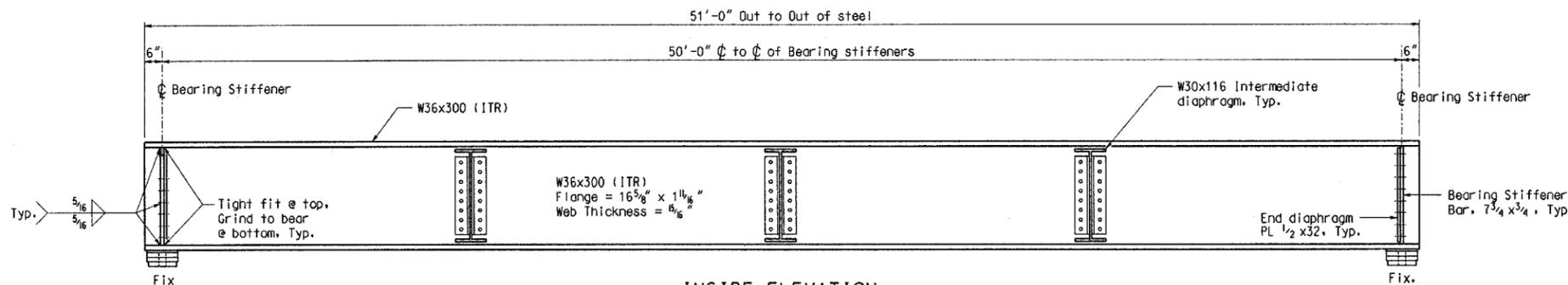
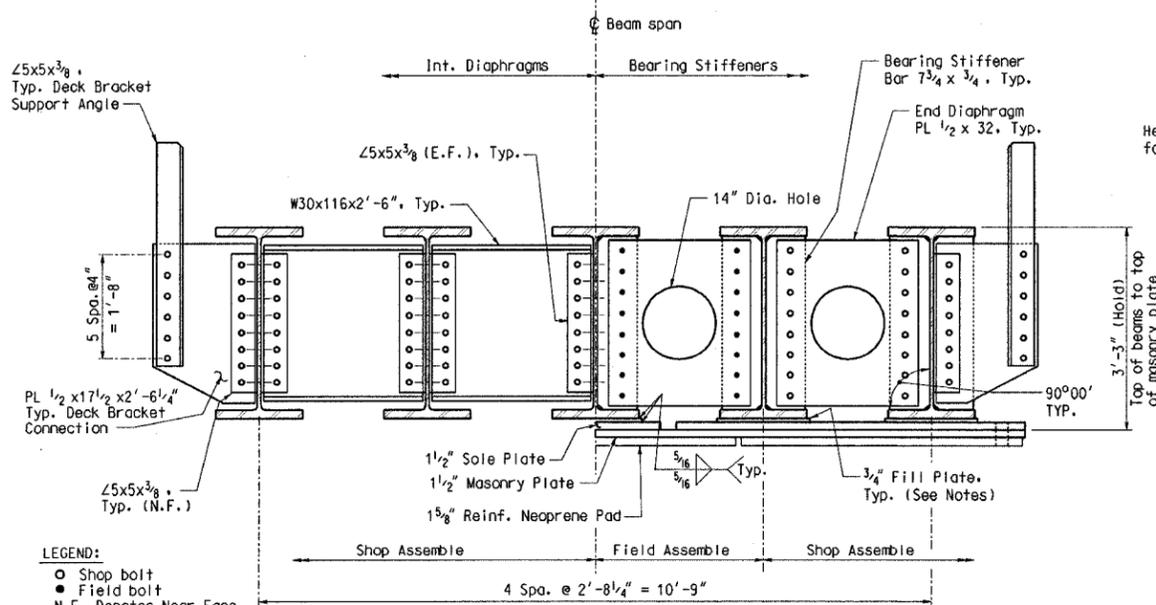


PLAN
Top flange not shown

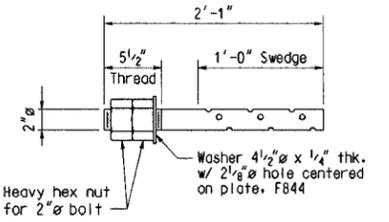


INSIDE ELEVATION
Deck Plate not shown

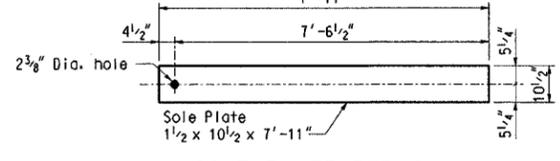


SECTION A-A

Keeper bars on bottom of masonry plate not shown for clarity

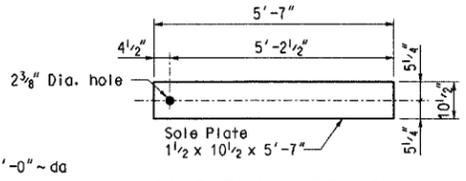


ANCHOR BOLT SAB145.01
8 REQ'D.
ASTM F1554 GR. 55, GALV.



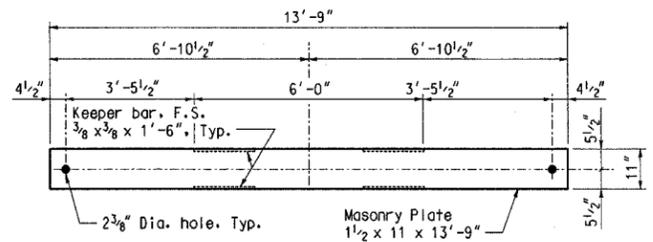
SOLE PLATE DETAIL

4 Req'd.
ASTM A709, GR. 50W



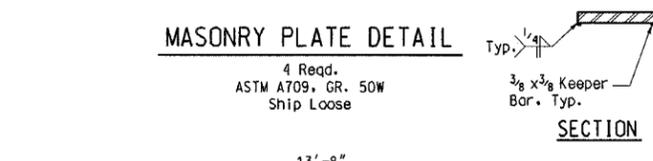
SOLE PLATE DETAIL

4 Req'd.
ASTM A709, GR. 50W



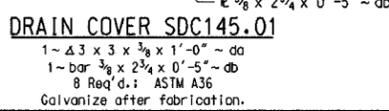
MASONRY PLATE DETAIL

4 Req'd.
ASTM A709, GR. 50W
Ship Loose



NEOPRENE PAD DETAIL SRP145.01

4 Total Req'd. of 3 pads each (12 pieces total)
60 Durometer
Bond to bottom of Masonry plate per pad mfr. recommendations



DRAIN COVER SDC145.01

1- 3/8 x 3 x 3/8 x 1'-0" db
1-bar 3/8 x 2 3/4 x 0'-5" db
8 Req'd.; ASTM A36
Galvanize after fabrication.

STEEL NOTES:

SPECIFICATIONS:

STRUCTURAL: CURRENT AREMA MANUAL FOR RAILWAY ENGINEERING.
WELDING: IN ACCORDANCE WITH CURRENT A.W.S. BRIDGE WELDING CODE D1.5 AND AREMA MANUAL FOR RAILWAY ENGINEERING. ALL WELD METAL MUST BE EQUIVALENT TO THE BASE METAL IN STRENGTH, CORROSION RESISTANCE, AND WEATHERED APPEARANCE.

DESIGN LOADING:

LIVE LOAD: COOPER'S E-80
IMPACT: DIESEL IMPACT FOR ROLLING EQUIPMENT WITHOUT HAMMER BLOW FOR BALLAST DECK
OTHER LOADS: AS PER AREMA MANUAL FOR RAILWAY ENGINEERING

STRUCTURAL STEEL:

FABRICATION AND WORKMANSHIP SHALL CONFORM TO THE CURRENT AREMA MANUAL FOR RAILWAY ENGINEERING.
ALL REentrant CUTS TO BE FILLETED TO A MINIMUM 3/4" RADIUS, UNLESS OTHERWISE SHOWN.
ALL CORNER CLIPS TO BE 1 1/2" x 1 1/2", UNLESS OTHERWISE SHOWN.
ALL STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. DESIGNATION A709, GRADE 50WT2, EXCEPT AS NOTED.
ALL STRUCTURAL STEEL DENOTED IN THE PLANS AS "ITR" SHALL MEET IMPACT REQUIREMENTS FOR HIGH STRENGTH STRUCTURAL STEEL FOR A MINIMUM AVERAGE ENERGY OF 15 FT.-LBS. AT 40°F PER CHAPTER 15 OF THE AREMA MANUAL. DECK PLATE, STIFFENERS, DIAPHRAGMS AND OTHER SECONDARY MEMBERS SHALL BE EXEMPT FROM IMPACT TEST REQUIREMENTS.
SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH ASTM A673 REQUIREMENTS USING THE H FREQUENCY TESTING.
ALL FASTENERS SHALL BE 1/8" DIAMETER HIGH STRENGTH BOLTS (A.S.T.M. A325, TYPE 3) WITH 1/16" DIAMETER OPEN HOLES UNLESS OTHERWISE NOTED. BOLTS SHALL BE HEAVY HEX STRUCTURAL TYPE WITH HEAVY HEX NUT AND HARDENED WASHER UNDER THE TURNED ELEMENT. HIGH STRENGTH BOLTS SHALL BE TIGHTENED BY THE TURN-OF-NUT METHOD TO OBTAIN PROPER BOLT TENSION.

SHOP NOTES:

ALL HOLES THROUGH MAIN STRUCTURAL MEMBERS ARE TO BE DRILLED FULL SIZE OR SUBDRILLED 1/4" LESS AND REAMED TO FULL SIZE.
THE BOTTOM FLANGES OF THE BEAMS MUST BE SQUARE WITH THE VERTICAL AXIS AT BOTH ENDS OF THE BEAMS.
THE TOP SURFACE OF BEAMS SHALL BE ADJUSTED TO FORM A STRAIGHT LINE AT ANY TRANSVERSE SECTION THROUGHOUT THE SPAN. (TOLERANCE 1/16" ±)
THE THICKNESS OF END FILL PLATES SHALL BE ADJUSTED TO MAINTAIN DEPTH SHOWN (TOLERANCE 1/16" ±) FOR EACH BEAM AT CENTERLINE OF BEARINGS.
FABRICATOR IS TO SHOW WELD CONFIGURATION AND JOINT PREPARATION ON ALL DETAIL DRAWINGS.
ALL EXPOSED SURFACES OF STRUCTURAL STEEL SHALL BE CLEANED PER STEEL STRUCTURES PAINTING COUNCIL SPECIFICATION SSPC-SP6.
FABRICATE SPAN WITH NATURAL BEAM CAMBER UP.
SPAN SHALL BE FULLY SHOP ASSEMBLED TO ASSURE ACCURATE FIT. DISASSEMBLE AS SHOWN FOR SHIPPING.
FOLLOWING FABRICATION, GALVANIZE ANCHOR BOLTS AND NUTS, AND WALK BRACKETS PER ASTM A123/A153 AS APPLICABLE.
NEOPRENE BEARING PADS ARE TO BE BONDED TO THE BOTTOM OF THE MASONRY PLATE PER NEOPRENE PAD SUPPLIER RECOMMENDATIONS.

DES: KHJ	DRW: KHJ	CHK: MGG	CHICAGO, IL TO FT. MADISON, IA
DATE: Nov., 2004	AUTH: 7-7000-05	LINE SEG: 7000	BRIDGE NO. 145.01
BRIDGE ENGINEERING		KANSAS CITY, KS	
APPROVED:		OVER CO. HWY. R40 NEAR PRINCEVILLE, IL	
K.H. Jennison		51'-0" BEAM SPAN DETAILS	
ASSISTANT DIRECTOR STRUCTURES DESIGN		PLAN NO.: 7000-145.01-05	SHEET: 5 OF 8