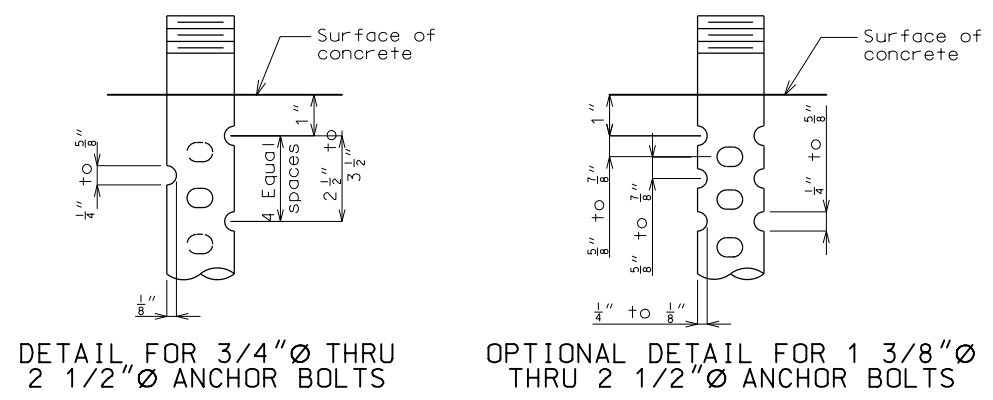
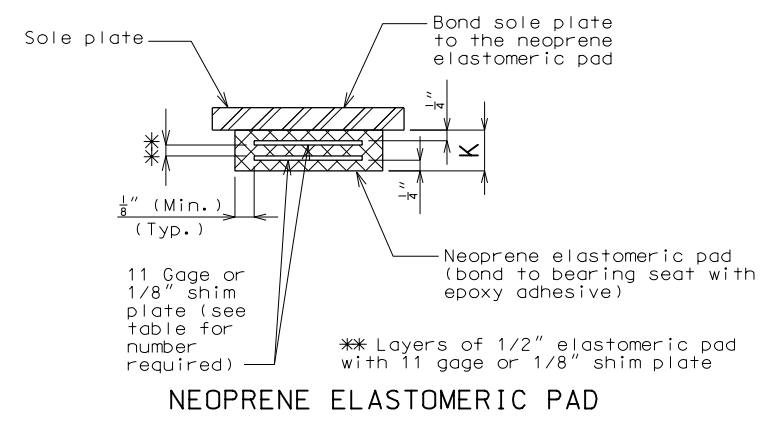
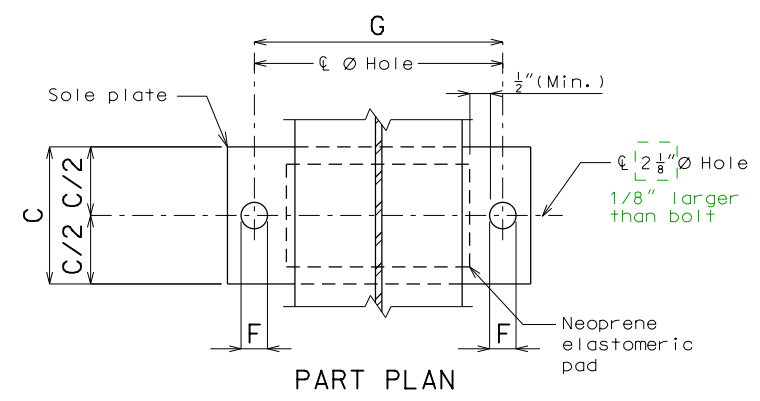
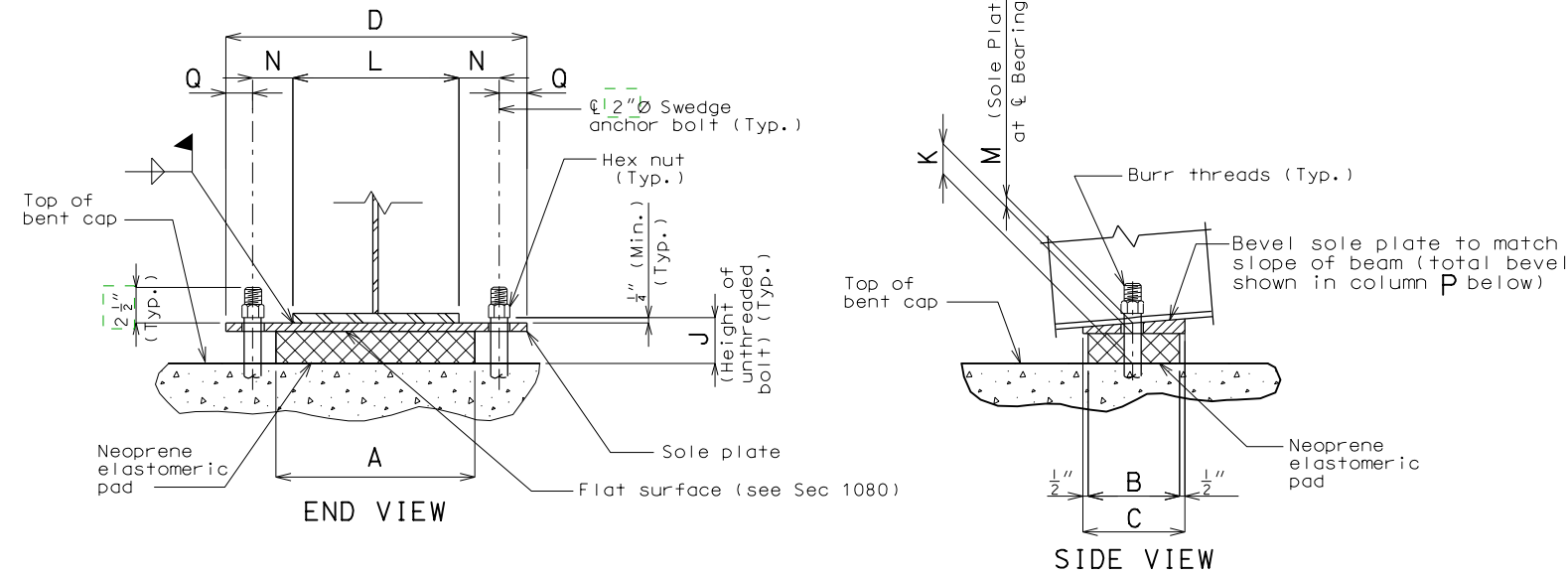


EPG 751.11 Bearings

Use current standard sheet found in ProjectWise under Bridge/A Bridge Standard Drawings/Bearings/Current/



SWEDGE ANCHOR BOLT DETAILS



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 1/8"	21"	4 1/4"	2 1/2"	15"	1 1/2"	3"	1/4"	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
- Note H3.46
- Note H3.47
- Note H3.49, (or H3.49.1)
- Note H3.50

GENERAL NOTES:

- Anchor bolts shall be 1/2" diameter ASTM F1554 Grade 55 swaged bolts and shall extend 18" into the concrete with ASTM A563 Grade A Hex or 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.
- All structural steel for the anchor bolts and heavy hexagon nuts shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum).
- Neoprene Elastomeric Pads shall be 60 Durometer.
- Structural steel for sole plate shall be ASTM A709 Grade 50W and shall be coated with a minimum of two coats of inorganic zinc primer (5 mils minimum).
- Laminated Neoprene Bearing Pad Assembly shall be in accordance with Sec 716.

DETAILS OF LAMINATED NEOPRENE BEARING PAD ASSEMBLY

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COUNTY		*
JOB NO.		*
CONTRACT ID.		
PROJECT NO.		
BRIDGE NO.		EXAMPLE

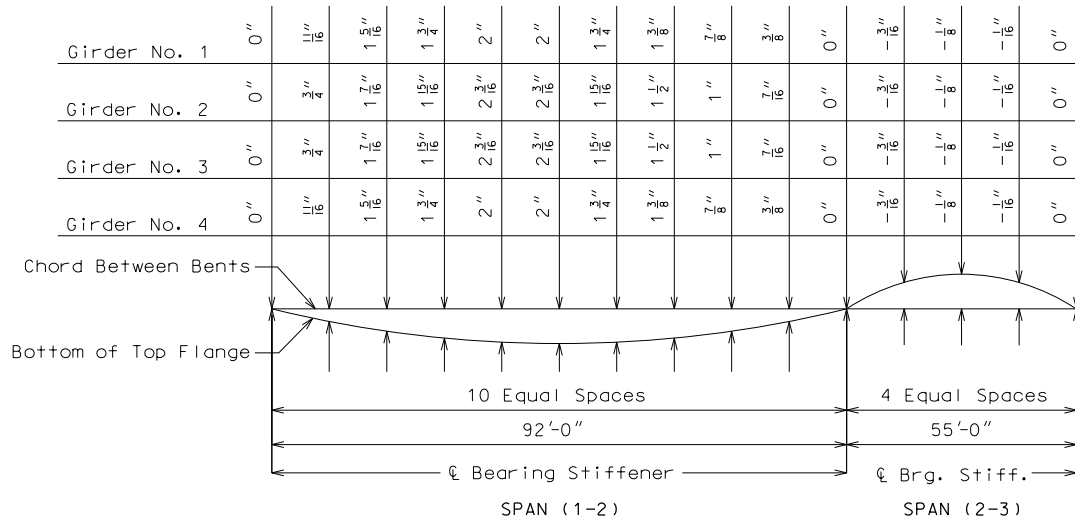
DESCRIPTION	DATE

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

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



DEAD LOAD DEFLECTION

17% of dead load deflection is due to the weight of structural steel.
Dead load deflection includes weight of structural steel, concrete slab, and barrier curb.

Cell in Tasks: Steel Girders
(Pl Girder Camber Diagram - Tenth Pts)
Fill in info from design.
Modify diagram as needed.

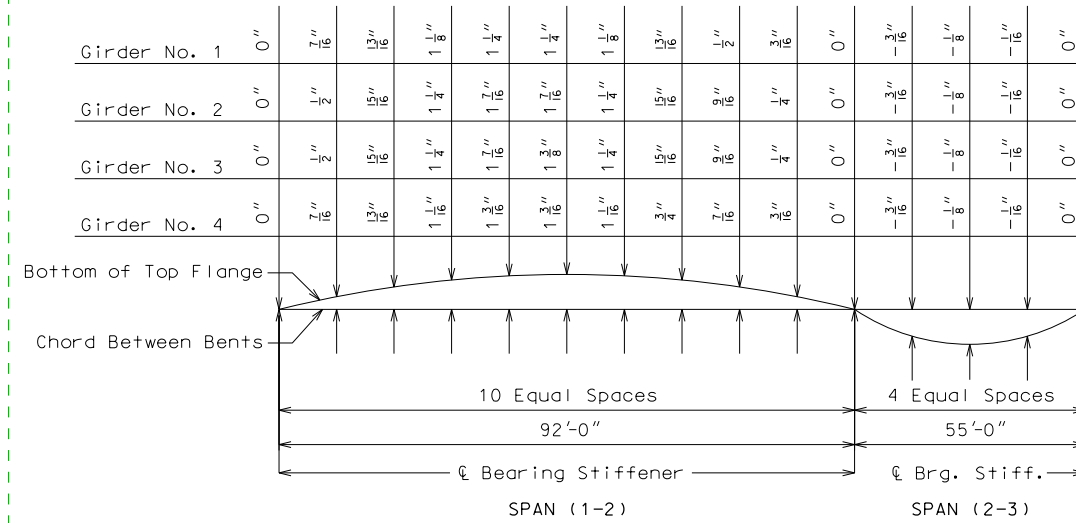


PLATE GIRDER CAMBER DIAGRAM

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

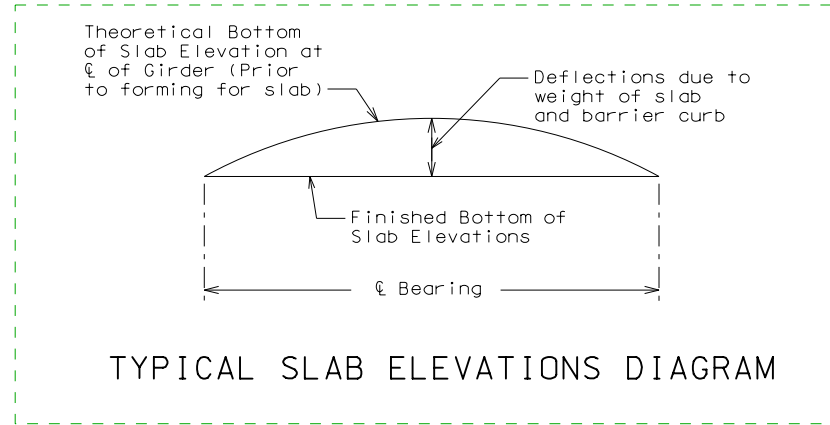
Cell in Tasks: Slab Sheet Details
(Bottom of Slab Elevations - Tenth Pts)
Fill in with info from design.

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

Girder Number	Span (1-2) (92'-0" CL Brg - CL Brg.)											Span (2-3) (55'-0" CL Brg - CL Brg.)				
	CL Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	CL Brg.	CL Brg.	.25	.50	.75	CL 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

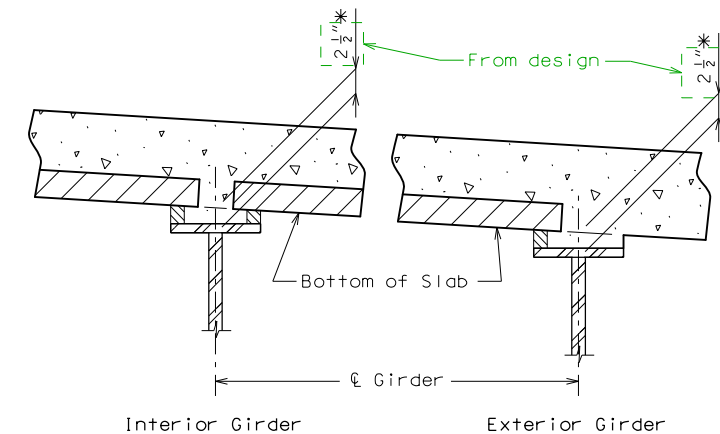
** Elevations are based on a constant slab thickness of 8 1/2" and include allowance for theoretical dead load deflections due to weight of slab (including precast panel) and barrier curb.

Cell in Tasks: Slab Sheet Details
(Bottom of Slab Elevation Diagram)



TYPICAL SLAB ELEVATIONS DIAGRAM

Cell in Tasks: Steel Girders
(Theoretical Slab Haunch Detail)



THEORETICAL SLAB HAUNCH

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

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COUNTY
ATCHISON

JOB NO.
J1P1047

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
EXAMPLE

DESCRIPTION

DATE

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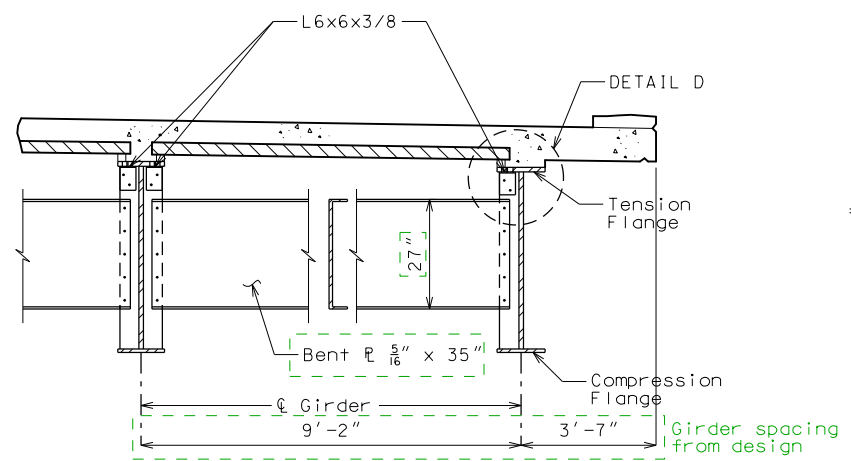
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STEEL PLATE GIRDER DETAILS

Use current standard sheet found in ProjectWise under Bridge/A_Bridge_Standard_Drawings/Diaphragms_DIA/Current/
Remove details that do not apply. Change Detail Letter designations as needed (Detail A, Detail B, etc.)

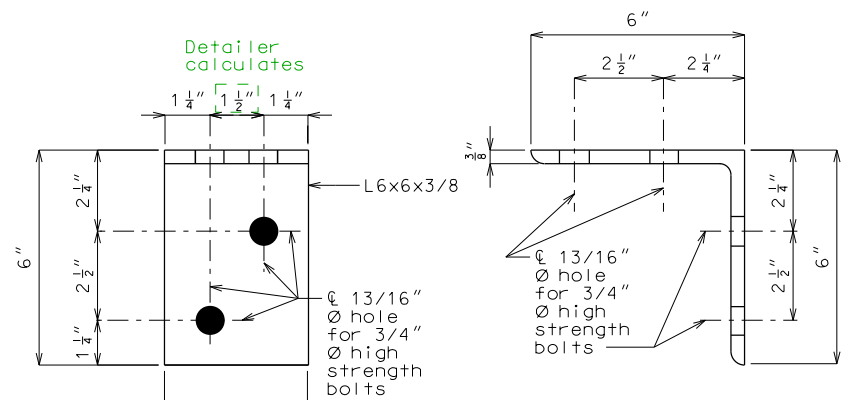
Always use the latest version from Standard Drawings. Do not copy from another structure.



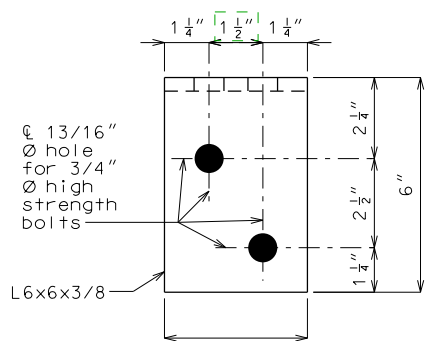
TYPICAL PART SECTION SHOWING CROSS FRAMES AND INTERMEDIATE DIAPHRAGMS TOP FLANGE IN TENSION

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.

Note H1.26, EPG 751.50

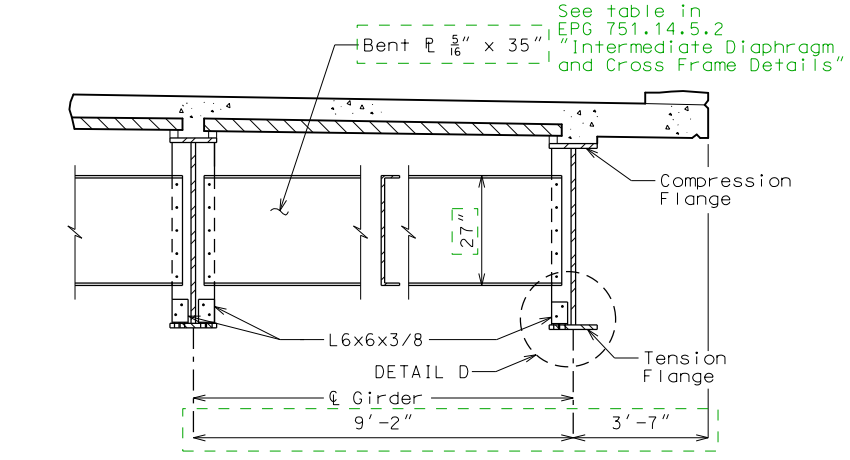
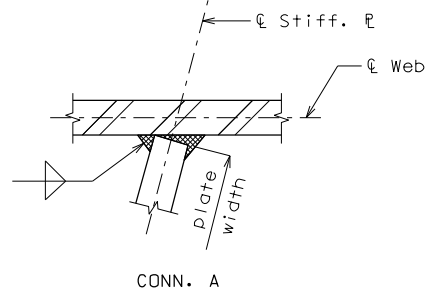
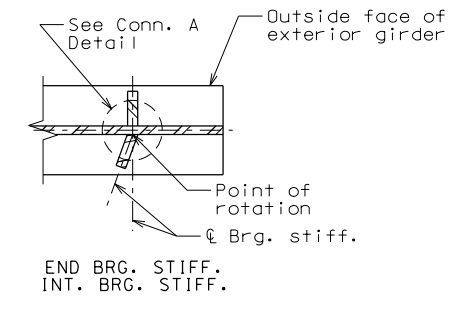


ELEVATION SIDE VIEW

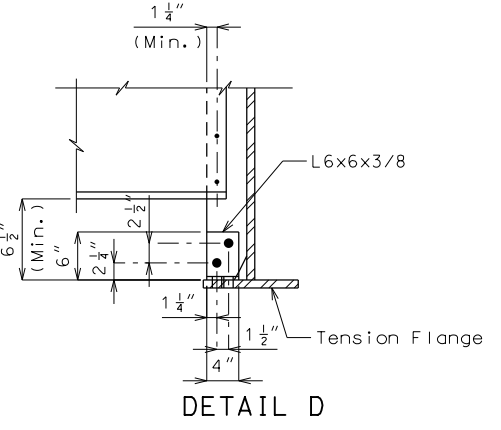


PLAN DETAIL OF FLANGE CONNECTION ANGLE

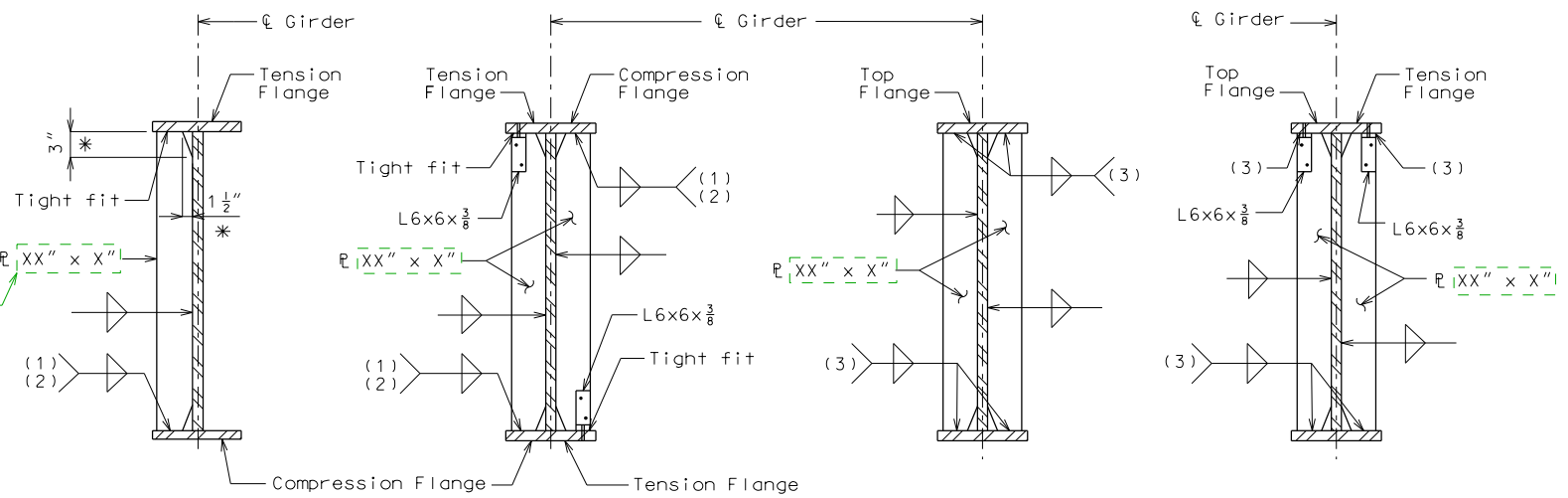
Notes:
The two 3/4" Ø H.S. bolts that connect the 6 x 6 x 3/8 angle to the top flange shall be placed so the nut is on the inside of flange (toward the web).
The 6 x 6 x 3/8 angle legs shall be adjusted to the variable angle between bearing stiffener and top flange created by girder tilt due to grade requirements.



TYPICAL PART SECTION SHOWING INTERMEDIATE DIAPHRAGMS BOTTOM FLANGE IN TENSION



DETAIL D



WELDING DETAILS

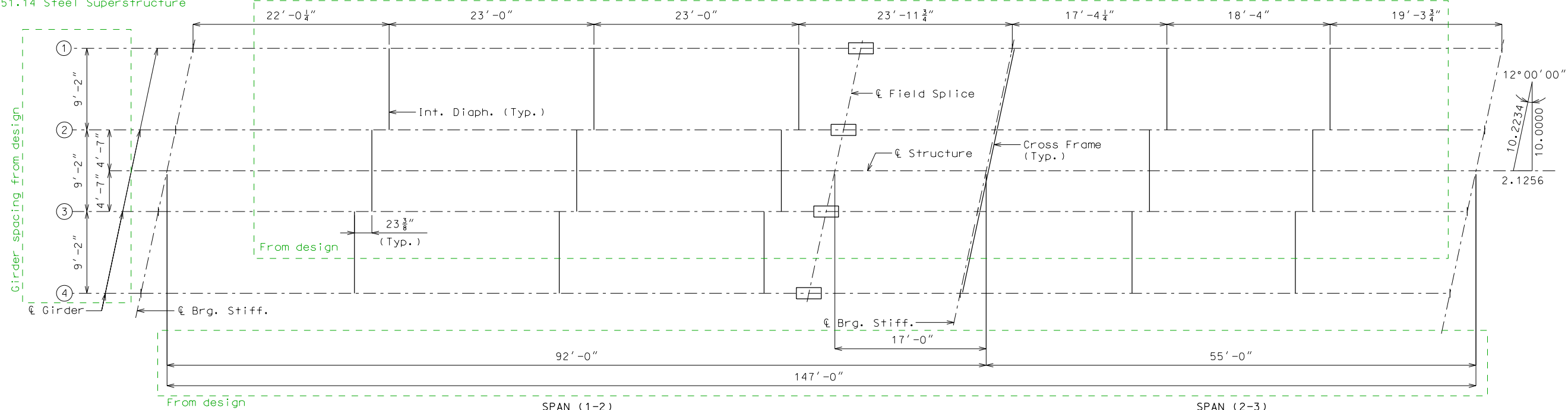
- (1) Tight fit
 - (2) Weld to compression flange as located on Elevation of Girder.
 - (3) Grind or mill to bear.
- * Typical for all intermediate web stiffeners, intermediate diaphragm connection plates, and bearing stiffeners.

STEEL PLATE GIRDER DETAILS

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DESCRIPTION	DATE

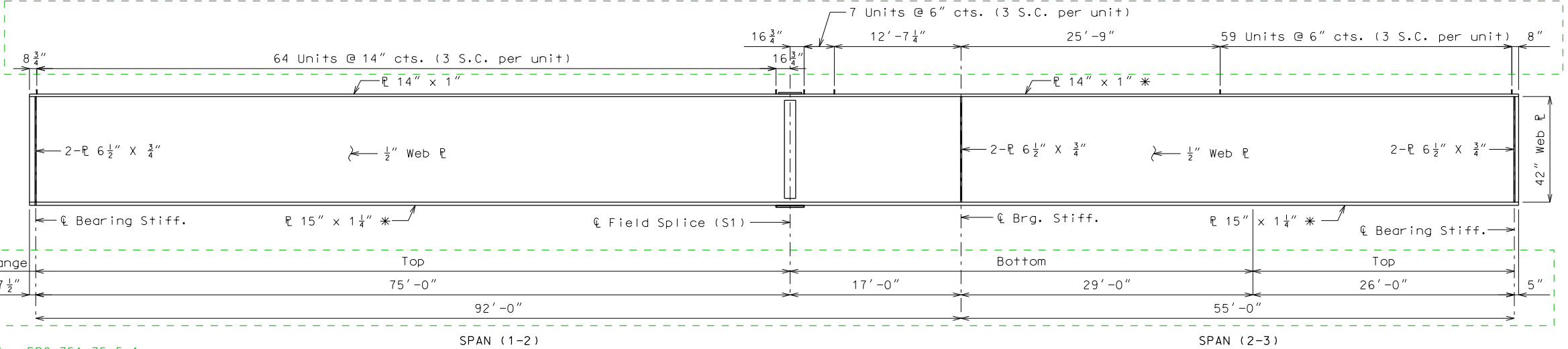
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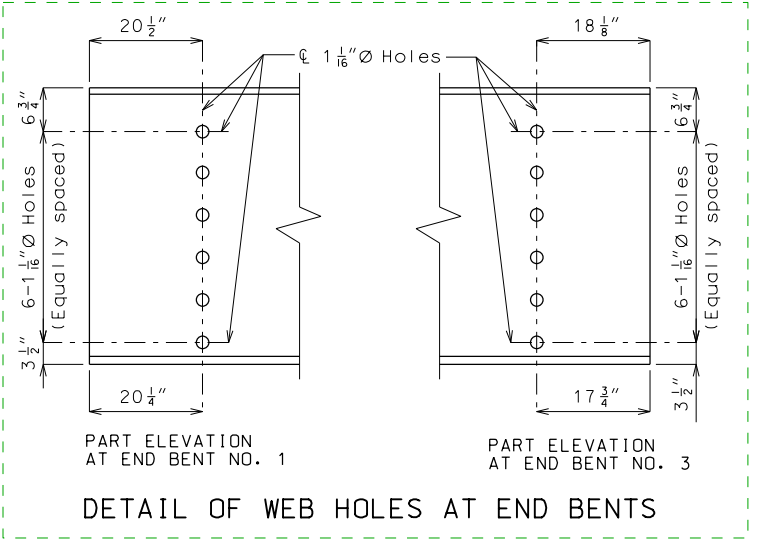
PLAN OF STRUCTURAL STEEL
Longitudinal dimensions are horizontal.

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

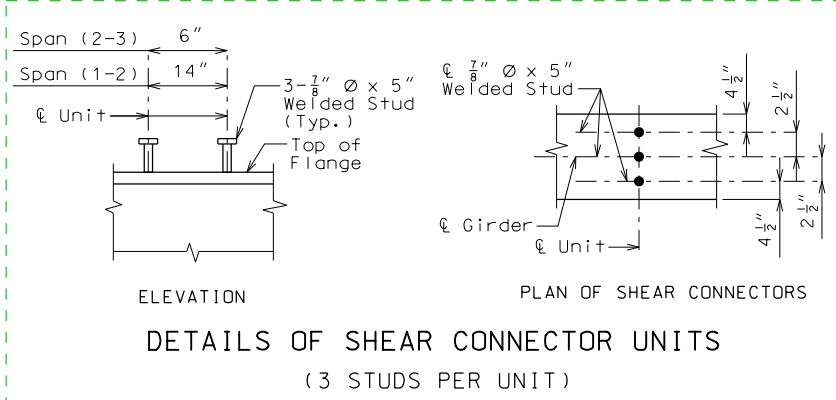


ELEVATION OF GIRDER

See EPG 751.35.5.1
(Integral end bents only)



See EPG 751.14.4.5 Spacing info from design



DETAILS OF SHEAR CONNECTOR UNITS
(3 STUDS PER UNIT)

EPG 751.50
Notes

- General Notes: Detailer calculates (See table in EPG 751.14.4.5)
- 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. 115.
 - For details of bolted field splices and Part Longitudinal Section, see Sheet No. 116.
 - For details of intermediate diaphragms, cross frames, bearing stiffeners and intermediate diaphragm connection plates, see Sheet No. 117.
 - For location of slab drain attachment holes, see Slab Drain Details sheet.
 - Note H1.23 Fabricated structural steel shall be ASTM A709, Grade 50W, except as noted.
 - Note H1.24 Longitudinal dimensions are horizontal from ϕ bearing to ϕ bearing. See Part-Longitudinal Sections on Sheet No. 116.

STEEL PLATE GIRDER DETAILS

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COUNTY: ATCHISON

JOB NO.: J1P1047

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PROJECT NO.:

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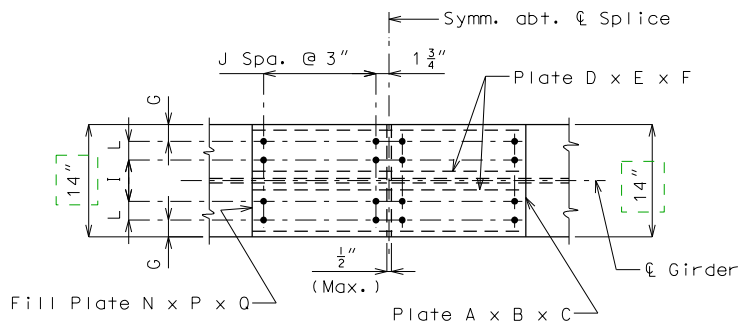
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EPG 751.14.3 Splice Design

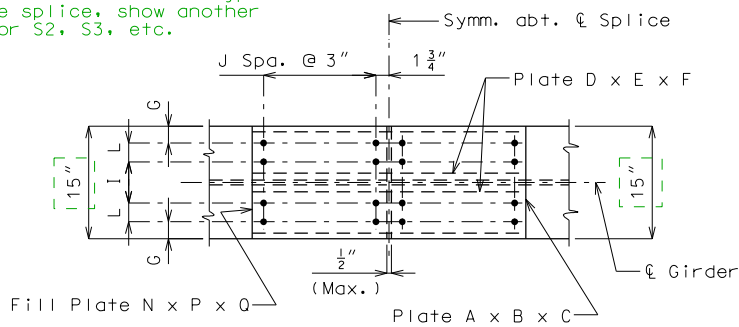
Use current standard sheet found in ProjectWise under Bridge/A.Bridge_Standard_Drawings/Plate_Gdr_Splice_PGS/Current/ Use appropriate version for design practice used (LFD or LRFD)

"DETAIL OF BOLTED FIELD SPLICE" shown is for flange splices with a uniform hole pattern only. Detail will need to be modified to accommodate flange splices with a staggered hole pattern.

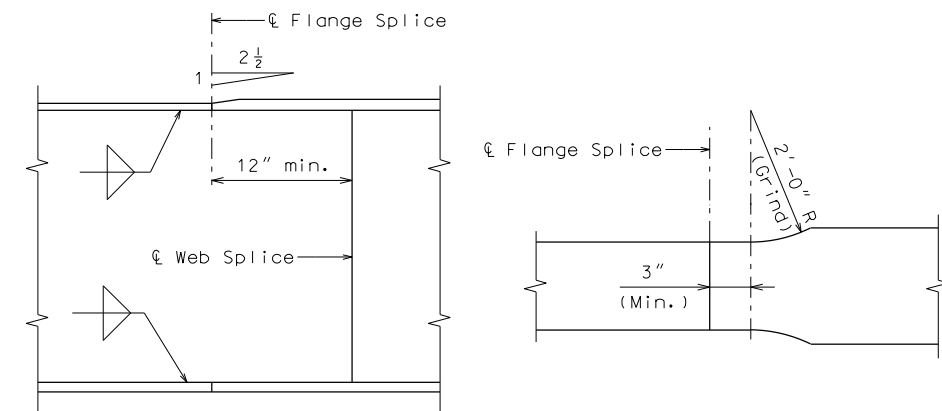
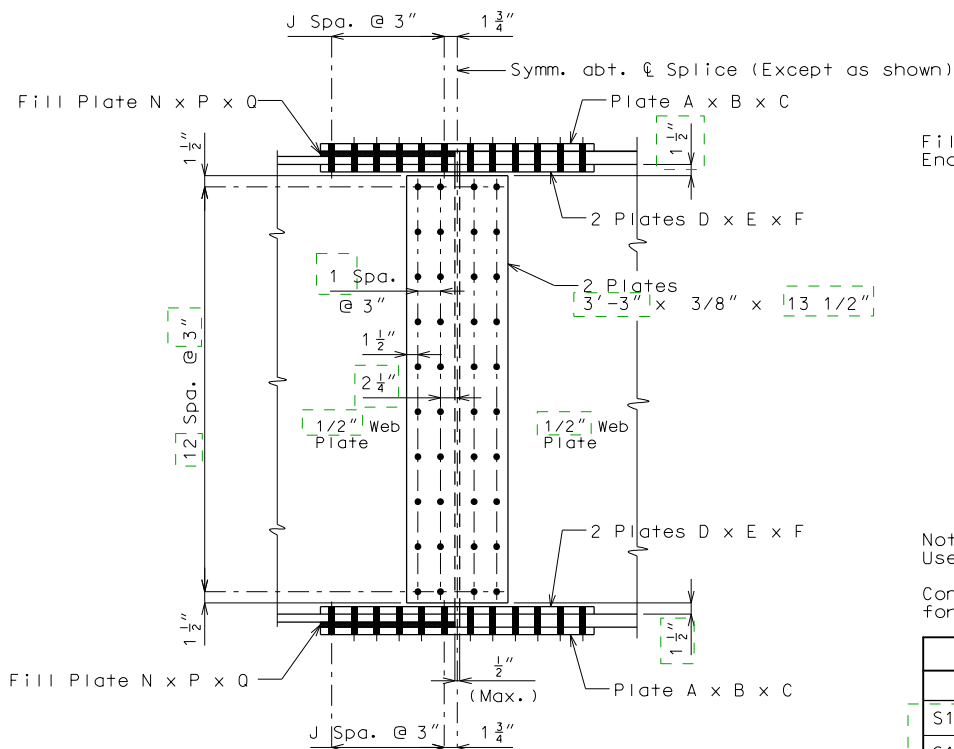
Cell in Tasks: Steel Girders (Welded Shop Splice Detail) See EPG 751.14.3.5



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

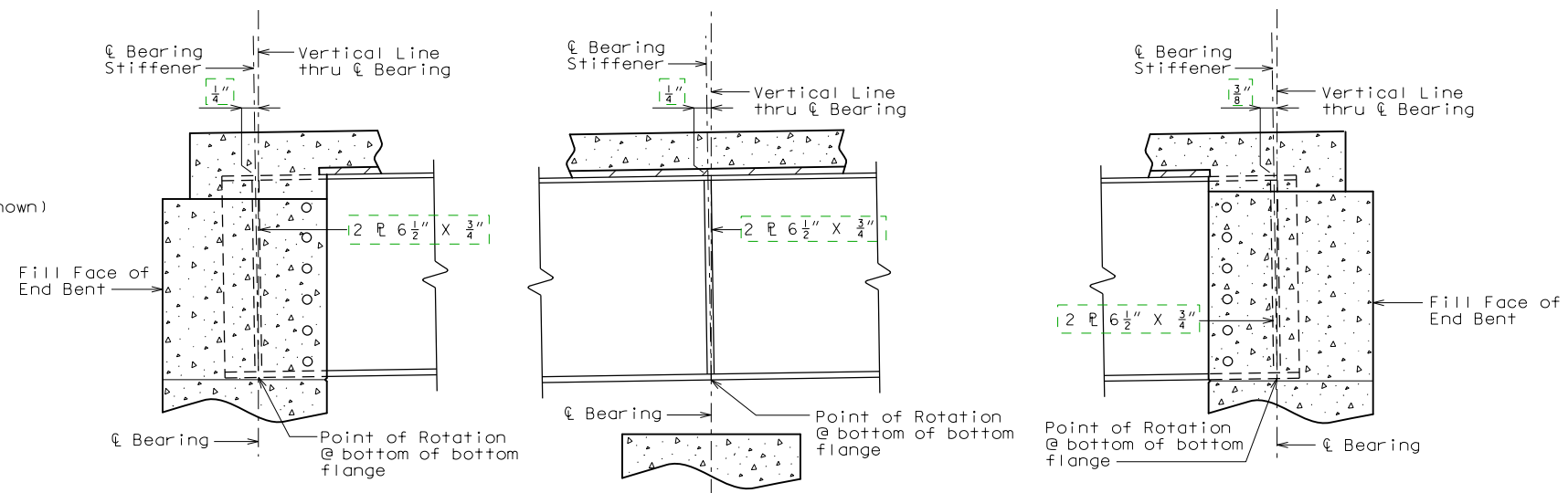


For location of S1 field splice, see Elevation of Girder on Sheet No.



WELDED SHOP WEB AND FLANGE SPLICE

Welded shop web and flange splices may be permitted when detailed on the shop drawings and approved by the engineer. No additional payment will be made for optional welded shop web and flange splices.



PART LONGITUDINAL SECTION

Note: Use 7/8"Ø high strength bolts with 15/16"Ø holes. Contact surfaces shall be in accordance with Sec 1081 for surface preparation.

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"	6 1/2"	7/8"	2'-9 1/2"	2"	6"	4	2 1/2"	0	0	0

If filler plate is not required, use zero.

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