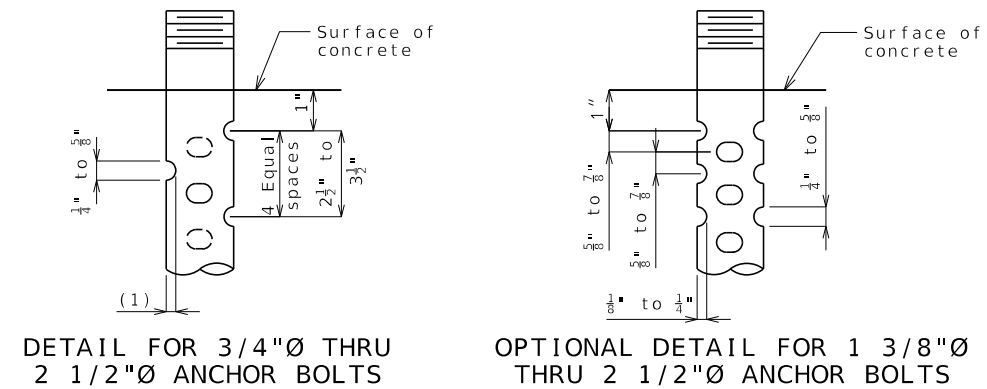


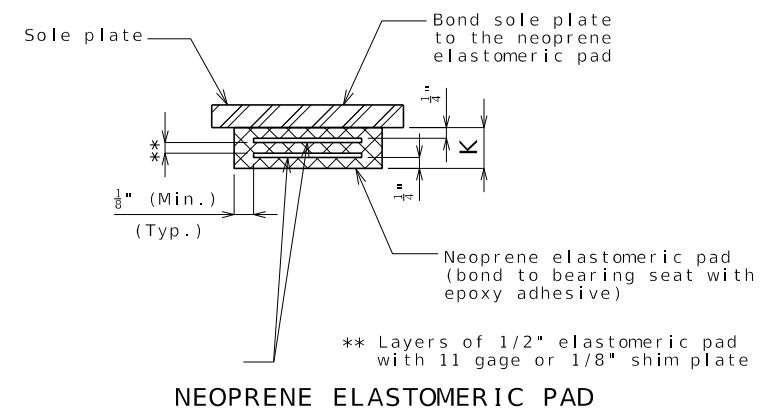
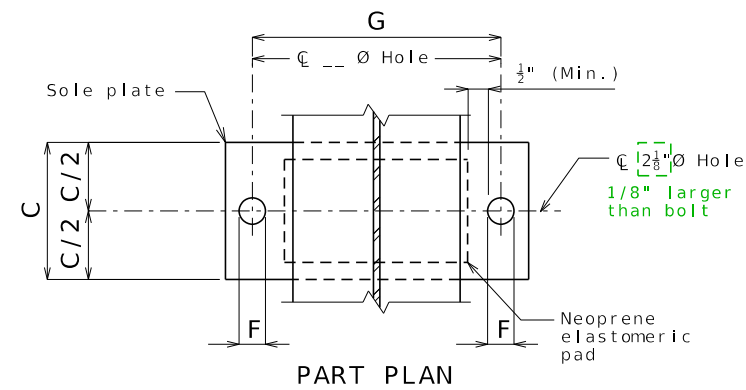
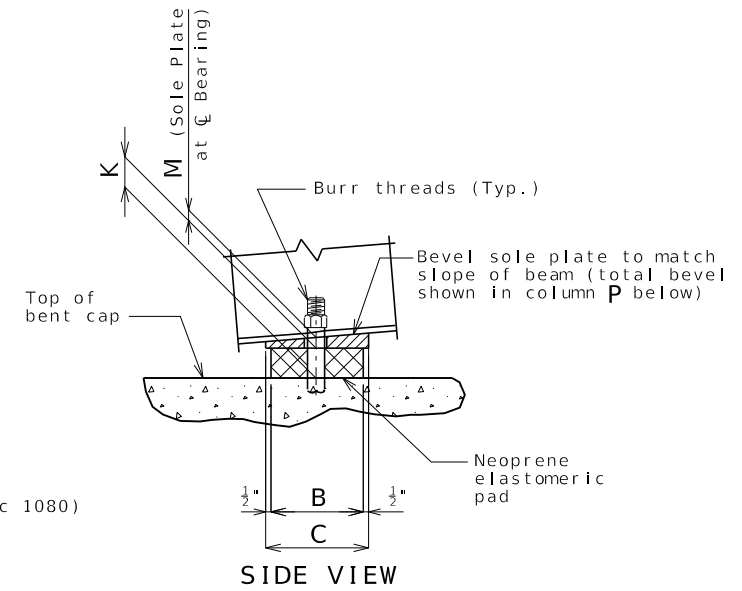
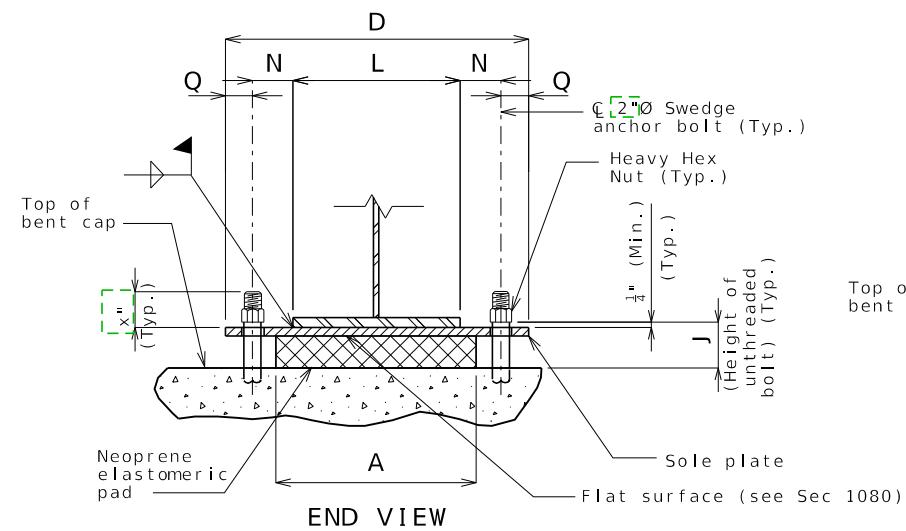
EPG 751.11 Bearings

Use current standard sheet found in ProjectWise under Bridge/Br Std Dwgs/Bearings BRG/Current/



SWEDGE ANCHOR BOLT DETAILS

- (1) 3/8" for 3/4"Ø thru 1 1/4"Ø anchor bolts
- 1/8" to 1/4" for 1 3/8"Ø thru 2 1/2"Ø anchor bolts



FIXED BEARINGS													NUMBER OF SHIM PLATES *	NUMBER REQUIRED	
BENT NO.	A	B	C	D	F	G	J	K	L	M	N	P			Q
2	18"	16"	17"	27"	2 1/2"	21"	4 1/4"	2 1/2"	15"	1 1/2"	3"	1 1/2"	3"	4	4
													TOTAL BEARINGS	4	

* The required shim plate shall be placed between layers of elastomer and molded together to form an integral unit.

Fill in (from design)

EPG 751.50 Standard Detailing Notes

- Note H3.45 Anchor bolts shall be 2"Ø ASTM F1554 Grade 55 swaged bolts and shall extend 18" into the concrete with ASTM A563 Grade A Heavy Hex nuts. Actual manufacturer's certified mill test reports (chemical and mechanical) shall be provided. Swedging shall be 1" less than extension into the concrete.
- Note H3.46 Anchor bolts and heavy hex nuts shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum, or galvanized in accordance with Sec 1081.
- Note H3.47 Neoprene Elastomeric Pads shall be 60 Durometer.
- Note H3.49, (or H3.49.1) Structural steel for sole plate shall be ASTM A709 Grade 50 and shall be coated with a minimum of two coats of inorganic zinc primer to provide a total dry film thickness of 4 mils minimum, 6 mils maximum.
- Note H3.50 Laminated Neoprene Bearing Pad Assembly shall be in accordance with Sec 716.

GENERAL NOTES:

LAMINATED NEOPRENE BEARING PAD ASSEMBLY

DATE PREPARED 5/22/2023	
ROUTE BR	STATE MO
DISTRICT BR	SHEET NO. 1
COUNTY	
JOB NO.	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. EXAMPLE	

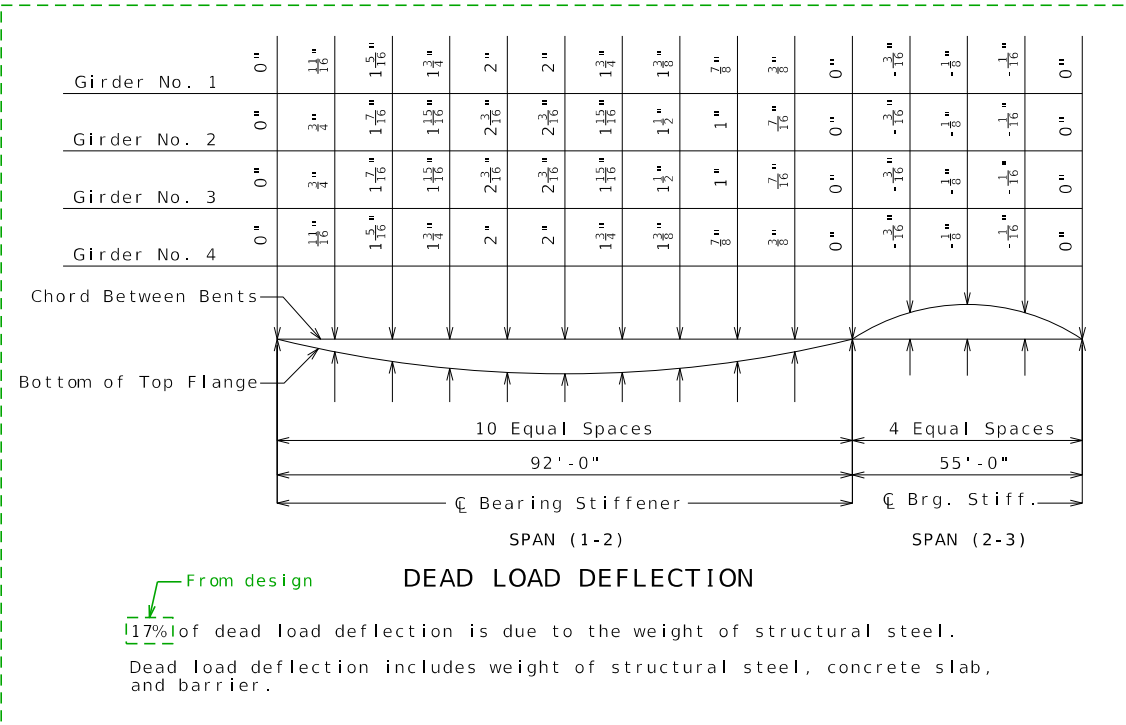
DESCRIPTION	DATE

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.

CADD Stds: Deadload Deflection - Tenth Pts (Steel Girders)
Fill in info from design. Modify diagram as needed.



DEAD LOAD DEFLECTION

CADD Stds: PI Girder Camber Diagram - Tenth Pts (Steel Girders)
Fill in info from design. Modify diagram as needed.

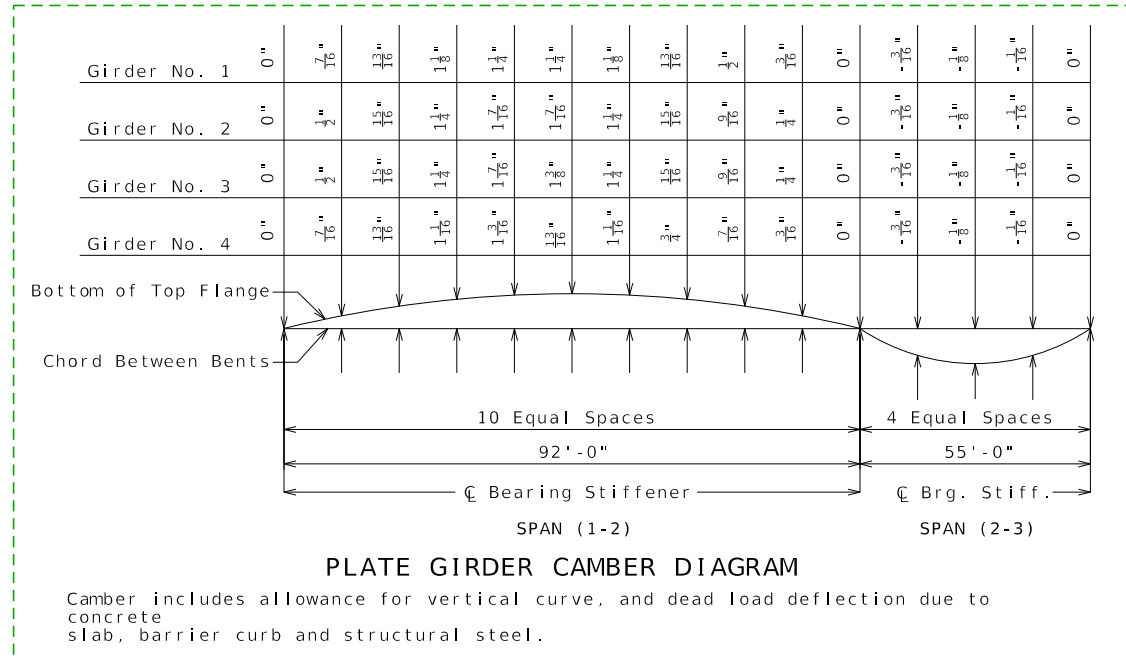


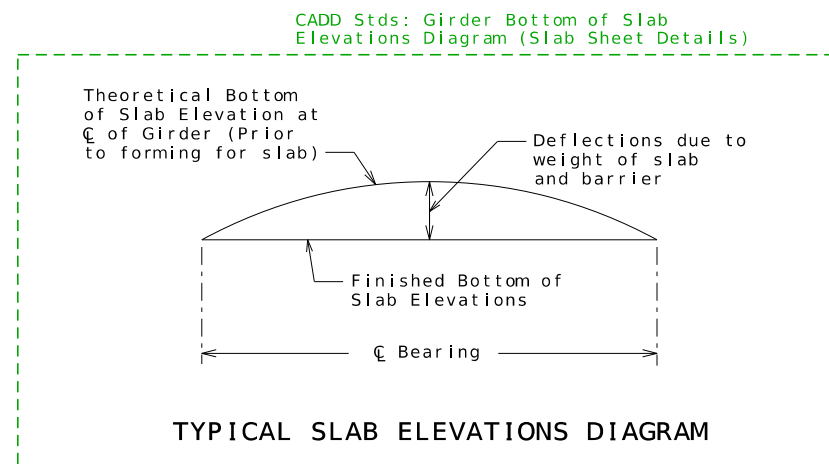
PLATE GIRDER CAMBER DIAGRAM

Theoretical Bottom of Slab Elevations at ☉ of Girder (Prior to Forming for Slab) **

Girder Number	Span (1-2) (92'-0" ☉ Brg - ☉ Brg.)										Span (2-3) (55'-0" ☉ Brg - ☉ Brg.)					
	☉ Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	☉ Brg.	.25	.50	.75	☉ Brg.	
1	1011.90	1011.98	1012.06	1012.13	1012.19	1012.25	1012.29	1012.33	1012.36	1012.40	1012.44	1012.44	1012.53	1012.64	1012.75	1012.85
2	1012.08	1012.16	1012.24	1012.32	1012.38	1012.43	1012.47	1012.51	1012.54	1012.57	1012.61	1012.61	1012.70	1012.81	1012.91	1013.02
3	1012.07	1012.15	1012.23	1012.31	1012.37	1012.42	1012.46	1012.49	1012.52	1012.55	1012.59	1012.59	1012.68	1012.79	1012.90	1013.01
4	1011.88	1011.96	1012.03	1012.10	1012.16	1012.21	1012.25	1012.29	1012.32	1012.35	1012.40	1012.40	1012.49	1012.59	1012.70	1012.81

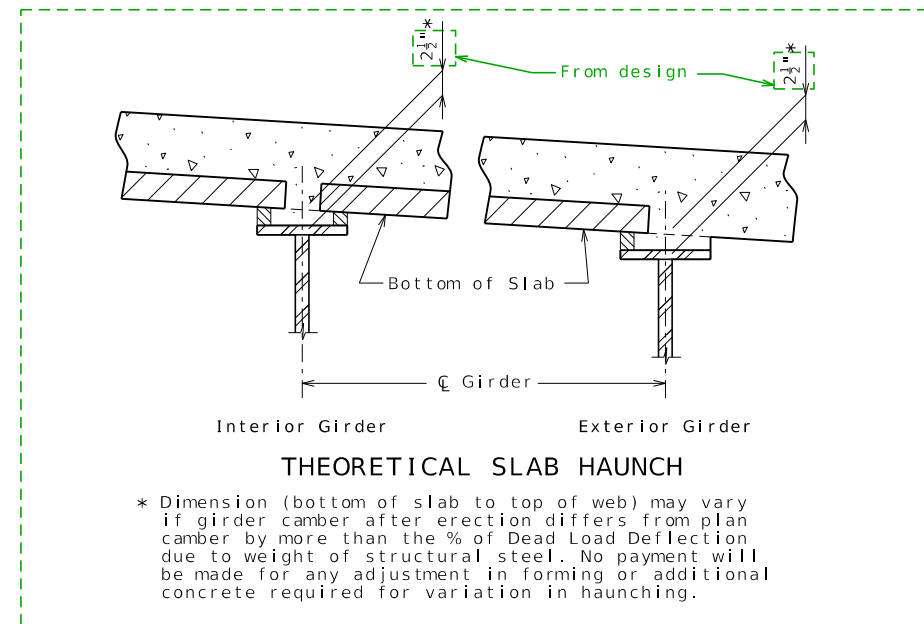
** Elevations are based on a constant slab thickness of 8 1/2" and include allowance for theoretical dead load deflections due to weight of slab (including precast panel) and barrier curb.

CADD Std: Girder Bottom of Slab Elevations - Tenth Pts (Slab Sheet Details)
Fill in with info from design.



TYPICAL SLAB ELEVATIONS DIAGRAM

CADD Stds: Theoretical Slab Haunch for Deck Panels (Steel Girders)



THEORETICAL SLAB HAUNCH

STEEL PLATE GIRDER DETAILS

DATE PREPARED		5/23/2023	
ROUTE	STATE	MO	
DISTRICT	SHEET NO.	BR	32
COUNTY			
JOB NO.			
CONTRACT ID.			
PROJECT NO.			
BRIDGE NO.			
EXAMPLE			

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

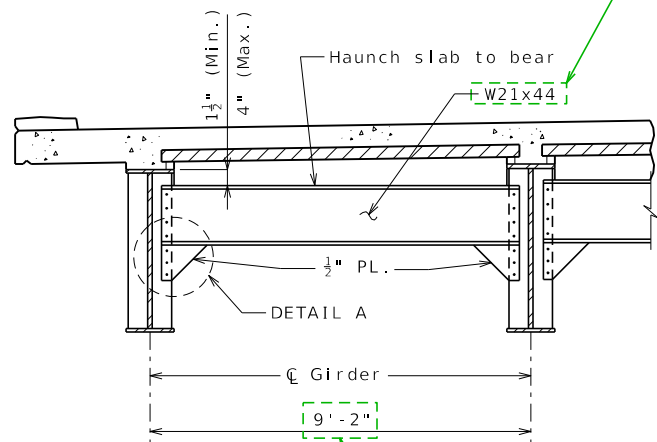
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-273-6636)

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

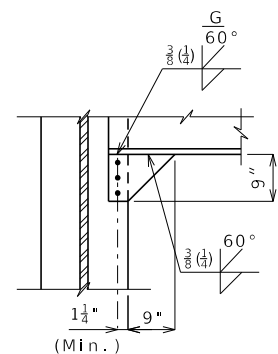
Use current standard sheet found in ProjectWise under Bridge/Br_Std_Dwgs/Diaphragms DIA/Current. Remove details that do not apply. Change detail letter designations as needed (Detail A, Detail B, etc.)

See Bridge Standard Drawing for additional guidance.

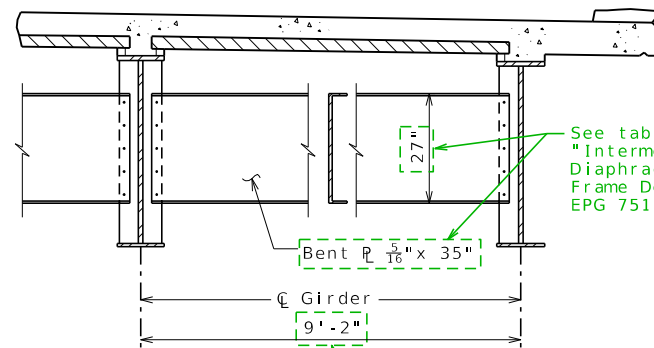
See EPG 751.14.5.3 End Diaphragms for Wide Flange Beams or 751.14.5.4 End Diaphragms for Plate Girders



TYPICAL PART SECTION SHOWING END DIAPHRAGMS



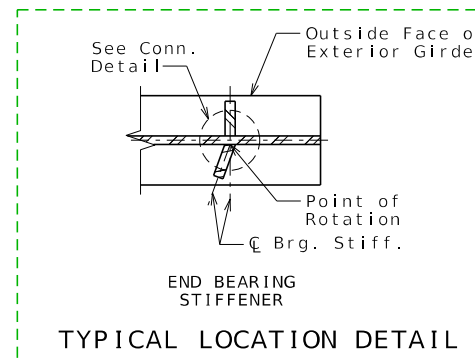
DETAIL A



TYPICAL PART SECTION SHOWING CROSS FRAMES AND INTERMEDIATE DIAPHRAGMS

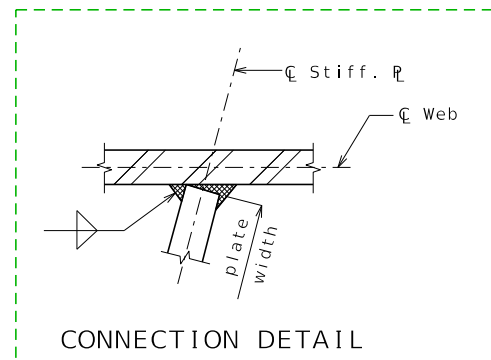
Note H1.26, EPG 751.50

At the contractor's option, holes in the diaphragm plate of non slab bearing diaphragms may be made 3/16" larger than the nominal diameter of the bolt. A hardened washer shall be used under the bolt head and nut when this option is used. Holes in the girder diaphragm connection plate or transverse web stiffener shall be standard size.



TYPICAL LOCATION DETAIL

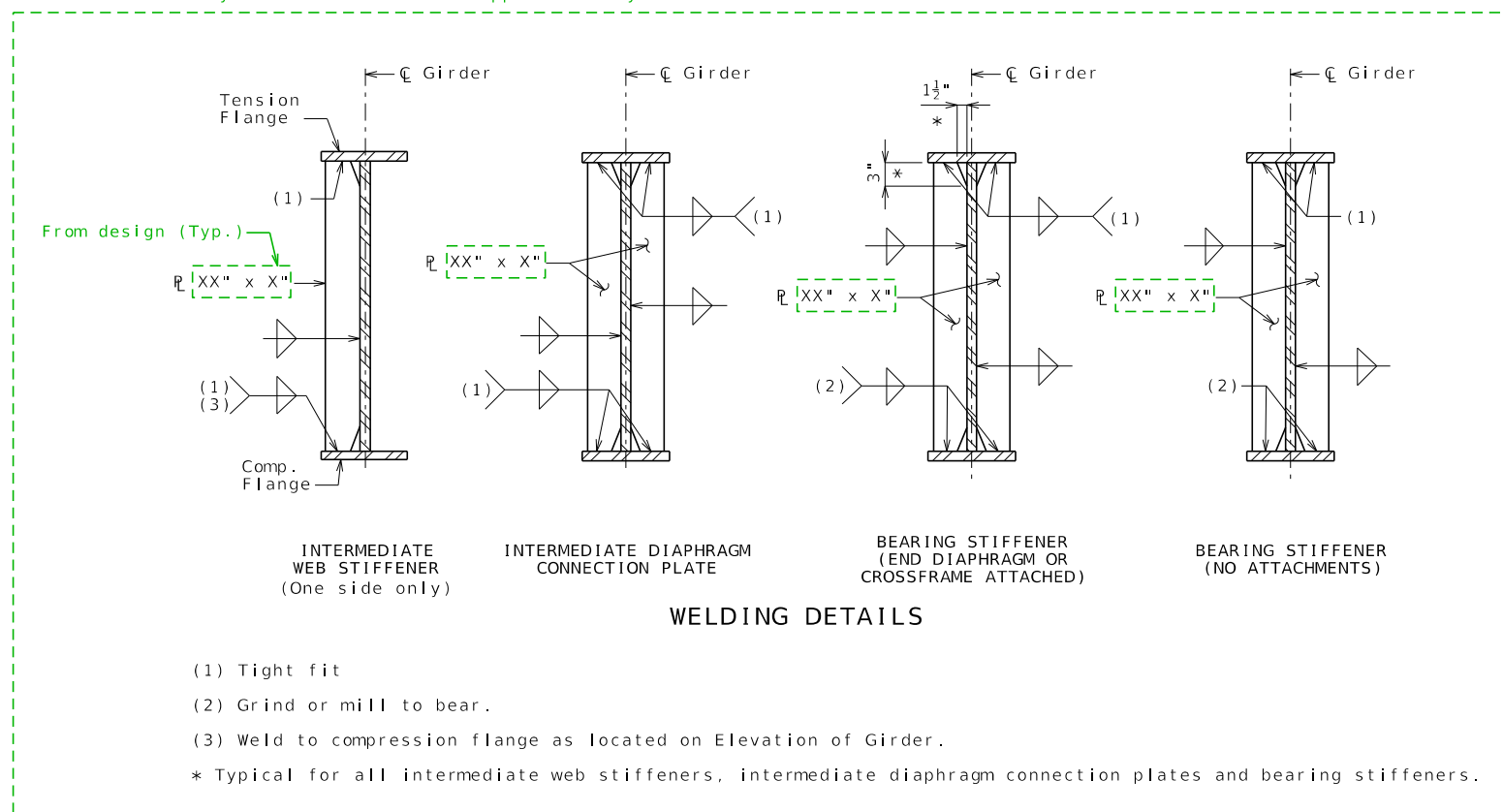
CADD Stds: Location Details (Steel Girders) See EPG 751.14.5.1 Locations



CONNECTION DETAIL

CADD Std: Connection Weld Details (Steel Girders). See EPG 751.14.5.1 Welds for Optional Stiffener Locations, and Table "Bearing Stiffener Connections for Given Skew and Stiffener Size" to determine which detail is required.

CADD Std: Stiff. Straight Girder Welded (Steel Girders) Any details that are not applicable may be removed.



WELDING DETAILS

- (1) Tight fit
- (2) Grind or mill to bear.
- (3) Weld to compression flange as located on Elevation of Girder.
- * Typical for all intermediate web stiffeners, intermediate diaphragm connection plates and bearing stiffeners.

STEEL DIAPHRAGMS

DATE PREPARED		5/23/2023	
ROUTE	STATE	MO	
DISTRICT	SHEET NO.	BR 33	
COUNTY			

JOB NO.

CONTRACT ID.

PROJECT NO.

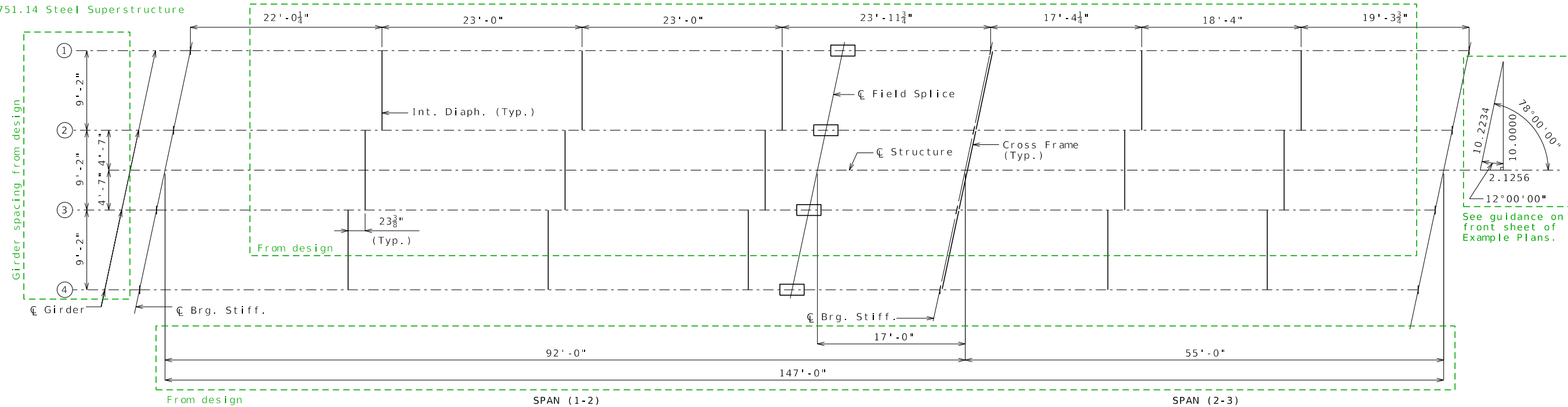
BRIDGE NO.
EXAMPLE

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

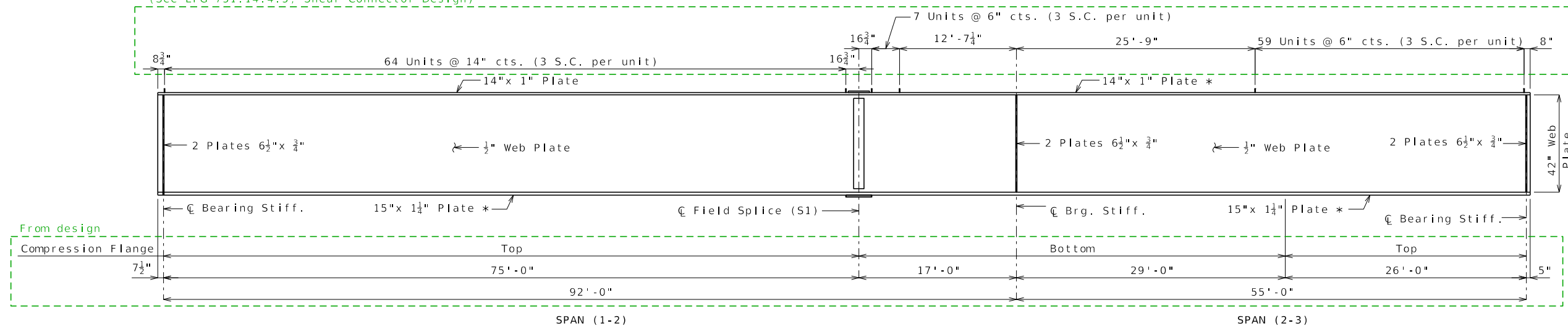
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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

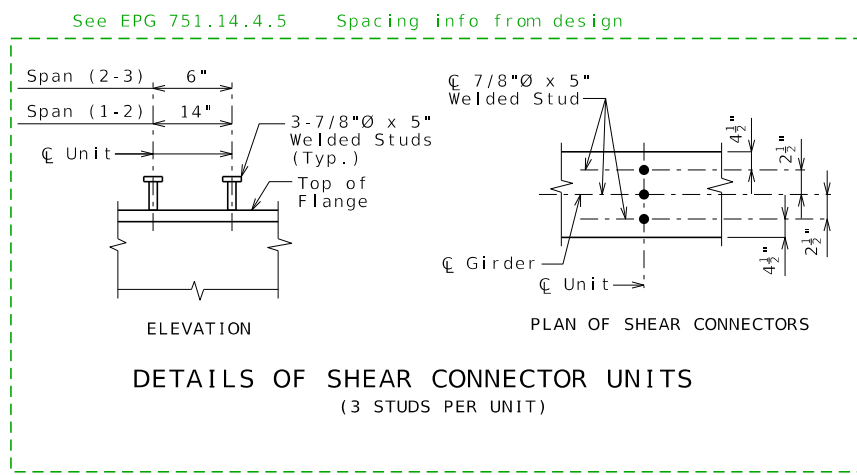
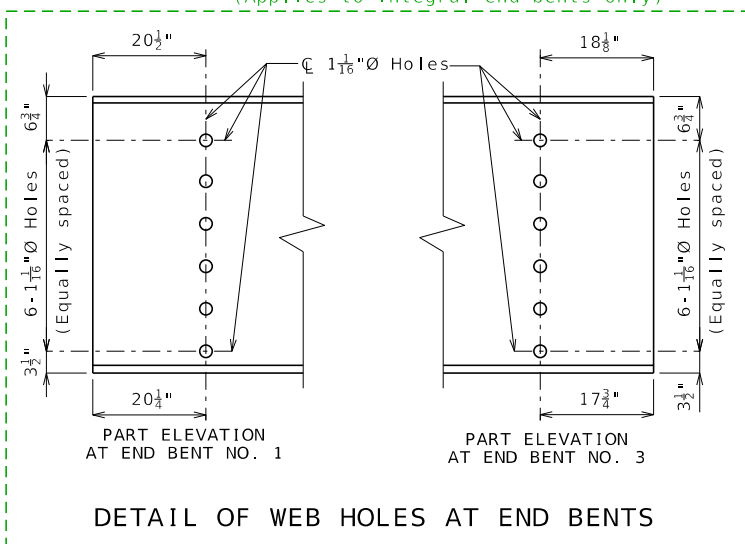


See guidance on front sheet of Example Plans.

Shear connector spacing from design
(See EPG 751.14.4.5, Shear Connector Design)



See EPG 751.35.5.1
(Applies to integral end bents only)



EPG 751.50 Notes

- Note H1.21 * Indicates flange plate subject to notch toughness requirements. All web plates shall be subject to notch toughness requirements.
- Note H1.17 Weight of 1,530 pounds of shear connectors is included in the weight of Fabricated Structural Low Alloy Steel (Plate Girder) A709, Grade 50W.
- Note H1.18 Shear connectors shall be in accordance with Sec 712, 1037 & 1080.
- Note H1.4 Plate girders shall be fabricated in accordance with the camber diagram shown on Sheet No. _.
- For details of bolted field splices and Part Longitudinal Section, see Sheet No. _.
- For details of intermediate diaphragms, cross frames, bearing stiffeners and intermediate diaphragm connection plates, see Sheet No. _.
- For location of slab drain attachment holes, see Slab Drain Details sheet.
- Note H1.23a Fabricated structural steel shall be ASTM A709, Grade 50W, except as noted.
- Note H1.29 Longitudinal dimensions are horizontal from \bar{C} bearing to \bar{C} bearing. See Part-Longitudinal Sections on Sheet No. _.

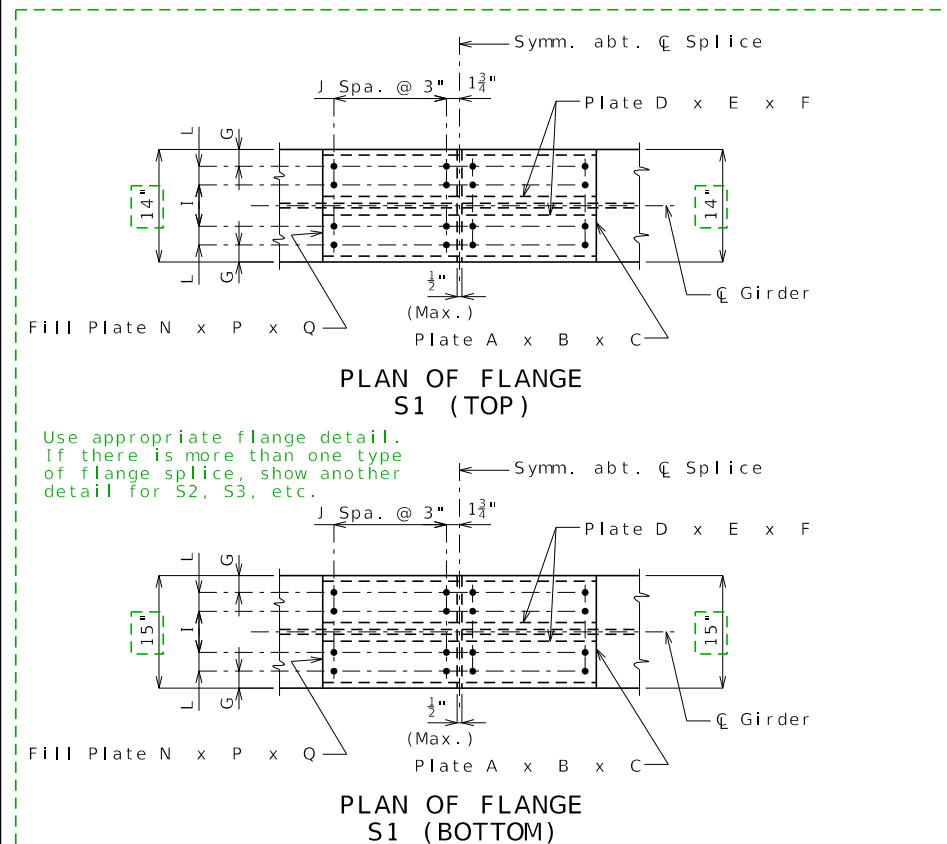
STEEL PLATE GIRDER DETAILS

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	DATE PREPARED	5/23/2023
	ROUTE	STATE
	DISTRICT	SHEET NO.
	COUNTY	
	JOB NO.	
	CONTRACT ID.	
	PROJECT NO.	
	BRIDGE NO.	
	EXAMPLE	
	DESCRIPTION	
DATE		
<p>105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)</p>		

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

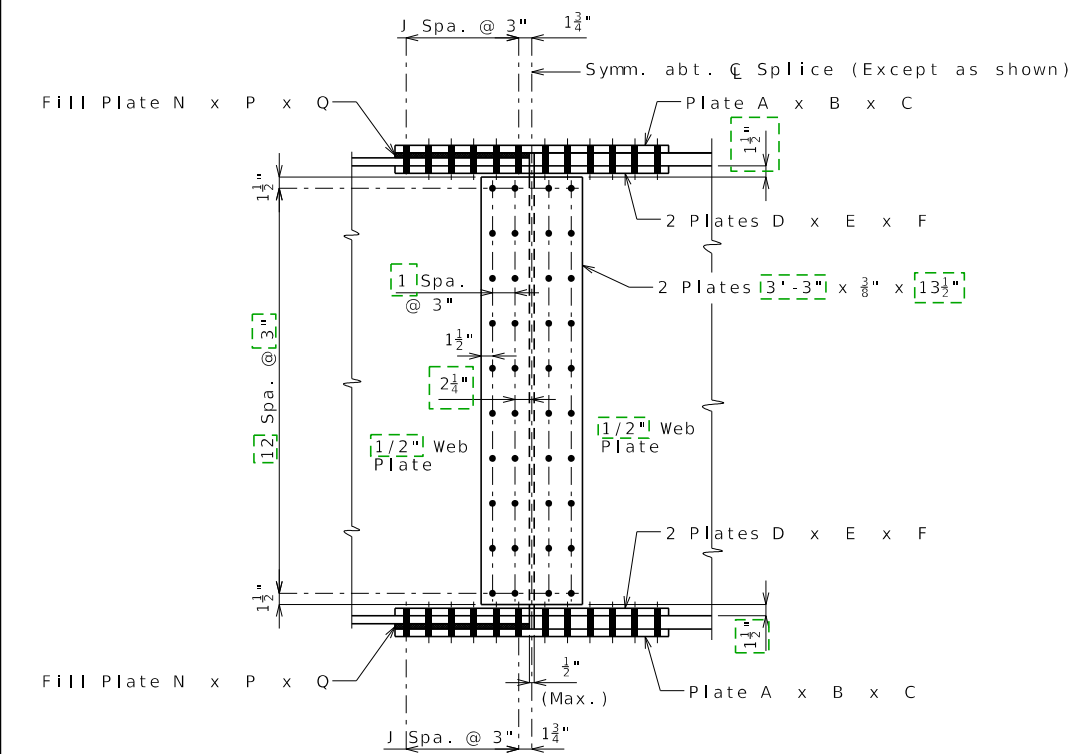
EPG 751.14.3 Splice Design

Use current standard sheet found in ProjectWise under
Bridge/Br Std Dwg/Plate Gdr Splices PGS/Current
Use appropriate version for design practice used (LFD or LRFD)

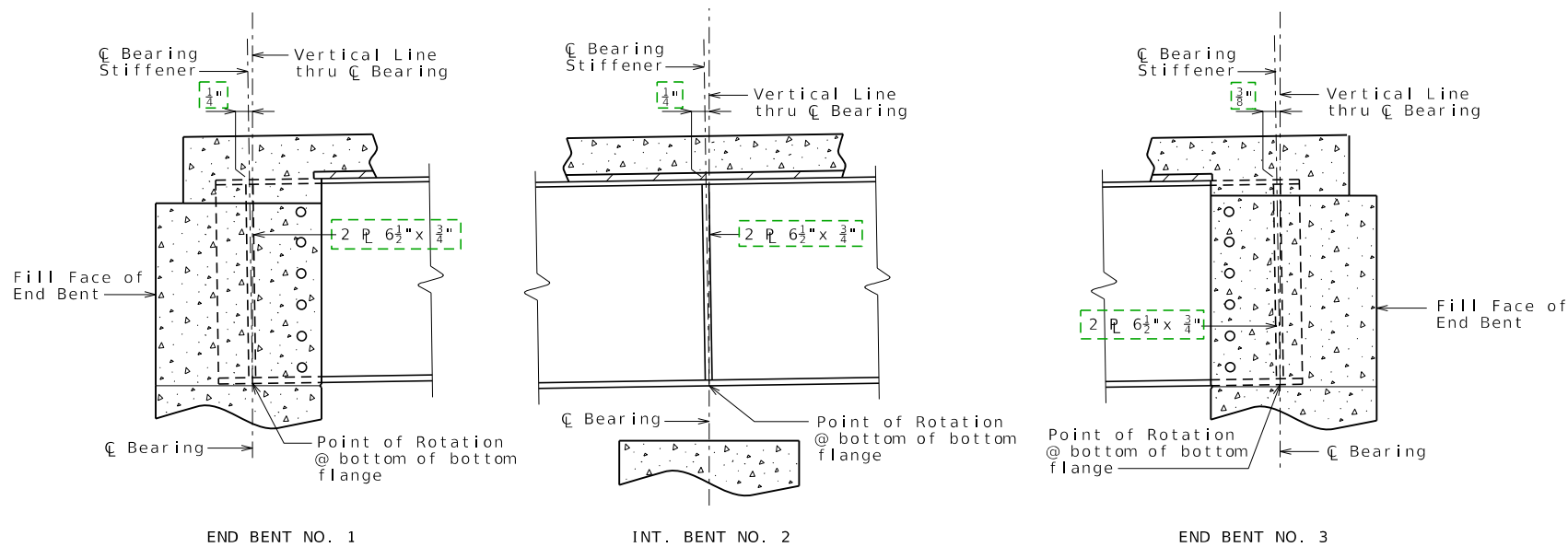
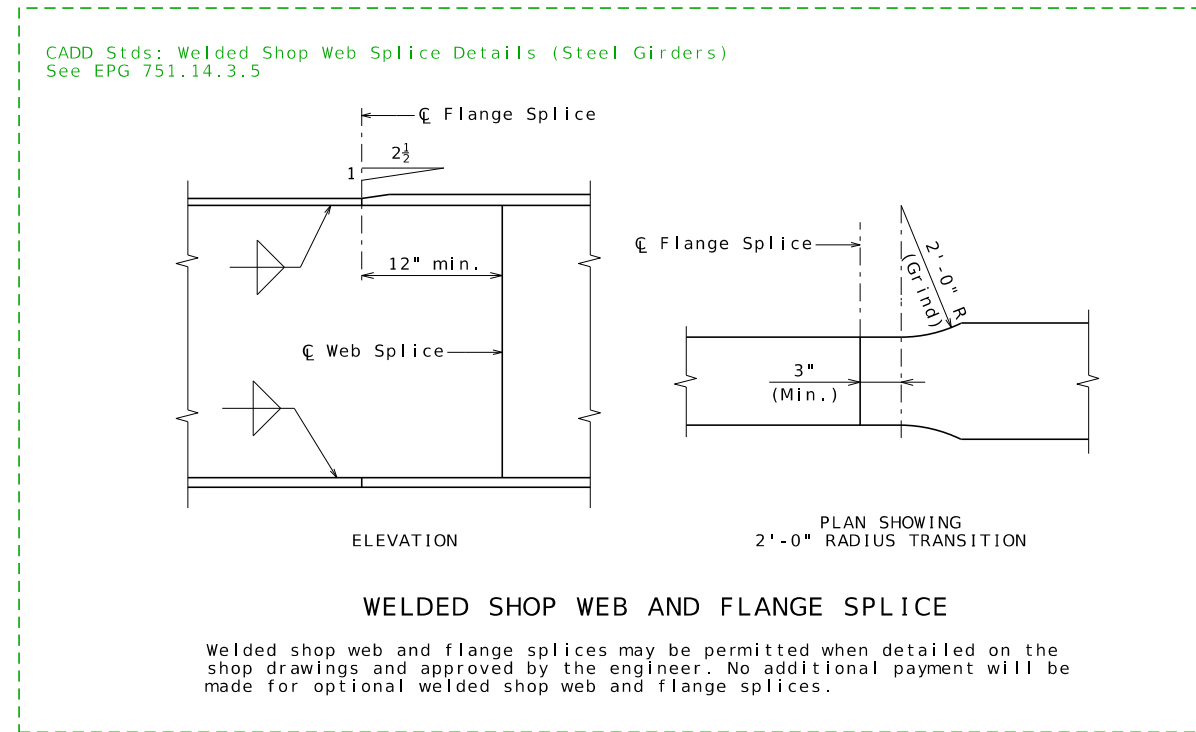


Use appropriate flange detail.
If there is more than one type
of flange splice, show another
detail for S2, S3, etc.

For location of S1 field splice, see Elevation of Girder on Sheet No. . .



DETAIL OF BOLTED FIELD SPLICE
Bolts shall be 7/8-inch diameter ASTM F3125 Grade A325
Type 1 in 15/16-inch diameter holes.
Contact surfaces shall be in accordance with Sec 1081
for surface preparation.



PART LONGITUDINAL SECTION

From design

TABLE OF DIMENSIONS - FIELD SPLICE													
LOCATION	A	B	C	D	E	F	G	I	J	L	N	P	Q
S1 (Top)	14"	5/8"	2'-3 1/2"	5 1/2"	3/4"	2'-3 1/2"	2"	5"	3	2 1/2"	0	0	0
S1 (Bottom)	15"	3/4"	2'-9 1/2"	5 1/2"	3/4"	2'-3 1/2"	2"	6"	4	2 1/2"	0	0	0

If filler plate is not required, use zero.

STEEL PLATE GIRDER DETAILS

DATE PREPARED 5/24/2023	
ROUTE BR	STATE MO
DISTRICT 1	SHEET NO. 1
COUNTY	
JOB NO.	
CONTRACT ID.	
PROJECT NO.	

BRIDGE NO. EXAMPLE
DATE
DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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