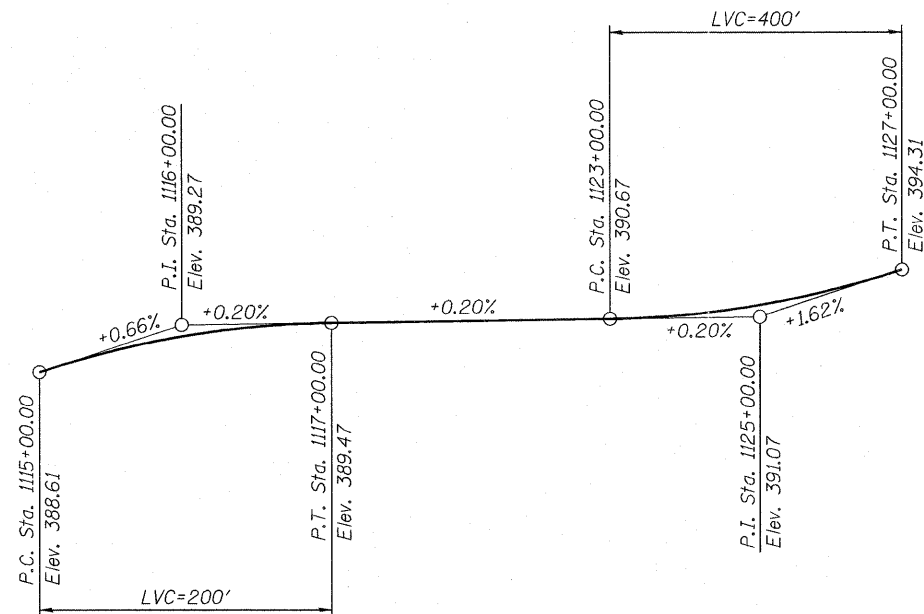


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PROFILE GRADE
(Along \hat{C} Roadway)

CURVE DATA

(Il. Rte. 4)

D = 3°-42'-32" S.E. = 7.3%
 R = 1544.83' P.C. Sta. = 1122+48.60
 L = 878.40' P.T. Sta. = 1131+27.00
 T = 451.43'
 E = 64.41'

Note: Transition from normal crown to full superelevation is attained linearly from Sta. 1122+34.00 to Sta. 1124+38.00.

GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{15}{16}$ in. ϕ unless otherwise noted.
- Calculated weight of Structural Steel = 636,850 lbs.
- All structural steel shall be AASHTO M270 Grade 50W except expansion joints which shall be AASHTO M270 Grade 50. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
- No field welding is permitted except as specified in the contract documents.
- *** Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- *** Reinforcement bars designated (E) shall be epoxy coated.
- *** If the Contractor elects to use cantilever forming brackets on the exterior girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specification. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior girder at each of these additional bracket locations.
- *** Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- *** Concrete Sealer shall be applied to the designated areas of the East and West Abutments.
- All structural steel and exposed surfaces of bearings within a distance of 10 ft. each way from the deck joints shall be painted as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
- *** Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- *** Seal coat thickness design is based on the Cofferdam Design Water Elevation (CDWE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.
- *** Slipforming of parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Furnishing Structural Steel	L. Sum	1		1
Storage of Structural Steel	Cal. Day	45		45
Furnishing Elastomeric Bearing Assembly, Type II	Each	12		12
Storage of Elastomeric Bearing Assemblies	Cal. Day	45		45

INDEX OF SHEETS

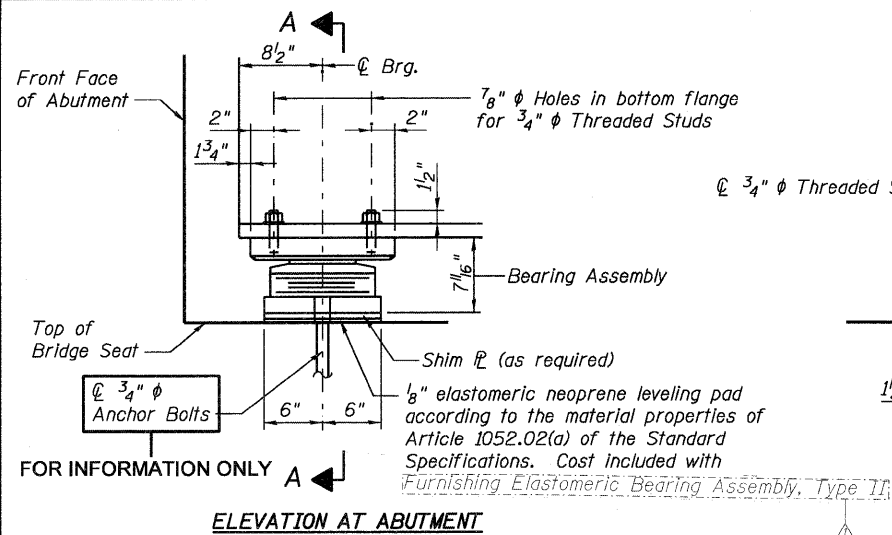
- 1 General Plan and Elevation
- 2 General Structure Data
- 3 Foundation Layout
- 4-7 Top of Slab Elevations
- *** 8 Top of W. Approach Slab Elevations
- *** 9 Top of E. Approach Slab Elevations
- 10 Superstructure Plan and Section
- 11 Superstructure Details
- *** 12-13 Bridge Approach Slab Details
- *** 14 Slab Pouring Sequence
- *** 15 Drainage Scupper, DS-11
- 16 Preformed Joint Strip Seal
- 17 Framing Plan and Design Data
- 18-20 Girder and Cross Frame Details
- 21 Bearing Details
- 22-23 West Abutment Details
- 24-25 East Abutment Details
- 26 Pier 1 Plan and Elevation
- 27 Pier 2 Plan and Elevation
- 28 Pier Details
- *** 29 Bar Splicer Assembly and Mechanical Splice Details
- *** 30 HP Pile Details
- *** 31-35 Boring Logs

*** THIS WORK IS NOT IN THE FABRICATION CONTRACT AND SHEET IS NOT INCLUDED IN THESE PLANS.

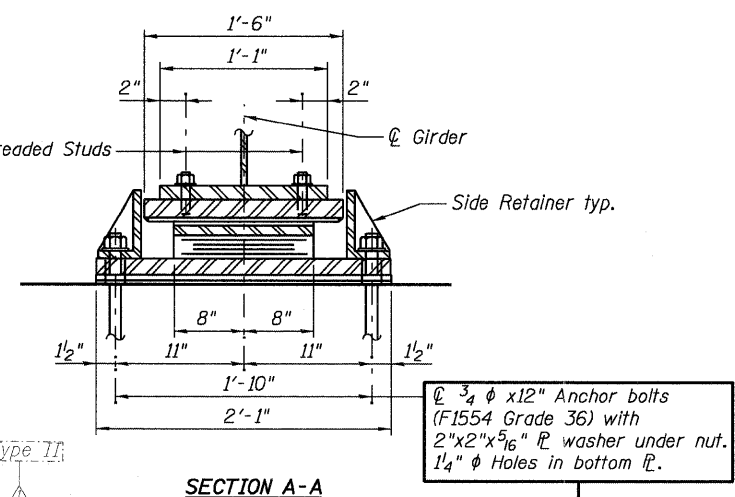
THESE PLANS ARE FOR THE FABRICATION OF THE STRUCTURAL STEEL AND BEARINGS. ALL WORK SHOWN THAT IS NOT RELATED TO THE FABRICATION IS FOR INFORMATION ONLY. IT IS NOT INCLUDED IN THIS CONTRACT AND IS IDENTIFIED AS "NOT INCLUDED IN THIS CONTRACT" OR "FOR INFORMATION ONLY."

JACOBS	USER NAME =	DESIGNED - B. ERSCHEN	REVISED Δ 11/09/11 J.T.B.	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL STRUCTURE DATA STRUCTURE NO. 039-0074	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT DATE = 06-OCT-2011	CHECKED - R. NIEMIETZ	REVISED -			686	114F-1	JACKSON	4	24
	FILE NAME = 039-0074978049-Structure Data.dgn	DRAWN - C. SALLADE	REVISED -			CONTRACT NO. 78283				

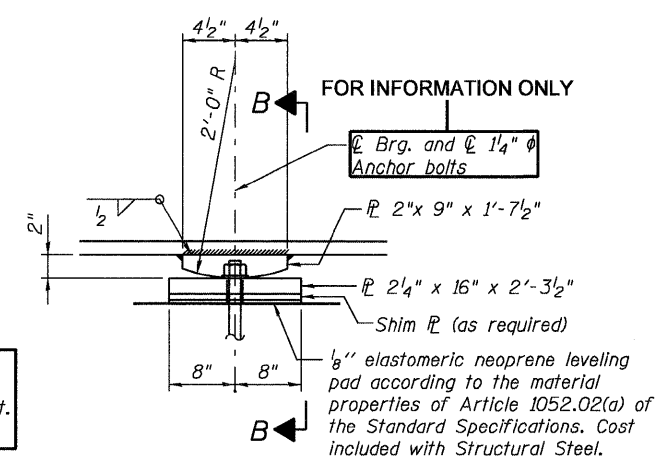
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 29-SEP-2011 10:39



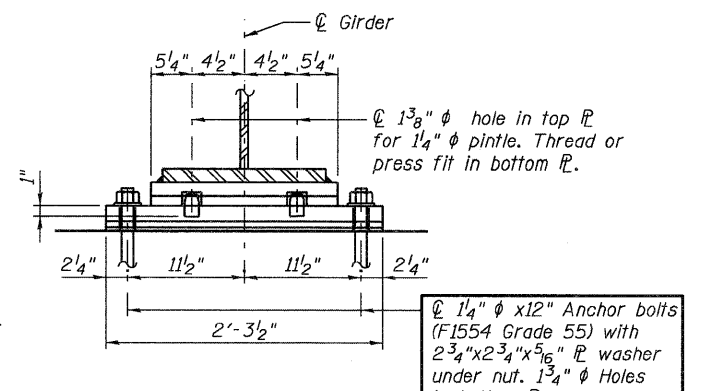
ELEVATION AT ABUTMENT



SECTION A-A



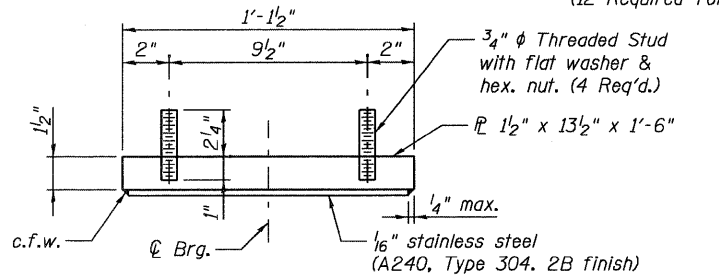
ELEVATION AT PIER



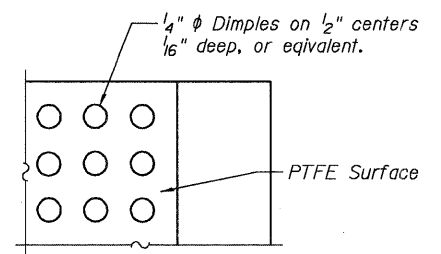
SECTION B-B

TYPE II ELASTOMERIC EXPANSION BEARING AT WEST AND EAST ABUTMENTS
(12 Required Total)

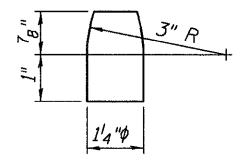
FIXED BEARING AT PIER 1 AND PIER 2
(12 Required Total)



TOP BEARING ASSEMBLY

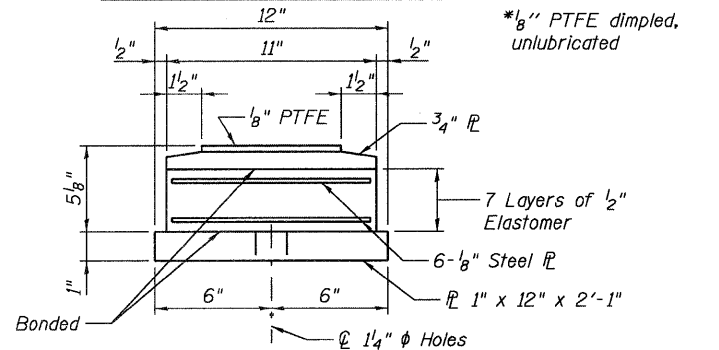


PLAN-PTFE SURFACE

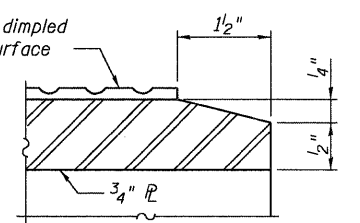


PINTLE

Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8 inch PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8 inch PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.
 The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.
 The structural steel of the bearing assembly shall conform to the requirements of AASHTO M270 Grade 50W.
 Two 1/8 inch adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



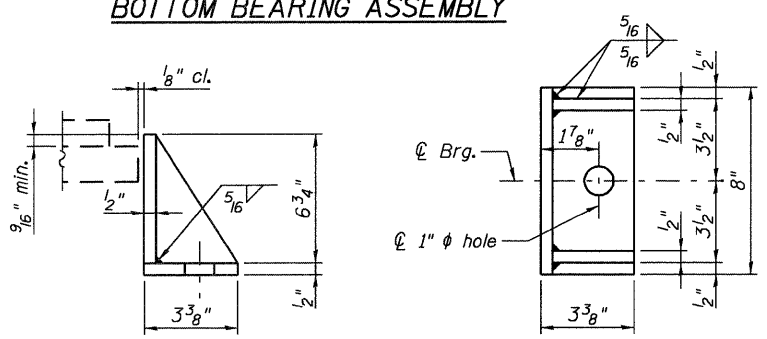
BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE

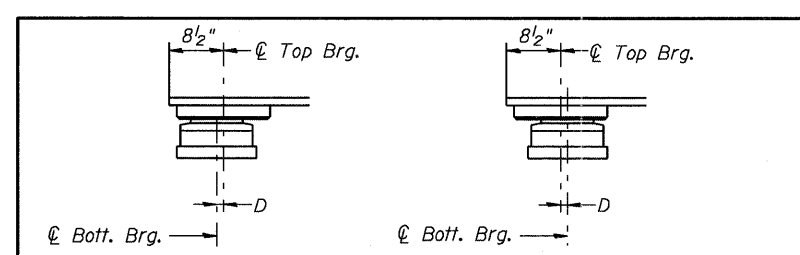
PLANNED SHIMS TABLE

Location	G1	G2	G3	G4	G5	G6
West Abutment	-	-	-	1/8"	-	-
Pier 1	-	-	-	1/8"	-	-
Pier 2	-	-	-	1/8"	-	-
East Abutment	-	-	-	1/8"	-	-



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8 inch per each 100 feet of expansion for every 15 degrees temperature change from the normal temperature of 50 degrees Fahrenheit.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 3/4"	Each	24
Anchor Bolts, 1 1/4"	Each	24



USER NAME =	DESIGNED - B. ERSCHEN	REVISED - 11/09/11 J.T.B.
PLOT DATE = 29-SEP-2011	CHECKED - M. CRONIN	REVISED -
	DRAWN - E. KRACK	REVISED -
	CHECKED - F. CAMBA	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BEARING DETAILS
STRUCTURE NO. 039-0074**

SHEET NO. 21 OF 35 SHEETS

F.A.P. RTE. 686	SECTION 114F-1	COUNTY JACKSON	TOTAL SHEETS 17	SHEET NO. 24
ILLINOIS FED. AID PROJECT			CONTRACT NO. 78283	