DESIGN DESIGNATION

A.A.D.T. - 2025 = 2,728
A.A.D.T. - 2045 = 3,014
D.H.V. = 7.55%
T = 15.63%
V = 35 M.P.H.
D = 51% / 49%
FUNCTIONAL CLASSIFICATION - URBAN MINOR ARTERIAL

NORMAL RIGHT OF WAY

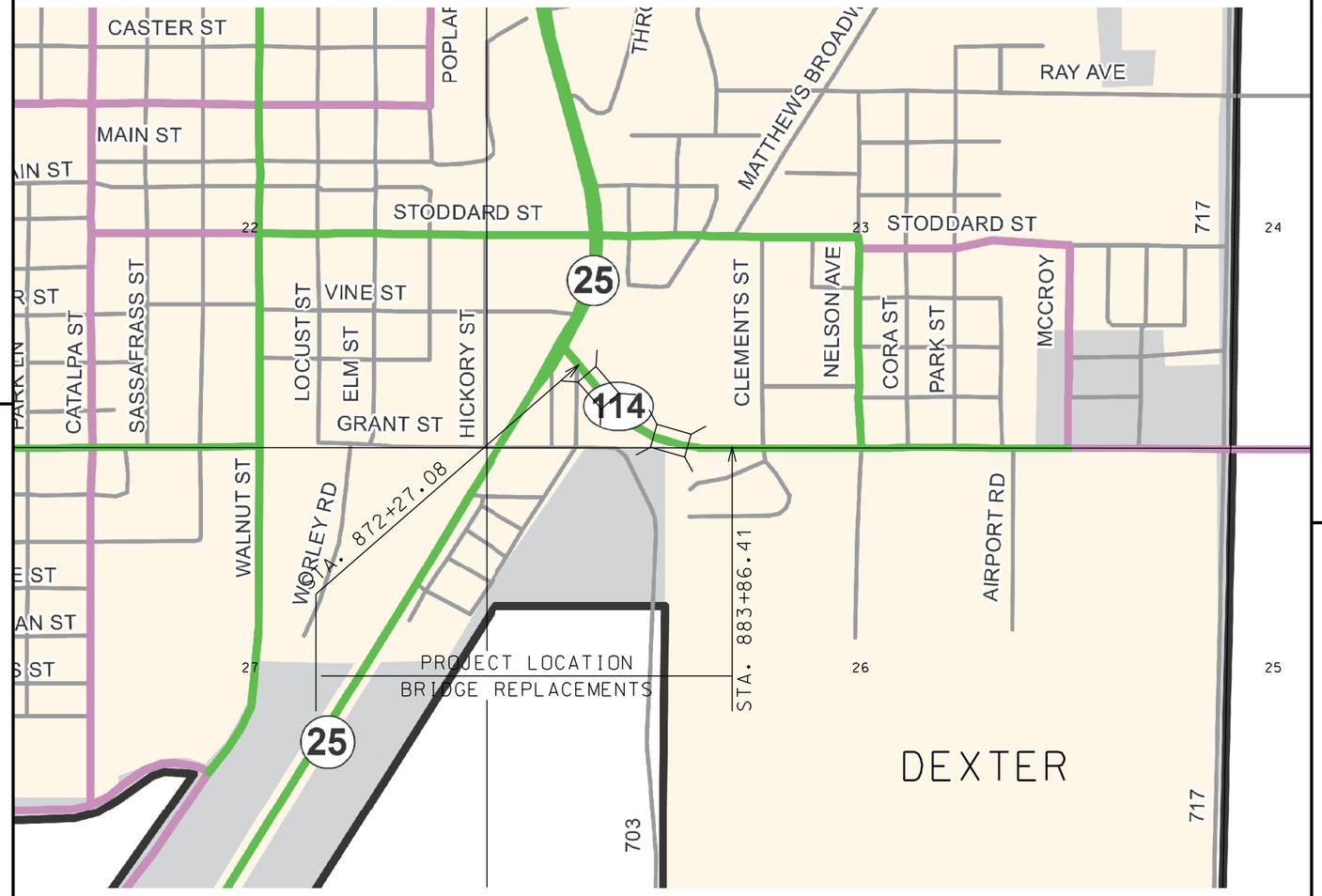
CONVENTIONAL SYMBOLS
(USED IN PLANS)

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

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY
STODDARD COUNTY

KEY MAP
SHOWING LOCATION OF COUNTY



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

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS) (3 SHEETS)	2
QUANTITIES (QU) (3 SHEETS)	3
PLAN-PROFILE (PP)	4-5
REFERENCE & COORDINATE POINTS (CP)	6
SPECIAL SHEETS (SS) (7 SHEETS)	7-13
TRAFFIC CONTROL SHEETS (TC) (2 SHEETS)	14
EROSION CONTROL SHEETS (EC)	15
BRIDGE DRAWINGS (B)	
A9224	1-30
A9225	1-48
CROSS SECTIONS (XS)	1-10

LENGTH OF PROJECT

BEGINNING OF PROJECT	STA.	872 + 27.08
END OF PROJECT	STA.	883 + 86.41
APPARENT LENGTH		1159.33 FEET
EQUATIONS AND EXCEPTIONS:		
TOTAL CORRECTIONS		0.00 FEET
NET LENGTH OF PROJECT		1159.33 FEET
STATE LENGTH		0.2196 MILES

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 10/16/2026
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 1
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224/A9225

DESCRIPTION | DATE

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

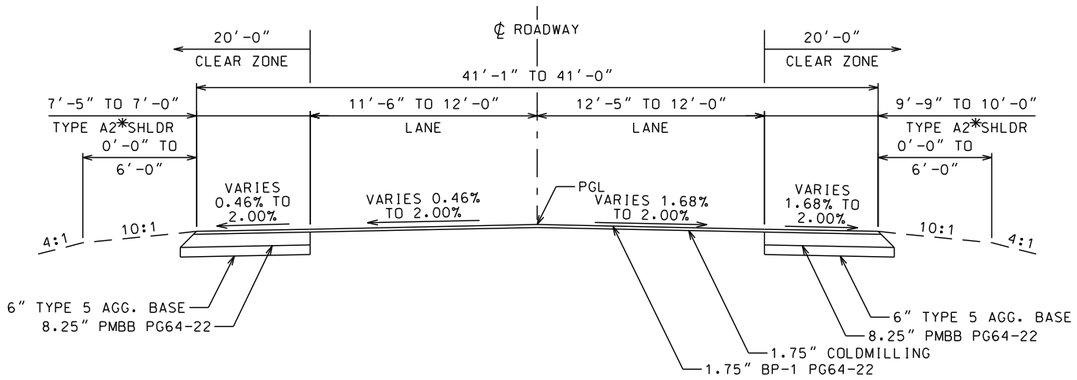
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TITLE SHEET (SHEET 1 OF 1)

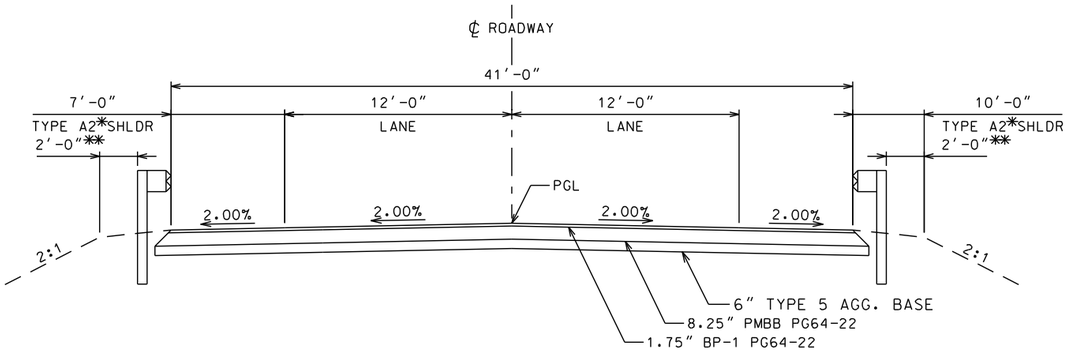
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

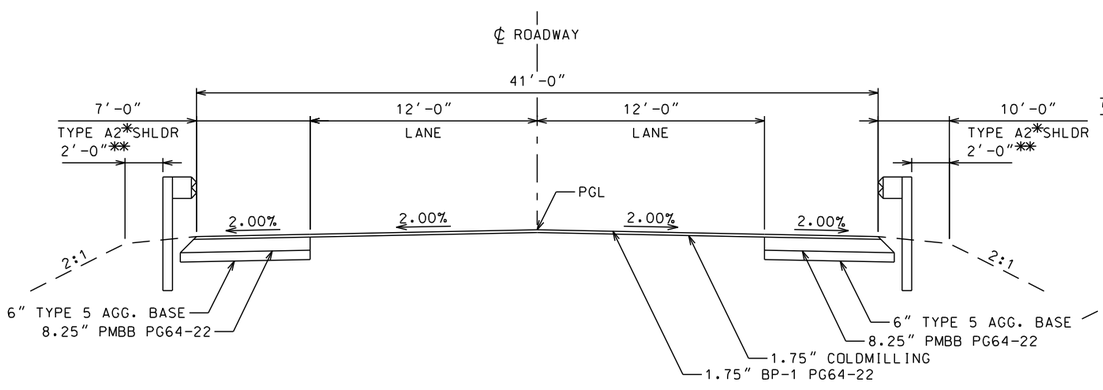
REV.



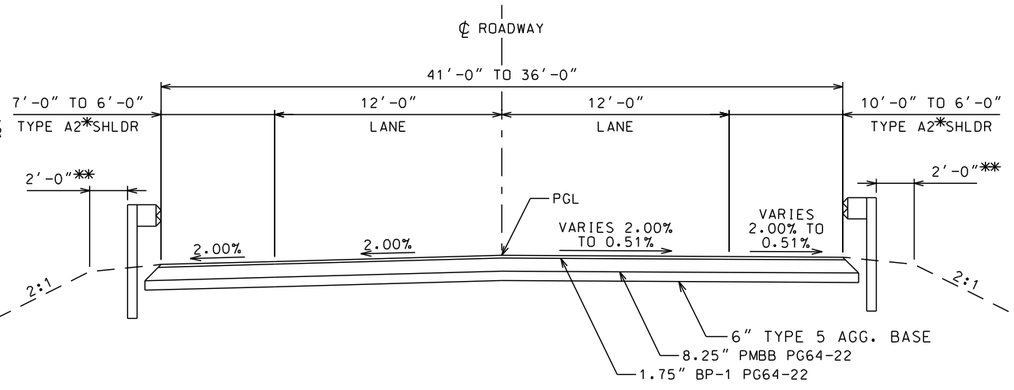
ROUTE 114 - NORMAL SECTION
STA. 872+27.08 TO STA. 872+57.08



ROUTE 114 - NORMAL SECTION
STA. 872+70.15 TO STA. 873+56.25



ROUTE 114 - NORMAL SECTION
STA. 872+57.08 TO STA. 872+70.15



ROUTE 114 - SUPERELEVATED SECTION
STA. 873+56.25 TO STA. 873+85.11

* TYPE A2 SHOULDER - SEE STANDARD PLAN 401.00
** GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD PLANS 606.50 AND 606.81

SCALE
0 4 8 16

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 11/29/2023
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 2
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224/A9225

DESCRIPTION	DATE

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

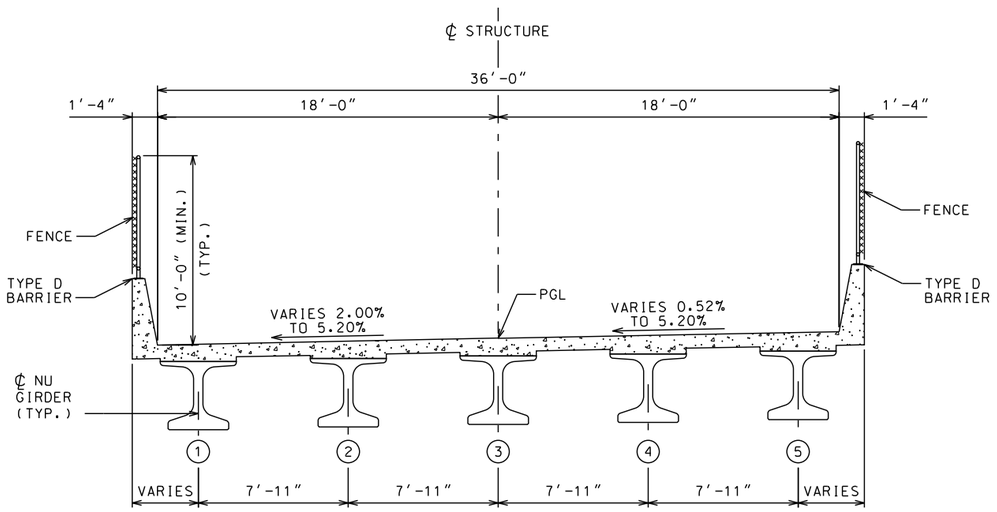
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TYPICAL SECTIONS (SHEET 1 OF 3)

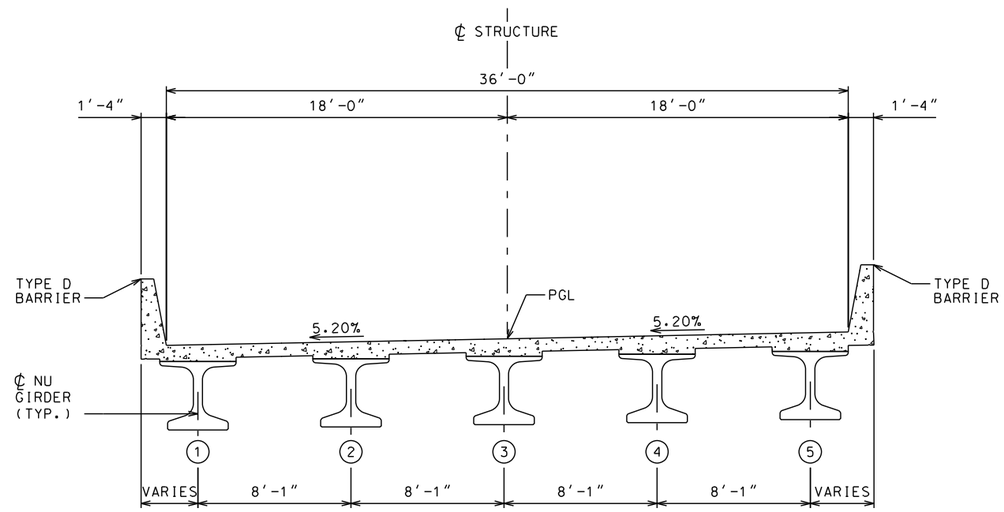
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

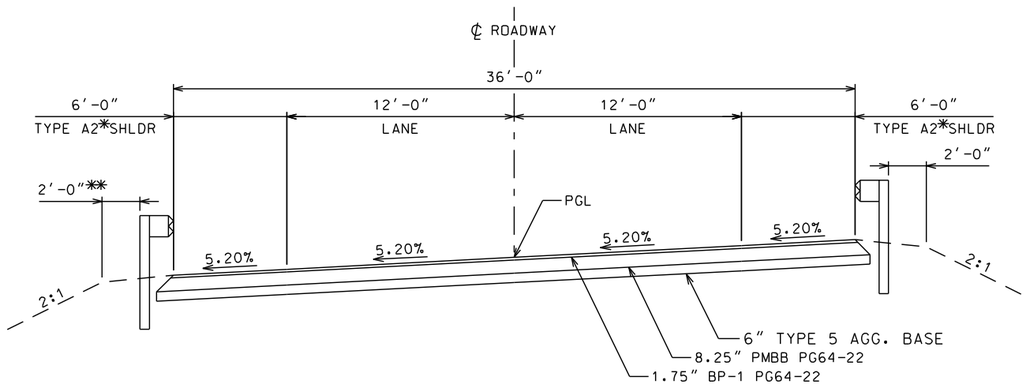
REV.



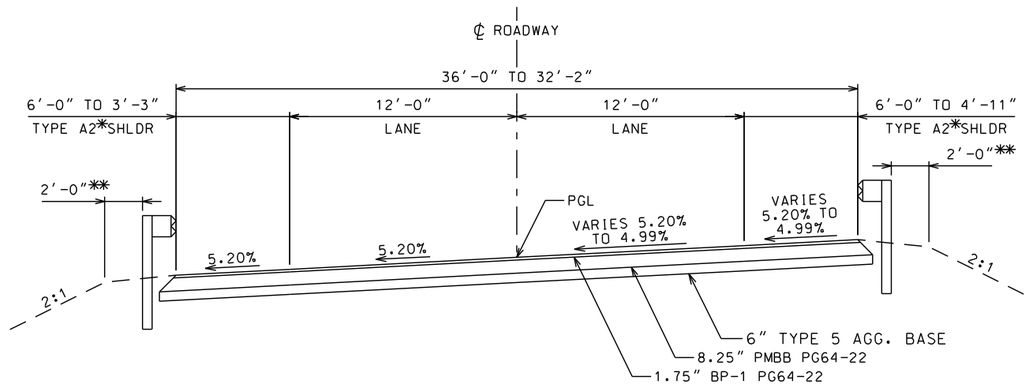
ROUTE 114
BRIDGE NO. A9225 TYPICAL
STA. 874+04.58 TO STA. 876+50.42



ROUTE 114
BRIDGE NO. A9224 TYPICAL
STA. 879+85.16 TO STA. 880+80.66



ROUTE 114 - SUPERELEVATED SECTION
STA. 876+69.91 TO STA. 879+65.68



ROUTE 114 - SUPERELEVATED SECTION
STA. 881+00.16 TO STA. 882+94.76

* TYPE A2 SHOULDER - SEE STANDARD PLAN 401.00
** GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD PLANS 606.50 AND 606.81

SCALE
0 4 8 16

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 11/29/2023
ROUTE 114 | STATE MO
DISTRICT SE | SHEET NO. 2
COUNTY STODDARD
JOB NO. J9S3726/J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224/A9225

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

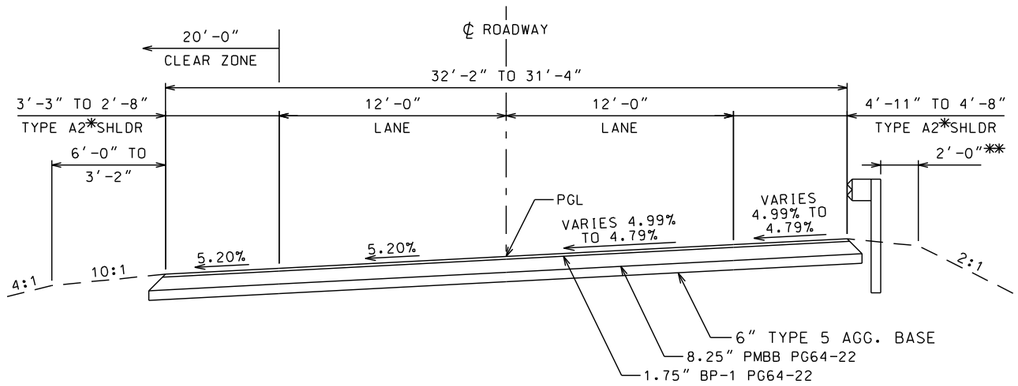
REV.	DESCRIPTION	DATE

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

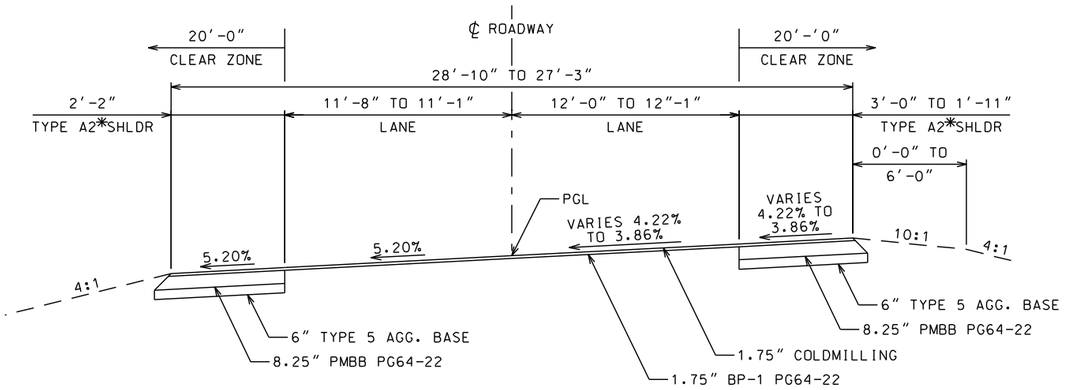
TYPICAL SECTIONS (SHEET 2 OF 3)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

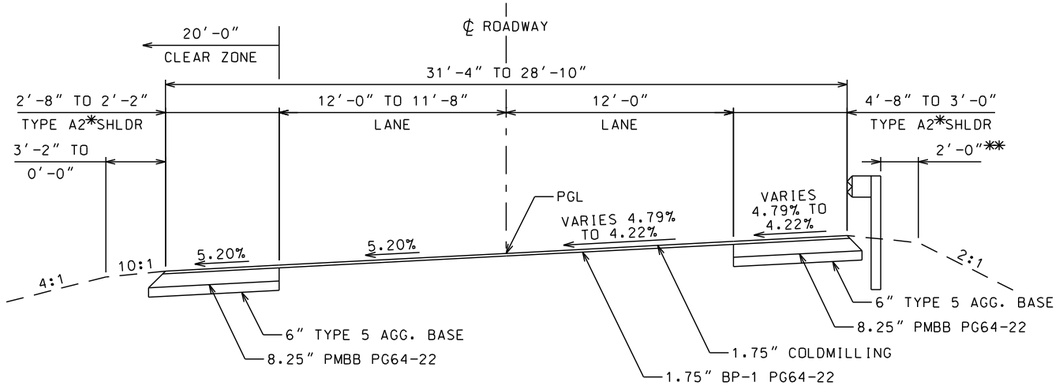
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416



ROUTE 114 - SUPERELEVATED SECTION
STA. 882+94.76 TO STA. 883+10.37



ROUTE 114 - SUPERELEVATED SECTION
STA. 883+56.97 TO STA. 883+86.41



ROUTE 114 - SUPERELEVATED SECTION
STA. 883+10.37 TO STA. 883+56.97

* TYPE A2 SHOULDER - SEE STANDARD PLAN 401.00
** GUARDRAIL INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD PLANS 606.50 AND 606.81

SCALE
0 4 8 16

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
11/29/2023

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
SE	2

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

DESCRIPTION	DATE

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

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

TYPICAL SECTIONS (SHEET 3 OF 3)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

EARTHWORK

STA	STA	APPROX EARTHWORK CUT (CY)	APPROX EARTHWORK FILL (CY)	CLASS A EXCAVATION (CY)	COMPACTING EMBANKMENT (CY)	SUBGRADE COMPACTION (100 FT)	REMARKS
872+27.08	872+70.15	11	27	11	27		
872+70.15	874+14.35	509	145	509	145	2	
874+14.35	875+16.51	6.079	0	6.079	0		
875+48.76	876+44.71	3.625	116	3.625	116		
876+44.71	878+00.00	85	3.045	85	3.045	1	
		TOTAL		10.309	3.333	3	

NOTES:
PER THE ROADWAY CROSS SECTIONS PROVIDED IN THE PLANS, THE EXISTING SIDE SLOPES SHOULD BE BENCHED PRIOR TO PLACEMENT OF ANY ADDITIONAL FILL MATERIAL ALONG THE PROJECT LIMITS. BENCHES SHOULD NOT EXCEED A MAXIMUM HEIGHT OF 3 FEET WITH A MINIMUM HEIGHT OF 1 FOOT. THE WIDTH OF THE BENCHES SHOULD BE SUFFICIENT WIDTH TO PERMIT PLACING AND COMPACTING OPERATIONS TO BE COMPLETED. A MINIMUM WIDTH OF 6 FEET SHOULD BE USED. EXCAVATION QUANTITIES WILL NOT BE MEASURED SEPARATELY FOR PAYMENT IN THE PLANS. PAYMENT FOR THIS WORK SHALL BE BID INCIDENTAL TO ITEM 203-60.00, "COMPACTING EMBANKMENT".

EXCESS EXCAVATED MATERIAL SHALL BE HAULED AWAY BY THE CONTRACTOR AT NO DIRECT PAY.

SUBGRADE COMPACTION IS INTENDED FOR LOCATIONS WHERE THE EXISTING ASPHALT PAVEMENT AND AGGREGATE BASE HAVE BEEN REMOVED.

CLEARING AND GRUBBING

STA	STA	LOCATION	CLEARING AND GRUBBING (ACRES)
872+27.08	875+13.11	LT OF RTE 114 ℄	0.24
872+27.08	875+16.51	RT OF RTE 114 ℄	0.36
875+48.76	878+00.00	LT OF RTE 114 ℄	0.39
875+51.17	878+00.00	RT OF RTE 114 ℄	0.44
		TOTAL	2

RIGHT OF WAY MARKERS

STA	OFFSET LEFT	OFFSET RIGHT
875+55.91	100′	
875+62.27	75′	
875+93.82		75′
875+99.04		105′
876+02.05		123.10′
876+19.44		105′
876+35.00	100′	
876+44.63		95′
877+20.00	100′	
877+35.00		95′
878+00.00	100′	
878+00.00	75′	
TOTAL	12	

PAVEMENT AND AGGREGATE BASE

STA	STA	LOCATION	LENGTH (FT)	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BP-1) (TON)	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE) (TON)	TYPE 5 AGGREGATE FOR BASE (6 IN. THICK) (SY)	TACK COAT (GA)	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS) (SY)	REMARKS
872+27.08	873+91.25	LT/RT OF RTE 114 ℄	164.17	67	230	538	10	197	
876+67.87	878+00.00	LT/RT OF RTE 114 ℄	132.13	49	236	548			
		TOTAL		116	466	1,086	10	197	

GUARDRAIL

STA	STA	LOCATION	LENGTH (FT)	MGS BRIDGE APPROACH TRANSITION (REGULAR / NO CURB) (EA)	TYPE A CRASHWORTHY END TERMINAL (MASH) (EA)	MGS GUARDRAIL (FT)	REMARKS
872+57.08	873+91.25	RT OF RTE 114 EOS	137.50	1	1	50.0	SW CORNER OF BRIDGE A9225
872+57.08	873+78.97	LT OF RTE 114 EOS	125.00	1	1	37.5	NW CORNER OF BRIDGE A9225
876+67.86	878+00.00	LT OF RTE 114 EOS	137.50	1		100.0	NE CORNER OF BRIDGE A9225
876+71.89	878+00.00	RT OF RTE 114 EOS	125.00	1		87.5	SE CORNER OF BRIDGE A9225
		TOTAL		4	2	275	

ROCK DITCH LINER

STA	STA	LOCATION	LENGTH (FT)	WIDTH (FT)	DEPTH (IN)	TYPE 1 ROCK DITCH LINER FURNISHING (CY)	TYPE 1 ROCK DITCH LINER PLACING (CY)	REMARKS
872+27.08	873+78.97	LT OF RTE 114 EOS	151.89	VARIES	8	14.6	14.6	
872+27.08	873+91.71	RT OF RTE 114 EOS	164.63	VARIES	8	15.8	15.8	
876+67.72	878+00.00	LT OF RTE 114 EOS	132.28	3.75	8	12.2	12.2	
876+71.89	878+00.00	RT OF RTE 114 EOS	128.11	3.75	8	11.9	11.9	
					TOTAL	55	55	

ROCK BLANKET

STA	STA	ROCK DEPTH (FT)	LENGTH (FT)	WIDTH (FT)	TYPE 2 ROCK BLANKET FURNISHING (CY)	TYPE 2 ROCK BLANKET PLACING (CY)	GEOTEXTILE FABRIC (SY)	REMARKS
873+78.52	874+68.73	2	90.21	VARIES	793.0	793.0	1,189.5	WEST END OF BRIDGE A9225
875+86.22	876+72.03	2	85.81	VARIES	814.1	814.1	1,221.2	EAST END OF BRIDGE A9225
				TOTAL	1,607	1,607	2,411	

POROUS BACKFILL

STA	LOCATION	POROUS BACKFILL GRADE 3, 4, OR 5 (CY)	REMARKS
874+04.11	LT/RT OF RTE 114	42.3	BRIDGE A9225 END
876+49.91	LT/RT OF RTE 114	40.4	BRIDGE A9225 END
	TOTAL	83	

REMOVAL OF IMPROVEMENTS

STA	STA	LOCATION	DESCRIPTION	REMARKS
872+27.08	874+59.86	LT OF RTE 114	EXISTING GUARDRAIL	APPROXIMATELY 237.5′ OF EXISTING GUARDRAIL
872+84.27	874+67.00	RT OF RTE 114	EXISTING GUARDRAIL	APPROXIMATELY 187.5′ OF EXISTING GUARDRAIL
874+09.23		LT OF RTE 114	MO ROUTE 114 / END SIGNS	APPROXIMATELY 55′ WEST OF EXISTING BRIDGE
876+05.88	879+77.94	RT OF RTE 114	EXISTING GUARDRAIL	APPROXIMATELY 375′ OF EXISTING GUARDRAIL
876+30.10	879+68.48	LT OF RTE 114	EXISTING GUARDRAIL	APPROXIMATELY 350′ OF EXISTING GUARDRAIL
876+39.23		LT/RT OF RTE D	JCT / MO ROUTE 25 SIGNS	APPROXIMATELY 40′ EAST OF EXISTING BRIDGE
881+22.30	882+95.28	LT OF RTE 114	EXISTING GUARDRAIL	APPROXIMATELY 175′ OF EXISTING GUARDRAIL
881+31.02	883+73.51	RT OF RTE 114	EXISTING GUARDRAIL	APPROXIMATELY 250′ OF EXISTING GUARDRAIL
1 LUMP SUM				

SEEDING AND MULCHING

STA	STA	LOCATION	LENGTH (FT)	SEEDING COOL SEASON MIX (ACRES)	MULCHING (ACRES)	REMARKS
872+27.08	875+16.51	LT/RT OF RTE 114	289.43	0.54	0.54	
875+48.76	878+00.00	LT/RT OF RTE 114	251.24	0.71	0.71	
			TOTAL	2	2	

NOTE: AC OF SEEDING - COOL SEASON MIXTURE AND MULCHING WILL BE PAID UNLESS ADDITIONAL AUTHORIZED BY ENGINEER

PERMANENT PAVEMENT MARKING

STA	STA	LOCATION	LENGTH (FT)	4" SOLID YELLOW CLASS 1 PAINT (18-MIL, TYPE P BEADS) (LF)	4" SOLID WHITE CLASS 1 PAINT (18-MIL, TYPE P BEADS) (LF)	REMARKS
872+27.08	878+00.00	℄ RTE 114	572.92	1,146		CENTERLINE
872+27.08	878+00.00	LT/RT OF RTE 114 ℄	572.92		1,146	EDGELINES
			TOTAL	1,146	1,146	

RAILROAD PLAN SUBMITTAL

1 LUMP SUM

MOBILIZATION

1 LUMP SUM

TEMPORARY EROSION CONTROL

	SILT FENCE (LF)
TOTAL	1,478

CONTRACTOR FURNISHED SURVEYING & STAKING

1 LUMP SUM

J9S3775 SUMMARY OF QUANTITIES

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 10/16/2026
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 3
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO.: A9224/A9225

DESCRIPTION	DATE

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

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

A9225 SUMMARY OF QUANTITIES (SHEET 1 OF 3)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL:(314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

EARTHWORK

STA	STA	APPROX EARTHWORK CUT (CY)	APPROX EARTHWORK FILL (CY)	CLASS A EXCAVATION (CY)	COMPACTING EMBANKMENT (CY)	SUBGRADE COMPACTION (100 FT)	REMARKS
878+00.00	880+32.53	268	1,570	268	1,570	2	
880+43.74	880+73.81	4	133	4	133		
880+73.81	883+10.37	328	1,368	328	1,368	2	
883+10.37	883+86.41	16	38	16	38		
		TOTAL		616	3,109	4	

NOTES:
PER THE ROADWAY CROSS SECTIONS PROVIDED IN THE PLANS, THE EXISTING SIDE SLOPES SHOULD BE BENCHED PRIOR TO PLACEMENT OF ANY ADDITIONAL FILL MATERIAL ALONG THE PROJECT LIMITS. BENCHES SHOULD NOT EXCEED A MAXIMUM HEIGHT OF 3 FEET WITH A MINIMUM HEIGHT OF 1 FOOT. THE WIDTH OF THE BENCHES SHOULD BE SUFFICIENT WIDTH TO PERMIT PLACING AND COMPACTING OPERATIONS TO BE COMPLETED. A MINIMUM WIDTH OF 6 FEET SHOULD BE USED. EXCAVATION QUANTITIES WILL NOT BE MEASURED SEPARATELY FOR PAYMENT IN THE PLANS. PAYMENT FOR THIS WORK SHALL BE BID INCIDENTAL TO ITEM 203-60.00, "COMPACTING EMBANKMENT".

EXCESS EXCAVATED MATERIAL SHALL BE HAULED AWAY BY THE CONTRACTOR AT NO DIRECT PAY.

SUBGRADE COMPACTION IS INTENDED FOR LOCATIONS WHERE THE EXISTING ASPHALT PAVEMENT AND AGGREGATE BASE HAVE BEEN REMOVED.

CLEARING AND GRUBBING

STA	STA	LOCATION	CLEARING AND GRUBBING (ACRES)
878+00.00	880+27.85	LT OF RTE 114 ℄	0.19
878+00.00	880+32.53	RT OF RTE 114 ℄	0.24
880+43.74	883+86.41	LT OF RTE 114 ℄	0.11
880+48.17	883+86.41	RT OF RTE 114 ℄	0.18
		TOTAL	1

RIGHT OF WAY MARKERS

STA	OFFSET LEFT	OFFSET RIGHT
878+35.00		85'
878+95.19		75'
881+50.00	75'	
881+50.00		75'
882+15.00	75'	
882+15.00	40'	
882+30.00		50'
883+10.00		50'
883+85.00		50'
883+85.00		40'
TOTAL	10	

PAVEMENT AND AGGREGATE BASE

STA	STA	LOCATION	LENGTH (FT)	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BP-1) (TON)	BITUMINOUS PAVEMENT MIXTURE PG64-22 (BASE) (TON)	TYPE 5 AGGREGATE FOR BASE (6 IN. THICK) (SY)	TACK COAT (GA)	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (3 IN. THICK OR LESS) (SY)	REMARKS
878+00.00	879+71.28	LT/RT OF RTE 114 ℄	171.28	63	300	698			
880+97.07	883+86.41	LT/RT OF RTE 114 ℄	289.34	96	354	835	12	227	
		TOTAL		159	654	1,533	12	227	

GUARDRAIL

STA	STA	LOCATION	LENGTH (FT)	MGS BRIDGE APPROACH TRANSITION (REGULAR / NO CURB) (EA)	TYPE A CRASHWORTHY END TERMINAL (MASH) (EA)	MGS GUARDRAIL (FT)	REMARKS
878+00.00	879+59.86	LT OF RTE 114 EOS	162.50	1		125.0	NW CORNER OF BRIDGE A9224
878+00.00	879+71.28	RT OF RTE 114 EOS	175.00	1		137.5	SW CORNER OF BRIDGE A9224
880+97.07	882+94.76	LT OF RTE 114 EOS	200.00	1	1	112.5	NE CORNER OF BRIDGE A9224
881+03.12	883+56.97	RT OF RTE 114 EOS	262.50	1	1	175.0	SE CORNER OF BRIDGE A9224
		TOTAL		4	2	550	

MOBILIZATION

1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING & STAKING

1 LUMP SUM

TEMPORARY EROSION CONTROL

	SILT FENCE (LF)	TYPE C BERM (LF)
TOTAL	1,307	157

ROCK DITCH LINER

STA	STA	LOCATION	LENGTH (FT)	WIDTH (FT)	DEPTH (IN)	TYPE 1 ROCK DITCH LINER FURNISHING (CY)	TYPE 1 ROCK DITCH LINER PLACING (CY)	REMARKS
878+00.00	879+59.86	LT OF RTE 114 EOS	159.86	3.75	8	14.8	14.8	
878+00.00	879+71.69	RT OF RTE 114 EOS	171.69	3.75	8	15.9	15.9	
880+96.84	883+24.72	LT OF RTE 114 EOS	227.88	VARIES	8	21.6	21.6	
881+03.12	883+86.41	RT OF RTE 114 EOS	283.29	VARIES	8	27.2	27.2	
					TOTAL	80	80	

SEEDING AND MULCHING

STA	STA	LOCATION	LENGTH (FT)	SEEDING COOL SEASON MIX (ACRES)	MULCHING (ACRES)	REMARKS
878+00.00	880+32.53	LT/RT OF RTE 114	232.53	0.40	0.40	
880+43.74	883+86.41	LT/RT OF RTE 114	342.67	0.20	0.20	
			TOTAL	1	1	

NOTE: AC OF SEEDING - COOL SEASON MIXTURE AND MULCHING WILL BE PAID UNLESS ADDITIONAL AUTHORIZED BY ENGINEER

ROCK BLANKET

STA	STA	ROCK DEPTH (FT)	LENGTH (FT)	WIDTH (FT)	TYPE 2 ROCK BLANKET FURNISHING (CY)	TYPE 2 ROCK BLANKET PLACING (CY)	GEOTEXTILE FABRIC (SY)	REMARKS
879+59.42	880+32.53	2	73.11	VARIES	290.7	290.7	436.1	WEST END OF BRIDGE A9224
880+43.74	881+03.34	2	59.60	VARIES	179.5	179.5	269.2	EAST END OF BRIDGE A9224
881+03.34	883+86.41	2	283.07	VARIES	345.1	345.1	517.2	RT OF RTE 114 ℄
				TOTAL	816	816	1,223	

PERMANENT PAVEMENT MARKING

STA	STA	LOCATION	LENGTH (FT)	4" SOLID YELLOW CLASS 1 PAINT (18-MIL, TYPE P BEADS) (LF)	4" SOLID WHITE CLASS 1 PAINT (18-MIL, TYPE P BEADS) (LF)	REMARKS
878+00.00	883+86.41	℄ RTE 114	586.41	1,173		CENTERLINE
878+00.00	883+86.41	LT/RT OF RTE 114 ℄	586.41		1,173	EDGELINES
			TOTAL	1,173	1,173	

POROUS BACKFILL

STA	LOCATION	POROUS BACKFILL GRADE 3, 4, OR 5 (CY)	REMARKS
879+85.68	LT/RT OF RTE 114	41.7	BRIDGE A9224 END
880+80.15	LT/RT OF RTE 114	40.7	BRIDGE A9224 END
	TOTAL	83	

J9S3726 SUMMARY OF QUANTITIES

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 10/16/2026
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 3
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224/A9225

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

DESCRIPTION | DATE

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

A9224 SUMMARY OF QUANTITIES (SHEET 2 OF 3)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL:(314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	
WARNING SIGNS								DESCRIPTIONS
W01-1L	48X48	16.00						TURN (SYMBOL LEFT ARROW)
W01-1R	48X48	16.00						TURN (SYMBOL RIGHT ARROW)
W01-2L	48X48	16.00						CURVE (SYMBOL LEFT ARROW)
W01-2R	48X48	16.00						CURVE (SYMBOL RIGHT ARROW)
W01-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT ARROW)
W01-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT ARROW)
W01-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT ARROW)
W01-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT ARROW)
W01-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LT ARROW)
W01-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RT ARROW)
W01-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LT ARROW)
W01-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RT ARROW)
W01-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)
W01-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)
W01-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)
W01-8	18X24	3.00						CHEVRON (SYMBOL)
W01-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
W03-1	48X48	16.00						STOP AHEAD (SYMBOL)
W03-2	48X48	16.00						YIELD AHEAD (SYMBOL)
W03-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)
W03-4	48X48	16.00						BE PREPARED TO STOP
W03-5	48X48	16.00						SPEED LIMIT AHEAD
W04-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)
W04-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)
W04-1aL	48X48	16.00						MERGE (ARROW SYMBOL)
W04-1aR	48X48	16.00						MERGE (ARROW SYMBOL)
W05-1	48X48	16.00						ROAD/BRIDGE/RAMP NARROWS
W05-3	48X48	16.00						ONE LANE BRIDGE
W05-5	48X48	16.00						NARROW LANES
W06-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)
W06-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)
W06-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)
W07-3a	30X24	5.00						NEXT XX MILES (PLAQUE)
W08-1	48X48	16.00						BUMP
W08-2	48X48	16.00						DIP
W08-3	48X48	16.00						PAVEMENT ENDS
W08-4	48X48	16.00						SOFT SHOULDER
W08-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)
W08-6	48X48	16.00						TRUCK CROSSING
W08-6c	48X48	16.00						TRUCK ENTRANCE
W08-7	36X36	9.00						LOOSE GRAVEL
W08-7a	36X36	9.00						FRESH OIL/LOOSE GRAVEL
W08-9	48X48	16.00						LOW SHOULDER
W08-11	48X48	16.00						UNEVEN LANES
W08-12	48X48	16.00						NO CENTER LINE
W08-15	48X48	16.00						GROOVED PAVEMENT
W08-15P	30X24	5.00						MOTORCYCLE (PLAQUE)
W08-17	48X48	16.00						SHOULDER DROP-OFF (SYMBOL)
W08-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)
W10-1	42RND.	9.62						RAILROAD CROSSING
W012-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)
W012-2	48X48	16.00						LOW CLEARANCE (SYMBOL)
W012-2X	24X18	3.00						LOW CLEARANCE (PLAQUE)
W012-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)
W012-4	120X60	50.00						LOW CLEARANCE XX FT XX IN XX MILES AHEAD
W012-5	120X60	50.00						WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD
W013-1	30X30	6.25						ADVISORY SPEED (PLAQUE)
W016-2	30X24	5.00						XXX FEET (PLAQUE)
W016-3	30X24	5.00						X MILE (PLAQUE)
W020-1	48X48	16.00						ROAD/BRIDGE/RAMP WORK AHEAD
W020-2	48X48	16.00	3	48.00				DETOUR AHEAD
W020-3	48X48	16.00	1	16.00				ROAD CLOSED AHEAD
W020-4	48X48	16.00						ONE LANE ROAD AHEAD
W020-5	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED AHEAD
W020-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
W020-6a	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED
W020-7a	48X48	16.00						FLAGGER (SYMBOL) WITH FLAGS
W021-2	36X36	9.00						FRESH OIL
W021-5	48X48	16.00						SHOULDER WORK AHEAD
W022-1	48X48	16.00						BLASTING ZONE AHEAD
W022-2	42X36	10.50						TURN OFF 2-WAY RADIO AND PHONE
W022-3	42X36	10.50						END BLASTING ZONE
G022-1	21X15	2.19						WET PAINT (ARROW PIVOTS)

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	
GUIDE SIGNS								DESCRIPTIONS
E05-1	36X48	12.00						GORE EXIT
E05-2	48X36	12.00						EXIT OPEN
E05-2a	48X36	12.00						EXIT CLOSED
G020-1	60X24	10.00						ROAD WORK NEXT XX MILES
G020-2	48X24	8.00						END ROAD WORK
G020-4	36X18	4.50						PILOT CAR FOLLOW ME
G020-4a	42X30	8.75						PLEASE WAIT FOR PILOT CAR
G020-5aP	36X24	6.00						WORK ZONE (PLAQUE)
M01-5	24X24	4.00	1	4.00				STATE NUMBERED SHIELD (2 NUMBERS)
M01-5	30X24	5.00	1	5.00				STATE NUMBERED SHIELD (3 NUMBERS)
M02-1	21X15	2.19	1	2.19				JUNCTION MARKER
M04-6	24X12	2.00	1	2.00				END MARKER
M04-8a	24X18	3.00	2	6.00				END DETOUR
M04-9L	48X36	12.00						DETOUR (LEFT ARROW)
M04-9R	48X36	12.00						DETOUR (RIGHT ARROW)
M04-9P	48X12	4.00						STREET NAME (PLAQUE)
M04-10L	48X18	6.00						DETOUR (ARROW LEFT)
M04-10R	48X18	6.00						DETOUR (ARROW RIGHT)
REGULATORY SIGNS								
R1-1	48X48	13.25						STOP
R1-2	48TRI.	6.93						YIELD
R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)
R1-3P	30X12	2.50						ALL WAY (PLAQUE)
R2-1	36X48	12.00						SPEED LIMIT XX
R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00						NO TURNS
R3-4	48X48	16.00						NO U-TURN (SYMBOL)
R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00						DO NOT PASS
R4-2	36X48	12.00						PASS WITH CARE
R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)
R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)
R5-1	30X30	6.25						DO NOT ENTER
R5-1a	36X24	6.00						WRONG WAY
R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)
R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)
R6-2L	24X30	5.00						ONE WAY (LEFT)
R6-2R	24X30	5.00						ONE WAY (RIGHT)
R9-9	24X12	2.00						SIDEWALK CLOSED
R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD. (ARROW LEFT) CROSS HERE
R9-11R	24X18	3.00						SIDEWALK CLOSED AHEAD. (ARROW RIGHT) CROSS HERE
R10-6	24X36	6.00						STOP HERE ON RED (45° ARROW)
R11-2	48X30	10.00	2	20.00				ROAD CLOSED
R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50	3	37.50				ROAD CLOSED TO THRU TRAFFIC
CONST-3a	60X48	20.00						FINE SIGN
CONST-3x	56X12	4.67						SPEED/PASSING (PLATE)
MISCELLANEOUS SIGNS								
CONST-5	48X36	12.00						POINT OF PRESENCE
CONST-4	96X48	32.00						POINT OF PRESENCE
CONST-7	48X24	8.00						RATE OUR WORK ZONE
CONST-7	72X36	18.00						RATE OUR WORK ZONE
CONST-8	48X36	12.00						WORK ZONE NO PHONE ZONE
W020-3a	48X36	16.00	2	32.00				ROAD CLOSED 500 FT
SPECIAL	84X48	28.00	2	28.00				EAST RTE 114 CLOSED XX MILES AHEAD
SPECIAL	84X48	28.00	1	28.00				WEST RTE 114 CLOSED XX MILES AHEAD
SPECIAL	36X78	19.50	17	331.50				EAST DETOUR ROUTE ASSEMBLY
SPECIAL	36X78	19.50	16	312.00				WEST DETOUR ROUTE ASSEMBLY

616-10.05 CONSTRUCTION SIGNS	TOTAL 873 SF
616-10.10 RELOCATED SIGNS	TOTAL 0 SF

ITEM NUMBER	TOTAL QTY	DESCRIPTIONS
6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)
6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)
6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)
6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)
6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6123000A		TRUCK OR TRAILER MOUNTED ATTENUATOR (TMA)
6161007		SPEED LIMIT AND STROBE LIGHT ASSEMBLY
6161008		ADVANCED WARNING RAIL SYSTEM
6161009		FLAG ASSEMBLY
6161012		BUOYS (BOUTS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161024		CHANNELIZER (TRIM LINE) WITH LIGHT
6161025		CHANNELIZER (TRIM LINE)
6161030	10	TYPE III MOVEABLE BARRICADE
6161031		TYPE III MOVEABLE BARRICADE WITH LIGHTS
6161033		DIRECTION INDICATOR BARRICADE
6161034		DIRECTION INDICATOR BARRICADE. WITH LIGHT
6161040		FLASHING ARROW PANEL
6161047		TYPE III OBJECT MARKER
6161052		WARNING LIGHT, TYPE B
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN. COMMISSION FURNISHED/RETAINED
6161098A	3	CHANGEABLE MESSAGE SIGN W/O COMM. INTERFACE. CONTRACTOR FURNISHED/RETAINED
6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE. CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002		TEMPORARY LONG-TERM RUMBLE STRIPS
6162004		TEMPORARY SHORT-TERM RUMBLE STRIPS
6173600D	48	TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/RETAINED
6173602B		TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/COMMISSION RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
6176000B		TEMPORARY TRAFFIC BARRIER COMMISSION FURNISHED/RETAINED
6177000B		TEMPORARY TRAFFIC BARRIER COMMISSION FURNISHED/RETAINED
6208064A		TEMPORARY RAISED PAVEMENT MARKER
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING

NOTE:
ALL SIGNING AND TEMPORARY TRAFFIC CONTROL ITEMS ARE INCLUDED IN THE J9S3775 ROADWAY ITEMS.

STATE OF MISSOURI
CHRISTOPHER LaROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

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

DATE PREPARED: 10/16/2026
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 3
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224/A9225

REV.	DESCRIPTION	DATE

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

SUMMARY OF QUANTITIES (SHEET 3 OF 3)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL:(314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

UTILITIES

COMMUNICATION AT&T DISTRIBUTION TEL: 314-275-0020	COMMUNICATION NEWWAVE COMMUNICATIONS TEL: 870-598-4046	SEWER & WATER CITY OF DEXTER 301 EAST STODDARD ST. DEXTER, MO 63841 TEL: 573-624-5527
POWER DISTRIBUTION AMEREN MISSOURI ELECTRIC TEL: 800-778-9140	GAS AMEREN MISSOURI GAS TEL: 800-552-7583	FIBER OPTIC CENTURYLINK (FORMERLY LEVEL 3) TEL: 877-366-8344

SECTION
23-T25N-R10E

DEXTER COLLISION LLC
0.00 NEW R/W
4.57 REMAINING

EXISTING BRIDGE K0032
TO BE REMOVED
CLOSE BRIDGE TO HANDLE TRAFFIC
(47'-47'-47') CONCRETE DECK
GIRDER SPANS

PROPOSED BRIDGE A9225 - STA. 875+27.50
(66'-113'-10"-66') PRESTRESSED CONC. NU GIRDER SPANS
36' ROADWAY

EXISTING BRIDGE K0031
TO BE REMOVED
CLOSE BRIDGE TO HANDLE
TRAFFIC
(39'-39'-39'-39')
CONCRETE DECK
GIRDER SPANS

(1) CITY OF DEXTER
0.13 NEW R/W
1.85 REMAINING

(5) MALLOY CUSTOM CONCRETE LLC
0.05 NEW R/W
1.34 REMAINING

END PROJECT
STA. 883+86.41

(4) CITY OF DEXTER
0.06 NEW R/W
468.17 REMAINING

PROPOSED BRIDGE A9224 -
STA. 880+32.91
(95'-6") PRESTRESSED
CONC. NU GIRDER SPAN
36' ROADWAY
DA = 3 SQ MI

EXISTING OVERHEAD
ELECTRIC
CURVE 114-1

MONTGOMERY, JOHN RICHARD
JOB NO. J9S3775
0.00 NEW R/W
7.00 REMAINING

(3) MALONE, LARRY E
AND MARY ANN H/W
0.13 NEW R/W
0.62 REMAINING EAST
0.01 REMAINING WEST

(2) NEELEY, HUBERT
AND TERESA H/W
0.01 NEW R/W
0.18 REMAINING

SECTION
26-T25N-R10E

ROBINSON, CARRIE B
0.00 NEW R/W
0.29 REMAINING

REINBOTT, CURTIS
AND PEGGY H/W
0.00 NEW R/W
0.78 REMAINING

SECTION
23-T25N-R10E

CURVE 114-1
(LEGACY)

BEGIN PROJECT
STA. 872+27.08

PC STA 874+62.06

CURVE EX25-1

PT STA 326+11.50

℄ ROUTE 114
S37°22'26"E
RTE 114 STA 869+41.25 =
RTE 25 STA 326+12.10

℄ ROUTE 25
S34°01'12"W

EXISTING SEWER

CP 300

CP 301

CP 100

CP 101

DEXTER CREEK

KITCHEN STREET

UNION PACIFIC RAILROAD

ACCESS ROAD

PAPER STREET

SEC. LINE

COUNTY ROUTE 703

GRANT STREET

UPRR TRACK

EXIST R/W

NEW R/W

ROUTE 114	CURVE 114-1 (LEGACY)	ROUTE 25
CURVE 114-1	PI = 871+34.58	CURVE EX25-1
PI = 878+86.14	PC = 867+76.02	PI = 324+93.39
PC = 874+62.06	PT = 874+62.06	PC = 323+74.73
PT = 883+10.22	Δ = 41°08'32.8" (LT)	PT = 326+11.50
Δ = 50°51'51.0" (LT)	D = 05°59'49.4"	Δ = 09°28'14.8" (RT)
D = 05°59'49.4"	L = 686.05'	D = 03°59'59.9"
L = 848.15'	T = 358.56'	L = 236.77'
T = 454.31'	R = 955.40'	T = 118.66'
R = 955.40'		R = 1,432.40'

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

LOCATION OF UTILITIES ARE APPROXIMATE. EXTREME CARE SHALL BE EXCERCISED TO PROTECT UNDERGROUND UTILITIES.

RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STA. 872+27.08 TO STA. 883+86.41, A DISTANCE OF 0.22 MILES.

ALL BEARINGS BASED ON GRID NORTH, MISSOURI COORDINATE SYSTEM OF 1983, EAST ZONE.

LAND CORNER

STA. 869+41.25 ℄ RTE 114/STA. 326+12.10 RTE 25 IS N 37°58'33" E, 993.11 FEET FROM THE SOUTHWEST QUARTER OF SECTION 23, TOWNSHIP 25 NORTH, RANGE 10 EAST RECORDED IN DOCUMENT NUMBER 600-36874.

SCALE
0 50 100 150

STATE OF MISSOURI
CHRISTOPHER LAROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 7/10/2025
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 4
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224/A9225

DESCRIPTION | DATE

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

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

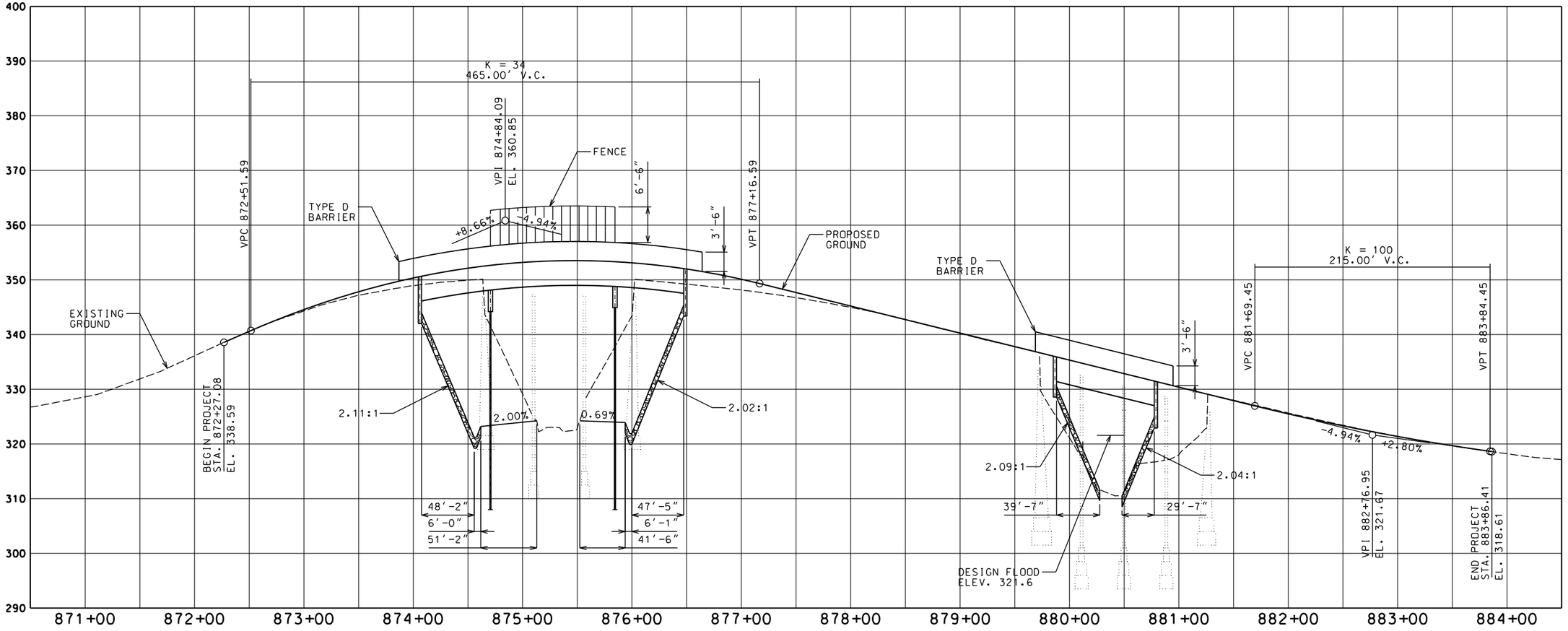
PLAN SHEET (SHEET 1 OF 1)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

ROUTE 114



BENCHMARKS - NAVD 88

BM #500 - CUT SQUARE 38' RT OF ℄ RTE 114
STA 869+94 ELEV 326.19

BM #501 - CUT SQUARE 21' RT OF ℄ RTE 114
STA 881+32 ELEV 330.31

BM #502 - CUT SQUARE 7' LT OF ℄ RTE 25
STA 325+65 ELEV 327.19

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER

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

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

DATE PREPARED
11/29/2023

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
SE	5

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

REV.	DESCRIPTION	DATE

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

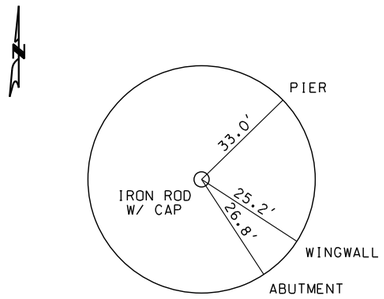
PROFILE SHEET (SHEET 1 OF 1)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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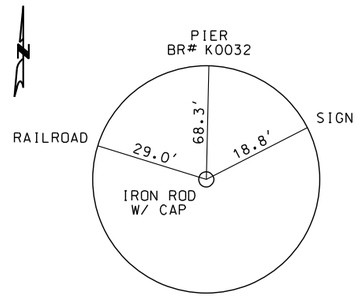
REFERENCE POINTS
NAD83 (EAST ZONE)
PROJECTION FACTOR = 1.000046858



CONTROL PT #300

X-E = 981689.1237 STA 874+05.13
Y-N = 348765.7696 OFF 257.35' LT
Z = 320.47

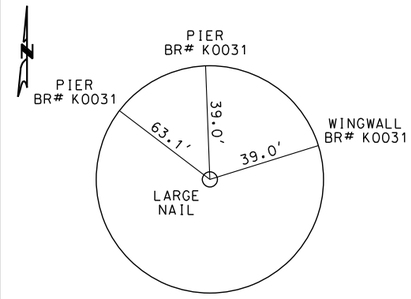
CP #300 - IRON ROD WITH CAP 270' NORTH OF BR# K0032 ON WEST RAILROAD BACKSLOPE



CONTROL PT #301

X-E = 981535.2445 STA 875+74.63
Y-N = 348423.4566 OFF 79.90' RT
Z = 321.14

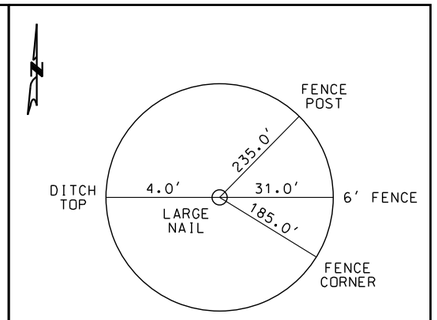
CP #301 - IRON ROD WITH CAP 85' SOUTH OF BR# K0032 ON EAST RAILROAD BACKSLOPE



CONTROL PT #100

X-E = 982031.3847 STA 881+02.55
Y-N = 348169.1277 OFF 50.53' RT
Z = 321.79

CP #100 - LARGE NAIL LOCATED IN SE QUAD OF RTE 114 AND DEXTER CREEK



CONTROL PT #101

X-E = 981984.3975 STA 879+00.27
Y-N = 348550.5716 OFF 292.90' LT
Z = 321.21

CP #101 - LARGE NAIL LOCATED IN NE QUAD OF RTE 114 AND DEXTER CREEK

COORDINATE POINT LISTING
MISSOURI COORDINATE SYSTEM OF 1983 (EAST ZONE)

COORDINATE POINTS

STATION	LOCATION	OFFSET	X - EASTING (US SURVEY FEET)	Y - NORTHING (US SURVEY FEET)	DESCRIPTION
874+05.13	ROUTE 114	257.35' LT.	981689.1237	348765.7696	BR# K0031/BR# K0032 CP 300 - IRON ROD WITH CAP 270' NORTH OF BR#K0032 ON WEST RAILROAD BACKSLOPE
874+62.06	ROUTE 114	-	981519.1687	348564.3136	PC
875+74.63	ROUTE 114	79.90' RT.	981535.2445	348423.4566	BR# K0031/BR# K0032 CP 301 - IRON ROD WITH CAP 85' SOUTH OF BR#K0032 ON EAST RAILROAD BACKSLOPE
878+86.14	ROUTE 114	102.52' RT.	981794.9424	348203.2744	PI
879+00.27	ROUTE 114	292.90' LT.	981984.3975	348550.5716	BR# K0031/BR# K0032 CP 101 - LARGE NAIL LOCATED IN NE QUAD OF RTE 114 AND DEXTER CREEK
881+02.55	ROUTE 114	50.53' RT.	982031.3847	348169.1277	BR# K0031/BR# K0032 CP 100 - LARGE NAIL LOCATED IN SE QUAD OF RTE 114 AND DEXTER CREEK
883+10.22	ROUTE 114	-	982249.0407	348189.3049	PT
887+00.00 BK = 888+00.00 R2	ROUTE 114	-	982638.6384	348177.3197	STATION EQUATION/POT

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 11/29/2023
ROUTE 114 | STATE MO
DISTRICT SE | SHEET NO. 6
COUNTY STODDARD
JOB NO. J9S3726/J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224/A9225

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

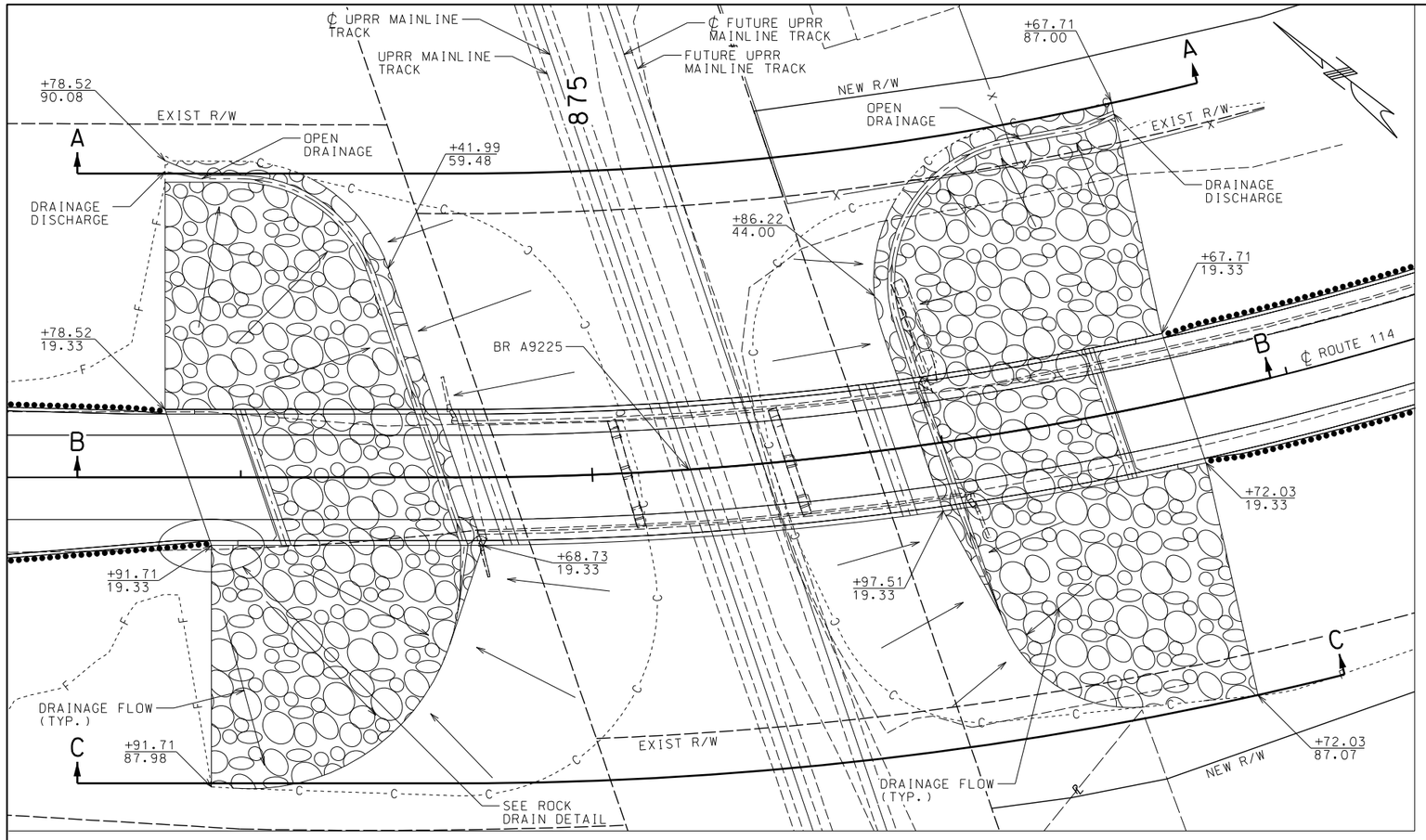
DESCRIPTION | DATE | REV.

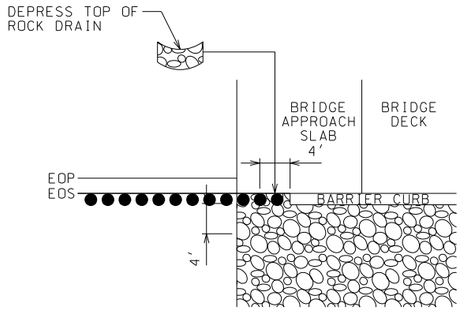
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REFERENCE & COORDINATE POINTS (SHEET 1 OF 1)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

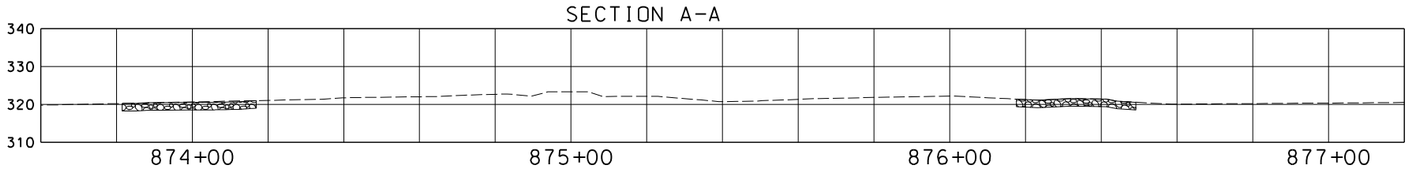
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

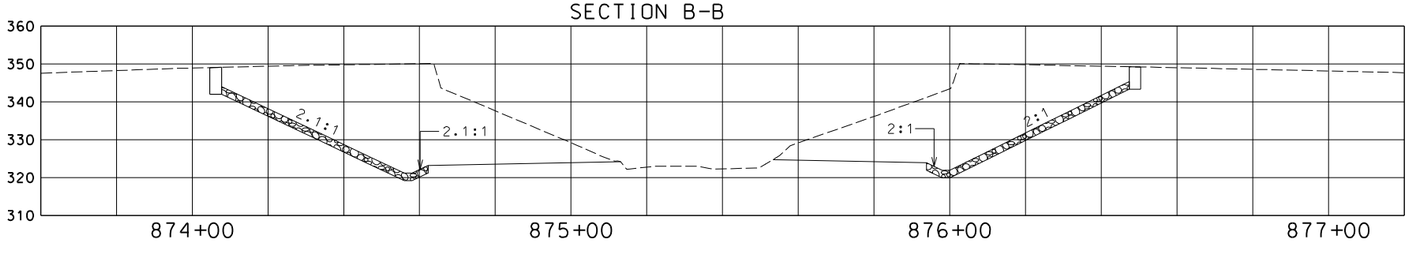


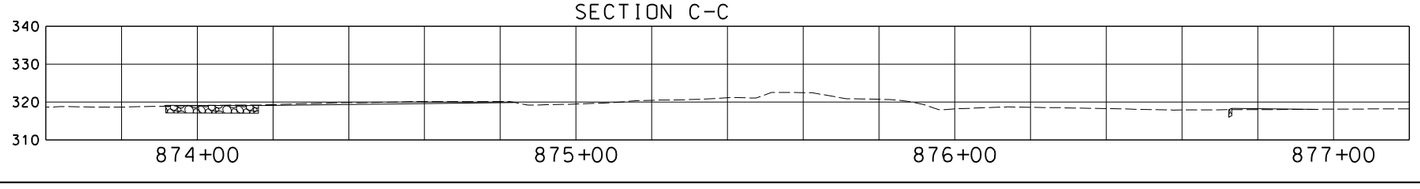


NOTE:
PLACE ROCK DRAIN AS SHOWN TO CATCH WATER THAT FLOWS ALONG BASE OF BARRIER.

ROCK DRAIN DETAIL









TYPE 2
ROCK BLANKET
(2' THICK)

NOTE:
THERE SHALL BE A LAYER OF GEOTEXTILE FABRIC AT THE BOTTOM OF ALL NEW TYPE 2 ROCK BLANKET.

DRAWING IS NOT TO SCALE

STATE OF MISSOURI
CHRISTOPHER LaROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 7/10/2025
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 7
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224/A9225

DESCRIPTION | DATE

SPECIAL SHEET (SHEET 1 OF 7)

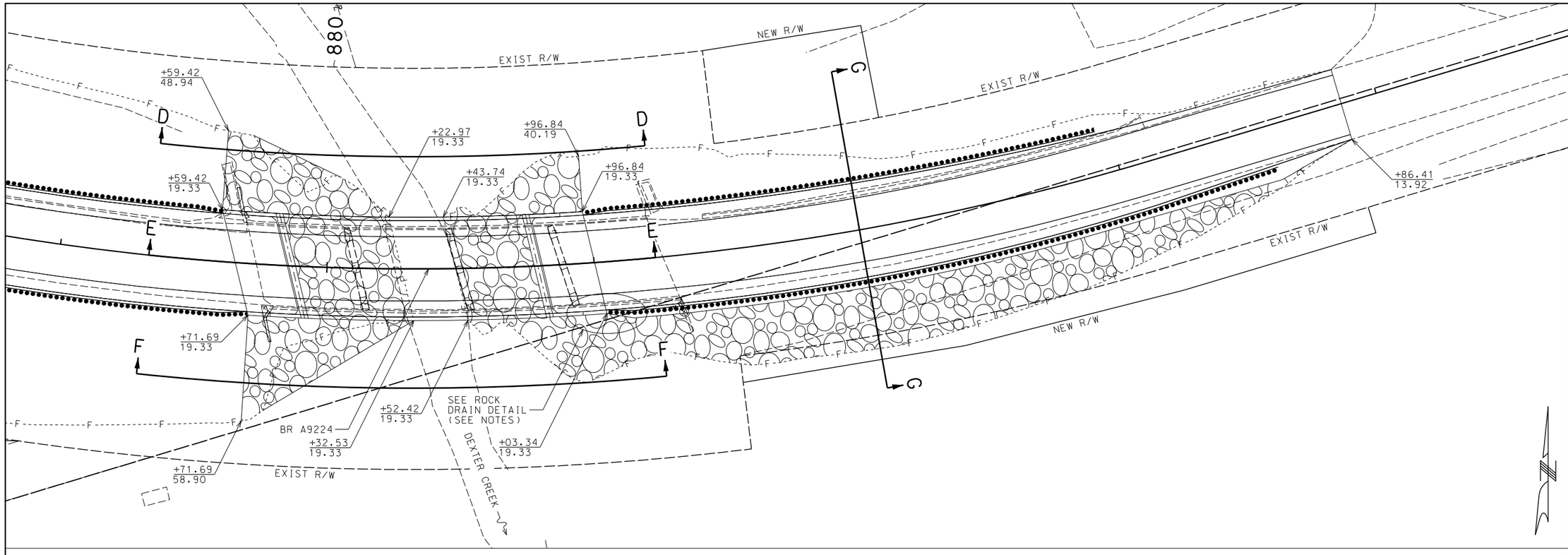
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

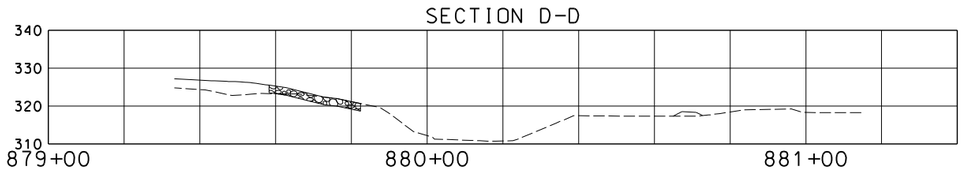
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

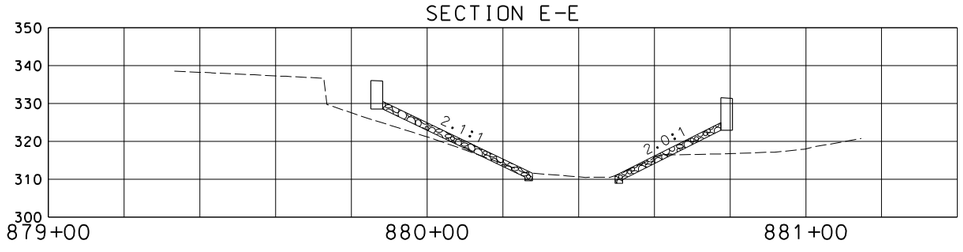
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

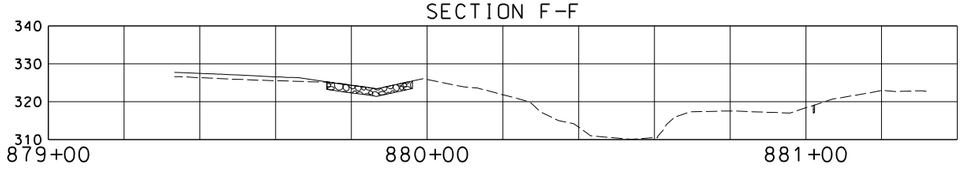
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

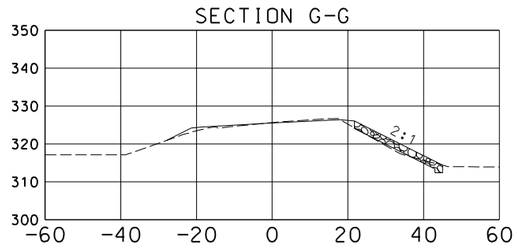
REV.













TYPE 2
ROCK BLANKET
(2' THICK)

NOTES:
THERE SHALL BE A LAYER OF GEOTEXTILE FABRIC AT THE BOTTOM OF ALL NEW TYPE 2 ROCK BLANKET.

SEE SPECIAL SHEET 1 OF 7 FOR ROCK DRAIN DETAIL.

DRAWING IS NOT TO SCALE

STATE OF MISSOURI
CHRISTOPHER LAROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
7/10/2025

ROUTE	STATE
114	MO

DISTRICT	SHEET NO.
SE	8

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

DESCRIPTION	DATE

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

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

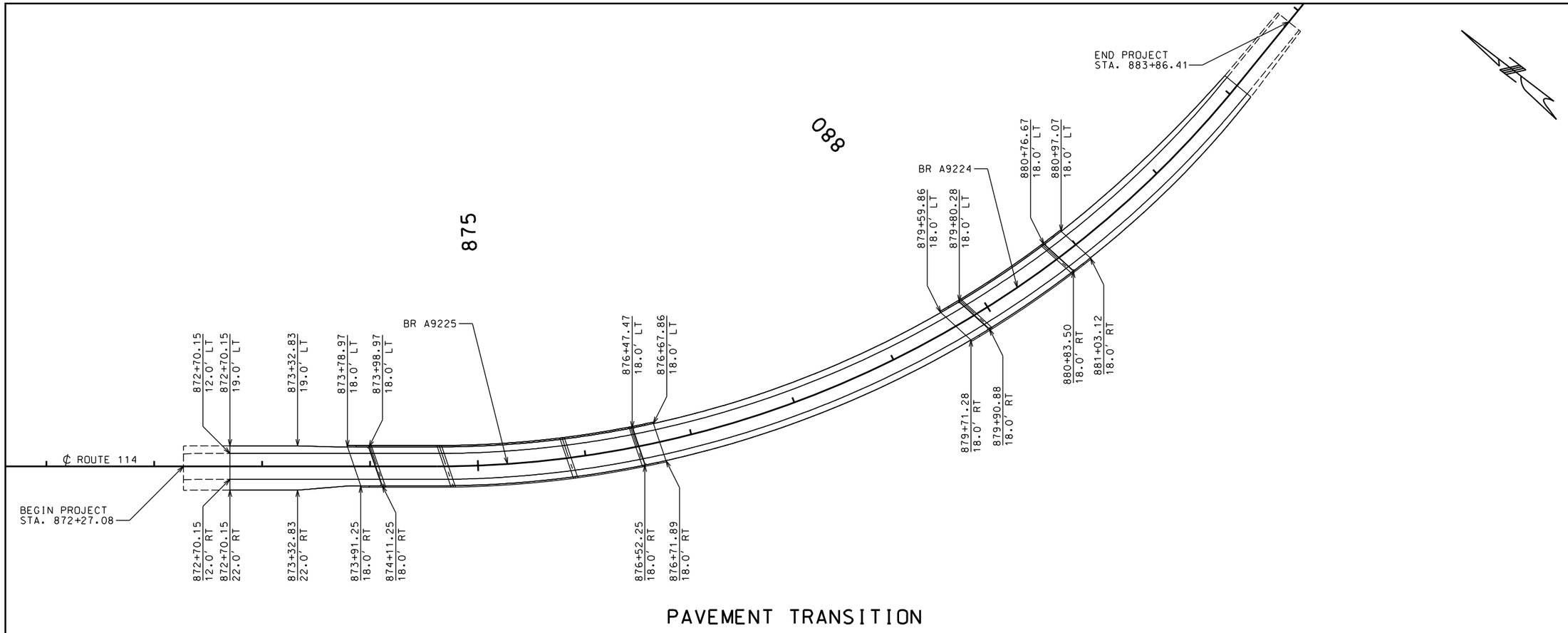
SPECIAL SHEET (SHEET 2 OF 7)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL:(314) 588-8115

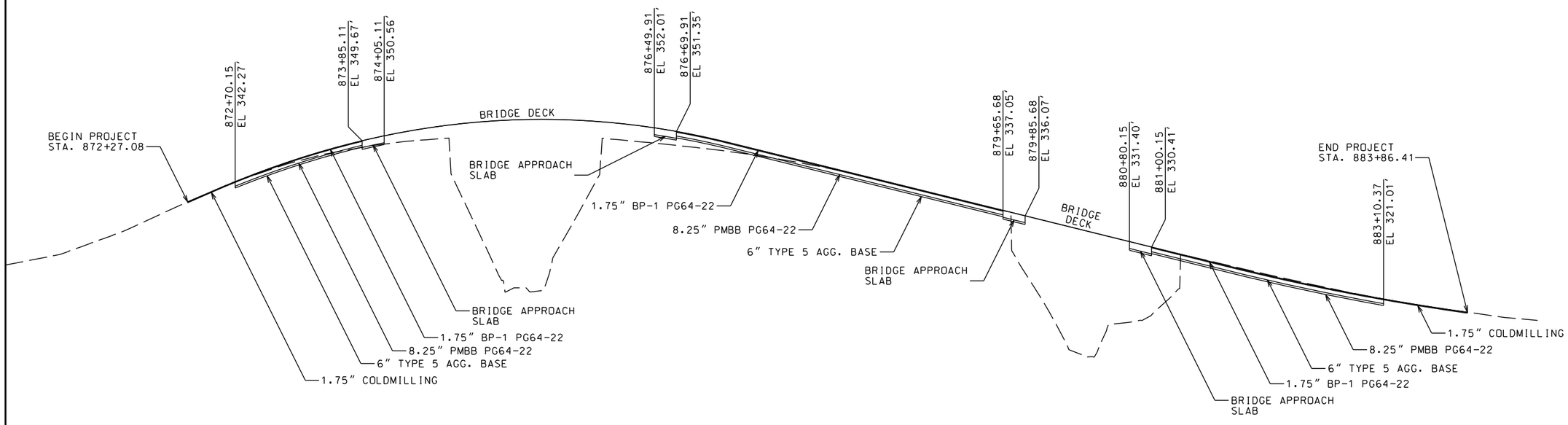
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

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PAVEMENT TRANSITION



DRAWING IS NOT TO SCALE

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER

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

DATE PREPARED
11/29/2023

ROUTE	STATE
114	MO

DISTRICT	SHEET NO.
SE	9

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

DESCRIPTION	DATE

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

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

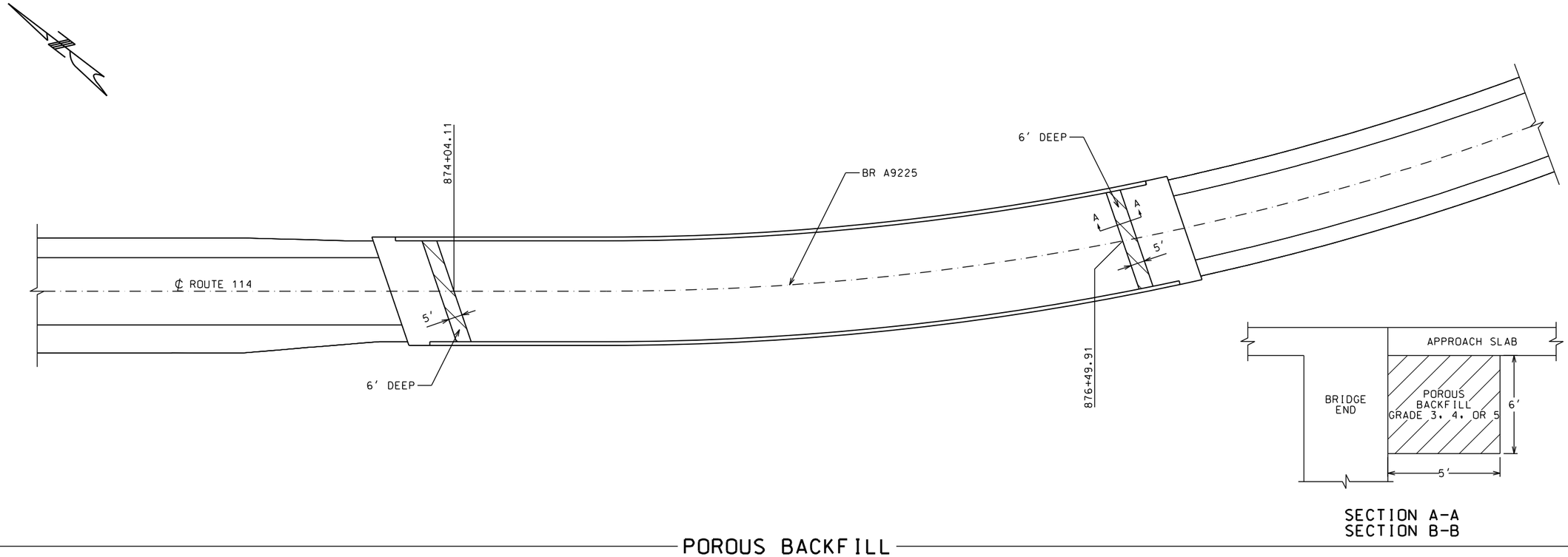
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SHEET (SHEET 3 OF 7)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

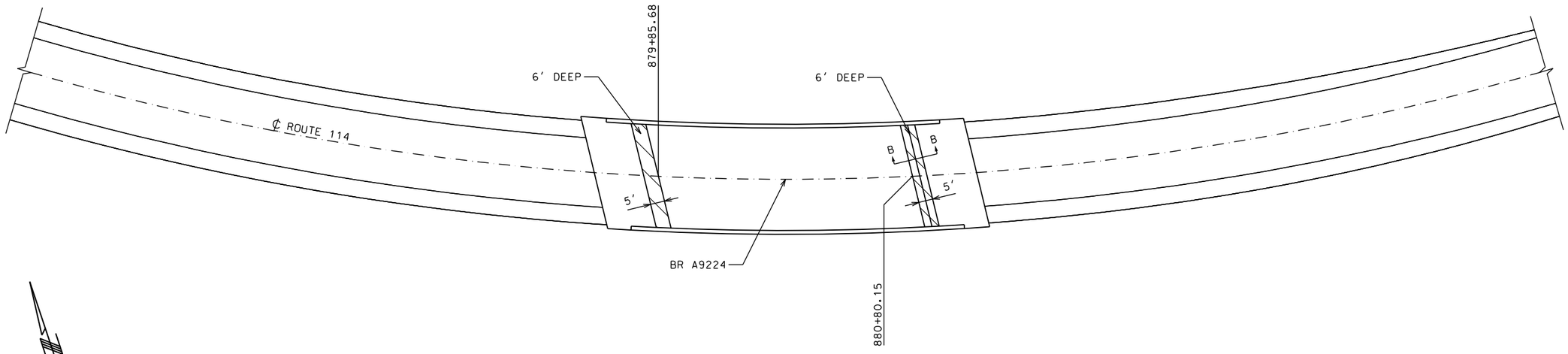
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.



SECTION A-A
SECTION B-B

POROUS BACKFILL



DRAWING IS NOT TO SCALE

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 11/29/2023
ROUTE: 114 | STATE: MO
DISTRICT: SE | SHEET NO.: 10
COUNTY: STODDARD
JOB NO.: J9S3726/J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224/A9225

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

REV.	DESCRIPTION	DATE

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

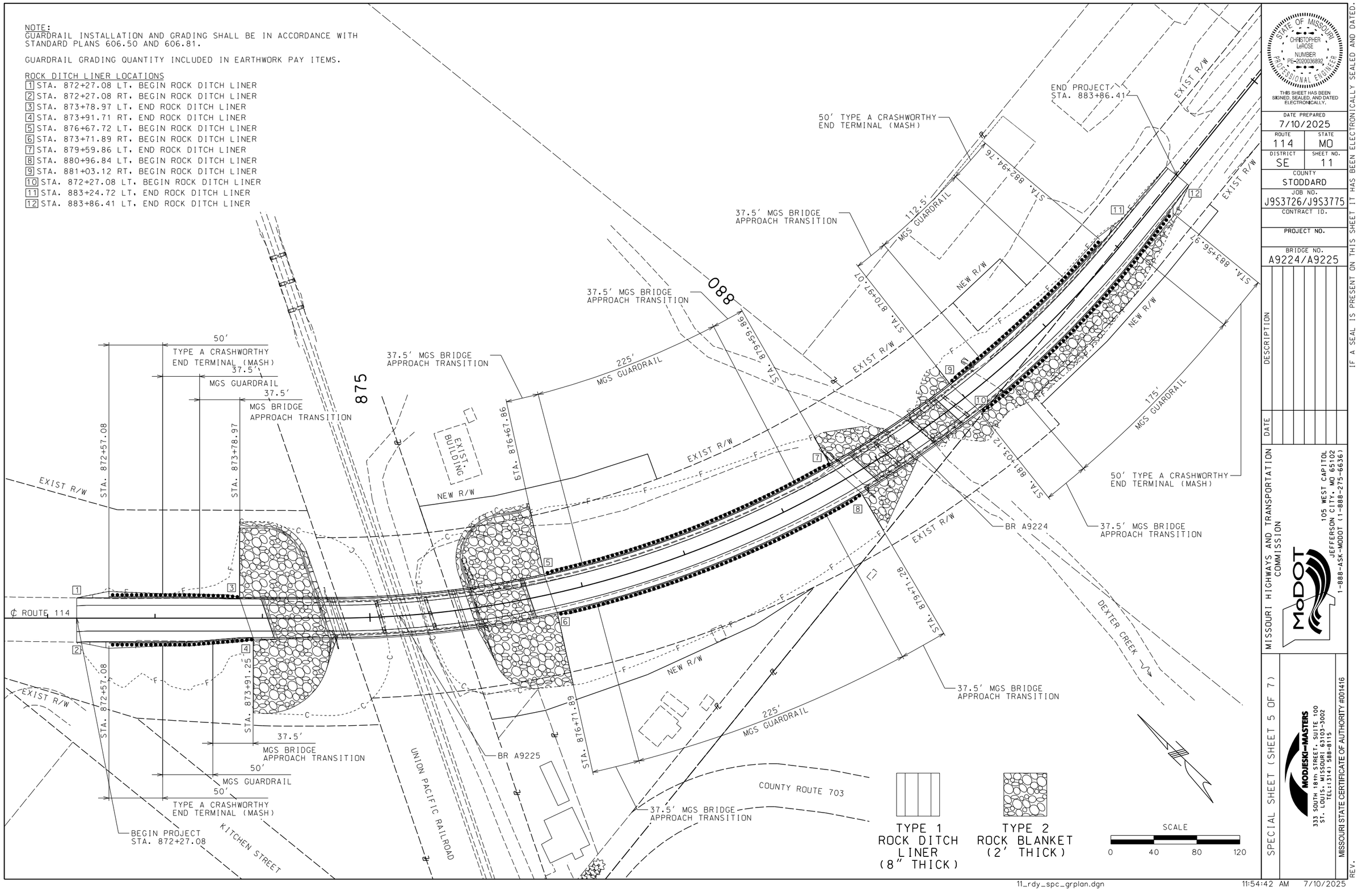
SPECIAL SHEET (SHEET 4 OF 7)

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

NOTE:
GUARDRAIL INSTALLATION AND GRADING SHALL BE IN ACCORDANCE WITH STANDARD PLANS 606.50 AND 606.81.

GUARDRAIL GRADING QUANTITY INCLUDED IN EARTHWORK PAY ITEMS.

ROCK DITCH LINER LOCATIONS
1 STA. 872+27.08 LT, BEGIN ROCK DITCH LINER
2 STA. 872+27.08 RT, BEGIN ROCK DITCH LINER
3 STA. 873+78.97 LT, END ROCK DITCH LINER
4 STA. 873+91.71 RT, END ROCK DITCH LINER
5 STA. 876+67.72 LT, BEGIN ROCK DITCH LINER
6 STA. 873+71.89 RT, BEGIN ROCK DITCH LINER
7 STA. 879+59.86 LT, END ROCK DITCH LINER
8 STA. 880+96.84 LT, BEGIN ROCK DITCH LINER
9 STA. 881+03.12 RT, BEGIN ROCK DITCH LINER
10 STA. 872+27.08 LT, BEGIN ROCK DITCH LINER
11 STA. 883+24.72 LT, END ROCK DITCH LINER
12 STA. 883+86.41 LT, END ROCK DITCH LINER



STATE OF MISSOURI
CHRISTOPHER LAROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
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DATE PREPARED 7/10/2025
ROUTE 114 | STATE MO
DISTRICT SE | SHEET NO. 11
COUNTY STODDARD
JOB NO. J9S3726/J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224/A9225

REV.	DESCRIPTION	DATE

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

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

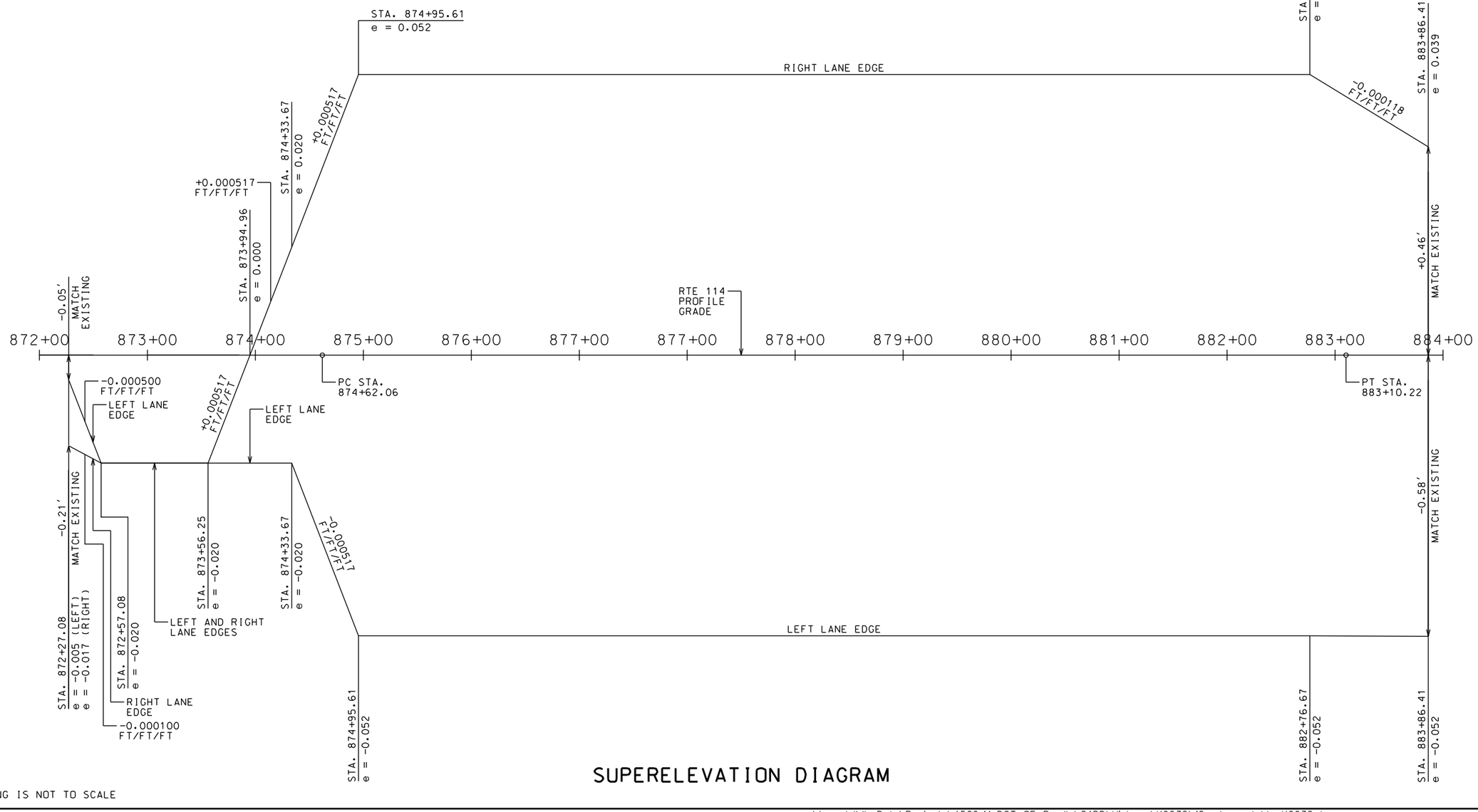
SPECIAL SHEET (SHEET 5 OF 7)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

11_rdy_spc_grplan.dgn 11:54:42 AM 7/10/2025

SUPERELEVATION TABLE									
STATION	LANE EDGE ELEVATION	CORR.	WIDTH	RATE	PROFILE GRADE	RATE	WIDTH	CORR.	LANE EDGE ELEVATION
872+27.08	338.54	-0.05	11.52	-0.005	338.59	-0.017	12.42	-0.21	338.38
872+50.00	340.38	-0.20	12.00	-0.016	340.58	-0.019	12.00	-0.23	340.35
872+57.08	340.94	-0.24	12.00	-0.020	341.18	-0.020	12.00	-0.24	340.94
873+00.00	344.32	-0.24	12.00	-0.020	344.56	-0.020	12.00	-0.24	344.32
873+50.00	347.58	-0.24	12.00	-0.020	347.82	-0.020	12.00	-0.24	347.58
873+56.25	347.94	-0.24	12.00	-0.020	348.18	-0.020	12.00	-0.24	347.94
873+94.96	349.89	-0.24	12.00	-0.020	350.13	0.000	12.00	0.00	350.13
874+00.00	350.11	-0.24	12.00	-0.020	350.35	0.003	12.00	0.03	350.38
874+33.67	351.40	-0.24	12.00	-0.020	351.64	0.020	12.00	0.24	351.88
874+50.00	351.80	-0.34	12.00	-0.028	352.14	0.028	12.00	0.34	352.48
874+95.61	352.52	-0.62	12.00	-0.052	353.14	0.052	12.00	0.62	353.76
FULL SUPERELEVATION									
882+76.67	321.64	-0.62	12.00	-0.052	322.26	0.052	12.00	0.62	322.88
883+00.00	320.76	-0.62	12.00	-0.052	321.38	0.049	12.00	0.59	321.97
883+50.00	319.08	-0.61	11.76	-0.052	319.69	0.043	12.00	0.52	320.21
883+86.41	318.03	-0.58	11.12	-0.052	318.61	0.039	12.03	0.46	319.07



SUPERELEVATION DIAGRAM

DRAWING IS NOT TO SCALE

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER

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

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

DATE PREPARED
11/29/2023

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
SE	12

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

REV.	DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

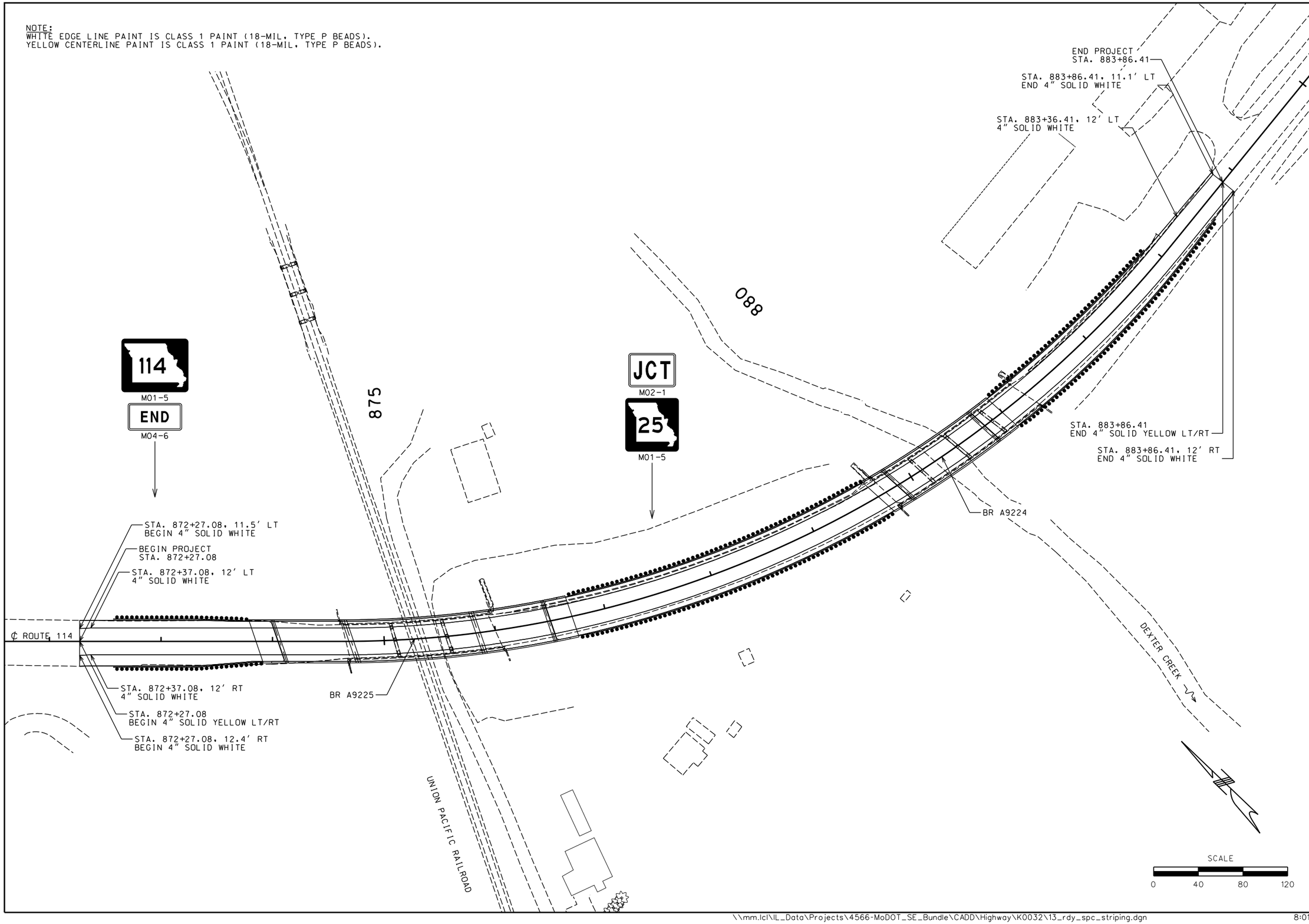
SPECIAL SHEET (SHEET 6 OF 7)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

\\mm.lcl\IL_Data\Projects\4566-MoDOT_SE_Bundle\CADD\Highway\K0032\12_rdy_suptable_K0032.dgn 12:55:23 PM 6/7/2024

NOTE:
WHITE EDGE LINE PAINT IS CLASS 1 PAINT (18-MIL, TYPE P BEADS).
YELLOW CENTERLINE PAINT IS CLASS 1 PAINT (18-MIL, TYPE P BEADS).



STATE OF MISSOURI
CHRISTOPHER LAROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
10/16/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
SE	13

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

DESCRIPTION	DATE

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

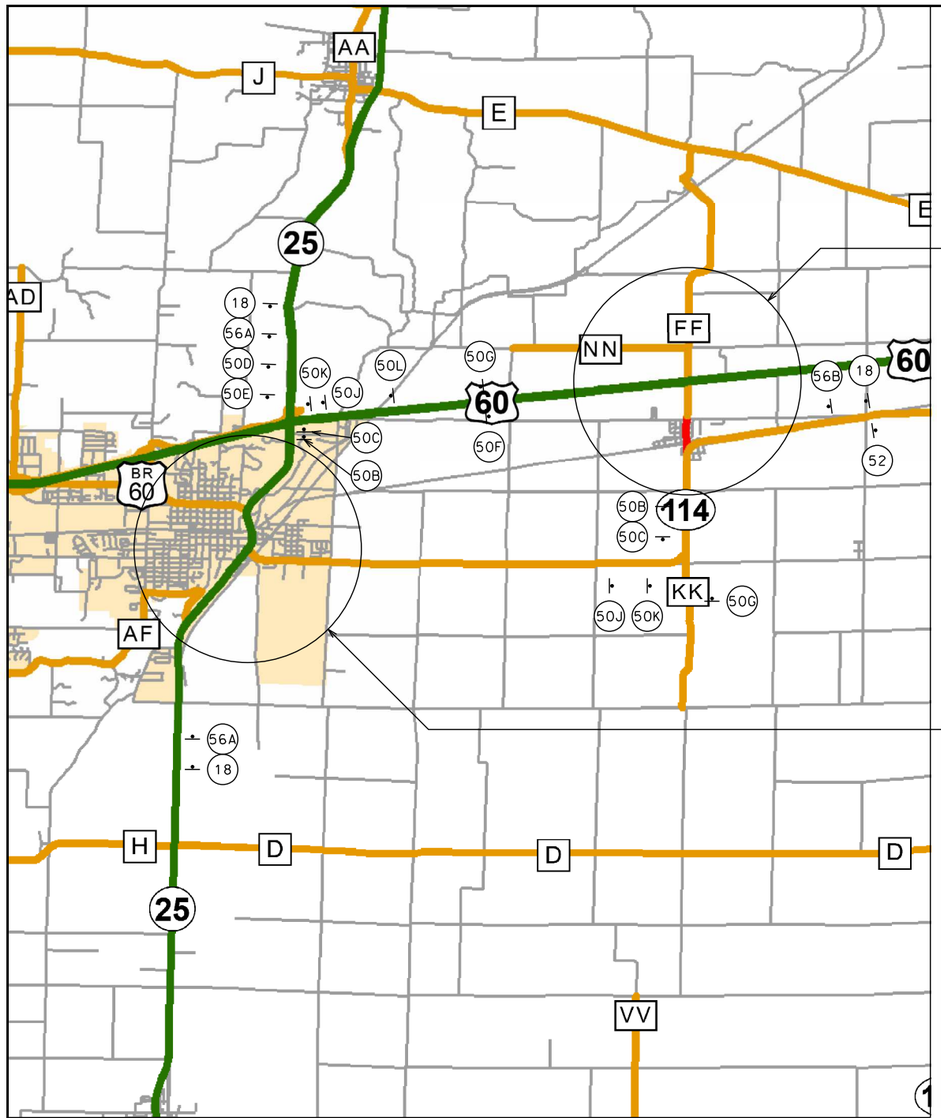
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

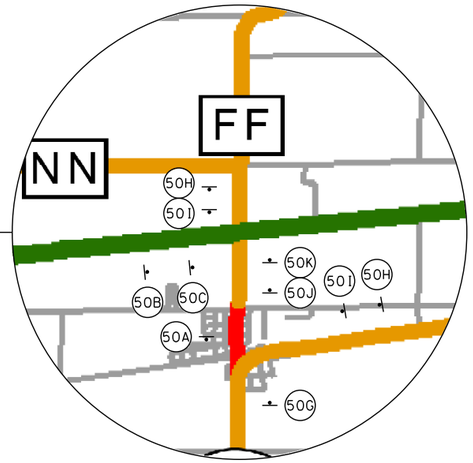
SPECIAL SHEET (SHEET 7 OF 7)

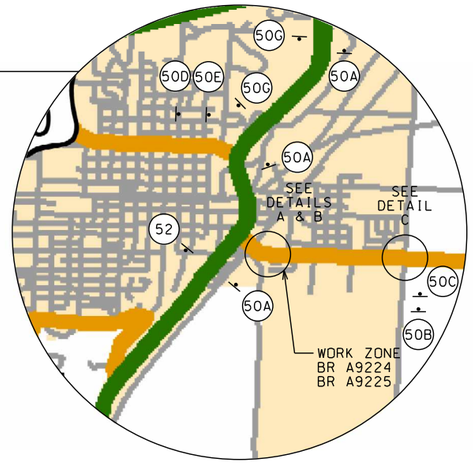
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.







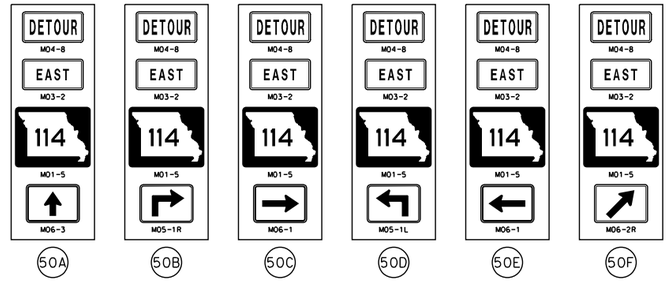
NOTE:
SIGNS MAY BE PRODUCED BY EITHER PROCESSES: APPROPRIATE CARDINAL DIRECTIONS, ROUTE SHIELDS, AND DIRECTIONAL ARROWS MAY BE SHEETED ON THE SIGN BLANKS AS ONE HOMOGENEOUS PRODUCT OR APPROPRIATE CARDINAL DIRECTIONS, ROUTE SHIELDS, AND DIRECTIONAL ARROWS PLATES MAY BE CONSTRUCTED AND MAY BE BOLTED ON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

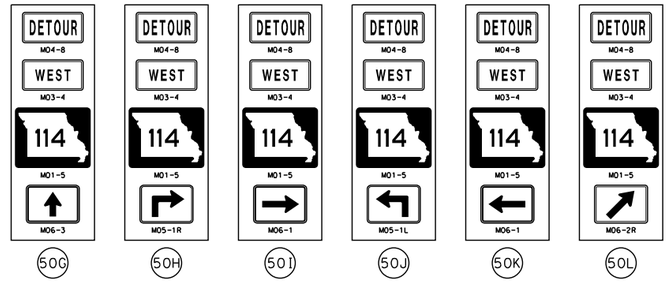
QUANTITY FOR # 56 SIGNS ARE FOR A HOMOGENOUS PRODUCT PER SIGN. SUBSTITUTION OF SIGN BLANKS WITH BOLTED PLATES WILL BE ALLOWED FOR NO ADDITIONAL COMPENSATION.

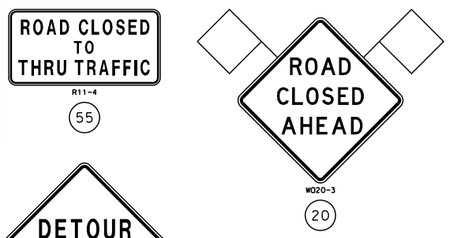
SIGN SPACING IS 500'. DISTANCE MAY BE ADJUSTED TO FIELD CONDITIONS.

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

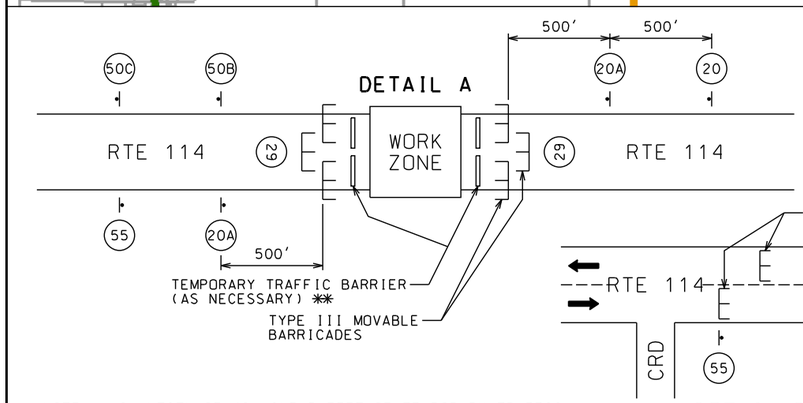
DIMENSIONS FOR ROUTE ASSEMBLY IS 36" X 78"











** NOTE: A QUANTITY OF 48 LINEAR FEET OF TEMPORARY TRAFFIC BARRER HAS BEEN INCLUDED IN THE QUANTITIES OF THIS PROJECT.

* SEE TRAFFIC CONTROL SHEET 2 OF 2 FOR SIGN FABRICATION DETAILS

STATE OF MISSOURI
CHRISTOPHER LAROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
10/16/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
SE	14

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775
CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

DATE	DESCRIPTION
1/05/24	△ - ADDED AND REVISED NOTES

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

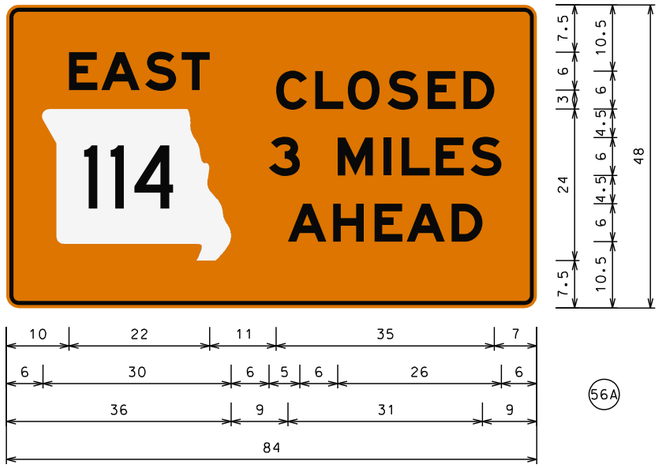
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL (SHEET 1 OF 2)

MODESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL:(314) 588-8115

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

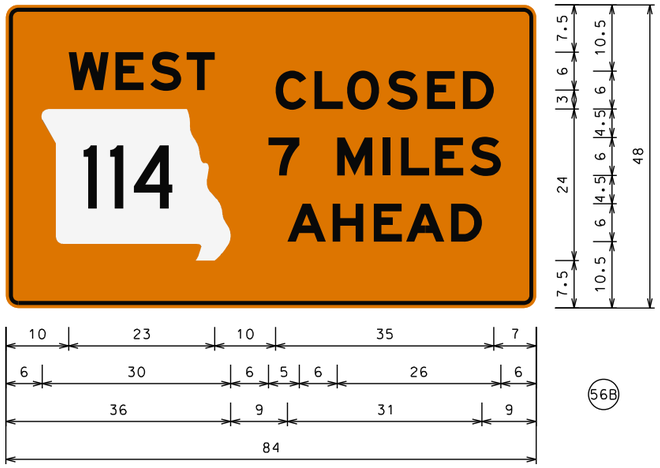
REV.



56A

MO3-13-84 SHF-FLAT SHEET RELFECTIVE: 1.50" Radius, 0.625" Border, 0.469" Indent, Black on Orange:
[EAST] E Mod: [CLOSED] E Mod: [3 MILES] E Mod: [AHEAD] E Mod:
Table of letter and object lefts:

E 9.924	A 15.024	S 21.984	T 27.744				
C 42.714	L 48.894	O 54.054	S 60.354	E 66.714	D 72.414		
114 5.616	3 41.604	M 52.464	I 59.724	L 62.604	E 68.004	S 73.524	
A 44.604	H 51.744	E 58.284	A 63.384	D 70.524			



56B

MO3-13-84 SHF-FLAT SHEET RELFECTIVE: 1.50" Radius, 0.625" Border, 0.469" Indent, Black on Orange:
[WEST] E Mod: [CLOSED] E Mod: [7 MILES] E Mod: [AHEAD] E Mod:
Table of letter and object lefts:

W 9.924	E 17.364	S 22.884	T 28.644				
C 42.714	L 48.894	O 54.054	S 60.354	E 66.714	D 72.414		
114 5.616	7 41.604	M 52.464	I 59.724	L 62.604	E 68.004	S 73.524	
A 44.604	H 51.744	E 58.284	A 63.384	D 70.524			

STATE OF MISSOURI
CHRISTOPHER LeROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER

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

DATE PREPARED
11/29/2023

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
SE	14

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

DESCRIPTION	DATE

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

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
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TRAFFIC CONTROL (SHEET 2 OF 2)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

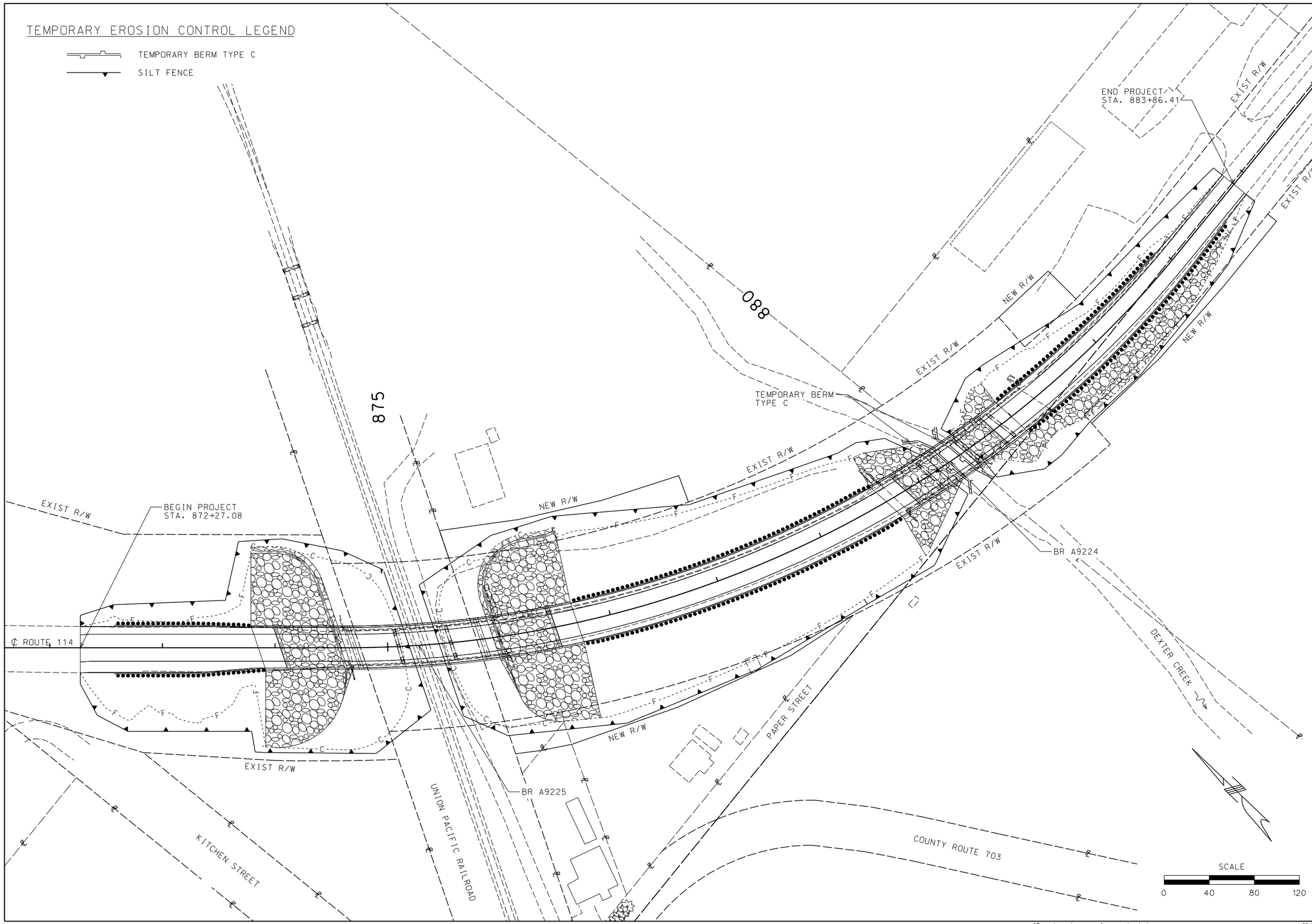
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

TEMPORARY EROSION CONTROL LEGEND

TEMPORARY BERM TYPE C

SILT FENCE



STATE OF MISSOURI
CHRISTOPHER LAROSE
NUMBER PE-2020036892
PROFESSIONAL ENGINEER

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

DATE PREPARED
7/10/2025

ROUTE	STATE
114	MO

DISTRICT	SHEET NO.
SE	15

COUNTY
STODDARD

JOB NO.
J9S3726/J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224/A9225

DESCRIPTION	DATE

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

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

EROSION CONTROL (SHEET 1 OF 1)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
TEL: (314) 588-8115

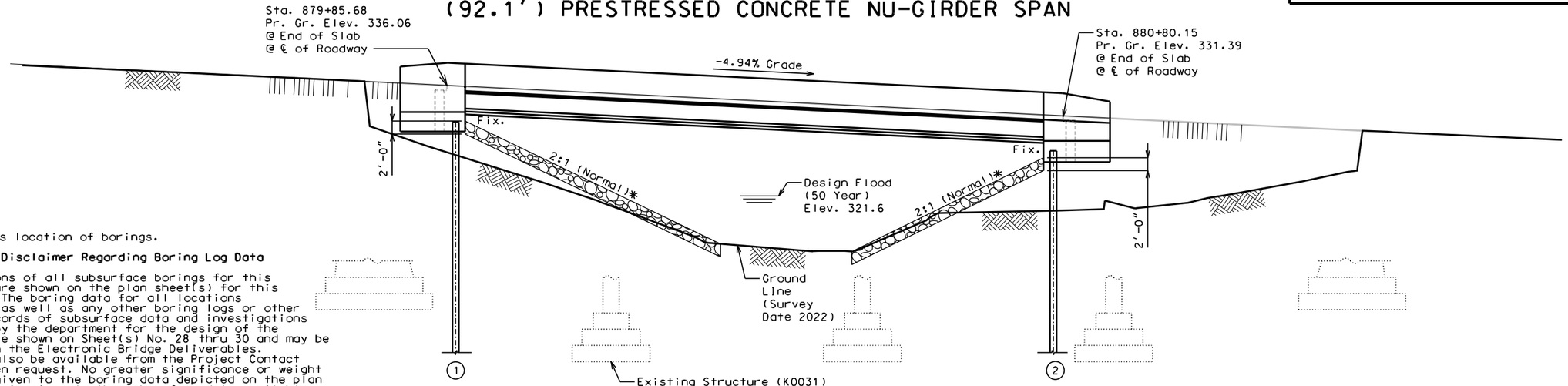
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

15_rdy_pln_erosioncontrol.dgn 11:53:53 AM 7/10/2025

SEC/SUR 23 TWP 25N RGE 10E

(92.1′) PRESTRESSED CONCRETE NU-GIRDER SPAN



Indicates location of borings.

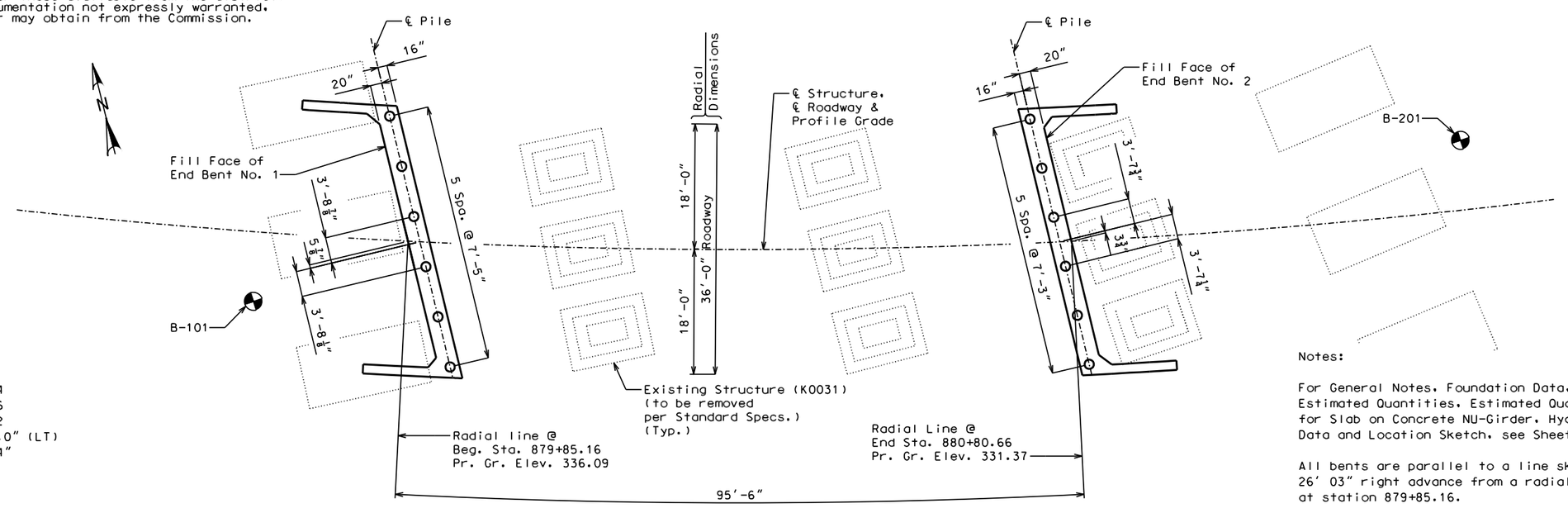
Notice and Disclaimer Regarding Boring Log Data

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. 28 thru 30 and may be included in the Electronic Bridge Deliverables. They will also be available from the Project Contact upon written request. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the district or elsewhere.

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

* 2′-0″ Type 2 Rock Blanket with Permanent Erosion Control Geotextile (Roadway Item)

GENERAL ELEVATION



Curve ℄ Roadway
PI = 878+86.14
PC = 874+62.06
PT = 833+10.22
Δ = 50°51′51.0″ (LT)
D = 5°59′49.4″
L = 848.15′
T = 454.31′
R = 955.40′
S.E = 5.2%

Span (1-2)

PLAN

Notes:

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

All bents are parallel to a line skewed 16° 26′ 03″ right advance from a radial line at station 879+85.16.

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 diven for any bents falling within the embankment section.

BM #501 ELEV 330.31
CUT SQUARE 21′ RT
OF ℄ RTE 114 STA 881+32

BRIDGE: ROUTE 114 OVER DEXTER CREEK

ROUTE 114 FROM ROUTE 25 TO ROUTE 153
ABOUT 0.2 MILE SOUTHEAST OF ROUTE 25
BEGINNING STA. 879+85.16

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION	DATE

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

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

Estimated Quantities

Item		Substr.	Superstr.	Total
Removal of Bridges (K0031)	lump sum			1
Bridge Approach Slab (Minor)	sq. yard		161	161
Galvanized Cast-In-Place Concrete Piles (20 in.)	linear foot	768		768
Dynamic Pile Testing	each	2		2
Class B Concrete (Substructure)	cu. yard	40.5		40.5
Type D Barrier	linear foot		235	235
Slab on Concrete NU-Girder	sq. yard		406	406
NU 43, Prestressed Concrete NU-Girder	linear foot		465	465
Vertical Drain at End Bents	each			2
Laminated Neoprene Bearing Pad (Tapered)	each		10	10

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

All reinforcement in the end bents and all reinforcement in cast-in-place piles at end bents is included in the Estimated Quantities for Slab on Concrete NU-Girder.

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 Concrete NU-Girder

Item		Total
Class B-2 Concrete	cu. yard	152
Reinforcing Steel (Epoxy Coated)	pound	36470

The table of Estimated Quantities for Slab on Concrete NU-Girder represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for 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.

General Notes:

Design Specifications:
2020 AASHTO LRFD Bridge Design Specifications (9th Ed.)
2011 AASHTO Guide Specifications for LRFD Seismic Bridge Design (2nd Ed.) and 2014 Interim Revisions (Seismic Details)
Seismic Design Category = D
Design earthquake response spectral acceleration coefficient at 1.0 second period, SD1 = 0.86g
Acceleration Coefficient (effective peak ground acceleration coefficient), As = 0.60g

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

Design Unit Stresses:

Class B Concrete (Substructure)	f'c = 3,000 psi
Class B-2 Concrete (Superstructure, except Prestressed Girders and Barrier)	f'c = 4,000 psi
Class B-1 Concrete (Barrier)	f'c = 4,000 psi
Reinforcing Steel (ASTM A706 Grade 60)	fy = 60,000 psi
Welded or Seamless steel shell (pipe) for CIP Pile (ASTM A252 Modified Grade 3)	fy = 50,000 psi

For prestressed girder stresses, see Sheets No. 13 and 14.

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

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

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

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

Excavation and Fill:
No superstructure construction is permitted until 8 weeks after the required fill has been placed.

Foundation Data

Type	Design Data		Bent Number 1	Bent Number 2
Load Bearing Pile	Pile Type and Size		CECIP 20"	CECIP 20"
	Number	ea	6	6
	Approximate Length Per Each	ft	64	64
	Min. Galvanized Penetration (Elev.)	ft	307.57	302.97
	Min. Tip Penetration (Elev.)	ft	305.00	305.00
	Criteria for Min. Tip Penetration	ft	Min. Embed.	Min. Embed.
	Pile Driving Verification Method		DT	DT
	Resistance Factor		0.65	0.65
	Minimum Nominal Axial Compressive Resistance	kip	363	363

CECIP = Closed Ended Cast-in-Place concrete pile
DT = Dynamic Testing

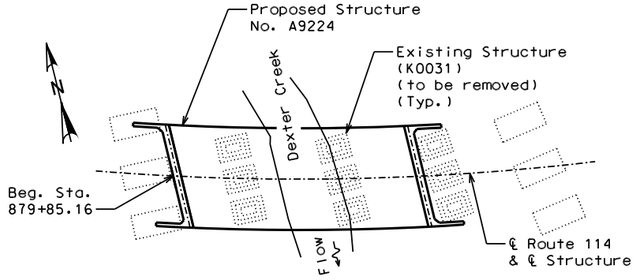
Load Bearing Pile:
Minimum Nominal Axial Compressive Resistance = $\frac{\text{Maximum Factored Loads}}{\text{Resistance Factor}}$

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

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

Hydrologic Data

Drainage Area = 3.0 mi²
Design Flood Frequency = 50 years
Design Flood Discharge = 1,900 cfs
Design Flood (D.F.) Elevation = 321.6 ft
Base Flood (100-year)
Base Flood Elevation = 322.5 ft
Base Flood Discharge = 2,300 cfs
Estimated Backwater = 0.9 ft
Average Velocity thru Opening = 8.0 ft/s
Freeboard (50-year)
Freeboard = 5.4 ft
Roadway Overtopping
Overtopping Flood Discharge = N/A
Overtopping Flood Frequency = >500 years
500-year Flood Elevation = 324.0 ft



LOCATION SKETCH

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
10/5/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	2

COUNTY
STODDARD

JOB NO.
J9S3726

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224

DESCRIPTION	DATE

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

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

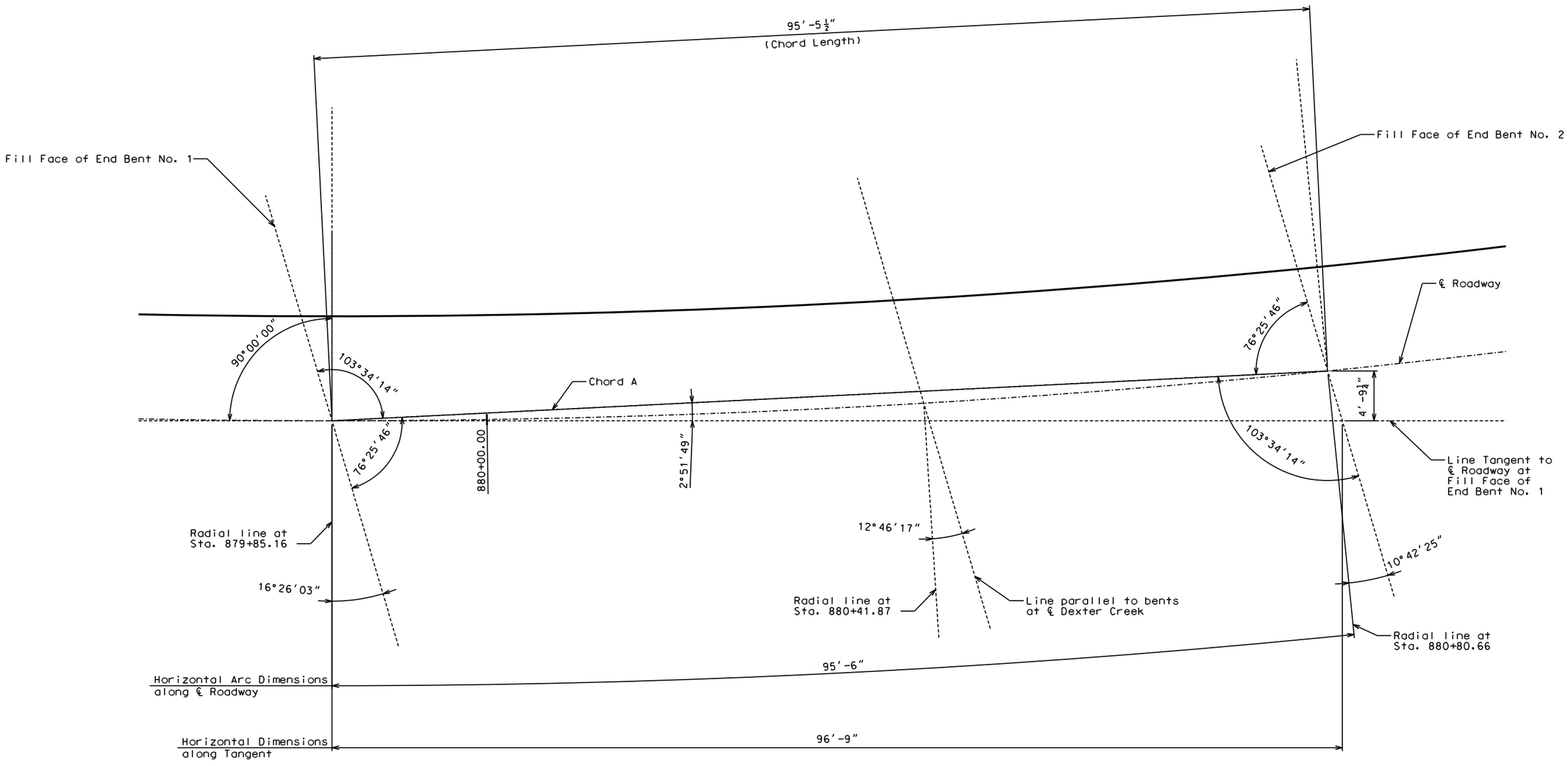
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9224_02_J9S3726_GNOTES.dgn 2:16:43 PM 10/5/2026



PLAN

SUBSTRUCTURE LAYOUT

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9224_03_J9S3726_SUBLAYOUT.dgn 2:17:13 PM 10/5/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
10/5/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	3

COUNTY
STODDARD

JOB NO.
J9S3726

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224

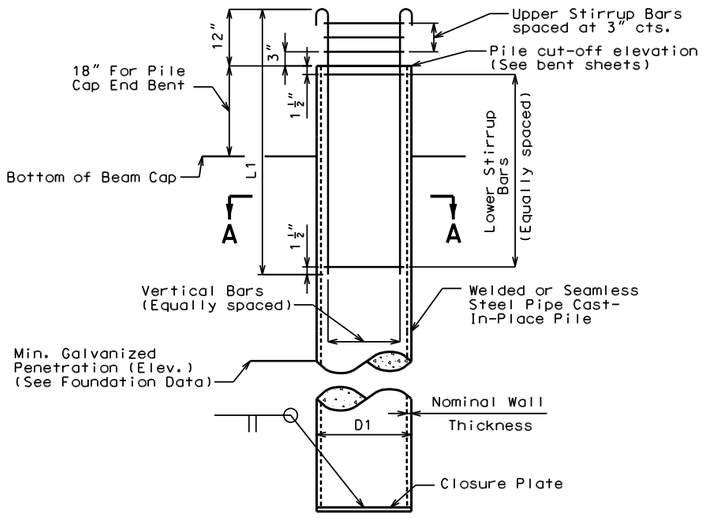
DATE	DESCRIPTION	REV.

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

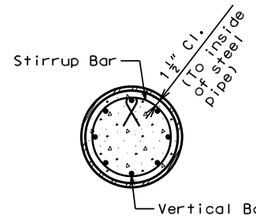
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
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MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

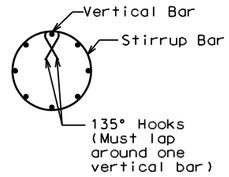
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



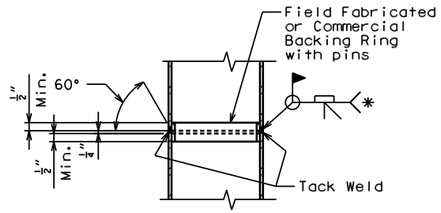
GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE WITHOUT PILE POINT REINFORCEMENT



SECTION A-A



DETAIL OF SEISMIC STIRRUP BAR



STEEL PIPE PILE SPLICE

* 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 Data		
Bent Number	1	2
D1. CECIP Pile (O.D.)	20"	20"
Min. Nominal Wall Thickness	1/2"	1/2"
Closure Plate Thickness	3/4"	3/4"
Pile Point Reinforcement	None	None
Vertical Bars	8-#6-V109	8-#6-V209
L1. Length of Vertical Bars	7'-3"	7'-3"
Upper Stirrup Bars	3-#4-P100	3-#4-P200
Lower Stirrup Bars	7-#4-P100	7-#4-P200

Notes:

Welded or seamless steel shell (pipe) shall be ASTM A252 Modified Grade 3 (fy = 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 for closure plate shall be ASTM A709 Grade 50.

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.

Closure plate shall not project beyond the outside diameter of the pipe pile. Satisfactory weldments may be made by beveling tip end of pipe or by use of inside backing rings. In either case, proper gaps shall be used to obtain weld penetration full thickness of pipe. Payment for furnishing and installing closure plate will be considered completely covered by the contract unit price for Galvanized Cast-In-Place Concrete Piles.

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.

Closure plate need not be galvanized.

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

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

For Foundation Data table, see Sheet No.2 .

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JERILYN M. HASSARD
NUMBER PE-2002003174
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DISTRICT BR | SHEET NO. 4
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE | REV.

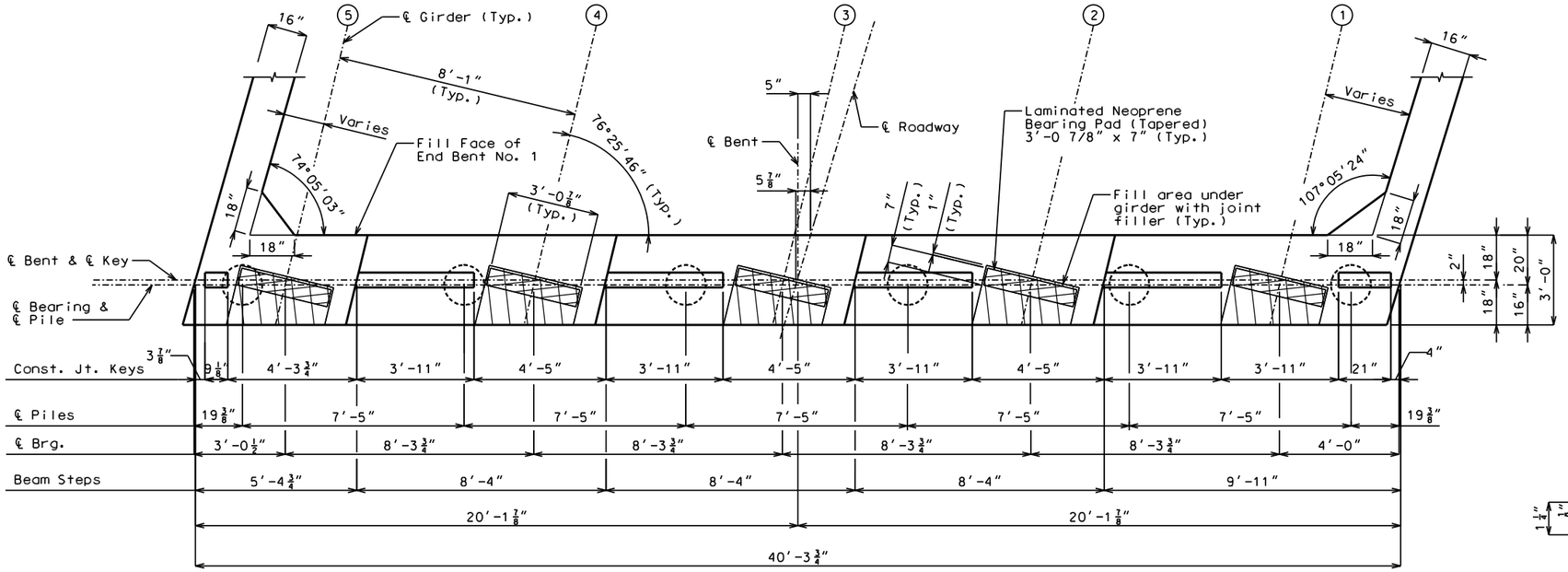
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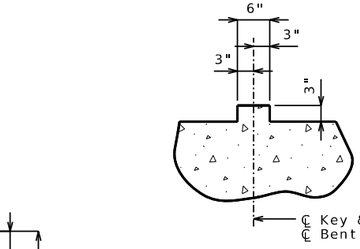
GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE

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

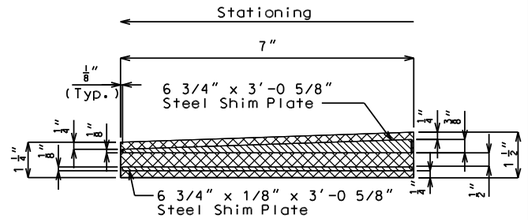
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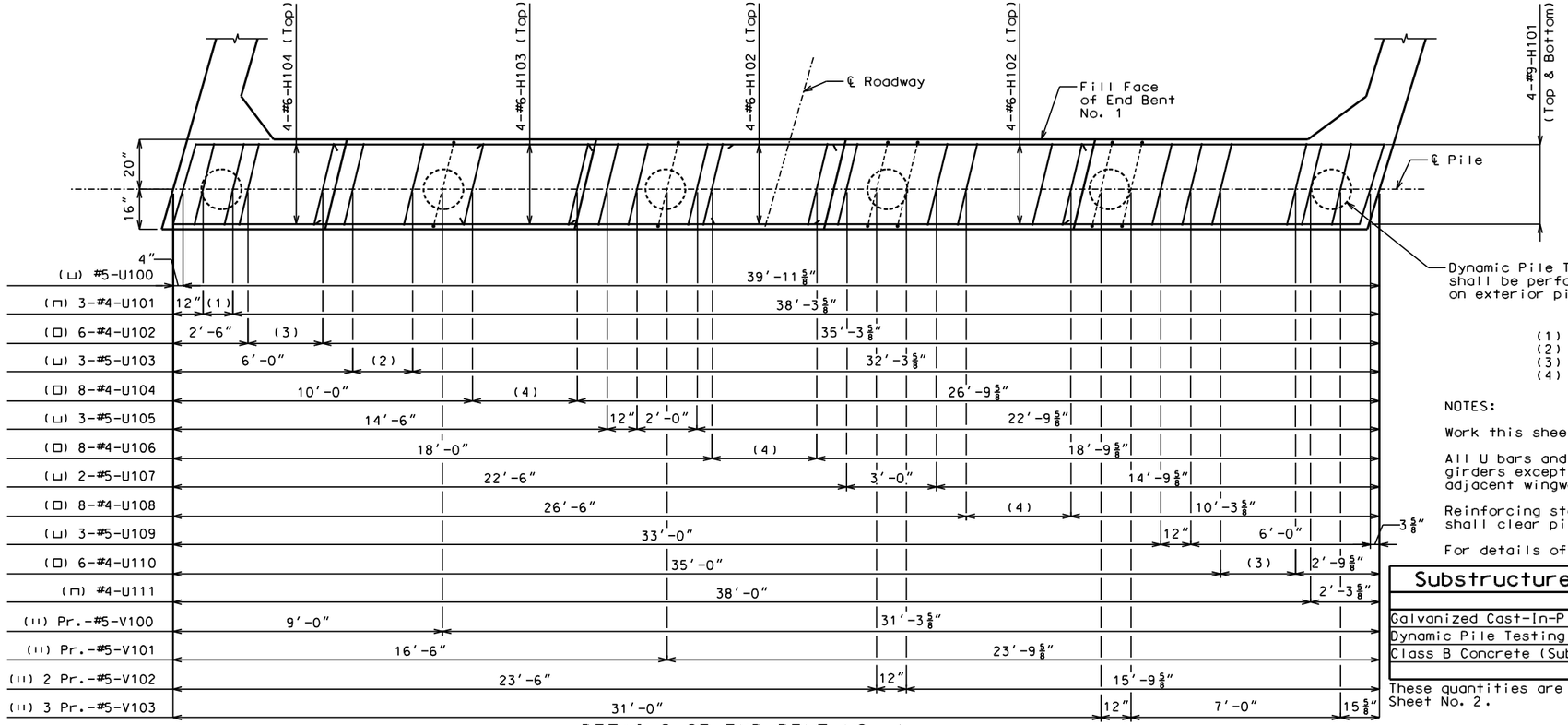
PLAN OF BEAM SHOWING DIMENSIONS



SECTION THRU KEY



SECTION THRU LAMINATED NEOPRENE BEARING PAD (TAPERED) 7" x 3'-0 7/8"



DETAILS OF END BENT NO. 1

Pile reinforcement and keys not shown for clarity

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

(1) 2 Spa. @ 6"
(2) 2 Spa. @ 12"
(3) 5 Spa. @ 6"
(4) 7 Spa. @ 6"

NOTES:

Work this sheet with Sheets No. 6 & 7.

All U bars and pairs of V bars shall be placed parallel to girders except bars at edge shall be placed parallel to the adjacent wingwall.

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

For details of Vertical Drain at End Bents, see Sheet No. 8.

Substructure Quantity Table for Bent No. 1

Item		Quantity
Galvanized Cast-In-Place Concrete Piles (20 in.)	linear foot	384
Dynamic Pile Testing	each	1
Class B Concrete (Substructure)	cu. yard	20.2

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

Detailed Sep. 2023
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Sheet No. 5 of 30

B_A9224_05_J9S3726_ENDBENT1_1.dgn 2:17:30 PM 10/5/2026

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DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 5
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

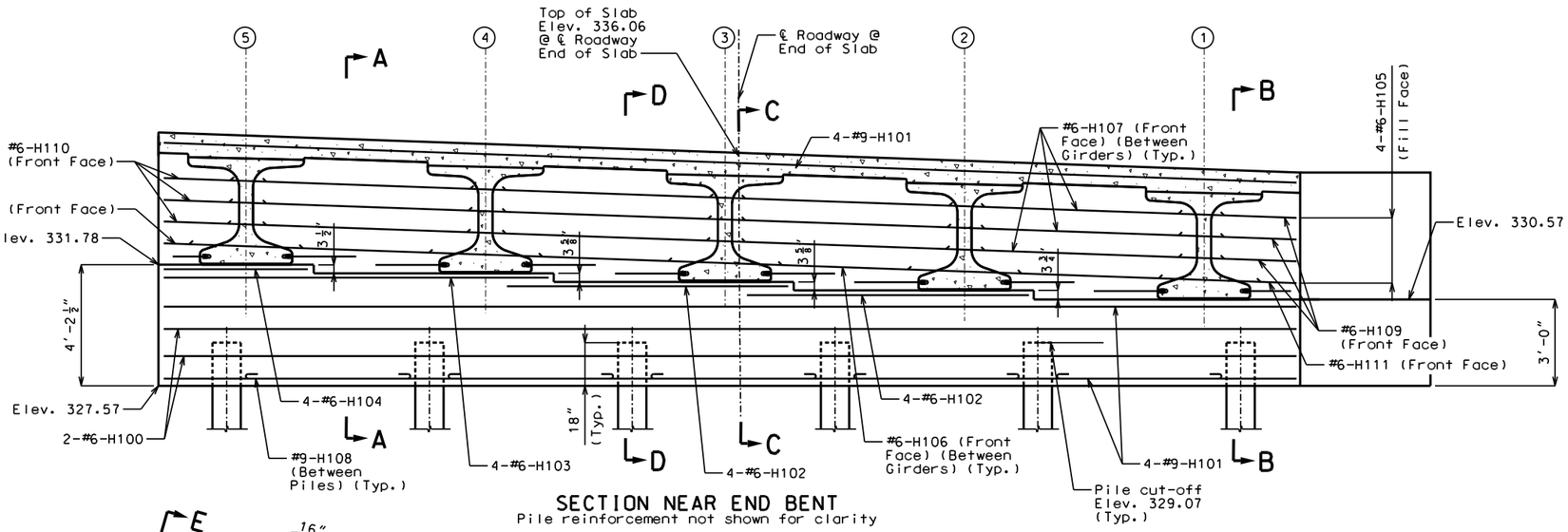
DESCRIPTION | DATE | REV.

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JEFFERSON CITY, MO 65102
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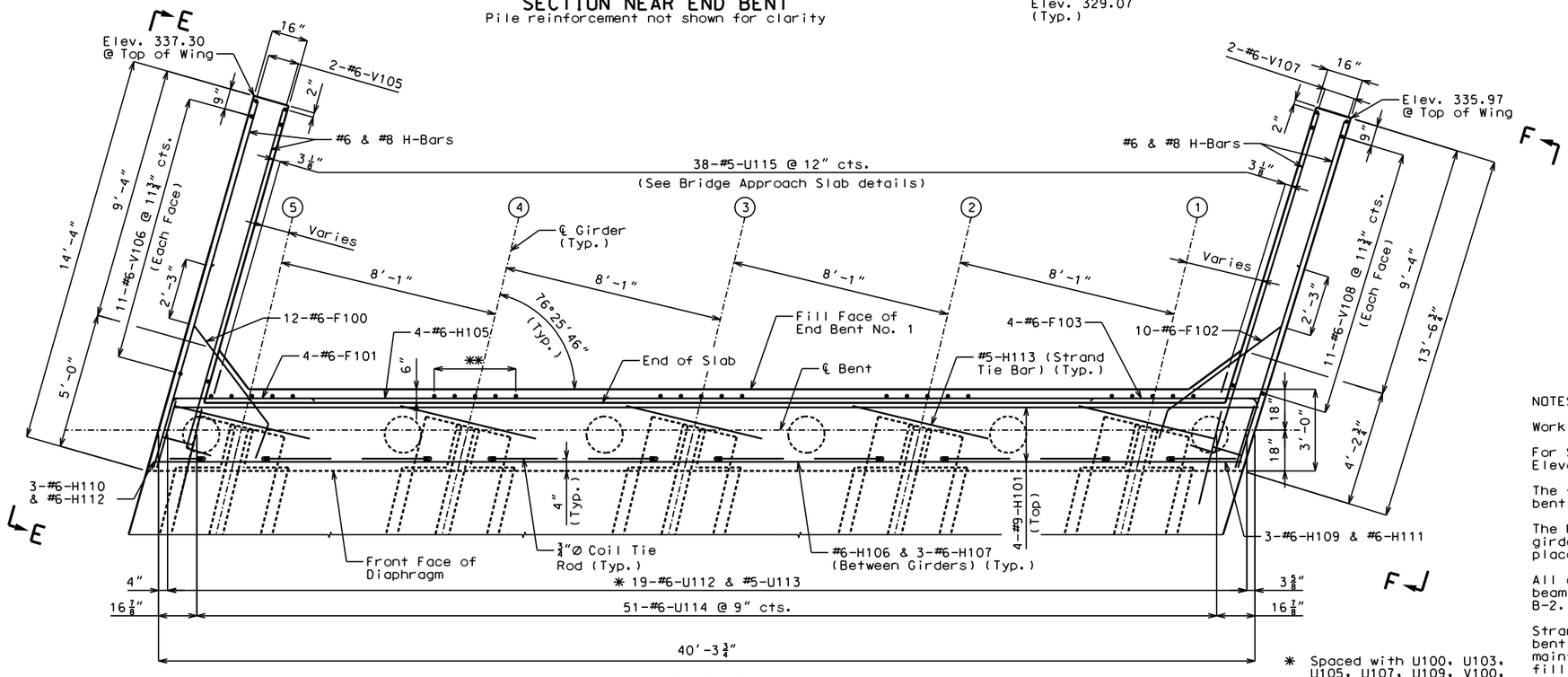
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SECTION NEAR END BENT

Pile reinforcement not shown for clarity



PART PLAN

Pile reinforcement not shown for clarity

* Spaced with U100, U103, U105, U107, U109, V100, V101, V102, & V103

** 5-#6-V104 @ 9" cts. (Each Girder) (Typ.)

NOTES:

Work this sheet with Sheets No. 5 & 7.

For Sections A-A, B-B, C-C & D-D and Elevations E-E & F-F, see Sheet No. 7.

The #6-F100 and #6-F102 bars shall be bent in the field to clear girders.

The U bars shall be placed parallel to girders except bars at edge shall be placed parallel to the adjacent wingwall.

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

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

For location of coil tie rods and #5-H113 (strand tie bar), see Sheets No. 13 & 14.

For details of Vertical Drain at End Bents, see Sheet No. 8.

For details of bridge approach slab, see Sheet No. 23.

DETAILS OF END BENT NO. 1

Detailed Sep. 2023
Checked Oct. 2023

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ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	6

COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE

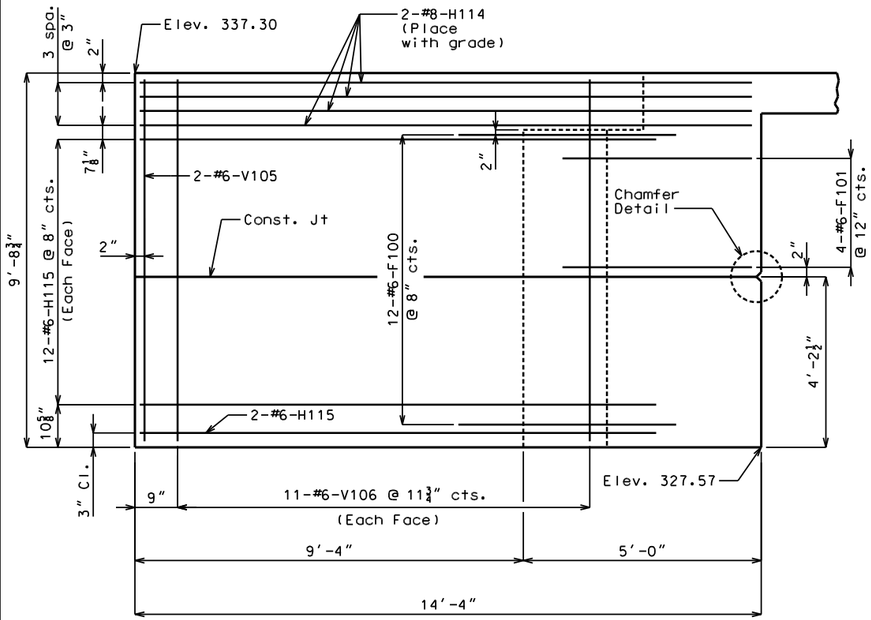
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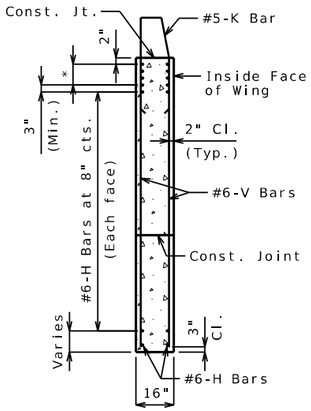
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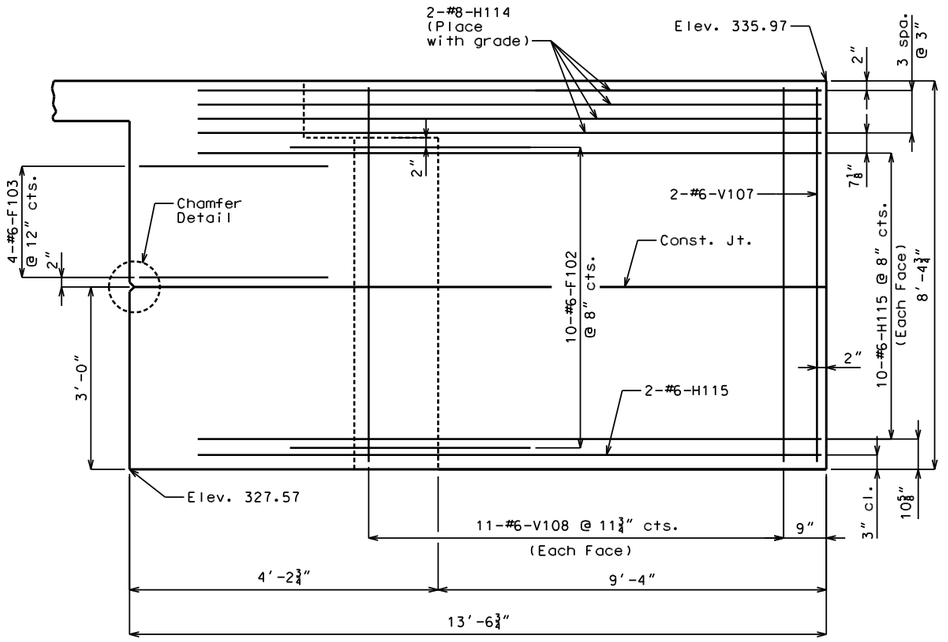


ELEVATION E-E

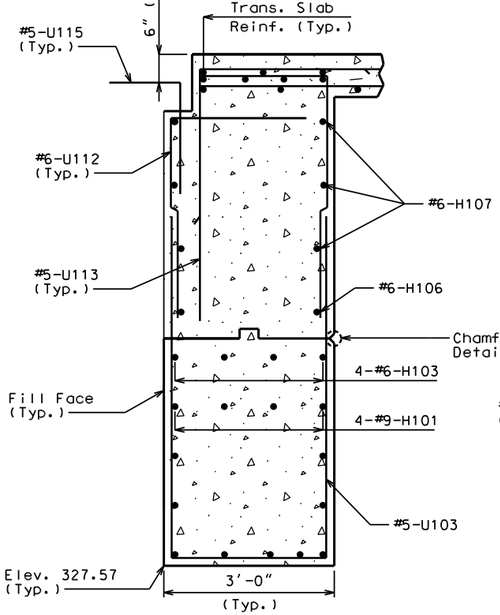


TYPICAL SECTION THRU WING

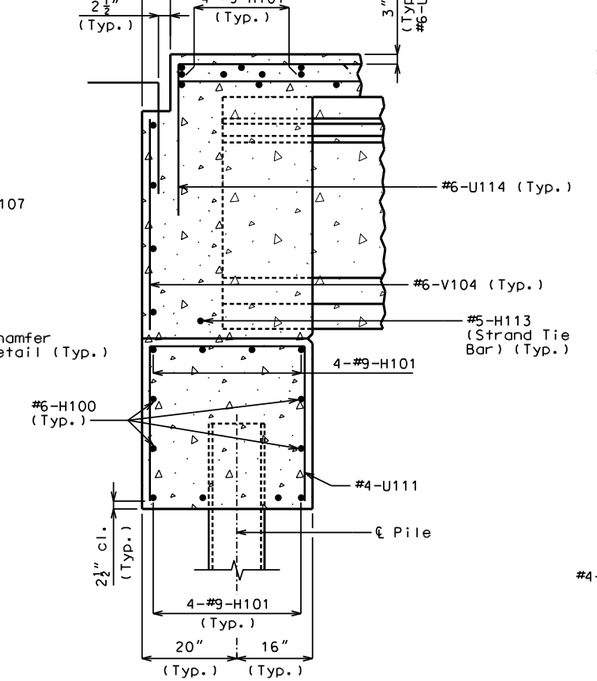
* #8-H Bars at 3" cts. (Each face)(Place with grade)



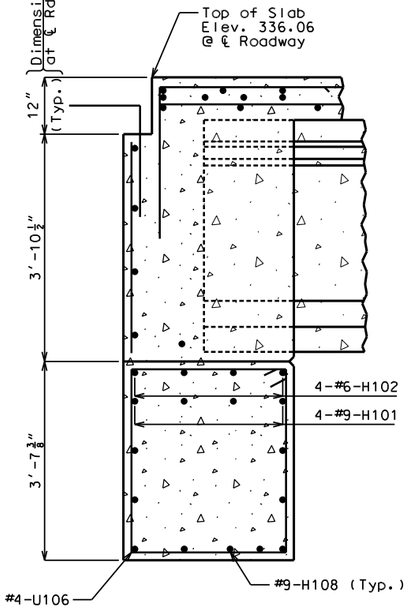
ELEVATION F-F



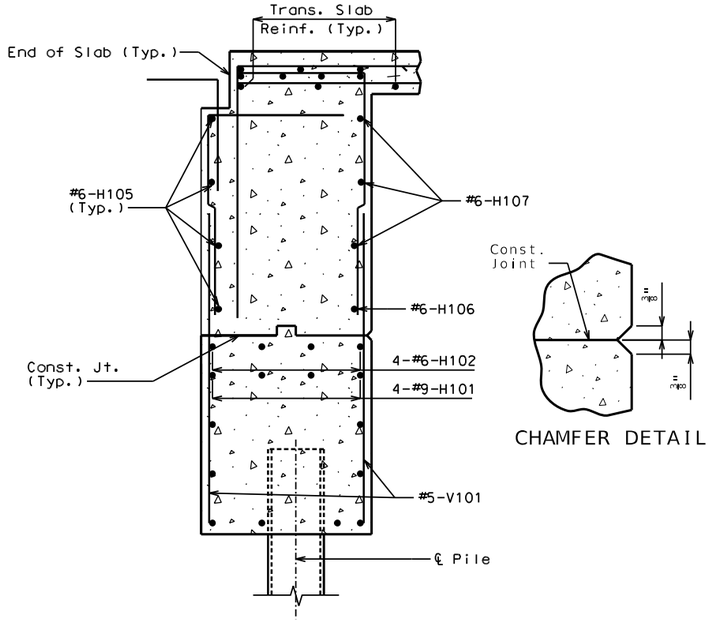
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

CHAMFER DETAIL

Notes:

Work this sheet with Sheets No. 5 & 6 .

For location of Sections A-A, B-B, C-C, & D-D and Elevations E-E & F-F, see Sheet No. 6.

For reinforcement of barrier, see Sheet No. 20 and 22.

DETAILS OF END BENT NO. 1

Pile reinforcement not shown for clarity

Detailed Sep. 2023
Checked Oct. 2023

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

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COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE

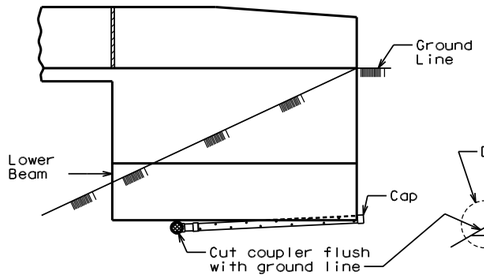
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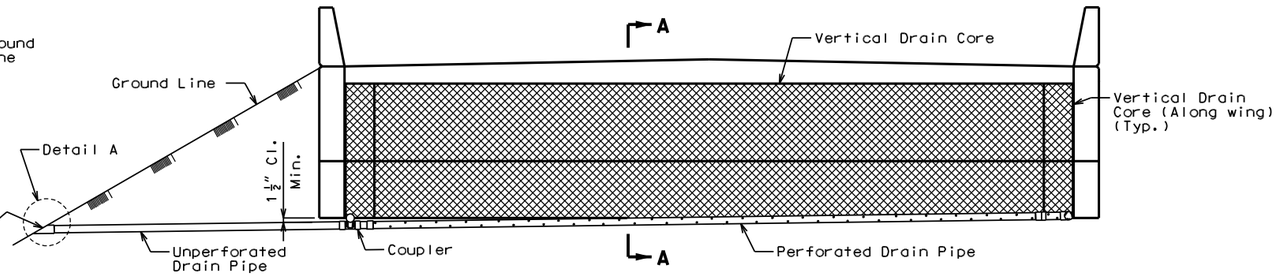
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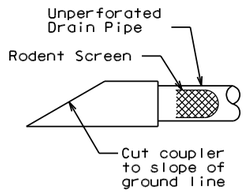
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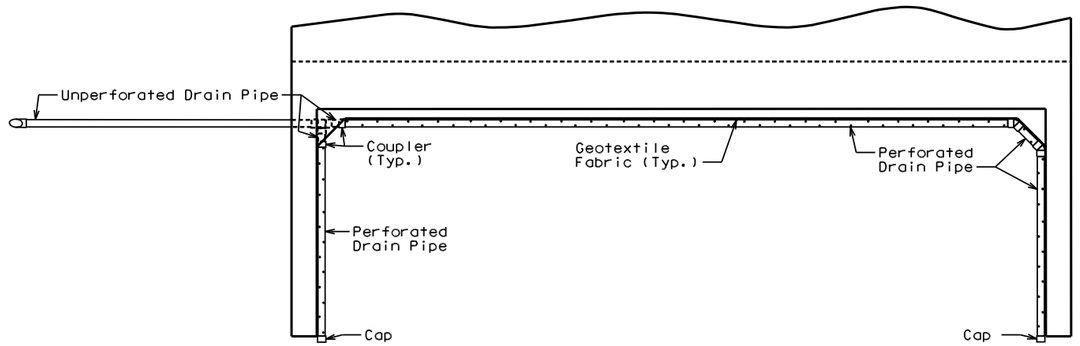
ELEVATION OF WING



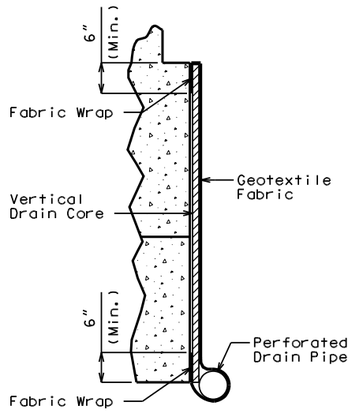
ELEVATION OF END BENT



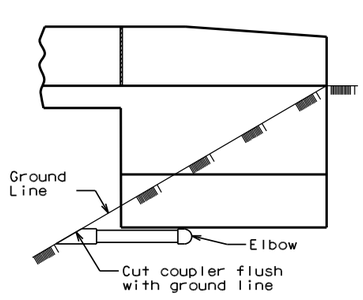
DETAIL A



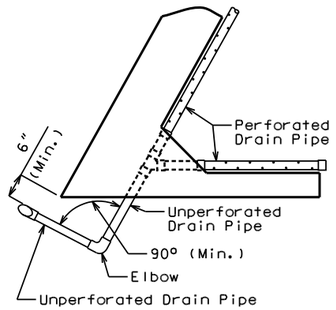
PLAN OF END BENT



PART SECTION A-A
(Section thru wing similar)



ELEVATION OF WING



PART PLAN

OPTIONAL TURNED DRAIN
(Use only when straight drain is not practical.)

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.

VERTICAL DRAIN AT END BENTS

(Squared end bent shown, skewed end bent similar)

Detailed Sep. 2023
Checked Oct. 2023

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

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COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE

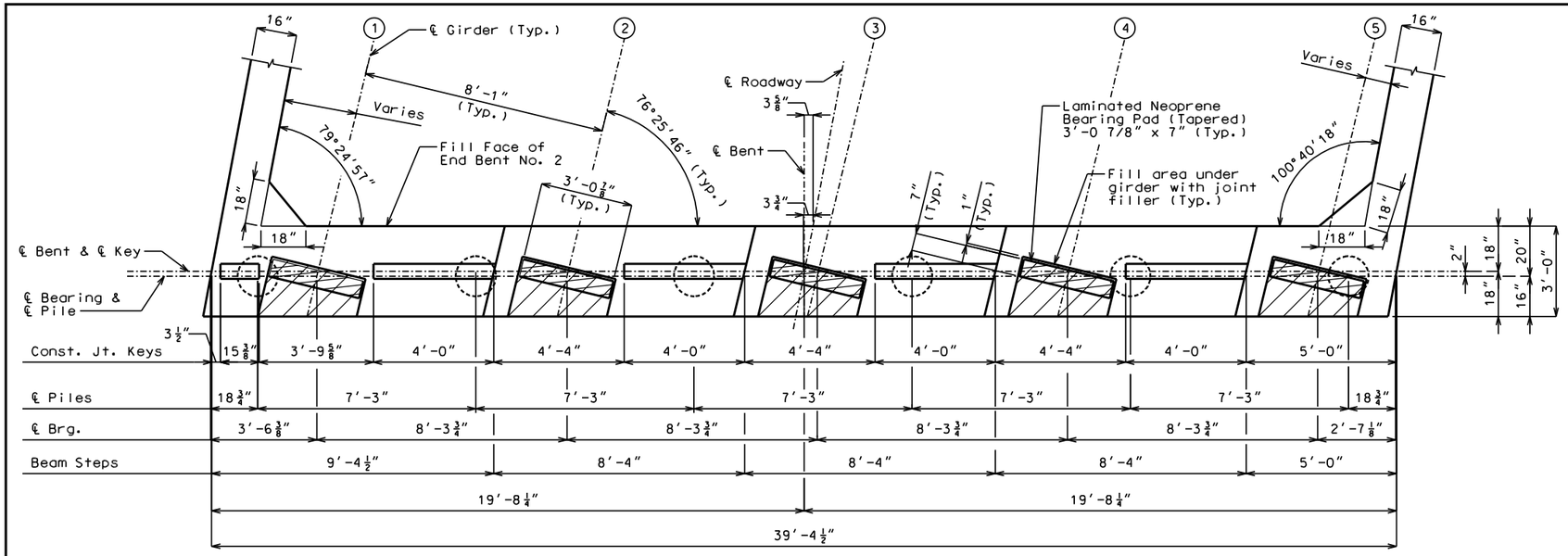
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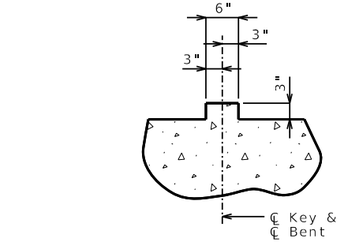
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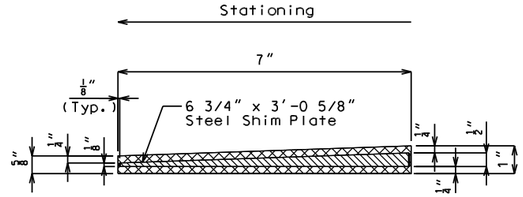
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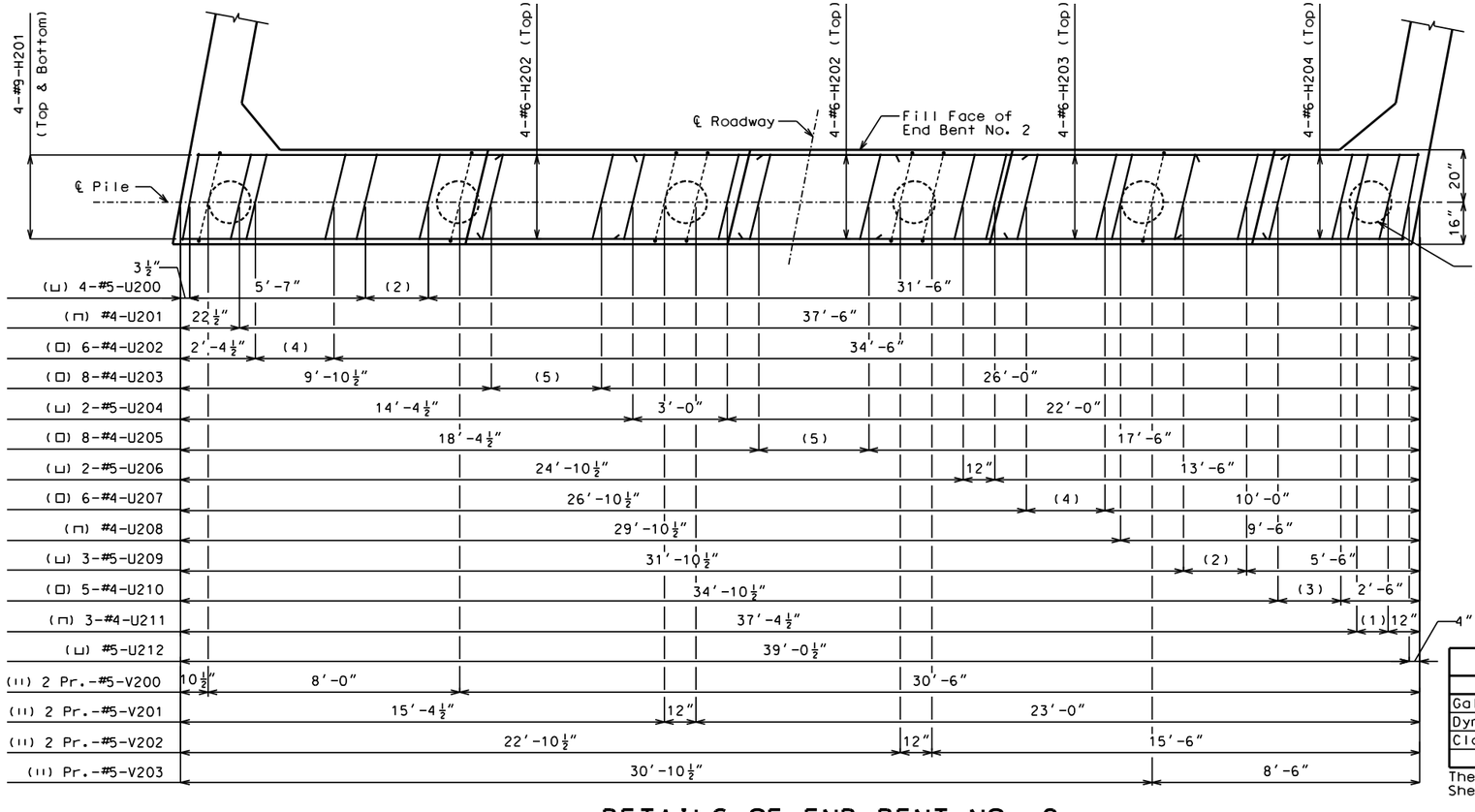
PLAN OF BEAM SHOWING DIMENSIONS



SECTION THRU KEY



SECTION THRU LAMINATED NEOPRENE BEARING PAD (TAPERED) 7" x 3'-0 7/8"



(1) 2 Spa. @ 6"
(2) 2 Spa. @ 12"
(3) 4 Spa. @ 6"
(4) 5 Spa. @ 6"
(5) 7 Spa. @ 6"

NOTES:

Work this sheet with Sheets No. 10 & 11.

All U bars and pairs of V bars shall be placed parallel to girders except bars at edge shall be placed parallel to the adjacent wingwall.

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

For details of Vertical Drain at End Bents, see Sheet No. 8.

Substructure Quantity Table for Bent No. 2

Item	Quantity
Galvanized Cast-In-Place Concrete Piles (20 in.) linear foot	384
Dynamic Pile Testing each	1
Class B Concrete (Substructure) cu. yard	20.3

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

DETAILS OF END BENT NO. 2

Pile reinforcement not shown for clarity

Detailed Sep. 2023
Checked Oct. 2023

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

Sheet No. 9 of 30

STATE OF MISSOURI
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DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 9
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

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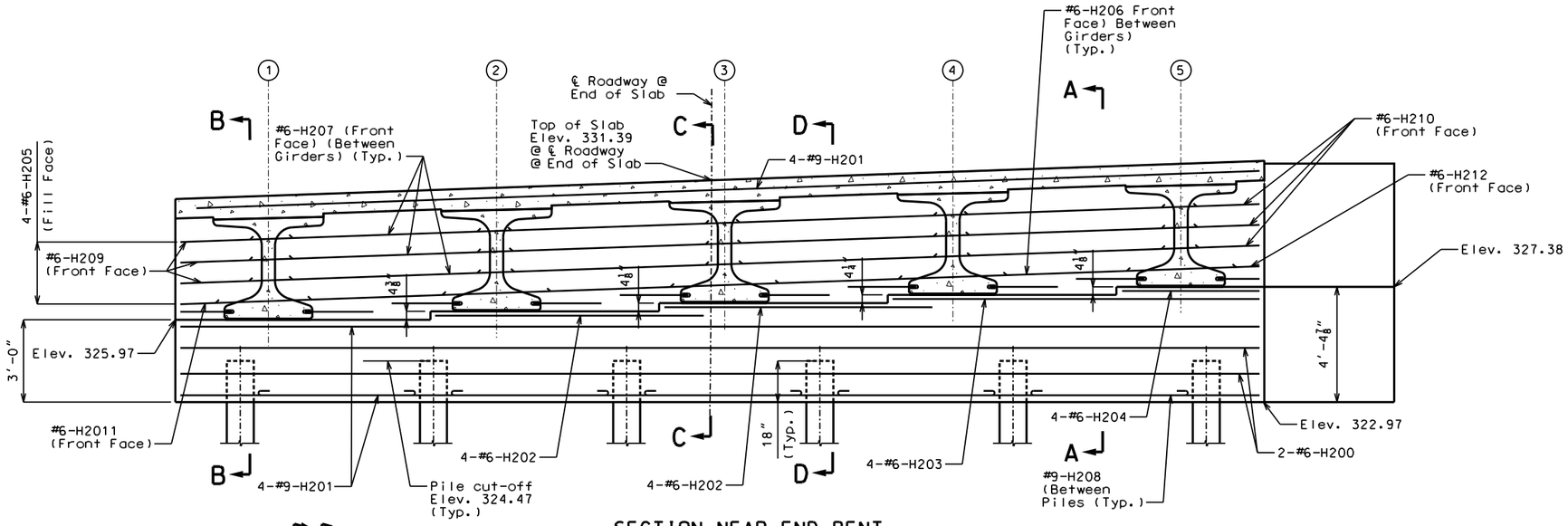
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JEFFERSON CITY, MO 65102
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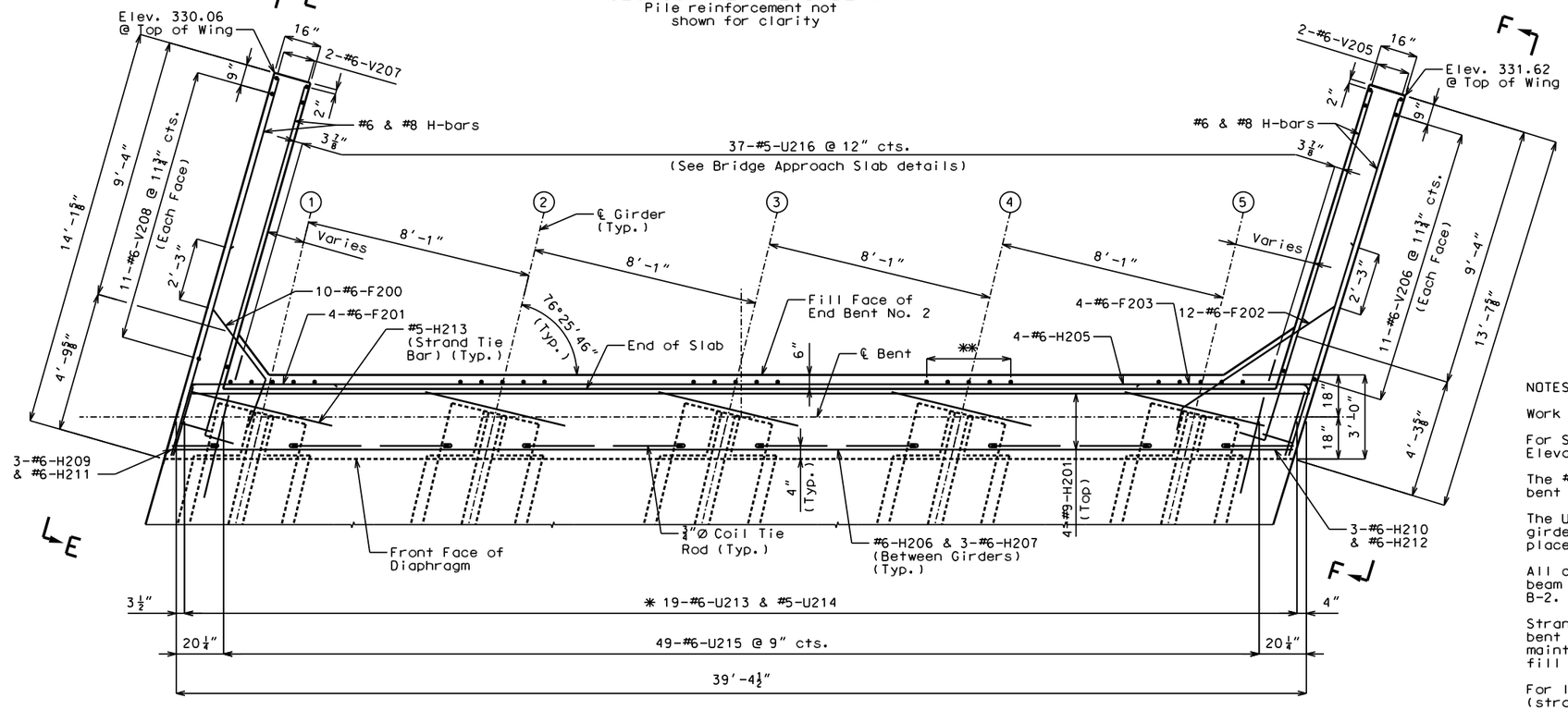
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SECTION NEAR END BENT

Pile reinforcement not shown for clarity



PART PLAN

Pile reinforcement not shown for clarity

DETAILS OF END BENT NO. 2

* Spaced with U200, U204, U206, U209, U212, V200, V201, V202 & V203

** 5-#6-V204 @ 9" cts. (Each Girder) (Typ.)

NOTES:

Work this sheet with Sheets No. 9 & 11.

For Sections A-A, B-B, C-C & D-D and Elevations E-E & F-F, see Sheet No. 11.

The #6-F200 and #6-F202 bars shall be bent in the field to clear girders.

The U bars shall be placed parallel to girders except bars at edge shall be placed parallel to the adjacent wingwall.

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

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

For location of coil tie rods and #5-H213 (strand tie bar), see Sheets No. 13 & 14.

For details of Vertical Drain at End Bents, see Sheet No. 8.

For details of bridge approach slab, see Sheet No. 23.

Detailed Sep. 2023
Checked Oct. 2023

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

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JERILYN M. HASSARD
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DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 10
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

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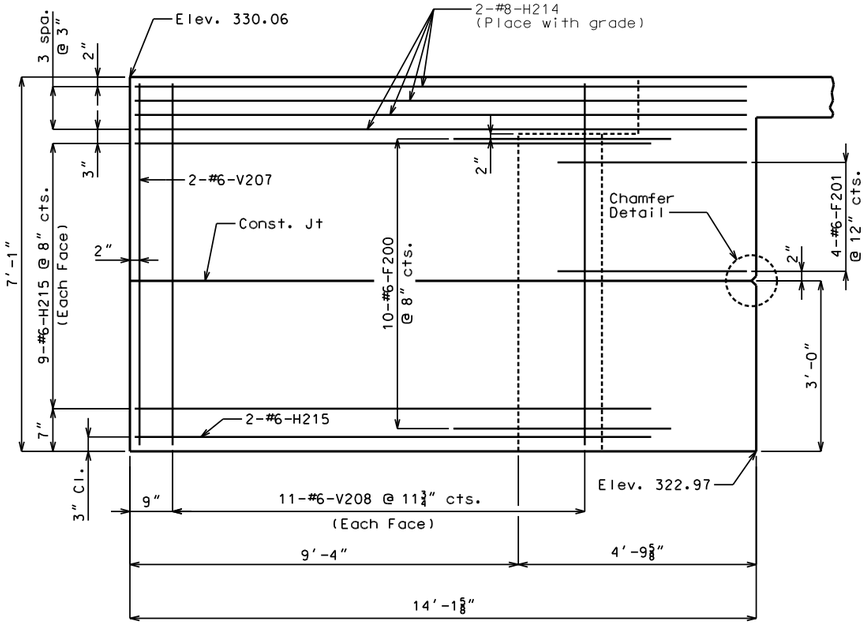
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JEFFERSON CITY, MO 65102
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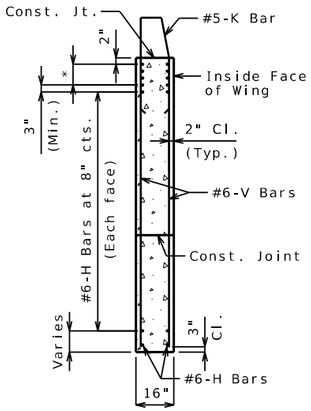
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

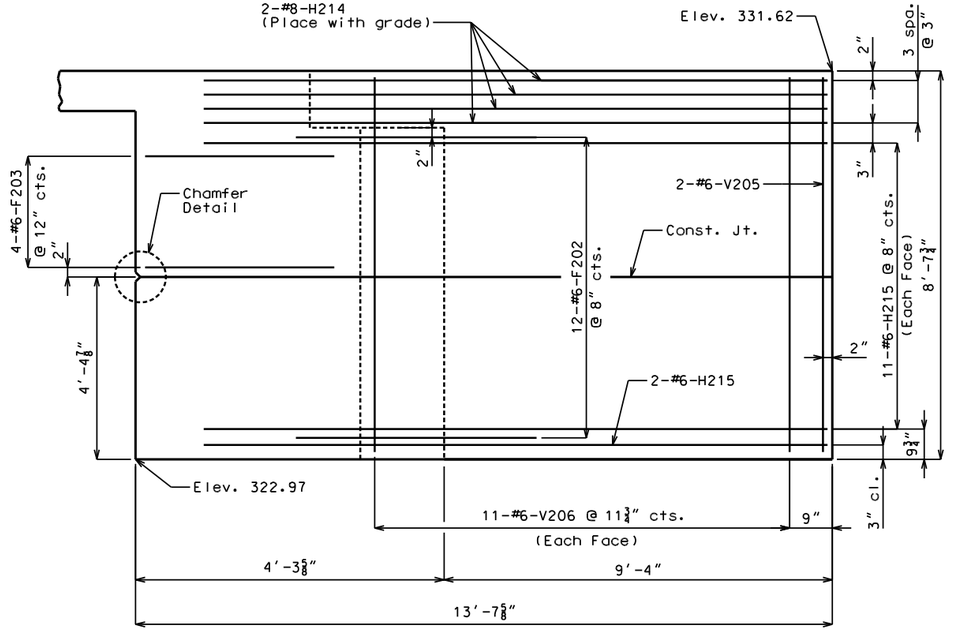


ELEVATION E-E

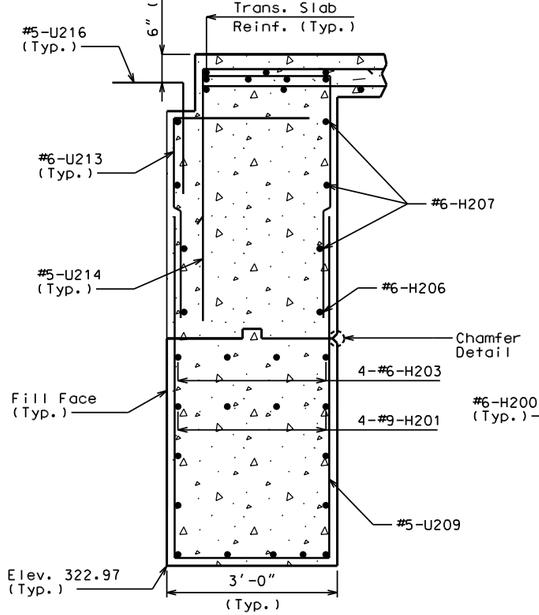


TYPICAL SECTION THRU WING

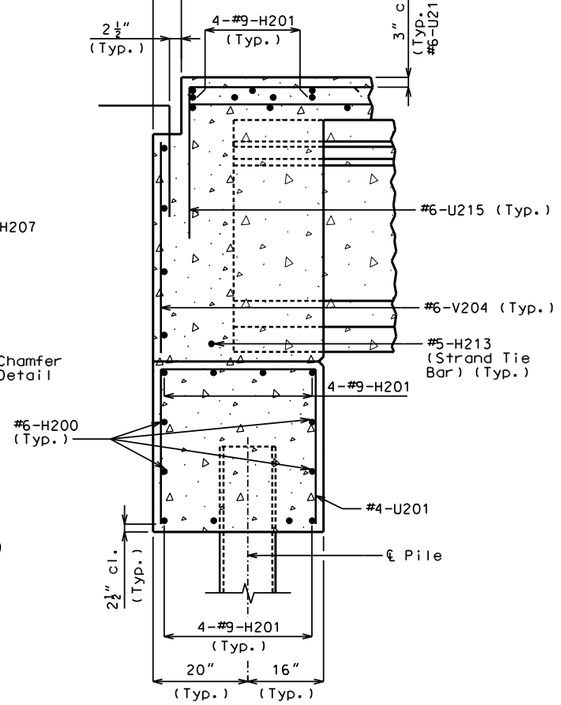
* #8-H Bars at 3" cts. (Each face)(Place with grade)



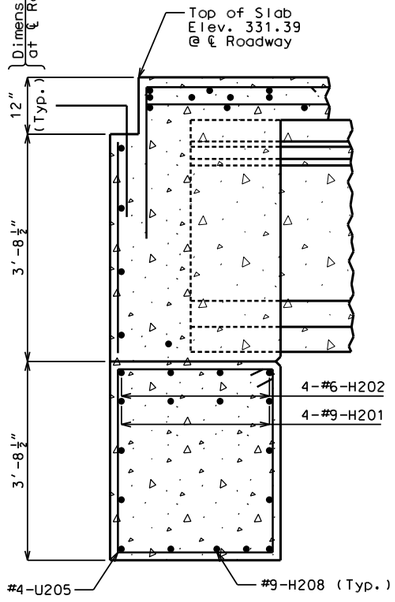
ELEVATION F-F



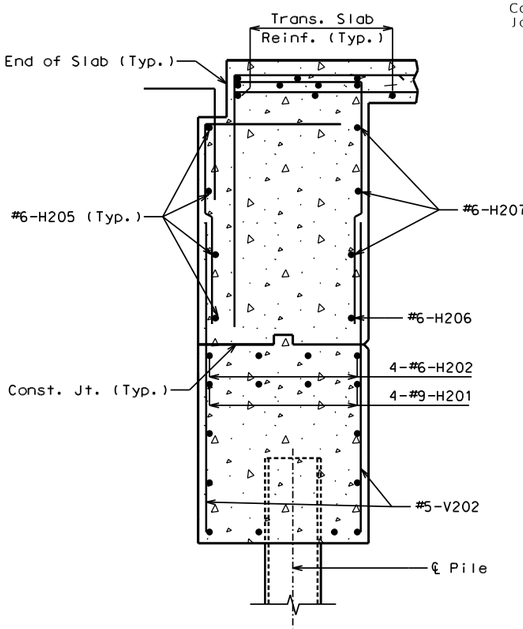
SECTION A-A



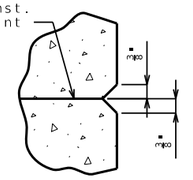
SECTION B-B



SECTION C-C



SECTION D-D



Chamfer Detail

NOTES:

Work this sheet with Sheets No. 9 & 10.

For location of Sections A-A, B-B, C-C & D-D and Elevations E-E & F-F, see Sheet No. 10.

For reinforcement of barrier, see Sheets No. 20 & 22.

DETAILS OF END BENT NO. 2

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9224_11_J9S3726_ENDBENT2_3.dgn 6:58:31 PM 10/5/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 11
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

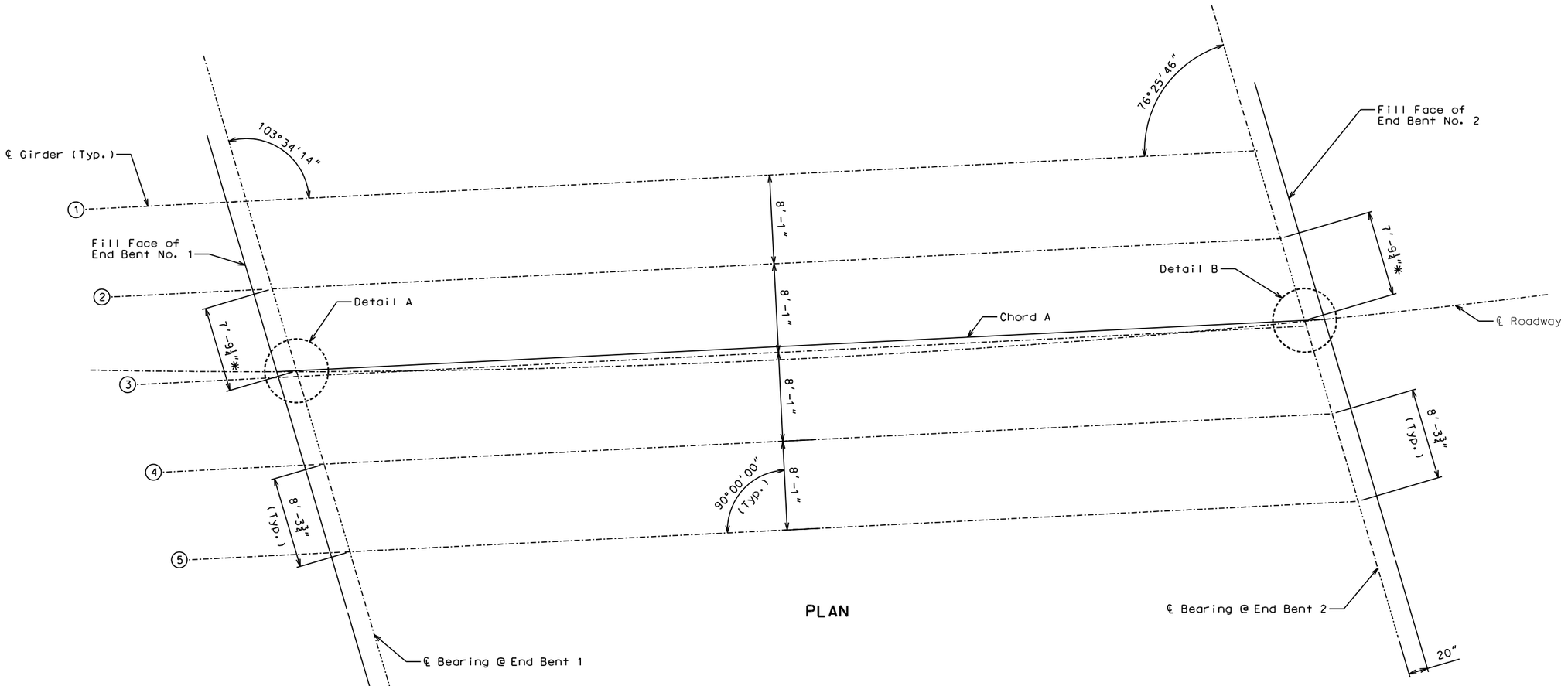
DESCRIPTION | DATE | REV.

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

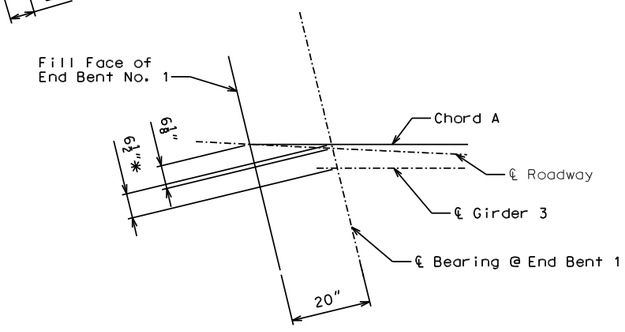
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

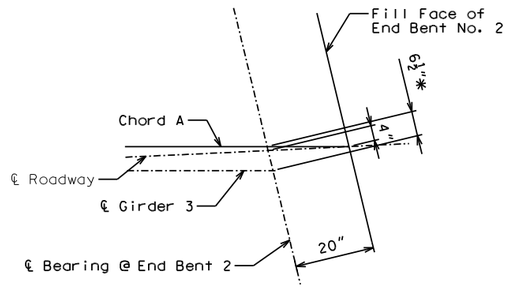
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416



PLAN



Detail A



Detail B

GIRDER LAYOUT

General Notes:

All dimensions are horizontal.

All bents are parallel.

* Dimensions along ℄ bearing are to Chord A.

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9224_12_J9S3726_GRDLAYOUT.dgn 2:18:52 PM 10/5/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER

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

DATE PREPARED
10/5/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	12

COUNTY
STODDARD

JOB NO.
J9S3726

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

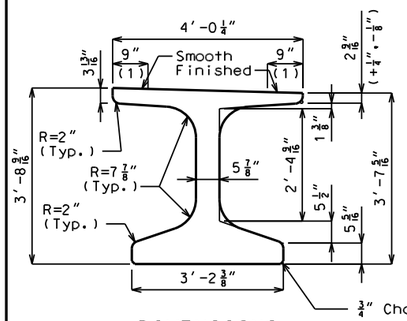
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

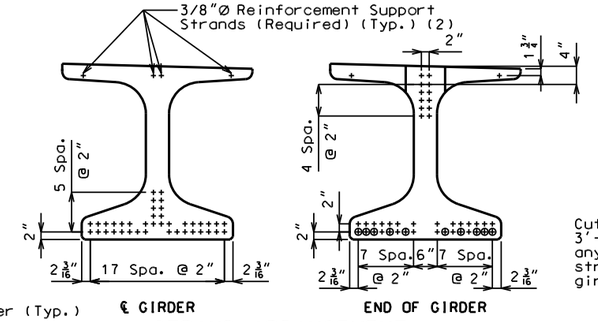
REV.

(1) Fabricator shall apply a bond breaker to this region.



DIMENSIONS

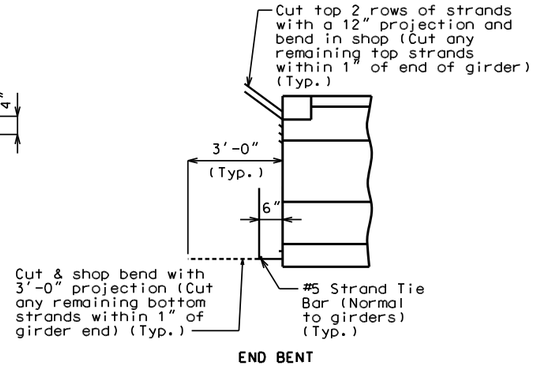
(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



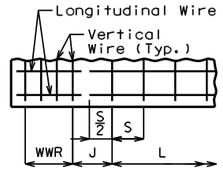
STRAND ARRANGEMENT

\+ Indicates prestressing strand.

o Indicates cut & shop bend with 3′-0″ projection.



STRANDS AT GIRDER ENDS



WELDED WIRE PLACEMENT

S = Vertical wire spacing

L = Length of WWR mats

J = Distance between WWR mats

Bill of Reinforcing Steel

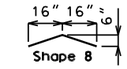
Bars Each Girder

No.	Size/Mark	Length	Shape
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2	4 G3	3′-8″	20
2	4 G6	3′-9″	20

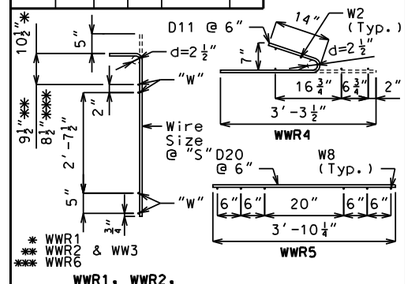
Welded Wire Each Girder

Mark	Size	S	W	L	J
WWR1	D22	8″	W9	6′-0″	14½″
WWR2	D22	12″	W9	18′-0″	14½″
WWR3	D22	16″	W9	37′-4″	--
WWR6	D31	2″	W12	16″	5⅛″

Bending Diagrams



Shape 20



WWR1, WWR2, WWR3 & WWR6

All dimensions are out to out.

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

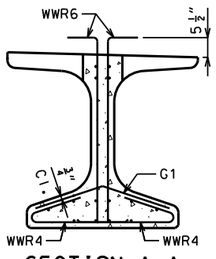
Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be 1″, unless otherwise shown.

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

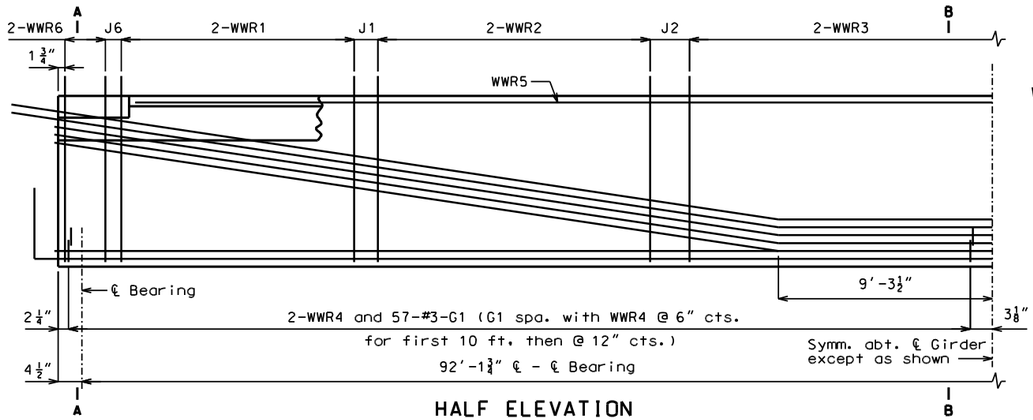
WWR shall be Grade 70 and in accordance with AASHTO M 336.

WWR shall not be epoxy coated.



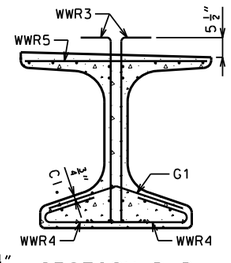
SECTION A-A

Strands not shown for clarity.



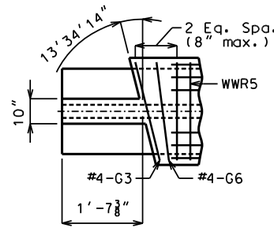
HALF ELEVATION

Reinforcement support strands not shown for clarity.



SECTION B-B

Strands not shown for clarity.



(End Bent)

TOP FLANGE BLOCKOUT

General Notes:

Concrete for prestressed beams shall be Class A-1 with f′c = 8000 psi and f′ci = 6500 psi.

Use 40 strands, 0.6″Ø Grade 270, with an initial prestress force of 1758 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

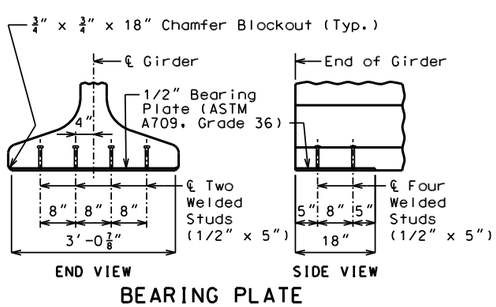
Exterior and interior girders are the same except: coil ties.

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

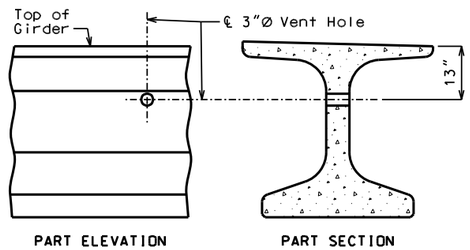
For Girder Camber Diagram, see Sheet No. 15.

For location of coil ties at integral bents, see Sheets No. 6 and 10.

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

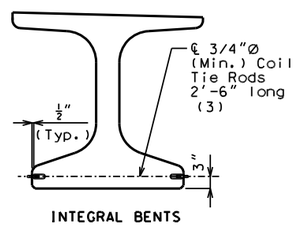


BEARING PLATE



VENT HOLE

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



COIL TIES

(3) 12″ at exterior face of exterior girders at end bents

NU-GIRDERS - SPAN (1-2)

Detailed Sep. 2026
Checked Sep. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	13

COUNTY: STODDARD
JOB NO.: J9S3726
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9224

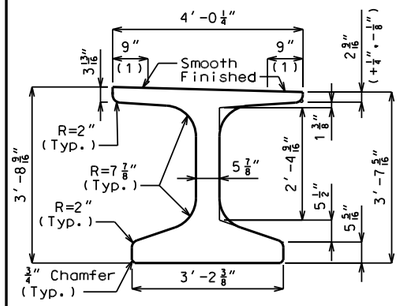
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MoDOT
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

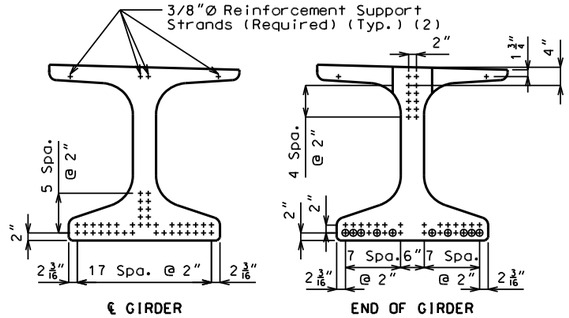
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

(1) Fabricator shall apply a bond breaker to this region.



DIMENSIONS

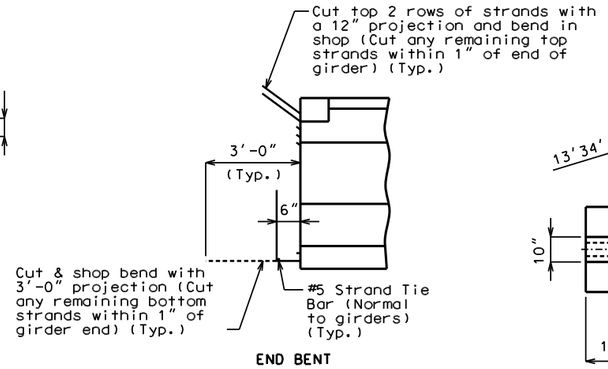
(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



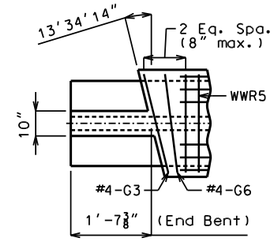
STRAND ARRANGEMENT

\+ Indicates prestressing strand.

o Indicates cut & shop bend with 3′-0″ projection.



STRANDS AT GIRDER ENDS

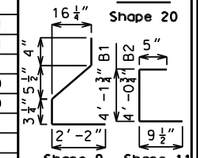


TOP FLANGE BLOCKOUT

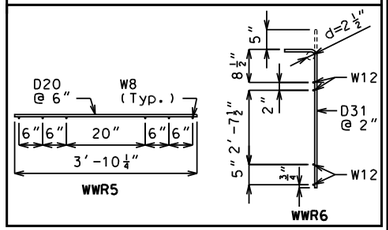
Bill of Reinforcing Steel - Each Girder

No.	Size/ Mark	Length	Shape
56	5 B1	5′-2″	11
114	5 B2	5′-1″	11
190	4 D1	4′-0″	9
2	4 G3	3′-8″	20
2	4 G6	3′-9″	20

Bending Diagrams



Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

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

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

Minimum clearance to reinforcing shall be 1″.

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

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

All B1 bars shall be epoxy coated.

General Notes:

Concrete for prestressed girders shall be Class A-1 with f′c = 8000 psi and f′ci = 6500 psi.

Use 40 strands, 0.6″Ø Grade 270, with an initial prestress force of 1758 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

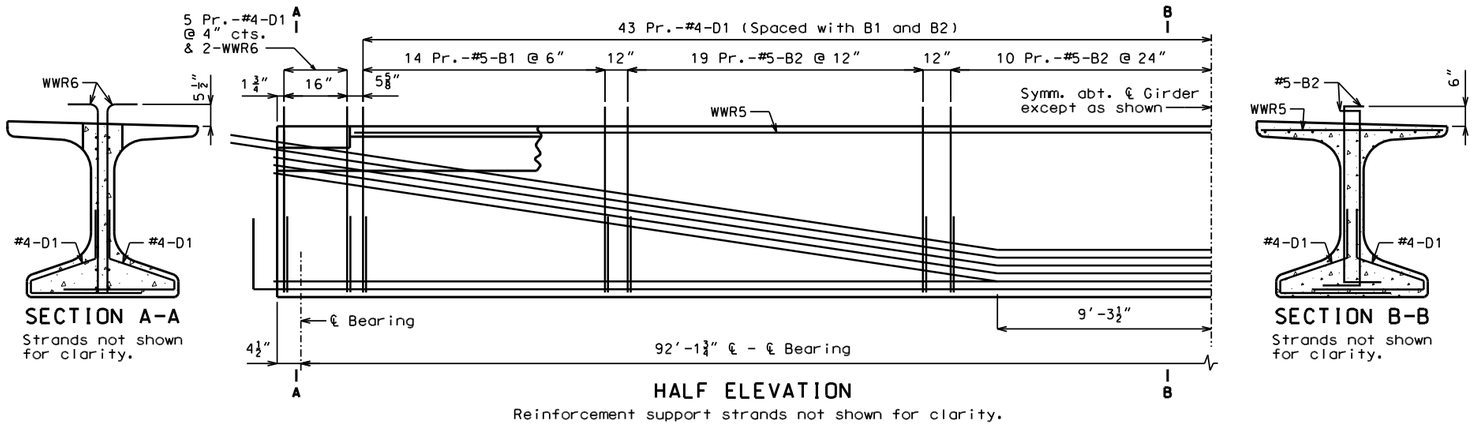
Exterior and interior girders are the same except: coil ties.

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

For Girder Camber Diagram, see Sheet No. 15.

For location of coil ties at integral bents, see Sheets No. 6 and 10.

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



SECTION A-A

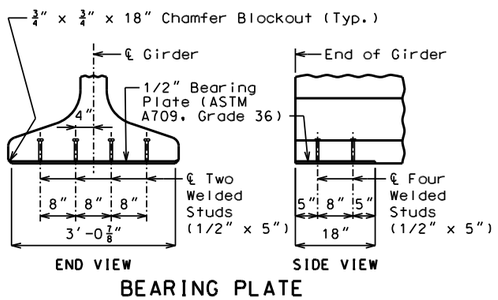
Strands not shown for clarity.

SECTION B-B

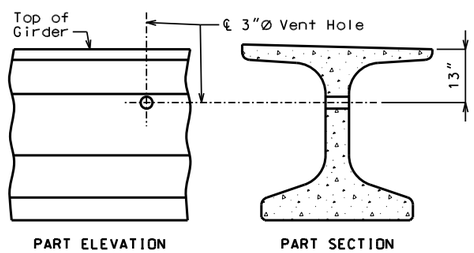
Strands not shown for clarity.

HALF ELEVATION

Reinforcement support strands not shown for clarity.

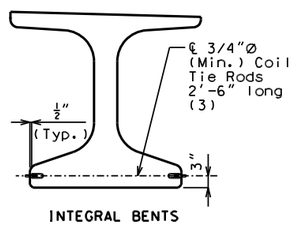


BEARING PLATE



VENT HOLE

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



COIL TIES

(3) 12″ at exterior face of exterior girders at end bents

NU-GIRDERS (ALTERNATE REINFORCEMENT) - SPAN (1-2)

Detailed Sep. 2026
Checked Sep. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 14
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

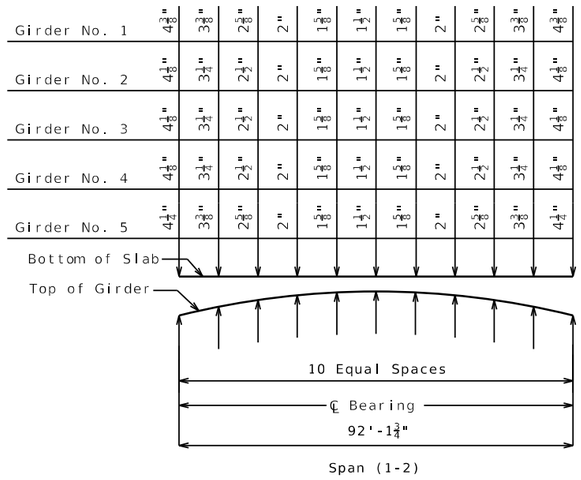
DESCRIPTION | DATE | REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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1-888-ASK-MODOT (1-888-275-6636)

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ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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THEORETICAL SLAB HAUNCHING DIAGRAM (ESTIMATED AT 90 DAYS)

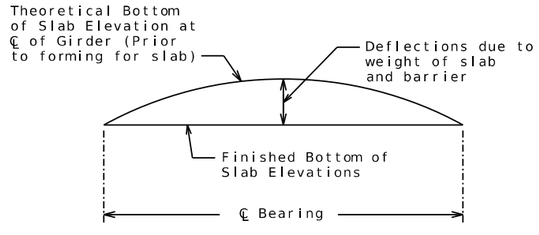
If girder camber is different from that shown in the camber diagram, in order to maintain minimum slab thickness, an adjustment of the slab haunches, an increase in slab thickness or a raise in grade uniformly throughout the structure shall be necessary. No payment will be made for additional labor or materials required for variation in haunching, slab thickness or grade adjustment.

Concrete in the slab haunches is included in the Estimated Quantities for Slab on Concrete NU-Girder.

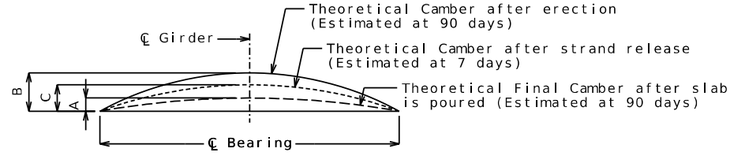
Theoretical Bottom of Slab Elevations at Centerline of Girder (Prior to forming for slab) (Estimated at 90 days)

Girder Number	Span (1-2) (92'-1¾" ℄ Brg. - ℄ Brg.)										
	℄ Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ Brg.
1	334.71	334.27	333.82	333.38	332.92	332.46	331.99	331.52	331.04	330.55	330.07
2	335.01	334.57	334.14	333.70	333.25	332.80	332.33	331.86	331.38	330.90	330.41
3	335.31	334.88	334.45	334.01	333.57	333.12	332.66	332.19	331.72	331.24	330.76
4	335.61	335.18	334.76	334.33	333.89	333.45	332.99	332.53	332.06	331.58	331.11
5	335.91	335.49	335.06	334.64	334.21	333.76	333.31	332.86	332.39	331.93	331.46

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 and barrier.



TYPICAL SLAB ELEVATIONS DIAGRAM



Girder	Span (1-2)		
	A	B	C
Exterior	2¼"	3¾"	2¾"
Interior	2⅛"		

GIRDER CAMBER DIAGRAM

Conversion Factors for Girder Camber (Estimated at 90 days):

0.1 pt. = 0.314 x 0.5 pt.
0.2 pt. = 0.593 x 0.5 pt.
0.3 pt. = 0.813 x 0.5 pt.
0.4 pt. = 0.952 x 0.5 pt.

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9224_15_J9S3726_GIRDCAMBER.dgn 2:19:17 PM 10/5/2026

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JERILYN M. HASSARD
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ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 15
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE

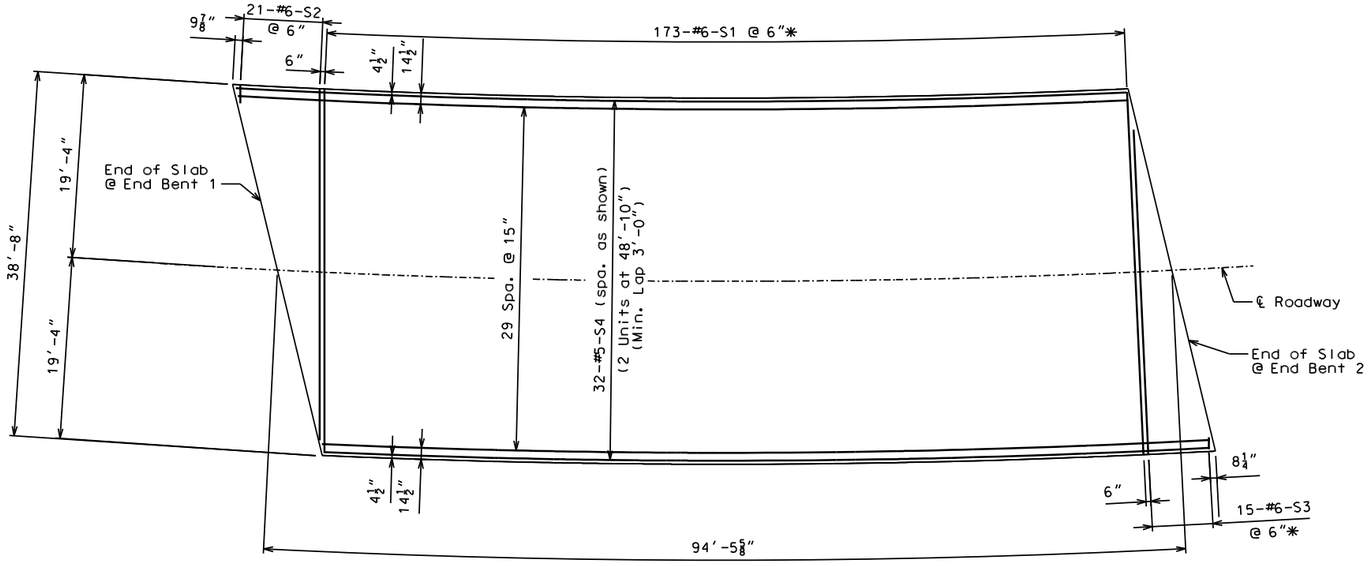
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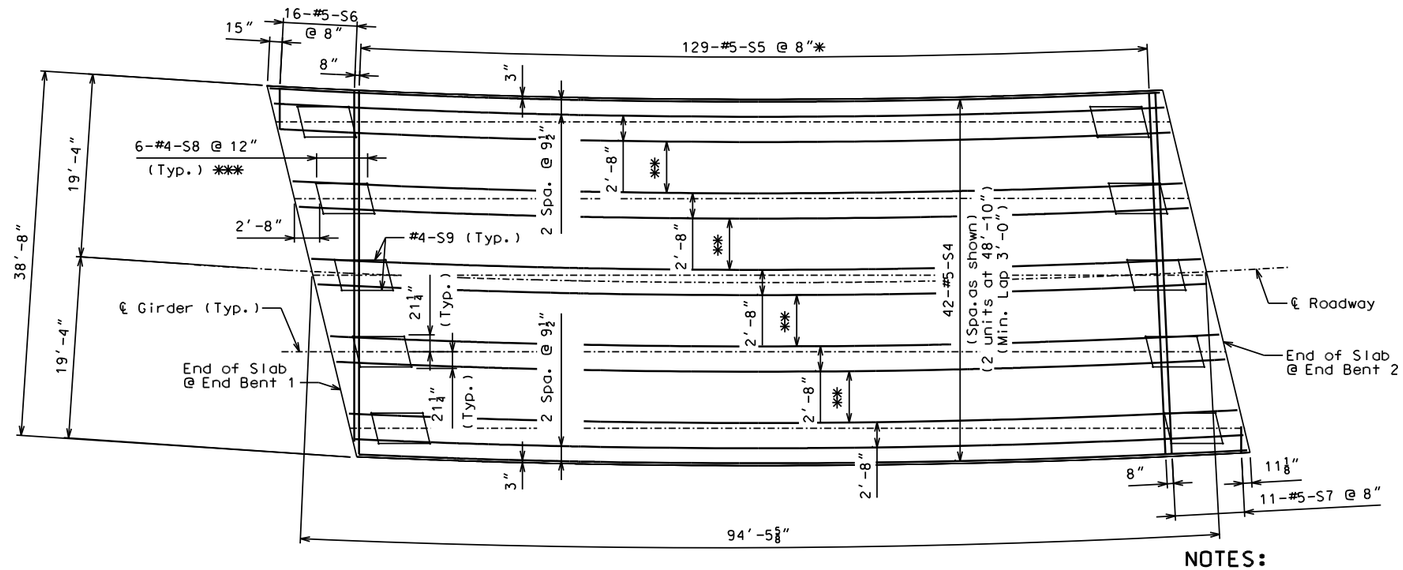
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REV.



PLAN OF SLAB SHOWING TOP REINFORCEMENT



PLAN OF SLAB SHOWING BOTTOM REINFORCEMENT

* Placed radially and spaced along right edge of slab

** 8 spaces @ 8⅛"

*** Placed parallel to End of Slab. May be placed at an angle to meet clearances

NOTES:

Unless otherwise shown, all longitudianl dimensions are horizontal arc dimensions along ℄ Structure, and transverse dimensions are measured radially.

Longitudinal reinforcement shall be placed parallel ℄ Roadway and spaced radially.

For Theoretical Bottom of Slab Elevations, Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 15.

For Section Thru Slab and Stay-in Place Form details, see Sheet No. 17.

For Details and Reinforcement of Type D Barrier not shown, see Sheets No. 19 thru 22.

For Plan of Slab Showing Curve Ordinates, see Sheet No. 18.

Detailed Sep. 2023
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B_A9224_16_J9S3726_SLAB1.dgn 2:19:25 PM 10/5/2026

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COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

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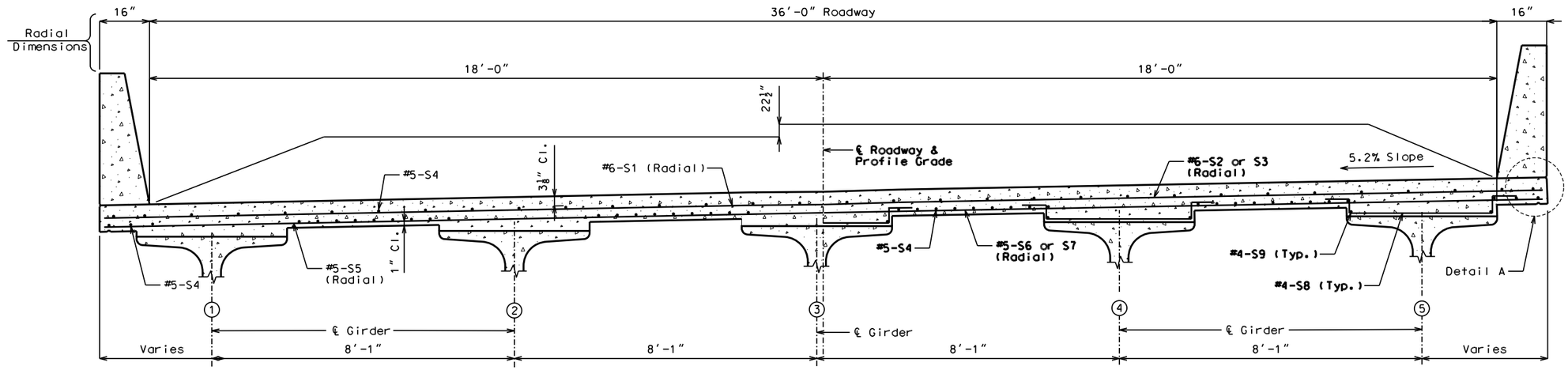
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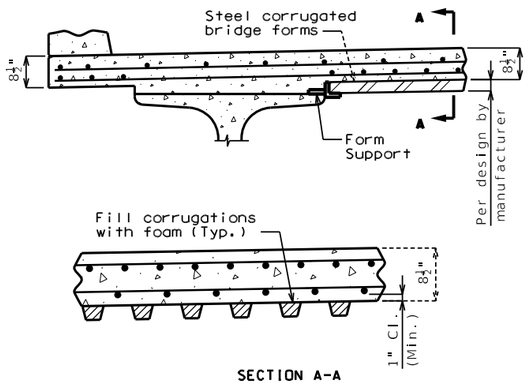
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HALF SECTION NEAR MIDSPAN

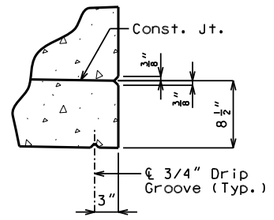
HALF SECTION NEAR END BENT

SECTION THRU SLAB

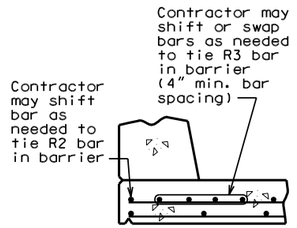


SECTION A-A

OPTIONAL STAY-IN-PLACE FORM DETAILS



DETAIL A



OPTIONAL SHIFTING TOP BARS AT BARRIER

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 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 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.

Notes:

The contractor shall pour up grade and satisfactorily finish the roadway slab at a rate of not less then 25 cubic yards per hour.

For reinforcement of barrier not shown, see Sheets No. 19 thru 22.

For Theoretical Bottom of Slab Elevations, Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 15.

For Plan of Slab Showing Reinforcement, see Sheet No. 16.

SLAB DETAILS

Detailed Sep. 2023
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PROJECT NO.
BRIDGE NO. A9224

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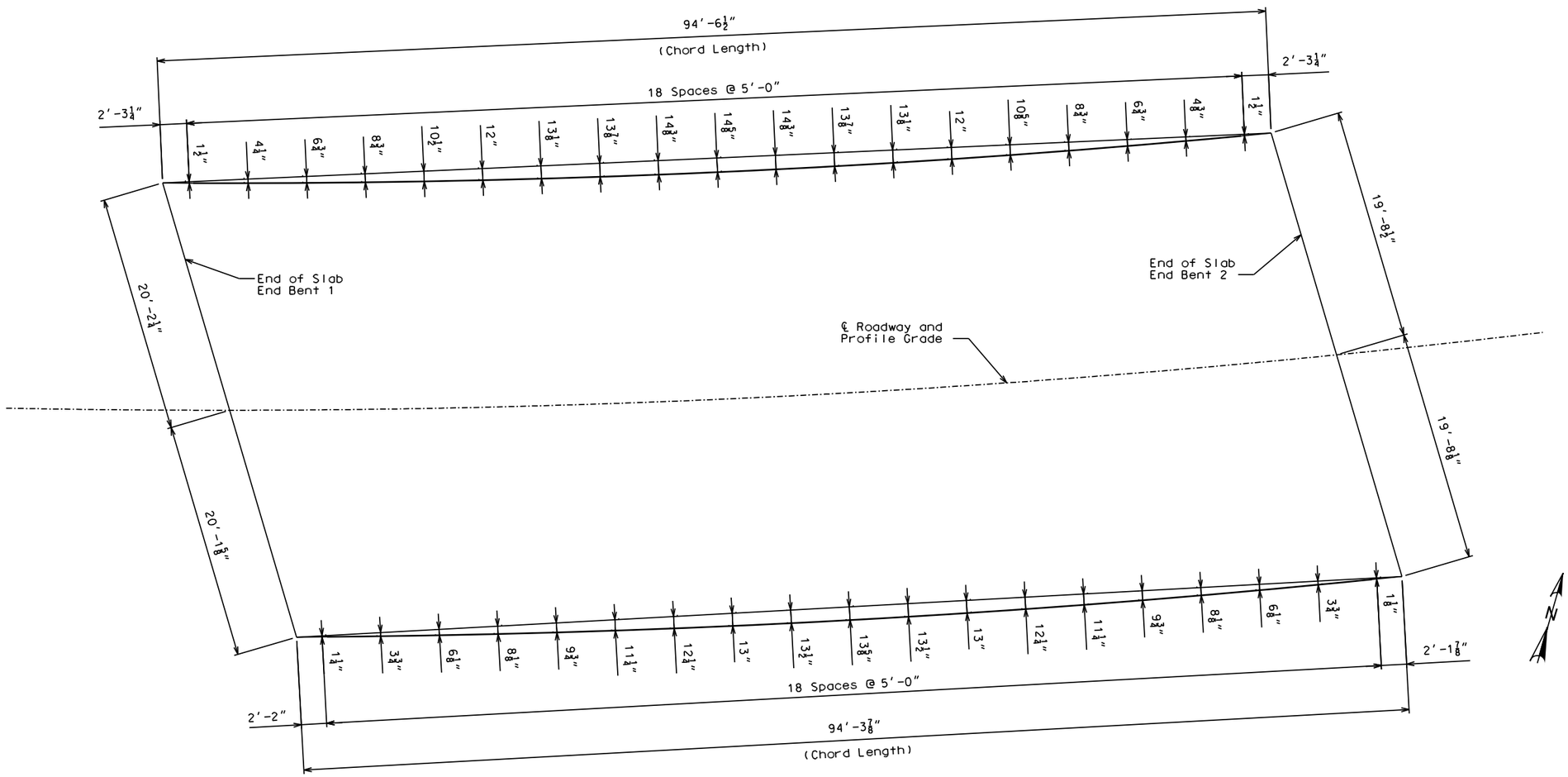
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Span (1-2)

SLAB CURVE ORDINATES

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BR	18

COUNTY
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JOB NO.
J9S3726

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224

DESCRIPTION	DATE

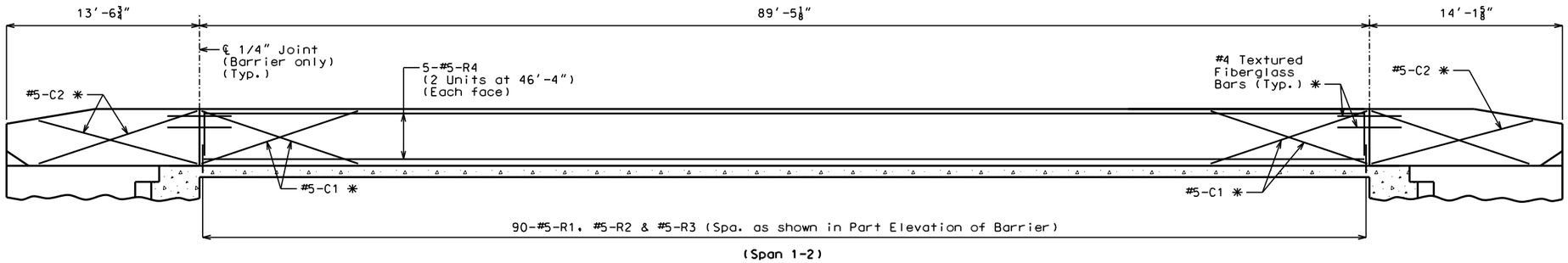
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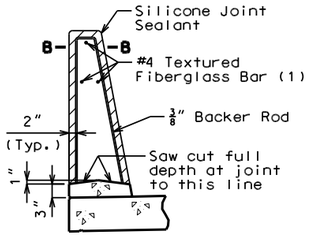
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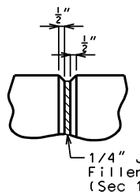


ELEVATION OF BARRIER

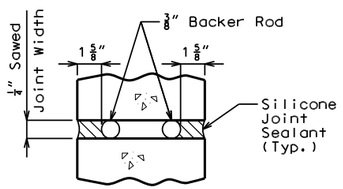
Longitudinal dimensions are horizontal arc dimensions along the outside face of barrier.



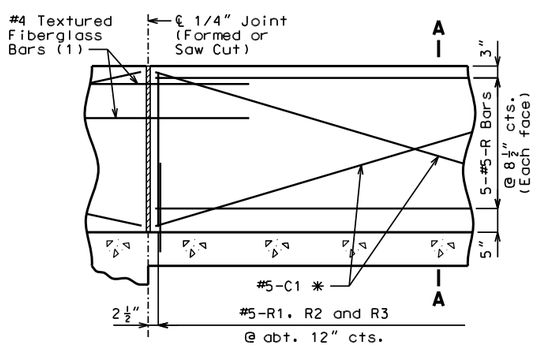
SECTION THRU
SAW CUT JOINT



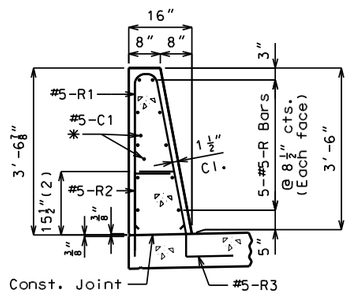
PART ELEVATION
AT FORMED JOINT



SECTION B-B



PART ELEVATION OF BARRIER
(1) Four feet long, centered on joint, slip-formed option only

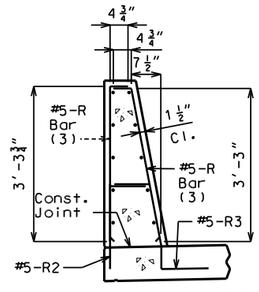


SECTION A-A

Use a minimum lap of 2′-6″ for #5 horizontal barrier bars.

The cross-sectional area above the slab is 3.57 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

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

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.

LEFT TYPE D BARRIER

Detailed Sep. 2026
Checked Sep. 2026

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PROFESSIONAL ENGINEER
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DISTRICT	SHEET NO.
BR	19

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JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION	DATE

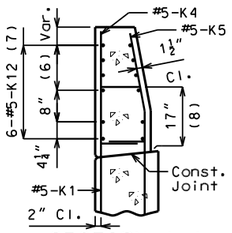
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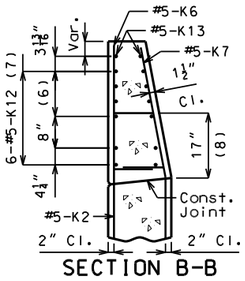
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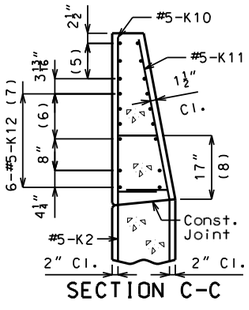
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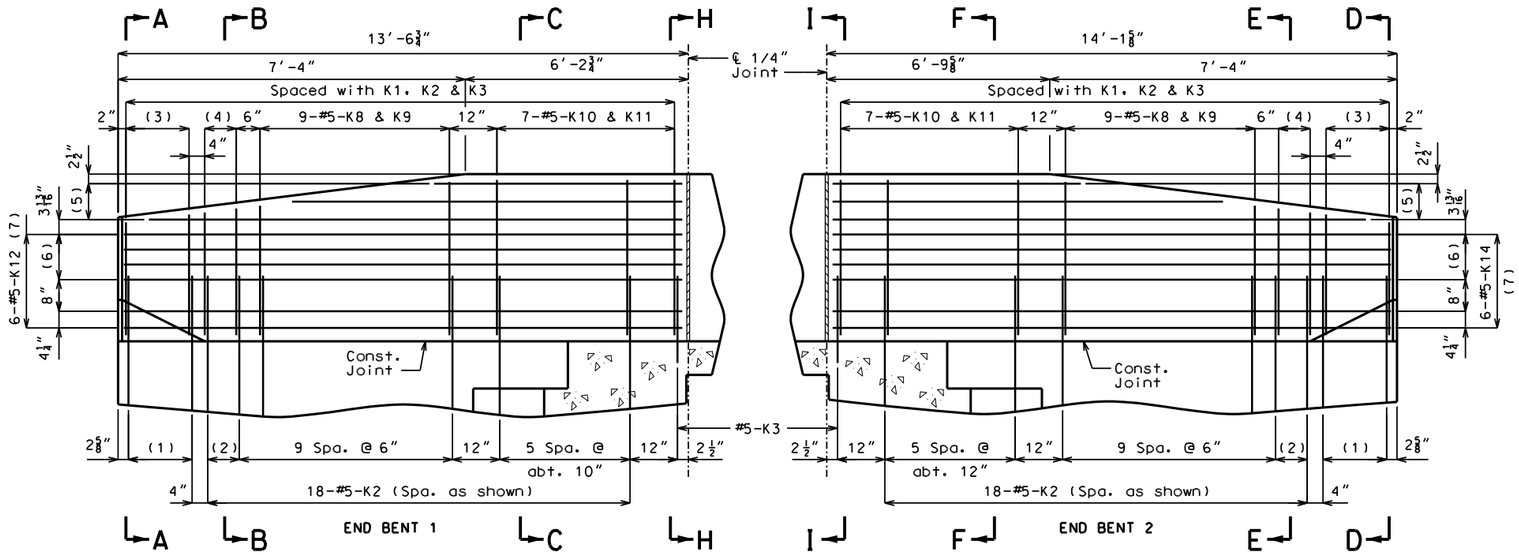
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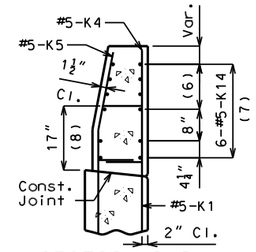
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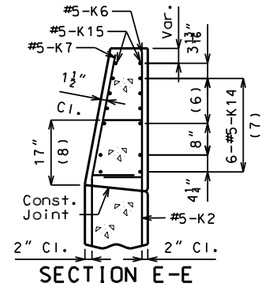
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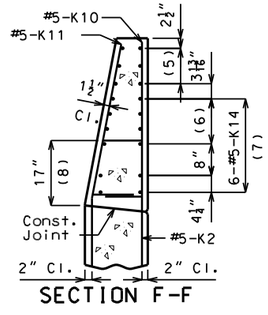
PART ELEVATION



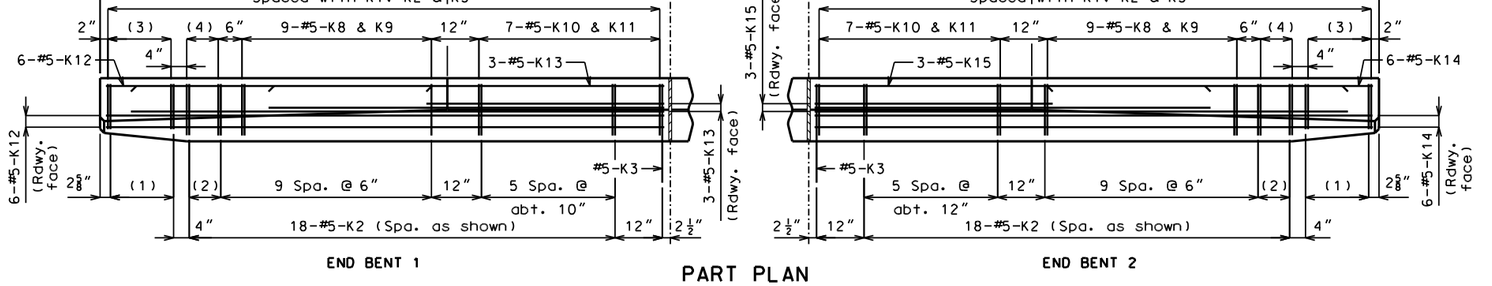
SECTION D-D



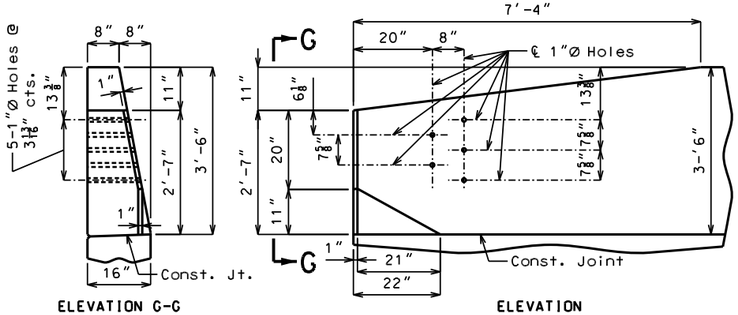
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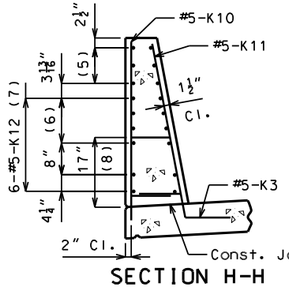
SECTION F-F



PART PLAN

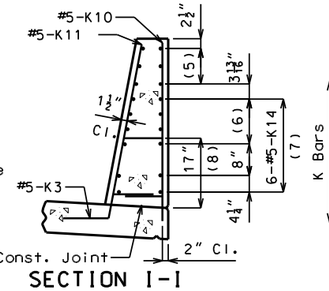


ELEVATION G-G ELEVATION

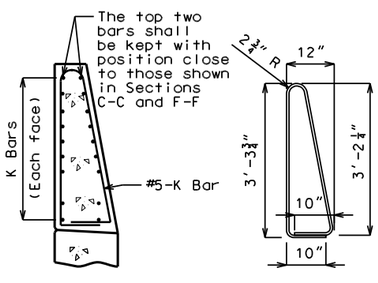


SECTION H-H

(1) 5-#5-K1 @ 4" cts.
(2) 2 spaces @ 4"
(3) 5-#5-K4 & K5
(4) 3-#5-K6 & K7
(5) 3-#5-K13 or K15 @ 4½" cts., each face
(6) 3 spaces @ 3 13/16"
(7) Spaced as shown, each face
(8) To top of bar



SECTION I-I

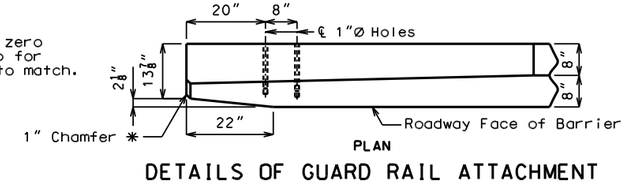


K10-K11 BAR PERMISSIBLE ALTERNATE SHAPE

(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.



PLAN

DETAILS OF GUARD RAIL ATTACHMENT

General Notes:

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

Reinforcing Steel:

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

LEFT TYPE D BARRIER AT END BENTS

Detailed Sep. 2023
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Note: This drawing is not to scale. Follow dimensions.

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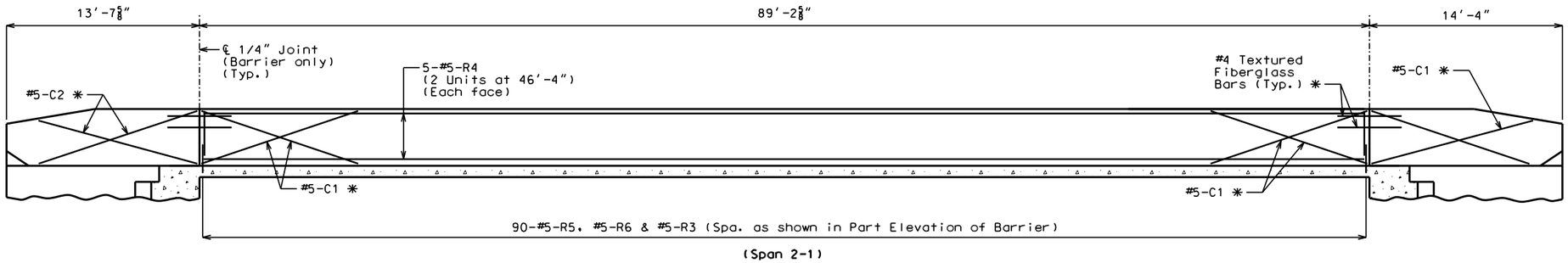
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COUNTY STODDARD
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PROJECT NO.
BRIDGE NO. A9224

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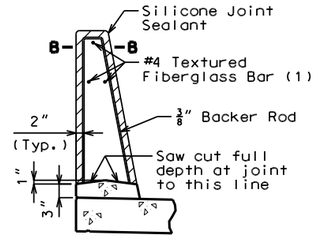
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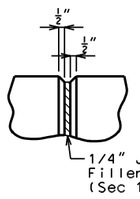


ELEVATION OF BARRIER

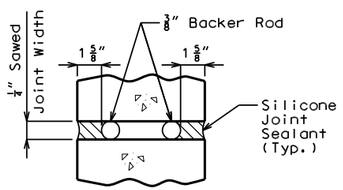
Longitudinal dimensions are horizontal arc dimensions along the outside face of barrier.



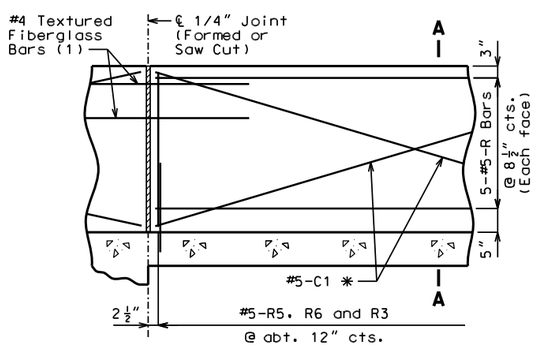
SECTION THRU
SAW CUT JOINT



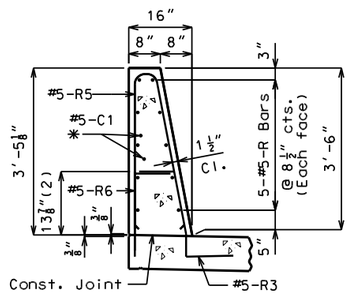
PART ELEVATION
AT FORMED JOINT



SECTION B-B



PART ELEVATION OF BARRIER
(1) Four feet long, centered on joint, slip-formed option only

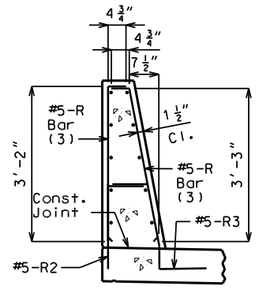


SECTION A-A

Use a minimum lap of 2′-6″ for #5 horizontal barrier bars.

The cross-sectional area above the slab is 3.47 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

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

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.

RIGHT TYPE D BARRIER

Detailed Sep. 2026
Checked Sep. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	21

COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION	DATE

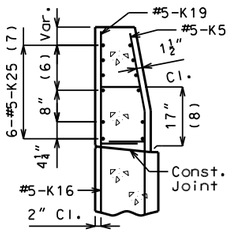
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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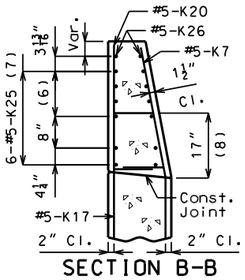
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

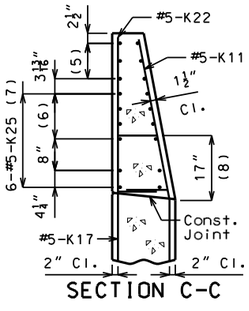
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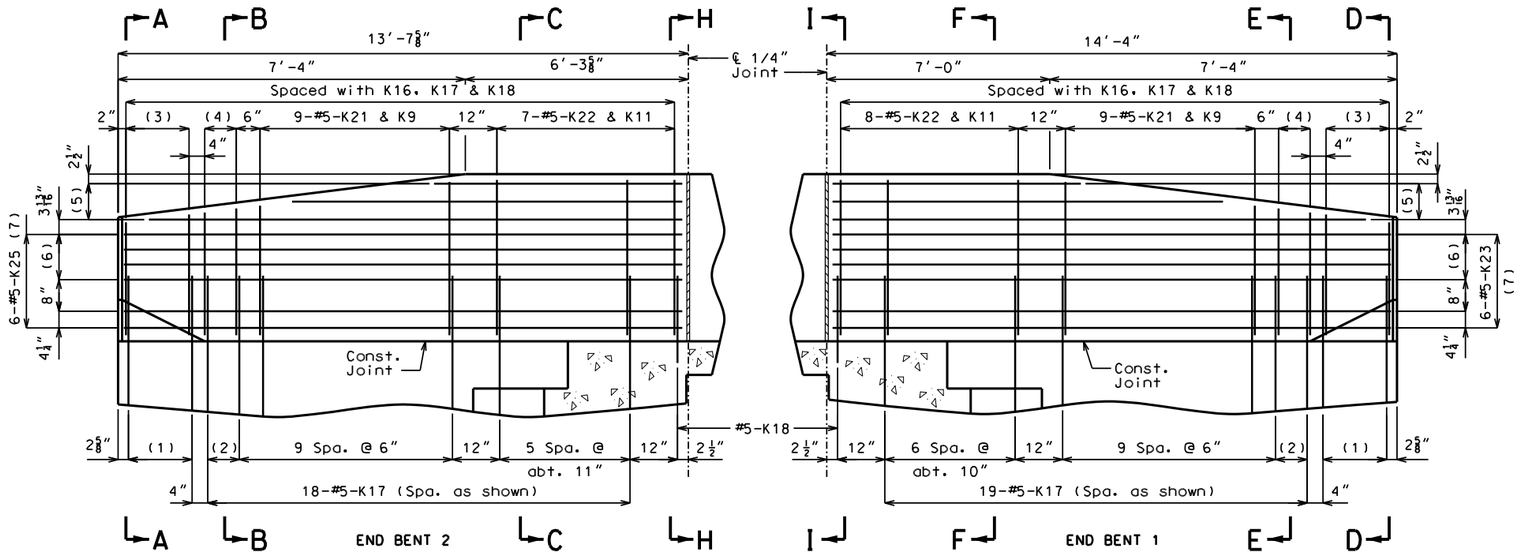
SECTION A-A



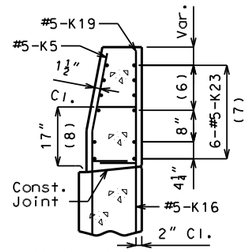
SECTION B-B



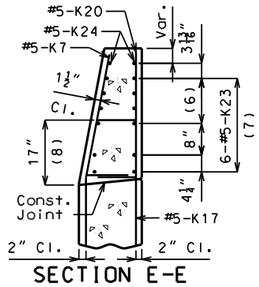
SECTION C-C



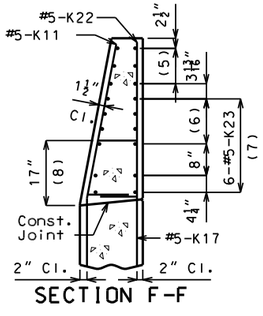
PART ELEVATION



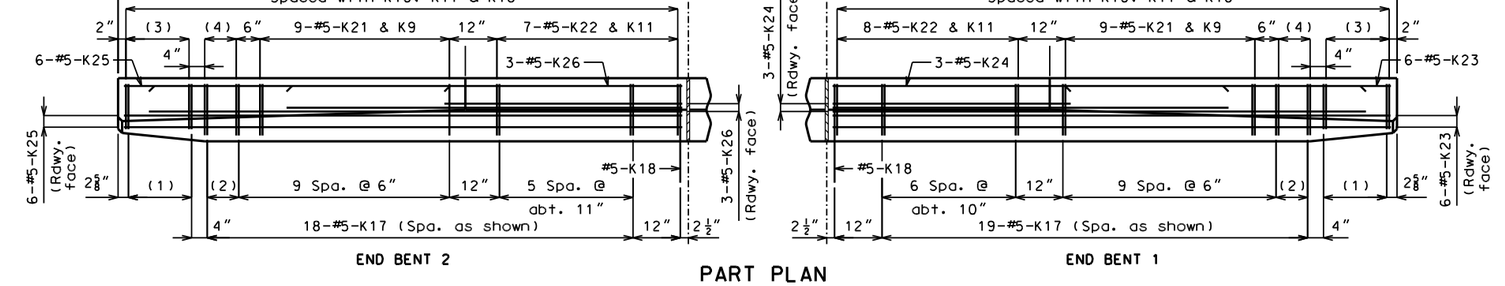
SECTION D-D



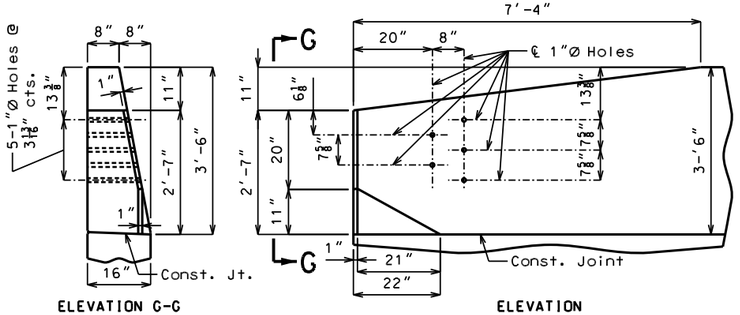
SECTION E-E



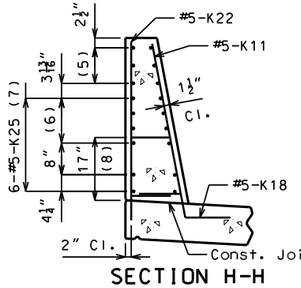
SECTION F-F



PART PLAN

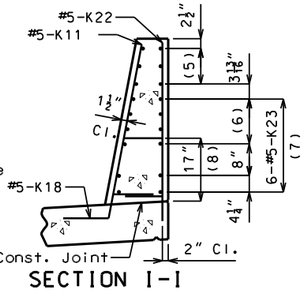


ELEVATION G-G ELEVATION

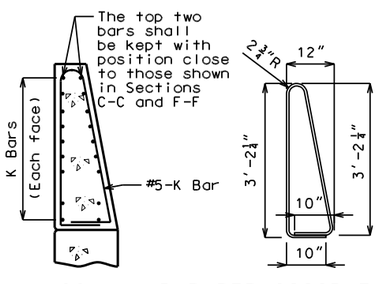


SECTION H-H

(1) 5-#5-K16 @ 4" cts.
(2) 2 spaces @ 4"
(3) 5-#5-K19 & K5
(4) 3-#5-K20 & K7
(5) 3-#5-K24 or K26 @ 4½" cts., each face
(6) 3 spaces @ 3 13/16"
(7) Spaced as shown, each face
(8) To top of bar



SECTION I-I

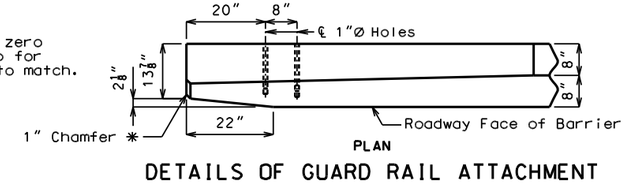


K22-K11 BAR PERMISSIBLE ALTERNATE SHAPE

(Other K bars not shown for clarity)

The K22-K11 bar combination may be furnished as one bar as shown, at the contractor's option.

All dimensions are out to out.



* Transition to zero at Type A curb for gutter lines to match.

DETAILS OF GUARD RAIL ATTACHMENT

General Notes:

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

Reinforcing Steel:

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

RIGHT TYPE D BARRIER AT END BENTS

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

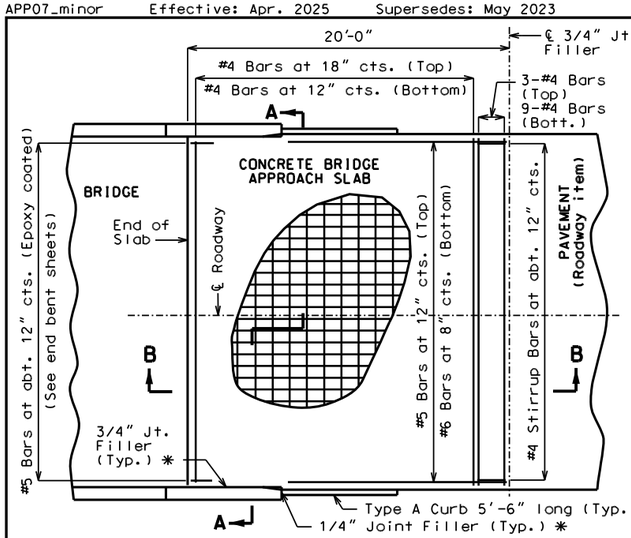
DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 22
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE

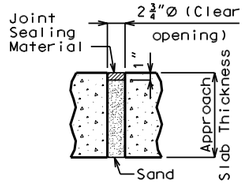
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
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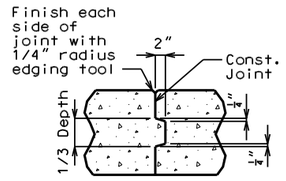
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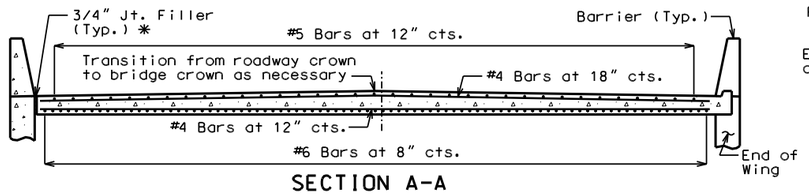
PART PLAN OF SQUARED STRUCTURE
(Skewed structure similar)



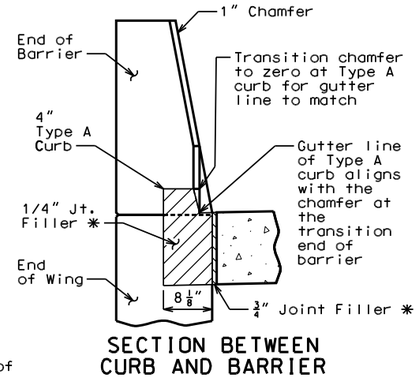
UNDERSEAL ACCESS HOLE DETAIL
(If required)



CONSTRUCTION JOINT DETAIL



SECTION A-A
With the approval of the engineer, the contractor may crown the bottom of the approach slab to match the crown of the roadway surface.



SECTION BETWEEN CURB AND BARRIER

Notes For Concrete Slab Only:

All concrete for the bridge approach slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Longitudinal construction joints in bridge approach slab shall be aligned with longitudinal construction joints in bridge slab.

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

The reinforcing steel in the bridge approach slab shall be continuous. The transverse reinforcing steel may be made continuous by providing a minimum lap splice of 26 inches for #4 bars, or by mechanical bar splice.

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

Payment for furnishing all materials, labor and excavation necessary to construct the concrete bridge approach slab, including the timber header, underdrain, Type 5 aggregate base, joint filler, and all other appurtenances and incidental work as shown on this sheet, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.

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

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

* Seal joint between vertical face of approach slab and wing with sealant in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

General Notes:

Contractor shall have the option to construct either slab except as noted.

The contractor shall pour and satisfactorily finish the bridge slab before placing the bridge approach slab.

MoDOT Construction personnel will indicate the bridge approach slab used for this structure:

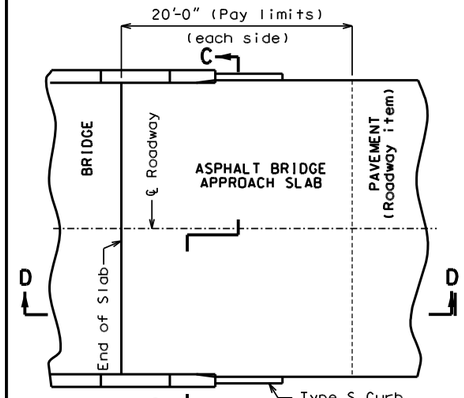
☐ Concrete Bridge Approach Slab

☐ Asphalt Bridge Approach Slab

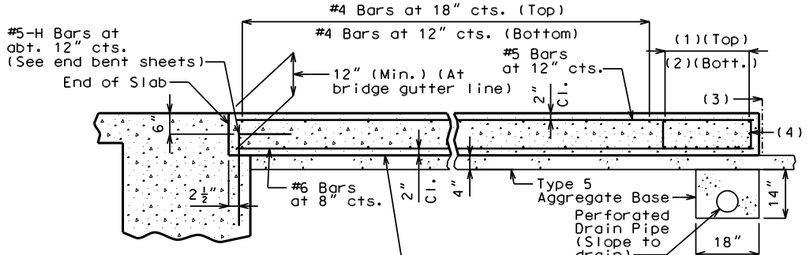
Notes For Asphalt Slab Only:

Payment for furnishing all materials, labor and excavation necessary to construct the asphalt bridge approach slab, including tack, curb, and Type 5 aggregate base within the pay limits shown, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.

Application of tack is required between lifts per Sec 403.



PART PLAN
(Squared structure shown, skewed structure similar)



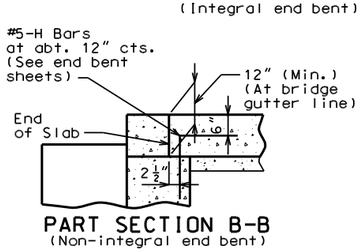
SECTION B-B
(Integral end bent)

(1) 3-#4 Bars

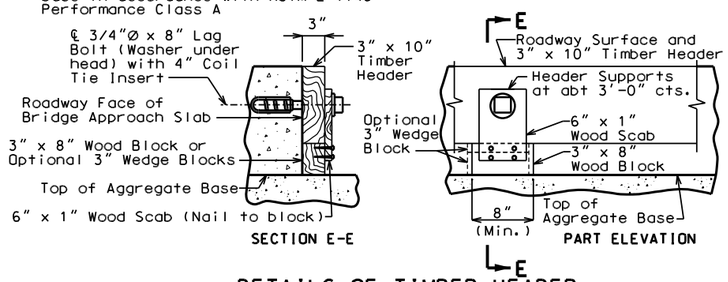
(2) 9-#4 Bars

(3) ℄ 3/4" Jt. Filler

(4) #4 Stirrup Bars at abt. 12" cts.: 2'-0"x 8" (Min.) out to out; Actual length = 5'-10" (Min.); 90° stirrup hook at bottom: Stirrup height (8") and actual length vary due to crown.



PART SECTION B-B
(Non-integral end bent)

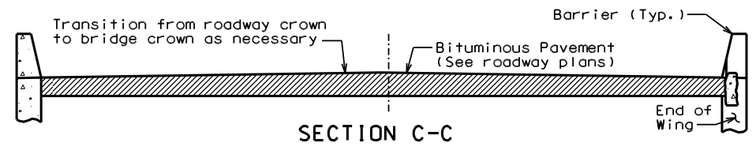


SECTION E-E

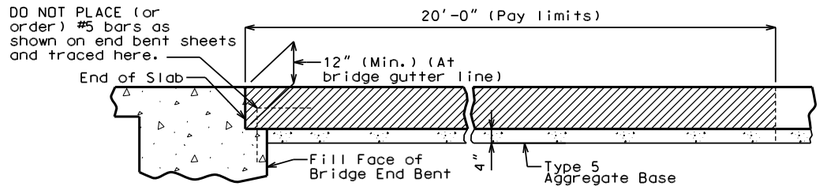
PART ELEVATION

DETAILS OF TIMBER HEADER
Remove timber header when concrete pavement is placed.

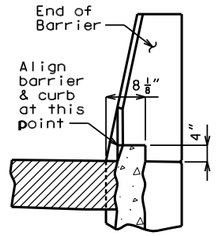
OPTIONAL CONCRETE SLAB



SECTION C-C
With the approval of the engineer, the contractor may crown the bottom of the approach slab to match the crown of the roadway surface.



SECTION D-D



4" TYPE S CURB
See Missouri Standard Plan 609.00 for details of Type S curb.

OPTIONAL ASPHALT SLAB (NOT ALLOWED WITH CONCRETE PAVEMENT)

BRIDGE APPROACH SLAB (MINOR)
Integral end bents shown, non-integral end bent similar.

Detailed Sep. 2026
Checked Sep. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 23
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION	DATE

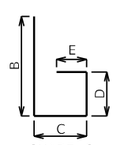
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105 WEST CAPITOL
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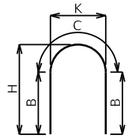
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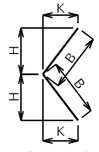
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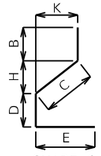
SHAPE 6
or 6S



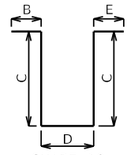
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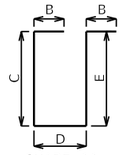
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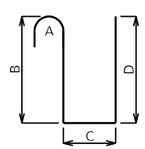
SHAPE 9
or 9S



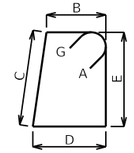
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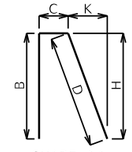
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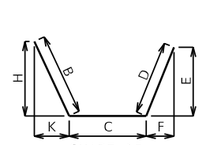
SHAPE 12



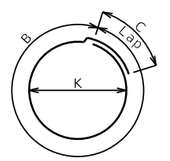
SHAPE 13S



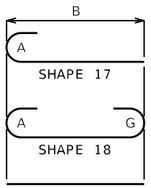
SHAPE 14
or 14S



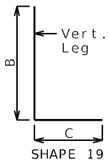
SHAPE 15
or 15S



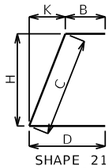
SHAPE 16



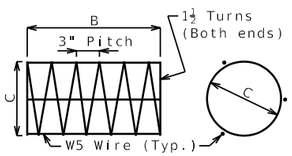
SHAPE 17
SHAPE 18
SHAPE 20



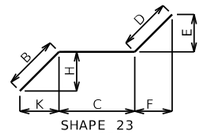
SHAPE 19
or 19S



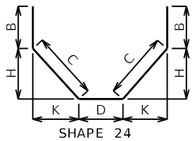
SHAPE 21
or 21S



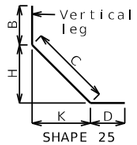
SHAPE 22



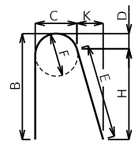
SHAPE 23
or 23S



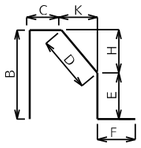
SHAPE 24
or 24S



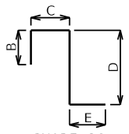
SHAPE 25
or 25S



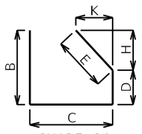
SHAPE 26



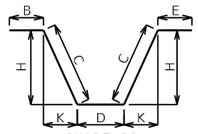
SHAPE 27S



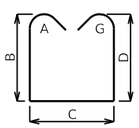
SHAPE 28
or 28S



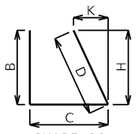
SHAPE 29
or 29S



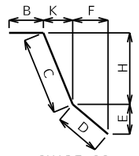
SHAPE 30
or 30S



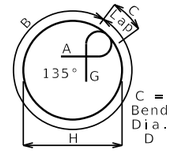
SHAPE 31S



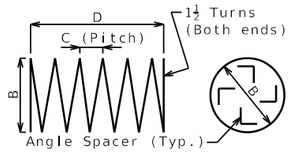
SHAPE 32
or 32S



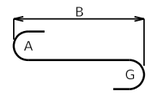
SHAPE 33
or 33S



SHAPE 34S



SHAPE 35 (1)

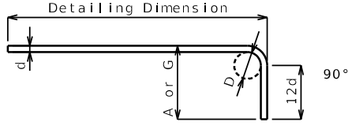


SHAPE 36

Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

Size	Case	D	A or G		J
			90°	180°	180°
#4	1	3"	8"	6"	4"
#5	1	3¾"	10"	7"	5"
#6	1	4½"	12"	8¼"	6"
#7	2	5¼"	14"	9¾"	7"
	3	7"	15"	11½"	8¾"
#8	2	6"	16"	11"	8"
	3	8"	17"	13¼"	10"
#9	1	9½"	19½"	15½"	11¾"
#10	1	10¾"	22"	17½"	13⅛"
#11	1	12"	24½"	19½"	14⅞"
#14	1	18¼"	31¼"	27½"	21⅝"
#18	1	24"	41½"	36¾"	28½"

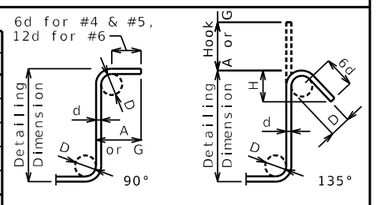


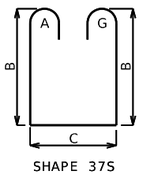
Stirrup Pin Bend Shapes (S)

Size	Case	D	A or G			H	J
			90°	135°	180°	135°	180°
#4	2	2"	4½"	4½"	5"	2⅝"	3"
	3	3"	5"	5¼"	6"	3"	4"
#5	2	2½"	5¾"	5¾"	5¾"	3⅜"	3¾"
	3	3¾"	6¼"	6½"	7"	3⅝"	5"
#6	1	4½"	12"	7¾"	8¼"	4⅜"	6"

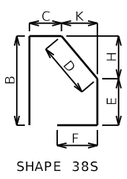
Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.





SHAPE 37S



SHAPE 38S

BENDING DIAGRAMS

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

	Size	Substructure		Superstructure				Entire Bridge	
				Slab					
		Plain	Epoxy	Plain	Epoxy	Barrier	Slip Form	Plain	Epoxy
By Size	W5	0	0	0	0	0	0	0	0
	4	0	0	0	1,365	0	0	0	1,365
	5	0	0	0	10,812	6,682	191	0	17,685
	6	0	0	0	19,539	0	0	0	19,539
	7	0	0	0	0	0	0	0	0
	8	0	0	0	1,246	0	0	0	1,246
	9	0	0	0	3,508	0	0	0	3,508
	10	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0
By Type		0	0	0	36,470	6,682	191	0	43,343

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

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

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

Detailed Sep. 2026
Checked Sep. 2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

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

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 24
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE | REV.

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		SUPERSTR.													
		END BENT 1													
12	6 F100	WING BRACE	E	23S		14.00	4 2.00	2 3.00	21.50	16.25	11.00	8.25	7 7	7 6	135
4	6 F101	DIAPHRAGM	E	23S		2 9.50	4 3.75				2 8.25	9.00	7 2	7 0	42
10	6 F102	WING BRACE	E	23S		2 3.00	5 4.25	14.00	8.25	11.25	16.00	21.50	8 10	8 9	131
4	6 F103	DIAPHRAGM	E	21S			2 9.75	5 11.75			2 8.25	9.75	8 10	8 8	52
4	6 H100	BEAM	E	20		40 0.00							40 0	40 0	240
12	9 H101	BEAM	E	20		40 0.00							40 0	40 0	1632
8	6 H102	BEAM	E	20		13 0.00							13 0	13 0	156
4	6 H103	BEAM	E	20		13 5.00							13 5	13 5	81
4	6 H104	BEAM	E	20		5 1.00							5 1	5 1	31
4	6 H105	DIAPHRAGM	E	20		40 1.00							40 1	40 1	241
4	6 H106	DIAPHRAGM	E	20		4 9.00							4 9	4 9	29
12	6 H107	DIAPHRAGM	E	20		7 2.00							7 2	7 2	129
5	9 H108	BEAM	E	18		5 10.00							8 4	8 4	142
3	6 H109	DIAPHRAGM	E	20		3 5.00							3 5	3 5	15
3	6 H110	DIAPHRAGM	E	20		2 7.00							2 7	2 7	12
1	6 H111	DIAPHRAGM	E	20		2 0.00							2 0	2 0	3
1	6 H112	DIAPHRAGM	E	20		14.00							14	14	2
5	5 H113	STRAND TIE	E	20		5 9.00							5 9	5 9	30
16	8 H114	WING	E	19		16.00	13 5.50						14 10	14 7	623
48	6 H115	WING	E	19		12.00	12 7.50						13 8	13 6	973
60	4 P100	PILE	E	34S		4 2.25	2.00				16.00		5 1	5 0	200
1	5 U100	BEAM	E	10S			7 1.50	2 9.75					17 1	16 10	18
3	4 U101	BEAM	E	10S			3 10.50	2 9.75					10 7	10 5	21
6	4 U102	BEAM	E	13S		2 9.75	3 10.50	2 9.75	3 10.50				14 2	13 11	56
3	5 U103	BEAM	E	10S			6 10.00	2 9.75					16 6	16 3	51
8	4 U104	BEAM	E	13S		2 9.75	3 7.00	2 9.75	3 7.00				13 7	13 4	71
3	5 U105	BEAM	E	10S			6 6.25	2 9.75					15 11	15 8	49
8	4 U106	BEAM	E	13S		2 9.75	3 3.25	2 9.75	3 3.25				12 11	12 8	68
2	5 U107	BEAM	E	10S			6 2.75	2 9.75					15 4	15 1	31
8	4 U108	BEAM	E	13S		2 9.75	2 11.75	2 9.75	2 11.75				12 4	12 1	65
3	5 U109	BEAM	E	10S			5 11.00	2 9.75					14 8	14 5	45
6	4 U110	BEAM	E	13S		2 9.75	2 8.00	2 9.75	2 8.00				11 9	11 6	46
1	4 U111	BEAM	E	10S			2 8.00	2 9.75					8 2	8 0	5
19	6 U112	DIAPHRAGM	E	19S		3 6.25	2 9.75						6 4	6 2	176
19	5 U113	DIAPHRAGM	E	10S			4 2.00	2 3.75					10 8	10 5	206
51	6 U114	DIAPHRAGM	E	19S		3 1.75	4 7.25						7 9	7 7	581
38	5 U115	DIAPHRAGM	E	19		2 0.00	15.00						3 3	3 2	126
2	5 V100	BEAM	E	20		6 10.00							6 10	6 10	14
2	5 V101	BEAM	E	20		6 7.00							6 7	6 7	14
4	5 V102	BEAM	E	20		6 3.00							6 3	6 3	26
6	5 V103	BEAM	E	20		5 11.00							5 11	5 11	37
25	6 V104	DIAPHRAGM	E	20		3 6.00							3 6	3 6	131
2	6 V105	WING	E	20		9 5.00							9 5	9 5	28
22	6 V106	WING	E	20	2	8 11.00							8 11	8 11	
		INCREMENT =				9 5.00							9 5	9 5	303
		0.500 INCH													
2	6 V107	WING	E	20		8 1.00							8 1	8 1	24
22	6 V108	WING	E	20	2	7 7.00							7 7	7 7	
		INCREMENT =				8 1.00							8 1	8 1	259
		0.500 INCH													
48	6 V109	PILE	E	17		7 3.00							7 11	7 11	571
		END BENT 2													
10	6 F200	WING BRACE	E	23S		14.00	3 8.00	2 3.00	20.75	17.25	10.75	8.75	7 1	7 0	105
4	6 F201	DIAPHRAGM	E	23S		2 8.75	4 11.25				2 8.25	6.00	7 8	7 7	46
12	6 F202	WING BRACE	E	23S		2 3.00	5 4.25	14.00	8.75	10.75	17.00	20.75	8 10	8 9	158
4	6 F203	DIAPHRAGM	E	21S			2 8.75	4 5.00			2 8.25	6.00	7 2	7 0	42
4	6 H200	BEAM	E	20		39 1.00							39 1	39 1	235
12	9 H201	BEAM	E	20		39 1.00							39 1	39 1	1595
8	6 H202	BEAM	E	20		13 0.00							13 0	13 0	156
4	6 H203	BEAM	E	20		13 1.00							13 1	13 1	79
4	6 H204	BEAM	E	20		4 9.00							4 9	4 9	29
4	6 H205	DIAPHRAGM	E	20		39 2.00							39 2	39 2	235
4	6 H206	DIAPHRAGM	E	20		4 9.00							4 9	4 9	29

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
12	6 H207	DIAPHRAGM	E	20		7 2.00							7 2	7 2	129
5	9 H208	BEAM	E	18		5 8.00							8 2	8 2	139
3	6 H209	DIAPHRAGM	E	20		2 9.00							2 9	2 9	12
3	6 H210	DIAPHRAGM	E	20		23.00								23	9
1	6 H211	DIAPHRAGM	E	20		17.00								17	2
1	6 H212	DIAPHRAGM	E	20		9.00								9	1
5	5 H213	STRAND TIE	E	20		5 9.00							5 9	5 9	30
16	8 H214	WING	E	19		16.00	13 5.50						14 10	14 7	623
44	6 H215	WING	E	19		12.00	12 7.50						13 8	13 6	892
60	4 P200	PILE	E	34S		4 2.25	2.00				16.00		5 1	5 0	200
4	5 U200	BEAM	E	10S			5 11.00	2 9.75					14 8	14 5	60
1	4 U201	BEAM	E	10S			2 8.00	2 9.75					8 2	8 0	5
6	4 U202	BEAM	E	13S		2 9.75	2 8.00	2 9.75	2 8.00				11 9	11 6	46
8	4 U203	BEAM	E	13S		2 9.75	3 0.25	2 9.75	3 0.25				12 5	12 2	65
2	5 U204	BEAM	E	10S			6 3.50	2 9.75					15 5	15 2	32
8	4 U205	BEAM	E	13S		2 9.75	3 4.50	2 9.75	3 4.50				13 2	12 11	69
2	5 U206	BEAM	E	10S			6 7.50	2 9.75					16 1	15 10	33
6	4 U207	BEAM	E	13S		2 9.75	3 8.75	2 9.75	3 8.75				13 10	13 7	54
1	4 U208	BEAM	E	10S			3 8.75	2 9.75					10 4	10 1	7
3	5 U209	BEAM	E	10S			6 11.75	2 9.75					16 10	16 7	52
5	4 U210	BEAM	E	13S		2 9.75	4 0.75	2 9.75	4 0.75				14 6	14 3	48
3	4 U211	BEAM	E	10S			4 1.00	2 9.75					11 0	10 10	22
1	5 U212	BEAM	E	10S			7 4.00	2 9.75					17 6	17 3	18
19	6 U213	DIAPHRAGM	E	19S		3 5.75	2 9.75						6 4	6 2	176
19	5 U214	DIAPHRAGM	E	10S			4 2.75	2 3.75					10 10	10 7	210
49	6 U215	DIAPHRAGM	E	19S		3 1.75	4 7.50						7 10	7 8	564
37	5 U216	DIAPHRAGM	E	19		2 0.00	15.00						3 3	3 2	122
4	5 V200	BEAM	E	20		5 11.00							5 11	5 11	25
4	5 V201	BEAM	E	20		6 4.00							6 4	6 4	26
4	5 V202	BEAM	E	20		6 8.00							6 8	6 8	28
2	5 V203	BEAM	E	20		7 0.00							7 0	7 0	15
25	6 V204	DIAPHRAGM	E	20		3 5.00							3 5	3 5	128
2	6 V205	WING	E	20		8 4.00							8 4	8 4	25
22	6 V206	WING	E	20		8 10.00							8 10	8 10	
		INCREMENT =				8 4.00							8 4	8 4	284
		0.500 INCH													
2	6 V207	WING	E	20		6 10.00							6 10	6 10	21
22	6 V208	WING	E	20		7 4.00							7 4	7 4	
		INCREMENT =				6 10.00							6 10	6 10	234
		0.500 INCH													
48	6 V209	PILE	E	17		7 3.00							7 11	7 11	571
		SLAB													
173	6 S1	SLAB	E	20		38 4.00							38 4	38 4	9961
21	6 S2	SLAB	E	20	1	2 0.00							2 0	2 0	
		INCREMENT =				36 8.00							36 8	36 8	610
		1.750 INCH													
15	6 S3	SLAB	E	20	1	2 7.00							2 7	2 7	
		INCREMENT =				38 4.00							38 4	38 4	461
		2.500 INCH													
74	5 S4	SLAB	E	20		48 10.00							48 10	48 10	3769
129	5 S5	SLAB	E	20		38 4.00							38 4	38 4	5158
16	5 S6	SLAB	E	20	1	3 4.00							3 4	3 4	
		INCREMENT =				38 1.00							38 1	38 1	346
		2.375 INCH													
11	5 S7	SLAB	E	20	1	3 10.00							3 10	3 10	
		INCREMENT =				38 2.00							38 2	38 2	241
		3.375 INCH													
60	4 S8	HAUNCH	E	10		1 0.00	4.75	3 9.50	1 0.00				6 7	6 2	247
20	4 S9	HAUNCH	E	20		5 3.00							5 3	5 3	70

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 24.

Detailed Sep. 2026
Checked Sep. 2026

Reinforcing steel (ASTM A706 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

BILL OF REINFORCING STEEL

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 25
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

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

DESCRIPTION | DATE | REV.

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		TYPE D BARRIER													
90	5 R1	BARRIER	E	26		3 3.75	5.50	2.25	3 1.25	5.50	3 0.75	6.75	7 1	6 10	641
90	5 R2	BARRIER	E	19S		21.25	9.50						2 7	2 6	235
180	5 R3	BARRIER	E	27S			9.50	15.25	5.00	12.00	15.00	3.00	3 6	3 4	626
40	5 R4	BARRIER	E	20		46 4.00							46 4	46 4	1933
90	5 R5	BARRIER	E	26		3 2.25	5.50	2.25	3 1.25	5.50	3 0.75	6.75	6 11	6 8	626
90	5 R6	BARRIER	E	19S		19.75	9.50						2 5	2 4	219
10	5 K1	BARRIER	E	27S		3 5.75	9.25	5.25	2 11.75		5.25	1.00	7 8	7 6	78
36	5 K2	BARRIER	E	27S		3 5.75	9.25	14.50	2 2.75		14.25	2.75	7 9	7 6	282
2	5 K3	BARRIER	E	27S		23.25	9.25	14.50	7.75	12.00	14.25	2.75	5 7	5 3	11
10	5 K4	BARRIER	E	19S	2	2 5.00	10.00						3 3	3 2	
		INCREMENT =				2 7.00	10.00						3 5	3 4	34
		0.500 INCH													
20	5 K5	BARRIER	E	38S	4			18.50	9.50	8.25	18.00	4.00	3 0	2 11	
		INCREMENT =						20.50	9.50	8.25	20.00	4.50	3 2	3 1	63
		0.500 INCH													
6	5 K6	BARRIER	E	19S		2 7.50	10.00						3 6	3 4	21
12	5 K7	BARRIER	E	21S			2 6.75	10.00			2 6.00	6.25	3 5	3 4	42
18	5 K8	BARRIER	E	19S	2	2 9.25	10.00						3 8	3 6	
		INCREMENT =				3 3.25	10.00						4 2	4 0	70
		0.750 INCH													
36	5 K9	BARRIER	E	21S	4		2 8.50	10.00			2 7.75	6.75	3 7	3 6	
		INCREMENT =					3 2.50	10.00			3 1.75	7.75	4 1	4 0	141
		0.750 INCH													
14	5 K10	BARRIER	E	19S		3 3.75	10.00						4 2	4 1	60
29	5 K11	BARRIER	E	21S			3 3.00	10.00			3 2.25	7.75	4 1	4 0	121
12	5 K12	BARRIER	E	20		13 3.00							13 3	13 3	166
6	5 K13	BARRIER	E	20	2	12 6.00							12 6	12 6	
		INCREMENT =				6 6.00							6 6	6 6	59
		36.000 INCH													
12	5 K14	BARRIER	E	20		13 10.00							13 10	13 10	173
6	5 K15	BARRIER	E	20	2	13 1.00							13 1	13 1	
		INCREMENT =				7 1.00							7 1	7 1	63
		36.000 INCH													
10	5 K16	BARRIER	E	27S		3 4.25	9.25	5.25	2 11.75		5.25	1.00	7 6	7 4	76
37	5 K17	BARRIER	E	27S		3 4.25	9.25	14.50	2 2.75		14.25	2.75	7 7	7 4	283
2	5 K18	BARRIER	E	27S		21.75	9.25	14.50	7.75	12.00	14.25	2.75	5 5	5 1	11
10	5 K19	BARRIER	E	19S	2	2 3.50	10.00						3 1	3 0	
		INCREMENT =				2 5.50	10.00						3 3	3 2	32
		0.500 INCH													
6	5 K20	BARRIER	E	19S		2 6.00	10.00						3 4	3 2	20
18	5 K21	BARRIER	E	19S	2	2 7.75	10.00						3 6	3 4	
		INCREMENT =				3 1.75	10.00						4 0	3 10	67
		0.750 INCH													
15	5 K22	BARRIER	E	19S		3 2.25	10.00						4 0	3 11	61
12	5 K23	BARRIER	E	20		14 1.00							14 1	14 1	176
6	5 K24	BARRIER	E	20	2	13 4.00							13 4	13 4	
		INCREMENT =				7 4.00							7 4	7 4	65
		36.000 INCH													
12	5 K25	BARRIER	E	20		13 4.00							13 4	13 4	167
6	5 K26	BARRIER	E	20	2	12 7.00							12 7	12 7	
		INCREMENT =				6 7.00							6 7	6 7	60
		36.000 INCH													
		SLIP FORM OPTION													
10	5 C1	BARRIER	E	20		12 0.00							12 0	12 0	125
6	5 C2	BARRIER	E	20		10 6.00							10 6	10 6	66

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
					1										

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 24.

Detailed Sep. 2026
Checked Sep. 2026

Reinforcing steel (ASTM A706 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.
SH = Required shape, see bending diagrams.
V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

BILL OF REINFORCING STEEL

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED
10/5/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	25

COUNTY
STODDARD

JOB NO.
J9S3726

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9224

DESCRIPTION	DATE

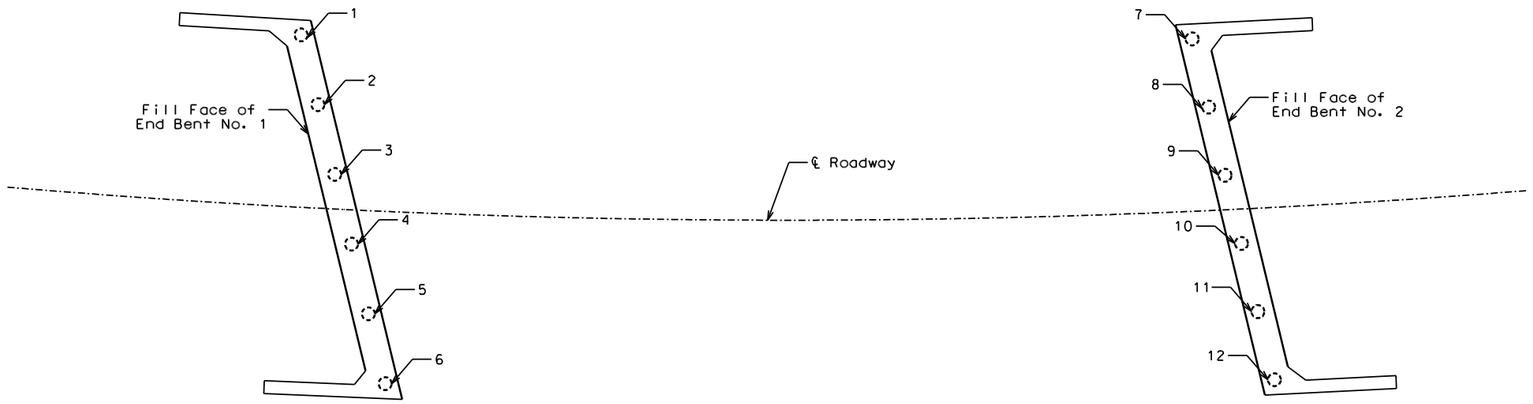
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.



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					
6					
					End Bent No. 2
7					
8					
9					
10					
11					
12					

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.

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 27
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE

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

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9224_27_J9S3726_PILEDATA.dgn 2:21:20 PM 10/5/2026

Missouri Department of Transportation
Construction and Materials

BORING NO. B-101
Page 1 of 3

Job No.: J9S3726 2021-1119.10 **County:** Stoddard **Route:** MO 114 over Dexter Creek
Design: A9224 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 1 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 879+63.63 **Northing:** 348259.4735 **Date of Work:** 12/13/22
Offset: 10.0 ft. RT **Easting:** 981850.4759 **Depth to Water:** 28.0
Elevation: 337.3 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-0.8' 10" CONCRETE 0.8-1.1' 3" ASPHALTIC CONCRETE 1.1-22.0' Fill: Light gray, lean clay, medium stiff, moist, trace brown	335						
5				X	100	3-4-3 (11)		PP = 2.00 tsf	MC = 19.2%
			330						
10		8.5' Becomes gray, trace roots, trace fine- to medium- grained sand		X	89	3-4-4 (12)		PP = 1.50 tsf	MC = 20.9%
			325						
15		13.5' Becomes brown		X	100	3-4-5 (14)		PP = 3.50 tsf	MC = 22.7%
			320						
20				■	100		Qu Test Results UCS = 2.40 ksf MC = 19.1% γ_{most} = 124.0 pcf		LL = 22 PL = 18
		22.0-47.0' (CL) Gray, LEAN CLAY, medium stiff to stiff, wet, some fine- to medium- grained sand	315						
25				X	100	4-5-4 (14)	Density Test Results MC = 25.5% γ_{most} = 138.6 pcf	PP = 1.50 tsf	
			310						
30		28.5' Becomes brown and gray, no sand 30.0' Switched to mud rotary		X	100	3-4-5 (14)		PP = 2.00 tsf	LL = 32 PL = 23 MC = 24.9%
			305						
35		33.5' Becomes gray		X	100	2-3-2 (8)		PP <0.25 tsf	MC = 23.2%

N_{60} = (Em/80)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE - MODOT 20150728.GDT - 2/27/23 12:02 - N:\LABORATORY\ACTIVE GINT PROJECTS\2021-1119.10 MO 114 OVER DEXTER CREEK.GPJ

Missouri Department of Transportation
Construction and Materials

BORING NO. B-101
Page 2 of 3

Job No.: J9S3726 2021-1119.10 **County:** Stoddard **Route:** MO 114 over Dexter Creek
Design: A9224 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 1 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 879+63.63 **Northing:** 348259.4735 **Date of Work:** 12/13/22
Offset: 10.0 ft. RT **Easting:** 981850.4759 **Depth to Water:** 28.0
Elevation: 337.3 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
35		22.0-47.0' (CL) Gray, LEAN CLAY, medium stiff to stiff, wet, some fine- to medium- grained sand *(continued)*	300						
40		38.5' Becomes brown, trace fine- to medium-grained sand		X	78	2-2-4 (9)	Density Test Results MC = 26.2% γ_{most} = 112.6 pcf	PP = 3.50 tsf	LL = 32 PL = 22
			295						
45				X	61	3-4-8 (19)		PP = 0.50 tsf	MC = 26.4%
		47.0-49.0' (SP) Brown, POORLY GRADED SAND, loose, wet, sand is fine- to coarse-grained, trace lean clay	290						
50		49.0-55.0' (CL) Dark gray, SANDY LEAN CLAY, medium stiff, wet, sand is fine- to medium-grained		X	44	4-5-4 (14)			MC = 15.0%
			285						
55		55.0-59.5' (SC) Gray, CLAYEY SAND, medium dense, wet, sand is fine- to coarse- grained, clay is lean							
			280						
60		59.5-65.0' (CL) Gray, SANDY LEAN CLAY, stiff, wet, sand is fine- to medium- grained		X	56	7-8-9 (27)			Sieve Analysis Sieve # % Passing 3/8" 98.9 #4 98.6 #10 98.3 #20 94.6 #40 53.7 #60 36.9 #100 32.3 #140 31.0 #200 30.3
			275						
65		65.0-75.0' (SP) Gray, POORLY GRADED SAND, medium dense, wet, sand is fine- to coarse- grained							
			270						
70				X	56	10-12-15 (42)			

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

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BORING DATA

Note: For locations of borings, see Sheet No. 1.
Note: This drawing is not to scale. Follow dimensions.

Detailed Sep. 2023
Checked Oct. 2023

Sheet No. 28 of 30

B_A9224_28_J9S3726_BORE1.dgn 2:21:30 PM 10/5/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 28
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

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

Missouri Department of Transportation
Construction and Materials

BORING NO. B-101
Page 3 of 3

Job No.: J9S3726 2021-1119.10 **County:** Stoddard **Route:** MO 114 over Dexter Creek
Design: A9224 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 1 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 879+63.63 **Northing:** 348259.4735 **Date of Work:** 12/13/22
Offset: 10.0 ft. RT **Easting:** 981850.4759 **Depth to Water:** 28.0
Elevation: 337.3 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
70		65.0-75.0' (SP) Gray, POORLY GRADED SAND, medium dense, wet, sand is fine- to coarse- grained *(continued)*	265						
75		73.5' Becomes fine- to medium- grained		X	72	8-10-10 (31)			Sieve Analysis Sieve # % Passing 3/8" 98.5 #4 98.0 #10 97.6 #20 92.5 #40 36.4 #60 13.3 #100 7.1 #140 5.3 #200 4.3
		Bottom of borehole at 75.0 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

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Missouri Department of Transportation
Construction and Materials

BORING NO. B-201
Page 1 of 3

Job No.: J9S3726 2021-1119.10 **County:** Stoddard **Route:** MO 114 over Dexter Creek
Design: A9224 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 2 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 881+37.94 **Northing:** 348202.2469 **Date of Work:** 12/12/22
Offset: 10.0 ft. LT **Easting:** 982109.0768 **Depth to Water:** 40.0
Elevation: 322.7 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-0.8' 10" CONCRETE							
		0.8-12.0' Fill: Brown, lean clay, medium stiff to stiff, moist, trace gray, trace fine- to medium-grained sand	320						
5			315	X	50	3-3-4 (11)		PP = 1.00 tsf	MC = 18.6%
10				X	72	3-6-5 (17)		PP = 0.50 tsf	MC = 17.2%
		12.0-23.5' (ML) Gray and brown, SILT, medium stiff to stiff, moist	310						
15				X	72	3-5-5 (16)	Density Test Results MC = 21.9% γ_{moist} = 139.6 pcf	PP = 1.50 tsf	LL = 26 PL = 22
		18.5' Some fine- to coarse- grained sand	305						
20				X	72	3-3-4 (11)		PP = 3.50 tsf	MC = 20.2%
		23.5-34.5' (CL-ML) Gray and brown, SILTY LEAN CLAY, medium stiff to stiff, moist	300						
25				X	83	3-4-5 (14)	Density Test Results MC = 24.7% γ_{moist} = 121.6 pcf	PP = 1.50 tsf	LL = 25 PL = 21
		28.5' Some fine- to mecium- grained sand	295						
30				X	83	3-4-5 (14)		PP = 0.50 tsf	MC = 15.2%
		33.5' With fine- to medium- grained sand	290						
35				X	100	2-3-9 (19)		PP = 0.50 tsf	MC = 29.7%

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE - MODOT 20150728.GDT - 2/27/23 12:02 - N:\LABORATORY\ACTIVE GINT PROJECTS\2021-1119.10 MO 114 OVER DEXTER CREEK.GPJ

BORING DATA

Note: For locations of borings, see Sheet No. 1.
Note: This drawing is not to scale. Follow dimensions.

Detailed Sep. 2023
Checked Oct. 2023

Sheet No. 29 of 30

B_A9224_29_J9S3726_BORE2.dgn 2:22:05 PM 10/5/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 29
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE | REV.

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

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

Missouri Department of Transportation
Construction and Materials

BORING NO. B-201
Page 2 of 3

Job No.: J9S3726 2021-1119.10 **County:** Stoddard **Route:** MO 114 over Dexter Creek
Design: A9224 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 2 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 881+37.94 **Northing:** 348202.2469 **Date of Work:** 12/12/22
Offset: 10.0 ft. LT **Easting:** 982109.0768 **Depth to Water:** 40.0
Elevation: 322.7 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
35		34.5-75.0' (SP) Gray, POORLY GRADED SAND, medium dense, wet, sand is fine- to coarse- grained, trace lean clay *(continued)*	285						
40		38.5' With lean clay			100	4-6-6 (19)			
		40.0' Switched to mud rotary	280						
45		43.5' Trace lean clay			61	8-10-12 (34)			Sieve Analysis Sieve # % Passing 3/8" 99.4 #4 92.9 #10 81.3 #20 64.2 #40 24.9 #60 9.9 #100 7.1 #140 5.8 #200 4.9
50			275		56	15-14-15 (45)			
55			270						
60			265		56	7-6-9 (23)			Sieve Analysis Sieve # % Passing #4 100.0 #10 100.0 #20 99.5 #40 52.1 #60 8.9 #100 4.0 #140 3.2 #200 2.7
65			260						
70		68.5' Becomes fine- to medium- grained	255		22	5-7-8 (23)			

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

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Missouri Department of Transportation
Construction and Materials

BORING NO. B-201
Page 3 of 3

Job No.: J9S3726 2021-1119.10 **County:** Stoddard **Route:** MO 114 over Dexter Creek
Design: A9224 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 2 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 881+37.94 **Northing:** 348202.2469 **Date of Work:** 12/12/22
Offset: 10.0 ft. LT **Easting:** 982109.0768 **Depth to Water:** 40.0
Elevation: 322.7 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
70		34.5-75.0' (SP) Gray, POORLY GRADED SAND, medium dense, wet, sand is fine- to coarse- grained, trace lean clay *(continued)*	250						
75		73.5' Becomes fine- to coarse- grained			50	7-7-6 (20)			
		Bottom of borehole at 75.0 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

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BORING DATA

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

Detailed Sep. 2023
Checked Oct. 2023

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

Sheet No. **30** of 30

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
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DATE PREPARED 10/5/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 30
COUNTY STODDARD
JOB NO. J9S3726
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9224

DESCRIPTION | DATE | REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

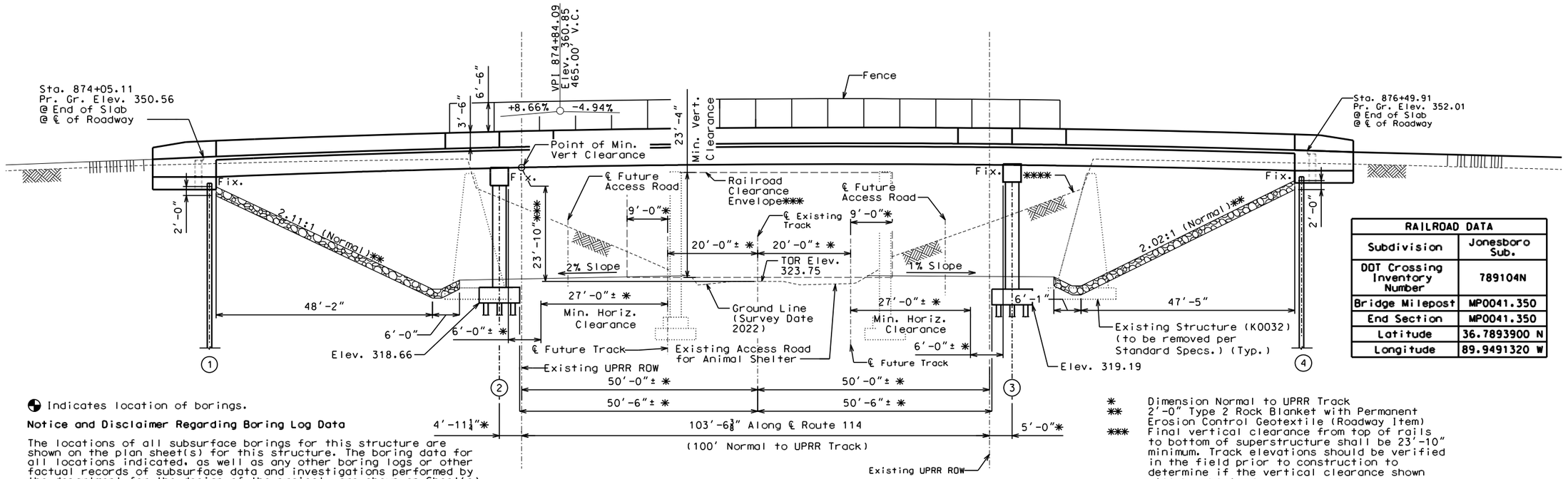
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SEC/SUR 23 TWP 25N RGE 10E

(64.2'-113.8'-64.2') PRESTRESSED CONCRETE NU-GIRDER SPANS



GENERAL ELEVATION

RAILROAD DATA	
Subdivision	Jonesboro Sub.
DOT Crossing Inventory Number	789104N
Bridge Milepost	MP0041.350
End Section	MP0041.350
Latitude	36.7893900 N
Longitude	89.9491320 W

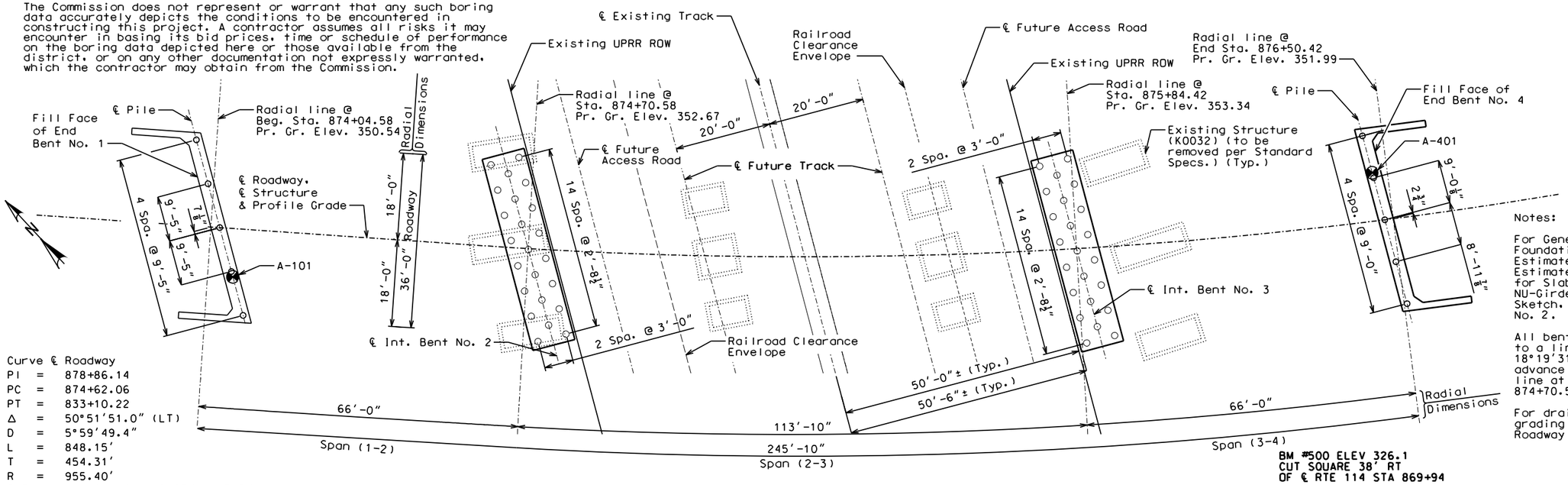
* Dimension Normal to UPRR Track
** 2'-0" Type 2 Rock Blanket with Permanent Erosion Control Geotextile (Roadway Item)
*** Final vertical clearance from top of rails to bottom of superstructure shall be 23'-10" minimum. Track elevations should be verified in the field prior to construction to determine if the vertical clearance shown will be obtained.
**** Existing roadway fill under the ends of the bridge shall be removed as shown. Removal of existing roadway fill will be considered completely covered by the contract unit price for roadway excavation.

⊕ Indicates location of borings.

Notice and Disclaimer Regarding Boring Log Data

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. 46 thru 48 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.



Curve ℄ Roadway
PI = 878+86.14
PC = 874+62.06
PT = 833+10.22
Δ = 50°51'51.0" (LT)
D = 5°59'49.4"
L = 848.15'
T = 454.31'
R = 955.40'
S.E = Varying from 0.05% to 5.2%

Notes:

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

All bents are parallel to a line skewed 18°19'31" right advance from a radial line at station 874+70.58.

For drainage and grading details, see Roadway Plans.

BM #500 ELEV 326.1
CUT SQUARE 38' RT
OF ℄ RTE 114 STA 869+94

PLAN

BRIDGE: ROUTE 114 OVER UPRR

ROUTE 114 FROM ROUTE 25 TO ROUTE 153
ABOUT 0.1 MILE SOUTHEAST OF ROUTE 25
BEGINNING STA. 874+04.58

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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ST. LOUIS, MISSOURI 63103-3002

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REV.

Estimated Quantities

Item		Substr.	Superstr.	Total
Class 1 Excavation	cu. yard	275		275
Removal of Existing Bridge (K0032)	lump sum			1
Bridge Approach Slab (Minor)	sq. yard		161	161
(78 in.) Chain-Link Railroad Fence (Structures)	linear foot		273	273
Galvanized Cast-in-Place Concrete Piles (16 in.)	linear foot	530		530
Galvanized Cast-in-Place Concrete Piles (20 in.)	linear foot	2070		2070
Dynamic Pile Testing	each	4		4
Class B Concrete (Substructure)	cu. yard	222.7		222.7
Type D Barrier	linear foot		538	538
Slab on Concrete NU-Girder	sq. yard		1052	1052
NU43, Prestressed Concrete NU-Girder	linear foot		1207	1207
Reinforcing Steel (Bridges)	pound	42150		42150
Vertical Drain at End Bents	each			2
Laminated Neoprene Bearing Pad	each		10	10
Laminated Neoprene Bearing Pad (Tapered)	each		20	20

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

All reinforcement in the end bents and all reinforcement in cast-in-place piles at end bents is included in the Estimated Quantities for Slab on Concrete NU-Girder.

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

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

All reinforcement in cast-in-place pile at intermediate bents is included in the substructure quantity tables.

Estimated Quantities for Slab on Concrete NU-Girder

Item		Total
Class B-2 Concrete	cu. yard	349
Reinforcing Steel (Epoxy Coated)	pound	83240

The table of Estimated Quantities for Slab on Concrete NU-Girder represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for stay-in-place corrugated steel forms, conventional forms, all concrete, and exoxy 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.

Foundation Data

Type	Design Data		Bent Number 1	2	3	4
Load Bearing Pile	Pile Type and Size		CECIP 16"	CECIP 20"	CECIP 20"	CECIP 16"
	Number	ea	5	23	23	5
	Approximate Length Per Each	ft	47	46	44	59
	Min. Galvanized Penetration (Elev.)	ft	322.61	Full Length	Full Length	323.77
	Min. Tip Penetration (Elev.)	ft	305.00	305.00	285.00	285.00
	Criteria for Min. Tip Penetration		Min. Embed.	Min. Embed.	Liquefaction	Liquefaction
	Pile Driving Verification Method		DT	DT	DT	DT
	Resistance Factor		0.65	0.65	0.65	0.65
	Minimum Nominal Axial Compressive Resistance	kip	343	310	305	339

CECIP = Closed Ended Cast-in-Place concrete pile
DT = Dynamic Testing

Load Bearing Pile:
Minimum Nominal Axial Compressive Resistance = $\frac{\text{Maximum Factored Loads}}{\text{Resistance Factor}}$

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

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

General Notes:

Design Specifications:

2020 AASHTO LRFD Bridge Design Specifications (9th Ed.)
2011 AASHTO Guide Specifications for LRFD Seismic Bridge Design (2nd Ed.) and 2014 Interim Revisions (Seismic Details)
Seismic Design Category = D
Design earthquake response spectral acceleration coefficient at 1.0 second period, SD1=0.86g
Acceleration Coefficient (effective peak ground acceleration coefficient) As=0.60g

Design Loading:

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

Design Unit Stresses:

Class B Concrete (Substructure)	f'c = 3.000 psi
Class B-2 Concrete (Superstructure, except Prestressed Girders and Barrier)	f'c = 4.000 psi
Class B-1 Concrete (Barrier)	f'c = 4.000 psi
Reinforcing Steel (ASTM A706 Grade 60)	fy = 60.000 psi
Welded or Seamless steel shell (pipe) for CIP Pile (ASTM A252 Modified Grade 3)	fy = 50.000 psi

For prestressed girder stresses, see Sheets No. 22 thru 27.

Neoprene Pads:

Neoprene Bearing Pads shall be 60 durometer and shall be in accordance with Sec 716.

Joint Filler:

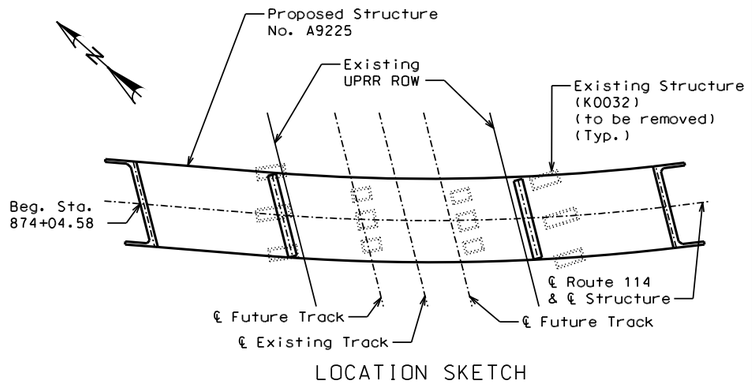
All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:

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

Traffic Handling:

Structure to be closed during construction. Traffic will be maintained on the other routes during construction. See roadway plans for traffic control. See Sheet No. 3 for railroad requirements.



LOCATION SKETCH

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 2
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

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

MODJESKI-MASTERS
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RAILROAD CONSTRUCTION NOTES - GENERAL:

1. Contractors shall notify the Missouri One Call System and UPRR Fiber Optics Hotline WWW.UP.COM/CBUD 48 hours prior to any excavation. The appropriate contact numbers shall be kept at the job site. UPRR Fiber Optics can be reached at 1-800-336-9193 in case of emergencies.
2. The Contractor shall comply with all Federal, State, County, and City Laws and Ordinances and Regulations of OSHA related to the safety and character of the work, equipment and labor personnel.
3. Contractor's superintendent in charge will verify the location of underground and overhead utilities before beginning construction.
4. Contractor shall protect in place (by any means necessary) all existing utilities to remain unless otherwise specified herein. Contractor shall be responsible for the complete repair, at his expense, for any damage to existing utilities, structures, or other site features, as a result of his work.
5. All existing underground utilities that are not to be re-used shall be abandoned in place. All existing pipelines to be abandoned in place shall be cement slurry filled and capped at least 3'-0" below top of proposed subgrade.
6. Field verify all dimensions, stations, and elevations prior to the start of construction. All changes to the design requirements shall be subject to the approval of the engineer.
7. It shall be the contractor's responsibility to divert the flow of water during construction in order to keep the construction area and Railroad right-of-way free of water.
8. Any existing conditions found to be a variance with these drawings must be immediately reported to the Engineer.
9. Contractor shall maintain and clean to the satisfaction of the Engineer, all access and service roads used during construction.
10. Contractor shall perform all construction in such a manner as to protect adjacent existing buildings and other site elements which are to remain in service.
11. Contractor shall provide As-built Drawings for all improvements.
12. No field changes will be permitted without direct written authorization from the Commission or its representative.
13. The contractor is responsible for preparing a Stormwater Pollution Prevention Plan (SWPPP) to comply with State regulations. General specifications and typical erosion control details are included in the plan set.
14. Right-of-way lines shown on the plans were taken from existing right-of-way information and are approximate.
15. Contractor shall maintain at least one access to all affected business. If necessary, multiphase construction shall be utilized.
16. The existing and proposed bridges cross the UPRR. During demolition and construction, contractor coordination with the Railroad will be required for right-of-entry, flagging protection, and work windows. See MoDOT Specification, Section 104.12 for additional information.

RAILROAD PROJECT NOTES:

NOTICE: ALL WORK BY THE AGENCY OR THEIR CONTRACTOR MUST BE PERFORMED WITHOUT DISRUPTING RAILROAD OPERATIONS AND/OR INFRASTRUCTURE. ALL MEANS AND METHODS MUST BE CONSIDERED BY THE AGENCY OR THEIR CONTRACTOR. CONSTRUCTION METHODS THAT PUT RAILROAD OPERATIONS AND INFRASTRUCTURE AT RISK WILL NOT BE ALLOWED. COST IS NOT THE DETERMINING FACTOR FOR THE RAILROAD.

1. Construction within the Railroad's right-of-way shall be designed to cause no interruption to the Railroad's operations, enabling the track(s) to remain open to traffic per the Railroad's requirements.
2. The proposed project shall not increase the quantity and/or characteristics of the flow in the Railroad's ditches and/or drainage structures.
3. The elevation of the existing top-of-rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Railroad prior to construction.
4. The Contractor must submit a proposed method of erosion and sediment control and have the method approved by the Railroad.
5. All shoring systems that impact the Railroad's operations and/or supports the Railroad's embankment shall be designed and constructed per current Railroad Guidelines for Temporary Shoring. The method of shoring permissible is dependent upon the availability of track windows, if any.
6. All demolitions within the Railroad's right-of-way and/or demolition that may impact the Railroad's tracks or operations shall be in compliance with the Railroad's Demolition Guidelines. Demolition activities shall be designed to cause no interruption to the Railroad's operation, enabling the track(s) to remain open to traffic per the Railroad's requirements. The method of demolition permissible is dependent upon the availability of track windows, if any.
7. Erection over the Railroad's right-of-way shall be designed to cause no interruption to the Railroad's operation, enabling the track(s) to remain open to traffic per the Railroad's requirements. The method of erection permissible is dependent upon the availability of track windows, if any.
8. Railroad requirements do not allow work within 50 feet of track centerline when a train passes the work site and all personnel must clear the area within 25 feet of the track centerline and secure all equipment.
9. Construction activities, including falsework/formwork, are not allowed within the "Minimum Construction Clearance Envelope" as they would otherwise disrupt Railroad operations.
10. All permanent clearances shall be verified before project closing. All discrepancies shall be brought to the attention of the Railroad.
11. Email Before You Dig. Prior to excavation, disrupting, or working on the Railroad property the contractor shall locate and protect UPRR facilities sending requests to the UPRR "Call Before You Dig" (CBUD) email. Guidance can be found at the following web address: www.up.com/CBUD.

NOTICE: All construction submittals shall be reviewed and approved by the Agency prior to the submitting to the Railroad for review and approval.

GENERAL CONSTRUCTION SEQUENCE:

1. Take care to avoid damage to the Railroad. Demolition of the existing structure shall not interrupt rail traffic and shall be coordinated with the Railroad.
2. Demolition plans shall be submitted to the Commission and the Railroad for approval prior to the start of work and shall comply with the Railroad Guidelines for Preparation of a Bridge Demolition and Removal Plan for Structures over Railroad.
3. Prepare the area for demolition of the existing structure.
4. Remove the existing superstructure. Structure removal over the Railroad will require track windows.
5. Excavate to approximate proposed ground elevations to facilitate removal of the existing substructure.
6. Remove the existing substructure. Remaining portions of existing substructure shall be removed two feet below the proposed ground line.
7. Install foundations and construct the substructure for the proposed structure.
8. Place the concrete NU girders on the completed substructure. NU girders will be simply supported for dead load but made continuous for live load.
9. Place the concrete diaphragms and deck, as well as the barriers and fencing, on the NU girders.
10. Finish the ground line to grade and install rock blanket on fill slopes.

RAILROAD DATA	
Subdivision	Jonesboro Sub.
DOT Crossing Inventory Number	789104N
Bridge Milepost	MP0041.350
End Section	MP0041.350
Latitude	36.7893900 N
Longitude	89.9491320 W

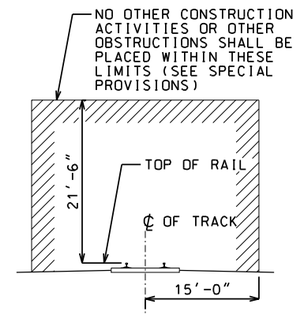


FIGURE 1: MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

(Normal to railroad)
(Not to scale)

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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 3
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DATE	DESCRIPTION
1 7/21/23	Adjusted notes and added RR Project notes

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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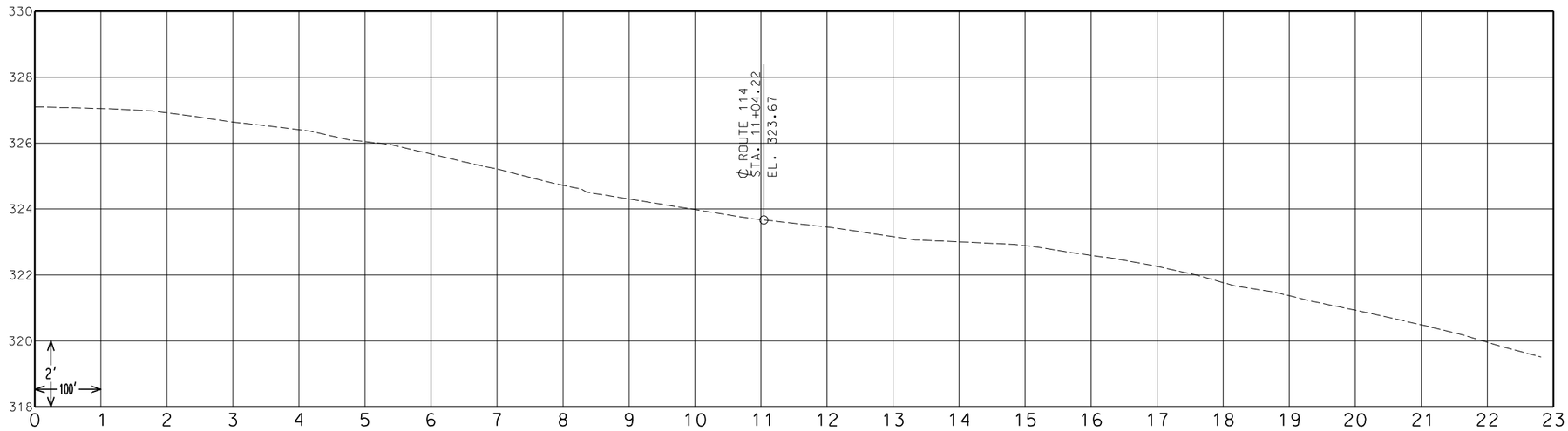
Detailed Sep. 2023
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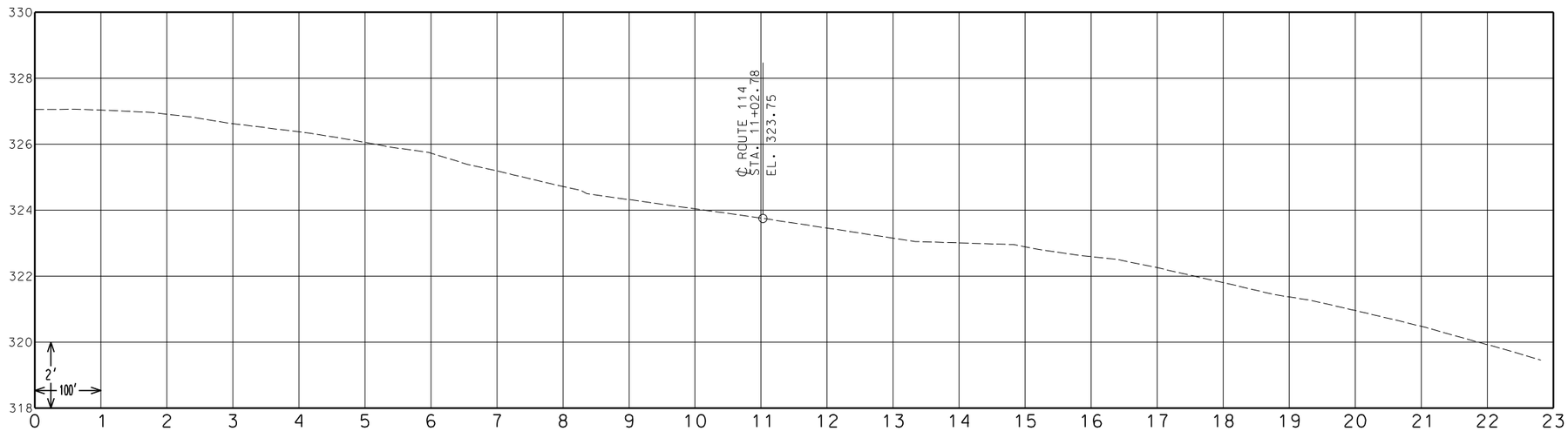
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RAILROAD DATA	
Subdivision	Jonesboro Sub.
DOT Crossing Inventory Number	789104N
Bridge Milepost	MP0041.350
End Section	MP0041.350
Latitude	36.7893900 N
Longitude	89.9491320 W

EXISTING TRACK
EASTERN TOP OF RAIL



EXISTING TRACK
WESTERN TOP OF RAIL



RAILROAD PROFILE GRADE

Detailed Sep. 2023
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DATE PREPARED
10/12/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	4

COUNTY
STODDARD

JOB NO.
J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9225

DESCRIPTION	DATE

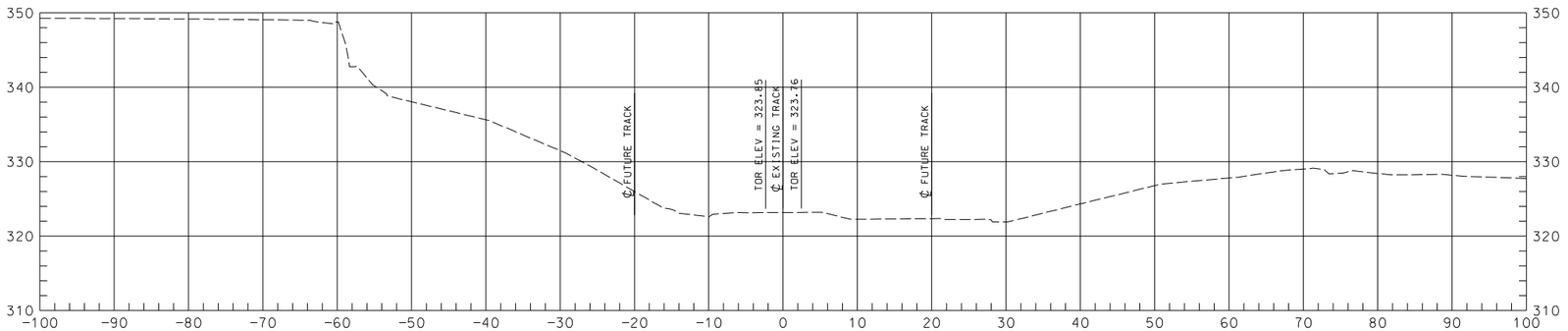
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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MODJESKI-MASTERS
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ST. LOUIS, MISSOURI 63103-3002

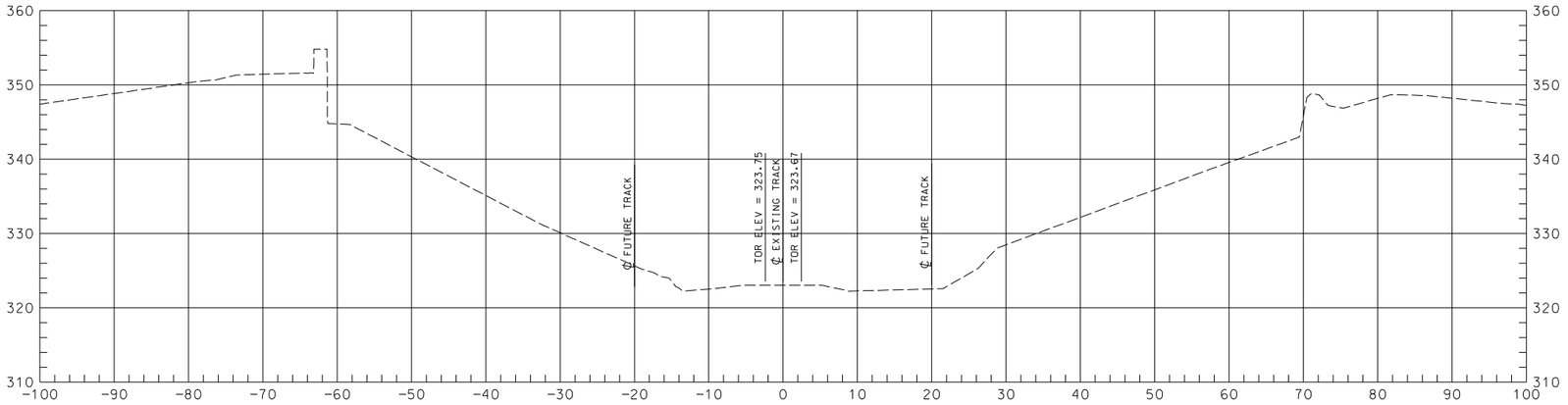
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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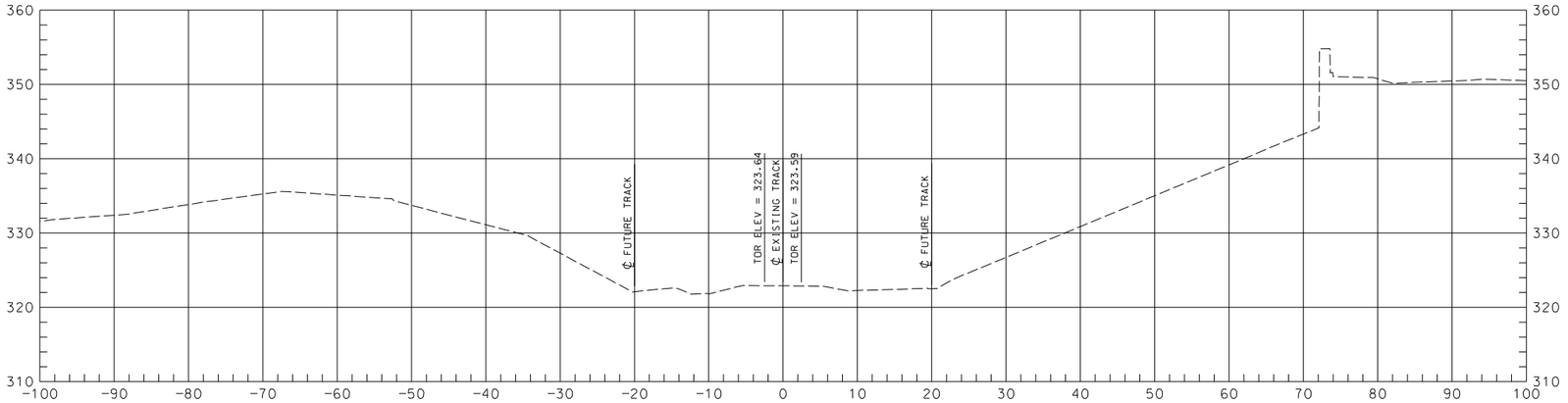
B_A9225_04_J9S3775_RRPRO.dgn 2:15:46 PM 10/8/2026



15′ NORTH OF STRUCTURE
(LOOKING NORTH)



℄ INTERSECTION WITH STRUCTURE
(LOOKING NORTH)



15′ SOUTH OF STRUCTURE
(LOOKING NORTH)

EXISTING RAILROAD CROSS SECTIONS

RAILROAD DATA	
Subdivision	Jonesboro Sub.
DOT Crossing Inventory Number	789104N
Bridge Milepost	MP0041.350
End Section	MP0041.350
Latitude	36.7893900 N
Longitude	89.9491320 W

STATE OF MISSOURI
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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 5
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

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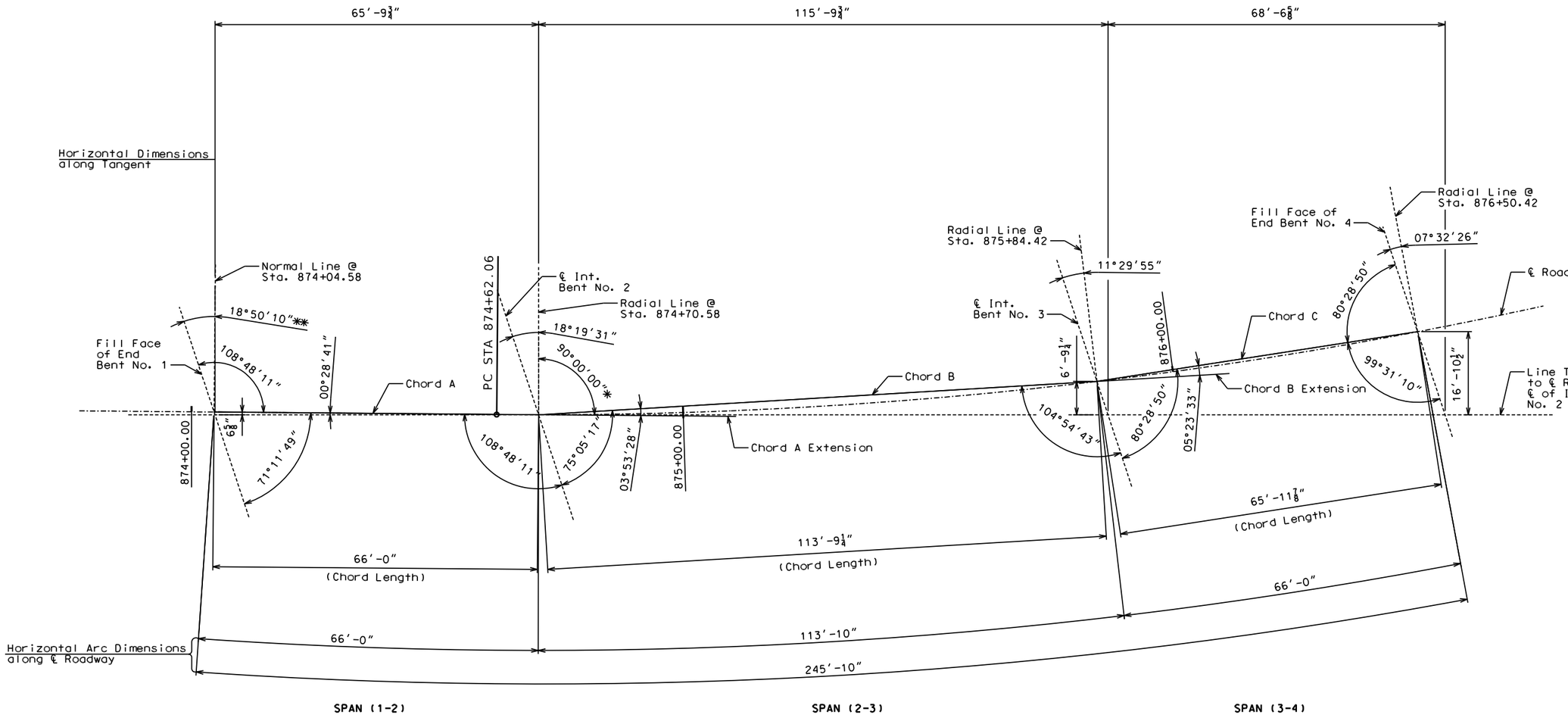
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PLAN

* Measured to line tangent to ℄ roadway
** Measured to line normal to Sta. 874+04.58

SUBSTRUCTURE LAYOUT

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ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	6

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STODDARD

JOB NO.
J9S3775

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PROJECT NO.

BRIDGE NO.
A9225

DESCRIPTION	DATE

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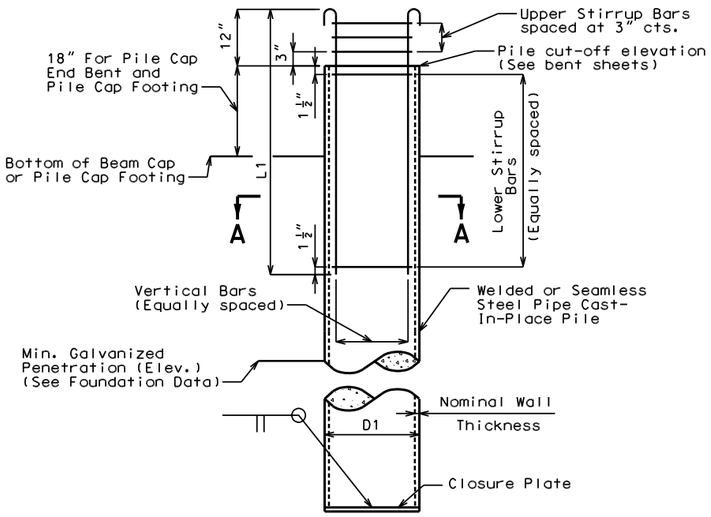
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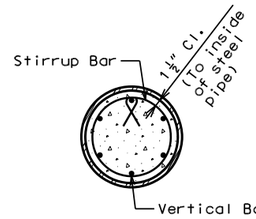
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REV.

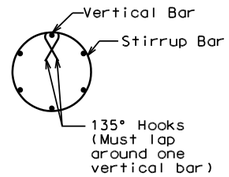
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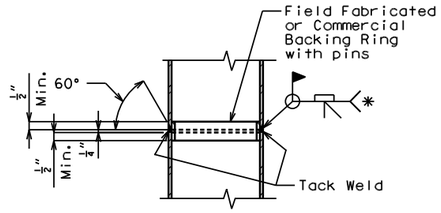
GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE WITHOUT PILE POINT REINFORCEMENT



SECTION A-A



DETAIL OF SEISMIC STIRRUP BAR



STEEL PIPE PILE SPLICE

* 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 Data				
Bent Number	1	2	3	4
D1, CECIP Pile (O.D.)	16"	20"	20"	16"
Min. Nominal Wall Thickness	1/2"	1/2"	1/2"	1/2"
Closure Plate Thickness	3/4"	3/4"	3/4"	3/4"
Pile Point Reinforcement	None	None	None	None
Vertical Bars	6-#6-V107	8-#6-V201	8-#6-V301	6-#6-V406
L1, Length of Vertical Bars	5'-3"	7'-3"	7'-3"	5'-3"
Upper Stirrup Bars	3-#4-P100	3-#4-P204	3-#4-P304	3-#4-P400
Lower Stirrup Bars	5-#4-P100	7-#4-P204	7-#4-P304	5-#4-P400

Notes:

Welded or seamless steel shell (pipe) shall be ASTM A252 Modified Grade 3 (fy = 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 for closure plate shall be ASTM A709 Grade 50.

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.

Closure plate shall not project beyond the outside diameter of the pipe pile. Satisfactory weldments may be made by beveling tip end of pipe or by use of inside backing rings. In either case, proper gaps shall be used to obtain weld penetration full thickness of pipe. Payment for furnishing and installing closure plate will be considered completely covered by the contract unit price for Galvanized Cast-In-Place Concrete Piles.

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 tunred outward, away from the pile core.

The hooks of vertical bars embedded in the pile cap footing should be oriented outward for all seismic categories.

Closure plate need not be galvanized.

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

All reinforcement for cast-in-place pile at end bents is included in the Estimated Quantities for Slab on Concrete NU-Girder. Reinforcement for the cast-in-place pile at intermediate bents is included in the substructure quantity tables.

For Foundation Data table, see Sheet No. 2.

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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 7
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

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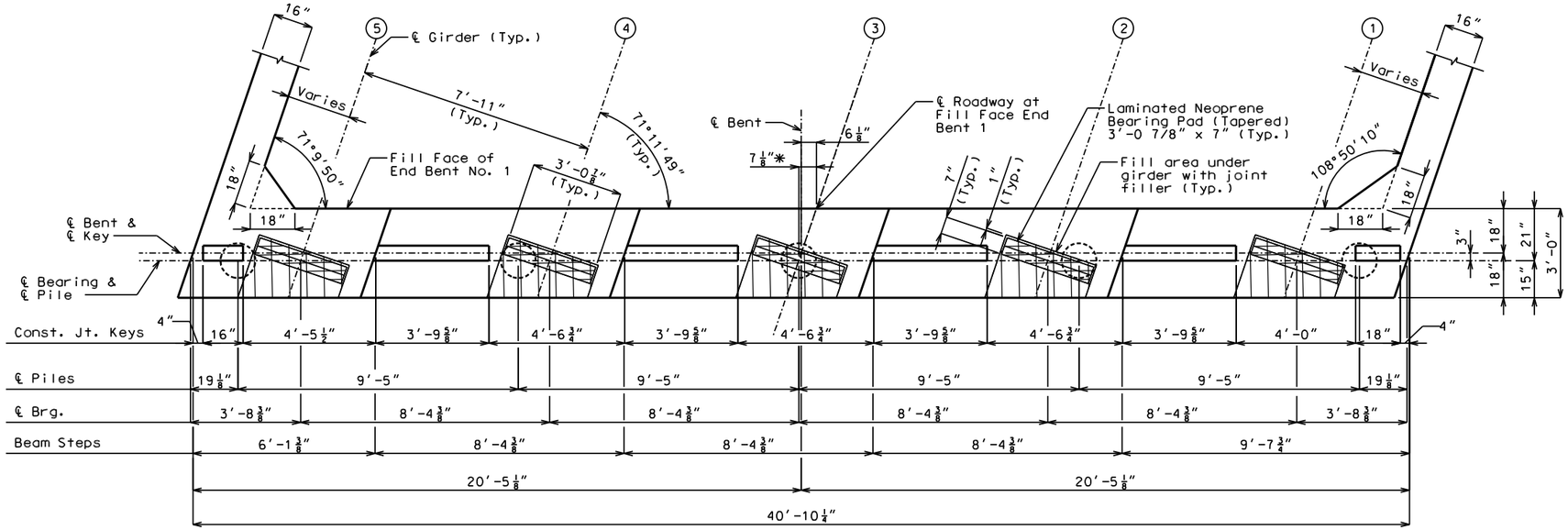
REV.

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Checked Oct. 2026

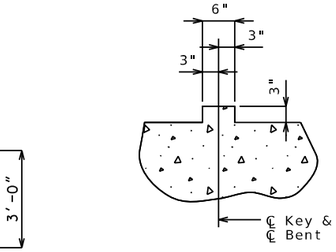
GALVANIZED CLOSED ENDED CAST-IN-PLACE (CECIP) CONCRETE PILE

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

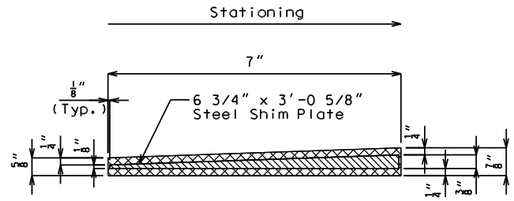
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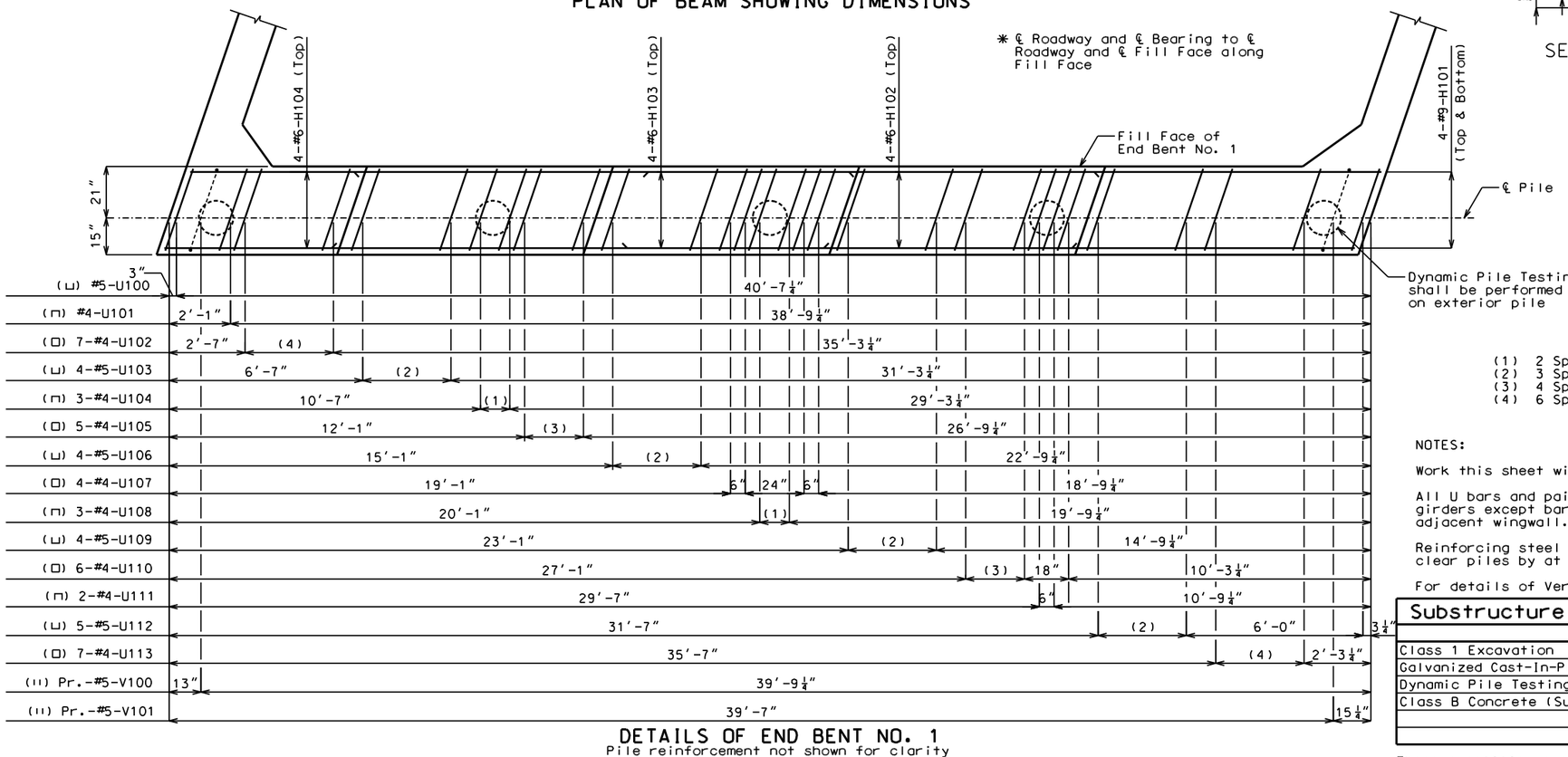
PLAN OF BEAM SHOWING DIMENSIONS



SECTION THRU KEY



SECTION THRU LAMINATED NEOPRENE BEARING PAD (TAPERED) 7" x 3'-0 7/8"



DETAILS OF END BENT NO. 1
Pile reinforcement not shown for clarity

* ℄ Roadway and ℄ Bearing to ℄ Roadway and ℄ Fill Face along Fill Face

Dynamic Pile Testing shall be performed on exterior pile

(1) 2 Spa. @ 6"
(2) 3 Spa. @ 12"
(3) 4 Spa. @ 6"
(4) 6 Spa. @ 6"

NOTES:

Work this sheet with Sheets No. 9 & 10.

All U bars and pairs of V bars shall be placed parallel to girders except bars at edge shall be placed parallel to the adjacent wingwall.

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

For details of Vertical Drain at End Bents, see Sheet No. 11.

Substructure Quantity Table for Bent No. 1

Item		Quantity
Class 1 Excavation	cu. yard	55
Galvanized Cast-In-Place Concrete Piles (16 in.)	linear foot	235
Dynamic Pile Testing	each	1
Class B Concrete (Substructure)	cu. yard	19.7

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

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9225_08_J9S3775_ENDBENT1_1.dgn 1:27:51 PM 10/6/2026

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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 8
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

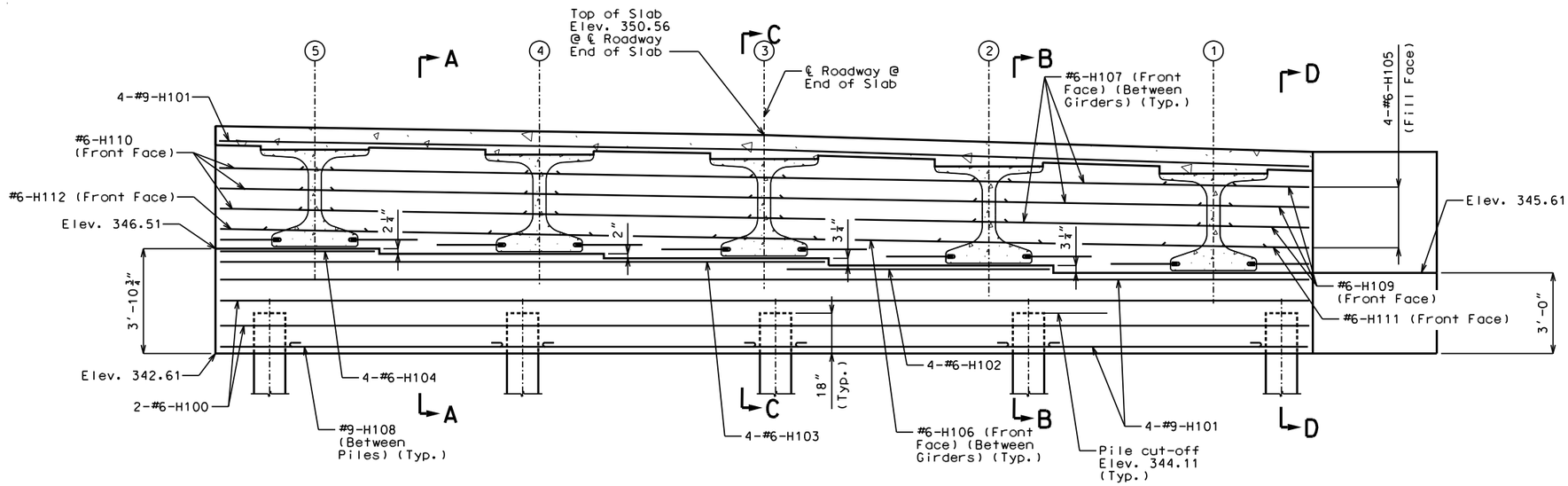
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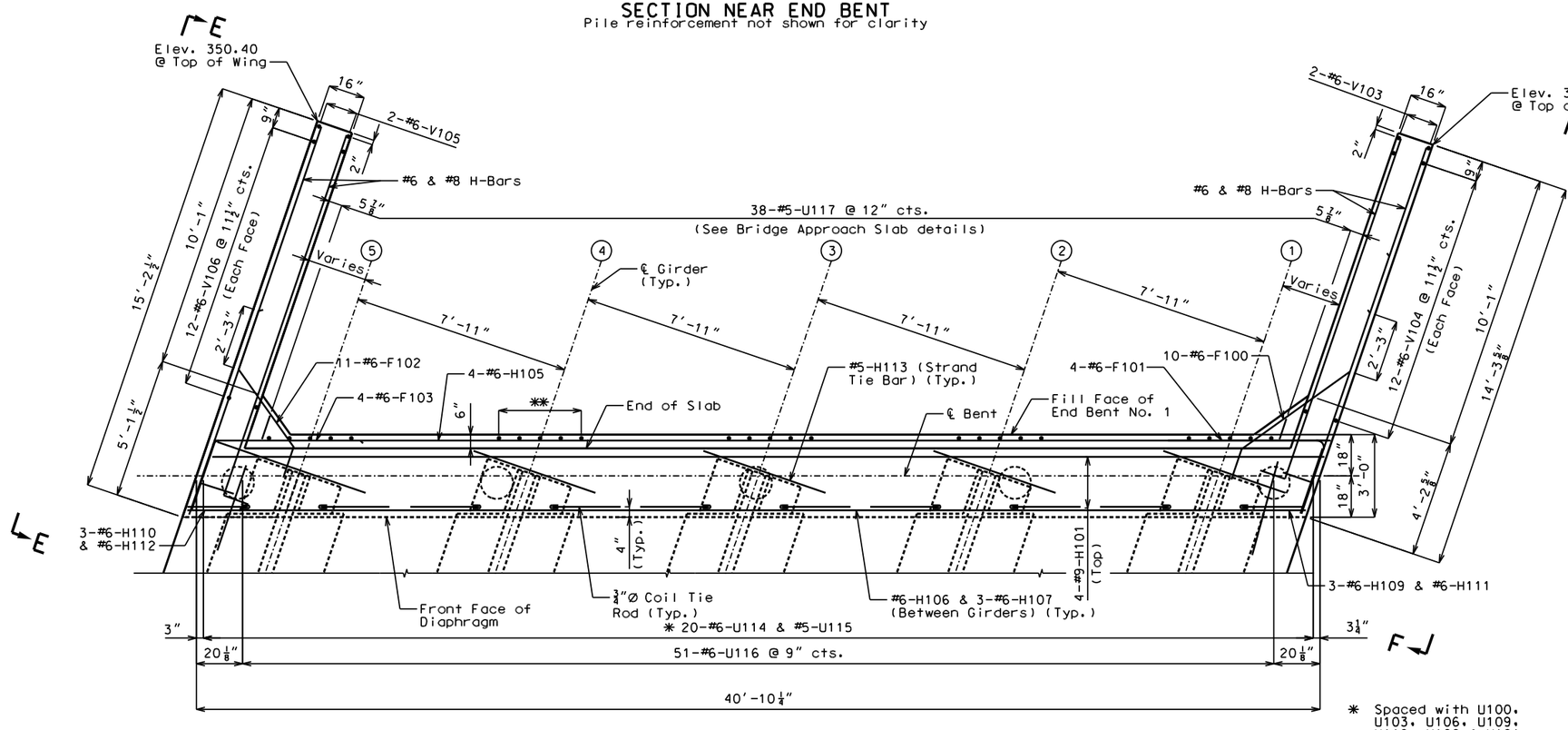
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REV.



SECTION NEAR END BENT
Pile reinforcement not shown for clarity



PART PLAN
Pile reinforcement not shown for clarity

* Spaced with U100, U103, U106, U109, U112, V100 & V101

** 5-#6-V102 @ 9" cts. (Each Girder) (Typ.)

NOTES:

Work this sheet with Sheets No. 8 & 10.

For Sections A-A, B-B, C-C & D-D and Elevations E-E & F-F, see Sheet No. 10.

The #6-F100 and #6-F102 bars shall be bent in the field to clear girders.

The U bars shall be placed parallel to girders except bars at edge shall be placed parallel to the adjacent wingwall.

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

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

For location of coil tie rods and #5-H113 (strand tie bar), see Sheets No. 22 thru 27.

For details of Vertical Drain at End Bents, see Sheet No. 11.

For details of bridge approach slab, see Sheet No. 40.

DETAILS OF END BENT NO. 1

Detailed Sep. 2023
Checked Oct. 2023

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ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 9
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

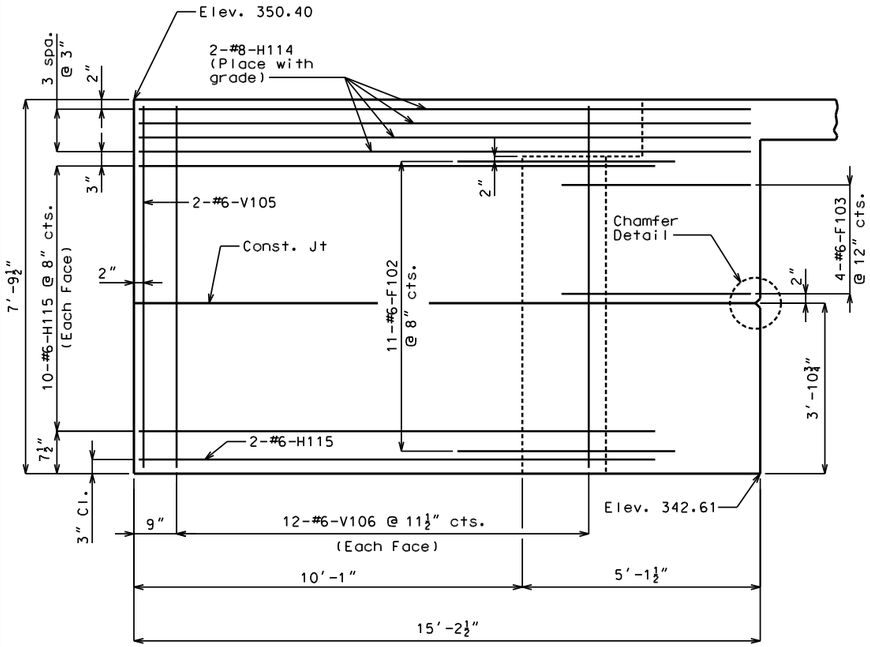
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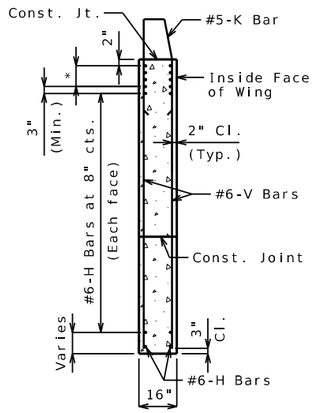
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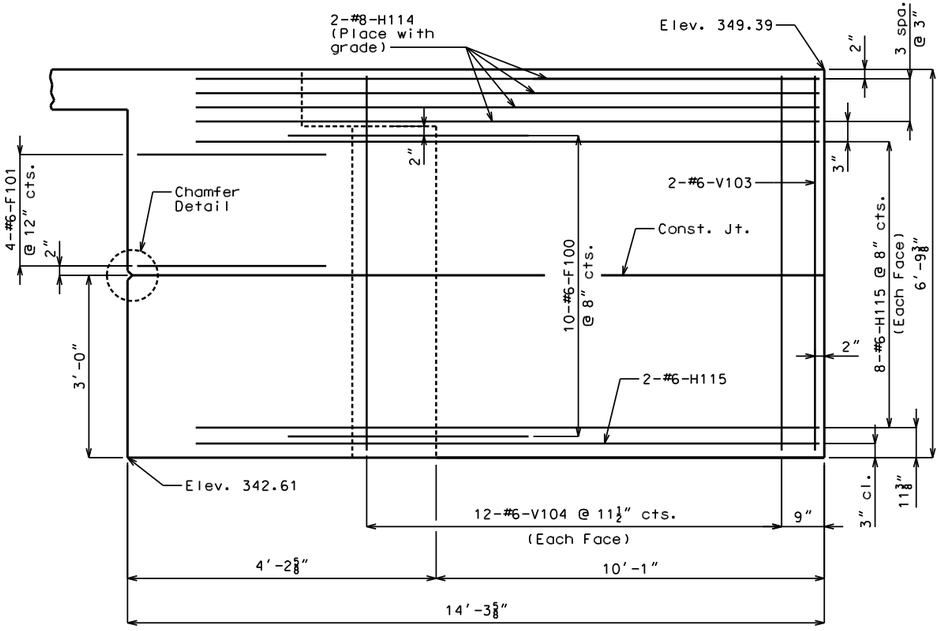


ELEVATION E-E

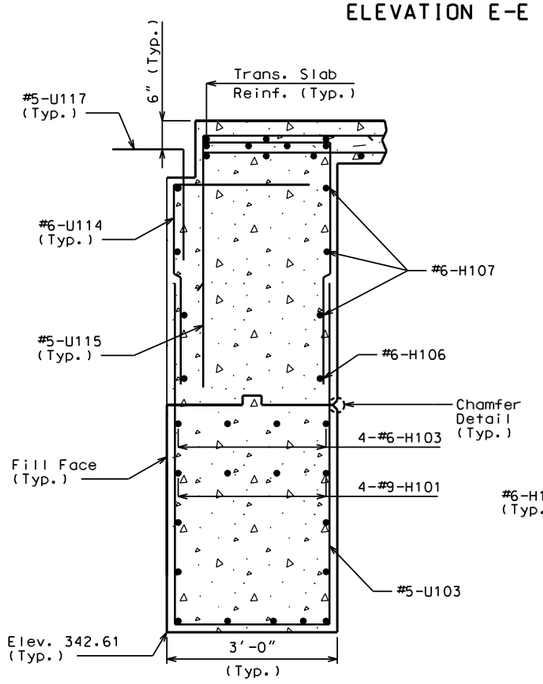


TYPICAL SECTION THRU WING

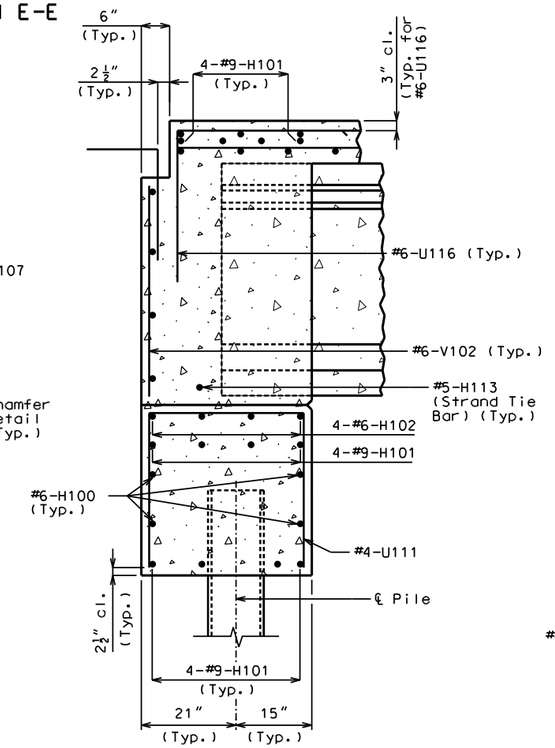
* #8-H Bars at 3" cts. (Each face)(Place with grade)



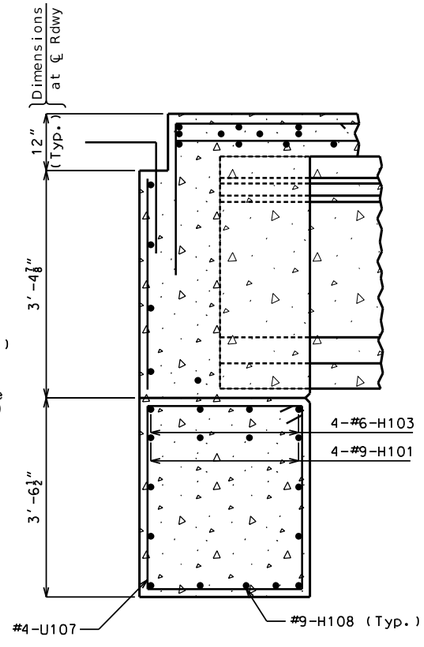
ELEVATION F-F



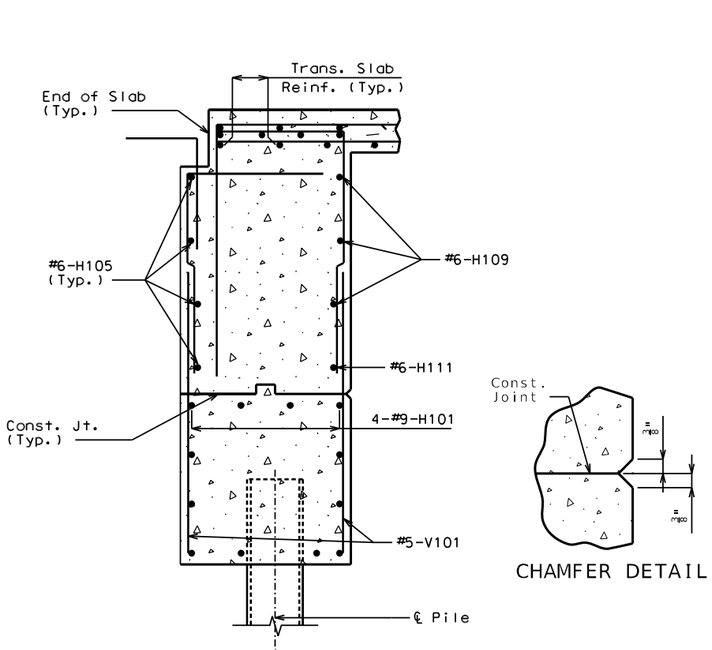
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

CHAMFER DETAIL

Notes:

Work this sheet with Sheets No. 8 & 9.

For location of Sections A-A, B-B, C-C & D-D and Elevations E-E & F-F, see Sheet No. 9.

For reinforcement of barrier, see Sheets No. 36 & 9.

DETAILS OF END BENT NO. 1

Pile reinforcement not shown for clarity

Detailed Sep. 2023
Checked Oct. 2023

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

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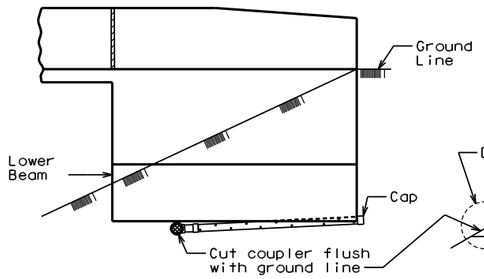
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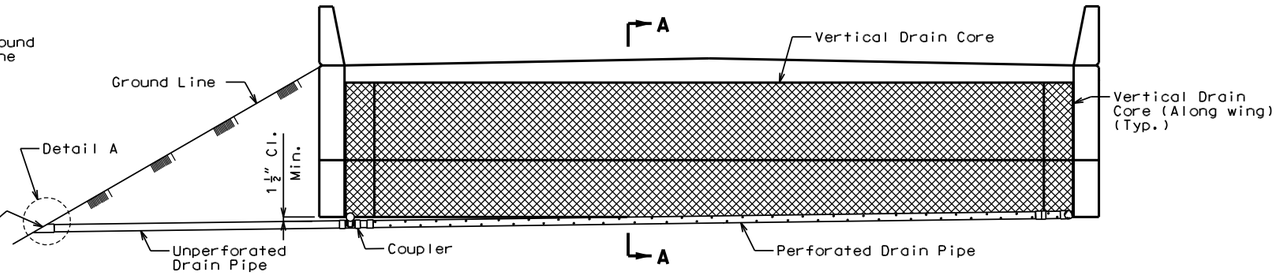
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MODJESKI and MASTERS
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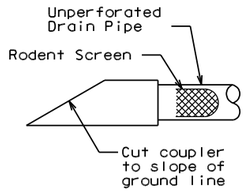
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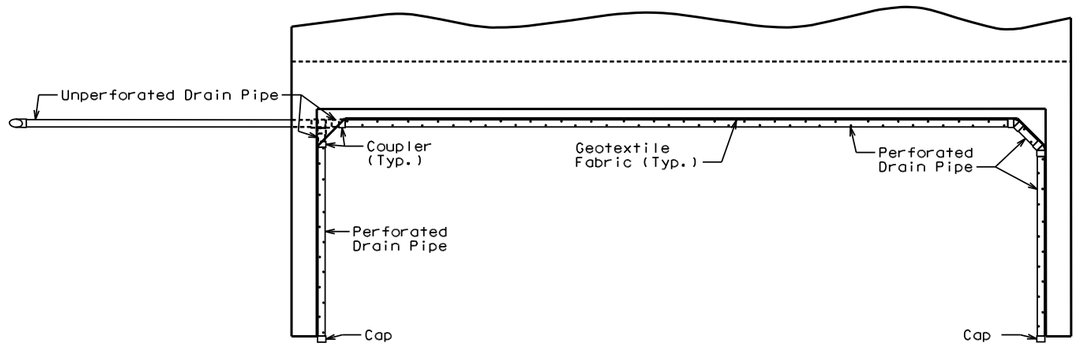
ELEVATION OF WING



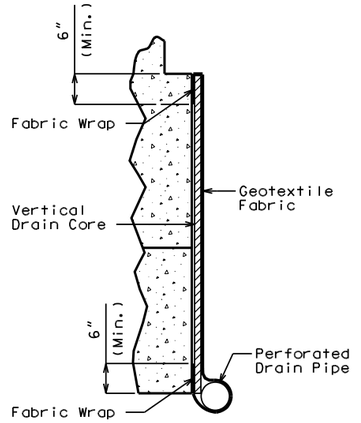
ELEVATION OF END BENT



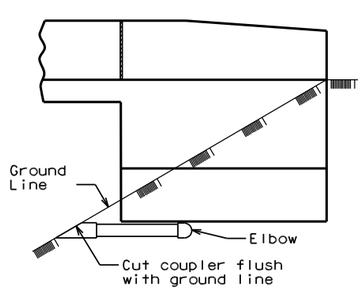
DETAIL A



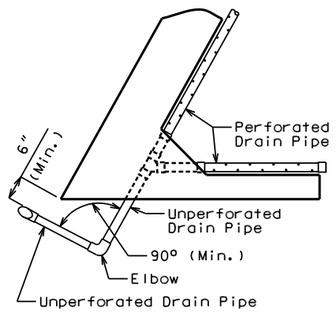
PLAN OF END BENT



PART SECTION A-A
(Section thru wing similar)



ELEVATION OF WING



PART PLAN

OPTIONAL TURNED DRAIN
(Use only when straight drain is not practical.)

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.

VERTICAL DRAIN AT END BENTS

(Squared end bent shown, skewed end bent similar)

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

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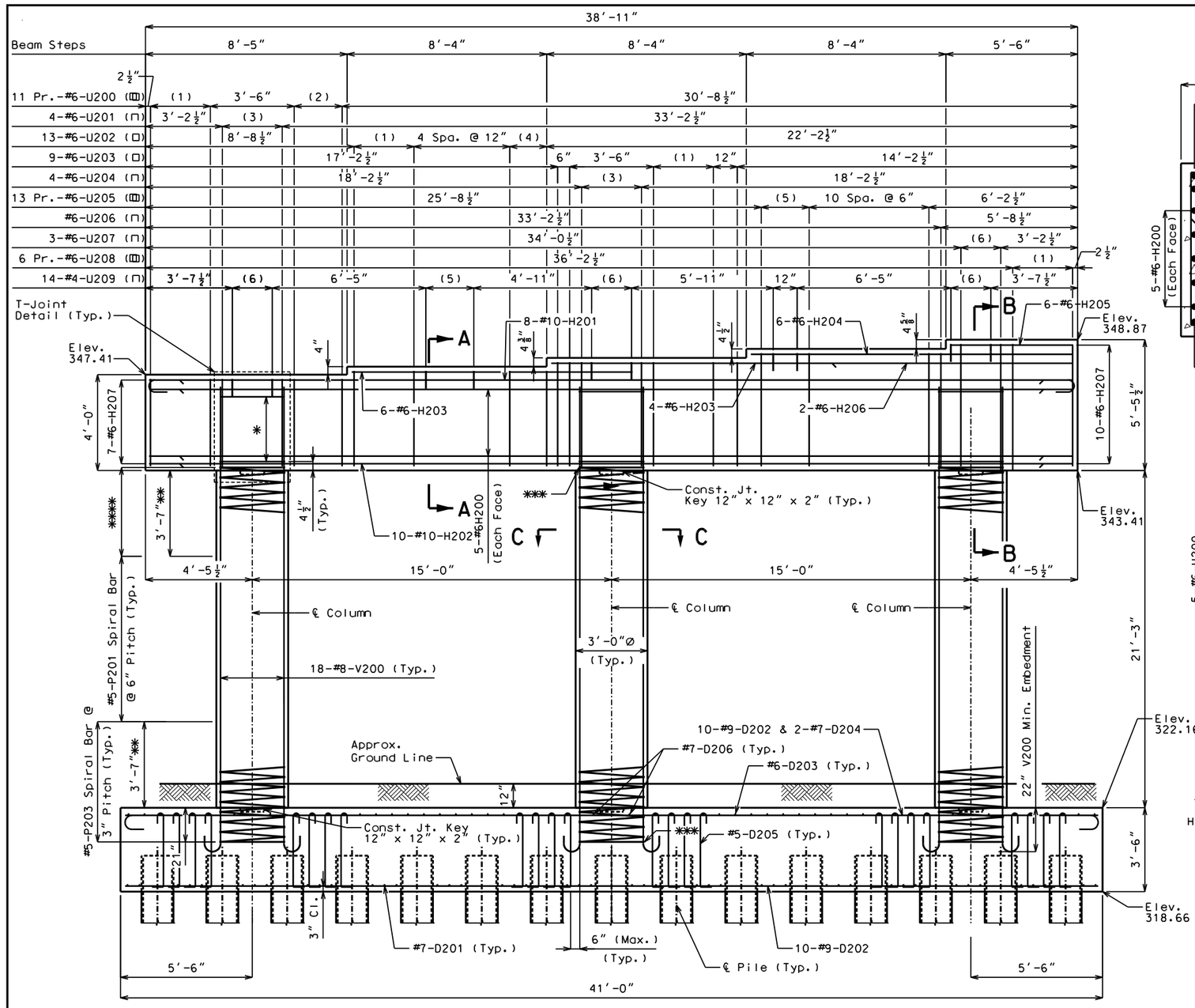
DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 11
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

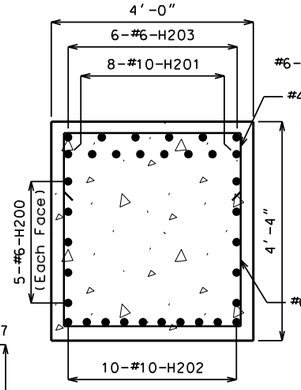
DESCRIPTION | DATE | REV.

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

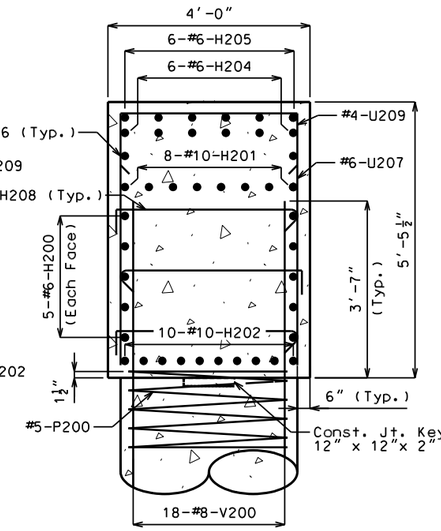
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416



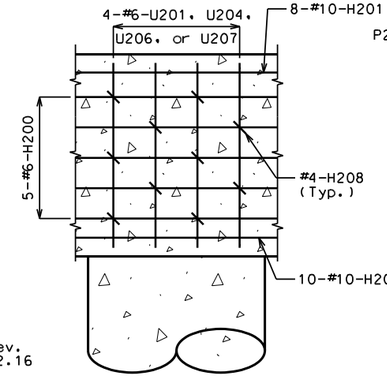


SECTION A-A



SECTION B-B

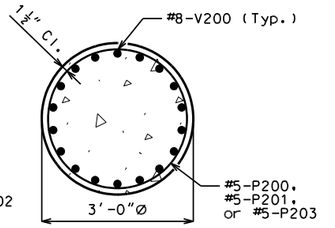
P202 bars not shown for clarity.



T-JOINT DETAIL

#4-H208 required at every other intersection of U-stirrup and H200 within column-beam cap joint.

Column bars and stirrups not shown for clarity.



SECTION C-C

Substructure Quantity Table for Bent No. 2		
Item		Quantity
Class 1 Excavation	cu. yard	90
Galvanized Cast-In-Place Concrete Piles (20in.)	linear foot	1058
Dynamic Pile Testing	each	1
Class B Concrete (Substructure)	cu. yard	91.5
Reinforcing Steel (Bridges)	pound	21470

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

Notes:

Work this sheet with Sheets No. 13 and 14.

* 13-#5 P202 seismic stirrup bars @ 3″ cts. (Typ.)

** Lapping of spiral reinforcement in this region is not permitted (Typ.)

*** Anchorage of spiral reinforcement shall be provided by 1 1/2 extra turns of spiral reinforcement at end of the spiral unit (Typ.)

**** #5-P200 Spiral Bar @ 3″ Pitch (Typ.)

ELEVATION

(Looking Upstation)
Beam keys not shown for clarity.
Pile reinforcement not shown for clarity.
H208 T-Joint bars not shown for clarity.

(1) 5 Spa. @ 6″
(2) 4 Spa. @ 6″
(3) 3 Spa. @ 10″
(4) 3 Spa. @ 6″
(5) 2 Spa. @ 12″
(6) 2 Spa. @ 10″

DETAILS OF INTERMEDIATE BENT NO. 2

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9225_12_J9S3775_INTBENT2_1.dgn 11:27:46 AM 10/12/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 12
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

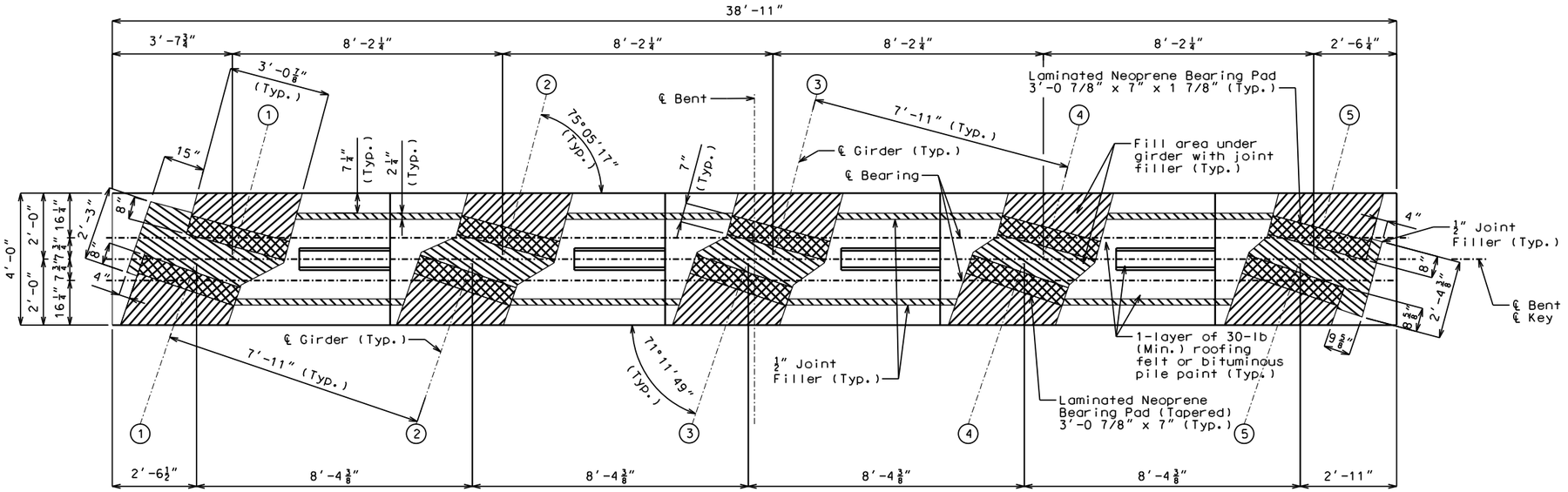
DESCRIPTION | DATE | REV.

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

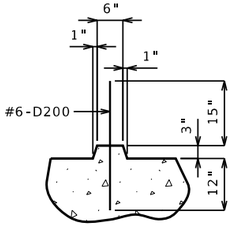
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

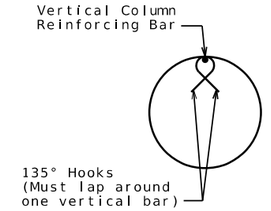
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416



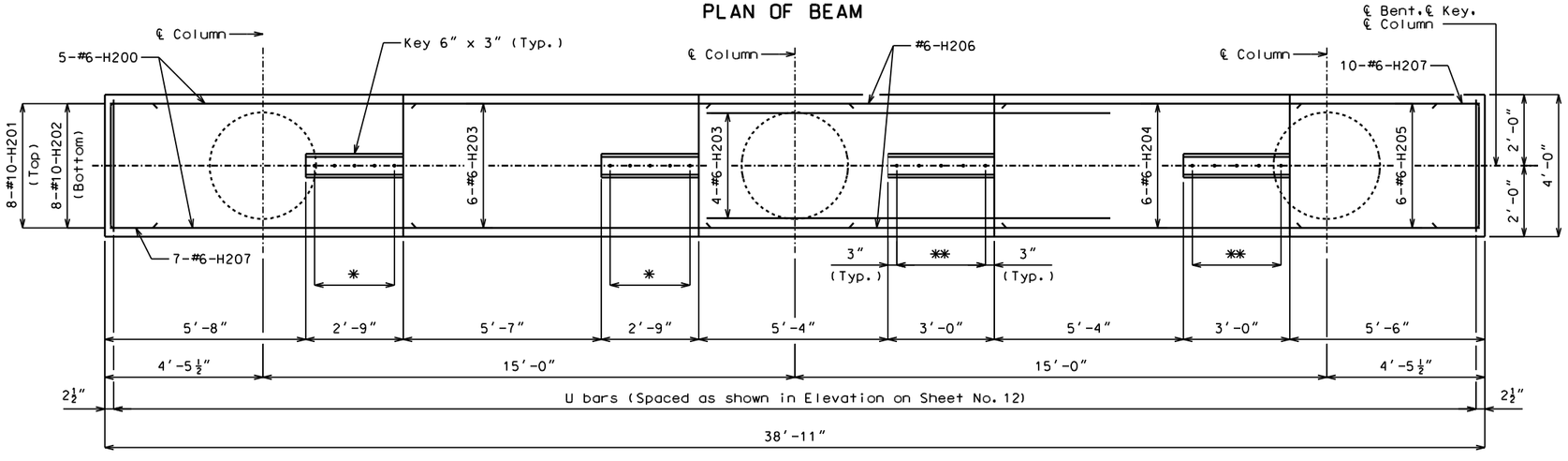
PLAN OF BEAM



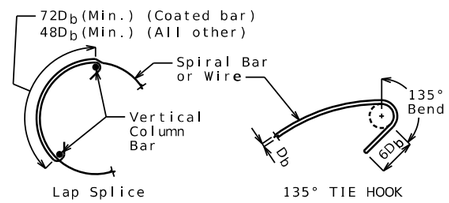
SECTION THRU KEY



SEISMIC STIRRUP BAR



PLAN OF BEAM SHOWING REINFORCEMENT



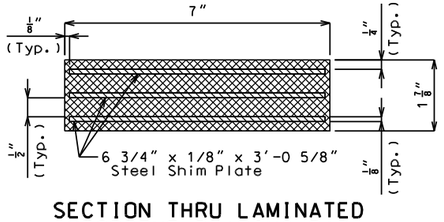
INTERMEDIATE SPLICE OF SPIRALS

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

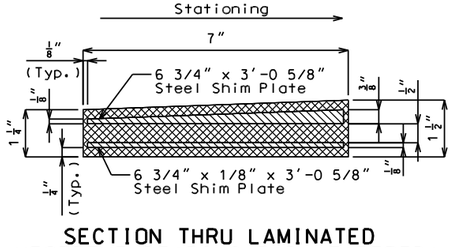
Notes:

Work this sheet with Sheet No. 12.

For steps 2 inches or more, use 2 1/4 x 1/2-inch joint filler up vertical face.



SECTION THRU LAMINATED NEOPRENE BEARING PAD 7″ x 1 7/8″ x 3′-0 7/8″



SECTION THRU LAMINATED NEOPRENE BEARING PAD (TAPERED) 7″ x 3′-0 7/8″

* 5-#8-D200 @ 6¾″
** 5-#8-D200 @ 7½″

DETAILS OF INTERMEDIATE BENT NO. 2

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 13
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

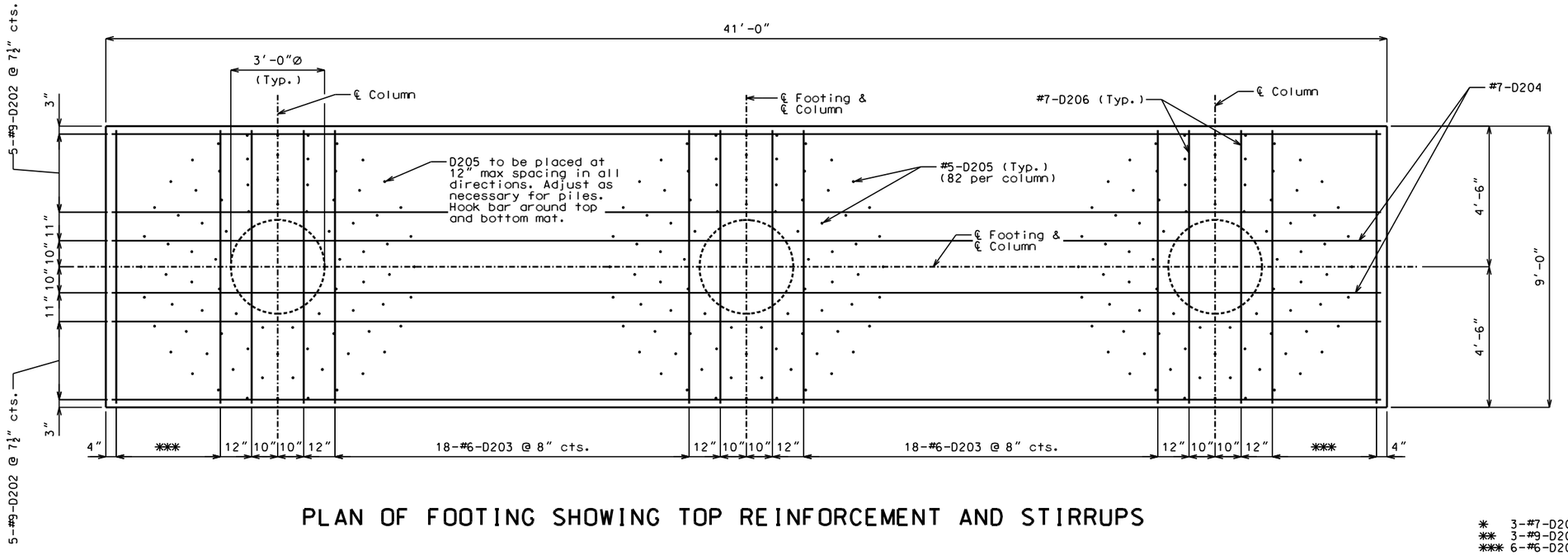
DESCRIPTION | DATE | REV.

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

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

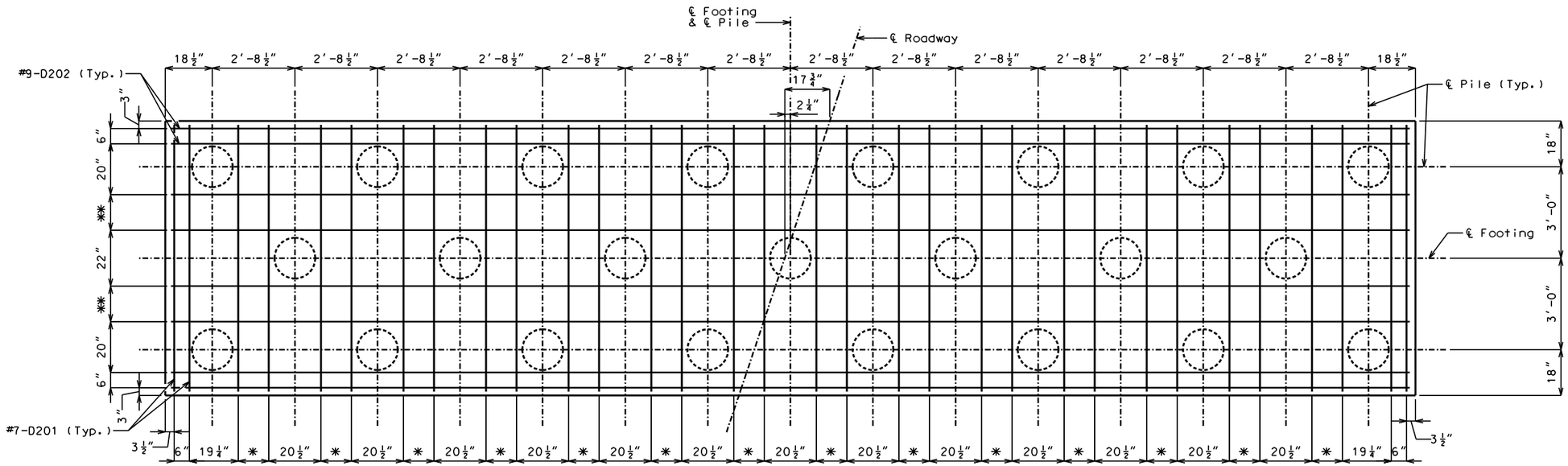
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416



PLAN OF FOOTING SHOWING TOP REINFORCEMENT AND STIRRUPS

* 3-#7-D201 @ 6" cts.
** 3-#9-D202 @ 7" cts.
*** 6-#6-D203 @ 8" cts.



PLAN OF FOOTING SHOWING BOTTOM REINFORCEMENT

Notes:

Work this sheet with Sheets No. 12 and 13.

Detailed Sep. 2023
Checked Oct. 2023

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

Sheet No. 14 of 48

B_A9225_14_J9S3775_INTBENT2_3.dgn 11:35:04 AM 10/12/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

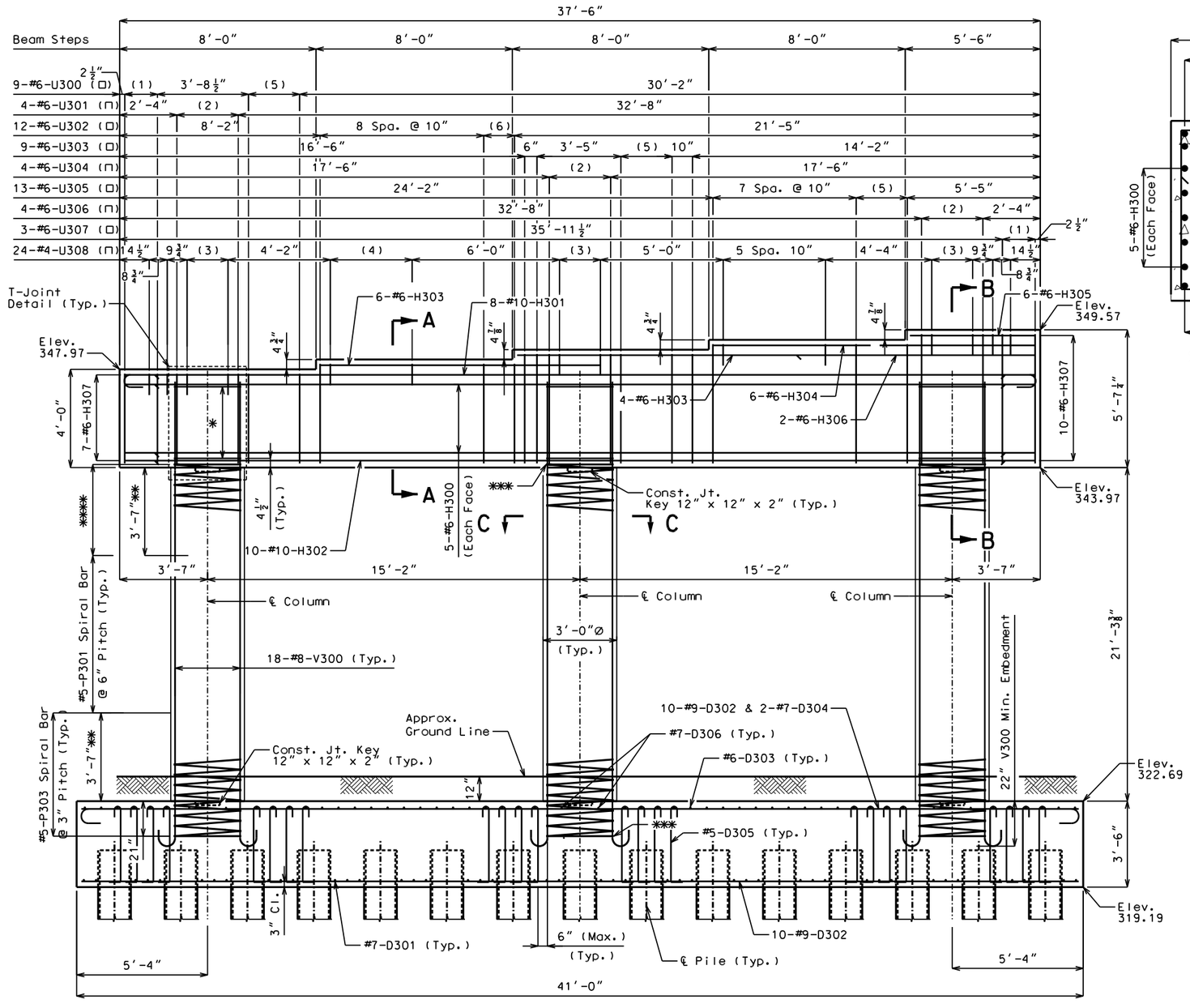
DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 14
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE | REV.

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

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333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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



* 13-#5 P302 seismic stirrup bars @ 3" cts. (Typ.)

** Lapping of spiral reinforcement in this region is not permitted (Typ.)

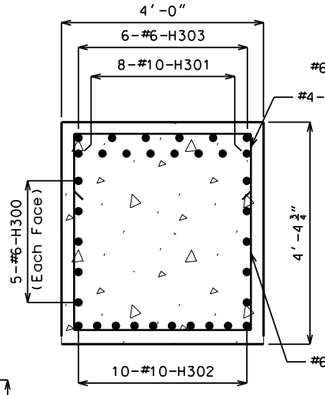
*** Anchorage of spiral reinforcement shall be provided by 1 1/2 extra turns of spiral reinforcement at end of the spiral unit (Typ.)

**** #5-P300 Spiral Bar @ 3" Pitch (Typ.)

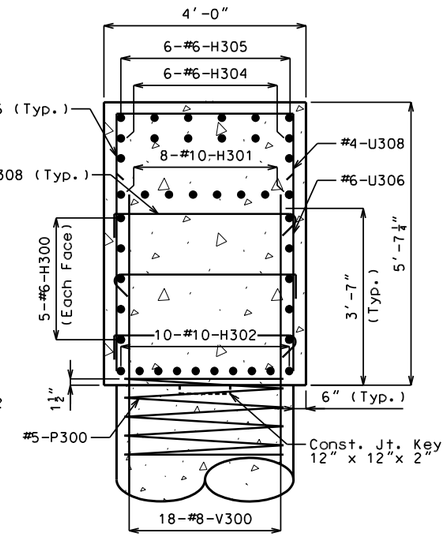
ELEVATION

(Looking Upstation)
Beam keys not shown for clarity.
Pile reinforcement not shown for clarity.
H308 T-Joint bars not shown for clarity.

(1) 2 Spa. @ 8"
(2) 3 Spa. @ 10"
(3) 2 Spa. @ 10"
(4) 4 Spa. @ 10"
(5) 5 Spa. @ 5"
(6) 3 Spa. @ 5"

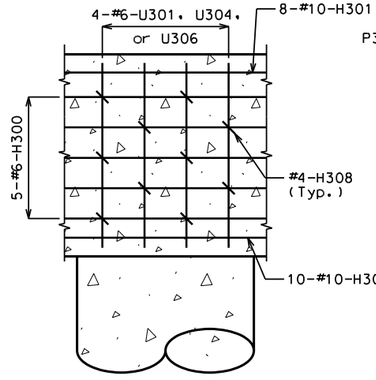


SECTION A-A



SECTION B-B

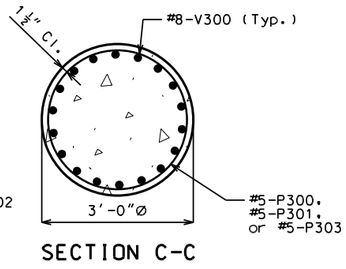
P302 bars not shown for clarity.



T-JOINT DETAIL

#4-H308 required at every other intersection of U-stirrup and H300 within column-beam cap joint.

Column bars and stirrups not shown for clarity.



SECTION C-C

Substructure Quantity Table for Bent No. 3

Item		Quantity
Class 1 Excavation	cu. yard	90
Galvanized Cast-In-Place Concrete Piles (20in.)	linear foot	1012
Dynamic Pile Testing	each	1
Class B Concrete (Substructure)	cu. yard	91.0
Reinforcing Steel (Bridges)	pound	20680

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

Notes:

Work this sheet with Sheets No. 16 and 17.

DETAILS OF INTERMEDIATE BENT NO. 3

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 15
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

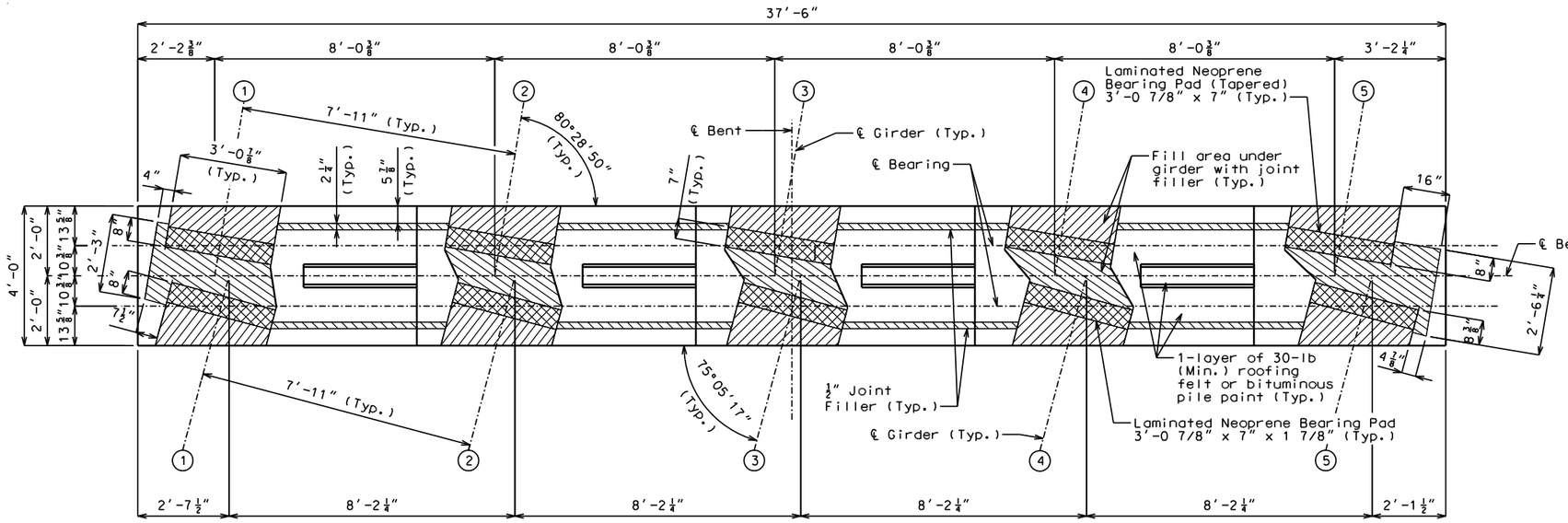
DESCRIPTION | DATE | REV.

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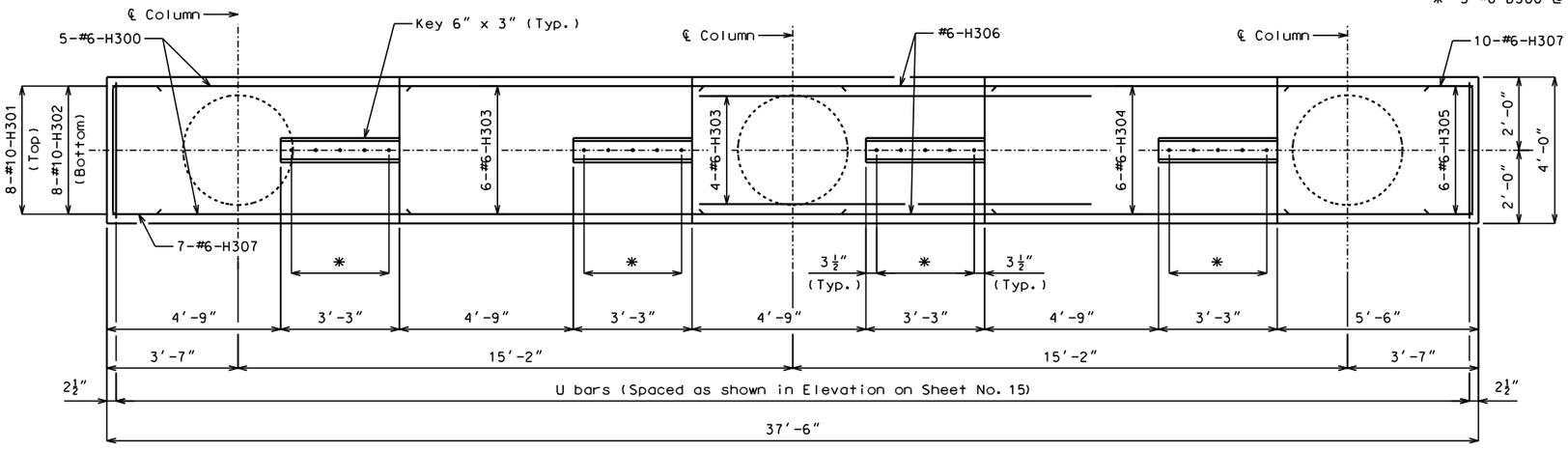
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

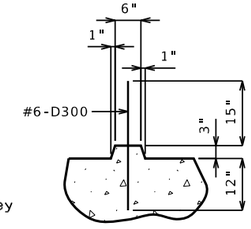


PLAN OF BEAM

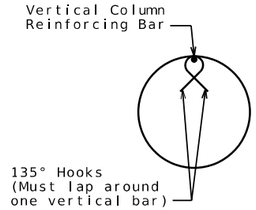


PLAN OF BEAM SHOWING REINFORCEMENT

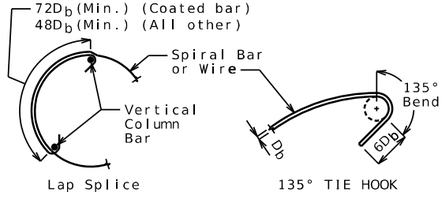
* 5-#8-D300 @ 8"



SECTION THRU KEY

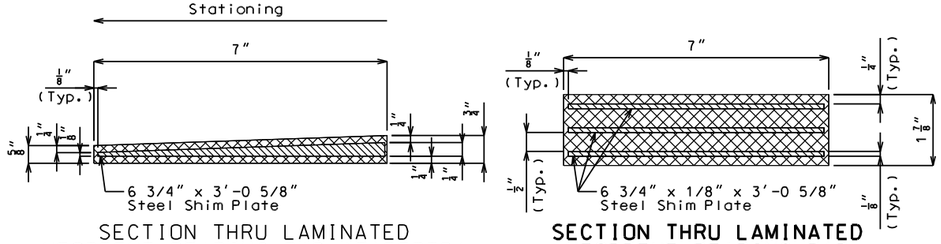


SEISMIC STIRRUP BAR



INTERMEDIATE SPLICE OF SPIRALS

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



SECTION THRU LAMINATED NEOPRENE BEARING PAD (TAPERED) 7" x 3'-0 7/8"

SECTION THRU LAMINATED NEOPRENE BEARING PAD 7" x 1 7/8" x 3'-0 7/8"

Notes:

Work this sheet with Sheet No. 15 .

For steps 2 inches or more, use 2 1/4 x 1/2-inch joint filler up vertical face.

DETAILS OF INTERMEDIATE BENT NO. 3

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9225_16_J9S3775_INTBENT3_2.dgn 3:23:49 PM 10/8/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 16
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

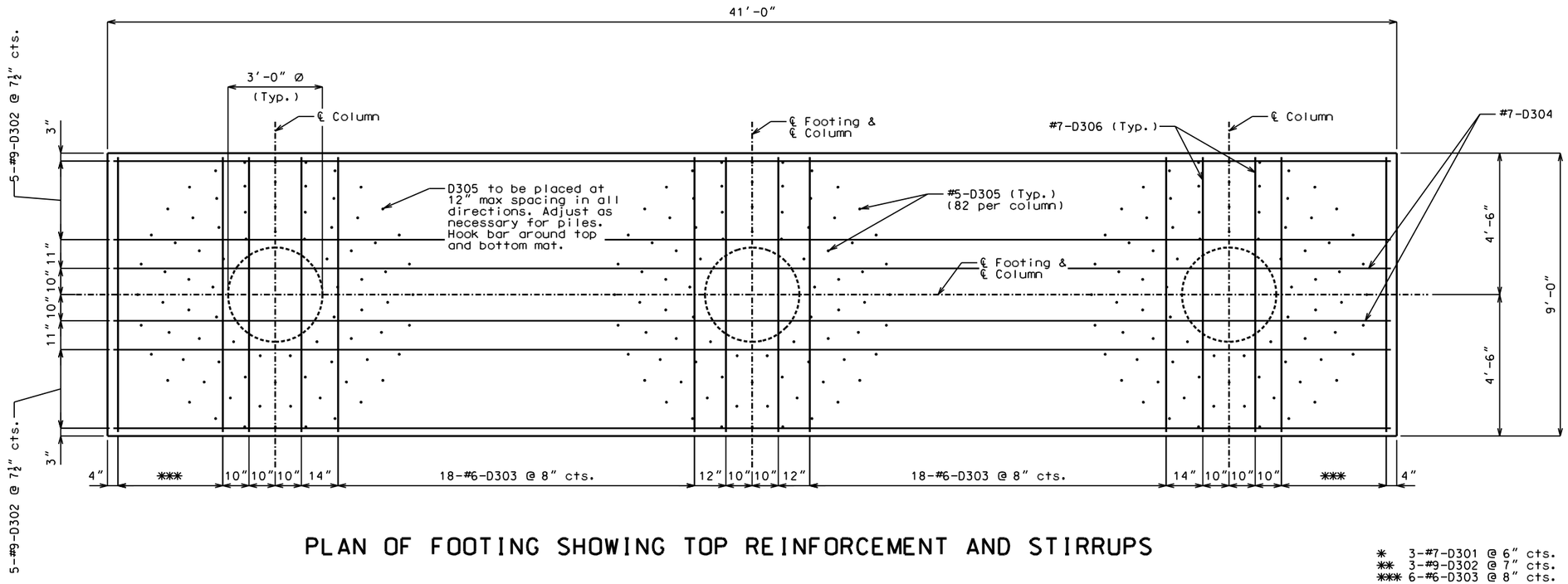
DESCRIPTION | DATE | REV.

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

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

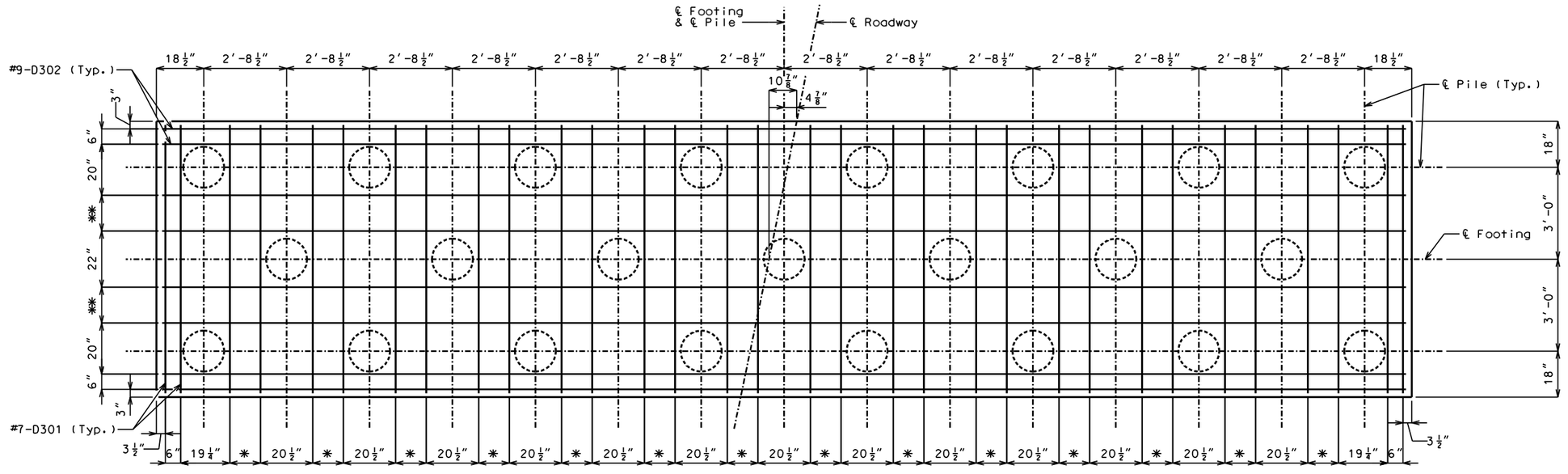
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416



PLAN OF FOOTING SHOWING TOP REINFORCEMENT AND STIRRUPS

* 3-#7-D301 @ 6" cts.
** 3-#9-D302 @ 7" cts.
*** 6-#6-D303 @ 8" cts.



PLAN OF FOOTING SHOWING BOTTOM REINFORCEMENT

DETAILS OF INTERMEDIATE BENT NO. 3

NOTES:
Work this sheet with Sheets No. 15 and 16.

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9225_17_J9S3775_INTBENT3_3.dgn 11:54:59 AM 10/12/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 17
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION	DATE

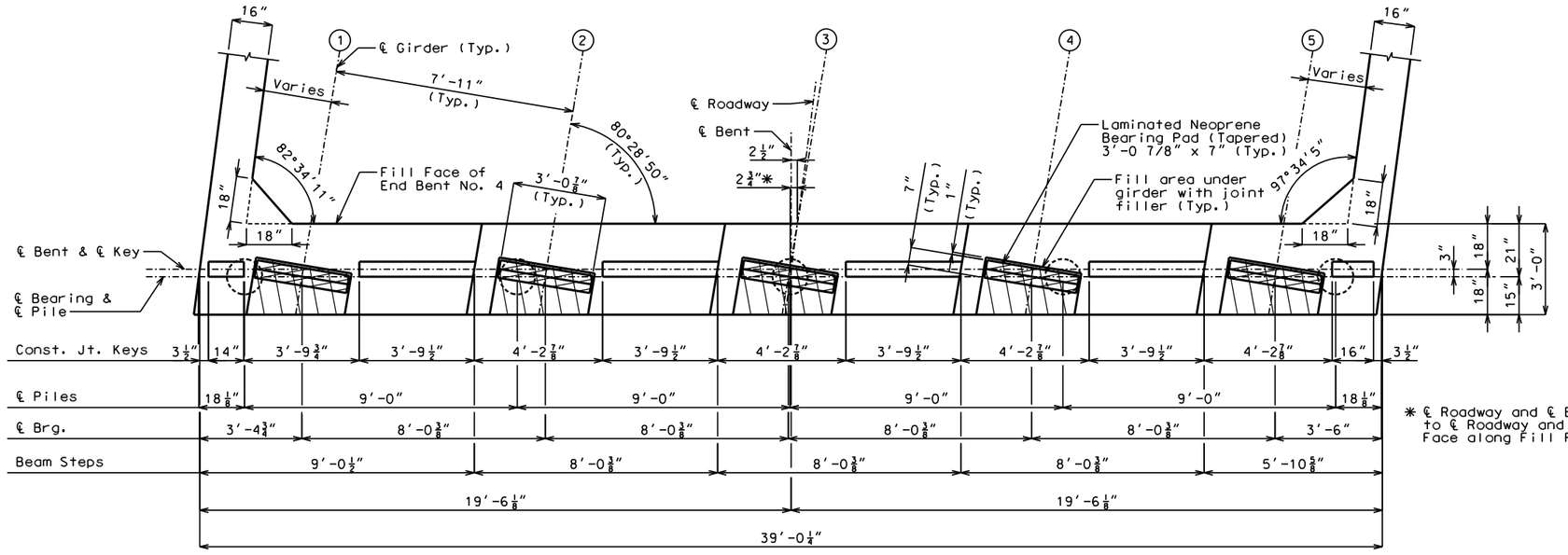
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

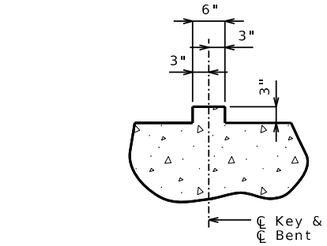
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

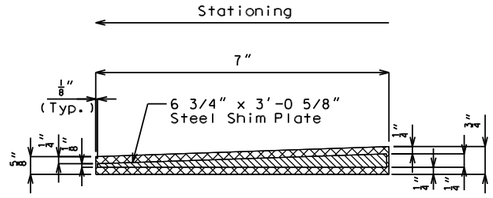
REV.



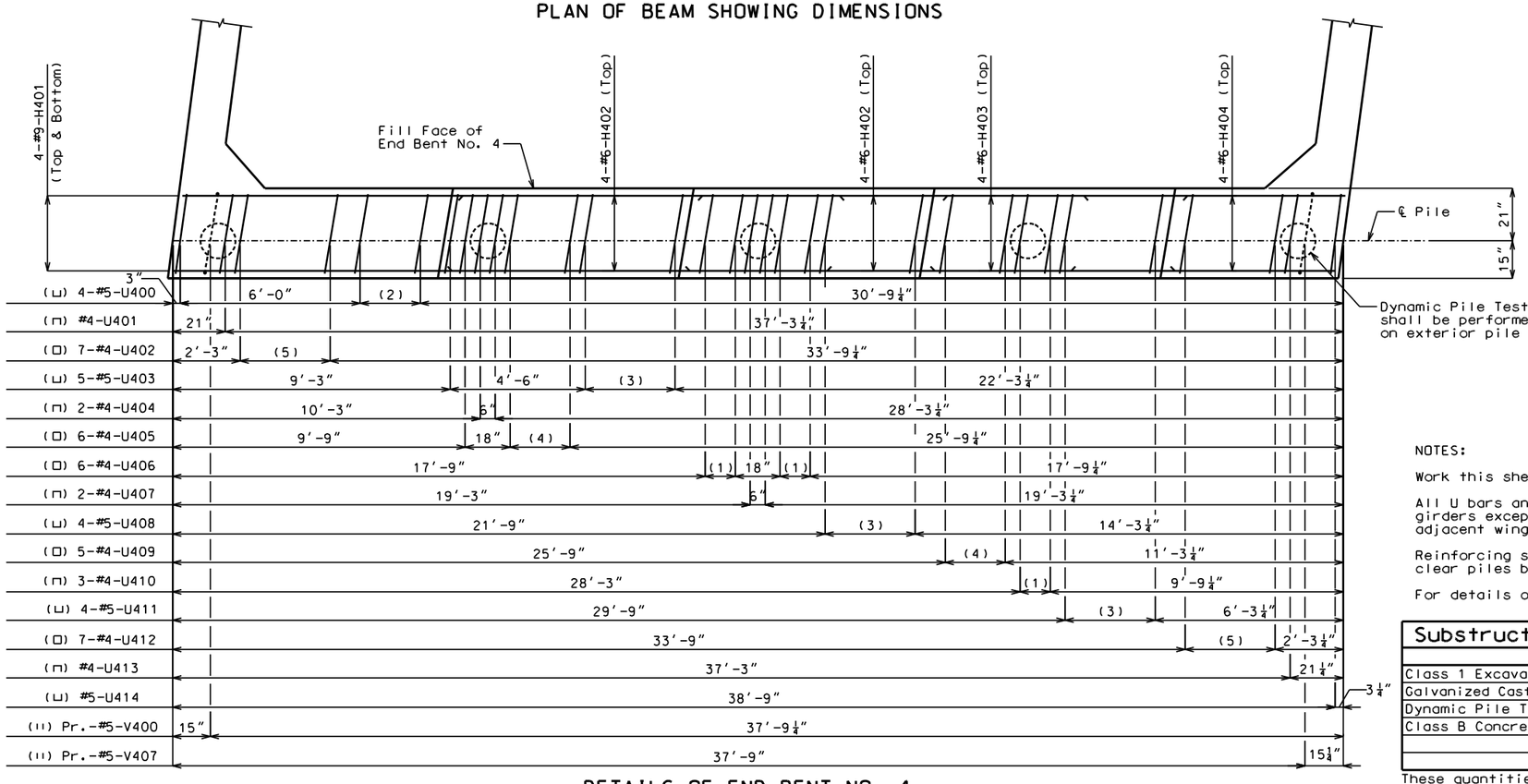
PLAN OF BEAM SHOWING DIMENSIONS



SECTION THRU KEY



SECTION THRU LAMINATED NEOPRENE BEARING PAD (TAPERED) 7" x 3'-0 7/8"



DETAILS OF END BENT NO. 4

Pile reinforcement not shown for clarity

(1) 2 Spa. @ 6"
(2) 2 Spa. @ 12"
(3) 3 Spa. @ 12"
(4) 4 Spa. @ 6"
(5) 6 Spa. @ 6"

NOTES:

Work this sheet with Sheets No. 19 & 20.

All U bars and pairs of V bars shall be placed parallel to girders except bars at edge shall be placed parallel to the adjacent wingwall.

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

For details of Vertical Drain at End Bents. See Sheet No. 11.

Substructure Quantity Table for Bent No. 4

Item		Quantity
Class 1 Excavation	cu. yard	40
Galvanized Cast-In-Place Concrete Piles (16 in.)	linear foot	295
Dynamic Pile Testing	each	1
Class B Concrete (Substructure)	cu. yard	20.5

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

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 18
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

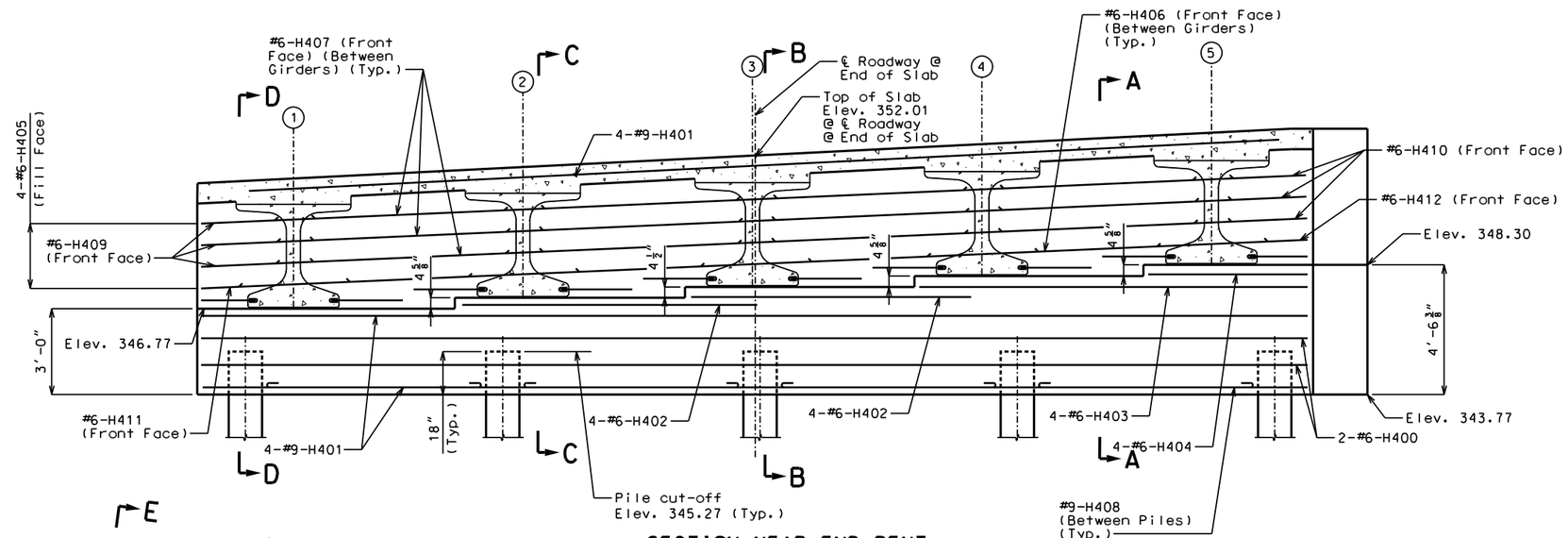
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

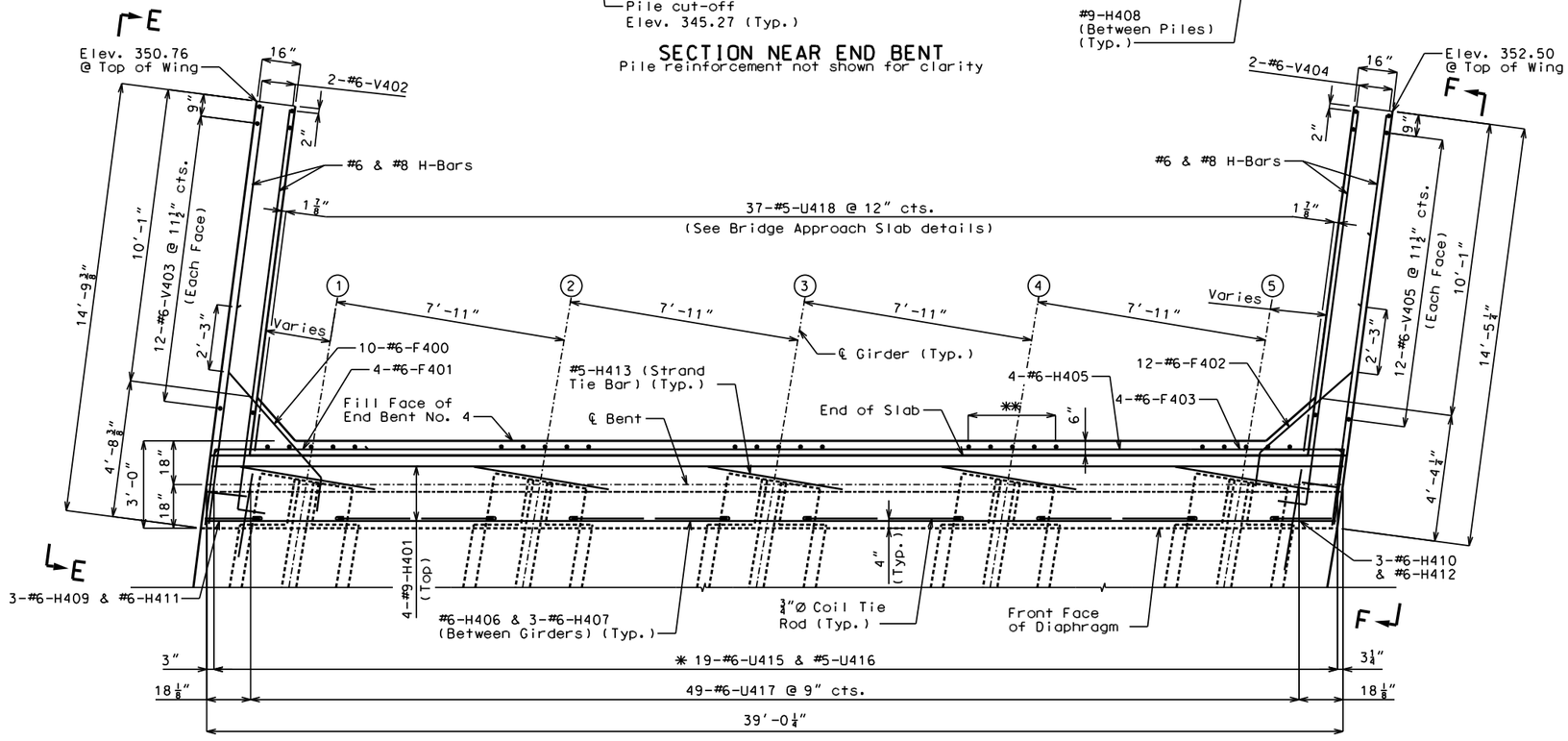
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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.



SECTION NEAR END BENT
Pile reinforcement not shown for clarity



PART PLAN
Pile reinforcement not shown for clarity

* Spaced with U400, U403, U408, U411, U414, & V400

** 5-#6-V401 @ 9" cts. (Each Girder) (Typ.)

DETAILS OF END BENT NO. 4

NOTES:

Work this sheet with Sheets No. 18 & 20.

For Sections A-A, B-B, C-C & D-D and Elevations E-E & F-F, see Sheet No. 20.

The #6-F400 and #6-F402 bars shall be bent in the field to clear girders.

The U bars shall be placed parallel to girders exceot bars at edge shall be placed parallel to the adjacent wingwall.

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

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

For location of coil tie rods and #5-H413 (strand tie bar), see Sheets No. 22 thru 27.

For details of Vertical Drain at End Bents, see Sheet No. 11.

For details of bridge approach slab, see Sheet No. 40.

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 19
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

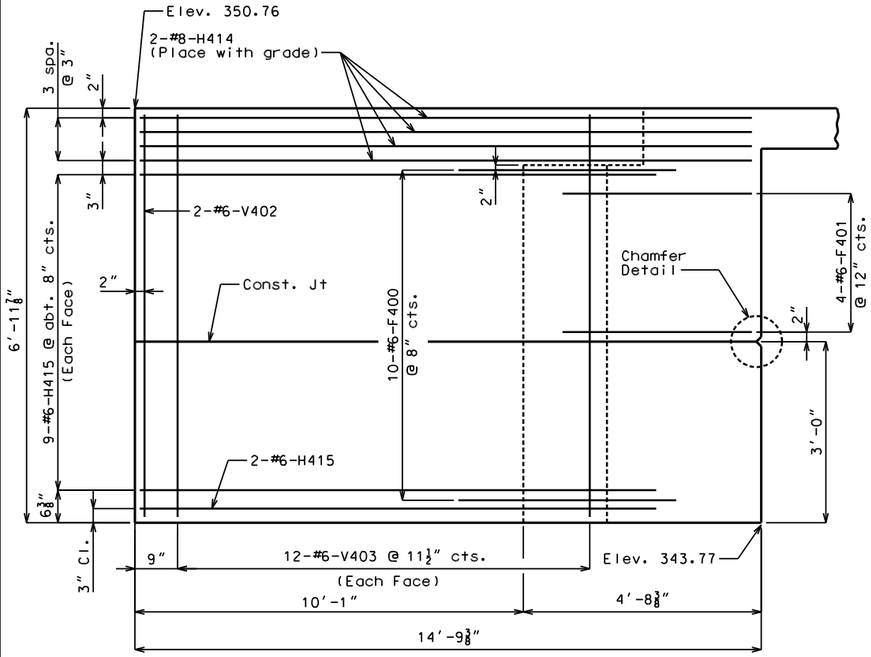
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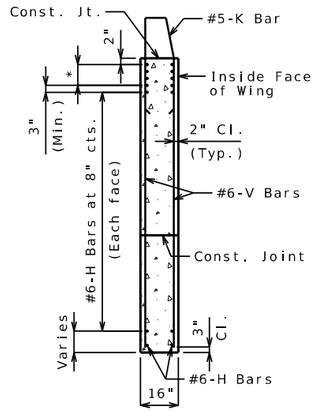
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

REV.

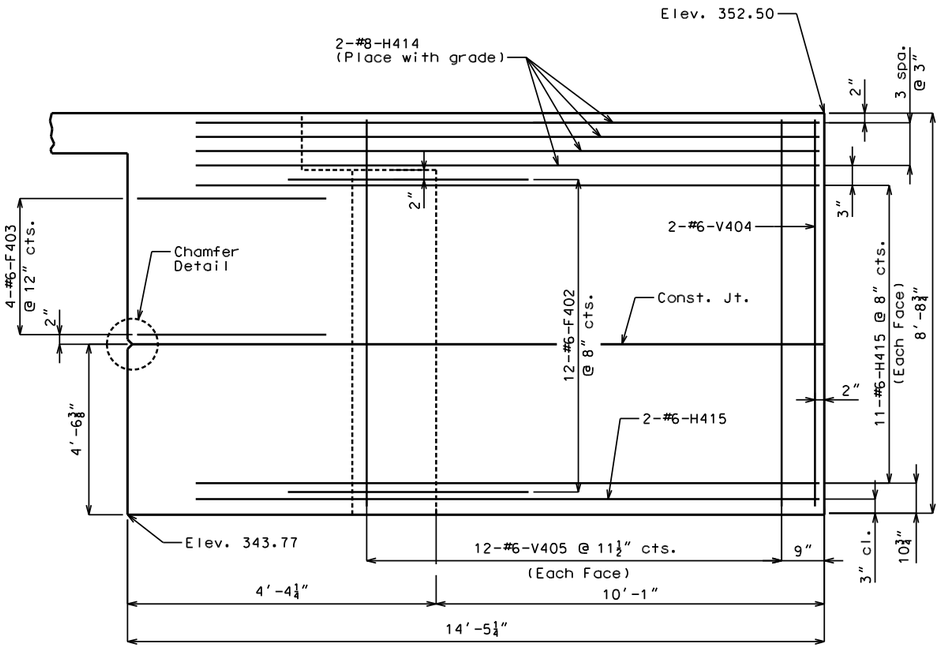


ELEVATION E-E

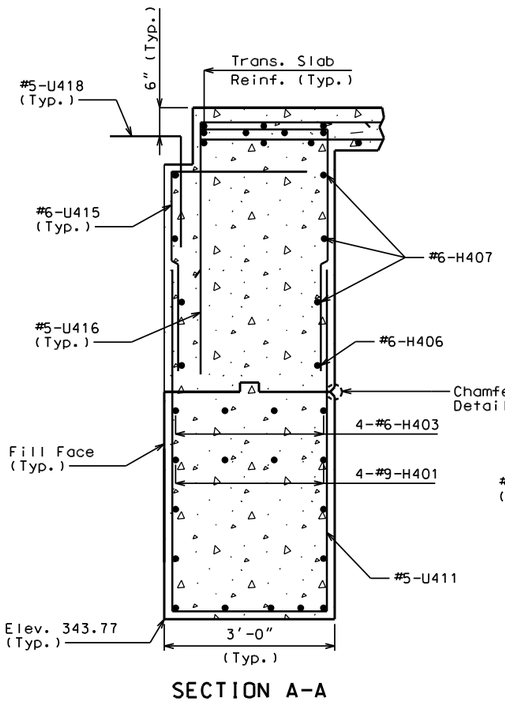


TYPICAL SECTION
THRU WING

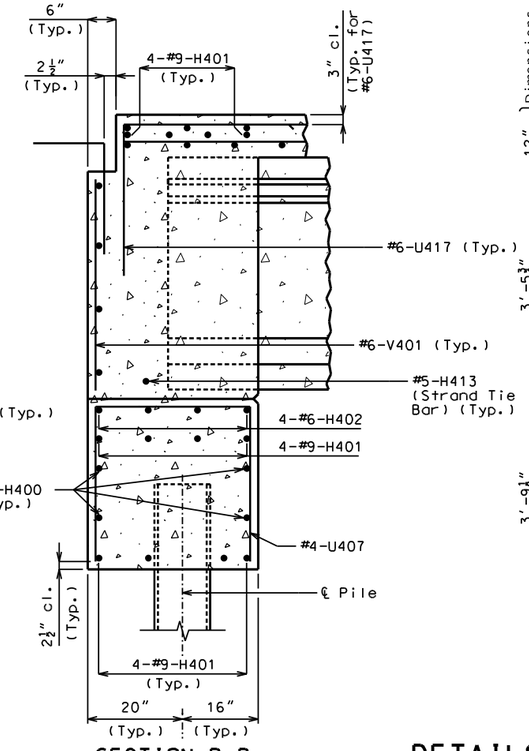
* #8-H Bars at 3" cts.
(Each face)(Place with grade)



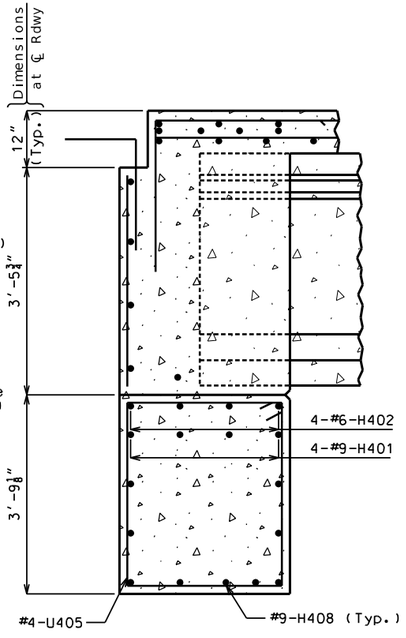
ELEVATION F-F



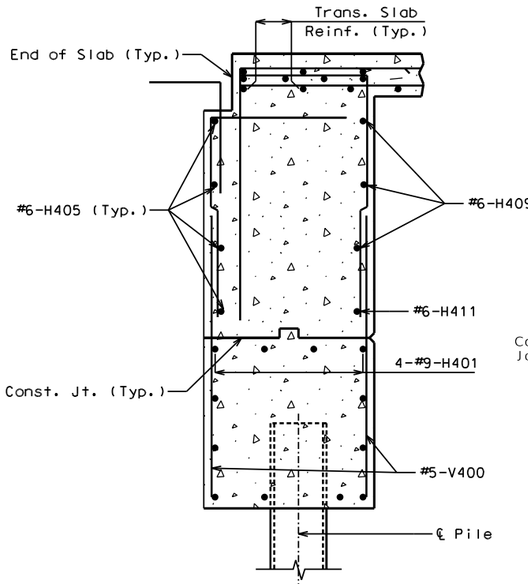
SECTION A-A



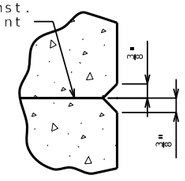
SECTION B-B



SECTION C-C



SECTION D-D



CHAMFER DETAIL

NOTES:

Work this sheet with Sheets No. 18 & 19.

For location of Sections A-A, B-B, C-C, & D-D and Elevations E-E & F-F, see Sheet No. 19.

For reinforcement of barrier, see Sheets No. 36 & 38.

DETAILS OF END BENT NO. 4

Pile reinforcement not shown for clarity

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9225_20_J9S3775_ENDBENT4_3.dgn 4:01:16 PM 10/8/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	20

COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

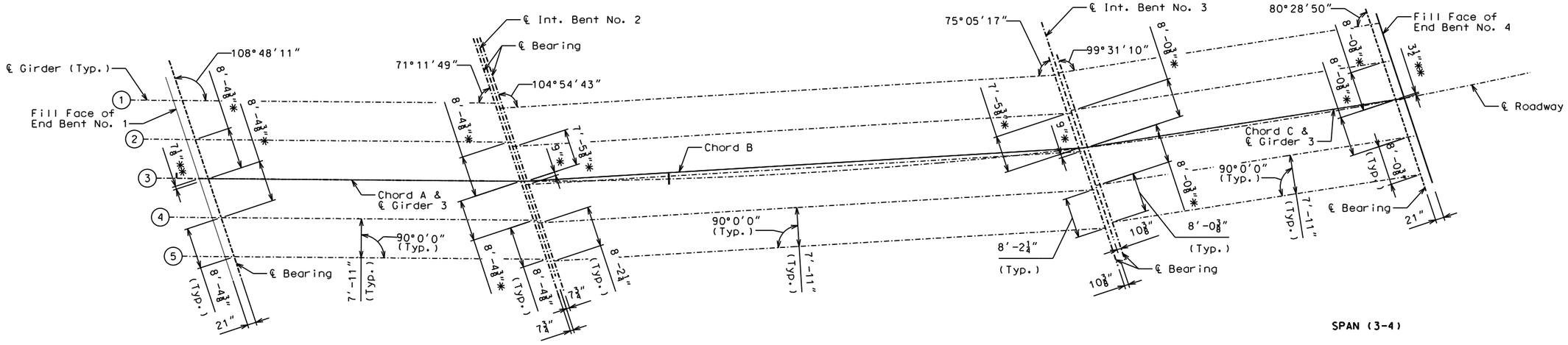
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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

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REV.



PLAN

NOTES:

All dimensions are horizontal.

All bents are parallel.

Girders within a span are parallelto chords.

* Dimensions along ℄ bearing are to Chords A, B, and C.
** Dimensions along Fill Face are to Chords A and C.

GIRDER LAYOUT

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED: 10/12/2026
ROUTE: 114 | STATE: MO
DISTRICT: BR | SHEET NO.: 21
COUNTY: STODDARD
JOB NO.: J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9225

DESCRIPTION | DATE

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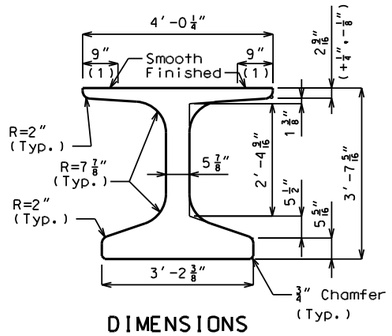
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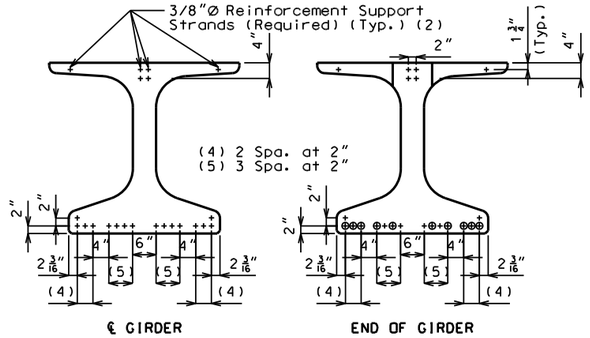
REV.

(1) Fabricator shall apply a bond breaker to this region.



DIMENSIONS

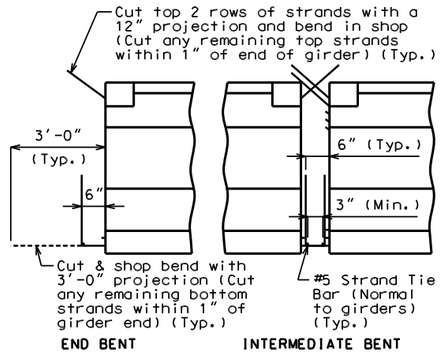
(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



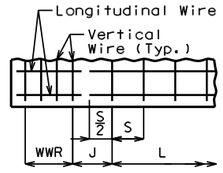
STRAND ARRANGEMENT

\+ Indicates prestressing strand.

o Indicates cut & shop bend with 3′-0″ projection.



STRANDS AT GIRDER ENDS



WELDED WIRE PLACEMENT

S = Vertical wire spacing

L = Length of WWR mats

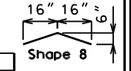
J = Distance between WWR mats

Bill of Reinforcing Steel

Bars Each Girder

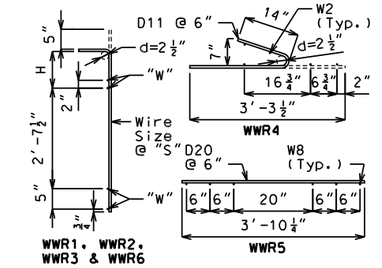
No.	Size/Mark	Length	Shape
86	3 G1	2′-10″	8
2	4 G3	3′-10″	20
2	4 G4	2′-3″	20
2	4 G5	2′-10″	20
4	4 G6	Varies	20

Bending Diagrams



Welded Wire Each Girder

Mark	Size	S	W	L	J	H
WWR1	D22	4″	W9	9′-8″	8″	9½″
WWR2	D22	8″	W9	8′-0″	16″	9½″
WWR3	D22	16″	W9	21′-4″	--	10″
WWR6	D31	2″	W12	16″	3⅜″	8½″



All dimensions are out to out.

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

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

Minimum clearance to reinforcing shall be 1″, unless otherwise shown.

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

WWR shall be Grade 70 and in accordance with AASHTO M 336.

WWR shall not be epoxy coated.

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

General Notes:

Concrete for prestressed beams shall be Class A-1 with f′c = 9500 psi and f′ci = 7000 psi.

Use 18 strands, 0.6″Ø Grade 270, with an initial prestress force of 791 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

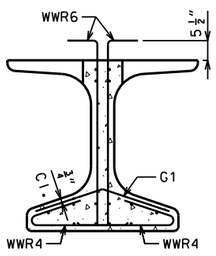
Exterior and interior girders are the same except: coil ties, top flange blockout.

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

For Girder Camber Diagram, see Sheet No. 31.

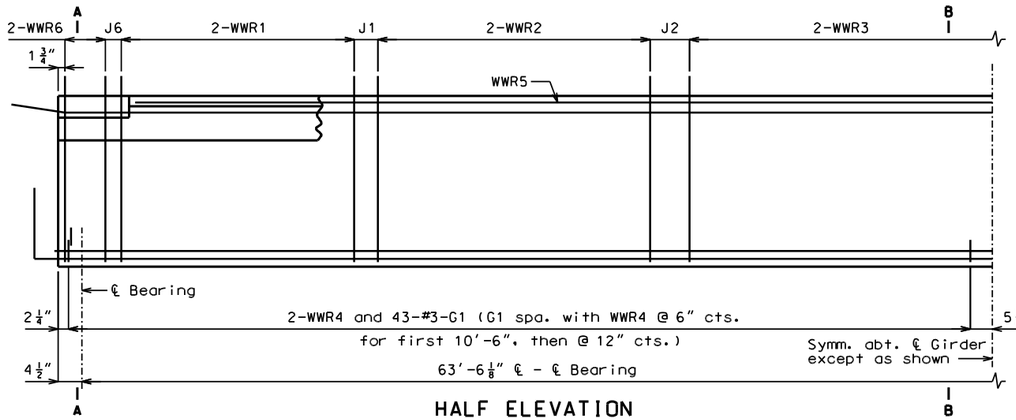
For location of coil ties at concrete diaphragms and integral bents, see Sheets No. 9 and 28.

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



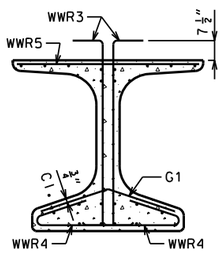
SECTION A-A

Strands not shown for clarity.



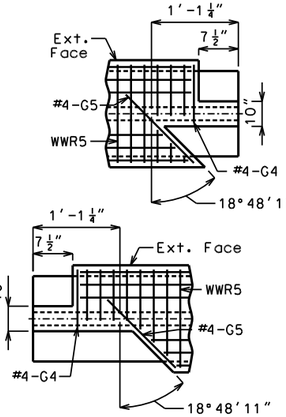
HALF ELEVATION

Reinforcement support strands not shown for clarity.



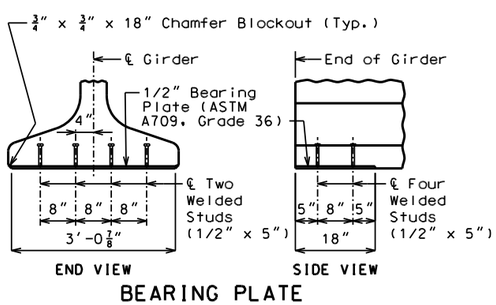
SECTION B-B

Strands not shown for clarity.

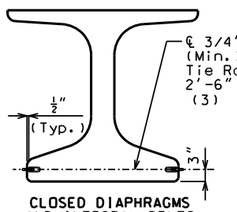


LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT

Rotate 180° for right ext.



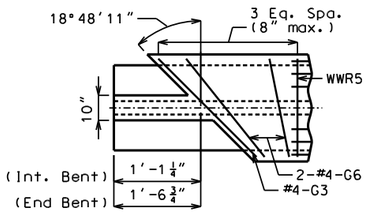
BEARING PLATE



COIL TIES

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

(3) 21″ at exterior face of exterior girders at end bents



INTERIOR GIRDER AT ALL BENTS & EXTERIOR GIRDER AT END BENT

TOP FLANGE BLOCKOUT

NU-GIRDERS - SPAN (1-2)

Detailed Oct. 2026
Checked Oct. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	22

COUNTY: STODDARD
JOB NO.: J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9225

DESCRIPTION | DATE

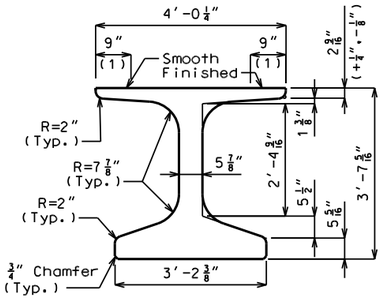
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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MoDOT
MODJESKI and MASTERS
333 SOUTH 18th STREET, SUITE 100
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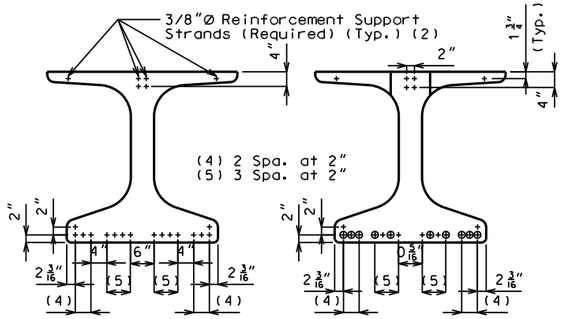
REV.

(1) Fabricator shall apply a bond breaker to this region.



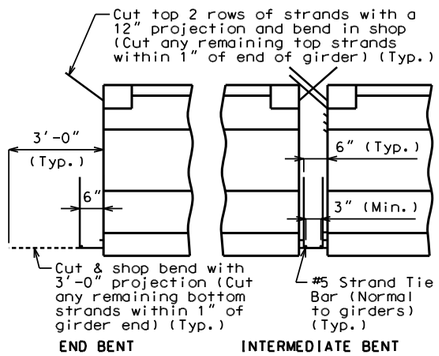
DIMENSIONS

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



℄ GIRDER END OF GIRDER

STRAND ARRANGEMENT

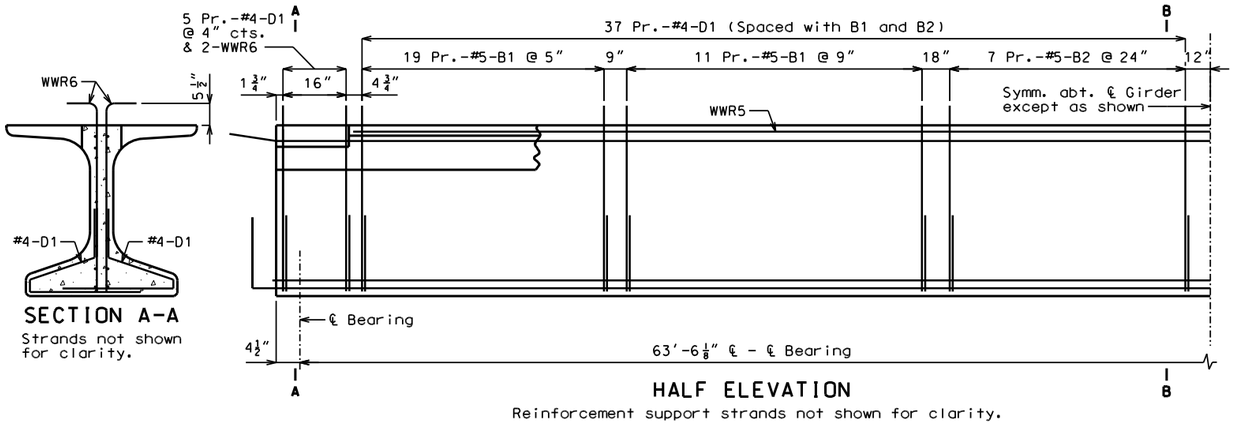


END BENT INTERMEDIATE BENT

STRANDS AT GIRDER ENDS

\+ Indicates prestressing strand.

o Indicates cut & shop bend with 3'-0" projection.

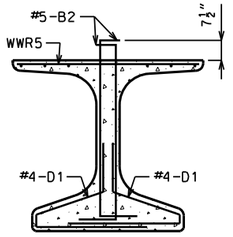


HALF ELEVATION

Reinforcement support strands not shown for clarity.

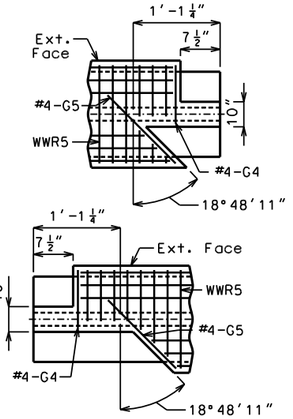
SECTION A-A

Strands not shown for clarity.



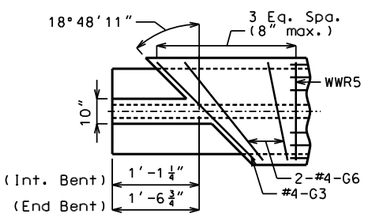
SECTION B-B

Strands not shown for clarity.



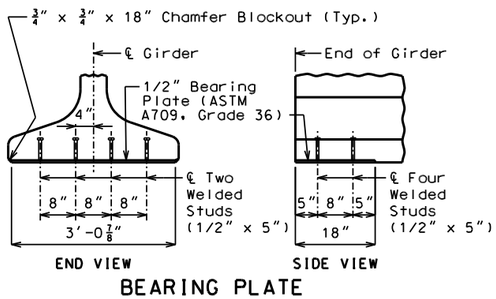
LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT

Rotate 180° for right ext.



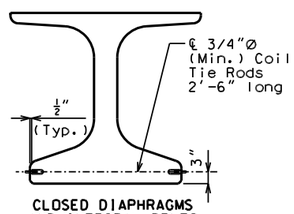
INTERIOR GIRDER AT ALL BENTS & EXTERIOR GIRDER AT END BENT

TOP FLANGE BLOCKOUT



END VIEW SIDE VIEW

BEARING PLATE



CLOSED DIAPHRAGMS AND INTEGRAL BENTS

COIL TIES

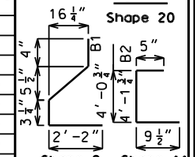
Exclude coil tie at exterior face of exterior girders except at intergral end bents.

(3) 21" at exterior face of exterior girders at end bents

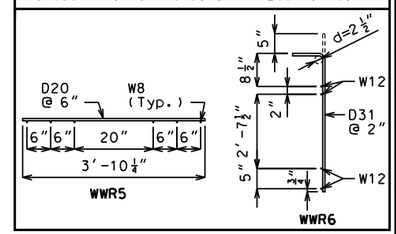
Bill of Reinforcing Steel - Each Girder

No.	Size/ Mark	Length	Shape
120	5 B1	5'-1"	11
28	5 B2	5'-2"	11
168	4 D1	4'-0"	9
2	4 G3	3'-10"	20
2	4 G4	2'-3"	20
2	4 G5	2'-10"	20
4	4 G6	Varies	20

Bending Diagrams



Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

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

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

Minimum clearance to reinforcing shall be 1".

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

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

All B1 bars shall be epoxy coated.

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

General Notes:

Concrete for prestressed girders shall be Class A-1 with f'c = 9500 psi and f'ci = 7000 psi.

Use 18 strands, 0.6"Ø Grade 270, with an initial prestress force of 791 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

Exterior and interior girders are the same except: coil ties, top flange blockout.

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

For Girder Camber Diagram, see Sheet No. 31.

For location of coil ties at concrete diaphragms and integral bents, see Sheets No. 9 and 28.

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026

ROUTE 114 | STATE MO

DISTRICT BR | SHEET NO. 23

COUNTY STODDARD

JOB NO. J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9225

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MoDOT
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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

REV.

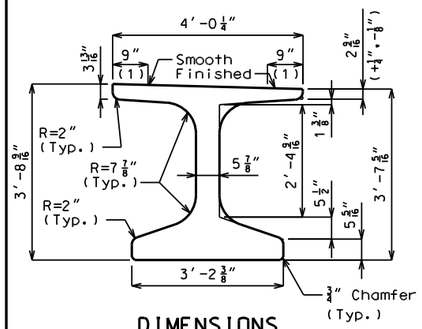
NU-GIRDERS (ALTERNATE REINFORCEMENT) - SPAN (1-2)

Detailed Oct. 2026
Checked Oct. 2026

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

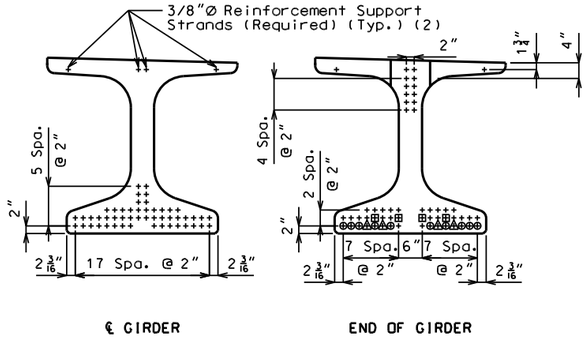
B_A9225_23_J9S3775_NU43Alt1-2.dgn 5:41:33 PM 10/8/2026

(1) Fabricator shall apply a bond breaker to this region.



DIMENSIONS

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



℄ GIRDER END OF GIRDER

STRAND ARRANGEMENT

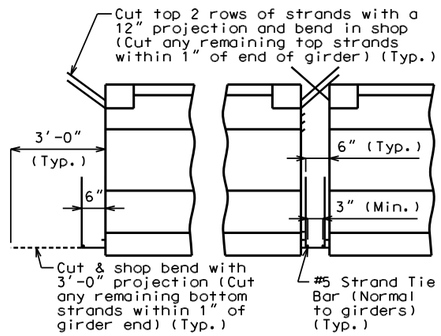
All strands are fully bonded unless otherwise noted.

\+ Indicates prestressing strand.

o Indicates cut & shop bend with 3′-0″ projection.

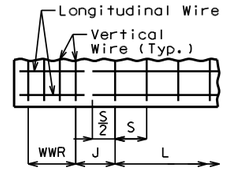
△ Indicates debonded for 11′-6″ from end of girder.

□ Indicates debonded for 3′-0″ from end of girder



INTERMEDIATE BENT INTERMEDIATE BENT

STRANDS AT GIRDER ENDS



WELDED WIRE PLACEMENT

S = Vertical wire spacing

L = Length of WWR mats

J = Distance between WWR mats

Bill of Reinforcing Steel

Bars Each Girder

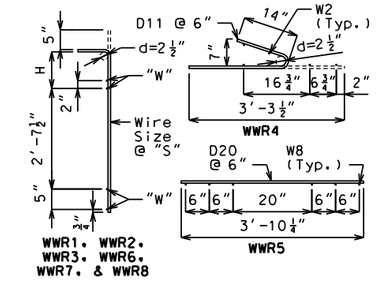
No.	Size/Mark	Length	Shape
134	3 G1	2′-10″	8
2	4 G3	3′-9″	20
2	4 G4	2′-3″	20
2	4 G5	2′-9″	20
4	4 G6	Varies	20

Bending Diagrams

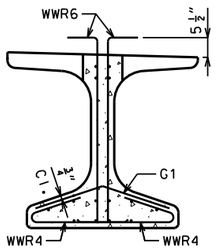


Welded Wire Each Grider

Mark	Size	S	W	L	J	H
WWR1	D22	4″	W9	9′-4″	8″	9½″
WWR2	D22	8″	W9	20′-0″	16″	10¾″
WWR3	D22	16″	W9	46′-8″	--	11½″
WWR6	D31	2″	W12	16″	4″	8½″
WWR7	D22	8″	W9	20′-0″	--	9¾″
WWR8	D22	16″	W9	46′-8″	--	9½″

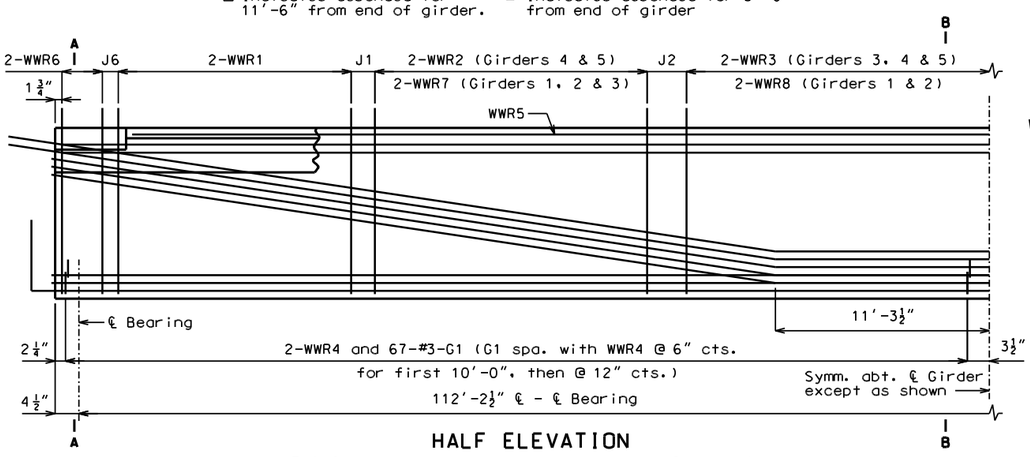


WWR1. WWR2. WWR3. WWR6. WWR7. & WWR8



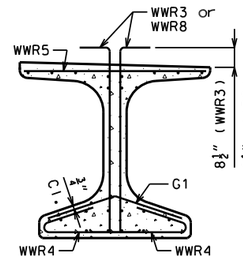
SECTION A-A

Strands not shown for clarity.



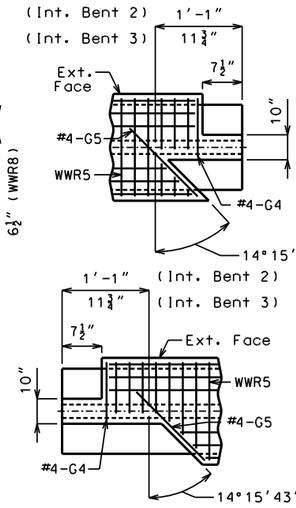
HALF ELEVATION

Reinforcement support strands not shown for clarity.



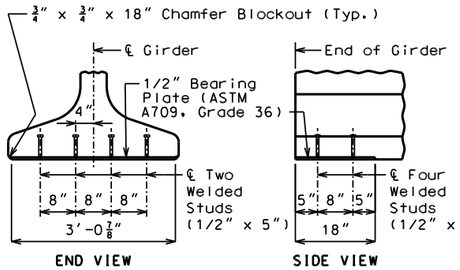
SECTION B-B

Strands not shown for clarity.

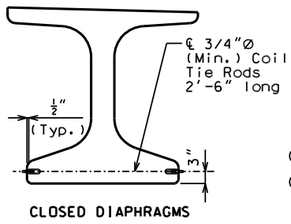


LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT

Rotate 180° for right ext.



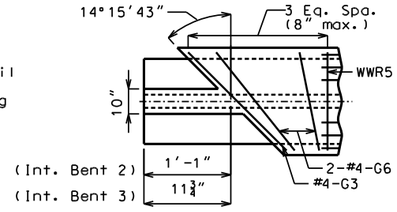
BEARING PLATE



CLOSED DIAPHRAGMS

COIL TIES

Exclude coil tie at exterior face of exterior girders.



INTERIOR GIRDER

TOP FLANGE BLOCKOUT

All dimensions are out to out.

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

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

Minimum clearance to reinforcing shall be 1″, unless otherwise shown.

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

WWR shall be Grade 70 and in accordance with AASHTO M 336.

WWR shall not be epoxy coated.

G4 and G5 not required for interior girders. G3 and G6 not required for exterior girders of intermediate spans.

General Notes:

Concrete for prestressed beams shall be Class A-1 with f′c = 9500 psi and f′ci = 7000 psi.

Use 50 strands, 0.6″Ø Grade 270, with an initial prestress force of 2197 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

Exterior and interior girders are the same except: coil ties, top flange blockout.

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

For Girder Camber Diagram, see Sheet No. 31.

For location of coil ties at concrete diaphragms, see Sheets No. 28 and 29.

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

NU-GIRDERS - SPAN (2-3)

Detailed Oct. 2026
Checked Oct. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 STATE MO
DISTRICT BR SHEET NO. 24
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

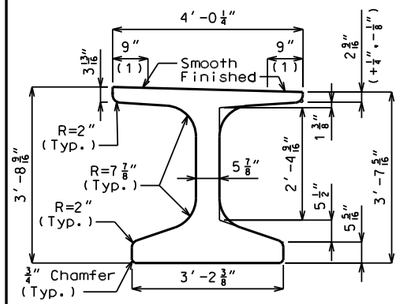
DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MoDOT
MODJESKI and MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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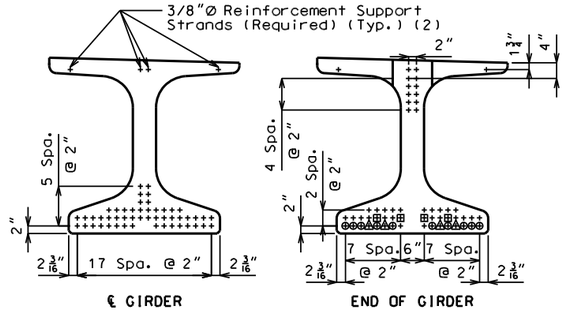
REV.

(1) Fabricator shall apply a bond breaker to this region.



DIMENSIONS

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



STRAND ARRANGEMENT

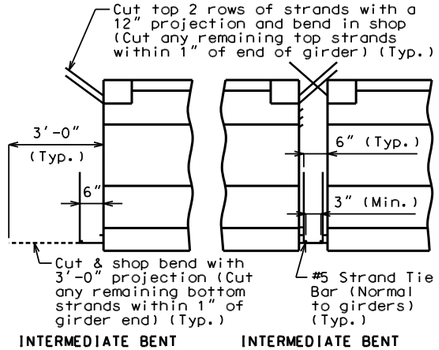
All strands are fully bonded unless otherwise noted.

+ Indicates prestressing strand.

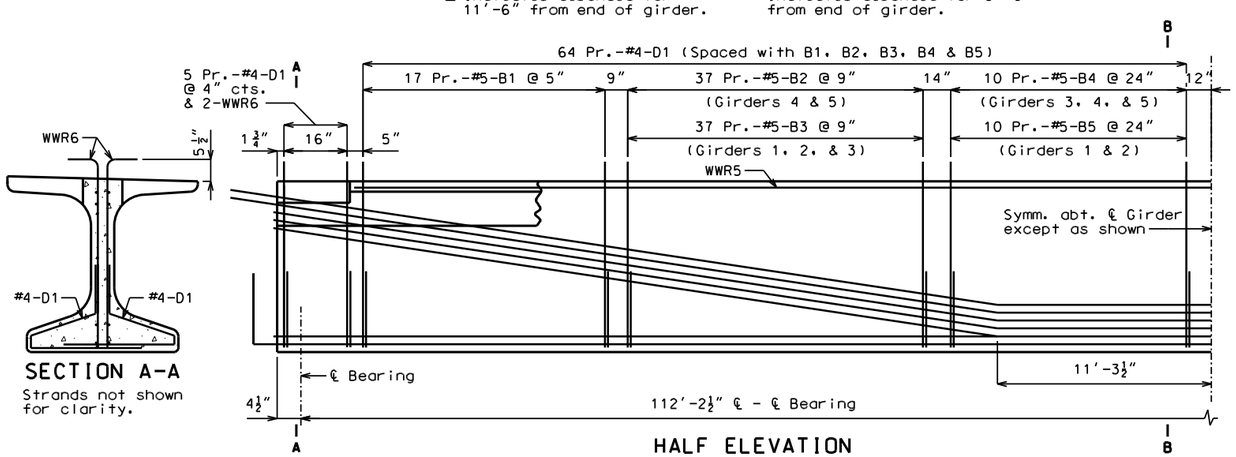
o Indicates cut & shop bend with 3'-0" projection.

△ Indicates debonded for 11'-6" from end of girder.

□ Indicates debonded for 3'-0" from end of girder.



STRANDS AT GIRDER ENDS

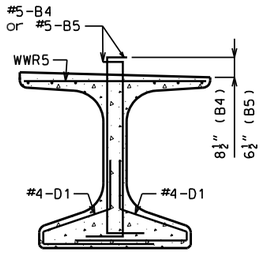


HALF ELEVATION

Reinforcement support strands not shown for clarity.

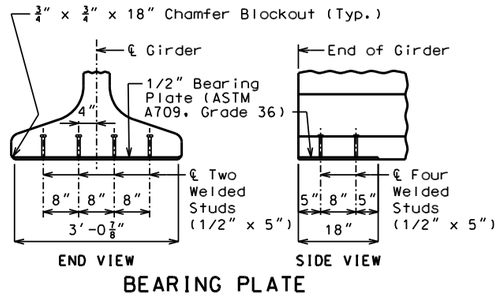
SECTION A-A

Strands not shown for clarity.

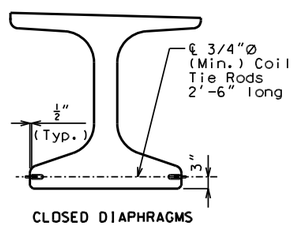


SECTION B-B

Strands not shown for clarity.



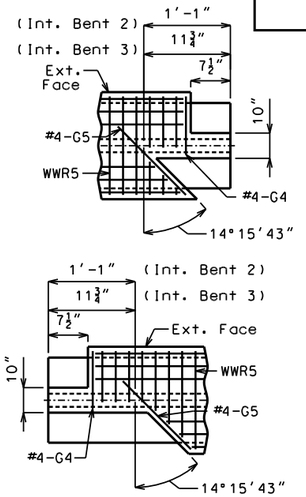
BEARING PLATE



CLOSED DIAPHRAGMS

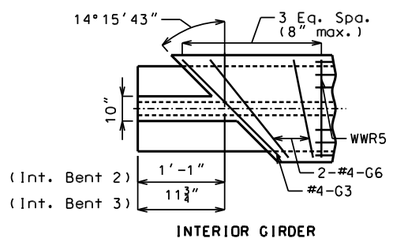
COIL TIES

Exclude coil tie at exterior face of exterior girders.



LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT

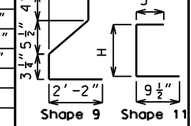
Rotate 180° for right ext.



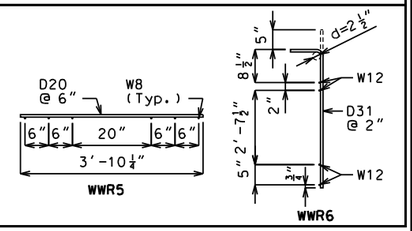
INTERIOR GIRDER

TOP FLANGE BLOCKOUT

Bill of Reinforcing Steel - Each Girder					
No.	Size/ Mark	Length	Shape	H	Bending Diagrams
68	5 B1	5'-1"	11	4'-¾"	
148*	5 B2	5'-2"	11	4'-2"	
148*	5 B3	5'-1"	11	4'-1"	
40*	5 B4	5'-3"	11	4'-2¾"	
40*	5 B5	5'-1"	11	4'-¾"	
276	4 D1	4'-0"	9	--	
2	4 G3	3'-9"	20	--	
2	4 G4	2'-3"	20	--	
2	4 G5	2'-9"	20	--	
4	4 G6	Varies	20	--	



Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

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

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

Minimum clearance to reinforcing shall be 1".

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

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

All B1 bars shall be epoxy coated.

G4 and G5 not required for interior girders. G3 and G6 not required for exterior girders of intermediate spans.

* B2, B3, B4, B5 not used for every girder. Totals reflect per girder total if the given bar is required. See Half Elevation for required bars.

General Notes:

Concrete for prestressed girders shall be Class A-1 with f'c = 9500 psi and f'ci = 7000 psi.

Use 50 strands, 0.6"Ø Grade 270, with an initial prestress force of 2197 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

Exterior and interior girders are the same except: coil ties, top flange blockout.

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

For Girder Camber Diagram, see Sheet No. 31.

For location of coil ties at concrete diaphragms, see Sheets No. 28 and 29.

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026

ROUTE 114 | STATE MO

DISTRICT BR | SHEET NO. 25

COUNTY STODDARD

JOB NO. J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9225

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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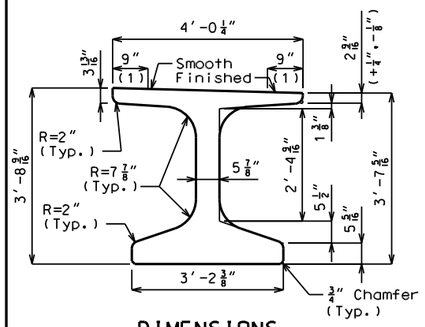
REV.

NU-GIRDERS (ALTERNATE REINFORCEMENT) - SPAN (2-3)

Detailed Oct. 2026
Checked Oct. 2026

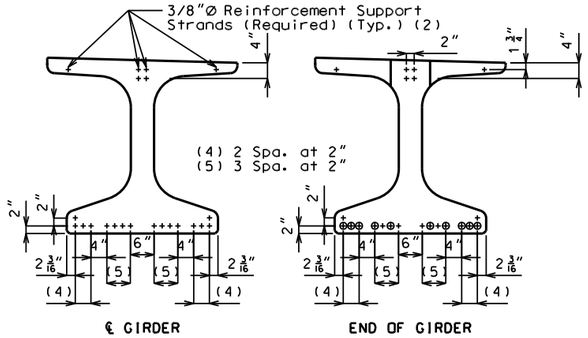
Note: This drawing is not to scale. Follow dimensions.

(1) Fabricator shall apply a bond breaker to this region.



DIMENSIONS

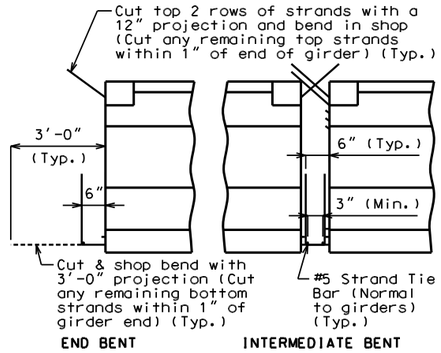
(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



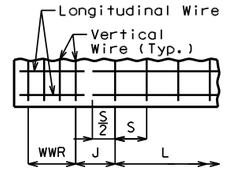
STRAND ARRANGEMENT

\+ Indicates prestressing strand.

o Indicates cut & shop bend with 3′-0″ projection.



STRANDS AT GIRDER ENDS



WELDED WIRE PLACEMENT

S = Vertical wire spacing

L = Length of WWR mats

J = Distance between WWR mats

Bill of Reinforcing Steel

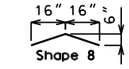
Bars Each Girder

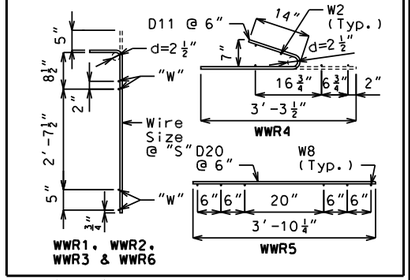
No.	Size/Mark	Length	Shape
86	3 G1	2′-10″	8
2	4 G3	3′-8″	20
2	4 G4	2′-3″	20
2	4 G5	2′-9″	20
2	4 G6	3′-9″	20

Welded Wire Each Girder

Mark	Size	S	W	L	J
WWR1	D22	4″	W9	9′-8″	8″
WWR2	D22	8″	W9	8′-0″	15″
WWR3	D22	16″	W9	21′-4″	--
WWR6	D31	2″	W12	16″	3⅜

Bending Diagrams





All dimensions are out to out.

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

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

Minimum clearance to reinforcing shall be 1″, unless otherwise shown.

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

WWR shall be Grade 70 and in accordance with AASHTO M 336.

WWR shall not be epoxy coated.

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

General Notes:

Concrete for prestressed beams shall be Class A-1 with f′c = 9500 psi and f′ci = 7000 psi.

Use 18 strands, 0.6″Ø Grade 270, with an initial prestress force of 791 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

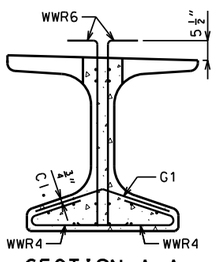
Exterior and interior girders are the same except: coil ties, top flange blockout.

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

For Girder Camber Diagram, see Sheet No. 31.

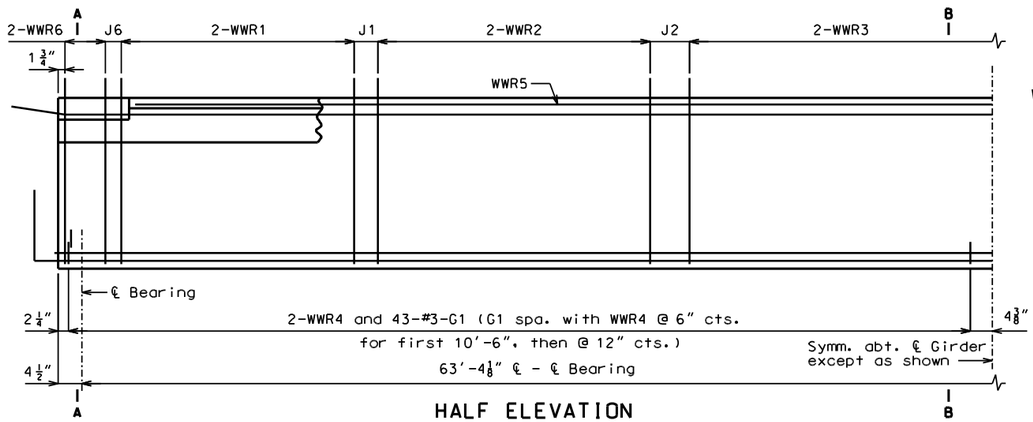
For location of coil ties at concrete diaphragms and integral bents, see Sheets No. 19 and 29.

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



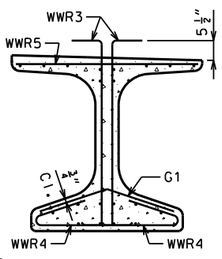
SECTION A-A

Strands not shown for clarity.



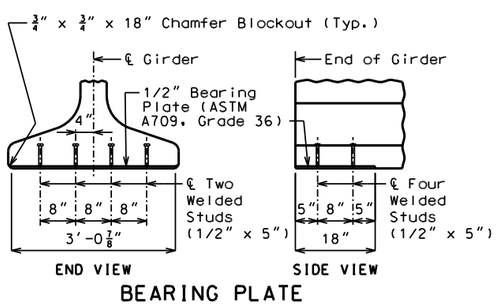
HALF ELEVATION

Reinforcement support strands not shown for clarity.

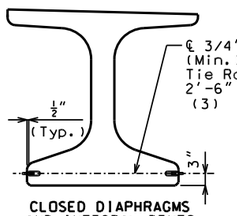


SECTION B-B

Strands not shown for clarity.



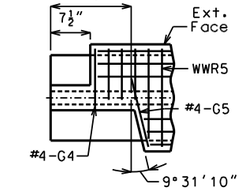
BEARING PLATE



COIL TIES

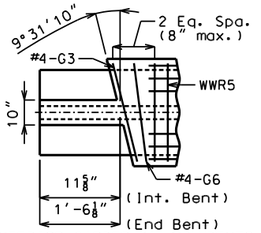
Exclude coil tie at exterior face of exterior girders except at integral end bents.

(3) 21″ at exterior face of exterior girders at end bents



LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT

Rotate 180° for right ext.



INTERIOR GIRDER AT ALL BENTS & EXTERIOR GIRDER AT END BENT

TOP FLANGE BLOCKOUT

NU-GIRDERS - SPAN (3-4)

Detailed Oct. 2026
Checked Oct. 2026

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

JERILYN M. HASSARD NUMBER PE-2002003174 PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 26
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

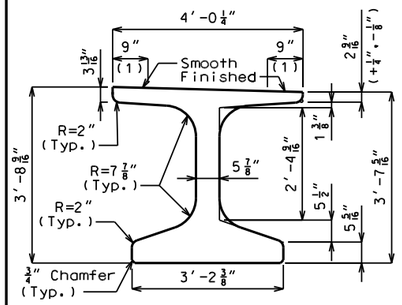
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
MoDOT
MODJESKI and MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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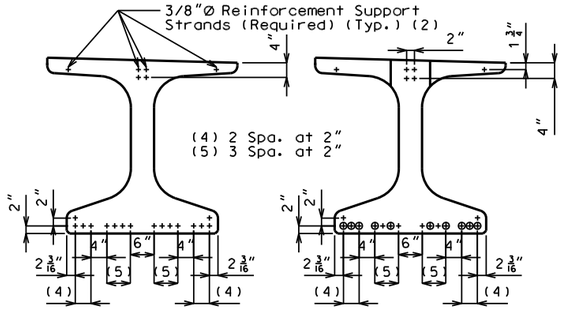
REV.

(1) Fabricator shall apply a bond breaker to this region.

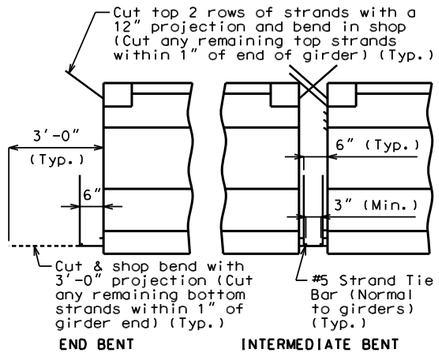


DIMENSIONS

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



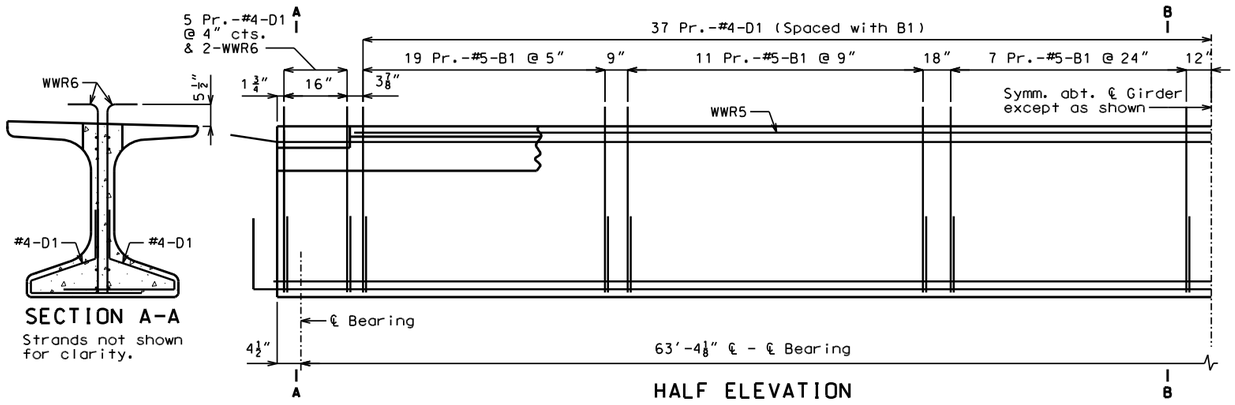
STRAND ARRANGEMENT

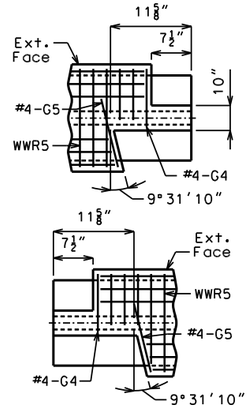


STRANDS AT GIRDER ENDS

\+ Indicates prestressing strand.

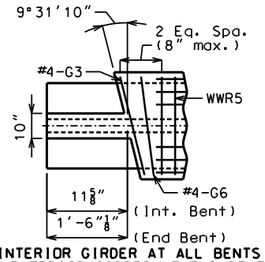
o Indicates cut & shop bend with 3'-0" projection.





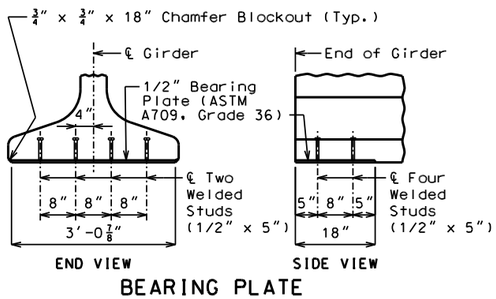
LEFT EXTERIOR GIRDER AT INTERMEDIATE BENT

Rotate 180° for right ext.

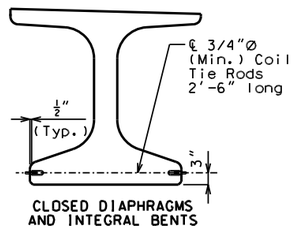


INTERIOR GIRDER AT ALL BENTS & EXTERIOR GIRDER AT END BENT

TOP FLANGE BLOCKOUT



BEARING PLATE



CLOSED DIAPHRAGMS AND INTEGRAL BENTS

COIL TIES

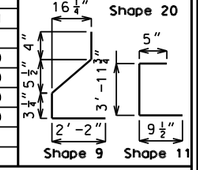
Exclude coil tie at exterior face of exterior girders except at integral end bents.

(3) 21" at exterior face of exterior girders at end bents

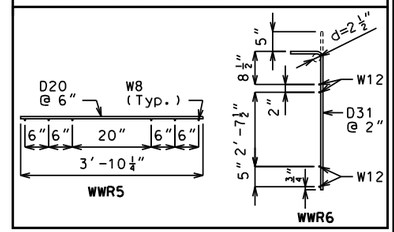
Bill of Reinforcing Steel - Each Girder

No.	Size/ Mark	Length	Shape
148	5 B1	5'-0"	11
168	4 D1	4'-0"	9
2	4 G3	3'-8"	20
2	4 G4	2'-3"	20
2	4 G5	2'-9"	20
2	4 G6	3'-9"	20

Bending Diagrams



Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

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

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

Minimum clearance to reinforcing shall be 1".

All bar reinforcement shall be ASTM A615 or A706 Grade 60.

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

All B1 bars shall be epoxy coated.

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

General Notes:

Concrete for prestressed girders shall be Class A-1 with f'c = 9500 psi and f'ci = 7000 psi.

Use 18 strands, 0.6"Ø Grade 270, with an initial prestress force of 791 kips.

Pretensioned members shall be in accordance with Sec 1029.

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

Exterior and interior girders are the same except: coil ties, top flange blockout.

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

For Girder Camber Diagram, see Sheet No. 31.

For location of coil ties at concrete diaphragms and integral bents, see Sheets No. 19 and 29.

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026

ROUTE 114 | STATE MO

DISTRICT BR | SHEET NO. 27

COUNTY STODDARD

JOB NO. J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO. A9225

DESCRIPTION | DATE

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

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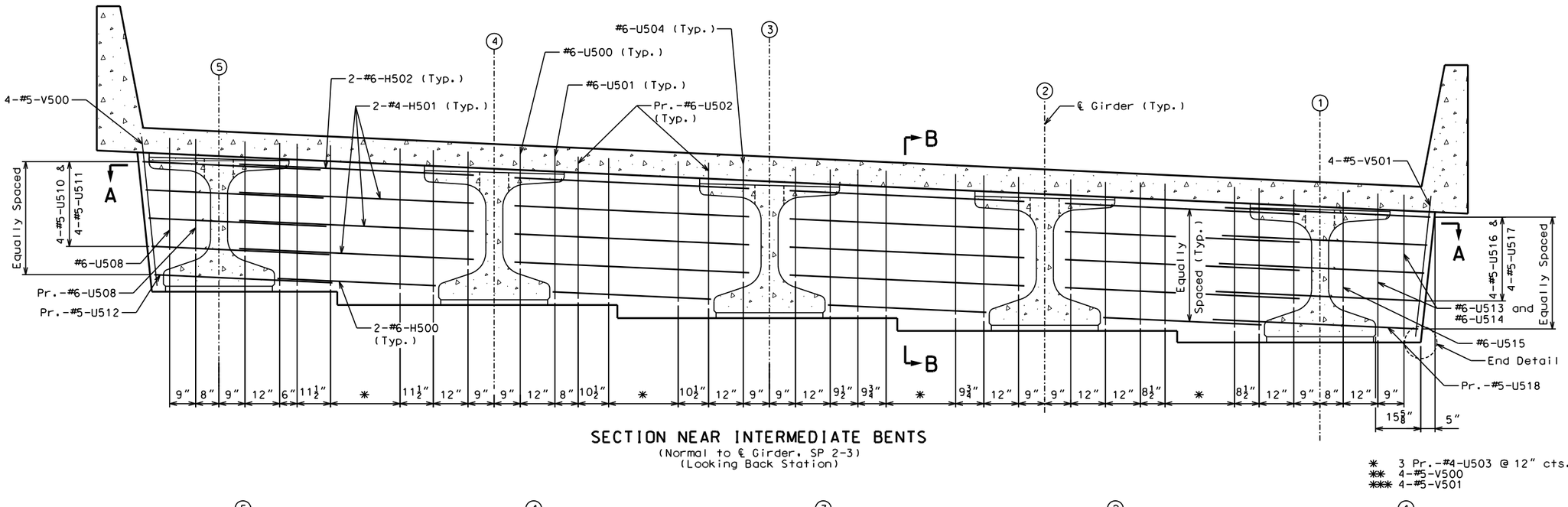
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

NU-GIRDERS (ALTERNATE REINFORCEMENT) - SPAN (3-4)

Detailed Oct. 2026
Checked Oct. 2026

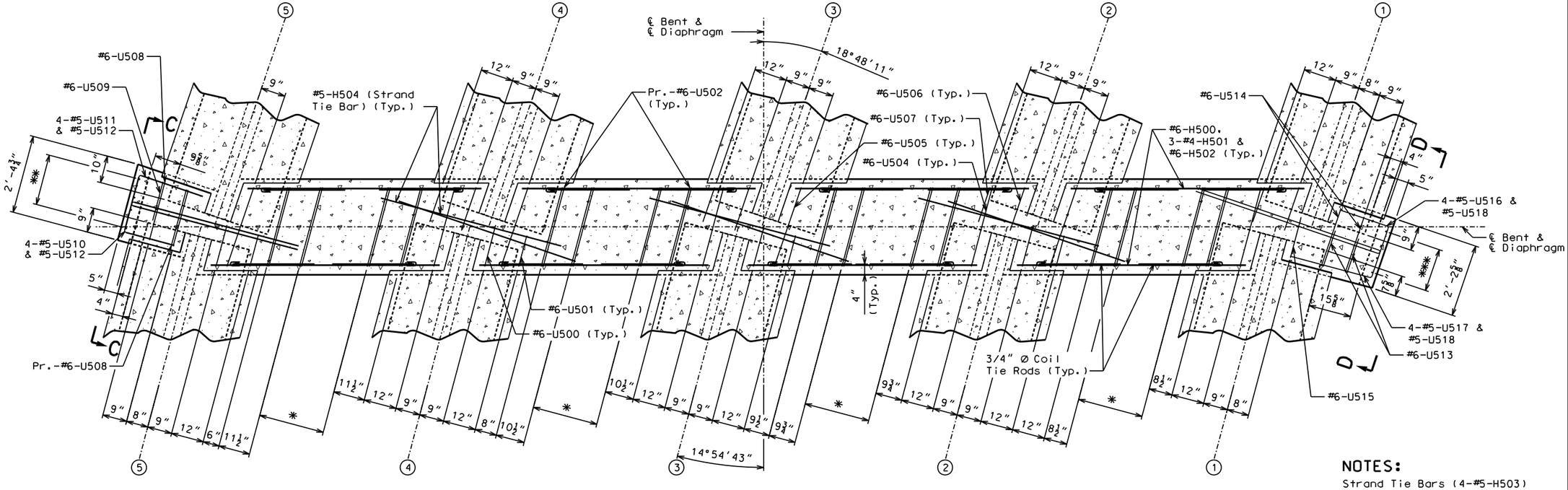
Note: This drawing is not to scale. Follow dimensions.



SECTION NEAR INTERMEDIATE BENTS

(Normal to ℄ Girder, SP 2-3)
(Looking Back Station)

* 3 Pr.-#4-U503 @ 12" cts.
** 4-#5-V500
*** 4-#5-V501



SECTION A-A

NOTES:

Strand Tie Bars (4-#5-H503) not shown for clarity at girder lines 1 & 5. See Sheet No. 26 for typical strand tie bar positioning.

For End Detail, Section B-B, and Elevations C-C & D-D, see Sheet No. 30.

DETAILS OF CONCRETE DIAPHRAGM AT INTERMEDIATE BENT NO. 2

Detailed Sep. 2023
Checked Oct. 2023

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

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JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
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DATE PREPARED: 10/12/2026
ROUTE: 114 | STATE: MO
DISTRICT: BR | SHEET NO.: 28
COUNTY: STODDARD
JOB NO.: J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9225

DESCRIPTION	DATE

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

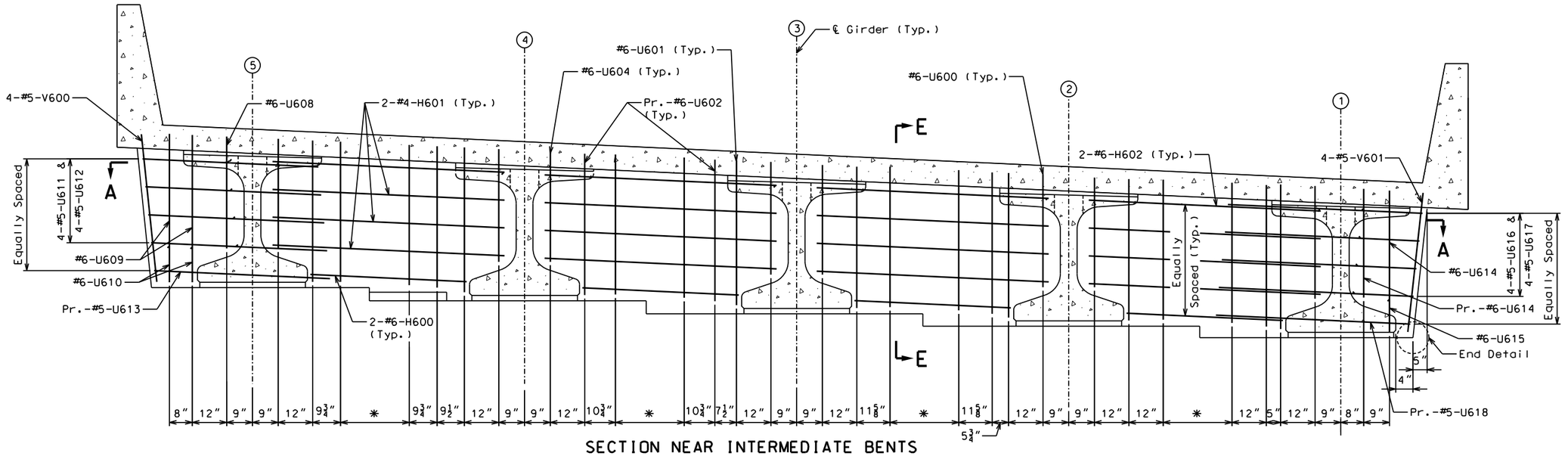
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

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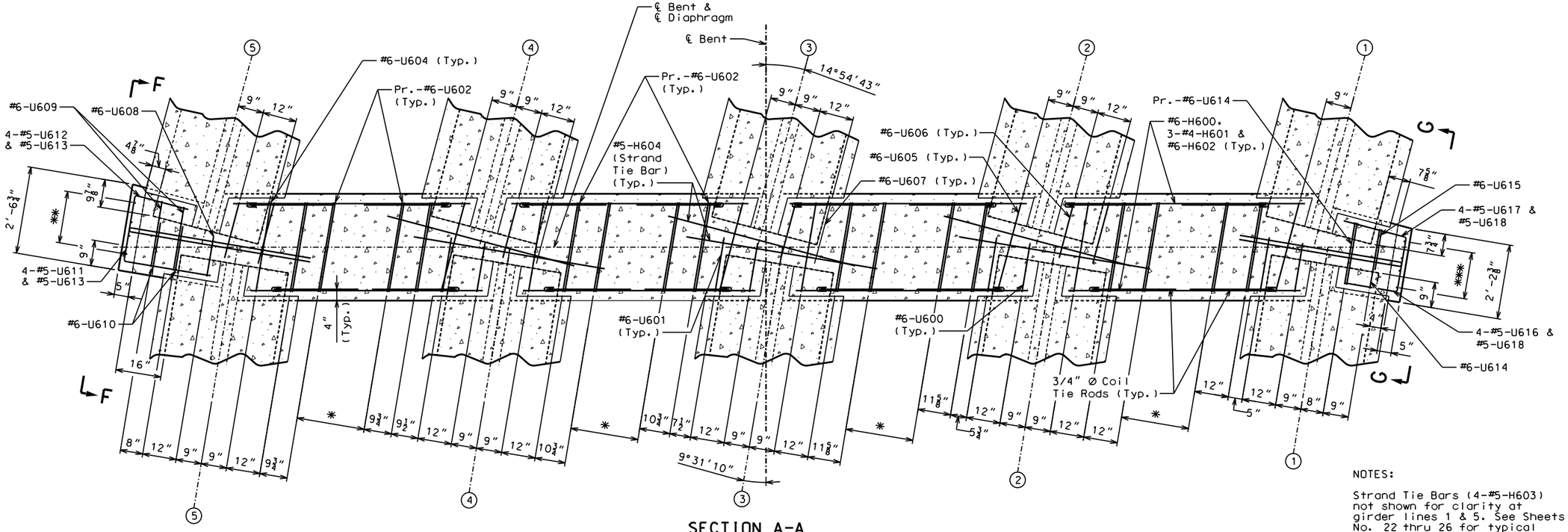
REV.

B_A9225_28_J9S3775_DIA_INT2_1.dgn 4:39:02 PM 10/8/2026



SECTION NEAR INTERMEDIATE BENTS
(Normal to ℄ Girder, SP 3-4)
(Looking Back Station)

* 3 Pr.-#4-U603 @ 12" cts.
** 4-#5-V600
*** 4-#5-V601



SECTION A-A

NOTES:

Strand Tie Bars (4-#5-H603) not shown for clarity at girder lines 1 & 5. See Sheets No. 22 thru 26 for typical strand tie bar positioning.

For End Detail, Section E-E, and Elevations F-F & G-G, see Sheet No. 30.

DETAILS OF CONCRETE DIAPHRAGM AT INTERMEDIATE BENT NO. 3

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
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DATE PREPARED: 10/12/2026
ROUTE: 114 | STATE: MO
DISTRICT: BR | SHEET NO.: 29
COUNTY: STODDARD
JOB NO.: J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9225

DATE	DESCRIPTION

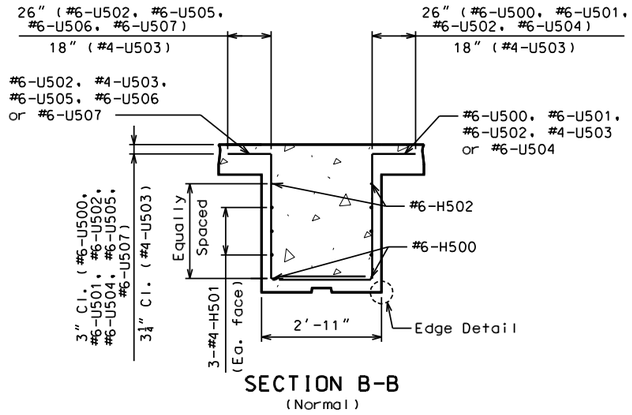
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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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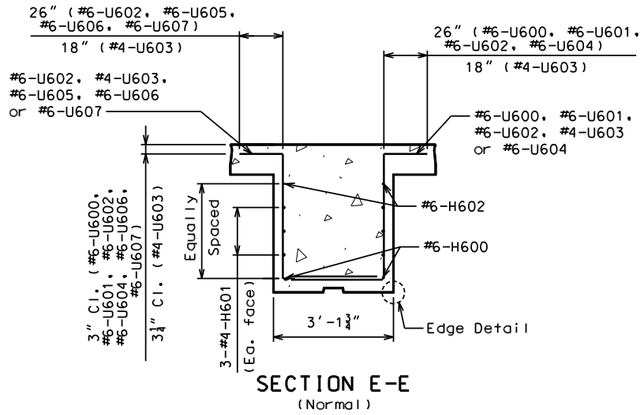
MODJESKI and MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

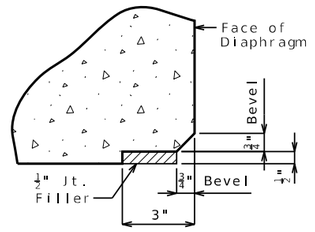
REV.



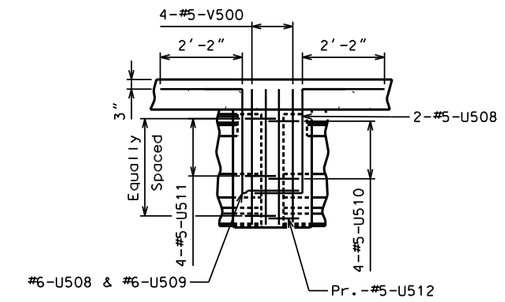
SECTION B-B
(Normal)



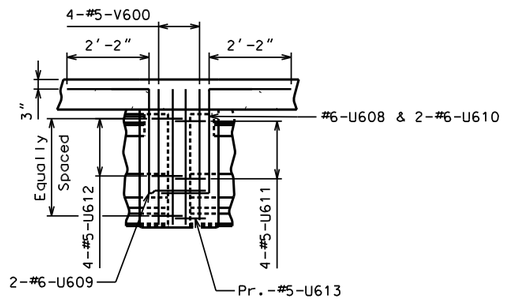
SECTION E-E
(Normal)



EDGE DETAIL



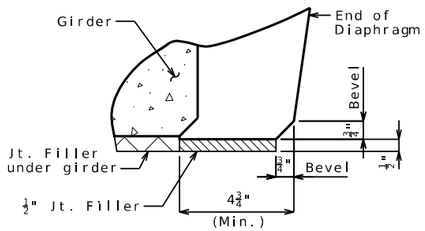
ELEVATION C-C



ELEVATION F-F

ELEVATION D-D

ELEVATION G-G



END DETAIL

Notes:

1. Work this sheet with Sheets No. 28 and 29.

DETAILS OF CONCRETE DIAPHRAGM AT INTERMEDIATE BENTS

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9225_30_J9S3775_DIA_INT_DTLS.dgn 1:30:55 PM 10/6/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
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DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 30
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

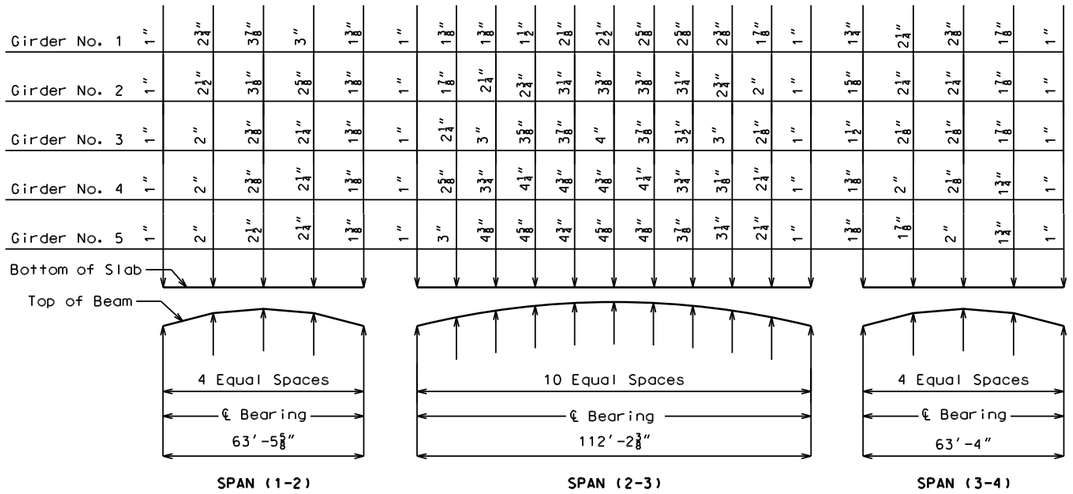
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105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

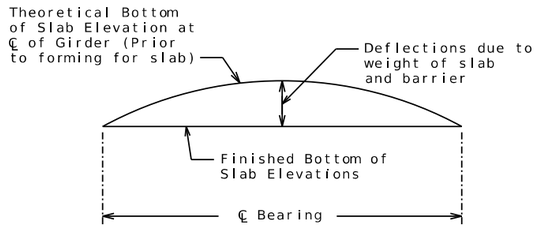
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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REV.



THEORETICAL SLAB HAUNCHING DIAGRAM (ESTIMATED AT 90 DAYS)



TYPICAL SLAB ELEVATIONS DIAGRAM

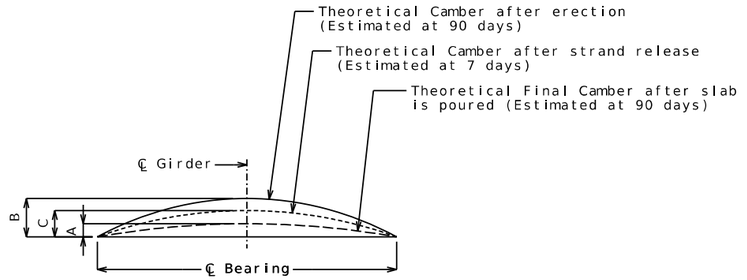
Theoretical Bottom of Slab Elevations at ℄ of Girder (Prior to forming for slab) (Estimated at 90 days)

Girder Number	Span (1-2) (63′-5⅝″ ℄ Brg. - ℄ Brg.)				
	℄ Brg.	.25	.50	.75	℄ Brg.
1	349.37	350.03	350.60	350.97	351.25
2	349.64	350.29	350.85	351.26	351.58
3	349.91	350.55	351.10	351.56	351.94
4	350.08	350.77	351.37	351.89	352.32
5	350.27	351.01	351.66	352.23	352.71

Girder Number	Span (2-3) (112′-2⅜″ ℄ Brg. - ℄ Brg.)										
	℄ Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ Brg.
1	351.31	351.54	351.71	351.88	352.04	352.15	352.20	352.19	352.13	352.02	351.87
2	351.65	351.92	352.14	352.34	352.50	352.60	352.64	352.63	352.55	352.43	352.27
3	352.00	352.31	352.57	352.78	352.93	353.03	353.06	353.04	352.96	352.84	352.67
4	352.38	352.72	353.01	353.21	353.36	353.45	353.48	353.45	353.37	353.24	353.07
5	352.77	353.14	353.45	353.64	353.78	353.87	353.89	353.86	353.77	353.64	353.47

Girder Number	Span (3-4) (63′-4″ ℄ Brg. - ℄ Brg.)				
	℄ Brg.	.25	.50	.75	℄ Brg.
1	351.84	351.63	351.35	351.00	350.73
2	352.23	352.02	351.74	351.38	350.95
3	352.62	352.41	352.12	351.76	351.33
4	353.01	352.79	352.51	352.15	351.72
5	353.40	353.18	352.89	352.53	352.10

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 and barrier.



Girder	Span (1-2)			Span (2-3)			Span (3-4)		
	A	B	C	A	B	C	A	B	C
Exterior	½″	⅞″	⅝″	1⅞″	5⅛″	4⅛″	½″	⅞″	⅝″
Interior	½″			1⅝″			½″		

GIRDER CAMBER DIAGRAM

If girder camber is different from that shown in the camber diagram, in order to maintain minimum slab thickness, an adjustment of the slab haunches, an increase in slab thickness or a raise in grade uniformly throughout the structure shall be necessary. The haunch shall be limited to ensure the projecting girder reinforcement is embedded into slab at least 2 inches. No payment will be made for additional labor or materials required for variation in haunching, slab thickness or grade adjustment.

Concrete in the slab haunches is included in the Estimated Quantities for Slab on Concrete NU-Girder.

Conversion Factors for Girder Camber (Estimated at 90 days):

Span (2-3)
0.1 pt. = 0.314 x 0.5 pt.
0.2 pt. = 0.593 x 0.5 pt.
0.3 pt. = 0.813 x 0.5 pt.
0.4 pt. = 0.952 x 0.5 pt.

Span (1-2) and Span (3-4)
0.25 pt. = 0.7125 x 0.5 pt.

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JERILYN M. HASSARD
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ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 31
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

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

MODJESKI-MASTERS
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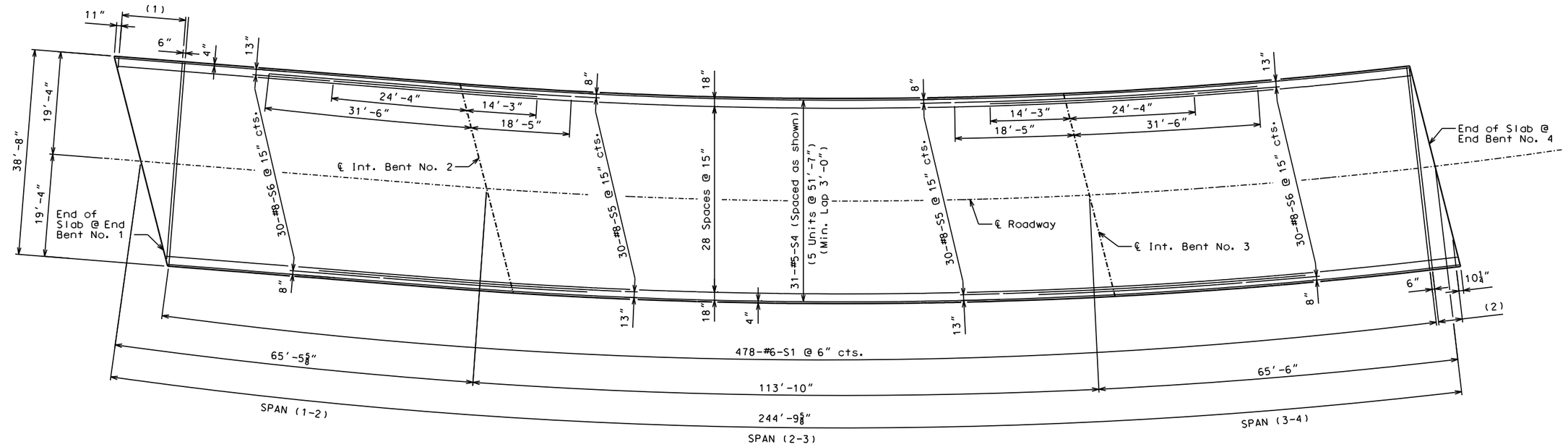
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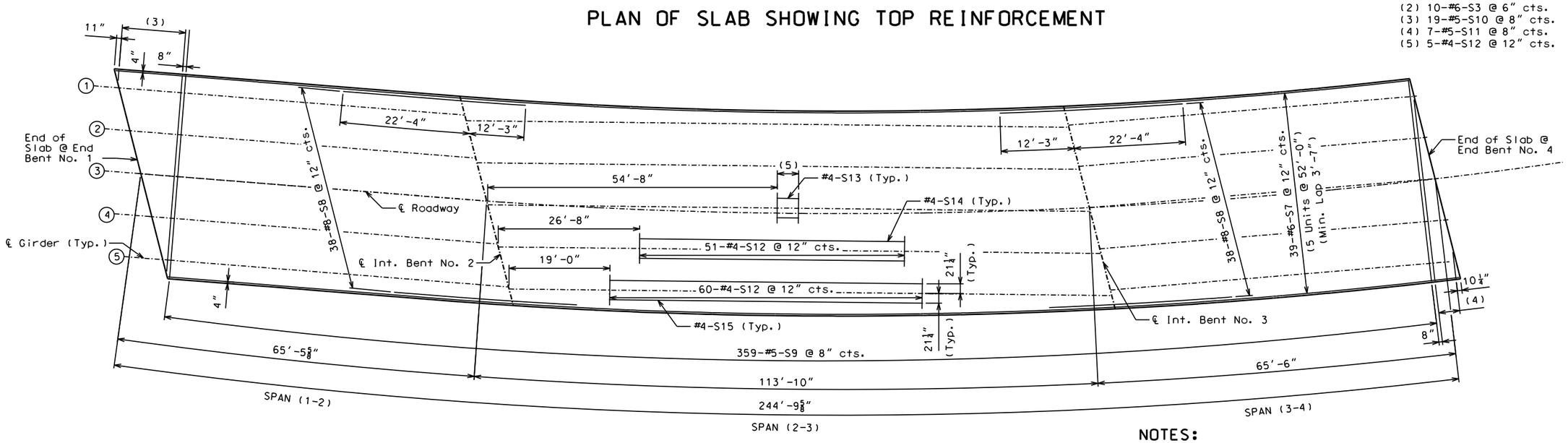
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B_A9225_31_J9S3775_GIRDCAMBER.dgn 1:31:03 PM 10/6/2026



PLAN OF SLAB SHOWING TOP REINFORCEMENT

(1) 25-#6-S2 @ 6" cts.
(2) 10-#6-S3 @ 6" cts.
(3) 19-#5-S10 @ 8" cts.
(4) 7-#5-S11 @ 8" cts.
(5) 5-#4-S12 @ 12" cts.



PLAN OF SLAB SHOWING BOTTOM REINFORCEMENT

NOTES:

Unless otherwise shown, all longitudinal dimensions are horizontal arc dimensions along ℄ Structure, and transverse dimensions are measured radially.

Longitudinal reinforcement shall be placed parallel to ℄ Roadway and spaced radially.

For Section Thru Slab and Slab Pouring Sequence, see Sheet No. 34.

For details and reinforcement of Type D barrier not shown, see Sheets No. 35 thru 38.

For Theoretical Bottom of Slab Elevations, Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 31.

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DISTRICT: BR | SHEET NO.: 32
COUNTY: STODDARD
JOB NO.: J9S3775
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9225

DESCRIPTION | DATE

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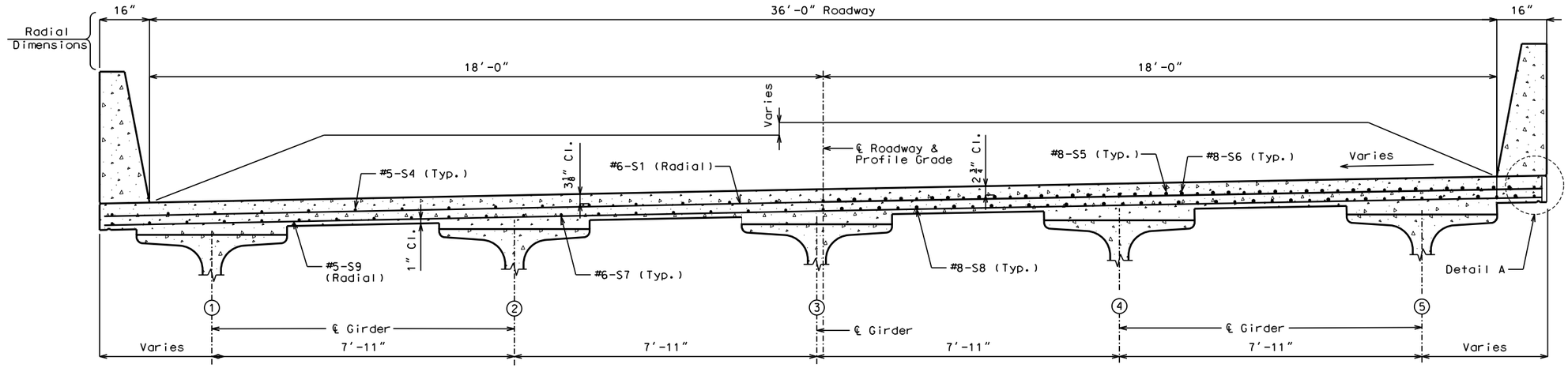
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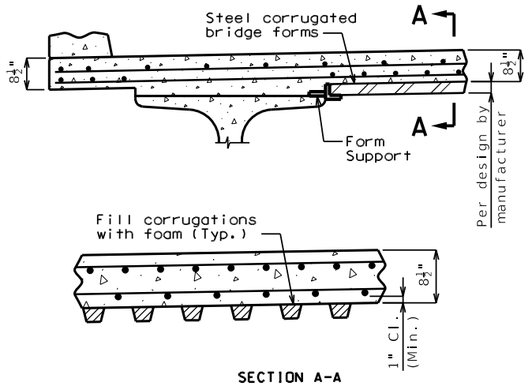
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HALF SECTION NEAR MIDSPAN

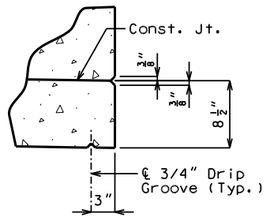
HALF SECTION INTERMEDIATE BENT

SECTION THRU SLAB

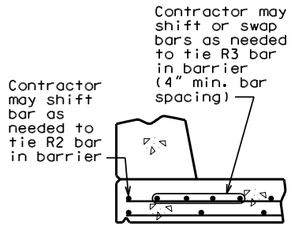


SECTION A-A

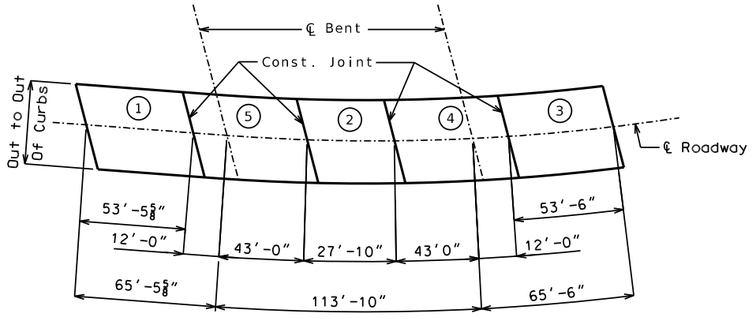
STAY-IN-PLACE FORM DETAILS



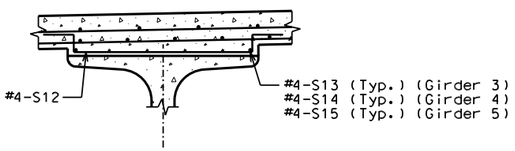
DETAIL A



OPTIONAL SHIFTING TOP BARS AT BARRIER



SPAN (1-2) SPAN (2-3) SPAN (3-4)



HAUNCH DETAIL NEAR MIDSPAN (2-3)

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 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 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.

	Sequence of Pours					Min. Rate of Pour Cu. Yds./Hr.
	Direction					With Retarder
Basic Sequence	1	2	3	4	5	25
	Either Direction					
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.						
Alternate A Pours	1	5 + 2		4 + 3		35
	End to 5	1 to 4		2 to End		
Alternate B Pours	1 + 5 + 2			4 + 3		35
	End to 4			2 to End		
Alternate C Pours	1 + 5 + 2 + 4 + 3					35
	End to End					

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

Notes:

For reinforcement of barrier not shown, see Sheets No. 35 thru 38.

For Theoretical Bottom of Slab Elevations, Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 31.

For Plan of Slab Showing Reinforcement, see Sheet No. 32.

SLAB DETAILS

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CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

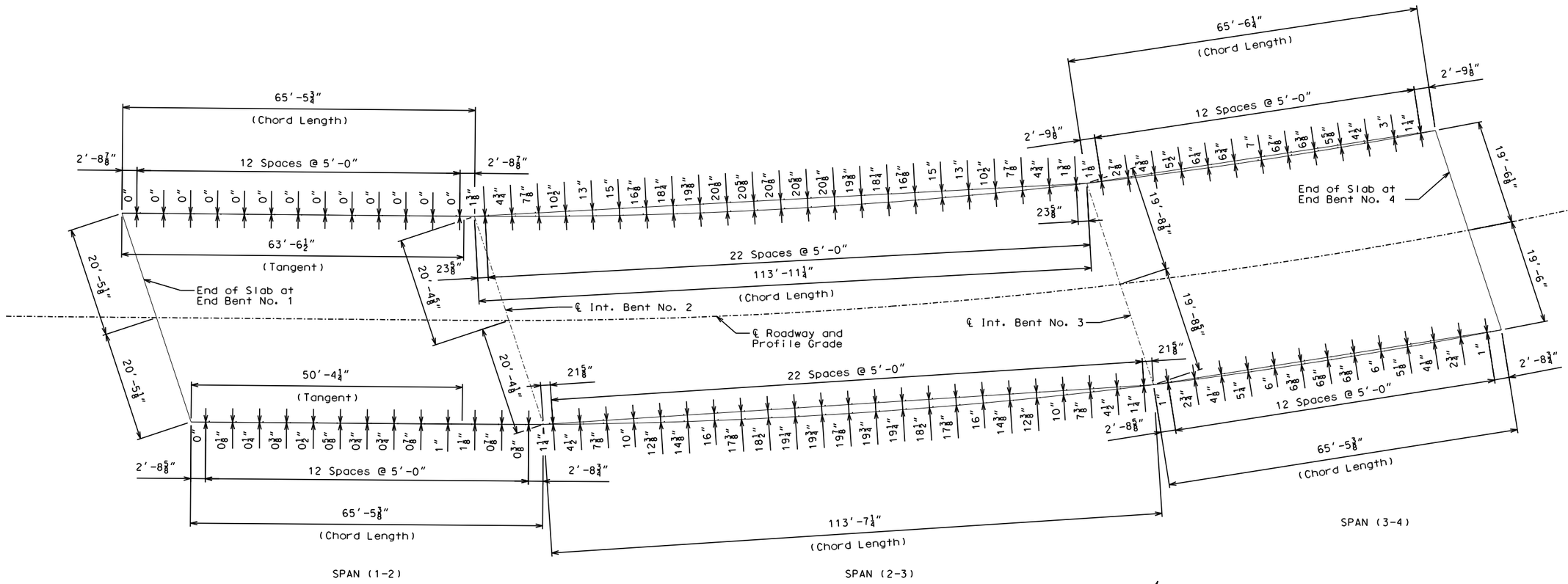
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SLAB CURVE ORDINATES

NOTES:

All dimensions are horizontal.

All bents are parellel.

Detailed Sep. 2023
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Sheet No. 34 of 48

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10/12/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	34

COUNTY
STODDARD

JOB NO.
J9S3775

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9225

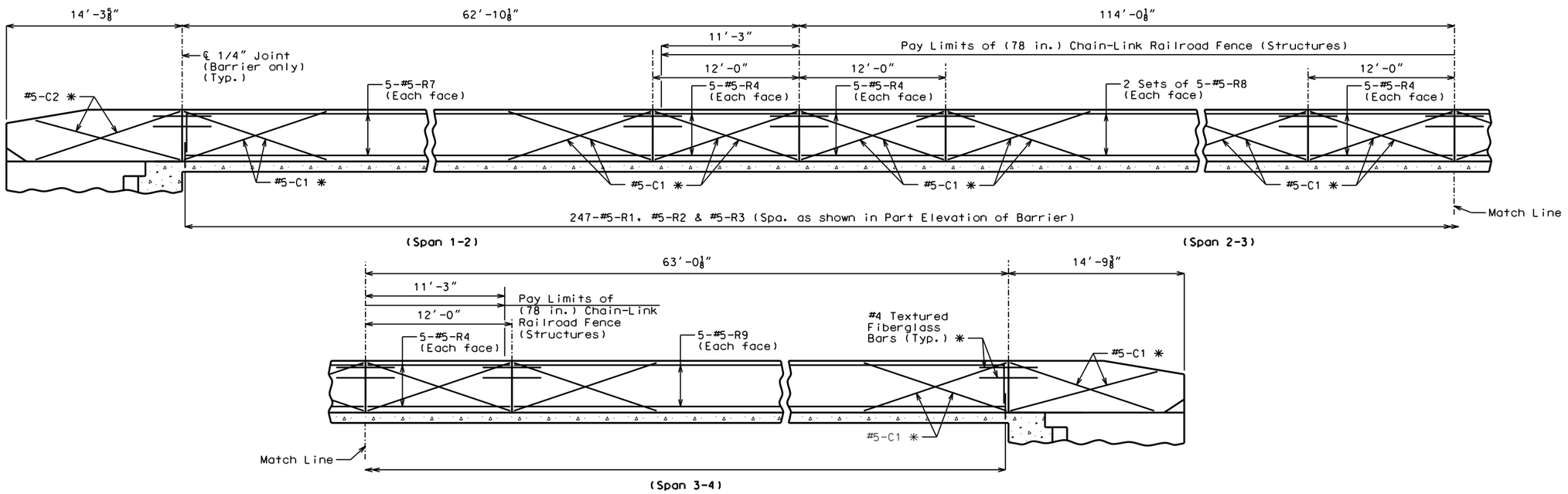
DATE	DESCRIPTION

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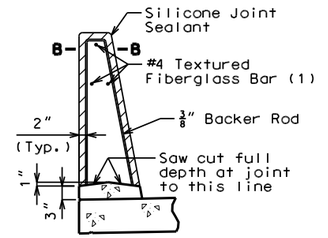
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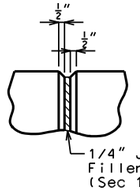


ELEVATION OF BARRIER

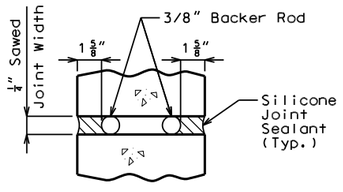
Longitudinal dimensions are horizontal.



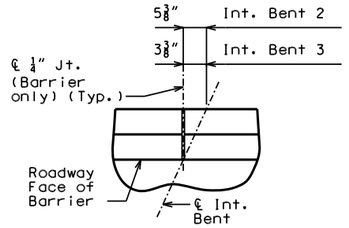
SECTION THRU SAW CUT JOINT



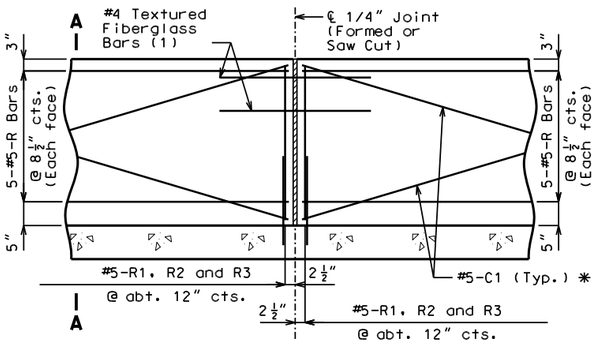
PART ELEVATION AT FORMED JOINT



SECTION B-B

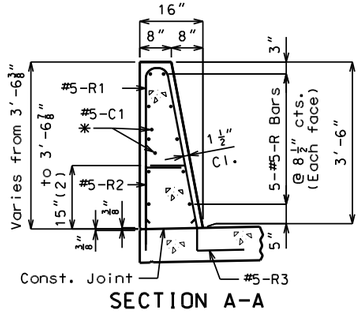


PART PLAN SHOWING JOINT LOCATION



PART ELEVATION OF BARRIER

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

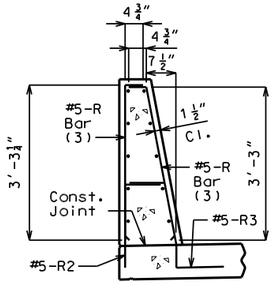


SECTION A-A

Use a minimum lap of 2′-6″ for #5 horizontal barrier bars.

The cross-sectional area above the slab varies from 3.54 to 3.57 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

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

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.

LEFT TYPE D BARRIER

Detailed Sep. 2026
Checked Sep. 2026

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

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DISTRICT BR | SHEET NO. 35
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

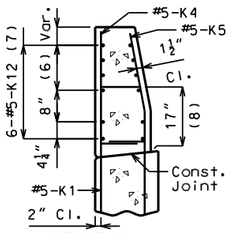
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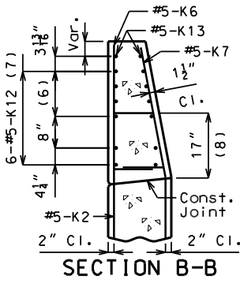
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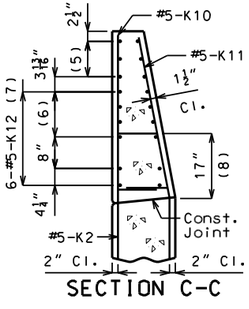
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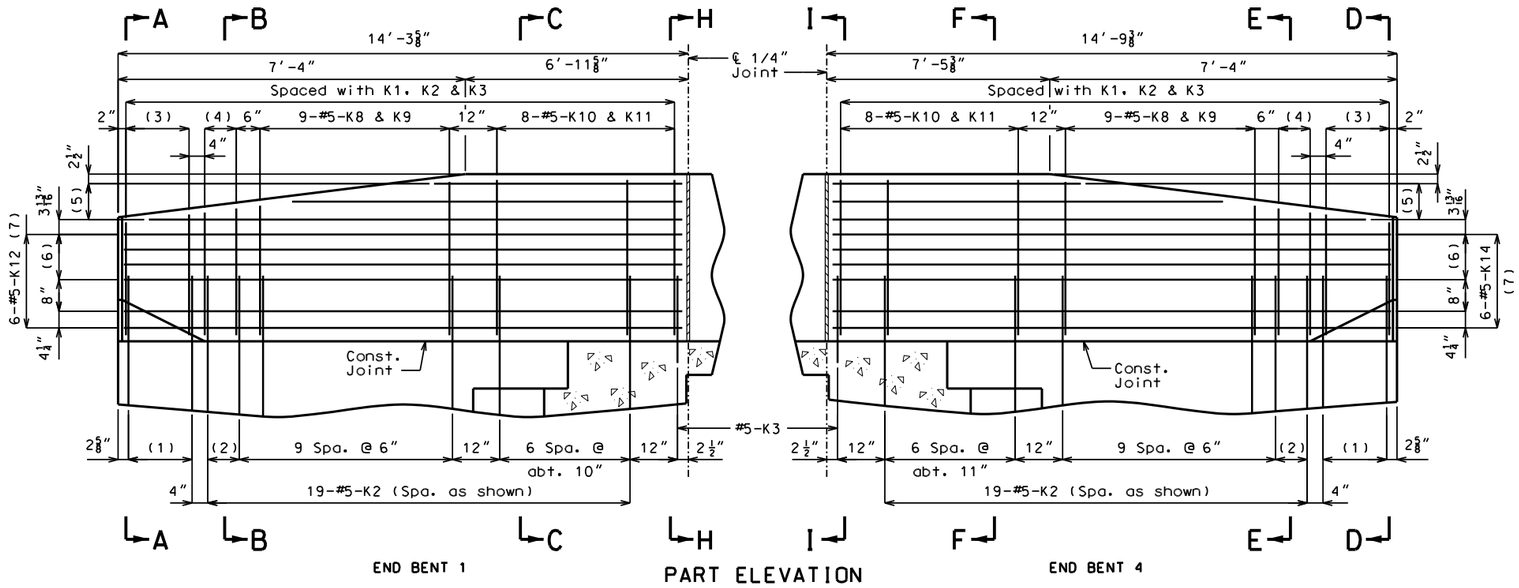
SECTION A-A



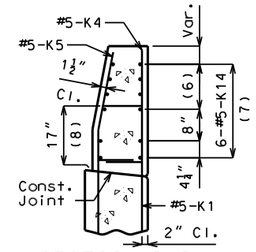
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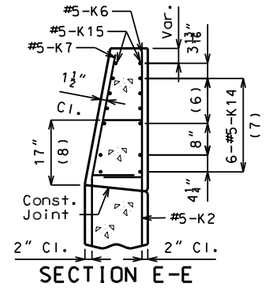
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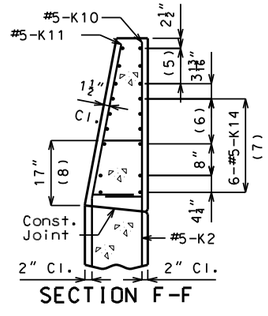
END BENT 1 PART ELEVATION END BENT 4



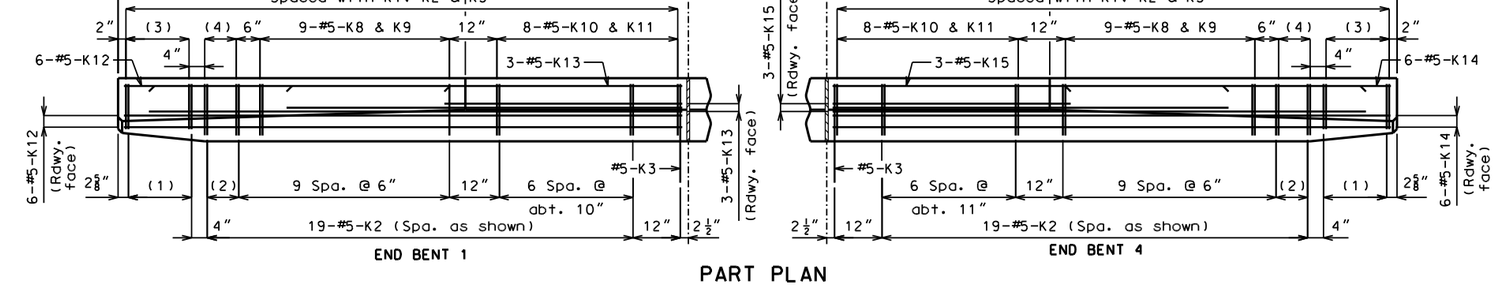
SECTION D-D



SECTION E-E

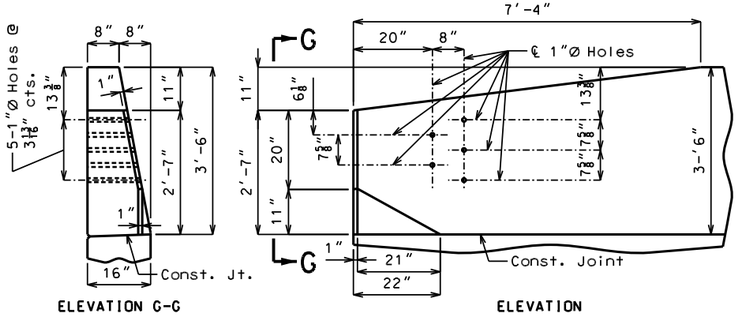


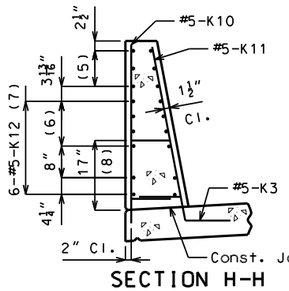
SECTION F-F



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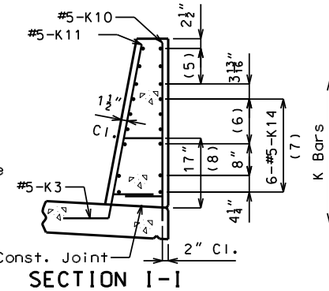
PART PLAN



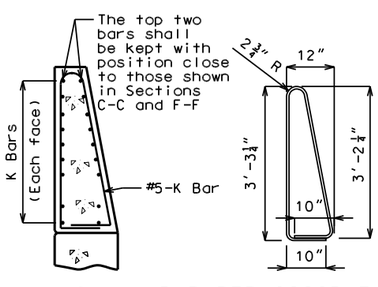


SECTION H-H

(1) 5-#5-K1 @ 4" cts.
(2) 2 spaces @ 4"
(3) 5-#5-K4 & K5
(4) 3-#5-K6 & K7
(5) 3-#5-K13 or K15 @ 4½" cts., each face
(6) 3 spaces @ 3 13/16"
(7) Spaced as shown, each face
(8) To top of bar



SECTION I-I

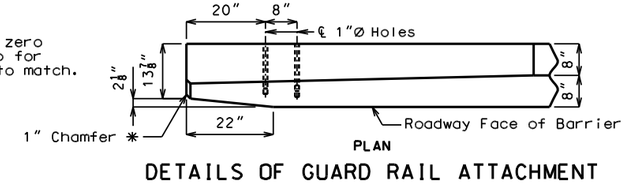


K10-K11 BAR PERMISSIBLE ALTERNATE SHAPE

(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.



* Transition to zero at Type A curb for gutter lines to match.

DETAILS OF GUARD RAIL ATTACHMENT

General Notes:

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

Reinforcing Steel:

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

LEFT TYPE D BARRIER AT END BENTS

Detailed Sep. 2023
Checked Oct. 2023

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

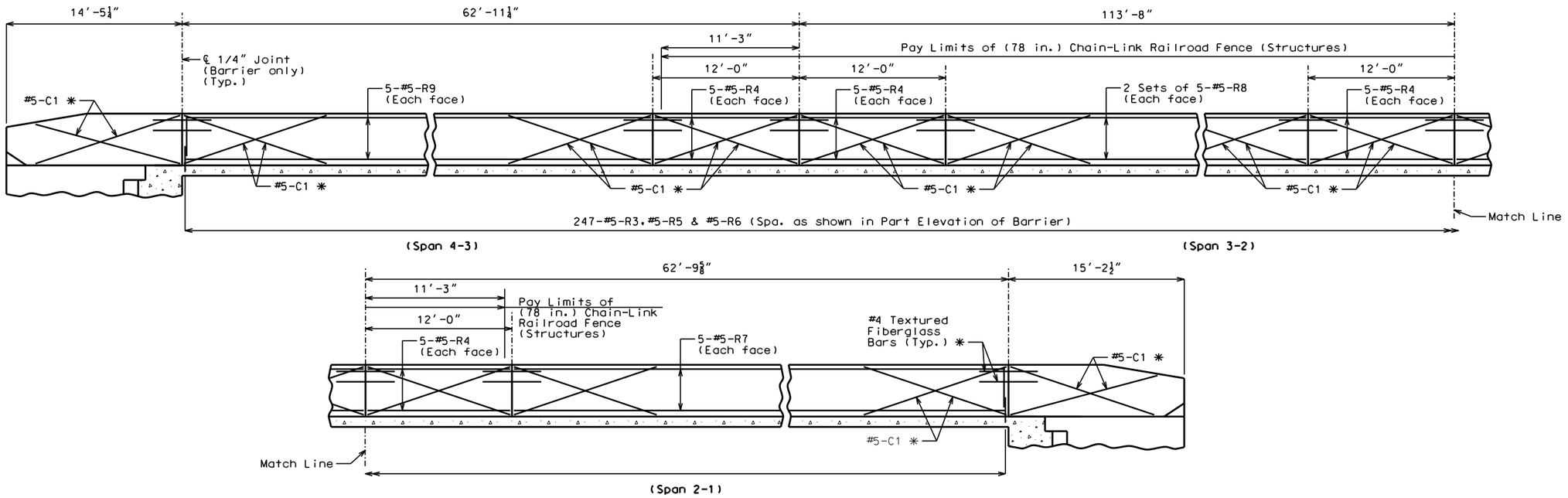
STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 36
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE | REV.

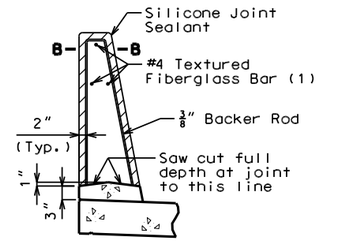
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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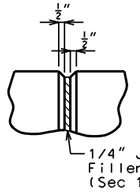


ELEVATION OF BARRIER

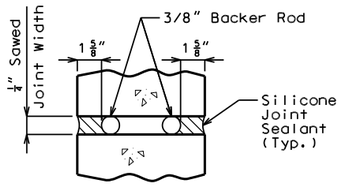
Longitudinal dimensions are horizontal.



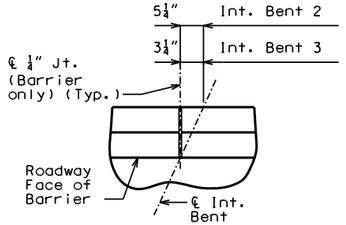
SECTION THRU SAW CUT JOINT



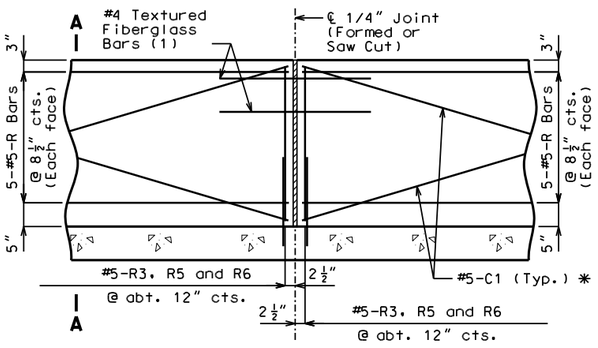
PART ELEVATION AT FORMED JOINT



SECTION B-B

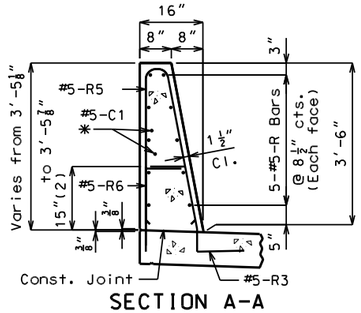


PART PLAN SHOWING JOINT LOCATION



PART ELEVATION OF BARRIER

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

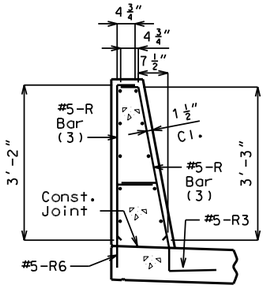


SECTION A-A

Use a minimum lap of 2′-6″ for #5 horizontal barrier bars.

The cross-sectional area above the slab varies from 3.47 to 3.51 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

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

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.

RIGHT TYPE D BARRIER

Detailed Sep. 2026
Checked Sep. 2026

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

B_A9225_37_J9S3775_RTBARRIER1.dgn 1:32:01 PM 10/6/2026

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 37
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

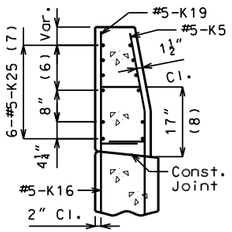
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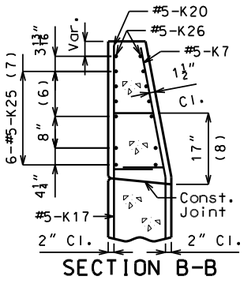
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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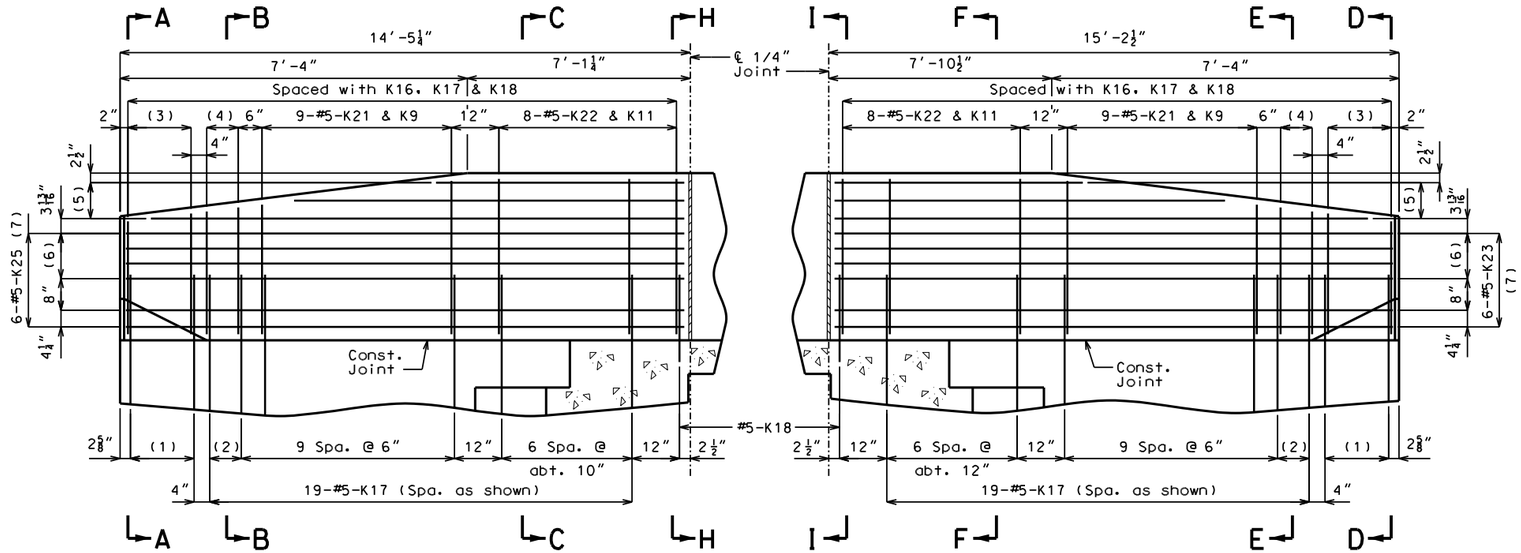


SECTION A-A

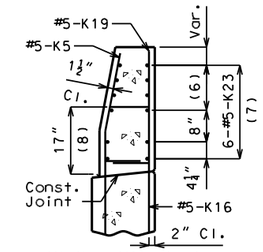


SECTION B-B

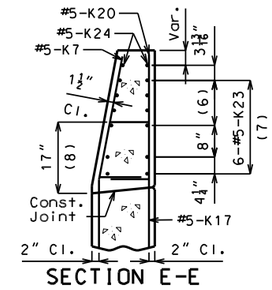
SECTION C-C



END BENT 4 PART ELEVATION END BENT 1



SECTION D-D

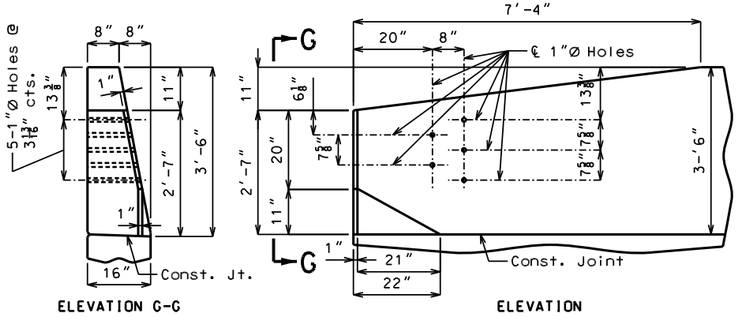


SECTION E-E

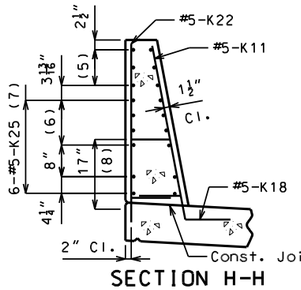
SECTION F-F

END BENT 4 END BENT 1

PART PLAN

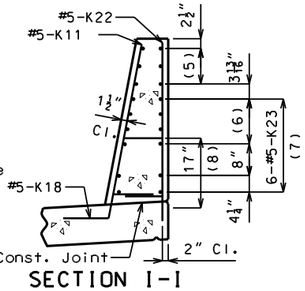


ELEVATION G-G ELEVATION

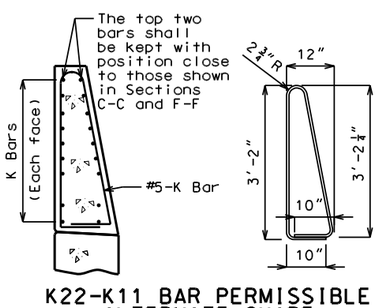


SECTION H-H

(1) 5-#5-K16 @ 4" cts.
(2) 2 spaces @ 4"
(3) 5-#5-K19 & K5
(4) 3-#5-K20 & K7
(5) 3-#5-K24 or K26 @ 4½" cts., each face
(6) 3 spaces @ 3 13/16"
(7) Spaced as shown, each face
(8) To top of bar



SECTION I-I



K22-K11 BAR PERMISSIBLE ALTERNATE SHAPE

(Other K bars not shown for clarity)

The K22-K11 bar combination may be furnished as one bar as shown, at the contractor's option.

All dimensions are out to out.

PLAN

* Transition to zero at Type A curb for gutter lines to match.

DETAILS OF GUARD RAIL ATTACHMENT

General Notes:

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

Reinforcing Steel:

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

RIGHT TYPE D BARRIER AT END BENTS

Detailed Sep. 2023
Checked Oct. 2023

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

STATE OF MISSOURI
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PROFESSIONAL ENGINEER
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ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 38
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

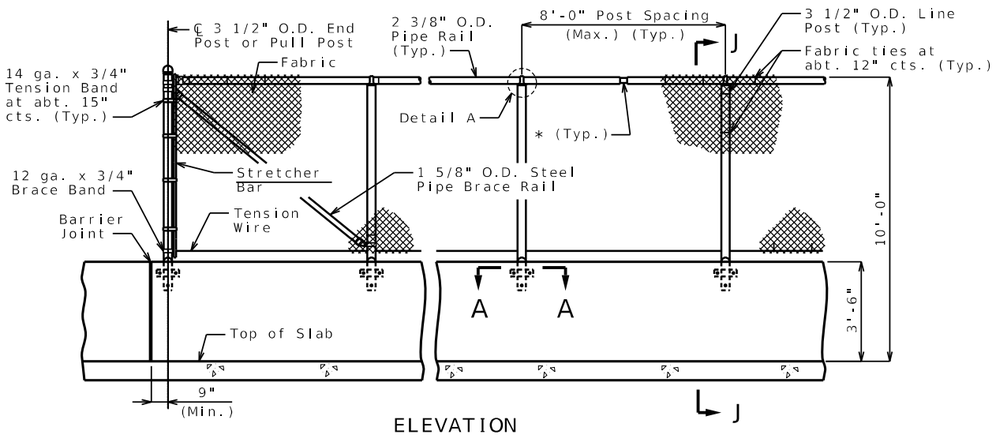
DESCRIPTION | DATE

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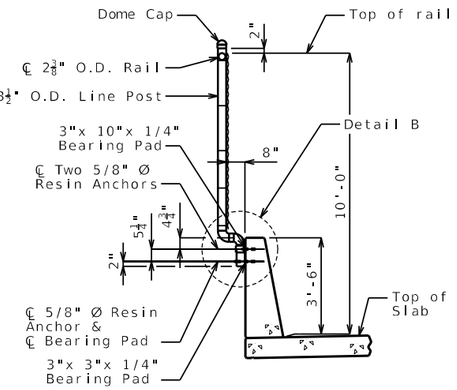
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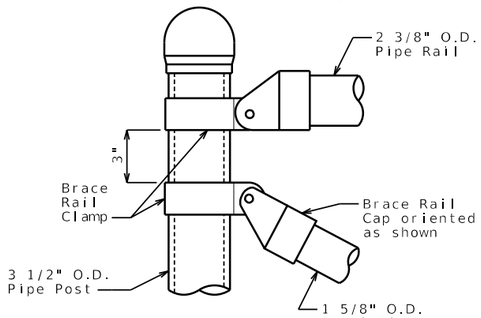
ELEVATION

(Welded Wire Panel not shown for clarity.)

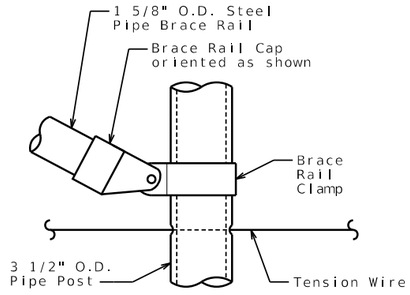
* $\frac{3}{8}$" Gap for splice at about 30'-0" centers with at least one splice gap between pull or end posts.



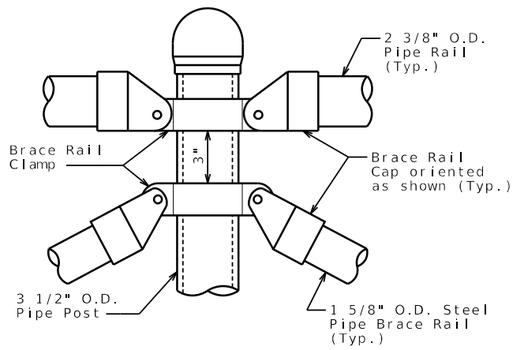
SECTION J-J
(TYPE D BARRIER)



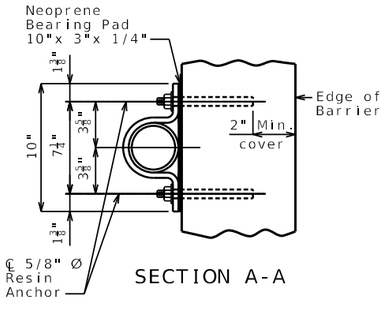
UPPER BRACE RAIL
CONNECTION DETAIL



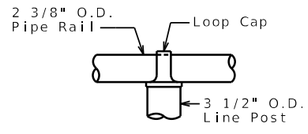
LOWER BRACE RAIL
CONNECTION DETAIL



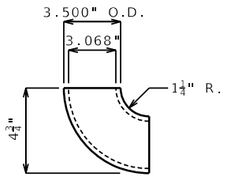
DUAL UPPER BRACE RAIL
CONNECTION DETAIL



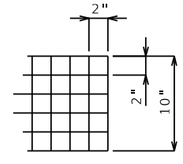
SECTION A-A



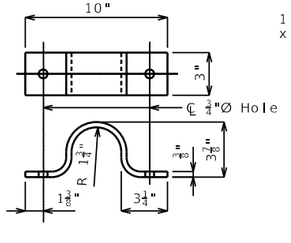
DETAIL A



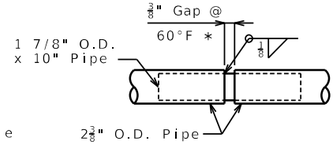
DETAIL C



PANEL DETAIL

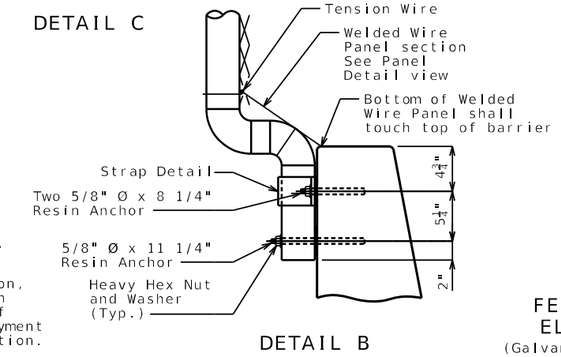


STRAP DETAIL

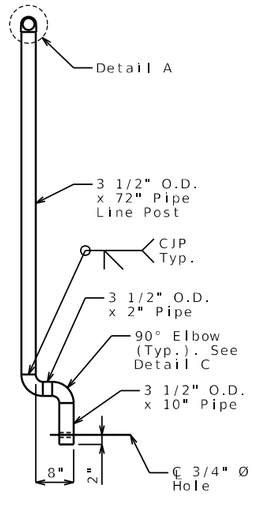


TYPICAL RAIL DETAIL
AT SPLICE GAP

Note: At the contractor's option, manufacturer-approved expansion coupling may be used in lieu of detail shown. No additional payment will be made for this substitution.



DETAIL B



FENCE POST
ELEVATION

(Galvanized after fabrication complete)

GENERAL NOTES:

Chain link fence shall be in accordance with Sec 1043 except all fabric shall have the top and bottom edges knuckled and pipe members shall be in accordance with ASTM F1083, Schedule 40, regular grade (minimum yield = 30 ksi).

All posts shall be vertical.

Payment for furnishing, galvanizing and erecting the fence and frame complete in place will be considered completely covered by the contract unit price for (78 in.) Chain-Link Railroad Fence (Structures) per linear foot.

Dimensions of chain link railroad fence are measured horizontally.

The maximum spacing allowed between pull posts and end posts is 100 feet. Post brace and Steel Pipe Brace Rail are required for panels adjacent to pull post and end posts only. Connect the upper end of brace rail to top of pull posts and end posts to which the stretcher bar is attached.

Rail clamps, dome cap, loop caps, bands, tie wires, stretcher bars and brace rail caps shall be in accordance with the manufacturer's recommendations. The brace rail and brace rail connections shall have a minimum capacity of 2000 pounds. Dome cap, loop caps, and brace rail caps shall fit tightly.

Expansion joints shall be placed in the horizontal pieces at not more than 30-foot centers and at all joint filler locations in the barrier with a minimum gap of 3/8 inch at 60 degrees F.

Steel for post straps shall be ASTM A709 Grade 50. Neoprene bearing pads shall be 50 durometer and shall be in accordance with Sec 716.

Tension Wire shall be Type II, ASTM A824 and A817, 7 guage, with Class 4 zinc coating. Position Tension Wires in center of diamonds in Chain Link as close as possible. Secure Tension Wire to Brace Band bolt at each end. Secure Chain Link to Tension Wires at 24" spacing with 12 guage zinc coated hog rings (ASTM F626). Tie Tension Wire to intermediate Posts with minimum 9 guage zinc coated wire (ASTM F626), with 3 wraps around the Tension Wire at each end of the tie wire.

Welded Wire panel is made of 0.122 inch diameter wire, at 2 inch spacing in each direction (cut to 10 inch wide from larger panels). Use 12 guage minimum hog rings (ASTM F626) to secure panels to each other two places at joints between sections, to each post, and to tension wire or chain link at 24 inch spacing.

Brace Rail is galvanized 1-5/8" O.D. steel pipe, cut to fit securely in Brace Rail Caps. Secure chain link fabric to Brace Rails with 9 guage zinc coated wire (ASTM F626) at 24" spacing.

Contractor shall submit complete detailed shop drawings in accordance with Sec 1080.

All straps, anchors, hex nuts and washers shall be galvainized in accordance with ASTM A123 and Sec 1081.

All steel components of the fence including purchased parts, hardware, and fabricated components, shall be galvanized.

Resin anchors shall be ASTM F1554 Grade 36.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for (78 in.) Chain-Link Railroad Fence (Structures).

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 6 1/2 inches.

(78 in.) Chain-Link Railroad Fence (Structures) will be measured to the nearest linear foot for each structure, measured along the centerline fence from end of fence to end of fence.

Chain link wire fabric shall be 9 gauge minimum, 2-inch diamond mesh, 75" in height.

Fabric ties shall be 9 gauge minimum zinc coated wire (ASTM F626).

The chain link fence shall be built in accordance with Sec 607 and Sec 1043.

For details of barrier and limits of fence, see Sheets No. 35 & 37.

CHAIN LINK RAILROAD FENCE DETAILS

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
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DATE PREPARED: 10/12/2026

ROUTE	STATE
114	MO
DISTRICT	SHEET NO.
BR	39

COUNTY: STODDARD

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CONTRACT ID.:

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105 WEST CAPITOL
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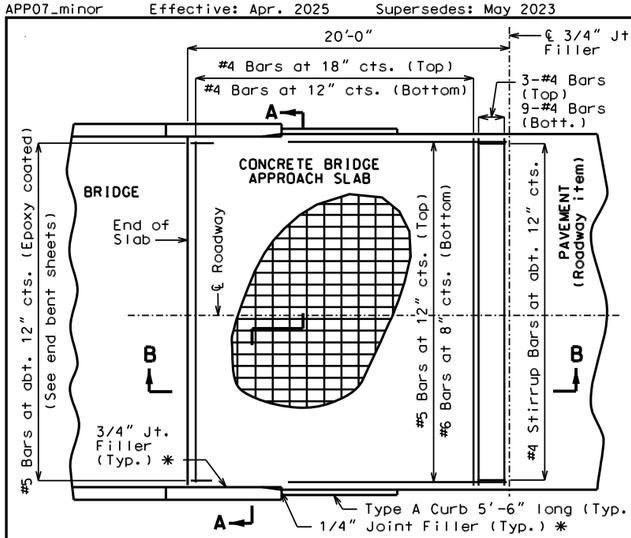
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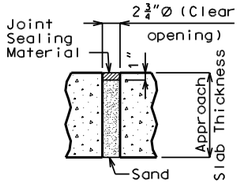
Detailed Oct. 2026
Checked Oct. 2026

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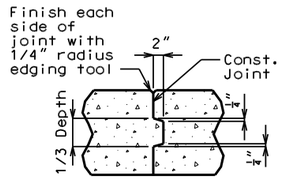
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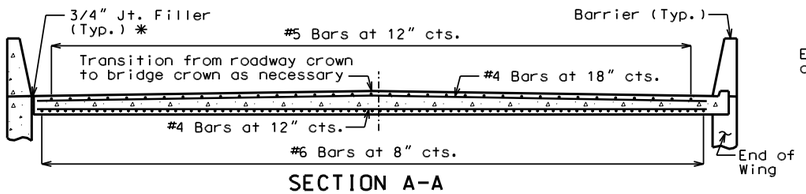
PART PLAN OF SQUARED STRUCTURE
(Skewed structure similar)



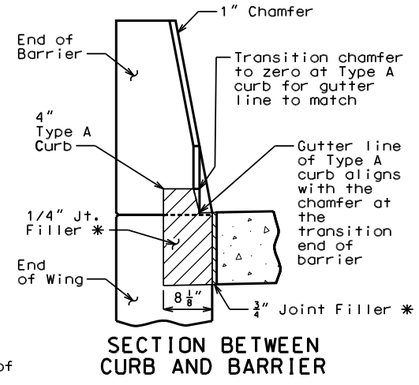
UNDERSEAL ACCESS HOLE DETAIL
(If required)



CONSTRUCTION JOINT DETAIL



SECTION A-A
With the approval of the engineer, the contractor may crown the bottom of the approach slab to match the crown of the roadway surface.



SECTION BETWEEN CURB AND BARRIER

Notes For Concrete Slab Only:

All concrete for the bridge approach slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Longitudinal construction joints in bridge approach slab shall be aligned with longitudinal construction joints in bridge slab.

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

The reinforcing steel in the bridge approach slab shall be continuous. The transverse reinforcing steel may be made continuous by providing a minimum lap splice of 26 inches for #4 bars, or by mechanical bar splice.

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

Payment for furnishing all materials, labor and excavation necessary to construct the concrete bridge approach slab, including the timber header, underdrain, Type 5 aggregate base, joint filler, and all other appurtenances and incidental work as shown on this sheet, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.

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

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

* Seal joint between vertical face of approach slab and wing with sealant in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

General Notes:

Contractor shall have the option to construct either slab except as noted.

The contractor shall pour and satisfactorily finish the bridge slab before placing the bridge approach slab.

MoDOT Construction personnel will indicate the bridge approach slab used for this structure:

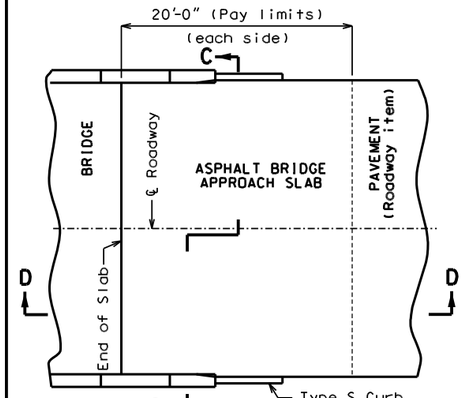
☐ Concrete Bridge Approach Slab

☐ Asphalt Bridge Approach Slab

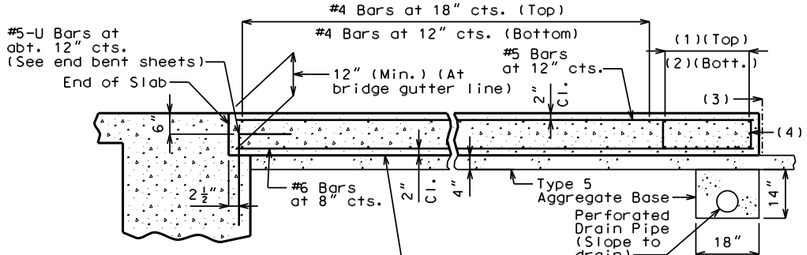
Notes For Asphalt Slab Only:

Payment for furnishing all materials, labor and excavation necessary to construct the asphalt bridge approach slab, including tack, curb, and Type 5 aggregate base within the pay limits shown, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.

Application of tack is required between lifts per Sec 403.



PART PLAN
(Squared structure shown, skewed structure similar)



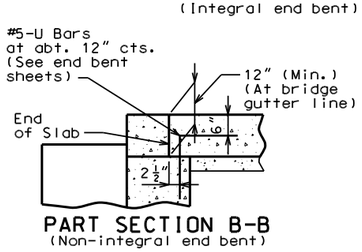
(1) 3-#4 Bars

(2) 9-#4 Bars

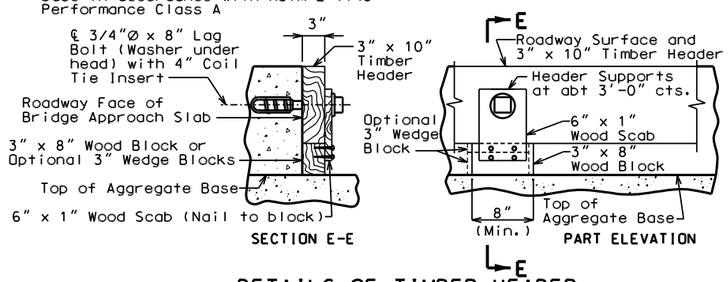
(3) ℄ 3/4" Jt. Filler

(4) #4 Stirrup Bars at abt. 12" cts.: 2'-0"x 8" (Min.) out to out; Actual length = 5'-10" (Min.); 90° stirrup hook at bottom: Stirrup height (8") and actual length vary due to crown.

SECTION B-B
(Integral end bent)



PART SECTION B-B
(Non-integral end bent)

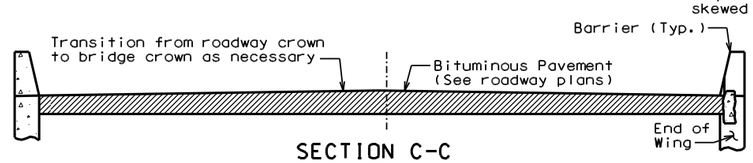


SECTION E-E

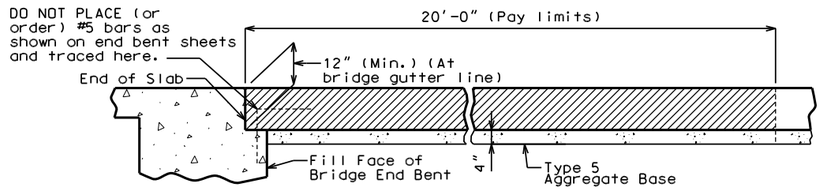
PART ELEVATION

DETAILS OF TIMBER HEADER
Remove timber header when concrete pavement is placed.

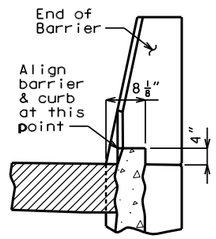
OPTIONAL CONCRETE SLAB



SECTION C-C
With the approval of the engineer, the contractor may crown the bottom of the approach slab to match the crown of the roadway surface.



SECTION D-D



4" TYPE S CURB
See Missouri Standard Plan 609.00 for details of Type S curb.

OPTIONAL ASPHALT SLAB (NOT ALLOWED WITH CONCRETE PAVEMENT)

BRIDGE APPROACH SLAB (MINOR)
Integral end bents shown, non-integral end bent similar.

Detailed Oct. 2026
Checked Oct. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 40
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

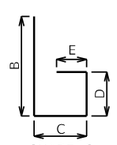
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

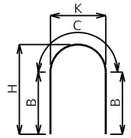
MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

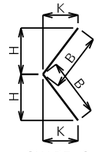
REV.



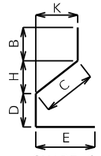
SHAPE 6
or 6S



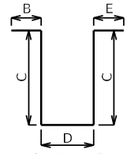
SHAPE 7



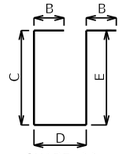
SHAPE 8
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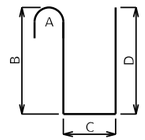
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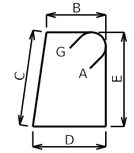
SHAPE 10
or 10S



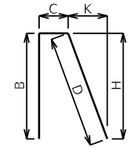
SHAPE 11
or 11S



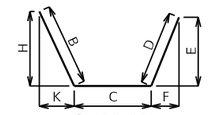
SHAPE 12



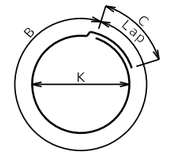
SHAPE 13S



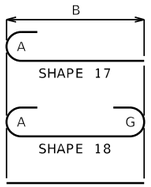
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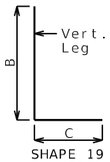
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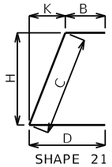
SHAPE 16



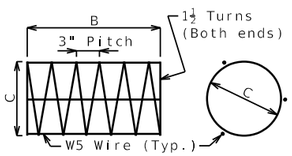
SHAPE 17
SHAPE 18
SHAPE 20



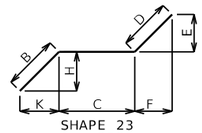
SHAPE 19
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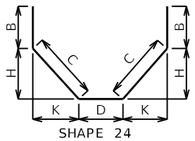
SHAPE 21
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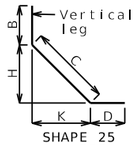
SHAPE 22



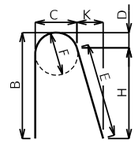
SHAPE 23
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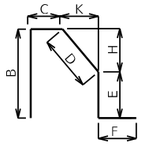
SHAPE 24
or 24S



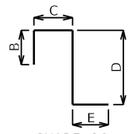
SHAPE 25
or 25S



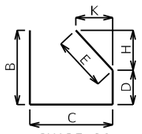
SHAPE 26



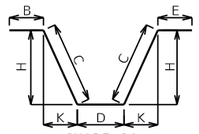
SHAPE 27S



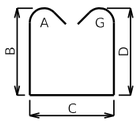
SHAPE 28
or 28S



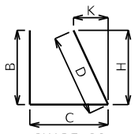
SHAPE 29
or 29S



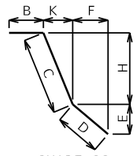
SHAPE 30
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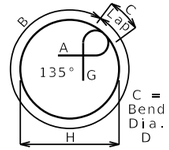
SHAPE 31S



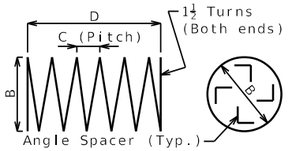
SHAPE 32
or 32S



SHAPE 33
or 33S



SHAPE 34S



SHAPE 35 (1)

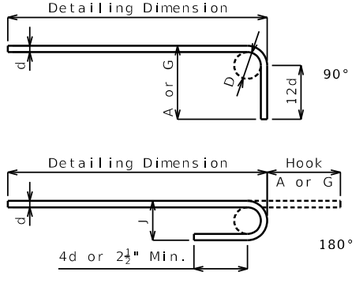


SHAPE 36

Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

Size	Case	D	A or G		J
			90°	180°	180°
#4	1	3"	8"	6"	4"
#5	1	3¾"	10"	7"	5"
#6	1	4½"	12"	8¼"	6"
#7	2	5¼"	14"	9¾"	7"
	3	7"	15"	11½"	8¾"
#8	2	6"	16"	11"	8"
	3	8"	17"	13¼"	10"
#9	1	9½"	19½"	15½"	11¾"
#10	1	10¾"	22"	17½"	13⅛"
#11	1	12"	24½"	19½"	14⅞"
#14	1	18¼"	31¼"	27½"	21⅝"
#18	1	24"	41½"	36¾"	28½"

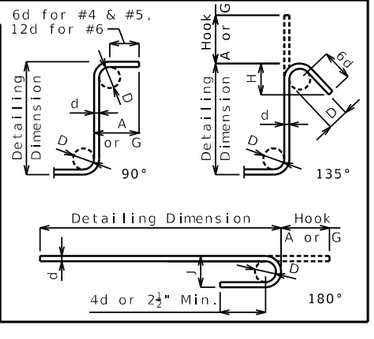


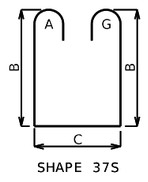
Stirrup Pin Bend Shapes (S)

Size	Case	D	A or G			H	J
			90°	135°	180°	135°	180°
#4	2	2"	4½"	4½"	5"	2⅝"	3"
	3	3"	5"	5¼"	6"	3"	4"
#5	2	2½"	5¾"	5¾"	5¾"	3⅝"	3¾"
	3	3¾"	6¼"	6½"	7"	3⅞"	5"
#6	1	4½"	12"	7¾"	8¼"	4⅝"	6"

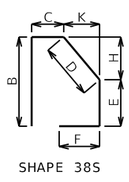
Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.

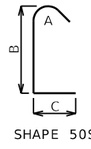




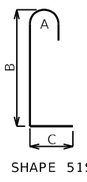
SHAPE 37S



SHAPE 38S



SHAPE 50S



SHAPE 51S

BENDING DIAGRAMS

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

	Size	Substructure		Superstructure				Entire Bridge	
				Slab			Slip		
		Plain	Epoxy	Plain	Epoxy	Barrier	Form	Plain	Epoxy
By Size	W5	0	0	0	0	0	0	0	0
	4	1,843	0	0	1,956	0	0	1,843	1,956
	5	6,817	0	0	25,058	16,088	498	6,817	41,644
	6	11,396	0	0	40,803	0	0	11,396	40,803
	7	2,248	0	0	0	0	0	2,248	0
	8	8,234	0	0	11,908	0	0	8,234	11,908
	9	5,542	0	0	3,515	0	0	5,542	3,515
	10	6,076	0	0	0	0	0	6,076	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		42,156	0	0	83,240	16,088	498	42,156	99,826

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

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

Detailed Oct. 2026
Checked Oct. 2026

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 41
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE | REV.

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

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

MODJESKI and MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002
MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		SUBSTRUCTURE													
		INT. BENT 2													
20	8 D200	KEY		20		2 6.00							2 6	2 6	134
46	7 D201	FOOTING		20		8 9.00							8 9	8 9	823
20	9 D202	FOOTING		20		40 9.00							40 9	40 9	2771
48	6 D203	FOOTING		20		8 9.00							8 9	8 9	631
2	7 D204	FOOTING		18		40 9.00							42 5	42 5	173
246	5 D205	FOOTING		51S		3 2.00	5.75						4 2	4 0	1026
6	7 D206	FOOTING		18		8 9.00							10 5	10 5	128
10	6 H200	BEAM		20		38 8.00							38 8	38 8	581
8	10 H201	BEAM		18		38 8.00							41 6	41 6	1429
10	10 H202	BEAM		20		38 8.00							38 8	38 8	1664
10	6 H203	BEAM		20		11 10.00							11 10	11 10	178
6	6 H204	BEAM		20		13 7.00							13 7	13 7	122
6	6 H205	BEAM		20		5 3.00							5 3	5 3	47
2	6 H206	BEAM		20		21 11.00							21 11	21 11	66
17	6 H207	BEAM		10			12.00	3 6.00					5 6	5 2	132
30	4 H208	BEAM		50S		3 9.00	4.50						4 6	4 5	89
3	5 P200	COLUMN		35S		2 9.00	3.00	3 8.50					154 10	154 10	484
3	5 P201	COLUMN		35S		2 9.00	6.00	14 1.00					270 9	270 9	847
39	5 P202	BEAM		34S		8 7.75	2.50				2 9.00		9 9	9 7	390
3	5 P203	COLUMN		35S		2 9.00	3.00	5 4.00					211 0	211 0	660
230	4 P204	PILE		34S		4 2.25	2.00				16.00		5 1	5 0	768
22	6 U200	BEAM		13S		2 6.00	3 9.00	2 6.00	3 9.00				13 10	13 5	443
4	6 U201	BEAM		10S			3 9.00	3 9.00					11 3	10 11	66
13	6 U202	BEAM		13S		3 9.00	4 0.75	3 9.00	4 0.75				17 0	16 6	322
9	6 U203	BEAM		13S		3 9.00	4 5.25	3 9.00	4 5.25				17 9	17 3	233
4	6 U204	BEAM		10S			4 5.25	3 9.00					12 8	12 4	74
26	6 U205	BEAM		13S		2 6.00	4 9.75	2 6.00	4 9.75				16 0	15 6	605
1	6 U206	BEAM		10S			4 9.75	3 9.00					13 5	13 1	20
3	6 U207	BEAM		10S			5 2.25	3 9.00					14 2	13 10	62
12	6 U208	BEAM		13S		2 6.00	5 2.25	2 6.00	5 2.25				16 9	16 3	293
14	4 U209	BEAM		10S			9.00	3 9.00					5 3	5 1	48
54	8 V200	COLUMN		17		26 8.00							27 7	27 7	3977
184	6 V201	PILE		17		7 3.00							7 11	7 11	2188
		INT. BENT 3													
20	8 D300	KEY		20		2 6.00							2 6	2 6	134
46	7 D301	FOOTING		20		8 9.00							8 9	8 9	823
20	9 D302	FOOTING		20		40 9.00							40 9	40 9	2771
48	6 D303	FOOTING		20		8 9.00							8 9	8 9	631
2	7 D304	FOOTING		18		40 9.00							42 5	42 5	173
246	5 D305	FOOTING		51S		3 2.00	5.75						4 2	4 0	1026
6	7 D306	FOOTING		18		8 9.00							10 5	10 5	128
10	6 H300	BEAM		20		37 3.00							37 3	37 3	559
8	10 H301	BEAM		18		37 3.00							40 1	40 1	1380
10	10 H302	BEAM		20		37 3.00							37 3	37 3	1603
10	6 H303	BEAM		20		11 6.00							11 6	11 6	173
6	6 H304	BEAM		20		13 3.00							13 3	13 3	119
6	6 H305	BEAM		20		5 3.00							5 3	5 3	47
2	6 H306	BEAM		20		21 3.00							21 3	21 3	64
17	6 H307	BEAM		10			12.00	3 6.00					5 6	5 2	132
30	4 H308	BEAM		50S		3 9.00	4.50						4 6	4 5	89
3	5 P300	COLUMN		35S		2 9.00	3.00	3 8.50					154 10	154 10	484
3	5 P301	COLUMN		35S		2 9.00	6.00	14 1.00					271 6	271 6	850
39	5 P302	BEAM		34S		8 7.75	2.50				2 9.00		9 9	9 7	390
3	5 P303	COLUMN		35S		2 9.00	3.00	5 4.00					211 0	211 0	660
230	4 P304	PILE		34S		4 2.25	2.00				16.00		5 1	5 0	768

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
9	6 U300	BEAM		13S		3 9.00	3 9.00	3 9.00	3 9.00				16 4	15 11	215
4	6 U301	BEAM		10S			3 9.00	3 9.00					11 3	10 11	66
12	6 U302	BEAM		13S		3 9.00	4 1.50	3 9.00	4 1.50				17 1	16 8	300
9	6 U303	BEAM		13S		3 9.00	4 6.50	3 9.00	4 6.50				17 11	17 6	237
4	6 U304	BEAM		10S			4 6.50	3 9.00					12 10	12 6	75
13	6 U305	BEAM		13S		3 9.00	4 11.25	3 9.00	4 11.25				18 9	18 3	356
4	6 U306	BEAM		10S			5 4.25	3 9.00					14 6	14 2	85
3	6 U307	BEAM		13S		3 9.00	5 4.25	3 9.00	5 4.25				19 7	19 1	86
24	4 U308	BEAM		10S			9.00	3 9.00					5 3	5 1	81
54	8 V300	COLUMN		17		26 8.50							27 8	27 8	3989
184	6 V301	PILE		17		7 3.00							7 11	7 11	2188
		SUPERSTR.													
		END BENT 1													
10	6 F100	WING BRACE	E	23S		14.00	4 10.50	2 3.00	15.50	21.75	8.00	11.25	8 4	8 3	124
4	6 F101	DIAPHRAGM	E	21S			2 10.00	5 10.00			2 8.25	11.00	8 8	8 7	52
11	6 F102	WING BRACE	E	23S		14.00	3 5.75	2 3.00	21.75	15.50	11.25	8.00	6 11	6 10	113
4	6 F103	DIAPHRAGM	E	23S		2 10.00	4 10.75				2 8.25	11.00	7 9	7 8	46
4	6 H100	BEAM	E	20		40 7.00							40 7	40 7	244
12	9 H101	BEAM	E	20		40 7.00							40 7	40 7	1656
4	6 H102	BEAM	E	20		13 0.00							13 0	13 0	78
4	6 H103	BEAM	E	20		22 7.00							22 7	22 7	136
4	6 H104	BEAM	E	20		5 10.00							5 10	5 10	35
4	6 H105	DIAPHRAGM	E	20		40 7.00							40 7	40 7	244
4	6 H106	DIAPHRAGM	E	20		4 8.00							4 8	4 8	28
12	6 H107	DIAPHRAGM	E	20		7 2.00							7 2	7 2	129
4	9 H108	BEAM	E	18		7 10.00							10 4	10 4	141
3	6 H109	DIAPHRAGM	E	20		3 0.00							3 0	3 0	14
3	6 H110	DIAPHRAGM	E	20		3 0.00							3 0	3 0	14
1	6 H111	DIAPHRAGM	E	20		1 9.00							21	21	3
1	6 H112	DIAPHRAGM	E	20		1 9.00							21	21	3
5	5 H113	STRAND TIE	E	20		5 9.00							5 9	5 9	30
16	8 H114	WING	E	19		16.00	14 2.50						15 7	15 4	655
40	6 H115	WING	E	19		12.00	13 4.50						14 5	14 3	856
40	4 P100	PILE	E	34S		3 1.75	2.00					12.00	4 1	3 11	105
1	5 U100	BEAM	E	10S			6 9.75	2 10.75					16 7	16 4	17
1	4 U101	BEAM	E	10S			3 6.75	2 10.75					10 1	9 10	7
7	4 U102	BEAM	E	13S		2 10.75	3 6.75	2 10.75	3 6.75				13 8	13 5	63
4	5 U103	BEAM	E	10S			6 7.50	2 10.75					16 2	15 11	66
3	4 U104	BEAM	E	10S			3 4.50	2 10.75					9 8	9 6	19
5	4 U105	BEAM	E	13S		2 10.75	3 4.50	2 10.75	3 4.50				13 4	13 1	44
4	5 U106	BEAM	E	10S			6 5.50	2 10.75					15 10	15 7	65
4	4 U107	BEAM	E	13S		2 10.75	3 2.50	2 10.75	3 2.50				13 0	12 9	34
3	4 U108	BEAM	E	10S			3 2.50	2 10.75					9 4	9 2	18
4	5 U109	BEAM	E	10S			6 2.25	2 10.75					15 4	15 1	63
6	4 U110	BEAM	E	13S		2 10.75	2 11.25	2 10.75	2 11.25				12 5	12 2	49
2	4 U111	BEAM	E	10S			2 11.25	2 10.75					8 10	8 7	11
5	5 U112	BEAM	E	10S			5 11.00	2 10.75					14 9	14 6	76
7	4 U113	BEAM	E	13S		2 10.75	2 8.00	2 10.75	2 8.00				11 11	11 8	55
20	6 U114	DIAPHRAGM	E	19S		3 2.50	2 10.75						6 2	6 0	180
20	5 U115	DIAPHRAGM	E	10S			3 11.50	2 4.50					10 4	10 1	210
51	6 U116	DIAPHRAGM	E	19S		3 1.75	4 8.00						7 10	7 8	587
38	5 U117	DIAPHRAGM	E	19		2 0.00	15.00						3 3	3 2	126
2	5 V100	BEAM	E	20		6 10.00							6 10	6 10	14
2	5 V101	BEAM	E	20		5 11.00							5 11	5 11	12
25	6 V102	DIAPHRAGM	E	20		3 2.00							3 2	3 2	119
2	6 V103	WING	E	20		6 6.00							6 6	6 6	20
24	6 V104	WING	E	20	2	7 0.00							7 0	7 0	
		INCREMENT =	E	20		6 6.00							6 6	6 6	243
		0.500 INCH													
2	6 V105	WING	E	20		7 6.00							7 6	7 6	23
24	6 V106	WING	E	20	2	8 0.00							8 0	8 0	
		INCREMENT =	E	20		7 6.00							7 6	7 6	279
		0.500 INCH													
30	6 V107	PILE	E	17		5 3.00							5 11	5 11	267

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 41.

Detailed Oct. 2026
Checked Oct. 2026

Reinforcing steel (ASTM A706 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.
SH = Required shape, see bending diagrams.
V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

BILL OF REINFORCING STEEL

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 42
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

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

DESCRIPTION | DATE | REV.

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight lb
		END BENT 4													
10	6 F400	WING BRACE	E	23S		14.00	4 10.00	2 3.00	20.25	17.75	10.50	9.00	8 3	8 2	123
4	6 F401	DIAPHRAGM	E	23S		2 9.25	4 10.25				2 9.00	4.25	7 8	7 6	45
12	6 F402	WING BRACE	E	23S		2 3.00	4 3.00	14.00	9.00	10.50	17.75	20.25	7 8	7 8	138
4	6 F403	DIAPHRAGM	E	21S			2 9.25	5 3.50			2 9.00	4.25	8 1	7 11	48
4	6 H400	BEAM	E	20		38 9.00							38 9	38 9	233
12	9 H401	BEAM	E	20		38 9.00							38 9	38 9	1581
8	6 H402	BEAM	E	20		12 8.00							12 8	12 8	152
4	6 H403	BEAM	E	20		13 8.00							13 8	13 8	82
4	6 H404	BEAM	E	20		5 7.00							5 7	5 7	34
4	6 H405	DIAPHRAGM	E	20		38 9.00							38 9	38 9	233
4	6 H406	DIAPHRAGM	E	20		4 6.00							4 6	4 6	27
12	6 H407	DIAPHRAGM	E	20		6 11.00							6 11	6 11	125
4	9 H408	BEAM	E	18		7 7.00							10 1	10 1	137
3	6 H409	DIAPHRAGM	E	20		2 8.00							2 8	2 8	12
3	6 H410	DIAPHRAGM	E	20		2 10.00							2 10	2 10	13
1	6 H411	DIAPHRAGM	E	20		17.00							17	17	2
1	6 H412	DIAPHRAGM	E	20		20.00							20	20	3
5	5 H413	STRAND TIE	E	20		5 9.00							5 9	5 9	30
16	8 H414	WING	E	19		16.00	14 2.50						15 7	15 4	655
44	6 H415	WING	E	19		12.00	13 4.50						14 5	14 3	942
40	4 P400	PILE	E	34S		3 1.75	2.00				12.00		4 1	3 11	105
4	5 U400	BEAM	E	10S			5 11.00	2 9.25					14 8	14 5	60
1	4 U401	BEAM	E	10S			2 8.00	2 9.25					8 2	7 11	5
7	4 U402	BEAM	E	13S		2 9.25	2 8.00	2 9.25	2 8.00				11 8	11 5	53
5	5 U403	BEAM	E	10S			6 3.75	2 9.25					15 5	15 2	79
2	4 U404	BEAM	E	10S			3 0.50	2 9.25					8 11	8 8	12
6	4 U405	BEAM	E	13S		2 9.25	3 0.50	2 9.25	3 0.50				12 5	12 2	49
6	4 U406	BEAM	E	13S		2 9.25	3 5.00	2 9.25	3 5.00				13 2	12 11	52
2	4 U407	BEAM	E	10S			3 5.00	2 9.25					9 8	9 5	13
4	5 U408	BEAM	E	10S			6 8.25	2 9.25					16 2	15 11	66
5	4 U409	BEAM	E	13S		2 9.25	3 9.75	2 9.25	3 9.75				13 11	13 8	46
3	4 U410	BEAM	E	10S			3 9.75	2 9.25					10 5	10 3	21
4	5 U411	BEAM	E	10S			7 0.75	2 9.25					16 11	16 8	70
7	4 U412	BEAM	E	13S		2 9.25	4 2.25	2 9.25	4 2.25				14 8	14 5	67
1	4 U413	BEAM	E	10S			4 2.25	2 9.25					11 2	11 0	7
1	5 U414	BEAM	E	10S			7 5.50	2 9.25					17 9	17 6	18
19	6 U415	DIAPHRAGM	E	19S		3 2.50	2 9.25						6 0	5 10	166
19	5 U416	DIAPHRAGM	E	10S			3 11.50	2 3.25					10 3	10 0	198
49	6 U417	DIAPHRAGM	E	19S		3 1.75	4 6.75						7 9	7 7	558
37	5 U418	DIAPHRAGM	E	19		2 0.00	15.00						3 3	3 2	122
2	5 V400	BEAM	E	20		5 11.00							5 11	5 11	12
25	6 V401	DIAPHRAGM	E	20		3 2.00							3 2	3 2	119
2	6 V402	WING	E	20		6 8.00							6 8	6 8	20
24	6 V403	WING	E	20	2	7 1.00							7 1	7 1	
		INCREMENT =				6 8.00							6 8	6 8	248
		0.500 INCH													
2	6 V404	WING	E	20		8 5.00							8 5	8 5	25
24	6 V405	WING	E	20	2	8 9.00							8 9	8 9	
		INCREMENT =				8 5.00							8 5	8 5	309
		0.250 INCH													
30	6 V406	PILE	E	17		5 3.00							5 11	5 11	267
2	6 V407	BEAM	E	20		7 6.00							7 6	7 6	23
		DIAPH AT													
		INT BENT 2													
8	6 H500	DIAPHRAGM	E	20		4 6.00							4 6	4 6	54
24	4 H501	DIAPHRAGM	E	20		6 11.00							6 11	6 11	111
8	6 H502	DIAPHRAGM	E	20		6 11.00							6 11	6 11	83
4	5 H503	STRAND TIE	E	20		4 8.00							4 8	4 8	19
6	5 H504	STRAND TIE	E	20		5 9.00							5 9	5 9	36
4	6 U500	DIAPHRAGM	E	28S			15.75	3 2.25	2 2.00				6 8	6 4	38
4	6 U501	DIAPHRAGM	E	28S			11.50	4 1.25	2 2.00				7 3	6 11	42
16	6 U502	DIAPHRAGM	E	28S			2 6.00	4 1.00	2 2.00				8 9	8 5	202
24	4 U503	DIAPHRAGM	E	28S			2 6.00	4 0.50	18.00				8 1	7 11	127
4	6 U504	DIAPHRAGM	E	28S			2 6.00	3 3.25	2 2.00				8 0	7 8	46
4	6 U505	DIAPHRAGM	E	28S			2 6.50	3 2.25	2 2.00				7 11	7 7	46
4	6 U506	DIAPHRAGM	E	28S			16.50	3 2.25	2 2.00				6 9	6 5	39

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight lb
4	6 U507	DIAPHRAGM	E	28S			13.25	4 1.00	2 2.00				7 5	7 1	43
3	6 U508	DIAPHRAGM	E	28S			21.25	3 2.50	2 2.00				7 2	6 10	31
1	6 U509	DIAPHRAGM	E	28S			14.50	4 3.00	2 2.00				7 8	7 4	11
4	5 U510	DIAPHRAGM	E	6S		5 3.00	11.50	19.00					7 10	7 7	32
4	5 U511	DIAPHRAGM	E	32S		5 3.00	11.50	2 0.25			2 0.25	1.50	8 3	8 0	33
2	5 U512	DIAPHRAGM	E	19S		5 3.00	11.50						6 3	6 1	13
2	6 U513	DIAPHRAGM	E	28S			14.50	4 1.25	2 2.00				7 6	7 2	22
2	6 U514	DIAPHRAGM	E	28S			22.00	3 1.75	2 2.00				7 2	6 10	21
1	6 U515	DIAPHRAGM	E	28S			15.25	3 1.75	2 2.00				6 7	6 3	9
4	5 U516	DIAPHRAGM	E	6S		5 11.00	10.50	18.75					8 4	8 2	34
4	5 U517	DIAPHRAGM	E	27S		5 11.00	10.50	2 6.75			2 6.50	2.00	9 5	9 2	38
2	5 U518	DIAPHRAGM	E	19S		5 11.00	10.50						6 10	6 8	14
4	5 V500	DIAPHRAGM	E	20		4 3.00							4 3	4 3	18
4	5 V501	DIAPHRAGM	E	20		4 0.00							4 0	4 0	17
		DIAPH AT													
		INT BENT 3													
8	6 H600	DIAPHRAGM	E	20		4 5.00							4 5	4 5	53
24	4 H601	DIAPHRAGM	E	20		6 10.00							6 10	6 10	110
8	6 H602	DIAPHRAGM	E	20		6 10.00							6 10	6 10	82
4	5 H603	STRAND TIE	E	20		4 8.00							4 8	4 8	19
6	5 H604	STRAND TIE	E	20		5 9.00							5 9	5 9	36
4	6 U600	DIAPHRAGM	E	28S			17.50	3 3.25	2 2.00				6 11	6 7	40
4	6 U601	DIAPHRAGM	E	28S			19.50	4 2.50	2 2.00				8 0	7 8	46
16	6 U602	DIAPHRAGM	E	28S			2 8.00	4 1.25	2 2.00				9 0	8 8	208
24	4 U603	DIAPHRAGM	E	28S			2 8.00	4 1.25	18.00				8 4	8 1	130
4	6 U604	DIAPHRAGM	E	28S			2 8.00	3 2.25	2 2.00				8 1	7 9	47
4	6 U605	DIAPHRAGM	E	28S			2 8.75	3 3.25	2 2.00				8 2	7 10	47
4	6 U606	DIAPHRAGM	E	28S			20.25	3 3.25	2 2.00				7 2	6 10	41
4	6 U607	DIAPHRAGM	E	28S			22.25	4 1.25	2 2.00				8 2	7 10	47
1	6 U608	DIAPHRAGM	E	28S			14.25	3 3.00	2 2.00				6 8	6 4	10
2	6 U609	DIAPHRAGM	E	28S			23.50	3 3.00	2 2.00				7 5	7 1	21
2	6 U610	DIAPHRAGM	E	28S			15.50	4 3.50	2 2.00				7 9	7 5	22
4	5 U611	DIAPHRAGM	E	6S		5 4.75	12.00	2 6.75					9 0	8 9	37
4	5 U612	DIAPHRAGM	E	32S		5 4.75	13.00	19.25			19.25	1.75	8 1	7 11	33
2	5 U613	DIAPHRAGM	E	19S		5 4.75	12.00						6 5	6 4	13
3	6 U614	DIAPHRAGM	E	28S			22.25	3 1.75	2 2.00				7 2	6 10	31
1	6 U615	DIAPHRAGM	E	28S			13.75	4 1.25	2 2.00				7 5	7 1	11
4	5 U616	DIAPHRAGM	E	6S		4 10.00	10.50	18.75					7 3	7 1	30
4	5 U617	DIAPHRAGM	E	27S		4 10.00	10.50	22.75			22.75	2.00	7 8	7 5	31
2	5 U618	DIAPHRAGM	E	19S		4 10.00	10.50						5 9	5 7	12
4	5 V600	DIAPHRAGM	E	20		4 3.00							4 3	4 3	18
4	5 V601	DIAPHRAGM	E	20		4 0.00							4 0	4 0	17
		SLAB													
478	6 S1	SLAB	E	20		38 4.00							38 4	38 4	27522
25	6 S2	SLAB	E	20	1	2 0.00							2 0	2 0	
		INCREMENT =				37 2.00							37 2	37 2	735
		17.625 INCH													
10	6 S3	SLAB	E	20	1	5 0.00							5 0	5 0	
		INCREMENT =				38 0.00							38 0	38 0	323
		44.000 INCH													
155	5 S4	SLAB	E	20		51 7.00							51 7	51 7	8339
30	8 S5	SLAB	E	20		49 11.00							49 11	49 11	3998
30	8 S6	SLAB	E	20		38 7.00							38 7	38 7	3091
39	6 S7	SLAB	E	20		52 0.00							52 0	52 0	3046
38	8 S8	SLAB	E	20		34 7.00							34 7	34 7	3509
359	5 S9	SLAB	E	20		38 4.00							38 4	38 4	14353
19	5 S10	SLAB	E	20	1	2 0.00							2 0	2 0	
		INCREMENT =				37 2.00							37 2	37 2	388
		23.500 INCH													
7	5 S11	SLAB	E	20	1	5 0.00							5 0	5 0	
		INCREMENT =				34 5.00							34 5	34 5	144
		58.875 INCH													
116	4 S12	HAUNCH	E	10		1 0.00	5.75	3 9.50	1 0.00				6 9	6 4	491
2	4 S13	HAUNCH	E	20		4 3.00							4 3	4 3	6
2	4 S14	HAUNCH	E	20		50 3.00							50 3	50 3	67
2	4 S15	HAUNCH	E	20		59 3.00							59 3	59 3	79

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 41.

Detailed Oct. 2026
Checked Oct. 2026

Reinforcing steel (ASTM A706 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

BILL OF REINFORCING STEEL

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 43
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE | REV.

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		TYPE D BARRIER													
247	5 R1	BARRIER	E	26		3 3.25	5.50	2.25	3 1.25	5.50	3 0.75	6.75	7 0	6 9	1739
247	5 R2	BARRIER	E	19S		21.25	9.50						2 7	2 6	644
494	5 R3	BARRIER	E	27S			9.50	15.25	5.00	12.00	15.00	3.00	3 6	3 4	1717
80	5 R4	BARRIER	E	20		11 9.00							11 9	11 9	980
247	5 R5	BARRIER	E	26		3 2.25	5.50	2.25	3 1.25	5.50	3 0.75	6.75	6 11	6 8	1717
247	5 R6	BARRIER	E	19S		20.25	9.50						2 6	2 5	623
40	5 R7	BARRIER	E	20		50 6.00							50 6	50 6	2107
40	5 R8	BARRIER	E	20		46 6.00							46 6	46 6	1940
40	5 R9	BARRIER	E	20		50 8.00							50 8	50 8	2114
10	5 K1	BARRIER	E	27S		3 5.75	9.25	5.25	2 11.75		5.25	1.00	7 8	7 6	78
38	5 K2	BARRIER	E	27S		3 5.75	9.25	14.50	2 2.75		14.25	2.75	7 9	7 6	297
2	5 K3	BARRIER	E	27S		23.25	9.25	14.50	7.75	12.00	14.25	2.75	5 7	5 3	11
10	5 K4	BARRIER	E	19S	2	2 4.50	10.00						3 2	3 1	
		INCREMENT =				2 6.50	10.00						3 4	3 3	33
		0.500 INCH													
20	5 K5	BARRIER	E	38S	4			18.50	9.50	8.25	18.00	4.00	3 0	2 11	
		INCREMENT =						20.50	9.50	8.25	20.00	4.50	3 2	3 1	63
		0.500 INCH													
6	5 K6	BARRIER	E	19S		2 7.00	10.00						3 5	3 3	20
12	5 K7	BARRIER	E	21S			2 6.75	10.00			2 6.00	6.25	3 5	3 4	42
18	5 K8	BARRIER	E	19S	2	2 8.75	10.00						3 7	3 5	
		INCREMENT =				3 2.75	10.00						4 1	3 11	69
		0.750 INCH													
36	5 K9	BARRIER	E	21S	4		2 8.50	10.00			2 7.75	6.75	3 7	3 6	
		INCREMENT =					3 2.50	10.00			3 1.75	7.75	4 1	4 0	141
		0.750 INCH													
16	5 K10	BARRIER	E	19S		3 3.25	10.00						4 1	4 0	67
32	5 K11	BARRIER	E	21S			3 3.00	10.00			3 2.25	7.75	4 1	4 0	134
12	5 K12	BARRIER	E	20		14 0.00							14 0	14 0	175
6	5 K13	BARRIER	E	20	2	13 3.00							13 3	13 3	
		INCREMENT =				7 3.00							7 3	7 3	64
		36.000 INCH													
12	5 K14	BARRIER	E	20		14 6.00							14 6	14 6	181
6	5 K15	BARRIER	E	20	2	13 9.00							13 9	13 9	
		INCREMENT =				7 9.00							7 9	7 9	67
		36.000 INCH													
10	5 K16	BARRIER	E	27S		3 4.75	9.25	5.25	2 11.75		5.25	1.00	7 7	7 5	77
38	5 K17	BARRIER	E	27S		3 4.75	9.25	14.50	2 2.75		14.25	2.75	7 8	7 5	294
2	5 K18	BARRIER	E	27S		22.25	9.25	14.50	7.75	12.00	14.25	2.75	5 6	5 2	11
10	5 K19	BARRIER	E	19S	2	2 3.50	10.00						3 1	3 0	
		INCREMENT =				2 5.50	10.00						3 3	3 2	32
		0.500 INCH													
6	5 K20	BARRIER	E	19S		2 6.00	10.00						3 4	3 2	20
18	5 K21	BARRIER	E	19S	2	2 7.75	10.00						3 6	3 4	
		INCREMENT =				3 1.75	10.00						4 0	3 10	67
		0.750 INCH													
16	5 K22	BARRIER	E	19S		3 2.25	10.00						4 0	3 11	65
12	5 K23	BARRIER	E	20		14 11.00							14 11	14 11	187
6	5 K24	BARRIER	E	20	2	14 2.00							14 2	14 2	
		INCREMENT =				8 2.00							8 2	8 2	70
		36.000 INCH													
12	5 K25	BARRIER	E	20		14 2.00							14 2	14 2	177
6	5 K26	BARRIER	E	20	2	13 5.00							13 5	13 5	
		INCREMENT =				7 5.00							7 5	7 5	65
		36.000 INCH													
38	5 C1	BARRIER	E	20		12 0.00							12 0	12 0	476
2	5 C2	BARRIER	E	20		10 6.00							10 6	10 6	22

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Length ft in.	Length ft in.	Weight lb

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 41.

Reinforcing steel (ASTM A706 Grade 60) fy = 60,000 psi

Codes: C = Required coatings, where E = Epoxy Coated and G = Galvanized.

SH = Required shape, see bending diagrams.

V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

Detailed Oct. 2026
Checked Oct. 2026

BILL OF REINFORCING STEEL

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

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 44
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

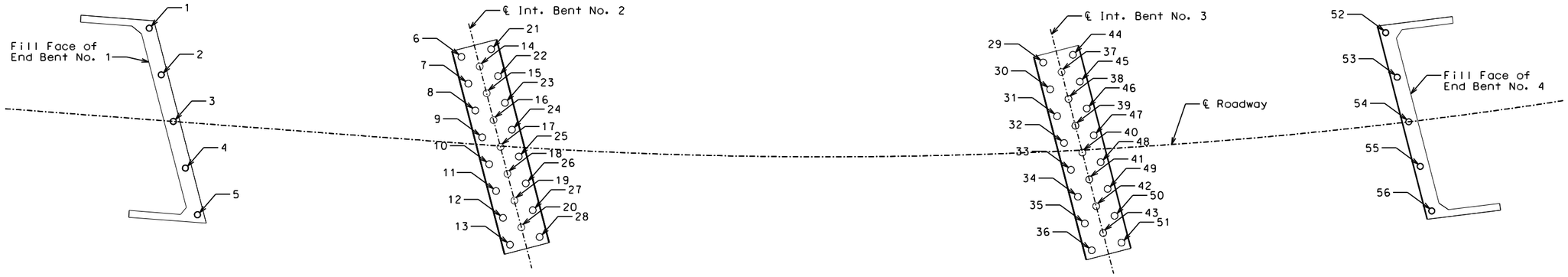
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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

REV.



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					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					

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. 3
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
					End Bent No. 4
52					
53					
54					
55					
56					

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.

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 45
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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

REV.

Detailed Sep. 2023
Checked Oct. 2023

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

B_A9225_45_J9S3775_PILEDATA.dgn 1:33:00 PM 10/6/2026

Missouri Department of Transportation
Construction and Materials

BORING NO. A-101
Page 1 of 3

Job No.: J9S3775 2021-1119.11 **County:** Stoddard **Route:** MO 114 Over UPRR
Design: A9225 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 1 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 874+9.84 **Northing:** 348622.6444 **Date of Work:** 12/14/22
Offset: 10.0 ft. RT **Easting:** 981429.1867 **Depth to Water:** 42.0
Elevation: 347.8 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-0.3' 3" ASPHALTIC CONCRETE 0.3-0.7' 5" CONCRETE							
		0.7-12.0' Fill: Light brown, lean clay, medium stiff to stiff, moist	345						
5				X	50	6-7-9 (25)		PP = 1.00 tsf	MC = 18.2%
			340						
10		8.5' Becomes brown and gray, trace fine- to medium- grained sand		X	100	2-2-2 (6)		PP = 0.50 tsf	MC = 17.0%
		12.0-15.5' Fill: Light brown, sandy lean clay, medium stiff to stiff, moist, sand is fine- to coarse-grained	335						
15				■	54		Density Test Results MC = 14.4% γ_{moist} = 120.5 pcf		LL = 24 PL = 18
		15.5-27.0' Fill: Light brown, lean clay, medium stiff to stiff, moist	330						
20		18.5' Becomes gray, no sand		X	100	2-2-3 (8)		PP = 1.00 tsf	MC = 21.2%
			325						
25				X	100	1-2-2 (6)		PP = 0.50 tsf	MC = 19.6%
		27.0-32.0' Fill: Gray, sandy lean clay, medium stiff, moist, sand is fine- to coarse- grained	320						
30				X	100	2-3-3 (9)			MC = 7.0%
		32.0-37.0' (SC) Gray, CLAYEY SAND, stiff, moist, sand is fine- to medium- grained, clay is lean	315						
35				X	78	4-7-4 (17)		PP = 0.50 tsf	Sieve Analysis Sieve # % Passing

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE - MODOT 2c150728.GDT - 2/27/23 11:53 - N:\LABORATORY\ACTIVE GINT PROJECTS\2021-1119.11 MO 114 OVER DEXTER UPRR.GPJ

Missouri Department of Transportation
Construction and Materials

BORING NO. A-101
Page 2 of 3

Job No.: J9S3775 2021-1119.11 **County:** Stoddard **Route:** MO 114 Over UPRR
Design: A9225 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 1 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 874+9.84 **Northing:** 348622.6444 **Date of Work:** 12/14/22
Offset: 10.0 ft. RT **Easting:** 981429.1867 **Depth to Water:** 42.0
Elevation: 347.8 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
35									#200 38.3
		37.0-42.0' (SP-SC) Gray, POORLY GRADED SAND WITH CLAY, loose, moist, sand is fine- to medium- grained, clay is lean	310						
40				X	89	5-5-5 (16)			Sieve Analysis Sieve # % Passing 3/4" 100.0 3/8" 95.1 4 88.8 10 81.6 20 66.9 40 30.3 60 8.8 100 6.4 140 5.8 200 5.3 LL = 35 PL = 23 MC = 28.4%
		42.0-55.0' (CL) Gray and brown, LEAN CLAY, medium stiff, wet	305						
45				X	89	3-4-4 (12)		PP = 2.00 tsf	
		45.0' Switched to mud rotary	300						
50		48.5' Trace fine- grained sand		X	100	3-3-4 (11)		PP = 0.50 tsf	MC = 30.3%
			295						
55		55.0-75.0' (SP-SC) Brown, POORLY GRADED SAND WITH CLAY, medium dense to dense, wet, sand is fine- to coarse- grained, clay is lean							
			290						
60				X	33	9-17-25 (66)			
			285						
65									
			280						
70				X	100	5-9-11 (31)			Sieve Analysis Sieve # % Passing

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE - MODOT 2c150728.GDT - 2/27/23 11:53 - N:\LABORATORY\ACTIVE GINT PROJECTS\2021-1119.11 MO 114 OVER DEXTER UPRR.GPJ

BORING DATA

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

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

Sheet No. **46** of 48

Detailed Sep. 2023
Checked Oct. 2023

STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 46
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

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

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

REV.

Missouri Department of Transportation
Construction and Materials

BORING NO. A-101
Page 3 of 3

Job No.: J9S3775 2021-1119.11 **County:** Stoddard **Route:** MO 114 Over UPRR
Design: A9225 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 1 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 874+9.84 **Northing:** 348622.6444 **Date of Work:** 12/14/22
Offset: 10.0 ft. RT **Easting:** 981429.1867 **Depth to Water:** 42.0
Elevation: 347.8 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
70									3/4" 100.0 3/8" 92.9 4 79.6 10 60.9 20 48.1 40 30.1 60 16.9 100 12.5 140 11.0 200 10.0
		55.0-75.0' (SP-SC) Brown, POORLY GRADED SAND WITH CLAY, medium dense to dense, wet, sand is fine- to coarse- grained, clay is lean *(continued)*	275						
75		73.5' Becomes fine- to medium- grained			100	9-10-13 (36)			
		Bottom of borehole at 75.0 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

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Missouri Department of Transportation
Construction and Materials

BORING NO. A-401
Page 1 of 3

Job No.: J9S3775 2021-1119.11 **County:** Stoddard **Route:** MO 114 Over UPRR
Design: A9225 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 4 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 876+47.30 **Northing:** 348401.048 **Date of Work:** 12/13/22
Offset: 10.0 ft. LT **Easting:** 981621.0184 **Depth to Water:** 66.0
Elevation: 348.2 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-0.3' 3" ASPHALTIC CONCRETE 0.3-1.1' 10" CONCRETE							
		1.1-12.0' Fill: Light gray, lean clay, stiff to medium stiff, moist	345						
5					83	5-7-7 (22)		PP = 1.50 tsf	MC = 18.4%
			340						
10		8.5' Trace brown			100	5-6-6 (19)		PP = 2.00 tsf	MC = 18.8%
		12.0-15.5' Fill: Light gray, sandy lean clay, stiff to medium stiff, moist, sand is fine- to coarse-grained	335		50		Density Test Results MC = 16.7% γ_{moist} = 113.2 pcf		LL = 25 PL = 19
15		15.5-27.0' Fill: Light gray, lean clay, stiff to medium stiff, moist							
			330						
20					94	6-6-6 (19)		PP = 4.50 tsf	MC = 20.7%
			325						
25					100	3-2-4 (9)		PP = 2.00 tsf	MC = 22.5%
		27.0-48.5' (CL-ML) Gray, SILTY LEAN CLAY, medium stiff to stiff, moist, trace fine- to medium- grained sand	320						
30					100	3-4-6 (16)	Density Test Results MC = 23.3% γ_{moist} = 127.0 pcf	PP = 1.00 tsf	LL = 26 PL = 21
			315						
35					100	2-2-3 (8)		PP = 2.00 tsf	MC = 26.6%

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
(1) = Assumed, (2) = Actual

Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

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STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 47
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE | REV.

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

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

BORING DATA

Note: For locations of borings, see Sheet No. 1.
Note: This drawing is not to scale. Follow dimensions.

Detailed Sep. 2023
Checked Oct. 2023

B_A9225_47_J9S3775_BORE2.dgn 1:33:40 PM 10/6/2026

Missouri Department of Transportation
Construction and Materials

BORING NO. A-401
Page 2 of 3

Job No.: J9S3775 2021-1119.11 **County:** Stoddard **Route:** MO 114 Over UPRR
Design: A9225 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 4 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 876+47.30 **Northing:** 348401.048 **Date of Work:** 12/13/22
Offset: 10.0 ft. LT **Easting:** 981621.0184 **Depth to Water:** 66.0
Elevation: 348.2 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
35		27.0-48.5' (CL-ML) Gray, SILTY LEAN CLAY, medium stiff to stiff, moist, trace fine- to medium- grained sand *(continued)*							
40		38.5' Becomes brown, trace gray, no sand	310		100	2-3-3 (9)		PP = 2.50 tsf	MC = 23.9%
45			305		100	3-4-6 (16)		PP = 1.00 tsf	MC = 26.2%
50		48.5-58.5' (ML) Brown, SILT, medium stiff to stiff, moist	300		89	2-3-3 (9)		PP = 1.00 tsf	LL = 29 PL = 23 MC = 28.4%
55			295						
60		58.5-75.0' (SP-SC) Brown, POORLY GRADED SAND WITH CLAY, medium dense, wet, trace lignite, sand is fine- to coarse- grained, clay is lean	290		50	3-4-7 (17)			Sieve Analysis Sieve # % Passing 3/4" 100.0 3/8" 84.9 4 64.8 10 48.4 20 36.0 40 18.9 60 10.2 100 7.8 140 6.6 200 5.7
65			285						
70		68.5' Trace lean clay, no lignite	280		44	6-9-12 (33)			

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
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Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
Coordinate Datum: **Coordinate Units:** U.S. Survey Feet

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Missouri Department of Transportation
Construction and Materials

BORING NO. A-401
Page 3 of 3

Job No.: J9S3775 2021-1119.11 **County:** Stoddard **Route:** MO 114 Over UPRR
Design: A9225 **Skew:** Varies (R.A.) **Location:** Dexter, Missouri
Bent: 4 **Logged By:** Ian Aubuchon **Operator:** Midwest Drilling Inc
Station: 876+47.30 **Northing:** 348401.048 **Date of Work:** 12/13/22
Offset: 10.0 ft. LT **Easting:** 981621.0184 **Depth to Water:** 66.0
Elevation: 348.2 **Requested Northing:** **Depth Hole Open:** 75
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** CME 750 ,Split-Spoon Sampler, Shelby Tube
Requested Elevation: **Location Note:**
Drill No.: Smith & Co **Hammer Efficiency:** 93.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
70		58.5-75.0' (SP-SC) Brown, POORLY GRADED SAND WITH CLAY, medium dense, wet, trace lignite, sand is fine- to coarse- grained, clay is lean *(continued)*							
75		Bottom of borehole at 75.0 feet.	275		56	7-9-9 (28)			

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value
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Coordinate System: **Coordinate Zone:** **Coordinate Proj. Factor:**
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BORING DATA

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

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

Sheet No. **48** of 48

Detailed Sep. 2023
Checked Oct. 2023

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STATE OF MISSOURI
JERILYN M. HASSARD
NUMBER PE-2002003174
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED, AND DATED ELECTRONICALLY.

DATE PREPARED 10/12/2026
ROUTE 114 | STATE MO
DISTRICT BR | SHEET NO. 48
COUNTY STODDARD
JOB NO. J9S3775
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9225

DESCRIPTION | DATE

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

MODJESKI-MASTERS
333 SOUTH 18th STREET, SUITE 100
ST. LOUIS, MISSOURI 63103-3002

MISSOURI STATE CERTIFICATE OF AUTHORITY #001416

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