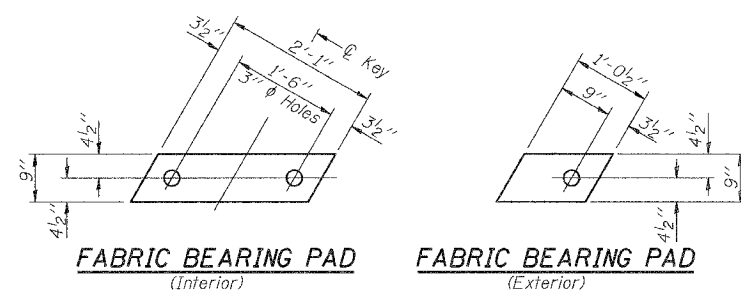


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

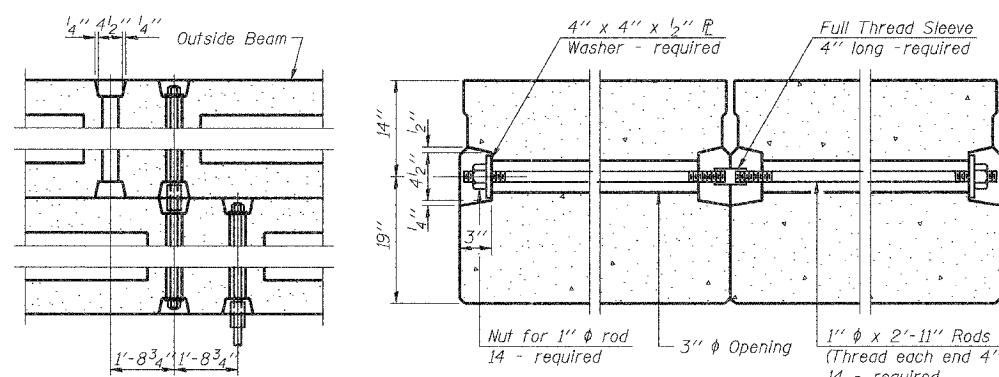
PROJECT NO.	SECTION	DATE	NO. OF SHEETS	SHEET NO.
E. 3150	BUREAU	15	5	5

Sheet 2  
of 9 Sheets

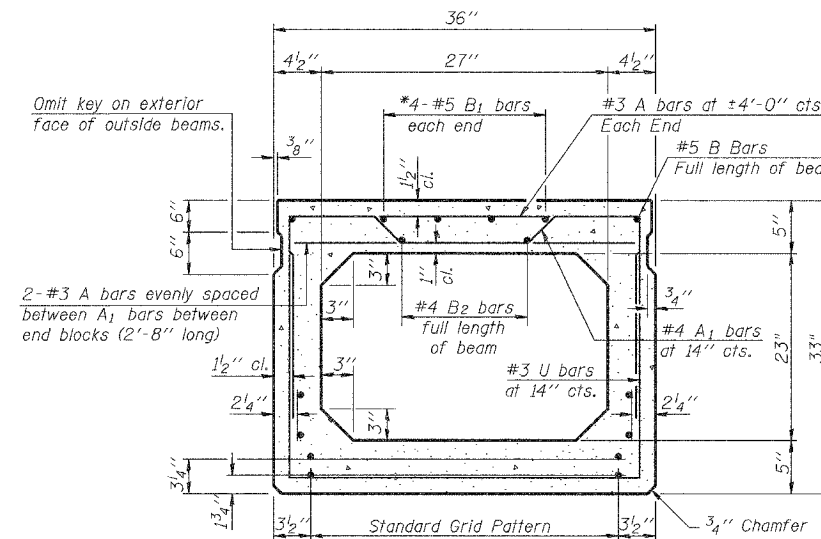
\*0.2 x Length of beam  
• 04-04113-00-BR



**FIXED**



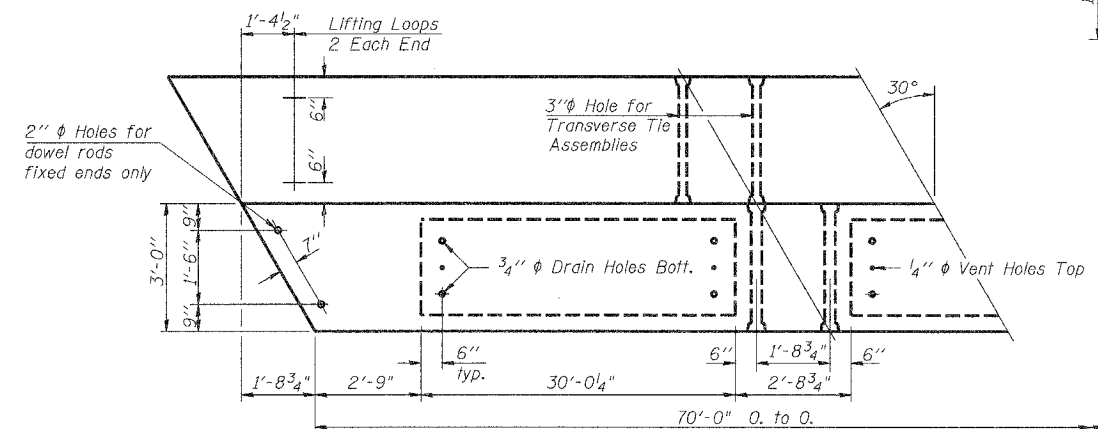
**TYPICAL TRANSVERSE TIE ASSEMBLY**



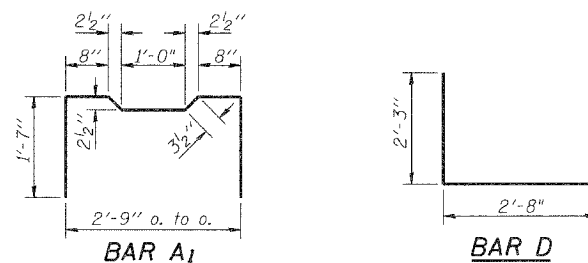
**TYPICAL SECTION**

1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
8-Strands 1 3/4" up, 5-Strands 3/4" up  
2-Strands 6" up, 2-Strands 9" up

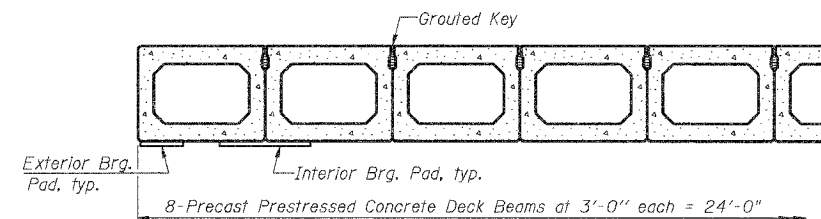
Note:  
Place strands symmetrically  
about  $\phi$  of beam.



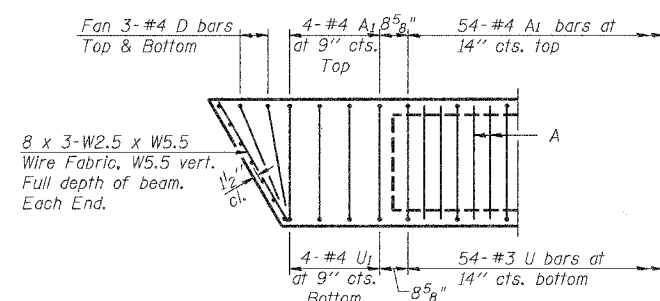
**PLAN**



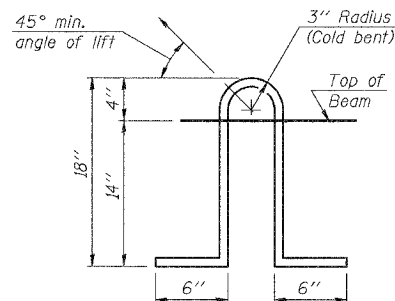
**BARS U & U1**



**HALF CROSS SECTION**



**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 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3-1/2"  $\phi$  270 ksi strands, as shown. The 1"  $\phi$  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 M-31 or M-322 Grade 60. 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 5000 p.s.i.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
A	114	#3	2'-8"	—
A1	62	#4	6'-1"	┌
B	2	#5	69'-9"	—
B1	8	#5	14'-0"	—
B2	2	#4	69'-9"	—
U	54	#3	7'-3"	┌
U1	8	#4	7'-3"	┌
D	12	#4	4'-11"	┌
Precast Prestressed Conc. Deck Bms.		Sq. Ft.	1680	

**BEAM DETAILS**  
E. 3150 TH ROAD OVER PIKE CREEK  
SECTION 04-04113-00-BR  
BUREAU COUNTY  
STA. 10+00  
SN 006-4051

DESIGNED	JLS
CHECKED	JDA
DRAWN	NQ
CHECKED	JKC

PD-5-R 1-16-04