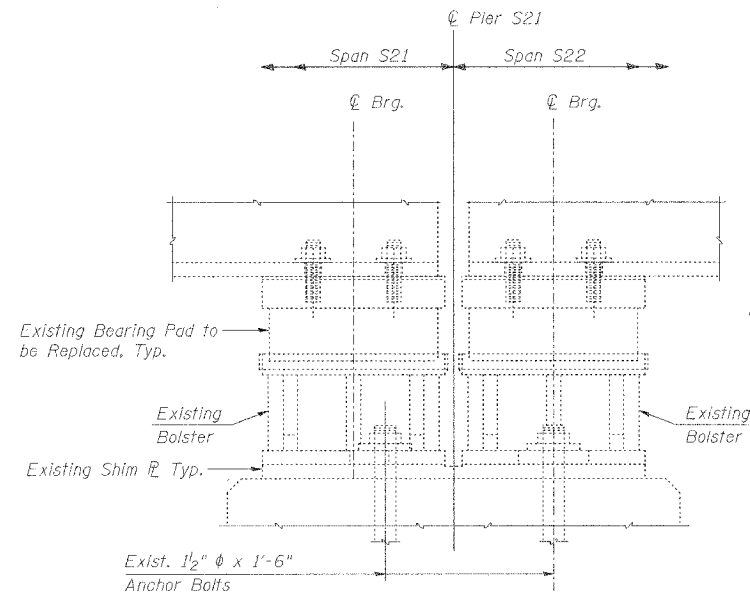
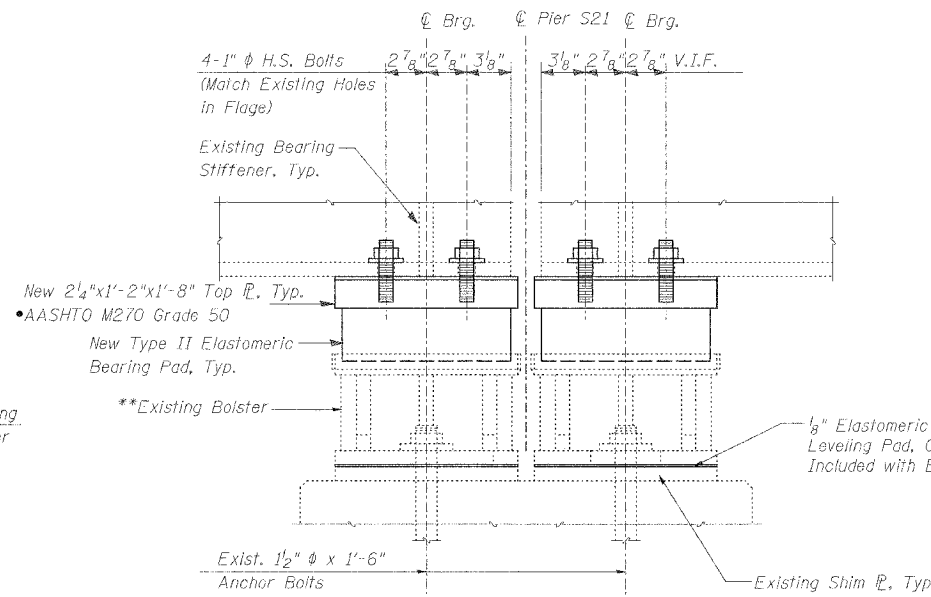


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 70	*	ST. CLAIR	111	110
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT - 1H-70		
* B2-3HYB-3R-3			SHEET S-43 OF S-44	
CONTRACT NO. 76305				

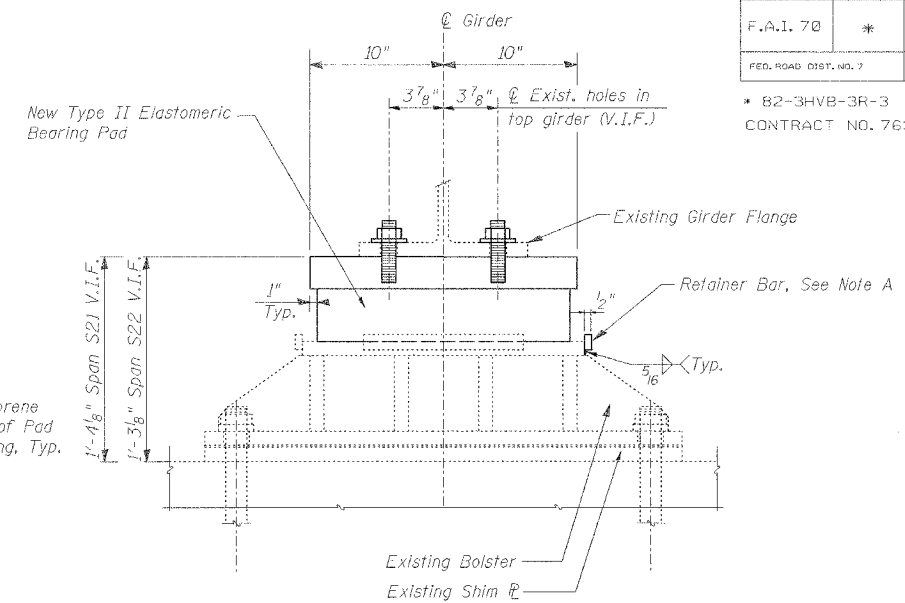


**1 BEARING REMOVAL**  
S43



**SIDE VIEW**

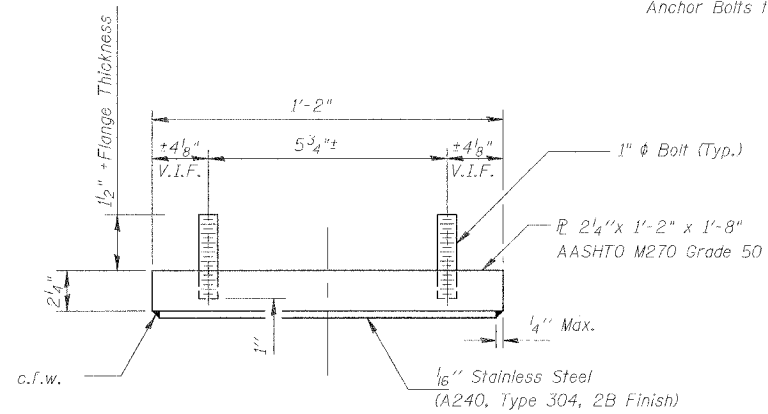
\*\*Reposition Existing Bolster in Span S21 such that Bolster is centered under Existing Bearing Stiffener. Drill new Holes as necessary in bottom Bolster Plate and Shim Plate to accommodate Existing Anchor Bolts to remain.



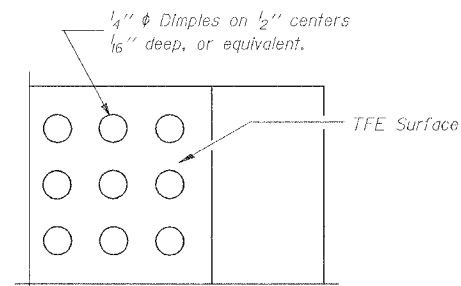
**END VIEW**

**2 BEARING REPLACEMENT**  
S43

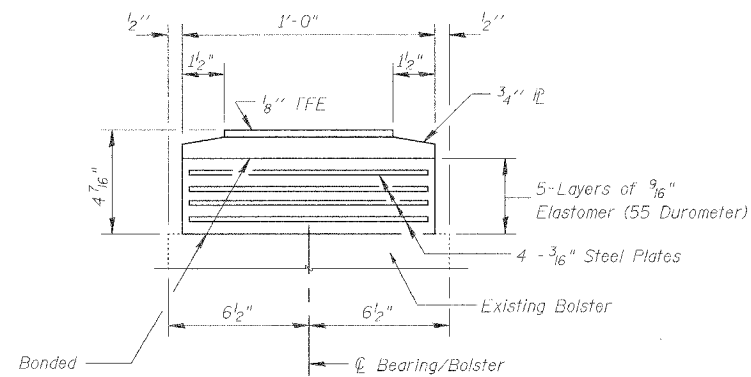
Note A: Remove existing retainer bar on one side for bearing replacement. Care shall be taken not to damage existing bolster during the removal. Grind smooth all weld metal remaining before installing new retainer bar. The Contractor shall provide a new retainer bar of the same size as existing and attach using a 5/16" fillet weld at the bottom edge only. Cost included with Elastomeric Bearing Assembly Type II.



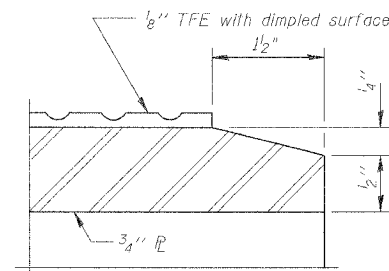
**TOP BEARING ASSEMBLY**



**PLAN-TFE SURFACE**



**BOTTOM BEARING ASSEMBLY**



**SECTION THRU TFE**

Note: 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.

**BEARING REACTION TABLE PIER S21**

Load*	Span S21 both Girders	Span S22 both Girders
RD (K)	95	72
RL (K)	64	62
Imp. (K)	20	19
R (Total) (K)	179	153

\*Gravity Service Loads  
Minimum jack size: 150 Ton

**Notes:**

- Bearings to be replaced are 4 exist. Elastomeric Bearings at Pier 21, both Girders.
- Exist. anchor bolts to be reused. Regrout in place where necessary.
- Air temperature at time of setting the Elastomeric Bearing shall not be lower than 35° F. or higher than 65° F.
- Area between Retainer Bars and Elastomeric Bearing to be filled with sealer 1" thick, sloped to drain. (Elastomeric Polymer Type Sealer)
- The cost of the Top Plate is included with Bearing.
- Shoring shall be incidental to bearing replacement.
- Exist. anchor bolts shall be cut off 1/2" above the 3/4" bar.
- May use standard nut if full engagement of threads is achieved.

**BILL OF MATERIAL**

Item	Unit	Total
Jack and Remove Existing Bearings	Each	4
Elastomeric Bearing Assembly Type II	Each	4

**BEARING DETAILS**

REVISIONS	
NAME	DATE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
REHABILITATION AND RETROFIT REPAIRS  
FAI ROUTE 70  
POPLAR STREET APPROACHES  
ST. CLAIR COUNTY

STRUCTURE NO. 082-0142 (RAMP S)

SCALE:

DATE: 02/28/2006

DATE: 4/9/2006  
FILENAME: P:\2001\1201-1300\2001.1240\Drafting\RoadwayRehab\_DS\Ramps\Bearings\S-BEAR01.dgn

DESIGNED	JEL
CHECKED	APJ
DRAWN	IMG
CHECKED	JEL