

DESIGN DESIGNATION

A.A.D.T. - 2022 = 2755

A.A.D.T. - 2042 = 3300

T = 18.4%

V = 30 M.P.H.

FUNCTIONAL CLASSIFICATION- INTERSTATE

**RIGHT OF WAY
ACQUISITION NOT REQUIRED
FOR THIS PROJECT**

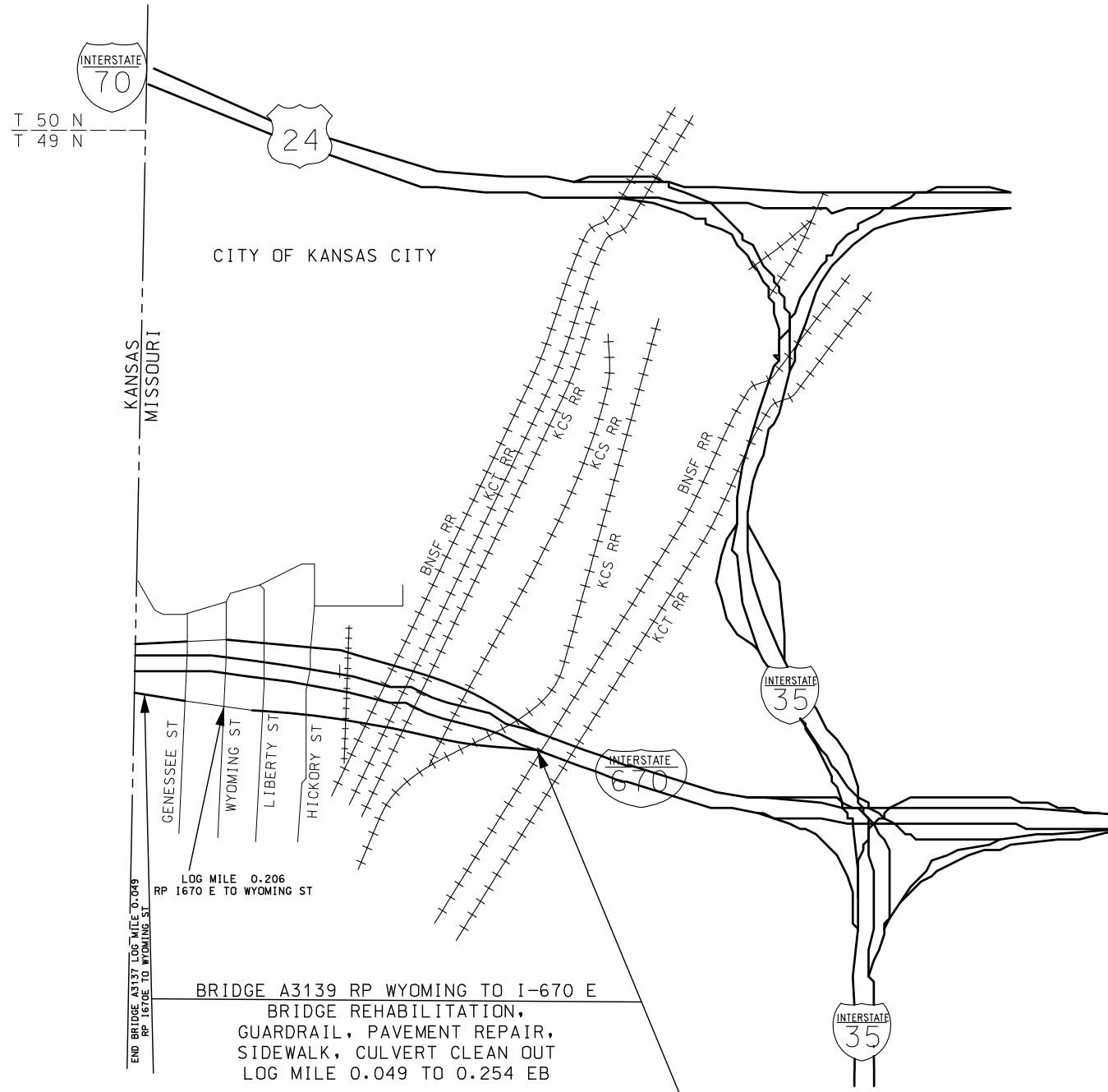
**CONVENTIONAL SYMBOLS
(USED IN PLANS)**

	EXISTING	NEW
BUILDINGS AND STRUCTURES	[Symbol]	[Symbol]
GUARD RAIL	[Symbol]	[Symbol]
GUARD CABLE	[Symbol]	[Symbol]
CONCRETE RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
STEEL RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
LOCATION SURVEY MARKER	[Symbol]	[Symbol]
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	[Symbol]	[Symbol]
FIRE HYDRANT	[Symbol]	[Symbol]
WATER VALVE	[Symbol]	[Symbol]
WATER METER	[Symbol]	[Symbol]
DROP INLET	[Symbol]	[Symbol]
DITCH BLOCK	[Symbol]	[Symbol]
GROUND MOUNTED SIGN	[Symbol]	[Symbol]
LIGHT POLE	[Symbol]	[Symbol]
H-FRAME POWER POLE	[Symbol]	[Symbol]
TELEPHONE PEDESTAL	[Symbol]	[Symbol]
FENCE		
CHAIN LINK	[Symbol]	[Symbol]
WOVEN WIRE	[Symbol]	[Symbol]
GATE POST	[Symbol]	[Symbol]
BENCHMARK	[Symbol]	[Symbol]

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

**MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY**

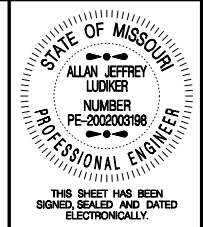
JACKSON COUNTY



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INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET -----	1
TYPICAL SECTIONS (TS) (2 SHEET)---	2
QUANTITIES (QU) (4 SHEETS)-----	3
PLAN SHEETS (PL)-----	4
TRAFFIC CONTROL SHEETS (TC)-----	5-7
EROSION CONTROL SHEETS (EC)-----	8
SIGNING (SN)-----	9



DATE PREPARED	11/1/2022
ROUTE	I-670
STATE	MO
DISTRICT	KC
SHEET NO.	1
COUNTY	JACKSON
JOB NO.	J413486
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	A3139

DATE	DESCRIPTION

LENGTH OF PROJECT

BEGINNING OF PROJECT LOG MILE 0.049 SB
END OF PROJECT LOG MILE 0.254 EB

APPARENT LENGTH 2091 FEET

EQUATIONS AND EXCEPTIONS:

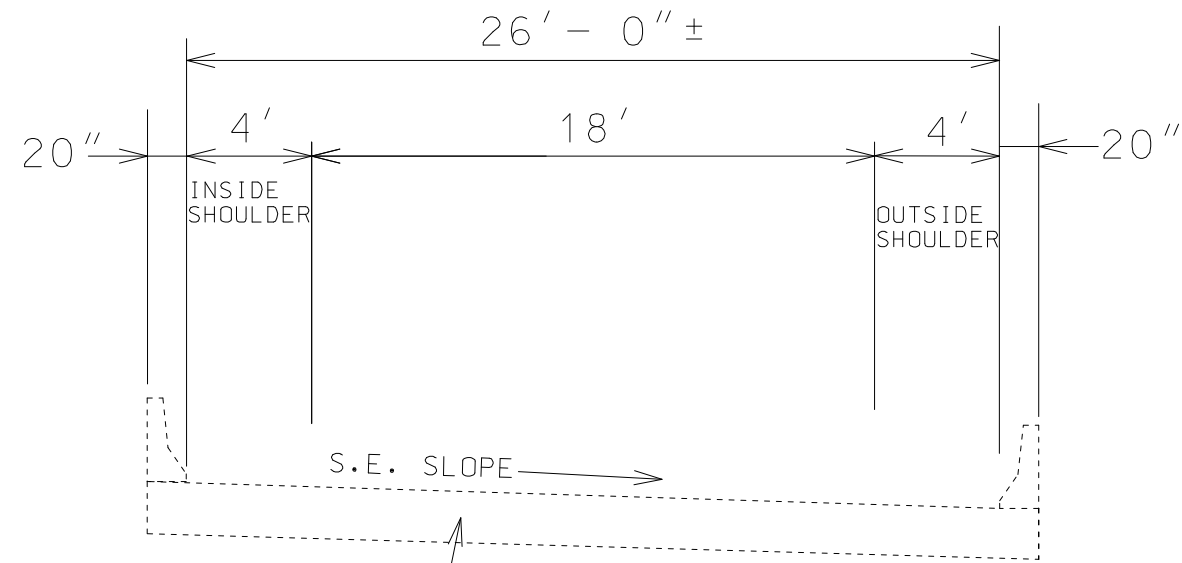
TOTAL CORRECTIONS 0 FEET
NET LENGTH OF PROJECT 2091 FEET
STATE LENGTH 0.396 MILES

FOR INFORMATION ONLY
ESTIMATED DISTURBED ACRES 0.08 ACRES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

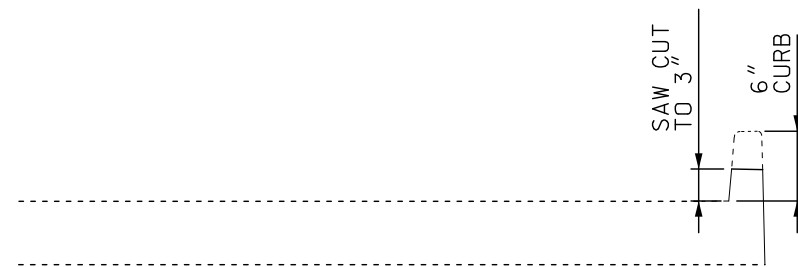
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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



BRIDGE A3139

BRIDGE TYPICAL SECTION
BRIDGE A3139
RP WYOMING ST TO I-670 EB



DETAILS FOR CONCRETE CURB
AT GUARDRAIL END TERMINAL

NOT TO SCALE

TYPICAL SHEET
SHEET 1 OF 2



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

DATE PREPARED 11/1/2022	
ROUTE I-670	STATE MO
DISTRICT KC	SHEET NO. 2
COUNTY JACKSON	
JOB NO. J413486	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A3139	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

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

REMOVAL OF IMPROVEMENTS				
BEGINNING LOG	ITEM	QUANTITY	UNIT	COMMENTS
0.022	GUARDRAIL	126.7	(FT)	RP WYOMING ST TO I670 BRIDGE A3139 UPSTREAM RT
0.022	GUARDRAIL	126.7	(FT)	RP WYOMING ST TO I670 BRIDGE A3139 UPSTREAM LT
	BRIDGE SLAB	65.2	(SY)	BRIDGE APPROACH SLAB
VARIOUS	CONCRETE CURB	220.0	FT	ADJACENT TO FULL DEPTH PAVEMENT REPAIR
VARIOUS	SIDEWALK WYOMING AND LIBERTY ST	281.9	(SY)	SIDEWALK REMOVAL
0.132	DROP INLET COVER	1.0	(EA)	RP I670 EB TO WYOMING ST
VARIOUS	SIGNS REMOVAL	5.0	(EA)	SIGNS REMOVAL ON CONCRETE MEDIAN ISLAND
0.459	CURB RAMP	16.7	(SY)	CURM RAMP TO W 13TH TERRACE ON LIBERTY ST
0.367	CONCRETE BARRIER BLOCK	7.0	(EA)	UNDER THE BRIDGE ON WYOMING ST NON PERMITTED ENTRANCES
0.204	CONCRETE MEDIAN ISLAND	17.7	(SY)	RP I670E TO WYOMING ST S
0.319	CONCRETE MEDIAN ISLAND	7.2	(SY)	RP I670 W TO WYOMING ST N
0.061	CONCRETE MEDIAN ISLAND	13.3	(SY)	RP I670E TO WYOMING ST S
0.072	CONCRETE MEDIAN ISLAND	11.6	(SY)	RP WYOMING ST TO I670W
0.141	CONCRETE MEDIAN ISLAND	16.2	(SY)	RP I670E TO WYOMING ST S
0.022	SAW CUT	100.0	(FT)	SAW CUT 3" HEIGHT FOR CONCRETE CURB FOR GUARDRAIL END TERMINAL
LUMP SUM				

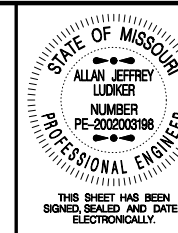
MOBILIZATION
1 LUMP SUM

GUARDRAIL						
BEGINNING LOG	LOCATION	MGS GUARDRAIL (FT)	MGS BRIDGE APPROACH TRANSITION EXTENDED CURB (EA)	TYPE A CRASHWORTHY END TERMINAL MASH (EA)	SHAPING SLOPES CLASS III (STA)	COMMENTS
0.022	WY TO I670 RAMP LT	62.5	1.0	1.0	0.8	RP WYOMING ST TO I670 BRIDGE A3139 UPSTREAM RT
0.022	WY TO I670 RAMP RT	62.5	1.0	1.0	0.8	RP WYOMING ST TO I670 BRIDGE A3139 UPSTREAM LT
PAY TOTAL		125.0	2.0	2.0	2.0	

CONCRETE SIDEWALK												
BEGINNING LOG	END LOG	LOCATION	LENGTH FOR 8" FT	LENGTH FOR 4" FT	WIDTH FT	AREA 4" SY	AREA 8" SY	TYPE 5 AGGR BASE 4" SY	CONCRETE CURB RAMP SY	TRUNCATED DOMES SF	LINEAR GRADING TYPE I STA	COMMENTS
0.348	0.384	WYOMING ST N RT		190.1	5.0	105.6			11.1	20.0	2.1	4" SIDEWALK AND CONCRETE CURB RAMPS
0.400	0.426	LIBERTY ST N LT		137.3	5.0	76.3					1.4	START AT MODOT RIGHT OF WAY
0.426	0.430	LIBERTY ST N LT	20.0		5.0		11.1	11.0			0.2	8" SIDEWALK FOR DRIVEWAY
0.430	0.434	LIBERTY ST N LT		20.0	5.0	11.1					0.2	4" SIDEWALK BETWEEN TWO DRIVEWAY
0.434	0.438	LIBERTY ST N LT	20.0		5.0		11.1	11.0			0.2	8" SIDEWALK FOR DRIVEWAY
0.438	0.469	LIBERTY ST N LT		120.0	5.0	66.7			5.6	10.0	1.2	4" SIDEWALK AND CONCRETE CURB RAMP
TOTAL						259.7	22.2	22.0	16.7	30.0	5.3	

CONCRETE CURB 6" AND UNDER TYPE A		
LOCATION	LENGTH FT	COMMENTS
VARIOUS	220	LOCATIONS TO BE DETERMINED BY ENGINEER
CONCRETE CURB RAMP	60	AT CONCRETE CURB RAMPS
TOTAL	280	

EROSION CONTROL- SEEDING AND SILT FENCE					
LOG	LOCATION SY	SEEDING - COOL SEASON GRASSES ACRE	MULCHING ACRE	CURB INLET CHECK EACH	COMMENTS
0.348	CST WYOMING ST RT	0.03	0.03		SIDEWALK ON WYOMING ST
0.400	CST LIBERTY ST NB	0.04	0.04	3.0	DI BY SIDEWALK ON LIBERTY ST
TOTAL		0.07	0.07	3.0	
PAY TOTAL		0.10	0.10	3.0	



DATE PREPARED
11/1/2022

ROUTE I-670 STATE MO
DISTRICT KC SHEET NO. 3

COUNTY JACKSON
JOB NO. J413486
CONTRACT ID.

PROJECT NO.

BRIDGE NO. 3139

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

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

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	DESCRIPTION
WARNING SIGNS								
W01-1L	48X48	16.00						TURN (SYMBOL LEFT ARROW)
W01-1R	48X48	16.00						TURN (SYMBOL RIGHT ARROW)
W01-2L	48X48	16.00						CURVE (SYMBOL LEFT ARROW)
W01-2R	48X48	16.00						CURVE (SYMBOL RIGHT ARROW)
W01-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT ARROW)
W01-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT ARROW)
W01-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT ARROW)
W01-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT ARROW)
W01-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LT ARROWS)
W01-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RT ARROWS)
W01-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LT ARROWS)
W01-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RT ARROWS)
W01-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)
W01-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)
W01-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)
W01-8	18X24	3.00						CHEVRON (SYMBOL)
W01-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
W03-1	48X48	16.00						STOP AHEAD (SYMBOL)
W03-2	48X48	16.00						YIELD AHEAD (SYMBOL)
W03-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)
W03-4	48X48	16.00						BE PREPARED TO STOP
W03-5	48X48	16.00						SPEED LIMIT AHEAD
W04-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)
W04-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)
W04-1aL	48X48	16.00						MERGE (ARROW SYMBOL)
W04-1aR	48X48	16.00						MERGE (ARROW SYMBOL)
W05-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS
W05-3	48X48	16.00						ONE LANE BRIDGE
W05-5	48X48	16.00						NARROW LANES
W06-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)
W06-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)
W06-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)
W07-3a	30X24	5.00						NEXT XX MILES (PLAQUE)
W08-1	48X48	16.00						BUMP
W08-2	48X48	16.00						DIP
W08-3	48X48	16.00						PAVEMENT ENDS
W08-4	48X48	16.00						SOFT SHOULDER
W08-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)
W08-6	48X48	16.00						TRUCK CROSSING (WITH FLAGS)
W08-6a	48X48	16.00						TRUCK ENTRANCE
W08-7	36X36	9.00						LOOSE GRAVEL
W08-7a	36X36	9.00						FRESH OIL/LOOSE GRAVEL
W08-9	48X48	16.00						LOW SHOULDER
W08-11	48X48	16.00						UNEVEN LANES
W08-12	48X48	16.00						NO CENTER LINE
W08-15	48X48	16.00						GROOVED PAVEMENT
W08-15P	30X24	5.00						MOTORCYCLE (PLAQUE)
W08-17	48X48	16.00						SHOULDER DROP-OFF (SYMBOL)
W08-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)
W10-1	42RND.	9.62						RAILROAD CROSSING
W012-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)
W012-2	48X48	16.00						LOW CLEARANCE (SYMBOL)
W012-2X	24X18	3.00						LOW CLEARANCE (PLAQUE)
W012-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)
W012-4	120X60	50.00						LOW CLEARANCE XX FT XX IN XX MILES AHEAD
W012-5	120X60	50.00						WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD
W013-1	30X30	6.25						ADVISORY SPEED (PLAQUE)
W016-2	30X24	5.00						XXX FEET (PLAQUE)
W016-3	30X24	5.00						X MILE (PLAQUE)
W020-1	48X48	16.00	4	64.00				ROAD/BRIDGE/RAMP WORK AHEAD
W020-2	48X48	16.00						DETOUR AHEAD
W020-3	48X48	16.00	1	16.00				ROAD CLOSED AHEAD
W020-4	48X48	16.00						ONE LANE ROAD AHEAD
W020-5	48X48	16.00	2	32.00				RIGHT/CENTER/LEFT LANE CLOSED AHEAD
W020-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
W020-6a	48X48	16.00	2	32.00				RIGHT/CENTER/LEFT LANE CLOSED
W020-7a	48X48	16.00						FLAGGER (SYMBOL, WITH FLAGS)
W021-2	36X36	9.00						FRESH OIL
W021-5	48X48	16.00						SHOULDER WORK AHEAD
W022-1	48X48	16.00						BLASTING ZONE AHEAD
W022-2	42X36	10.50						TURN OFF 2-WAY RADIO AND PHONE
W022-3	42X36	10.50						END BLASTING ZONE
G022-1	21X15	2.19						WET PAINT (ARROW PIVOTS)

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	DESCRIPTION
GUIDE SIGNS								
E05-1	36X48	12.00						GORE EXIT
E05-2	48X36	12.00						EXIT OPEN
E05-2a	48X36	12.00						EXIT CLOSED
G020-1	60X24	10.00						ROAD WORK NEXT XX MILES
G020-2	48X24	8.00	4	32.00				END ROAD WORK
G020-4	36X18	4.50						PILOT CAR FOLLOW ME
G020-4a	42X30	8.75						PILOT CAR IN USE WAIT & FOLLOW
G020-4a	18X12	1.50						PILOT CAR IN USE WAIT & FOLLOW
G020-5aP	36X24	6.00	2	12.00				WORK ZONE (PLAQUE)
M04-8a	24X18	3.00						END DETOUR
M04-9L	48X36	12.00						DETOUR (LEFT ARROW)
M04-9R	48X36	12.00						DETOUR (RIGHT ARROW)
M04-9P	48X12	4.00						STREET NAME (PLAQUE)
M04-10L	48X18	6.00						DETOUR (ARROW LEFT)
M04-10R	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	2	24.00				SPEED LIMIT XX
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						DO NOT PASS
R4-2	36X48	12.00						PASS WITH CARE
R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)
R4-7a	36X48	12.00						KEEP RIGHT (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	8.00				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						ROAD CLOSED
R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD
R11-4	60X30	12.50						LOCAL TRAFFIC ONLY
CONST-3A	60X48	20.00						ROAD CLOSED TO THRU TRAFFIC
CONST-3X	56X12	4.67						FINE SIGN
								SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS								
CONST-5	48X36	12.00						POINT OF PRESENCE
CONST-5	96X48	32.00						POINT OF PRESENCE
CONST-7	48X24	8.00	2	16.00				RATE OUR WORK ZONE
CONST-7	72X36	18.00						RATE OUR WORK ZONE
CONST-8	48X36	12.00	4	48.00				WORK ZONE NO PHONE ZONE
				TOTAL				
616-10.05				284				
CONSTRUCTION SIGNS								
616-10.10				TOTAL		0		
RELOCATED SIGNS								

ITEM NUMBER	TOTAL QTY	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		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)
6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)
6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6123000A		TRUCK OR TRAILER MOUNTED ATTENUATOR (TMA)
6161008	2	ADVANCED WARNING RAIL SYSTEM
6161012		BUOYS (BOATS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161025	160	CHANNELIZER (TRIM LINE)
6161030	4	TYPE III MOVEABLE BARRICADE
6161033		DIRECTION INDICATOR BARRICADE
6161040	2	FLASHING ARROW PANEL
6161047		TYPE III OBJECT MARKER
6161051		WARNING LIGHT, TYPE A
6161052		WARNING LIGHT, TYPE B
6161053		WARNING LIGHT, TYPE C
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A	2	CHANGEABLE MESSAGE SIGN W/O COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002		TEMPORARY LONG-TERM RUMBLE STRIPS
6162004		TEMPORARY SHORT-TERM RUMBLE STRIPS
6173600D		TEMPORARY TRAFFIC BARRIER
6173600D		CONTRACTOR FURNISHED/RETAINED
6173602B		TEMPORARY TRAFFIC BARRIER
6173602B		CONTRACTOR FURNISHED/COMMISSION RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
6176000B		TEMPORARY TRAFFIC BARRIER
6176000B		COMMISSION FURNISHED/RETAINED
6177000B		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION
6177000B		COMMISSION FURNISHED/RETAINED
6208064A		TEMPORARY RAISED PAVEMENT MARKER
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING
6169902	4	ADA COMPLIANT MOVEABLE BARRICADE

Traffic Control Legend, Sign Spacing, Device Spacing, Channelizing Taper Lengths And Recommended Maximum Speed Reductions

SIGN SPACING FOR ADVANCE SIGN SERIES (1) (2)		
PERMANENT POSTED SPEED MPH	UNDIVIDED HIGHWAYS	DIVIDED HIGHWAYS
0-35	200'	200'
40-45	350'	500'
50-55	500'	1000'
60-70	1000'	SA - 1000' SB - 1500' SC - 2640'

TAPER LENGTHS AND END TREATMENTS FOR CONCRETE BARRIER				
PERMANENT POSTED SPEED MPH	MINIMUM LANE TAPER LENGTH (3)			END TREATMENT (4)
	10'	11'	12'	
B40	160'	168'	176'	BARRIER HEIGHT TRANSITION
C40	160'	168'	176'	APPROVED CRASH CUSHION

TAPER LENGTHS AND SPACING FOR CHANNELIZERS							
PERMANENT POSTED SPEED MPH	MINIMUM LANE TAPER LENGTH (L) (3)			MINIMUM SHOULDER TAPER LENGTH (T1) BASED ON 10' SHOULDER	BUFFER LENGTH FT	MAXIMUM CHANNELIZER SPACING	
	10'	11'	12'			THROUGH TAPER	THROUGH WORK AREA
0-35	205'	225'	245'	70'	280'	35'	40'
40-45	450'	495'	540'	150'	400'	40'	80'
50-55	550'	605'	660'	185'	560'	50'	80'
60-70	700'	770'	840'	235'	840'	60'	120'

** THE SA DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN.
THE SB DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS.
THE SC DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS.
(THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TEMPORARY TRAFFIC CONTROL ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TEMPORARY TRAFFIC CONTROL ZONE)

DETAILS NOTES:

- (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OF SIGNED CONDITION.
- (2) SPACING MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.
- (3) TAPER LENGTHS SHOWN INCLUDE LENGTH REQUIRED FOR LANE AND 10' SHOULDER
- (4) CONCRETE BARRIER MAY BE INSTALLED AT 8:1 FLARE RATE FROM THE SHOULDER POINT OF THE LIMITS OF THE CLEAR ZONE WHERE THE SIDE SLOPE IS 6:1 OR FLATTER

EPG TABLE 616.29 RECOMMENDED MAXIMUM SPEED REDUCTIONS	
ACTIVITY (I.E. WORKERS, EQUIPMENT OR MATERIAL) LOCATION	RECOMMENDED WORK ZONE SPEED REDUCTION (WHEN APPLICABLE)
10 FT. BEYOND EDGE OF TRAVELWAY TO EDGE OF RIGHT OF WAY	NO SPEED REDUCTION
IN TRAFFIC LANE OR WITHIN 10FT. OF THE TRAFFIC LANE	10 MPH
HEAD-TO-HEAD ON MULTILANE	10 MPH
SPECIAL CIRCUMSTANCES WITHIN A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY WARRANT A LOWER SPEED LIMIT THAN RECOMMENDED ABOVE. ALL SPEED LIMIT REDUCTIONS GREATER THAN 10 MPH SHALL BE DOCUMENTED, SUBMITTED TO AND APPROVED BY THE DISTRICT WORK ZONE COORDINATOR.	

TRAFFIC CONTROL LEGEND

TAPER LENGTH (L)
 L = W X P FOR 40 MPH OR MORE
 L = $\frac{WP^2}{60}$ FOR 35 MPH OR LESS
 L = TAPER LENGTH IN FEET
 W = LATERAL SHIFT IN FEET
 P = POSTED SPEED PRIOR TO ROAD WORK IN MPH

<ul style="list-style-type: none"> SIGN (SINGLE SIDED) FLAGGER CHANNELIZER PROTECTIVE VEHICLE WITH WORK SIGN, FLASHING ARROW PANEL AND REAR-MOUNTED IMPACT ATTENUATOR UNIT. 	<ul style="list-style-type: none"> FLASHING ARROW PANEL CHANGEABLE MESSAGE BOARD BARRICADE
---	--

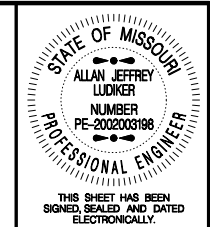
LEGEND NOTE:

THE PROTECTIVE VEHICLE SIGN SHALL BE MOUNTED AT A RECOMMENDED HEIGHT OF 48 IN. ABOVE THE ROAD SURFACE.

GENERAL NOTES:

- 1. SEE STANDARD PLAN 616.10 FOR DETAILS AND ITEMS NOT SHOWN.
- 2. EXISTING SIGNS SHALL BE COVERED DURING WORKING HOURS ONLY IF IN CONFLICT WITH TRAFFIC CONTROL PLANS.
- 3. NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING, COVERING, UNCOVERING OR REMOVING SIGNS.
- 4. CONES ALLOWABLE FOR DAYTIME OPERATIONS ONLY.
- 5. LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE, ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS OR CONES.

TEMPORARY
TRAFFIC CONTROL
SHEET 1 OF 3

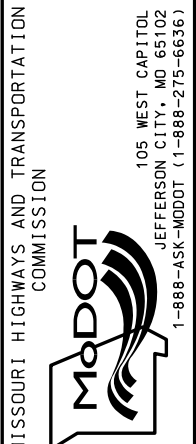


DATE PREPARED
11/1/2022

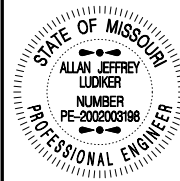
ROUTE I-670 STATE MO
DISTRICT KC SHEET NO. 5

COUNTY JACKSON
JOB NO. J413486
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A3139

DATE	DESCRIPTION



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



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
11/1/2022

ROUTE STATE
I-670 MO

DISTRICT SHEET NO.
KC 6

COUNTY
JACKSON

JOB NO.
J413486

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A3139

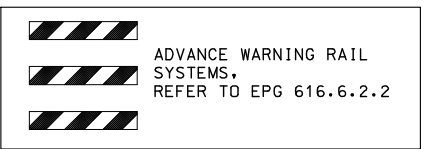
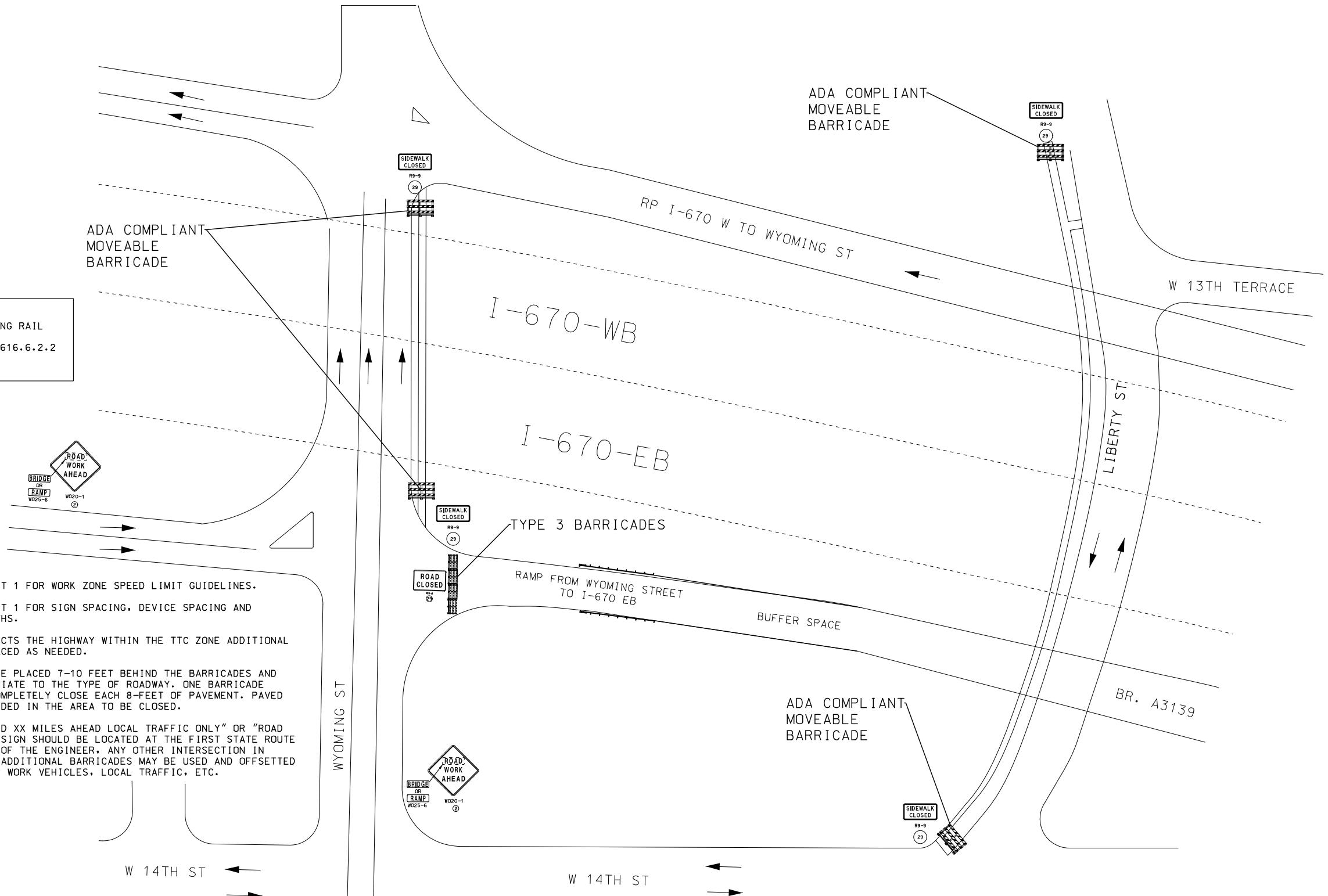
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

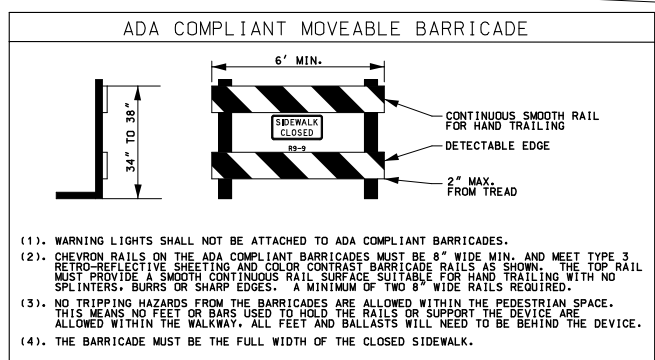
MoDOT

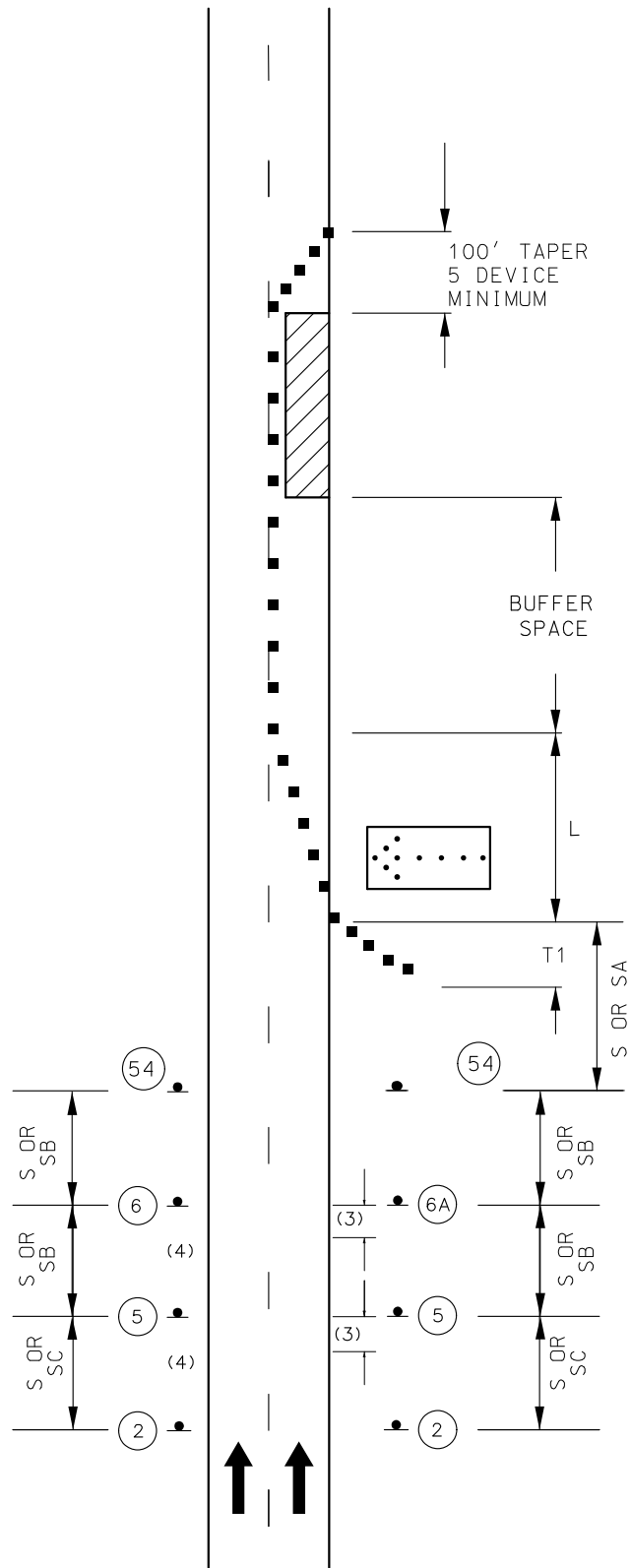
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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



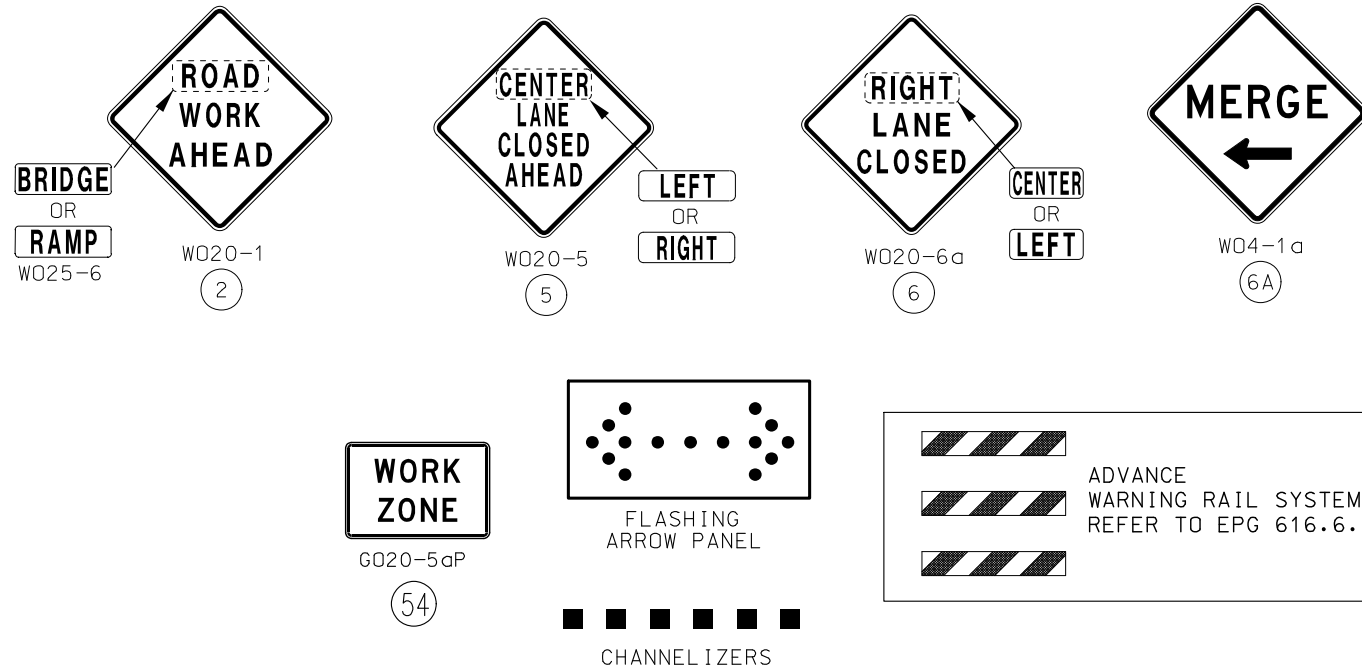
- NOTES:
- SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.
 - SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
 - WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TTC ZONE ADDITIONAL TTC DEVICES SHALL BE PLACED AS NEEDED.
 - "ROAD CLOSED" SIGN MAY BE PLACED 7-10 FEET BEHIND THE BARRICADES AND AT A SIGN HEIGHT APPROPRIATE TO THE TYPE OF ROADWAY. ONE BARRICADE SHOULD BE REQUIRED TO COMPLETELY CLOSE EACH 8-FEET OF PAVEMENT. PAVED SHOULDERS SHALL BE INCLUDED IN THE AREA TO BE CLOSED.
 - IF USED, THE "ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY" OR "ROAD CLOSED TO THRU TRAFFIC" SIGN SHOULD BE LOCATED AT THE FIRST STATE ROUTE OR, UPON THE DISCRETION OF THE ENGINEER, ANY OTHER INTERSECTION IN ADVANCE OF THE CLOSURE. ADDITIONAL BARRICADES MAY BE USED AND OFFSETTED TO FACILITATE ACCESS FOR WORK VEHICLES, LOCAL TRAFFIC, ETC.





TWO-LANE DIVIDED HIGHWAY

TA-33



NOTES:

SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.

SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.

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

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM CLOSURES.

THIS INFORMATION ALSO SHALL BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN ON A DIVIDED HIGHWAY. IN THIS CASE, THE LEFT LANE CLOSED SIGNS AND THE CORRESPONDING MERGE OR LANE ENDS SIGN SHALL BE SUBSTITUTED.

WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TTC ZONE ADDITIONAL TTC DEVICES SHALL BE PLACED AS NEEDED.

TEMPORARY TRAFFIC BARRIERS, IF USED SHALL COMPLY WITH THE PROVISIONS IN EPG 616.6.85 TEMPORARY TRAFFIC BARRIER AND REVIEW TA-34 LANE CLOSURE WITH A TEMPORARY TRAFFIC BARRIER.

REVIEW EPG TA-34a LANE CLOSURE WITH WIDTH AND LANE RESTRICTIONS DE/CM FOR A LANE CLOSURE WITH WIDTH RESTRICTIONS.

AN 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 CLOSED LANE.

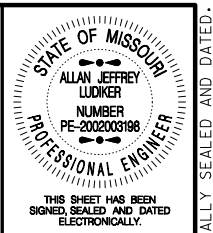
REVIEW EPG 616.6.83 WARNING LIGHTS WHEN SEQUENTIAL OR WARNING LIGHTS SHOULD BE USED ON NIGHTTIME OPERATIONS.

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

FOR FLAGS AND ADVANCE WARNING RAIL SYSTEM, REFER TO EPG 616.6.2.2 FLAG AND ADVANCE WARNING RAIL SYSTEM.

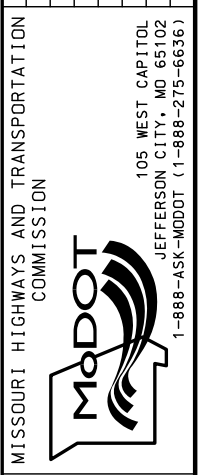
REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES

STATIONARY
LANE CLOSURE
TEMPORARY
TRAFFIC CONTROL
SHEET 3 OF 3



DATE PREPARED	11/1/2022
ROUTE	I-670
STATE	MO
DISTRICT	KC
SHEET NO.	7
COUNTY	JACKSON
JOB NO.	J413486
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

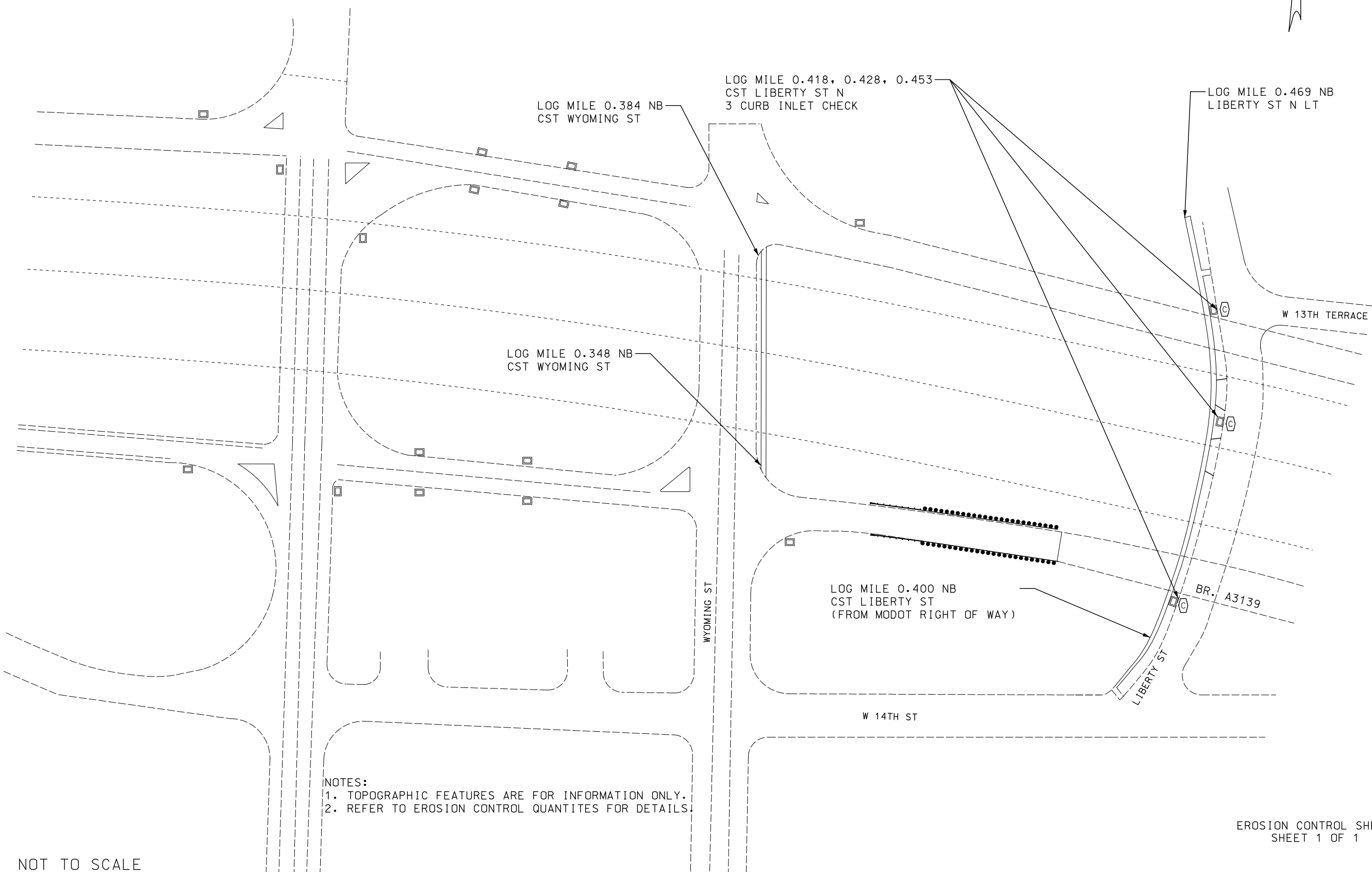
DATE	DESCRIPTION



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

TEMPORARY EROSION CONTROL LEGEND


 CURB INLET CHECK



- NOTES:
1. TOPOGRAPHIC FEATURES ARE FOR INFORMATION ONLY.
 2. REFER TO EROSION CONTROL QUANTITIES FOR DETAILS.

NOT TO SCALE

EROSION CONTROL SHEET
SHEET 1 OF 1

STATE OF MISSOURI
 ALLAN JEFFREY LUDKER
 NUMBER PE-202203198
 PROFESSIONAL ENGINEER
 THIS SHEET HAS BEEN
 SIGNED, SEALED AND DATED
 ELECTRONICALLY.

DATE PREPARED
11/1/2022


ROUTE I-670	STATE MO
DISTRICT KC	SHEET NO. 8

COUNTY
JACKSON
JOB NO.
J413486
CONTRACT ID.

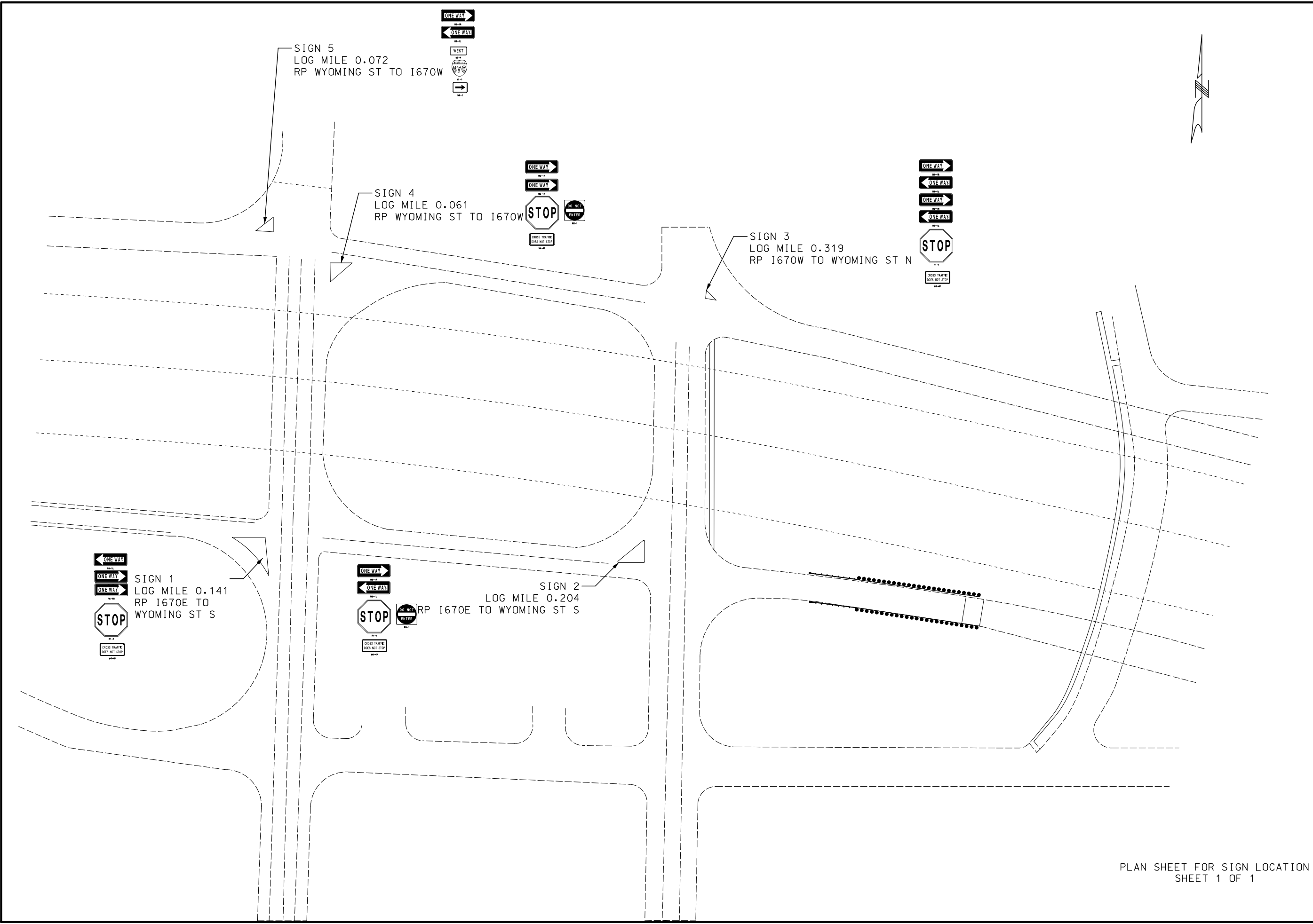
PROJECT NO.

BRIDGE NO.
A3139

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
 COMMISSION

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

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



STATE OF MISSOURI
 ALLAN JEFFREY LUDKER
 NUMBER PE-2022003198
 PROFESSIONAL ENGINEER
 THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 11/1/2022
 ROUTE I-670 STATE MO
 DISTRICT KC SHEET NO. 9
 COUNTY JACKSON
 JOB NO. J413486
 CONTRACT ID.
 PROJECT NO.
 BRIDGE NO. A3139

DATE	DESCRIPTION

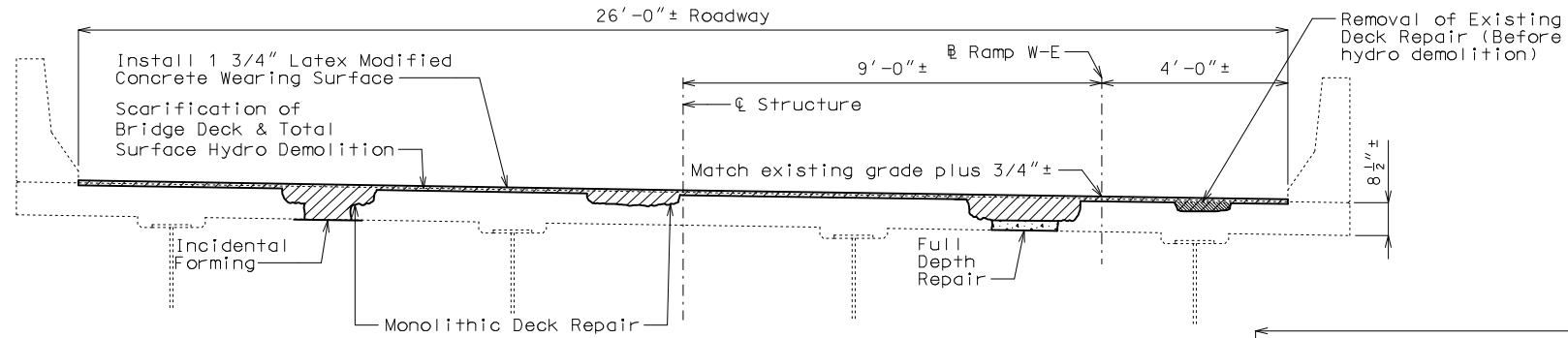
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

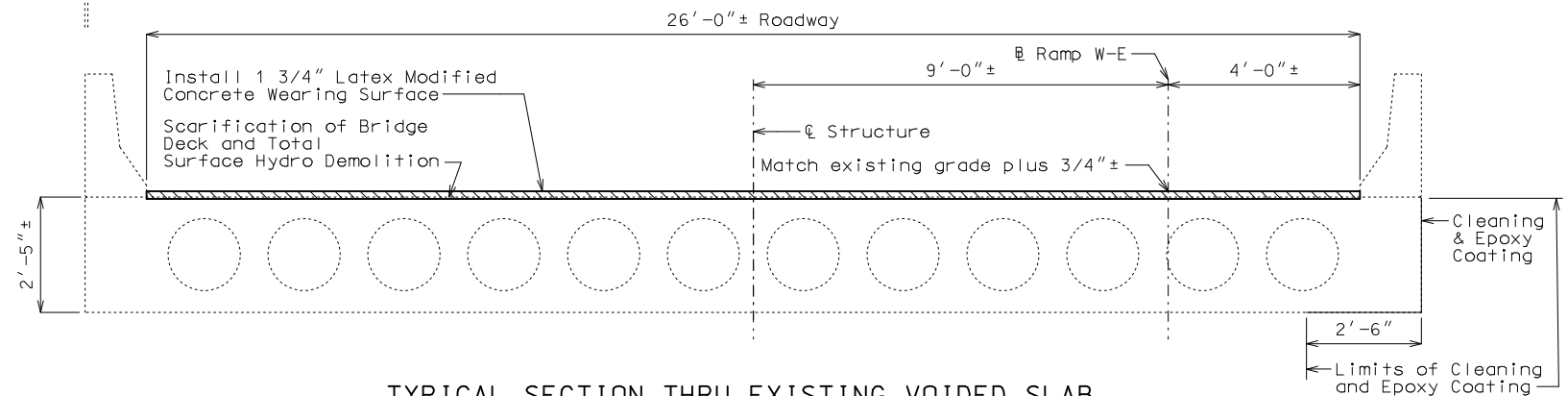
105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

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

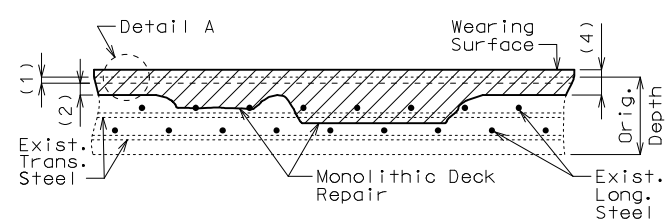
U.I.P. AND REHABILITATE EXISTING (44'-65'-65'-65'-61') CONTINUOUS VOIDED SLAB SPANS, (4'-76'-100'-136'-113'-92')(6'-122'-139') CONTINUOUS COMPOSITE PLATE GIRDER SPANS



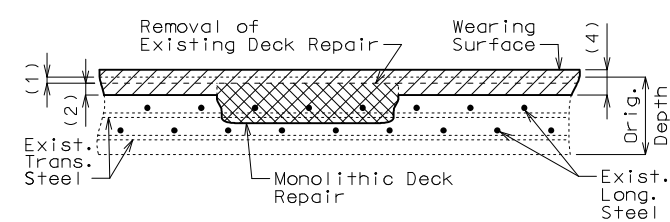
TYPICAL SECTION THRU EXISTING C.I.P. SLAB



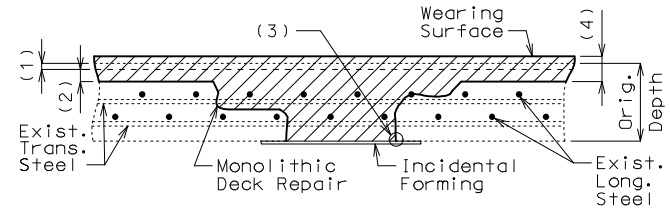
TYPICAL SECTION THRU EXISTING VOIDED SLAB



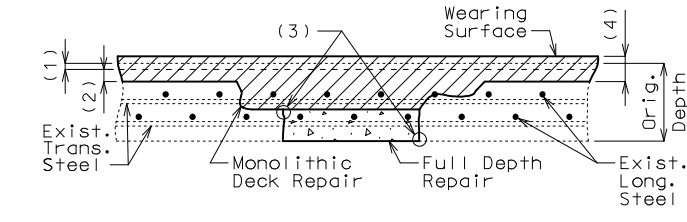
MONOLITHIC DECK REPAIR



REMOVAL OF EXISTING DECK REPAIR BEFORE HYDRO DEMOLITION



MONOLITHIC DECK REPAIR REQUIRING INCIDENTAL FORMING



MONOLITHIC DECK REPAIR REQUIRING FULL DEPTH REPAIR

- (1) 1/2" scarification of existing deck
- (2) 1/2" minimum total surface hydro demolition of sound concrete, measured to mortar line
- (3) 1" vertical side shall be established outside the deteriorated area.
- (4) 1 3/4" minimum Latex modified concrete wearing surface

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 6

Design Loading:

HS20-44 Modified (1979) and Military 24,000 lb Tandem Axle (1979)

Design Unit Stresses:

Class B-2 Concrete (Half-Sole and Full Depth Repair) f'c = 4,000 psi
Structural Carbon Steel (ASTM 709 Grade 36) Fy = 36,000 psi

Concrete Protective Coatings:

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

Miscellaneous:

Roadway surfacing adjacent to bridge ends shall match new bridge 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.

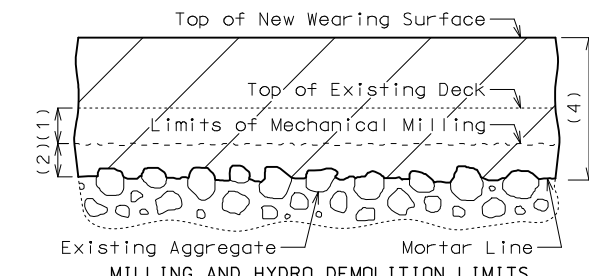
Contractor shall verify all dimensions in field before ordering new material.

In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

For Table of Estimated Quantities, see Sheet No. 2.

Traffic Handling:

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



DETAIL A

REPAIRS TO BRIDGE: RAMP W-E (WYOMING ST. TO I-670 EB VIADUCT) OVER VARIOUS STREETS, BNSF AND KCT RR

RAMP FROM WYOMING STREET TO WB I-670 ABOUT 0.4 MILES WEST OF RTE. I-35 BEGINNING STATION 2+44.52± (Match Existing)

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

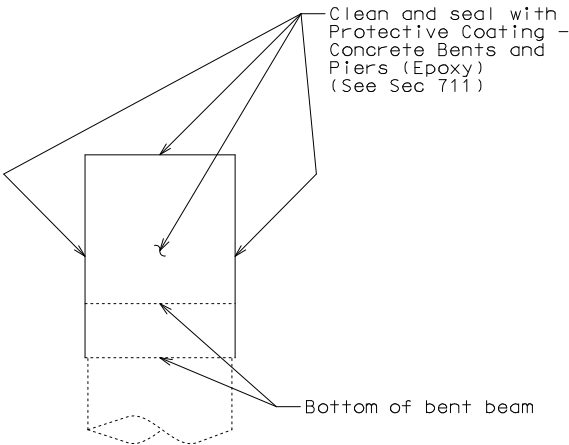
STATE OF MISSOURI
TIMOTHY D. LEAF
NUMBER PE-2012000778
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SEALED AND DATED ELECTRONICALLY.

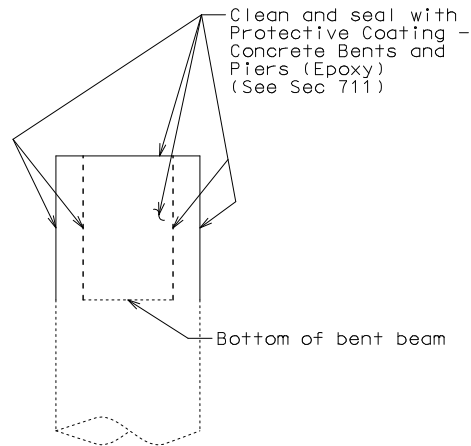
DATE PREPARED 9/30/2022	
ROUTE I-670	STATE MO
DISTRICT BR	SHEET NO. 1
COUNTY JACKSON	
JOB NO. J413486	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A31392	
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

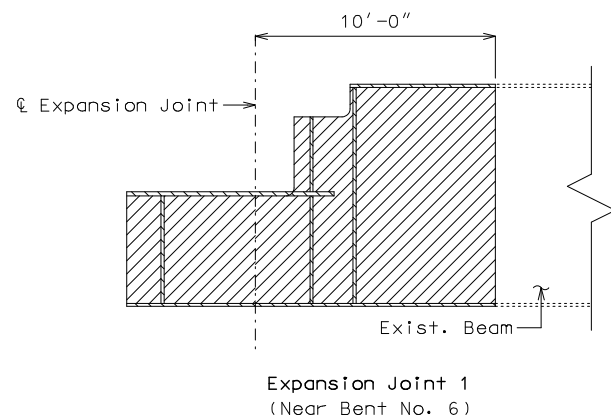
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



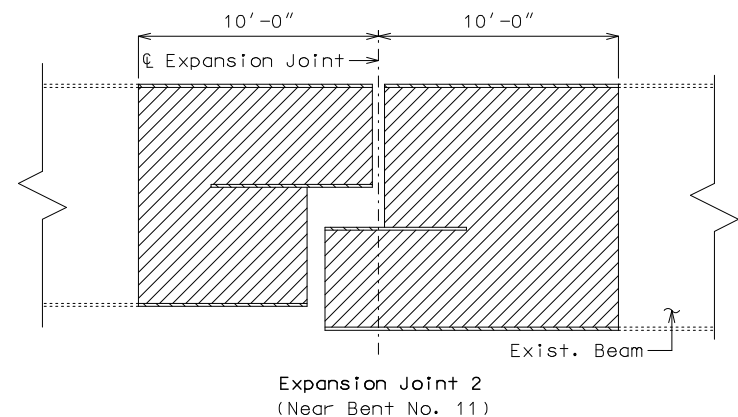
PART END ELEVATION OF INTERMEDIATE BENT NO. 11 SHOWING PROTECTIVE COATING



PART END ELEVATION OF INTERMEDIATE BENT NO. 6 & 12 SHOWING PROTECTIVE COATING

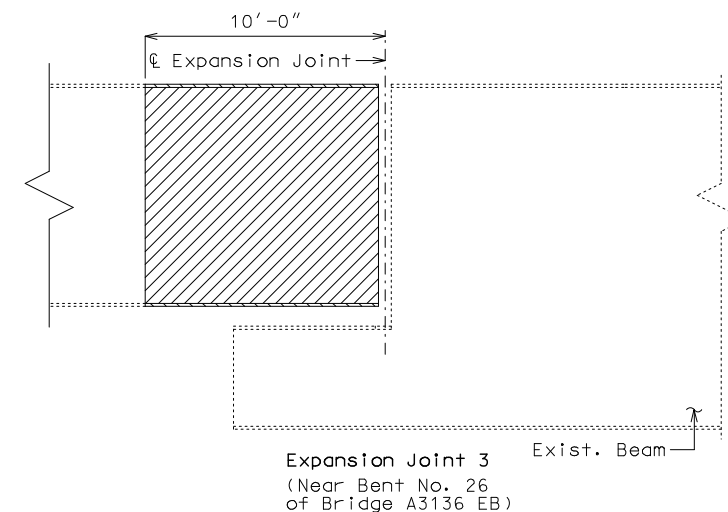


Expansion Joint 1 (Near Bent No. 6)



Expansion Joint 2 (Near Bent No. 11)

PART ELEVATION OF EXISTING BEAM SHOWING EXTENT OF SYSTEM G COATING (Bearings and all vertical stiffeners not shown for clarity)



Expansion Joint 3 (Near Bent No. 26 of Bridge A3136 EB)

Notes:

Amount of substructure repair is anticipated to be 10 square feet or less. Locations to be determined in the field and per the approval of the engineer. No direct pay.

Structural Steel Protective Coating:
Protective Coating: System G in accordance with Sec 1081.

Limits of Protective Coating: The surfaces of all existing and new structural steel located within a distance of not less than 10 feet from the ϕ of Expansion Joint No. 1, 2 & 3 and remaining on the superstructure of Bridge A3139, shall be recoated with a complete System G.

Surface Preparation: Surface preparation of the existing and new steel shall be in accordance with Sec 1081 for Recoating of Structural Steel (System G). The cost of surface preparation will be considered completely covered by the contract unit price per sq. foot for Surface Preparation for Recoating Structural Steel.

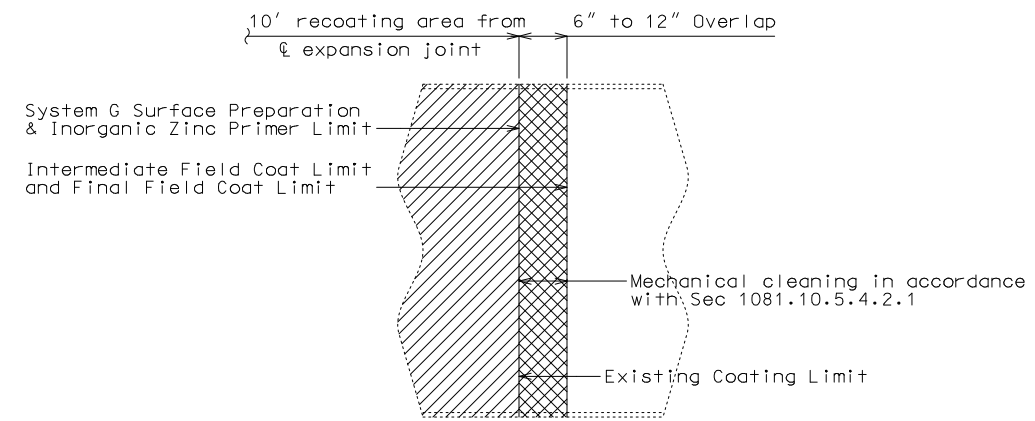
Prime Coat: The cost of the prime coat will be considered completely covered by the contract unit price per sq. foot for Field Application of Inorganic Zinc Primer.

Field Coat: The color of the field coat shall be Gray (Federal Standard #26373). The cost of the intermediate field coat will be considered completely covered by the contract unit price per sq. foot for Intermediate Field Coat (System G). The cost of the finish field coat will be considered completely covered by the unit price per sq. foot for Finish Field Coat (System G).

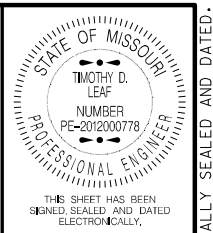
Limits of Paint Overlap: System G shall overlap the existing coating between 6 inches and 12 inches in order to achieve maximum coverage at the paint limit of each complete system near the expansion and contraction areas. The final field coating shall be masked to provide crisp, straight lines and to prevent overspray beyond the overlap required.

Estimated Quantities		
Item		Total
Scarification of Bridge Deck	sq. yard	3155
Total Surface Hydro Demolition	sq. yard	3155
Removal of Existing Expansion Joint Seal or Sealant	linear foot	52
Bridge Approach Slab (Major)	sq. yard	58
* Supplementary Wearing Surface Material	cu. yard	25
Latex Modified Concrete Wearing Surface	sq. yard	3155
Diamond Grinding	sq. yard	3155
Removal of Existing Deck Repair	sq. foot	250
Full Depth Repair	sq. foot	100
Cleaning and Epoxy Coating (Slab Edge)	sq. foot	1721
Protective Coating - Concrete Bents and Piers (Epoxy)	lump sum	1
Fabricated Structural Carbon Steel (Misc.)	pounds	260
Steel Bar Dam	each	4
Surface Preparation for Recoating Structural Steel	sq. foot	1900
Field Application of Inorganic Zinc Primer	sq. foot	1900
Intermediate Field Coat (System G)	sq. foot	1900
Finish Field Coat (System G)	sq. foot	1900
Strip Seal	linear foot	52

* Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.



PART ELEVATION SHOWING LIMITS OF PAINT OVERLAP (Vertical or horizontal paint limit. Horizontal limit shown)



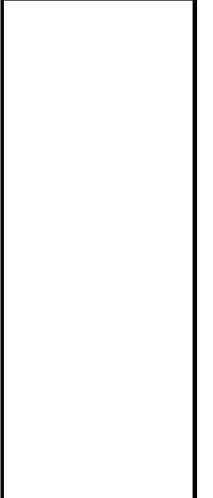
DATE PREPARED
10/4/2022
ROUTE I-670 STATE MO
DISTRICT BR SHEET NO. 2

COUNTY JACKSON
JOB NO. J413486
CONTRACT ID.

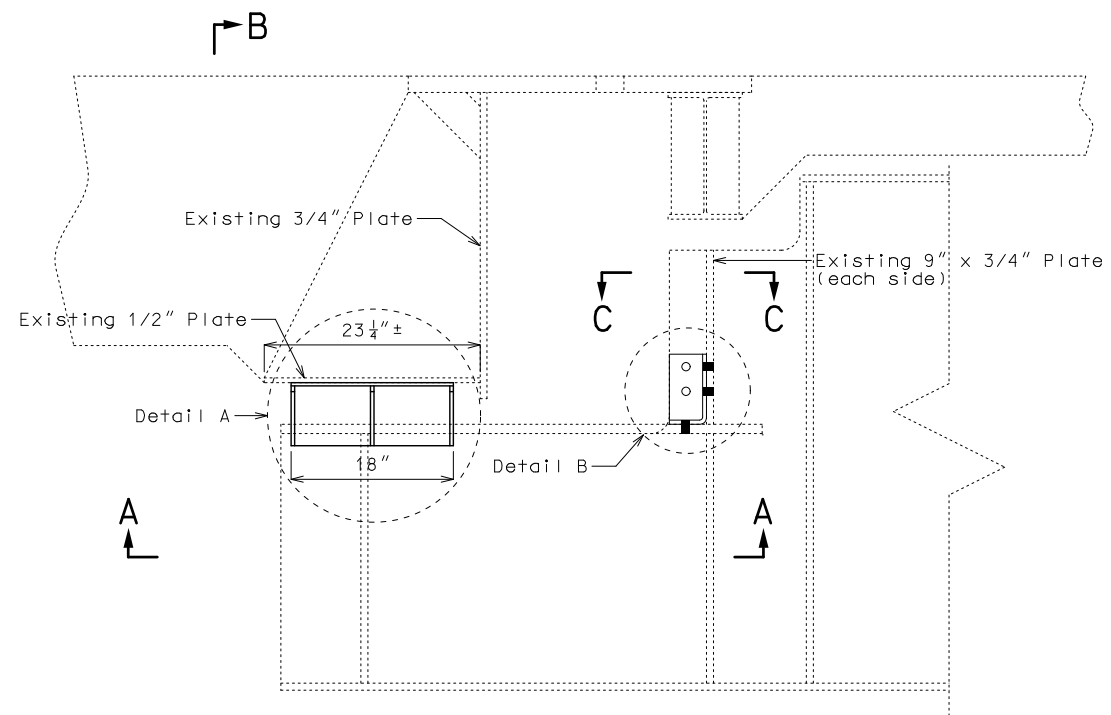
PROJECT NO.
BRIDGE NO. A31392

DESCRIPTION	DATE

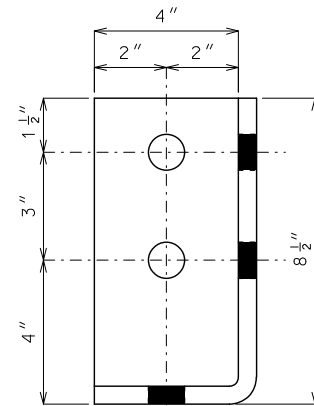
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



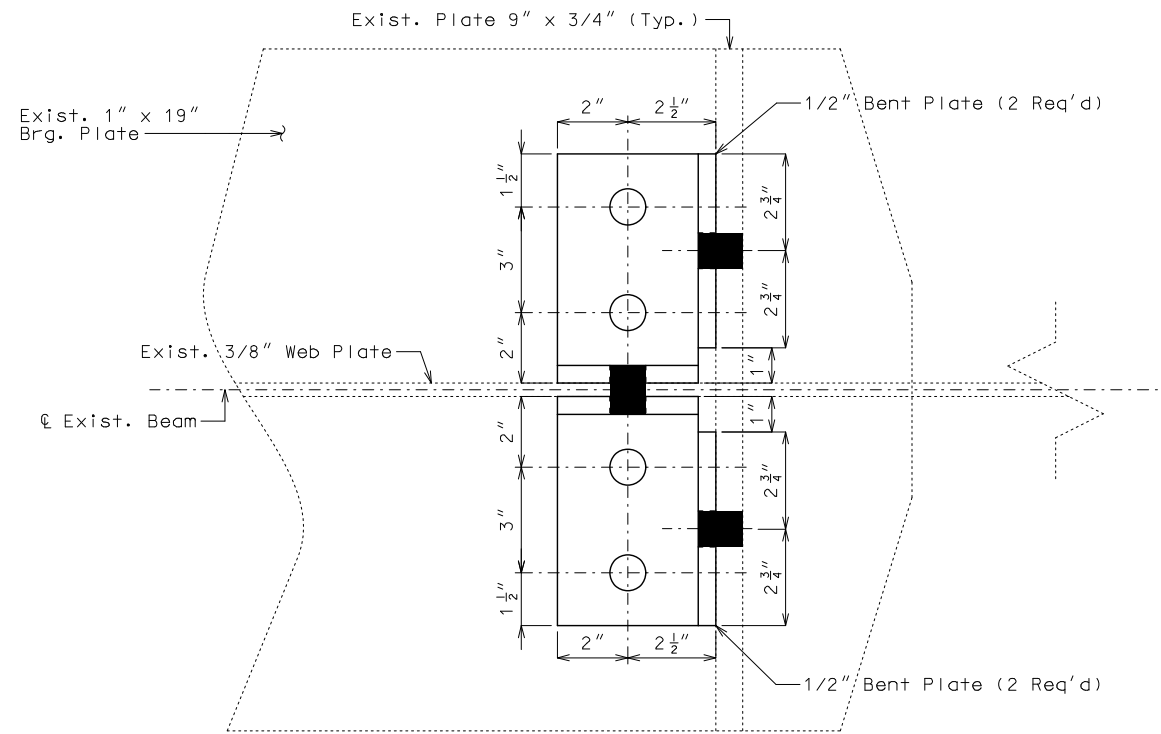
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



PART ELEVATION SHOWING
FABRICATED ANGLE IRON
ALIGNMENT GUIDES
AND WEB REPAIR



DETAIL B



SECTION C-C

Notes:

Fabricated structural steel for web repairs shall be ASTM A709 Grade 36.

Fabricated Angle Iron Alignment Guides may be ASTM Grade 36.

Web repairs to be performed on Girders No. 1 and No. 4.

Field connections shall be made with 3/4-inch diameter ASTM F3125 Grade A325 Type 1 bolts and 13/16-inch diameter holes, except as noted.

Contact surfaces shall be in accordance with Sec 1081 for surface preparation.

Plate lengths and bolt locations may be adjusted as conditions warrant. The distance from the edge of the plate to center of bolt should be no less than 1 1/4" and no more than 3". The center to center spacing of bolts shall be no less than 2 1/2" and no more than 4 1/2", except as shown.

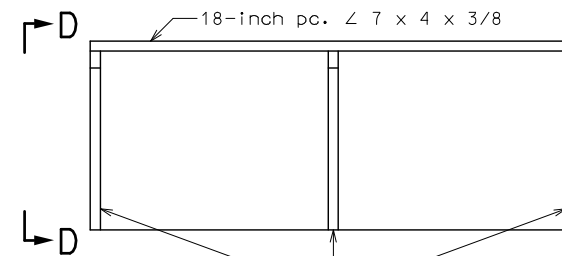
The cost of furnishing and installing 1/2-inch bent plates for web repair and fabricating angle iron alignment guides, complete in place, will be considered completely covered by the contract unit price for Fabricated Structural Carbon Steel (Misc.).

Cost of coating web repairs and Fabricating Angle Iron Guides will be considered completely covered by the contract unit price for System G Coating.

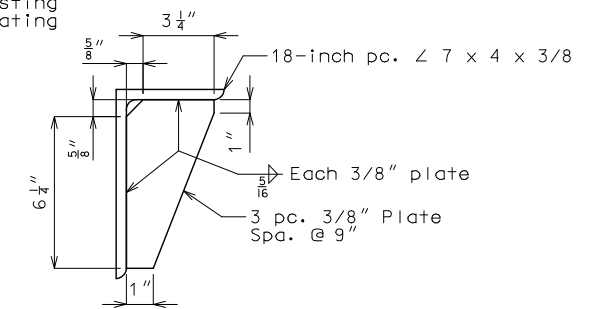
Field galvanize the field weld area in accordance with Sec 1081 by zinc alloy stick method.

Galvanized components and Stainless Steel Plates in existing bearing pads are to be protected from overspray when coating existing beams with System G.

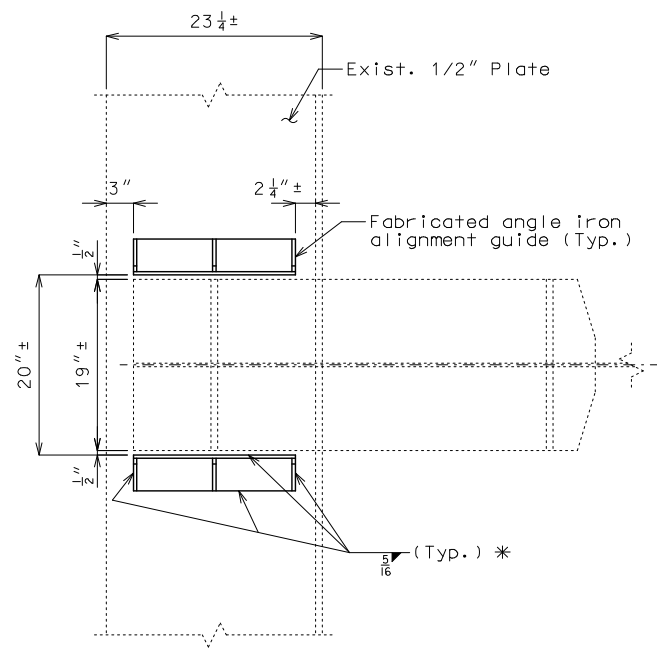
SECTION B-B



DETAIL A
FABRICATED ANGLE IRON ALIGNMENT GUIDES
(8 required)



ELEVATION D-D



SECTION A-A

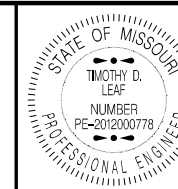
* Weld along the girder side to the extent that can be reached

DETAILS OF WEB REPAIR AND ALIGNMENT GUIDES NEAR BENT NO. 6

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

Sheet No. 3 of 5

Detailed Sep. 2022
Checked Sep. 2022



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

DATE PREPARED
9/30/2022

ROUTE STATE
I-670 MO

DISTRICT SHEET NO.
BR 3

COUNTY
JACKSON

JOB NO.
J413486

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A31392

DESCRIPTION

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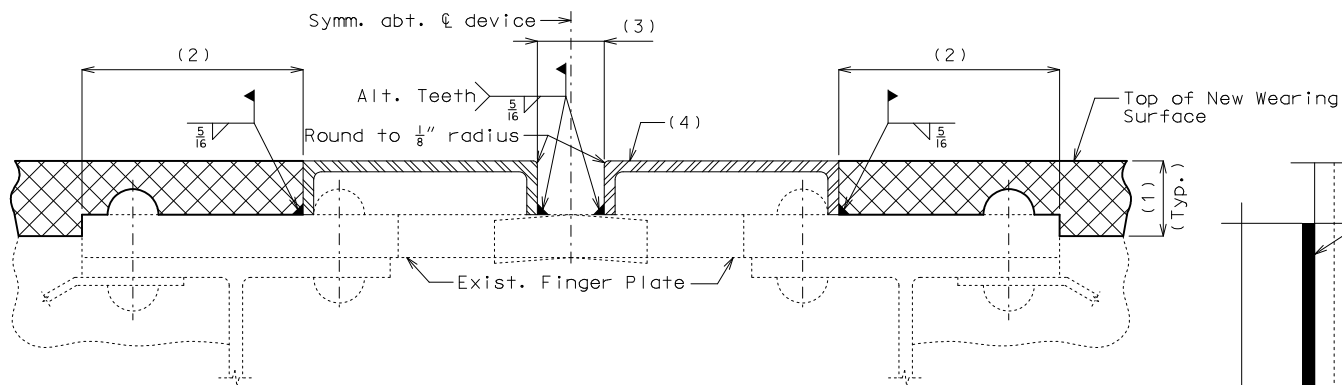
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MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



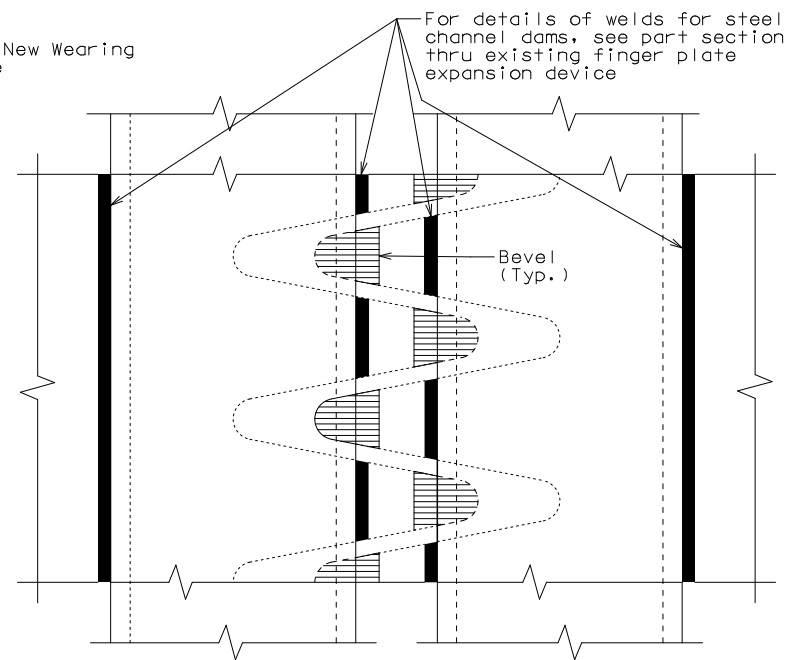
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



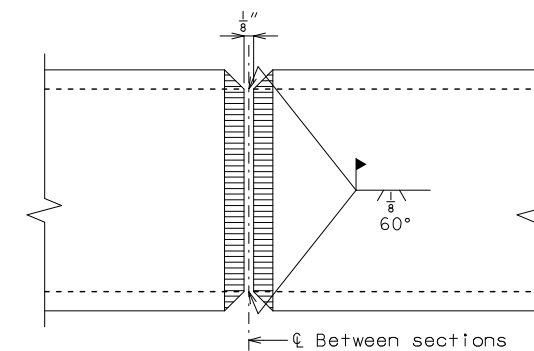
PART SECTION THRU EXISTING FINGER PLATE EXPANSION DEVICE
(Expansion Joint 1)
Riveted finger plate shown, existing finger plate similar.

Notes:

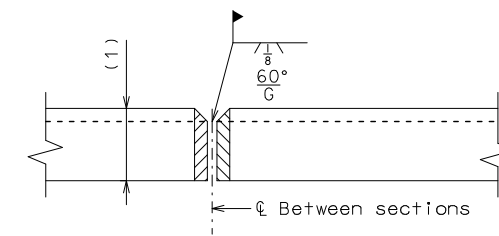
- (3) Expansion gap to be 2" (at 60°F) measured parallel to centerline roadway for devices designed for 200 feet or less of bridge expansion and gap increased 1/4" for each 50 feet of additional length up to a maximum space of 2-1/2".
- (4) Use channel C6 X 10.5 for wearing surfaces thru 1 3/4" and channel C7 X 14.75 or MC6 X 15.1 for wearing surfaces greater than 1 3/4" to 2 1/4". Cut flanges to match required wearing surface thickness.



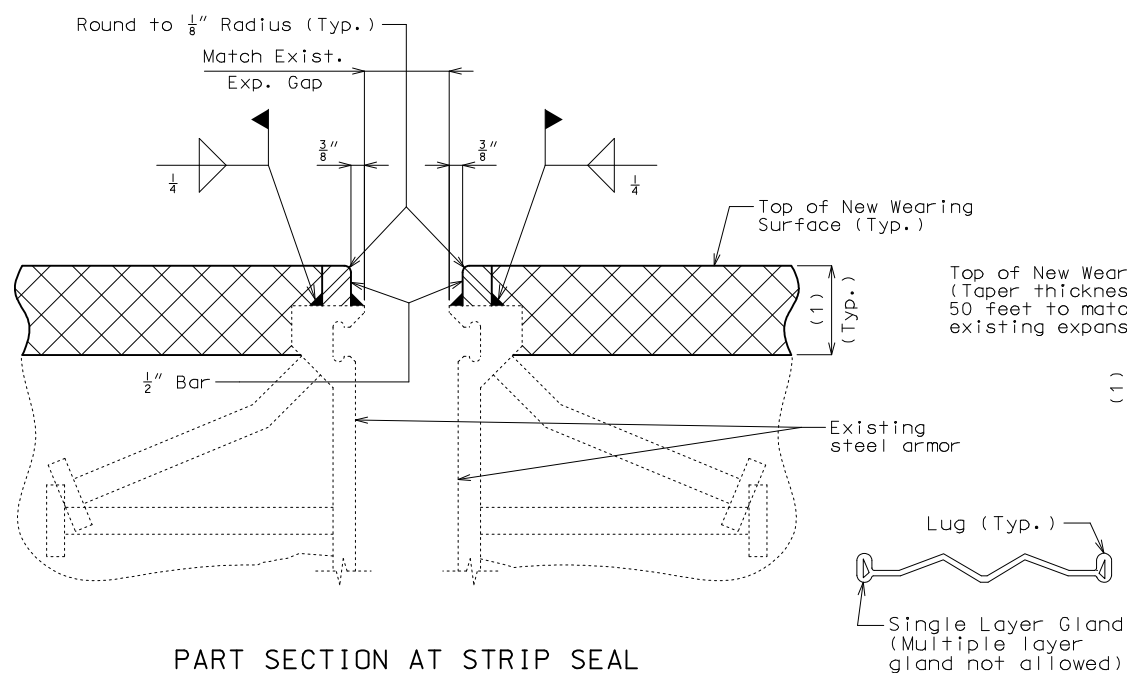
PART PLAN AT FINGER PLATE EXPANSION DEVICE
(Expansion Joint 1)
Top surface at ends of all teeth to be beveled 1/8" in 1 1/2" to permit free movement under new channel.



PLAN OF CHANNEL SPLICE
Splice to be at centerline roadway for two lane bridges

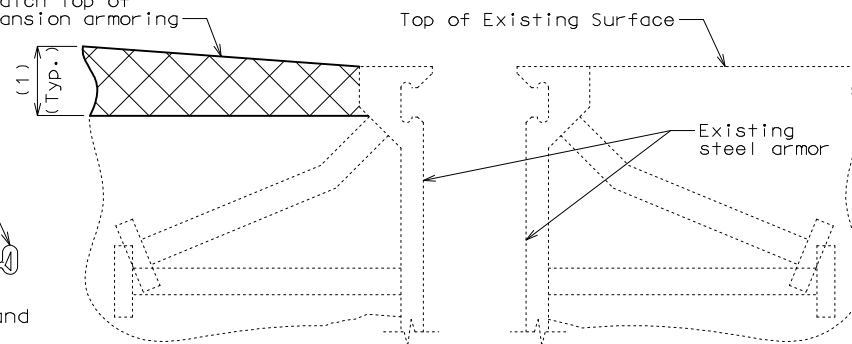


ELEVATION OF CHANNEL SPLICE



PART SECTION AT STRIP SEAL EXPANSION DEVICE
(Expansion Joint 2)
(New strip seal gland not shown for clarity)

DETAIL OF GLAND
(Strip Seal Gland Size = 4")

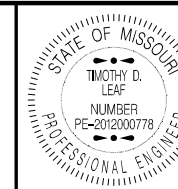


PART SECTION AT STRIP SEAL EXPANSION DEVICE
(Expansion Joint 3)
(New strip seal gland not shown for clarity)

Notes:

- Structural steel shall be in accordance with ASTM A709 Grade 36.
- The Steel Dams shall extend full roadway width between barriers.
- Steel Dams shall be fabricated and installed to the crown and grade of the roadway.
- Steel channels or bars on both sides of expansion joint, for full width of roadway, will be considered completely covered by the contract unit price for Steel Bar Dam.
- Apply coating of inorganic zinc primer 5.0 mils thickness to inside surface of channel steel.
- Shop drawings will not be required for steel bar dams.
- 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.
- The cost of removing strip seal glands at the expansion joints 2 & 3 will be considered completely covered by the contract unit price for Removal of Existing Expansion Joint Seal or Sealant.
- The cost of replacing strip seal glands at the expansion joints 2 & 3 will be considered completely covered by the contract unit price for Strip Seal.
- (1) For wearing surface thickness, see Sheet No. 1.
- (2) When this dimension exceeds 3" and a concrete wearing surface is used, tank weld a one inch bar chair to the plate or angle for each 3" of plate or angle to be covered by wearing surface.

DETAILS OF STEEL BAR DAMS AT EXPANSION JOINTS 1, 2 & 3



THIS SHEET HAS BEEN
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ELECTRONICALLY.

DATE PREPARED
10/4/2022

ROUTE I-670 STATE MO

DISTRICT BR SHEET NO. 4

COUNTY JACKSON

JOB NO. J413486

CONTRACT ID.

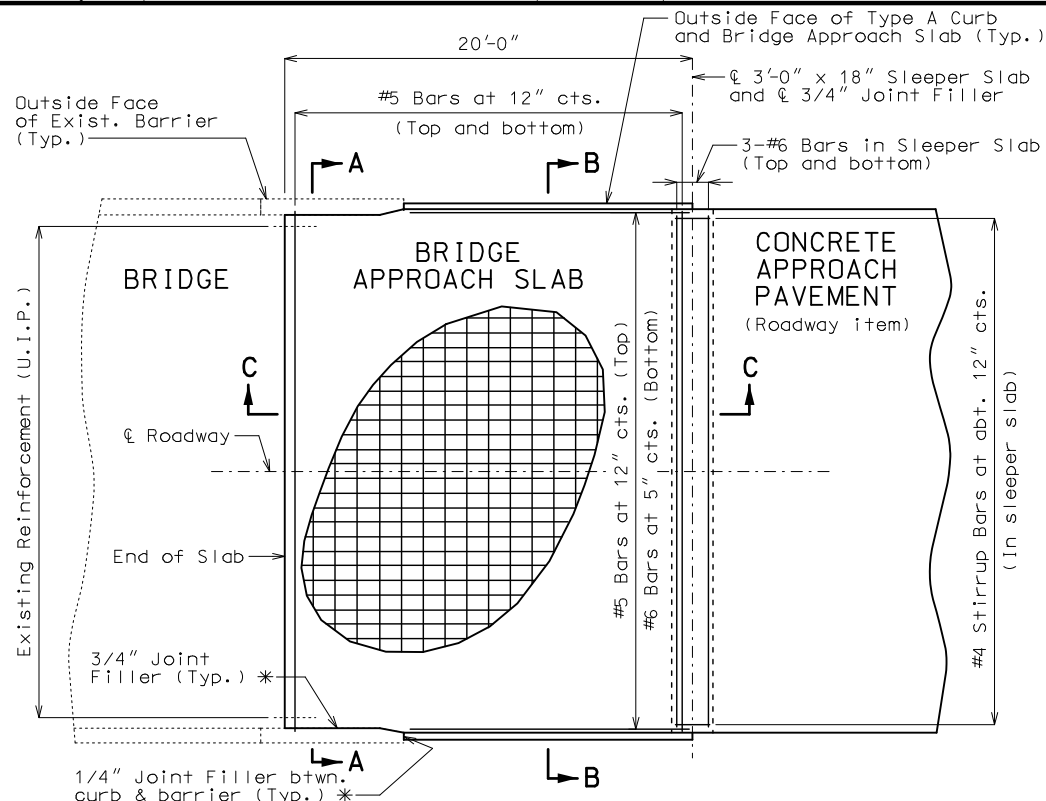
PROJECT NO.

BRIDGE NO. A31392

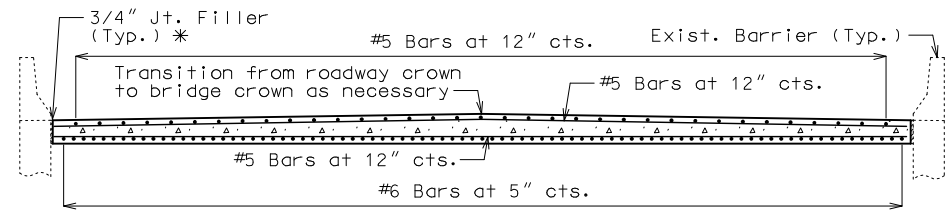
DATE	DESCRIPTION

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

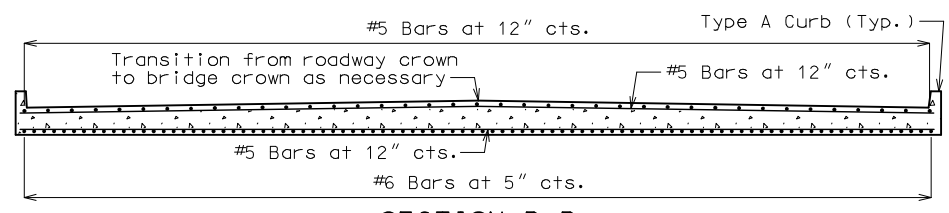
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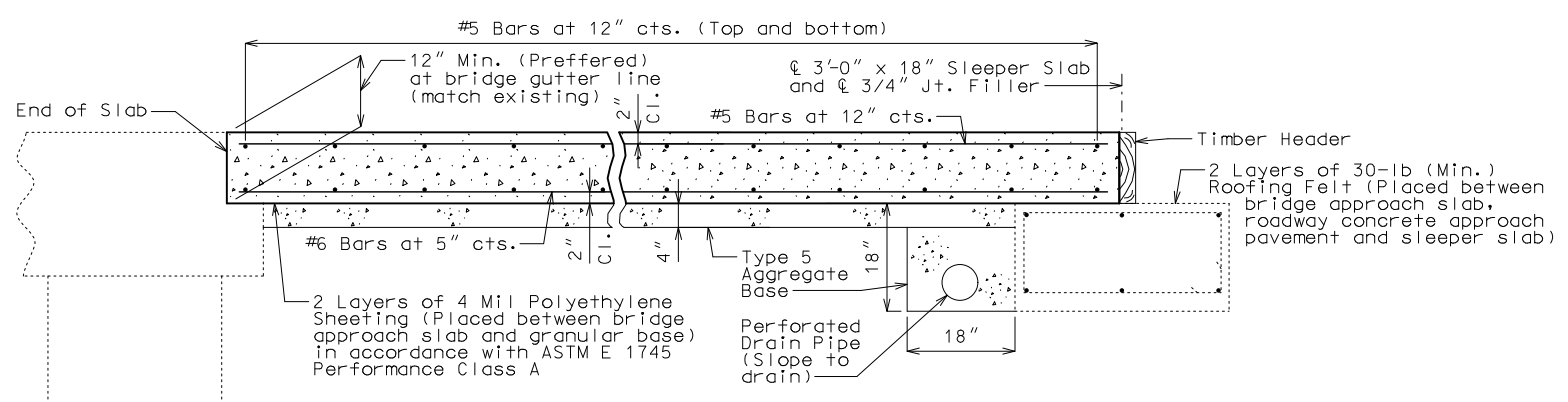
PART PLAN SHOWING REINFORCEMENT



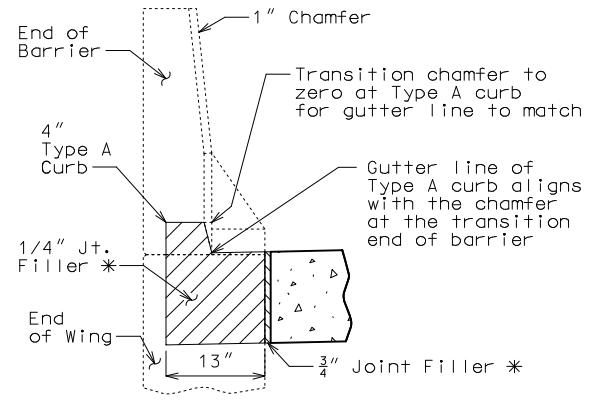
SECTION A-A



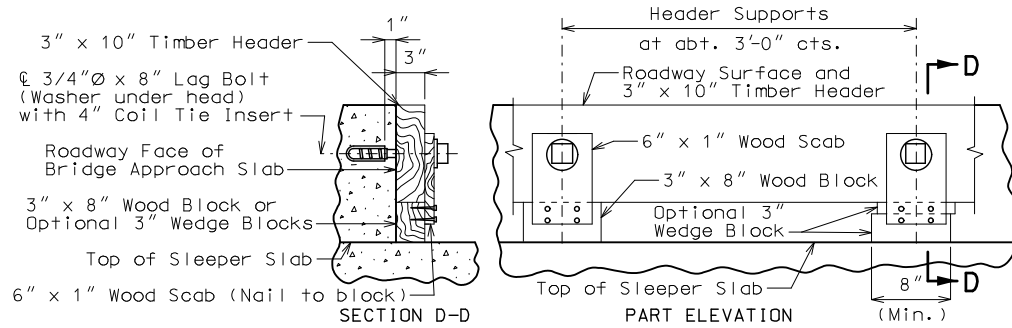
SECTION B-B



SECTION C-C



SECTION BETWEEN CURB AND BARRIER



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 $f_y = 60,000$ psi.

Drain pipe may be either 6" diameter corrugated metallic-coated pipe underdrain, 4" diameter corrugated 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 lap splicing the #5 bars 29" 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.

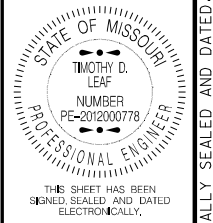
The contractor shall pour and satisfactorily finish the bridge slab before placing the bridge approach slab. Longitudinal construction joints in approach slab and sleeper slab shall be aligned with longitudinal construction joints in bridge slab.

For concrete approach pavement details, see roadway plans.

See Missouri Standard Plan 609.00 for details of Type A curb.

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, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Major) per square yard.

* 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.



DATE PREPARED	9/30/2022	
ROUTE	I-670	STATE MO
DISTRICT	BR	SHEET NO. 5
COUNTY	JACKSON	
JOB NO.	J413486	
CONTRACT ID.		
PROJECT NO.		
BRIDGE NO.	A31392	

DESCRIPTION	DATE



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BRIDGE APPROACH SLAB (MAJOR)

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