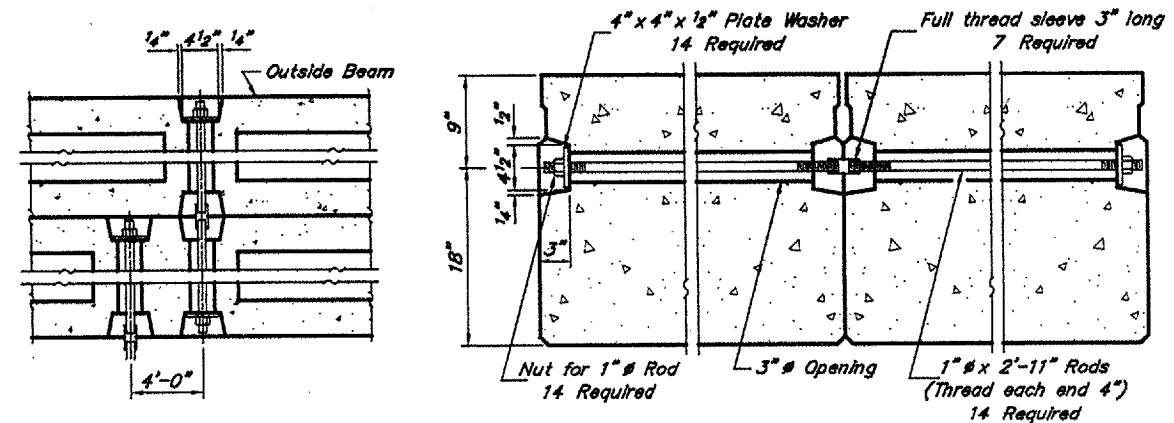
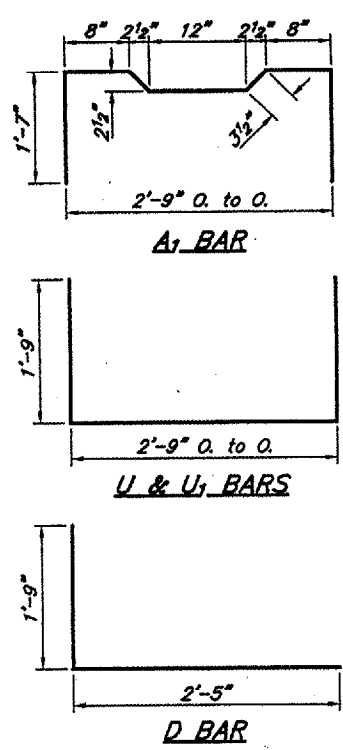
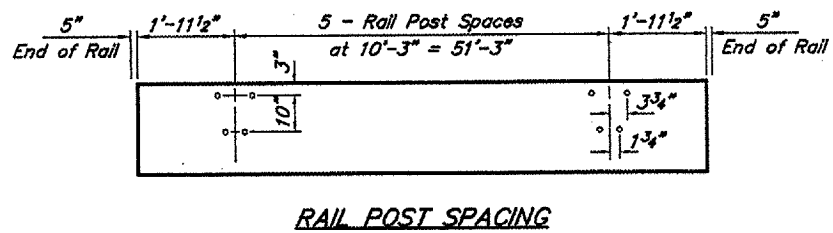


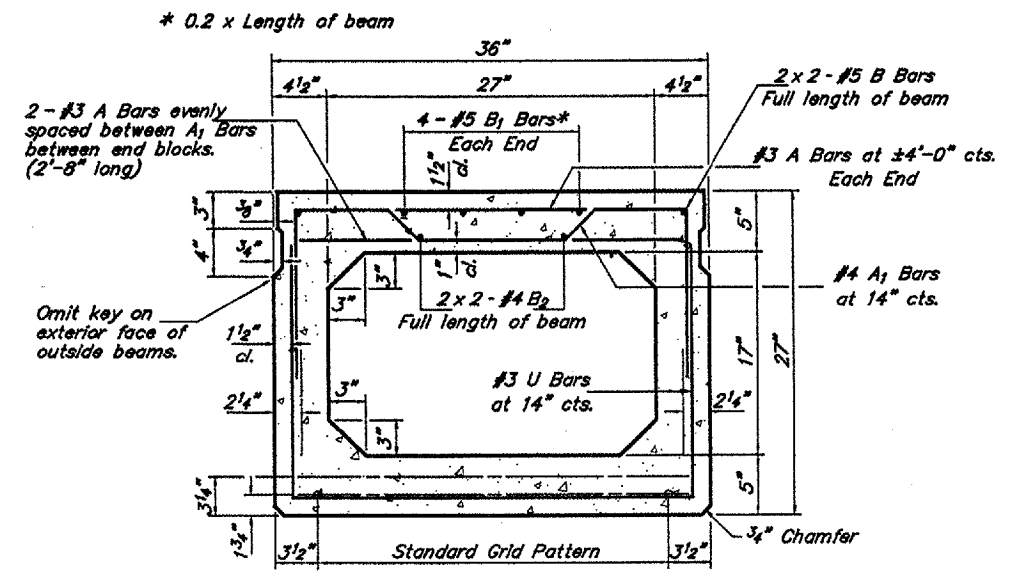
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
CH 1	02-00092-00-BR	UNION	10	4



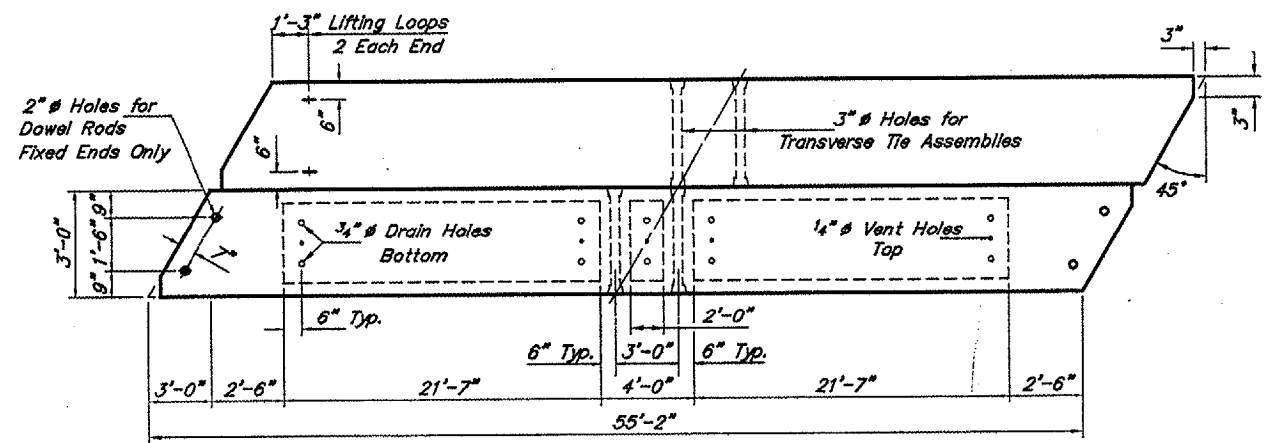
TYPICAL TRANSVERSE TIE ASSEMBLY



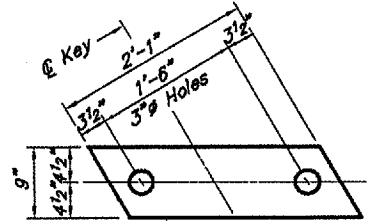
RAIL POST SPACING



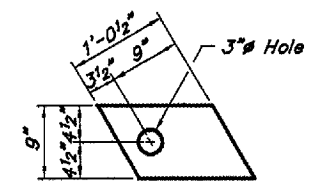
TYPICAL SECTION
13 - 1/2" # Strands Each Strand Stressed to 28,900 lbs.
9 - Strands 1 3/4" up, 4 - Strands 3 1/4" up.



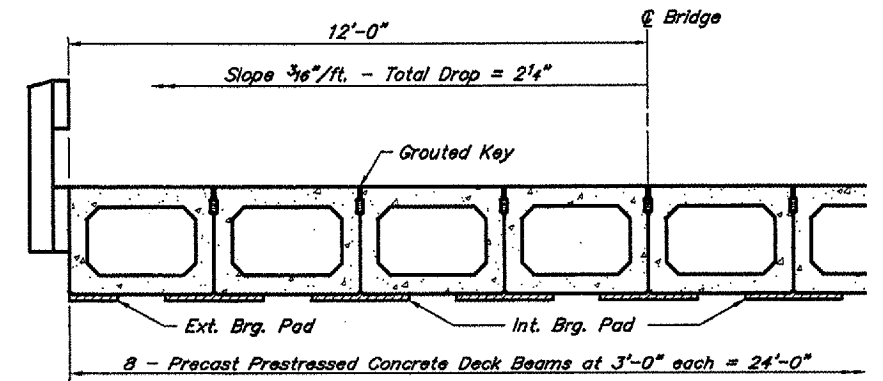
PLAN



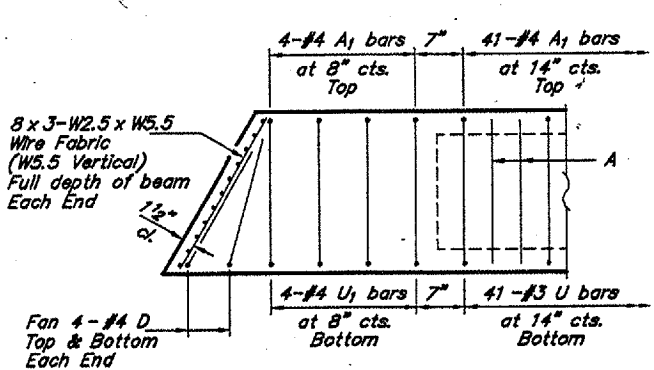
FABRIC BEARING PAD (Interior)



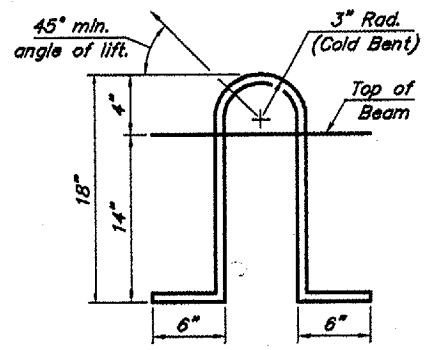
FABRIC BEARING PAD (Exterior)



HALF CROSS SECTION



END PLAN



LIFTING LOOP DETAIL

NOTES

Rail Post Anchor Devices shall be cast into outside beams as elsewhere specified.
 Reinforcement bars shall conform to AASHTO M-31, M-42 or M-53 Grade 60.
 Prestressing steel shall be uncoated high strength, stress-relieved 7-wire strand, Grade 270.
 The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
 Required release strength, F_{cl}, shall be 4,000 p.s.i.
 An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted.
 Lifting loops shall be 3/8" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33,000 lbs. or 2 - 1/2" #270 strands, as shown.
 Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.
 The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
 The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
 After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys.
 Longitudinal keys shall be grouted.

BILL OF MATERIAL
(Bars shown for one beam)

Bar	No.	Size	Length	Shape
A	88	#3	2'-8"	—
A ₁	49	#4	6'-1"	—
B	4	#5	28'-6"	—
B ₁	8	#5	11'-0"	—
B ₂	4	#4	28'-6"	—
D	16	#4	4'-2"	—
U	41	#3	6'-3"	—
U ₁	8	#4	6'-3"	—
Precast Prestressed Concrete Deck Beams (27" Depth)		Sq. Ft.	1324	

SUPERSTRUCTURE - 27" X 36" BEAMS
 TRIBUTARY TO DRURY CREEK
 SECTION 02-00092-00-BR
 UNION COUNTY