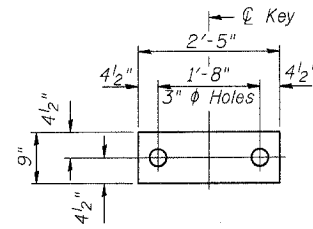
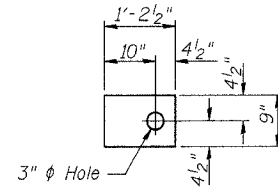


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

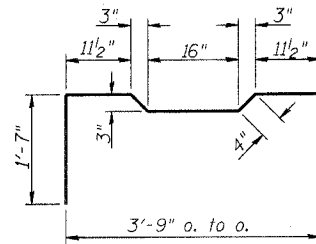
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 16	00-00115-01-BR	MARION	14	6
		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 97287				



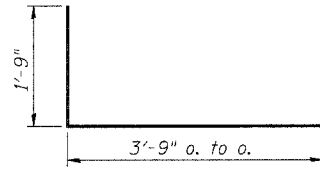
**FABRIC BEARING PAD**  
(Interior)



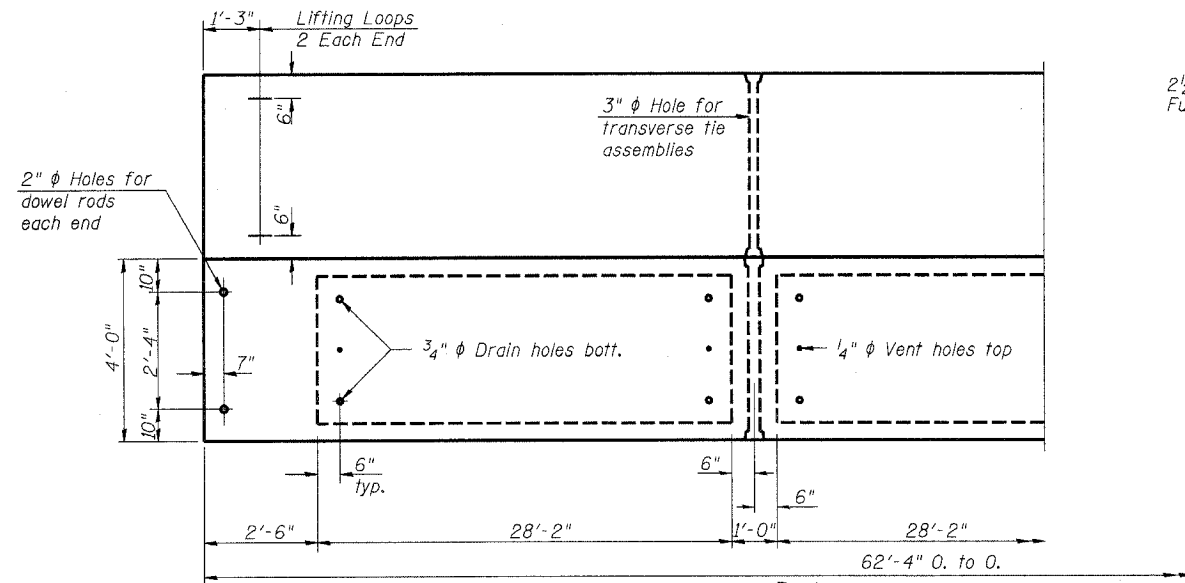
**FABRIC BEARING PAD**  
(Exterior)



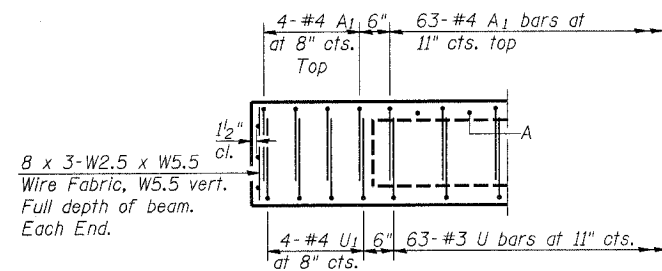
**BAR A1**



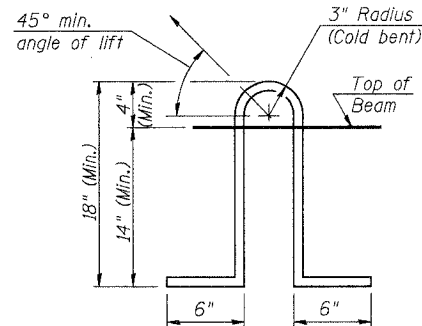
**BARS U & U1**



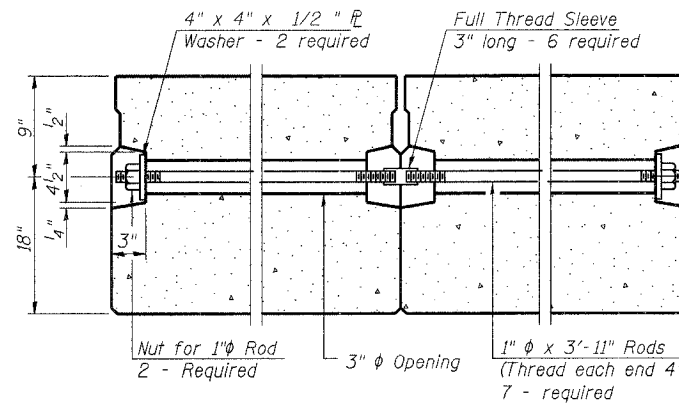
**PLAN**



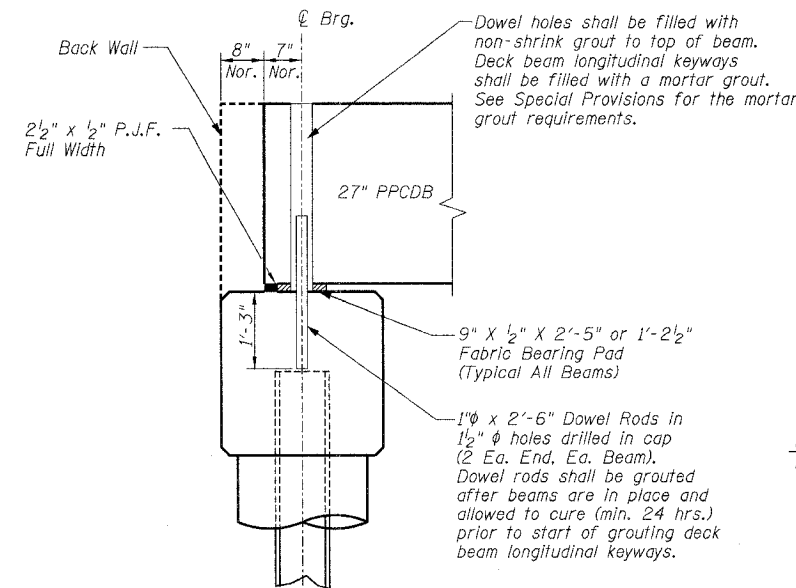
**END ELEVATION**



**LIFTING LOOP DETAIL**



**TYPICAL TRANSVERSE TIE ASSEMBLY**



**FIXED BEARING ABUTMENT**

**NOTES**

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.

Lifting loops shall be 3 - 1/2" diameter - 270 ksi strands, as shown.

The 1" diameter 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.

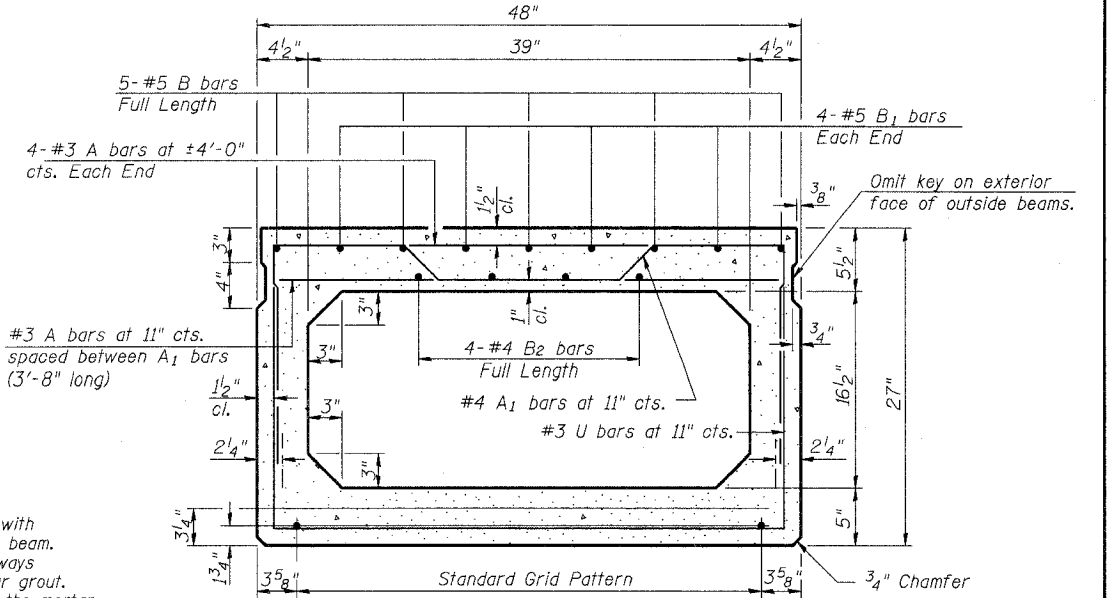
Non-prestressing steel shall conform to AASHTO M-31, M-42 or M-53 Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. As required, 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.

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

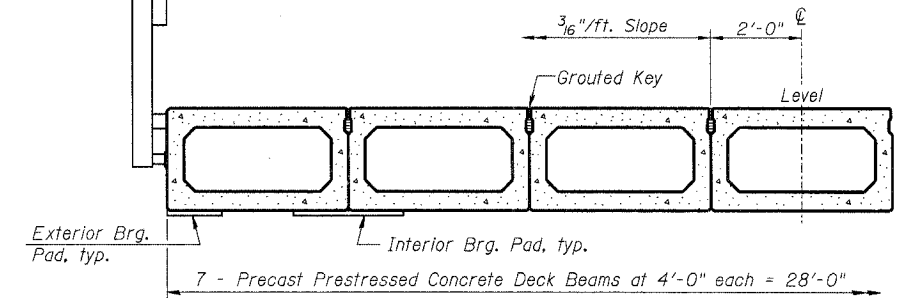
An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted. However, all strands shall be stressed to a maximum of 28,900 pounds per strand.



**TYPICAL SECTION**

19-1/2" diameter Strands, Each Strand Stressed to 28,900 Lbs.  
12-Strands 1 3/4" up, 7-Strands 3 1/4" up

Note: Place strands symmetrically about centerline of beam.



**HALF CROSS SECTION**

**BILL OF MATERIAL FOR ONE BEAM**

Bar	No.	Size	Length	Shape	
A	70	#3	3'-8"	—	
A1	71	#4	7'-1"	⌋	
B	10	#5	32'-6"	—	
B1	8	#5	12'-6"	—	
B2	8	#4	32'-0"	—	
U	63	#3	7'-3"	⌋	
U1	8	#4	7'-3"	⌋	
Precast Prestressed Conc. Deck Bms.				Sq. Ft.	250
Reinforcement Bars				Pound	1260
Beam Weight				Pound	47,440

**PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS**  
PROPOSED BRIDGE CARRYING CH 16 OVER BRANCH TO CROOKED CREEK  
SECTION 00-00115-01-BR  
MARION COUNTY, ILLINOIS

Sheet 6 of 14  
Job No. 50805

10/13/2006