

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17 34 SHEETS
F.A.P. 301 (US 20)	(2HB -JD)	WINNEBAGO	107	82	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

Contract #64B07

STEEL EXTENSION TABLE

Location	Bm. No.	Tn	Tt	Lt	Wp	Wn	Wt
East Abut.	2	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	3	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	4	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	5	6 3/8"	8 3/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	6	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	7	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	8	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	9	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	10	6 3/8"	8 3/8"	12"	3 1/4"	7 1/2"	8 1/2"
East Abut.	11	6 1/8"	8 1/8"	12"	3 1/4"	7 1/2"	8 1/2"

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 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, steel extensions, and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" 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 surfaces.

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

Two 1/4" gln adjusting shims shall be provided for each bearing in addition to all other plates of shims placed as shown on bearing details.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

BILL OF MATERIAL

Item	Unit	Total
Jack & Remove Existing Bearings	Each	10
Elastomeric Bearing Assembly Type II	Each	12
Anchor Bolts 1"φ	Each	24

ELASTOMERIC BEARING ASSEMBLY TYPE II

F.A.P. ROUTE 301 (US 20)

OVER SIMPSON ROAD

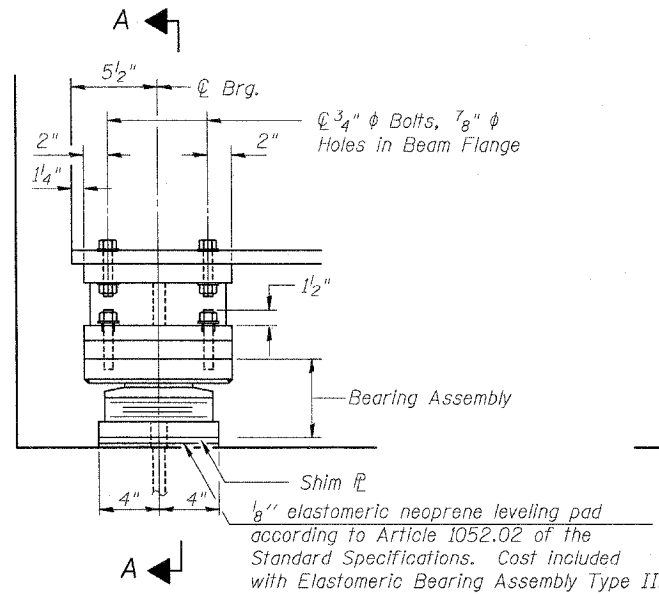
SECTION (2HB-1)D

WINNEBAGO COUNTY

STATION 849+27.97

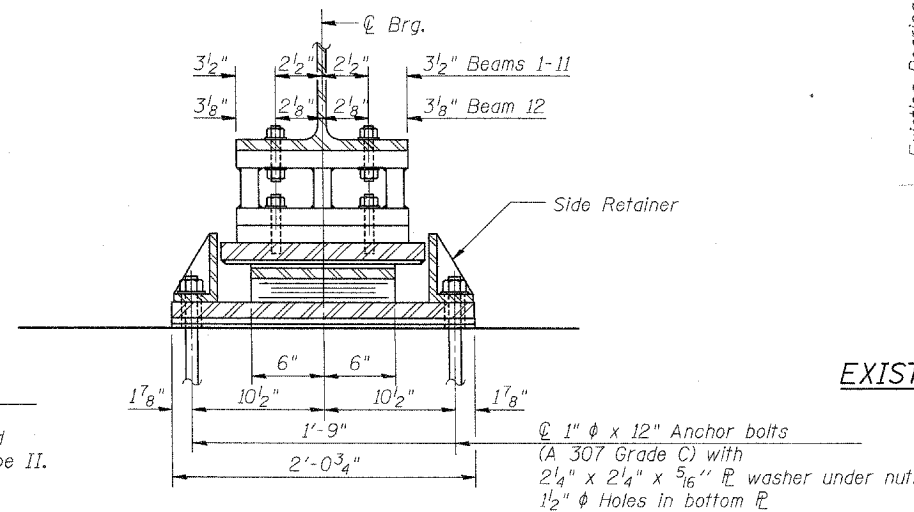
STRUCTURE NO. 101-0053 (W.B.)

STRUCTURE NO. 101-0054 (E.B.)



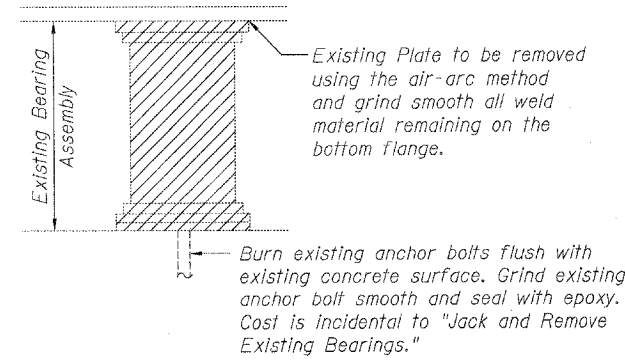
ELEVATION AT ABUT.

TYPE II ELASTOMERIC EXP. BRG.
(East Abutment)



SECTION A-A

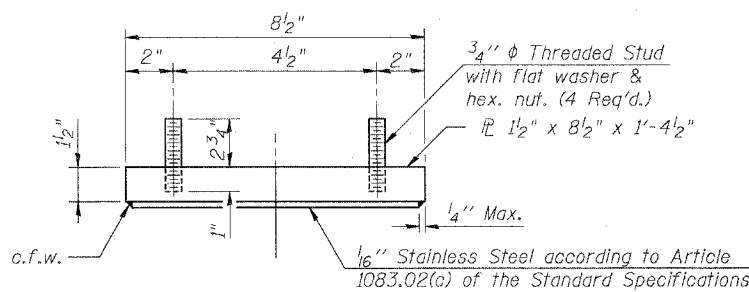
EXISTING BEARING REMOVAL DETAIL



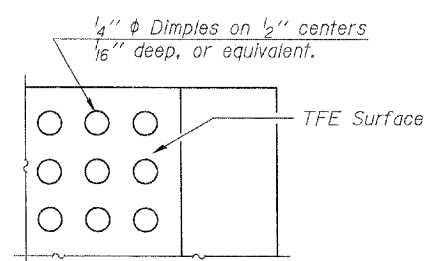
NOTES:

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

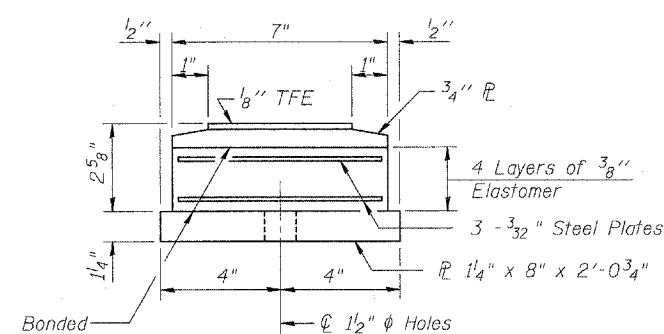
For existing beams 2-11, holes will need to be drilled in the bottom flange of the beams using the proposed steel extension as a template. Cost is included with Elastomeric Bearing Assembly Type II.



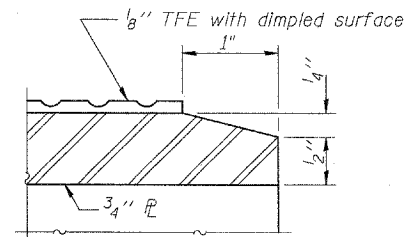
TOP BEARING ASSEMBLY



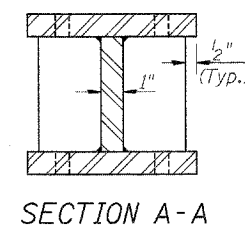
PLAN-TFE SURFACE



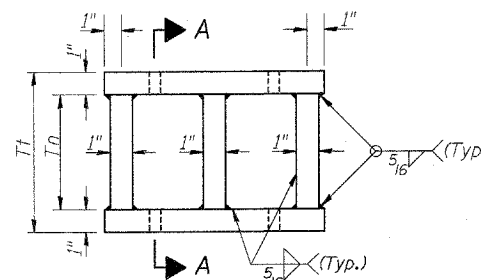
BOTTOM BEARING ASSEMBLY



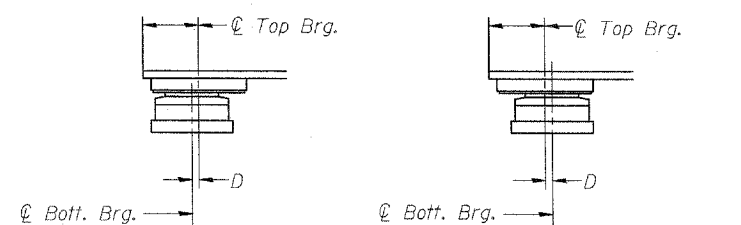
SECTION THRU TFE



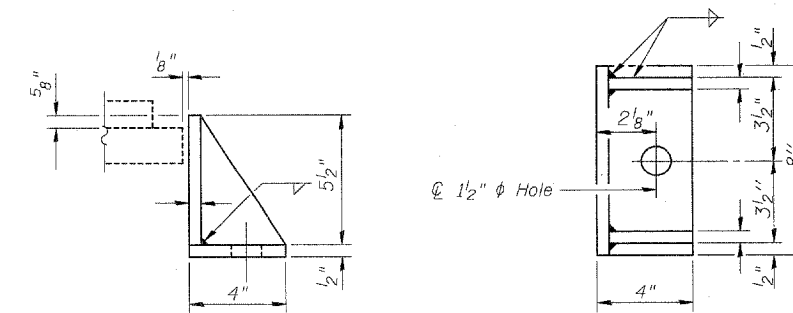
SECTION A-A



ELEVATION STEEL EXTENSION



BELOW 50°F. (Move bott. brg. away from fixed brg.) ABOVE 50°F. (Move bott. brg. toward fixed brg.)



SIDE RETAINER

(24 Required)
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

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.

DESIGNED	SSM
CHECKED	JLA
DRAWN	GYR
CHECKED	SSM

I-2-E2

11-1-06

Plans Prepared by: Kudrna & Associates, Ltd.