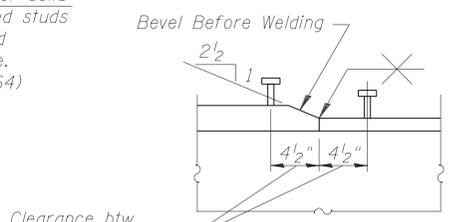
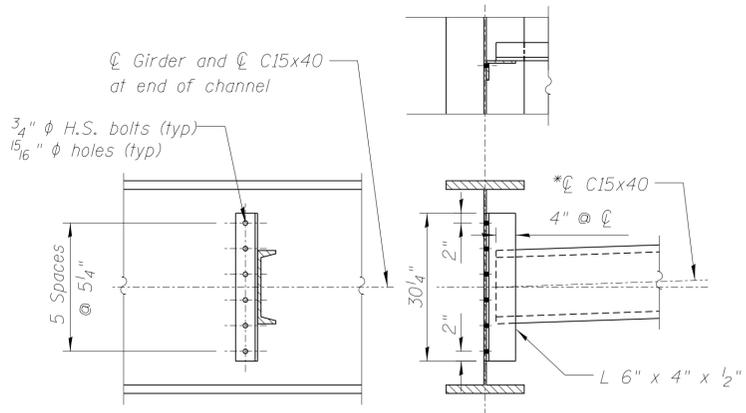


SECTION A-A

3/4" ϕ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd. = 3,564)

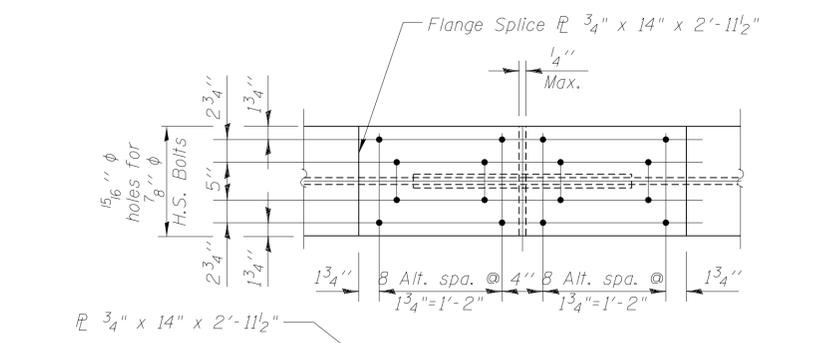


DETAIL "B"

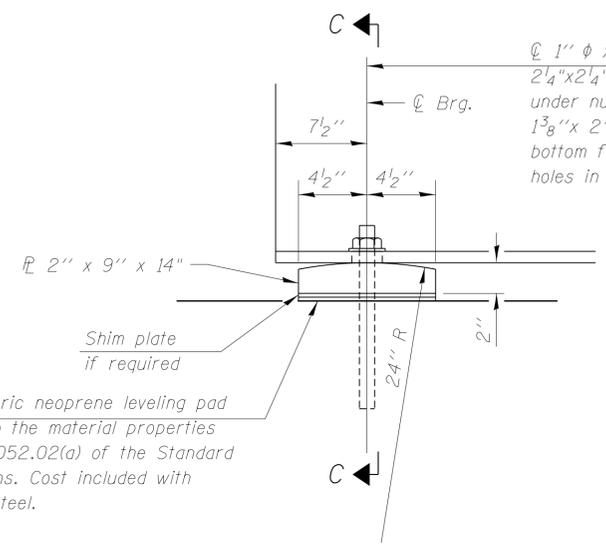


DIAPHRAGM D
45 Required

Notes:
Two hardened washers required for each set of oversized holes.
*Alternate channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
3/4" ϕ HS bolts, 5/16" ϕ holes

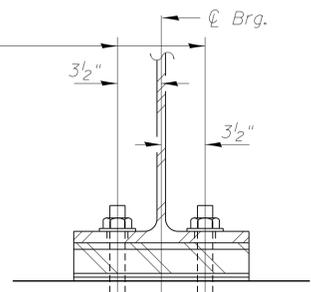


DETAIL OF SPLICE

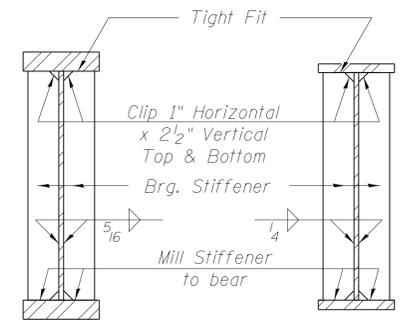


ELEVATION AT ABUTMENT

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

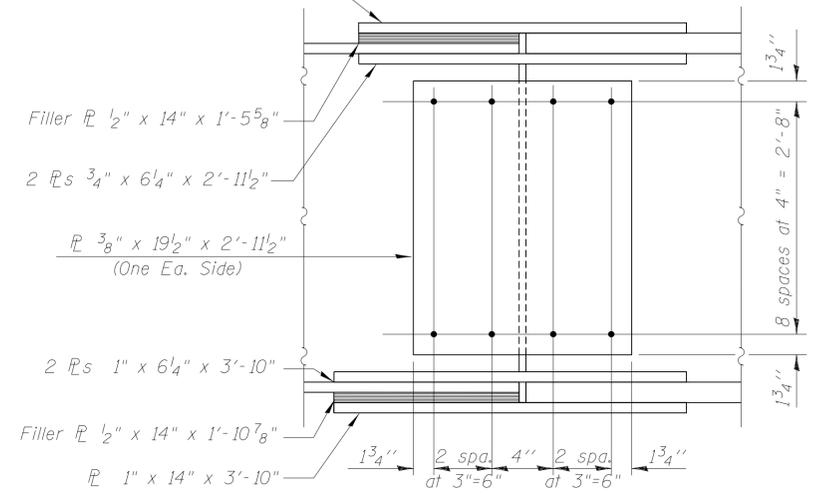


SECTION C-C



SECTION AT PIER

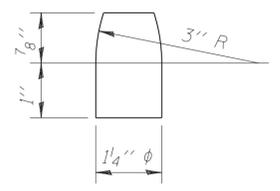
SECTION AT ABUTMENT



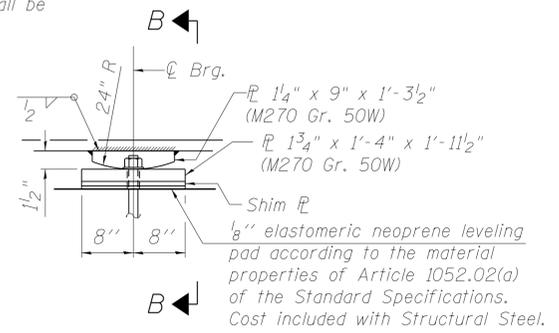
ESTIMATED SHIM PLATE THICKNESS

Beam	S. Abut.	N. Abut.	Pier
3	1/2"	1/2"	1/2"

In addition to other shims required to be provided, Contractor shall supply and install a 1/2" shim with the same plan dimensions as the bottom bearing plate for beam #3 at all of the substructures as shown in the above table. These shims shall be included in the cost of Structural Steel.

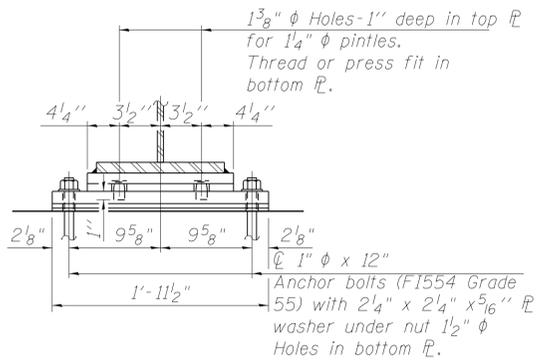


DETAIL OF PINTLE



ELEVATION AT PIER

FIXED BEARING



SECTION B-B

Notes:
Anchor bolts shall be ASTM F1554 (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A 307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36 ksi). 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.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

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

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

BILL OF MATERIAL

ITEM	EACH	TOTAL
Anchor Bolts, 1"	Each	36
Stud Shear Connector	Each	3564

MSJL RT 116 OVER TEN MILE CREEK CIVIL\AStructural\Final Plans\SHEET\0468671-014-Steel details.dgn



USER NAME = cvm
FILE NAME = D468671-014-Steel details.dgn
PLOT DATE = 10/4/2012

DESIGNED - OY
CHECKED - DB
DRAWN - CM
CHECKED - JB

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS
STRUCTURE NO. 090-0179

SHEET NO. S14 OF S22 SHEETS

F.A.P. RTE. 673
SECTION (102B-1) BR
COUNTY TAZEWELL
TOTAL SHEETS 89
SHEET NO. 57
CONTRACT NO. 68671
ILLINOIS FED. AID PROJECT