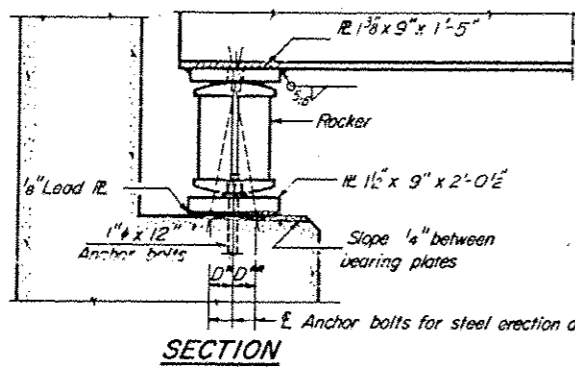


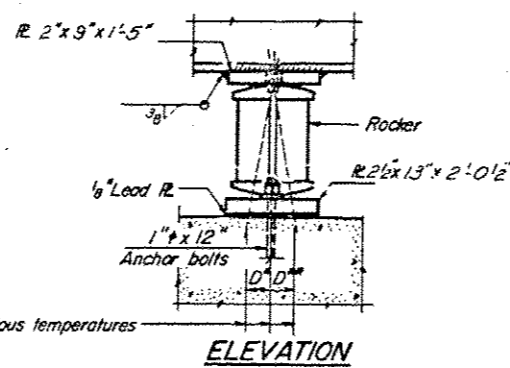
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	REVISION	NO.
11/9	PKC		47

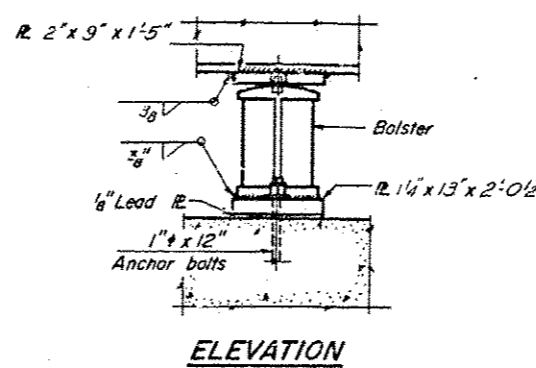
SHEET NO. 10
16 SHEETS



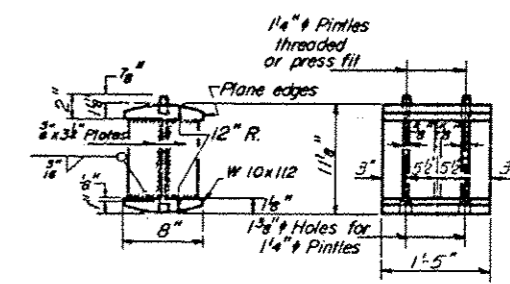
SECTION



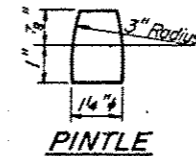
ELEVATION



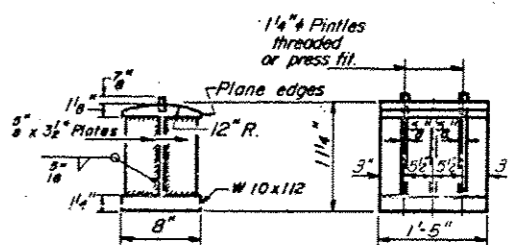
ELEVATION



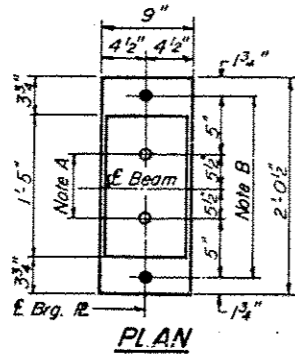
ROCKER



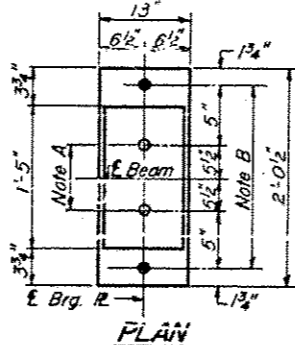
PINTLE



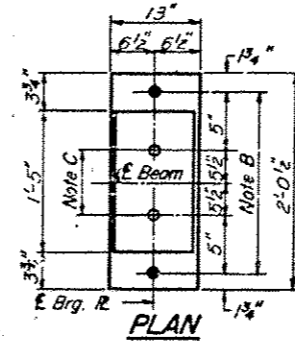
BOLSTER



PLAN AT ABUTMENTS



PLAN AT PIER 1



PLAN AT PIER 2

NOTE A
1 1/2" Holes - 1" deep in top R. for pintles. Thread or press fit pintles into bottom R.

NOTE B
1 1/2" Holes for 1" anchor bolts. 1 1/2" x 2 1/2" x 2 1/2" R. Washers under nut.

NOTE C
1 1/2" Holes 1" deep in top R. only for 1 1/4" pintles.

BEARING ASSEMBLY DETAILS

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
- D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.
- b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

	Support 6sp 3	Pier	0.5 Sp. 2
L ₁ (in ⁴)	18953	36634	18953
I _c (in ⁴)	50519	50519	50519
S _s (in ³)	883	1430	883
S _c (in ³)	1227	1227	1227
Q ₁ (in)	1.028	1.487	1.028
M ₁ (in)	518	1478	306
F ₁ (ksi)	7.0	12.4	4.2
S ₁ (in)	0.439	0.439	0.439
M ₂ (in)	257	209	209
M ₃ (in)	794	658	762
M _{imp} (in)	184	148	166
TOTAL (in)	1235	806	1137
F ₁ + S ₁ (ksi)	12.1	6.8	11.1
F ₁ TOTAL (ksi)	19.1	19.2	15.3
VR (in)	62.4	55.6	

	Abut.	Pier
R ₁ (k)	47.8	158.4
R ₂ (k)	45.7	71.0
Impd (k)	10.7	16.1
R ₁ TOTAL (in)	104.2	245.5

*** Primary stresses only
I₁ and S₁ are the moment of inertia and section modulus of the steel section.
I_c and S_c are the moment of inertia and section modulus of the composite section used in computing I_s.
VR is the maximum 1/4" impact shear range in span used to determine shear connector spacing.

DESIGNED	EXAMINED
CHECKED	PASSED
R.P.S.	APPROVED
DRAWN P.G. Bennett	
CHECKED JNP	

I-2-B 9-1-65, 8-1-70

STRUCTURAL STEEL
F.A. RT.36 SEC.14B-1
PIKE COUNTY
STATION 555+80

FOR INFORMATION ONLY