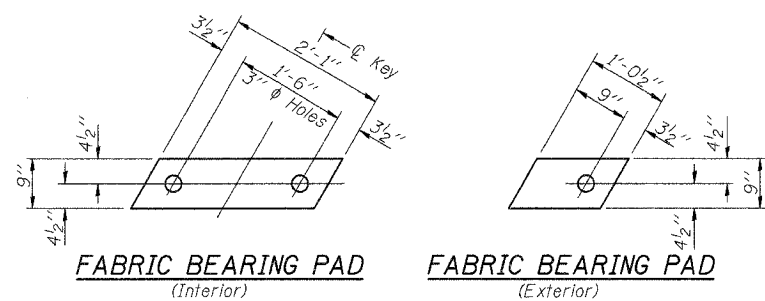
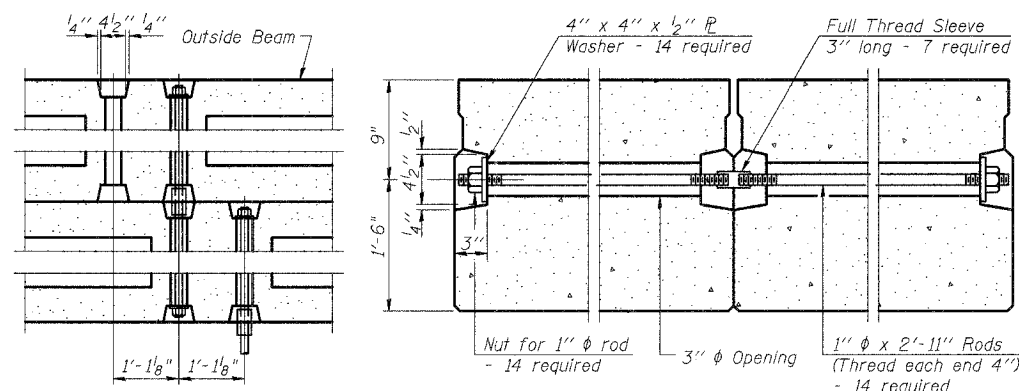


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 7	05-00259-00-BR	SHELBY	19	14
FED. ROAD DIST. NO.	ILLINOIS PROJECT		SHEET 3 of 8	



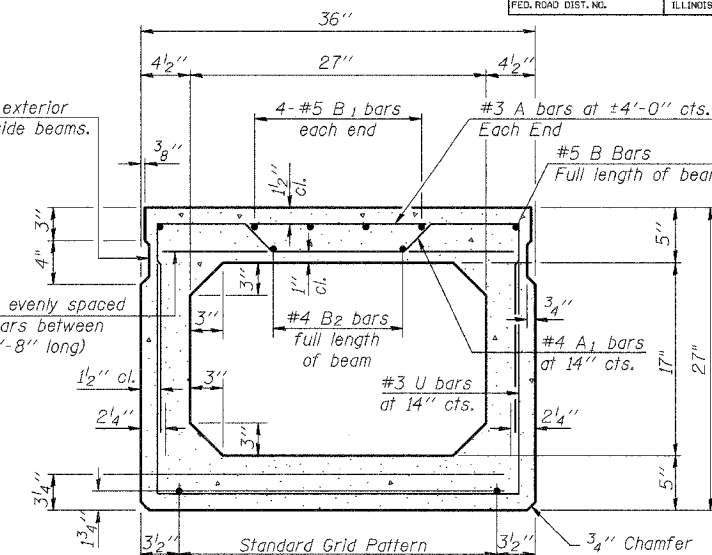
FIXED



TYPICAL TRANSVERSE TIE ASSEMBLY

Omit key on exterior face of outside beams.

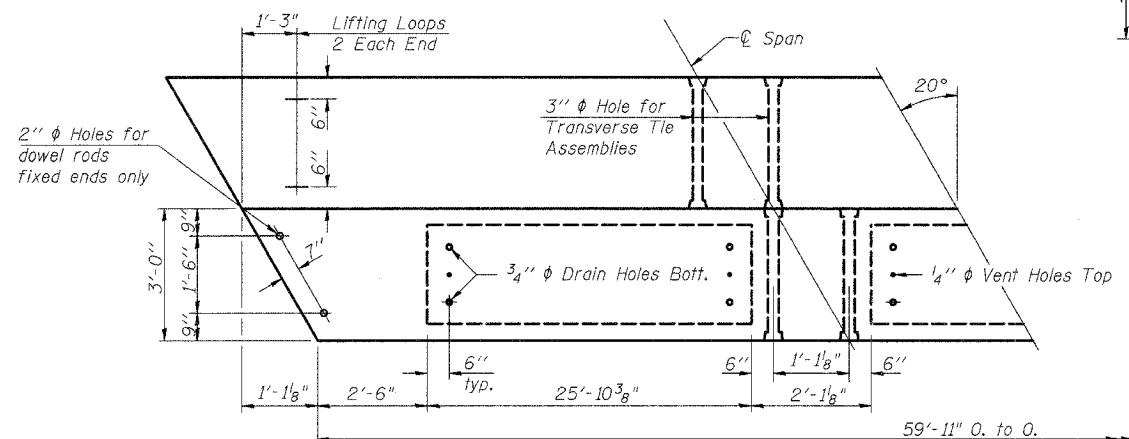
2-#3 A bars evenly spaced between A₁ bars between end blocks (2'-8" long)



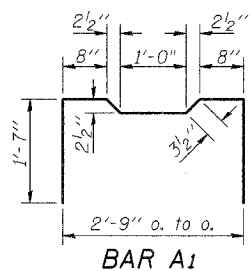
TYPICAL SECTION

1/2" φ Strands, Each Strand Stressed to 30,900 Lbs.
7-Strands 1 3/4" up, 6-Strands 3/4" up, & 2-Strands 7/2" up

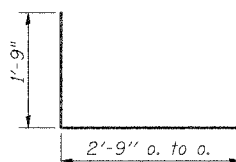
Note: Place strands symmetrically about C of beam.



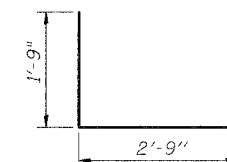
PLAN



BAR A1

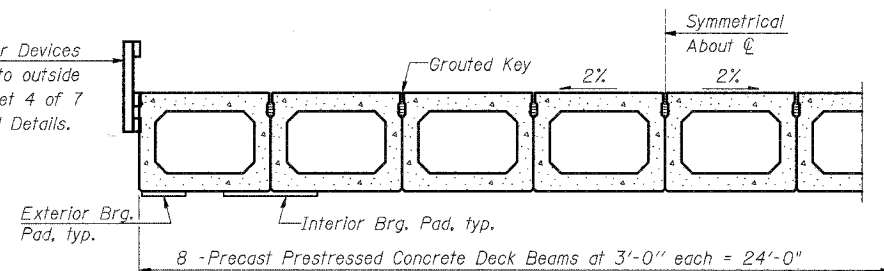


BARS U & U1



BAR D

Rail Post Anchor Devices shall be cast into outside beams. See Sheet 4 of 7 for Spacing and Details.



HALF CROSS SECTION

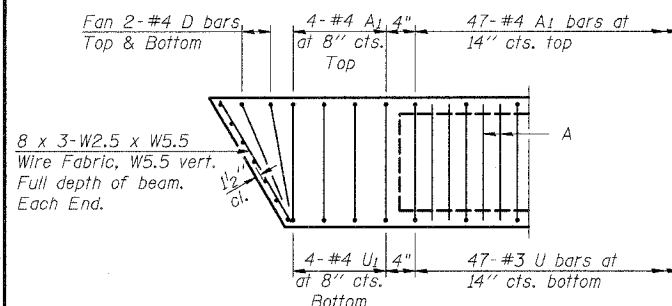
BILL OF MATERIAL

(Bar List for One Beam Only)

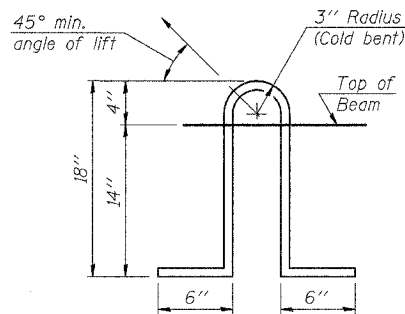
Bar	No.	Size	Length	Shape
A	100	#3	2'-8"	—
A ₁	55	#4	6'-1"	┘
B	6	#5	20'-11"	—
B ₁	8	#5	12'-0"	—
B ₂	6	#4	20'-8"	—
D	8	#4	4'-6"	└
U	47	#3	6'-3"	┘
U ₁	8	#4	6'-3"	┘
Precast Prestressed Conc. Deck Beams		Sq. Ft.	1438	

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - 1/2" 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. Non prestressing steel shall conform to AASHTO A706 Grade 60 (IL Modified). 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. 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. Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i.



END PLAN



LIFTING LOOP DETAIL

**P.P.C. BEAM DETAILS SPAN 2
C.H. 7 OVER RICHLAND CREEK
SEC. 05-00259-00-BR
SHELBY COUNTY
S.N. 087-3550
STA. 9+80**

ie consultants

DESIGNED: C.M.V. CHECKED: D.R.B.
DRAWN: T.H.W. DATE: DECEMBER 2006