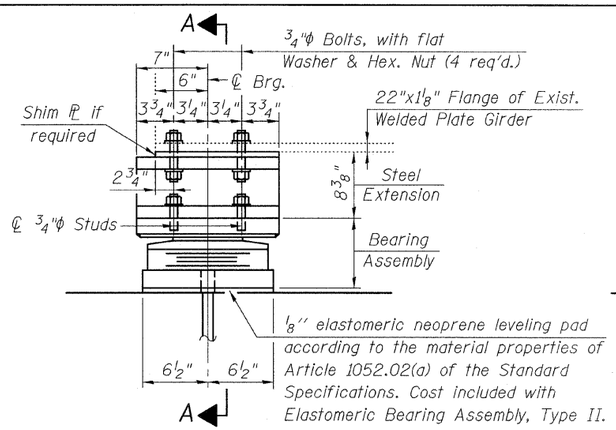
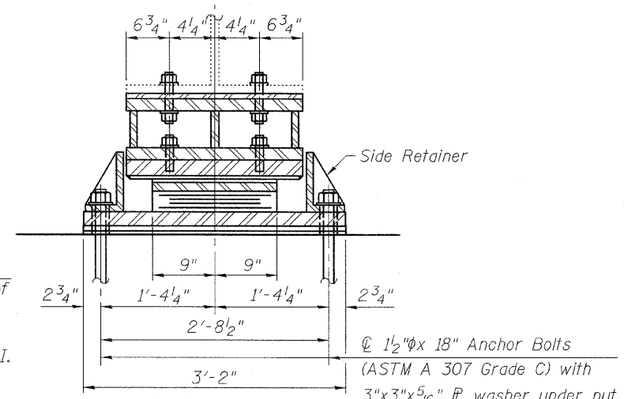
TYPE II ELASTOMERIC EXP. BRG. WITH FABRICATED STEEL EXTENSION

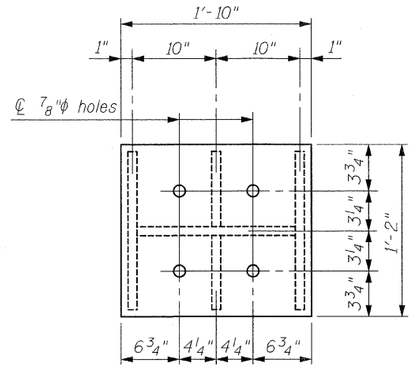
(8 North Bearings required)



ELEVATION AT PIER 9



SECTION A-A



TOP & BOTTOM PLATE PLAN

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 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 shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" 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.

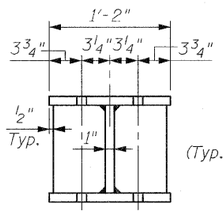
Bonding of 1/8" PTFE Sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Elastomeric Bearing Assembly, Type II.

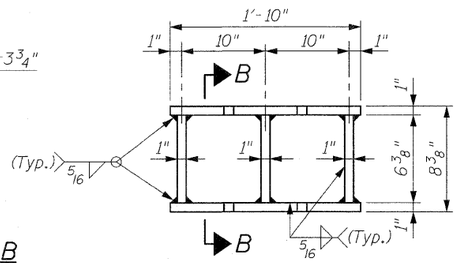
Prior to ordering any material, the Contractor shall verify in the field all Bearing height and Shim thickness dimensions.

Min. jack capacity = 100 tons for Pier 9 at each Bearing location.

Steel extensions, shim plates and connection bolts are included with Furnishing Structural Steel.



SECTION B-B



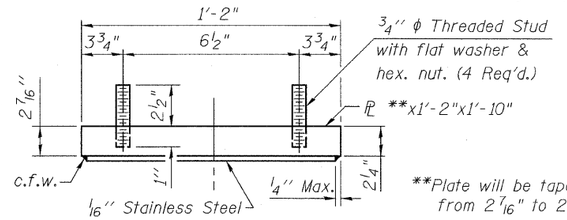
STEEL EXTENSION ELEVATION

STEEL EXTENSION DETAIL

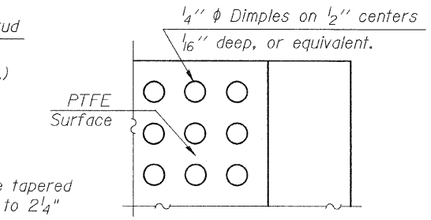
(8 required)

BEARING REACTIONS FROM EXISTING PLANS

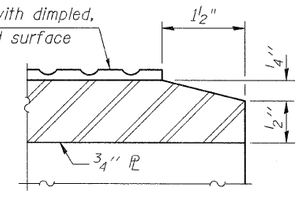
PIER 9 (NORTH BEARING)		
RP	(K)	83.1
RL	(K)	65.9
RImp.	(K)	10.5
R (Total)	(K)	159.5



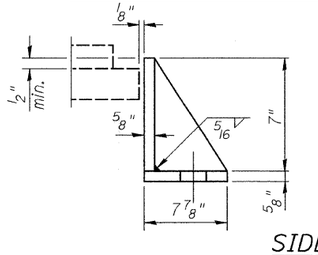
BOTTOM BEARING ASSEMBLY



PLAN-PTFE SURFACE

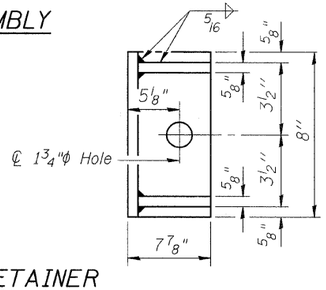


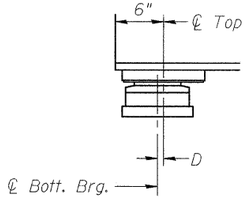
SECTION THRU PTFE



SIDE RETAINER

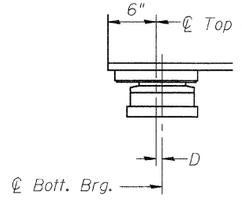
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.





BELOW 50°F.

(Move bott. brg. away from fixed brg.)



ABOVE 50°F.

(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL AT PIER 9 (NORTH BEARINGS)

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	8
Anchor Bolts, 1 1/2"ϕ	Each	16
Furnishing and Erecting Structural Steel	Pound	2,150

I-2E-2 10-1-08

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS – PLANNERS – SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
PHONE: (312)372-2023 FAX: (312)372-5274

FILE NAME = brg_assem_type-II.dgn	USER NAME = IDOT	DESIGNED - B.N.S.	REVISED -
		DRAWN - R.E.S./D.L./F.M.	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - B.N.S./J.C.N.	REVISED -
	PLOT DATE = 3/4/2009	DATE - JANUARY, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELASTOMERIC BEARING ASSEMBLY, TYPE II
LEMONT ROAD OVER DES PLAINES RIVER **S.N. 016-2504**

SCALE: | SHEET NO. 531 OF 541 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2612	3104 B-1-1-2	COOK	80	67
		CONTRACT NO. 60D76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		