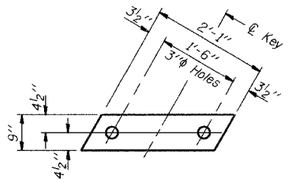
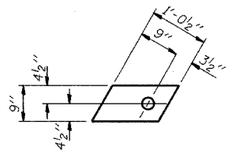
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 14 F.A.S. 209	00-00091-00-BR	MERCER	111	60
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

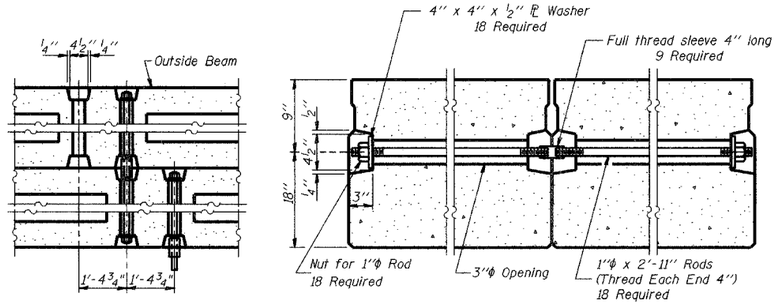
CONTRACT NO. 89312



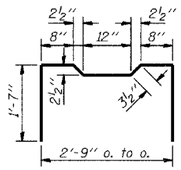
½" FABRIC BEARING PAD
(Interior - Fixed)



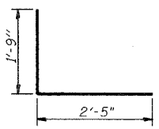
½" FABRIC BEARING PAD
(Exterior - Fixed)



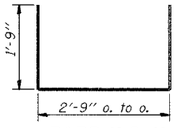
TYPICAL TRANSVERSE TIE ASSEMBLY



BAR A1

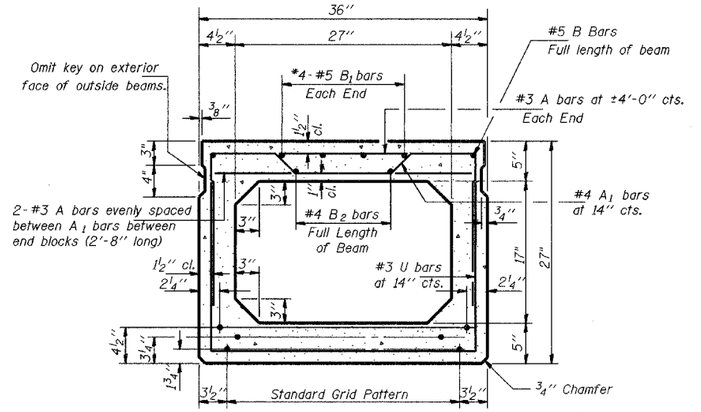


BAR D



BARS U & U1

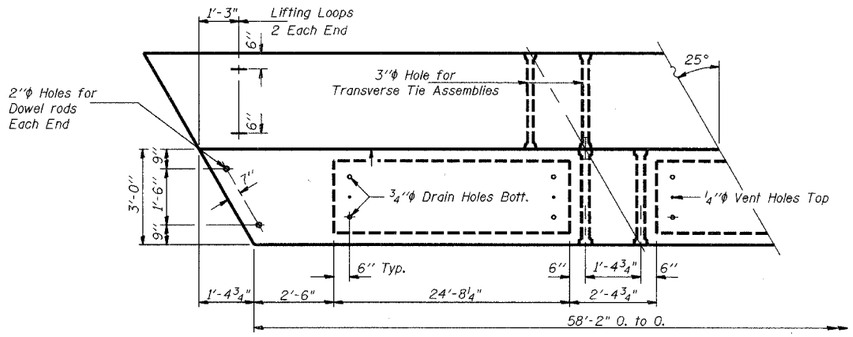
*0.2 x Length of beam



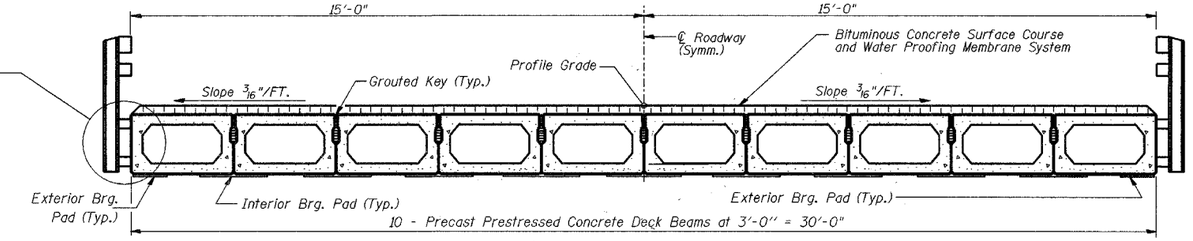
TYPICAL SECTION

13 - ½"ϕ Strands Each Strand Stressed to 30,900 Lbs.
7-Strands 1¾" up, 4-Strands 3¼" up, 2-Strands 4½" up

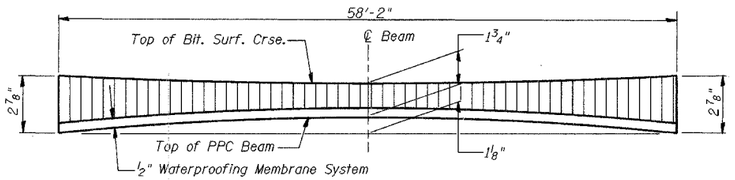
Note: Place strands symmetrically about ℄ of beam.



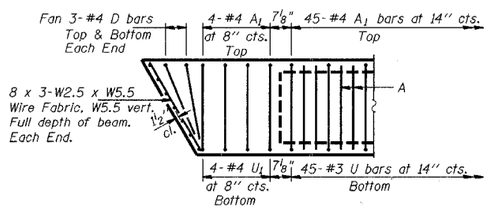
PLAN



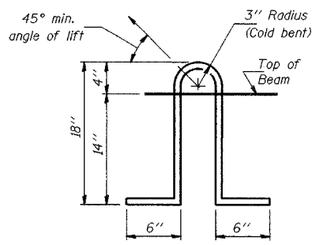
CROSS SECTION



ANTICIPATED CAMBER DIAGRAM



END PLAN



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - ½"ϕ-270 ksi strands, as shown.

The 1"ϕ 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.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322, Grade 60.

When a Waterproofing Membrane System is specified, the top surface of the beams shall be screeded with a straightedge and finished with a hand float. The finished surface shall be free of depressions or high spots with sharp corners and the top edge of keys shall be rounded or chamfered a minimum of ¼".

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

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 top of the beam and the bottom edge of the key.

Required Release Strength, f'ci, shall be 4000 p.s.i.

An equal substitution of the low-relaxation strands for the stress relieved strands will be permitted.

A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

MIN. BAR LAP
#4 bars = 1'-4"
#5 bars = 1'-8"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
Precast Prestressed Conc. Deck Bms. (27" Depth)			Sq. Ft.	1745

SUPERSTRUCTURE

Date	Designed DCS	F.A.S. 209 (C.H. 14) OVER KEATING CREEK SECTION 00-00091-00-BR MERCER COUNTY STA. 111+67.50 PROP. STR. NO. 066-3157	Sheet No. 2 of 5
Revisions	Drawn BKN		
	Checked DCS		
	Approved KWB		
Prepared by: URS	3040 North University Avenue Decatur, Il. 62526		WVP Job No. 2100001253.01