

A.A.D.T. - 2026 = 1,128
A.A.D.T. - 2046 = 1,247
D.H.V. = 9%
T = 13%
V (MO) = 55 M.P.H.
V (AR) = 45 M.P.H.

FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

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

NOTE: DASHED OR OPEN SYMBOLS INDICATE
EXISTING FEATURES

KEY MAP
LOCATION OF DUNKLIN COUNTY



BEGIN PROJECT
STA 50+47.97

PROJECT LOCATION

GRADING, DRAINAGE, PAVING AND
REPLACEMENT OF BRIDGE H0927 OVER
THE ST FRANCIS RIVER

END PROJECT
STA 16+84.17

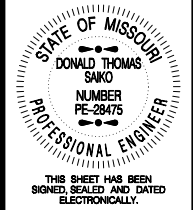


INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET -----	1
TYPICAL SECTIONS (TS) (01 SHEET)---	2
QUANTITIES (QU) (03 SHEETS)-----	3
PLAN-PROFILE (PP)-----	4-5
REFERENCE POINTS (RP)-----	6
COORDINATE POINTS (CP)-----	7
SPECIAL SHEETS (SS)-----	8-9
TRAFFIC CONTROL SHEETS (TC)-----	10-13
EROSION CONTROL SHEETS (EC)-----	14-15
SIGNING (SN)-----	16-22
CROSS SECTIONS (XS)-----	1-8
BRIDGE DRAWINGS (B)	
A9436-----	1-61

LENGTH OF PROJECT

BEGINNING OF PROJECT	STA.	50+47.97
END OF PROJECT	STA.	16+84.17
APPARENT LENGTH:		-3,363.80 FEET
EQUATIONS AND EXCEPTIONS:		
EQ STA 52+90.81 BK=		
STA 1+11.00 AH		5,179.81 FEET
TOTAL CORRECTIONS	5,179.81 FEET	
NET LENGTH OF PROJECT	1,816.01 FEET	
STATE LENGTH	0.344 MILES	
FOR INFORMATION ONLY		
ESTIMATED DISTURBED ACRES	1 ACRE	



DATE PREPARED	
7/8/2025	
ROUTE	STATE
62	MO
DISTRICT	SHEET NO.
SE	1
COUNTY	
DUNKLIN	
JOB NO.	
JSE0155	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

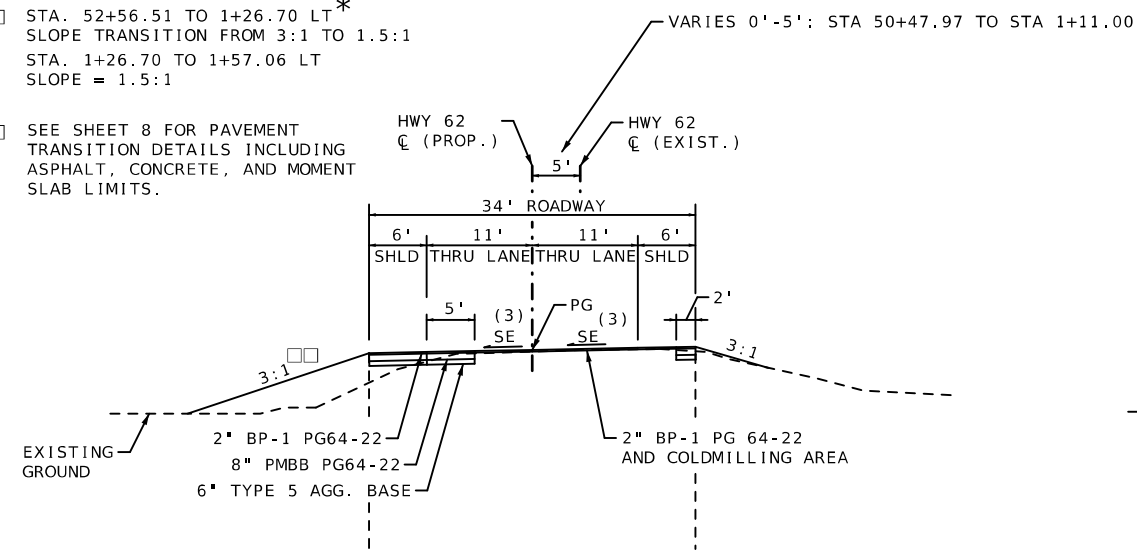
GARVER, LLC.
75509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



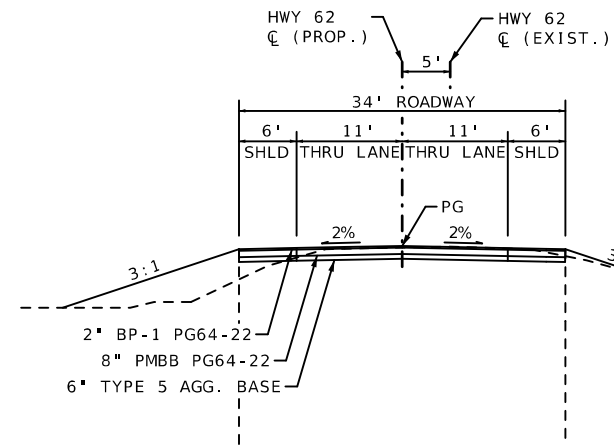
□ STA. 52+17.83 TO 1+30.00 RT*
SLOPE = 3:1. NO ROCK BLANKET.
STA. 15+00.00 TO 15+83.05 LT
SLOPE = 3:1. NO ROCK BLANKET.

□□ STA. 52+56.51 TO 1+26.70 LT*
SLOPE TRANSITION FROM 3:1 TO 1.5:1
STA. 1+26.70 TO 1+57.06 LT
SLOPE = 1.5:1

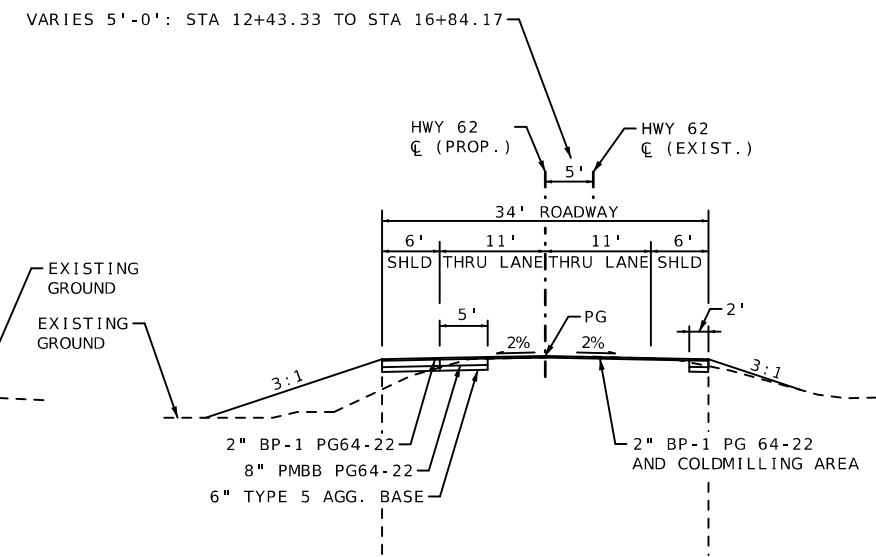
SEE SHEET 8 FOR PAVEMENT
TRANSITION DETAILS INCLUDING
ASPHALT, CONCRETE, AND MOMENT
SLAB LIMITS.



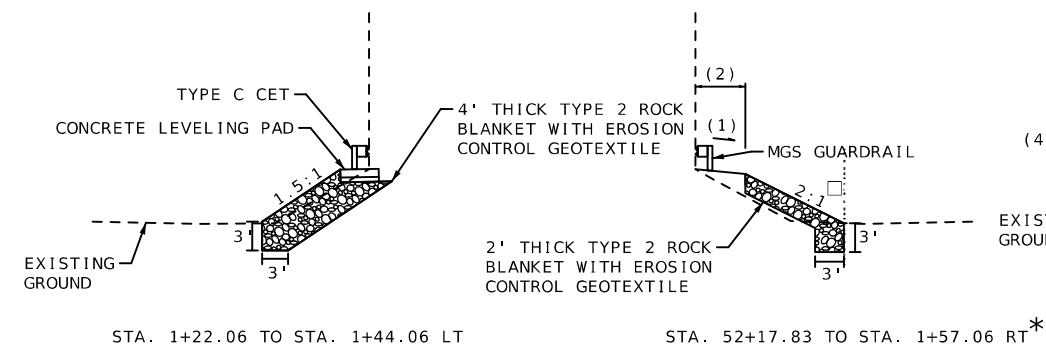
STA. 50+47.97 TO STA. 1+32.06*



STA. 1+32.06 TO STA. 1+57.06
STA. 12+64.14 TO STA. 12+89.14

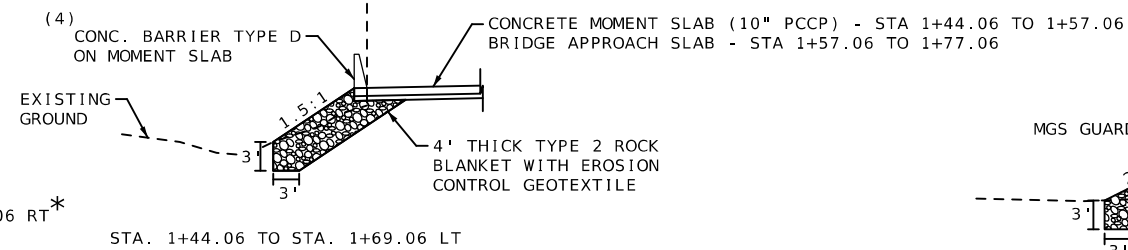


STA. 12+89.14 TO STA. 16+84.17

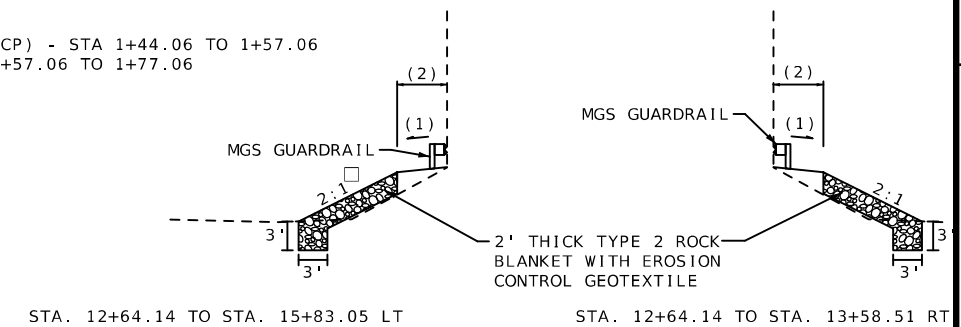


STA. 50+47.97 TO STA. 1+76.56*

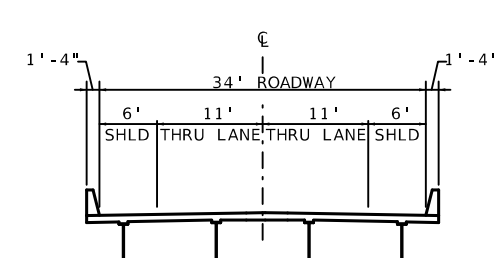
STA. 12+44.64 TO STA. 16+84.17



STA. 1+66.43 TO STA. 12+55.14

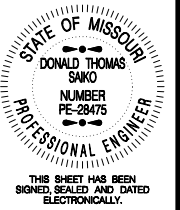


STA. 1+76.56 TO STA. 12+44.64



- (1) 10:1 OR FLATTER
- (2) WIDENING FOR GUARDRAIL WIDTH VARIES
SEE STD PLANS 606.81
- (3) REFER TO SUPERELEVATION DIAGRAM ON
PROFILE FOR CROSS SLOPE INFORMATION
IN SECTION ON CURVE
- (4) SEE STD PLANS 617.10

TYPICAL SECTIONS
SHEET 1 OF 1



DATE PREPARED

7 / 10 / 2025

ROUTE	STATE
52	MO

52	MO
MO	52

SHEET NO. 2

DE	2
COUNTY	

DUNKLIN

JOB NO.

USE0155

CONTRACT ID.

PROJECT NO. _____

PROJECT NO.

BRIDGE NO.

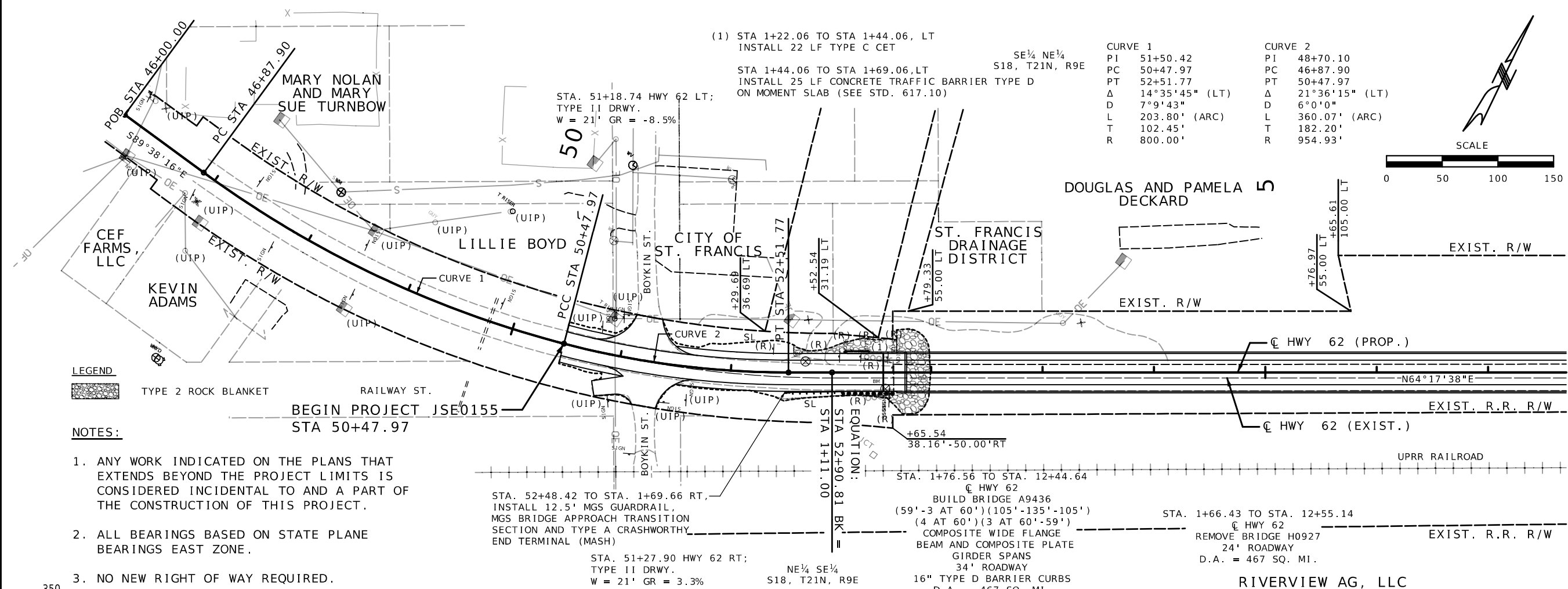
DESCRIPTION

DATE _____

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

BARVER, LLC.
757509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090





BENCHMARKS

EASTERN ZONE
NAD83 HORIZONTAL DATUM
NAVD88 VERTICAL DATUM
PROJECTION FACTOR: 0.99993647
GRID FACTOR: 1.000063534

B.M.1 - C HWY 62 (EXISTING)
STA. 52+67.12, 14.60' LT
ELEV. = 303.32
MAG. NAIL IN ASPH. SHOULDER

B.M.2 - C HWY 62 (EXISTING)
STA. 1+58.89, 9.70' RT
ELEV. = 306.02
TOP OF CONC. CURB
SW CORNER BRIDGE

RIGHT EOP & EOS
+47.97
+4.37%
(MATCH EXISTING)

LEFT EOP & EOS
+47.97
-4.34%
(MATCH EXISTING)

RIGHT EOP & EOS
+07.97
+2.00%

LEFT EOP & EOS
+07.97
-2.00%

PROFILE GRADE
AXIS OF ROTATION

LEFT AND RIGHT EOP & EOS
+54.66
+2.00%

+74.85
-2.00%

K = 122
100.00' V.C.

STA 52+90.81 (BK) =
STA 1+11.00 (AH)

VPI 50+47.97
EL 298.88

VPC 51+00.00
EL 299.78

VPT 52+00.00
EL 301.91

VPI 51+50.00
EL 300.64

VPC 3+00.00
EL 309.01

VPI 5+00.00
EL 314.09

VHR 6+01.97
EL 312.85

VPT 7+00.00
EL 312.44

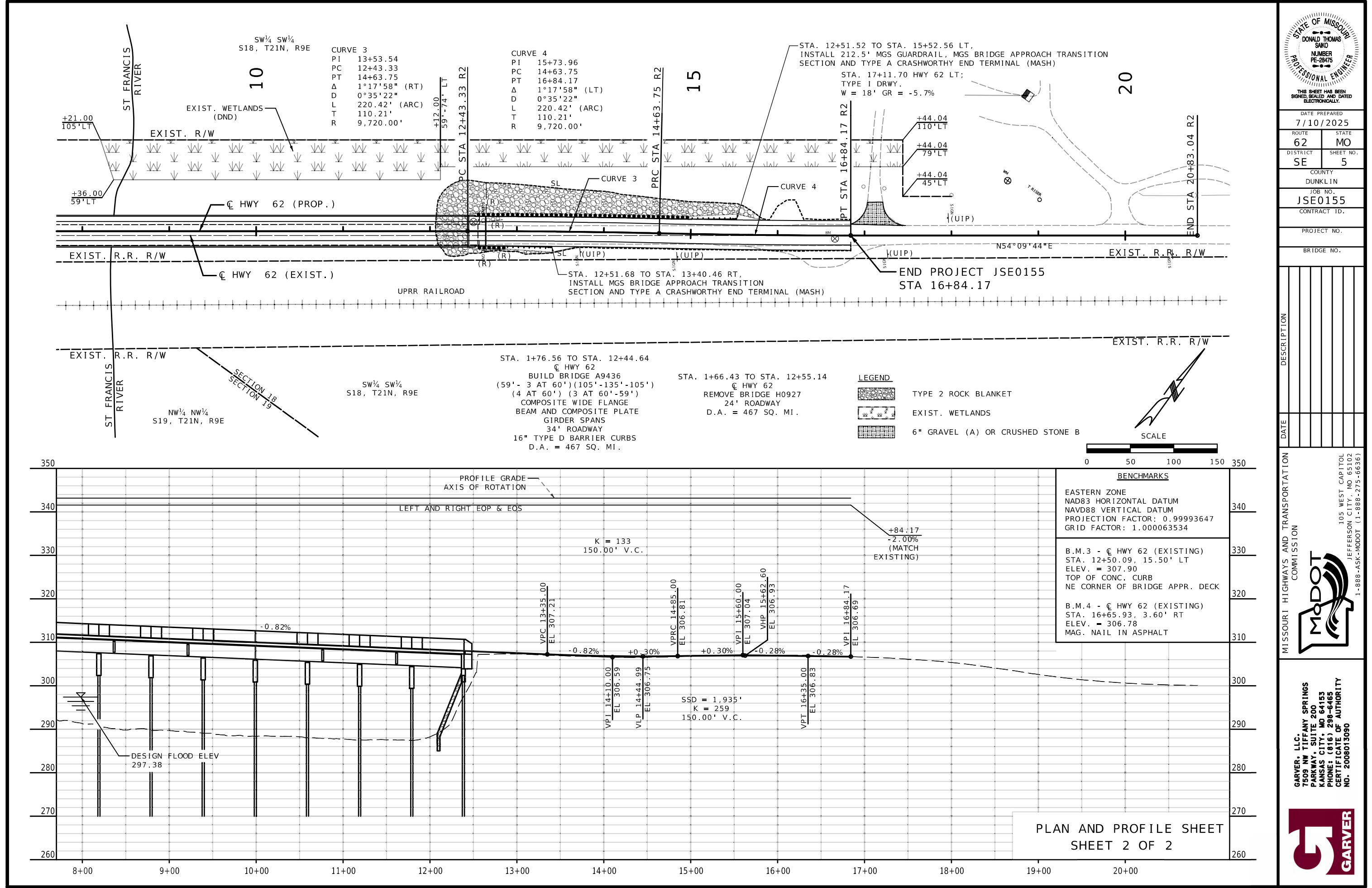
EXIST. GROUND

DESIGN FLOOD ELEV
297.38

SSD = 520'
K = 119
400.00' V.C.

PLAN AND PROFILE SHEET
SHEET 1 OF 2

PLAN AND PROFILE SHEET
SHEET 1 OF 2



DATE PREPARED 7/10/2025	
ROUTE 62	STATE MO
DISTRICT SE	SHEET NO. 5
COUNTY DUNKLIN	
JOB NO. JSE0155	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

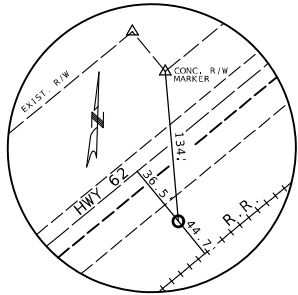
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

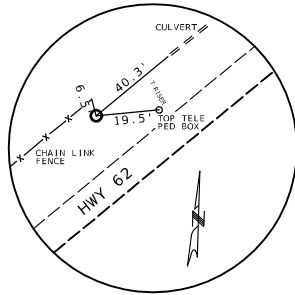
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

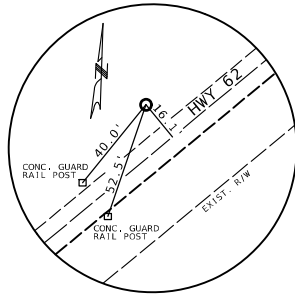




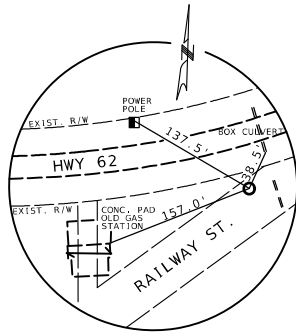
CONTROL POINT #1
SET 5/8" REBAR W/ ALUM. CAP
N: 227357.44
E: 927640.73
ELEV. 305.09'
C HWY 62
STA. 16+24.13, 35.53' RT



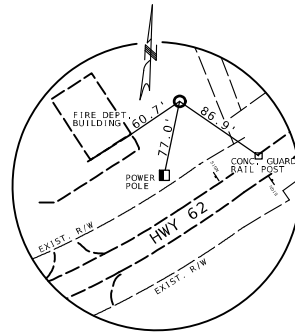
CONTROL POINT #2
SET 5/8" REBAR W/ ALUM. CAP
N: 227712.03
E: 928003.46
ELEV. 298.42'
C HWY 62
STA. 21+25.57, 39.75' LT



CONTROL POINT #3
SET 5/8" REBAR W/ ALUM. CAP
N: 227224.37
E: 927366.09
ELEV. 305.97'
C HWY 62
STA. 13+23.20, 12.91' LT



CONTROL POINT #4
SET 5/8" REBAR W/ ALUM. CAP
N: 226298.12
E: 926104.59
ELEV. 247.64'
C HWY 62
STA. 49+51.67, 58.08' RT



CONTROL POINT #5
SET 5/8" REBAR W/ ALUM. CAP
N: 226598.39
E: 926349.91
ELEV. 301.01'
C HWY 62
STA. 1+33.01, 100.08' LT



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

DATE PREPARED
7/8/2025

ROUTE
62

STATE
MO

DISTRICT
SE

SHEET NO.
6

COUNTY
DUNKLIN

JOB NO.
JSE0155

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)

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

REFERENCE POINT SHEET
SHEET 1 OF 1

GARVER

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

PROJECT COORDINATE INFORMATION

COORDINATE SYSTEM	MODIFIED MISSOURI STATE PLANE SYSTEM OF 1983
HORIZONTAL DATUM	NAD 83 (2011)
VERTICAL DATUM	NAVD 88
GEOID MODEL	GEOID 18
ELEVATIONS DETERMINED BY	GPS OBSERVATION AND DIFFERENTIAL LEVELING
PROJECT PROJECTION FACTOR	0.99993647
COORDINATE SYSTEM	MISSOURI COORDINATE SYSTEM OF 1983
CONTROL STATION	MO KE
DESIGNATION	MODOT KENNET CORS ARP
CORS_ID	MO KE
PID	DL 6892
LATITUDE	36°13'17.10465"N
LONGITUDE	90°04'24.46779"N
NORTHING (M)	43143.1560
EASTING (M)	288347.8830
ZONE	MISSOURI EAST 2401
PROJECT AVERAGE GRID FACTOR	1.000063534

COORDINATE POINT LISTING								
SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION	GPK POINT ID
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)		
PROJECT CONTROL POINTS								
5	16+24.13	HWY 62	35.53 RT	227357.4440	927640.7340	305.09	CONTROL POINT 1	
5	21+25.57	HWY 62	39.75 LT	227712.0340	928003.4580	298.42	CONTROL POINT 2	
5	13+23.20	HWY 62	12.91 LT	227224.3650	927366.0890	305.97	CONTROL POINT 3	
4	49+51.67	HWY 62	58.08 RT	226298.1240	926104.5910	247.64	CONTROL POINT 4	
4	1+33.01	HWY 62	100.08 LT	226598.3920	926349.9050	301.01	CONTROL POINT 5	
4	52+67.12	HWY 62	14.60 LT	226498.4951	926365.6194	303.32	BENCHMARK 1	
4	1+58.89	HWY 62	9.70 RT	226520.4928	926438.0932	306.02	BENCHMARK 2	
5	12+50.09	HWY 62	15.50 LT	227179.8111	927307.9506	307.90	BENCHMARK 3	
5	16+65.93	HWY 62	3.60 RT	227407.7983	927656.2458	306.78	BENCHMARK 4	
ALIGNMENTS								
-	46+87.90	HWY 62	-	226319.5469	925828.4494		PC	
4	48+70.10	HWY 62	16.80 RT	226319.2159	926012.7335		PI	
4	50+47.97	HWY 62	-	226384.5504	926180.4079		PCC (BEGIN PROJECT)	
4	51+50.42	HWY 62	6.46 RT	226421.8572	926276.4100		PI	
4	52+51.77	HWY 62	-	226481.5116	926359.0124		PT	
4	52+90.81	HWY 62	-	226504.3705	926390.6631		STA. BK	
4	1+11.00	HWY 62	-	226504.3705	926390.6631		STA. AH	
5	12+43.33	HWY 62	-	227167.3401	927308.6168		PC	
5	13+53.54	HWY 62	0.63 LT	227346.1221	927562.1216		PI	
5	14+63.75	HWY 62	-	227294.5432	927489.0244		PRC	
5	15+73.96	HWY 62	0.63 RT	227356.8441	927579.5455		PI	
5	16+84.17	HWY 62	-	227421.6799	927668.9420		PT (END PROJECT)	

COORDINATE POINT SHEET

SHEET 1 OF 1

STATE OF MISSOURI

DONALD THOMAS

SAKO

NUMBER

PE-28475

PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED

7/8/2025

ROUTE

62

STATE

MO

DISTRICT

SE

SHEET NO.

7

COUNTY

DUNKLIN

JOB NO.

JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

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

GARVER, LLC.

76309 NW TIFFANY SPRINGS

PAWNBAY, SUITE 2200

KANSAS CITY, MO 64153

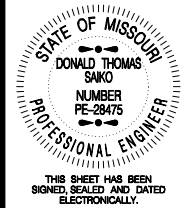
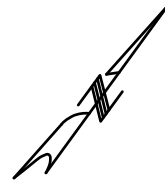
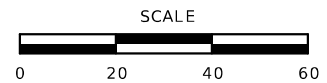
PHONE: (816) 298-6865

CERTIFICATE OF AUTHORITY

NO. 220800 ED090

GARVER

- 2" PG 64-22 (BP-1)
- TYPE 2 ROCK BLANKET
- CONCRETE BRIDGE APPROACH SLAB
- CONCRETE MOMENT SLAB (10" PCCP)



DATE PREPARED
7/10/2025

ROUTE 62 STATE MO

DISTRICT SE SHEET NO. 8

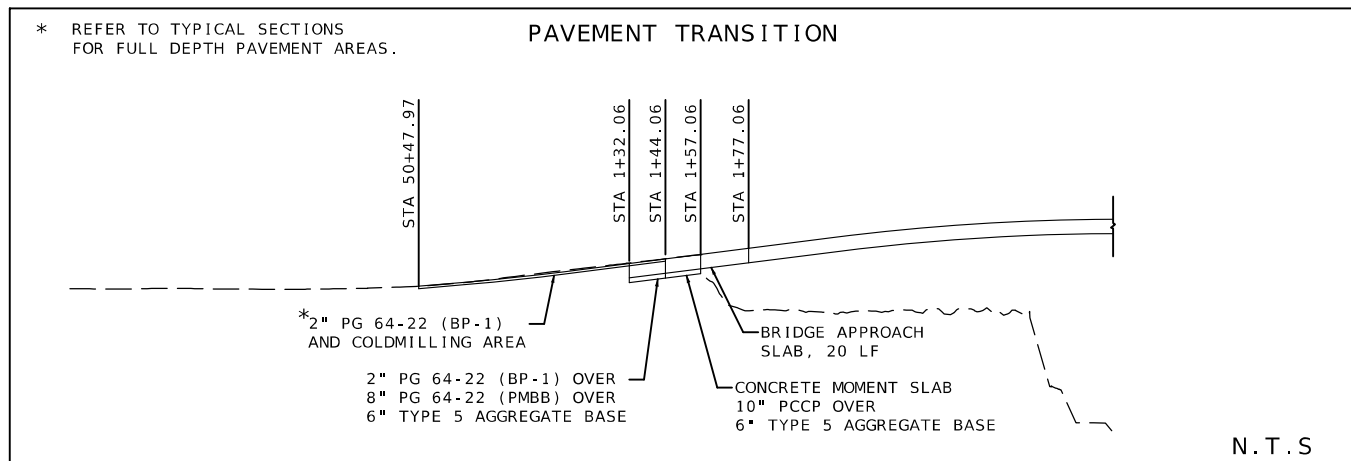
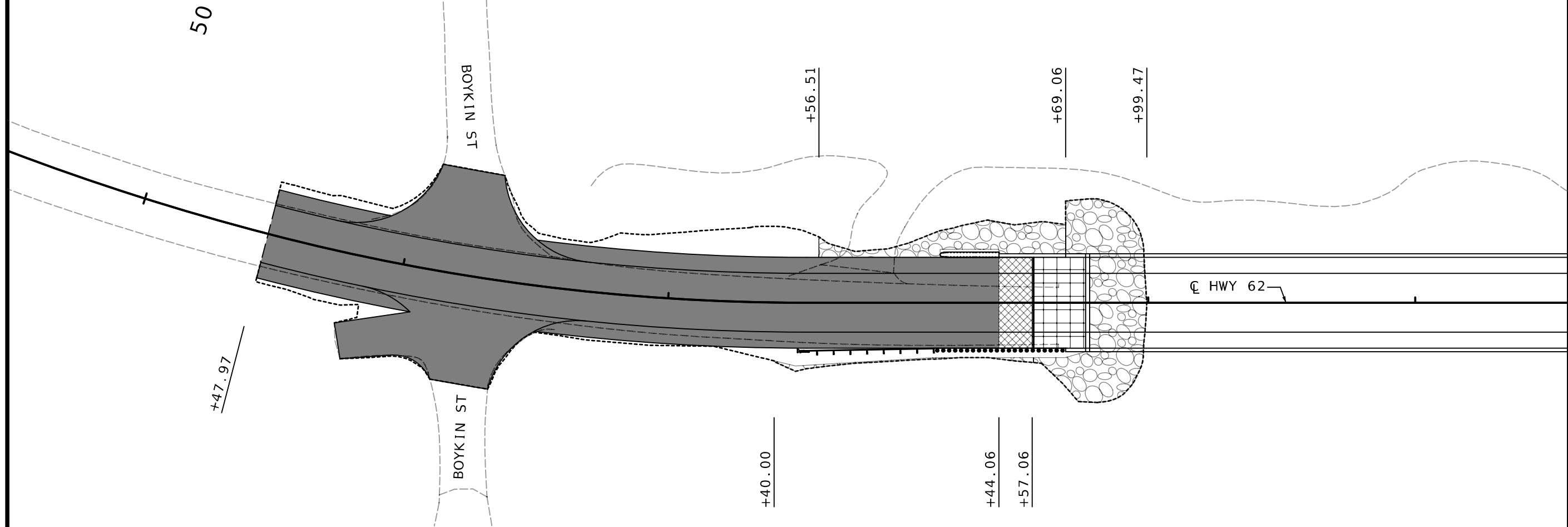
COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.



SPECIAL SHEET
PAVING DETAILS
SHEET 1 OF 2

DATE	DESCRIPTION

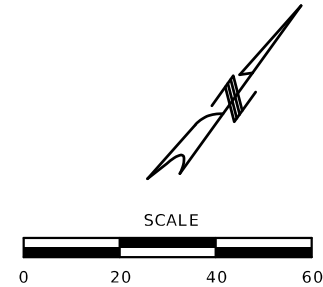
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



- 2" PG 64-22 (BP-1)
- TYPE 2 ROCK BLANKET
- CONCRETE BRIDGE APPROACH SLAB
- 6" GRAVEL (A) OR CRUSHED STONE B



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

DATE PREPARED
7/10/2025

ROUTE STATE
62 MO

DISTRICT SHEET NO.
SE 9

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

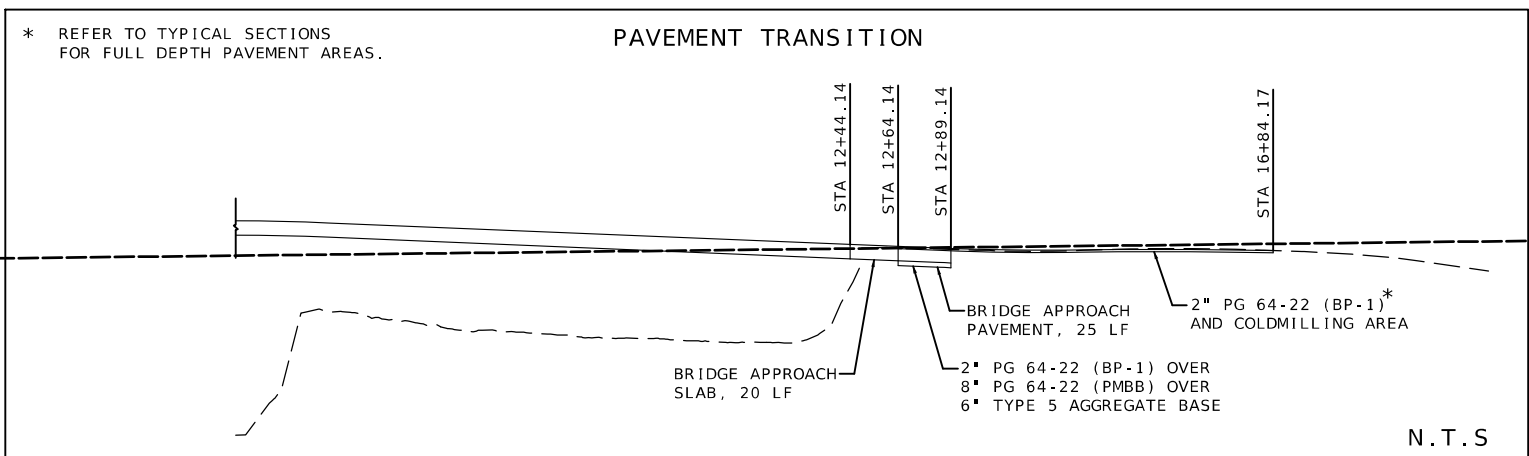
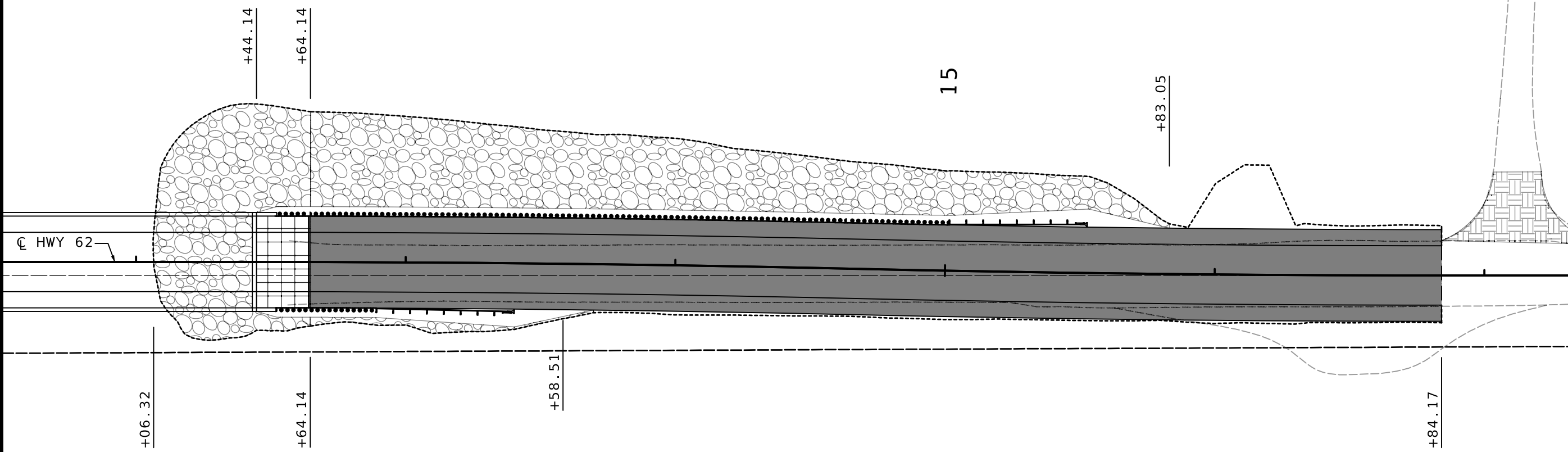
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

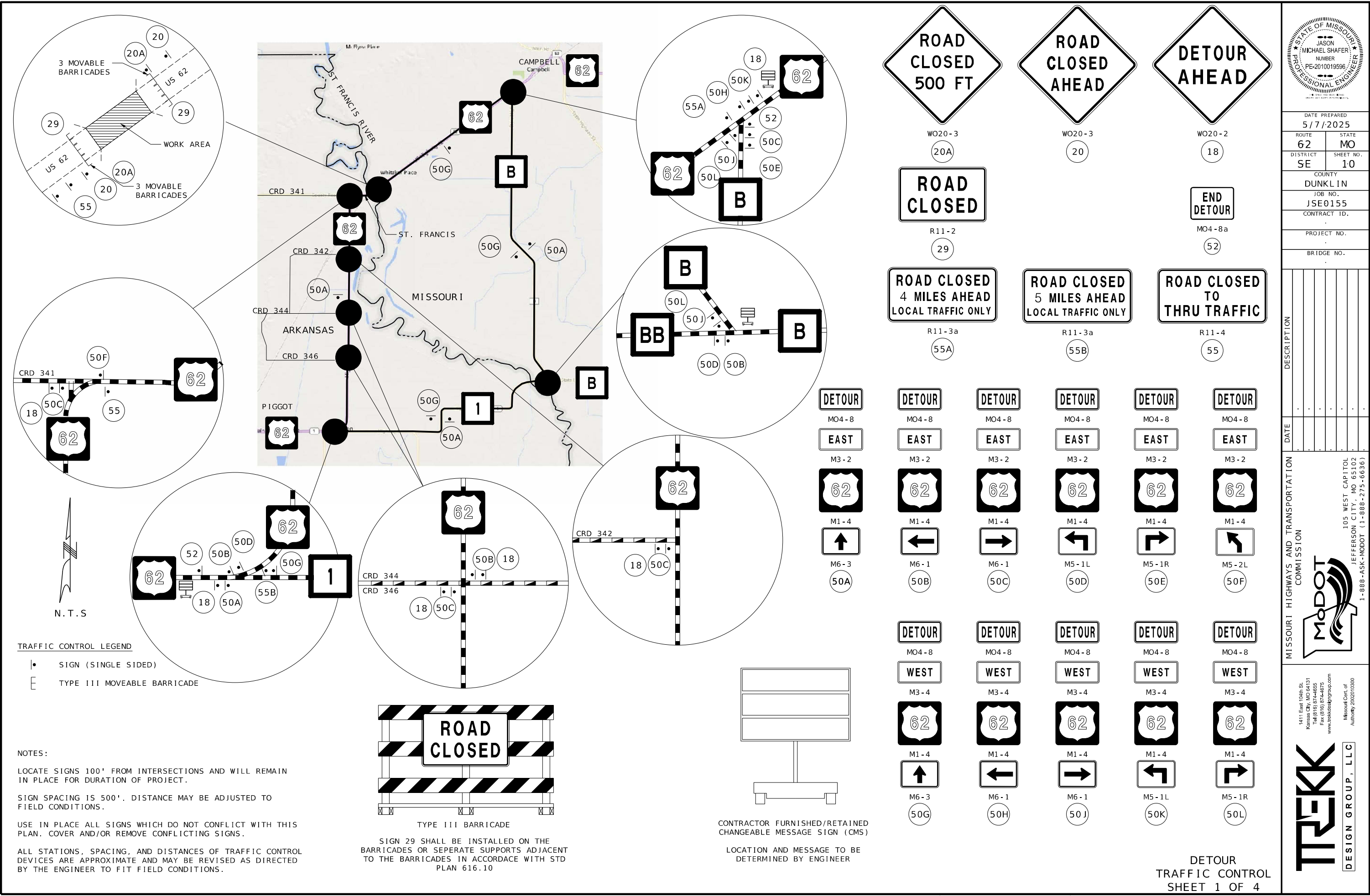


105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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CERTIFICATE OF AUTHORITY
NO. 2008013090



SPECIAL SHEET
PAVING DETAILS
SHEET 2 OF 2



TRAFFIC CONTROL LEGEND

• SIGN (SINGLE SIDED)
E TYPE III MOVEABLE BARRICADE

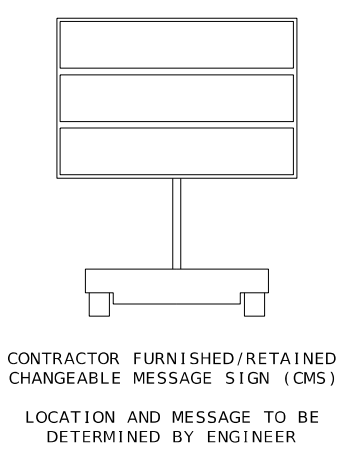
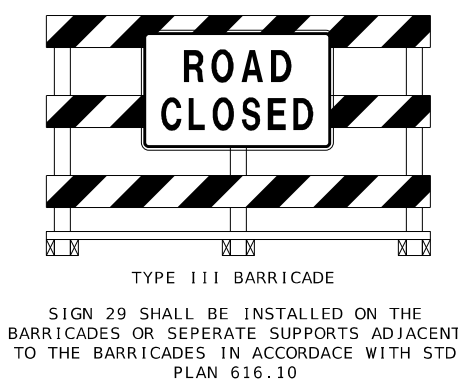
NOTES:

LOCATE SIGNS 100' FROM INTERSECTIONS AND WILL REMAIN IN PLACE FOR DURATION OF PROJECT.

SIGN SPACING IS 500'. DISTANCE MAY BE ADJUSTED TO FIELD CONDITIONS.

USE IN PLACE ALL SIGNS WHICH DO NOT CONFLICT WITH THIS PLAN. COVER AND/OR REMOVE CONFLICTING SIGNS.

ALL STATIONS, SPACING, AND DISTANCES OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE AND MAY BE REVISED AS DIRECTED BY THE ENGINEER TO FIT FIELD CONDITIONS.



ROAD CLOSED
500 FT

WO20-3
20A

ROAD CLOSED

R11-2
29

ROAD CLOSED
4 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3a
55A

ROAD CLOSED
AHEAD

WO20-3
20

ROAD CLOSED
5 MILES AHEAD
LOCAL TRAFFIC ONLY

R11-3a
55B

DETOUR AHEAD

WO20-2
18

END DETOUR

MO4-8a
52

ROAD CLOSED
TO THRU TRAFFIC

R11-4
55

DETOUR
MO4-8
EAST
M3-2
62
M1-4
M6-3
50A

DETOUR
MO4-8
EAST
M3-2
62
M1-4
M6-1
50B

DETOUR
MO4-8
EAST
M3-2
62
M1-4
M6-1
50C

DETOUR
MO4-8
EAST
M3-2
62
M1-4
M5-1L
50D

DETOUR
MO4-8
EAST
M3-2
62
M1-4
M5-1R
50E

DETOUR
MO4-8
EAST
M3-2
62
M1-4
M5-2L
50F

DETOUR
MO4-8
WEST
M3-4
62
M1-4
M6-3
50G

DETOUR
MO4-8
WEST
M3-4
62
M1-4
M6-1
50H

DETOUR
MO4-8
WEST
M3-4
62
M1-4
M6-1
50J

DETOUR
MO4-8
WEST
M3-4
62
M1-4
M5-1L
50K

DETOUR
MO4-8
WEST
M3-4
62
M1-4
M5-1R
50L

DETOUR
TRAFFIC CONTROL
SHEET 1 OF 4

STATE OF MISSOURI
JASON MICHAEL SHAFER
NUMBER PE-2010019596
PROFESSIONAL ENGINEER

DATE PREPARED 5/7/2025
ROUTE 62 STATE MO
DISTRICT SE SHEET NO. 10
COUNTY DUNKLIN
JOB NO. JSE0155
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

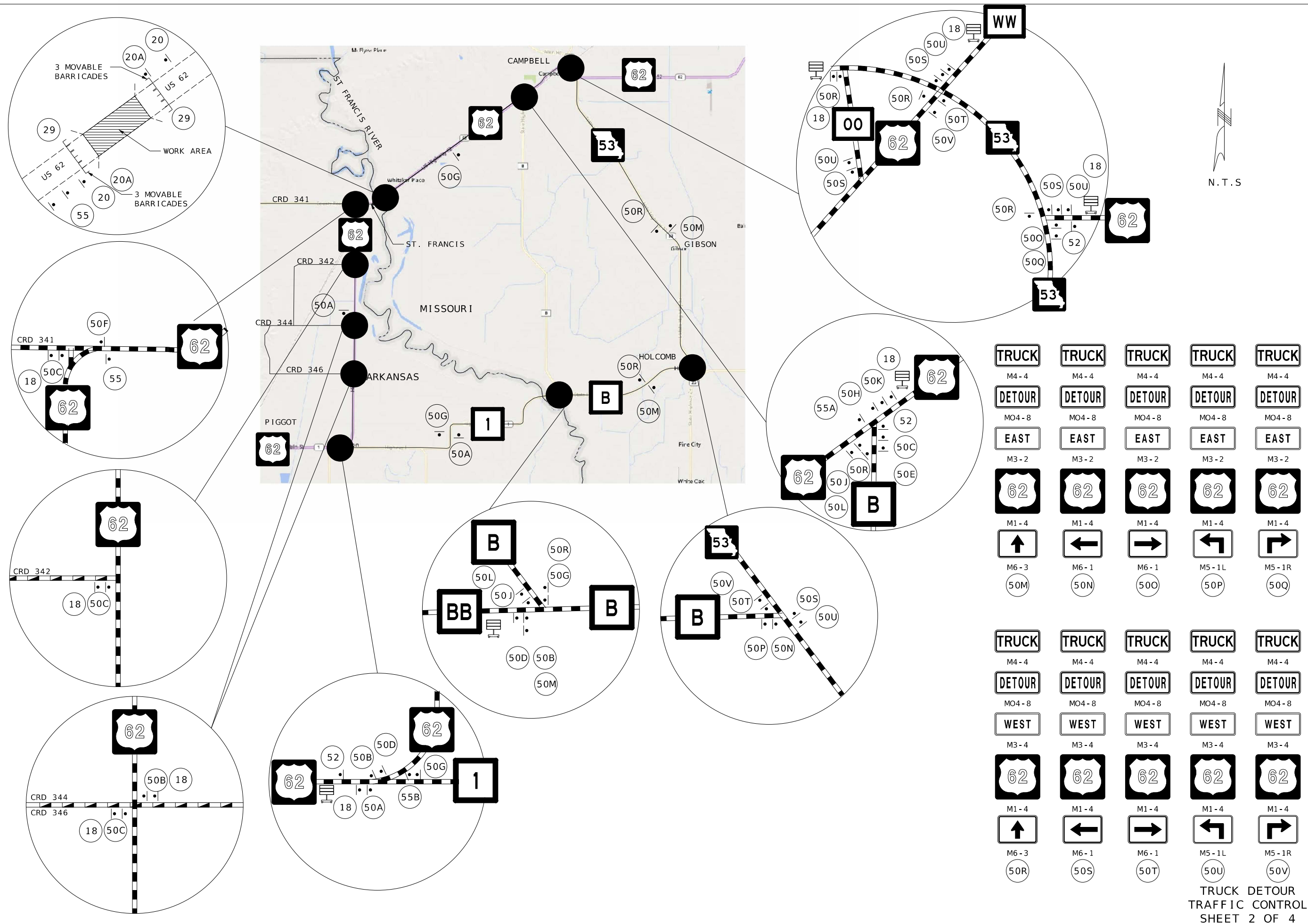
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

1411 East 104th St.
Kansas City, MO 64131
Tel (816) 874-6855
Fax (816) 874-6075
www.trekdesigngroup.com
Missouri Dept. of
Transportation
Authority 202510300

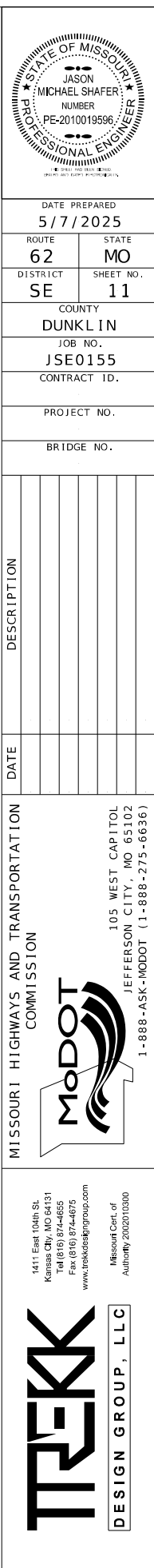
TREKK

DESIGN GROUP, LLC

c:\projectwise\garver-pw.bentley.com_garver-pw-01\dms81924\010_TC_01_JSE0155_i1000.dgn 10:25:41 AM 5/7/2025

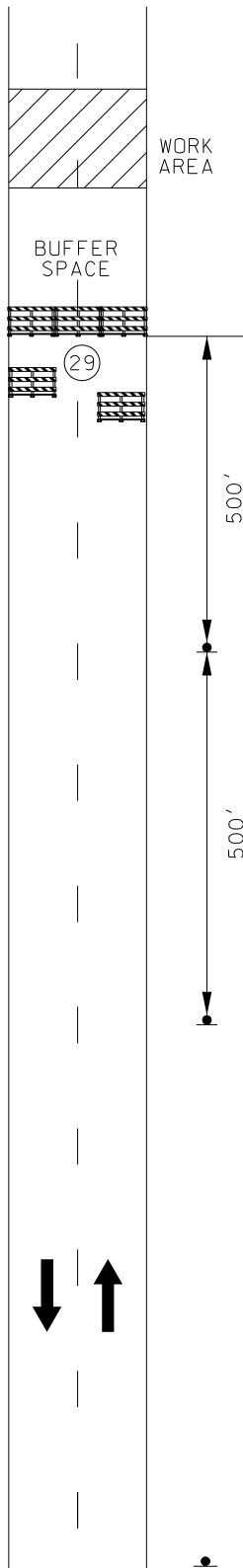


TRUCK DETOUR
TRAFFIC CONTROL
SHEET 2 OF 4





R11-2
(29)



ROAD CLOSURE
ON TWO LANE ROAD



W020-3



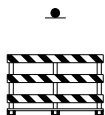
W020-3



R11-3a



R11-4



SIGN
TYPE III
MOVEABLE BARRICADE

NOTES:

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-FOET 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 OFFSET TO FACILITATE ACCESS FOR WORK VEHICLES, LOCAL TRAFFIC, ETC.

TRAFFIC CONTROL SHOULD BE REMOVED AS SOON AS PRACTICAL AFTER CONDITION FOR THE CLOSURE NO LONGER EXISTS.

SEE STANDARD PLAN 616.10 FOR USE OF THE BARRICADES AND SIGNS.

THE OPPOSITE SIDE OF THE WORK SPACE WILL HAVE THE SAME ROADWAY/BRIDGE CLOSURE SET-UP.

EXTRA BARRICADES TO BE USED FOR CLOSURE AT BOYKIN STREET AS DIRECTED BY ENGINEER.

TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES						
SPEED (P) MPH	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MINIMUM TAPER SHOULDER (T1)	MAXIMUM CHANNELIZER SPACING	
	10 FT	11 FT	12 FT		THROUGH TAPER	THROUGH WORK AREA
0-35	205 FT	225 FT	245 FT	70	35 FT	50 FT
40-45	450 FT	495 FT	540 FT	150	40 FT	100 FT
50-55	550 FT	605 FT	660 FT	185	50 FT	100 FT
60-70	700 FT	770 FT	840 FT	235	60 FT	100 FT

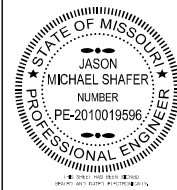
- (1) SHOULDER TAPER LENGTH BASED ON 10' (STANDARD SHOULDER WIDTH) OFFSETS.
- (2) TAPER LENGTHS MA BE ADJUSTED TO ACCOMMODATE CROSSROADS, CURVES, RAMPS, INTERSECTIONS, OR OTHER GEOMETRIC FEATURES.
- (3) SPACING MAY BE REDUCED TO DISCOURAGE TRAFFIC ENCROACHMENT.
- (4) SPACING REDUCED TO ONE-HALF AT INTERSECTIONS.
- (5) SPACING MAY BE REDUCED TO ONE-HALF AT INTERSECTIONS.

SIGN SPACING FOR ADVANCE SIGN SERIES (1) (2)		
SPEED (P) MPH	NON-DIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)
0-35	200 FT	200 FT
40-45	350 FT	500 FT
50-55	500 FT	1000 FT
60-70	SA-1000 FT, SB-1500 FT, SC-2640 FT **	

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

(2) SPACING MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.

TRAFFIC CONTROL
SHEET 3 OF 4

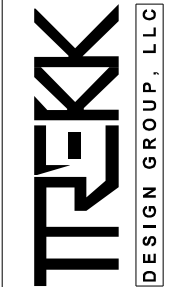


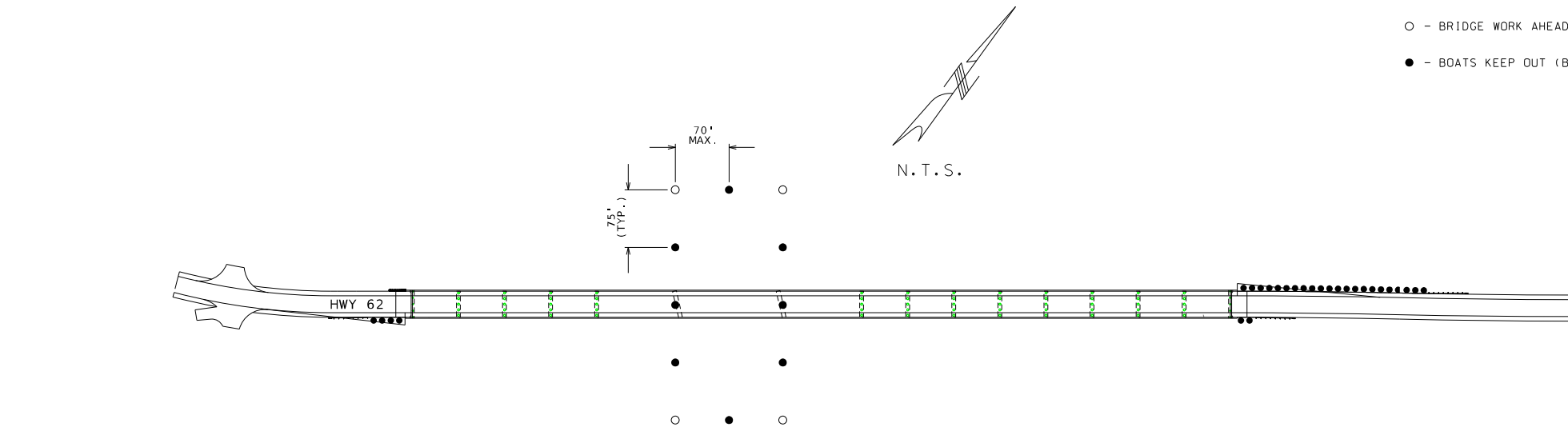
DATE PREPARED
5/7/2025
ROUTE 62 STATE MO
DISTRICT SE SHEET NO. 12
COUNTY DUNKLIN
JOB NO. JSE0155
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

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

1411 East 104th St.
Kansas City, MO 64131
Tel (816) 874-6555
Fax (816) 874-6075
www.trekdesigngroup.com
Missouri Seal of
Authority 202510300





51 POUND ANCHOR
TACKLE PERMITTED

CONTROLLED AREA BUOY

("BOATS KEEP OUT")

(8 REQUIRED - ROADWAY ITEM)

SPECIAL SIGN ASSEMBLY
("BRIDGE WORK AHEAD")
W020-1
(4 REQUIRED - ROADWAY ITEM)

LEGEND

- - BRIDGE WORK AHEAD (SIGN)
- - BOATS KEEP OUT (BUOY)

GENERAL NOTES:

INFORMATION SHOWN IS SCHEMATIC ONLY. FINAL LOCATION
AND NUMBER OF SIGNS AND BUOYS IS SUBJECT TO APPROVAL
OF MISSOURI STATE WATER PATROL

THE DETAILS SHOWN ARE FOR BIDDING PURPOSES ONLY. ALL MATERIALS AND LABOR NECESSARY TO INSTALL AND REMOVE SIGNS SHALL BE INCIDENTAL TO OTHER ITEMS

THE CONTRACTOR IS RESPONSIBLE FOR BUOY MAINTENANCE
THROUGHOUT CONSTRUCTION AND FOR DETERMINING
ANTICIPATED WATER LEVELS DURING CONSTRUCTION. EACH
SIGN AND BUOY SHALL BE ANCHORED TO BOTTOM OF RIVER.

SIGNS SHALL BE DOUBLE FACED

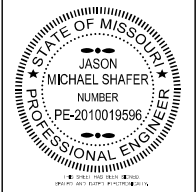
EACH SIGN SHALL BE EQUIPPED WITH TWO (2) FLASHING LIGHT UNITS WITH AMBER LENS. FLASHING LIGHT UNITS SHALL BE FURNISHED AND MAINTAINED BY THE CONTRACTOR

ALL LETTERING TO BE BLACK IN COLOR IN BLOCK FORM.

FOR OTHER INFORMATION AND LOCATION OF SIGNS AND BUOYS
SEE SPECIAL PROVISIONS.

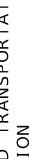
COLOR:
BACKGROUND - WHITE
LEGEND - BLACK
2" REFLECTIVE BAND AND SYMBOL - INTERNATIONAL
ORANGE

BOAT TRAFFIC
TRAFFIC CONTROL
SHEET 4 OF 4



DATE PREPARED	
5/7/2025	
ROUTE	STATE
62	MO
DISTRICT	SHEET NO.
SE	13
COUNTY	
DUNKLIN	
JOB NO.	
JSE0155	
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)

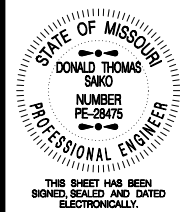
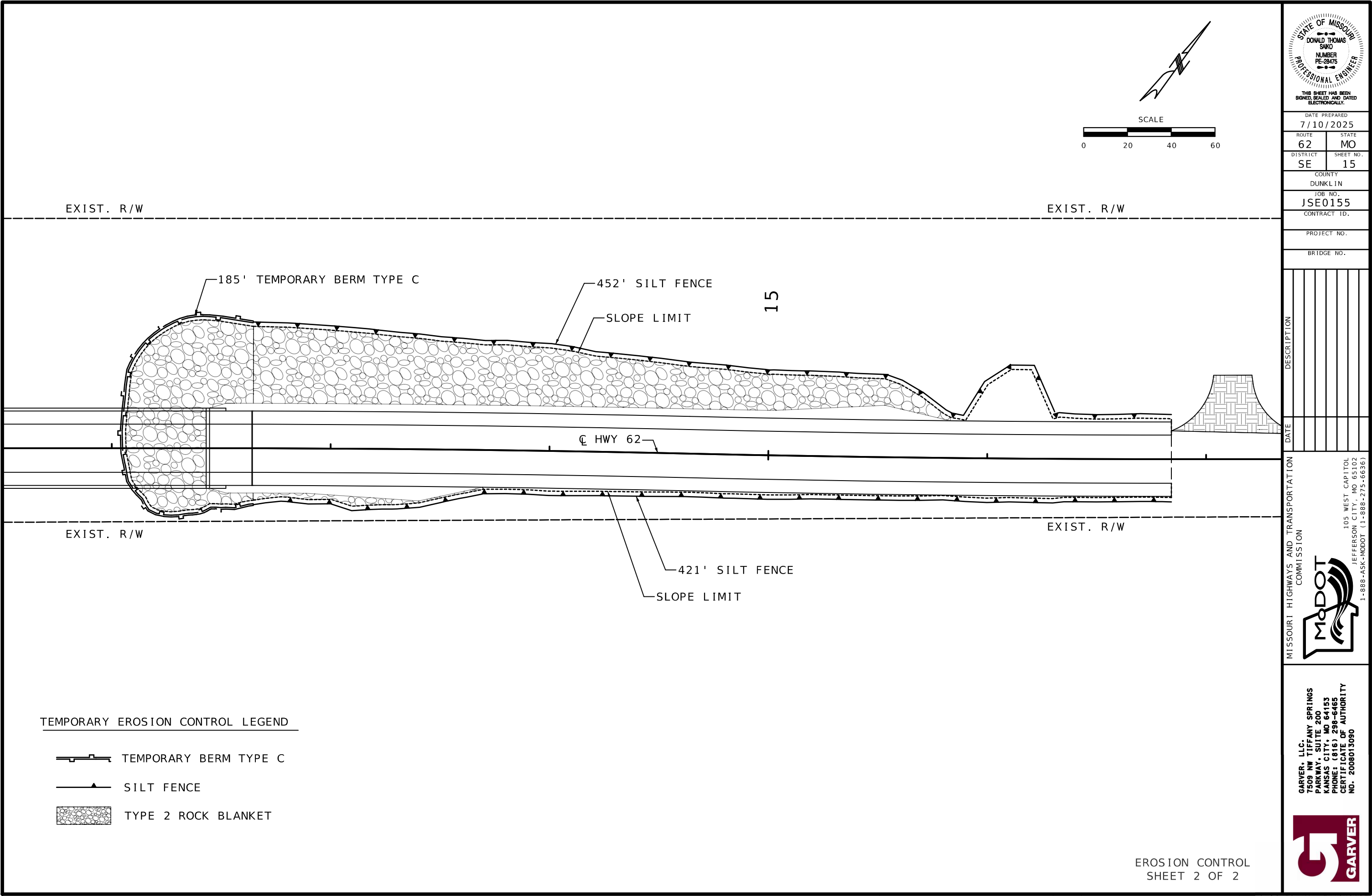
TEK

1411 East 104th St.
Kansas City, MO 64131
Tel (816) 874-6555
Fax (816) 874-4675
www.tekdesigngroup.com

Missouri Cert. of
Authority: 20020210300

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DATE PREPARED 7/10/2025	
ROUTE 62	STATE MO
DISTRICT SE	SHEET NO. 15
COUNTY DUNKLIN	
JOB NO. JSE0155	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

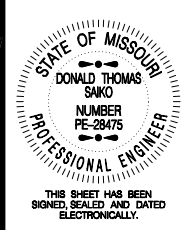
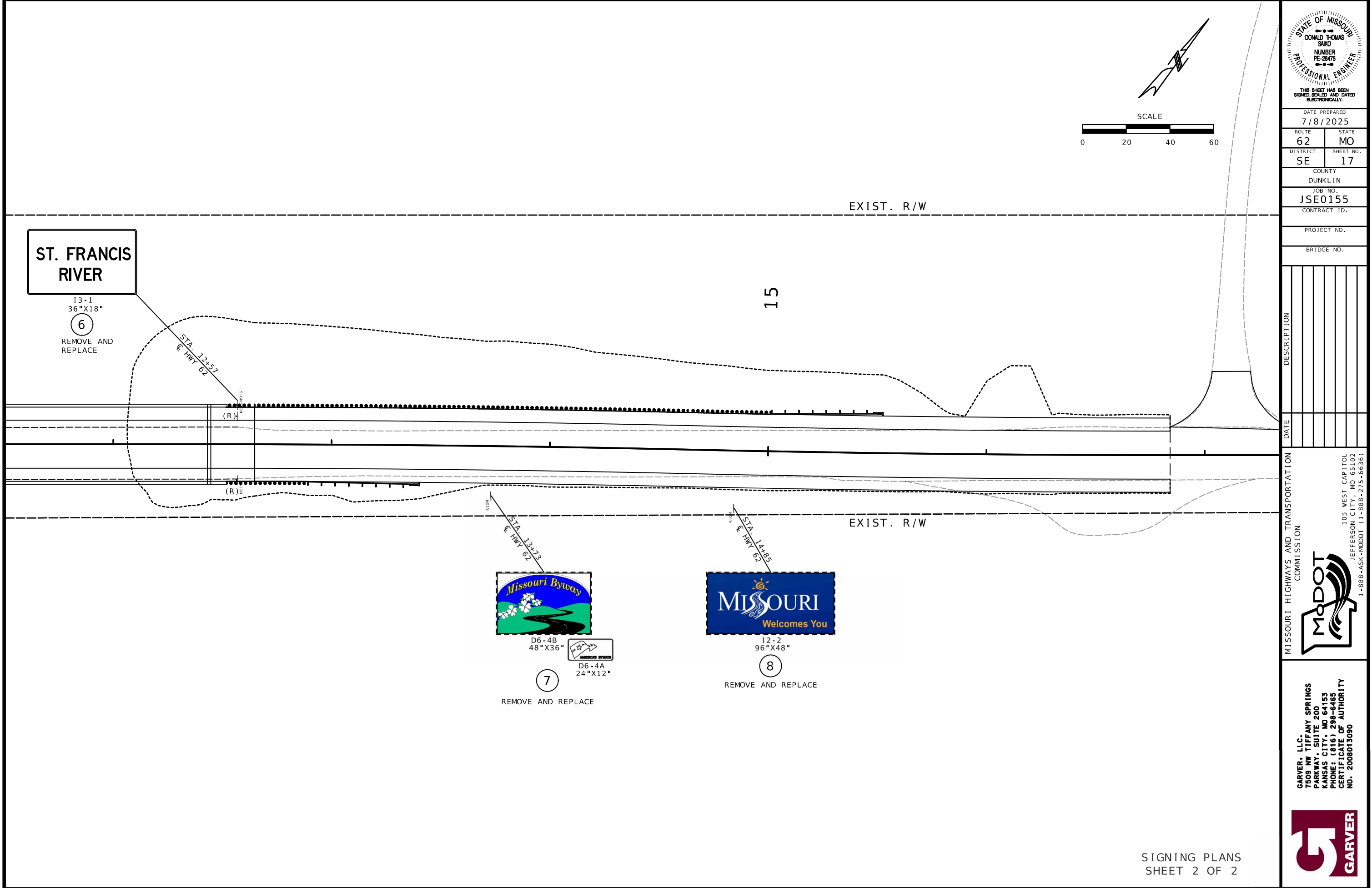
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



EROSION CONTROL
SHEET 2 OF 2



DATE PREPARED 7/8/2025	
ROUTE 62	STATE MO
DISTRICT SE	SHEET NO. 17
COUNTY DUNKLIN	
JOB NO. JSE0155	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

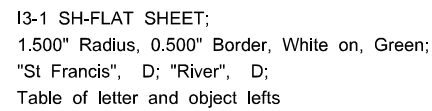
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



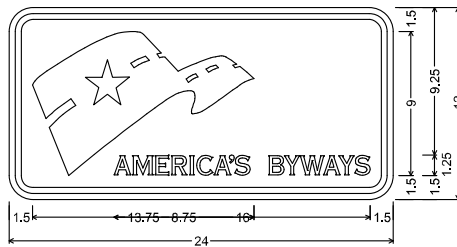
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



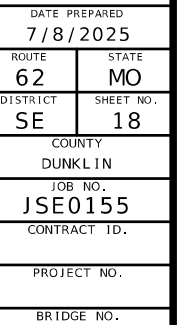
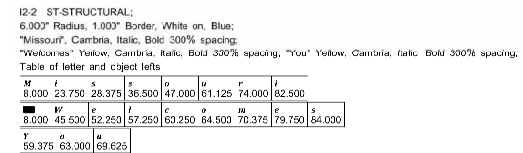


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12.875	16.125	18.375	21.875	25.125	28.500	30.000		
R	i	v	e	r				
11.125	15.000	16.500	19.875	23.125				



D6-4a SH-FLAT SHEET;
1,500" Radius, 0,375" Border, 0,375" Indent, Blue on, White;
Table of letter and object lefts

1.500	6.500



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

7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



SIGN DETAILS
SHEET 1 OF 1

DATE PREPARED	
7/8/2025	
ROUTE	STATE
62	MO
DISTRICT	SHEET NO.
SE	19
COUNTY	

JOB NO.
JSE0155

PROJECT NO.

BRIDGE NO.

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U.S. DEPARTMENT OF ENERGY

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11/11/2019

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NO.

1. *Journal of Management Studies*, 1996, 33, 1, 1-14.



POST				FOOTING									
POST DES. NO.	NOM. SIZE	WEIGHT		STUB LENGTH	DIA.	LEVEL GROUND		6:1 GRADE		4:1 GRADE		3:1 OR 2:1 GRADE	
		LBS/FT	LBS/IN			DEPTH	C.Y.	DEPTH	C.Y.	DEPTH	C.Y.	DEPTH	C.Y.
1	W6	9.0	0.75	3'-0"	15"	3'-0"	0.14	3'-2"	0.15	3'-3"	0.16	3'-6"	0.17
2	W6	15.0	1.25	4'-0"	24"	4'-0"	0.47	4'-2"	0.50	4'-3"	0.51	4'-6"	0.54
3	W8	18.0	1.50	4'-6"	28"	4'-6"	0.71	4'-8"	0.73	4'-9"	0.74	5'-0"	0.78
4	W10	22.0	1.83	5'-0"	36"	5'-0"	1.31	5'-2"	1.36	5'-3"	1.39	5'-6"	1.45
5	W10	26.0	2.17	5'-0"	36"	5'-0"	1.31	5'-3"	1.37	5'-5"	1.43	5'-9"	1.52
6	W12	35.0	2.92	5'-6"	36"	5'-6"	1.44	5'-9"	1.52	5'-11"	1.56	6'-3"	1.65

ROUND PIPE POST AND FOOTING DATA TABLE						
NOM. SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	
2½	5.79	0.48	4' - 3½"	12"	4-6"	0.13
3	7.58	0.63	4' - 3½"	12"	4-6"	0.13
4	10.79	0.90	5' - 3½"	18"	5-6"	0.36



DATE PREPARED	
7/8/2025	
ROUTE	STATE
62	MO
DISTRICT	SHEET NO
SE	20

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

[illegible]

**MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION**

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

**GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-8465
CERTIFICATE OF AUTHORITY
NO. 2008013090**



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ELECTRONICALLY.

DATE PREPARED
7/8/2025

ROUTE	STATE
62	MO

DISTRICT	SHEET
SE	21

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

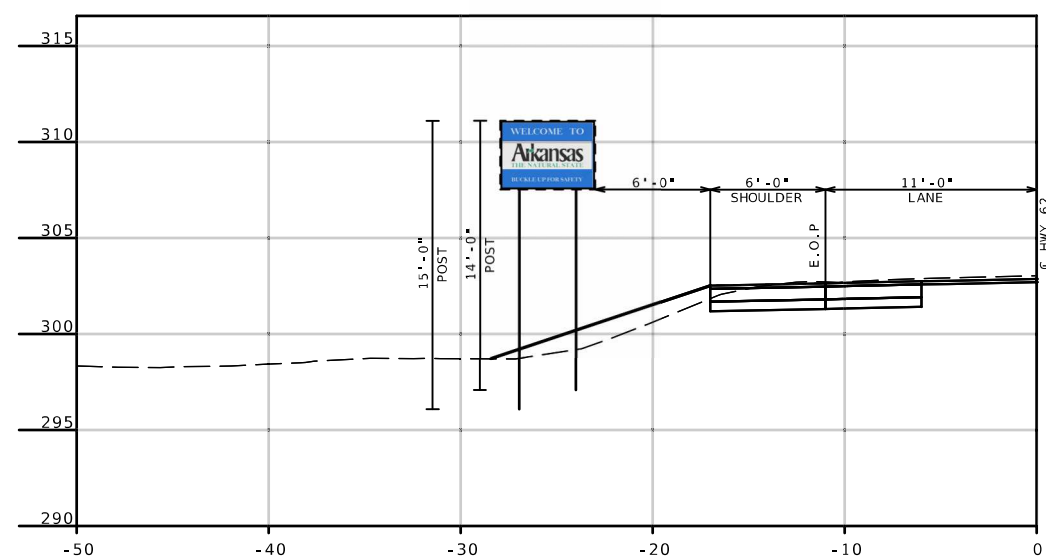
BRIDGE NO.

[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO. 65102

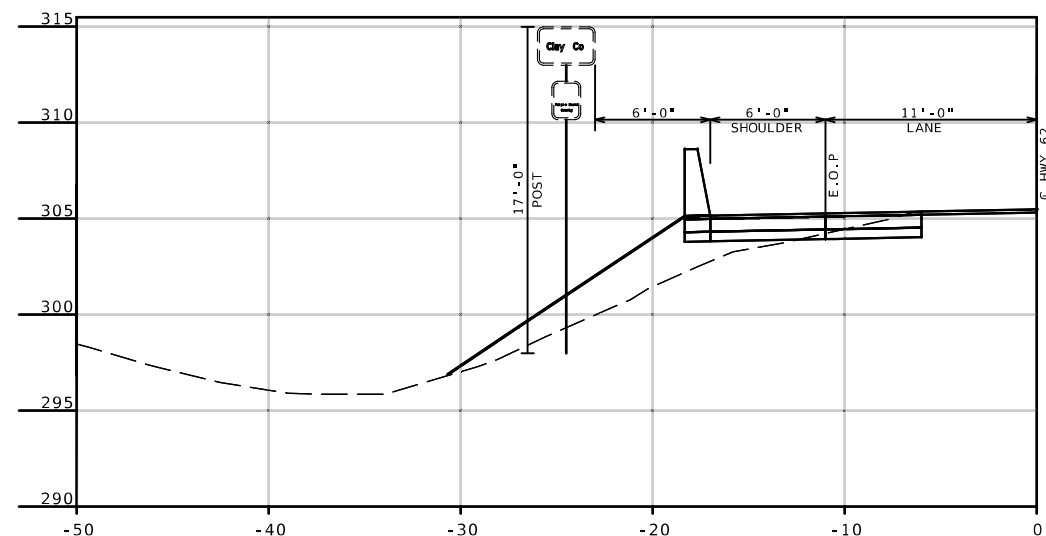
SARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-8465
ID. 2008013090



①

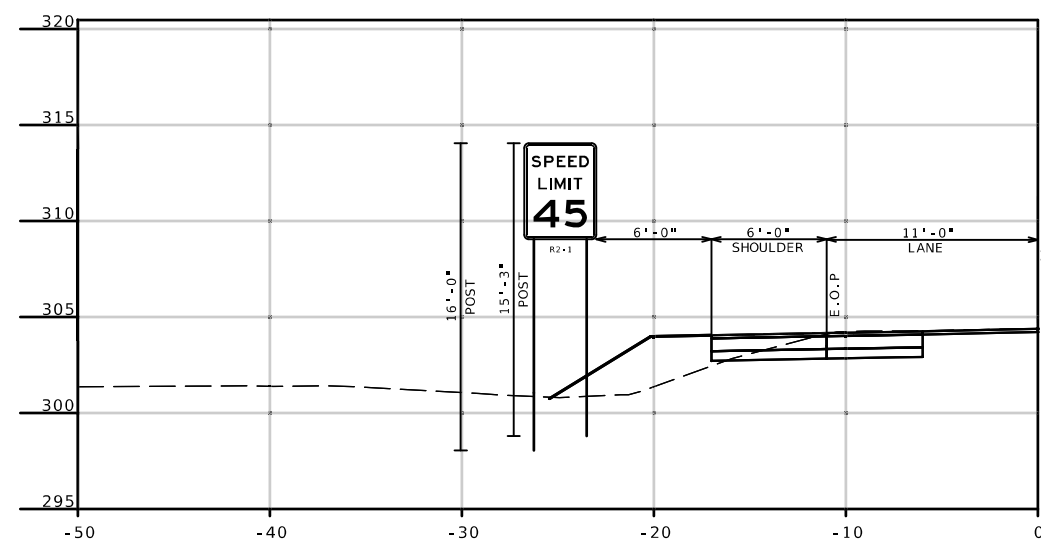
HWY 62 STA. 52+38.00 LT.
2- U-CHANNEL POSTS, 15 LF AND 14 LF

RE-USE EXISTING HORIZONTAL
U-CHANNEL SUPPORTS LOCATED
ON BACK OF SIGN.



③

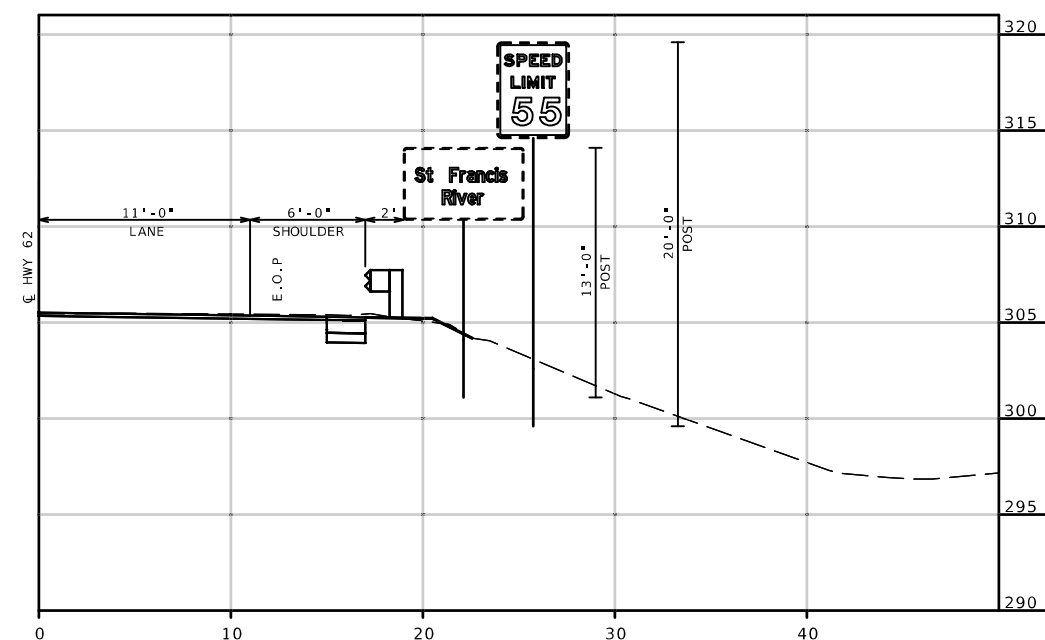
HWY 62 STA. 1+61.00 LT.
1-U-CHANNEL POST, 17 LF



②

HWY 62 STA. 1+18.00 LT.
R2-1 (36"x48")
2-U-CHANNEL POSTS, 16 LF AND 15.25 LF

RE-USE EXISTING HORIZONTAL
U-CHANNEL SUPPORTS LOCATED
ON BACK OF SIGN.



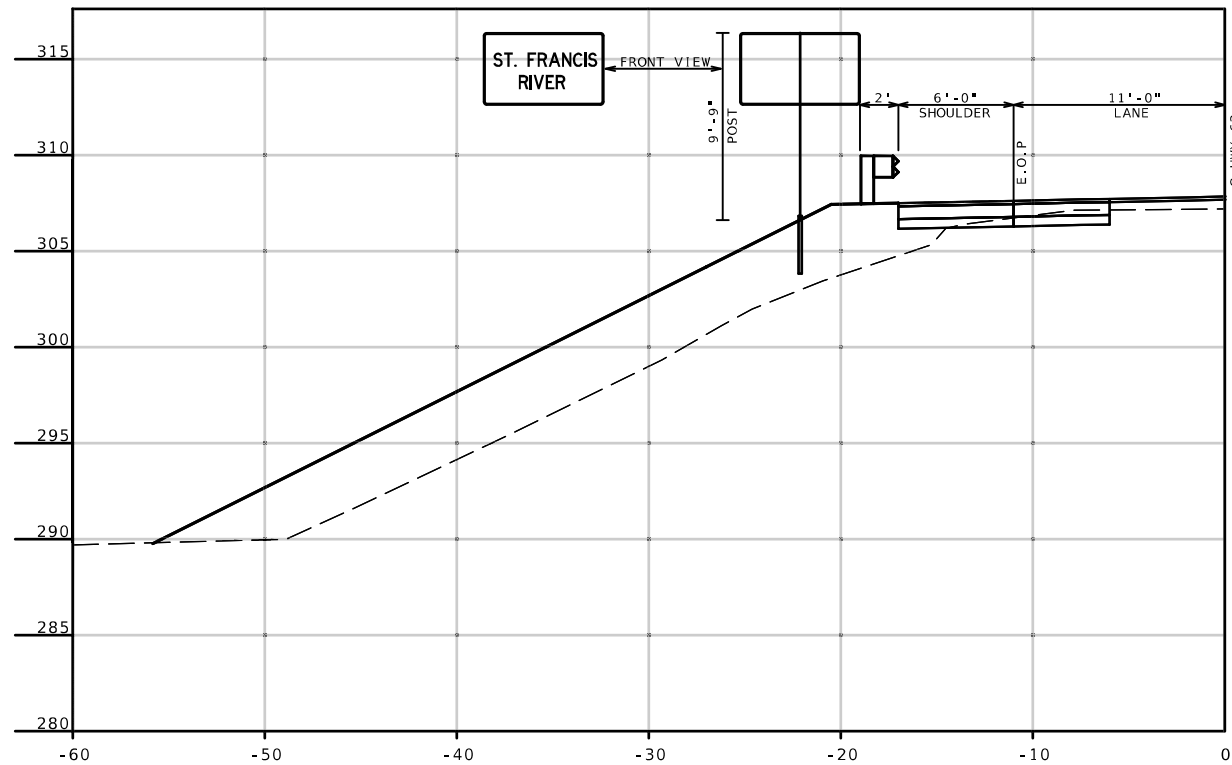
④

HWY 62 STA. 1+62.00 RT.
1 U-CHANNEL POST, 13 LF

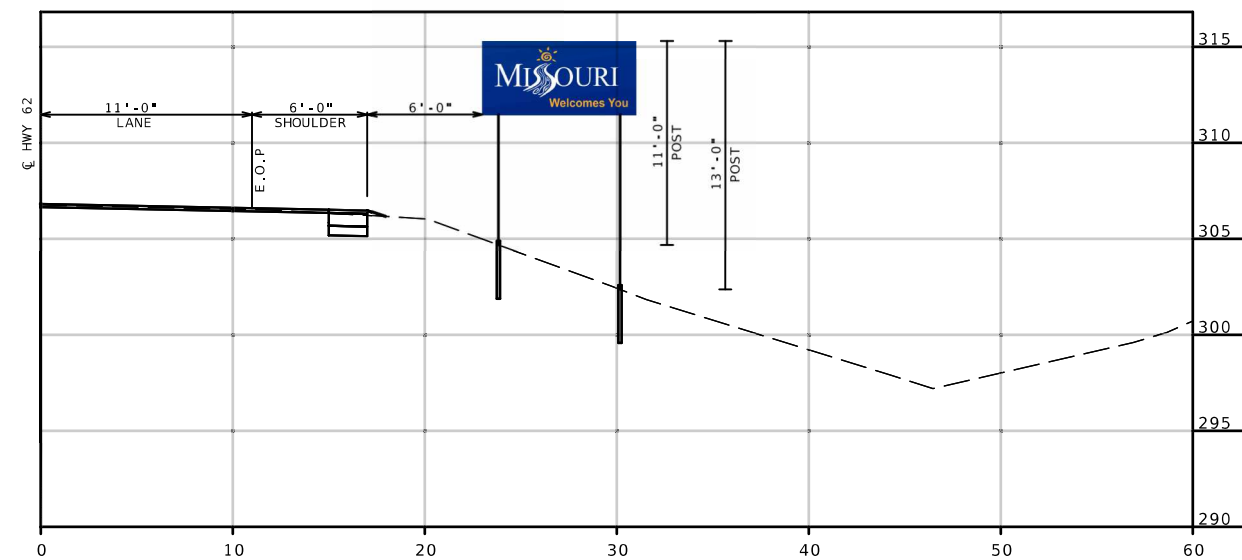
⑤

HWY 62 STA. 1+62.00 RT.
1 U-CHANNEL POST, 20 LF

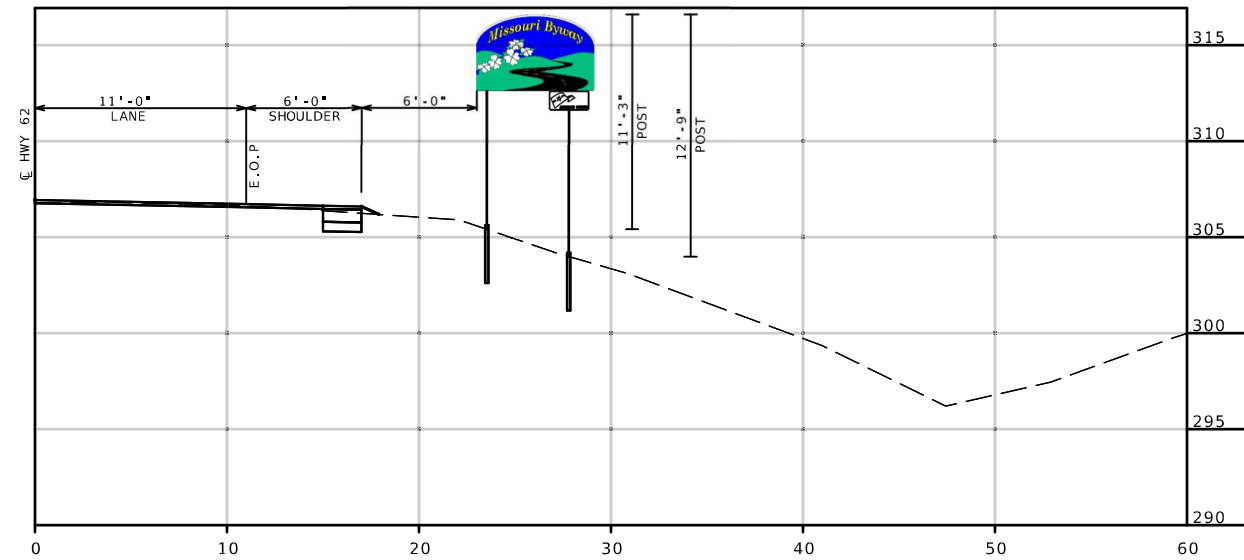
SIGN SECTIONS
SHEET 1 OF 2



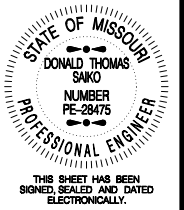
⑥
HWY 62 STA. 12+57.00 LT.
13-1 (36"x 18")
1 - 2" 12 GA PSST, 9.75 LF



⑧
HWY 62 STA. 14+85.00 RT.
12-2 (96"x 48")
2 - 2" 12 GA PSST, 11.00 LF AND 13.00 LF

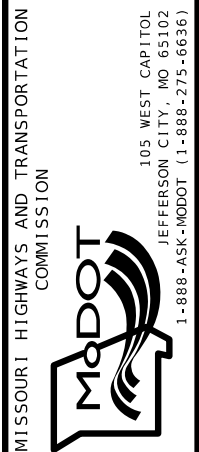


⑦
HWY 62 STA. 13+73.00 RT.
D6-4B (48"x36") AND D6-4A (24"x 12")
2 - 2" 12 GA PSST, 11.25 LF AND 12.75 LF



DATE PREPARED 7/8/2025	
ROUTE 62	STATE MO
DISTRICT SE	SHEET NO. 22
COUNTY DUNKLIN	
JOB NO. JSE0155	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

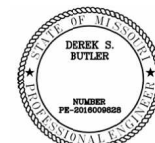


GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



(59'-3 @ 60') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS - UNIT 1
(105'-135'-105') CONTINUOUS COMPOSITE PLATE GIRDER SPANS - UNIT 2
(4 @ 60') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS - UNIT 3
(3 @ 60'-59') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS - UNIT 4

SEC/SUR 18 TWP 21N RGE 9E



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED
7/11/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 1

COUNTY DUNKLIN

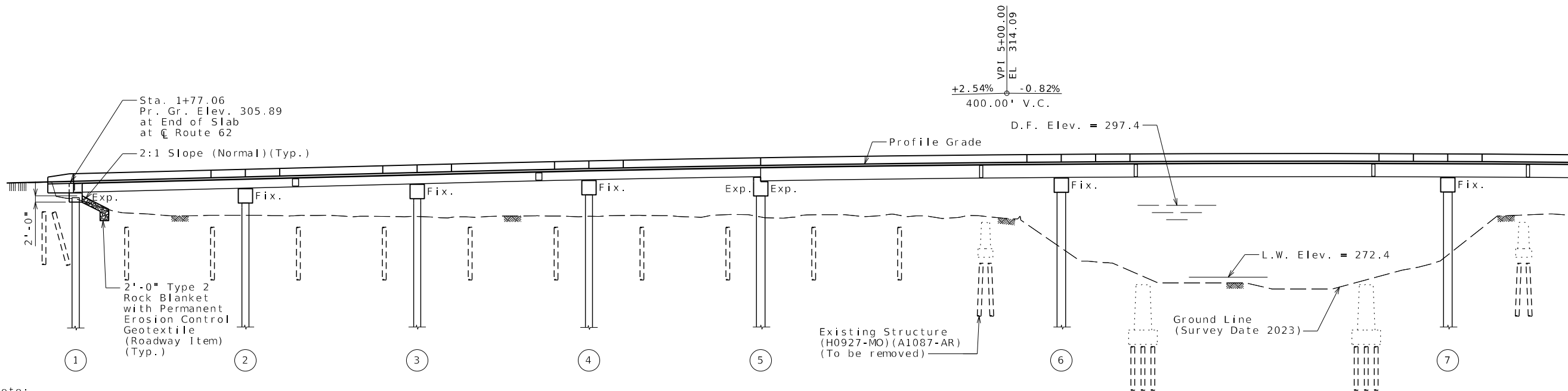
JOB NO. JSE0155

CONTRACT ID.

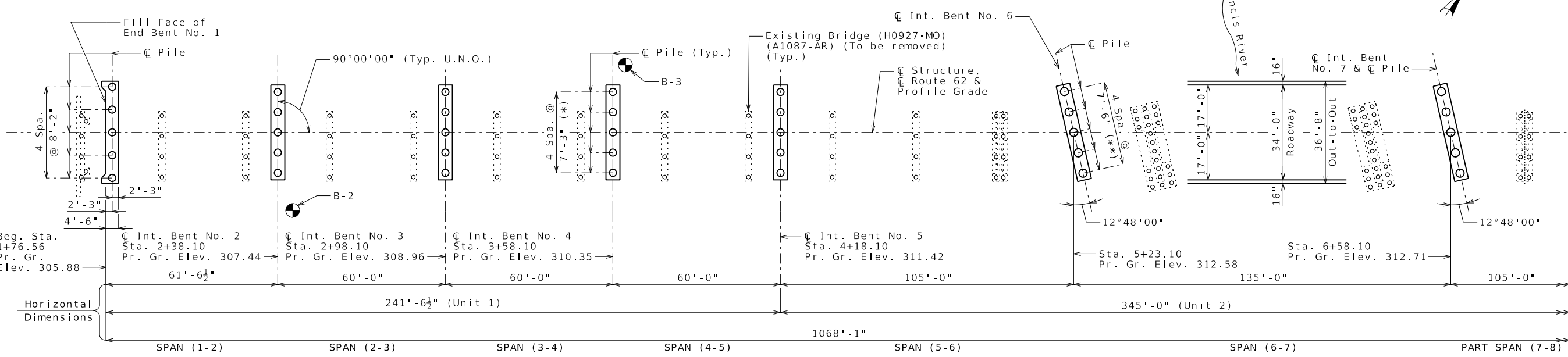
PROJECT NO.

BRIDGE NO. A9436

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



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



* Applies to Bents No. 2-5 & 8-15
** Applies to Bents No. 6 & 7

Notes:
For Part Plan and Part General Elevation not shown, see Sheet No. 2.
For General Notes, Estimated Quantities and Estimated Quantities for Slab on Steel, see Sheet No. 3.
For Hydrologic Data, Location Sketch and Foundation Data, see Sheet No. 4.

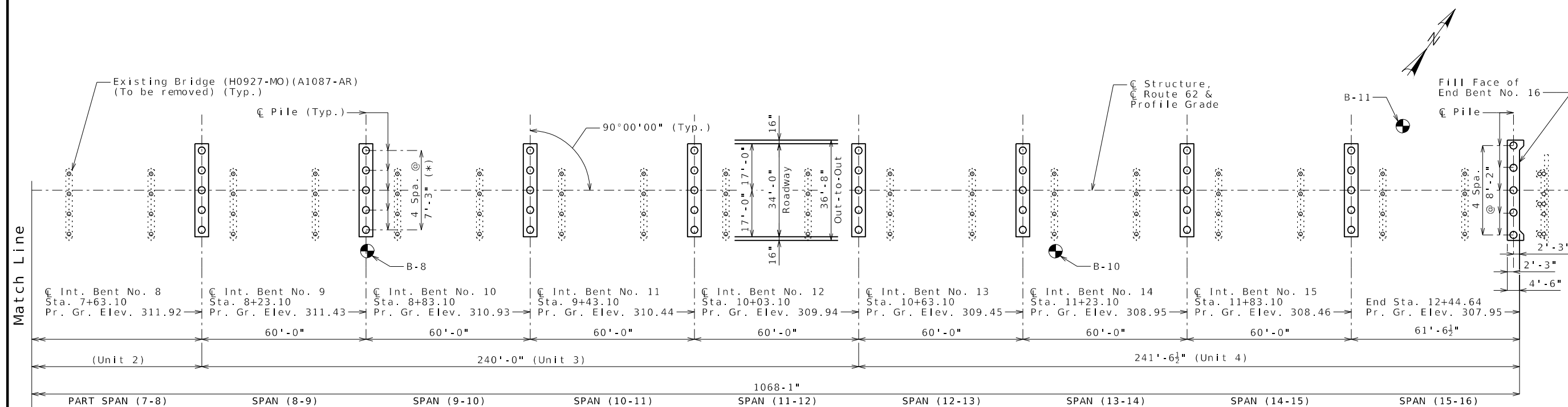
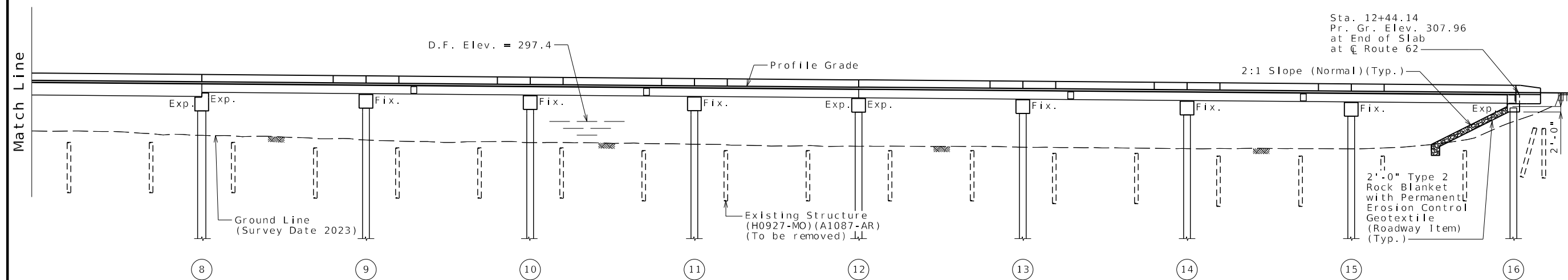
Indicates location of borings.
The locations of all subsurface borings for this structure are shown on the plan sheet(s) for this structure. The boring data for all locations indicated, as well as any other boring logs or other factual records of subsurface data and investigations performed by the department for the design of the project, are shown on Sheet(s) No. 54 thru 61 and may be included in the Electronic Bridge Deliverables. They will also be available from the Project Contact upon written request. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the district or elsewhere.

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

C.P. #1 STA. 16+24.13, 35.53' RT., ELEV. 305.09'
5/8" REBAR W/ ALUM. CAP
B.M. #1 STA. 52+67.12, 14.6' LT., ELEV. 303.32'
MAG NAIL IN ASP SHOULDER 12
C.P. #3 STA. 13+23.20, 12.91' LT., ELEV. 305.97'
5/8" REBAR W/ ALUM. CAP
B.M. #4 STA. 16+65.93, 3.6' RT., ELEV. 306.78'
MAG NAIL IN ASP
C.P. #5 STA. 1+33.01, 100.08' LT., ELEV. 301.01'
5/8" REBAR W/ ALUM. CAP

BRIDGE: ROUTE 62 OVER ST. FRANCIS RIVER
ROUTE 62 FROM ST. FRANCIS (AR) TO ROUTE B
ABOUT 3.3 MILES WEST OF ROUTE B
BEGIN STATION 1+76.56

Designed Oct. 2024
Detailed Nov. 2024
Checked Jan. 2025



Notes:

For Part Plan and Part General Elevation
not shown, see Sheet No. 1.

For General Notes, Estimated Quantities
and Estimated Quantities for Slab on
Steel, see Sheet No. 3.

For Hydrologic Data, Location Sketch and Foundation Data, see Sheet No. 4.

PLAN AND GENERAL ELEVATION

Detailed Nov. 2024
Checked Jan. 2025

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

Sheet No. 2 of 61



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED

ROUTE 62	STATE MO
DISTRICT BR	SHEET NO. 2

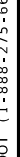
COUNTY

JOB NO.

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9436

[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



General Notes:

Design Specifications:
2020 AASHTO LRFD Bridge Design Specifications (9th Edition)
2011 AASHTO Guide Specifications for LRFD Seismic Bridge Design (2nd Ed.)
and 2014 Interim Revisions (Seismic)
Seismic Design Category = C
Design earthquake response spectral acceleration coefficient at 1.0 second period, $S_{D1} = 0.706g$
Acceleration Coefficient (effective peak ground acceleration coefficient), $A_s = 0.534g$

Design Loading:
Vehicular = HL-93
Future Wearing Surface = 35 lb/sf
Earth = 120 lb/cf
Equivalent Fluid Pressure = 45 lb/cf (Min.)

Design Unit Stresses:
Class B Concrete (Substructure, except CIP Concrete Piles) $f'c = 3,000$ psi
Class B-1 Concrete (Type D Barrier and CIP Concrete Piles) $f'c = 4,000$ psi
Class B-2 Concrete (Superstructure, except Type D Barrier) $f'c = 4,000$ psi
Reinforcing Steel (ASTM A706 Grade 60) $f_y = 60,000$ psi
Structural Steel (ASTM A709 Grade 50W) $f_y = 50,000$ psi
Welded or Seamless steel shell (pipe) for CIP pile (ASTM A252 Modified Grade 3) $f_y = 50,000$ psi

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

Fabricated Steel Connections:
Field connections shall be made with 7/8-inch diameter ASTM F3125 Grade A325 Type 3 bolts and 15/16-inch diameter holes, except as noted.

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

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

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

Coating New Steel:
Protective coating: System G in accordance with Sec 1081. The following weathering steel surfaces shall be coated:

All steel surfaces within 10 feet of bridge deck expansion joints, including cross frames, stiffeners, connection bolts and bearings.

All steel surfaces exposed to the outside face of the bridge, including outside faces and bottom of the exterior beams and girders, splice plates and bolts, stiffeners, drip bars and bearings.

Prime Coat:
The cost of the inorganic zinc prime coat will be considered completely covered by the contract unit price for the fabricated structural steel.

Field Coat(s): The color of the field coats shall be Gray (Federal Standard #26373).
The cost of the intermediate and finish field coats will be completely covered by the contract unit price for the fabricated structural steel.

At the option of the contractor, the intermediate and finish field coats may be applied in the shop. The contractor shall exercise extreme care during all phases of loading, hauling, handling, erection and pouring of the slab to minimize damage and shall be fully responsible for all repairs and cleaning of the coating systems as required by the engineer.

Concrete Protective Coatings:
Temporary coating for concrete bents and piers (weathering steel) shall be applied on all concrete surfaces above the ground line or low water elvation on all abutments and intermediate bents in accordance with Sec 711.

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

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

Pile Driving:
Dynamic Pile Restrike Testing shall be performed at least 1 hr after the completion of driving to evaluate pile relaxation.

The first three production piles driven and dynamically tested shall be as follows: one from pile numbers 8, 13, 18 or 23; one from 28 or 33; and one from 43, 48, 53, 58, 63, 68 or 73. For pile numbers, see As-Built Pile Data on Sheets No. 52 & 53.

The test pile at each bent shall be driven completely and tested prior to installing or driving the remaining piles for that bent. The test pile at each bent shall be the center pile.

Abbreviations:
E.F. - Each Face

Estimated Quantities			
Item	Substr.	Superstr.	Total
Removal of Bridges (H0927-MO)(A1087-AR)	Lump sum		1
Bridge Approach Slab (Minor)	sq. yard		152
Dynamic Pile Testing	each	16	16
Dynamic Pile Restrike Testing	each	16	16
Pile Point Reinforcement	each	80	80
Galvanized Cast-In-Place Concrete Piles (30 in.)	linear foot	7,605	7,605
Galvanized Cast-In-Place Concrete Piles (36 in.)	linear foot	1,185	1,185
Class B Concrete (Substructure)	cu. yard	471.2	471.2
Slab on Steel	sq. yard	4,348	4,348
Type D Barrier	linear foot	2,165	2,165
Reinforcing Steel (Bridges)	pound	74,140	74,140
Reinforcing Steel (Epoxy Coated)	pound	42,900	42,900
Protective Coating - Concrete Bents and Piers (Epoxy)	Lump sum		1
Temporary Coating - Concrete Bents and Piers (Weathering Steel)	Lump sum		1
Expansion Device (Finger Plate)	linear foot	74	74
Fabricated Structural Low Alloy Steel (I-Beam) A709, Grade 50W	pound	515,570	515,570
Fabricated Structural Low Alloy Steel (Plate Girder) A709, Grade 50W	pound	405,370	405,370
Slab Drain	each	18	18
Vertical Drain at End Bents	each		2
Laminated Neoprene Bearing Pad Assembly	each	76	76
Strip Seal Expansion Joint System	linear foot	110	110

Concrete above the upper construction joint in the backwall at End Bents No. 1 and 16 is included with Class B-2 Concrete Quantities.

All reinforcement in cast-in-place piles at non-integral end bents and intermediate bents is included in the substructure quantities.

Cost of any required excavation for bridge will be considered completely covered by the contract unit price for other items.

Estimated Quantities for Slab on Steel	
Item	Total
Class B-2 Concrete	cu. yard 1,059
Reinforcing Steel (Epoxy Coated)	pound 373,780

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

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

Slab shall be cast-in-place with conventional forms or stay-in-place corrugated steel forms. Precast prestressed panels will not be permitted.



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/29/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 3

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

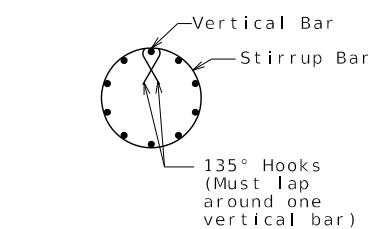
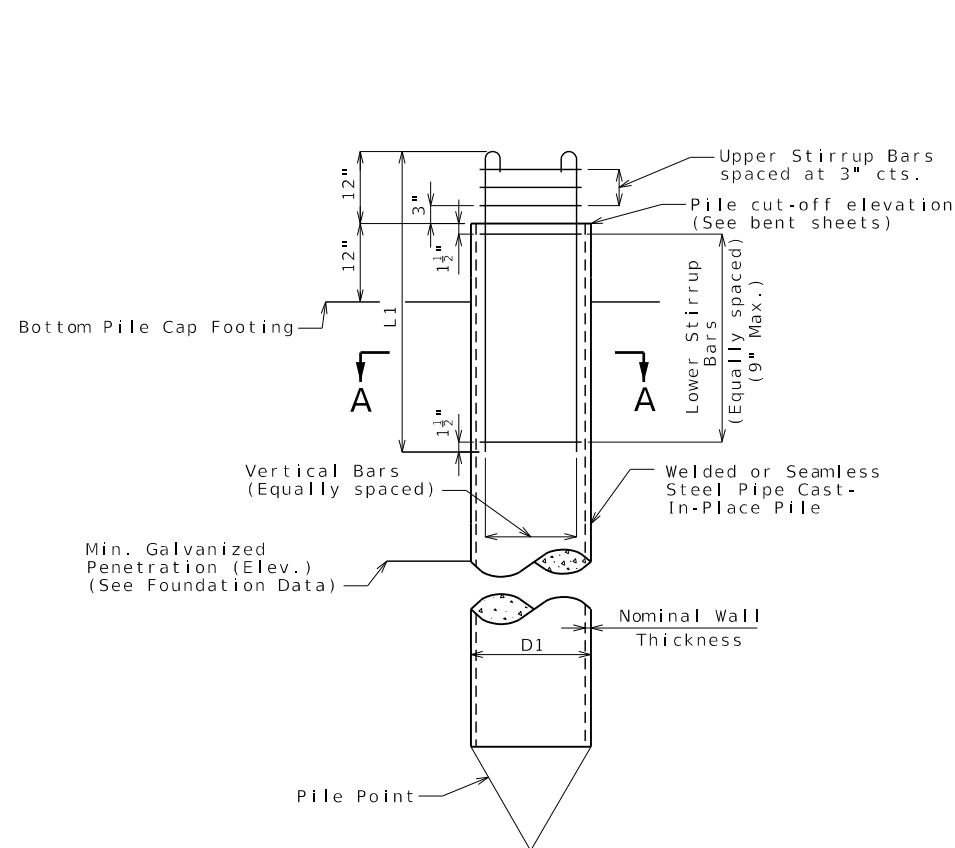
BRIDGE NO.
A9436

DESCRIPTION	DATE	PILE QUANTITY	PILE QUANTITY UPDATE
	07-29-25		

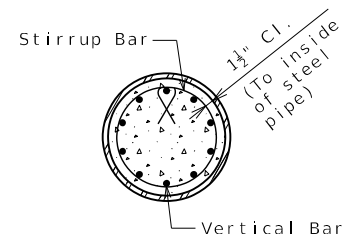


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PARKWAY, SUITE 200
KANSAS CITY, MO 64153
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CERTIFICATE OF AUTHORITY
NO. 2008013090





Galvanized Closed Ended Cast-In-Place (CECIP) Concrete Pile Data		
Bent Number	1	16
D1, CECIP Pile (O.D.)	30"	30"
Min. Nominal Wall Thickness	3/4"	3/4"
Pile Point Reinforcement	Conical	Conical
Vertical Bars	10-#9-V104	10-#9-V1604
L1, Length of Vertical Bars	12'-11"	12'-11"
Upper Stirrup Bars	3-#5-P100	3-#5-P1600
Lower Stirrup Bars	17-#5-P100	17-#5-P1600



Notes :

Welded or seamless steel shell (pipe) shall be ASTM A252 Modified Grade 3 ($f_y = 50,000$ psi) with physical and chemical requirements that meet ASTM A572 Grade 50. Pipe certification and source material certification shall be required.

Concrete for cast-in-place pile shall be Class B-1.

Steel casting for conical pile point reinforcement shall be ASTM A27 Grade 65-35.

The minimum wall thickness of any spot or local area of any type shall not be more than 12.5% under the specified nominal wall thickness.

The contractor shall determine the pile wall thickness required to avoid damage from all driving activities, but wall thickness shall not be less than the minimum specified. No additional payment will be made for furnishing a thicker pile wall than specified on the plans.

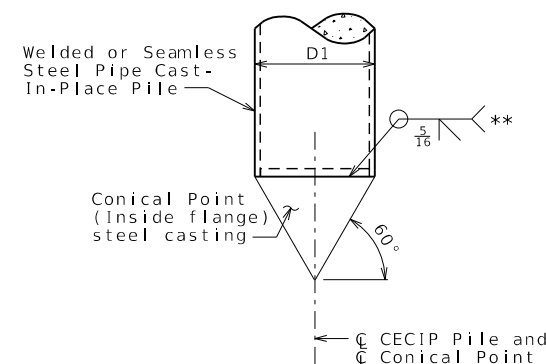
Splices of pipe for cast-in-place concrete pile shall be made watertight and to the full strength of the pipe above and below the splice to permit hard driving without damage. Pipe damaged during driving shall be replaced without cost to the state. Pipe sections used for splicing shall be at least 5 feet in length.

The hooks of vertical bars embedded in the beam cap should not be turned outward, away from the pile core.

Reinforcing steel for cast-in-place piles is included in the Bill of Reinforcing Steel.

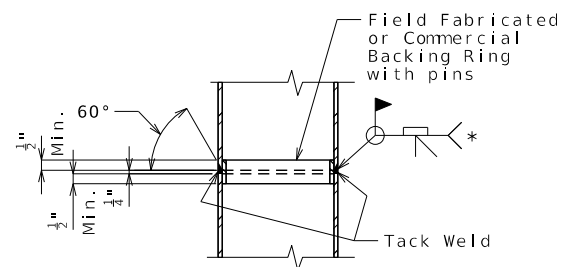
All reinforcement for cast-in-place pile is included in the estimated quantities for bents.

For Foundation Data table, see Sheet No. 4.



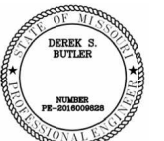
MANUFACTURED CONICAL PILE POINT
(Omit closure plate)

** If the conical pile point is not pre-beveled, place a 3/8" bevel at 40 degrees on the pipe.



* Galvanizing material shall be omitted or removed one inch clear of weld locations in accordance with Sec 702.

GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE AT END BENTS



THIS SHEET HAS BEEN
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ELECTRONICALLY

DATE PREPARED

ROUTE	STATE
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DISTRICT	SHEET NO.
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COUNTY

JOB NO.

CONTRACT ID.

PROJECT NO. _____

BRIDGE NO.

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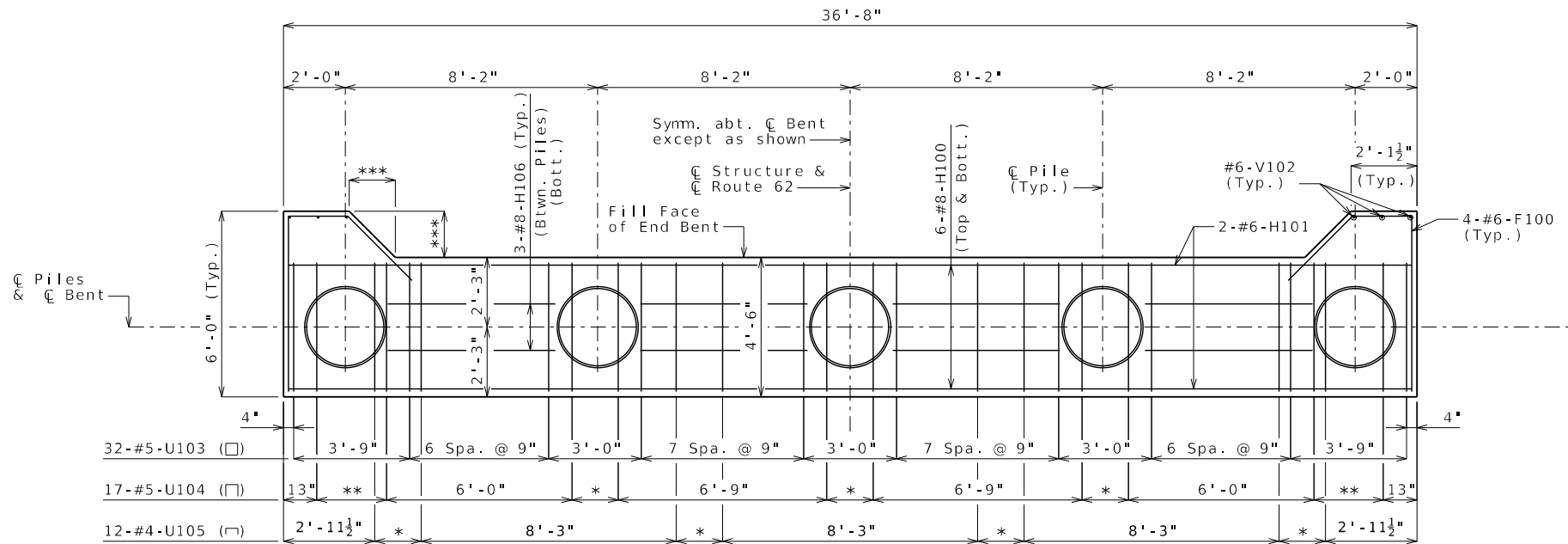
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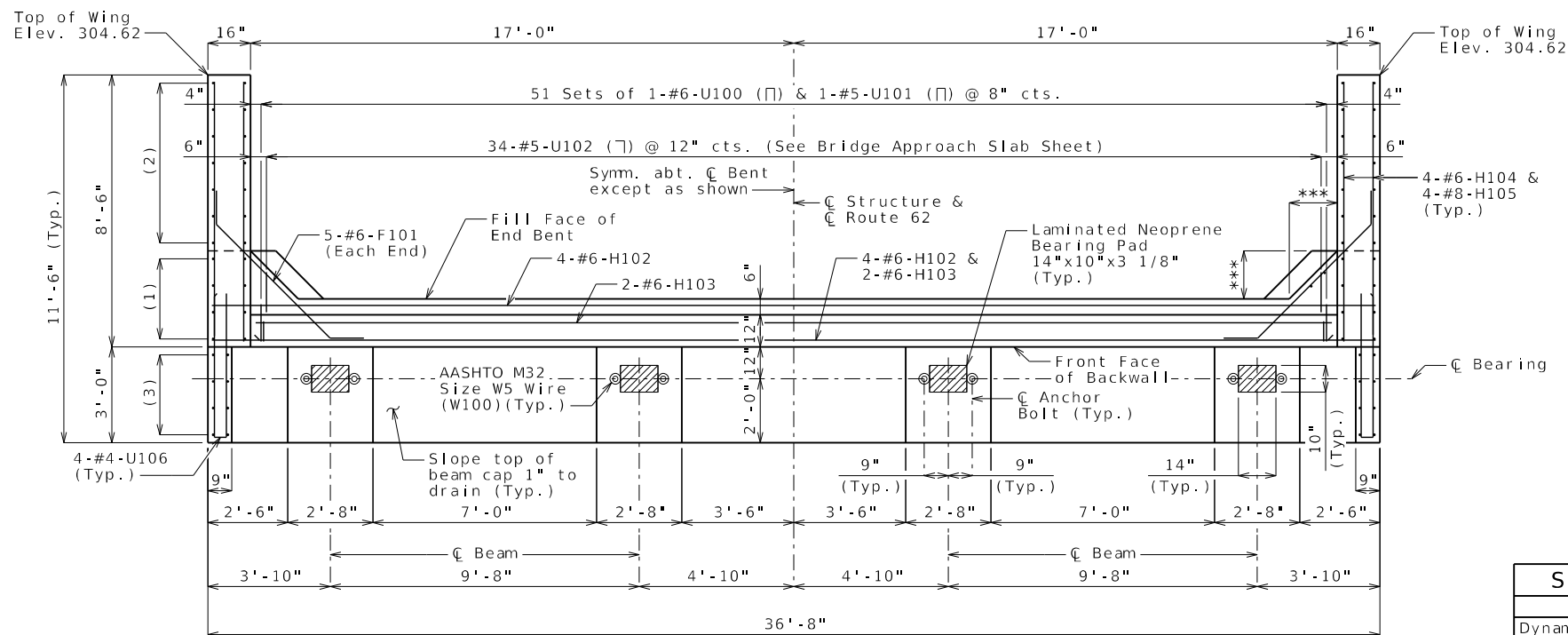
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PLAN OF BEAM SHOWING PILE SPACING AND REINFORCEMENT
(Keys & steps not shown for clarity)

* 2 Spa. @ 9"
** 3 Spa. @ 9"
*** 18" (Typ.)



- (1) 4-#6-V100 @ 10" cts. (E.F.)(Typ.)
- (2) 7-#6-V101 @ 10" cts. (E.F.)(Typ.)
- (3) 4-#4-V103 @ 10" cts. (E.F.)(Typ.)

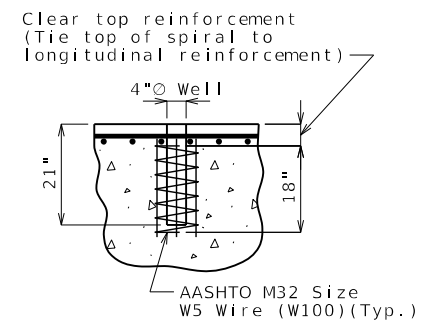
PART PLAN

REVIS¹ 07-29-2025

DETAILS OF END BENT NO. 1

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

Sheet No. 7 of 61



ANCHOR BOLT WELLS

Notes:

Work this sheet with Sheets No. 8 & 9.

For details of vertical drain at end bents, see Sheet No. 10.

For details of bridge approach slab, see Sheet No. 48.

For details of Type D Barrier, see Sheet No. 47.

For details of Laminated Neoprene Bearing Pad Assembly, see Sheet No. 22.

For details of galvanized cast-in-place concrete piles, see Sheet No. 6.

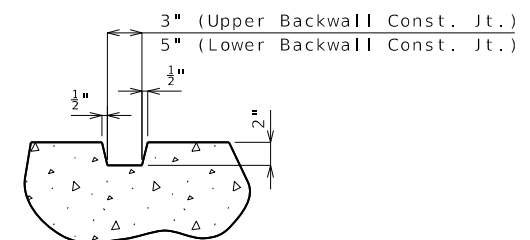
All concrete above the upper construction joint in the backwall shall be Class B-2.

Top of backwall for End Bent No. 1 shall be formed to the crown and grade of the roadway. Backwall above upper construction joint shall not be poured until the superstructure slab has been poured in the adjacent span.

Reinforcing steel shall be shifted to clear piles. U bars shall be shifted to clear piles by at least 1 1/2 inches.

Reinforcing steel in beam cap and cast-in-place piles shall be shifted where necessary to clear anchor bolt wells by at least 1/2".

Seal the following surfaces with Protective Coating - Concrete Bents and Piers (Epoxy): backwall; top and front of beam cap; all sides and top of curtain walls; outside of beam cap above ground line; and outside of wingwalls for 2 ft beyond curtain walls.



SECTION THRU KEY

Substructure Quantity Table for End Bent No. 1

Item	Quantity
Dynamic Pile Testing	each 1
Dynamic Pile Restrike Testing	each 1
Pile Point Reinforcement	each 5
Galvanized Cast-In-Place Concrete Pile (30 in.)	linear foot 350
Class B Concrete (Substructure)	cu. yard 29.5
Reinforcing Steel (Epoxy Coated)	pound 8,690

These quantities are included in the Estimated Quantities table on Sheet No. 3.



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DATE PREPARED 7/29/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 7

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE 07-29-25

PILE QUANTITY Update

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

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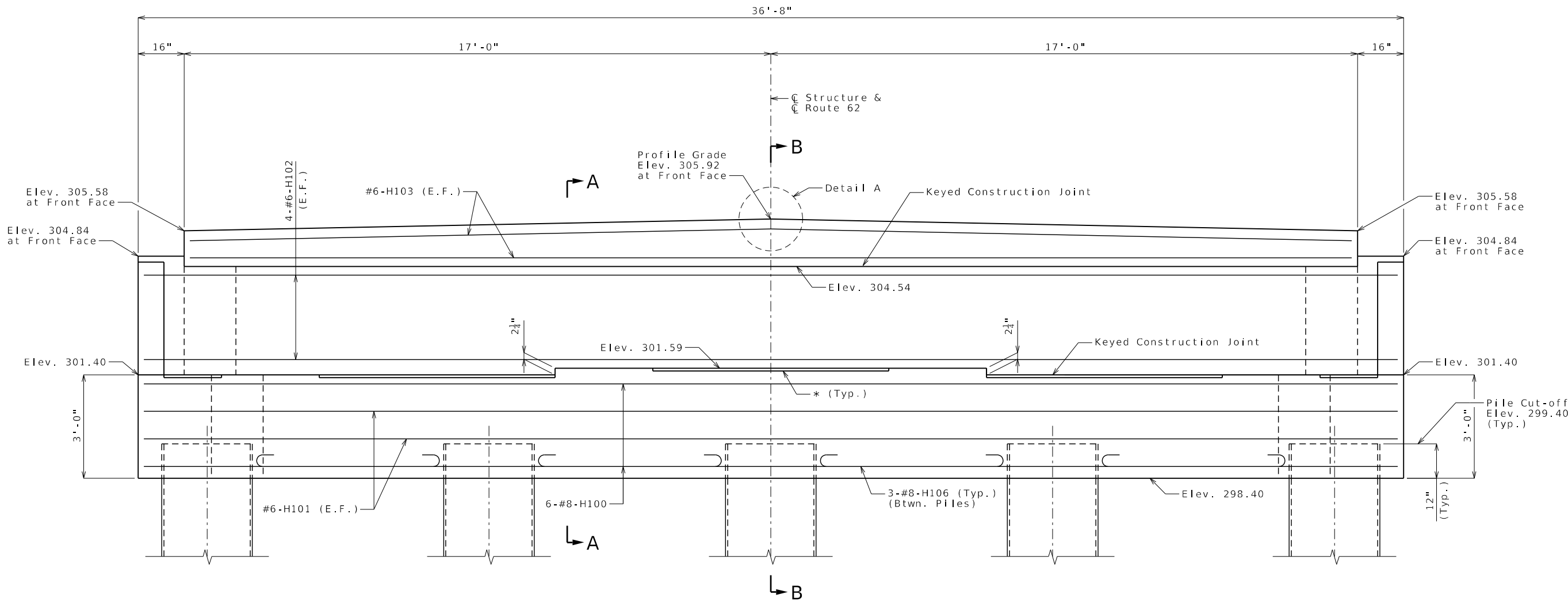
GARVER, LLC

7509 NW TIFFANY SPRINGS PARKWAY, SUITE 200 KANSAS CITY, MO 64153

PHONE: (816) 298-6465

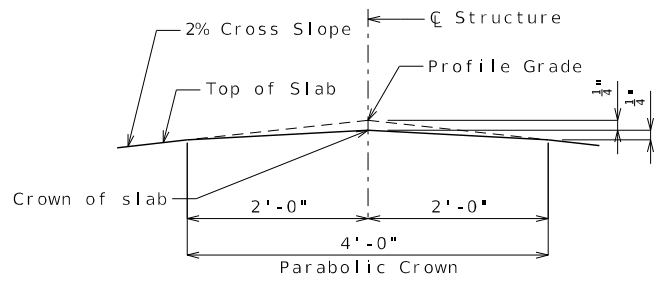
CERTIFICATE OF AUTHORITY NO. 2008013090

Garver logo



SECTION NEAR END BENT
(Looking Back Station)

* Slope top of beam cap 1" to drain, from front face of backwall to front face of beam cap.



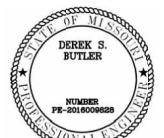
DETAIL A

DETAILS OF END BENT NO. 1

- Notes:
- Work this sheet with Sheets No. 7 & 9.
 - For Wingwall Elevation and Sections A-A & B-B, see Sheet No. 9.
 - For additional notes, See Sheet No. 7.

Detailed Nov. 2024
Checked Jan. 2025

Note: This drawing is not to scale. Follow dimensions. Sheet No. 8 of 61



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DATE PREPARED
5/29/2025

ROUTE 62	STATE MO
DISTRICT BR	SHEET NO. 8

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9436

DESCRIPTION	DATE

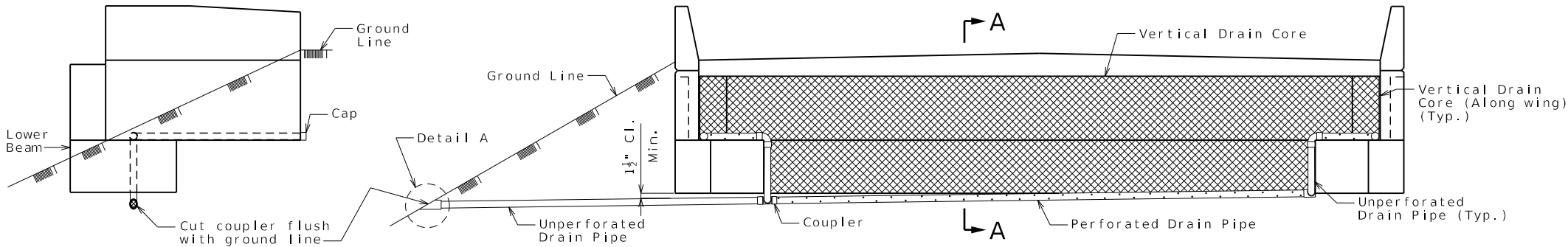
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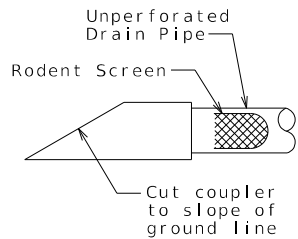
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KANSAS CITY, MO 64153
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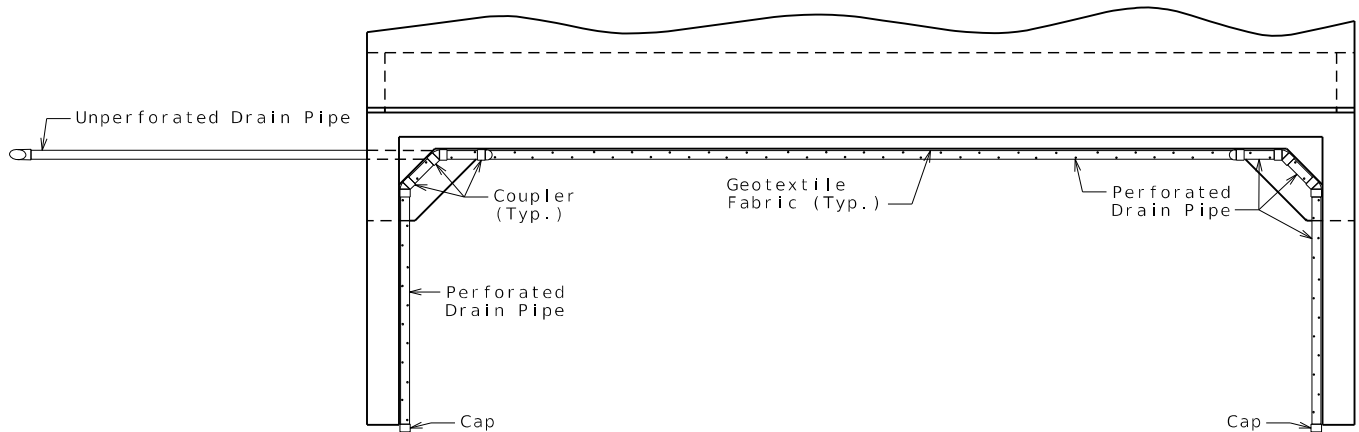


ELEVATION OF WING

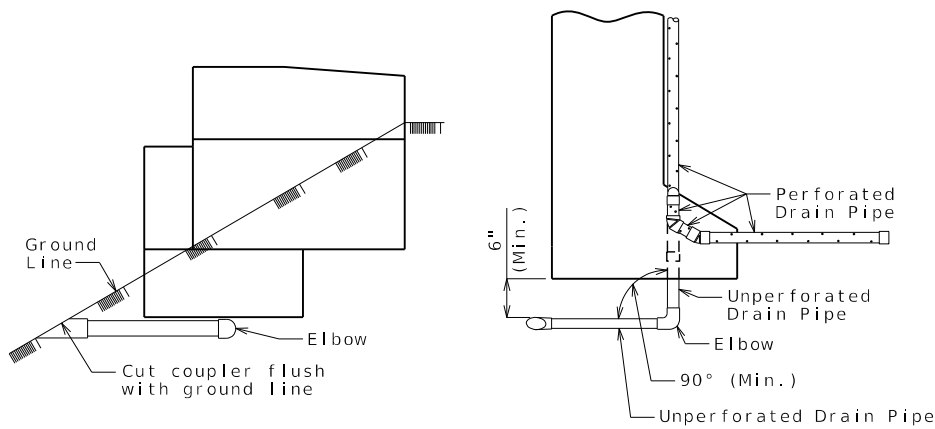
ELEVATION OF END BENT



DETAIL A



PLAN OF END BENT

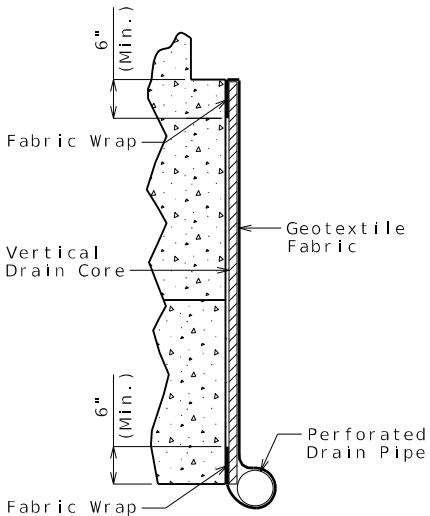


ELEVATION OF WING

PART PLAN

OPTIONAL TURNED DRAIN

(Use only when straight drain is not practical.)



PART SECTION A-A
(Section thru wing similar)

General Notes:

All drain pipe shall be sloped 1 to 2 percent.

Drain pipe may be either 6-inch diameter corrugated metallic-coated steel pipe underdrain, 4-inch diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4-inch diameter corrugated polyethylene (PE) drain pipe.

Drain pipe shall be placed at fill face of end bent and inside face of wings. The pipe shall slope to lowest grade of ground line, also missing the lower beam of end bent by a minimum of 1 1/2 inches.

Perforated pipe shall be placed at fill face side and inside face of wings at the bottom of end bent and plain pipe shall be used where the vertical drain ends to the exit at ground line.



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DATE PREPARED 5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 10

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

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

MODOT

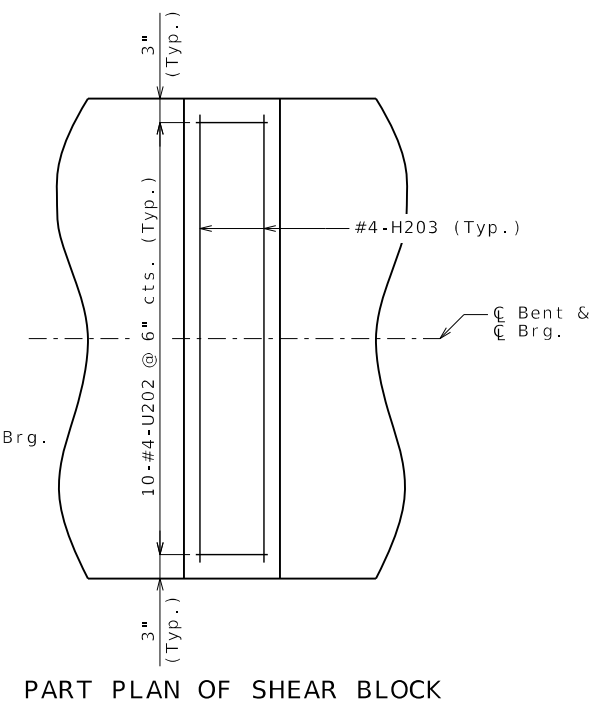
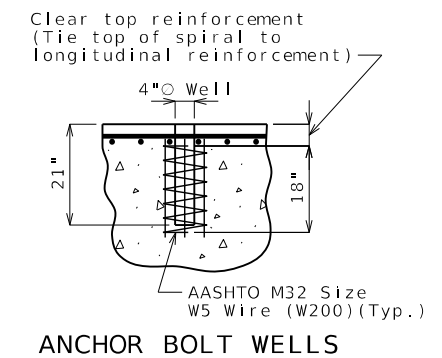
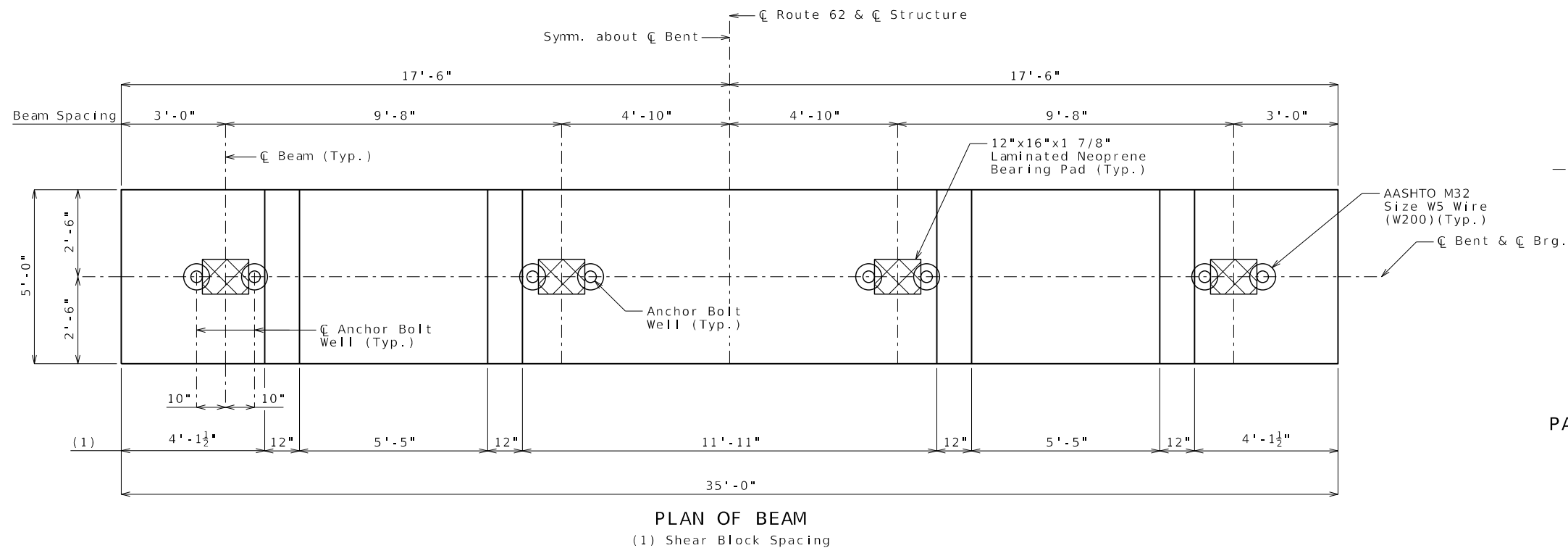
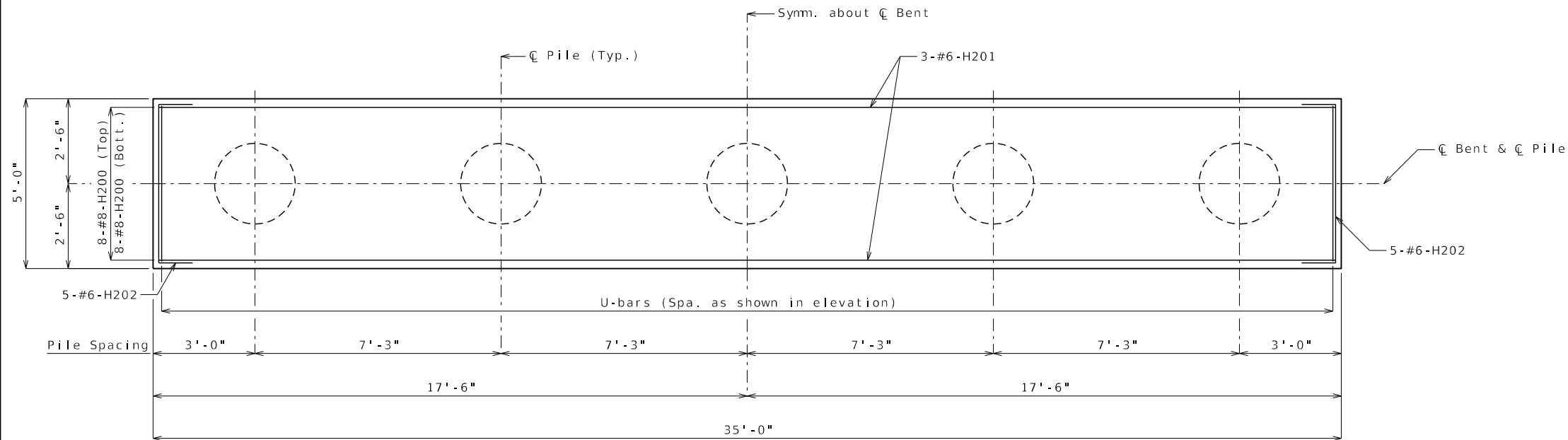
GARVER, LLC

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PHONE: (816) 298-6465

CERTIFICATE OF AUTHORITY NO. 2008013090

GARVER

[illegible]

These quantities are included in the Estimated Quantities table on Sheet No. 3.

DETAILS OF INTERMEDIATE BENTS NO. 2-4, 9-11 & 13-15

Detailed Dec. 2024
Checked Jan. 2025

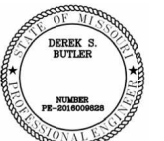
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 12 of 61

Notes :

For details of Laminated Neoprene Bearing Pad Assembly, see Sheet No. 22.

Reinforcing steel shall be shifted to clear anchor bolt wells by at least 1/2".



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DATE PREPARED

5/19/2025	
ROUTE	STATE
62	MO

DISTRICT	SHEET NO.
BR	12

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9436

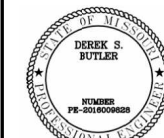
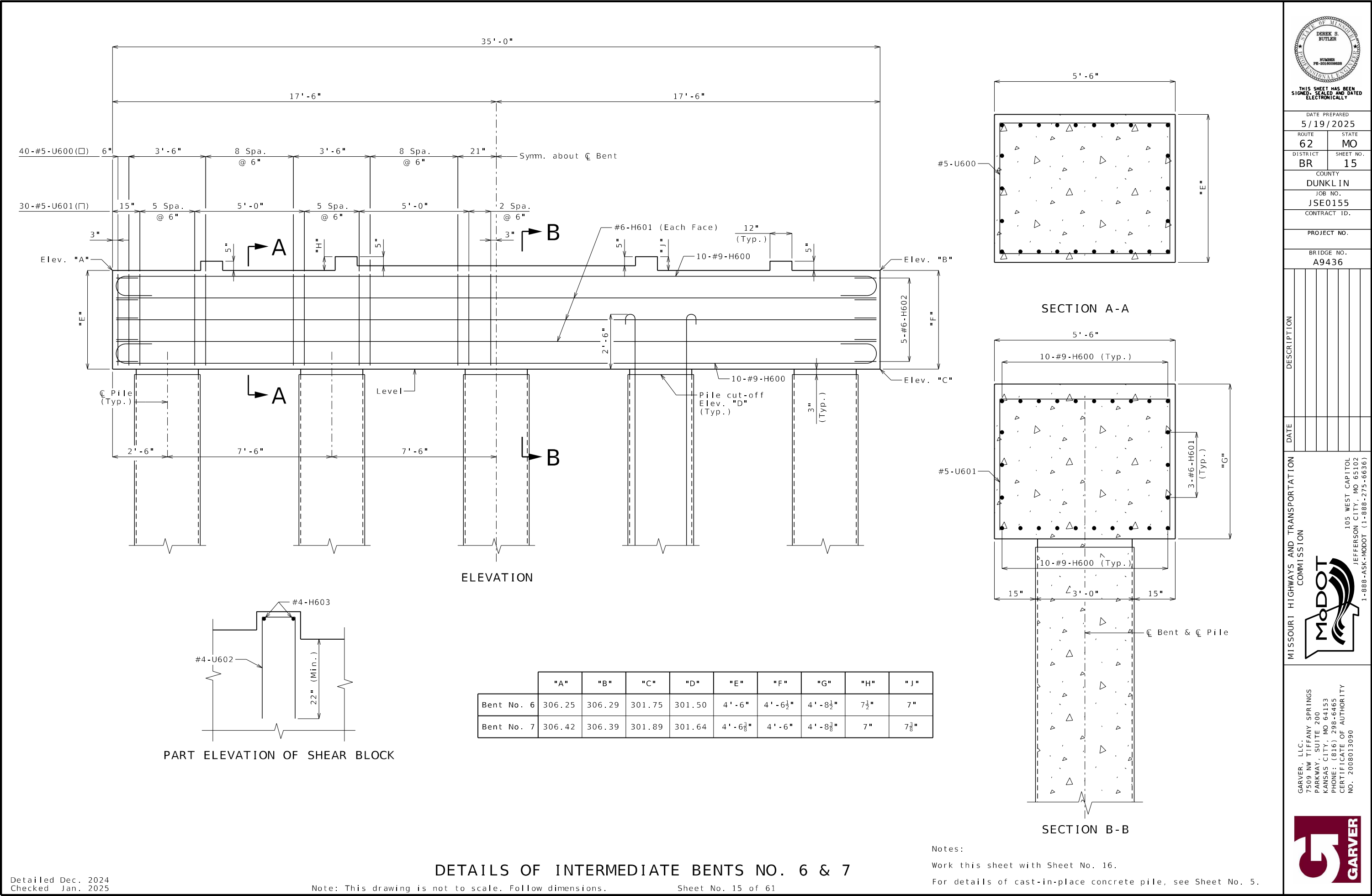
[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

GARVER, LLC.
7509 NW TIFFANY SPRINGS
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KANSAS CITY, MO 64153
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CERTIFICATE OF AUTHORITY
NO. 2008013090



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5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 15

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

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

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

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

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

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

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

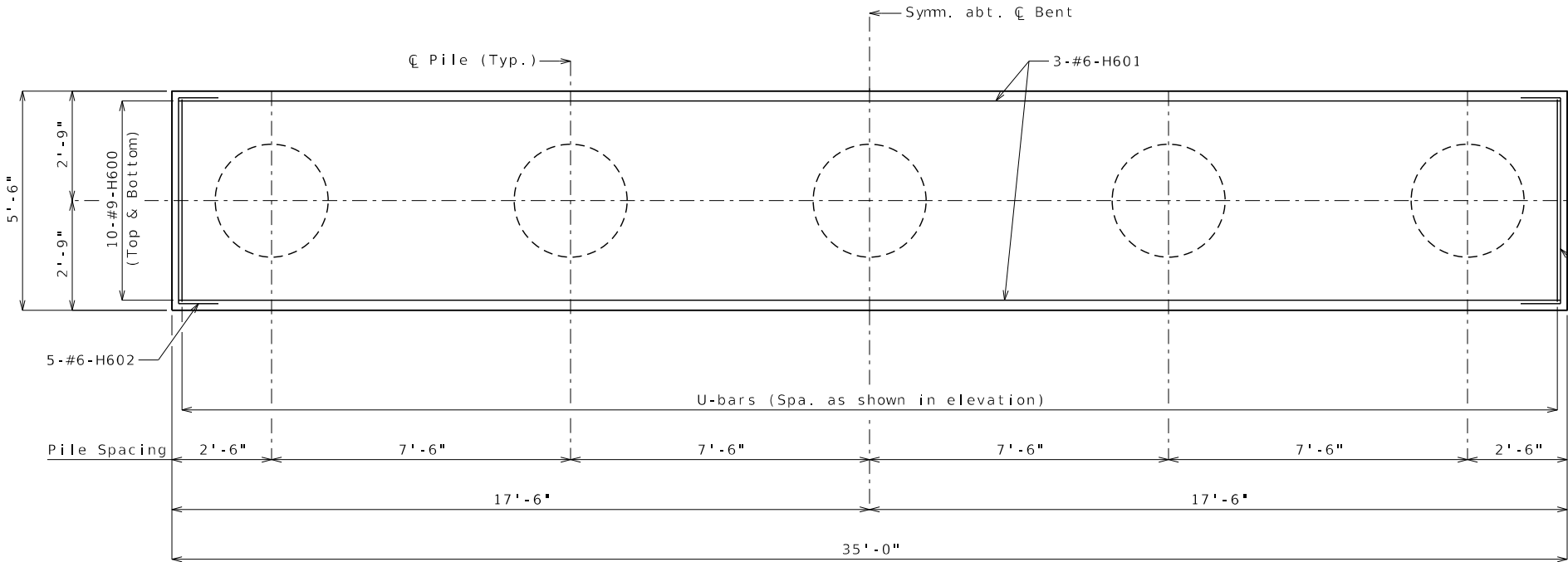
1-888-ASK-MODOT (1-888-275-6636)

Detailed Dec. 2024
Checked Jan. 2025

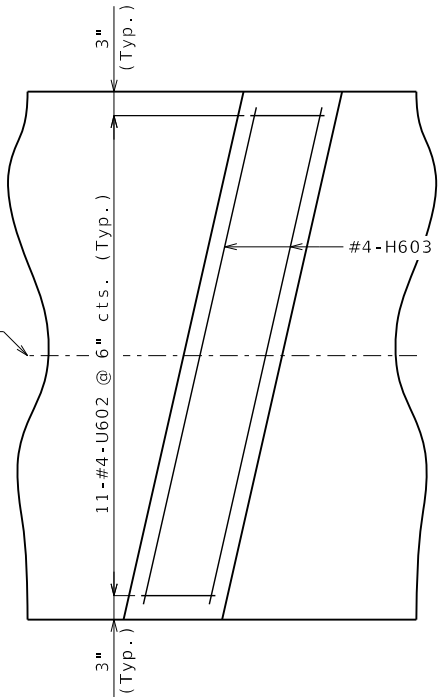
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 15 of 61

Notes:
Work this sheet with Sheet No. 16.
For details of cast-in-place concrete pile, see Sheet No. 5.



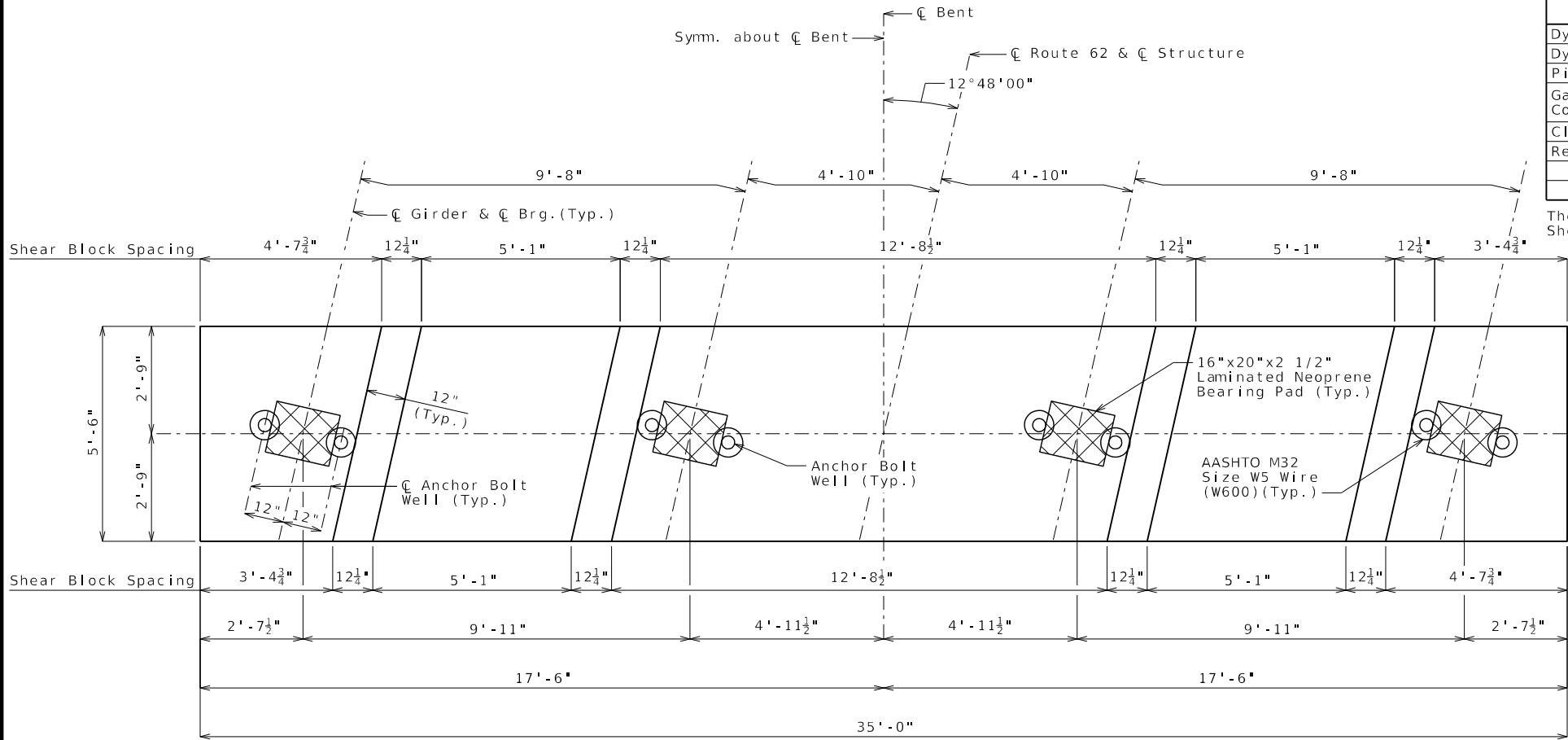
PLAN SHOWING REINFORCEMENT & PILES
(TOP & BOTTOM)



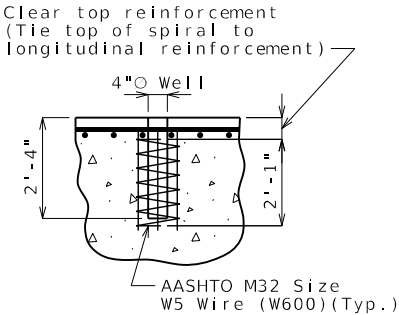
PART PLAN OF SHEAR BLOCK

Substructure Quantity Table for Intermediate Bents No. 6 & 7			
Item		Quantity	
		Bent No. 6	Bent No. 7
Dynamic Pile Testing	each	1	1
Dynamic Pile Restrike Testing	each	1	1
Pile Point Reinforcement	each	5	5
Galvanized Cast-in-Place Concrete Piles (36 in.)	linear foot	635	550
Class B Concrete (Substructure)	cu. yard	33.1	33.1
Reinforcing Steel (Bridges)	pound	8,560	8,560

These quantities are included in the Estimated Quantities table on Sheet No. 3.



PLAN OF BEAM
DETAILS OF INTERMEDIATE BENTS NO. 6 & 7



ANCHOR BOLT WELLS

Notes:
For details of Laminated Neoprene Bearing Pad Assembly, see Sheet No. 23.
Reinforcing steel shall be shifted to clear anchor bolt wells by at least 1/2".



THIS SHEET HAS BEEN
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ELECTRONICALLY

DATE PREPARED
5/19/2025
ROUTE 62 STATE MO
DISTRICT BR SHEET NO. 16
COUNTY DUNKLIN
JOB NO. JSE0155
CONTRACT ID.

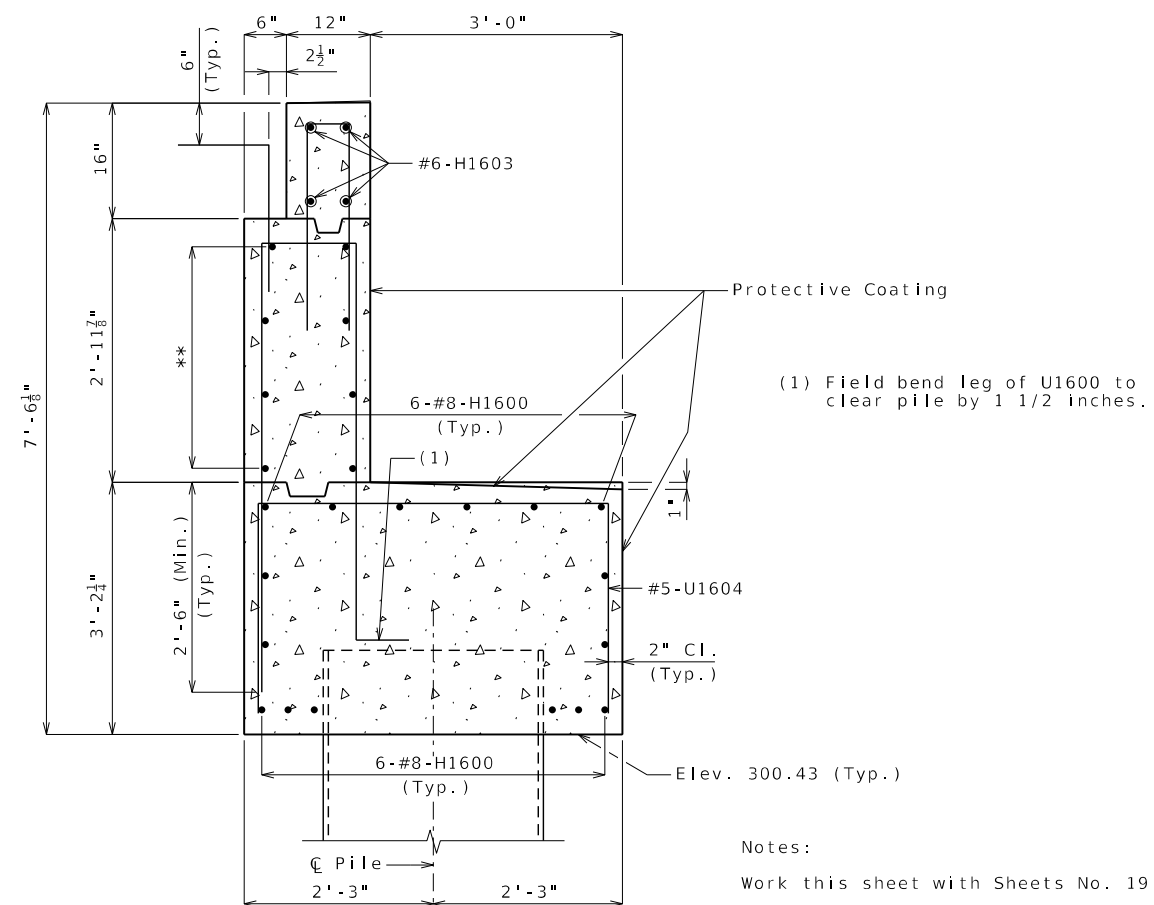
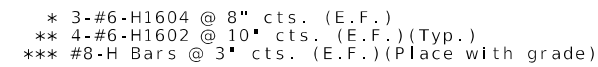
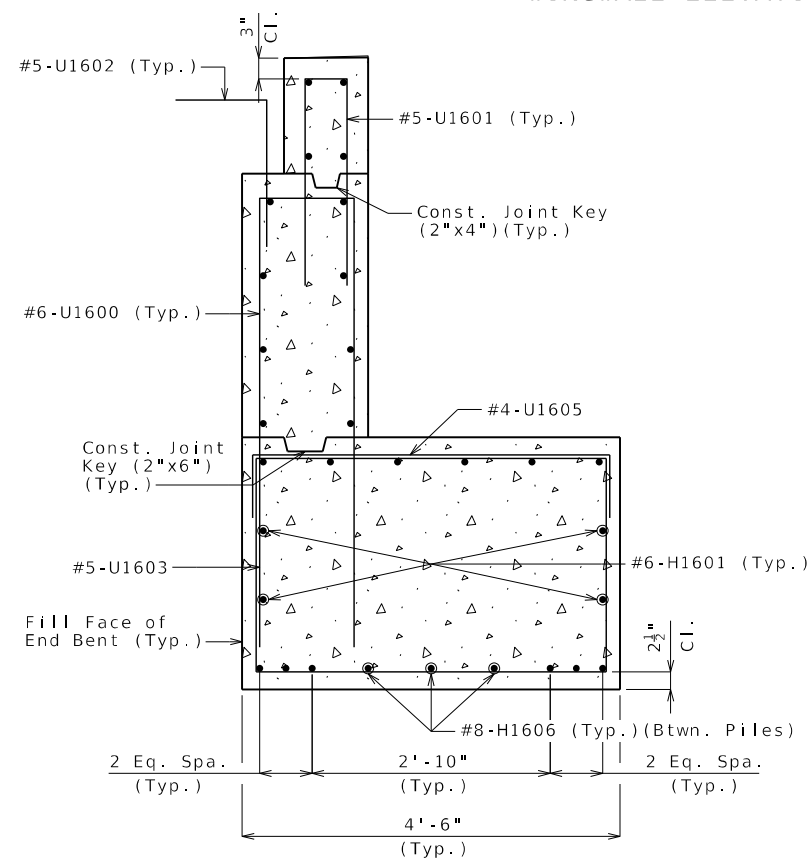
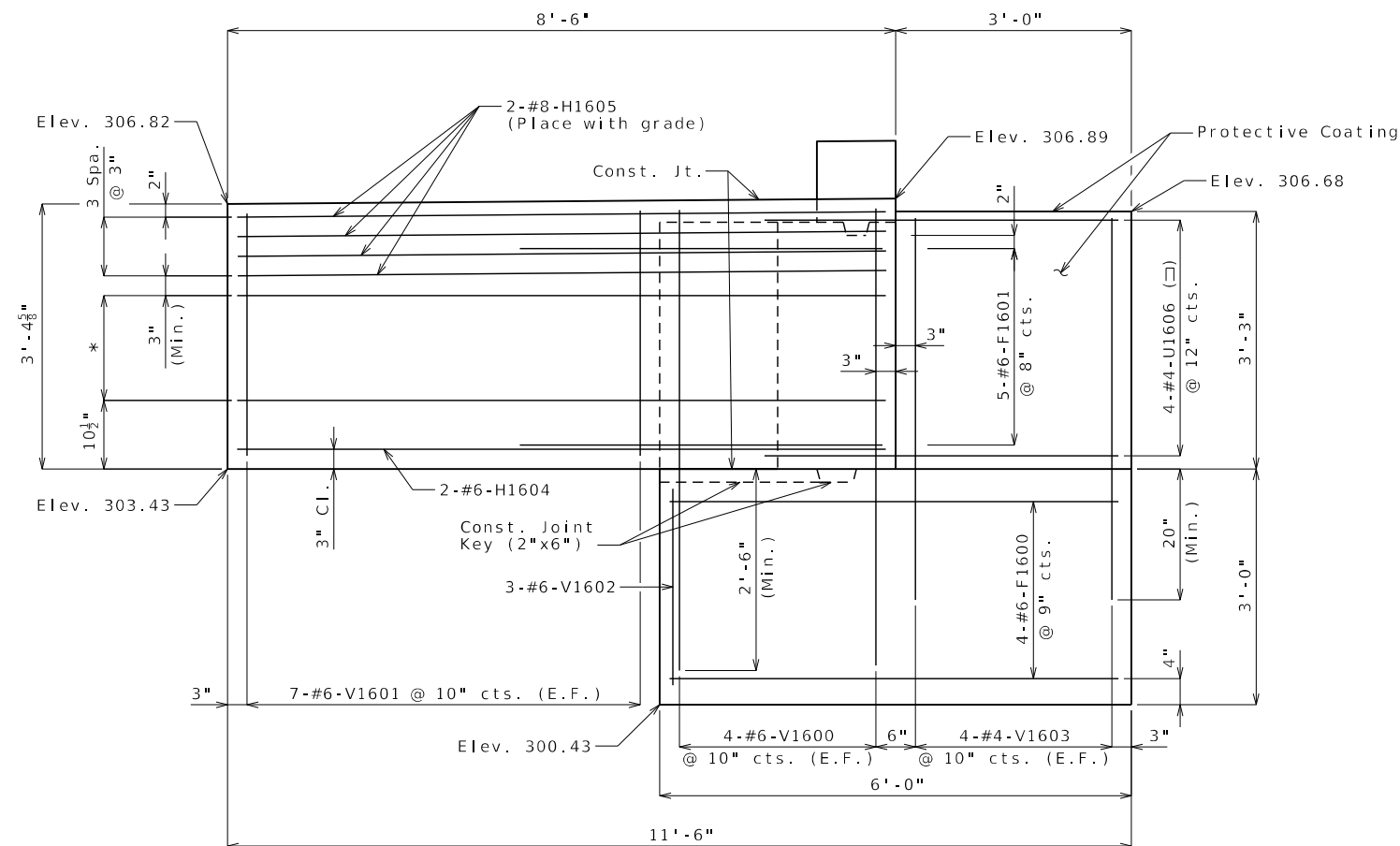
PROJECT NO.
BRIDGE NO. A9436

DATE	DESCRIPTION

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

GARVER, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



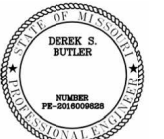


Notes:

Work this sheet with Sheets No. 19 & 20.

For locations of Sections A-A & B-B, see Sheet No. 20.

For additional notes, see Sheet No. 19.



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED
10/10/2007

29/2025

STATE	MO
-------	----

MO	
SHEET NO.	

21

COUNTY

DUNKLIN

JOB NO.
1550155

USE0155

CONTRACT ID.

PROJECT NO. _____

BRIDGE NO.

A9436

[illegible]

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



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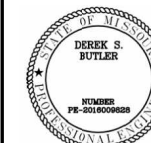
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℄ Ahd. Brg. Int. Bent No. 8 or
℄ Ahd. Brg. Int. Bent No. 12

℄ Int. Bent No. 2,
℄ Int. Bent No. 9 or
℄ Int. Bent No. 13

℄ Int. Bent No. 3,
℄ Int. Bent No. 10 or
℄ Int. Bent No. 14

℄ Int. Bent No. 4,
℄ Int. Bent No. 11 or
℄ Int. Bent No. 15

℄ Bk. Brg. Int. Bent No. 5,
℄ Bk. Brg. Int. Bent No. 12 or
℄ Brg. End Bent No. 16



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5/19/2025

ROUTE STATE

62 MO

DISTRICT SHEET NO.

BR 24

COUNTY

DUNKLIN

JOB NO.

JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

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

Garver, LLC

7509 NW TIFFANY SPRINGS

PARKWAY, SUITE 200

KANSAS CITY, MO 64153

PHONE: (816) 298-6465

CERTIFICATE OF AUTHORITY

NO. 2008013090

Garver

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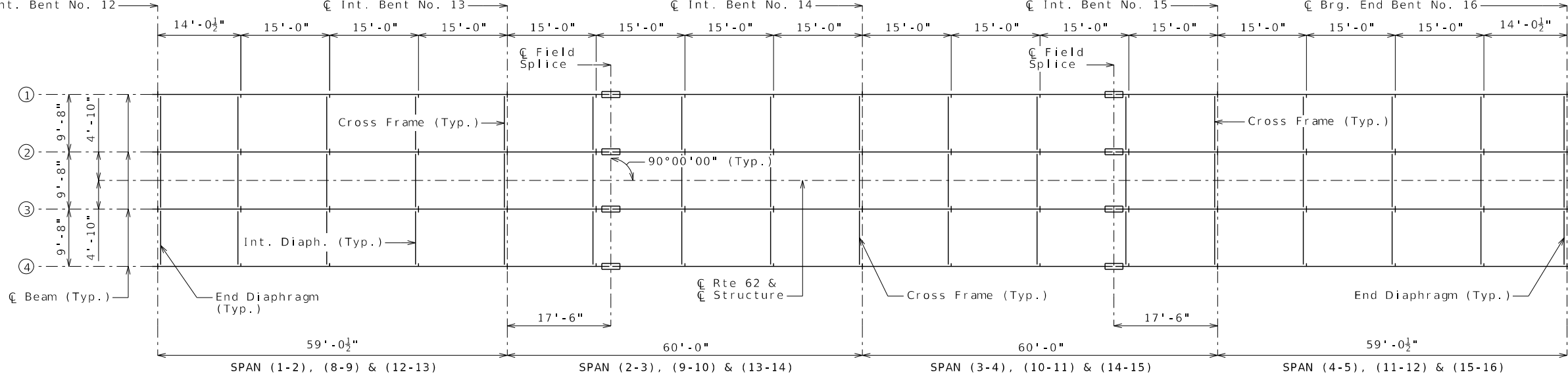
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Garver

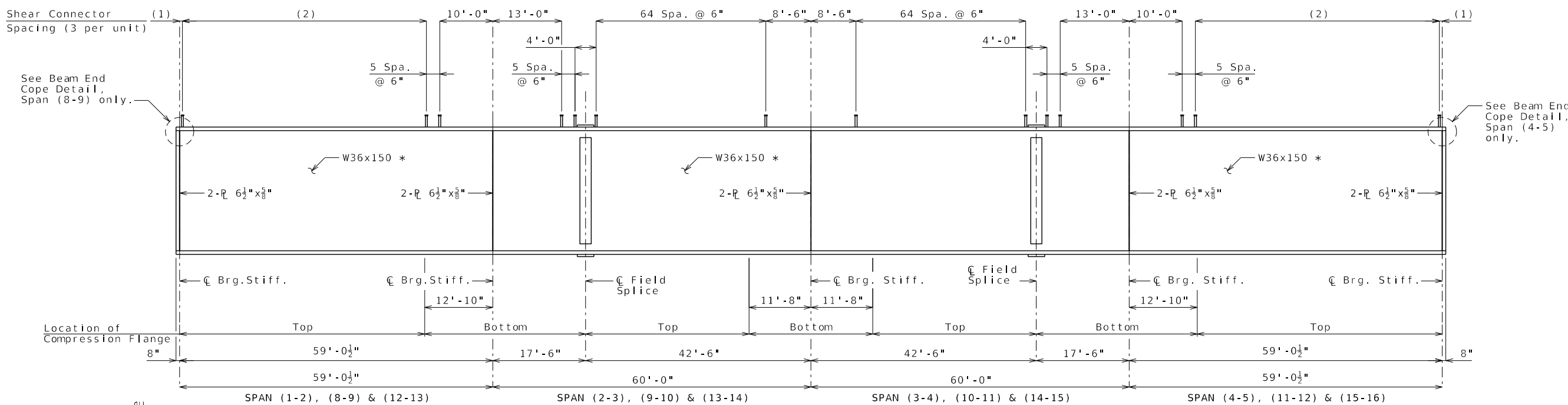
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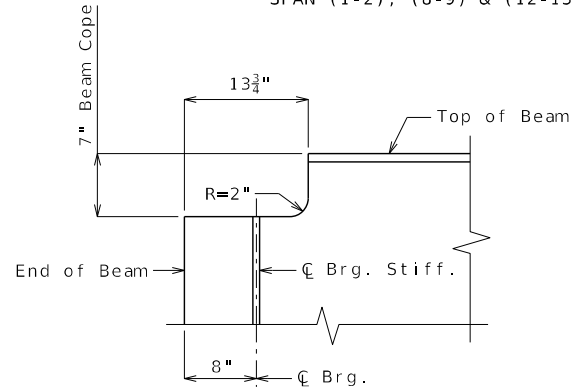
Garver



PLAN OF STRUCTURAL STEEL



ELEVATION OF BEAM



BEAM END COPE DETAIL
(Shown at Int. Bent No. 8.
Similar at Int. Bent No. 5)

PLAN OF STRUCTURAL STEEL AND
ELEVATION OF BEAM - UNITS 1, 3 & 4

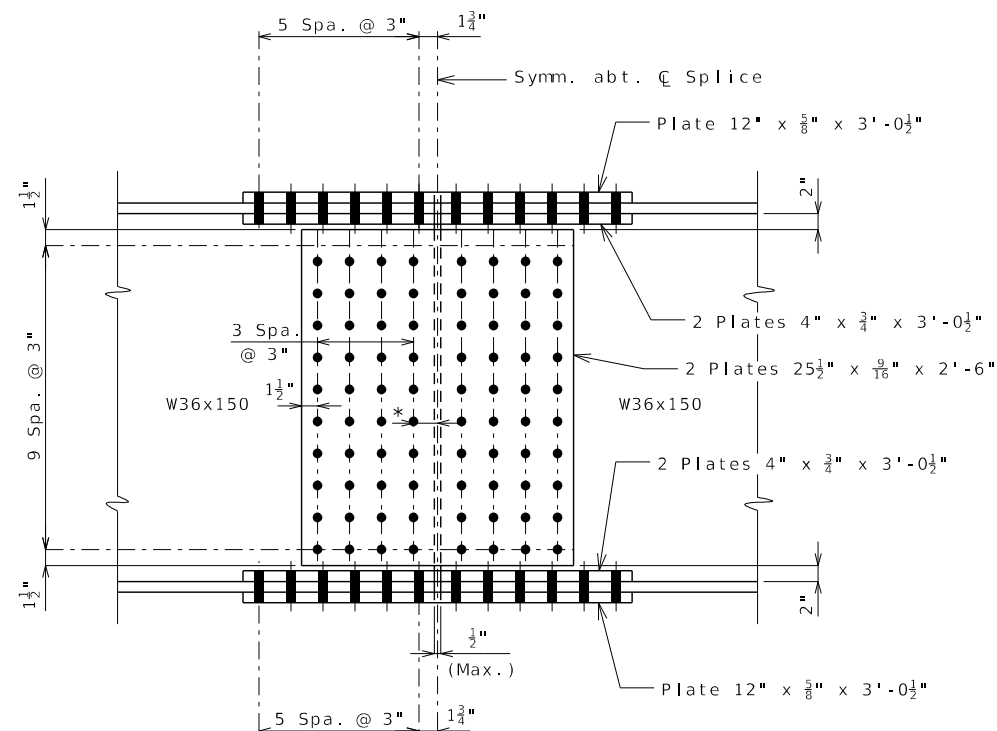
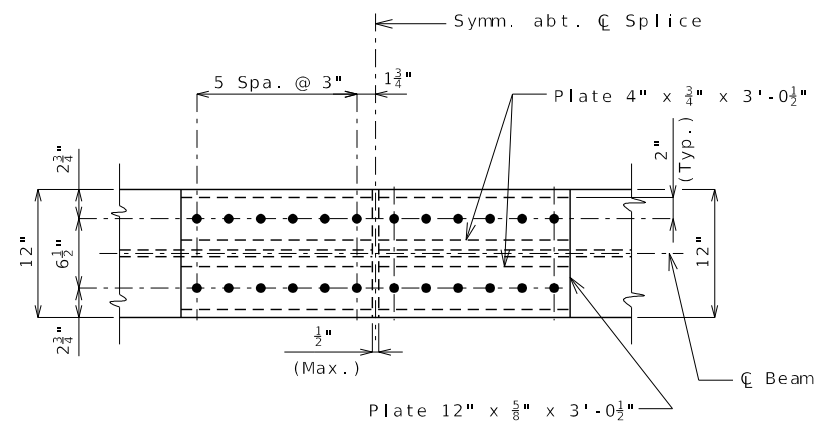
- (1) 6 1/2" [Spans (1-2), (11-12), (12-13) & (15-16)]
18 1/2" [Spans (4-5) & (8-9)]
- (2) 46 Spa. @ 12" [Spans (1-2), (11-12), (12-13) & (15-16)]
45 Spa. @ 12" [Spans (4-5) & (8-9)]

Notes:

- * Notch toughness is required for all wide flange beams.
- For details of bolted field splices, see Sheet No. 26.
- Fabricated structural steel shall be ASTM A709, Grade 50W, except as noted.
- Longitudinal dimensions are horizontal from ℄ bearing to ℄ bearing. See Part Longitudinal Section on Sheet No. 32.
- For location of slab drain attachment holes, see Sheet No. 33.
- For details of intermediate diaphragms, cross frames, end diaphragms, bearing stiffeners and intermediate diaphragm connection plates, see Sheet No. 27.

Detailed Oct. 2024
Checked Dec. 2024

Note: This drawing is not to scale. Follow dimensions. Sheet No. 24 of 61

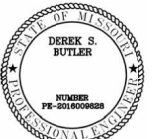
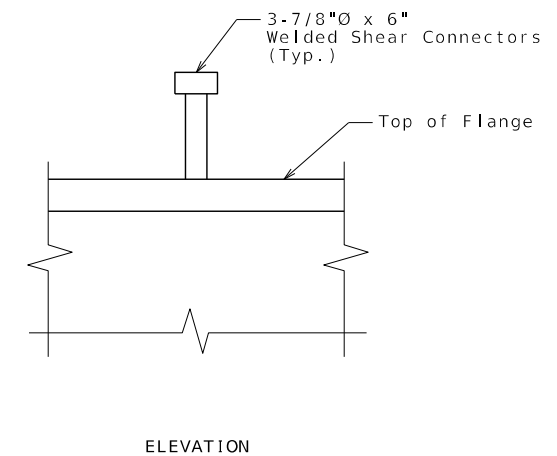
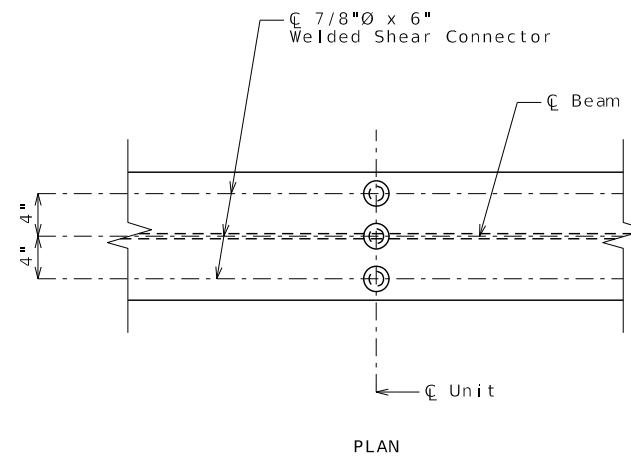


* $2\frac{1}{4}$ "

Bolts shall be 7/8-inch diameter ASTM F3125 Grade A325 Type 3 in 15/16-inch diameter holes.

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

Fabricated Structural Steel for splice plates shall be ASTM A709 Grade 50W. All splice plates shall be subject to notch toughness requirements.



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ROUTE	STATE
62	MO

DISTRICT	SHEET NO.
BR	26

COUNTY

DUNKLIN

JOB NO.

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

GARVER, LLC.
77509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

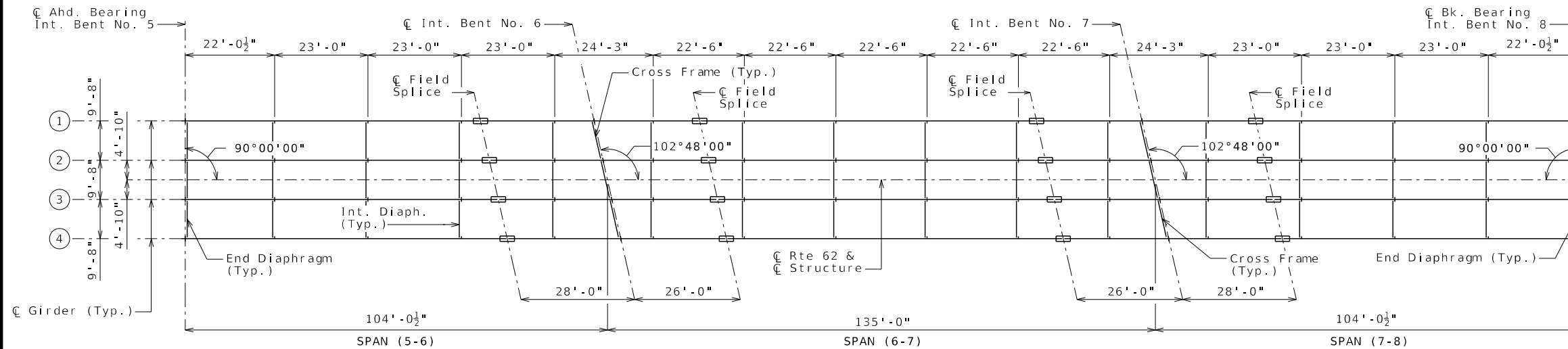


Detailed Nov. 2024
Checked Dec. 2024

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

Sheet No. 26 of 61

B A9436_026_SE0155_Steel_Detail.dgn 9:33:57 AM 5/19/2025



* Indicates flange plates subject to notch toughness requirements. All web plates shall be subject to notch toughness requirements.

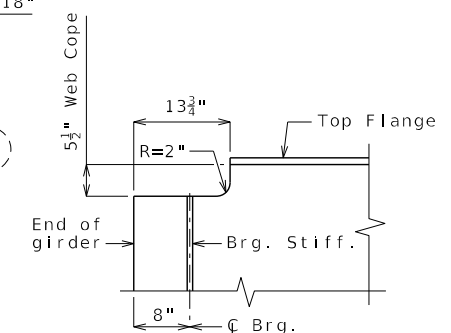
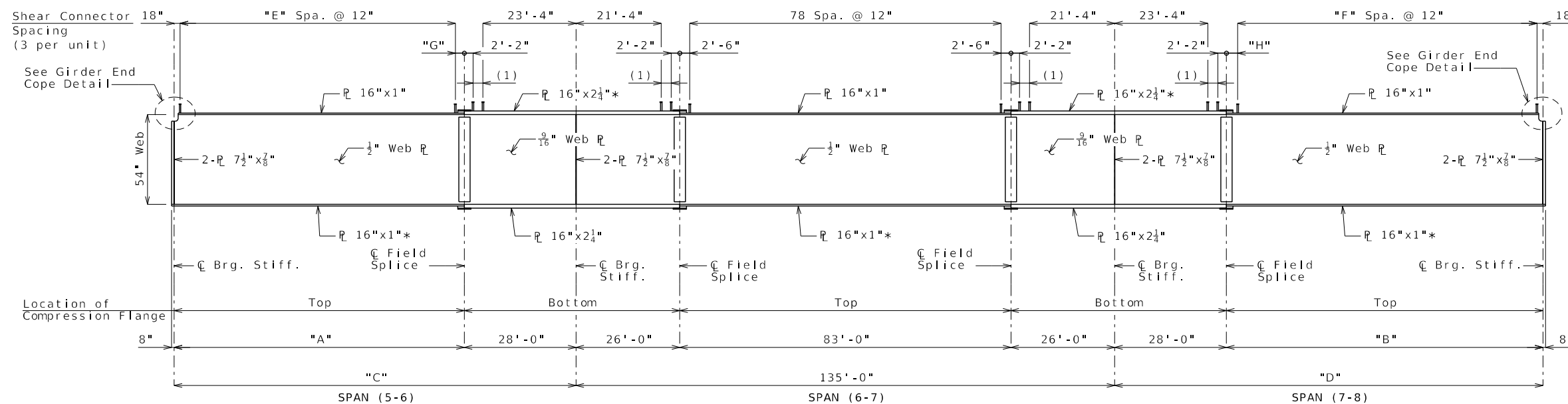
Plate girders shall be fabricated to be in accordance with the camber diagram shown on Sheet No. 29.

For details of bolted field splices,
see Sheet No. 30.

Fabricated structural steel shall be ASTM A709, Grade 50W, except as noted.

Longitudinal dimensions are horizontal from $\odot$ bearing to $\odot$ bearing. See Part Longitudinal Section on Sheet No. 32.

For details of intermediate diaphragms, cross frames, end diaphragms, bearing stiffeners and intermediate diaphragm connection plates, see Sheet No. 31.

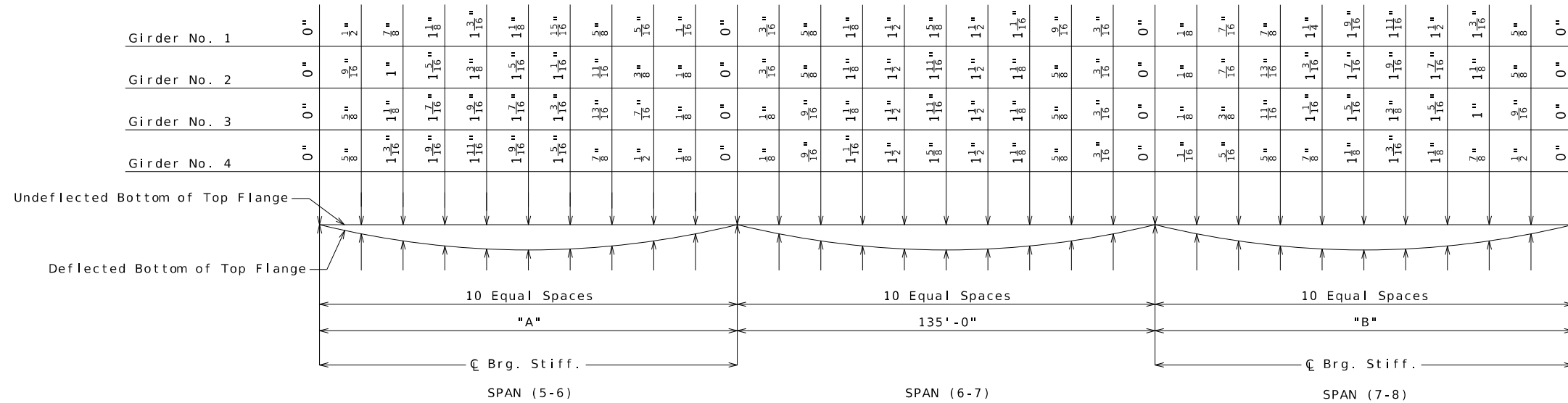


Girdir Number	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
1	72'-9"	79'-4"	100'-9"	107'-4"	69	75	2'-3"	2'-10"
2	74'-11 ³ / ₈ "	77'-1 ⁵ / ₈ "	102'-11 ¹ / ₈ "	105'-1 ⁵ / ₈ "	71	73	2'-5 ³ / ₈ "	2'-7 ⁵ / ₈ "
3	77'-11 ¹ / ₈ "	74'-11 ³ / ₈ "	105'-1 ¹ / ₈ "	102'-11 ³ / ₈ "	73	71	2'-7 ¹ / ₈ "	2'-5'-5 ³ / ₈ "
4	79'-4"	72'-9"	107'-4"	100'-9"	75	69	2'-10"	2'-3"

DEAD LOAD DEFLECTIONS AND PLATE GIRDER CAMBER DIAGRAM - UNIT 2

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

Sheet No. 29 of 61



DEAD LOAD DEFLECTION

17% of dead load deflection is due to the weight of structural steel.

Dead load deflection includes weight of structural steel, concrete slab, and barrier.

Girder Number	"A"	"B"
1	100'-9"	107'-4"
2	102'-11 ³ / ₈ "	105'-1 ⁵ / ₁₆ "
3	105'-1 ¹ / ₈ "	102'-11 ³ / ₈ "
4	107'-4"	100'-9"

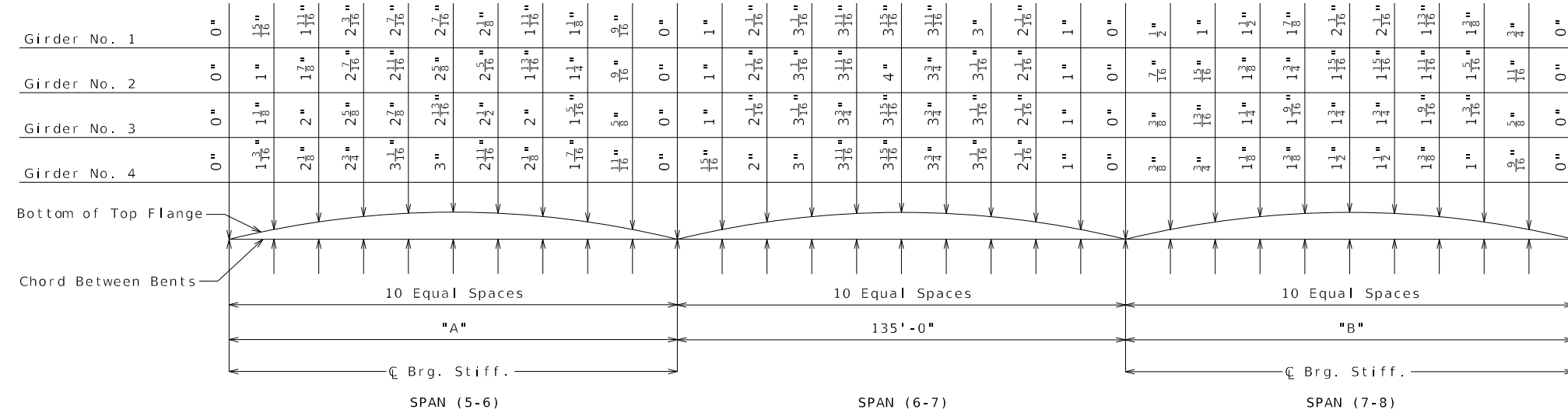
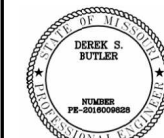


PLATE GIRDER CAMBER DIAGRAM

Camber includes allowance for vertical curve and dead load deflection due to concrete slab, barrier, and structural steel.



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5/19/2025

ROUTE STATE

62 MO

DISTRICT SHEET NO.

BR 29

COUNTY

DUNKLIN

JOB NO.

JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9436

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

MoDOT

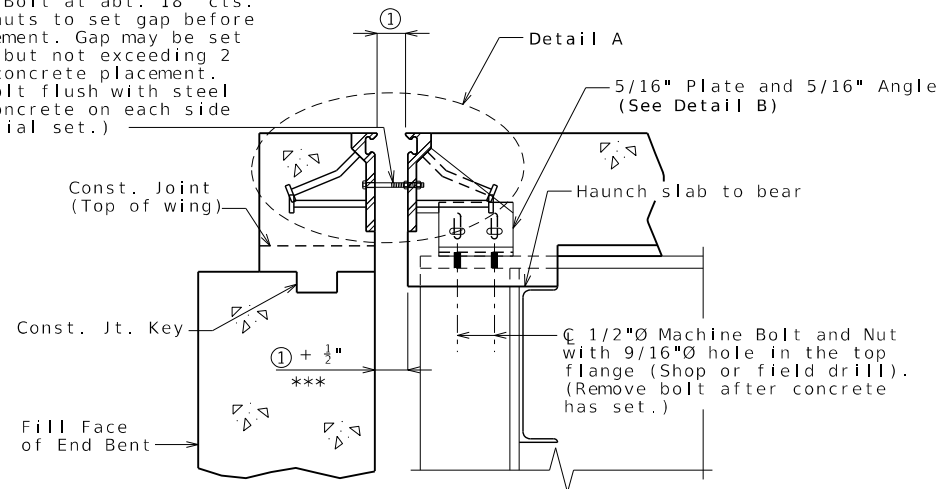
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

GARVER, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

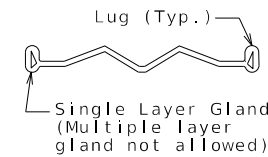


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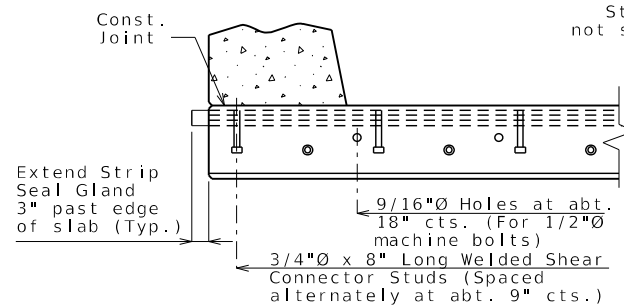
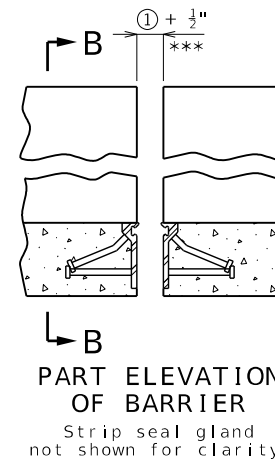
1/2"Ø Machine Bolt at abt. 18" cts.
(Use two hex nuts to set gap before
concrete placement. Gap may be set
anytime up to but not exceeding 2
hours before concrete placement.
Cut machine bolt flush with steel
armor after concrete on each side
has taken initial set.)



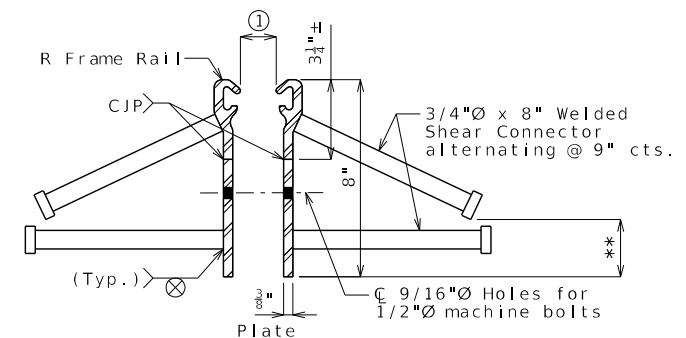
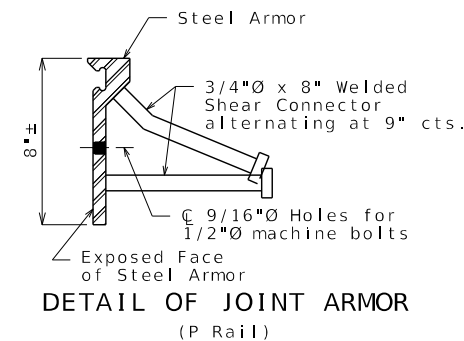
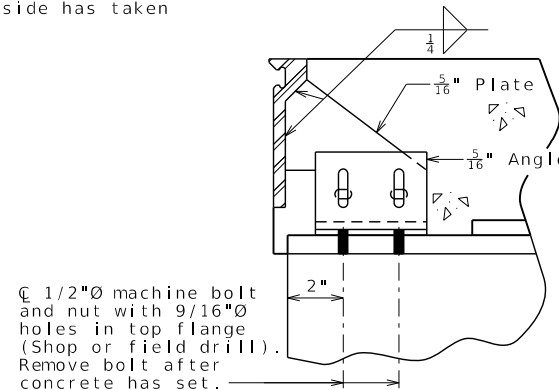
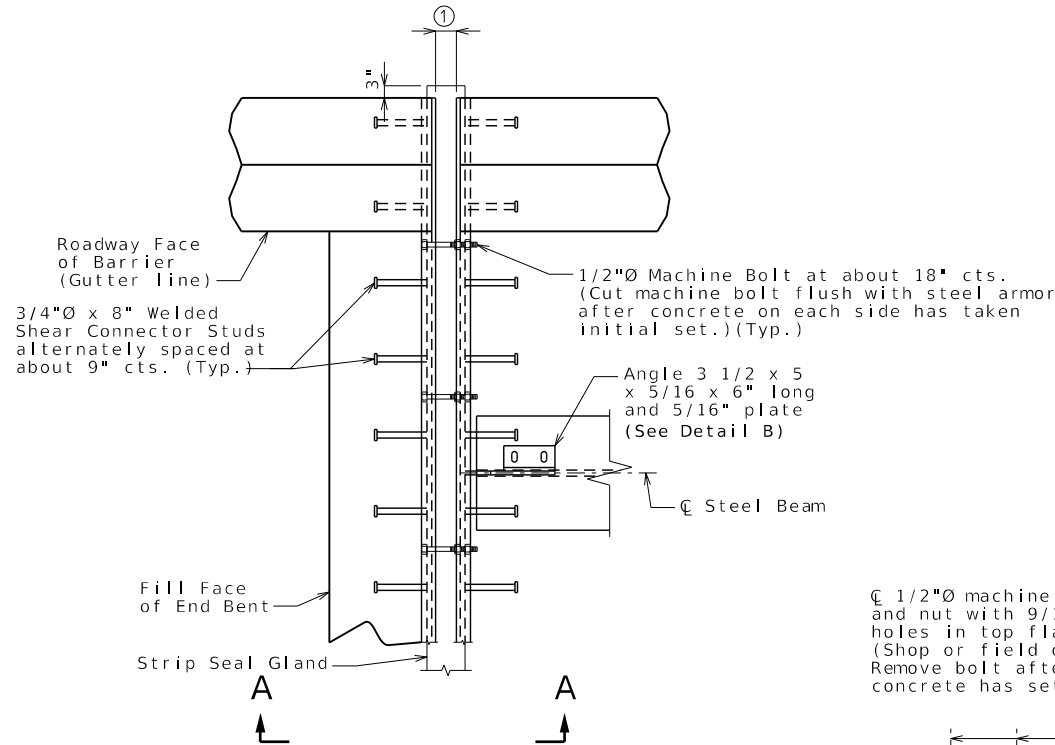
SECTION A-A



DETAIL OF GLAND



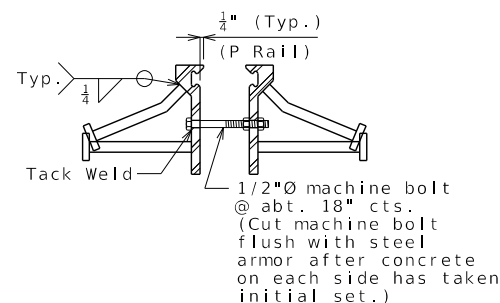
PART SECTION B-B



OPTIONAL R RAIL DETAIL

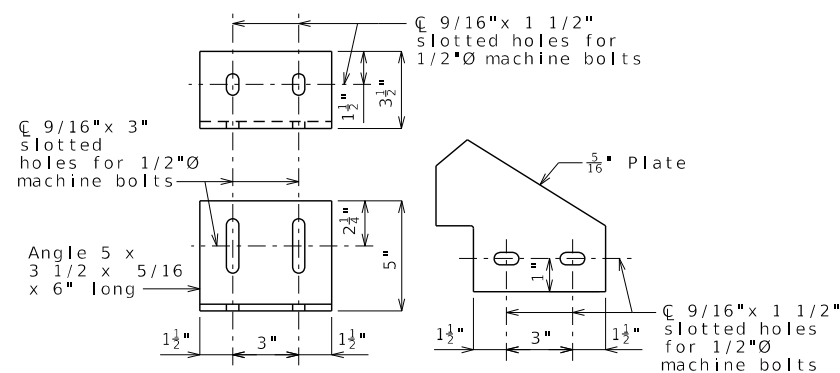
Table of Allowed Transverse Strip Seal Expansion Joint System

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 $\frac{1}{16}$ "	2 $\frac{1}{4}$ "	2 $\frac{1}{8}$ "	2"	1 $\frac{7}{8}$ "	1 $\frac{3}{4}$ "	1 $\frac{1}{16}$ "	□
Watson Bowman Acme (Wabo)	Strip seal SE-400	1 $\frac{1}{16}$ "	2 $\frac{1}{4}$ "	2 $\frac{1}{8}$ "	2"	1 $\frac{7}{8}$ "	1 $\frac{3}{4}$ "	1 $\frac{1}{16}$ "	□



DETAIL A

(P Rail shown, R Rail similar)



DETAIL B

STRIP SEAL EXPANSION JOINT SYSTEM AT END BENTS NO. 1 & 16

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

Sheet No. 34 of 61



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED _____

ROUTE	STATE
-------	-------

DISTRICT	SHEET NO.
----------	-----------

COUNTY

JOB NO.

CONTRACT ID.

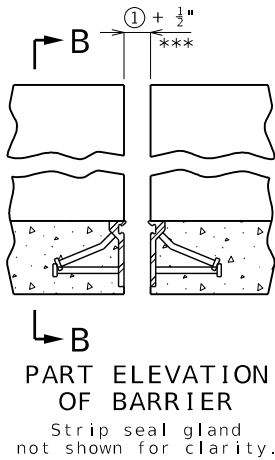
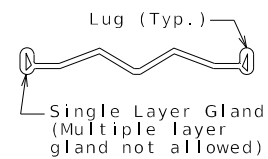
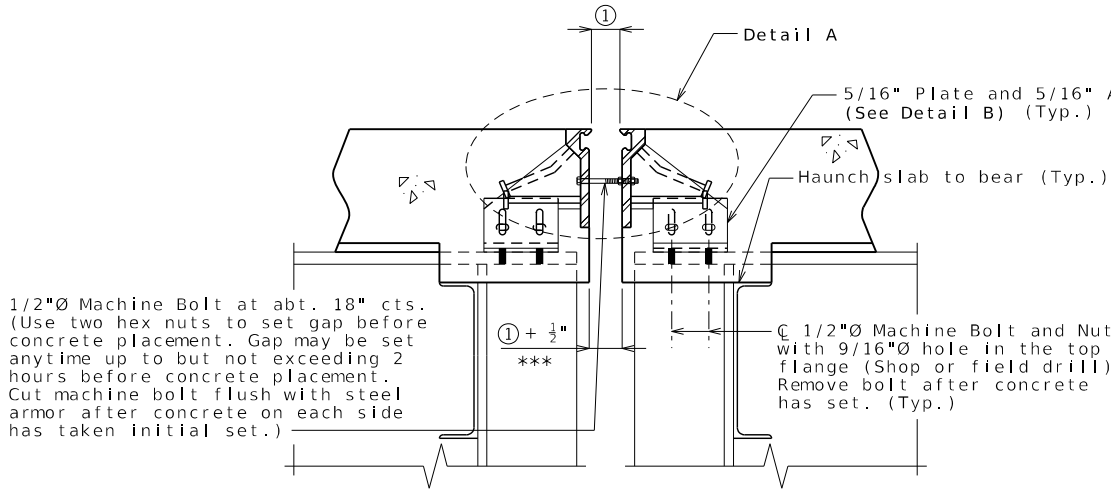
PROJECT NO.

BRIDGE NO.

[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090





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.

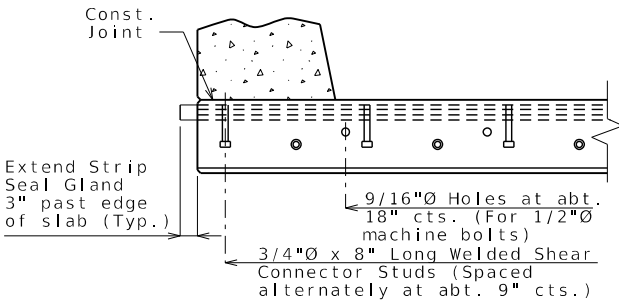
② The installation temperature shall be taken as the actual air temperature averaged over the 24-hour period immediately preceding installation.

③ MoDOT Construction personnel will indicate the strip seal expansion joint system installed.

Steel armor may also be referred to as extrusion or rail.

The terms P and R rail are used for identification only, and are not endorsements for any particular manufacturer.

*** Because of variation in armor dimensions, the concrete opening will vary if the optional R rail is used. Dimensions shown are based on the P rail option.



PART SECTION B-B

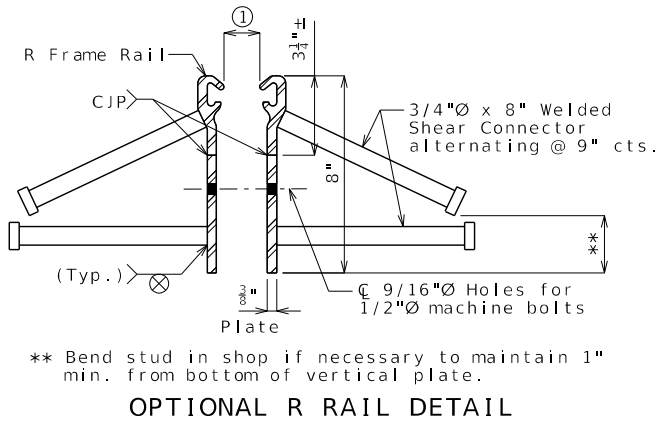
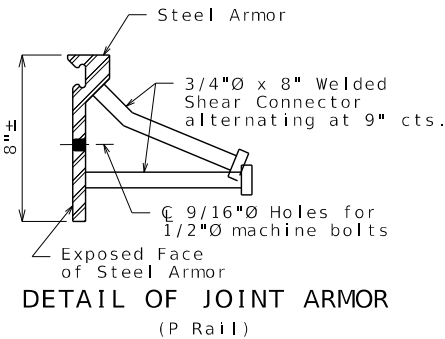
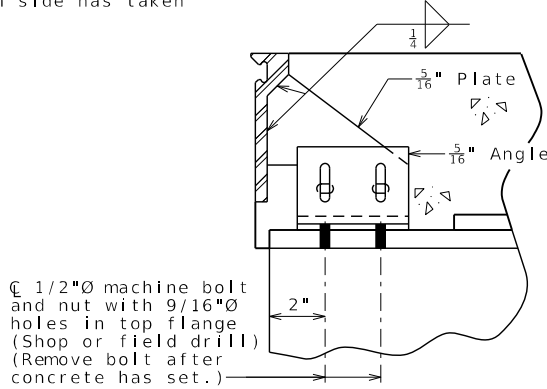
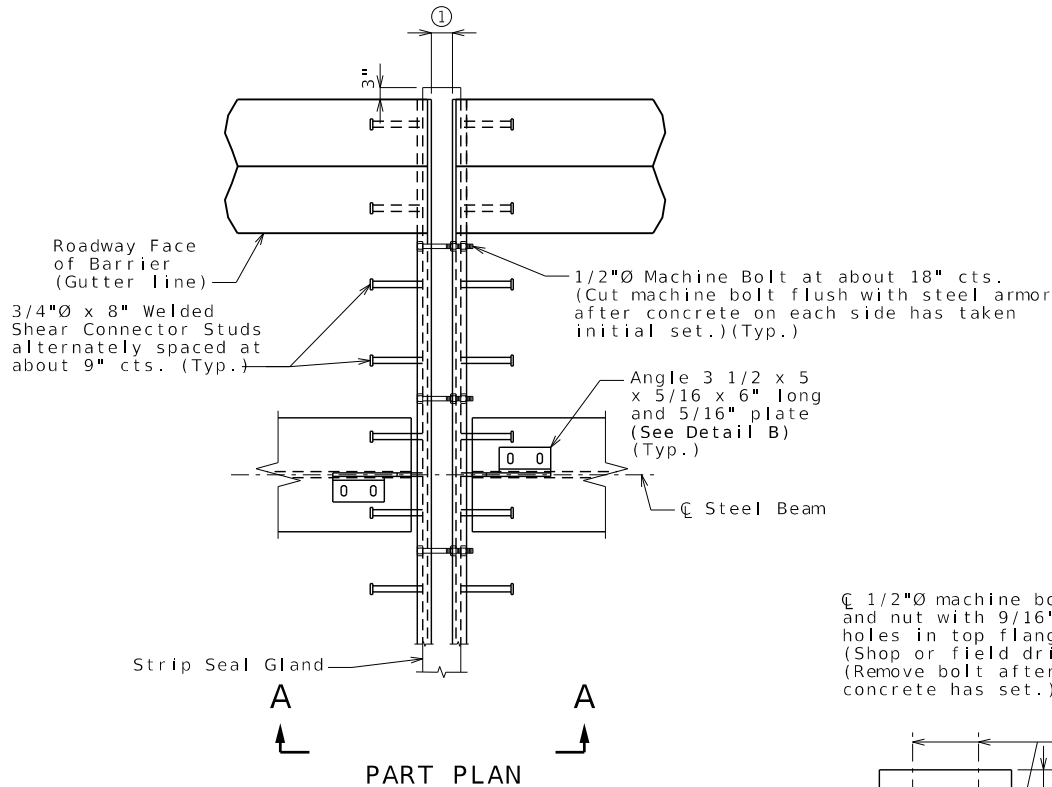
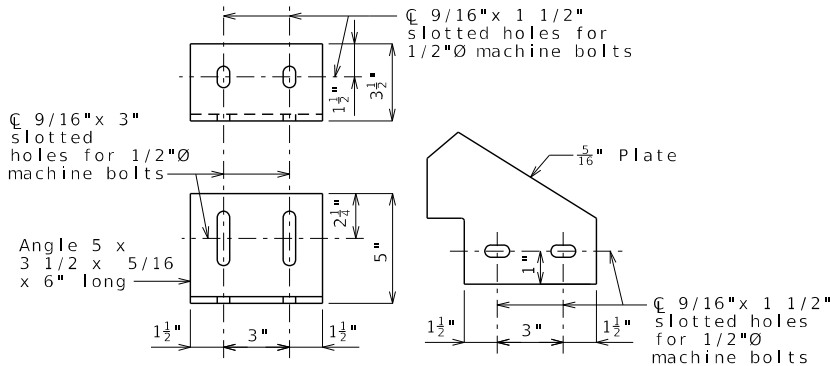
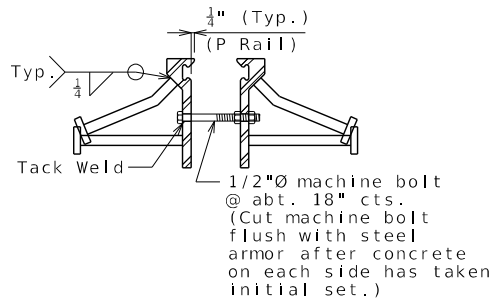
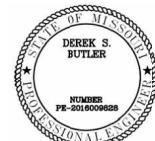


Table of Allowed Transverse Strip Seal Expansion Joint System								
Manufacturer	Strip Seal System (Designated Name)	Movement Parallel to RDWY	① Allowed Installation Gap Normal to Joint at RDWY Surface @ Air/Surface Temperature					
			@ 40°F	@ 50°F	@ 60°F	@ 70°F	@ 80°F	@ 90°F
D S Brown	Strip seal L2-400	3 3/8"	2 7/16"	2 1/4"	2"	1 3/4"	1 9/16"	N/A
Watson Bowman Acme (Wabo)	Strip seal SE-400	3 3/8"	2 7/16"	2 1/4"	2"	1 3/4"	1 9/16"	N/A

N/A = Installation is not allowed at this temperature.



STRIP SEAL EXPANSION JOINT SYSTEM AT INTERMEDIATE BENT NO. 12



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DATE PREPARED

5/19/2025

ROUTE

62

STATE

MO

DISTRICT

BR

SHEET NO.

35

COUNTY

DUNKLIN

JOB NO.

JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

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

Garver, LLC

7509 NW TIFFANY SPRINGS

PARKWAY, SUITE 200

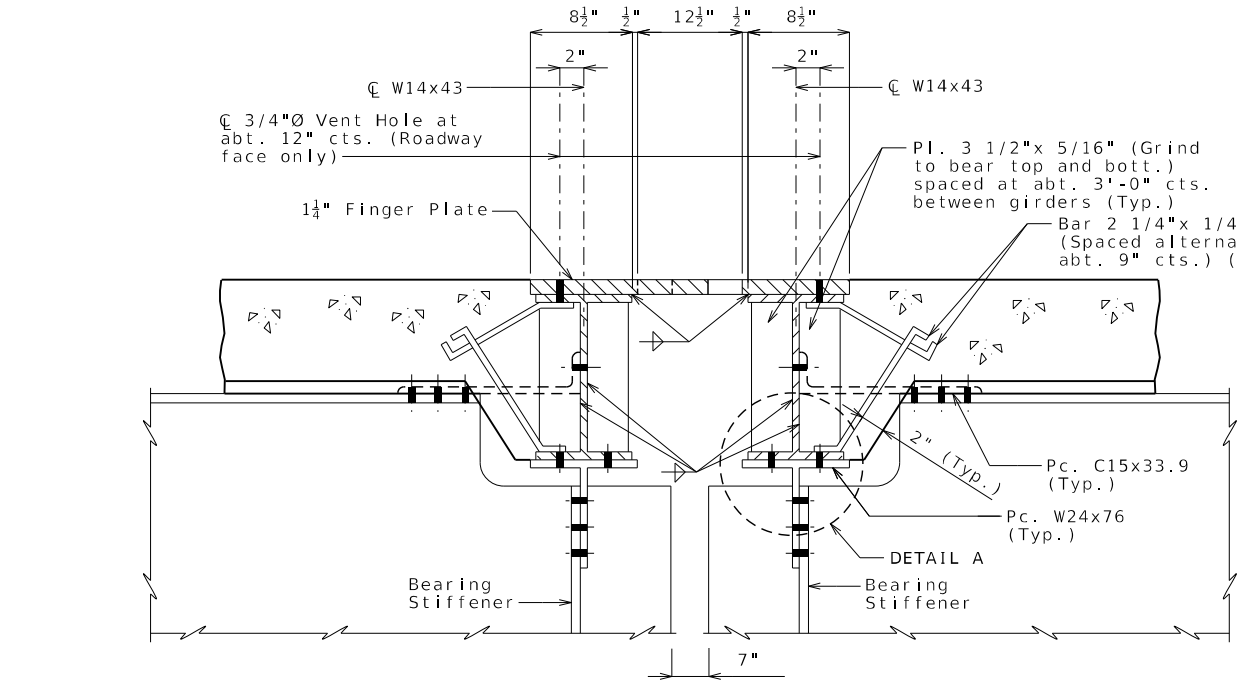
KANSAS CITY, MO 64153

PHONE: (816) 298-6465

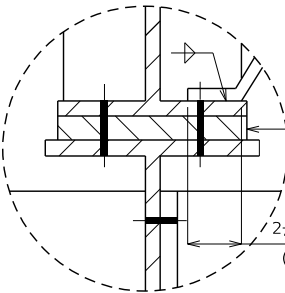
CERTIFICATE OF AUTHORITY

NO. 2008013090

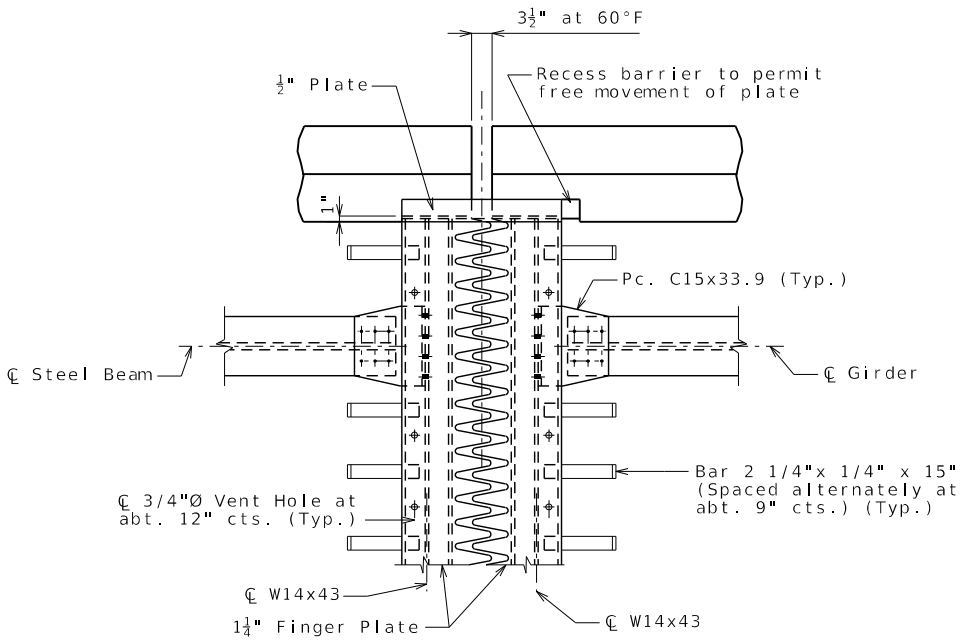
Garver



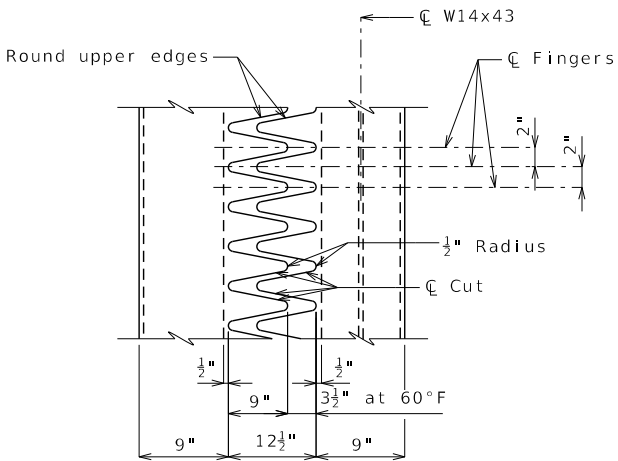
SECTION THRU DEVICE



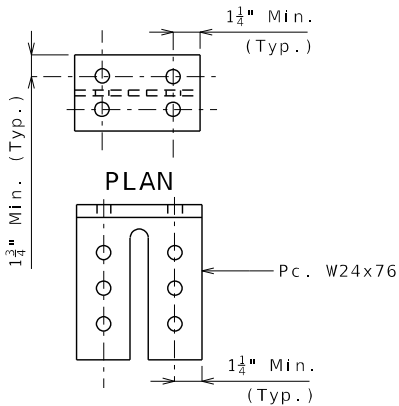
DETAIL A



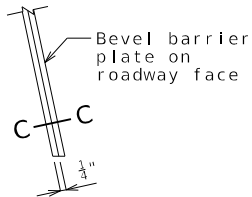
PART PLAN OF DEVICE



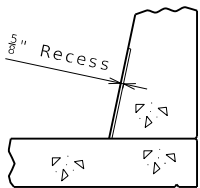
PART PLAN OF FINGER PLATE



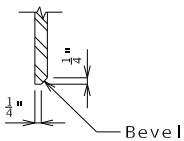
ELEVATION
Pc. W24x76



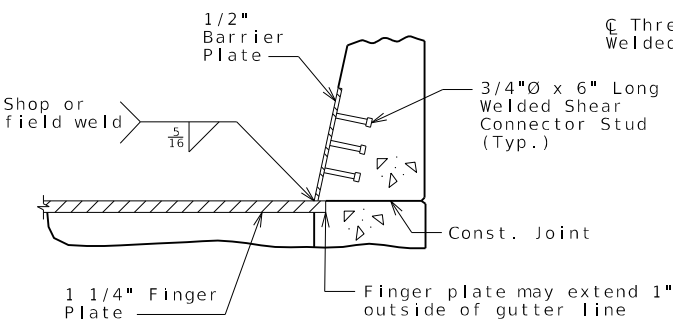
PART ELEVATION
AT END OF
BARRIER PLATE



SECTION B-B



SECTION C-C



SECTION A-A

GENERAL NOTES:

Finger plate shall be cut with a machine guided gas torch from one plate. The plate from which fingers are cut may be spliced before fingers are cut. The surface of cut shall be perpendicular to the surface of the plate. The cut shall not exceed 1/8" in width. The centerline of cut shall not deviate more than 1/16" from the position of centerline of cut shown. No splicing of finger plate or finger plate assembly will be allowed after fingers are cut. The expansion device shall be fabricated and installed to the crown and grade of the roadway.

Plan dimensions are based on installation at 60°F. The expansion gap and other dimensions shall be increased or decreased 1/4" for each 10° fall or rise in temperature at installation.

Material for the expansion device shall be ASTM A709 Grade 36 structural steel. Anchors for the expansion device shall be in accordance with Sec 1037.

Structural steel for the expansion device and barrier plate 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.

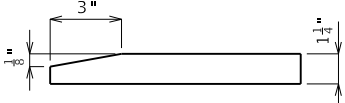
Payment for furnishing, coating or galvanizing and installing the structural steel for the expansion device will be considered completely covered by the contract unit price for Expansion Device (Finger Plate) per linear foot.

All holes shown for connections shall be subpunched 11/16-inch diameter (shop or field drill) and reamed to 13/16-inch diameter in field, except holes in members that will be used as templates may be drilled to 13/16-inch diameter in the shop. For multi-piece connections, only the holes in the template member may be drilled to 13/16-inch diameter in the shop.

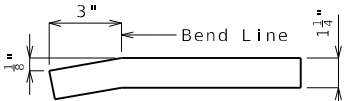
Longitudinal reinforcing steel shall be placed so that ends shall not be more than ±1" from the web of W14 x 43 at the expansion device.

Complete joint penetration welds utilized in the fabrication of the expansion device shall be nondestructively tested by an approved method.

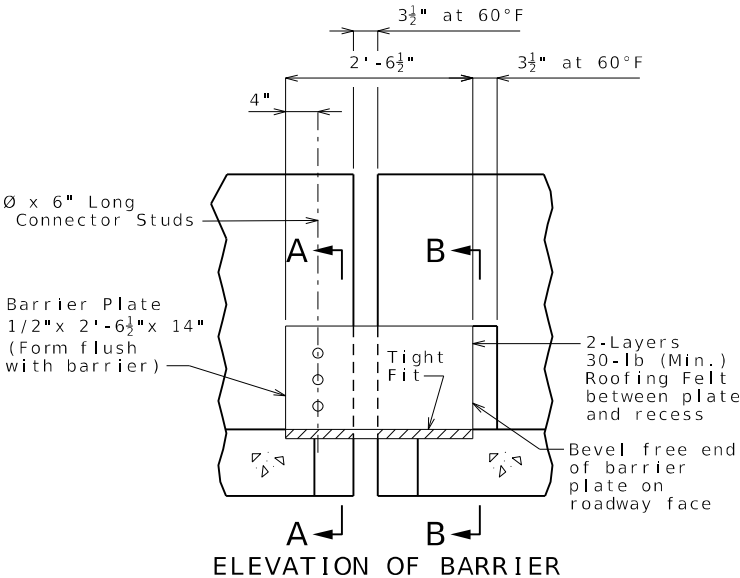
Bolts shall be 3/4-inch diameter ASTM F3125 Grade A325 Type 3.



FINGER DETAIL

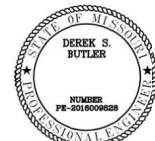


OPTIONAL FINGER DETAIL



ELEVATION OF BARRIER

FINGER PLATE EXPANSION DEVICE AT INT. BENTS NO. 5 & 8



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DATE PREPARED
5/19/2025

ROUTE
62

STATE
MO

DISTRICT
BR

SHEET NO.
36

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

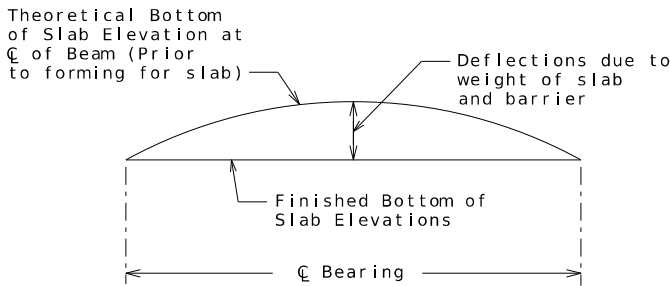
MODOT

GARVER, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

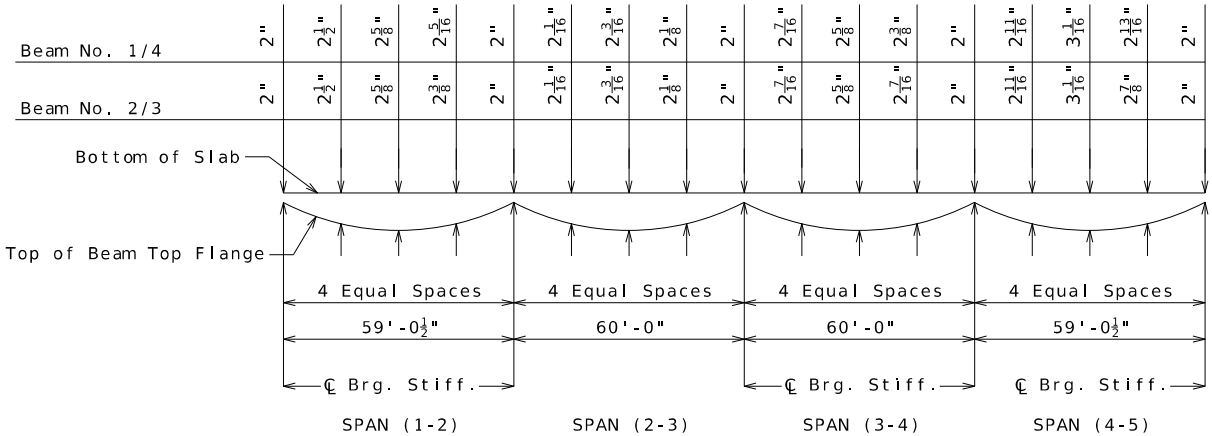
GARVER

Theoretical Bottom of Slab Elevations at Centerline of Beam (Prior to forming for slab)											
Unit 1	Beam Number	Span (1-2) (59'-0½" C Brg. - C Brg.)				Span (2-3) (60'-0" C Brg. - C Brg.)					
		C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.
	1/4	304.94	305.36	305.74	306.10	306.44	306.44	306.83	307.22	307.60	307.97
	2/3	305.14	305.55	305.94	306.29	306.64	306.64	307.02	307.41	307.79	308.16
	Beam Number	Span (3-4) (60'-0" C Brg. - C Brg.)				Span (4-5) (59'-0½" C Brg. - C Brg.)					
Unit 3		C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.
	1/4	307.97	308.35	308.71	309.04	309.35	309.35	309.67	309.97	310.21	310.41
	2/3	308.16	308.54	308.90	309.23	309.54	309.54	309.86	310.16	310.41	310.60
	Beam Number	Span (8-9) (59'-0½" C Brg. - C Brg.)				Span (9-10) (60'-0" C Brg. - C Brg.)					
		C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.
Unit 4	1/4	310.92	310.83	310.72	310.58	310.43	310.43	310.31	310.20	310.07	309.93
	2/3	311.11	311.03	310.92	310.77	310.62	310.62	310.50	310.39	310.26	310.13
	Beam Number	Span (10-11) (60'-0" C Brg. - C Brg.)				Span (11-12) (59'-0½" C Brg. - C Brg.)					
		C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.
	1/4	309.93	309.82	309.70	309.57	309.44	309.44	309.35	309.25	309.12	308.95
	2/3	310.13	310.01	309.90	309.76	309.63	309.63	309.54	309.44	309.31	309.15
	Beam Number	Span (12-13) (59'-0½" C Brg. - C Brg.)				Span (13-14) (60'-0" C Brg. - C Brg.)					
		C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.
	1/4	308.94	308.86	308.75	308.60	308.45	308.45	308.33	308.22	308.09	307.96
	2/3	309.13	309.05	308.94	308.79	308.64	308.64	308.53	308.41	308.28	308.15
	Beam Number	Span (14-15) (60'-0" C Brg. - C Brg.)				Span (15-16) (59'-0½" C Brg. - C Brg.)					
		C Brg.	.25	.50	.75	C Brg.	C Brg.	.25	.50	.75	C Brg.
	1/4	307.96	307.84	307.72	307.59	307.46	307.46	307.37	307.27	307.14	306.98
	2/3	308.15	308.04	307.92	307.78	307.66	307.66	307.56	307.46	307.33	307.17

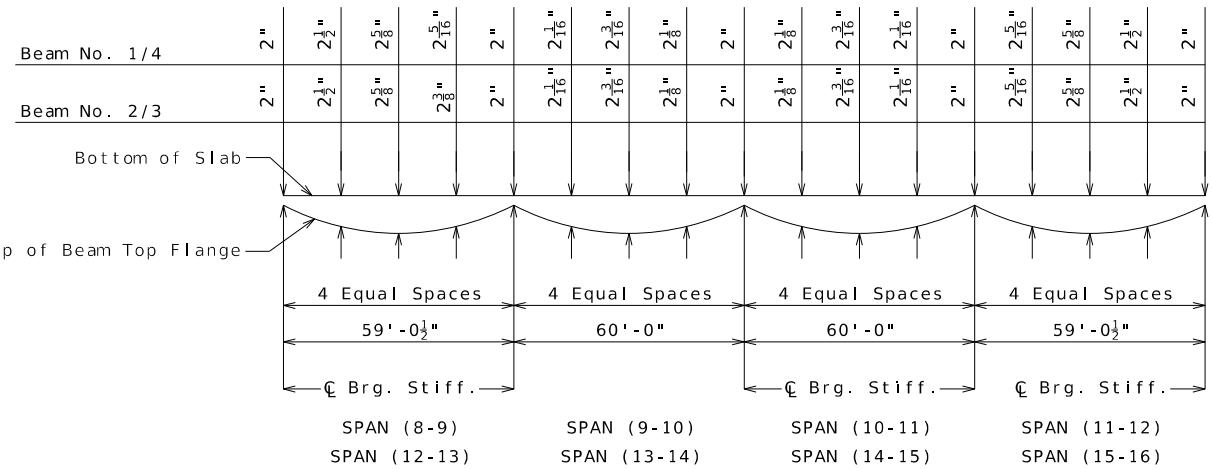
Elevations are based on a constant slab thickness of 8 1/2" and include allowance for theoretical dead load deflections due to weight of slab (including optional corrugated steel forms) and barriers.



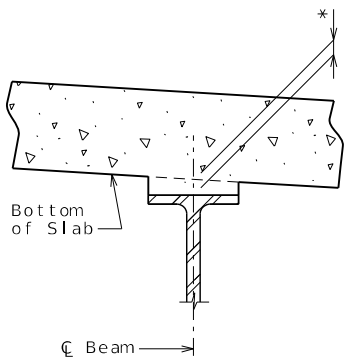
TYPICAL SLAB ELEVATIONS DIAGRAM



THEORETICAL SLAB HAUNCHING DIAGRAM - UNIT 1



THEORETICAL SLAB HAUNCHING DIAGRAM - UNITS 3 & 4



THEORETICAL SLAB HAUNCH

* Dimension (bottom of slab to top of top flange) may vary if beam camber after erection differs from plan camber by more than the % of Dead Load Deflection due to weight of structural steel. No payment will be made for any adjustment in forming or additional concrete required for variation in haunching.

THEORETICAL BOTTOM OF SLAB ELEVATIONS AND THEORETICAL SLAB HAUNCHING DIAGRAM - UNITS 1, 3 & 4

Detailed Oct. 2024
Checked Dec. 2024

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

Sheet No. 37 of 61



THIS SHEET HAS BEEN
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ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 37

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL JEFFERSON CITY, MO 65102

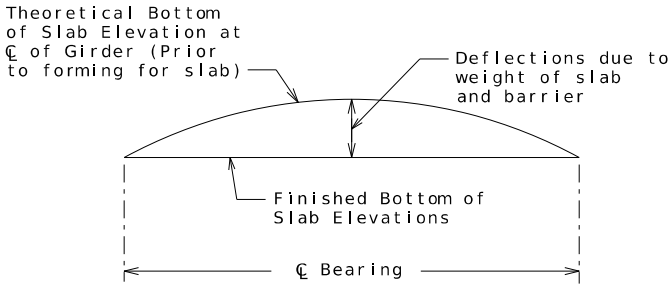
1-888-ASK-MODOT (1-888-273-6636)

GARVER, LLC. 7509 NW TIFFANY SPRINGS PARKWAY, SUITE 200 KANSAS CITY, MO 64153 PHONE: (816) 298-6465 CERTIFICATE OF AUTHORITY NO. 2008013090

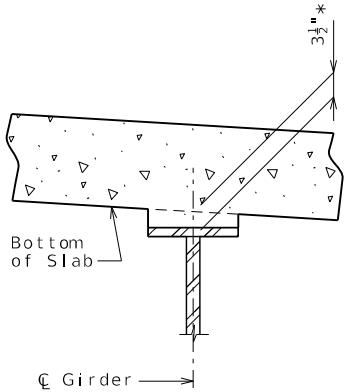
GARVER

Theoretical Bottom of Slab Elevations at Centerline of Girder (Prior to forming for slab)											
Girder Number	Span (5-6) (Varies C Brg. - C Brg.)										
	C Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	C Brg.
1	310.44	310.62	310.79	310.94	311.08	311.19	311.28	311.36	311.43	311.50	311.56
2	310.63	310.83	311.00	311.16	311.29	311.40	311.50	311.57	311.64	311.71	311.77
3	310.63	310.83	311.01	311.18	311.31	311.43	311.52	311.59	311.66	311.72	311.79
4	310.44	310.65	310.83	311.00	311.14	311.25	311.34	311.42	311.48	311.54	311.61
Girder Number	Span (6-7) (135'-0" C Brg. - C Brg.)										
	C Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	C Brg.
1	311.56	311.66	311.76	311.85	311.92	311.95	311.95	311.92	311.86	311.80	311.73
2	311.77	311.87	311.97	312.05	312.12	312.15	312.15	312.11	312.05	311.98	311.91
3	311.79	311.88	311.97	312.06	312.12	312.15	312.15	312.11	312.04	311.97	311.90
4	311.61	311.69	311.79	311.87	311.93	311.96	311.95	311.91	311.85	311.77	311.70
Girder Number	Span (7-8) (Varies C Brg. - C Brg.)										
	C Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	C Brg.
1	311.73	311.69	311.65	311.60	311.55	311.48	311.40	311.30	311.19	311.06	310.93
2	311.91	311.87	311.83	311.78	311.73	311.66	311.58	311.48	311.37	311.25	311.12
3	311.90	311.86	311.81	311.76	311.71	311.64	311.56	311.47	311.36	311.25	311.12
4	311.70	311.65	311.60	311.55	311.49	311.42	311.35	311.26	311.16	311.05	310.93

Elevations are based on a constant slab thickness of 8 1/2" and include allowance for theoretical dead load deflections due to weight of slab (including optional corrugated steel forms) and barriers.

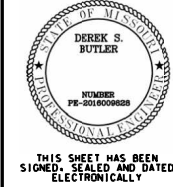


TYPICAL SLAB ELEVATIONS DIAGRAM



THEORETICAL SLAB HAUNCH

* Dimension (bottom of slab to top of web) may vary if girder camber after erection differs from plan camber by more than the % of Dead Load Deflection due to weight of structural steel. No payment will be made for any adjustment in forming or additional concrete required for variation in haunching.



DATE PREPARED 5/19/2025	
ROUTE 62	STATE MO
DISTRICT BR	SHEET NO. 38
COUNTY DUNKLIN	
JOB NO. JSE0155	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A9436	

DESCRIPTION	DATE

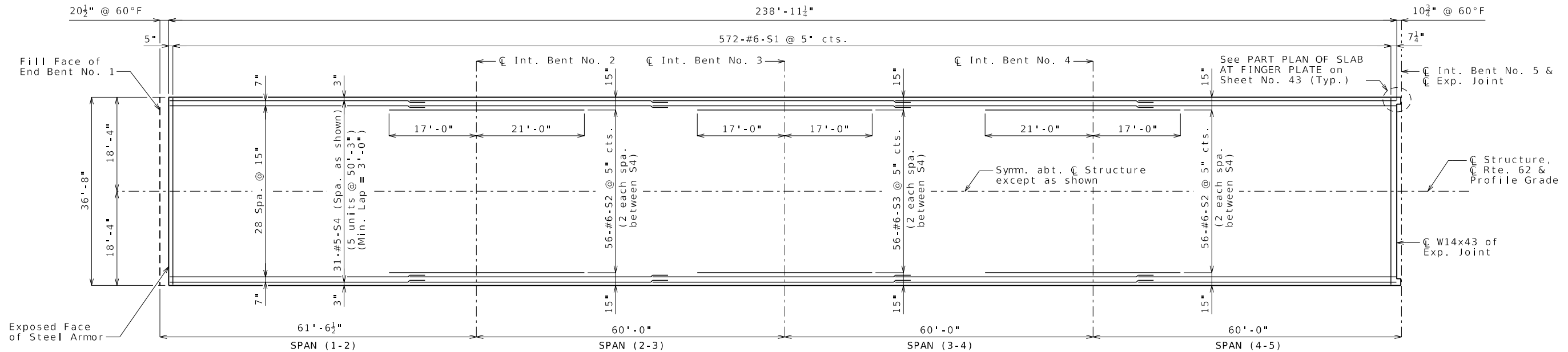
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

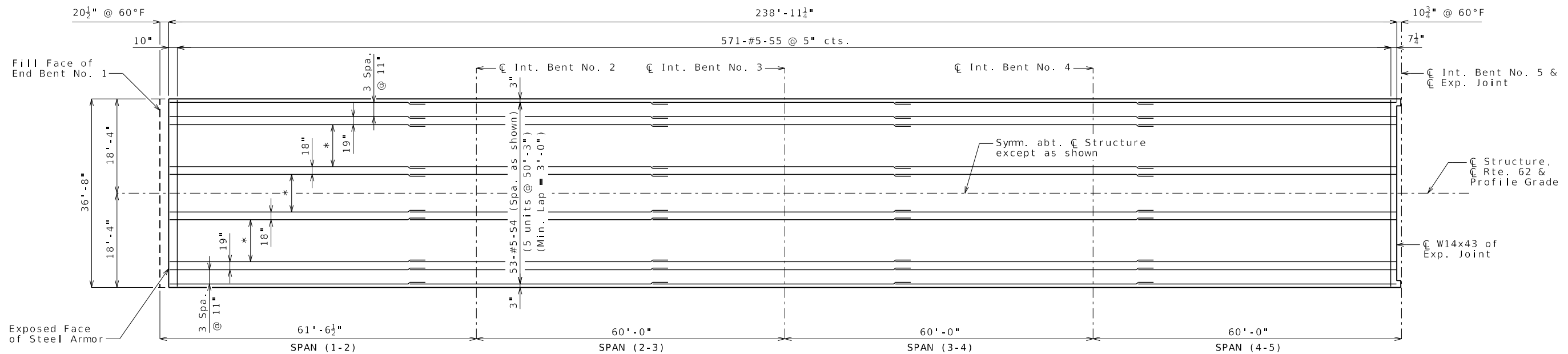
GARVER, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



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



TOP REINFORCEMENT



* 14 Spa. @ 7"

BOTTOM REINFORCEMENT

Notes:

Longitudinal dimensions are horizontal.

For Section Thru Slab and Part Plan of Slab at Finger Plate, see Sheet No. 43.

For details and locations of slab drains, see Sheet No. 33.

For details and reinforcement of Type D Barrier not shown, see Sheets No. 45 & 46.

For Slab Pouring Sequence, see Sheet No. 44.

For Theoretical Slab Haunch and Theoretical Bottom of Slab Elevations, see Sheet No. 37.

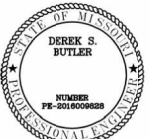
Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" from the web of W14x43 or the vertical leg of steel armor of the expansion device.

Detailed Oct. 2024
Checked Dec. 2024

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

Sheet No. 39 of 61

PLAN OF SLAB SHOWING REINFORCEMENT - UNIT 1



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 39

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

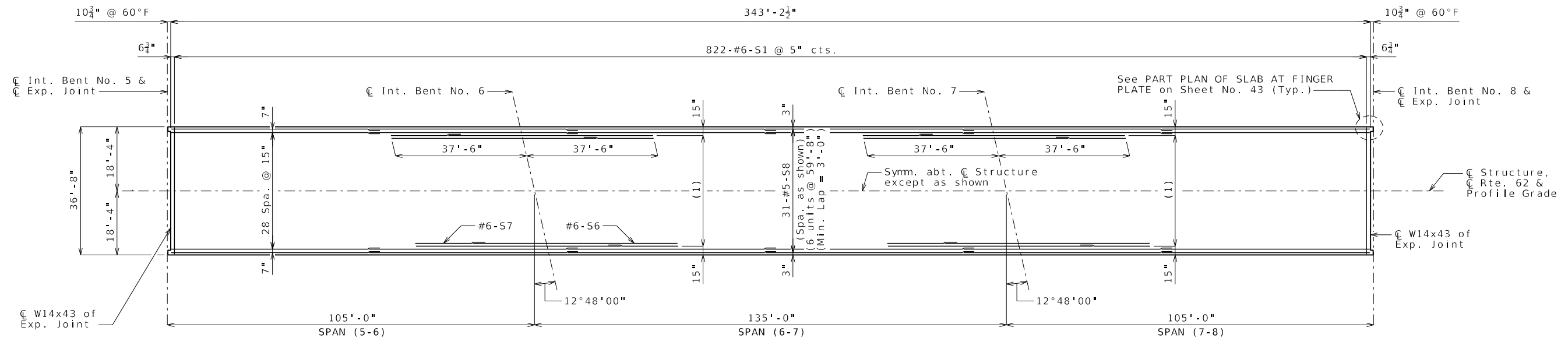
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MODOT

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

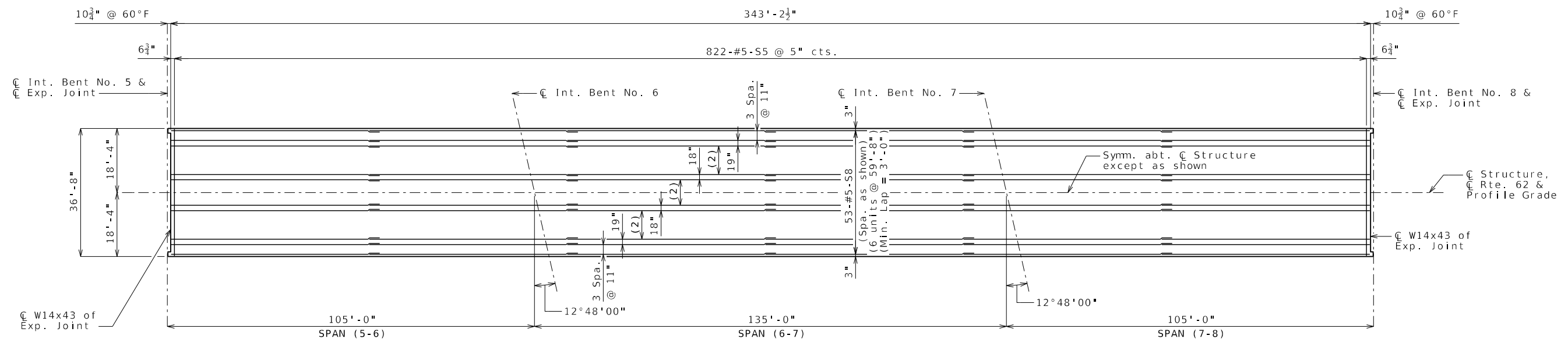
GARVER, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

GARVER



- (1) 56-#6-S6 & 56-#6-S7 @ 5" cts. (2 each spa. btwn. S8)(Alternate Splice)
(2) 14 Spa. @ 7"

TOP REINFORCEMENT



BOTTOM REINFORCEMENT

Notes:

Longitudinal dimensions are horizontal.

For Section Thru Slab and Part Plan of Slab at Finger Plate, see Sheet No. 43.

For details and locations of slab drains, see Sheet No. 33.

For details and reinforcement of Type D Barrier not shown, see Sheets No. 45 & 46.

For Slab Pouring Sequence, see Sheet No. 44.

For Theoretical Slab Haunch and Theoretical Bottom of Slab Elevations, see Sheet No. 38.

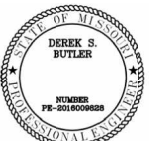
Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" from the web of W14x43 or the vertical leg of steel armor of the expansion device.

PLAN OF SLAB SHOWING REINFORCEMENT - UNIT 2

Detailed Oct. 2024
Checked Dec. 2024

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

Sheet No. 40 of 61



THIS SHEET HAS BEEN
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ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 40

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

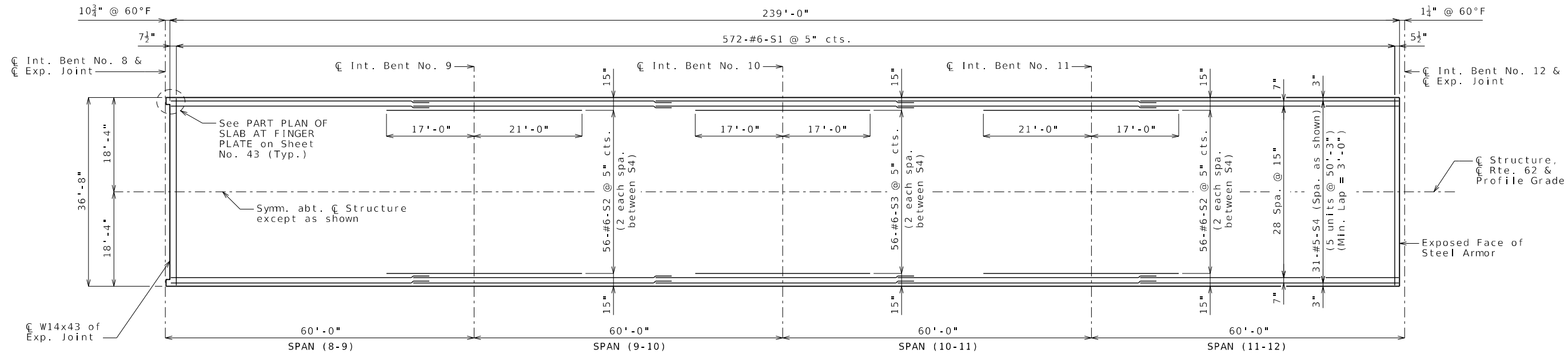
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

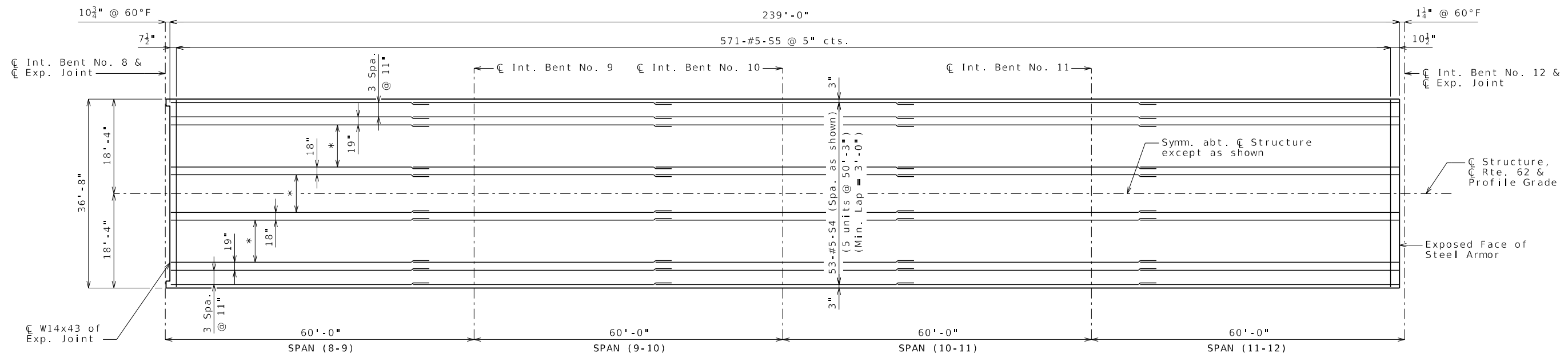
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

Garver



TOP REINFORCEMENT



BOTTOM REINFORCEMENT

* 14 Spa. @ 7"

- Notes:
- Longitudinal dimensions are horizontal.
 - For Section Thru Slab and Part Plan of Slab at Finger Plate, see Sheet No. 43.
 - For details and locations of slab drains, see Sheet No. 33.
 - For details and reinforcement of Type D Barrier not shown, see Sheets No. 45 & 46.
 - For Slab Pouring Sequence, see Sheet No. 44.
 - For Theoretical Slab Haunch and Theoretical Bottom of Slab Elevations, see Sheet No. 37.
 - Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" from the web of W14x43 or the vertical leg of steel armor of the expansion device.

PLAN OF SLAB SHOWING REINFORCEMENT - UNIT 3

Detailed Oct. 2024
Checked Dec. 2024



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED 5/19/2025	
ROUTE 62	STATE MO
DISTRICT BR	SHEET NO. 41
COUNTY DUNKLIN	
JOB NO. JSE0155	
CONTRACT ID.	

PROJECT NO.
BRIDGE NO.
A9436

DESCRIPTION	DATE

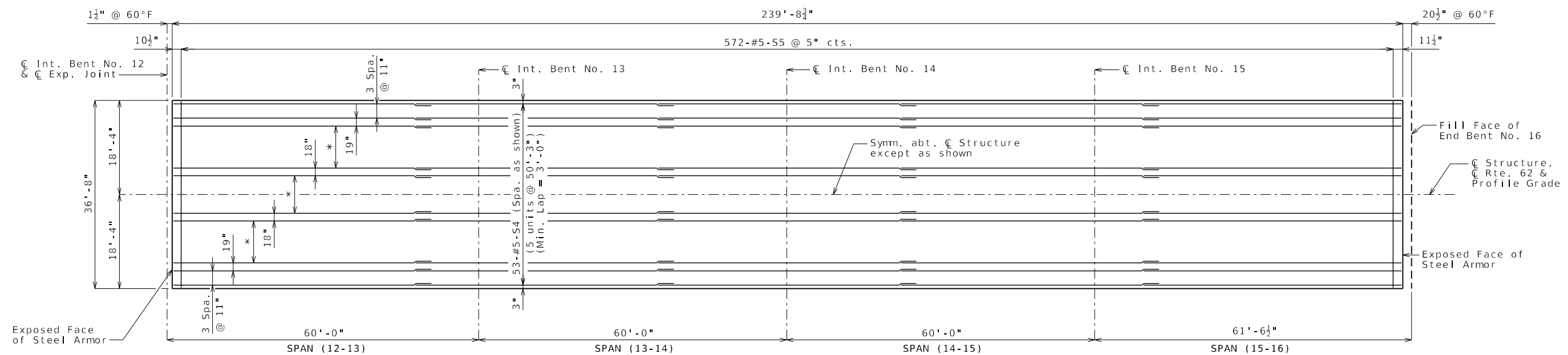
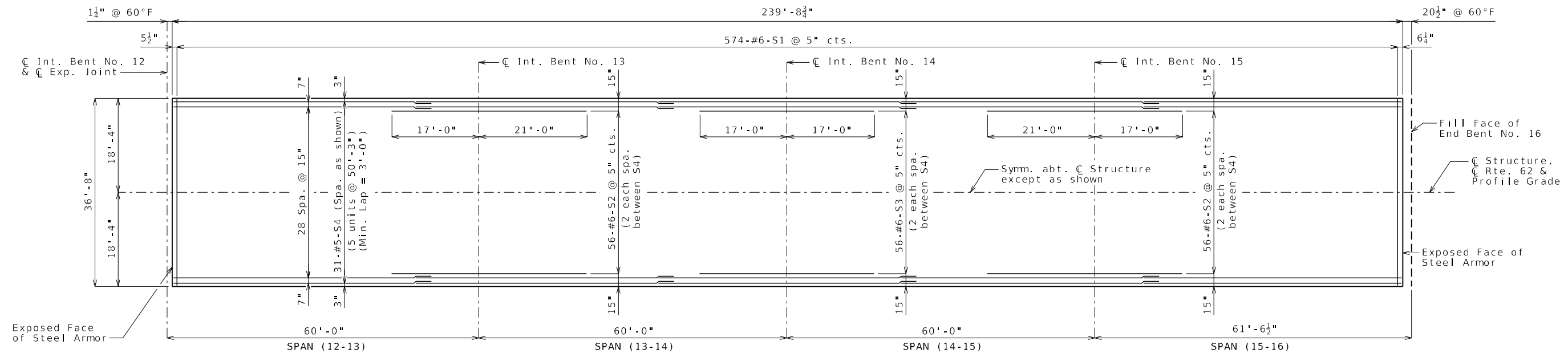
MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

GARVER, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090



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



* 14 Spa. @ 7"

Notes:

Longitudinal dimensions are horizontal.

For Section Thru Slab and Part Plan of Slab at Finger Plate,
see Sheet No. 43.

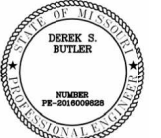
For details and locations of slab drains, see Sheet No. 33.

For details and reinforcement of Type D Barrier not shown,
see Sheets No. 45 & 46.

For Slab Pouring Sequence, see Sheet No. 44.

For Theoretical Slab Haunch and Theoretical Bottom of Slab Elevations, see Sheet No. 37.

Longitudinal reinforcing steel shall be placed so that ends shall not be more than 1" from the web of W14x43 or the vertical leg of steel armor of the expansion device.



THIS SHEET HAS BEEN
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ELECTRONICALLY

DATE PREPARED

5 / 19 / 2025

ROUTE
62

62

TATE
40

10

DISTRICT
RD

BR
CO

SHEET NO.
42

COUNTY
LINK INDUNKLEIN
108-10

JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

A9436

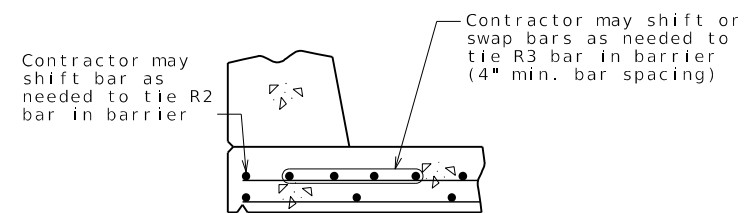
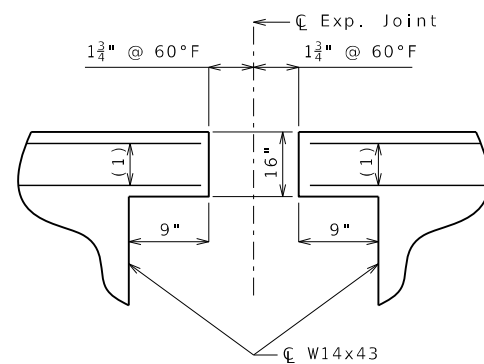
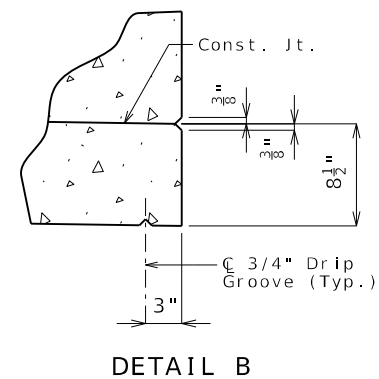
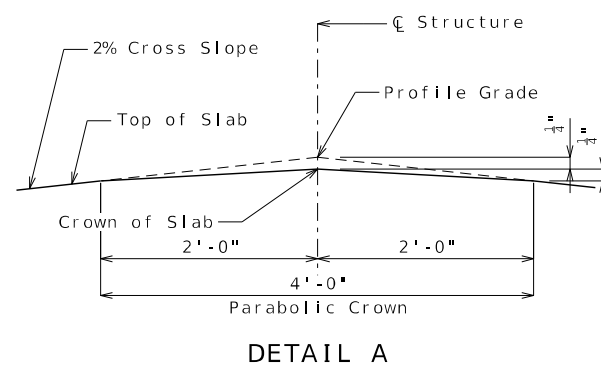
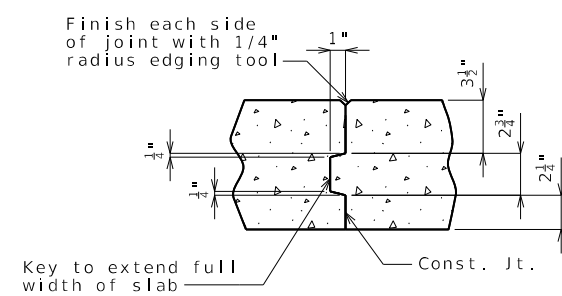
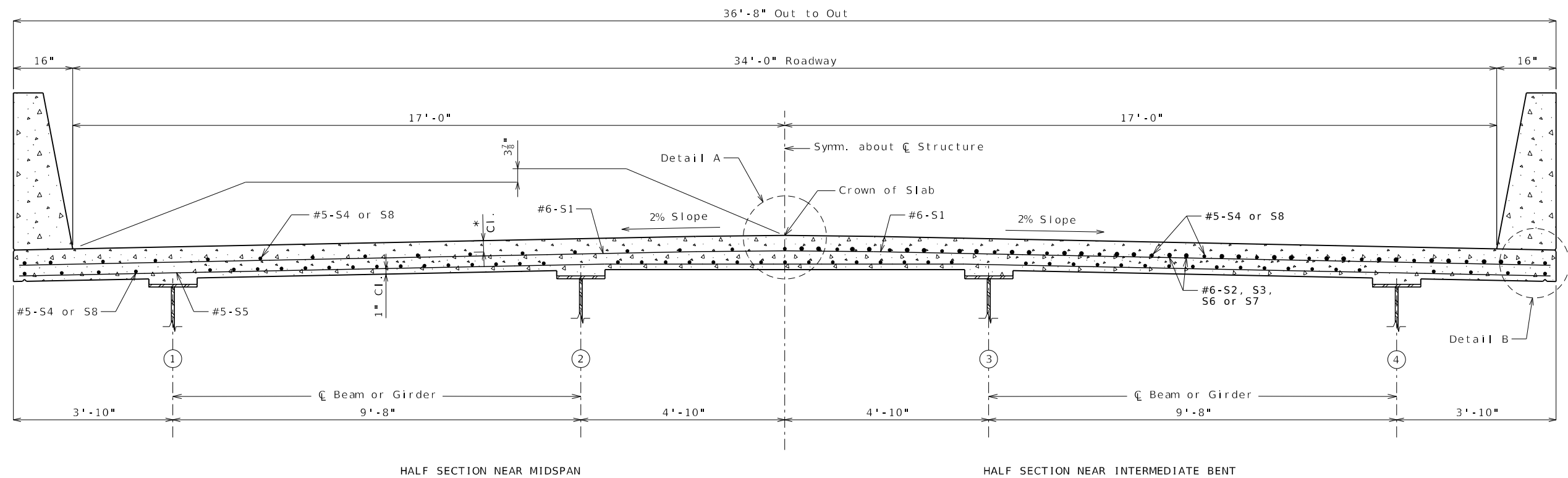
[illegible]

105 WEST CAPITOL
PERSON CITY, MO 65102
NOT (1-888-275-6636)

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

GARVER, LLC.
77509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090





Notes:

For reinforcement of barrier not shown, see Sheets No. 45 & 46.

For Theoretical Bottom of Slab Elevations and Theoretical Slab Haunching Diagram, see Sheets No. 37 & 38.

For Plan of Slab Showing Reinforcement, see Sheets No. 39 thru 42.

For details of optional stay-in-place forms, see Sheet No. 44.



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED

/ 19 / 2025

TE	STATE
0	MO

2	MO
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SHEET NO. 42

R	43
COUNTY	

DUNKLIN

JOB NO.

JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
10100[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

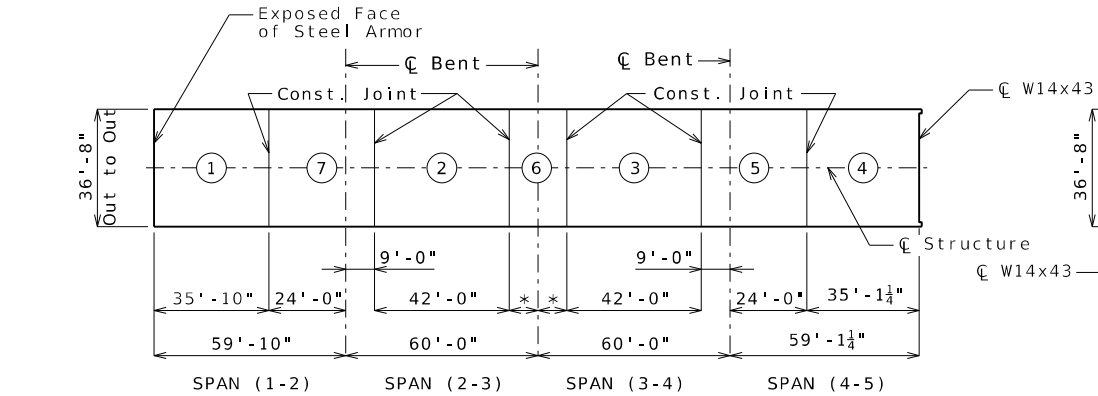
GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

Detailed Nov. 2024
Checked Dec. 2024

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

Sheet No. 43 of 61

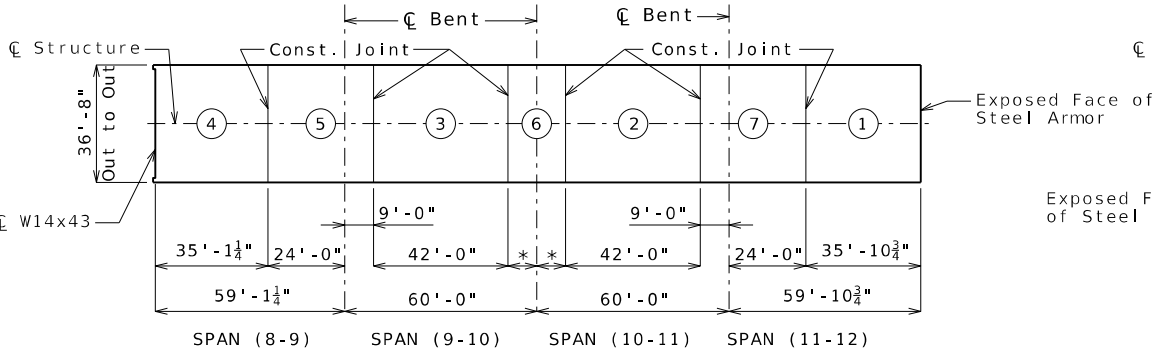
B A9436_043_SE0155_Typ. Section.dgn 9:45:26 AM 5/19/2025



	Sequence of Pours							Min. Rate of Pour Cu. Yds./Hr.	
	Direction							With Retarder	No Retarder
Basic Sequence	1	2	3	4	5	6	7	25	25
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.									
Alternate A Pours	1	7 + 2	6 + 3	5 + 4				25	29
Alternate B Pours	1 + 7 + 2	6 + 3	5 + 4					25	29
Alternate C Pours	1 + 7 + 2	6 + 3 + 5 + 4						25	29
Alternate D Pours	1 + 7 + 2 + 6 + 3 + 5 + 4							25	29

The contractor shall pour and satisfactorily finish the slab pours at the rate given. Retarder, if used, shall be an approved type and retard the set of concrete to 2.5 hours.

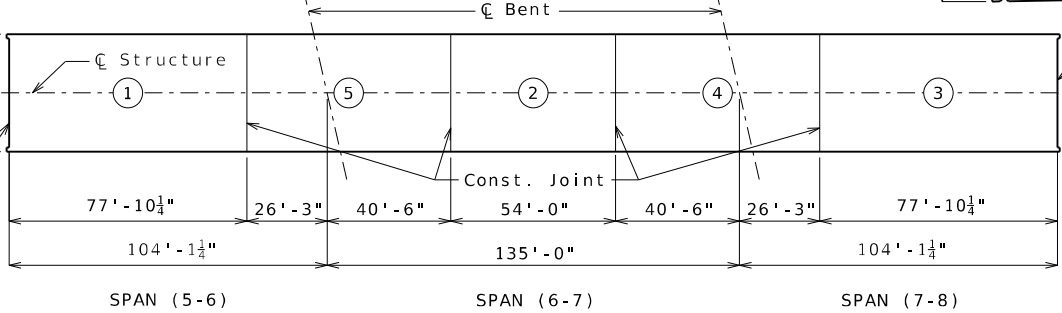
SLAB POURING SEQUENCE - UNIT 1



	Sequence of Pours							Min. Rate of Pour Cu. Yds./Hr.	
	Direction							With Retarder	No Retarder
Basic Sequence	1	2	3	4	5	6	7	25	25
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.									
Alternate A Pours	1	7 + 2	6 + 3	5 + 4				25	29
Alternate B Pours	1 + 7 + 2	6 + 3	5 + 4					25	29
Alternate C Pours	1 + 7 + 2	6 + 3 + 5 + 4						25	29
Alternate D Pours	1 + 7 + 2 + 6 + 3 + 5 + 4							25	29

The contractor shall pour and satisfactorily finish the slab pours at the rate given. Retarder, if used, shall be an approved type and retard the set of concrete to 2.5 hours.

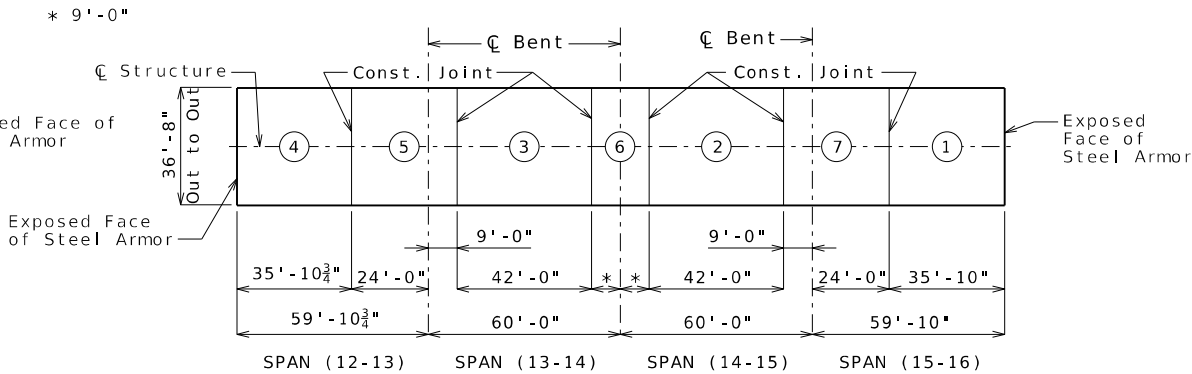
SLAB POURING SEQUENCE - UNIT 3



	Sequence of Pours					Min. Rate of Pour Cu. Yds./Hr.	
	Direction					With Retarder	No Retarder
Basic Sequence	1	2	3	4	5	25	25
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.							
Alternate A Pours	1	5 + 2	4 + 3			39	65
Alternate B Pours	1 + 5 + 2	4 + 3				39	65
Alternate C Pours	1 + 5 + 2 + 4 + 3					39	65

The contractor shall pour and satisfactorily finish the slab pours at the rate given. Retarder, if used, shall be an approved type and retard the set of concrete to 2.5 hours.

SLAB POURING SEQUENCE - UNIT 2

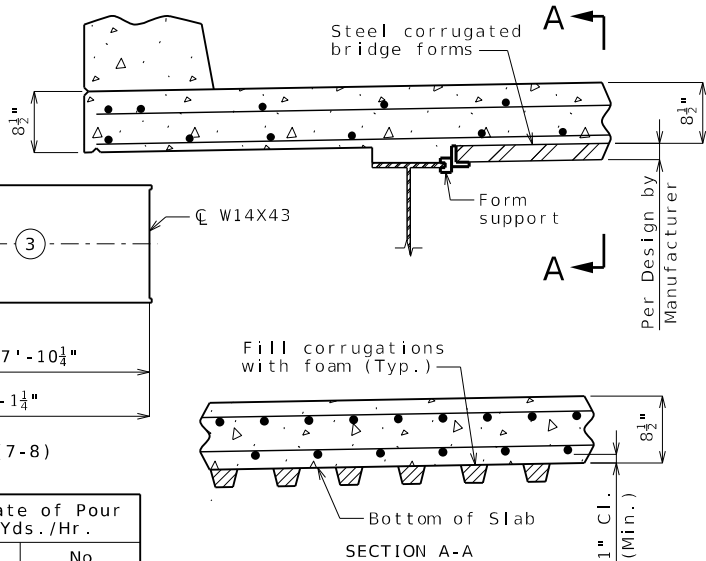


	Sequence of Pours							Min. Rate of Pour Cu. Yds./Hr.	
	Direction							With Retarder	No Retarder
Basic Sequence	1	2	3	4	5	6	7	25	25
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.									
Alternate A Pours	1	7 + 2	6 + 3	5 + 4				25	29
Alternate B Pours	1 + 7 + 2	6 + 3	5 + 4					25	29
Alternate C Pours	1 + 7 + 2	6 + 3 + 5 + 4						25	29
Alternate D Pours	1 + 7 + 2 + 6 + 3 + 5 + 4							25	29

The contractor shall pour and satisfactorily finish the slab pours at the rate given. Retarder, if used, shall be an approved type and retard the set of concrete to 2.5 hours.

SLAB POURING SEQUENCE - UNIT 4

SLAB DETAILS



OPTIONAL STAY-IN-PLACE FORM DETAILS

Stay-In-Place Forms:

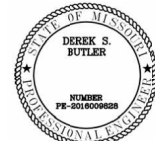
Corrugated steel forms, supports, closure elements and accessories shall be in accordance with grade requirement and coating designation G165 of ASTM A653. Complete shop drawings of the permanent steel deck forms shall be required in accordance with Sec 1080.

Corrugations of stay-in-place forms shall be filled with an expanded polystyrene material. The polystyrene material shall be placed in the forms with an adhesive in accordance with the manufacturer's recommendations.

Form sheets shall not rest directly on the top of beam or girder flanges. Sheets shall be securely fastened to form supports with a minimum bearing length of one inch on each end. Form supports shall be placed in direct contact with the flange. Drilling holes in the beam or girder flanges will not be permitted. All steel fabrication and construction shall be in accordance with Sec 1080 and 712. Certified field welders will not be required for welding of the form supports.

The design of stay-in-place corrugated steel forms is per manufacturer which shall be in accordance with Sec 703 for false work and forms. Maximum actual weight of corrugated steel forms allowed shall be 4 psf assumed for girder loading.

The contractor shall provide a method of preventing the direct contact of the stay-in-place forms and connection components with uncoated weathering steel members that is approved by the engineer.



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ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE
62

STATE
MO

DISTRICT
BR

SHEET NO.
44

COUNTY
DUNKLIN

JOB NO.
JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9436

DESCRIPTION

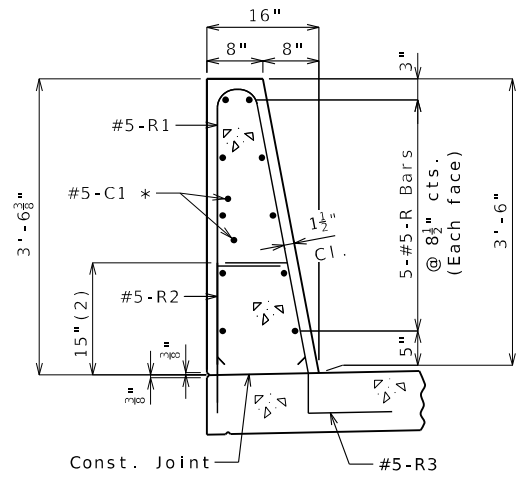
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

GARVER, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

Garver logo

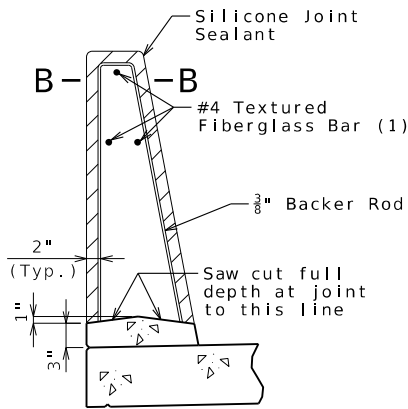


SECTION A-A

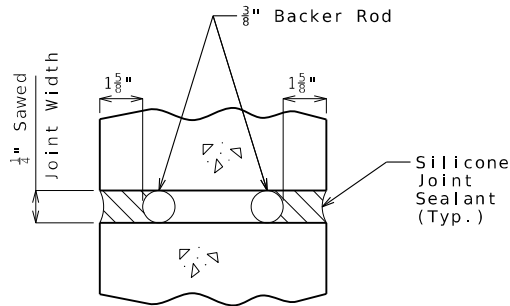
Use a minimum lap of 3'-1" for #5 horizontal barrier bars.

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

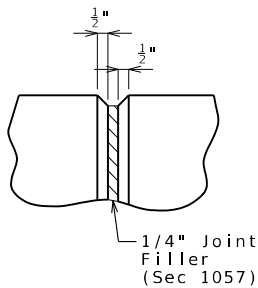
(2) To top of bar



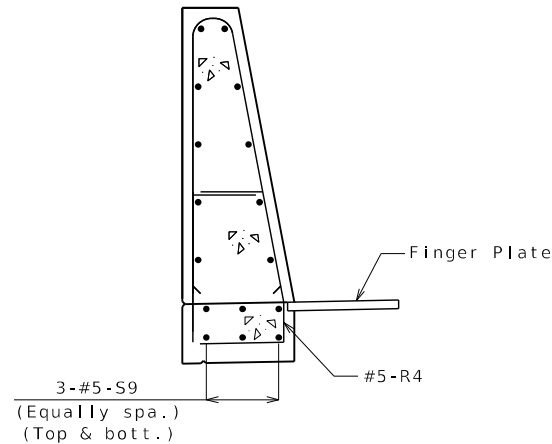
SECTION THRU SAW CUT JOINT



SECTION B-B

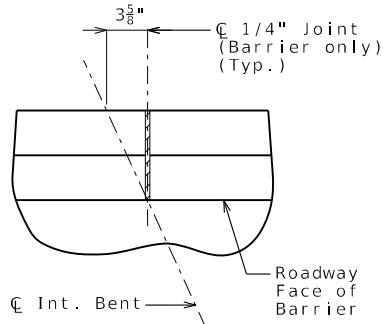


PART ELEVATION AT FORMED JOINT



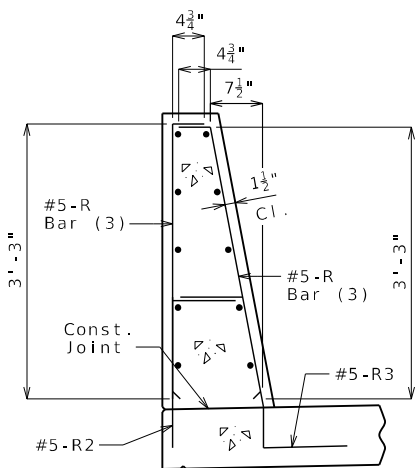
SECTION C-C

(Similar to Section A-A, except as shown)



PART PLAN SHOWING JOINT LOCATION

(Int. Bents No. 6 & 7)



R-BAR PERMISSIBLE ALTERNATE SHAPE

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

General Notes:

* Slip-formed option only.

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

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

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

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

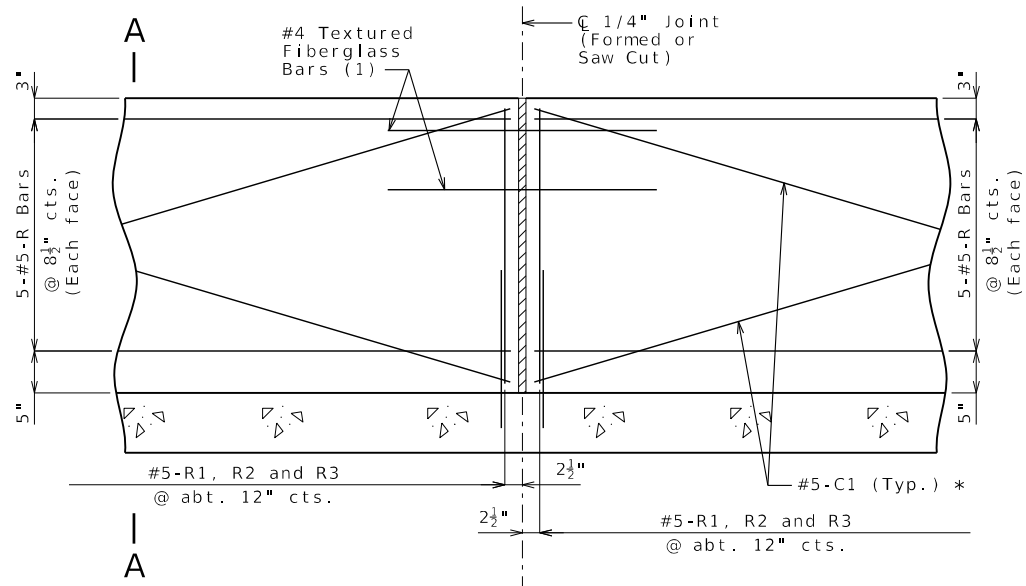
Concrete in barrier shall be Class B-1.

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

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

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

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



PART ELEVATION OF BARRIER

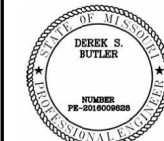
(1) Four feet long, centered on joint, slip-formed option only

TYPE D BARRIER DETAILS

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

Sheet No. 46 of 61

Note:
For location of Section C-C, see Sheet No. 45.



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ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 46

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

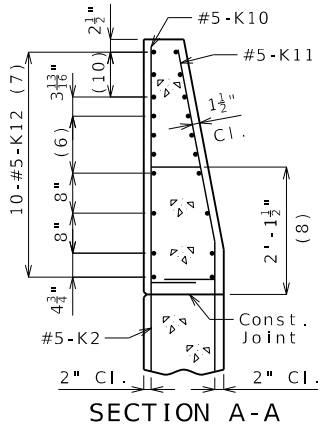
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

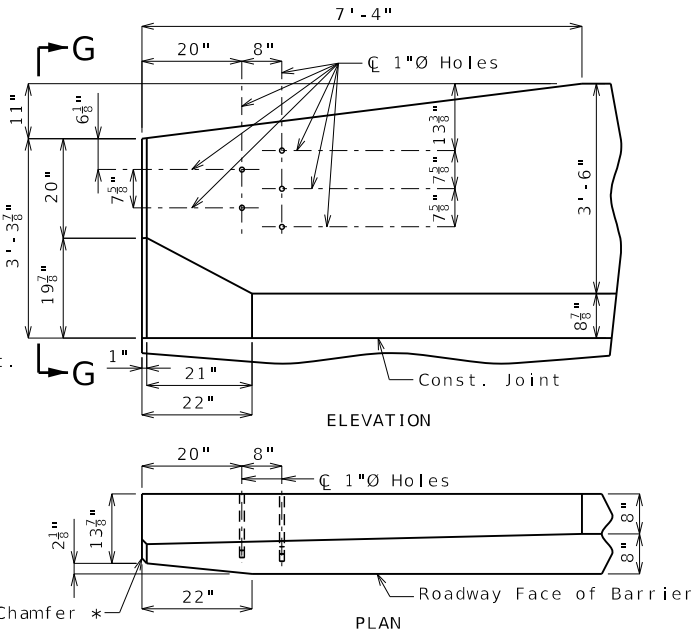
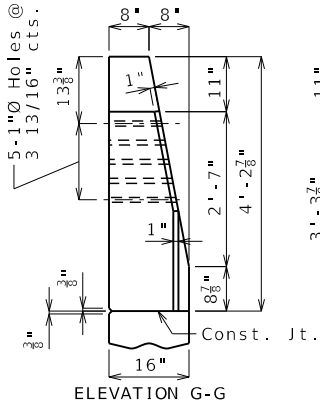
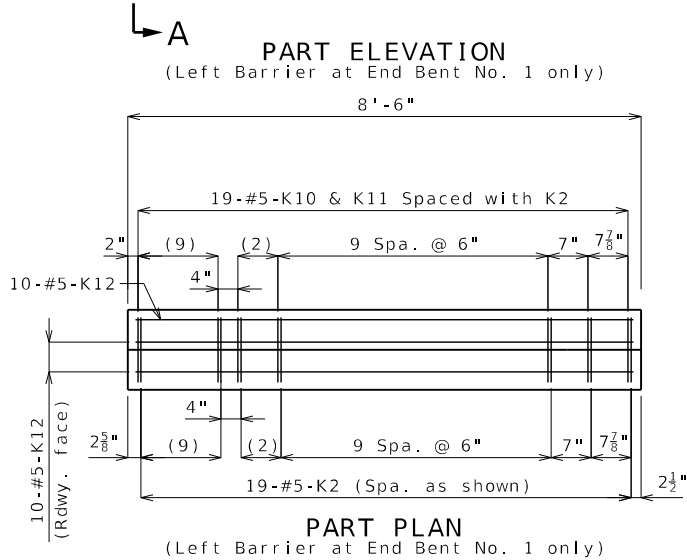
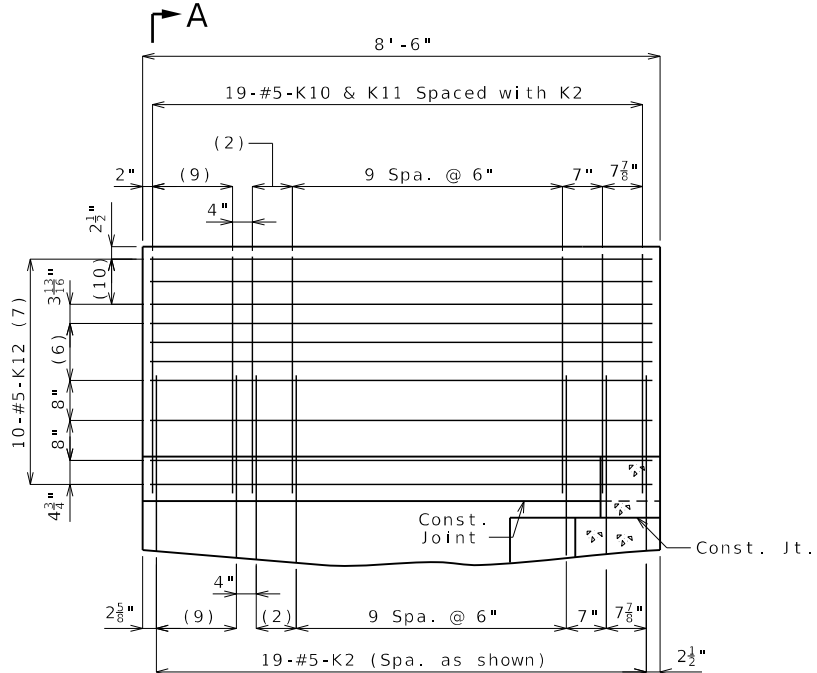
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

Garver, LLC
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

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- (1) 5-#5-K1 @ 4" cts.
- (2) 2 spaces @ 4"
- (3) 5-#5-K4 & K5
- (4) 3-#5-K6 & K7
- (5) 3-#5-K13 @ 4 1/2" cts., each face
- (6) 3 Spaces @ 3 13/16"
- (7) Spaced as shown, each face
- (8) To top of bar
- (9) 4 spaces @ 4"
- (10) 2 spaces @ 4 1/2"



General Notes:

Reinforcing Steel:

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

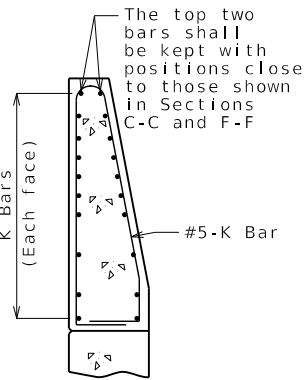
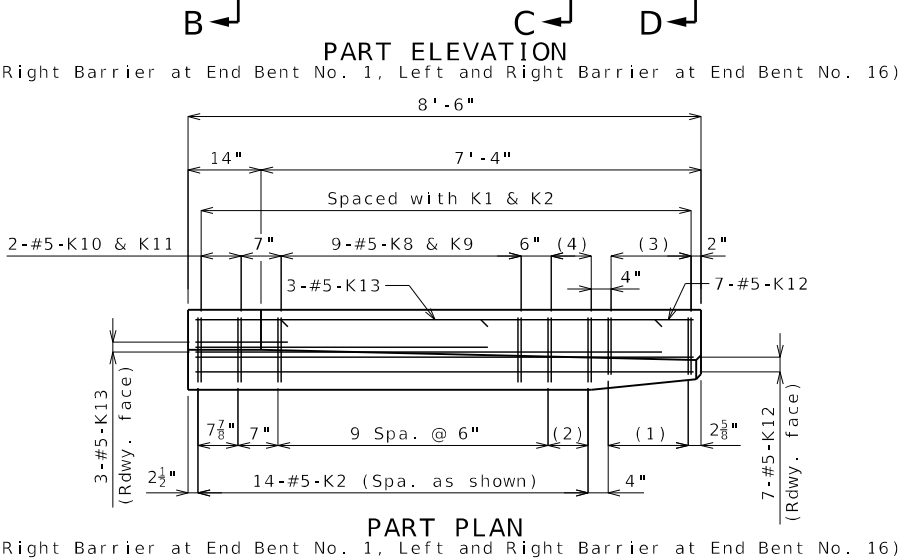
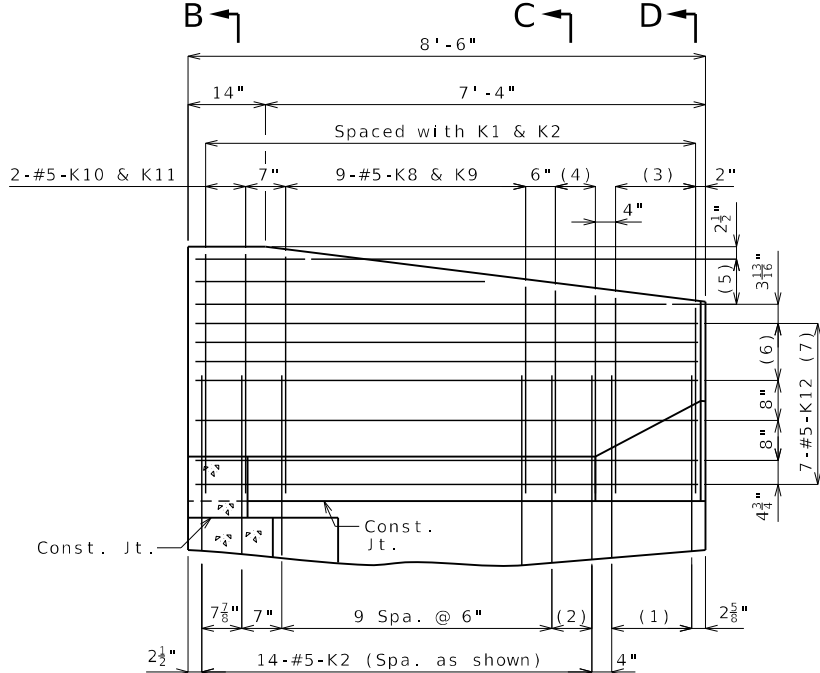
Minimum clearance to reinforcing steel shall be 1 1/2" except as shown for bars embedded into end bent.

TYPE D BARRIER AT END BENTS

(Left barrier at End Bent No. 1 shown, right barrier and End Bent No. 16 similar except as noted)

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

Sheet No. 47 of 61

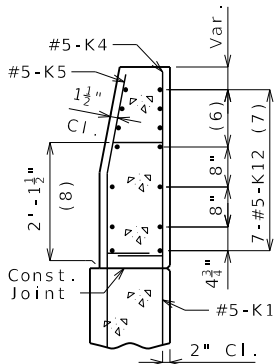


K10-K11 BAR PERMISSIBLE ALTERNATE SHAPE

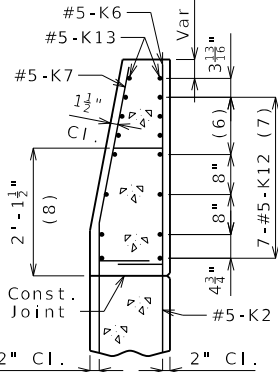
(Other K bars not shown for clarity)

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

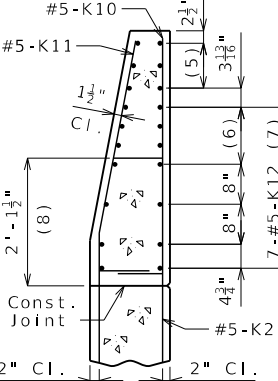
All dimensions are out to out.



SECTION D-D



SECTION C-C



SECTION B-B



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/11/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 47

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

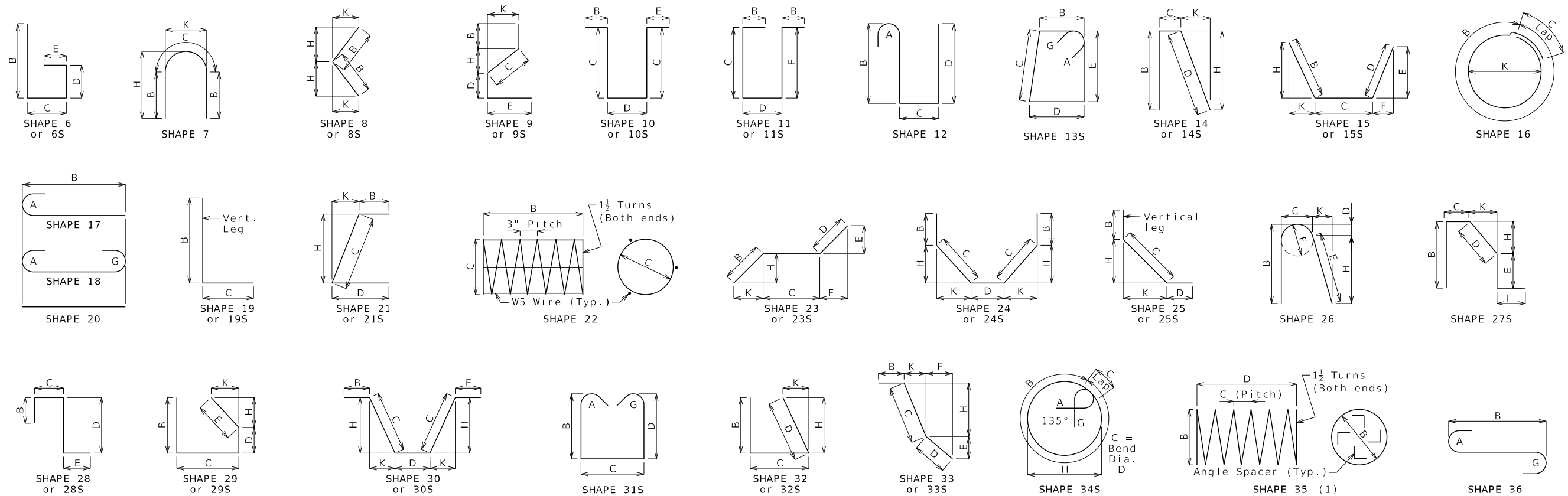
Garver, LLC

7509 NW TIFFANY SPRINGS PARKWAY, SUITE 200 KANSAS CITY, MO 64153 PHONE: (816) 298-6465 CERTIFICATE OF AUTHORITY NO. 2008013090

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

Modot

Garver



Finished Bend Dimensions 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	3 $\frac{3}{4}$ "	10"	7"	5"	
#6	1	4 $\frac{1}{4}$ "	12"	8 $\frac{1}{4}$ "	6"	
#7	2	5 $\frac{1}{4}$ "	14"	9 $\frac{3}{4}$ "	7"	
	3	7"	15"	11 $\frac{1}{2}$ "	8 $\frac{3}{4}$ "	
#8	2	6"	16"	11"	8"	
	3	8"	17"	13 $\frac{1}{4}$ "	10"	
#9	1	9 $\frac{1}{2}$ "	19 $\frac{1}{2}$ "	15 $\frac{1}{2}$ "	11 $\frac{3}{4}$ "	
#10	1	10 $\frac{3}{4}$ "	22"	17 $\frac{1}{2}$ "	13 $\frac{1}{4}$ "	
#11	1	12"	24 $\frac{1}{2}$ "	19 $\frac{1}{2}$ "	14 $\frac{7}{8}$ "	
#14	1	18 $\frac{1}{4}$ "	31 $\frac{1}{4}$ "	27 $\frac{1}{2}$ "	21 $\frac{3}{8}$ "	
#18	1	24"	41 $\frac{1}{2}$ "	36 $\frac{1}{4}$ "	28 $\frac{1}{2}$ "	
Stirrup Pin Bend Shapes (S)						
Size	Case	D	A or G			J
			90°	135°	180°	
#4	2	2"	4 $\frac{1}{2}$ "	4 $\frac{1}{2}$ "	5"	2 $\frac{7}{8}$ "
	3	3"	5"	5 $\frac{1}{4}$ "	6"	3"
#5	2	2 $\frac{1}{2}$ "	5 $\frac{3}{4}$ "	5 $\frac{3}{4}$ "	5 $\frac{3}{4}$ "	3 $\frac{3}{8}$ "
	3	3 $\frac{3}{4}$ "	6 $\frac{1}{4}$ "	6 $\frac{1}{4}$ "	7"	3 $\frac{7}{8}$ "
#6	1	4 $\frac{1}{2}$ "	12"	7 $\frac{3}{4}$ "	8 $\frac{1}{4}$ "	4 $\frac{5}{8}$ "
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.						

90°

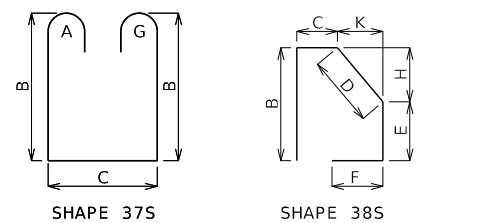
180°

6d for #4 & #5,
12d for #6

90°

135°

180°

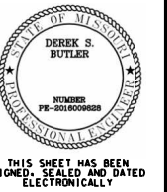


BENDING DIAGRAMS

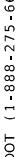
All dimensions are out to out.	(1) Shall be a deformed or plain spiral bar or wire.
Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.	Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.
Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.	

	Reinforcing Steel Totals (Pounds)								
		Substructure		Superstructure				Entire Bridge	
				Slab					
	Size	Plain	Epoxy	Plain	Epoxy	Barrier	Slip Form	Plain	Epoxy
By Size	W5	397	296	0	0	0	0	397	296
	4	1,829	784	0	0	0	0	1,829	784
	5	22,204	11,609	0	193,870	52,825	2,752	22,204	261,056
	6	4,527	6,707	0	179,912	0	0	4,527	186,619
	7	0	0	0	0	0	0	0	0
	8	14,034	5,054	0	0	0	0	14,034	5,054
	9	31,144	18,447	0	0	0	0	31,144	18,447
	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		74,135	42,897	0	373,782	52,825	2,752	74,135	472,256

All superstructure reinforcing steel shall be epoxy coated unless otherwise specified.



DATE PREPARED	
7/11/2025	
ROUTE	STATE
62	MO
DISTRICT	SHEET NO.
BR	49
COUNTY	
DUNKLIN	
JOB NO.	
JSE0155	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
A9436	

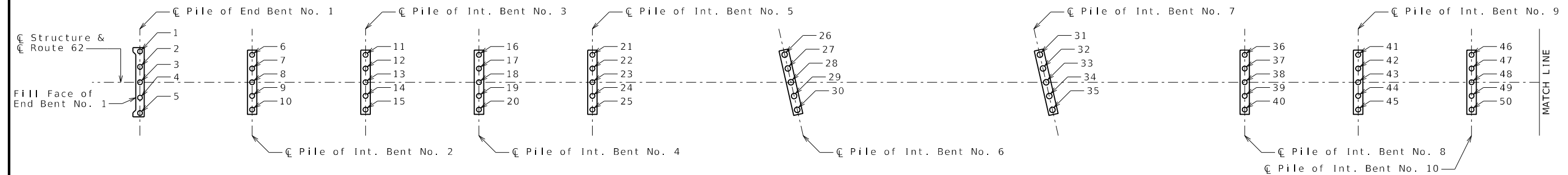
[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

GARVER, LLC.
77509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090





PART PLAN SHOWING PILE NUMBERING FOR RECORDING AS-BUILT PILE DATA

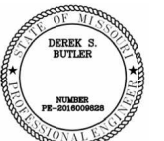
As-Built Pile Data					
Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
					End Bent No. 1
1					
2					
3					
4					
5					
					Intermediate Bent No. 2
6					
7					
8					
9					
10					
					Intermediate Bent No. 3
11					
12					
13					
14					
15					
					Intermediate Bent No. 4
16					
17					
18					
19					
20					

As-Built Pile Data					
Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
					Intermediate Bent No. 5
21					
22					
23					
24					
25					
					Intermediate Bent No. 6
26					
27					
28					
29					
30					
					Intermediate Bent No. 7
31					
32					
33					
34					
35					
					Intermediate Bent No. 8
36					
37					
38					
39					
40					

As-Built Pile Data					
Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
					Intermediate Bent No. 9
41					
42					
43					
44					
45					
					Intermediate Bent No. 10
46					
47					
48					
49					
50					

Note:
Indicate in remarks column:
A. Pile type and grade
B. Batter
C. Driven to practical refusal
D. PDA test pile
E. Minimum tip elevation controlled
(Use when actual blow count is less than PDA blow count due to minimum tip elevation requirement. A plus sign (+) shall be placed after the PDA nominal axial compressive resistance value indicating actual value is higher than PDA value.)

This sheet to be completed by MoDOT construction personnel.



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED _____

ROUTE	STATE
-------	-------

DISTRICT	SHEET NO.
----------	-----------

COUNTY

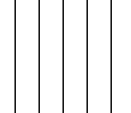
JOB NO.

CONTRACT ID.

PROJECT NO. _____

BRIDGE NO.

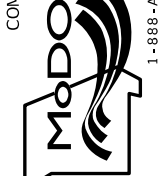
A9450						

[illegible][illegible][illegible][illegible]

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[illegible]TOL
102
36)CAP
O 6
5-6EST
Y,
8-205
1-81ION
ERSO
DOT

JEFF K-M



NOTE: STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. GRAPHIC LOG FOR ILLUSTRATION PURPOSES ONLY.

Surface Elevation: <u>292.9</u>		Completion Date: <u>9/5/23</u>		GRAPHIC LOG	DRY UNIT WEIGHT (pcf) SPT BLOW COUNTS (N60) CORE RECOVERY/RQD	SAMPLES	SHEAR STRENGTH, tsf		
Datum: <u>NAVD88</u>		Northing: <u>226544.84</u> Easting: <u>926455.58</u>					Δ - UU/2 ○ - QU/2 □ - PP/2 0.5 1.0 1.5 2.0 2.5		
DESCRIPTION OF MATERIAL		STANDARD PENETRATION RESISTANCE ▲ N-VALUE (BLOWS PER FOOT) (ASTM D 1586)							
DEPTH IN FEET	ELEVATION IN FEET						WATER CONTENT, % PL 10 20 30 40 50 LL		
105	187.9	Medium stiff, gray, LEAN CLAY and sand - CL <i>(continued)</i>			2-1-4 (8)	SS24	▲		
110	182.9	Very dense, brown, poorly-graded SAND, little to trace silt - SP			14-22-27 (77)	SS25	▲		
115	177.9				10-14-19 (52)	SS26	▲		
120	172.9				14-17-19 (56)	SS27	▲		
125	167.9	dense			12-14-16 (47)	SS28	▲		
130	162.9				10-18-22 (63)	SS29	▲		
135	157.9	Brown GRAVEL cuttings							
140	152.9								
145	147.9								
150	142.9	Boring terminated at 150 feet.							
155	137.9								
GROUNDWATER DATA		DRILLING DATA		Drawn by: ADP Date: 11/21/23		Checked by: CKK Date: 11/30/23		App'vd. by: CKK Date: 8/22/24	
ENCOUNTERED AT <u>15</u> FEET ∇		___ AUGER <u>3 3/4"</u> HOLLOW STEM WASHBORING FROM <u>86</u> FEET FD - Smith & Co. DRILLER <u>HMB</u> LOGGER <u>CME 750</u> DRILL RIG HAMMER TYPE <u>Auto</u> HAMMER EFFICIENCY <u>94</u> %				Route 62 over St. Francis River Dunklin County, MO and Clay County, AR		LOG OF BORING: B-2 Page 3 of 3	
REMARKS:								Project No. J042646.01	

NOTE: STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. GRAPHIC LOG FOR ILLUSTRATION PURPOSES ONLY.

Surface Elevation: <u>293.9</u>		Completion Date: <u>9/7/23</u>		GRAPHIC LOG	DRY UNIT WEIGHT (pcf) SPT BLOW COUNTS (N60) CORE RECOVERY/RQD	SAMPLES	SHEAR STRENGTH, tsf		
Datum: <u>NAVD88</u>		Northing: <u>226656.85</u> Easting: <u>926521.62</u>					Δ - UU/2 ○ - QU/2 □ - PP/2 0.5 1.0 1.5 2.0 2.5		
DESCRIPTION OF MATERIAL		STANDARD PENETRATION RESISTANCE ▲ N-VALUE (BLOWS PER FOOT) (ASTM D 1586)							
DEPTH IN FEET	ELEVATION IN FEET						WATER CONTENT, % PL 10 20 30 40 50 LL		
		Medium stiff to very soft, gray, LEAN CLAY - (CL)			104	ST1	●		
5	288.9				0-1-1 (3)	SS2	▲ □ ●		
10	283.9				0-1-2 (5)	SS3	▲ □ ●		
15	278.9				*	ST4			
20	273.9				1-1-3 (6)	SS5	▲ □ ●		
25	268.9	Medium dense, gray, poorly-graded SAND and clay - SC			0-0-0 (0)	SS6	▲ □ ●		
30	263.9	Very soft, gray, LEAN CLAY, trace sand - CL			3-6-5 (17)	SS7	▲ ●		
35	258.9	Stiff, gray SILT, trace clay - (ML)			0-0-0 (0)	SS8	▲ □ ●		
40	253.9	Stiff, gray SILT, trace to some sand - (MH)			4-3-5 (13)	SS9	□ ▲ ●		
45	248.9				3-3-5 (13)	SS10	▲ □ ● 67		
50	243.9	Medium stiff to stiff, gray, LEAN CLAY - (CL)			11-13-16 (44)	SS11	□ ● ▲		
					2-3-5 (13)	SS12	▲ □ ●		
GROUNDWATER DATA		DRILLING DATA		Drawn by: ADP Date: 11/21/23		Checked by: CKK Date: 11/30/23		App'vd. by: CKK Date: 8/22/24	
ENCOUNTERED AT <u>14.5</u> FEET ∇		___ AUGER <u>3 3/4"</u> HOLLOW STEM WASHBORING FROM <u>31</u> FEET FD - Smith & Co. DRILLER <u>JWU</u> LOGGER <u>CME 750</u> DRILL RIG HAMMER TYPE <u>Auto</u> HAMMER EFFICIENCY <u>94</u> %				Route 62 over St. Francis River Dunklin County, MO and Clay County, AR		LOG OF BORING: B-3 Page 1 of 3	
REMARKS:								Project No. J042646.01	

Coordinates shown in boring logs are State Plane. See roadway plans for projection factor.

BORING DATA

Note: for locations of borings, see Sheets No. 1 & 2.

Detailed Dec. 2024
Checked Jan. 2025

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

Sheet No. 55 of 61



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 55

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

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

MoDOT

CERTIFICATE OF AUTHORITY

NO. 2008013090

Garver, LLC

7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153

PHONE: (816) 298-6465

Garver

NOTE: STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. GRAPHIC LOG FOR ILLUSTRATION PURPOSES ONLY.

Surface Elevation: <u>290.5</u>		Completion Date: <u>9/13/23</u>		GRAPHIC LOG	DRY UNIT WEIGHT (pcf) SPT BLOW COUNTS (N60) CORE RECOVERY/RQD	SAMPLES	SHEAR STRENGTH, tsf				
Datum: <u>NAVD88</u>		Northing: <u>226889.16</u> Easting: <u>926922.47</u>					STANDARD PENETRATION RESISTANCE ▲ N-VALUE (BLOWS PER FOOT) (ASTM D 1586)				
							WATER CONTENT, % PL 10 20 30 40 50 LL				
DEPTH IN FEET	ELEVATION IN FEET	DESCRIPTION OF MATERIAL									
105	185.5	Medium dense to dense, gray, poorly-graded SAND, some to and silt - SM (continued)			7-13-14 (42)	SS23					
110	180.5				6-8-12 (31)	SS24					
115	175.5				8-13-16 (45)	SS25					
120	170.5				14-13-19 (50)	SS26					
125	165.5	Very dense, brown, poorly-graded SAND, trace to and gravel, trace clay - SP			12-14-19 (52)	SS27					
130	160.5				50/5*	SS28					
135	155.5	Boring terminated at 136 feet.			14-23-16 (61)	SS29					
140	150.5										
145	145.5										
150	140.5										
155	135.5										
GROUNDWATER DATA		DRILLING DATA		Drawn by: ADP Date: 11/21/23		Checked by: CKK Date: 11/30/23		App'vd. by: CKK Date: 8/22/24			
ENCOUNTERED AT <u>13</u> FEET ∓		___ AUGER <u>3 3/4"</u> HOLLOW STEM WASHBORING FROM <u>30</u> FEET FD - Smith & Co. DRILLER <u>DWJ</u> LOGGER <u>CME 750</u> DRILL RIG HAMMER TYPE <u>Auto</u> HAMMER EFFICIENCY <u>94</u> %				Route 62 over St. Francis River Dunklin County, MO and Clay County, AR		LOG OF BORING: B-8 Page 3 of 3		Project No. J042646.01	
REMARKS:											

NOTE: STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. GRAPHIC LOG FOR ILLUSTRATION PURPOSES ONLY.

Surface Elevation: <u>287.5</u>		Completion Date: <u>9/19/23</u>		GRAPHIC LOG	DRY UNIT WEIGHT (pcf) SPT BLOW COUNTS (N60) CORE RECOVERY/RQD	SAMPLES	SHEAR STRENGTH, tsf				
Datum: <u>NAVD88</u>		Northing: <u>227033.80</u> Easting: <u>927122.88</u>					STANDARD PENETRATION RESISTANCE ▲ N-VALUE (BLOWS PER FOOT) (ASTM D 1586)				
							WATER CONTENT, % PL 10 20 30 40 50 LL				
DEPTH IN FEET	ELEVATION IN FEET	DESCRIPTION OF MATERIAL									
		Very soft to soft, brown, LEAN CLAY, trace to some sand - (CL)			0-0-1 (2)	SS1					
					*	ST2					
5	282.5				0-1-1 (3)	SS3					
					99	ST4					
10	277.5				1-1-2 (5)	SS5					
		67% passing #200 sieve			98	ST6					
15	272.5	Medium dense, gray, poorly-graded SAND, trace clay - SC			2-4-8 (19)	SS7					
		Soft, gray, FAT CLAY - (CH)			1-2-1 (5)	SS8					
20	267.5	Stiff to medium stiff, gray LEAN CLAY, trace to some silt - (CL)			107	ST9					
					3-3-4 (11)	SS10					
25	262.5				87	ST11					
					3-2-4 (9)	SS12					
30	257.5				2-2-2 (6)	SS13					
					2 2 2 (6)	SS14					
35	252.5	Stiff, gray, FAT CLAY - (CH)			3-4-5 (14)	SS15					
40	247.5										
45	242.5										
50	237.5										
GROUNDWATER DATA		DRILLING DATA		Drawn by: ADP Date: 11/21/23		Checked by: CKK Date: 11/30/23		App'vd. by: CKK Date: 8/22/24			
ENCOUNTERED AT <u>8</u> FEET ∓		___ AUGER <u>3 3/4"</u> HOLLOW STEM WASHBORING FROM <u>22</u> FEET FD - Smith & Co. DRILLER <u>DWJ</u> LOGGER <u>CME 750</u> DRILL RIG HAMMER TYPE <u>Auto</u> HAMMER EFFICIENCY <u>94</u> %				Route 62 over St. Francis River Dunklin County, MO and Clay County, AR		LOG OF BORING: B-10 Page 1 of 3		Project No. J042646.01	
REMARKS:											

Coordinates shown in boring logs are State Plane. See roadway plans for projection factor.

BORING DATA

Note: for locations of borings, see Sheets No. 1 & 2.

Detailed Dec. 2024
Checked Jan. 2025

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

Sheet No. 58 of 61



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 58

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

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

MODOT

GARVER, LLC,
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

GARVER

NOTE: STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. GRAPHIC LOG FOR ILLUSTRATION PURPOSES ONLY.

Surface Elevation: <u>288.3</u>		Completion Date: <u>9/22/23</u>		GRAPHIC LOG	DRY UNIT WEIGHT (pcf) SPT BLOW COUNTS (N60) CORE RECOVERY/RQD	SAMPLES	SHEAR STRENGTH, tsf		STANDARD PENETRATION RESISTANCE ▲ N-VALUE (BLOWS PER FOOT) (ASTM D 1586)					
Datum: <u>NAVD88</u>		Northing: <u>227147.68</u>					0.5 1.0 1.5 2.0 2.5							
		Easting: <u>927202.44</u>					▲ - UU/2 ○ - QU/2 □ - PP/2							
DEPTH IN FEET	ELEVATION IN FEET	DESCRIPTION OF MATERIAL				WATER CONTENT, %								
		Medium stiff to soft, brown, LEAN CLAY, trace to some sand - (CL)				PL	10	20	30	40	50	LL		
						92	ST11							
5	283.3					1-1-2 (5)	SS1	▲	□					
						98	ST2		□					
10	278.3					1-1-1 (3)	SS3	▲						
		Very loose, gray, poorly-graded SAND, some clay - SC												
15	273.3					0-2-1 (5)	SS4	▲						
						*	ST5							
20	268.3	4-2-1 (5)	SS6	▲										
		Medium stiff, gray, FAT CLAY and sand - CH												
25	263.3					0-1-2 (5)	SS7	▲						
		Very loose, gray, poorly-graded SAND, some clay - SC												
							ST8							
30	258.3	Medium stiff to stiff, gray, LEAN CLAY, little to and silt - (CL)				0-2-2 (6)	SS9	▲						
35	253.3					2-2-3 (8)	SS10	▲						
40	248.3					2-3-2 (8)	SS12	▲						
		Medium stiff, gray, FAT CLAY - CH				81	ST13	▲						
45	243.3					2-2-3 (8)	SS14	▲						
						95	ST15	▲						
50	238.3	1-3-3 (9)	SS16	▲										
GROUNDWATER DATA		DRILLING DATA				Drawn by: ADP Date: 11/21/23		Checked by: CKK Date: 11/30/23		App'd. by: CKK Date: 8/22/24				
ENCOUNTERED AT <u>21</u> FEET ▽		___ AUGER <u>3 3/4"</u> HOLLOW STEM WASHBORING FROM <u>21</u> FEET FD - Smith & Co. DRILLER <u>DWJ</u> LOGGER <u>CME 750</u> DRILL RIG HAMMER TYPE <u>Auto</u> HAMMER EFFICIENCY <u>94</u> %				 GEOTECHNOLOGY A Universal Engineering Sciences Company Route 62 over St. Francis River Dunklin County, MO and Clay County, AR LOG OF BORING: B-11 Page 1 of 3 Project No. J042646.01								
REMARKS:														

Coordinates shown in boring logs are State Plane. See roadway plans for projection factor.

BORING DATA

Note: for locations of borings, see Sheets No. 1 & 2.

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

Sheet No. 60 of 61

Detailed Dec. 2024
Checked Jan. 2025

NOTE: STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARIES BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL. GRAPHIC LOG FOR ILLUSTRATION PURPOSES ONLY.

Surface Elevation: <u>288.3</u>		Completion Date: <u>9/22/23</u>		GRAPHIC LOG	DRY UNIT WEIGHT (pcf) SPT BLOW COUNTS (N60) CORE RECOVERY/RQD	SAMPLES	SHEAR STRENGTH, tsf		STANDARD PENETRATION RESISTANCE ▲ N-VALUE (BLOWS PER FOOT) (ASTM D 1586)
Datum: <u>NAVD88</u>		Northing: <u>227147.68</u>					0.5 1.0 1.5 2.0 2.5		
		Easting: <u>927202.44</u>					▲ - UU/2 ○ - QU/2 □ - PP/2		
DEPTH IN FEET	ELEVATION IN FEET	DESCRIPTION OF MATERIAL		WATER CONTENT, %		PL			



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY

DATE PREPARED
5/19/2025

ROUTE 62 STATE MO

DISTRICT BR SHEET NO. 60

COUNTY DUNKLIN

JOB NO. JSE0155

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9436

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

105 WEST CAPITOL
JEFFERSON CITY, MO 65102

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

GARVER, LLC.
7509 NW TIFFANY SPRINGS
PARKWAY, SUITE 200
KANSAS CITY, MO 64153
PHONE: (816) 298-6465
CERTIFICATE OF AUTHORITY
NO. 2008013090

GARVER

