

TYPE II TFE ELASTOMERIC EXP. BRG.

### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

Erecting Structural Steel.

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

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

Min. jack capacity = 255 kN.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM ASOT Grade C anchor bolts may be used in level ASTM E1554.

and administry specified. ASTM ASUT Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 250 (Fy=248MPa). The corresponding specified grade of AASTM OM314 anchor bolts may be used in lieu of ASTM F1554. Anchor bolts for Type II bearings shall be placed in holes drilled through 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 3mm TFE 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

surraces.

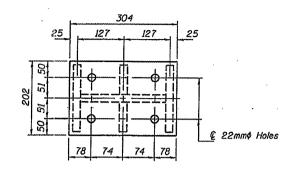
Bonding of 3mm TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Existing & to be removed

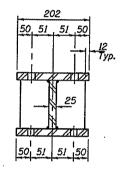
using the air-arc method

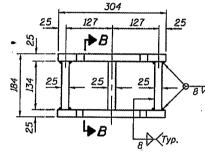
and grind smooth all weld material remaining on the

Burn existing anchor bolts flush with



## PLAN TOP AND BOTTOM PLATE





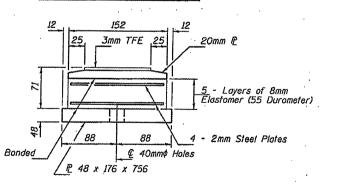
SECTION B-B

STEEL EXTENSION DETAIL

# - 20mm¢ Threaded Stud with flat washer & hex nut. (4-Reqd.) 41 x 202 x 304 2mm Stainless Steel (A240, Type 304, 2B Finish)

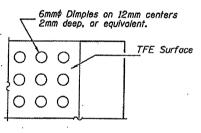


**ELEVATION AT ABUTMENT** 



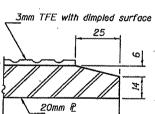
BOTTOM BEARING ASSEMBLY

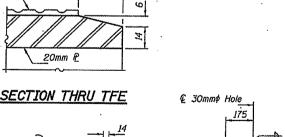
DESIGNED		AJB	NOVEMBER 18, 2008
CHECKED		ATH	EXAMINED & Carl Prayer
DRAWN	Kyle M.	Steffen	PASSED Ralph E. andreway
CHECKED	AJB	ATH	ENDINEER OF BRIDGES AND STRUCTURES

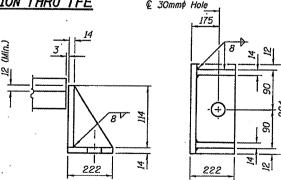


PLAN-TFE SURFACE

SECTION A-A



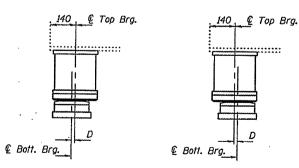




## existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy.

## EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



ABOVE 10°C (Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

> SETTING ANCHOR BOLTS AT EXP. BRG. D = 1mm per each 10m of expansion for every 8°C temp. change from the normal temp. of 10°C.

## SHIM PLATES

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	SN	Beam	Abut.	Thickness			
05	7-0025	H	East	76			
05	7-0025	H	West	<i>3</i> 5			

## BILL OF MATERIAL

<u> </u>	Unit	Total	
Elastomeric Bearing Assembly, Type II	Each	2	
Jack and Remove Existing Bearings	Each	2	
Furnishing and Erecting Structural Steel	kg	150	
Anchor Bolts, M24	Each	4	

BEARING REPLACEMENT DETAILS FOR BEAM H F.A.I. 55 OVER U.S. RTE. 51 SN 057-0024(NB) & 0025 (SB)

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

1 REVISED SHEET 12/23/08

SHEET NO. 3	F.A.I. RTE.	SECTION			COUNTY	TOTAL SHEETS	SHEE NO.
	55	(57-4)HBR-5 RVBR-1)		MCLEAN	70	51	
		R57-2HB-1		CONTRACT NO. 70661			
	FED. RO.	DAD DIST. NO.   ILLINOIS FED. AI			PROJECT		