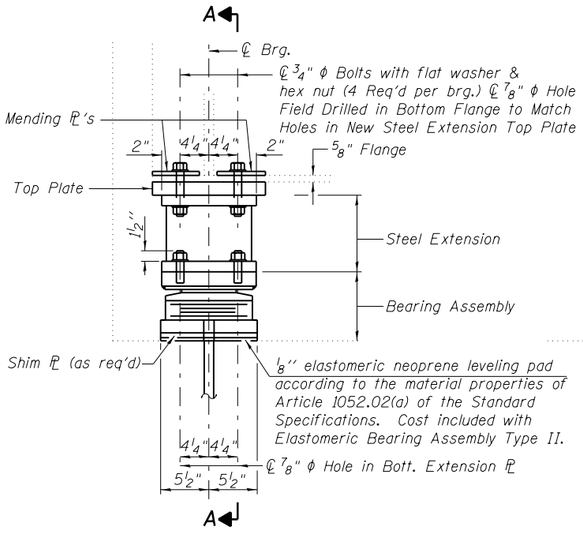
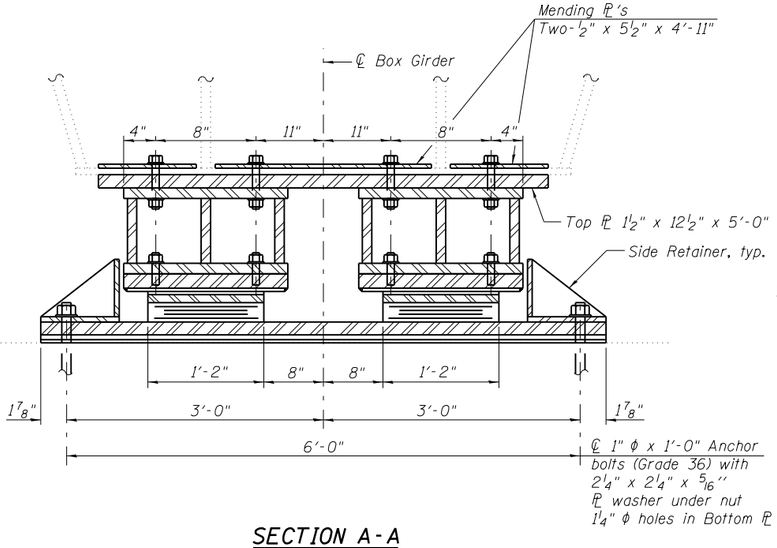


ELEVATION AT ABUT.



SECTION A-A

(Dims. at Rt. L's to ℄ Girder)

STEEL EXTENSION DIMENSIONS

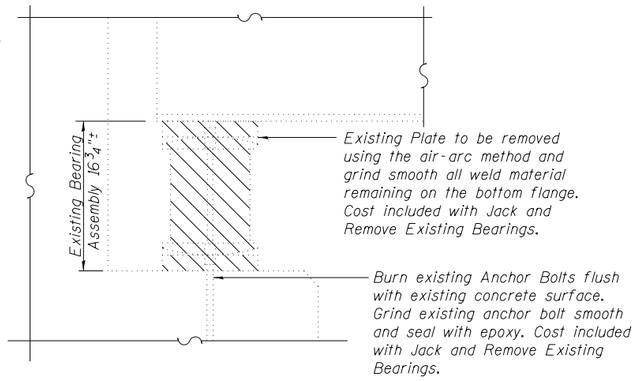
	A	B
WB W. Abut.	9 3/4"	7 3/4"
EB W. Abut.	11 9/16"	9 9/16"
WB E. Abut.	10 1/16"	8 1/16"
EB E. Abut.	11 3/16"	9 3/16"

BOX GIRDER REACTION TABLE

(From Existing Plans)

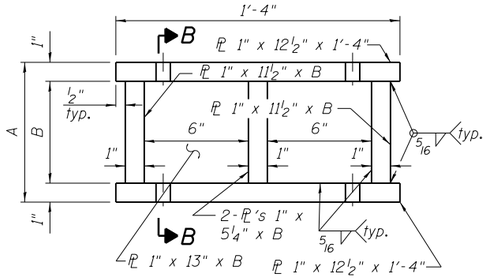
	Per Girder	Per Bearing
Dead Load (k)	120	60
Live Load (k)	68	34
Impact (k)	14	7
Total (k)	202	101
Min. Jack Capacity (Tons)	120	60

No Live Load during jacking.

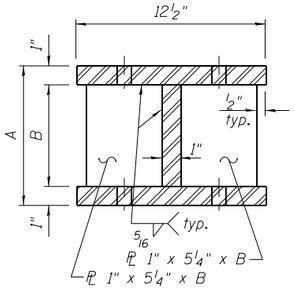


EXISTING BEARING REMOVAL DETAIL

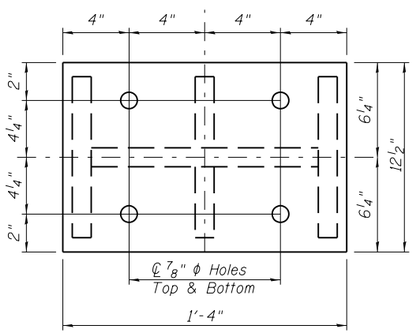
TYPE II ELASTOMERIC EXP. BRG.



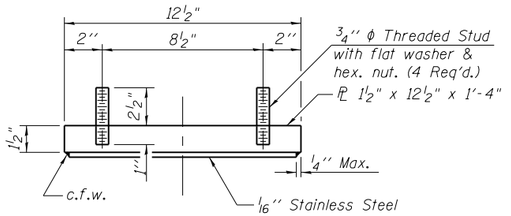
ELEVATION STEEL EXTENSION



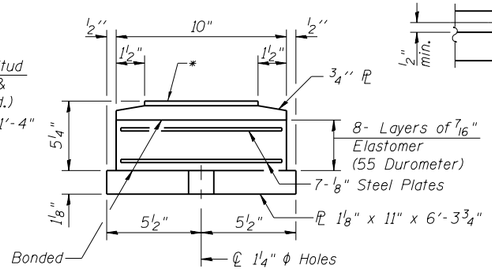
SECTION B-B



PLAN STEEL EXTENSION

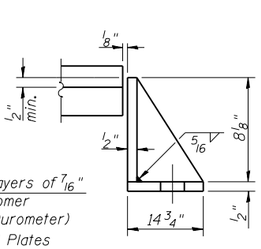


TOP BEARING ASSEMBLY



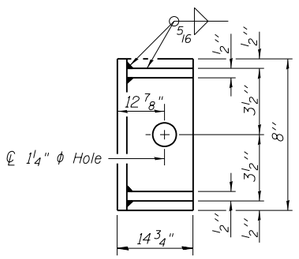
BOTTOM BEARING ASSEMBLY

*1/8" PTFE dimpled, unlubricated



SIDE RETAINER

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



Notes:

Hatched area indicates Bearing removal. See Special Provision for Jack and Remove Existing Bearings.

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.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The Contractor is to verify the existing dimensions prior to fabricating the steel extensions. Existing bearing dimensions shown are taken from the original plans.

1 1/2" top plate, side retainers, Steel Extensions, Fasteners and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts.

The bearings shall be in place and the jacks lowered before the new concrete deck is poured.

Cost of 1/2" mending plates and fasteners required for beam end repairs is included in the cost of Structural Steel Repair. See Sheet 13 of 20 for details.

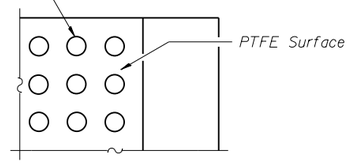
The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

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.

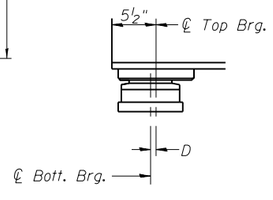
See Sheet 13 of 20 for details of 1/2" Top Plate, 1/2" Mending Plates and Anchor Bolt Layout.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	24
Anchor Bolts, 1"	Each	24
Jack and Remove Existing Bearings	Each	12

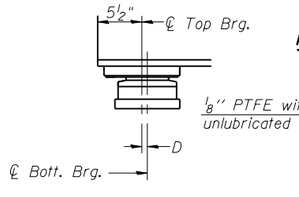


PLAN-PTFE SURFACE



BELOW 50°F.

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

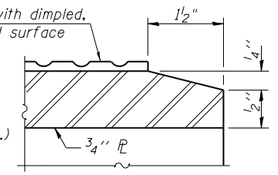


ABOVE 50°F.

(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.



SECTION THRU PTFE

LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - ESH	REVISED -	
FILE NAME =	CHECKED - MTH	REVISED -	
PLOT SCALE =	DRAWN - ESH	REVISED -	
PLOT DATE =	CHECKED - MTH	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS AT ABUTMENTS
STRUCTURE NOS. 084-0152 & 084-0153
SHEET NO. 11 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	(84-10-1)BDR	SANGAMON	35	25
		CONTRACT NO. 72F01		
	ILLINOIS FED. AID PROJECT			