

INTERIOR BEAM MOMENT TABLE			
		0.4 Sp. 1	Pier
		0.6 Sp. 2	
I_s	(in ⁴)	4,090	4,090
I_c	(in ⁴)	11,178	
$I_c(3n)$	(in ⁴)	8,121	
S_s	(in ³)	299	299
$S_c(n)$	(in ³)	447	
$S_c(3n)$	(in ³)	402	
D	(k/ft.)	0.702	1.144
$M\ell$	('k)	178	479
$s\ell$	(k/ft.)	0.442	
$Ms\ell$	('k)	127	
$M\ell$	('k)	366	192
$M(Imp)$	('k)	99	51
$^5_3[M\ell + M(Imp)]$	('k)	775	405
Ma	('k)	1,404	1,149
Mu	('k)	2,261	1,429
$fs\ell$ non-comp (k.s.i.)		7.1	19.2
$fs\ell$ (comp) (k.s.i.)		3.8	
$fs^5_3(\ell + Imp)$ (k.s.i.)		20.9	16.2
fs (Overload) (k.s.i.)		31.8	35.4
VR	(k)	43.5	

INTERIOR BEAM REACTION TABLE			
		Abut.	Pier
$R\ell$	(k)	26.4	84.7
$R\ell$	(k)	31.8	35.9
$Imp.$	(k)	8.6	9.7
R (Total)	(k)	66.8	130.3

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

$I_c(n)$ and $S_c(n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

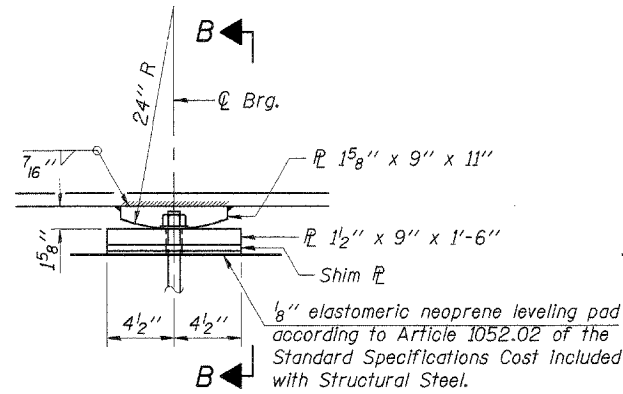
$I_c(3n)$ and $S_c(3n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.

VR is the maximum Live Load + Impact shear range in span.

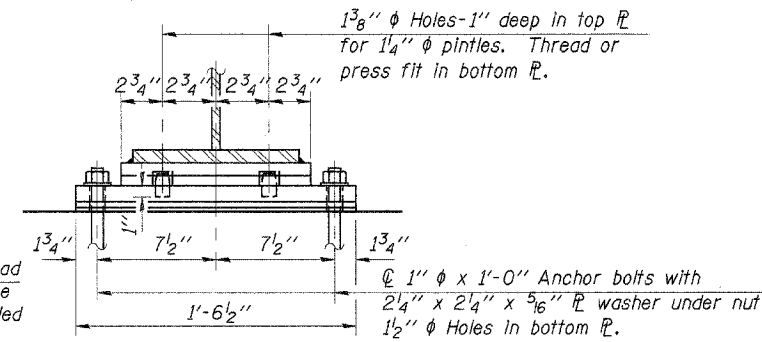
Ma (Applied Moment) = $1.3IM\ell + Ms\ell + ^5_3(M\ell + M(Imp))$.

The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.

fs (Overload) is the sum of the stresses due to $M\ell + Ms\ell + ^5_3(M\ell + M(Imp))$.

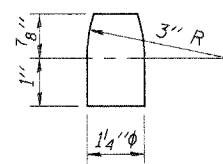


ELEVATION AT PIER

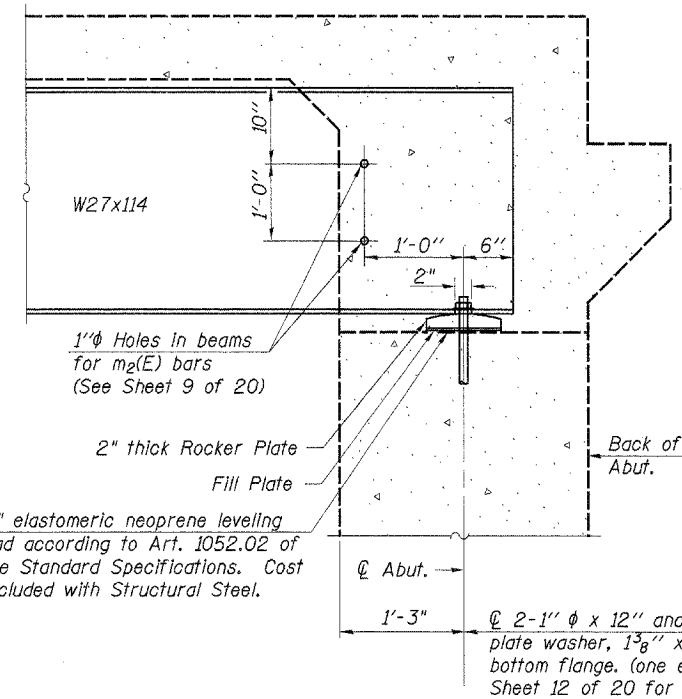


SECTION B-B

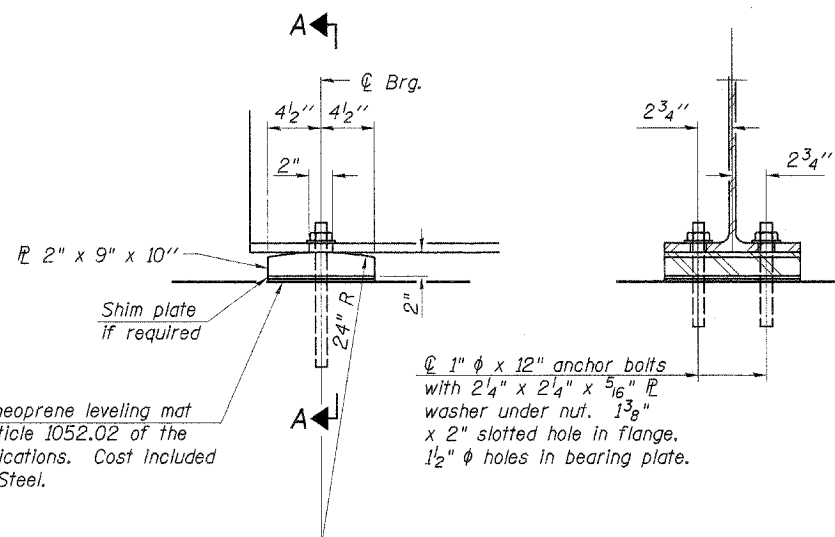
BEARING AT PIER
6 Required



PINTLE



SECTION C-C

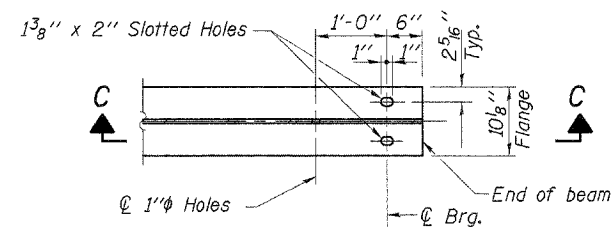


ELEVATION AT ABUTMENT

SECTION A-A

BEARING AT ABUTMENTS
12 Required

Notes: Anchor bolts at bearings may be built into the masonry.
See sheet 12 of 20 for Anchor Bolt Installation.



END OF BEAM DETAILS
Bottom Flange Plan

DESIGNED	P.S.L.
CHECKED	A.R.K. & F.J.S.
DRAWN	K.T.R.
CHECKED	P.S.L. & A.R.K.

STRUCTURAL STEEL DETAILS

IL. RTE. 9 OVER WALL TOWN DRAINAGE DITCH
FAP ROUTE 697 - SECTION 17BR-1
FORD COUNTY
STATION 993+80.38
S.N. 027-0094

4440 ASH GROVE
SPRINGFIELD, ILL. 62707
(217) 793-8600
casinc@famid.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

JOB NO.: 0306.2
FILE: STEEL02.D
DATE: 06-08-04