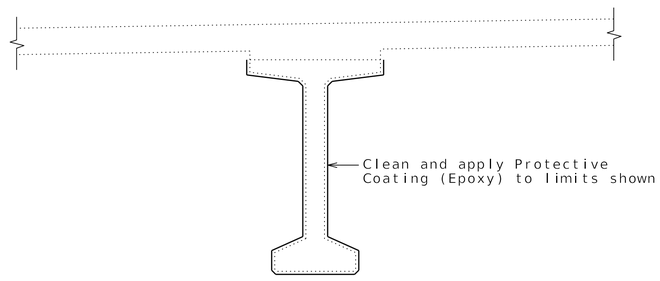
CLEAN AND PROTECTIVE COATING (EPOXY)

(Bents 2 (2W), 3 (3W), 5 (5W), 6 (6W), 7 (7W), 9 (9W), 10 (10W), 11 (11W), 17 (1E), 18 (2E), 20 (4E), 21 (5E) and 23 (7E))



DETAIL SHOWING LIMITS OF CLEANING AND PROTECTIVE COATING

(Bent 4 (4W), Bent 8 (8W), Bent 12 (1C), Bent 16 (5C), Bent 19 (3E) and Bent 22 (6E))



SECTION A-A

CONCRETE DIAPHRAGM REPAIR AND DIAPHRAGM AND GIRDER PROTECTIVE COATING DETAILS

Detailed May 2025
Checked May 2025

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STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO

DISTRICT	SHEET NO.
BR	7

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO.: J6P3554

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.: A45576

DESCRIPTION	DATE

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105 WEST CAPITOL
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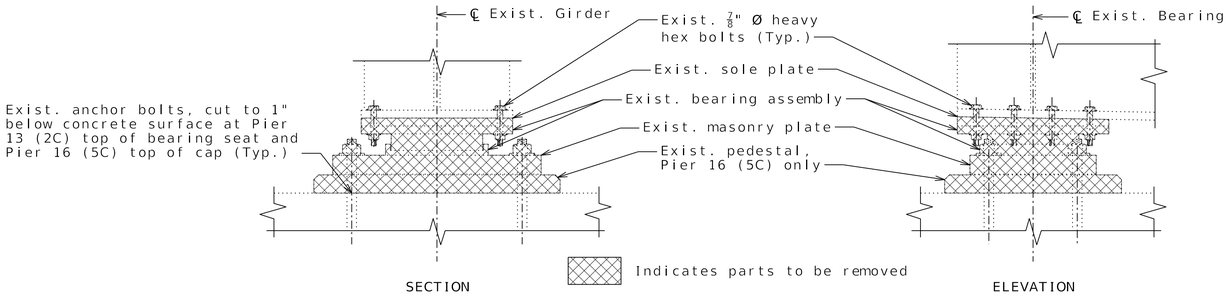
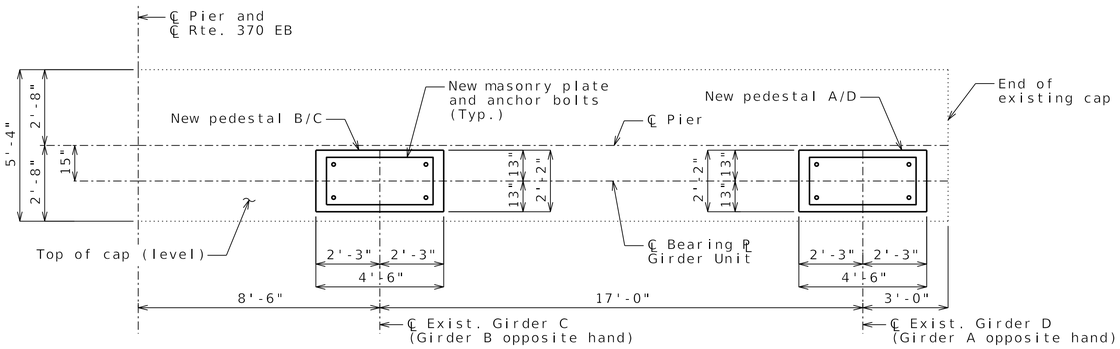
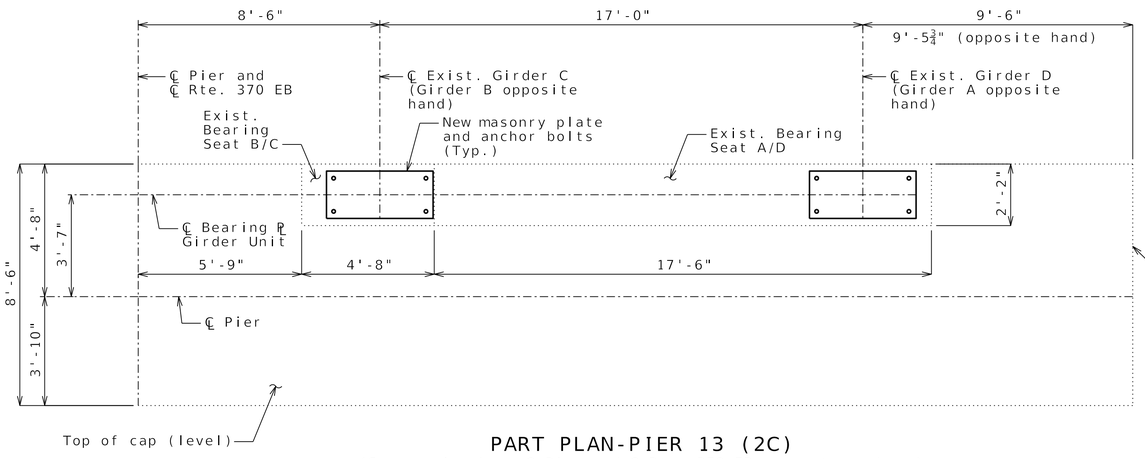


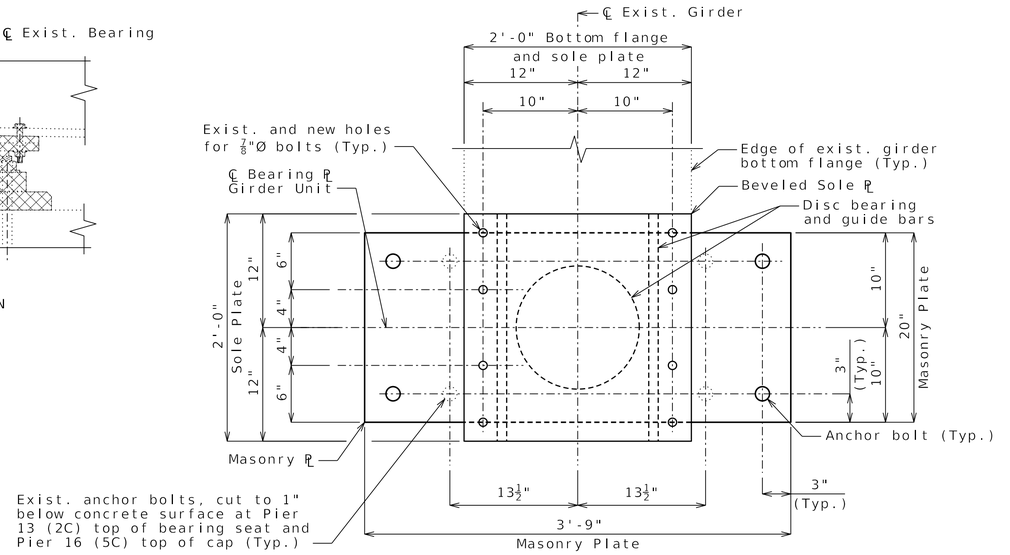
REMOVE EXISTING BEARINGS
(Piers 13 (2C) and 16 (5C))



PART PLAN-PIER 16 (5C)
(Symmetric about ℄ Pier and ℄ Rte. 370 EB)



PART PLAN-PIER 13 (2C)
(Symmetric about ℄ Pier and ℄ Rte. 370 EB, except as shown)

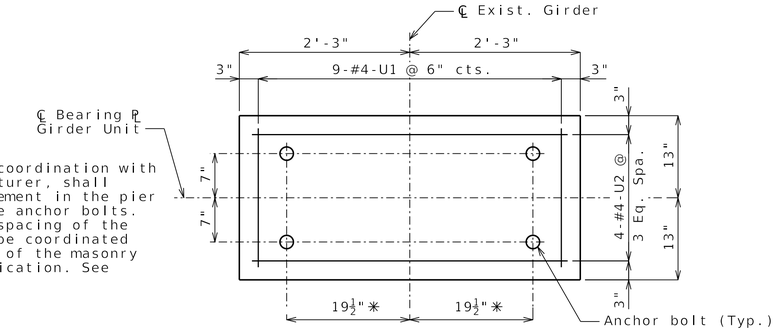


PART PLAN - BEARING

Beveled Sole Plates	
Location	Slope (Ft/Ft)
Pier 13 (2C)	-0.0090
Pier 16 (5C)	-0.0220

Girder Service (Unfactored) Bearing Reactions
(Per Girder) (kip)

Location	Girders	Dead Load	Live Load with Impact	Girders	Dead Load	Live Load with Impact
Pier 13 (2C)	A & D	168	167	B & C	214	209
Pier 16 (5C)	A & D	170	167	B & C	216	209



✳ The contractor, in coordination with the bearing manufacturer, shall locate the reinforcement in the pier caps adjacent to the anchor bolts. Adjustments to the spacing of the anchor bolts shall be coordinated with the dimensions of the masonry plate prior to fabrication. See Sheet No. 9.

PEDESTAL REINFORCING DETAIL
Note: Drill and grout #4-U bars 6" min. into top of cap.
U-Bars may be shifted 1/2" to miss exist. reinforcement.

Approx. Existing Pedestal/Bearing Seat Height (measured from top of cap)				
Location	Girders	Height	Girders	Height
Pier 13 (2C)	A & D	3'-2⅛"	B & C	3'-5⅜"
Pier 16 (5C)	A & D	4"	B & C	7¼"

Notes:

The above reactions are the maximum service bearing reactions.

Reactions shown include Dead Load of the existing structure and vehicular live load. Any additional Dead Load or Construction Live Load shall be determined by the contractor. Capacities of the jacks used to lift the bridge shall be at least 50% greater than those reactions and additional load determined by the contractor.

Jacking and replacement of bearings shall be performed one pier at a time.

The contractor shall submit a jacking sequence for approval.

The contractor shall be responsible for maintaining the stability of the structure at all times and shall take all necessary precautions to maintain the stability and safety of the existing bridge at the contractor's cost.

Remove existing bearing assembly, masonry plate, and sole plate. Remove existing concrete pedestals at Pier 16 (5C). Cut existing anchor bolts to 1" below top of bearing seat or top of cap. At Pier 13 (2C), fill holes with a special qualified mortar.

Sole plates shall be beveled to the slope shown above.

Existing pier caps are Class B Concrete, f'c = 3,000 psi.

The cost of all labor, materials, and equipment necessary for jacking the superstructure and removal of existing bearings will be considered completely covered by the contract price for Removal of Existing Bearings, per each.

HIGH LOAD MULTI-ROTATIONAL (HLMR) DISC BEARING RETROFIT DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/28/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 8
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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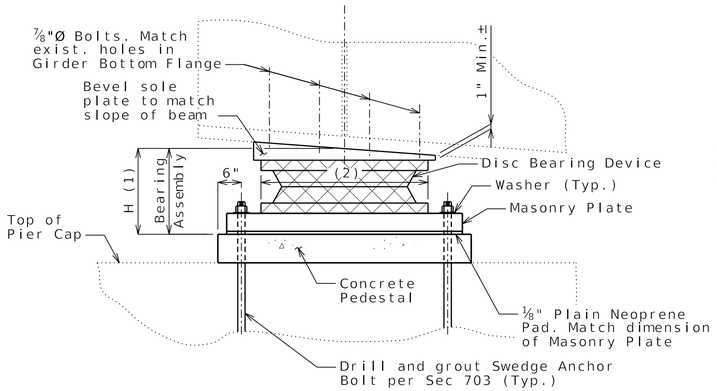
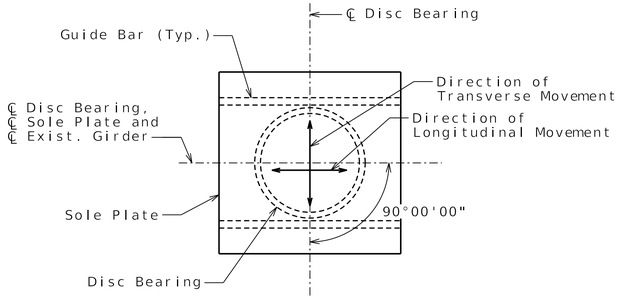
314-425-8300
Certificate of Authority: 000856



DISC BEARING ELEVATION



DISC BEARING PLAN

BEARING DATA TABLE

Location				Pier 13 (2C)	Pier 16 (5C)
Fix/Exp.				Exp.	Exp.
Quan. Req'd.				4	4
Design load (kip)	Service limit state	Vertical	max.	392	394
			perm.	214	216
			min.	188	191
		Transverse		39	39
		Longitudinal		0	0
	Strength limit state	Vertical		579	582
		Transverse		58	58
		Longitudinal		0	0
Translation	Service limit state	Transverse		0.22"	0.22"
		Longitudinal		3.92"	3.92"
	Strength limit state	Transverse		0.22"	0.22"
		Longitudinal		3.92"	3.92"
Rotation (rad.)	Service limit state	Transverse		0.01	0.01
		Longitudinal		0.0172	0.0175
One Way Longit. Movement (3)				3.61"	3.61"
(G) Guide Clearance (4)					
Masonry Plate	Lm				
	Wm				
	Tm				
Auxilliary Plate	La				
	Wa				
	Ta				
Sole Plate	Ls				
	Ws				
	T1				
	T2				
Dimension H				9"	9"
Anchor Bolts	d				
	Bolts / Brg.			4	4
Weld Size	W1				
	W2				

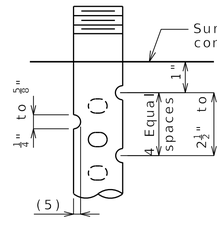
Notes:

T2 is upstation of T1.

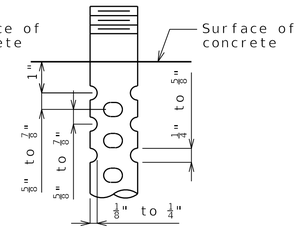
(3) One Way Longitudinal Movement is the maximum one way movement (expansion or contraction) of the superstructure when bearings are set at 70 degrees F plus 1" tolerance.

(4) On wide structures and on curved structures provisions shall be made for limited lateral movement.

Indicates parts designed by the manufacturer.



DETAIL FOR 3/4"Ø THRU 2 1/2"Ø ANCHOR BOLTS



OPTIONAL DETAIL FOR 1 3/8"Ø THRU 2 1/2"Ø ANCHOR BOLTS

SWEDGE ANCHOR BOLT DETAILS

(5) ⅛" for ¾"Ø thru 1¼"Ø anchor bolts

⅛" to ¼" for 1⅜"Ø thru 2½"Ø anchor bolts

GENERAL NOTES:

The bearing design shall conform to the Special Provisions and provisions of the latest edition of AASHTO LRFD Bridge Design Specifications.

The contractor, in coordination with the bearing manufacturer, shall be responsible for sizing the thickness of the sole plate and masonry plate and determining the size and length of the anchor bolts based on the load and movement capacities, indicated in the Bearing Data.

The contractor, in coordination with the bearing manufacturer, shall locate the reinforcement in the pier caps adjacent to the anchor bolts. Adjustments to the spacing of the anchor bolts shall be coordinated with the dimensions of the masonry plate prior to fabrication. See Sheet No. 8.

The contractor shall submit calculations sealed by a Professional Engineer, licensed in the state of Missouri, indicating conformance with design load and material criteria in the contract documents.

(1) Maximum vertical dimension of the complete bearing. If the actual bearing dimension differs, adjustments shall be made in the thickness of the sole plate, masonry plate and concrete pad as needed by the contractor at no additional cost to the owner. Contractor shall submit proposed method of adjustment to Engineer for approval.

(2) Estimated horizontal dimension of the disc bearing device. If the actual dimension differs, adjust the size of the sole plate and masonry plate as needed by the contractor at no additional cost to the owner.

The Dimension H in the Bearing Data Table represents the assumed total height of bearing mechanism including the sole plate and masonry plate per as-built plans and shop drawings.

The bearings shall be manufactured disc bearings, designed for the load and movement capacities indicated in the Bearing Data Table.

All expansion bearings shall have maximum friction coefficient of 3%.

Steel for disc bearings shall be AASHTO M270 Grade 50 and shall be galvanized. Steel for sole plate and masonry plates shall be AASHTO M270 Grade 50.

Anchor bolts shall conform to ASTM F1554 Grade 55. The anchor bolts shall be the swedge-type and shall have a minimum diameter of 1 1/2 inches. Swedging shall be 1 inch less than the extension into the concrete.

Anchor bolts shall be installed using a hardened steel washer at each exposed location.

Washers shall conform to ASTM F463.

Anchor bolts and hardened washers shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with Sec 1081.

Certified mill test reports, conforming to the requirements of the specifications, for the metals of the disc bearing device, sole plate, masonry plate and anchor bolts shall be submitted.

The masonry plate shall be prepared per the specifications and shop-coated with two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

The sole plate shall be prepared per the specifications and shop-coated with two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

The bearing device, sole plate and masonry plate shall be assembled in the shop and the bearing assembly shall be field bolted to the bottom flange of the steel girder. Bolts shall be 7/8" diameter ASTM F3125 Grade A325, galvanized in accordance with Sec. 1081.

After installation of the bearings, any uncoated or damaged surfaces of the masonry and sole plates shall be prepared in accordance with the specifications and field-coated with inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

After installation of the bearings and field-applied prime coats, the surfaces of the masonry and sole plates shall be field-coated with System I or System L finish coat.

All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow that points up-station. All marks shall be permanent and be visible after the bearing is installed.

The disc bearing device, sole plate, masonry plate, anchor bolts, washers, anchor bolt wells, grout, plain neoprene pad and any other appurtenances included in the fabrication and installation of the disc bearing device shall be incidental to the pay item High Load Multi-Rotational (HLMR) Disc Bearing Assembly, per each.

Whenever jacking of the superstructure is needed to reset the bearings, the contractor shall submit a jacking sequence for approval.

HIGH LOAD MULTI-ROTATIONAL (HLMR) DISC BEARING ASSEMBLY

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	9

COUNTY
ST. LOUIS/ ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45576

DESCRIPTION	DATE

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Girder Service (Unfactored) Bearing Reactions (Per Girder) (kip)			
Location	Girder	Dead Load	Live Load with Impact
4 (4W) west	Exterior (2)	98	112
4 (4W) west	Interior (2)	100	109
8 (8W) west	Exterior (2)	100	112
8(8W) west	Interior (2)	102	109
8 (8W) east	Exterior (2)	100	112
8 (8W) east	Interior (2)	102	109
22 (6E) east	D & E	111	112

(2) Maximum reaction for exterior and interior girders at bent.

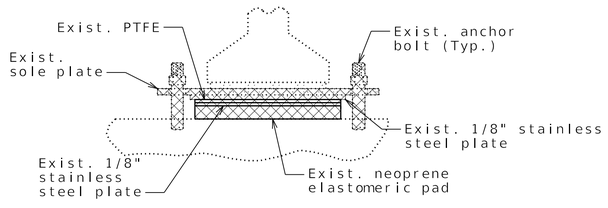
Notes:
The above reactions are the maximum service bearing reactions.

Reactions shown include in Dead Load of the existing structure and vehicular live load. Any additional Dead Load or Construction Live Load shall be determined by the contractor. Capacities of the jacks used to lift the bridge shall be at least 50% greater than those reactions and additional load determined by the contractor.

Jacking and replacement of bearings shall be performed one pier at a time.

The contractor shall submit a jacking sequence for approval.

The contractor shall be responsible for maintaining the stability of the structure at all times and shall take all necessary precautions to maintain the stability and safety of the existing bridge at the contractor's cost.



REMOVE EXISTING BEARINGS

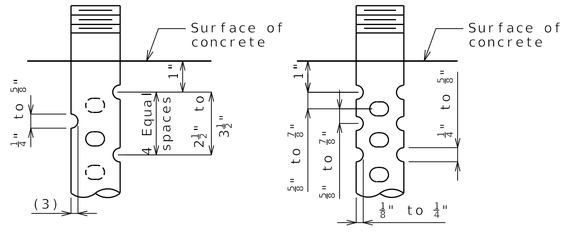
Notes:
Remove existing sole plate, stainless steel plate, neoprene elastomeric pad and stainless steel plate with bonded PTFE from the locations shown in the table PTFE SLIDING BEARINGS.

Grind existing weld at 1/2" embeded plate smooth.

Cut and core out existing anchor bolts and clean out holes for new anchor bolts.

Remove any reinforcing bars or steel angles previously welded to the bearing assembly to act as retainers. Grind tack weld locations smooth and cover with two coats of inorganic zinc primer.

The cost of all labor, materials, and equipment necessary for jacking the superstructure and removal of existing bearings will be considered completely covered by the contract price for Removal of Existing Bearings, per each.



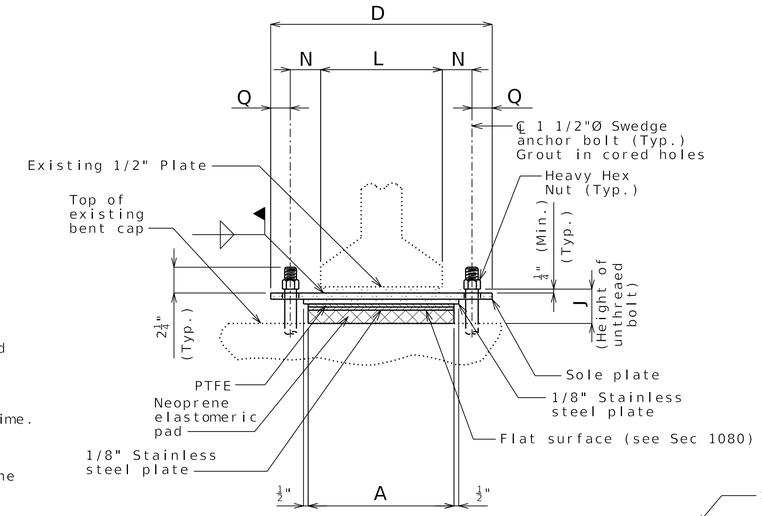
DETAIL FOR 3/4"Ø THRU 2 1/2"Ø ANCHOR BOLTS

OPTIONAL DETAIL FOR 1 3/8"Ø THRU 2 1/2"Ø ANCHOR BOLTS

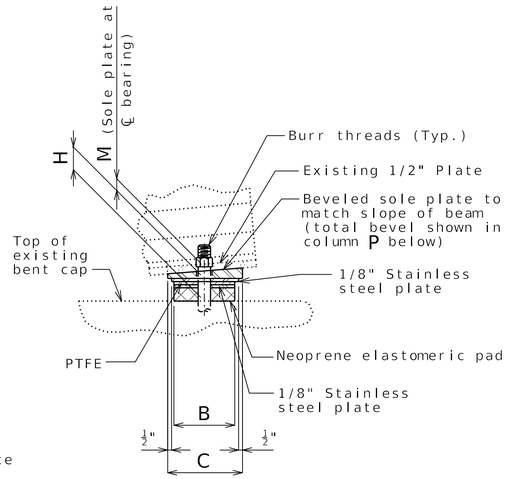
SWEDGE ANCHOR BOLT DETAILS

(3) ⅛" for ¾"Ø thru 1¼"Ø anchor bolts

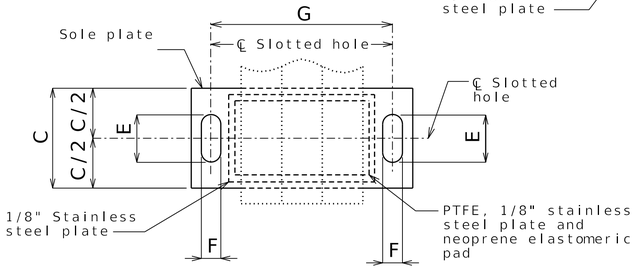
⅛" to ¼" for 1⅜"Ø thru 2½"Ø anchor bolts



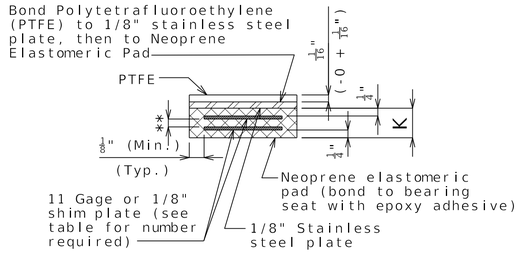
END VIEW



SIDE VIEW



PART PLAN



NEOPRENE ELASTOMERIC PAD

** Layers of 1/2" elastomeric pad alternating with 11 gage or 1/8" shim plate

∗ Existing dimension

PTFE SLIDING BEARINGS																	
BENT NO.	A	B	C	D	E	F	G	H	J	K	L∗	M	N	P	Q	NUMBER OF SHIM PLATES (1)	NUMBER REQUIRED
4 (4W) West	2'-4"	12"	16"	3'-2"	5½"	1⅝"	2'-9"	1 9/16"	3½"	1¼"	2'-2"	1½"	3½"	⅜"	2½"	2	8 (All)
8 (8W) West & East	2'-4"	12"	16"	3'-2"	5½"	1⅝"	2'-9"	1 9/16"	3½"	1¼"	2'-2"	1½"	3½"	¼"	2½"	2	14 (All)
22 (6E) East	2'-4"	12"	16"	3'-2"	5½"	1⅝"	2'-9"	1 9/16"	3½"	1¼"	2'-2"	1½"	3½"	⅜"	2½"	2	2 (Gdr. D & E)
																TOTAL BEARINGS	24

(1) The required shim plate shall be placed between layers of elastomer and molded together to form an integral unit.

GENERAL NOTES:

Design coefficient of friction equals 0.1691.

The bottom face of the 1/8" stainless steel plate that is welded to the sole plate shall be lubricated with a lubricant that is approved by the bearing manufacturer.

Neoprene Elastomeric Pads shall be 70 Durometer.

Type N PTFE Bearings shall be in accordance with Sec 716.

PTFE surface shall be fabricated as a single piece. Splicing will not be permitted.

The PTFE surface shall be flat.

Coat weld between sole plate and embedded plate with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

Cost of furnishing Type N PTFE Bearing, complete in place, including any incidental materials, will be considered completely covered by the contract unit price Type N PTFE Bearing per each.

Anchor bolts shall be 1 1/2"Ø ASTM F1554 Grade 55 swedged bolts and shall extend 15" into the concrete with ASTM A563 Grade DH Heavy Hex nuts. Actual manufacturer's certified mill test reports (chemical and mechanical) shall be provided. Swedging shall be 1" less than extension into the concrete.

Anchor bolts and heavy hex nuts shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with Sec 1081.

Structural steel for sole plate shall be ASTM A709 Grade 36 and shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum. The stainless steel plate shall be protected from any coating.

TYPE N PTFE BEARINGS

Detailed May 2025
Checked May 2025

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

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AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
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DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 10
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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HDR Engineering, Inc.
401 S. 18th Street
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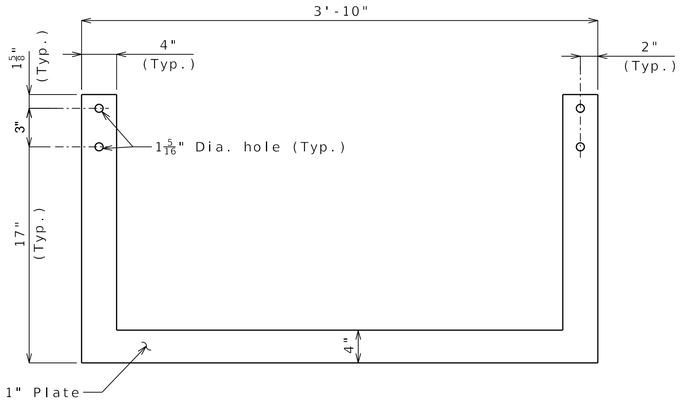
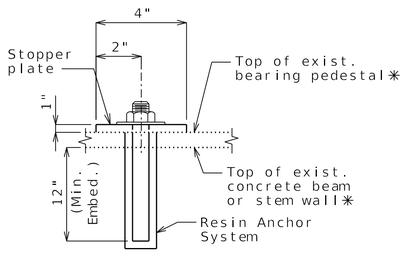
314-425-8300
Certificate of Authority: 000856

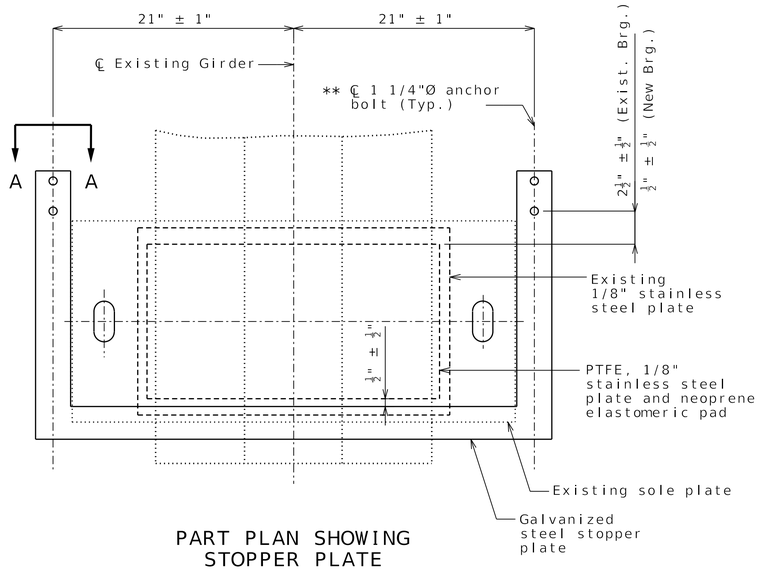


PLAN OF GALVANIZED
STOPPER PLATE



SECTION A-A

✳Bearing pedestals at Bents 4 (4W), 8 (8W), 19 (3E), and 22 (6E). Stem wall at Piers 12 (1C) and 16 (5C).



PART PLAN SHOWING
STOPPER PLATE

STOPPER PLATE - BEARING RETAINER RETROFIT	
Bent No. / Location	Number of Steel Stopper Plates
4 (4W) West	8
4 (4W) East	7
8 (8W) West & East	14
12 (1C) West	6
16 (5C) East	6
19 (3E) West & East	12
22 (6E) West & East	12
Total	65

** The contractor shall locate the reinforcement in the bent cap prior to drilling holes for anchor bolts. Adjust placement of stopper plate within the 1/2" ± longitudinal and 1" ± transverse tolerances shown to clear reinforcement. Install only 1 anchor bolt per leg in the hole that provides clearance to reinforcement.

Notes:

Structural steel for the stopper plate shall be ASTM A709 Grade 36 and shall be galvanized in accordance with ASTM A123 and Sec 1081.

Anchor bolts shall be 1 1/4"ø ASTM F1554 Grade 55 with heavy hex nut and hardened washer.

Anchor bolts, hardened washers and heavy hex nuts shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec. 1039.

The minimum embedment depth in concrete with f'c = 3,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec. 1039, but not less than shown.

Stopper plates shall be provided to prevent loss of support due to creeping of PTFE bearings at all bearing locations noted in the Table for Stopper Plate - Bearing Retainer Retrofit. Payment for fabricating and installing the stopper plates will be considered completely covered by the contract unit price for Bearing Retainer Retrofit per each.

Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Bearing Retainer Retrofit per each.

BEARING RETAINER RETROFIT DETAILS

Detailed May 2025
Checked May 2025

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

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DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	11

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION	DATE

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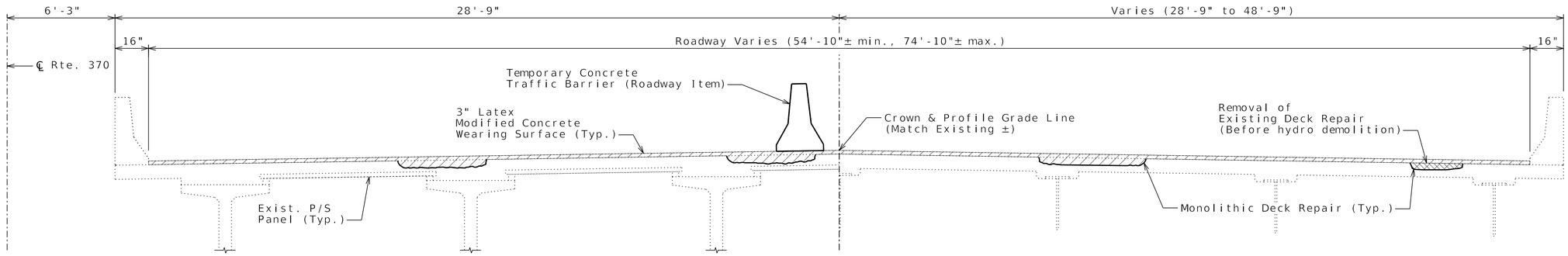
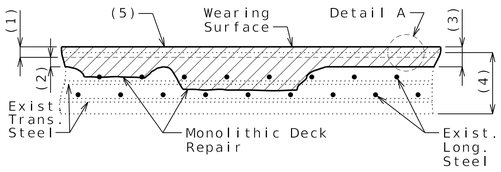


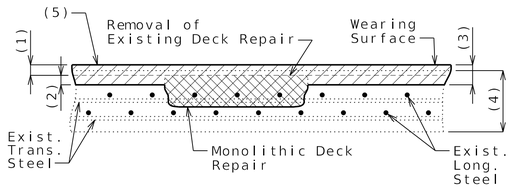
UNITS 1-3 AND 6-8 PRESTRESSED CONCRETE BULB-TEE GIRDER SECTION

UNIT 4 SIMPLE THRU TRUSS (SHOWN) AND UNIT 5 CONTINUOUS COMPOSITE PLATE GIRDER SECTION

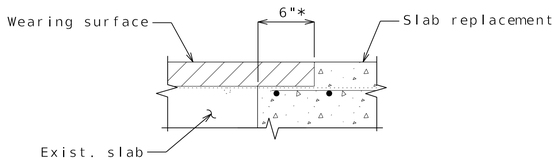
TYPICAL SECTION THRU EXISTING DECK



MONOLITHIC DECK REPAIR
(Cast-in-place deck from Units 4-5 shown, Prestress Panel Deck in Units 1-3 and 6-8 similar)

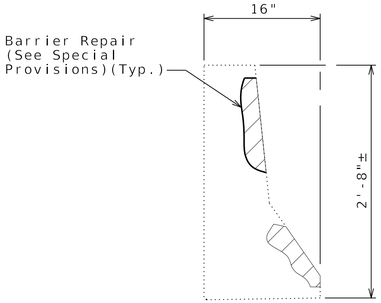


REMOVAL OF EXISTING DECK REPAIR BEFORE HYDRO DEMOLITION
(Cast-in-place deck from Units 4-5 shown, Prestress Panel Deck in Units 1-3 and 6-8 similar)

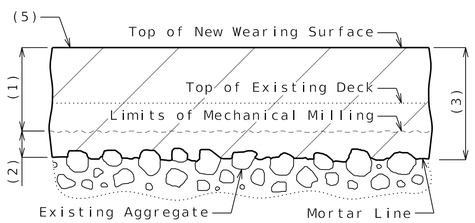


* Overlap Latex Modified Concrete Wearing Surface as shown at all slab replacement locations

SECTION THRU SLAB REPLACEMENT AT EXPANSION JOINTS



SECTION THRU BARRIER



MILLING AND HYDRO DEMOLITION LIMITS

DETAIL A

(1) Removal of existing 2 1/4"± Low Slump Concrete wearing surface plus 1/4" of existing deck.

(2) 1/2" minimum total surface hydro demolition of sound concrete, measured to mortar line.

(3) 3" minimum Latex Modified concrete wearing surface.

(4) Original depth of deck minus previous scarification.

(5) Diamond Grind new wearing surface. See Special Provisions.

Notes:

For Staging Plans, see Sheet No. 4.

Unformed Barrier Repair may utilize shotcrete concrete repair method. See Special Provisions.

DECK AND BARRIER REPAIR DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

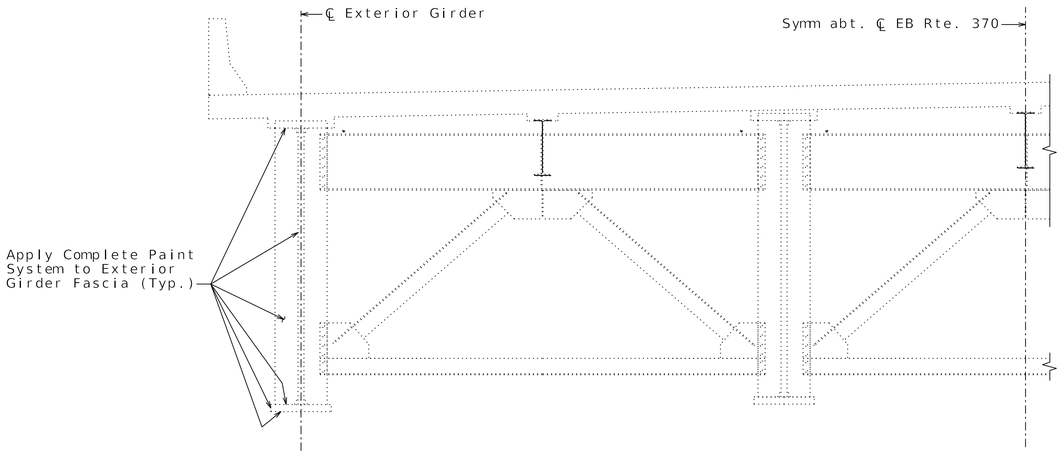
DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 12
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION | DATE

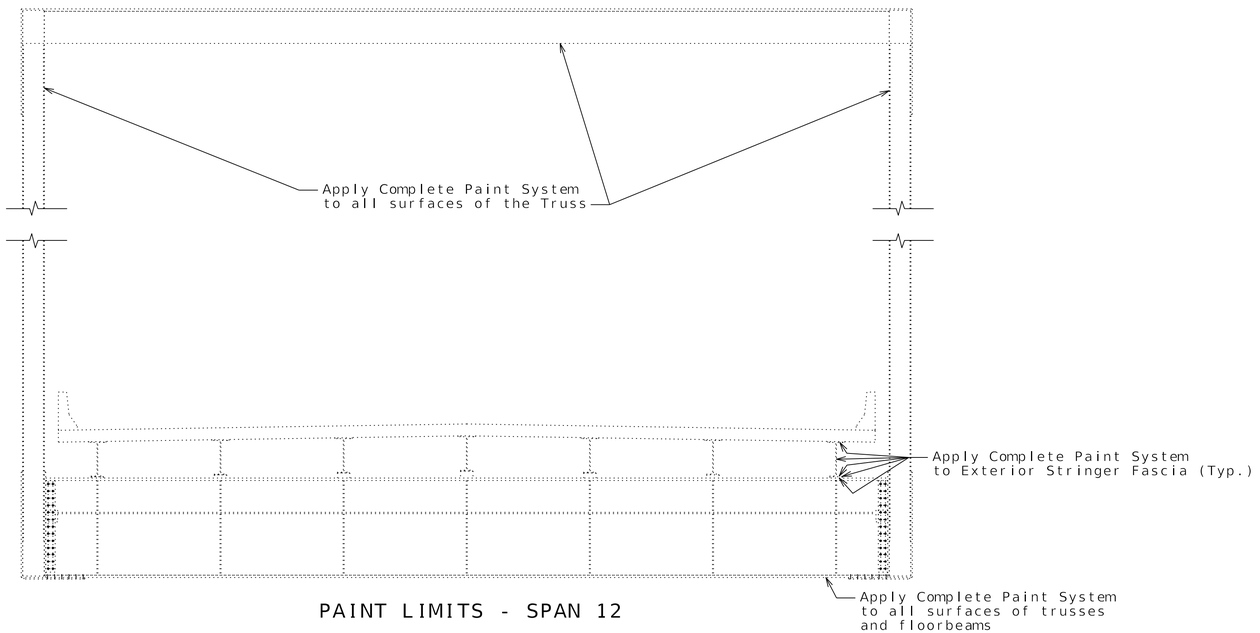
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



PAINT LIMITS - SPAN 13 THRU 15



PAINT LIMITS - SPAN 12

STEEL PROTECTIVE COATING LIMITS

Notes:

At the contractor's option, Paint Alternate 1 - Finish Field Coat (System I) or Paint Alternate 2 - Finish Field Coat (System L) may be used, see Special Provisions. Only one paint system shall be used for the entirety of the bridge.

Paint Limits:

All existing structural steel surfaces shall receive surface preparation for recoating structural steel and application of inorganic zinc primer. Inorganic zinc primer will be required. Organic zinc primer will not be allowed.

Span 12 Truss:
Complete paint system shall be applied to all structural steel surfaces of trusses and floorbeams.

Span 12 Truss Floor Systems:
Complete paint system shall be applied to the Exterior Stringer Fascia including the bottom of the top exterior flange, the top of the bottom exterior flange, the exterior web area, and the exterior face and bottom of the bottom flange.

Span 13 thru 15 Cont. Plate Girder Unit:
Complete paint system shall be applied to the exterior girder fascia including the bottom of the top exterior flange, the top of the bottom exterior flange, the exterior web and bearing stiffener area, the exterior face of the bottom flange and the bottom of the bottom flange. See Sheet No. 9 for protective coating requirements for the HLMR Disc Bearing Assemblies.

Near Expansion Devices:
Complete paint system shall be applied to all structural steel within a distance of not less than 10 feet from the centerline of all expansion joints including truss bearings at Piers 12 (1C) and 13 (2C).

STATE OF MISSOURI
AMY E. SMITH
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PE-2021015056
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	13

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION	DATE

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JEFFERSON CITY, MO 65102
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314-425-8300
Certificate of Authority: 000856

Detailed May 2025
Checked May 2025

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

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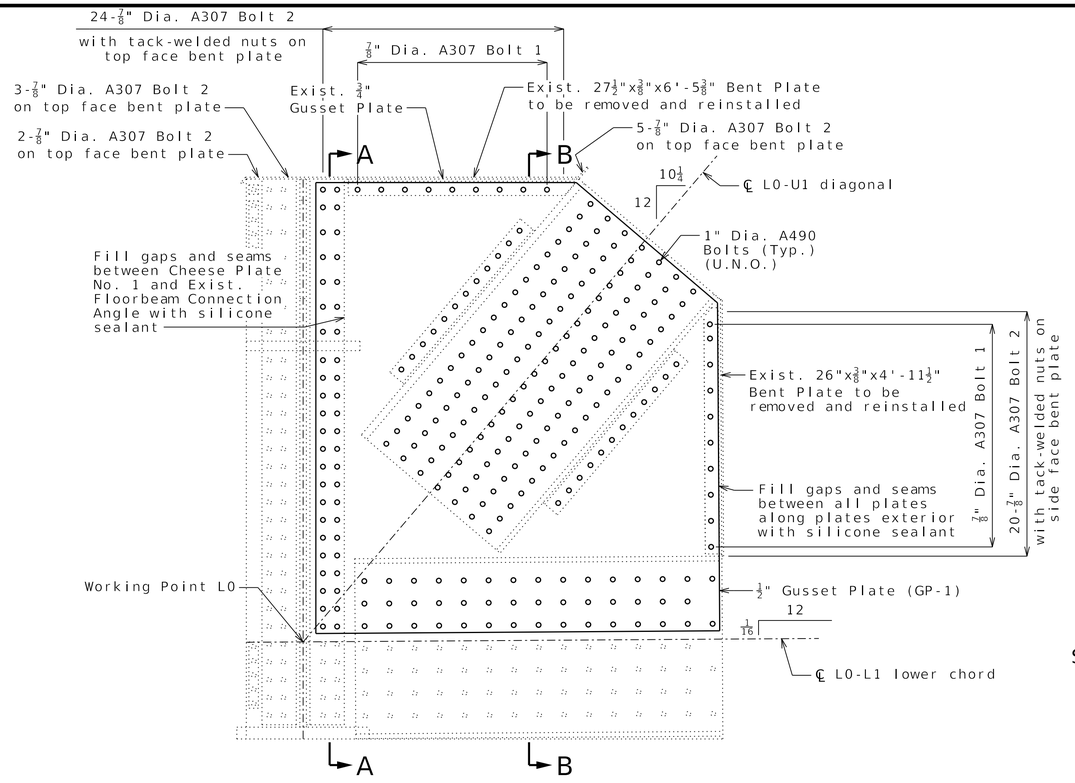


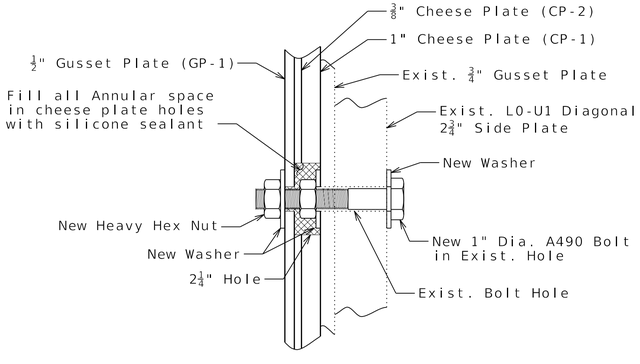
L0 INSIDE FACE GUSSET

(Cheese Plate not shown for clarity, see Sheet No.15)

LEGEND

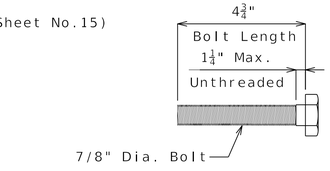
- Existing bolt to remain
- Existing bolt holes filled with new 7/8" Dia. A307 or 1" Dia. A490 Bolt

U.N.O. = Unless noted otherwise

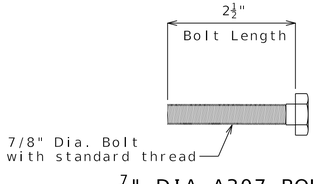


BOLT INSTALLATION DETAIL - INSIDE FACE

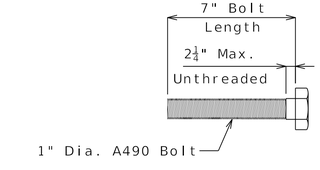
(Bolt installation at existing diagonal shown, bolt installation at other locations similar)



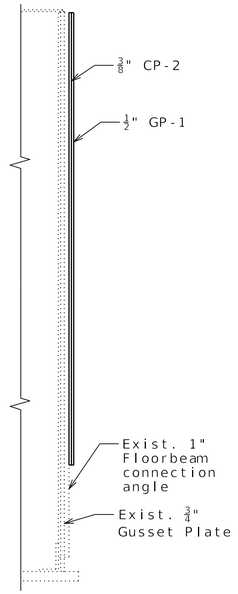
7/8" DIA A307 BOLT 1



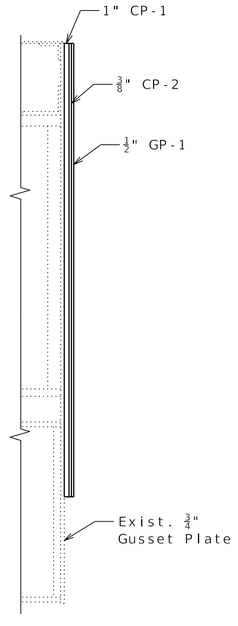
7/8" DIA A307 BOLT 2



1" DIA A490 BOLT



SECTION A-A



SECTION B-B

GUSSET PLATE L0 RETROFIT

BOLT REMOVAL AND REPLACEMENT PROCEDURE

1) Remove the existing bent plates as shown in L0 Gusset Details to facilitate access for gusset retrofit.

2) Remove individual existing bolts at locations as shown in the L0 Gusset Details. The removal and replacement of the existing bolts in the L0-U1 diagonal and the L0-L1 lower chord shall be completed in their entirety completely separate from each other. The option to complete the bolt replacement of the diagonal or the lower chord first shall be left up to the contractor. The bolts in the L0-U1 diagonal shall be removed symmetrically about centerline of the member.

3) Install new bolt with nut and washers in the existing bolt holes.

4) Tighten nut to 30 kips of pretension on the bolt. At no time shall more than 7 existing bolt holes (one row) for the L0-U1 diagonal and 6 existing bolt holes (two rows) for the L0-L1 lower chord remain void of a new pretensioned high strength bolt. The bolts in the L0-U1 diagonal shall be replaced symmetrically about centerline of the member.

5) Repeat steps 1-4 on up to a maximum of 7 bolts at a time for the L0-U1 diagonal or 6 bolts for the L0-L1 lower chord until all bolts as shown in these plans have been replaced.

6) Following the removal and replacement of all L0-U1 and L0-L1 bolts as indicated in steps 1-5, the remaining bolts along the vertical face of the L0 Gusset shall be removed and replaced.

PLATE INSTALLLATION PROCEDURE

1) Following the bolt removal and replacement, all existing L0 Gusset structural steel shall receive surface preparation for recoating structural steel and application of inorganic zinc primer. Inorganic zinc primer will be required. Organic zinc primer will not be allowed.

2) For inside face, install CP-1 prior to the installation of CP-2. For outside face install CP-3.

3) Fill all annular spaces in cheese plate holes, as well as gaps and seams between all plates, with silicone sealant.

4) Install GP-1 for inside face or GP-2 for outside face, and install washer and nut on bolts. See Bolt Installation Detail. Tighten bolts to full pre-tension force.

5) Remove existing tack-welded nuts at the bent plate connections. Smooth and clean interior face of connection angles with hand tools. Install new nuts on interior side of angles by tack welding. Reinstall existing bent plates with new 7/8" Dia. A307 bolts. Install bolts to snug-tight.

6) After installation, apply silicone sealant to fill gaps between plates along the exterior of the plates; clean and apply final field coat of paint to all new plates and bolts.

General Notes:

Gusset plate retrofit for all L0 locations in EB Bridge shall be completed during Stages 2A and 2B construction.

Bolt removals shall not start on L0 Right Truss until L0 Left Truss gusset plate retrofit has been completed or vice versa. Bolt removals shall not start on outside gusset plate retrofit until inside gusset plate retrofit has been completed or vice versa.

All measurements are based on as-built plans. Contractor shall verify all dimensions in field before ordering materials.

Use care when removing portions of the existing bridge so as to not damage the remaining parts of the structure. At the direction of the Engineer, replace or repair all parts of the structure which are designated to remain and are damaged during the removal operations at the direction of the Engineer at no cost to the State.

The contractor is responsible for safely and adequately supporting all existing and new structural steel elements during their full or partial removal, shipping, handling and erection, such that allowable stresses, in accordance with AASHTO Specifications, are not exceeded.

Stability of existing structural members is to be maintained by the contractor during erection, until all steel members are in place and all bolts properly installed. Loads for Bolt Removal and Replacement Procedure include dead load of existing structure and staged live load. Any additional dead load or construction live load determined by the contractor shall be submitted to the Engineer for evaluation prior to beginning bolt removal and replacement.

Structural steel for gusset and cheese plates shall be ASTM A709 Grade 50 and shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

Gusset plate retrofit connections shall be made with 1" diameter ASTM F3125 Grade A490 Type 1 bolts with additional threads, or 7/8" diameter ASTM A307 Grade A bolts, as shown on the plans.

Seal assembled structural steel members from external moisture as directed in the plans with a silicone sealant. The silicone sealant shall be fully covered by the contract unit price for Gusset Plate L0 Retrofit. Silicone sealant shall be in accordance with Sec 1057.11.

ESTIMATED L0 INSIDE GUSSET RETROFIT QUANTITIES

(FOR INFORMATION ONLY)

Item		Quantity
Fabricated Structural Low Alloy Steel (Misc.)	pound	3970
1" Dia. A490 High Strength Bolt	each	254
7/8" Dia. A307 Bolt 1	each	19
7/8" Dia. A307 Bolt 2	each	54
Exist. 1" Dia. Bolts to be Removed	each	254
Exist. 7/8" Dia. Bolts to be Removed	each	73

The above table of estimated quantities represents the quantities used by the State in preparing the cost estimate for the L0 Gusset retrofit. Payment for furnishing all materials and labor necessary to install gusset plate retrofits, complete in place, will be considered completely covered by the contract unit price for Gusset Plate L0 Retrofit per each. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	14

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45576

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Detailed May 2025
Checked May 2025

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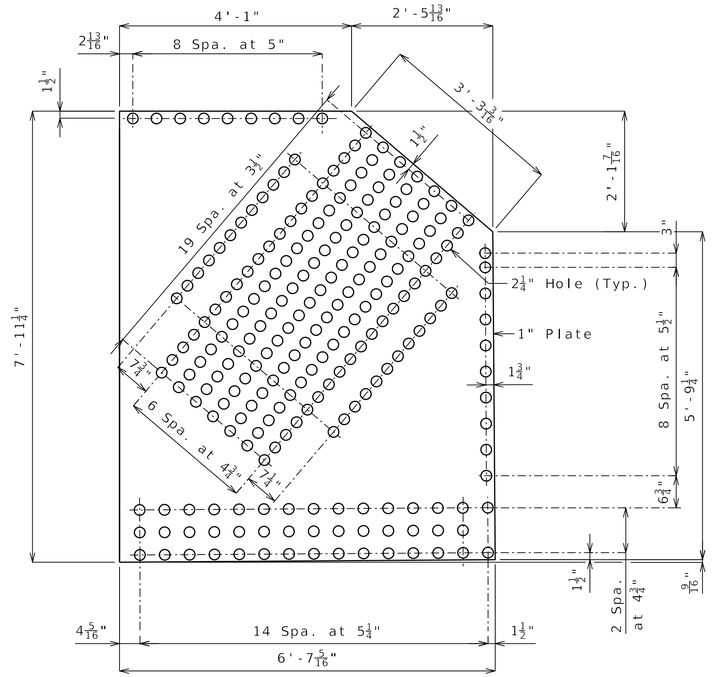
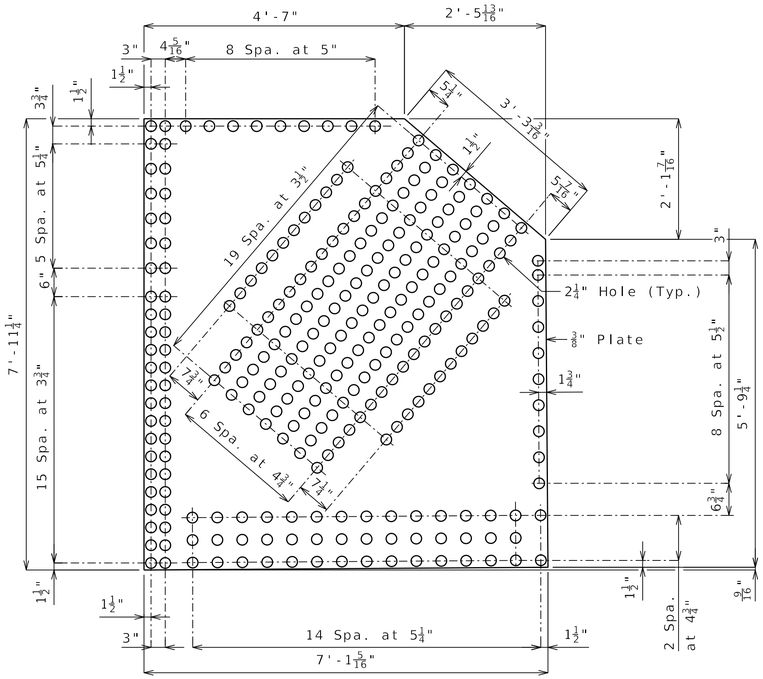
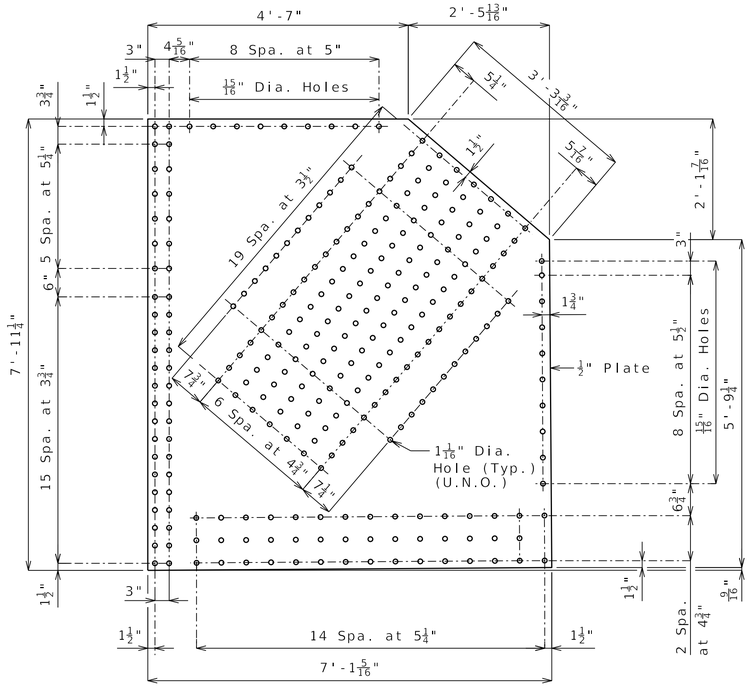


L0 INSIDE CHEESE PLATE NO. 1 (CP-1)



L0 INSIDE CHEESE PLATE NO. 2 (CP-2)



L0 INSIDE GUSSET PLATE RETROFIT (GP-1)

Notes:

For Bolt Removal and Replacement Procedure and for Plate Installation Procedure, see Sheet No. 14.

For Gusset Plate L0 Retrofit details and general notes, see Sheet No. 14.

U.N.O. = Unless noted otherwise.

GUSSET PLATE L0 RETROFIT

Detailed May 2025
Checked May 2025

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STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
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ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	15

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DATE	DESCRIPTION

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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
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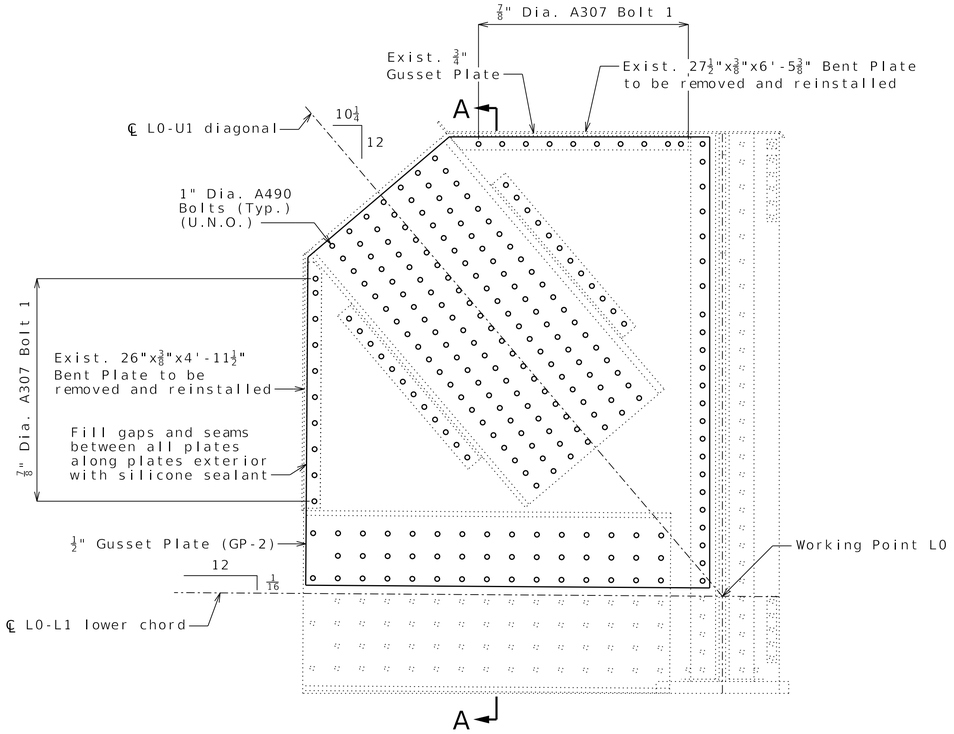


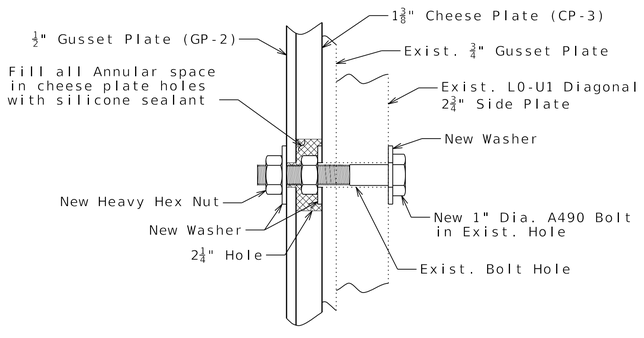
L0 OUTSIDE FACE GUSSET

(Cheese Plate not shown for clarity, see Sheet No.17)

LEGEND

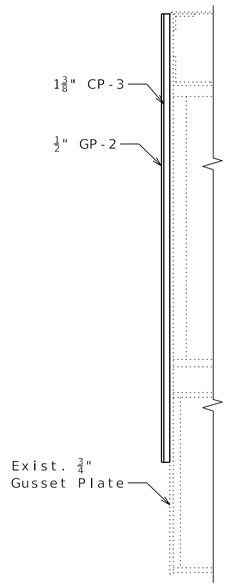
- Existing bolt to remain
- Existing bolt holes filled with new 7/8" Dia. A307 or 1" Dia. A490 Bolt

U.N.O. = Unless noted otherwise



BOLT INSTALLATION DETAIL - OUTSIDE FACE

(Bolt installation at existing diagonal shown, bolt installation at other locations similar)



SECTION A-A

Notes:

For Bolt Removal and Replacement Procedure and Plate Installation Procedure, see Sheet No. 14.

For general notes, see Sheet No. 14.

ESTIMATED L0 OUTSIDE GUSSET RETROFIT QUANTITIES
(FOR INFORMATION ONLY)

Item		Quantity
Fabricated Structural Low Alloy Steel (Misc.)	pound	4090
1" Dia. A490 High Strength Bolt	each	231
7/8" Dia. A307 Bolt 1	each	20
Exist. 1" Dia. Bolts to be Removed	each	231
Exist. 7/8" Dia. Bolts to be Removed	each	20

The above table of estimated quantities represents the quantities used by the State in preparing the cost estimate for the L0 Gusset retrofit. Payment for furnishing all materials and labor necessary to install gusset plate retrofits, complete in place, will be considered completely covered by the contract unit price for Gusset Plate L0 Retrofit per each. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

GUSSET PLATE L0 RETROFIT

Detailed May 2025
Checked May 2025

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STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	16

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION	DATE

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

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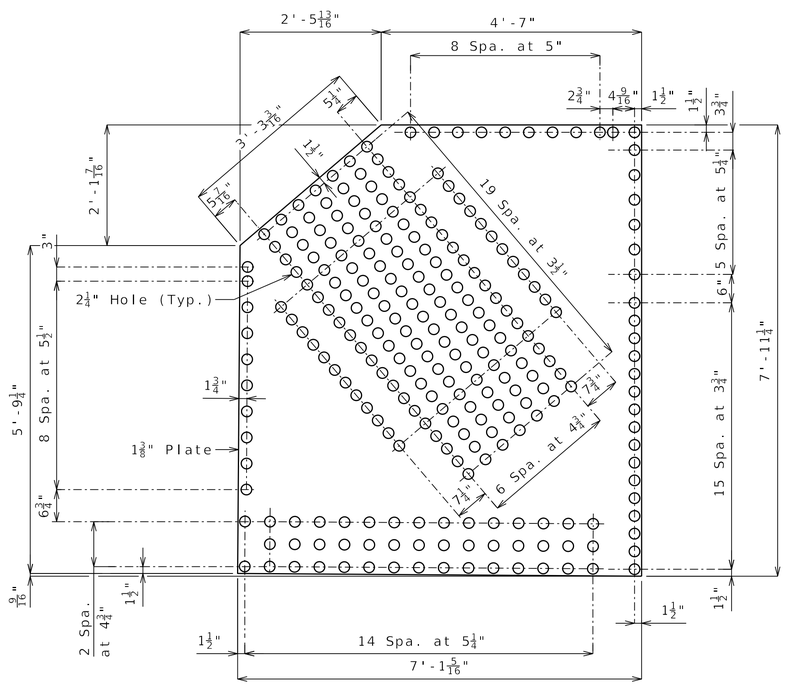
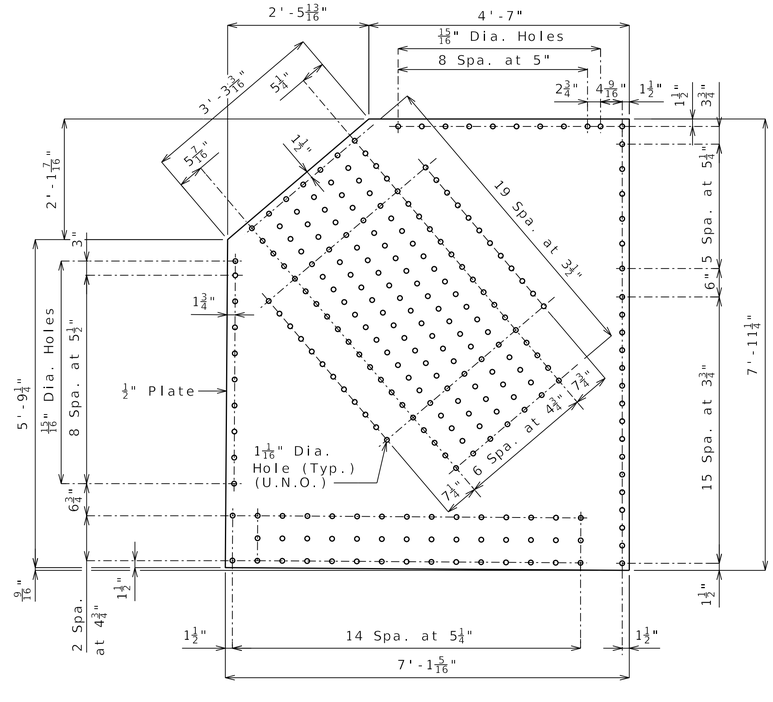


L0 OUTSIDE CHEESE PLATE NO. 3 (CP-3)



L0 OUTSIDE GUSSET PLATE RETROFIT (GP-2)

Notes:

For Bolt Removal and Replacement Procedure and Plate Installation Procedure, see Sheet No. 14.

For general notes, see Sheet No. 14.

For Gusset Plate L0 Retrofit details, see Sheet No. 16.

U.N.O. = Unless noted otherwise.

GUSSET PLATE L0 RETROFIT

Detailed May 2025
Checked May 2025

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ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 17
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

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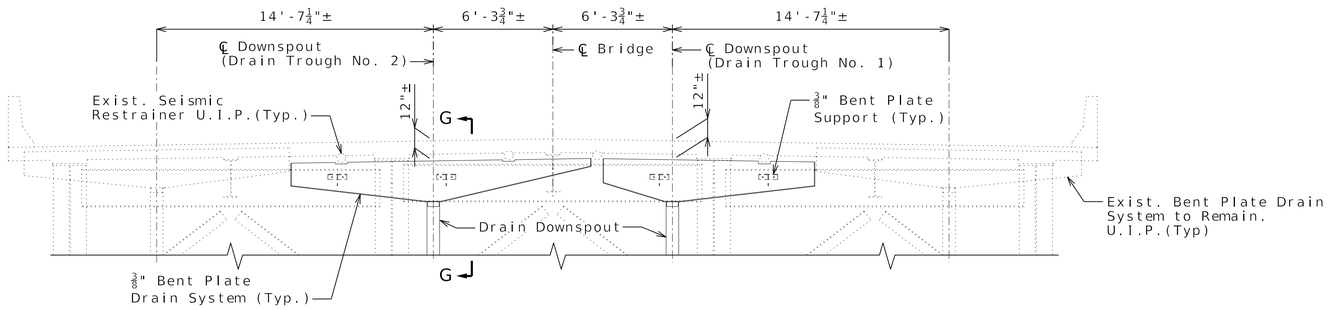
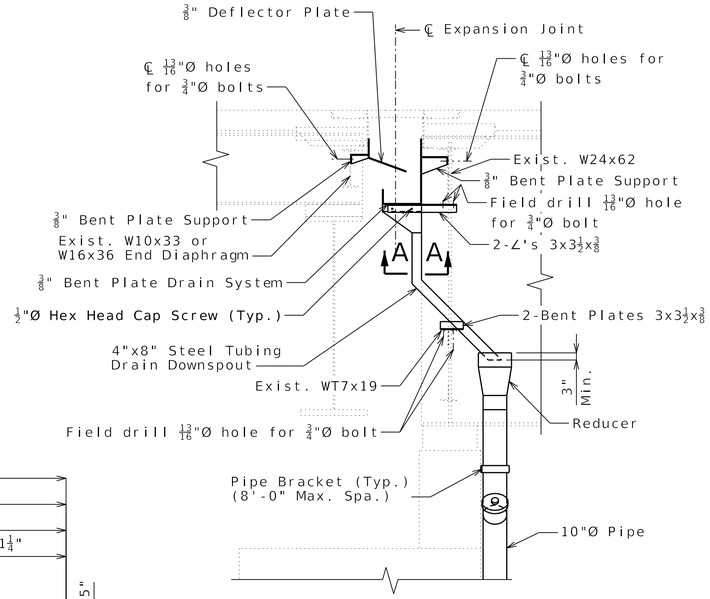
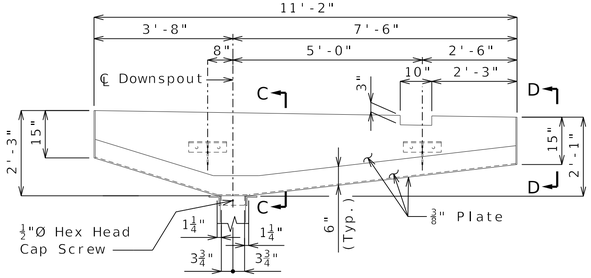


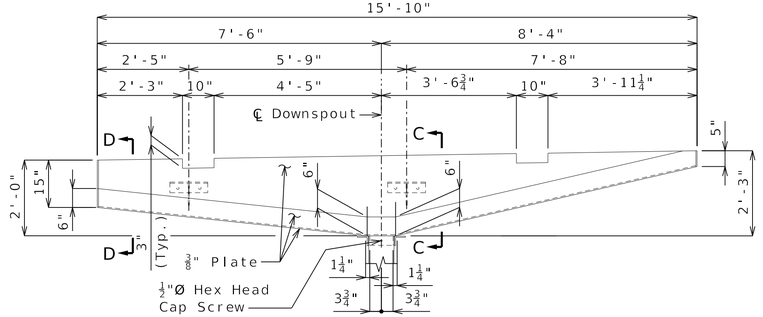
PROPOSED DRAIN DOWNSPOUT PIPING DETAIL - PIER 13 (2C)
(Looking Ahead Station)



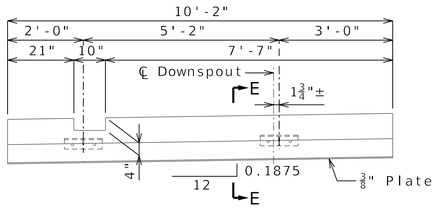
SECTION G-G



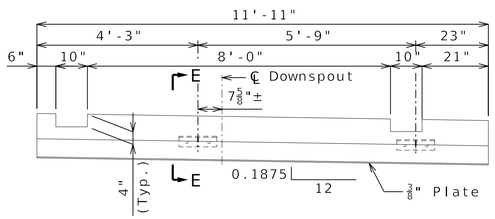
PROPOSED DRAIN TROUGH NO. 1 DETAIL
(Looking Ahead Station)



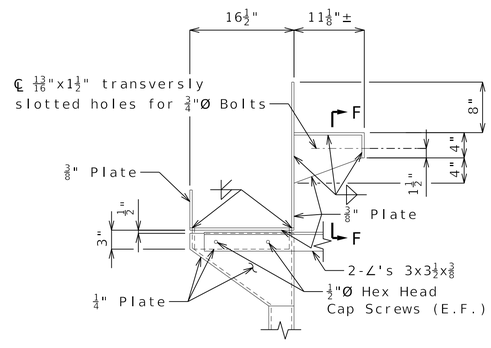
PROPOSED DRAIN TROUGH NO. 2 DETAIL
(Looking Ahead Station)



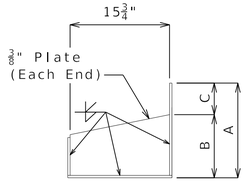
PROPOSED DEFLECTOR PLATE NO. 1 DETAIL
(Looking Back Station)



PROPOSED DEFLECTOR PLATE NO. 2 DETAIL
(Looking Back Station)

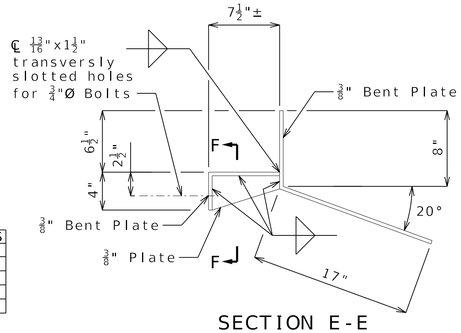


SECTION C-C

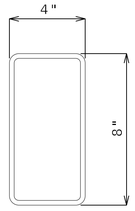


SECTION D-D

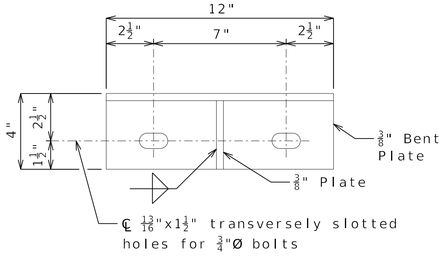
LOCATION	DIMENSIONS		
	A	B	C
Drain Trough No. 1 (Left)	15"	10"	5"
Drain Trough No. 1 (Right)	15"	10"	5"
Drain Trough No. 2 (Right)	5"	5"	0"
Drain Trough No. 2 (Left)	15"	10"	5"



SECTION E-E



SECTION A-A



SECTION F-F

Notes:

All structural steel for the Bent Plate Drain System and Supports shall be ASTM A709 Grade 36 except tubing shall be ASTM A500 or A501.

All structural steel for the Bent Plate Drain System shall be galvanized in accordance with ASTM A123.

All fasteners shall be galvanized in accordance with AASHTO M232 (ASTM A153), Class C.

Bent Plate Support connections to the existing diaphragms shall be made with 3/4" dia. ASTM F3125 Grade A325 Type 1 bolts, nuts and washers.

The cost of all labor, materials, and equipment necessary to complete the installation of the drainage modifications will be considered completely covered by the contract lump sum price for Drainage Modifications.

Contractor to verify all dimensions in the field before ordering materials.

DRAINAGE MODIFICATIONS AT PIER 13 (2C)

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

Detailed May 2025
Checked May 2025

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	18

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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HDR Engineering, Inc.
401 S. 18th Street
Suite 300
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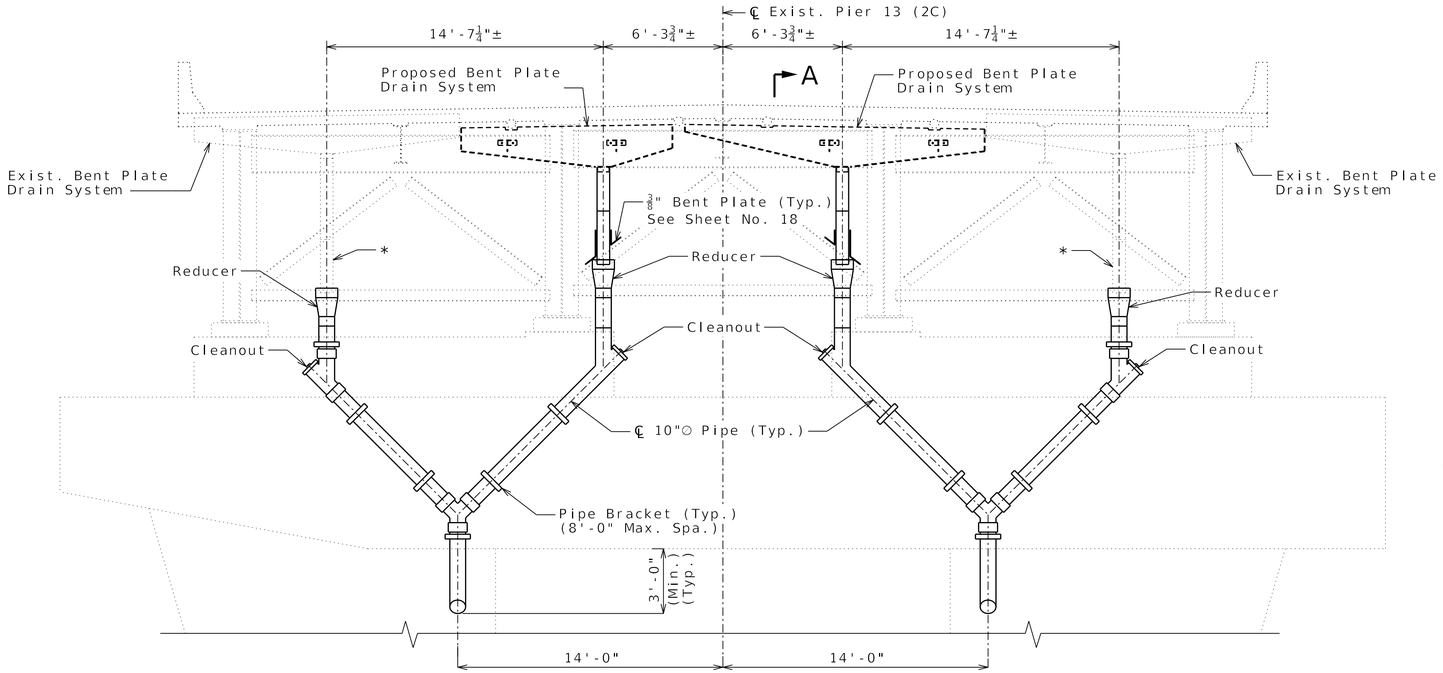
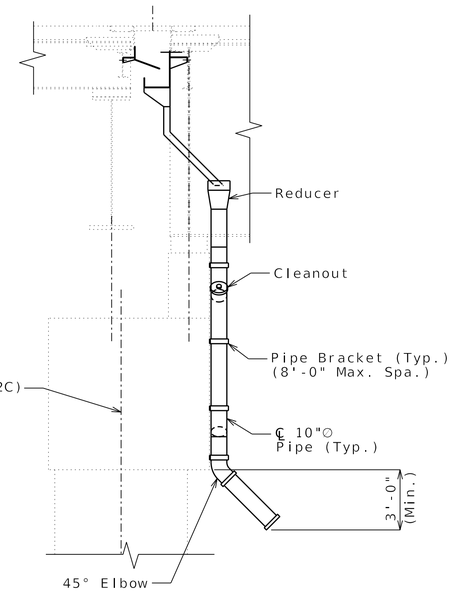
314-425-8300
Certificate of Authority: 000856



PIER 13 (2C) ELEVATION
(Looking Back Station)

* Contractor to modify exist. downspout as needed to connect to proposed system.



SECTION A-A

Notes:

For proposed Bent Plate Drainage System details, see Sheet No. 18.

Drainage system shall be fabricated from Reinforced Thermosetting Resin Pipe (RTRP) in accordance with the Special Provisions.

Contractor shall verify all dimensions in field before ordering materials.

All equipment, labor, and materials necessary to install the drainage collection piping and support pieces will be completely covered by the contract lump sum price for Drainage Modifications.

DRAINAGE MODIFICATIONS AT PIER 13 (2C)

Detailed May 2025
Checked May 2025

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

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AMY E. SMITH
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370	MO
DISTRICT	SHEET NO.
BR	19

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

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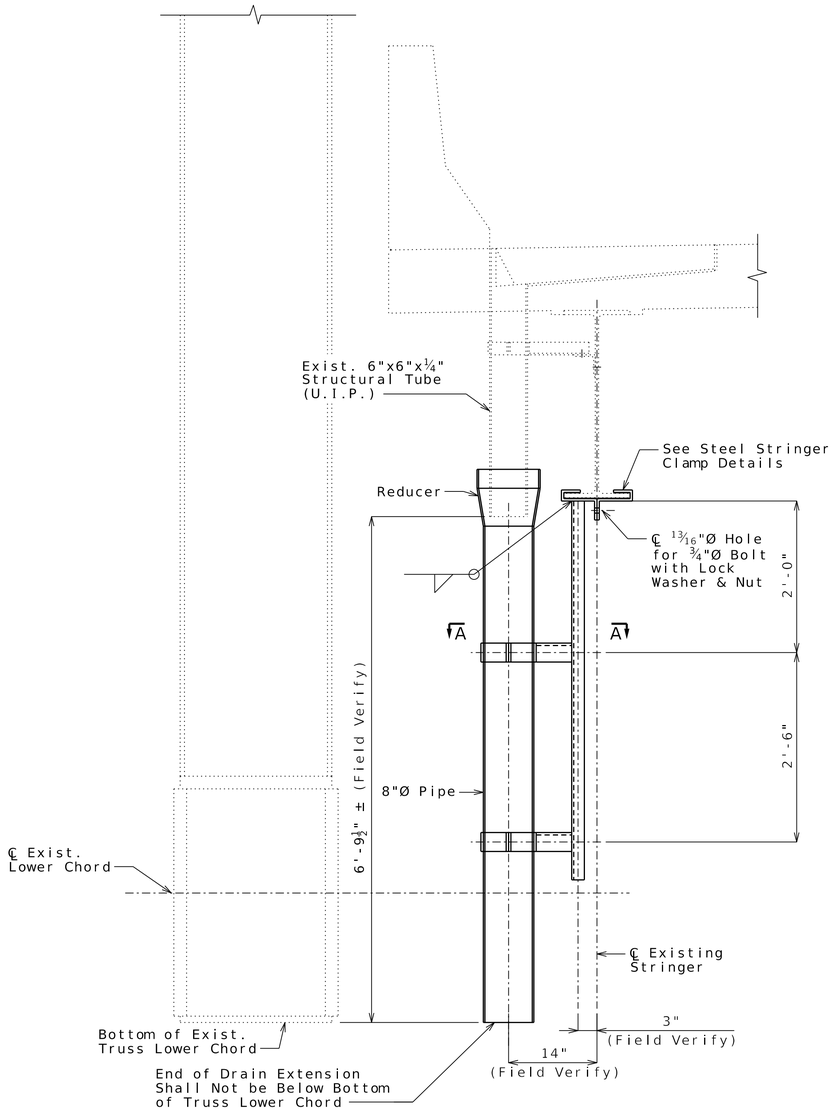
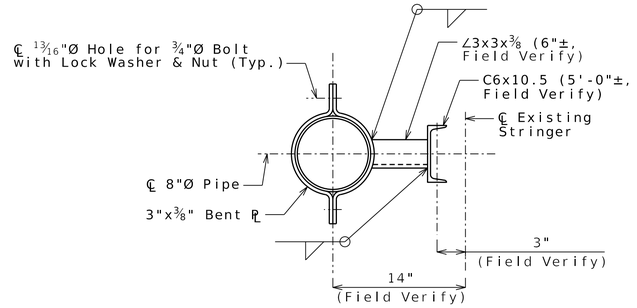
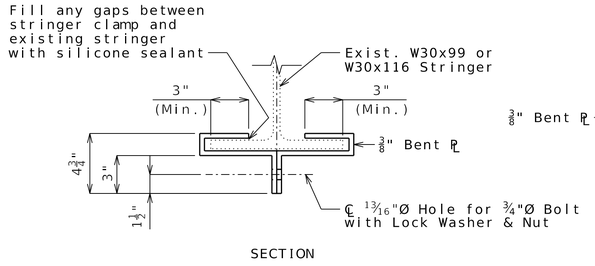


BRIDGE DRAIN EXTENSION - UNIT 4

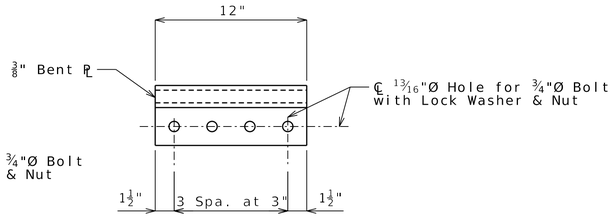


SECTION A-A

DRAIN EXTENTION LOCATION		
Unit	Stringer	Station
4	1 and 7	525+55.70
	1 and 7	526+59.70
	1 and 7	527+63.70
	1 and 7	529+19.70
	1 and 7	530+23.70
	1 and 7	531+37.70



SECTION



ELEVATION

STEEL STRINGER CLAMP DETAILS

Notes:

U.I.P. = Use In Place

Slab drain dimensions are measured to centerline of pipe.

Slab drain extension bracket assembly shall be ASTM A709 Grade 36 Steel.

The bracket assembly shall be galvanized in accordance with ASTM A123 and Sec 1081.

All bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with ASTM A153.

Piping shall be fabricated from field checked dimensions.

Slab drain extensions shall be fabricated from Reinforced Thermosetting Resin Pipe (RTRP) in accordance with the Special Provisions.

Any gap present between the proposed steel stringer clamp and the existing stringer shall be filled with silicone sealant.

Shop drawing will be required for pipe and bracket assembly.

All equipment, labor, and material necessary to install the slab drain extensions and support pieces will be completely covered by the contract unit price for Extend Slab Drain per each.

SLAB DRAIN EXTENSIONS IN TRUSS SPAN

Detailed May 2025
Checked May 2025

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

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AMY E. SMITH
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370	MO
DISTRICT	SHEET NO.
BR	20

COUNTY
ST. LOUIS/
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J6P3554

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PROJECT NO.

BRIDGE NO.
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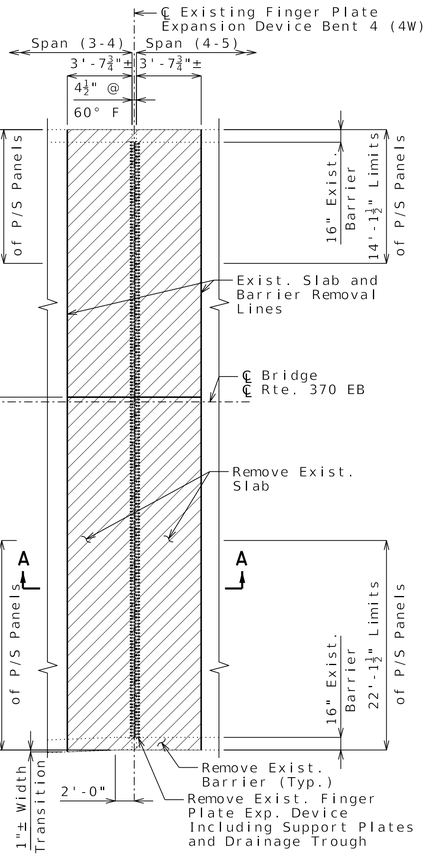
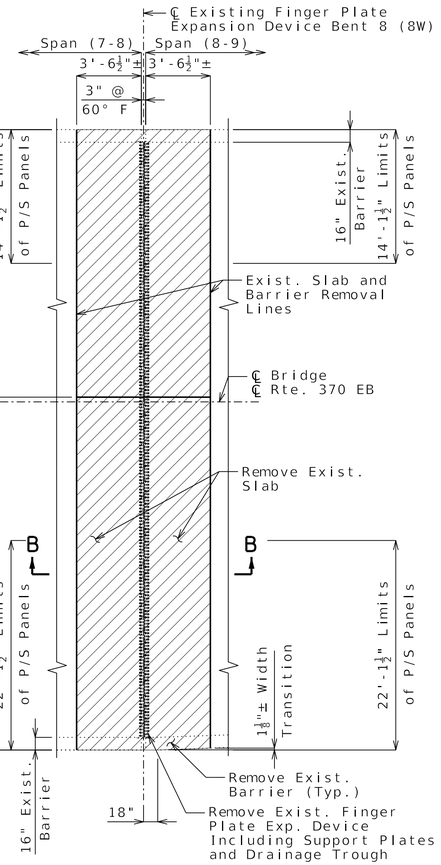
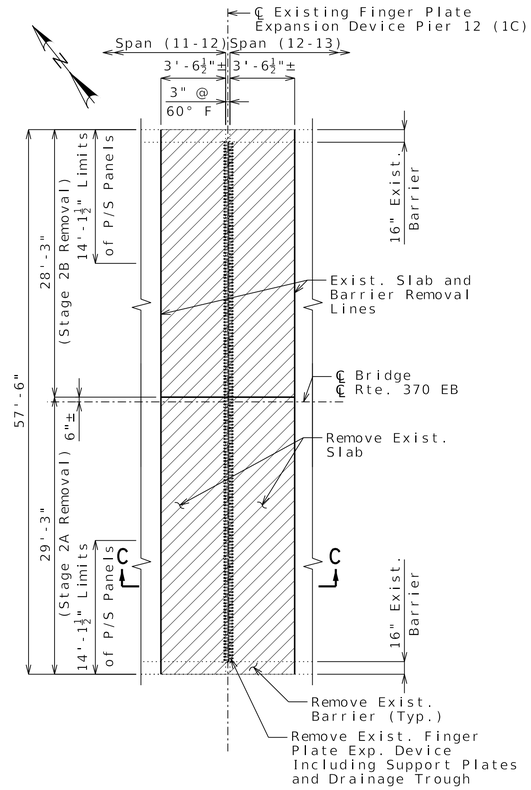


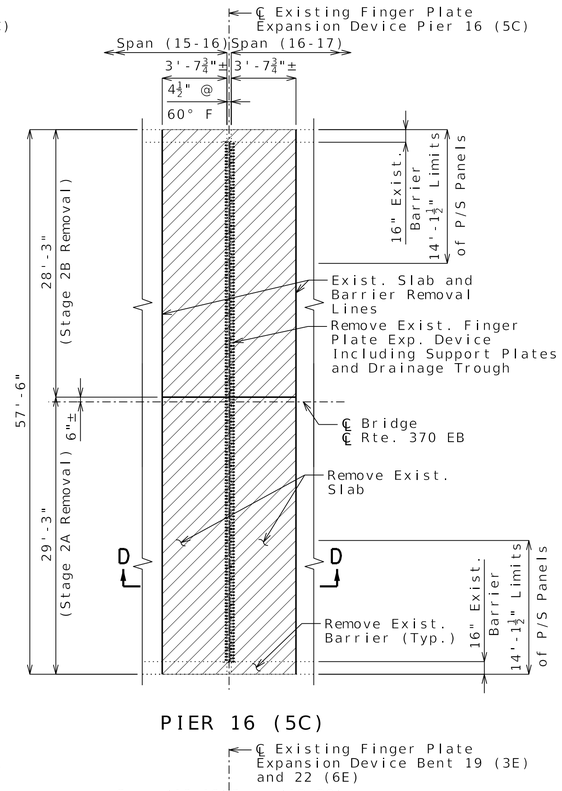
BENT 4 (4W)



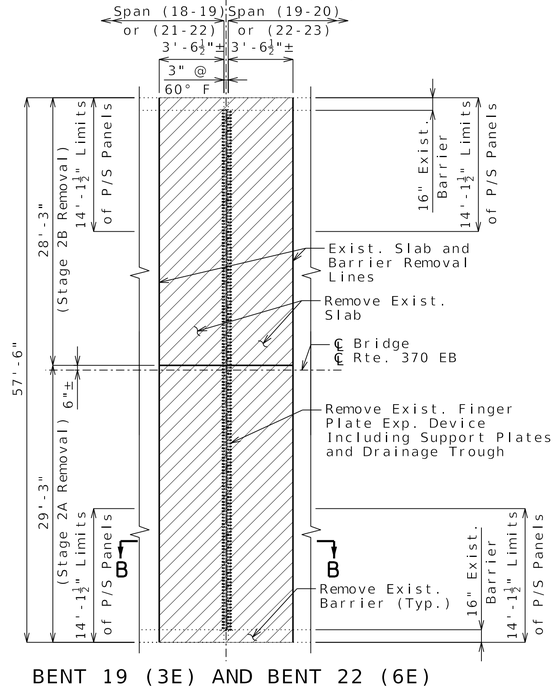
BENT 8 (8W)



PIER 12 (1C)



PIER 16 (5C)



BENT 19 (3E) AND BENT 22 (6E)

Notes:

Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for plain bars and 30 diameters for deformed bars, unless otherwise noted.

For details of slab replacement, see Sheets No. 27 thru 30.

For details of barrier replacement, see Sheet No. 31.

For Sections A-A thru D-D, see Sheet No. 22.

The cost of all labor, materials and equipment for the removal of existing finger plate expansion device including drainage troughs and support beams, and concrete slab including reinforcement shall be considered completely covered by the contract unit price for Removal of Existing Expansion Joints & Adjacent Concrete per linear foot.

The cost of all labor, materials and equipment for the removal and replacement of the existing barrier including reinforcement, and all new concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Remove and Replace Barrier Curb per linear foot.

EXPANSION DEVICE REMOVAL DETAILS

Detailed May 2025
Checked May 2025

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

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AMY E. SMITH
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370	MO
DISTRICT	SHEET NO.
BR	21

COUNTY: ST. LOUIS/ ST. CHARLES
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PROJECT NO.:
BRIDGE NO.: A45576

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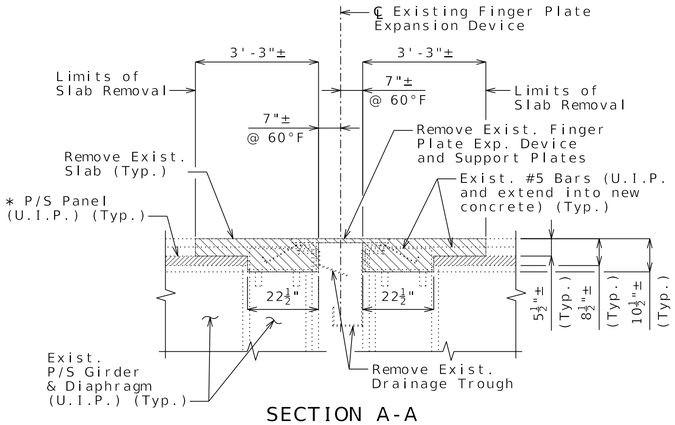
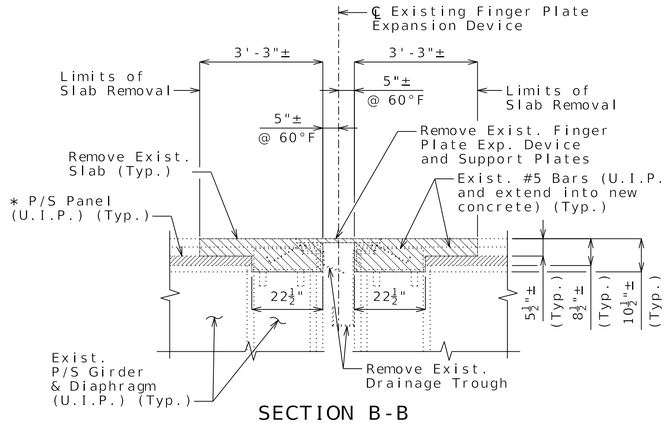
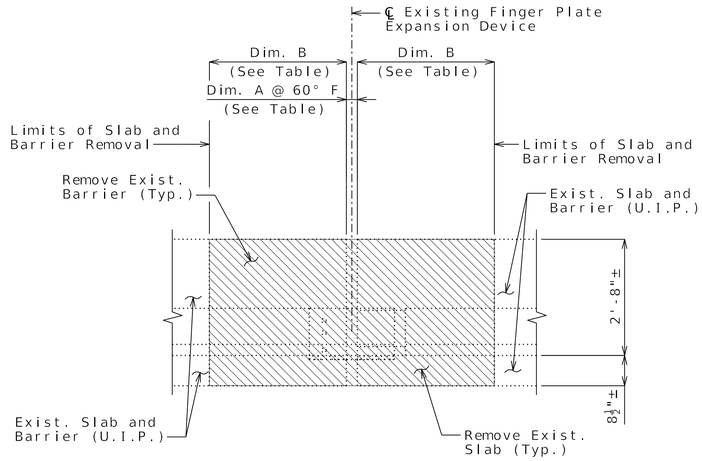


SECTION A-A

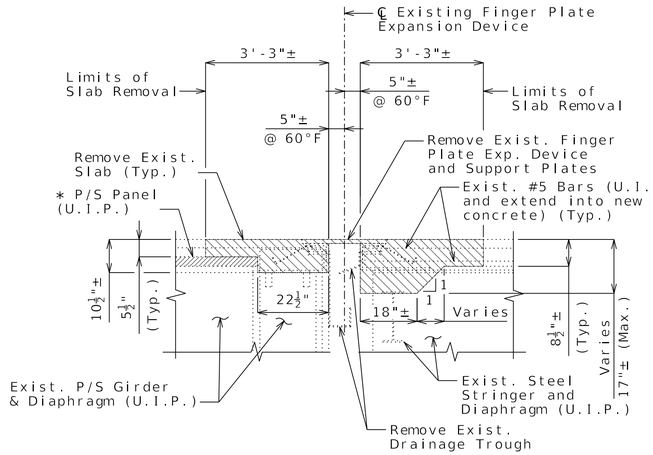


SECTION B-B

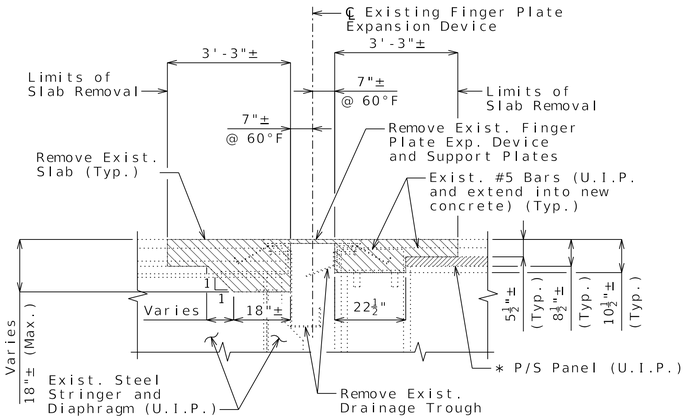


PART ELEVATION OF BARRIER REMOVAL AT FINGER PLATE EXPANSION DEVICE

TABLE OF DIMENSIONS		
Joint Location	Dim. A	Dim. B
Bent 4(4W)	4½"	3'-7¾"
Bent 8(8W)	3"	3'-6½"
Pier 12(1C)	3"	3'-6½"
Pier 16(5C)	4½"	3'-7¾"
Bent 19(3E)	3"	3'-6½"
Bent 22(6E)	3"	3'-6½"



SECTION C-C



SECTION D-D

* Note: In areas without P/S Panels, remove slab to top of girder. See part plans on Sheet No. 21 for limits of existing P/S Panel at each expansion joint.

Notes:

For additional expansion device removal notes, see Sheet No. 21.

For part plan details of expansion device removal, see Sheet No. 21.

For locations of Section A-A thru D-D, see Sheet No. 21.

For details of removal of existing expansion joint support bolts in top of P/S Girders, see Sheets No. 23 and 24.

EXPANSION DEVICE REMOVAL DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
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370	MO
DISTRICT	SHEET NO.
BR	22

COUNTY ST. LOUIS/ ST. CHARLES

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CONTRACT ID.

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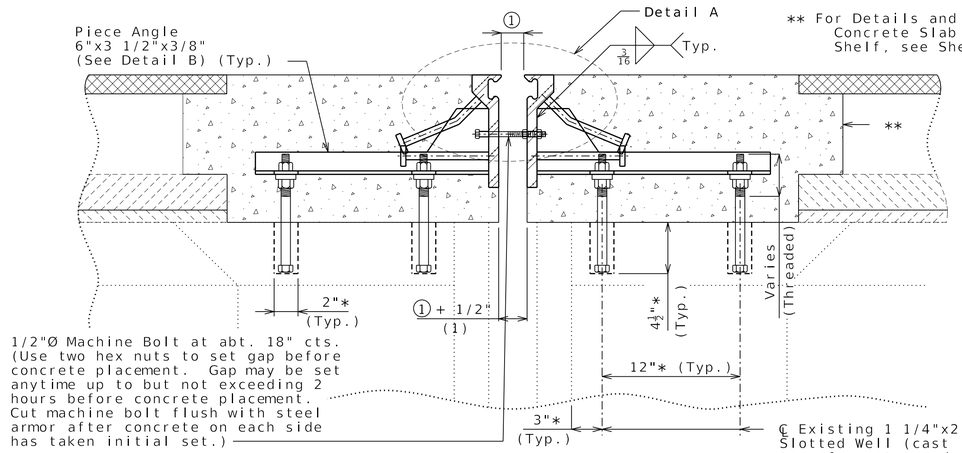
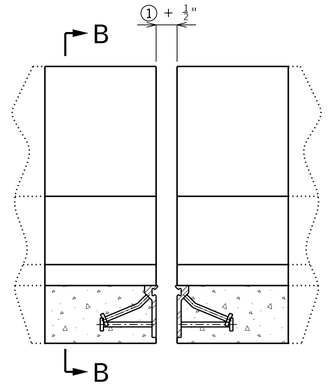


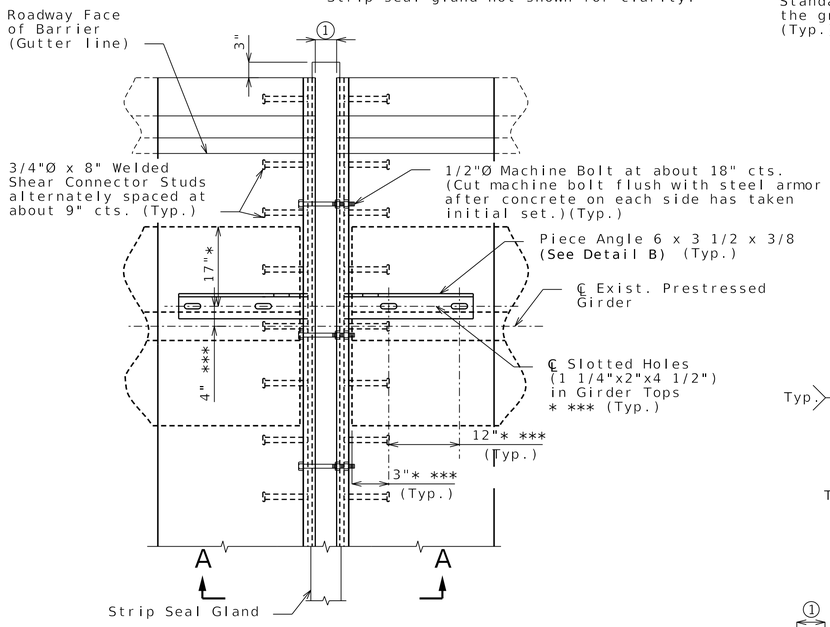
SECTION A-A

Strip seal gland not shown for clarity.



PART ELEVATION OF BARRIER AT BENTS 8 (8W) 19 (3E) AND 22 (6E)

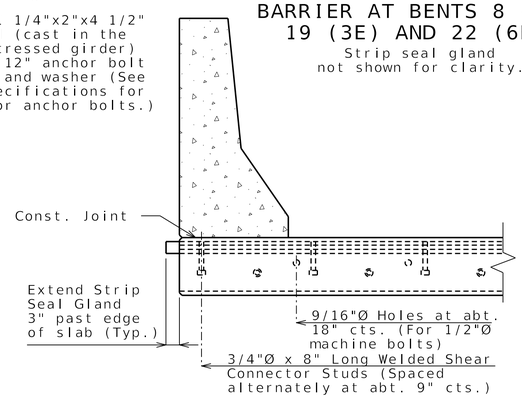
Strip seal gland not shown for clarity.



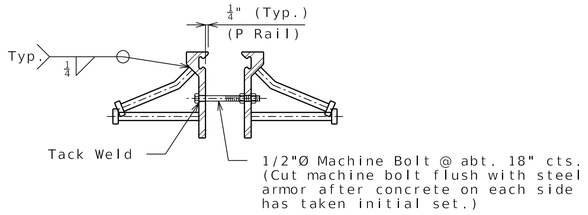
PART PLAN AT BENTS 8 (8W), 19 (3E) AND 22 (6E)

* Approximate Locations of existing 3/4"∅ x 7" anchor bolt w/ nut and washer grouted in slotted holes (1 1/4"x2"x4 1/2") in girder tops. Contractor to use a 2"Ø core bit to drill around and remove existing 3/4"∅ anchor bolts to a depth of 4 1/2" into the top of girder flange. The Contractor should exercise extreme caution when coring the existing girder concrete to not damage existing girder reinforcement or prestressed strands. Contractor to install the new 3/4"∅ anchor bolt within the cored hole, see Standard Specifications for the grout for anchor bolts.

*** Contractor to field verify.

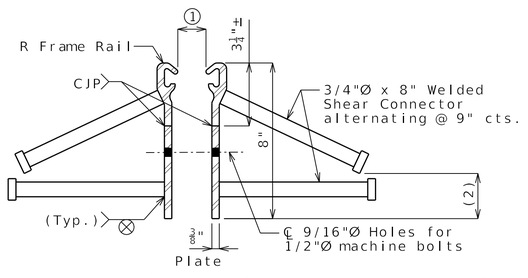


PART SECTION B-B



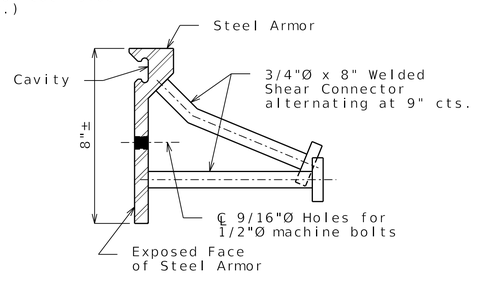
DETAIL A

(P Rail shown, R Rail similar)



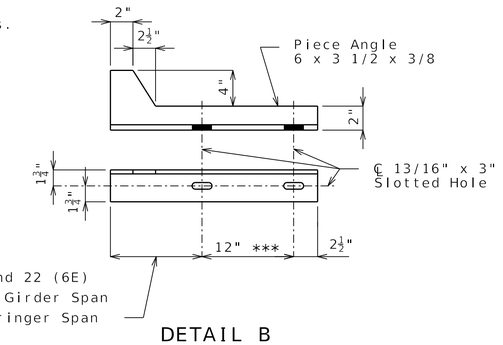
(2) Bend stud in shop if necessary to maintain 1" min. from bottom of vertical plate.

OPTIONAL R RAIL DETAIL



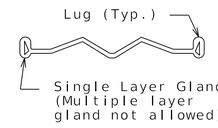
DETAIL OF JOINT ARMOR

(P Rail)



10 ¼" *** Bents 8 (8W), 19 (3E) and 22 (6E)
10 ¾" *** Bent 12 (1C) - Concrete Girder Span
10 ⅜" *** Bent 12 (1C) - Steel Stringer Span

DETAIL B



DETAIL OF GLAND

GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for staged construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

Longitudinal reinforcing steel shall be placed so that ends shall be 1" from the vertical leg of the steel armor at the expansion joint system.

Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

② The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

③ MoDOT Construction personnel will indicate the strip seal expansion joint system installed.

Steel armor may also be referred to as extrusion or rail.

Payment for furnishing, coating, or galvanizing and installing the structural steel for the expansion joint will be considered completely covered by the contract unit price for Strip Seal Expansion Joint System.

For Barrier Details, see Sheet No. 31.

For Construction Staging, see Sheet No. 4.

The terms P and R rail are used for identification only, and are not endorsements for any particular manufacturer.

(1) Because of variations in armor dimensions, the concrete opening will vary if the option R rail is used. Dimensions shown are based on P rail option.

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

STRIP SEAL EXPANSION JOINT DETAILS AT BENTS 8 (8W), 12 (1C), 19 (3E) AND 22 (6E)

Detailed May 2025
Checked May 2025

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

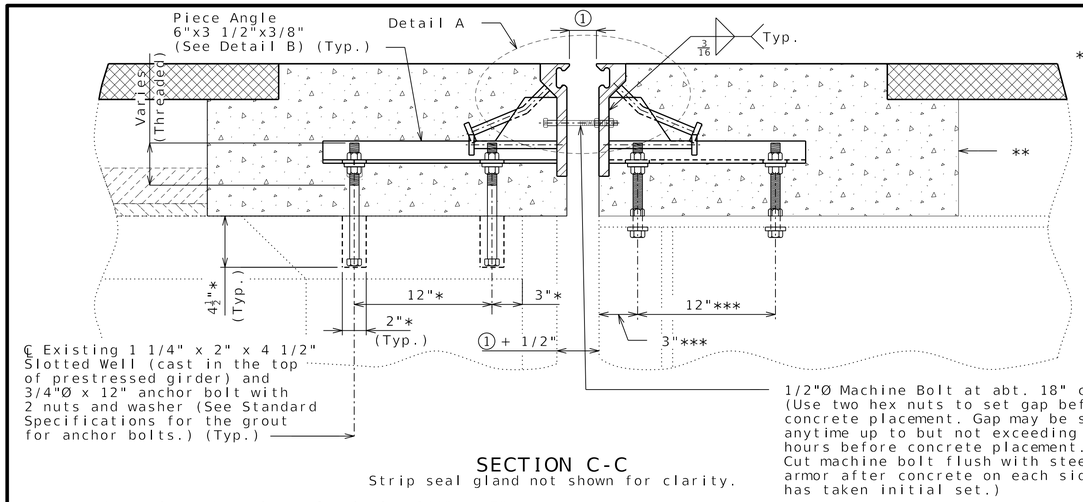
STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 23
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



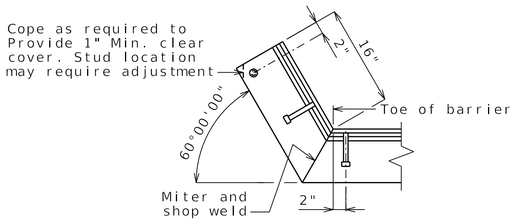
SECTION C-C

Strip seal gland not shown for clarity.

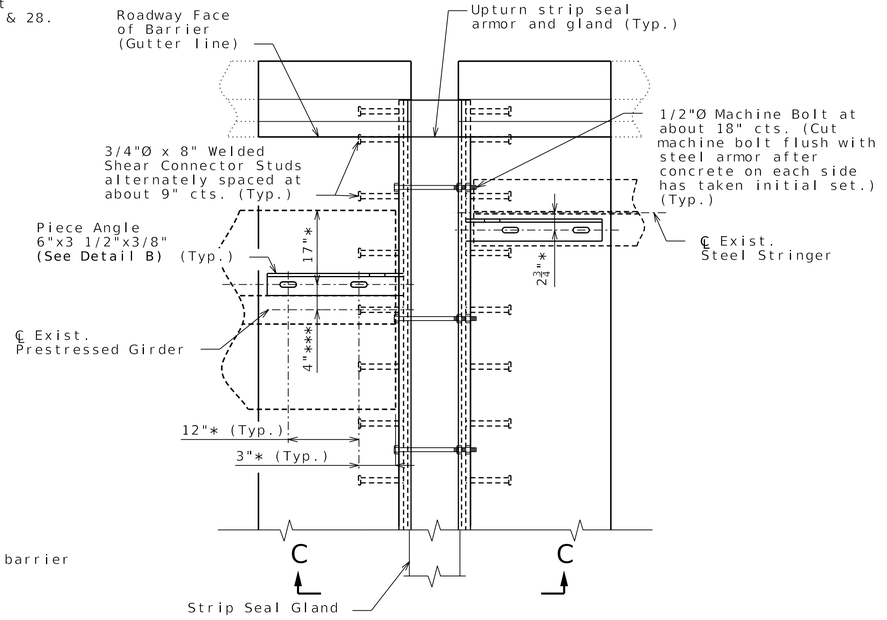
** For Details and Reinf. of Concrete Slab and Support Shelf, see Sheets No. 27 & 28.

* Approximate Locations of existing 3/4"∅ x 7" anchor bolt w/ nut and washer grouted in slotted holes (1 1/4"x2"x4 1/2") in girder tops. Contractor to use a 2"Ø core bit to drill around and remove existing 3/4"∅ anchor bolts to a depth of 4 1/2" into the top of girder flange. The Contractor should exercise extreme caution when coring the existing girder concrete to not damage existing girder reinforcement or prestressed strands. Contractor to install the new 3/4"∅ anchor bolt within the cored hole, see Standard Specifications for the grout for anchor bolts.

*** Contractor to field verify. Approximate locations of existing 3/4" diam. bolts thru existing stringer top flange. Contractor to remove existing bolts and install new 3/4" diam. anchor bolts, fully threaded, thru existing 13/16" diam. holes in existing stringer top flange with additional nut as shown.



UPTURN DETAIL

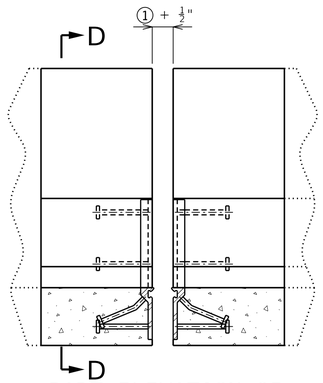


PART PLAN AT BENT 12 (1C)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Table of Allowed Transverse Strip Seal Expansion Joint System: Bent 8 (8W), Bent 19 (3E) and Bent 22 (6E)

Manufacturer	Strip Seal System (Designated Name)	① Allowed Installation Gap Normal to Joint at RDWY Surface @ Air/Surface Temperature ②																							
		Movement Parallel to RDWY			@ 40°F			@ 50°F			@ 60°F			@ 70°F			@ 80°F			@ 90°F			③		
		Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)
D S Brown	Strip seal L2-500	3 13/16"	3 1/8"	3 5/8"	3 1/8"	3"	3 1/8"	2 13/16"	2 3/4"	2 13/16"	2 1/2"	2 1/2"	2 1/2"	2 3/16"	2 1/4"	2 3/16"	1 7/8"	2"	1 7/8"	1 9/16"	1 3/4"	1 9/16"	□	□	□
Watson Bowman Acme (Wabo)	Strip seal SE-500	3 13/16"	3 1/8"	3 5/8"	3 1/8"	3"	3 1/8"	2 13/16"	2 3/4"	2 13/16"	2 1/2"	2 1/2"	2 1/2"	2 3/16"	2 1/4"	2 3/16"	1 7/8"	2"	1 7/8"	1 9/16"	1 3/4"	1 9/16"	□	□	□

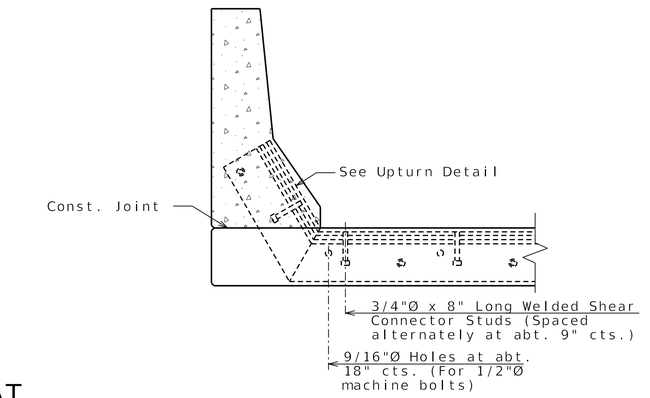


PART ELEVATION OF BARRIER AT BENT 12 (1C)

Strip seal gland not shown for clarity.

Table of Allowed Transverse Strip Seal Expansion Joint System: Bent 12 (1C)

Manufacturer	Strip Seal System (Designated Name)	Movement Parallel to RDWY	Allowed Installation Gap Normal to Joint at RDWY Surface @ Air/Surface Temperature ②						③
			@ 40°F	@ 50°F	@ 60°F	@ 70°F	@ 80°F	@ 90°F	
D S Brown	Strip seal L2-400	1 7/8"	2 5/16"	2 3/16"	2"	1 13/16"	1 11/16"	1 1/2"	□
Watson Bowman Acme (Wabo)	Strip seal SE-400	1 7/8"	2 5/16"	2 3/16"	2"	1 13/16"	1 11/16"	1 1/2"	□



PART SECTION D-D

STRIP SEAL EXPANSION JOINT DETAILS AT BENTS 8 (8W), 12 (1C), 19 (3E) AND 22 (6E)

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 24
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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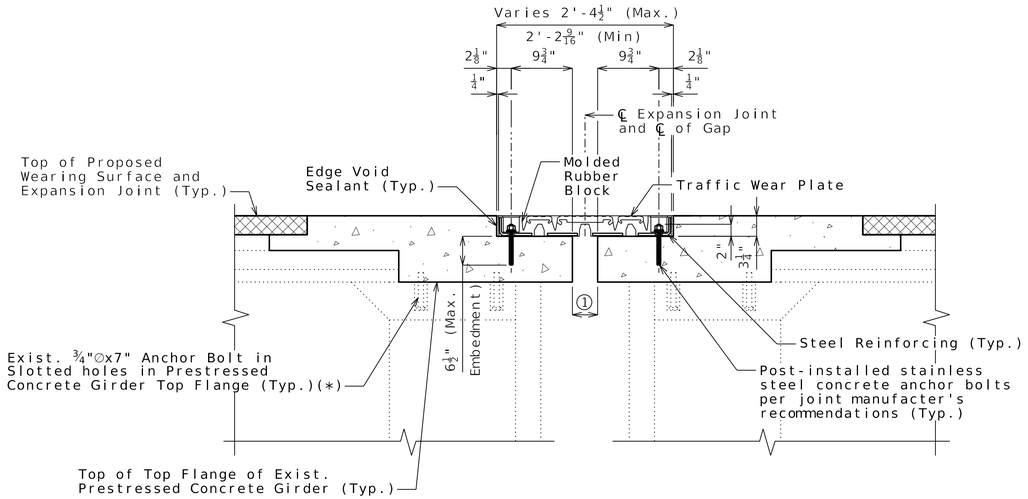
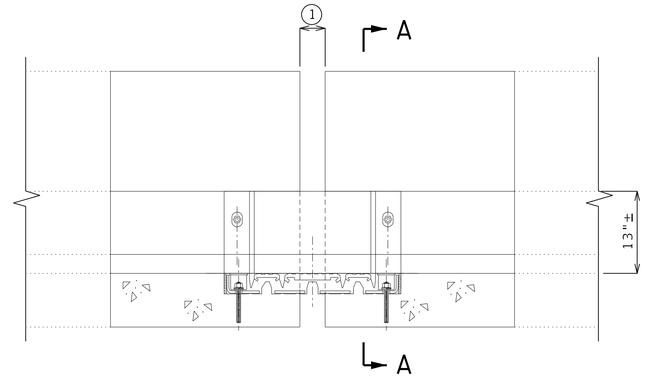
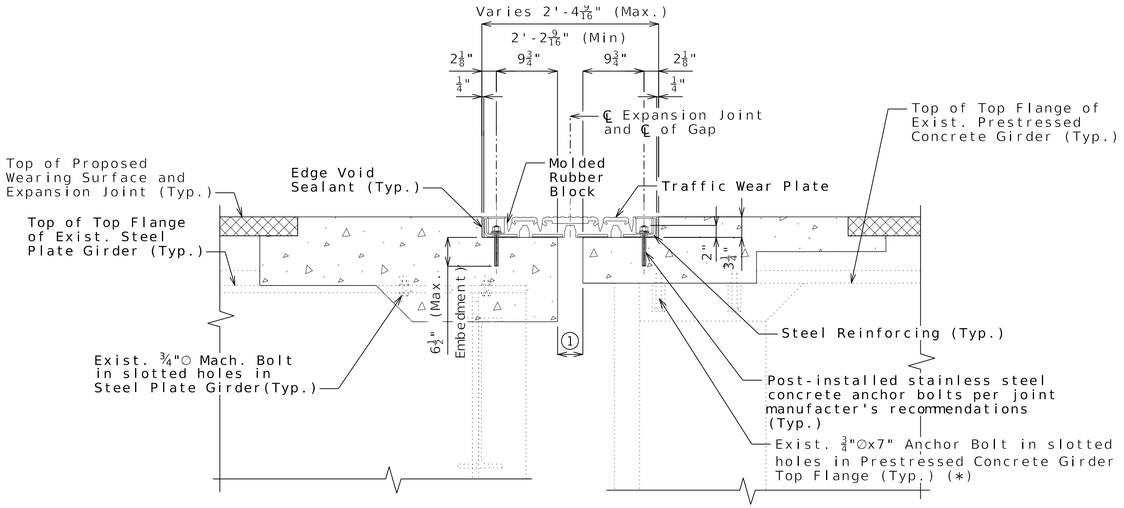
314-425-8300
Certificate of Authority: 000856



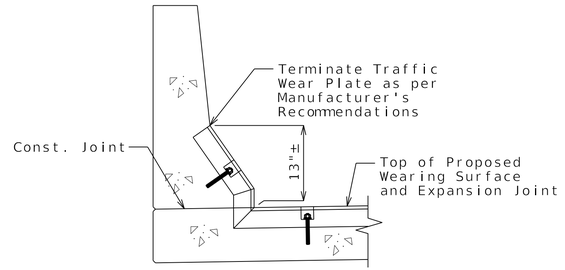
SECTION THRU JOINT AT BENT 4 (4W)



PART ELEVATION OF BARRIER



SECTION THRU JOINT AT BENT 16 (5C)



PART SECTION A-A

Table of Allowed Transverse Segmental Expansion Joint System: Bent 4 (4W) and Bent 16 (5C)															
Manufacturer	Segmental Expansion Joint System (Designated Name)	Movement Parallel to RDWY		Allowed Installation Gap ① Normal to Joint at RDWY Surface at Air/Surface Temperature ②											
				@ 40° F		@ 50° F		@ 60° F		@ 70° F		@ 80° F		@ 90° F	
		Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)
Watson Bowman Acme (Wabo)	Wabo Flex Model SR 6.5A	4 11/16"	5½"	4¾"	4 13/16"	4⅝"	4⅝"	4"	4"	3⅜"	3⅝"	3¼"	3 3/16"	2 1/16"	2 1/16"

(*) If exist. 3/4"∅ anchor bolts conflict with proposed segmental joint installation the contractor may cut exist. anchor bolts flush with the top of exist. prestressed concrete girder. Extreme caution should be used by the contractor when the cutting operation is performed as to not damage the exist. girder.

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Replacement expansion joint shall be a Wabo Flex Model SR 6.5A as manufactured by Watson Bowman Acme Corp. Amherst New York.

Block-out dimensions shown are only applicable for a Wabo Flex Model SR 6.5A.

The expansion device shall be fabricated to match the crown of the roadway.

② The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

For Construction Staging, see Sheet No. 4.

All hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A153), Class C.

SEGMENTAL EXPANSION JOINT DETAILS AT BENTS 4 (4W) AND 16 (5C)

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/1/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 25
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
HDR Engineering, Inc.
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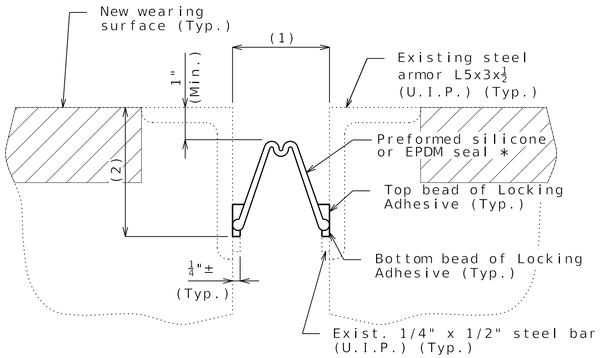
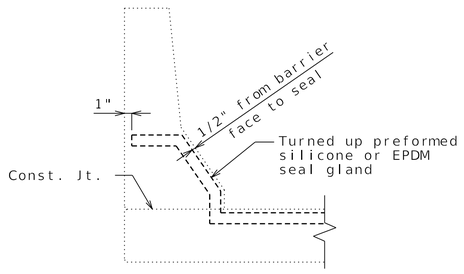
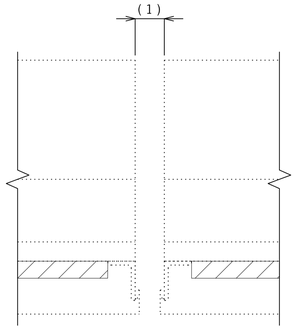
314-425-8300
Certificate of Authority: 000856



SECTION THRU JOINT IN UNIT 4 TRUSS SPAN



SECTION THRU EDGE OF SLAB NEAR JOINT



PART ELEVATION OF BARRIER

Preformed silicone or EPDM seal not shown for clarity. Seal installation turned up between barriers in-place is required.

General Notes:

Seals shall be installed in the slab joints near panel points L4 and L4' of Unit 4.

Existing seals shall be removed in accordance with Sec 216. Surfaces shall be prepared in accordance with Sec 717 and manufacturer's procedures.

The seal shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

(1) Allowed installation gap (±) normal to joint at roadway surface (see table)

(2) Installation depth (±) per manufacturer's recommendation

For Construction Staging, see Sheet No. 4.

DETAIL OF SEAL

* Double hump seal shown in figure. Actual shape of seal may be double or single hump as per manufacturer.

Allowed Transverse Preformed Silicone or EPDM Joint Seals

Manufacturer	Seal Name	Movement Parallel to Roadway	(1) Allowed Installation Gap Normal to Joint at Roadway Surface at Air/Surface Temperature				Type Used (✓)
			@ 40°F	@ 50°F	@ 60°F	@ 70°F	
R J Watson (Silicoflex Joint Seal)	Silicoflex SF150	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐
R J Watson (Silicoflex Joint Seal)	Silicoflex SF225	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐
Watson Bowman Acme Wabo (Preformed Silicone Joint Seal)	Wabo SPS-225	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐
D S Brown (EPDM Joint Seal)	V-Seal V-300	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐

MoDOT Construction personnel will indicate the type of seal used.

PREFORMED SILICONE OR EPDM JOINT SEAL IN UNIT 4

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 26
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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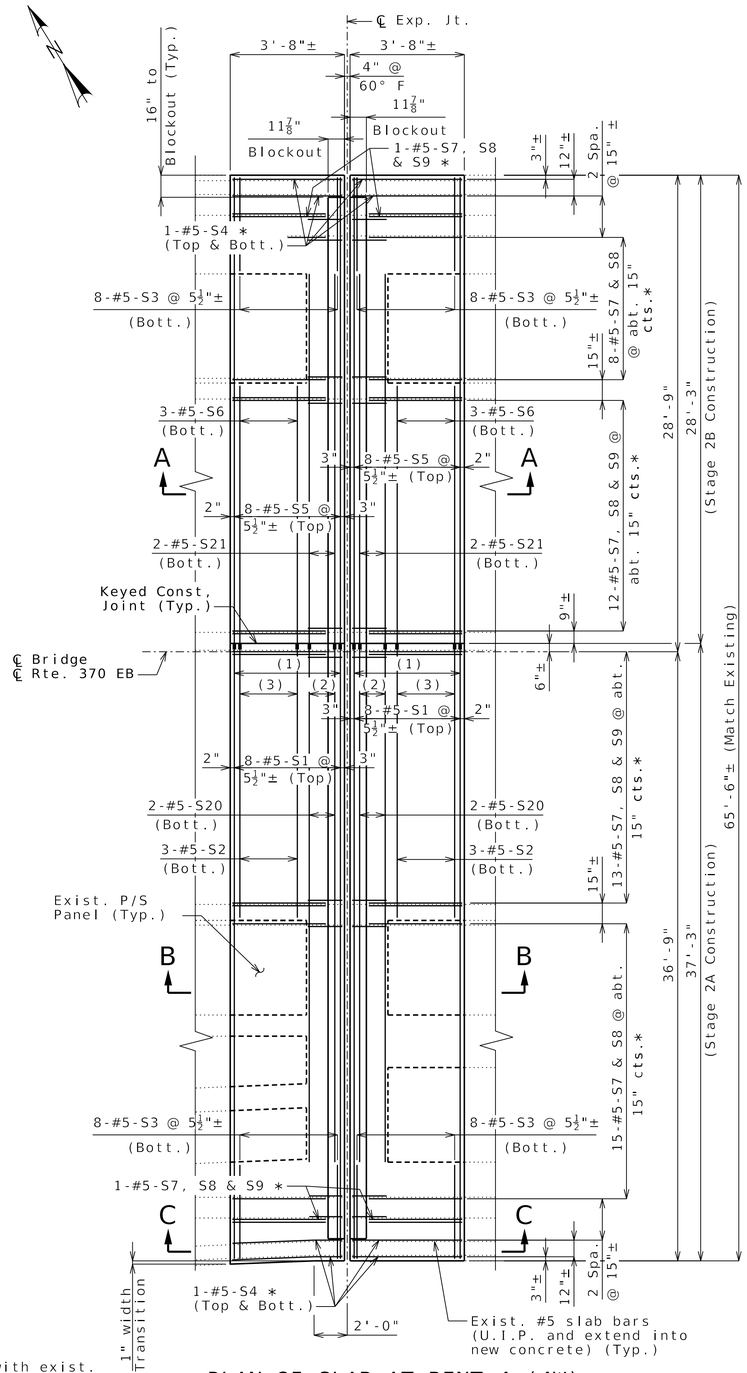
314-425-8300
Certificate of Authority: 000856

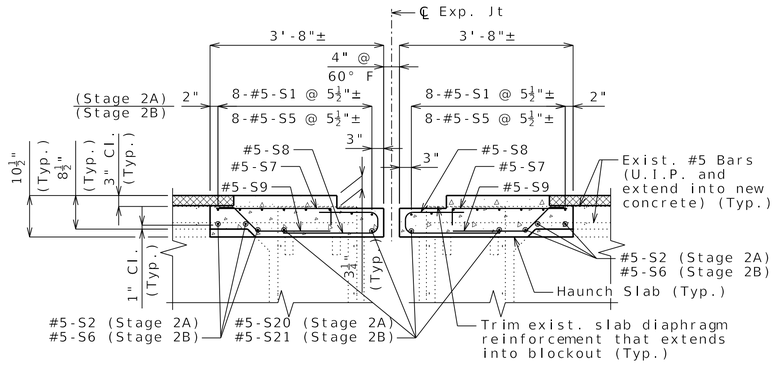


∗ Space with exist. reinforcement.

(1) 8-MBS S1-S5
(2) 2-MBS S20-S21
(3) 3-MBS S2-S6

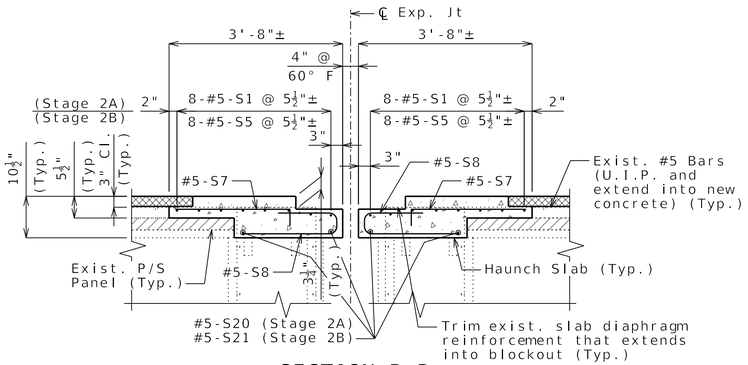
PLAN OF SLAB AT BENT 4 (4W) SHOWING TOP AND BOTTOM REINFORCING

(Latex Modified Concrete Wearing Surface not shown for clarity)



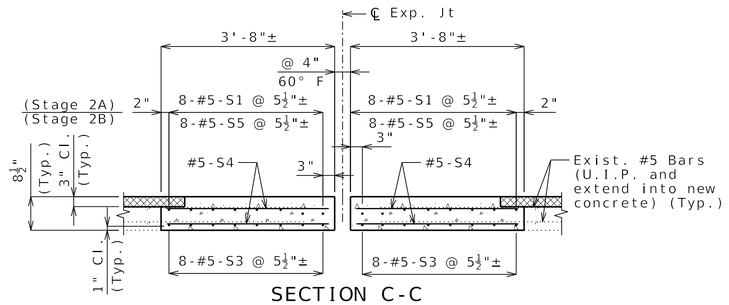
SECTION A-A

(Section within limits of full depth CIP slab)



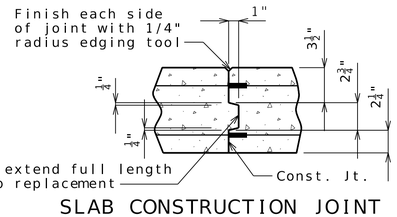
SECTION B-B

(Section within limits of P/S Panels)



SECTION C-C

(Section within limits of full depth CIP slab overhang)



SLAB CONSTRUCTION JOINT

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the segmental expansion joint system at Bent 4 (4W), see Sheet No. 25,

For barrier replacement details, see Sheet No. 31.

SLAB REPLACEMENT AT BENT 4 (4W)

AMY E. SMITH
NUMBER PE-2021015056
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	27

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
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HDR Engineering, Inc.
401 S. 18th Street
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314-425-8300
Certificate of Authority: 000856

Detailed May 2025
Checked May 2025

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

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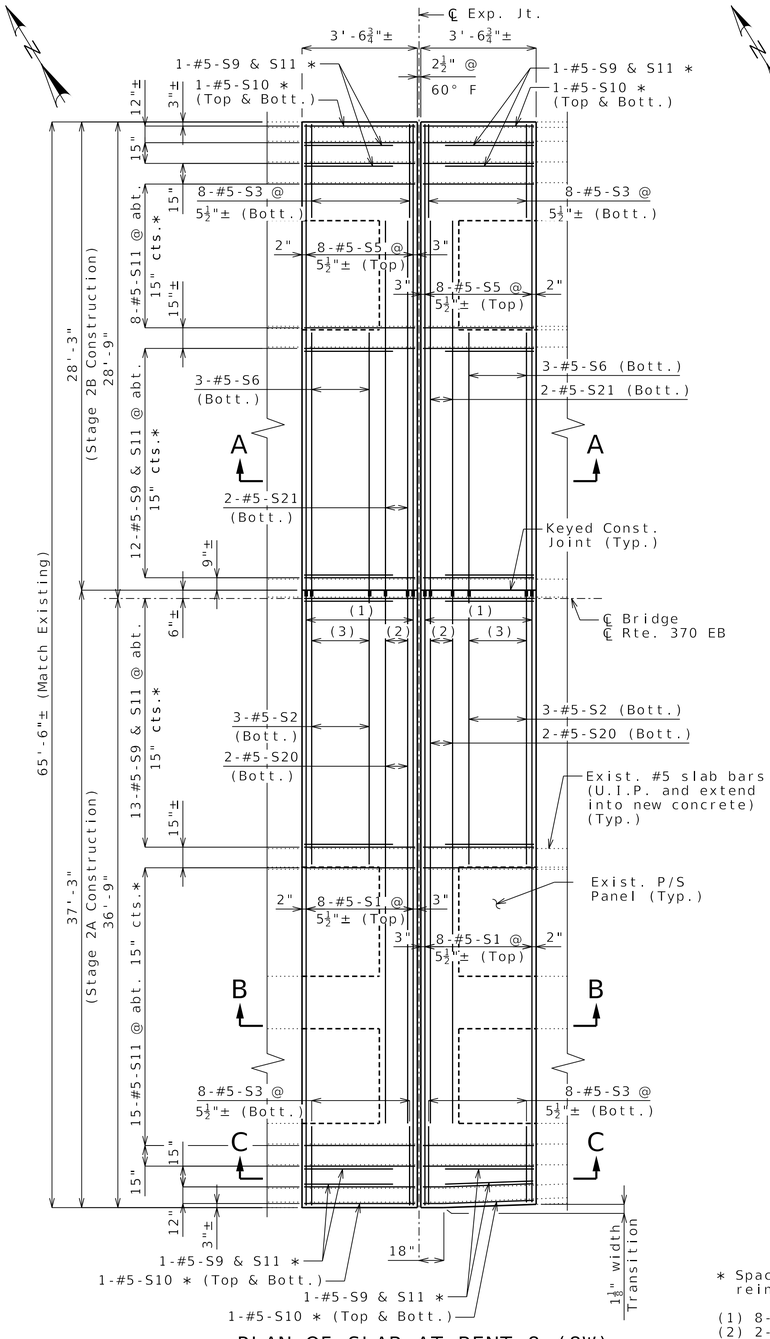
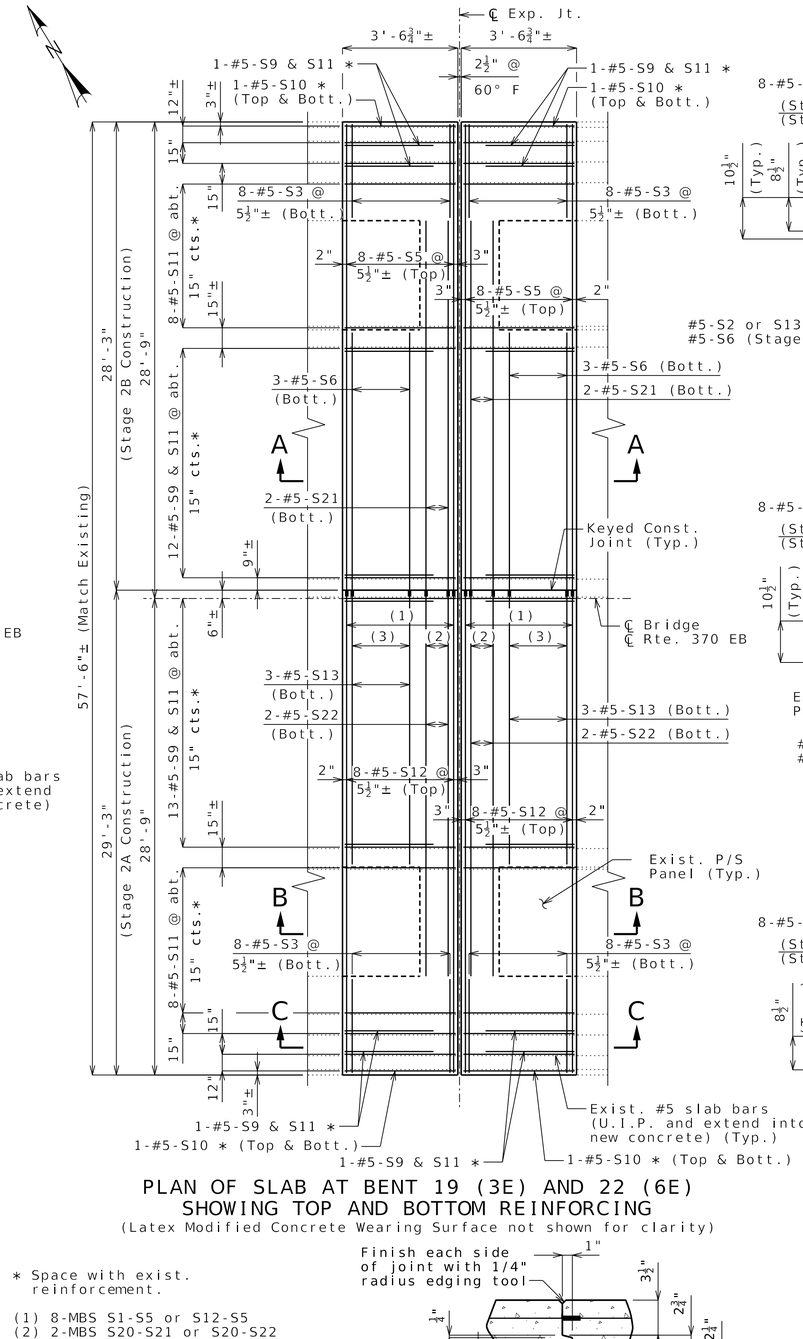


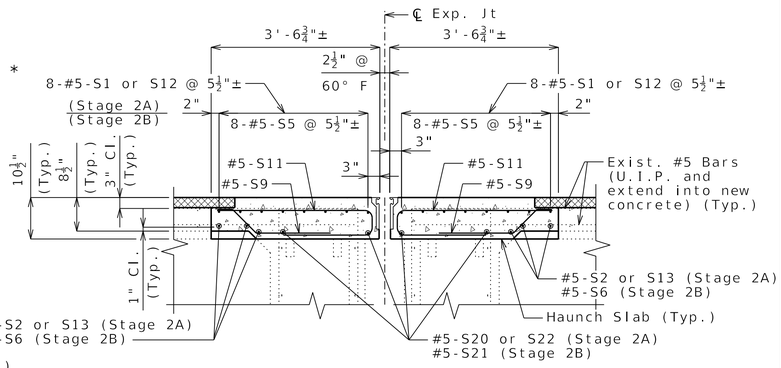
PLAN OF SLAB AT BENT 8 (8W)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)



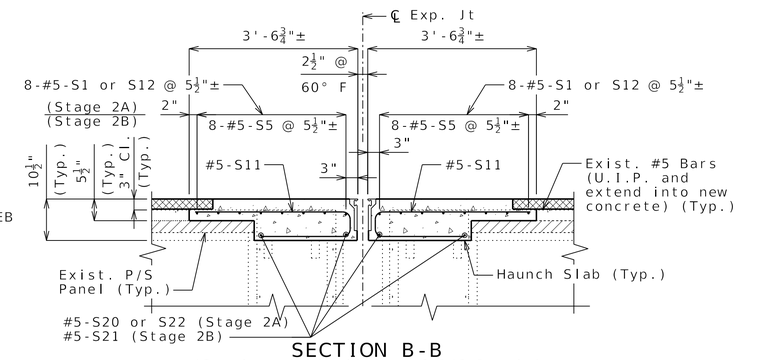
PLAN OF SLAB AT BENT 19 (3E) AND 22 (6E)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)

∗ Space with exist. reinforcement.

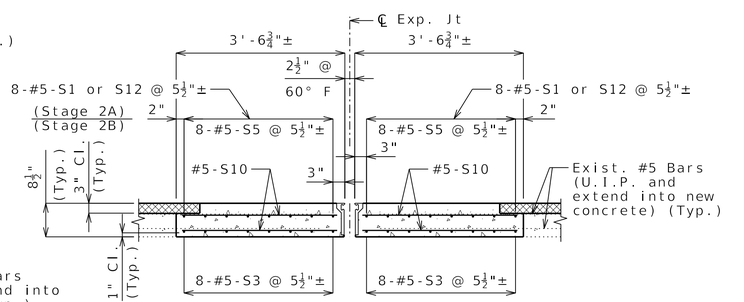
(1) 8-MBS S1-S5 or S12-S5
(2) 2-MBS S20-S21 or S20-S22
(3) 3-MBS S2-S6 or S13-S6



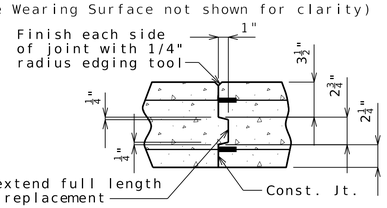
SECTION A-A
(Section within limits of full depth CIP slab)



SECTION B-B
(Section within limits of P/S Panels)



SECTION C-C
(Section within limits of full depth CIP slab overhang)



SLAB CONSTRUCTION JOINT

SLAB REPLACEMENT AT BENTS 8 (8W), 19 (3E) AND 22 (6E)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Longitudinal reinforcing steel shall be placed so that ends shall be 1" from vertical leg of the steel armor at the expansion joint system.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the strip seal expansion joint system at Bents 8 (8W), 19 (3E) and 22 (6E), see Sheets No. 23 and 24.

For barrier replacement details, see Sheet No. 31.

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	28

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Detailed May 2025
Checked May 2025

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

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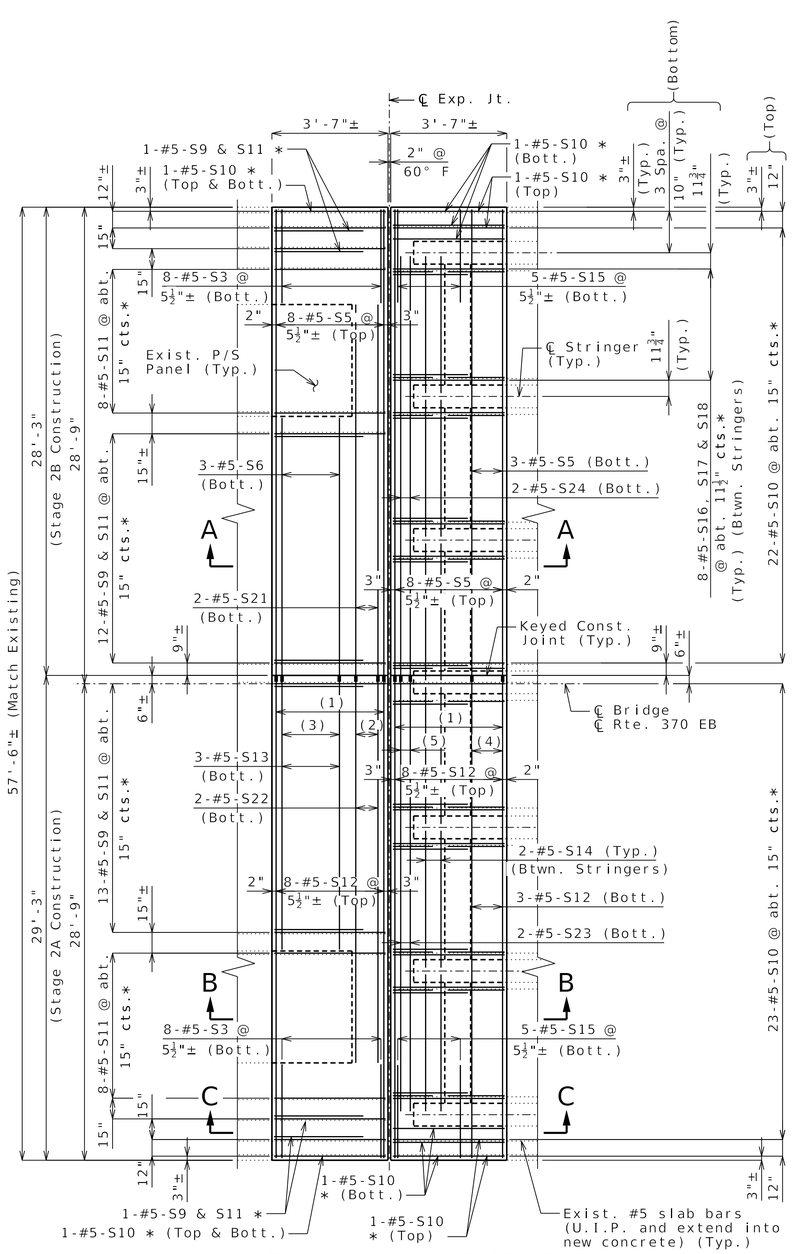
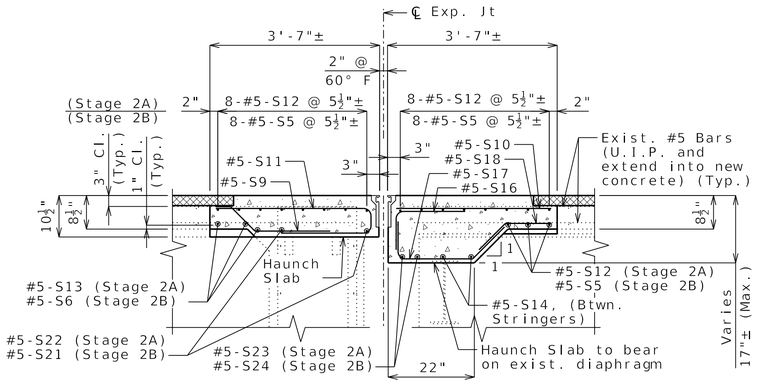


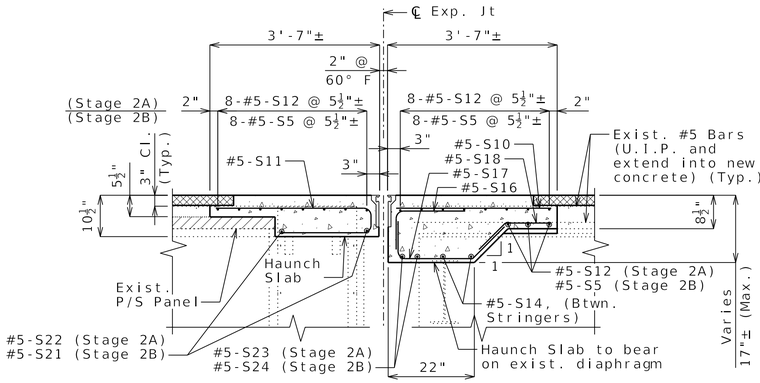
PLAN OF SLAB AT PIER 12 (1C)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)

* Space with exist. reinforcement.

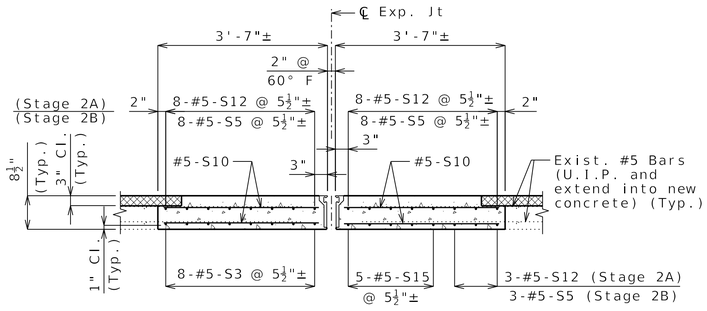
(1) 8-MBS S12-S5
(2) 2-MBS S20-S22
(3) 3-MBS S13-S6
(4) 3-MBS S12-S5
(5) 2-MBS S23-S24



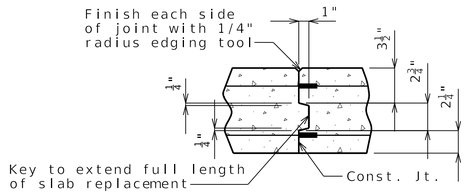
SECTION A-A
(Section within limits of full depth CIP slab)



SECTION B-B
(Section within limits of P/S Panels)



SECTION C-C
(Section within limits of full depth CIP slab overhang)



SLAB CONSTRUCTION JOINT

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Longitudinal reinforcing steel shall be placed so that ends shall be 1" from vertical leg of the steel armor at the expansion joint system.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the strip seal expansion joint system at Pier 12 (1C), see Sheets No. 23 and 24.

For barrier replacement details, see Sheet No. 31.

SLAB REPLACEMENT AT PIER 12 (1C)

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
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DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	29

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Detailed May 2025
Checked May 2025

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

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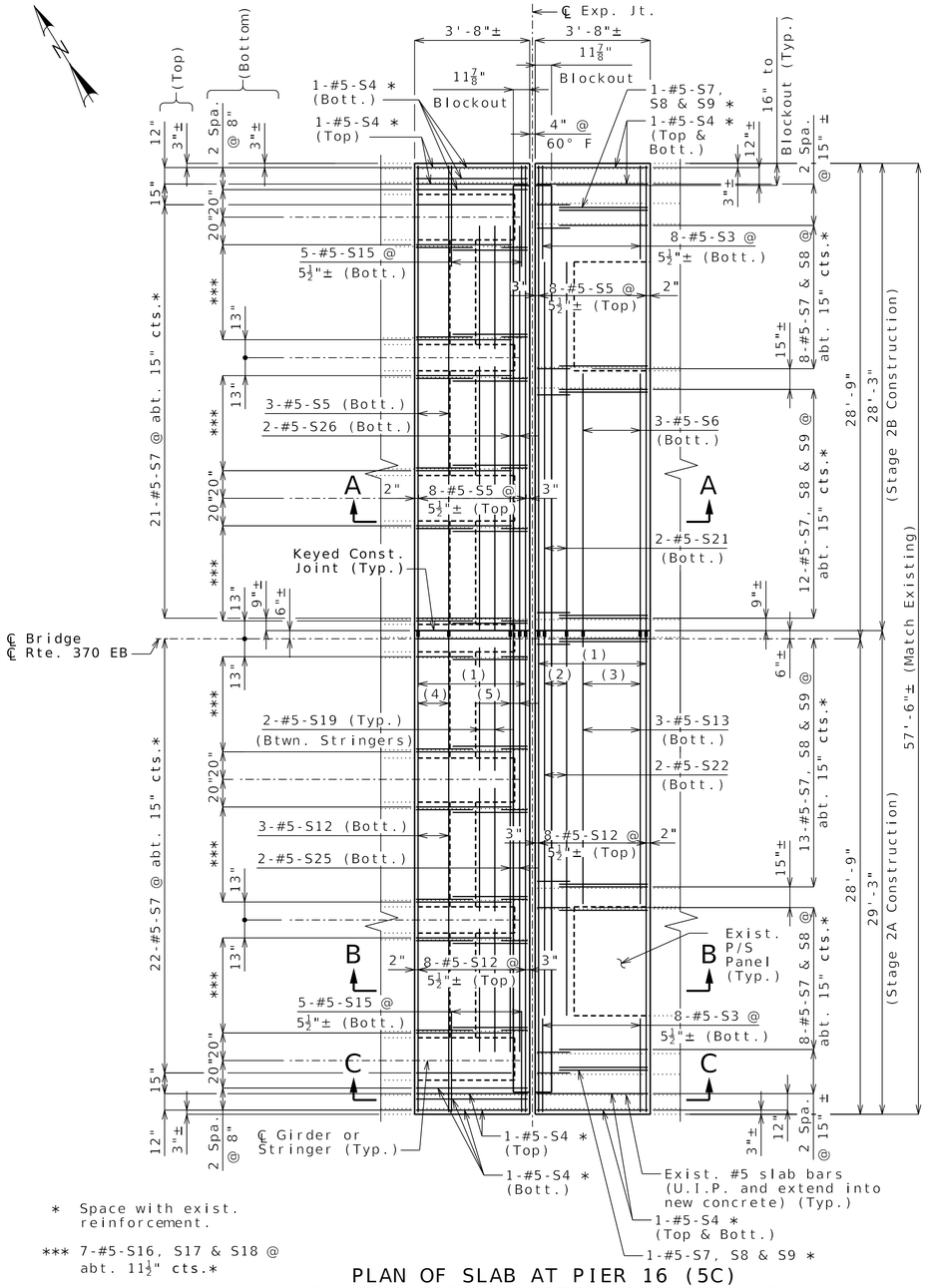
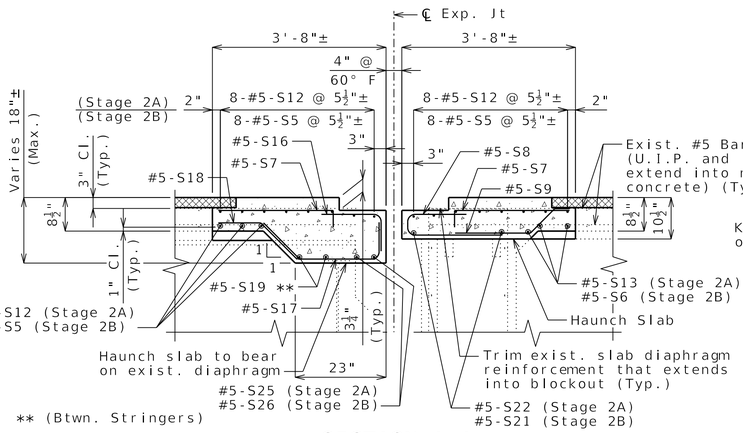


* Space with exist. reinforcement.

*** 7-#5-S16, S17 & S18 @ abt. 11½" cts.*

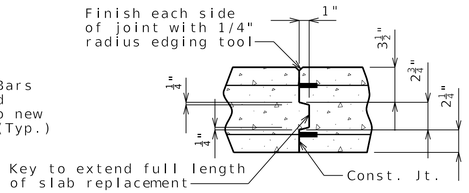
(1) 8-MBS S12-S5
(2) 2-MBS S20-S22
(3) 3-MBS S13-S6
(4) 3-MBS S12-S5
(5) 2-MBS S25-S26

PLAN OF SLAB AT PIER 16 (5C)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)

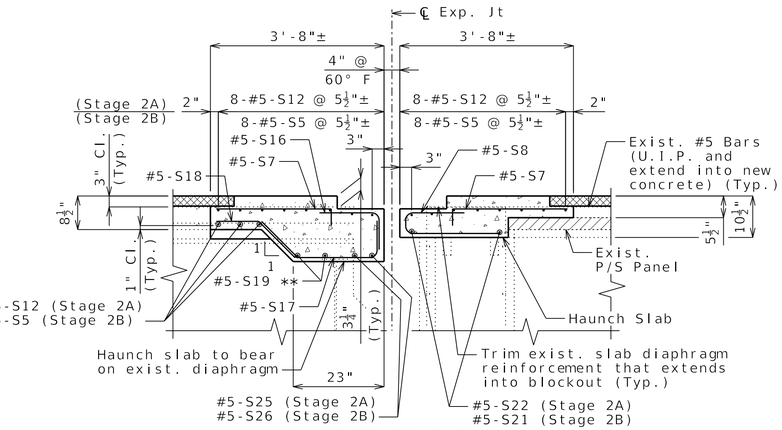


** (Btwn. Stringers)

SECTION A-A
(Section within limits of full depth CIP slab)

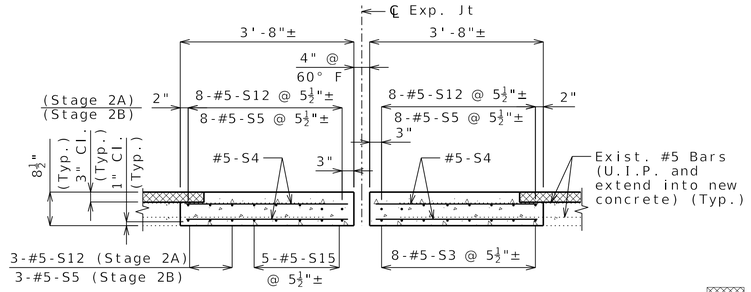


SLAB CONSTRUCTION JOINT



** (Btwn. Stringers)

SECTION B-B
(Section within limits of P/S Panels)



SECTION C-C
(Section within limits of full depth CIP slab overhang)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the segmental expansion joint system at Pier 16 (5C), see Sheet No. 25.

For barrier replacement details, see Sheet No. 31.

SLAB REPLACEMENT AT PIER 16 (5C)

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
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DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	30

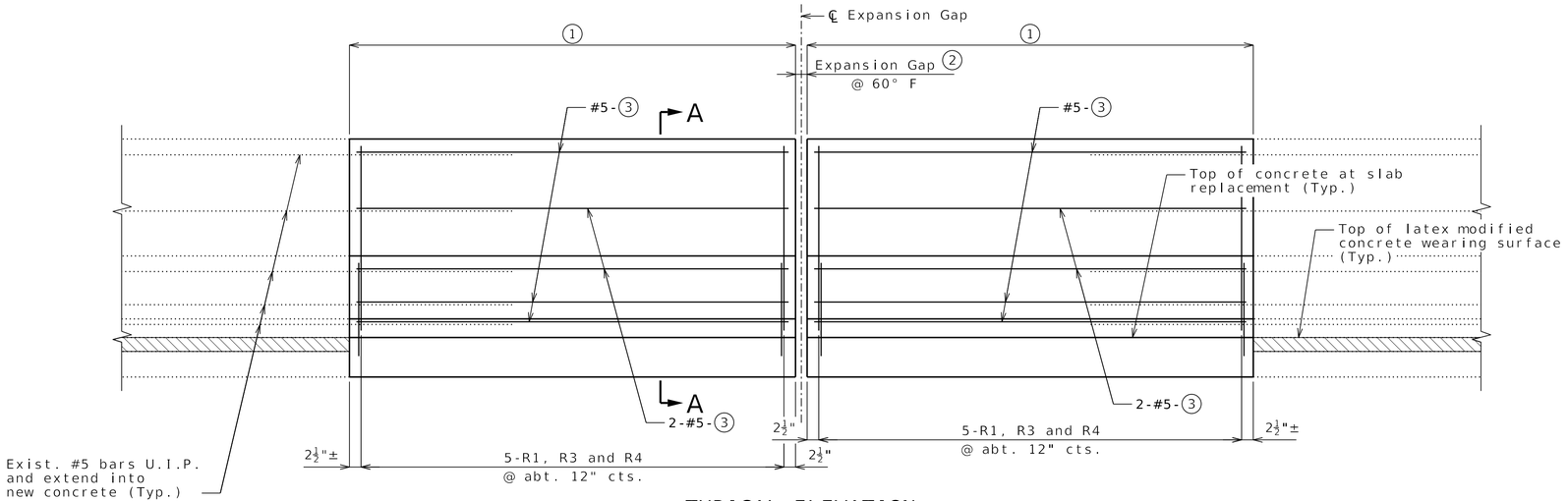
COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

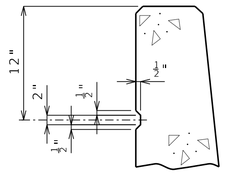
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

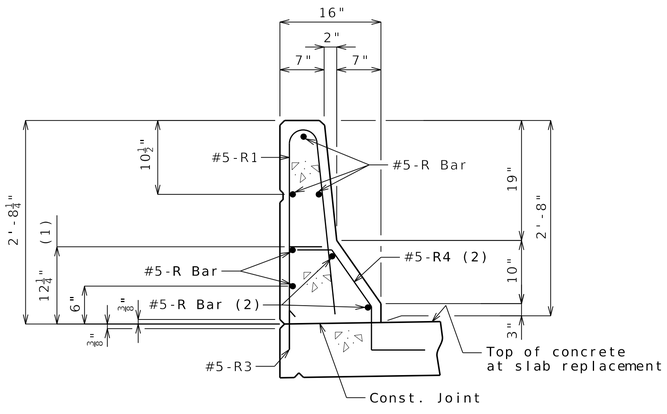


TYPICAL ELEVATION

TABLE OF BARRIER DIMENSIONS AND BAR MARKS			
Location	1	2	3
Bent 4 (4W)	3'-8"±	4"	R5
Bent 8 (8W)	3'-6½"±	3"	R6
Pier 12 (1C)	3'-6¾"±	2½"	R6
Pier 16 (5C)	3'-8"±	4"	R5
Bent 19 (3E)	3'-6½"±	3"	R6
Bent 22 (6E)	3'-6½"±	3"	R6



RUSTICATION DETAIL



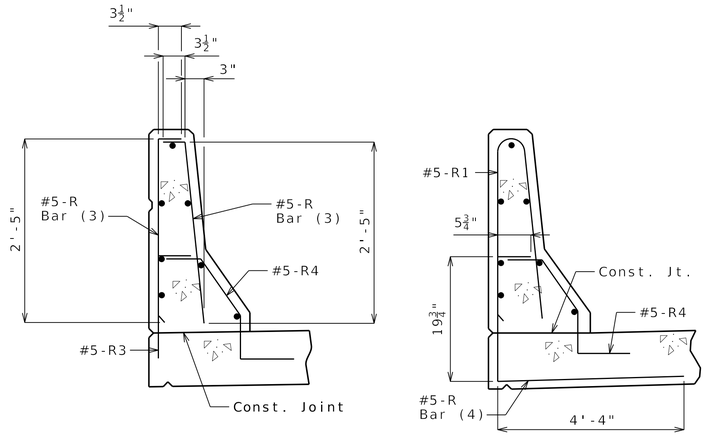
SECTION A-A

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

The cross-sectional area above the slab is 2.27 square feet.

(1) To top of bar

(2) At Bent 4 (4W) and Pier 16 (2C), trim 2-Bars R5 and shift Bar R4 inward to clear segmental expansion joint turn-up in face of barrier.



R-BAR PERMISSABLE 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 R3 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.

Notes:

Top of barrier shall be built parallel to grade with barrier joints normal to grade.

All exposed edges of new barrier replacement shall match existing barrier dimensions.

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 Remove and Replace Barrier Curb per linear foot.

Concrete in the barrier shall be Class B-1.

Measurement of barrier is to the nearest linear foot, measured along the outside top of slab.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plans 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 Remove and Replace Barrier Curb per linear foot.

BARRIER REPLACEMENT AT EXPANSION JOINT LOCATIONS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	31

COUNTY ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

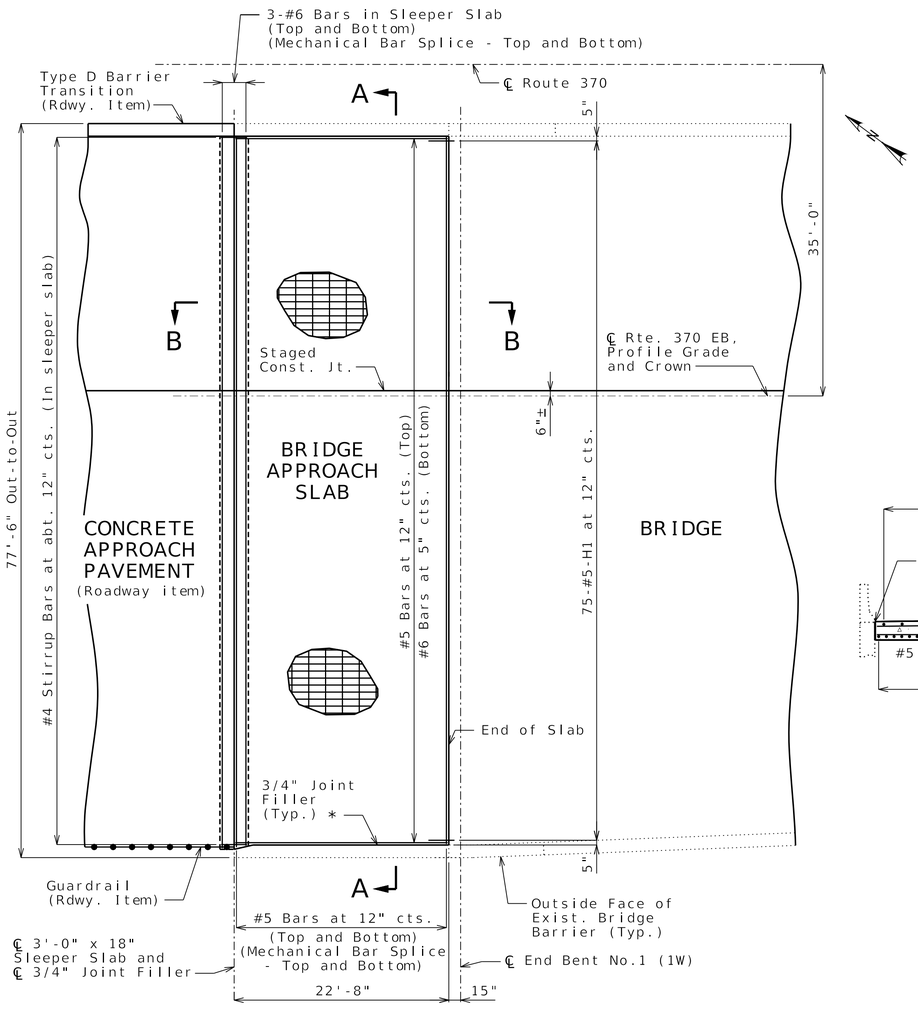
PROJECT NO.

BRIDGE NO. A45576

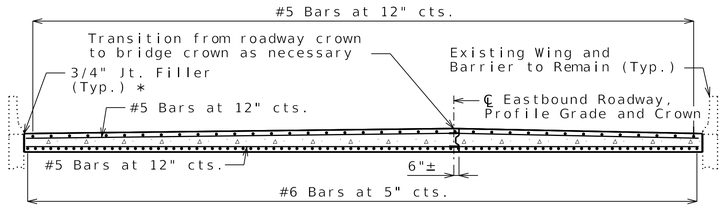
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

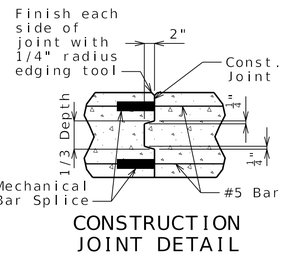
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



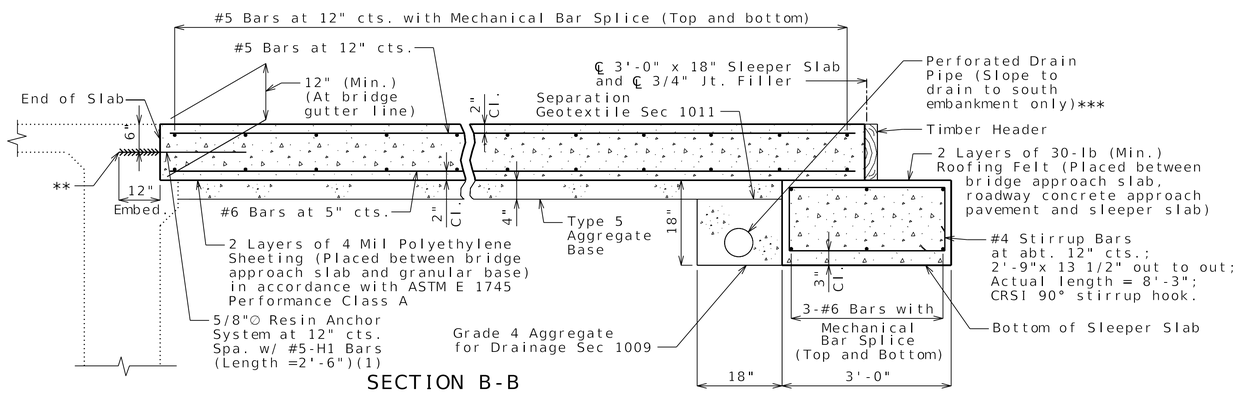
PART PLAN SHOWING REINFORCEMENT



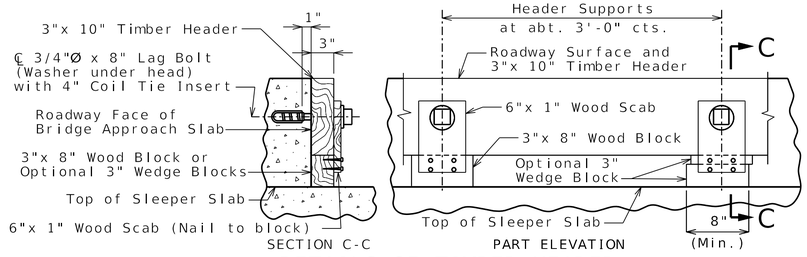
SECTION A-A



CONSTRUCTION
JOINT DETAIL



SECTION B-B



DETAILS OF TIMBER HEADER

Remove timber header when concrete pavement is placed.

DETAILS OF BRIDGE APPROACH SLAB AT END BENT NO. 1 (1W) (MAJOR)

General Notes:

All concrete for the bridge approach slab and sleeper slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab and the sleeper slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Drain pipe may be either 6" diameter corrugated metallic-coated pipe underdrain, 4" diameter polyvinyl chloride (PVC) drain pipe, or 4" diameter corrugated polyethylene (PE) drain pipe.

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

The longitudinal reinforcing steel in the bridge approach slab shall be continuous. The reinforcing in the sleeper slab and transverse reinforcing steel in the bridge approach slab shall be made continuous by mechanical bar splice as detailed.

Mechanical bar splices shall be in accordance with Sec 710. (Estimate 52 splices.)

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

Longitudinal construction joints in approach slab and sleeper slab shall be aligned with longitudinal construction joints in bridge slab.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

For concrete approach pavement details, see Roadway Plans.

Payment for furnishing all materials, labor and excavation necessary to construct the approach slab, including the timber header, sleeper slab, underdrain, Type 5 aggregate base, joint filler and all other appurtenances and incidental work as shown on this sheet including furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

Removal of existing approach slab is included in Roadway Items.

* Seal joint between vertical face of approach slab and wing with sealant in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

** Existing reinforcement connecting the existing end bent and approach slab to be cleaned and reused if present. Otherwise, 5/8" dia. Resin Anchor System to be utilized as shown.Cost will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

*** Contractor shall redirect Drain Pipe as required to daylight along the south embankment. Drain Pipe falling outside the limits of the bridge approach slab shall be unperforated drain pipe.

(1) Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

STATE OF MISSOURI
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ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	32

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION	DATE

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105 WEST CAPITOL
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Detailed May 2025
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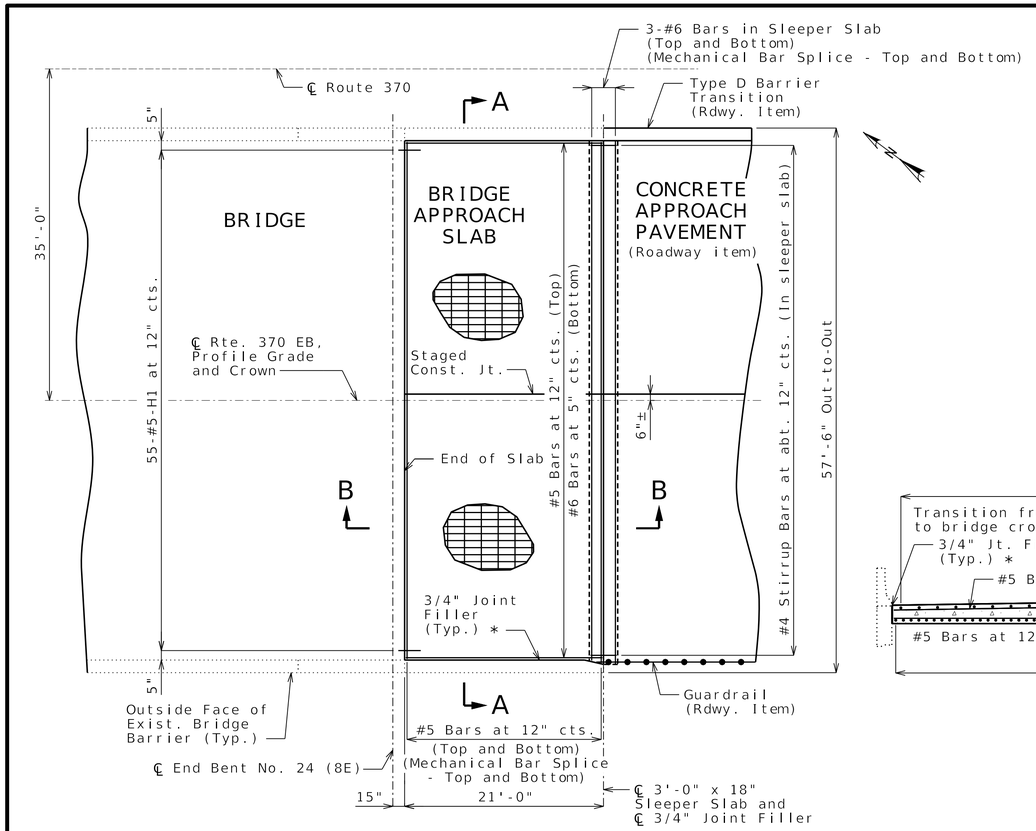
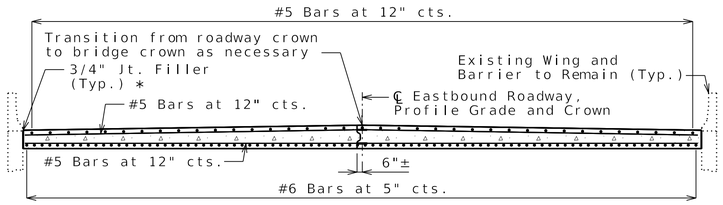
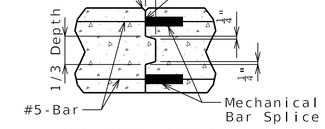


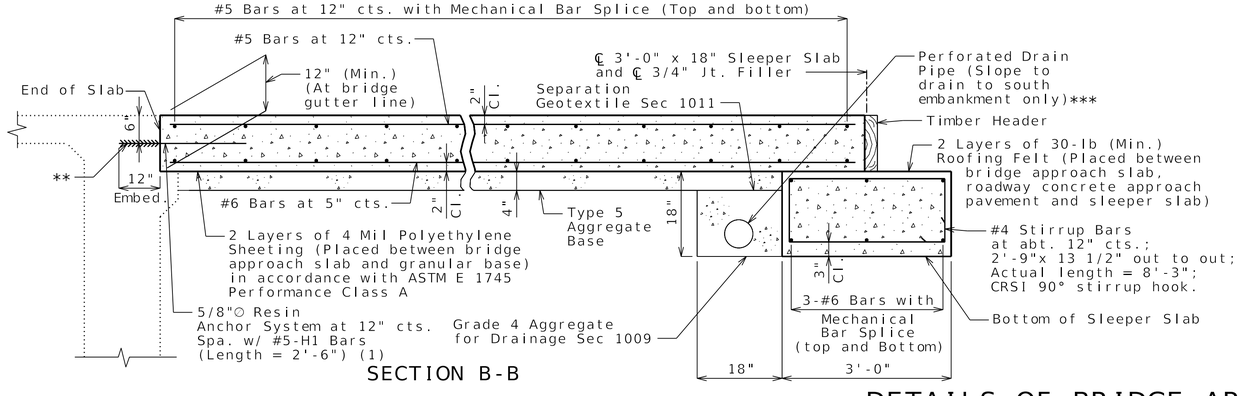
PART PLAN SHOWING REINFORCEMENT



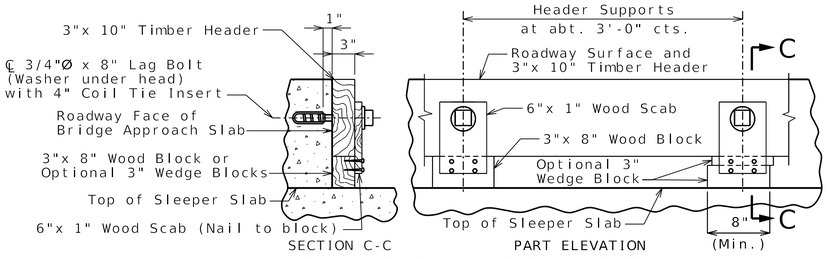
SECTION A-A



CONSTRUCTION JOINT DETAIL



SECTION B-B



DETAILS OF TIMBER HEADER

Remove timber header when concrete pavement is placed.

DETAILS OF BRIDGE APPROACH SLAB AT END BENT NO. 24 (8E) (MAJOR)

General Notes:

All concrete for the bridge approach slab and sleeper slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab and the sleeper slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Drain pipe may be either 6" diameter corrugated metallic-coated pipe underdrain, 4" diameter polyvinyl chloride (PVC) drain pipe, or 4" diameter corrugated polyethylene (PE) drain pipe.

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

The longitudinal reinforcing steel in the bridge approach slab shall be continuous. The reinforcing in the sleeper slab and transverse reinforcing steel in the bridge approach slab shall be made continuous by mechanical bar splice as detailed.

Mechanical bar splices shall be in accordance with Sec 710. (Estimate 48 splices.)

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

Longitudinal construction joints in approach slab and sleeper slab shall be aligned with longitudinal construction joints in bridge slab.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

For concrete approach pavement details, see Roadway Plans.

Payment for furnishing all materials, labor and excavation necessary to construct the approach slab, including the timber header, sleeper slab, underdrain, Type 5 aggregate base, joint filler and all other appurtenances and incidental work as shown on this sheet including furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

Removal of existing approach slab is included in Roadway Items.

* Seal joint between vertical face of approach slab and wing with sealant in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

** Existing reinforcement connecting the existing end bent and approach slab to be cleaned and reused if present. Otherwise, 5/8" dia. Resin Anchor System to be utilized as shown. Cost will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

*** Contractor shall redirect Drain Pipe as required to daylight along the south embankment. Drain Pipe falling outside the limits of the bridge approach slab shall be unperforated drain pipe.

(1) Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	33

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

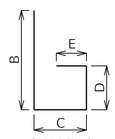
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

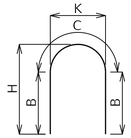
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Detailed May 2025
Checked May 2025

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



SHAPE 6
or 6S



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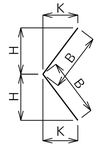

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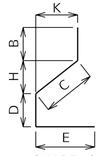

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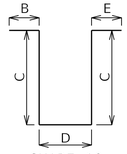

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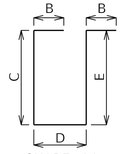

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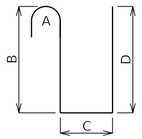

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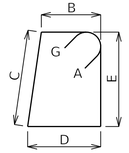

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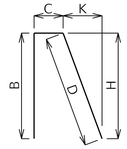

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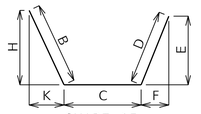

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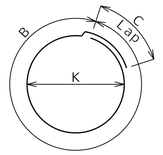

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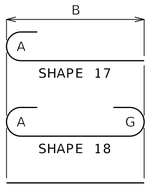
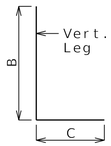


SHAPE 17
SHAPE 18
SHAPE 20



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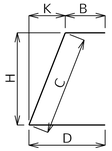

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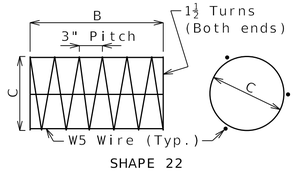

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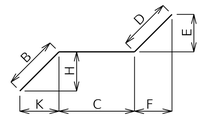

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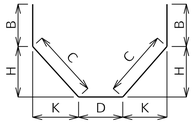

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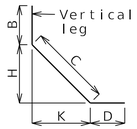

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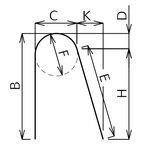

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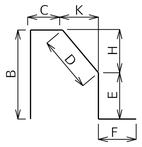

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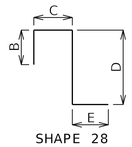

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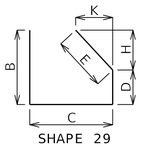

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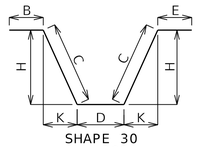

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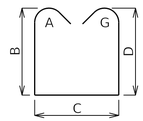

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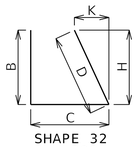

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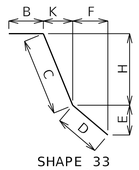

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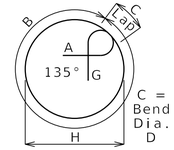

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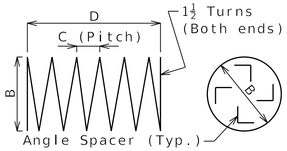
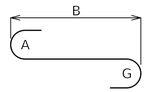


SHAPE 35 (1)

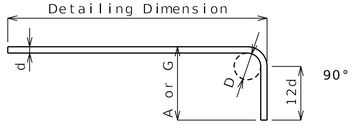


SHAPE 36

Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

Size	Case	D	A or G		J
			90°	180°	180°
#4	1	3"	8"	6"	4"
#5	1	3¾"	10"	7"	5"
#6	1	4½"	12"	8¼"	6"
#7	2	5¼"	14"	9⅜"	7"
	3	7"	15"	11½"	8¾"
#8	2	6"	16"	11"	8"
	3	8"	17"	13¼"	10"
#9	1	9½"	19½"	15½"	11¾"
#10	1	10¾"	22"	17½"	13¼"
#11	1	12"	24½"	19½"	14⅞"
#14	1	18¼"	31¼"	27½"	21⅝"
#18	1	24"	41½"	36¾"	28½"

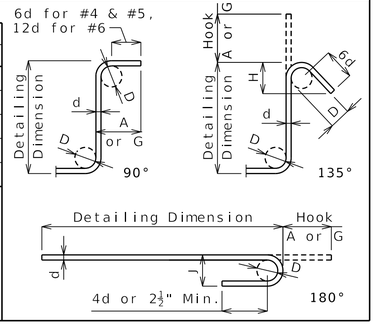


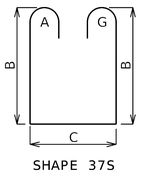
Stirrup Pin Bend Shapes (S)

Size	Case	D	A or G			H	J
			90°	135°	180°	135°	180°
#4	2	2"	4½"	4½"	5"	2⅝"	3"
	3	3"	5"	5¼"	6"	3"	4"
#5	2	2½"	5¾"	5¾"	5¾"	3⅝"	3¾"
	3	3¾"	6¼"	6½"	7"	3⅞"	5"
#6	1	4½"	12"	7¾"	8¼"	4⅝"	6"

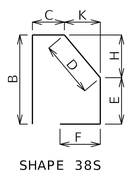
Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.





SHAPE 37S



SHAPE 38S

BENDING DIAGRAMS

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

		Substructure		Superstructure				Entire Bridge	
				Slab					
	Size	Plain	Galv.	Plain	Galv.	Barrier	Slip Form	Plain	Galv.
By Size	W5	0	0	0	0	0	0	0	0
	4	0	155	0	0	0	0	0	155
	5	0	0	0	14,460	901	0	0	15,361
	6	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0
By Type		0	155	0	14,460	901	0	0	15,516

All superstructure reinforcing steel shall be galvanized unless otherwise specified.

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

Detailed May 2025
Checked May 2025

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

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 6/30/2025
ROUTE: 370 STATE: MO
DISTRICT: BR SHEET NO.: 34
COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight
						ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	lb
		Substructure													
		Pier 16 (5C)													
36	4 U1	PEDESTAL	G	10			12.00	23.00					3 11	3 9	90
16	4 U2	PEDESTAL	G	10			12.00	4 3.00					6 3	6 1	65
		Superstructure													
		Slab at Bent 4 (4W)													
16	5 S1	SLAB	G	20		37 1.00							37 1	37 1	619
6	5 S2	SLAB	G	20		16 6.00							16 6	16 6	103
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
16	5 S4	SLAB	G	20		3 5.00							3 5	3 5	57
16	5 S5	SLAB	G	20		28 1.00							28 1	28 1	469
6	5 S6	SLAB	G	20		15 6.00							15 6	15 6	97
100	5 S7	SLAB	G	19		6.00	2 5.00						2 11	2 9	287
100	5 S8	SLAB	G	6		2 0.00	5.25	15.00					3 8	3 5	356
54	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	145
4	5 S20	SLAB	G	20		31 4.00							31 4	31 4	131
4	5 S21	SLAB	G	20		22 4.00							22 4	22 4	93
		Slab at Bent 8 (8W)													
16	5 S1	SLAB	G	20		37 1.00							37 1	37 1	619
6	5 S2	SLAB	G	20		16 6.00							16 6	16 6	103
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
16	5 S5	SLAB	G	20		28 1.00							28 1	28 1	469
6	5 S6	SLAB	G	20		15 6.00							15 6	15 6	97
58	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	156
8	5 S10	SLAB	G	20		3 3.00							3 3	3 3	27
104	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	588
4	5 S20	SLAB	G	20		31 4.00							31 4	31 4	131
4	5 S21	SLAB	G	20		22 4.00							22 4	22 4	93
		Slab at Pier 12(1C)													
16	5 S3	SLAB	G	20		5 7.00							5 7	5 7	93
19	5 S5	SLAB	G	20		28 1.00							28 1	28 1	557
3	5 S6	SLAB	G	20		15 6.00							15 6	15 6	48
29	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	78
14	5 S10	SLAB	G	20		3 3.00							3 3	3 3	47
45	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	254
19	5 S12	SLAB	G	20		29 1.00							29 1	29 1	576
3	5 S13	SLAB	G	20		16 6.00							16 6	16 6	52
12	5 S14	SLAB	G	20		8 4.00							8 4	8 4	104
10	5 S15	SLAB	G	20		6 3.00							6 3	6 3	65
48	5 S16	SLAB	G	19		9.50	18.00						2 4	2 2	108
48	5 S17	SLAB	G	14		9.50	19.50	12.00			8.50	8.50	3 5	3 3	163
48	5 S18	SLAB	G	15		10.50	13.50				7.50	7.50	2 0	2 0	100
2	5 S21	SLAB	G	20		22 4.00							22 4	22 4	47
2	5 S22	SLAB	G	20		23 4.00							23 4	23 4	49
2	5 S23	SLAB	G	20		26 4.00							26 4	26 4	55
2	5 S24	SLAB	G	20		25 4.00							25 4	25 4	53
		Slab at Pier 16(5C)													
16	5 S3	SLAB	G	20		5 7.00							5 7	5 7	93
18	5 S4	SLAB	G	20		3 5.00							3 5	3 5	64
19	5 S5	SLAB	G	20		28 1.00							28 1	28 1	557
3	5 S6	SLAB	G	20		15 6.00							15 6	15 6	48
86	5 S7	SLAB	G	19		6.00	2 5.00						2 11	2 9	247
43	5 S8	SLAB	G	6		2 0.00	5.25	15.00					3 8	3 5	153
27	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	73
19	5 S12	SLAB	G	20		29 1.00							29 1	29 1	576
3	5 S13	SLAB	G	20		16 6.00							16 6	16 6	52
10	5 S15	SLAB	G	20		6 3.00							6 3	6 3	65
42	5 S16	SLAB	G	19		9.50	18.00						2 4	2 2	95
42	5 S17	SLAB	G	14		9.50	19.50	12.00			8.50	8.50	3 5	3 3	142
42	5 S18	SLAB	G	15		10.50	13.50				7.50	7.50	2 0	2 0	88
12	5 S19	SLAB	G	20		8 2.00							8 2	8 2	102
2	5 S21	SLAB	G	20		22 4.00							22 4	22 4	47
2	5 S22	SLAB	G	20		23 4.00							23 4	23 4	49
2	5 S25	SLAB	G	20		25 10.00							25 10	25 10	54
2	5 S26	SLAB	G	20		24 10.00							24 10	24 10	52

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight
						ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	lb
		Superstructure, cont'd.													
		Slab at Bent 19(3E)													
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
16	5 S5	SLAB	G	20		28 1.00							28 1	28 1	469
6	5 S6	SLAB	G	20		15 6.00							15 6	15 6	97
58	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	156
8	5 S10	SLAB	G	20		3 3.00							3 3	3 3	27
90	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	508
16	5 S12	SLAB	G	20		29 1.00							29 1	29 1	485
6	5 S13	SLAB	G	20		16 6.00							16 6	16 6	103
4	5 S21	SLAB	G	20		22 4.00							22 4	22 4	93
4	5 S22	SLAB	G	20		23 4.00							23 4	23 4	97
		Slab at Bent 22(6E)													
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
16	5 S5	SLAB	G	20		28 1.00							28 1	28 1	469
6	5 S6	SLAB	G	20		15 6.00							15 6	15 6	97
58	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	156
8	5 S10	SLAB	G	20		3 3.00							3 3	3 3	27
90	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	508
16	5 S12	SLAB	G	20		29 1.00							29 1	29 1	485
6	5 S13	SLAB	G	20		16 6.00							16 6	16 6	103
4	5 S21	SLAB	G	20		22 4.00							22 4	22 4	93
4	5 S22	SLAB	G	20		23 4.00							23 4	23 4	97
		Barrier													
60	5 R1	BARRIER	G	26		2 5.00	4.00	1.75	2 3.25	4.00	2 3.25	3.00	5 0	5 0	313
60	5 R3	BARRIER	G	19S		17.75	5.75						2 0	1 10	115
60	5 R4	BARRIER	G	27S			5.75	11.50	7.75	12.00	9.50	6.75	3 1	2 11	183
28	5 R5	BARRIER	G	20		3 5.00							3 5	3 5	100
56	5 R6	BARRIER	G	20		3 3.00							3 3	3 3	190

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 34.

Detailed May 2025
Checked May 2025

All bars shal be Grade 60.

BILL OF REINFORCING STEEL

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

Sheet No. 35 of 40

Codes: C = Required coatings, where E = Epoxy coated and G = Galvanized

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length.Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	35

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45576

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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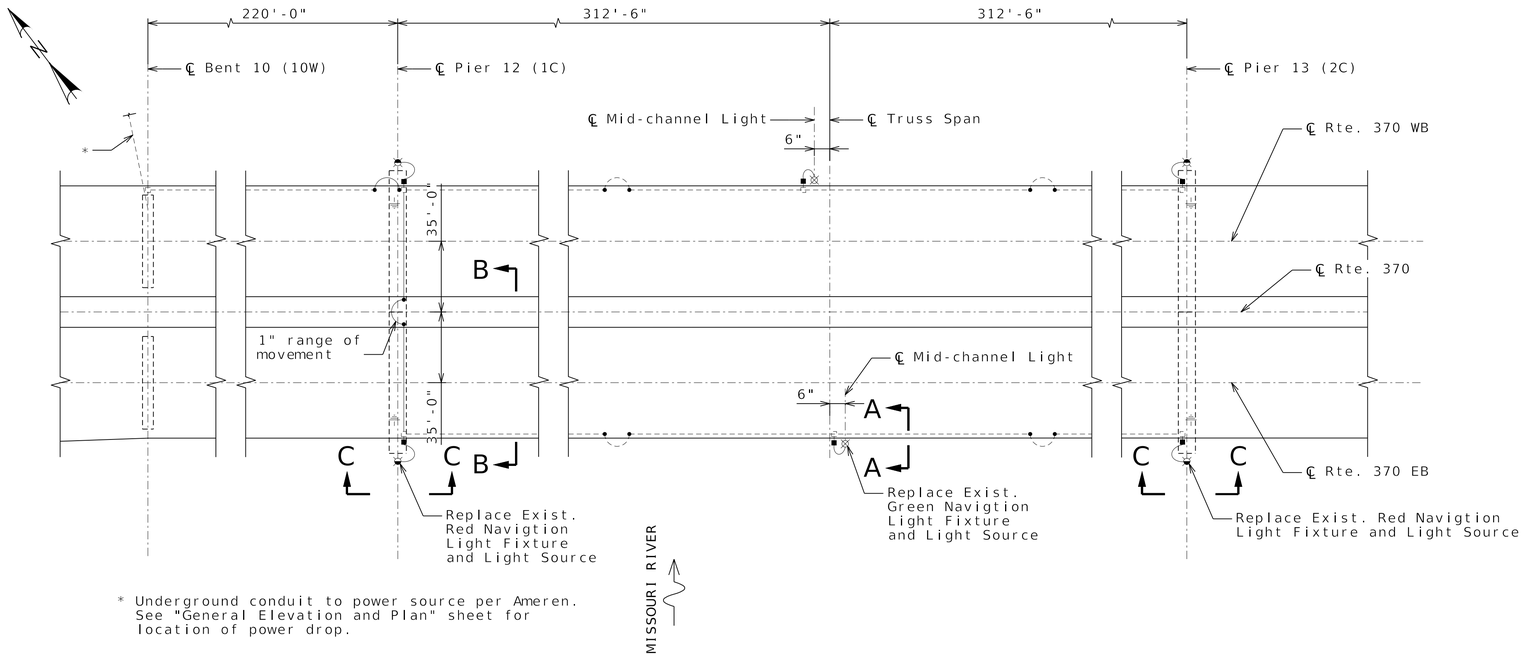
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



* Underground conduit to power source per Ameren. See "General Elevation and Plan" sheet for location of power drop.

PART PLAN
(Truss not shown for clarity)

SYMBOLS

- Exist. Navigation Light 180° Red
- Exist. Navigation Light 360° Green
- Exist. Junction Box embedded under parapet
- Replace Junction or Pull Box, surface mounted 6"x6"x4"
- Exist. 1¼" PVC conduit placed in slab beneath barrier curb
- Exist. conduit expansion fitting (liquid tight)
- Replace conduit expansion fitting with total range of movement as indicated(liquid tight)
- Replace 1" exposed, rigid galvanized steel conduit with 2" PVC conduit
- Exist. bridge ground

Notes:

All new conduit shall be rigid nonmetallic schedule 40 heavy wall polyvinyl chloride (PVC). Each section of the conduit shall bear the Underwriters Laboratory (UL) label.

All original conduit and surface mounted junction boxes shall be completely removed and replaced as shown.

The existing ground connections at Piers 12 (1C) and 13 (2C) shall not be disturbed without approval of the Engineer. Any portions of the grounding system that is allowed to be temporarily disconnected to allow placement of the new conduit and junction boxes shall be reconnected as soon as possible.

Any existing conduit system fastener holes in structural steel members not used shall be filled with an equal sized high strength bolt.

Notes: (Cont.)

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

Weep holes shall be provided at low points or other critical locations to drain any moisture in the conduit system. Conduit shall be sloped to drain.

All wiring shall be type THWN, unless otherwise noted.

For requirements of Navigation Lighting System installation, see Job Special Provisions.

Additional expansion fittings beyond what is specified on the bridge plans shall be provided and placed in accordance with the conduit manufacturer's recommendations.

Notes: (Cont.)

All conduit clamps shall be commercially-available, nonmetallic clamps and approved by the engineer.

All conduits shall be secured to the the concrete with nonmetallic clamps at about 5'-0" cts. Concrete anchors for clamps shall be in accordance with Commercial Item Description (CID)A-A-1923A and shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C, ASTM B695, Class 55 or stainless steel. Minimum embedment in concrete shall be 1 3/4". The supplier shall furnish a manufacturer's certification that the concrete anchors meet the required material and galvanizing specifications.

Cost of furnishing and installing the conduit system complete in place, including conduit, wiring, junction boxes, and fixtures will be considered completely covered by the contract lump sum price for Navigation Lighting System.

For Sections A-A and B-B and View C-C, see Sheet No. 37.

Installation of Navigation Lighting System for Bridge No. A45576 shall be coordinated with Bridge No. A45577. See Bridge No. A45577 bridge plans for details and notes pertaining to the westbound structure.

NAVIGATION LIGHTING PLAN

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	36

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION	DATE

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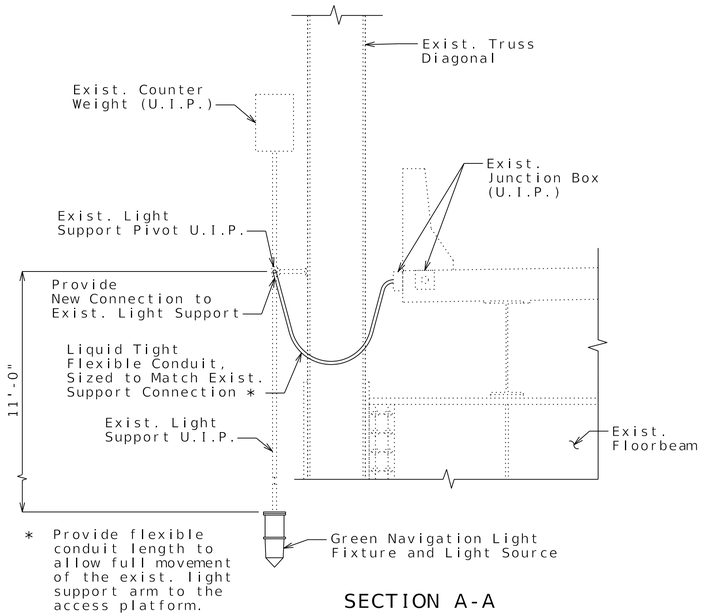
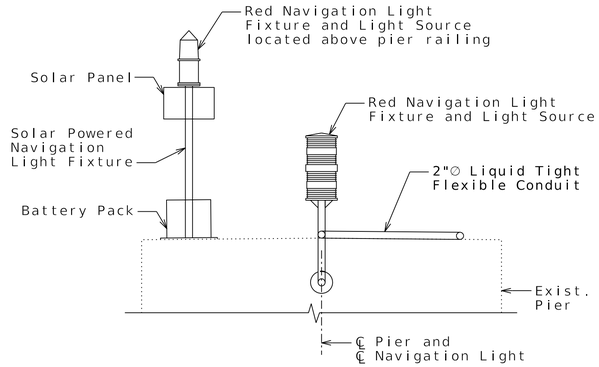
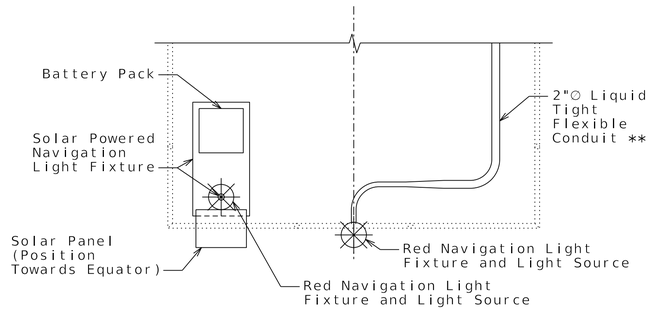


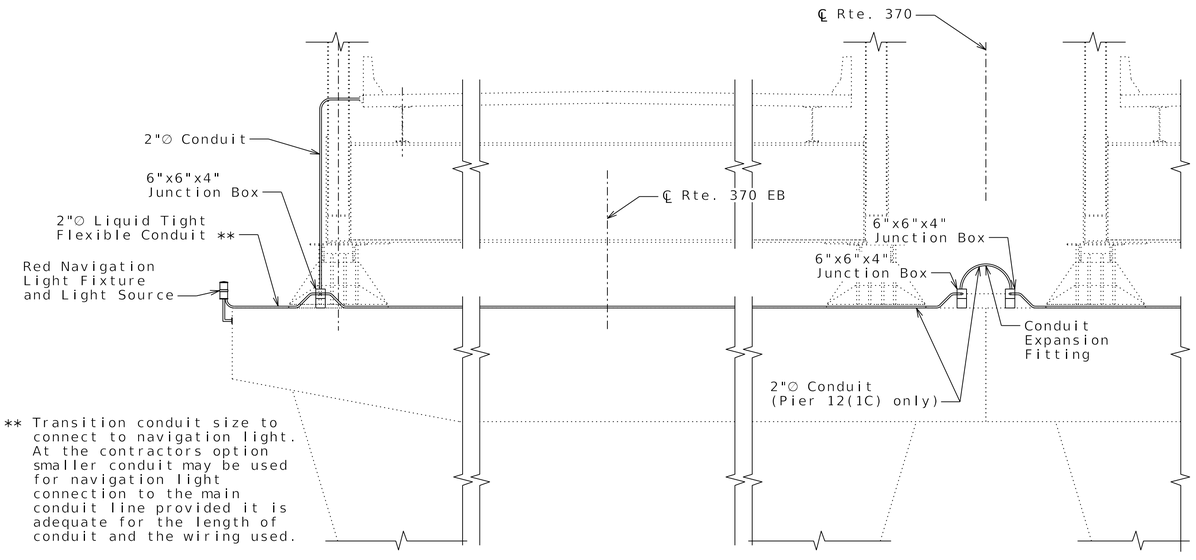
SECTION A-A



VIEW C-C
(Pier 12 (1C) shown, Pier 13 (2C) similar)
(Railing post on pier not shown for clarity)



PART PLAN OF PIER END
(Pier 12 (1C) shown, Pier 13 (2C) similar)



SECTION B-B
(Looking Back Station)
(Pier 12 (1C) shown, Pier 13 (2C) similar except as noted)

Notes:

Solar Powered Pier lights shall be anchored with number and size of anchors as recommended by the light manufacturer. Light fixtures shall be installed in accordance with the manufacturer's recommendations, Sec 901 and 1091 and Job Special Provisions.

Navigation light fixtures shall be supplied by Tideland Signal Corporation and shall consist of the following:

Replace AC Powered Navigation Lighting Fixtures
- 3-MLED - 140 Lantern
- 2-MaxiHALO-60 II LED Flasher, LED color shall be Red for Pier lights
- 2-MaxiHALO-60 II LED Flasher, LED color shall be Green for Mid-Channel lights
- 3-AC/DC Power Converter

Replace Solar Powered Navigation Light Fixture
- 2-Sola-Chan Solar Powered Channel Marker fixture
- 2-MLED - 140 Lantern
- 2-MaxiHALO-60 II LED Flasher, LED color shall be Red

The above navigation light fixtures are for Bridge No. A45576. See bridge plans for Bridge No. A45577 for navigation light fixtures associated with the rehabilitation of that bridge.

Solar powered navigation lights shall operate independently of the AC powered system.

Where holes are field drilled in the flanges or base plates of the Sola-Chan fixture, areas shall be touched up in accordance with Sec 1081.

Cost of furnishing and installing the navigation lighting fixtures and LED flashers and solar powered navigation light fixtures will be considered completely covered by the contract lump sum price for Navigation Lighting System.

Working drawings shall be submitted to the Engineer for approval.

All steel shall be stainless steel or galvanized.

U.I.P. denotes Use In Place

For Location of Sections A-A & B-B and View C-C, see Sheet No. 36.

NAVIGATION LIGHTING DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	37

COUNTY ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45576

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
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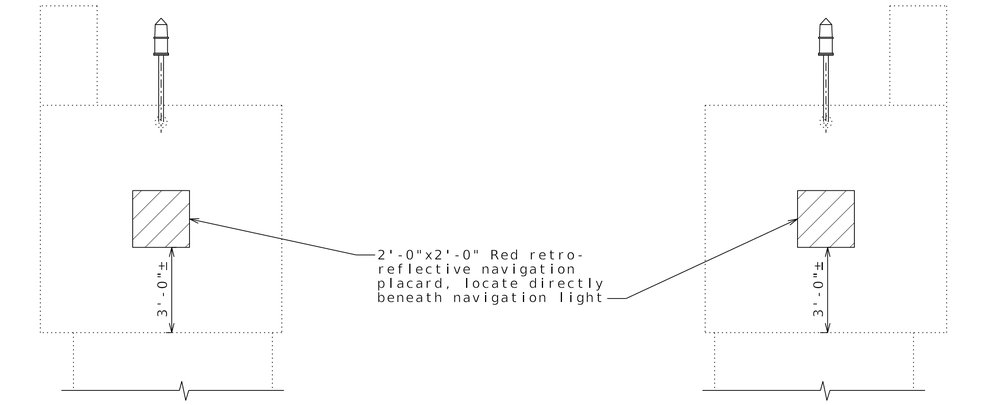
314-425-8300
Certificate of Authority: 000856



PIER 12 (1C) - SOUTH (UPSTREAM) FACE

PIER 13 (2C) - SOUTH (UPSTREAM) FACE

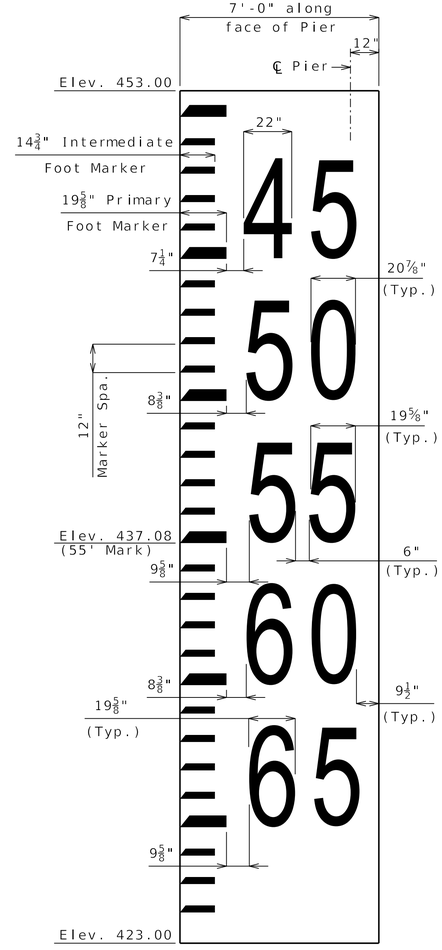
REPLACEMENT OF NAVIGATION PLACARDS

Notes:

Remove existing navigation placards prior to application of Protective Coating (Urethane). Install new navigation placards after coating is complete.

Placards shall be fabricated with type 2 reflective sheeting on aluminum flat sheet in accordance with Sec. 1042. For mounting, use 3/8" stainless sleeve anchors with stainless steel washers and nuts.

The furnishing and installation of materials for the Navigation Placards shall be considered completely covered by the contract price for Navigation Placard Replacement per each.



RIVER GAUGE MARKING AT PIER 13 (2C) SOUTH (UPSTREAM) FACE

Notes:

River gauges are to be repainted in-kind to the original gauges, per the elevations and dimensions provided herein. All elevations and dimensions shall be verified by the contractor prior to re-painting.

Dimensions shown are for clearance to low steel at west face of Pier 13 (2C). Dimensions shall be adjusted as necessary to achieve that result.

The size, type and spacing of numerals must conform to the "Standard Alphabets for Highway Signs", Series C Type numerals. Numeral shall be 3'-0" in height. Stroke width of numerals and primary foot marks shall be 5".

Primary foot markers shall be spaced at 5'-0" intervals. Intermediate foot markers shall be spaced at 12" between primary foot markers. Intermediate foot markers shall have a stroke width of half that noted for primary markers.

Background to be painted white and numerals and foot marks to be painted black. See Special Provisions.

The furnishing and installation of materials for the Clearance Gauge on the pier shall be considered completely covered by the contract price for Repaint River Gauge Markings per lump Sum.

NAVIGATION PLACARD AND RIVER GAUGE MARKING DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
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DATE PREPARED: 6/30/2025
ROUTE: 370 | STATE: MO
DISTRICT: BR | SHEET NO.: 38
COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45576

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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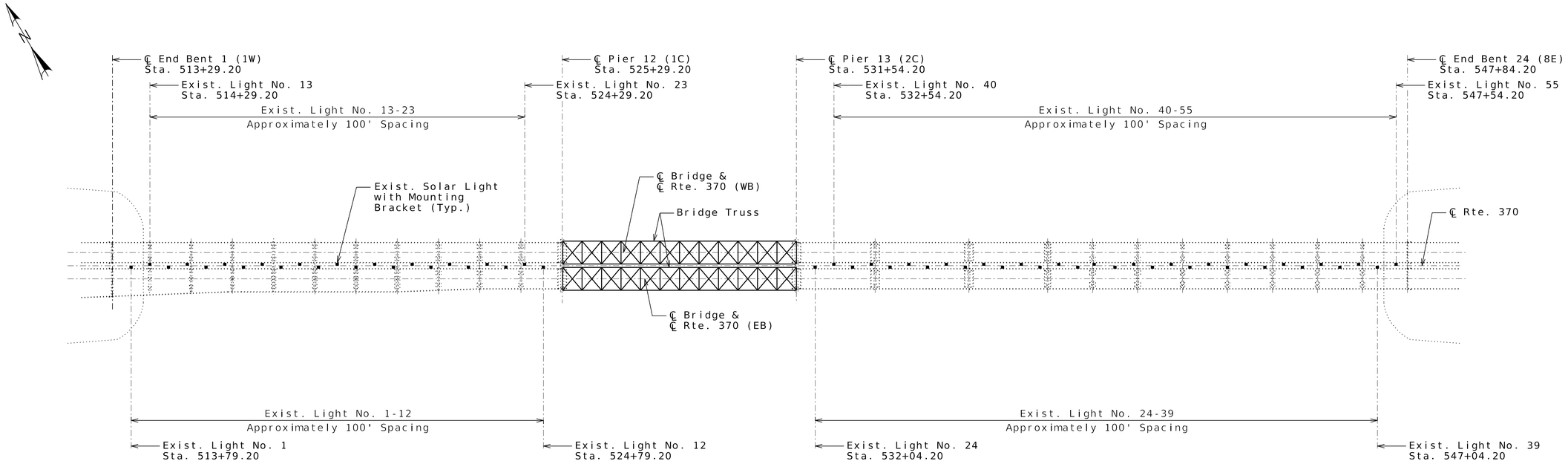
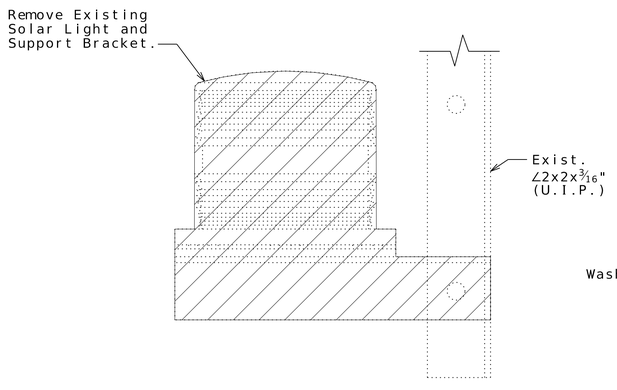
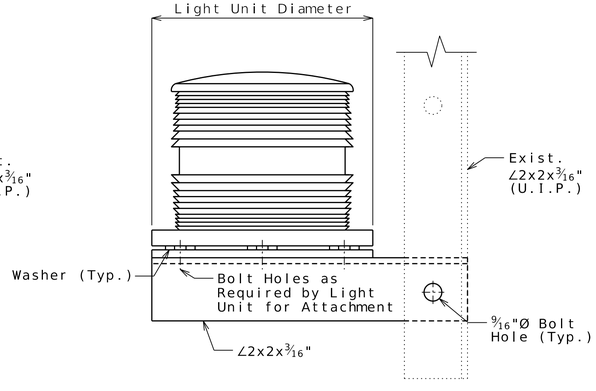
314-425-8300
Certificate of Authority: 000856



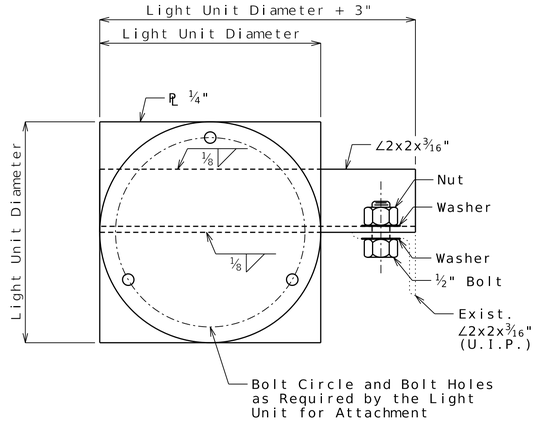
PLAN



REMOVAL OF EXISTING SOLAR LIGHT DETAIL



REPLACEMENT SOLAR LIGHT DETAIL



LIGHT BASE DETAIL

Notes:

Limits of Solar Light and Support Bracket Removal.

U.I.P. = Use In Place

Washers to be placed between light and light base plate at connection.

All steel to be ASTM A709 Grade 36 steel. Steel shall be galvanized in accordance with ASTM A123 and Sec 1081.

At the contractors option, new bolt holes may be drilled in the existing base plate as needed and the existing solar light support bracket may be used in place if the replacement solar light is compatible with the existing base plate and support bracket.

The cost of all labor, materials and equipment necessary to complete the median light replacement shall be considered completely covered by the contract lump sum price for Median Solar Light System.

Installation of Median Solar Light System for Bridge No. A45576 shall be coordinated with Bridge No. A45577. See Bridge No. A45577 bridge plans for details and notes pertaining to the westbound structure.

MEDIAN LIGHTING DETAILS

Detailed May 2025
Checked May 2025

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

AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	39

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45576

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
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314-425-8300
Certificate of Authority: 000856

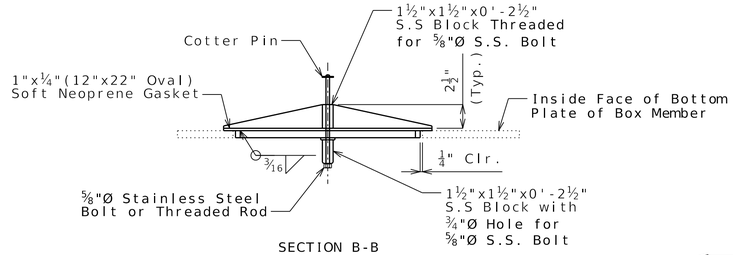
BOLT REPLACEMENT TABLE				
Repair	Location	Description	Type & Size of Bolt	Estimated No. of Bolts to be Replaced
1	L5L6 Stringer 5	Missing Bolt from the Cross Brace Support	A325, ⅞" Dia.	1
2	U4' Right Truss Inner Gusset	Missing Bolt in Cross Brace Gusset on the Bottom Flange	A325, ⅞" Dia.	1
3	U4' Left Truss Inner Gusset	Missing Bolt in Cross Brace Gusset on the Top Flange	A325, ⅞" Dia.	1
4	L3'L2' Stringer 5 at L3'	One Bolt Sheared Off on East Side	A325, ⅞" Dia.	1
5	L3'L2' Stringer 6 at L3'	Three Bearing Plate Bolts are Sheared Off with Remaining Bolt on East Side Loose	A325, ⅞" Dia.	4
6	L2'U2'Left Truss	Missing Bolt in Lower Lateral Brace Connection	A325, ⅞" Dia.	1
7	Span 10W Cross Frame between Girder E and F	Missing Three Bolts in West Cross Frame	A325, ⅞" Dia.	3
8	Span 10W Cross Frame between Girder E and F	Four Loose Nuts with Insufficient Thread Length	A325, ⅞" Dia.	4

Notes:

All connections shall be 7/8" diameter High Strength Bolts, Nuts and Washers as indicated in the Bolt Replacement Table.

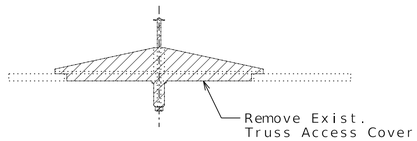
Contractor shall replace all missing or loose bolts as indicated in the Bolt Replacement Table.

The cost of all labor, materials, and equipment necessary to complete the bolt replacement as indicated in the Bolt Replacement Table shall be considered completely covered by the contract unit price for Miscellaneous Bolt Replacement.



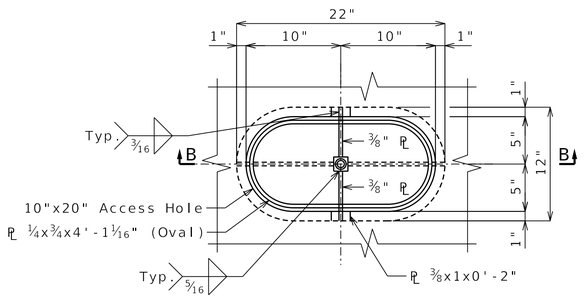
SECTION B-B

BOTTOM VIEW

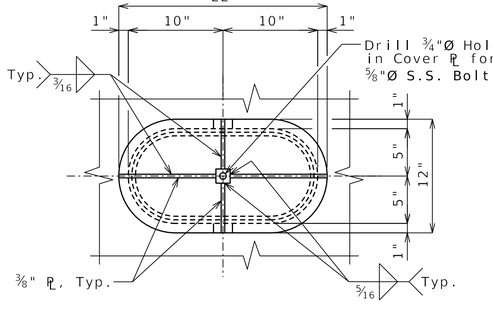


SECTION A-A

TRUSS ACCESS HOLE COVER REMOVAL DETAILS



BOTTOM VIEW



TOP VIEW

TRUSS ACCESS HOLE COVER REPLACEMENT DETAILS

TRUSS ACCESS HOLE COVER REMOVAL & REPLACEMENT	
Repair	Location
1	L2 Right Lower Gusset East Access Hole
2	L2 Right Lower Gusset West Access Hole
3	L4' Right Lower Gusset West Access Hole

Notes:

Limits of Access Hole Removal.

All steel for the truss access hole cover replacement shall be ASTM A709 Grade 36, unless noted otherwise.

The cost of all labor, materials and equipment necessary to complete the truss access hole cover replacement shall be considered completely covered by the contract unit price for Truss Access Hole Cover Replacement per each.

MISCELLANEOUS DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 40
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45576

DESCRIPTION | DATE

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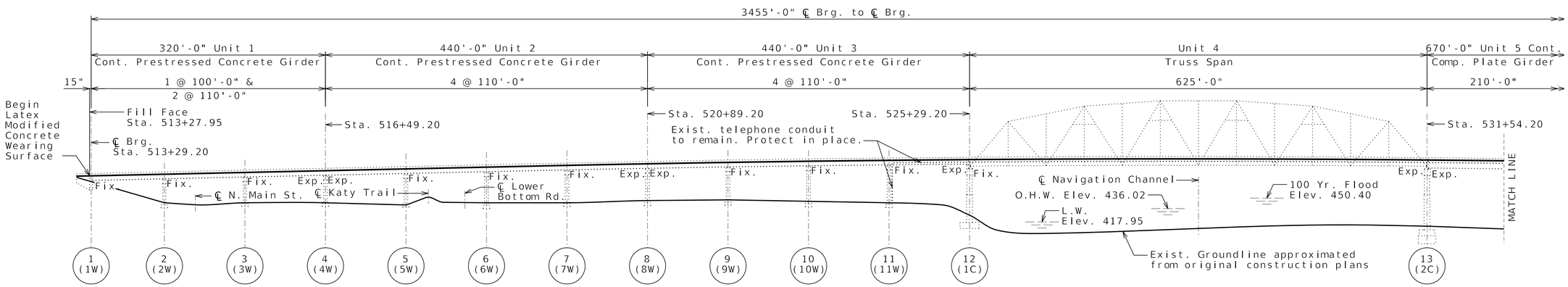
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

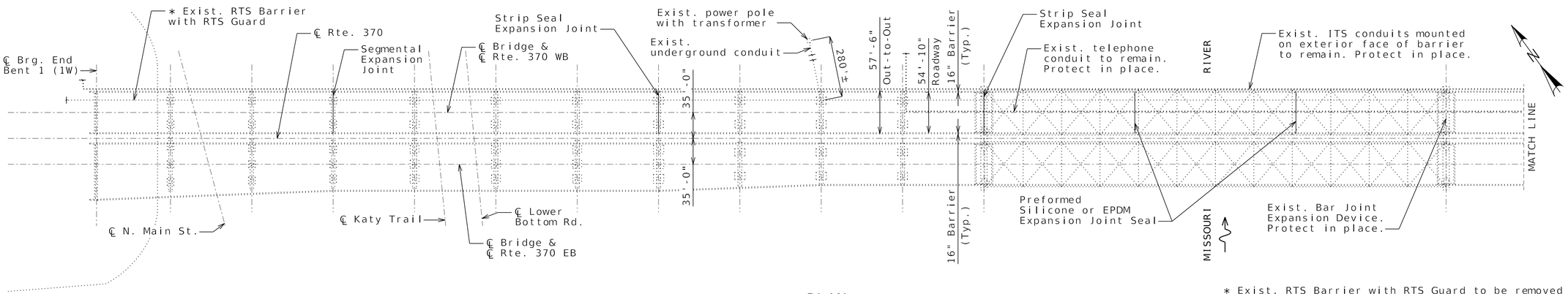
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

SEC/SUR 32 TWP 47N RGE 5E

U.I.P. AND REHABILITATE
EXISTING (100'-110'-110'), (4@110'), (4@110') CONT. PRESTRESSED CONCRETE BULB-TEE GIRDER SPANS, (625') SIMPLE THRU TRUSS SPAN, (210'-250'-210') CONT. COMPOSITE PLATE GIRDER SPANS, (3@120'), (3@120'), (2@120') CONT. PRESTRESSED CONCRETE BULB-TEE GIRDER SPANS



GENERAL ELEVATION



PLAN

* Exist. RTS Barrier with RTS Guard to be removed for full limits of bridge and roadway before Stage 1 construction and restored at end of construction. See Special Provisions.

For replacement of damaged RTS Barrier units and RTS Guard, see Special Provisions.

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1. General Elevation and Plan
2. General Elevation and Plan
3. General Notes and Quantities
4. Construction Staging
5. Substructure Repair & Concrete Protective Coating Details
6. Substructure Repair & Concrete Protective Coating Details
7. Concrete Diaphragm Repair and Diaphragm and Girders Protective Coating Details
8. High Load Multi-Rotational (HLMR) Disc Bearing Retrofit Details
9. High Load Multi-Rotational (HLMR) Disc Bearing Assembly
10. Type N PTFE Bearings
11. Bearing Retainer Retrofit Details
12. Deck and Barrier Repair Details
13. Steel Protective Coating Limits
14. Gusset Plate LO Retrofit
15. Gusset Plate LO Retrofit
16. Gusset Plate LO Retrofit
17. Gusset Plate LO Retrofit
18. Drainage Modifications at Pier 13 (2C)
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20. Slab Drain Extensions in Truss Span
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22. Expansion Device Removal Details
23. Strip Seal Expansion Joint Details at Bents 8 (8W), 12 (1C), 19 (3E) and 22 (6E)
24. Strip Seal Expansion Joint Details at Bents 8 (8W), 12 (1C), 19 (3E) and 22 (6E)
25. Segmental Expansion Joint Details at Bents 4 (4W) and 16 (5C)
26. Preformed Silicone or EPDM Joint Seal in Unit 4
27. Slab Replacement at Bent 4 (4W)
28. Slab Replacement at Bents 8 (8W), 19 (3E) and 22 (6E)
29. Slab Replacement at Pier 12 (1C)
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33. Details of Bridge Approach Slab at End Bent No. 24 (8E) (Major)
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35. Bill of Reinforcing Steel
36. Navigation Lighting Plan
37. Navigation Lighting Details
38. Navigation Placard and River Gauge Marking Details
39. Median Lighting Details
40. Miscellaneous Details
41. Bicycle Plate Details at Bar Joint
42. Bicycle Plate Details at Strip Seal Expansion Joints
43. Bicycle Plate Details at Segmental Expansion Joints

GENERAL ELEVATION AND PLAN

Designed May 2025
Detailed May 2025
Checked May 2025

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

REPAIRS TO BRIDGE:
ROUTE 370 WB OVER MISSOURI RIVER

ROUTE 370 FROM ROUTE 94 TO ROUTE 141
ABOUT 0.2 MILE EAST OF ROUTE 94
STA. 513+27.95± (MATCH EXISTING)

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	1

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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401 S. 18th Street
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314-425-8300
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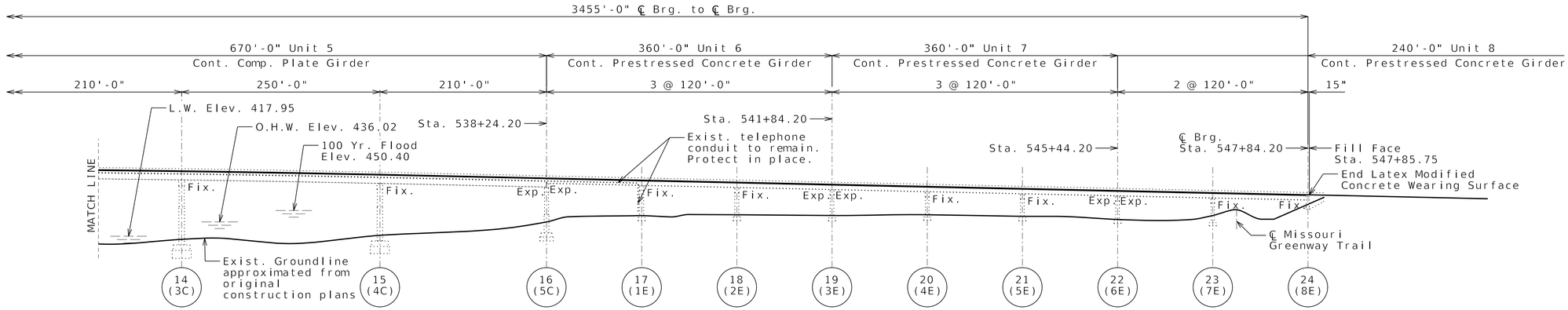
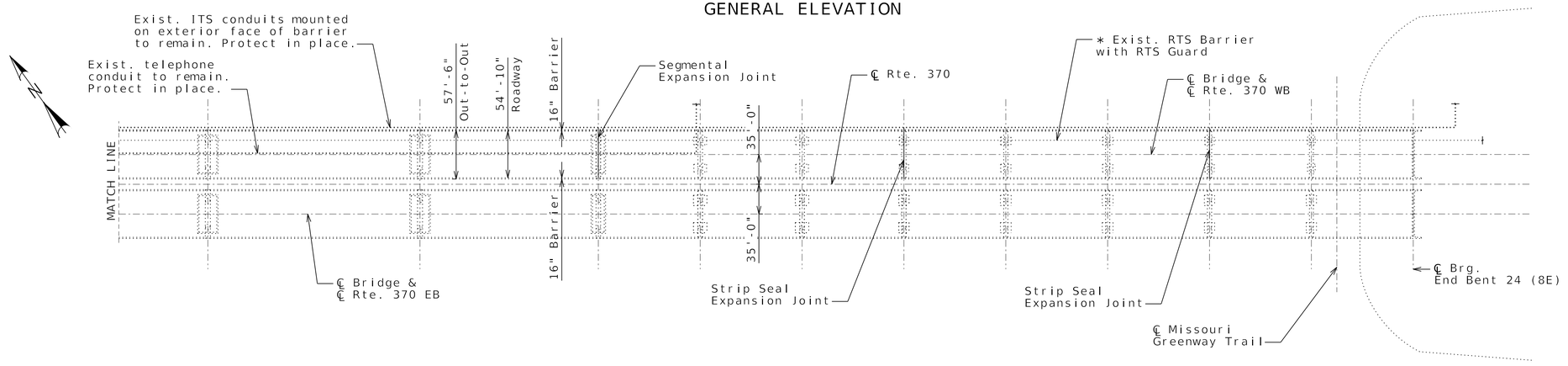


GENERAL ELEVATION



PLAN

* Exist. RTS Barrier with RTS Guard to be removed for full limits of bridge and roadway before Stage 1 construction and restored at end of construction. See Special Provisions.

For replacement of damaged RTS Barrier units and RTS Guard, see Special Provisions.

GENERAL ELEVATION AND PLAN

Detailed May 2025
Checked May 2025

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STATE OF MISSOURI
AMY E. SMITH
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PE-2021015056
PROFESSIONAL ENGINEER
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DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	2

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45577

DESCRIPTION	DATE

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ESTIMATED QUANTITIES

	Item	Unit	Substr.	Superstr.	Total
	Total Surface Hydro Demolition	SY		20,759	20,759
	Removal of Concrete Wearing Surface	SF		186,831	186,831
	Removal of Existing Expansion Joint & Adjacent Concrete	LF		329	329
	Removal of Existing Expansion Joint Seal or Sealant	LF		110	110
	Removal of Existing Bearings	EA		10	10
	Remove and Replace Barrier Curb	LF		86	86
	Bridge Approach Slab (Major)	SY		256	256
	Supplementary Wearing Surface Material	CY		114	114
	Latex Modified Concrete Wearing Surface	SY		20,759	20,759
	Diamond Grinding	SY		20,759	20,759
	Class B-2 Concrete	CY		77.2	77.2
	Substructure Repair (Unformed)	SF	637		637
	Fiber Reinforced Polymer Wrap	SF	2,328		2,328
	Barrier Repair	LF		40	40
	Concrete Diaphragm Repair (Formed)	SF		10	10
	Cleaning and Protective Coating (Epoxy)	SF		11,168	11,168
	Reinforcing Steel (Galvanized)	LB	160	13,960	14,120
	Protective Coating - Concrete Bents and Piers (Urethane)	LS	1		1
	Repaint River Gauge Markings	LS	1		1
*	Surface Preparation for Recoating Structural Steel - Unit 4	LS		1	1
*	Field Application of Inorganic Zinc Primer - Unit 4	LS		1	1
**	Surface Preparation for Recoating Structural Steel - Unit 5	SF		84,900	84,900
**	Field Application of Inorganic Zinc Primer - Unit 5	SF		84,900	84,900
	Drainage Modifications	LS			1
	Expansion Joint Bicycle Plate	EA		10	10
	Gusset Plate L0 Retrofit	EA		4	4
	Miscellaneous Bolt Replacement	EA		6	6
	Extend Slab Drain	EA		12	12
	Truss Access Hole Cover Replacement	EA		4	4
	Type N PTFE Bearing	EA		2	2
	High Load Multi-Rotational (HLMR) Disc Bearing Assembly	EA		8	8
	Bearing Retainer Retrofit	EA		60	60
	Strip Seal Expansion Joint System	LF		219	219
	Preformed Silicone or EPDM Expansion Joint Seal	LF		110	110
	Segmental Expansion Joint System	LF		110	110
	Navigation Lighting System	LS			1
	Median Solar Light System	LS			1
	Navigation Placard Replacement	EA			2
	PAINT ALTERNATE 1				
*	Finish Field Coat (System I) - Unit 4	LS		1	1
**	Finish Field Coat (System I) - Unit 5	SF		21,400	21,400
	PAINT ALTERNATE 2				
*	Finish Field Coat (System L) - Unit 4	LS		1	1
**	Finish Field Coat (System L) - Unit 5	SF		21,400	21,400

* Includes steel to be recoated within Unit 4 truss span (12-13) including the floor system, per limits shown on Sheet No. 13, to be paid by lump sum. See Special Provisions for total steel weight of truss span including floor system.

** Includes steel to be recoated within Unit 5 approach girder spans (13-14), (14-15) and (15-16), per limits shown on Sheet No. 13, to be paid per square foot of surface area.

GENERAL NOTES:

DESIGN SPECIFICATIONS:
2020 - AASHTO LRFD Bridge Design Specifications (9th Edition) (New construction)

DESIGN LOADING:
Vehicular = HS20-44 (1988) (Existing Construction), HL-93 (New construction)
No Future Wearing Surface

DESIGN UNIT STRESSES:

Class B-2 Concrete (Superstructure except Barrier)	f'c = 4,000 psi.
Class B-1 Concrete (Substructure and Barrier)	f'c = 4,000 psi.
Reinforcing Steel (ASTM A615 Grade 60)	fy = 60,000 psi.
Structural Carbon Steel (ASTM A709 Grade 36)	fy = 36,000 psi.
Structural Steel (ASTM A709 Grade 50)	fy = 50,000 psi.

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:
Traffic to be maintained on structure during construction. See roadway plans for traffic control and Sheet No. 4 for staged construction details.

RECOATING EXISTING STEEL:
At the contractor's option, Paint Alternate 1 - Finish Field Coat (System I) or Paint Alternate 2 - Finish Field Coat (System L) may be used, see Special Provisions. Only one paint system shall be used for the entirety of the bridge.

Protective Coating: System I in accordance with Sec 1081 or System L in accordance with Special Provisions, and limits shown on plans.

Surface Preparation: Surface Preparation of the existing steel shall be in accordance with Sec 1081 for Recoating of Structural Steel (System I) or in accordance with Special Provisions (System L), with inorganic zinc primer. The cost of surface preparation will be considered completely covered by the contract lump sum price or price per sq. foot for Surface Preparation for Recoating Structural Steel.

Prime Coat: Inorganic zinc primer will be required. Organic zinc primer will not be allowed. The cost of the prime coat will be considered completely covered by the contract lump sum price or price per sq. foot for Field Application of Inorganic Zinc Primer.

Field Coats: The color of the field coats shall be Gray (Federal Standard #26373). The cost of the finish field coat will be considered completely covered by the lump sum price or price per sq. foot for Finish Field Coat (System I) or Finish Field Coat (System L).

For the duration of the cleaning and recoating the truss spans, the truss span superstructure in any span shall not be draped with an impermeable surface subject to wind loads for a length any longer than 1/4 the span length at any one time regardless of height of coverage. Simultaneous work in adjacent spans is permissible using the specified limits in each span.

COATING NEW STEEL:
The same Finish Field Coat system for recoating existing steel shall be used for new steel.

Protective Coating: System I in accordance with Sec 1081 or System L in accordance with Special Provisions.

Prime Coat: Inorganic zinc primer will be required. Organic zinc primer will not be allowed. The cost of the prime coat shall be considered completely covered by the contract unit price for other items.

Field Coats: The color of the field coats shall be Gray (Federal Standard #26373). The cost of the finish field coat will be considered completely covered by the contract unit price for other items.

CONCRETE PROTECTIVE COATINGS:
Protective coating for concrete bents and piers (Urethane) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Protective coating for concrete diaphragms and girders (Epoxy) shall be applied as shown on the bridge plans and in accordance with the Special Provisions.

MISCELLANEOUS:
Roadway surfacing adjacent to bridge ends shall match new bridge slab surface wearing surface (roadway item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

High strength bolts, nuts and washers will be sampled for quality assurance as specified in Sec 106.

All existing dimensions shown were taken from as-built drawings, shop drawings or limited field measurements. All dimensions measuring existing components should be considered to have +/- tolerance.

Finish each side of the construction joints with a 1/4" radius edging tool.

Longitudinal dimensions are based on original design plans.

VERIFY DIMENSIONS
Contractor shall verify all dimensions in field before finalizing the shop drawings.

BARS BONDED IN EXISTING CONCRETE:
Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available existing bars shall extend into new concrete at least 40 diameters for plain bars and 30 diameters for deformed bars, unless otherwise noted.

REMOVAL, STORAGE AND RE-SETTING OF EXISTING RTS BARRIER:
The existing RTS Barrier with RTS Guard shall be removed, stored, and re-set per the Roadway Special Provisions.

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	3

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45577

DESCRIPTION	DATE

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314-425-8300
Certificate of Authority: 000856

GENERAL NOTES AND QUANTITIES

Detailed May 2025
Checked May 2025

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

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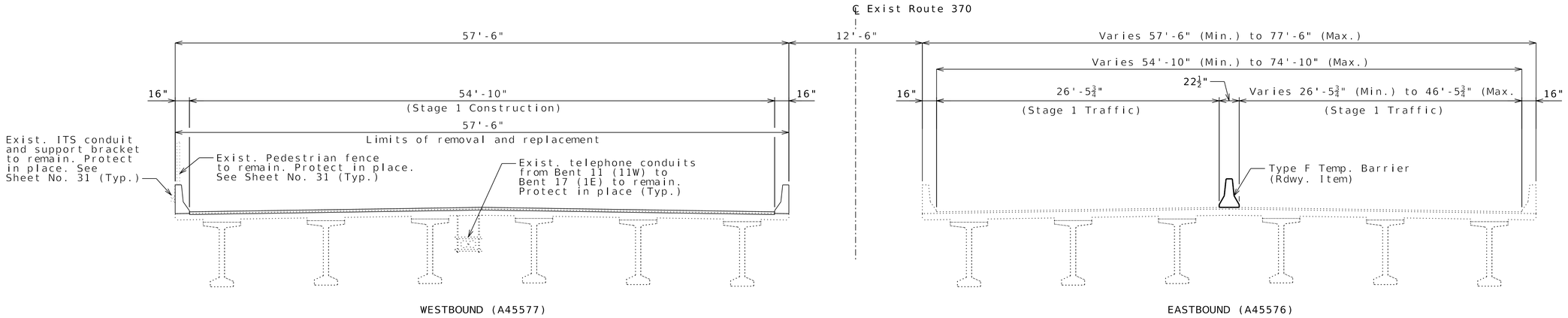
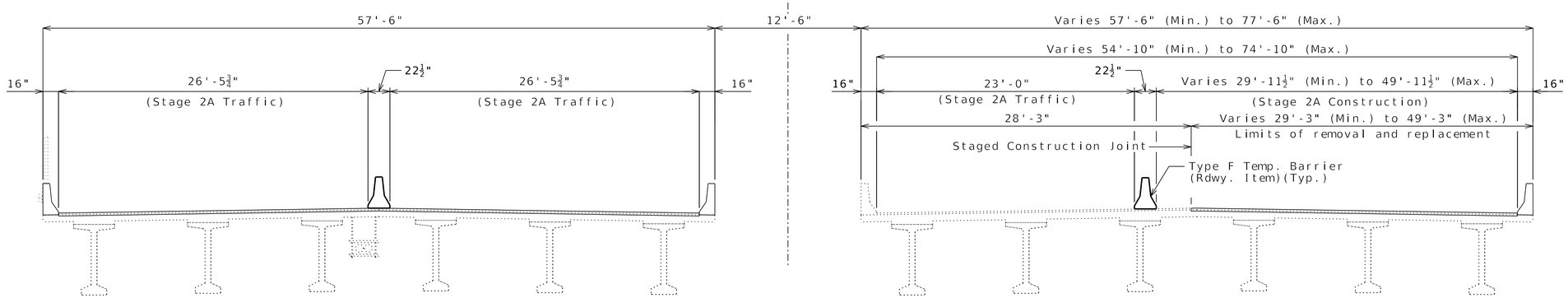
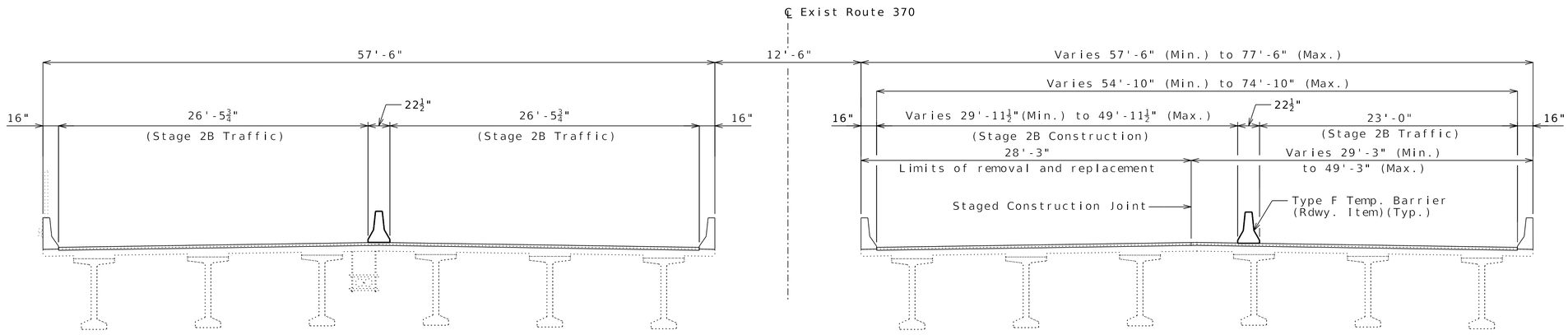


STAGE 1 CONSTRUCTION



STAGE 2A CONSTRUCTION



STAGE 2B CONSTRUCTION

CONSTRUCTION STAGING

Notes:

Limits of removal and replacement includes removal of existing wearing surface, hydro demolition, new latex modified concrete wearing surface, and expansion joint replacements with adjacent slab and barrier replacement.

Notes: (Cont.)

For details of deck repair, see Sheet No. 6.

For details of expansion joint replacements, see Sheets No. 21-25.

Notes: (Cont.)

For details of slab and barrier replacement, see Sheets No. 27-31.

Temporary barrier shall not be attached to the bridge.

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 6/30/2025
ROUTE: 370 | STATE: MO
DISTRICT: BR | SHEET NO.: 4
COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION | DATE

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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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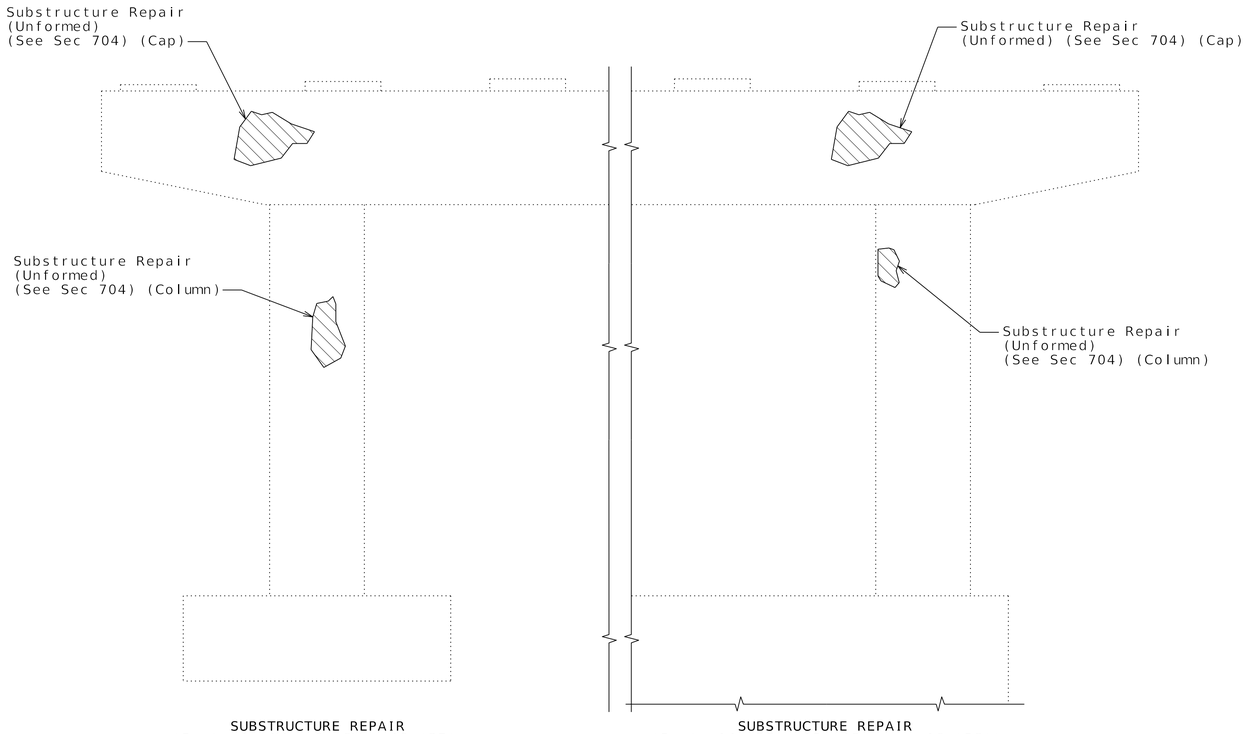
SUBSTRUCTURE REPAIR (UNFORMED)			
BENT	LOCATION		QUANTITY SQ. FT.
	CAP	COLUMNS	
4 (4W)	East face and underside	---	30
8 (8W)	East face and underside	East and west face @ North Col. South and east face @ South Col.	138
12 (1C)	West face	---	3
13 (2C)	East and west face	East and west face @ North Col. West face @ South Col.	191
14 (3C)	---	East face @ North Col.	1
15 (4C)	---	East face @ North Col.	1
16 (5C)	West face	East, west, and north face @ North Col. South and west face @ South Col.	201
19 (3E)	East face and underside	---	56
22 (6E)	Underside	---	16



SUBSTRUCTURE REPAIR
(Bents 4 (4W), 8 (8W), 19 (3E), and 22 (6E))

SUBSTRUCTURE REPAIR
(Bents 14 (3C), 15 (4C), and 16 (5C))

Notes:

Unformed substructure repairs shall utilize shotcrete concrete repair method. See Special Provision.

Work this sheet with Sheet No. 6.

SUBSTRUCTURE REPAIR & CONCRETE PROTECTIVE COATING DETAILS

Detailed May 2025
Checked May 2025

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DATE PREPARED: 6/30/2025
ROUTE: 370 | STATE: MO
DISTRICT: BR | SHEET NO.: 5
COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

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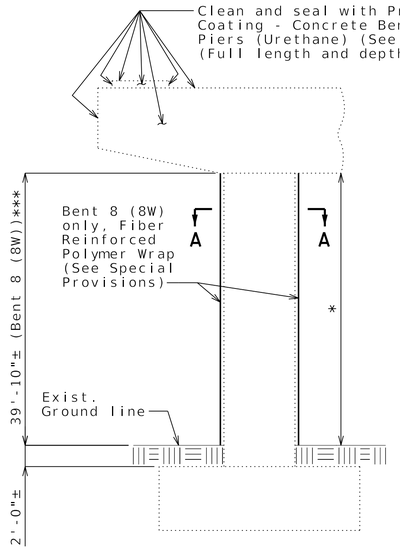
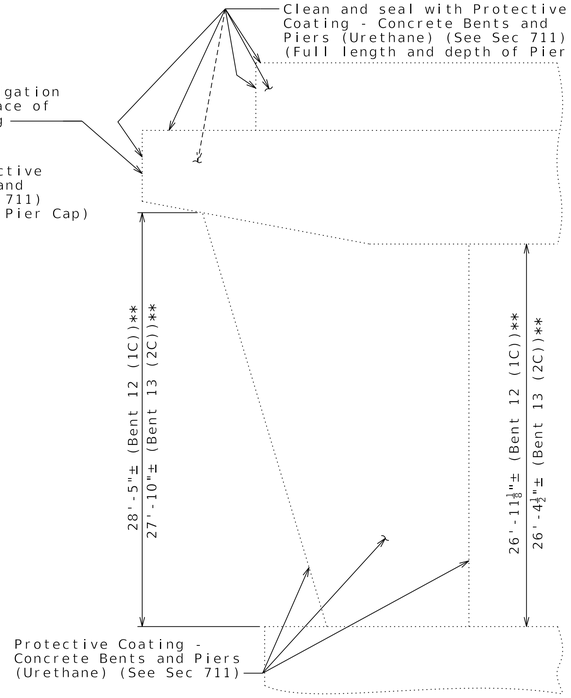
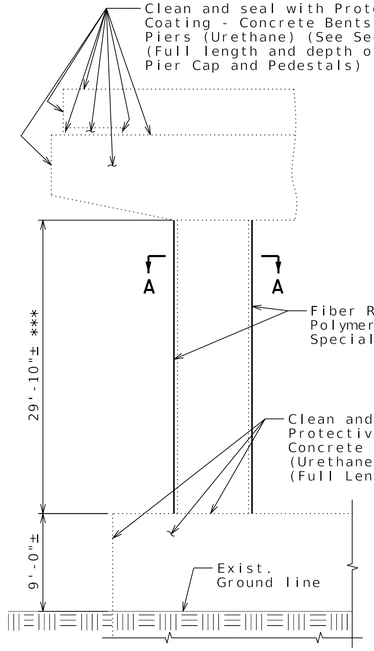


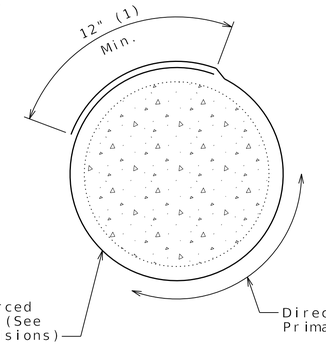
PROTECTIVE COATING AND FIBER WRAP
(Bents 4 (4W), 8 (8W), 19 (3E) and 22 (6E))



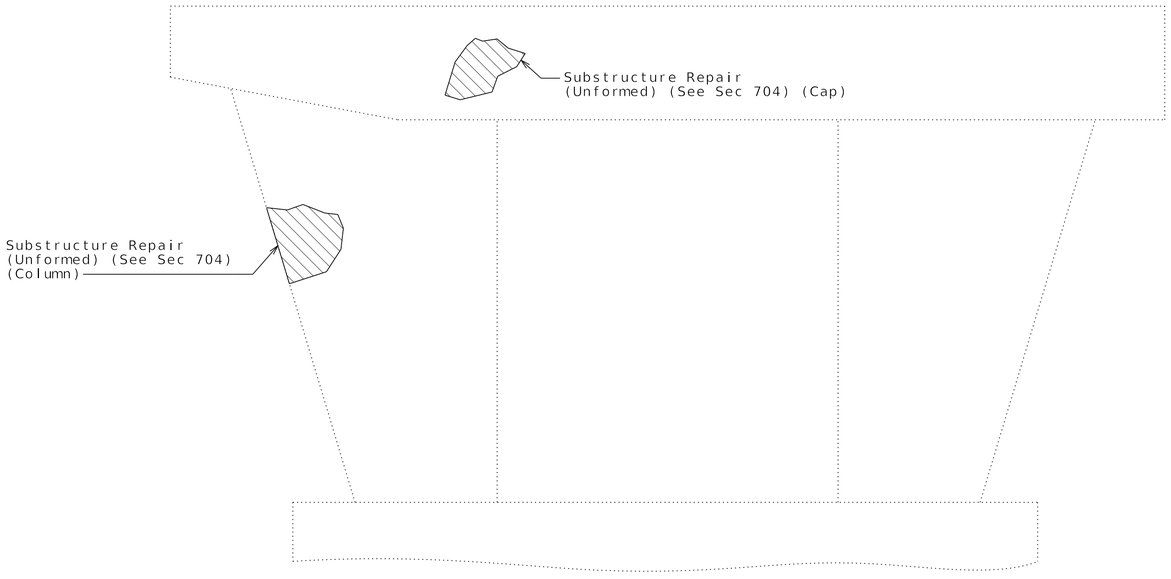
PROTECTIVE COATING
(Bents 12 (1C) and 13 (2C))



PROTECTIVE COATING & FIBER WRAP
(Bents 16 (5C))



SECTION A-A
(1) Fiber Reinforced Polymer Wrap shall be overlapped per the manufacturer's recommendations (12" min.)



SUBSTRUCTURE REPAIR
(Bents 12 (1C) and 13 (2C))

* Limits of Protective Coating - Concrete Bents and Piers (Urethane) (Typ. @ each column)
31'-4"± (Bent 4 (4W))
28'-7"± (Bent 19 (3E))
23'-8"± (Bent 22 (6E))

** Limits of Protective Coating - Concrete Bents and Piers (Urethane) (Typ. @ each column)

*** Limits of Fiber Reinforced Polymer Wrap (see Special Provisions) (Typ. @ each column)

Notes:

Work this sheet with Sheet No. 5.

Protective Coating - Concrete Bents and Piers (Urethane) shall not be applied on the FRP system.

SUBSTRUCTURE REPAIR & CONCRETE PROTECTIVE COATING DETAILS

Detailed May 2025
Checked May 2025

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

AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	6

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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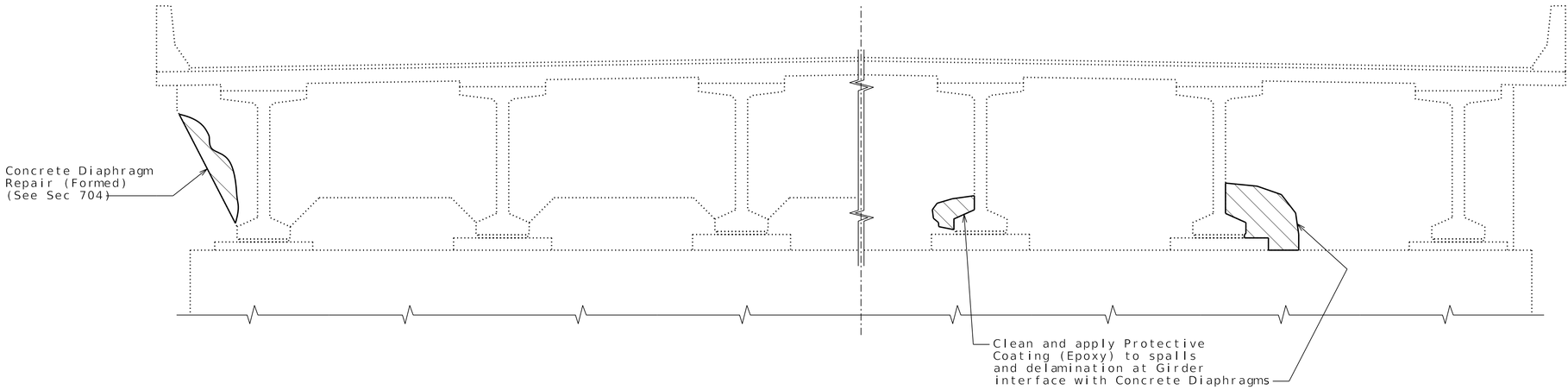
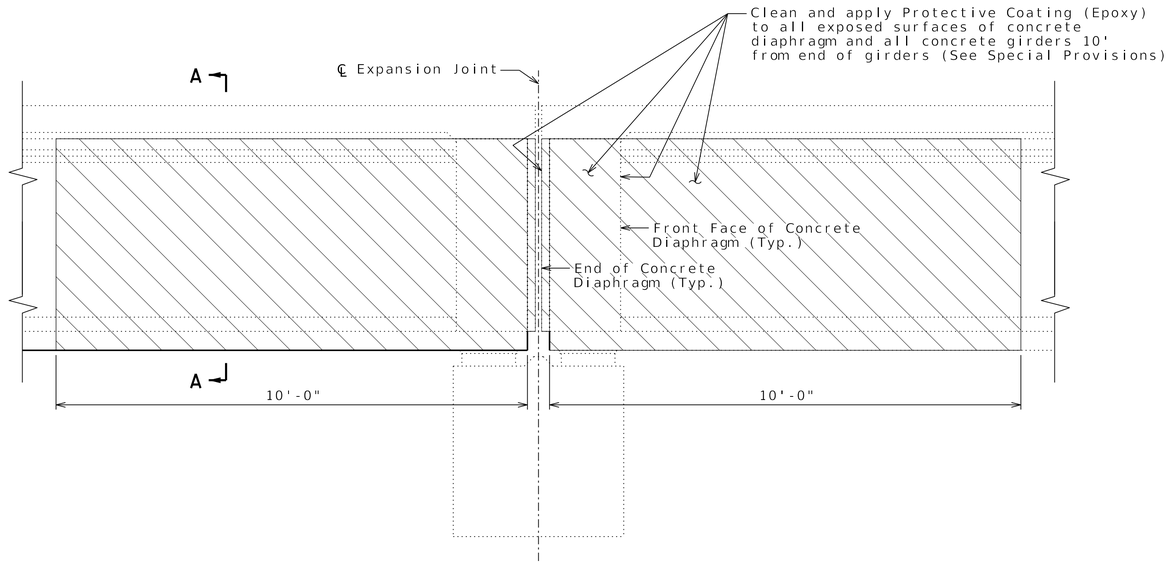


CONCRETE DIAPHRAGM REPAIR (FORMED)

(Bents 4 (4W) and 18 (2E))

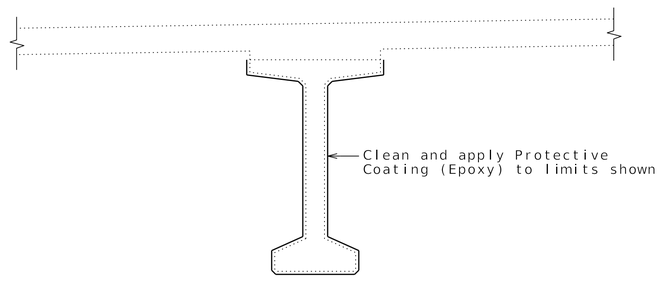
CLEAN AND PROTECTIVE COATING (EPOXY)

(Bents 2 (2W), 3 (3W), 5 (5W), 6 (6W), 7 (7W), 9 (9W), 10 (10W), 11 (11W), 17 (1E), 18 (2E), 20 (4E), 21 (5E) and 23 (7E))



DETAIL SHOWING LIMITS OF CLEANING AND PROTECTIVE COATING

(Bent 4 (4W), Bent 8 (8W), Bent 12 (1C), Bent 16 (5C), Bent 19 (3E) and Bent 22 (6E))



SECTION A-A

CONCRETE DIAPHRAGM REPAIR AND DIAPHRAGM AND GIRDER PROTECTIVE COATING DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

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DATE PREPARED: 6/30/2025

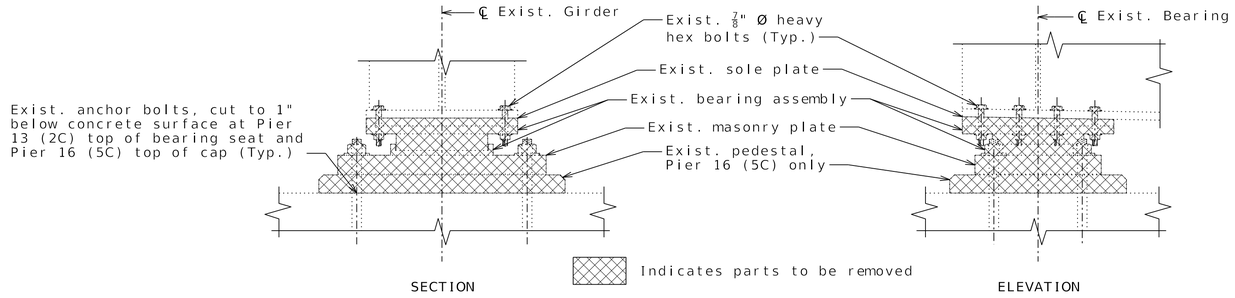
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	7

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

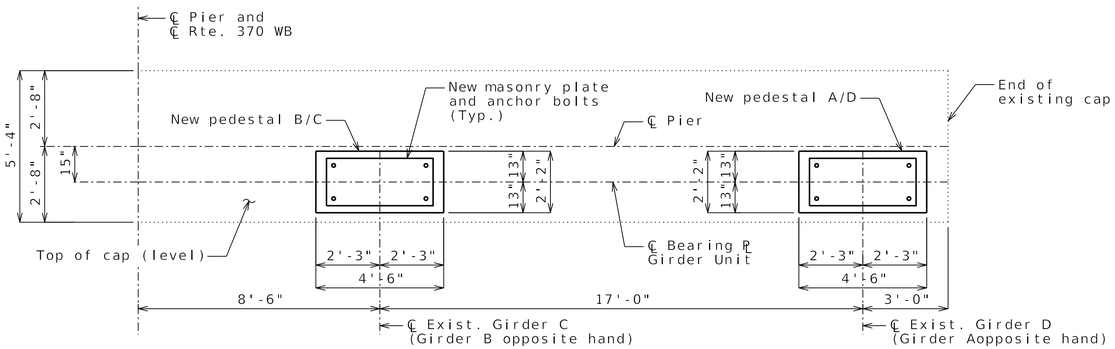
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

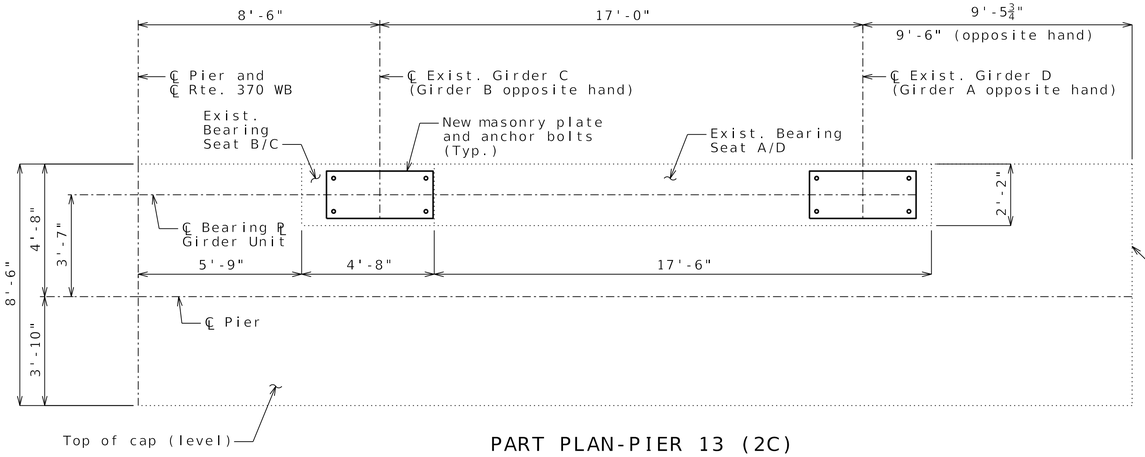
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



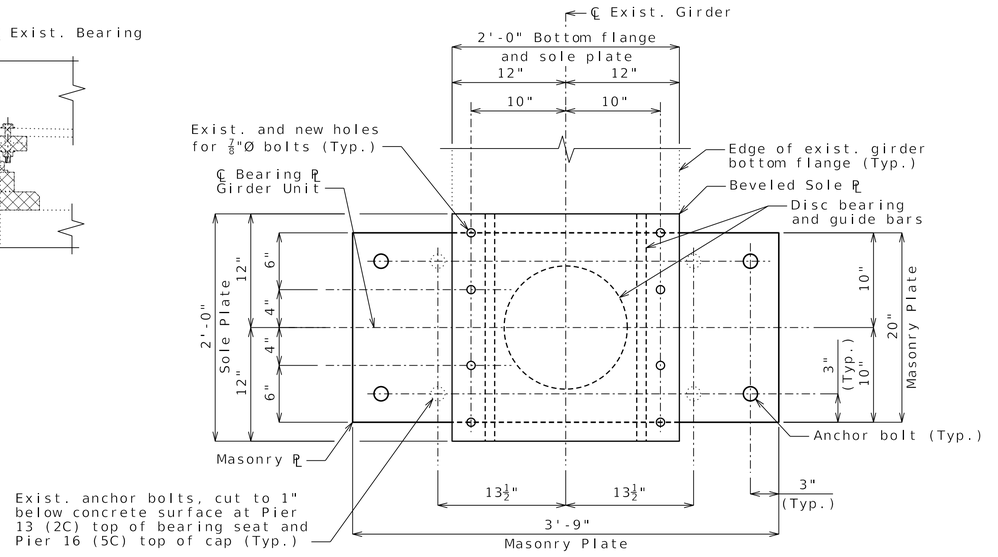
REMOVE EXISTING BEARINGS
(Piers 13 (2C) and 16 (5C))



PART PLAN-PIER 16 (5C)
(Symmetric about ℄ Pier and ℄ Rte. 370 WB)



PART PLAN-PIER 13 (2C)
(Symmetric about ℄ Pier and ℄ Rte. 370 WB, except as shown)

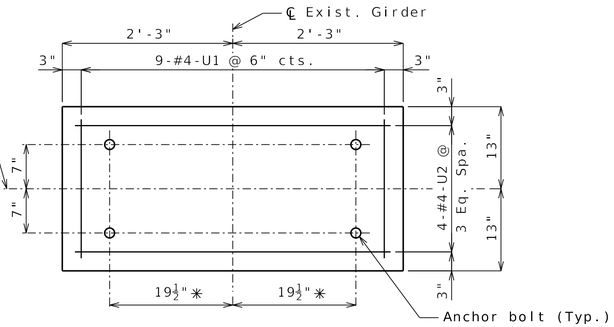


PART PLAN - BEARING

Beveled Sole Plates	
Location	Slope (Ft/Ft)
Pier 13 (2C)	-0.0090
Pier 16 (5C)	-0.0220

Girder Service (Unfactored) Bearing Reactions
(Per Girder) (kip)

Location	Girders	Dead Load	Live Load with Impact	Girders	Dead Load	Live Load with Impact
Pier 13 (2C)	A & D	168	167	B & C	214	209
Pier 16 (5C)	A & D	170	167	B & C	216	209



PEDESTAL REINFORCING DETAIL
Note: Drill and grout #4-U bars 6" min. into top of cap.
U-Bars may be shifted 1/2" to miss exist. reinforcement.

✳The contractor, in coordination with the bearing manufacturer, shall locate the reinforcement in the pier caps adjacent to the anchor bolts. Adjustments to the spacing of the anchor bolts shall be coordinated with the dimensions of the masonry plate prior to fabrication. See Sheet No. 9.

Approx. Existing Pedestal/Bearing Seat Height (measured from top of cap)				
Location	Girders	Height	Girders	Height
Pier 13 (2C)	A & D	3'-2⅛"	B & C	3'-5⅜"
Pier 16 (5C)	A & D	4"	B & C	7¼"

Notes:

The above reactions are the maximum service bearing reactions.

Reactions shown include Dead Load of the existing structure and vehicular live load. Any additional Dead Load or Construction Live Load shall be determined by the contractor. Capacities of the jacks used to lift the bridge shall be at least 50% greater than those reactions and additional load determined by the contractor.

Jacking and replacement of bearings shall be performed one pier at a time.

The contractor shall submit a jacking sequence for approval.

The contractor shall be responsible for maintaining the stability of the structure at all times and shall take all necessary precautions to maintain the stability and safety of the existing bridge at the contractor's cost.

Remove existing bearing assembly, masonry plate, and sole plate. Remove existing concrete pedestals at Pier 16 (5C). Cut existing anchor bolts to 1" below top of bearing seat or top of cap. At Pier 13 (2C), fill holes with a special qualified mortar.

Sole plates shall be beveled to the slope shown above.

Existing pier caps are Class B Concrete, f'c = 3,000 psi.

The cost of all labor, materials, and equipment necessary for jacking the superstructure and removal of existing bearings will be considered completely covered by the contract price for Removal of Existing Bearings, per each.

HIGH LOAD MULTI-ROTATIONAL (HLMR) DISC BEARING RETROFIT DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/28/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 8
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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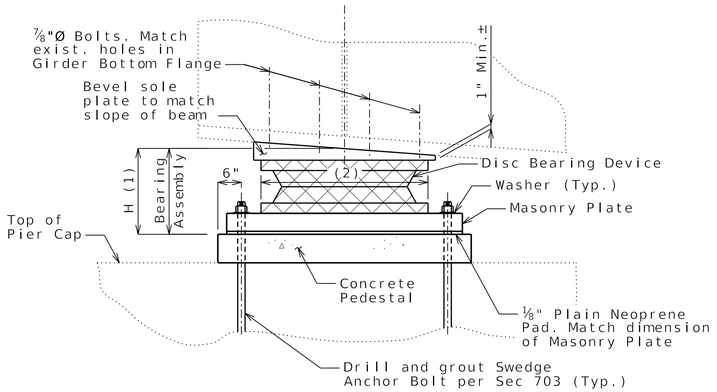
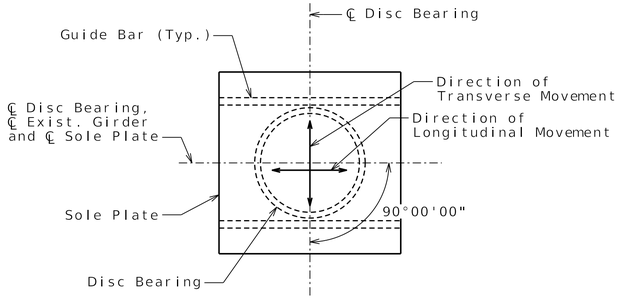
Certificate of Authority: 000856



DISC BEARING ELEVATION



DISC BEARING PLAN

BEARING DATA TABLE

Location				Pier 13 (2C)	Pier 16 (5C)
Fix/Exp.				Exp.	Exp.
Quan. Req'd.				4	4
Design load (kip)	Service limit state	Vertical	max.	392	394
			perm.	214	216
			min.	188	191
		Transverse		39	39
		Longitudinal		0	0
	Strength limit state	Vertical		579	582
		Transverse		58	58
		Longitudinal		0	0
Translation	Service limit state	Transverse		0.22"	0.22"
		Longitudinal		3.92"	3.92"
	Strength limit state	Transverse		0.22"	0.22"
		Longitudinal		3.92"	3.92"
Rotation (rad.)	Service limit state	Transverse		0.01	0.01
		Longitudinal		0.0172	0.0175
One Way Longit. Movement (3)				3.61"	3.61"
(G) Guide Clearance (4)					
Masonry Plate	Lm				
	Wm				
	Tm				
Auxilliary Plate	La				
	Wa				
	Ta				
Sole Plate	Ls				
	Ws				
	T1				
	T2				
Dimension H				9"	9"
Anchor Bolts	d				
	Bolts / Brg.			4	4
Weld Size	W1				
	W2				

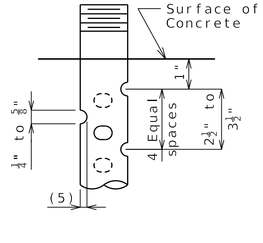
Notes:

T2 is upstation of T1.

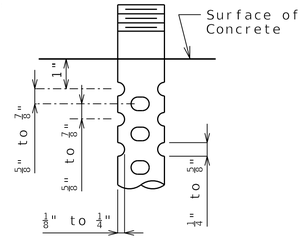
(3) One Way Longitudinal Movement is the maximum one way movement (expansion or contraction) of the superstructure when bearings are set at 70 degrees F plus 1" tolerance.

(4) On wide structures and on curved structures provisions shall be made for limited lateral movement.

Indicates parts designed by the manufacturer.



DETAIL OF 3/4"Ø THRU 2 1/2"Ø ANCHOR BOLTS



OPTIONAL DETAIL OF 1 3/8"Ø THRU 2 1/2"Ø ANCHOR BOLTS

SWEDGE ANCHOR BOLT DETAILS

(5) ⅛" for ¾"Ø thru 1¼"Ø anchor bolts

⅛" to ¼" for 1⅜"Ø thru 2½"Ø anchor bolts

GENERAL NOTES:

The bearing design shall conform to the Special Provisions and provisions of the latest edition of AASHTO LRFD Bridge Design Specifications.

The contractor, in coordination with the bearing manufacturer, shall be responsible for sizing the thickness of the sole plate and masonry plate and determining the size and length of the anchor bolts based on the load and movement capacities, indicated in the Bearing Data.

The contractor, in coordination with the bearing manufacturer, shall locate the reinforcement in the pier caps adjacent to the anchor bolts. Adjustments to the spacing of the anchor bolts shall be coordinated with the dimensions of the masonry plate prior to fabrication. See Sheet No. 8.

The contractor shall submit calculations sealed by a Professional Engineer, licensed in the state of Missouri, indicating conformance with design load and material criteria in the contract documents.

(1) Maximum vertical dimension of the complete bearing. If the actual bearing dimension differs, adjustments shall be made in the thickness of the sole plate, masonry plate and concrete pad as needed by the contractor at no additional cost to the owner. Contractor shall submit proposed method of adjustment to Engineer for approval.

(2) Estimated horizontal dimension of the disc bearing device. If the actual dimension differs, adjust the size of the sole plate and masonry plate as needed by the contractor at no additional cost to the owner.

The Dimension H in the Bearing Data Table represents the assumed total height of bearing mechanism including the sole plate and masonry plate per as-built plans and shop drawings.

The bearings shall be manufactured disc bearings, designed for the load and movement capacities indicated in the Bearing Data Table.

All expansion bearings shall have maximum friction coefficient of 3%.

Steel for disc bearings shall be AASHTO M270 Grade 50 and shall be galvanized. Steel for sole plate and masonry plates shall be AASHTO M270 Grade 50.

Anchor bolts shall conform to ASTM F1554 Grade 55. The anchor bolts shall be the swedge-type and shall have a minimum diameter of 1 1/2 inches. Swedging shall be 1 inch less than the extension into the concrete.

Anchor bolts shall be installed using a hardened steel washer at each exposed location.

Washers shall conform to ASTM F463.

Anchor bolts and hardened washers shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with Sec 1081.

Certified mill test reports, conforming to the requirements of the specifications, for the metals of the disc bearing device, sole plate, masonry plate and anchor bolts shall be submitted.

The masonry plate shall be prepared per the specifications and shop-coated with two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

The sole plate shall be prepared per the specifications and shop-coated with two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

The bearing device, sole plate and masonry plate shall be assembled in the shop and the bearing assembly shall be field bolted to the bottom flange of the steel girder. Bolts shall be 7/8" diameter ASTM F3125 Grade A325, galvanized in accordance with Sec. 1081.

After installation of the bearings, any uncoated or damaged surfaces of the masonry and sole plates shall be prepared in accordance with the specifications and field-coated with inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

After installation of the bearings and field-applied prime coats, the surfaces of the masonry and sole plates shall be field-coated with System I or System L finish coat.

All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow that points up-station. All marks shall be permanent and be visible after the bearing is installed.

The disc bearing device, sole plate, masonry plate, anchor bolts, washers, anchor bolt wells, grout, plain neoprene pad and any other appurtenances included in the fabrication and installation of the disc bearing device shall be incidental to the pay item High Load Multi-Rotational (HLMR) Disc Bearing Assembly, per each.

Whenever jacking of the superstructure is needed to reset the bearings, the contractor shall submit a jacking sequence for approval.

HIGH LOAD MULTI-ROTATIONAL (HLMR) DISC BEARING ASSEMBLY

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	9

COUNTY
ST. LOUIS/ ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45577

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
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Certificate of Authority: 000856

Girder Service (Unfactored) Bearing Reactions (Per Girder) (kip)			
Location	Girder	Dead Load	Live Load with Impact
8 (8W) west	D & E	105	109

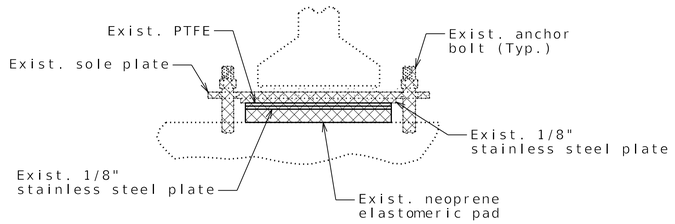
Notes:
The above reactions are the maximum service bearing reactions.

Reactions shown include in Dead Load of the existing structure and vehicular live load. Any additional Dead Load or Construction Live Load shall be determined by the contractor. Capacities of the jacks used to lift the bridge shall be at least 50% greater than those reactions and additional load determined by the contractor.

Jacking and replacement of bearings shall be performed one pier at a time.

The contractor shall submit a jacking sequence for approval.

The contractor shall be responsible for maintaining the stability of the structure at all times and shall take all necessary precautions to maintain the stability and safety of the existing bridge at the contractor's cost.



Indicates parts to be removed

REMOVE EXISTING BEARINGS

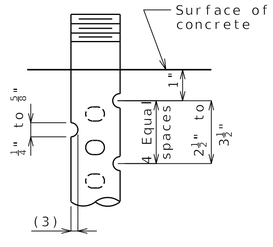
Notes:
Remove existing sole plate, stainless steel plate, neoprene elastomeric pad and stainless steel plate with bonded PTFE from the locations shown in the table PTFE SLIDING BEARINGS.

Grind existing weld at 1/2" embedded plate smooth.

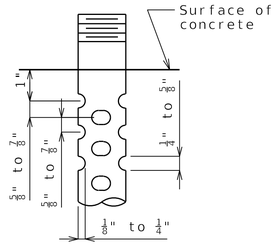
Cut and core out existing anchor bolts and clean out holes for new anchor bolts.

Remove any reinforcing bars or steel angles previously welded to the bearing assembly to act as retainers. Grind tack weld locations smooth and cover with two coats of inorganic zinc primer.

The cost of all labor, materials, and equipment necessary for jacking the superstructure and removal of existing bearings will be considered completely covered by the contract price for Removal of Existing Bearings, per each.



DETAIL FOR 3/4"Ø THRU 2 1/2"Ø ANCHOR BOLTS

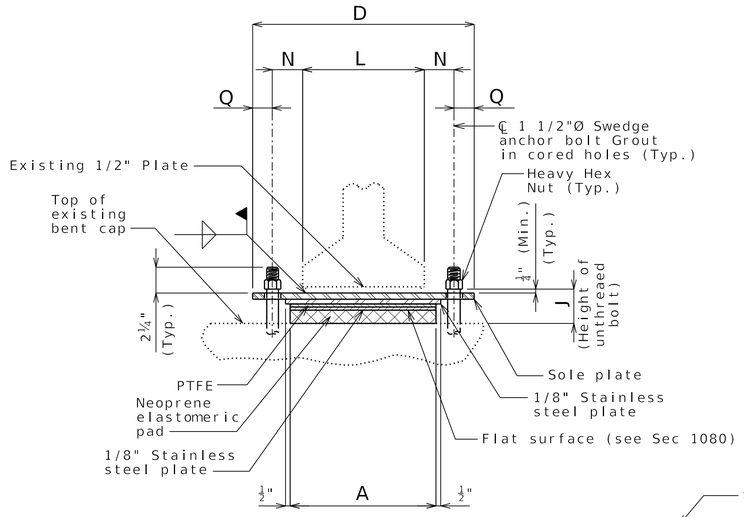


OPTIONAL DETAIL FOR 1 3/8"Ø THRU 2 1/2"Ø ANCHOR BOLTS

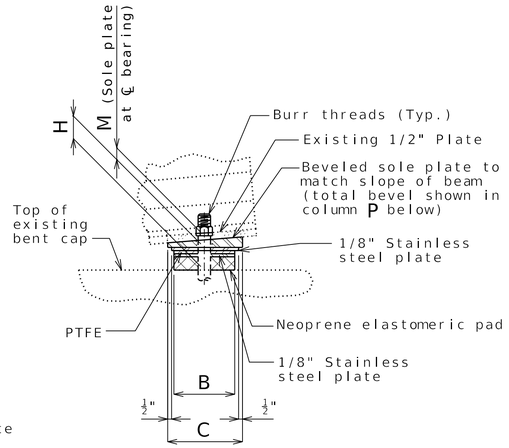
SWEDGE ANCHOR BOLT DETAILS

(3) ⅛" for ¾"Ø thru 1¼"Ø anchor bolts

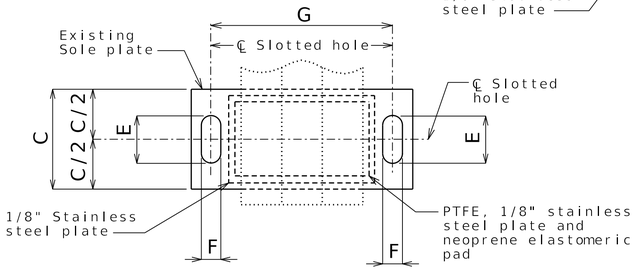
⅛" to ¼" for 1⅜"Ø thru 2½"Ø anchor bolts



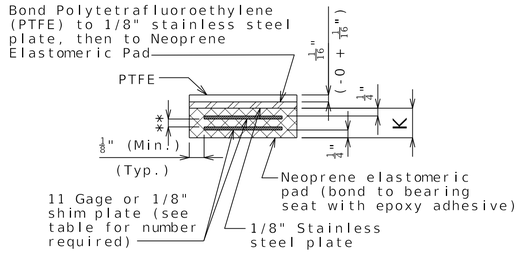
END VIEW



SIDE VIEW



PART PLAN



NEOPRENE ELASTOMERIC PAD

** Layers of 1/2" elastomeric pad alternating with 11 gage or 1/8" shim plate

* Existing dimension

PTFE SLIDING BEARINGS																	
BENT NO.	A	B	C	D	E	F	G	H	J	K	L*	M	N	P	Q	NUMBER OF SHIM PLATES (1)	NUMBER REQUIRED
8 (8W) West	2'-4"	12"	16"	3'-2"	5½"	1⅝"	2'-9"	1 9/16"	3½"	1¼"	2'-2"	1½"	3½"	¼"	2½"	2	2 (Gdr. D & E)
																TOTAL BEARINGS	2

(1) The required shim plate shall be placed between layers of elastomer and molded together to form an integral unit.

GENERAL NOTES:

Design coefficient of friction equals 0.1691.

The bottom face of the 1/8" stainless steel plate that is welded to the sole plate shall be lubricated with a lubricant that is approved by the bearing manufacturer.

Neoprene Elastomeric Pads shall be 70 Durometer.

Type N PTFE Bearings shall be in accordance with Sec 716.

PTFE surface shall be fabricated as a single piece. Splicing will not be permitted.

The PTFE surface shall be flat.

Coat weld between sole plate and embedded plate with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

Cost of furnishing Type N PTFE Bearing, complete in place, including any incidental materials, will be considered completely covered by the contract unit price Type N PTFE Bearing per each.

Anchor bolts shall be 1 1/2"Ø ASTM F1554 Grade 55 swedged bolts and shall extend 15" into the concrete with ASTM A563 Grade DH Heavy Hex nuts. Actual manufacturer's certified mill test reports (chemical and mechanical) shall be provided. Swedging shall be 1" less than extension into the concrete.

Anchor bolts and heavy hex nuts shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with Sec 1081.

Structural steel for sole plate shall be ASTM A709 Grade 36 and shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum. The stainless steel plate shall be protected from any coating.

TYPE N PTFE BEARINGS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 10
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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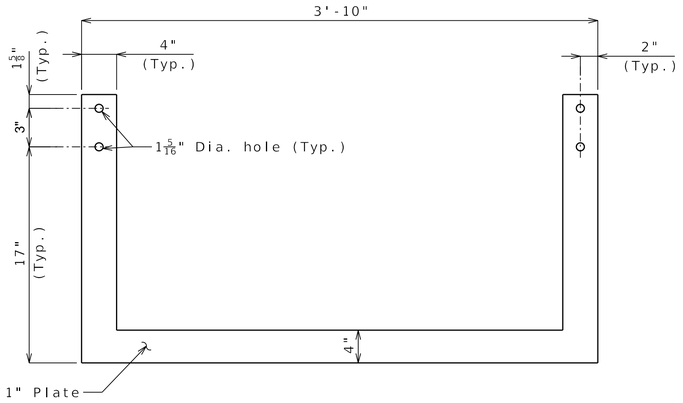
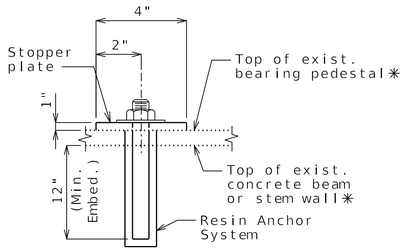
314-425-8300
Certificate of Authority: 000656

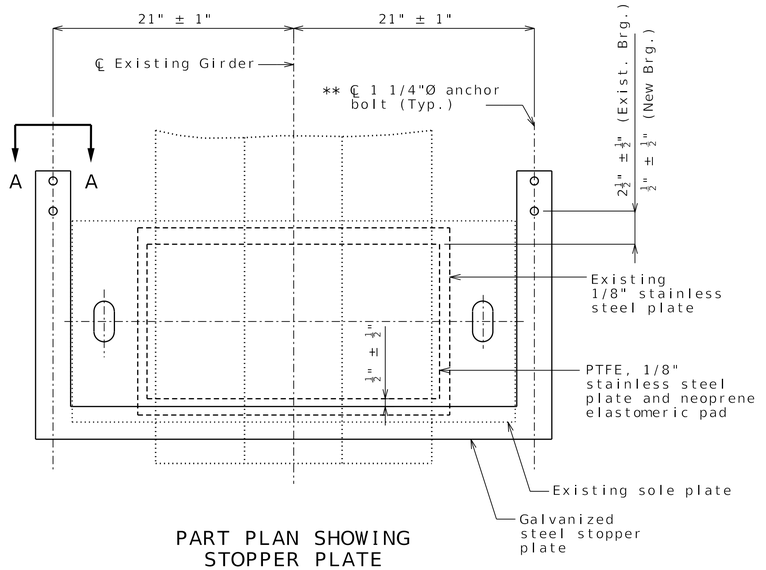


PLAN OF GALVANIZED
STOPPER PLATE



SECTION A-A

*Bearing pedestals at Bents 4 (4W), 8 (8W), 19 (3E), and 22 (6E). Stem wall at Piers 12 (1C) and 16 (5C).



PART PLAN SHOWING
STOPPER PLATE

STOPPER PLATE - BEARING RETAINER RETROFIT	
Bent No. / Location	Number of Steel Stopper Plates
4 (4W) West & East	12
8 (8W) West & East	12
12 (1C) West	6
16 (5C) East	6
19 (3E) West & East	12
22 (6E) West & East	12
Total	60

** The contractor shall locate the reinforcement in the bent cap prior to drilling holes for anchor bolts. Adjust placement of stopper plate within the 1/2" ± longitudinal and 1" ± transverse tolerances shown to clear reinforcement. Install only 1 anchor bolt per leg in the hole that provides clearance to reinforcement.

Notes:

Structural steel for the stopper plate shall be ASTM A709 Grade 36 and shall be galvanized in accordance with ASTM A123 and Sec 1081.

Anchor bolts shall be 1 1/4"ø ASTM F1554 Grade 55 with heavy hex nut and hardened washer.

Anchor bolts, hardened washers and heavy hex nuts shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec. 1039.

The minimum embedment depth in concrete with f'c = 3,000 psi for the resin anchor system shall be that required to meet the minimum ultimate pullout strength in accordance with Sec. 1039, but not less than shown.

Stopper plates shall be provided to prevent loss of support due to creeping of PTFE bearings at all bearing locations noted in the Table for Stopper Plate - Bearing Retainer Retrofit. Payment for fabricating and installing the stopper plates will be considered completely covered by the contract unit price for Bearing Retainer Retrofit per each.

Cost of furnishing and installing the resin anchor system, complete in place, will be considered completely covered by the contract unit price for Bearing Retainer Retrofit per each.

BEARING RETAINER RETROFIT DETAILS

Detailed May 2025
Checked May 2025

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PROFESSIONAL ENGINEER
AMY E. SMITH
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ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	11

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.: .
PROJECT NO.: .
BRIDGE NO.: A45577

DESCRIPTION	DATE
.	.

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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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401 S. 18th Street
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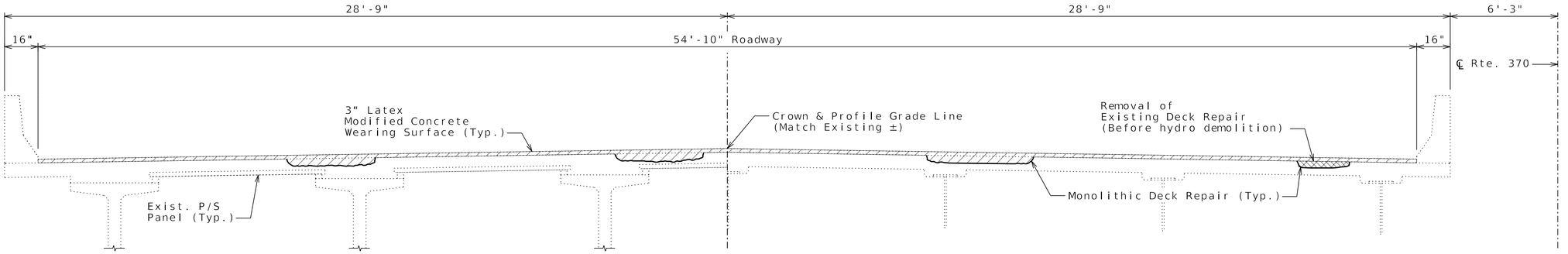
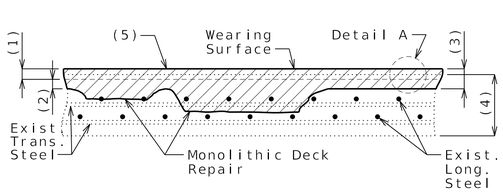


UNITS 1-3 AND 6-8 PRESTRESSED CONCRETE BULB-TEE GIRDER SECTION

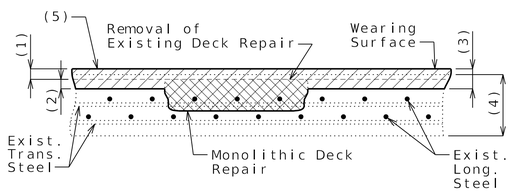
UNIT 4 SIMPLE THRU TRUSS (SHOWN) AND UNIT 5 CONTINUOUS COMPOSITE PLATE GIRDER SECTION

TYPICAL SECTION THRU EXISTING DECK



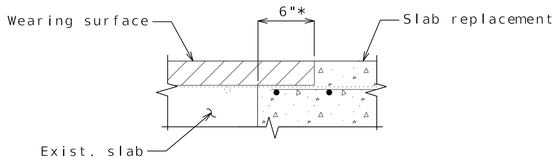
MONOLITHIC DECK REPAIR

(Cast-in-place deck from Units 4-5 shown, Prestress Panel Deck in Units 1-3 and 6-8 similar)



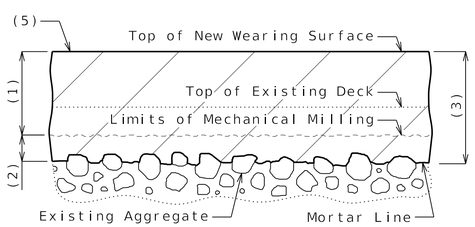
REMOVAL OF EXISTING DECK REPAIR BEFORE HYDRO DEMOLITION

(Cast-in-place deck from Units 4-5 shown, Prestress Panel Deck in Units 1-3 and 6-8 similar)



* Overlap Latex Modified Concrete Wearing Surface as shown at all slab replacement locations

SECTION THRU SLAB REPLACEMENT AT EXPANSION JOINTS



DETAIL A

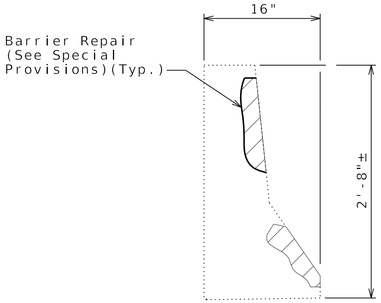
(1) Removal of existing 2 1/4"± Low Slump Concrete wearing surface plus 1/4" of existing deck.

(2) 1/2" minimum total surface hydro demolition of sound concrete, measured to mortar line.

(3) 3" minimum Latex Modified concrete wearing surface.

(4) Original depth of deck minus previous scarification.

(5) Diamond Grind new wearing surface. See Special Provisions.



SECTION THRU BARRIER

Notes:

For Staging Plans, see Sheet No. 4.

Unformed Barrier Repair may utilize shotcrete concrete repair method. See Special Provisions.

DECK AND BARRIER REPAIR DETAILS

Detailed May 2025
Checked May 2025

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

AMY E. SMITH
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STATE OF MISSOURI
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ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	12

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45577

DESCRIPTION	DATE

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105 WEST CAPITOL
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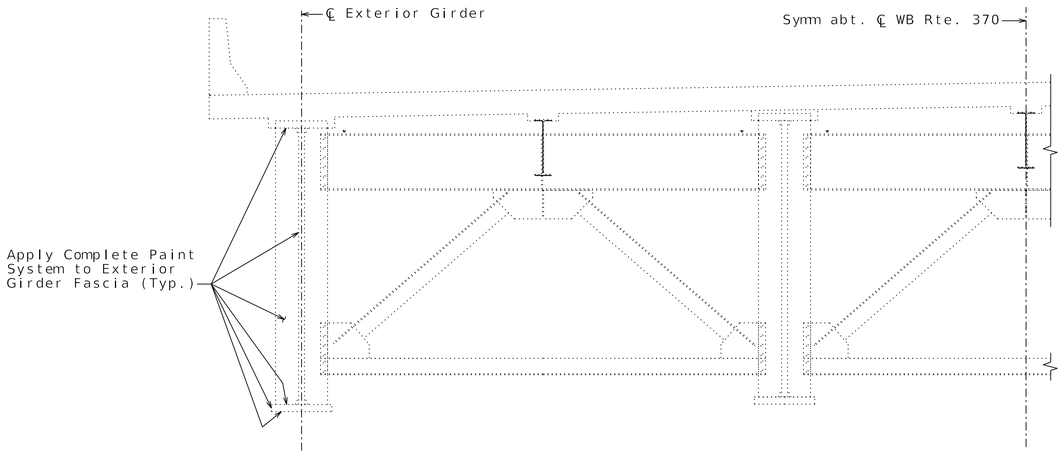
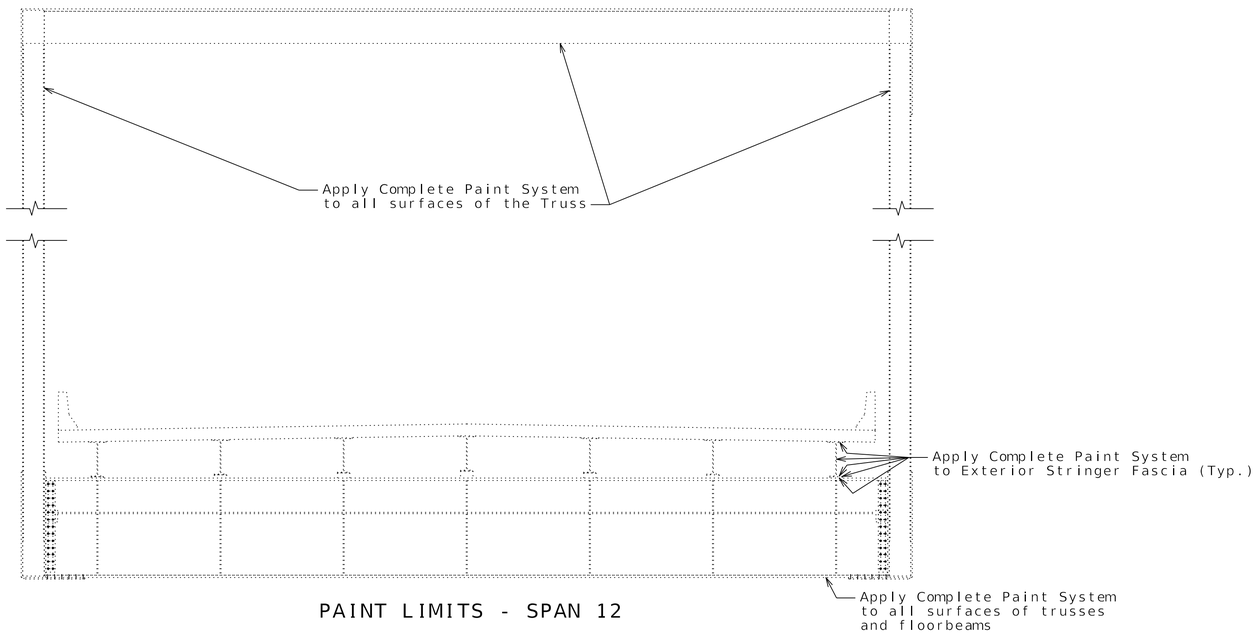
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



PAINT LIMITS - SPANS 13 THRU 15



PAINT LIMITS - SPAN 12

STEEL PROTECTIVE COATING LIMITS

Notes:

At the contractor's option, Paint Alternate 1 - Finish Field Coat (System I) or Paint Alternate 2 - Finish Field Coat (System L) may be used, see Special Provisions. Only one paint system shall be used for the entirety of the bridge.

Paint Limits:

All existing structural steel surfaces shall receive surface preparation for recoating structural steel and application of inorganic zinc primer. Inorganic zinc primer will be required. Organic zinc primer will not be allowed.

Span 12 Truss:
Complete paint system shall be applied to all structural steel surfaces of trusses and floorbeams.

Span 12 Truss Floor Systems:
Complete paint system shall be applied to the Exterior Stringer Fascia including the bottom of the top exterior flange, the top of the bottom exterior flange, the exterior web area, and the exterior face and bottom of the bottom flange.

Span 13 thru 15 Cont. Plate Girder Unit:
Complete paint system shall be applied to the exterior girder fascia including the bottom of the top exterior flange, the top of the bottom exterior flange, the exterior web and bearing stiffener area, the exterior face of the bottom flange and the bottom of the bottom flange. See Sheet No. 9 for protective coating requirements for the HLMR Disc Bearing Assemblies.

Near Expansion Devices:
Complete paint system shall be applied to all structural steel within a distance of not less than 10 feet from the centerline of all expansion joints including truss bearings at Piers 12 (1C) and 13 (2C).

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PROFESSIONAL ENGINEER
AMY E. SMITH
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ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	13

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

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314-425-8300
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Detailed May 2025
Checked May 2025

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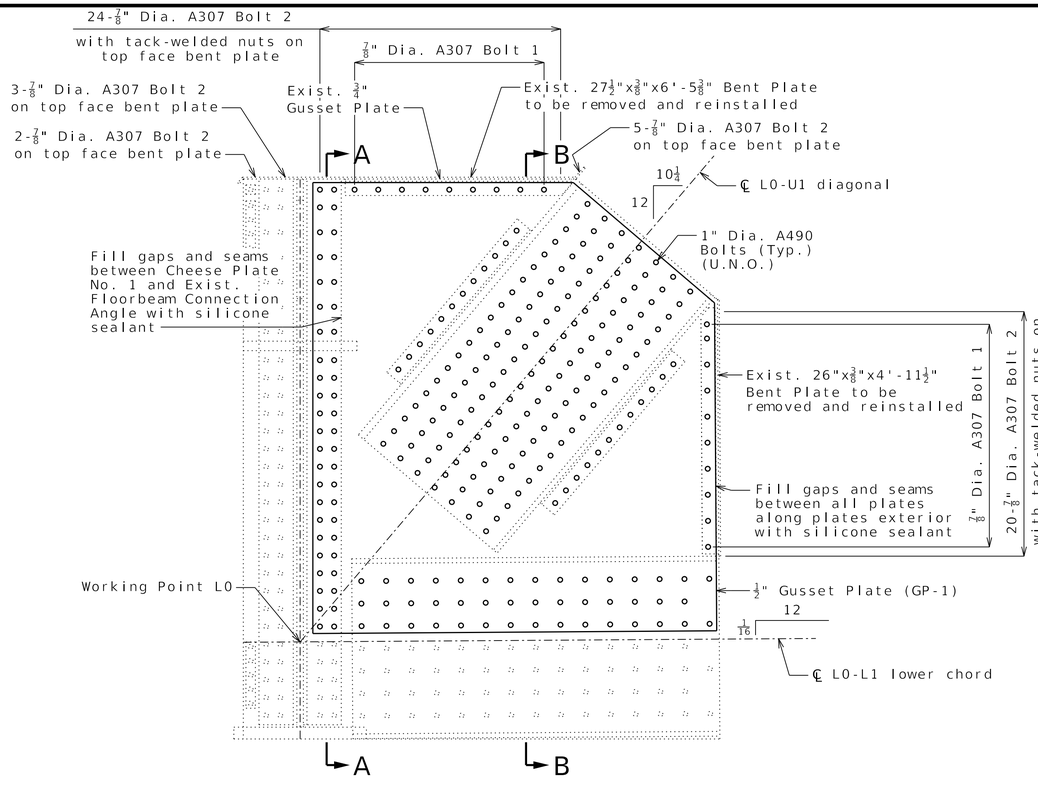


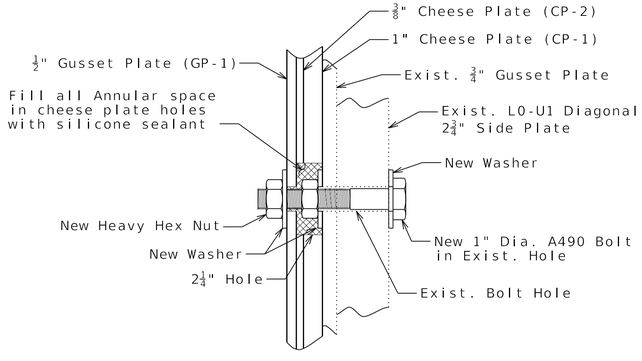
L0 INSIDE FACE GUSSET

(Cheese Plate not shown for clarity, see Sheet No.15)

LEGEND

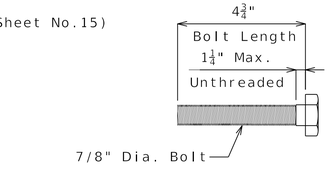
- Existing bolt to remain
- Existing bolt holes filled with new 7/8" Dia. A307 or 1" Dia. A490 Bolt

U.N.O. = Unless noted otherwise

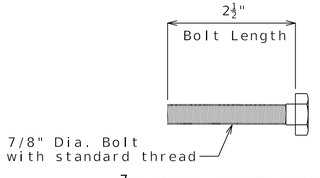


BOLT INSTALLATION DETAIL - INSIDE FACE

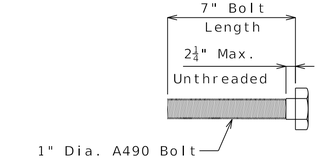
(Bolt installation at existing diagonal shown, bolt installation at other locations similar)



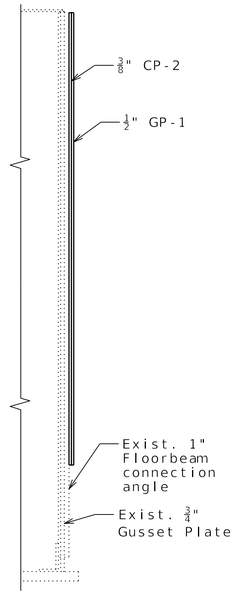
7/8" DIA A307 BOLT 1



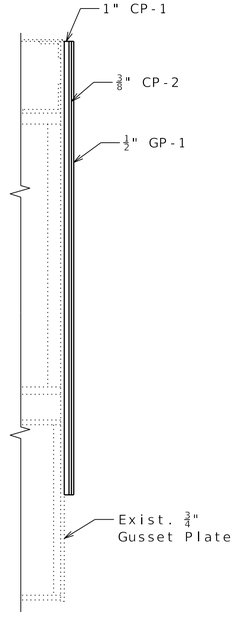
7/8" DIA A307 BOLT 2



1" DIA A490 BOLT



SECTION A-A



SECTION B-B

GUSSET PLATE L0 RETROFIT

Detailed May 2025
Checked May 2025

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

Sheet No. 14 of 43

BOLT REMOVAL AND REPLACEMENT PROCEDURE

1) Remove the existing bent plates as shown in L0 Gusset Details to facilitate access for gusset retrofit.

2) Remove individual existing bolts at locations as shown in the L0 Gusset Details. The removal and replacement of the existing bolts in the L0-U1 diagonal and the L0-L1 lower chord shall be completed in their entirety completely separate from each other. The option to complete the bolt replacement of the diagonal or the lower chord first shall be left up to the contractor. The bolts in the L0-U1 diagonal shall be removed symmetrically about centerline of the member.

3) Install new bolt with nut and washers in the existing bolt holes.

4) Tighten nut to 30 kips of pretension on the bolt. At no time shall more than 7 existing bolt holes (one row) for the L0-U1 diagonal and 6 existing bolt holes (two rows) for the L0-L1 lower chord remain void of a new pretensioned high strength bolt. The bolts in the L0-U1 diagonal shall be replaced symmetrically about centerline of the member.

5) Repeat steps 1-4 on up to a maximum of 7 bolts at a time for the L0-U1 diagonal or 6 bolts for the L0-L1 lower chord until all bolts as shown in these plans have been replaced.

6) Following the removal and replacement of all L0-U1 and L0-L1 bolts as indicated in steps 1-5, the remaining bolts along the vertical face of the L0 Gusset shall be removed and replaced.

PLATE INSTALLLATION PROCEDURE

1) Following the bolt removal and replacement, all existing L0 Gusset structural steel shall receive surface preparation for recoating structural steel and application of inorganic zinc primer. Inorganic zinc primer will be required. Organic zinc primer will not be allowed.

2) For inside face, install CP-1 prior to the installation of CP-2. For outside face install CP-3.

3) Fill all annular spaces in cheese plate holes, as well as gaps and seams between all plates, with silicone sealant.

4) Install GP-1 for inside face or GP-2 for outside face, and install washer and nut on bolts. See Bolt Installation Detail. Tighten bolts to full pre-tension force.

5) Remove existing tack-welded nuts at the bent plate connections. Smooth and clean interior face of connection angles with hand tools. Install new nuts on interior side of angles by tack welding. Reinstall existing bent plates with new 7/8" Dia. A307 bolts. Install bolts to snug-tight.

6) After installation, apply silicone sealant to fill gaps between plates along the exterior of the plates; clean and apply final field coat of paint to all new plates and bolts.

General Notes:

Gusset plate retrofit for all L0 locations in WB Bridge shall be completed during Stage 1 construction.

Bolt removals shall not start on L0 Right Truss until L0 Left Truss gusset plate retrofit has been completed or vice versa. Bolt removals shall not start on outside gusset plate retrofit until inside gusset plate retrofit has been completed or vice versa.

All measurements are based on as-built plans. Contractor shall verify all dimensions in field before ordering materials.

Use care when removing portions of the existing bridge so as to not damage the remaining parts of the structure. At the direction of the Engineer, replace or repair all parts of the structure which are designated to remain and are damaged during the removal operations at the direction of the Engineer at no cost to the State.

The contractor is responsible for safely and adequately supporting all existing and new structural steel elements during their full or partial removal, shipping, handling and erection, such that allowable stresses, in accordance with AASHTO Specifications, are not exceeded.

Stability of existing structural members is to be maintained by the contractor during erection, until all steel members are in place and all bolts properly installed. Loads for Bolt Removal and Replacement Procedure include dead load of existing structure and staged live load. Any additional dead load or construction live load determined by the contractor shall be submitted to the Engineer for evaluation prior to beginning bolt removal and replacement.

Structural steel for gusset and cheese plates shall be ASTM A709 Grade 50 and shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.

Gusset plate retrofit connections shall be made with 1" diameter ASTM F3125 Grade A490 Type 1 bolts with additional threads, or 7/8" diameter ASTM A307 Grade A bolts, as shown on the plans.

Seal assembled structural steel members from external moisture as directed in the plans with a silicone sealant. The silicone sealant shall be fully covered by the contract unit price for Gusset Plate L0 Retrofit. Silicone sealant shall be in accordance with Sec 1057.11.

ESTIMATED L0 INSIDE GUSSET RETROFIT QUANTITIES

(FOR INFORMATION ONLY)

Item		Quantity
Fabricated Structural Low Alloy Steel (Misc.)	pound	3970
1" Dia. A490 High Strength Bolt	each	254
7/8" Dia. A307 Bolt 1	each	19
7/8" Dia. A307 Bolt 2	each	54
Exist. 1" Dia. Bolts to be Removed	each	254
Exist. 7/8" Dia. Bolts to be Removed	each	73

The above table of estimated quantities represents the quantities used by the State in preparing the cost estimate for the L0 Gusset retrofit. Payment for furnishing all materials and labor necessary to install gusset plate retrofits, complete in place, will be considered completely covered by the contract unit price for Gusset Plate L0 Retrofit per each. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

STATE OF MISSOURI
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NUMBER
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PROFESSIONAL ENGINEER

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ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	14

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

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Certificate of Authority: 000856

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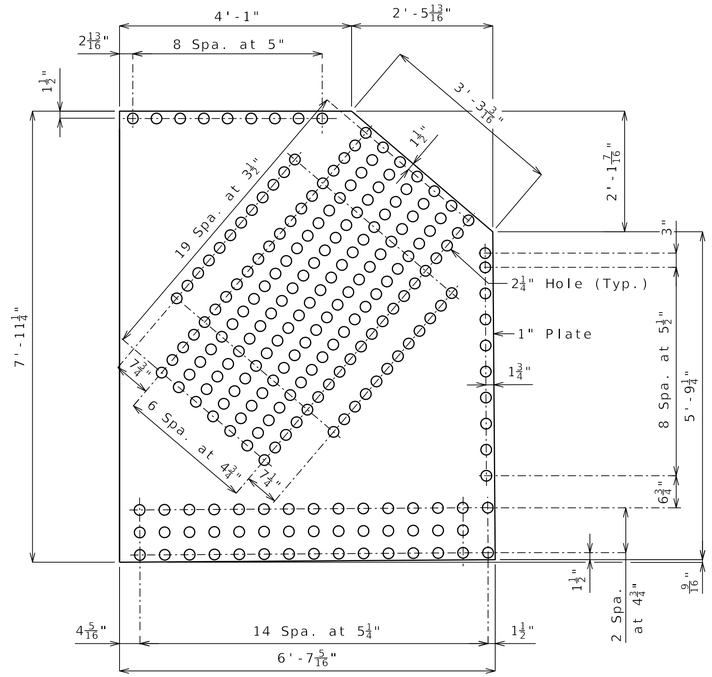
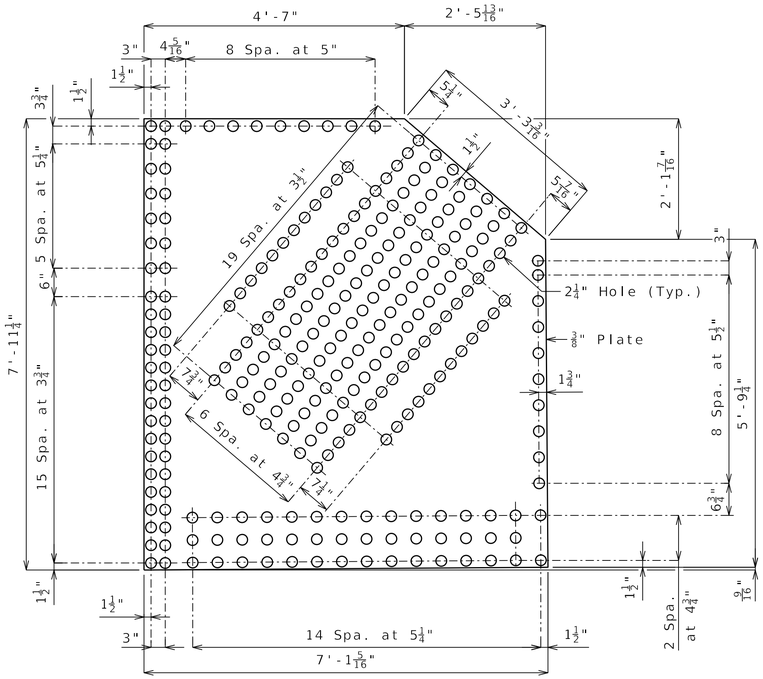
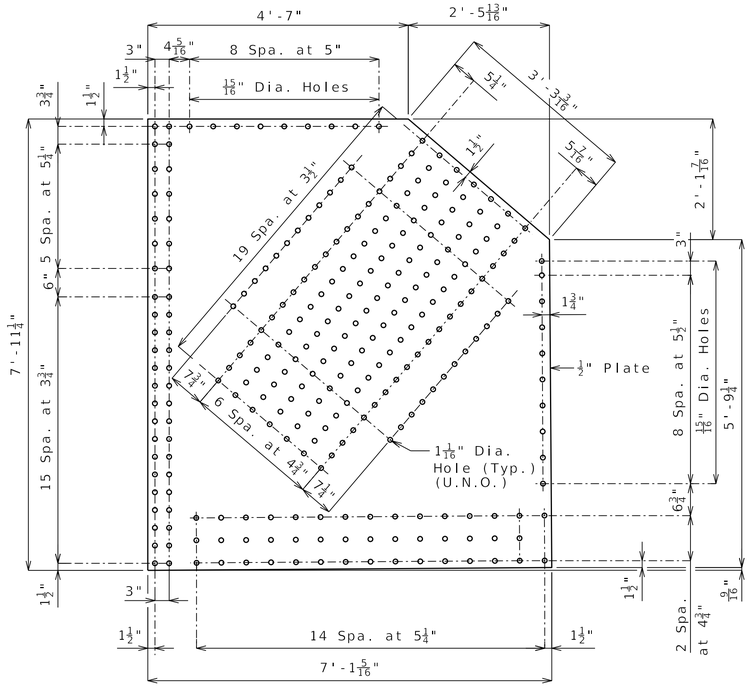


L0 INSIDE CHEESE PLATE NO. 1 (CP-1)



L0 INSIDE CHEESE PLATE NO. 2 (CP-2)



L0 INSIDE GUSSET PLATE RETROFIT (GP-1)

Notes:

For Bolt Removal and Replacement Procedure and for Plate Installation Procedure, see Sheet No. 14.

For Gusset Plate L0 Retrofit details and general notes, see Sheet No. 14.

U.N.O. = Unless noted otherwise.

GUSSET PLATE L0 RETROFIT

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	15

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DATE	DESCRIPTION

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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HDR Engineering, Inc.
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Suite 300
St. Louis, MO 63103-2267
314-425-8300
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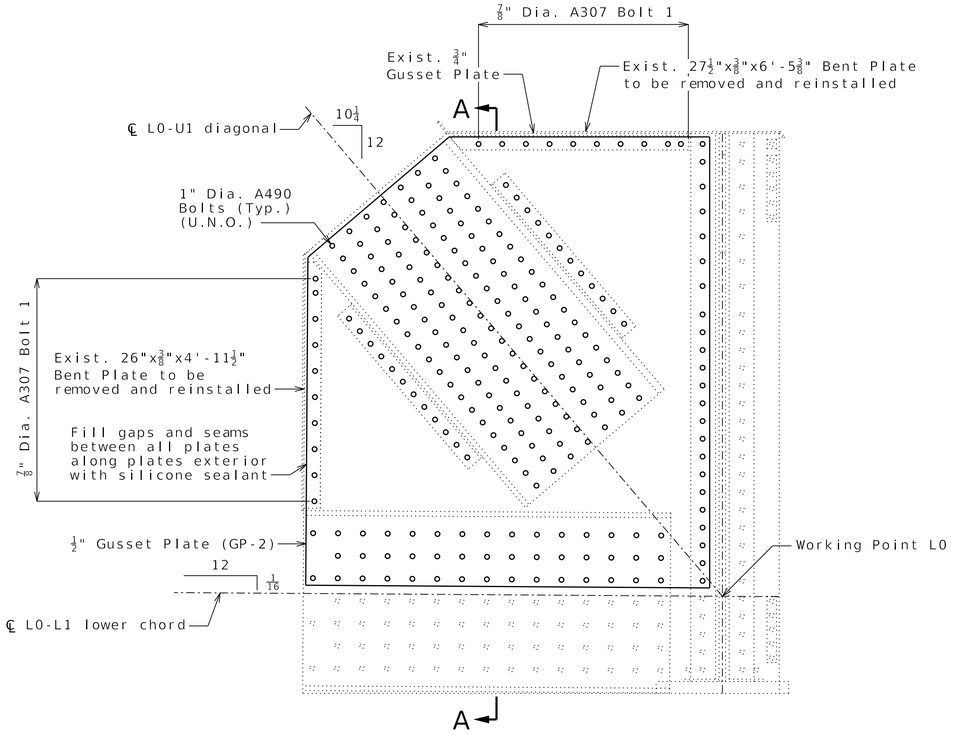


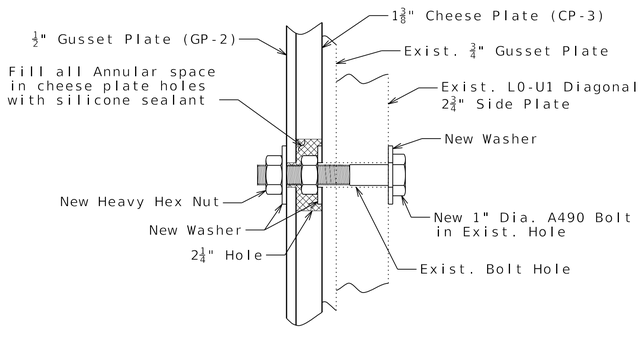
L0 OUTSIDE FACE GUSSET

(Cheese Plate not shown for clarity, see Sheet No.17)

LEGEND

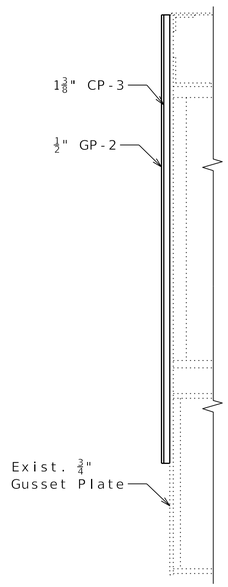
- Existing bolt to remain
- Existing bolt holes filled with new 7/8" Dia. A307 or 1" Dia. A490 Bolt

U.N.O. = Unless noted otherwise



BOLT INSTALLATION DETAIL - OUTSIDE FACE

(Bolt installation at existing diagonal shown, bolt installation at other locations similar)



SECTION A-A

Notes:

For Bolt Removal and Replacement Procedure and Plate Installation Procedure, see Sheet No. 14.

For general notes, see Sheet No. 14.

ESTIMATED L0 OUTSIDE GUSSET RETROFIT QUANTITIES
(FOR INFORMATION ONLY)

Item		Quantity
Fabricated Structural Low Alloy Steel (Misc.)	pound	4090
1" Dia. A490 High Strength Bolt	each	231
7/8" Dia. A307 Bolt 1	each	20
Exist. 1" Dia. Bolts to be Removed	each	231
Exist. 7/8" Dia. Bolts to be Removed	each	20

The above table of estimated quantities represents the quantities used by the State in preparing the cost estimate for the L0 Gusset retrofit. Payment for furnishing all materials and labor necessary to install gusset plate retrofits, complete in place, will be considered completely covered by the contract unit price for Gusset Plate L0 Retrofit per each. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

GUSSET PLATE L0 RETROFIT

Detailed May 2025
Checked May 2025

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PROFESSIONAL ENGINEER
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	16

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

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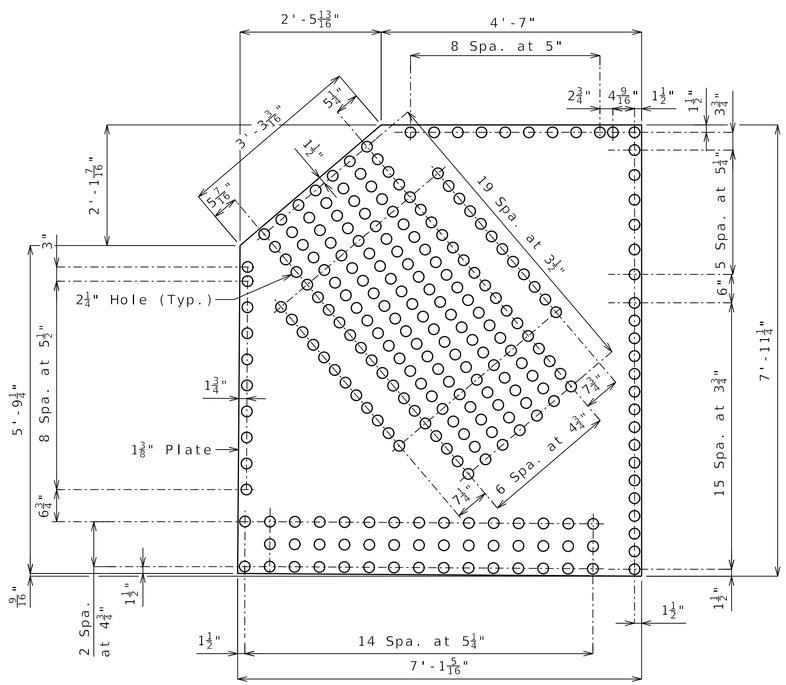
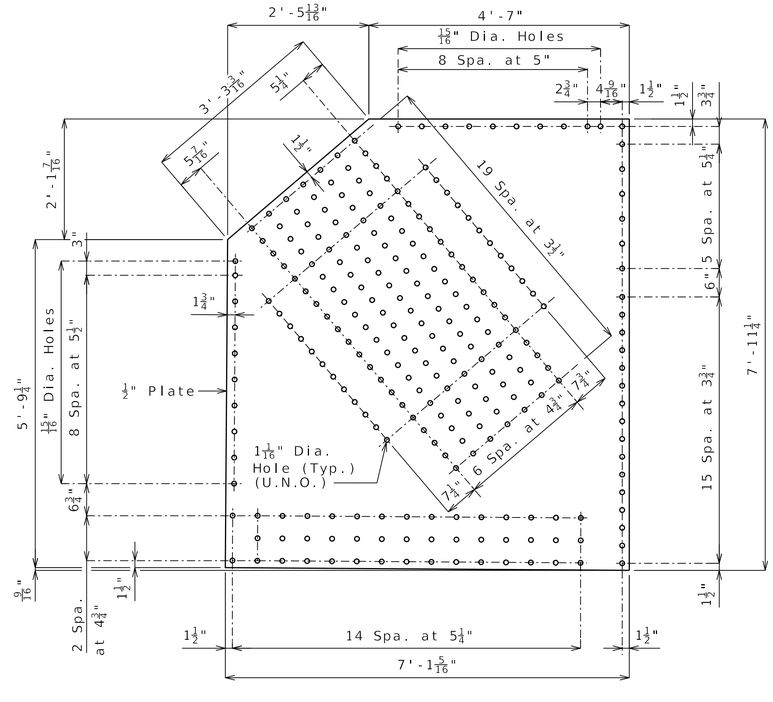


L0 OUTSIDE CHEESE PLATE NO. 3 (CP-3)



L0 OUTSIDE GUSSET PLATE RETROFIT (GP-2)

Notes:

For Bolt Removal and Replacement Procedure and Plate Installation Procedure, see Sheet No. 14.

For general notes, see Sheet No. 14.

For Gusset Plate L0 Retrofit details, see Sheet No. 16.

U.N.O. = Unless noted otherwise.

GUSSET PLATE L0 RETROFIT

Detailed May 2025
Checked May 2025

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DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 17
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

DATE	DESCRIPTION

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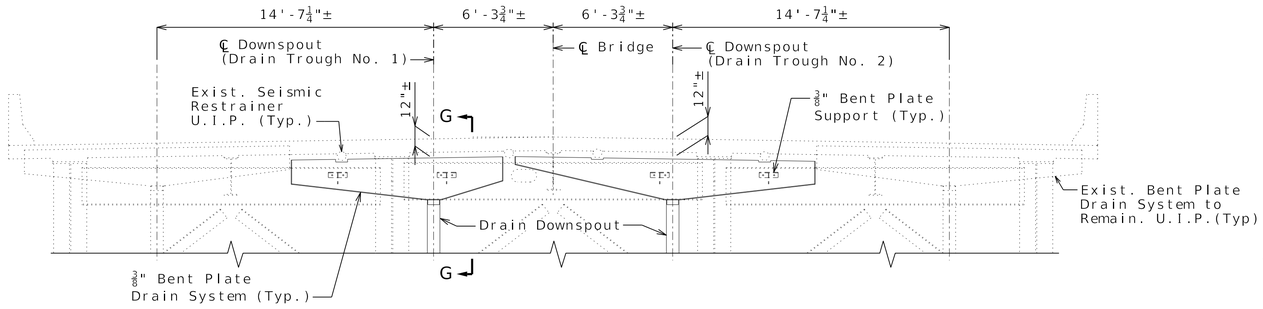
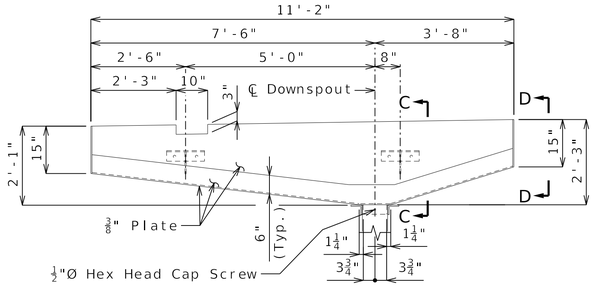
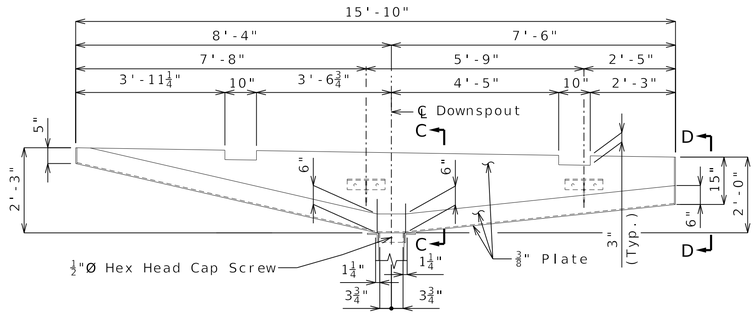


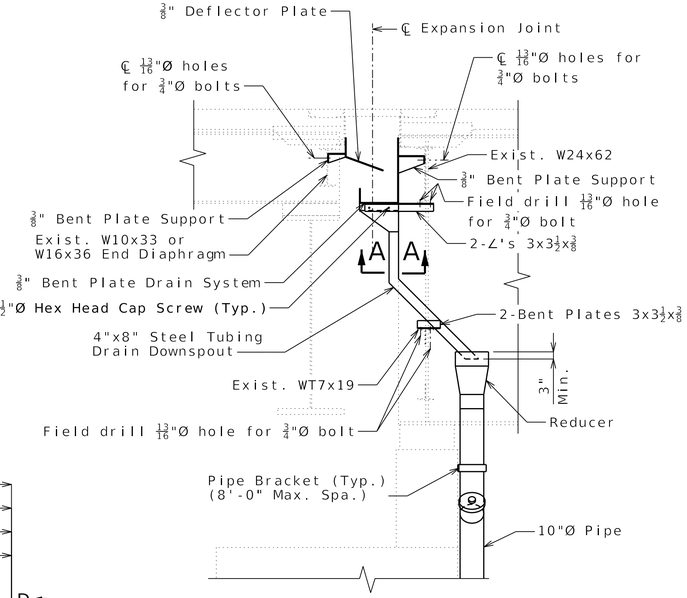
PROPOSED DRAIN DOWNSPOUT PIPING DETAIL - PIER 13 (2C)
(Looking Ahead Station)



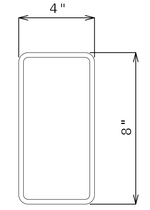
PROPOSED DRAIN TROUGH NO. 1 DETAIL
(Looking Ahead Station)



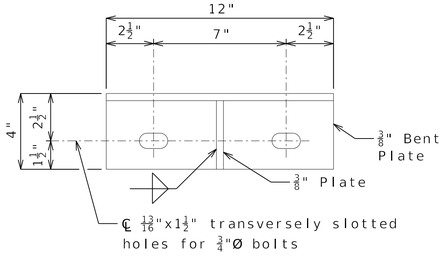
PROPOSED DRAIN TROUGH NO. 2 DETAIL
(Looking Ahead Station)



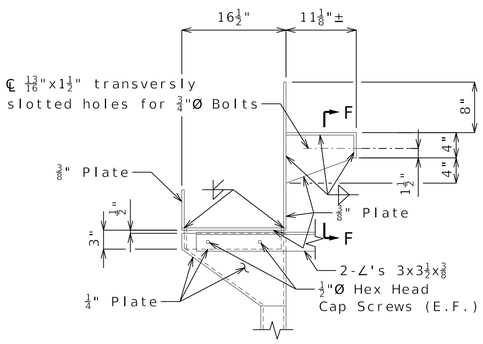
SECTION G-G



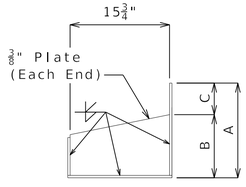
SECTION A-A



SECTION F-F

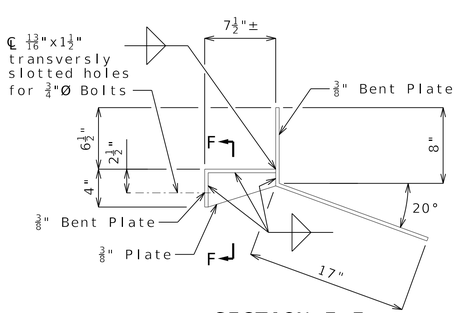


SECTION C-C

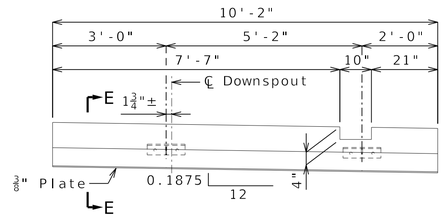


SECTION D-D

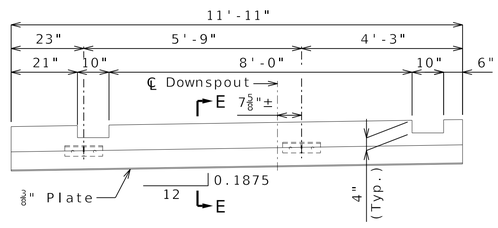
LOCATION	DIMENSIONS		
	A	B	C
Drain Trough No. 1 (Left)	15"	10"	5"
Drain Trough No. 1 (Right)	15"	10"	5"
Drain Trough No. 2 (Left)	5"	5"	0"
Drain Trough No. 2 (Right)	15"	10"	5"



SECTION E-E



PROPOSED DEFLECTOR PLATE NO. 1 DETAIL
(Looking Back Station)



PROPOSED DEFLECTOR PLATE NO. 2 DETAIL
(Looking Back Station)

Notes:

All structural steel for the Bent Plate Drain System and Supports shall be ASTM A709 Grade 36 except tubing shall be ASTM A500 or A501.

All structural steel for the Bent Plate Drain System shall be galvanized in accordance with ASTM A123.

All fasteners shall be galvanized in accordance with AASHTO M232 (ASTM A153), Class C.

Bent Plate Support connections to the existing diaphragms shall be made with 3/4" dia. ASTM F3125 Grade A325 Type 1 bolts, nuts and washers.

The cost of all labor, materials, and equipment necessary to complete the installation of the drainage modifications will be considered completely covered by the contract lump sum price for Drainage Modifications.

Contractor to verify all dimensions in the field before ordering materials.

DRAINAGE MODIFICATIONS AT PIER 13 (2C)

Detailed May 2025
Checked May 2025

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

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PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
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DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 18
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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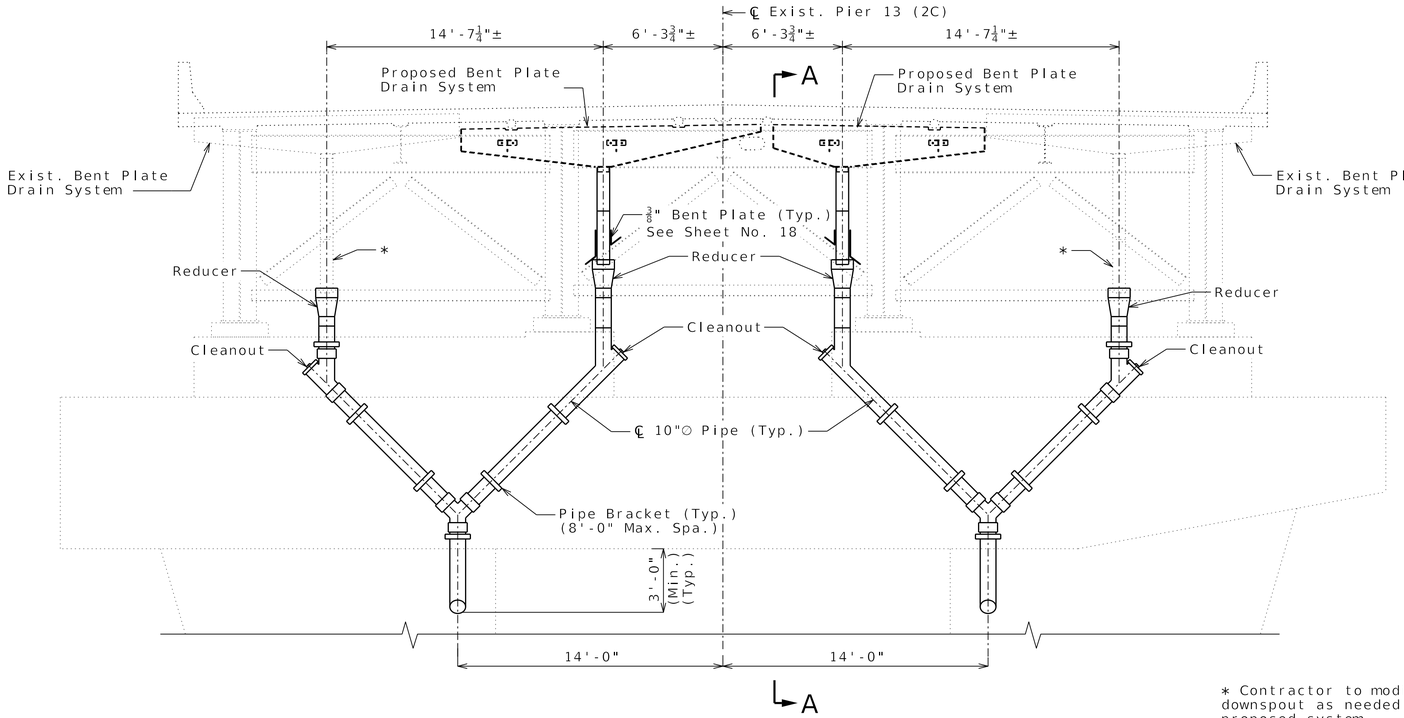
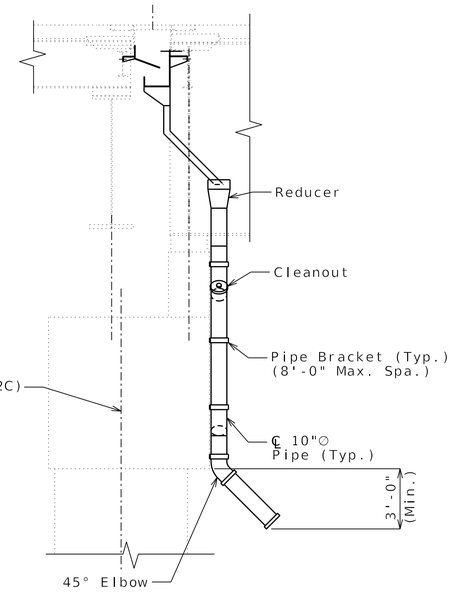


PIER 13 (2C) ELEVATION
(Looking Back Station)



SECTION A-A

* Contractor to modify exist. downspout as needed to connect to proposed system.

Notes:

For proposed Bent Plate Drainage System details, see Sheet No. 18.

Drainage system shall be fabricated from Reinforced Thermosetting Resin Pipe (RTRP) in accordance with the Special Provisions.

Contractor shall verify all dimensions in field before ordering materials.

All equipment, labor, and materials necessary to install the drainage collection piping and support pieces will be completely covered by the contract lump sum price for Drainage Modifications.

DRAINAGE MODIFICATIONS AT PIER 13 (2C)

Detailed May 2025
Checked May 2025

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DATE PREPARED: 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	19

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

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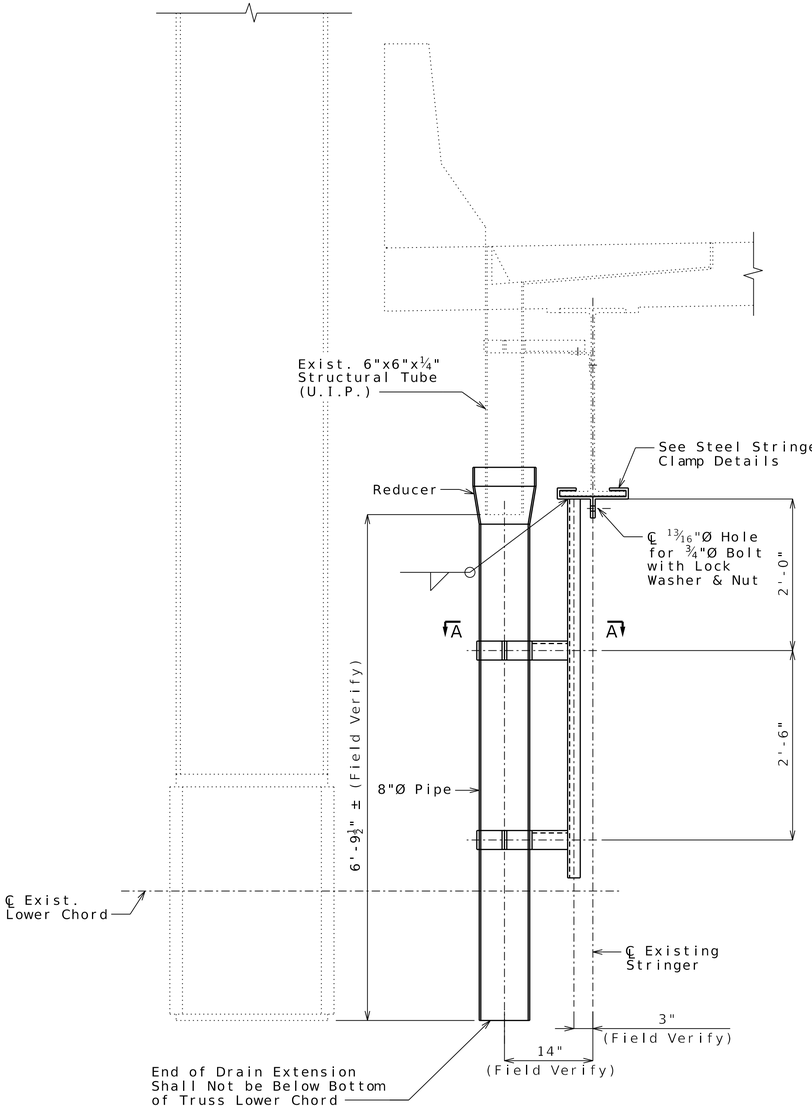
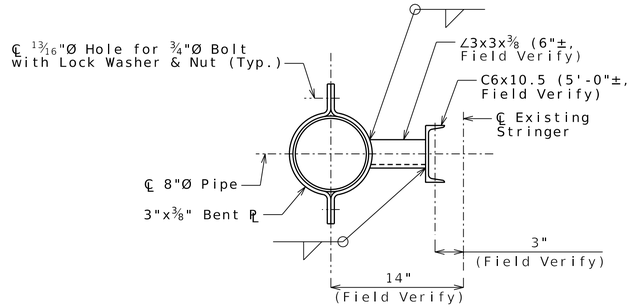
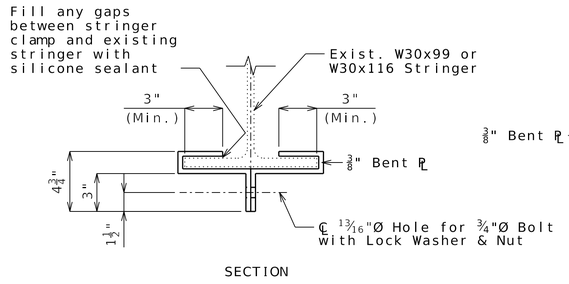


BRIDGE DRAIN EXTENSION - UNIT 4

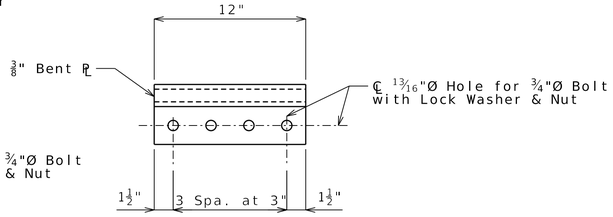


SECTION A-A

DRAIN EXTENTION LOCATION		
Unit	Stringer	Station
4	1 and 7	525+55.70
	1 and 7	526+59.70
	1 and 7	527+63.70
	1 and 7	529+19.70
	1 and 7	530+23.70
	1 and 7	531+37.70



SECTION



ELEVATION

STEEL STRINGER CLAMP DETAILS

Notes:

U.I.P. = Use In Place

Slab drain dimensions are measured to centerline of pipe.

Slab drain extension bracket assembly shall be ASTM A709 Grade 36 Steel.

The bracket assembly shall be galvanized in accordance with ASTM A123 and Sec 1081.

All bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with ASTM A153.

Piping shall be fabricated from field checked dimensions.

Slab drain extensions shall be fabricated from Reinforced Thermosetting Resin Pipe (RTRP) in accordance with the Special Provisions.

Any gap present between the proposed steel stringer clamp and the existing stringer shall be filled with silicone sealant.

Shop drawing will be required for pipe and bracket assembly.

All equipment, labor, and material necessary to install the slab drain extensions and support pieces will be completely covered by the contract unit price for Extend Slab Drain per each.

SLAB DRAIN EXTENSIONS IN TRUSS SPAN

Detailed May 2025
Checked May 2025

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DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 20
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

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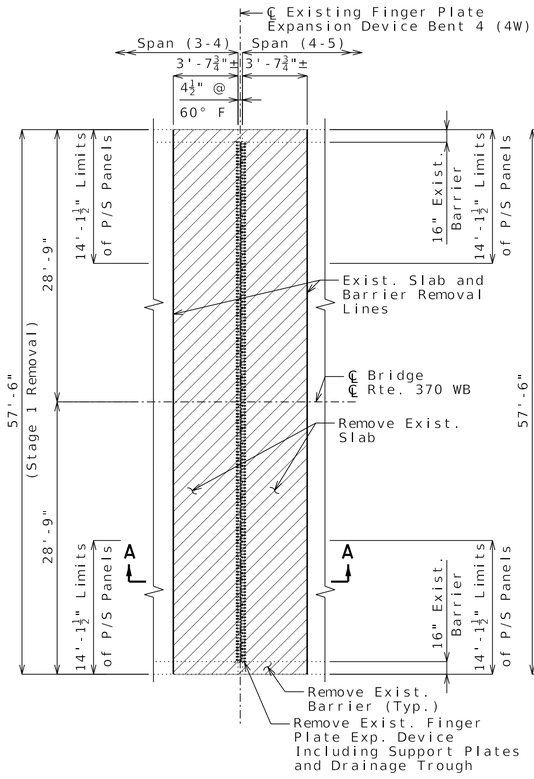
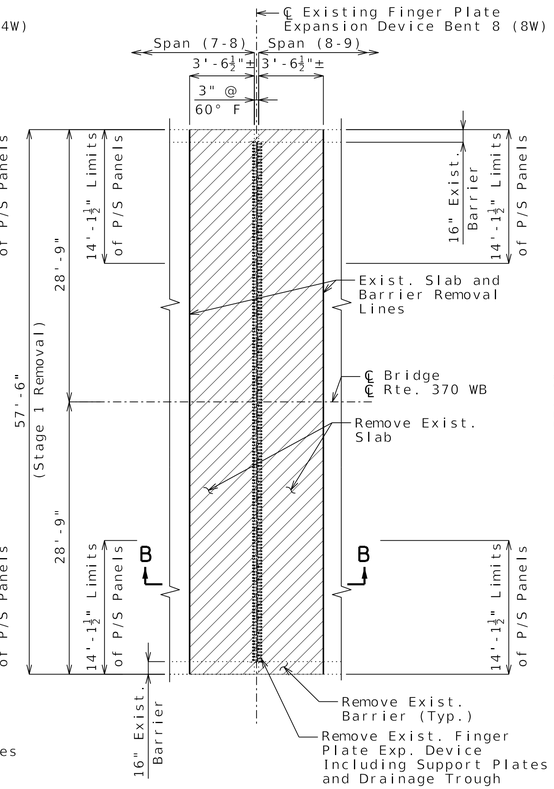
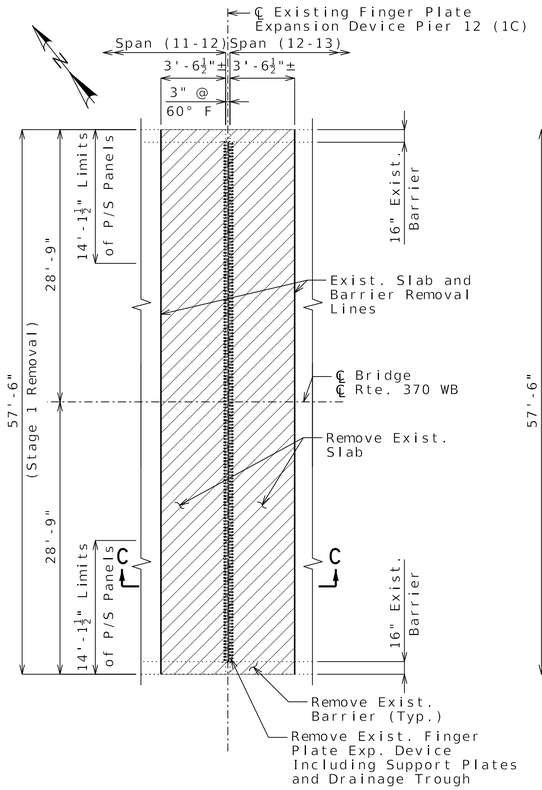


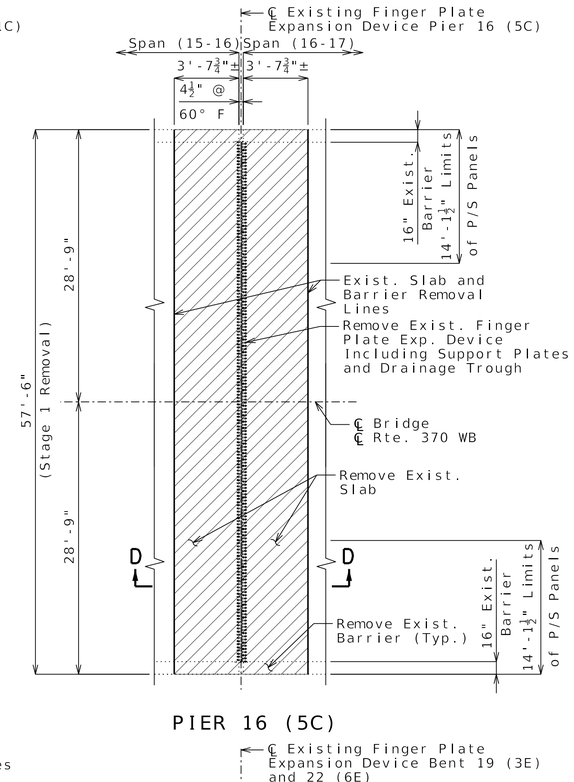
BENT 4 (4W)



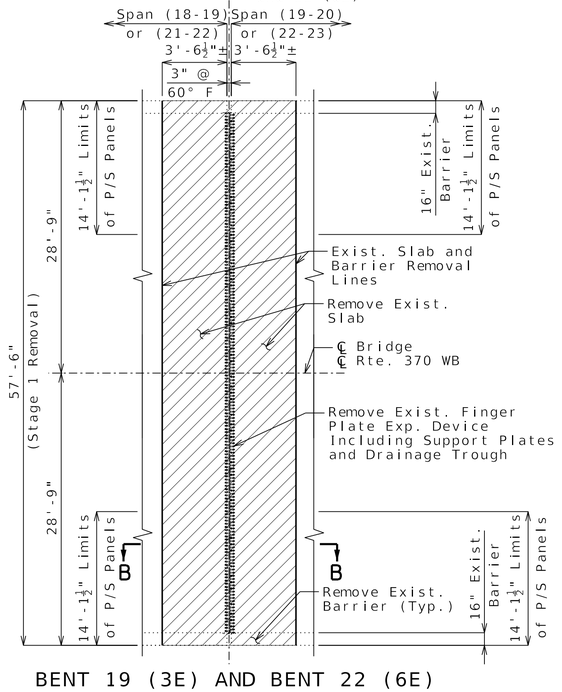
BENT 8 (8W)



PIER 12 (1C)



PIER 16 (5C)



BENT 19 (3E) AND BENT 22 (6E)

Notes:

Bars bonded in existing concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, existing bars shall extend into new concrete at least 40 diameters for plain bars and 30 diameters for deformed bars, unless otherwise noted.

For details of slab replacement, see Sheets No. 27 thru 30.

For details of barrier replacement, see Sheet No. 31.

For Sections A-A thru D-D, see Sheet No. 22.

The cost of all labor, materials and equipment for the removal of existing finger plate expansion device including drainage troughs and support beams, and concrete slab including reinforcement shall be considered completely covered by the contract unit price for Removal of Existing Expansion Joints & Adjacent Concrete per linear foot.

The cost of all labor, materials and equipment for the removal and replacement of the existing barrier including reinforcement, and all new concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Remove and Replace Barrier Curb per linear foot.

EXPANSION DEVICE REMOVAL DETAILS

Detailed May 2025
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ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	21

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

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314-425-8300
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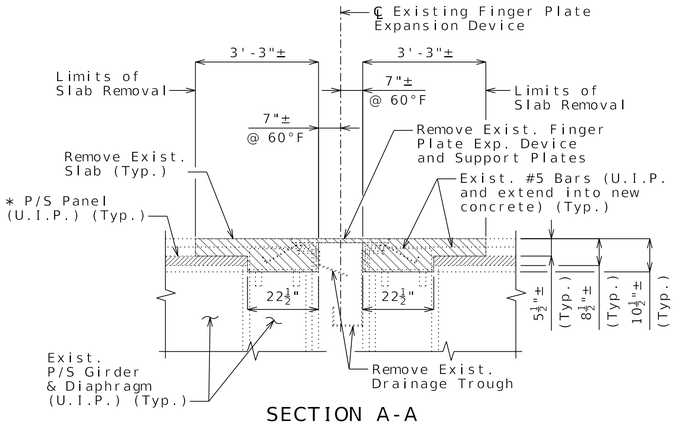
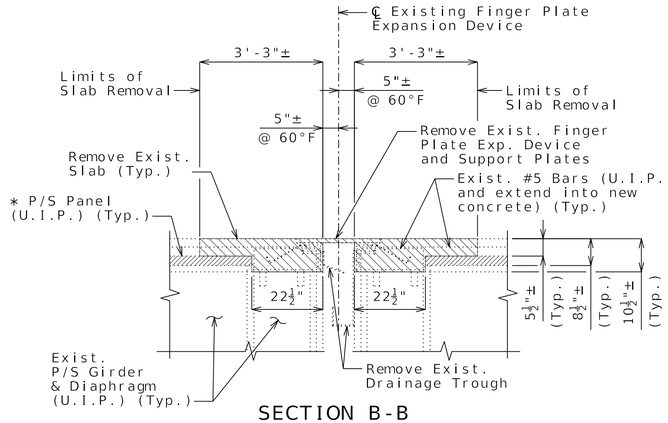
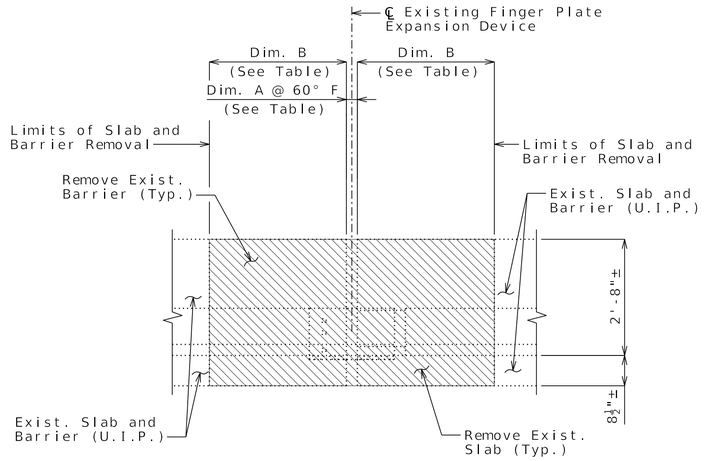


SECTION A-A

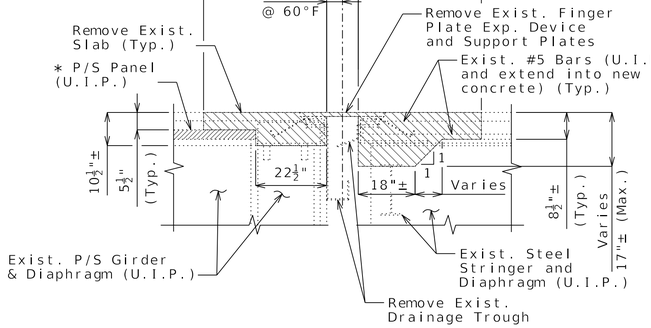


SECTION B-B

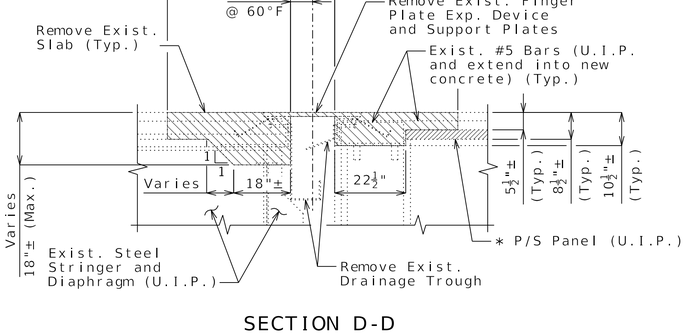


PART ELEVATION OF BARRIER REMOVAL AT FINGER PLATE EXPANSION DEVICE

TABLE OF DIMENSIONS		
Joint Location	Dim. A	Dim. B
Bent 4(4W)	4½"	3'-7¾"
Bent 8(8W)	3"	3'-6½"
Pier 12(1C)	3"	3'-6½"
Pier 16(5C)	4½"	3'-7¾"
Bent 19(3E)	3"	3'-6½"
Bent 22(6E)	3"	3'-6½"



SECTION C-C



SECTION D-D

* Note: In areas without P/S Panels, remove slab to top of girder. See part plans on Sheet No. 21 for limits of existing P/S Panel at each expansion joint.

Notes:

For additional expansion device removal notes, see Sheet No. 21.

For part plan details of expansion device removal, see Sheet No. 21.

For locations of Section A-A thru D-D, see Sheet No. 21.

For details of removal of existing expansion joint support bolts in top of P/S Girders, see Sheets No. 23 and 24.

EXPANSION DEVICE REMOVAL DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

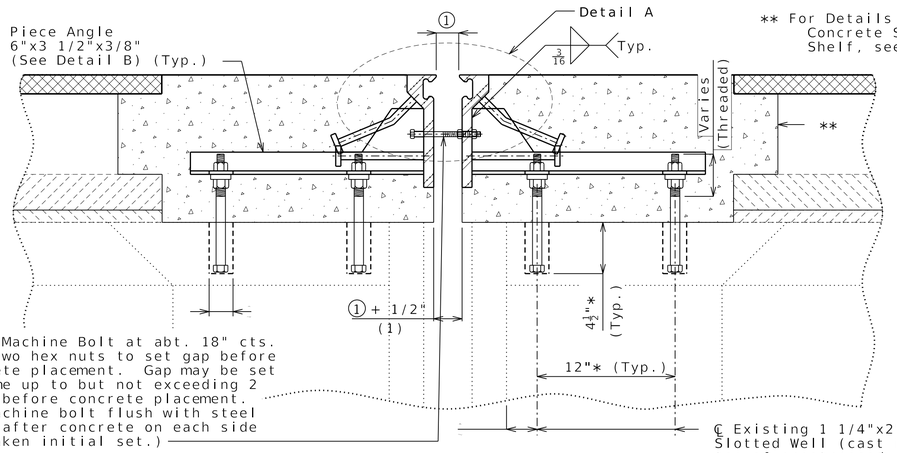
DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 22
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

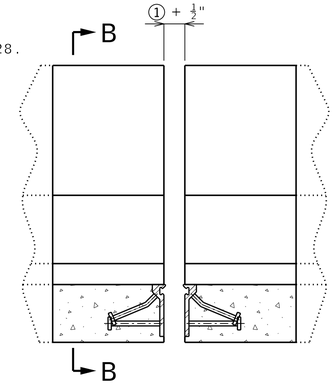
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



** For Details and Reinf. of Concrete Slab and Support Shelf, see Sheets No. 27 & 28.

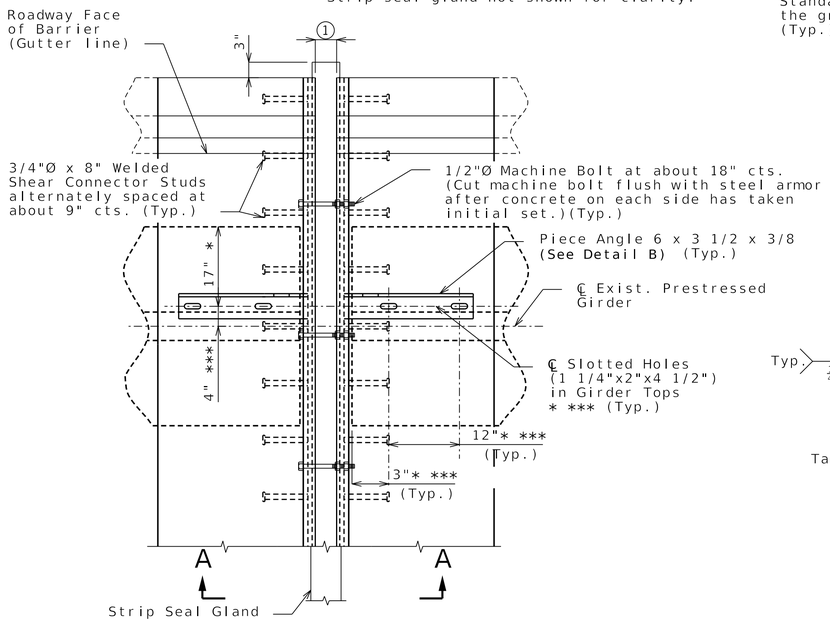
SECTION A-A

Strip seal gland not shown for clarity.

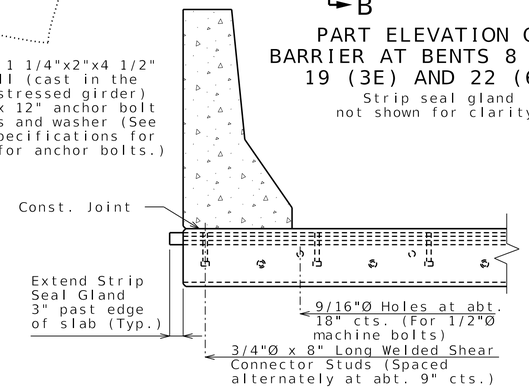


PART ELEVATION OF BARRIER AT BENTS 8 (8W), 19 (3E) AND 22 (6E)

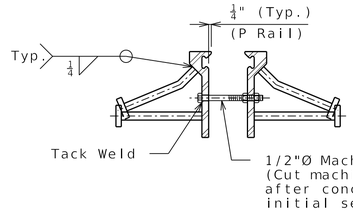
Strip seal gland not shown for clarity.



PART PLAN AT BENTS 8 (8W), 19 (3E) AND 22 (6E)

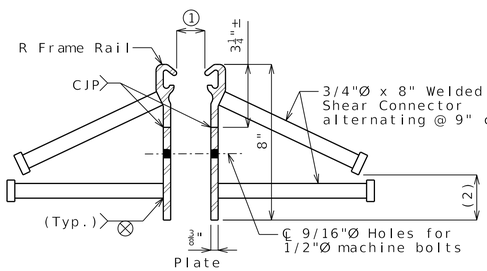


PART SECTION B-B



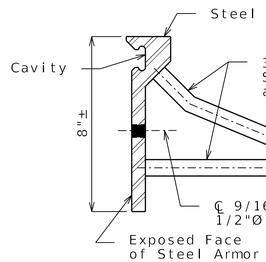
DETAIL A

(P Rail shown, R Rail similar)



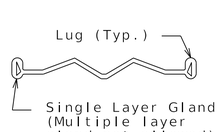
(2) Bend stud in shop if necessary to maintain 1" min. from bottom of vertical plate.

OPTIONAL R RAIL DETAIL

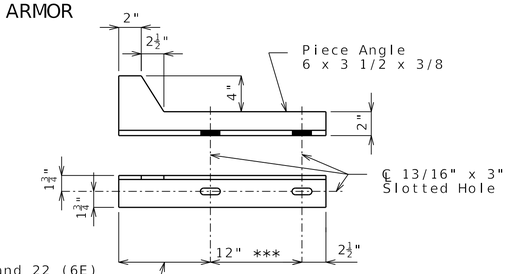


DETAIL OF JOINT ARMOR

(P Rail)



DETAIL OF GLAND



10 1/4" *** Bents 8 (8W), 19 (3E) and 22 (6E)
10 3/4" *** Bent 12 (1C) - Concrete Girder Span
10 5/8" *** Bent 12 (1C) - Steel Stringer Span

DETAIL B

* Approximate Locations of existing 3/4"○ x 7" anchor bolt w/ nut and washer grouted in slotted holes (1 1/4"x2"x4 1/2") in girder tops. Contractor to use a 2"Ø core bit to drill around and remove existing 3/4"○ anchor bolts to a depth of 4 1/2" into the top of girder flange. The Contractor should exercise extreme caution when coring the existing girder concrete to not damage existing girder reinforcement or prestressed strands. Contractor to install the new 3/4"○ anchor bolt within the cored hole, see Standard Specifications for the grout for anchor bolts.

*** Contractor to field verify.

GENERAL NOTES:

Expansion joint system shall be fabricated in one section, except for staged construction and when the length is over 50 feet. A complete joint penetration groove welded splice shall be required. Welds shall be ground flush to provide a smooth surface. The expansion joint system shall be fabricated and installed to the crown and grade of the roadway.

The strip seal gland shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

Structural steel for the expansion joint system shall be ASTM A709 Grade 36 except the steel armor may be ASTM A709 Grade 50W. Anchors for the expansion joint system shall be in accordance with Sec 1037. Strip seal expansion joint system shall be in accordance with Sec 717.

Structural steel for the expansion joint system shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with ASTM A123. Anchors need not be protected from overspray.

Longitudinal reinforcing steel shall be placed so that ends shall be 1" from the vertical leg of the steel armor at the expansion joint system.

Concrete shall be forced under and around steel armor and anchors. Proper consolidation of the concrete shall be achieved by localized internal vibration.

② The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

③ MoDOT Construction personnel will indicate the strip seal expansion joint system installed.

Steel armor may also be referred to as extrusion or rail.

Payment for furnishing, coating, or galvanizing and installing the structural steel for the expansion joint will be considered completely covered by the contract unit price for Strip Seal Expansion Joint System.

For Barrier Details, see Sheet No. 31.

For Construction Staging, see Sheet No. 4.

The terms P and R rail are used for identification only, and are not endorsements for any particular manufacturer.

(1) Because of variations in armor dimensions, the concrete opening will vary if the option R rail is used. Dimensions shown are based on P rail option.

▨ Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	23

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45577

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

STRIP SEAL EXPANSION JOINT DETAILS AT BENTS 8 (8W), 12 (1C), 19 (3E) AND 22 (6E)

Detailed May 2025
Checked May 2025

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

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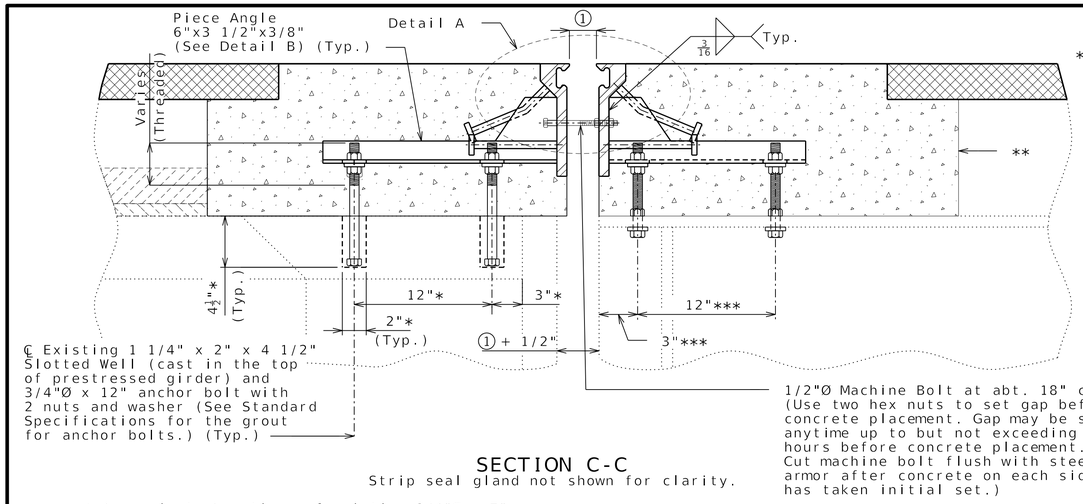


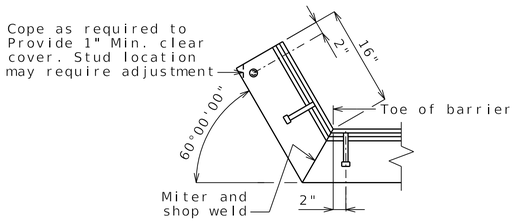
SECTION C-C

Strip seal gland not shown for clarity.

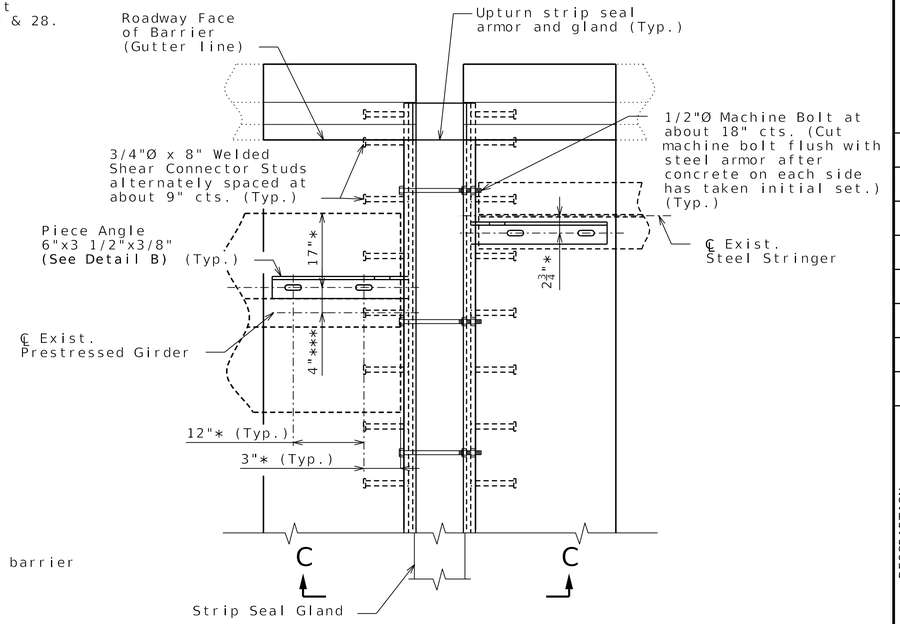
** For Details and Reinf. of Concrete Slab and Support Shelf, see Sheets No. 27 & 28.

* Approximate Locations of existing 3/4"∅ x 7" anchor bolt w/ nut and washer grouted in slotted holes (1 1/4"x2"x4 1/2") in girder tops. Contractor to use a 2"Ø core bit to drill around and remove existing 3/4"∅ anchor bolts to a depth of 4 1/2" into the top of girder flange. The Contractor should exercise extreme caution when coring the existing girder concrete to not damage existing girder reinforcement or prestressed strands. Contractor to install the new 3/4"∅ anchor bolt within the cored hole, see Standard Specifications for the grout for anchor bolts.

*** Contractor to field verify. Approximate locations of existing 3/4" diam. bolts thru existing stringer top flange. Contractor to remove existing bolts and install new 3/4" diam. anchor bolts, fully threaded, thru existing 13/16" diam. holes in existing stringer top flange with additional nut as shown.



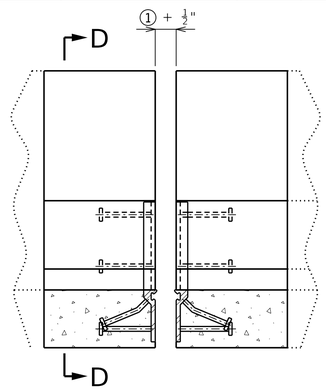
UPTURN DETAIL



PART PLAN AT BENT 12 (1C)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

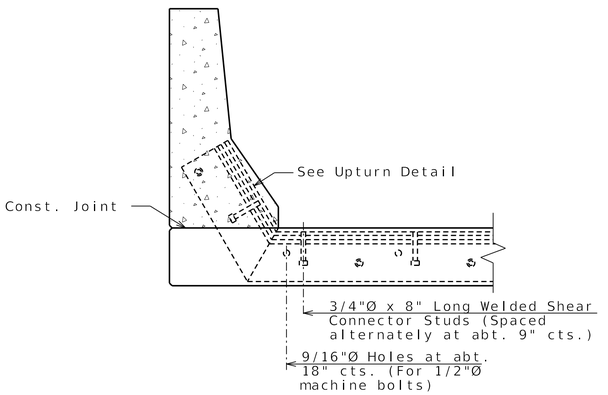
Table of Allowed Transverse Strip Seal Expansion Joint System: Bent 8 (8W), Bent 19 (3E) and Bent 22 (6E)																									
Manufacturer	Strip Seal System (Designated Name)	① Allowed Installation Gap Normal to Joint at RDWY Surface @ Air/Surface Temperature ②																							
		Movement Parallel to RDWY			@ 40°F			@ 50°F			@ 60°F			@ 70°F			@ 80°F			@ 90°F			③		
		Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)	Bent 8 (8W)	Bent 19 (3E)	Bent 22 (6E)
D S Brown	Strip seal L2-500	3 13/16"	3 1/8"	3 5/8"	3 1/8"	3"	3 1/8"	2 13/16"	2 3/4"	2 13/16"	2 1/2"	2 1/2"	2 1/2"	2 3/16"	2 1/4"	2 3/16"	1 7/8"	2"	1 7/8"	1 9/16"	1 3/4"	1 9/16"	□	□	□
Watson Bowman Acme (Wabo)	Strip seal SE-500	3 13/16"	3 1/8"	3 5/8"	3 1/8"	3"	3 1/8"	2 13/16"	2 3/4"	2 13/16"	2 1/2"	2 1/2"	2 1/2"	2 3/16"	2 1/4"	2 3/16"	1 7/8"	2"	1 7/8"	1 9/16"	1 3/4"	1 9/16"	□	□	□



PART ELEVATION OF BARRIER AT BENT 12 (1C)

Strip seal gland not shown for clarity.

Table of Allowed Transverse Strip Seal Expansion Joint System: Bent 12 (1C)									
Manufacturer	Strip Seal System (Designated Name)	Movement Parallel to RDWY	Allowed Installation Gap ① Normal to Joint at RDWY Surface @ Air/Surface Temperature ②						③
			@ 40°F	@ 50°F	@ 60°F	@ 70°F	@ 80°F	@ 90°F	
D S Brown	Strip seal L2-400	1 7/8"	2 5/16"	2 3/16"	2"	1 13/16"	1 11/16"	1 1/2"	□
Watson Bowman Acme (Wabo)	Strip seal SE-400	1 7/8"	2 5/16"	2 3/16"	2"	1 13/16"	1 11/16"	1 1/2"	□



PART SECTION D-D

STRIP SEAL EXPANSION JOINT DETAILS AT BENTS 8 (8W), 12 (1C), 19 (3E) AND 22 (6E)

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	24

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

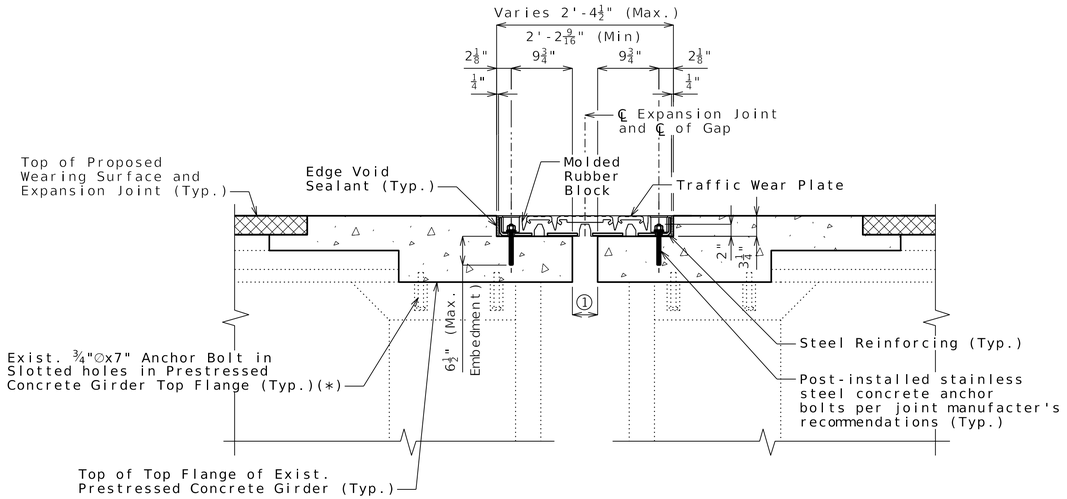
BRIDGE NO. A45577

DESCRIPTION	DATE

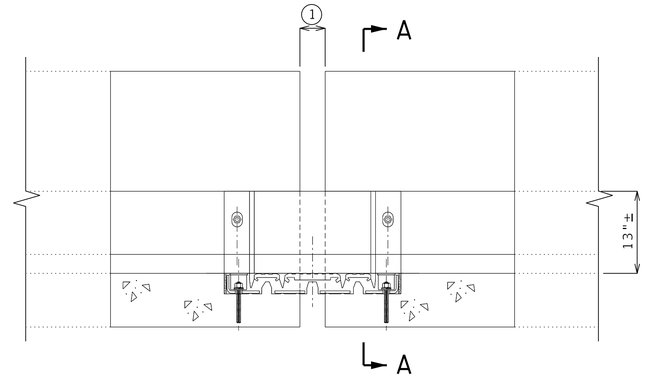
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

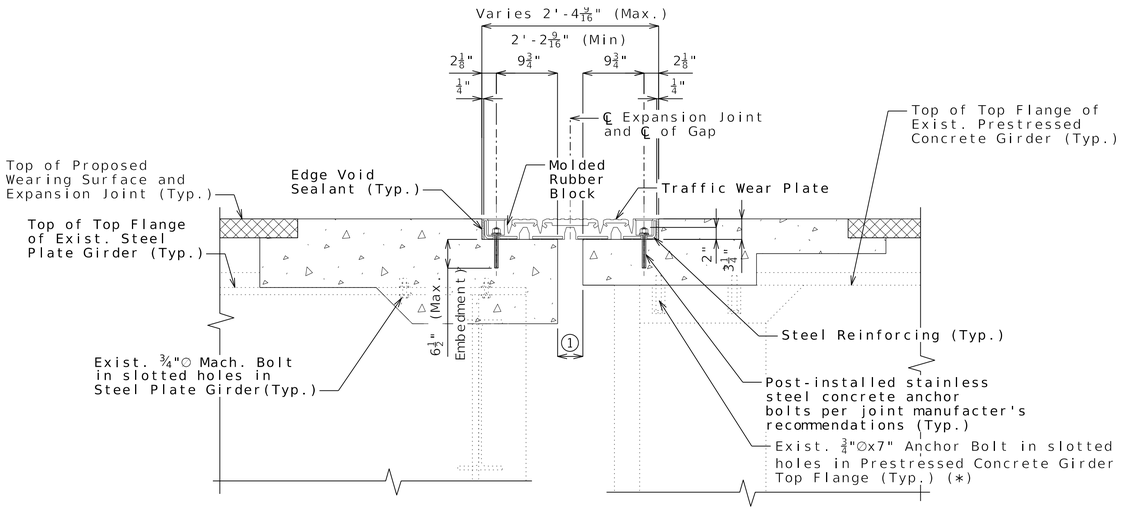
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



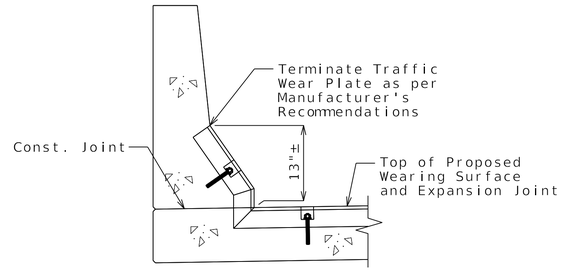
SECTION THRU JOINT AT BENT 4 (4W)



PART ELEVATION OF BARRIER



SECTION THRU JOINT AT BENT 16 (5C)



PART SECTION A-A

Table of Allowed Transverse Segmental Expansion Joint System: Bent 4 (4W) and Bent 16 (5C)															
Manufacturer	Segmental Expansion Joint System (Designated Name)	Movement Parallel to RDWY		Allowed Installation Gap ① Normal to Joint at RDWY Surface at Air/Surface Temperature ②											
				@ 40° F		@ 50° F		@ 60° F		@ 70° F		@ 80° F		@ 90° F	
		Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)	Bent 4 (4W)	Bent 16 (5C)
Watson Bowman Acme (Wabo)	Wabo Flex Model SR 6.5A	4 11/16"	5½"	4¾"	4 13/16"	4⅝"	4⅝"	4"	4"	3⅜"	3⅝"	3¼"	3 3/16"	2 1/16"	2 1/16"

- Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

(*) If exist. 3/4"∅ anchor bolts conflict with proposed segmental joint installation the contractor may cut exist. anchor bolts flush with the top of exist. prestressed concrete girder. Extreme caution should be used by the contractor when the cutting operation is performed as to not damage the exist. girder.

Notes:

Replacement expansion joint shall be a Wabo Flex Model SR 6.5A as manufactured by Watson Bowman Acme Corp. Amherst New York.

Block-out dimensions shown are only applicable for a Wabo Flex Model SR 6.5A.

The expansion device shall be fabricated to match the crown of the roadway.

② The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

For Construction Staging, see Sheet No. 4.

All hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M232 (ASTM A153), Class C.

SEGMENTAL EXPANSION JOINT DETAILS AT BENTS 4 (4W) AND 16 (5C)

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/1/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	25

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
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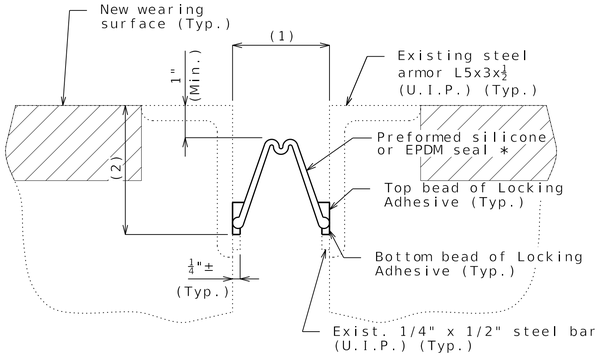
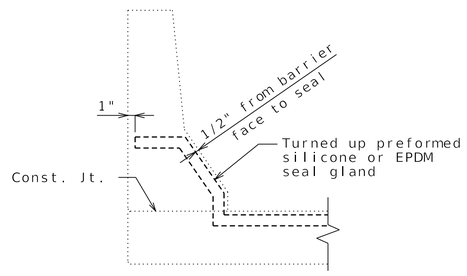
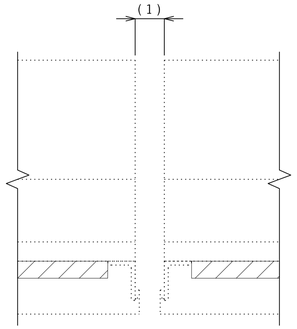
Certificate of Authority: 000856



SECTION THRU JOINT IN UNIT 4 TRUSS SPAN



SECTION THRU EDGE OF SLAB NEAR JOINT



PART ELEVATION OF BARRIER

Preformed silicone or EPDM seal not shown for clarity. Seal installation turned up between barriers in-place is required.

General Notes:

Seals shall be installed in the slab joints near panel points L4 and L4' of Unit 4.

Existing seals shall be removed in accordance with Sec 216. Surfaces shall be prepared in accordance with Sec 717 and manufacturer's procedures.

The seal shall be installed in joints in one continuous piece without field splices. Factory splicing will be permitted for joints in excess of 53 feet.

The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

(1) Allowed installation gap (±) normal to joint at roadway surface (see table)

(2) Installation depth (±) per manufacturer's recommendation

For Construction Staging, see Sheet No. 4.

DETAIL OF SEAL

* Double hump seal shown in figure. Actual shape of seal may be double or single hump as per manufacturer.

Allowed Transverse Preformed Silicone or EPDM Joint Seals

Manufacturer	Seal Name	Movement Parallel to Roadway	(1) Allowed Installation Gap Normal to Joint at Roadway Surface at Air/Surface Temperature				Type Used (✓)
			@ 40°F	@ 50°F	@ 60°F	@ 70°F	
R J Watson (Silicoflex Joint Seal)	Silicoflex SF150	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐
R J Watson (Silicoflex Joint Seal)	Silicoflex SF225	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐
Watson Bowman Acme Wabo (Preformed Silicone Joint Seal)	Wabo SPS-225	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐
D S Brown (EPDM Joint Seal)	V-Seal V-300	1 5/16"	2 9/16"	2 7/16"	2 1/4"	2 1/16"	☐

MoDOT Construction personnel will indicate the type of seal used.

PREFORMED SILICONE OR EPDM JOINT SEAL IN UNIT 4

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
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DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 26
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
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St. Louis, MO 63103-2267
314-425-8300
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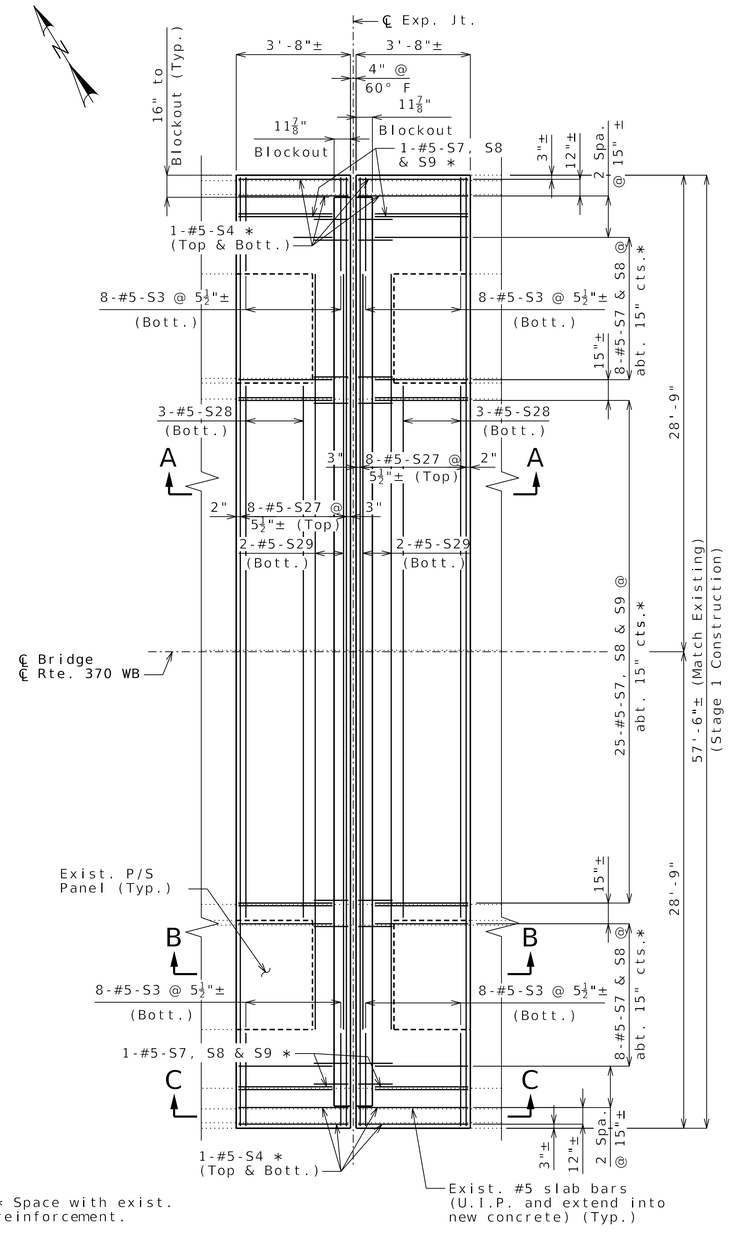
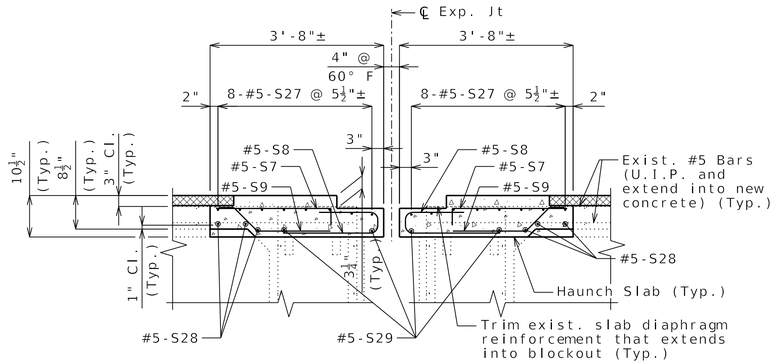
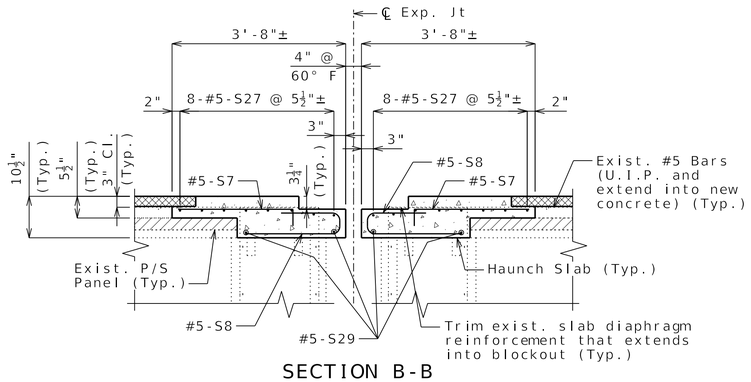


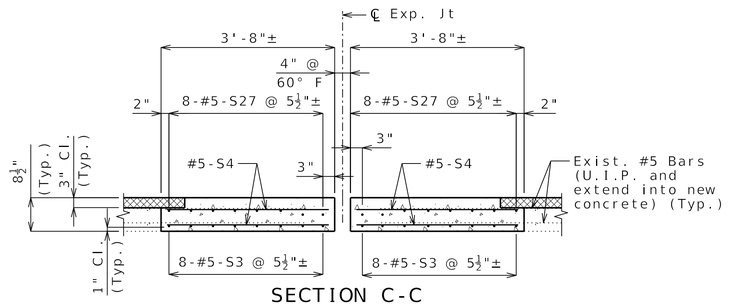
PLAN OF SLAB AT BENT 4 (4W)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)



SECTION A-A
(Section within limits of full depth CIP slab)



SECTION B-B
(Section within limits of P/S Panels)



SECTION C-C
(Section within limits of full depth CIP slab overhang)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the segmental expansion joint system at Bent 4 (4W), see Sheet No. 25,

For barrier replacement details, see Sheet No. 31.

SLAB REPLACEMENT AT BENT 4 (4W)

Detailed May 2025
Checked May 2025

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

AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	
6/30/2025	
ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	27

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
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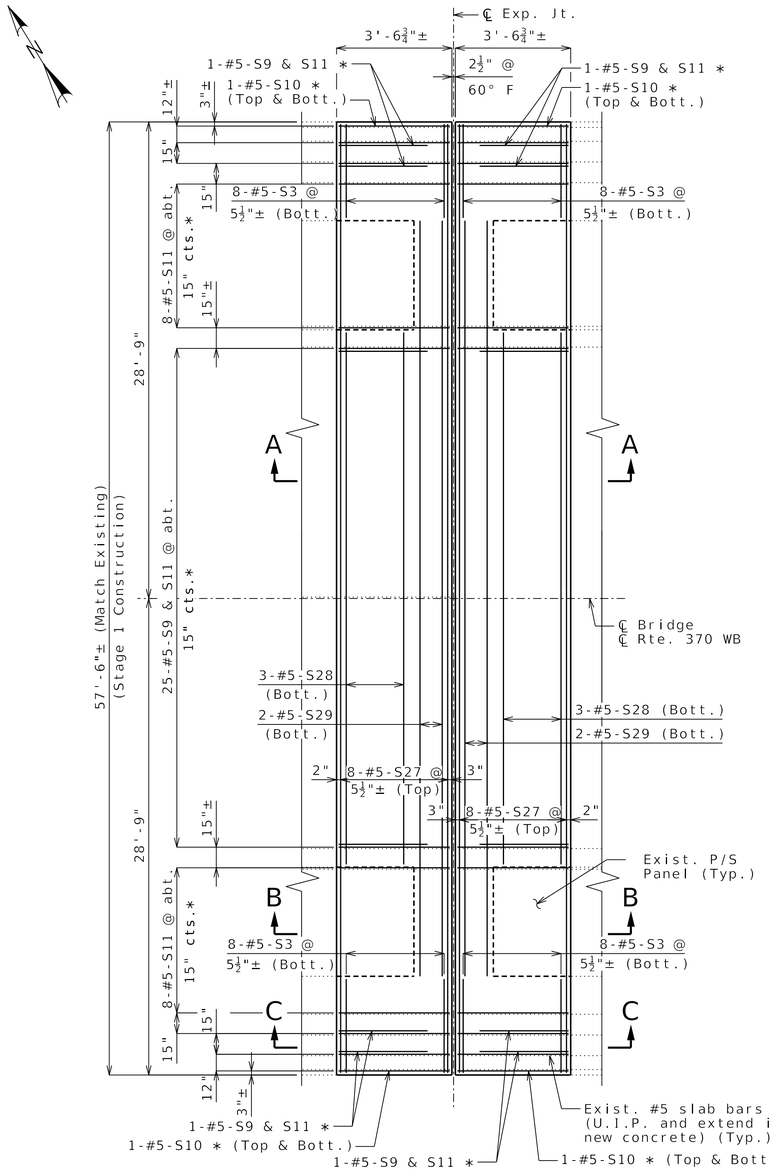
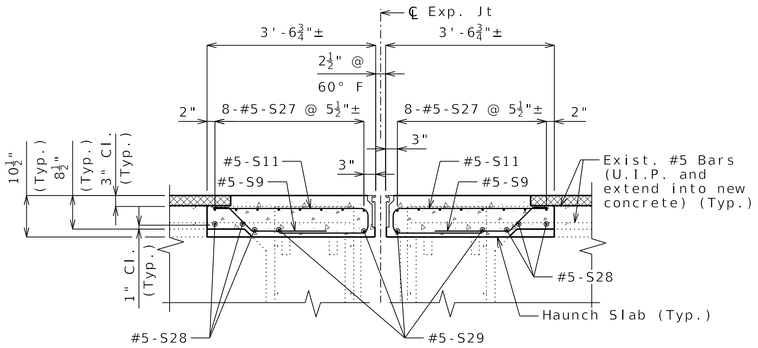
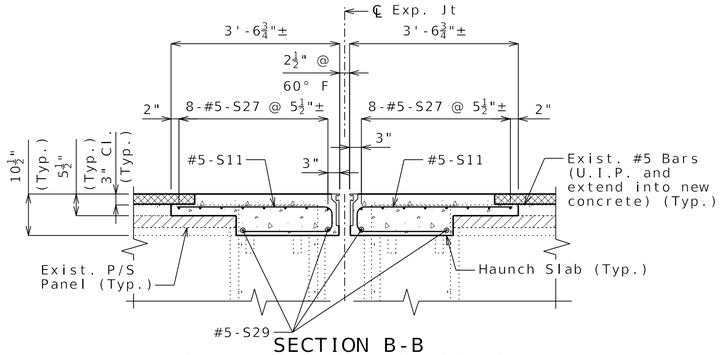


PLAN OF SLAB AT BENT 8 (8W), 19 (3E) AND 22 (6E)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)

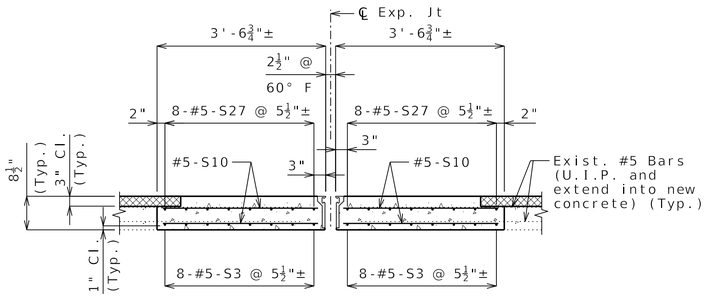
* Space with exist. reinforcement.



SECTION A-A
(Section within limits of full depth CIP slab)



SECTION B-B
(Section within limits of P/S Panels)



SECTION C-C
(Section within limits of full depth CIP slab overhang)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Longitudinal reinforcing steel shall be placed so that ends shall be 1" from vertical leg of the steel armor at the expansion joint system.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the strip seal expansion joint system at Bents 8 (8W), 19 (3E) and 22 (6E), see Sheets No. 23 and 24.

For barrier replacement details, see Sheet No. 31.

SLAB REPLACEMENT AT BENTS 8 (8W), 19 (3E) AND 22 (6E)

Detailed May 2025
Checked May 2025

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

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ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 28
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A45577

DESCRIPTION | DATE

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105 WEST CAPITOL
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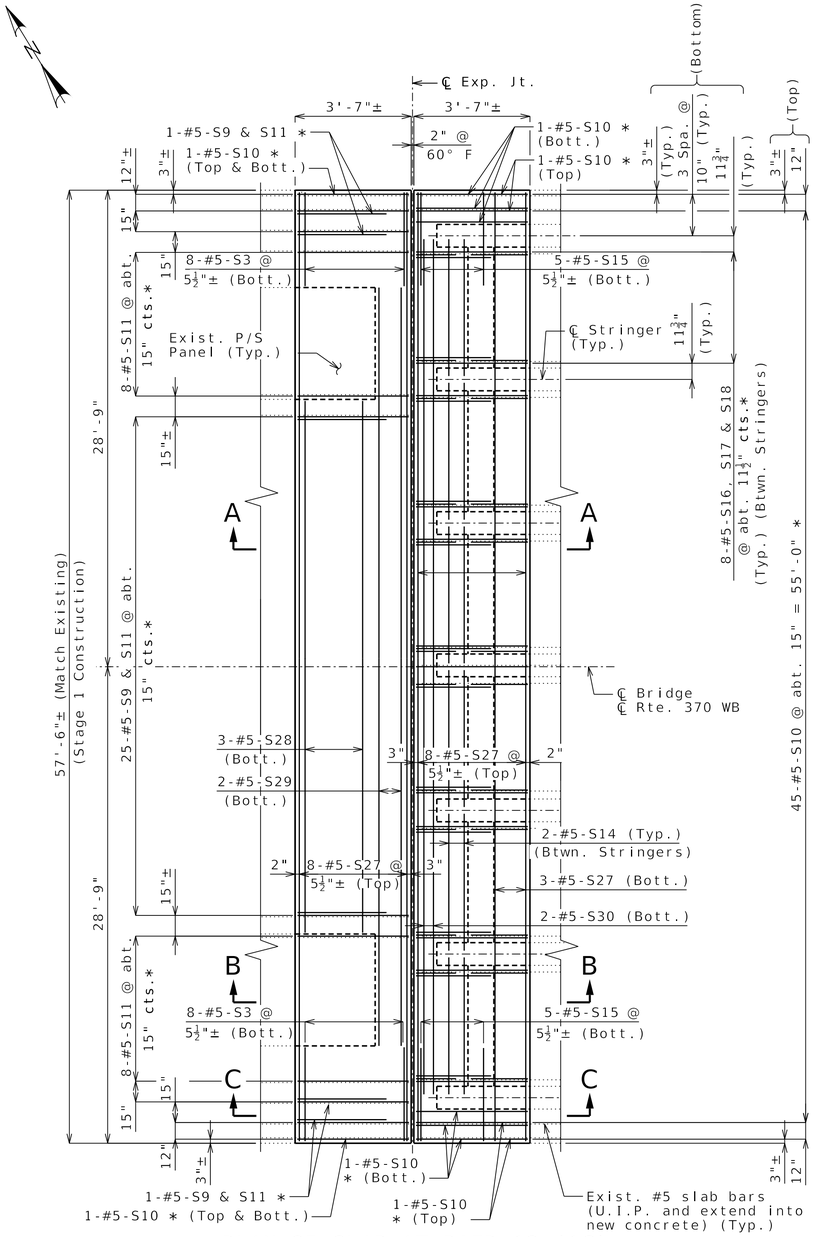
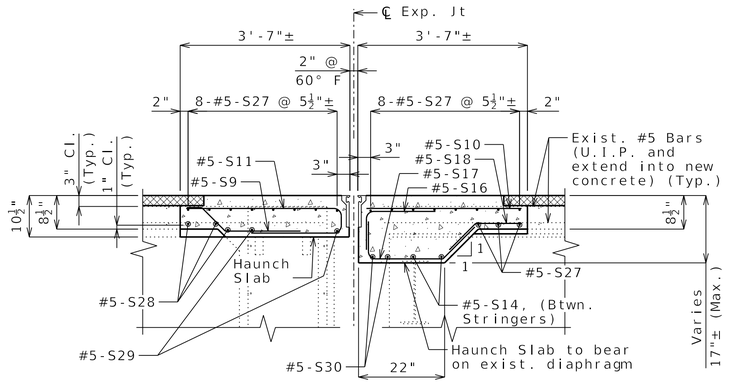
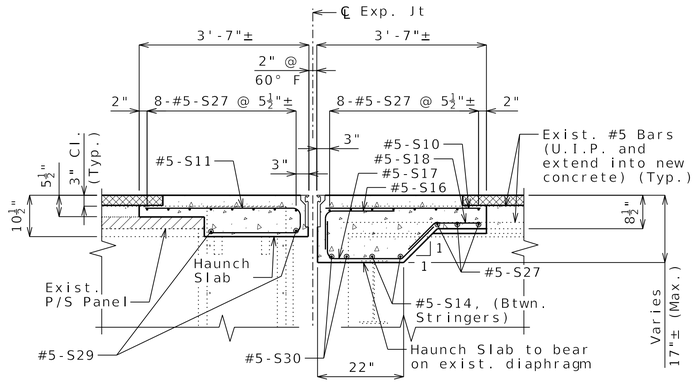


PLAN OF SLAB AT PIER 12 (1C)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)

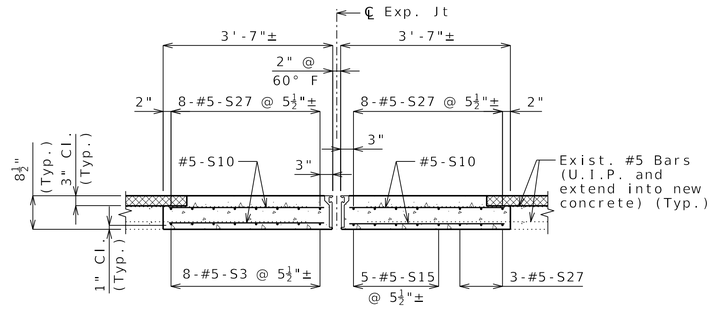
* Space with exist. reinforcement.



SECTION A-A
(Section within limits of full depth CIP slab)



SECTION B-B
(Section within limits of P/S Panels)



SECTION C-C
(Section within limits of full depth CIP slab overhang)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Longitudinal reinforcing steel shall be placed so that ends shall be 1" from vertical leg of the steel armor at the expansion joint system.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the strip seal expansion joint system at Pier 12 (1C), see Sheets No. 23 and 24.

For barrier replacement details, see Sheet No. 31.

SLAB REPLACEMENT AT PIER 12 (1C)

Detailed May 2025
Checked May 2025

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

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DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	29

COUNTY
ST. LOUIS/ ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45577

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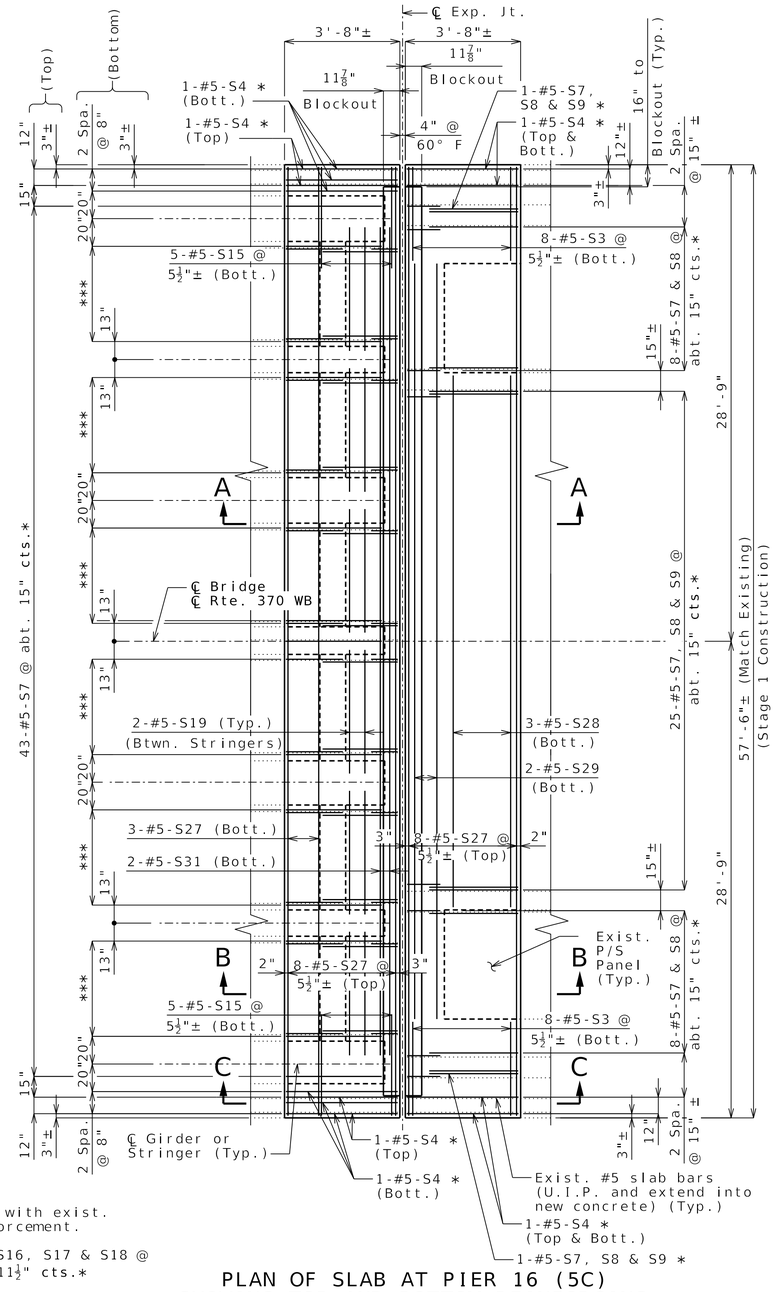
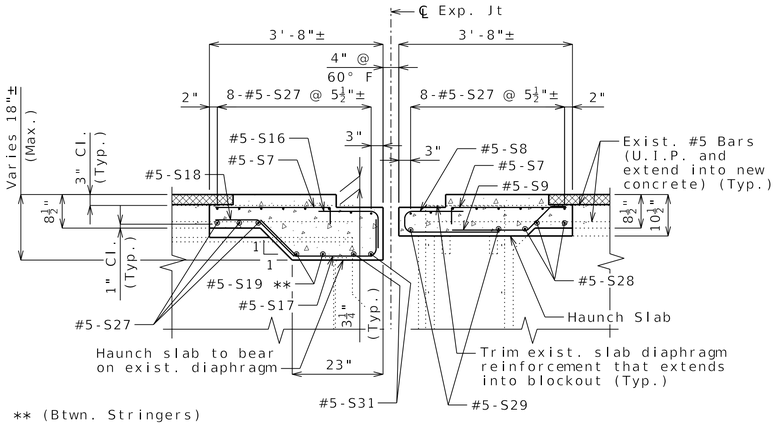


* Space with exist. reinforcement.

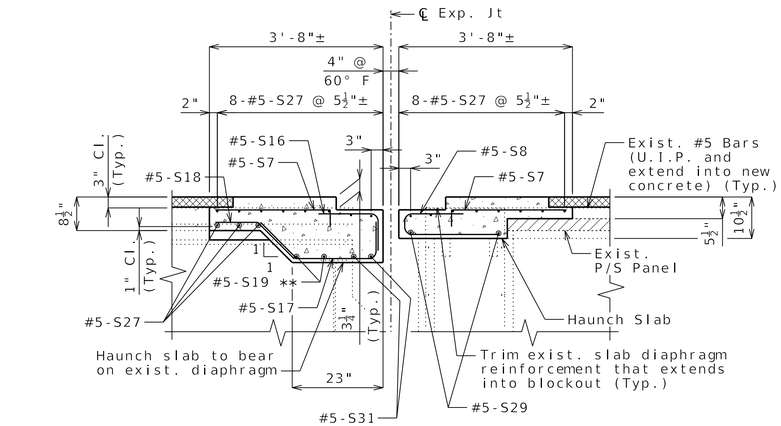
*** 7-#5-S16, S17 & S18 @ abt. 11½" cts.*

PLAN OF SLAB AT PIER 16 (5C)
SHOWING TOP AND BOTTOM REINFORCING
(Latex Modified Concrete Wearing Surface not shown for clarity)

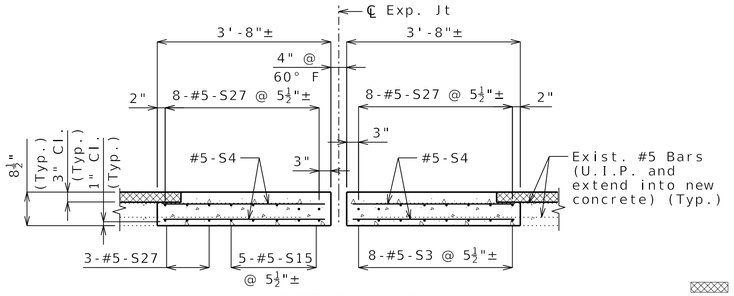


** (Btwn. Stringers)

SECTION A-A
(Section within limits of full depth CIP slab)



SECTION B-B
(Section within limits of P/S Panels)



SECTION C-C
(Section within limits of full depth CIP slab overhang)

Latex Modified Concrete Wearing Surface, see Sheet No. 12 for details.

Notes:

Section depths shown are approximate per existing plans. Contractor to field verify. New sections to match existing.

Concrete in slab shall be Class B-2.

Any damaged areas found on existing U.I.P. epoxy coated longitudinal bars shall be repaired in accordance with Sec 710.

For details of the segmental expansion joint system at Pier 16 (5C), see Sheet No. 25.

For barrier replacement details, see Sheet No. 31.

SLAB REPLACEMENT AT PIER 16 (5C)

Detailed May 2025
Checked May 2025

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AMY E. SMITH
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	30

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

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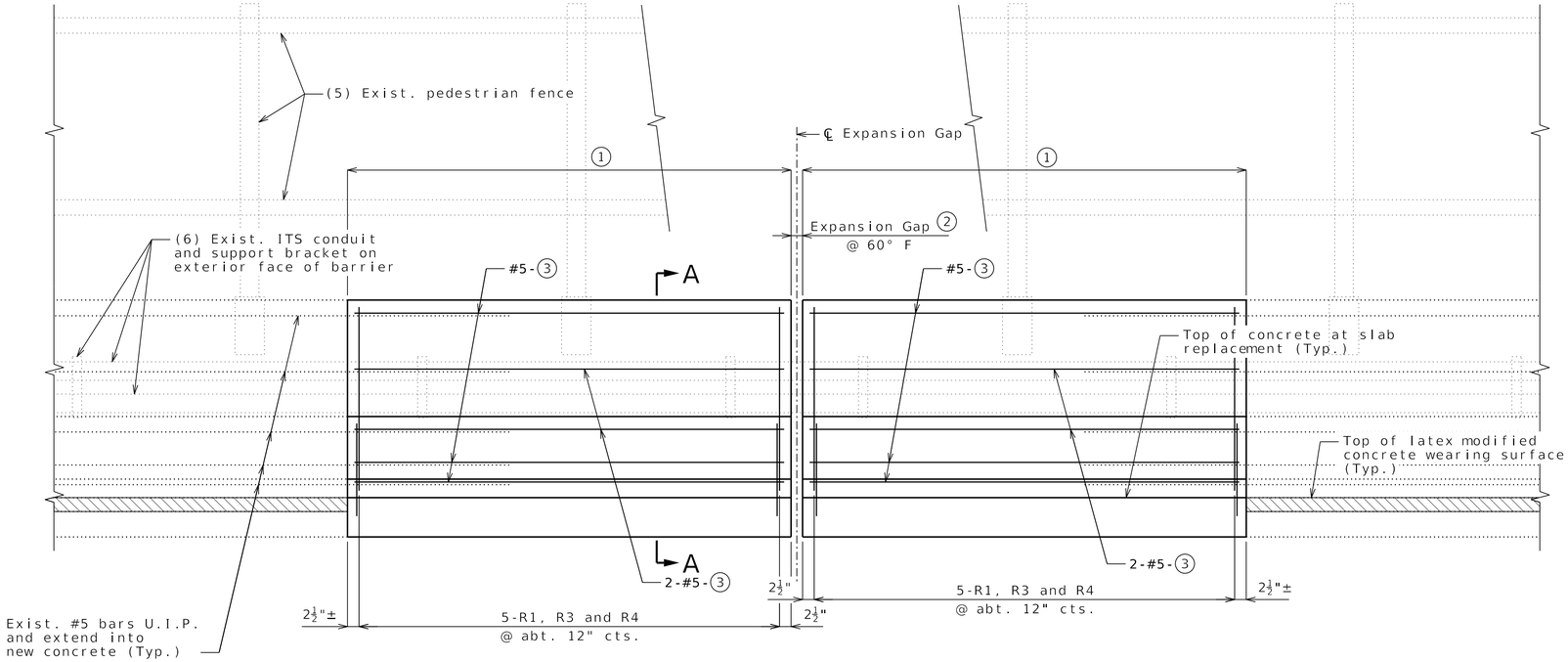
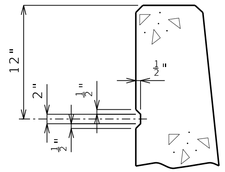
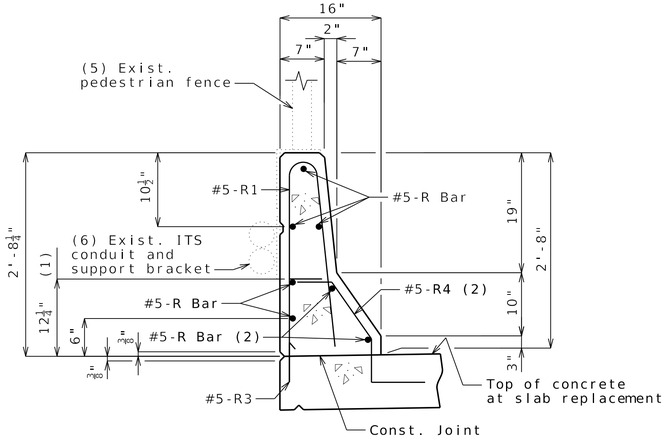


TYPICAL ELEVATION

TABLE OF BARRIER DIMENSIONS AND BAR MARKS			
Location	(1)	(2)	(3)
Bent 4 (4W)	3'-8"±	4"	R5
Bent 8 (8W)	3'-6¾"±	3"	R6
Pier 12 (1C)	3'-6¾"±	2½"	R6
Pier 16 (5C)	3'-8"±	4"	R5
Bent 19 (3E)	3'-6½"±	3"	R6
Bent 22 (6E)	3'-6½"±	3"	R6



RUSTICATION DETAIL



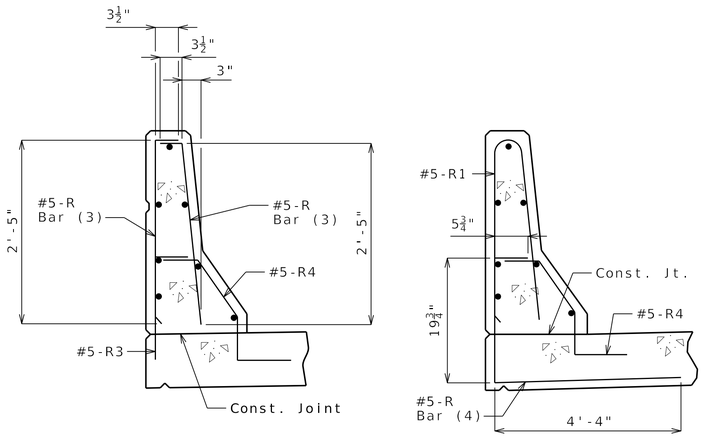
SECTION A-A

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

The cross-sectional area above the slab is 2.27 square feet.

(1) To top of bar

(2) At Bent 4 (4W) and Pier 16 (2C), trim 2-Bars R5 and shift Bar R4 inward to clear segmental expansion joint turn-up in face of barrier.



R-BAR PERMISSABLE 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 R3 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.

RUSTICATION DETAIL

(5) Remove pedestrian fence posts, brackets and panels within the limits of the barrier replacement and store for re-installation. Re-install pedestrian fence after concrete has attained the compressive strength specified on the plans. Fence post, brackets, and panels damaged during removal, storage or re-installation shall be replaced without cost to the state. Removal and re-installation of the pedestrian fence is considered completely covered by the contract unit price for Remove and Replace Barrier Curb.

6) Remove ITS support brackets within the limits of the barrier replacement and store for re-installation. Support and protect the ITS conduit during the barrier replacement. Re-install the ITS support brackets after concrete has attained the compressive strength specified on the plans. ITS conduit or support brackets damaged during removal, storage or re-installation shall be replaced without cost to the state. Removal and re-installation of the ITS support brackets is considered completely covered by the contract unit price Remove and Replace Barrier Curb.

Notes:

Top of barrier shall be built parallel to grade with barrier joints normal to grade.

All exposed edges of new barrier replacement shall match existing barrier dimensions.

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 Remove and Replace Barrier Curb per linear foot.

Concrete in the barrier shall be Class B-1.

Measurement of barrier is to the nearest linear foot, measured along the outside top of slab.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plans 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 Remove and Replace Barrier Curb per linear foot.

BARRIER REPLACEMENT AT EXPANSION JOINT LOCATIONS

Detailed May 2025
Checked May 2025

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

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DATE PREPARED 6/30/2025
ROUTE 370 | STATE MO
DISTRICT BR | SHEET NO. 31
COUNTY ST. LOUIS/ ST. CHARLES
JOB NO. J6P3554
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PROJECT NO.
BRIDGE NO. A45577

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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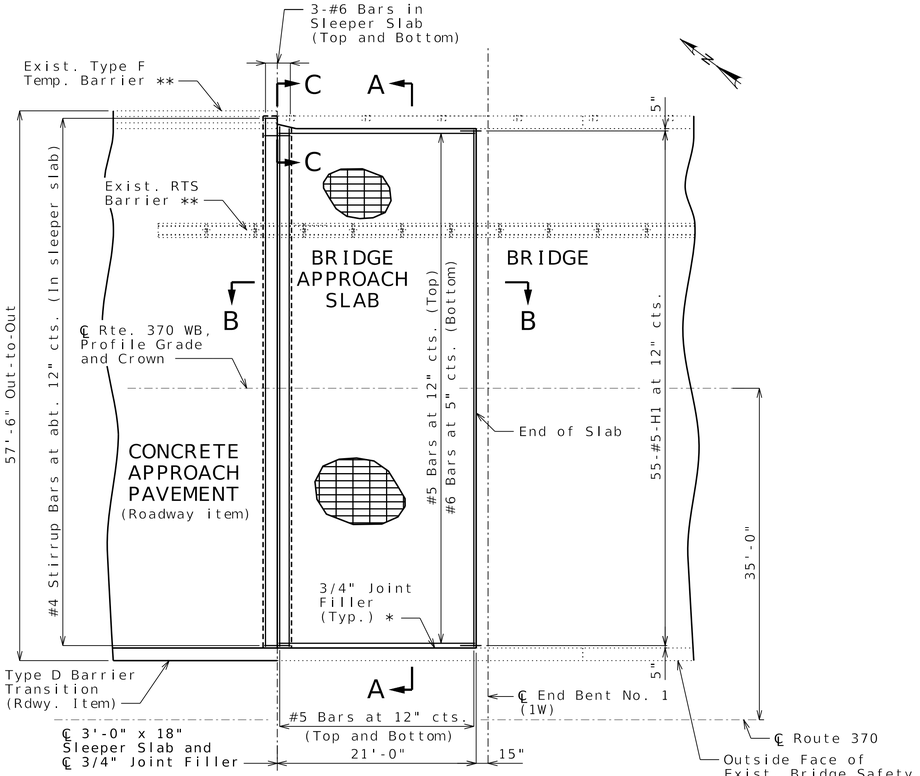
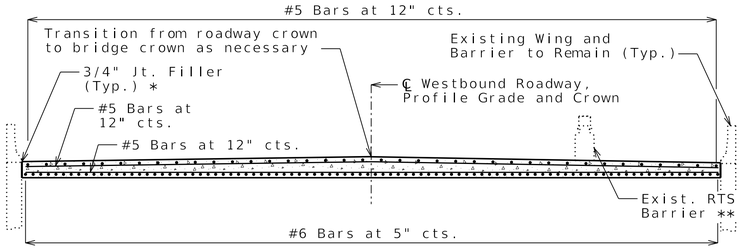
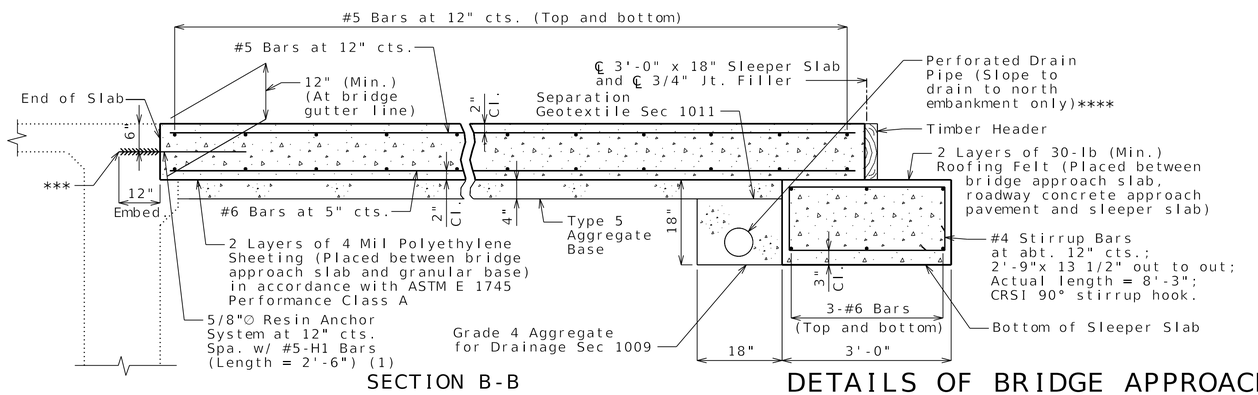


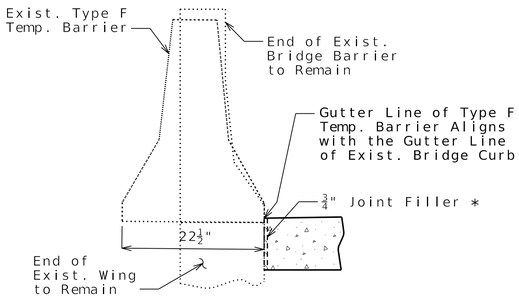
PART PLAN SHOWING REINFORCEMENT



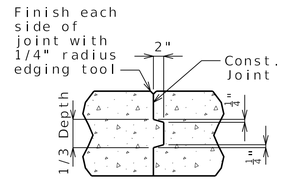
SECTION A-A



SECTION B-B



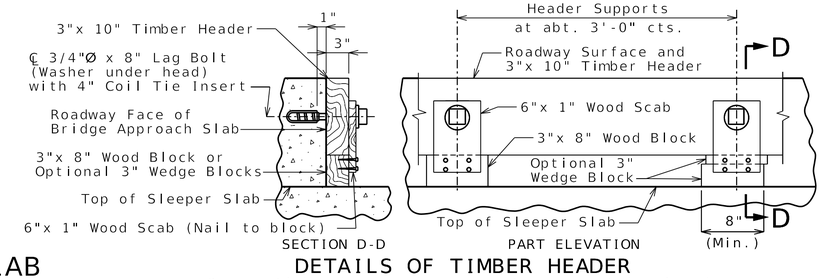
SECTION C-C



CONSTRUCTION JOINT DETAIL

DETAILS OF BRIDGE APPROACH SLAB AT END BENT NO. 1 (1W) (MAJOR)

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



DETAILS OF TIMBER HEADER

Remove timber header when concrete pavement is placed.

General Notes:

All concrete for the bridge approach slab and sleeper slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab and the sleeper slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Drain pipe may be either 6" diameter corrugated metallic-coated pipe underdrain, 4" diameter polyvinyl chloride (PVC) drain pipe, or 4" diameter corrugated polyethylene (PE) drain pipe.

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

The reinforcing steel in the bridge approach slab and the sleeper slab shall be continuous. The transverse reinforcing steel may be made continuous by providing a minimum lap splice of 29 inches for #5 bars and 44 inches for #6 bars, or by mechanical bar splice.

Mechanical bar splices shall be in accordance with Sec 710.

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

For concrete approach pavement details, see Roadway Plans.

Payment for furnishing all materials, labor and excavation necessary to construct the approach slab, including the timber header, sleeper slab, underdrain, Type 5 aggregate base, joint filler and all other appurtenances and incidental work including the temporary relocation and replacement of the Type F Temp. Barrier as shown on this sheet, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

Removal of existing approach slab is included in Roadway Items.

* Seal joint between vertical face of approach slab and wing with sealant in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

** Contractor to temporarily relocate barrier as needed to facilitate removal and replacement of the approach slab.

*** Existing reinforcement connecting the existing end bent and approach slab to be cleaned and reused if present. Otherwise, 5/8" dia. Resin Anchor System to be utilized as shown. Cost will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

**** Contractor shall redirect Drain Pipe as required to daylight along the north embankment. Drain Pipe falling outside the limits of the bridge approach slab shall be unperforated drain pipe.

(1) Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the mimimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	32

COUNTY
ST. LOUIS/ ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45577

DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

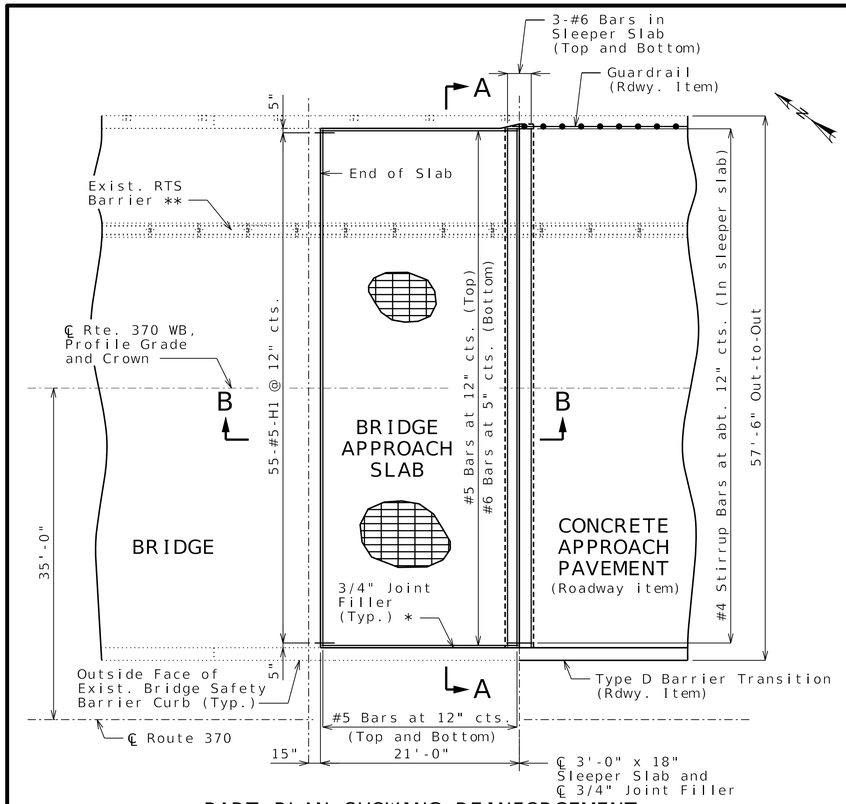
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

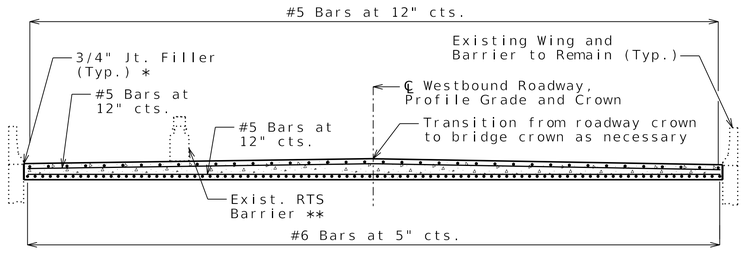
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Detailed May 2025
Checked May 2025

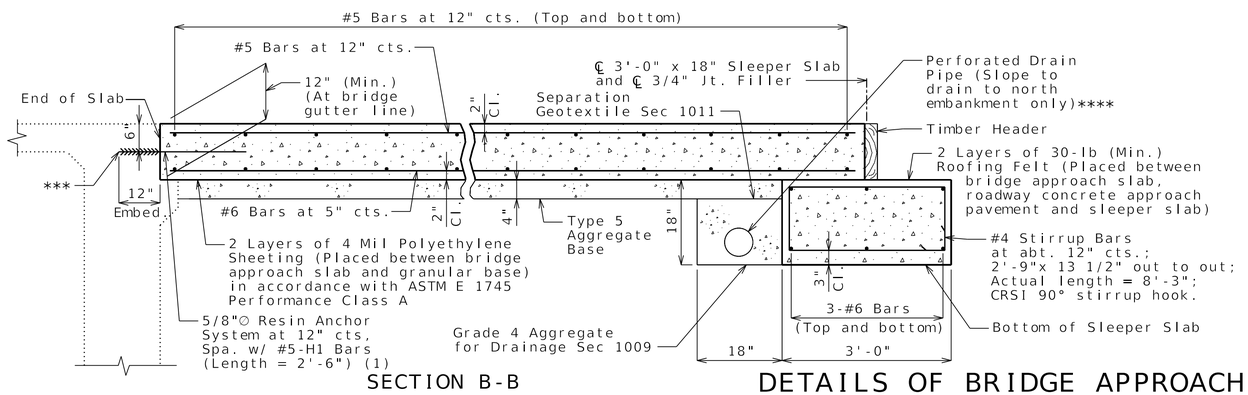
c:\pwworking\central01\d4318784\B_A45577_032_J6P3554.dgn 1:39:21 PM 6/30/2025



PART PLAN SHOWING REINFORCEMENT



SECTION A-A



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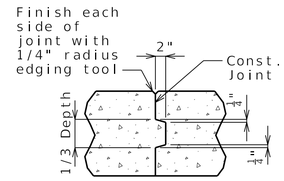

CONSTRUCTION JOINT DETAIL

General Notes:

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For concrete approach pavement details, see Roadway Plans.

Payment for furnishing all materials, labor and excavation necessary to construct the approach slab, including the timber header, sleeper slab, underdrain, Type 5 aggregate base, joint filler and all other appurtenances and incidental work including the temporary relocation and replacement of the Type F Temp. Barrier as shown on this sheet, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

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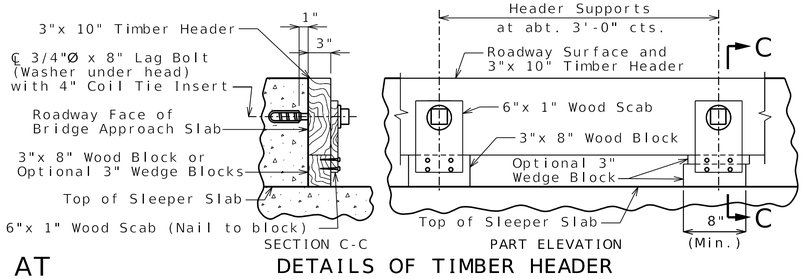

DETAILS OF TIMBER HEADER

Remove timber header when concrete pavement is placed.

DETAILS OF BRIDGE APPROACH SLAB AT END BENT NO. 24 (8E) (MAJOR)

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	33

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
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Certificate of Authority: 000856

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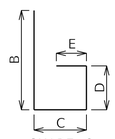

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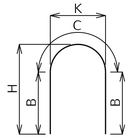

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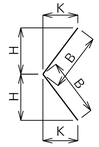

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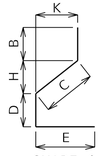

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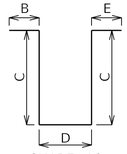

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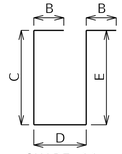

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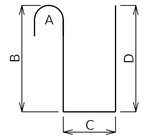

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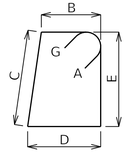

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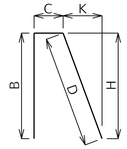

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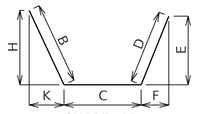

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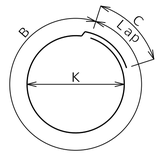

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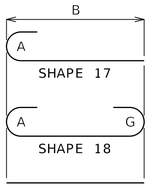
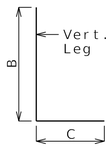


SHAPE 17
SHAPE 18
SHAPE 20



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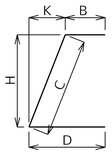

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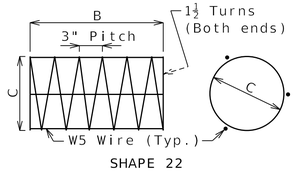

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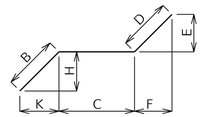

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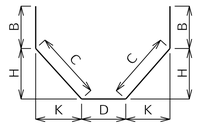

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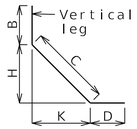

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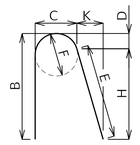

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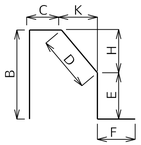

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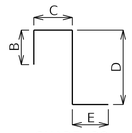

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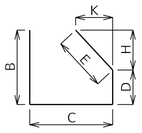

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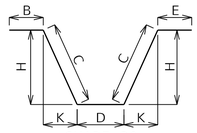

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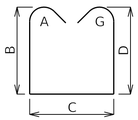

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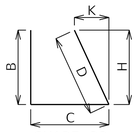

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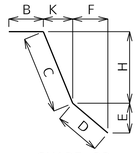

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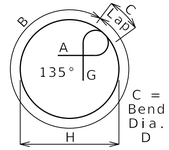

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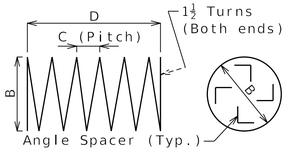

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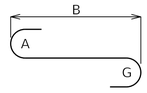
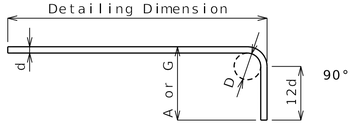


SHAPE 36

Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

Size	Case	D	A or G		J
			90°	180°	180°
#4	1	3"	8"	6"	4"
#5	1	3¾"	10"	7"	5"
#6	1	4½"	12"	8¼"	6"
#7	2	5¼"	14"	9⅜"	7"
	3	7"	15"	11½"	8¾"
#8	2	6"	16"	11"	8"
	3	8"	17"	13¼"	10"
#9	1	9½"	19½"	15½"	11¾"
#10	1	10¾"	22"	17½"	13¼"
#11	1	12"	24½"	19½"	14⅞"
#14	1	18¼"	31¼"	27½"	21⅝"
#18	1	24"	41½"	36¾"	28½"

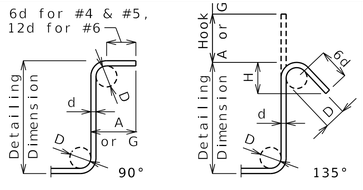


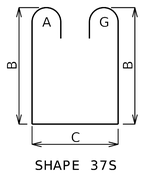
Stirrup Pin Bend Shapes (S)

Size	Case	D	A or G			H	J
			90°	135°	180°	135°	180°
#4	2	2"	4½"	4½"	5"	2⅝"	3"
	3	3"	5"	5¼"	6"	3"	4"
#5	2	2½"	5¾"	5¾"	5¾"	3⅝"	3¾"
	3	3¾"	6¼"	6½"	7"	3⅞"	5"
#6	1	4½"	12"	7¾"	8¼"	4⅝"	6"

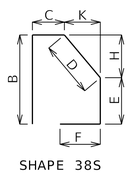
Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.





SHAPE 37S



SHAPE 38S

BENDING DIAGRAMS

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

	Size	Substructure		Superstructure				Entire Bridge	
				Slab					
		Plain	Galv.	Plain	Galv.	Barrier	Slip Form	Plain	Galv.
By Size	W5	0	0	0	0	0	0	0	0
	4	0	155	0	0	0	0	0	155
	5	0	0	0	13,964	901	0	0	14,865
	6	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0
By Type		0	155	0	13,964	901	0	0	15,020

All superstructure reinforcing steel shall be galvanized unless otherwise specified.

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 6/30/2025
ROUTE: 370
STATE: MO
DISTRICT: BR
SHEET NO.: 34
COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight
						ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	lb
		Substructure													
		Pier 16 (5C)													
36	4 U1	PEDESTAL	G	10			12.00	23.00					3 11	3 9	90
16	4 U2	PEDESTAL	G	10			12.00	4 3.00					6 3	6 1	65
		Superstructure													
		Slab at Bent 4 (4W)													
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
16	5 S4	SLAB	G	20		3 5.00							3 5	3 5	57
86	5 S7	SLAB	G	19		6.00	2 5.00						2 11	2 9	247
86	5 S8	SLAB	G	6		2 0.00	5.25	15.00					3 8	3 5	306
54	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	145
16	5 S27	SLAB	G	20		57 3.00							57 3	57 3	955
6	5 S28	SLAB	G	20		32 0.00							32 0	32 0	200
4	5 S29	SLAB	G	20		45 9.00							45 9	45 9	191
		Slab at Bent 8 (8W)													
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
58	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	156
8	5 S10	SLAB	G	20		3 3.00							3 3	3 3	27
90	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	508
16	5 S27	SLAB	G	20		57 3.00							57 3	57 3	955
6	5 S28	SLAB	G	20		32 0.00							32 0	32 0	200
4	5 S29	SLAB	G	20		45 9.00							45 9	45 9	191
		Slab at Pier 12(1C)													
16	5 S3	SLAB	G	20		5 7.00							5 7	5 7	93
29	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	78
14	5 S10	SLAB	G	20		3 3.00							3 3	3 3	47
45	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	254
12	5 S14	SLAB	G	20		8 4.00							8 4	8 4	104
10	5 S15	SLAB	G	20		6 3.00							6 3	6 3	65
48	5 S16	SLAB	G	19		9.50	18.00						2 4	2 2	108
48	5 S17	SLAB	G	14		9.50	19.50	12.00			8.50	8.50	3 5	3 3	163
48	5 S18	SLAB	G	15		10.50	13.50				7.50	7.50	2 0	2 0	100
19	5 S27	SLAB	G	20		57 3.00							57 3	57 3	1,135
3	5 S28	SLAB	G	20		32 0.00							32 0	32 0	100
2	5 S29	SLAB	G	20		45 9.00							45 9	45 9	95
2	5 S30	SLAB	G	20		51 8.00							51 8	51 8	108
		Slab at Pier 16(5C)													
16	5 S3	SLAB	G	20		5 7.00							5 7	5 7	93
18	5 S4	SLAB	G	20		3 5.00							3 5	3 5	64
86	5 S7	SLAB	G	19		6.00	2 5.00						2 11	2 9	247
43	5 S8	SLAB	G	6		2 0.00	5.25	15.00					3 8	3 5	153
27	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	73
10	5 S15	SLAB	G	20		6 3.00							6 3	6 3	65
42	5 S16	SLAB	G	19		9.50	18.00						2 4	2 2	95
42	5 S17	SLAB	G	14		9.50	19.50	12.00			8.50	8.50	3 5	3 3	142
42	5 S18	SLAB	G	15		10.50	13.50				7.50	7.50	2 0	2 0	88
12	5 S19	SLAB	G	20		8 2.00							8 2	8 2	102
19	5 S27	SLAB	G	20		57 3.00							57 3	57 3	1,135
3	5 S28	SLAB	G	20		32 0.00							32 0	32 0	100
2	5 S29	SLAB	G	20		45 9.00							45 9	45 9	95
2	5 S31	SLAB	G	20		50 8.00							50 8	50 8	106
		Slab at Bent 19(3E)													
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
58	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	156
8	5 S10	SLAB	G	20		3 3.00							3 3	3 3	27
90	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	508
16	5 S27	SLAB	G	20		57 3.00							57 3	57 3	955
6	5 S28	SLAB	G	20		32 0.00							32 0	32 0	200
4	5 S29	SLAB	G	20		45 9.00							45 9	45 9	191

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight
						ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	ft in.	lb
		Superstructure, cont'd.													
		Slab at Bent 22(6E)													
32	5 S3	SLAB	G	20		5 7.00							5 7	5 7	186
58	5 S9	SLAB	G	23		3.75	9.25	18.50	13.00	13.00	2.75	2.75	2 8	2 7	156
8	5 S10	SLAB	G	20		3 3.00							3 3	3 3	27
90	5 S11	SLAB	G	6		3 3.25	6.50	22.50					5 8	5 5	508
16	5 S27	SLAB	G	20		57 3.00							57 3	57 3	955
6	5 S28	SLAB	G	20		32 0.00							32 0	32 0	200
4	5 S29	SLAB	G	20		45 9.00							45 9	45 9	191
		Barrier													
60	5 R1	BARRIER	G	26		2 5.00	4.00	1.75	2 3.25	4.00	2 3.25	3.00	5 0	5 0	313
60	5 R3	BARRIER	G	19S		17.75	5.75						2 0	1 10	115
60	5 R4	BARRIER	G	27S			5.75	11.50	7.75	12.00	9.50	6.75	3 1	2 11	183
28	5 R5	BARRIER	G	20		3 5.00							3 5	3 5	100
56	5 R6	BARRIER	G	20		3 3.00							3 3	3 3	190

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 34.

Detailed May 2025
Checked May 2025

All bars shal be Grade 60.

BILL OF REINFORCING STEEL

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

Sheet No. 35 of 43

Codes: C = Required coatings, where E = Epoxy coated and G = Galvanized

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length.Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	35

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

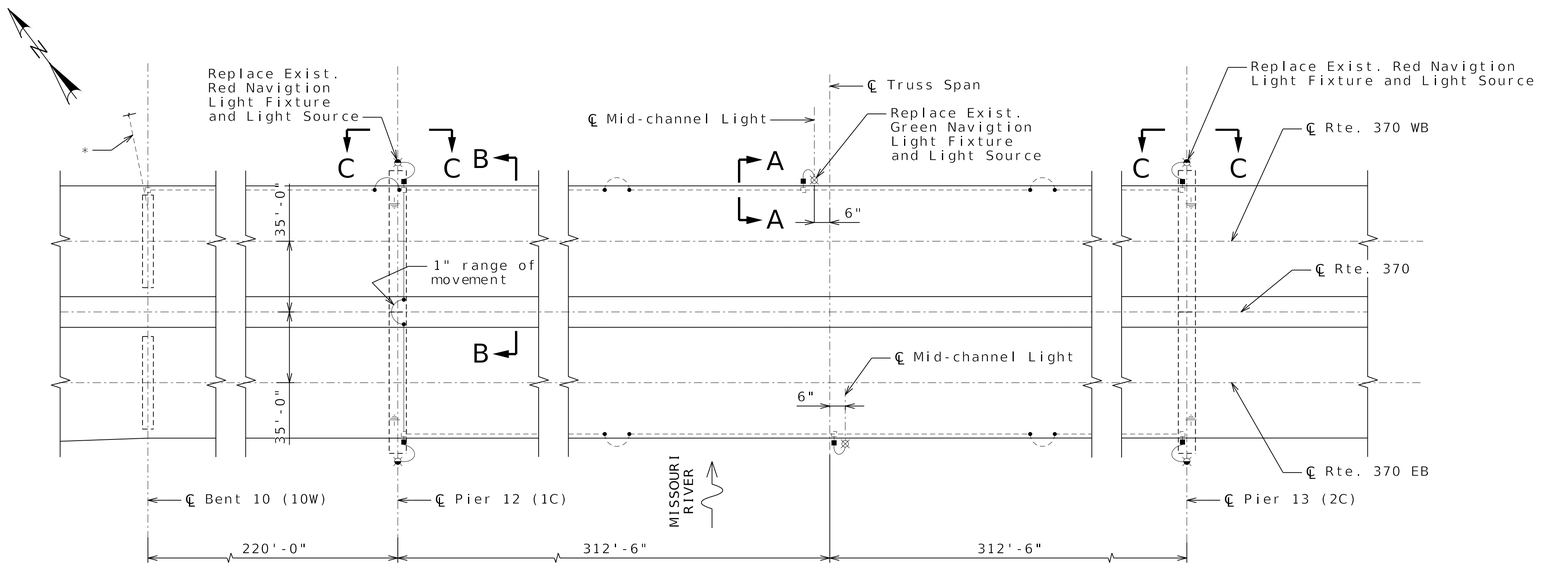
BRIDGE NO.
A45577

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



* Underground conduit to power source per Ameren. See "General Elevation and Plan" sheet for location of power drop.

PART PLAN
(Truss not shown for clarity)

SYMBOLS

- Exist. Navigation Light 180° Red
- Exist. Navigation Light 360° Green
- Exist. Junction Box embedded under parapet
- Replace Junction or Pull Box, surface mounted 6"x6"x4"
- Exist. 1¼" PVC conduit placed in slab beneath barrier curb
- Exist. conduit expansion fitting (liquid tight)
- Replace conduit expansion fitting with total range of movement as indicated (liquid tight)
- Replace 1" exposed, rigid galvanized steel conduit with 2" PVC conduit
- Exist. bridge ground

Notes:

All new conduit shall be rigid nonmetallic schedule 40 heavy wall polyvinyl chloride (PVC). Each section of the conduit shall bear the Underwriters Laboratory (UL) label.

All original conduit and surface mounted junction boxes shall be completely removed and replaced as shown.

The existing ground connections at Piers 12 (1C) and 13 (2C) shall not be disturbed without approval of the Engineer. Any portions of the grounding system that is allowed to be temporarily disconnected to allow placement of the new conduit and junction boxes shall be reconnected as soon as possible.

Any existing conduit system fastener holes in structural steel members not used shall be filled with an equal sized high strength bolt.

Notes: (Cont.)

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

Weep holes shall be provided at low points or other critical locations to drain any moisture in the conduit system. Conduit shall be sloped to drain.

All wiring shall be type THWN, unless otherwise noted.

For requirements of Navigation Lighting System installation, see Job Special Provisions.

Additional expansion fittings beyond what is specified on the bridge plans shall be provided and placed in accordance with the conduit manufacturer's recommendations.

Notes: (Cont.)

All conduit clamps shall be commercially-available, nonmetallic clamps and approved by the engineer.

All conduits shall be secured to the the concrete with nonmetallic clamps at about 5'-0" cts. Concrete anchors for clamps shall be in accordance with Commercial Item Description (CID)A-A-1923A and shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C, ASTM B695, Class 55 or stainless steel. Minimum embedment in concrete shall be 1 3/4". The supplier shall furnish a manufacturer's certification that the concrete anchors meet the required material and galvanizing specifications.

Cost of furnishing and installing the conduit system complete in place, including conduit, wiring, junction boxes, and fixtures will be considered completely covered by the contract lump sum price for Navigation Lighting System.

For Sections A-A and B-B and View C-C, see Sheet No. 37.

Installation of Navigation Lighting System for Bridge No. A45577 shall be coordinated with Bridge No. A45576. See Bridge No. A45576 bridge plans for details and notes pertaining to the eastbound structure.

NAVIGATION LIGHTING PLAN

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	36

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

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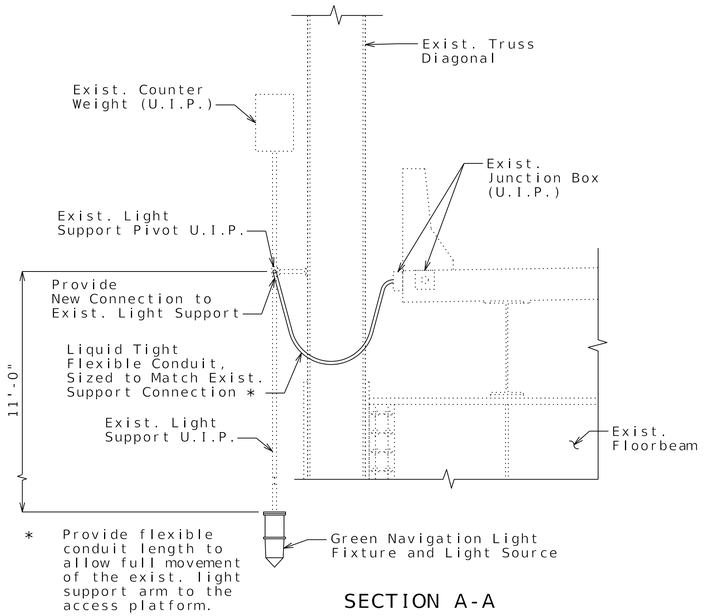
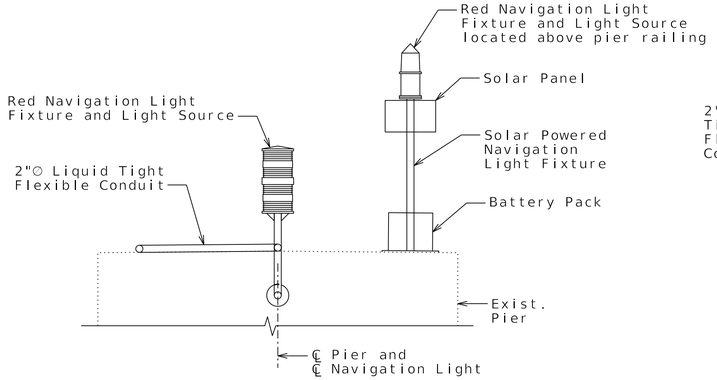
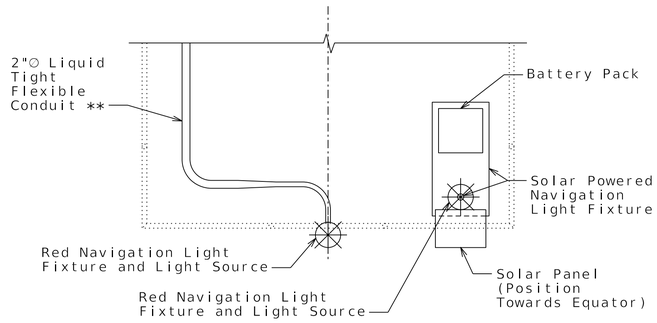


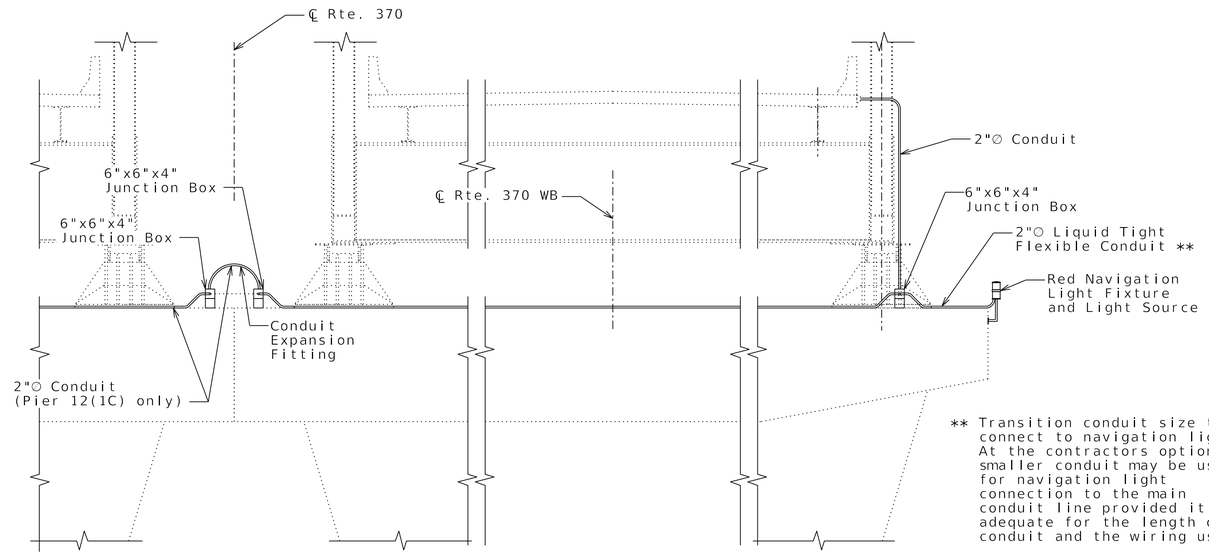
SECTION A-A



VIEW C-C
(Pier 12 (1C) shown, Pier 13 (2C) similar)
(Railing post on pier not shown for clarity)



PART PLAN OF PIER END
(Pier 12 (1C) shown, Pier 13 (2C) similar)



SECTION B-B
(Looking Back Station)
(Pier 12 (1C) shown, Pier 13 (2C) similar except as noted)

Notes:

Solar Powered Pier lights shall be anchored with number and size of anchors as recommended by the light manufacturer. Light fixtures shall be installed in accordance with the manufacturer's recommendations, Sec 901 and 1091 and Job Special Provisions.

Navigation light fixtures shall be supplied by Tideland Signal Corporation and shall consist of the following:

Replace AC Powered Navigation Lighting Fixtures
- 3-MLED - 140 Lantern
- 2-MaxiHALO-60 II LED Flasher, LED color shall be Red for Pier lights
- 2-MaxiHALO-60 II LED Flasher, LED color shall be Green for Mid-Channel lights
- 3-AC/DC Power Converter

Replace Solar Powered Navigation Light Fixture
- 2-Sola-Chan Solar Powered Channel Marker fixture
- 2-MLED - 140 Lantern
- 2-MaxiHALO-60 II LED Flasher, LED color shall be Red

The above navigation light fixtures are for Bridge No. A45577. See bridge plans for Bridge No. A45576 for navigation light fixtures associated with the rehabilitation of that bridge.

Solar powered navigation lights shall operate independently of the AC powered system.

Where holes are field drilled in the flanges or base plates of the Sola-Chan fixture, areas shall be touched up in accordance with Sec 1081.

Cost of furnishing and installing the navigation lighting fixtures and LED flashers and solar powered navigation light fixtures will be considered completely covered by the contract lump sum price for Navigation Lighting System.

Working drawings shall be submitted to the Engineer for approval.

All steel shall be stainless steel or galvanized.

U.I.P. denotes Use In Place

For Location of Sections A-A & B-B and View C-C, see Sheet No. 36.

NAVIGATION LIGHTING DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	37

COUNTY
ST. LOUIS/ ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45577

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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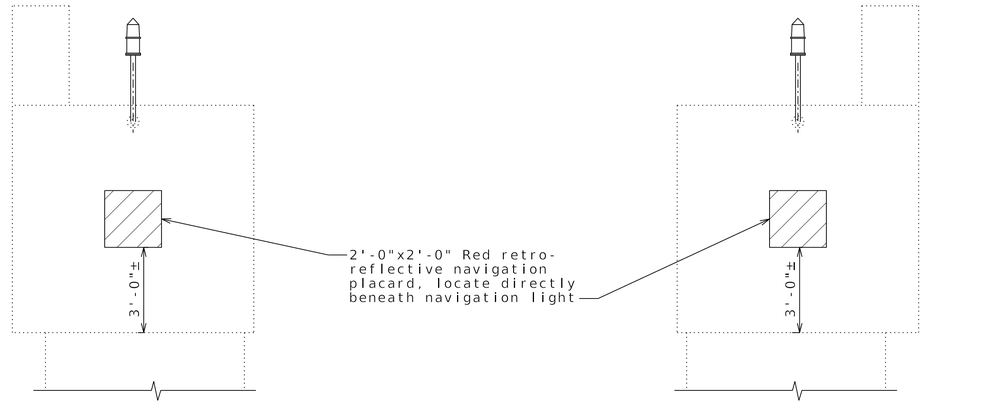


PIER 13 (2C) - NORTH (DOWNSTREAM) FACE

PIER 12 (1C) - NORTH (DOWNSTREAM) FACE

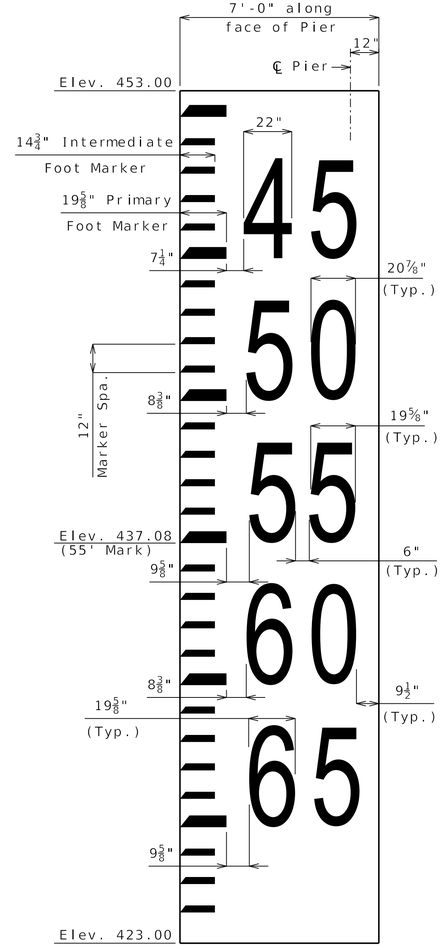
REPLACEMENT OF NAVIGATION PLACARDS

Notes:

Remove existing navigation placards prior to application of Protective Coating (Urethane). Install new navigation placards after coating is complete.

Placards shall be fabricated with type 2 reflective sheeting on aluminum flat sheet in accordance with Sec. 1042. For mounting, use 3/8" stainless sleeve anchors with stainless steel washers and nuts.

The furnishing and installation of materials for the Navigation Placards shall be considered completely covered by the contract price for Navigation Placard Replacement per each.



RIVER GAUGE MARKING AT PIER 12 (1C) NORTH (DOWNSTREAM) FACE

Notes:

River gauges are to be repainted in-kind to the original gauges, per the elevations and dimensions provided herein. All elevations and dimensions shall be verified by the contractor prior to re-painting.

Dimensions shown are for clearance to low steel at east face of Pier 12 (1C). Dimensions shall be adjusted as necessary to achieve that result.

The size, type and spacing of numerals must conform to the "Standard Alphabets for Highway Signs", Series C Type numerals. Numeral shall be 3'-0" in height. Stroke width of numerals and primary foot marks shall be 5".

Primary foot markers shall be spaced at 5'-0" intervals. Intermediate foot markers shall be spaced at 12" between primary foot markers. Intermediate foot markers shall have a stroke width of half that noted for primary markers.

Background to be painted white and numerals and foot marks to be painted black. See Special Provisions.

The furnishing and installation of materials for the Clearance Gauge on the pier shall be considered completely covered by the contract price for Repaint River Gauge Markings per lump sum.

NAVIGATION PLACARD AND RIVER GAUGE MARKING DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	38

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45577

DESCRIPTION | DATE

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Certificate of Authority: 000856

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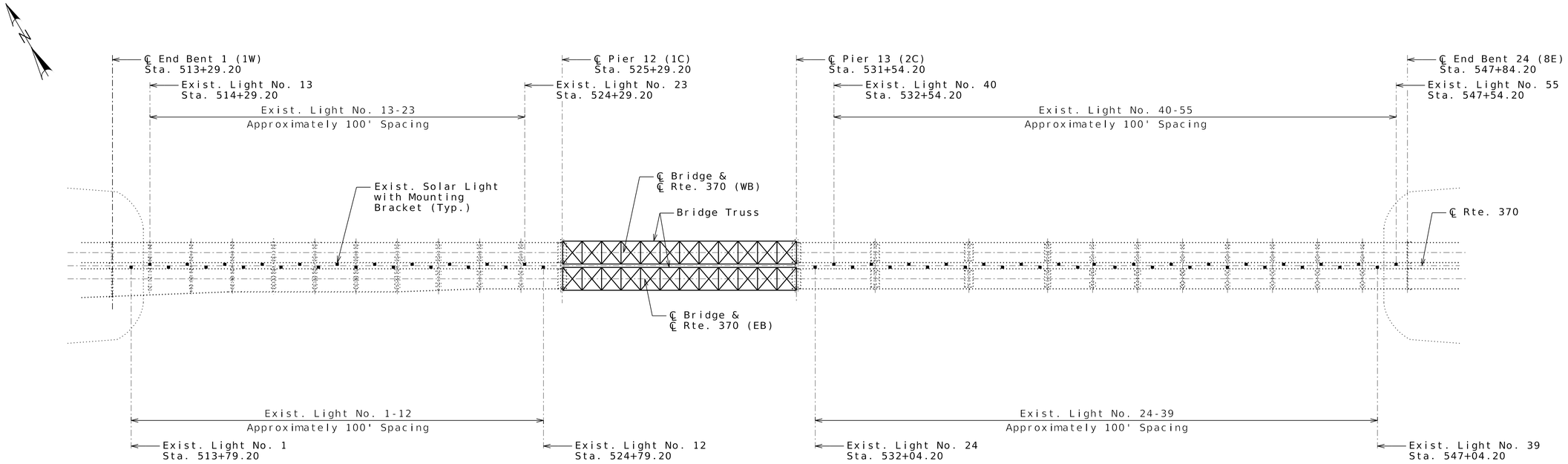
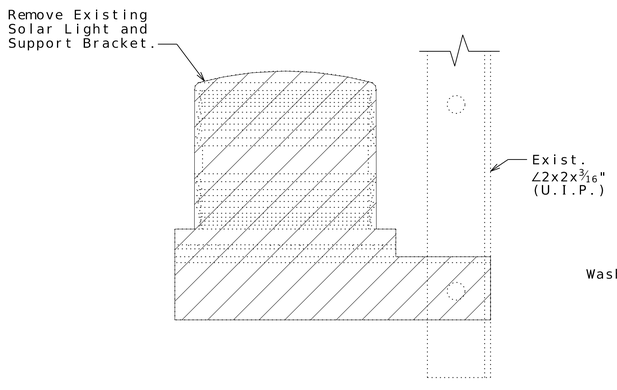
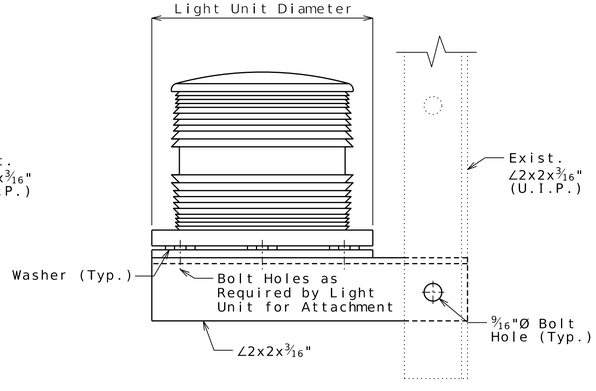


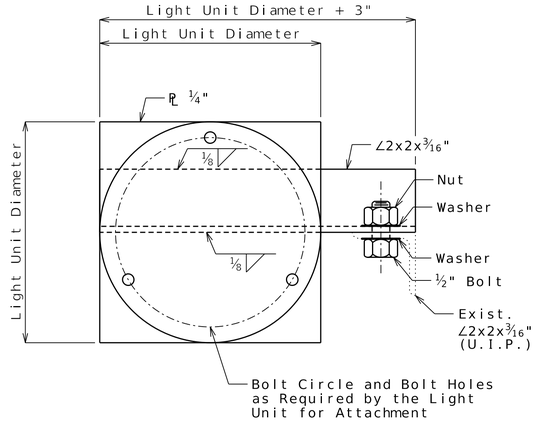
PLAN



REMOVAL OF EXISTING SOLAR LIGHT DETAIL



REPLACEMENT SOLAR LIGHT DETAIL



LIGHT BASE DETAIL

Notes:

Limits of Solar Light and Support Bracket Removal.

U.I.P. = Use In Place

Washers to be placed between light and light base plate at connection.

All steel to be ASTM A709 Grade 36 steel. Steel shall be galvanized in accordance with ASTM A123 and Sec 1081.

At the contractors option, new bolt holes may be drilled in the existing base plate as needed and the existing solar light support bracket may be used in place if the replacement solar light is compatible with the existing base plate and support bracket.

The cost of all labor, materials and equipment necessary to complete the median light replacement shall be considered completely covered by the contract lump sum price for Median Solar Light System.

Installation of Median Solar Light System for Bridge No. A45577 shall be coordinated with Bridge No. A45576. See Bridge No. A45576 bridge plans for details and notes pertaining to the eastbound structure.

MEDIAN LIGHTING DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
PROFESSIONAL ENGINEER
AMY E. SMITH
NUMBER
PE-2021015056
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO

DISTRICT	SHEET NO.
BR	39

COUNTY: ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A45577

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856

BOLT REPLACEMENT TABLE				
Repair	Location	Description	Type & Size of Bolt	Estimated No. of Bolts to be Replaced
1	U5 Right Truss Inner Gusset	One Incorrect Bolt at Gusset Connection	A325, 1" Dia.	1
2	U5 Right Truss Outer Gusset	One Incorrect Bolt at Gusset Connection	A325, 1" Dia.	1
3	L5L6 Stringer 6 at L5	One Bolt Loose at Flange Connection	A325, ⅞" Dia.	1
4	L4'L3' Stringer 1 near L4'	Missing Bolt at Sign Support	A325, ½" Dia.*	1
5	U3' Right Truss Inner Gusset	Missing Bolt on Top Lateral Brace Connection	A325, ⅞" Dia.	1
6	U3' Right Truss Inner Gusset	Missing Bolt Fourth Row Down at Gusset Connection	A325, 1" Dia.	1

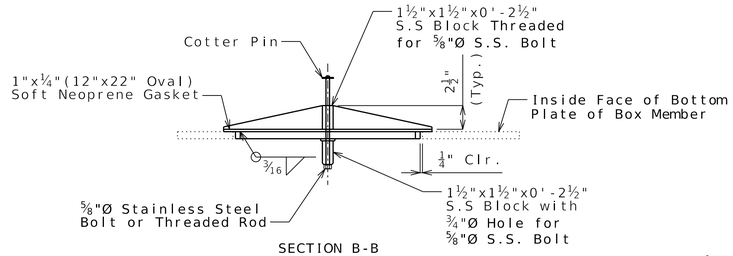
* Field verify size of bolt.

Notes:

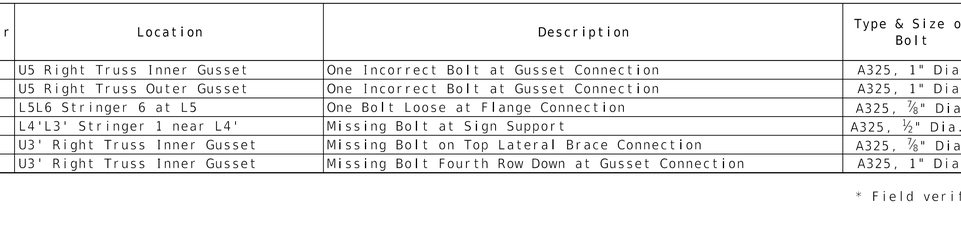
All connections shall be 1/2", 7/8" or 1" diameter High Strength Bolts, Nuts and Washers as indicated in the Bolt Replacement Table.

Contractor shall replace all missing or loose bolts as indicated in the Bolt Replacement Table.

The cost of all labor, materials, and equipment necessary to complete the bolt replacement as indicated in the Bolt Replacement Table shall be considered completely covered by the contract unit price for Miscellaneous Bolt Replacement.



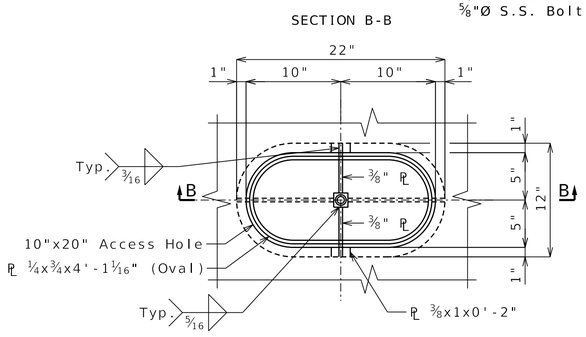
SECTION B-B



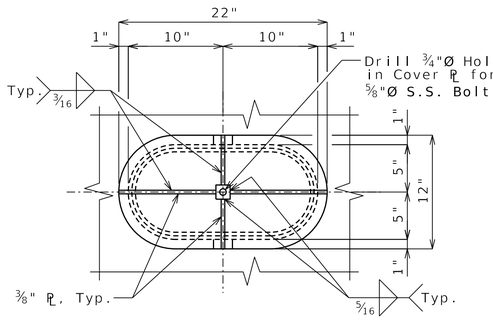
BOTTOM VIEW

SECTION A-A

TRUSS ACCESS HOLE COVER REMOVAL DETAILS



BOTTOM VIEW



TOP VIEW

TRUSS ACCESS HOLE COVER REPLACEMENT DETAILS

TRUSS ACCESS HOLE COVER REMOVAL & REPLACEMENT	
Repair	Location
1	L0 Right Lower Gusset West Access Hole
2	L2 Left Lower Gusset East Access Hole
3	L2 Left Lower Gusset West Access Hole
4	L6 Right Lower Gusset East Access Hole

Notes:

Limits of Access Hole Removal.

All steel for the truss access hole cover replacement shall be ASTM A709 Grade 36, unless noted otherwise.

The cost of all labor, materials and equipment necessary to complete the truss access hole cover replacement shall be considered completely covered by the contract unit price for Truss Access Hole Cover Replacement per each.

MISCELLANEOUS DETAILS

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

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DATE PREPARED 6/30/2025

ROUTE 370 | STATE MO

DISTRICT BR | SHEET NO. 40

COUNTY ST. LOUIS/ ST. CHARLES

JOB NO. J6P3554

CONTRACT ID.

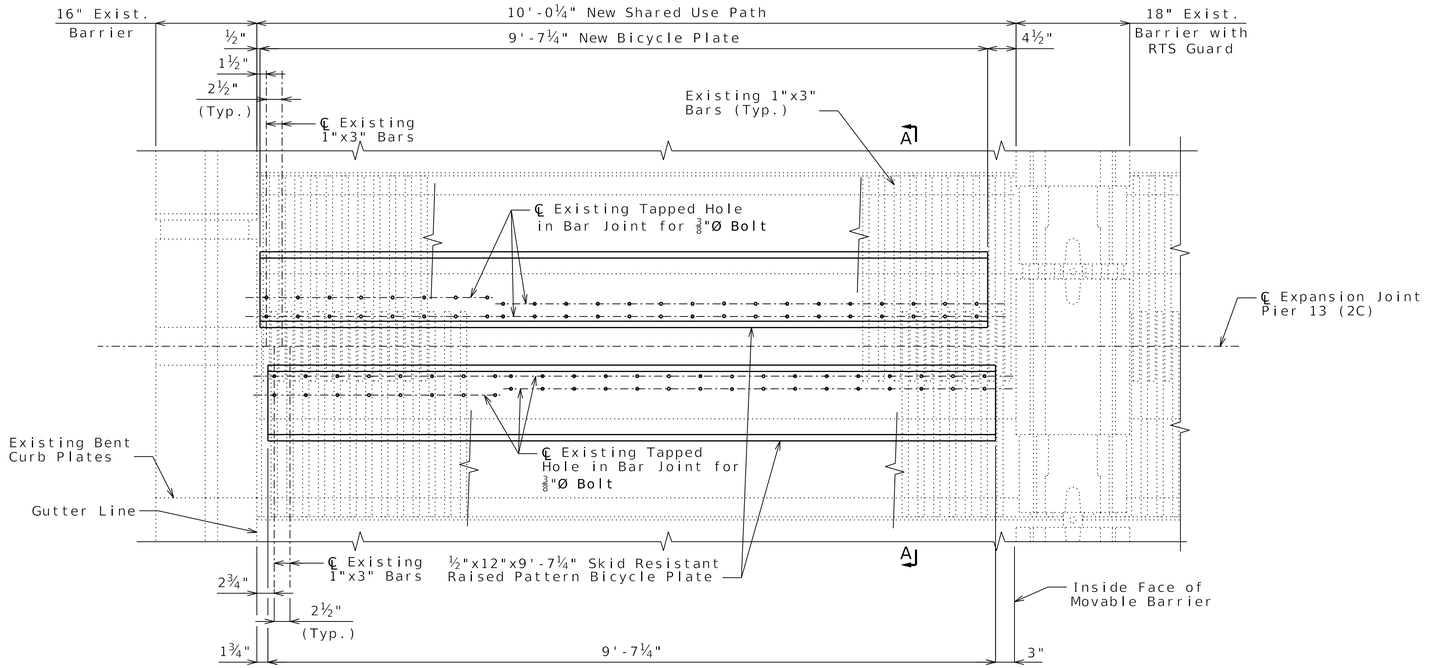
PROJECT NO.

BRIDGE NO. A45577

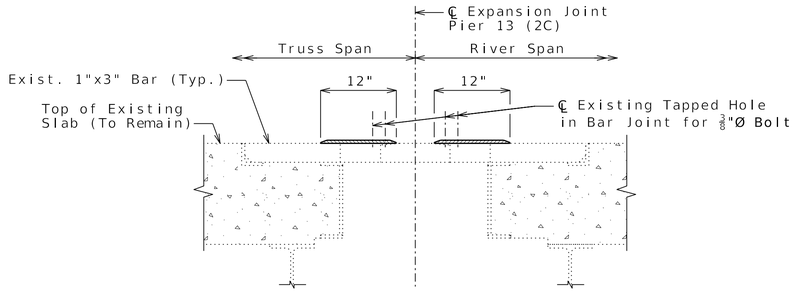
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

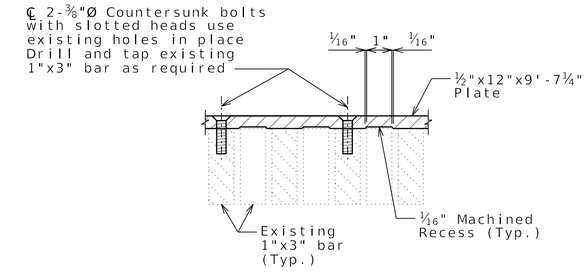
HDR Engineering, Inc.
401 S. 18th Street
Suite 300
St. Louis, MO 63103-2267
314-425-8300
Certificate of Authority: 000856



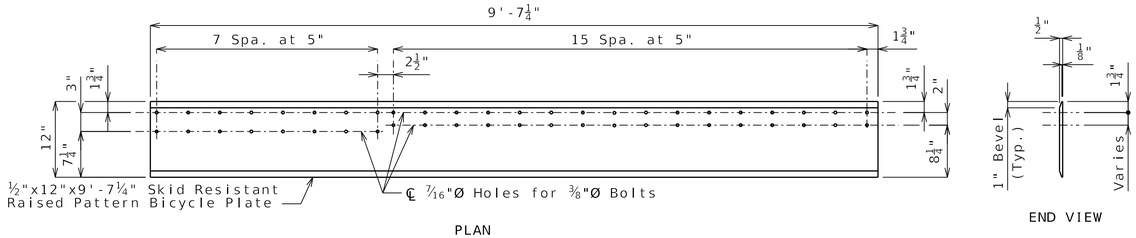
PART PLAN



SECTION A-A



SECTION THRU BAR JOINT



BICYLE PLATE
(2 Required)

Notes:

Bicycle plate details at bar joint shall be required at Pier 13 (2C).

Bicycle plates shall be ASTM A709, Grade 50 and shall be galvanized in accordance to ASTM A123.

Payment for removal of existing bicycle plates and furnishing, coating or galvanizing, and installing the bicycle plates at the expansion joint will be considered completely covered by the contract unit price for Expansion Joint Bicycle Plate.

BICYCLE PLATE DETAILS AT BAR JOINT

Detailed May 2025
Checked May 2025

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

STATE OF MISSOURI
AMY E. SMITH
NUMBER
PE-2021015056
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	41

COUNTY
ST. LOUIS/
ST. CHARLES

JOB NO.
J6P3554

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A45577

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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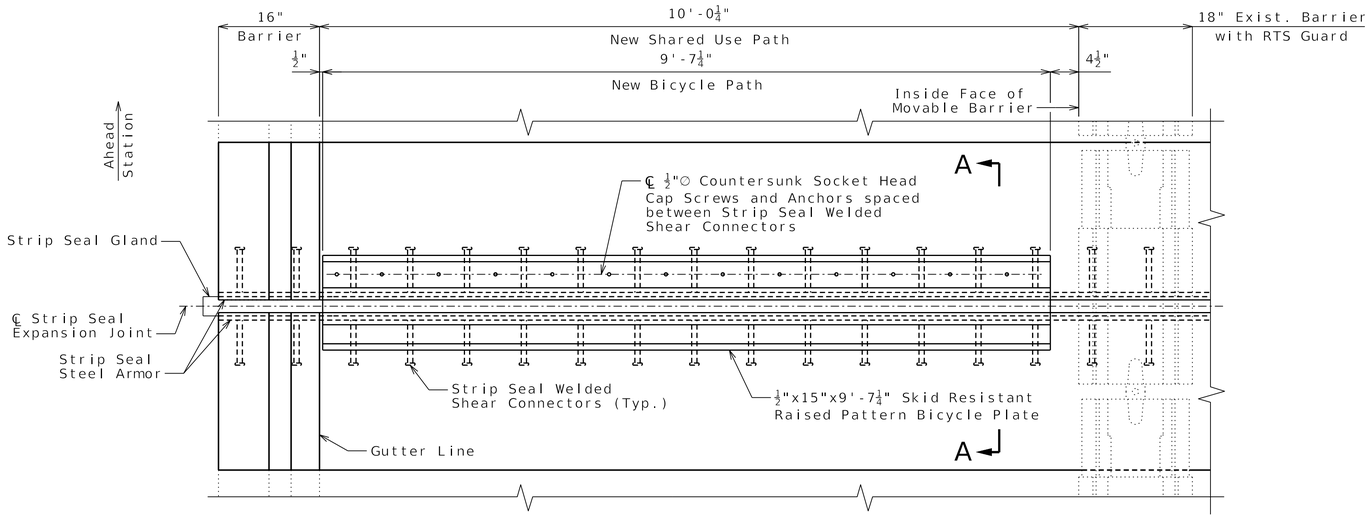
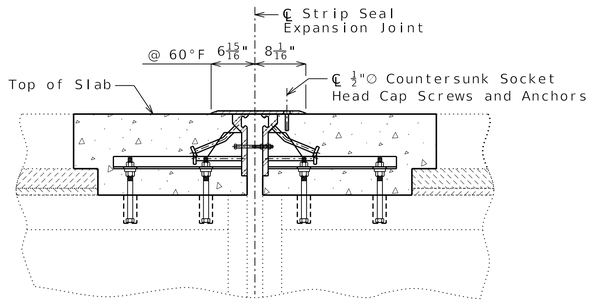
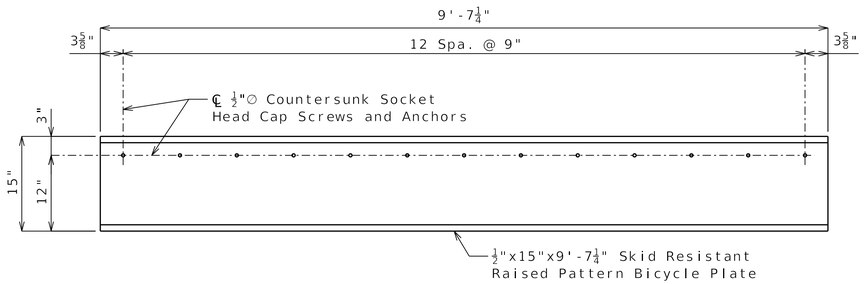


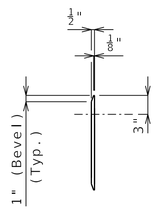
PART PLAN



SECTION A-A



PLAN



END VIEW

BICYCLE PLATE
(1 Required at Each Noted Pier)

Notes:

For Expansion Device Removal Details, see Sheet No. 21 and 22.

For Strip Seal Expansion Joint Details, see Sheets No. 23 and 24.

For Slab Replacement at Bents 8 (8W), 19 (3E), 12 (1C) and 22 (6E), see Sheets No. 28 and 29.

Bicycle plate details at strip seal expansion joints shall be required at Piers 8 (8W), 12 (1C), 19 (3E) and 22 (6E).

Bicycle plates shall be ASTM A709, Grade 50 and shall be galvanized in accordance to ASTM A123.

Bicycle plates at strip seal expansion joints shall be coordinated with the fabrication and installation of the strip seal expansion joint systems to ensure compatibility of strip seal welded shear connector locations with the bicycle plate anchor locations. Spacing of bicycle plate anchor locations may be revised with engineer's approval.

Payment for removal of existing bicycle plates and furnishing, coating or galvanizing, and installing steel bicycle plates at the expansion joints will be considered completely covered by the contract unit price for Expansion Joint Bicycle Plate.

BICYCLE PLATE DETAILS AT STRIP SEAL EXPANSION JOINTS

Detailed May 2025
Checked May 2025

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

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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	42

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

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105 WEST CAPITOL
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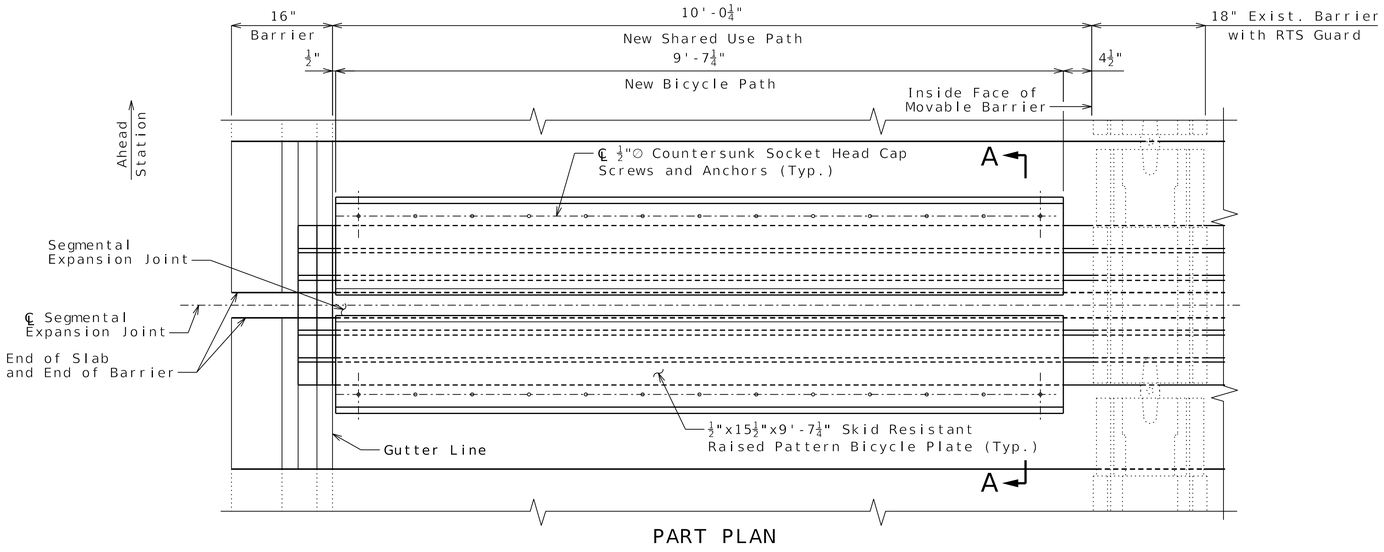
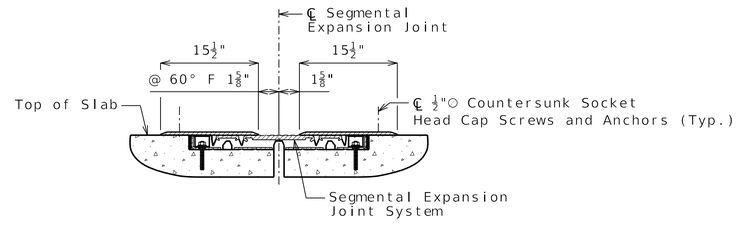
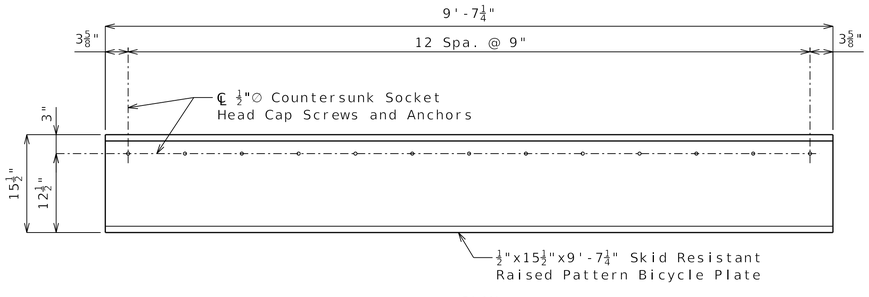


PART PLAN



SECTION A-A



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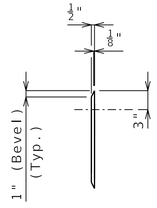

END VIEW

BICYCLE PLATE
(2 Required at Each Noted Pier)

Notes:

For Expansion Device Removal Details, see Sheets No. 21 and 22.

For Segmental Expansion Joint Details, see Sheet No. 25.

For Slab Replacement at Bent 4 (4W) and Pier 16 (5C), see Sheets No. 27 and 30.

Bicycle plate details at segmental expansion joints shall be required at Piers 4 (4W) and 16 (5C).

Bicycle plates shall be ASTM A709, Grade 50 and shall be galvanized in accordance to ASTM A123.

Bicycle plates at segmental expansion joints shall be coordinated with the fabrication and installation of the segmental expansion joint systems.

Payment for removal of existing bicycle plates and furnishing, coating or galvanizing, and installing steel bicycle plates at the expansion joints will be considered completely covered by the contract unit price for Expansion Joint Bicycle Plate.

BICYCLE PLATE DETAILS AT SEGMENTAL EXPANSION JOINTS

Detailed May 2025
Checked May 2025

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PROFESSIONAL ENGINEER
AMY E. SMITH
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DATE PREPARED 6/30/2025

ROUTE	STATE
370	MO
DISTRICT	SHEET NO.
BR	43

COUNTY: ST. LOUIS/ ST. CHARLES
JOB NO.: J6P3554
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A45577

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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