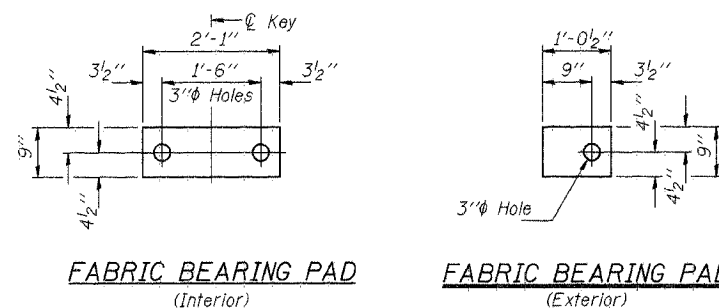


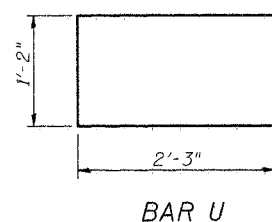
ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL
TR 43	*	PIATT	11	7
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT:

\*04-04124-00-BR

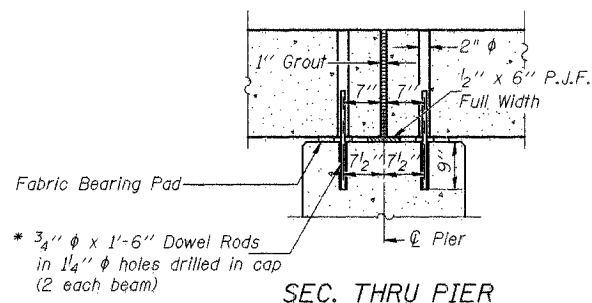


FABRIC BEARING PAD (Interior)

FABRIC BEARING PAD (Exterior)



BAR U

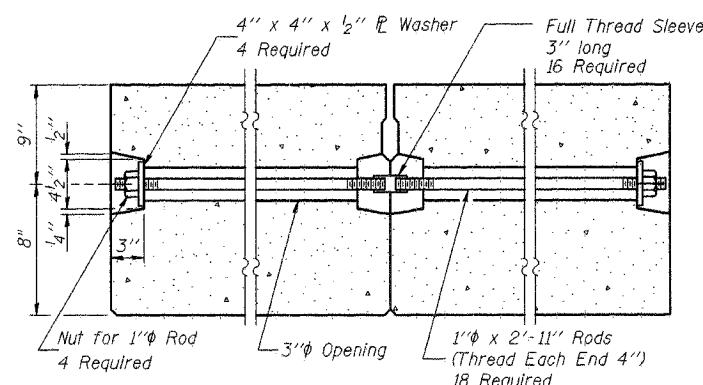


SEC. THRU PIER

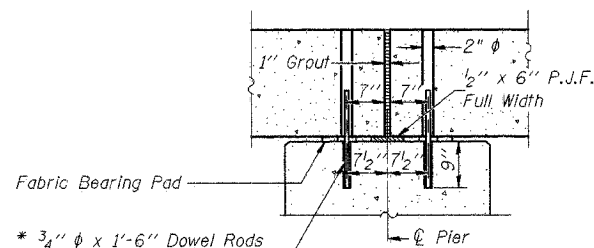
1" Joint shall be packed with a very dry mix of 2:1 sand and P.C. mortar. 1" Dimension may vary plus or minus to accommodate tolerance in beam lengths.

\* 3/4" φ x 1'-6" Dowel Rods in 1 1/4" φ holes drilled in cap (2 each beam)

\* Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hrs.) prior to grouting the shear keys.



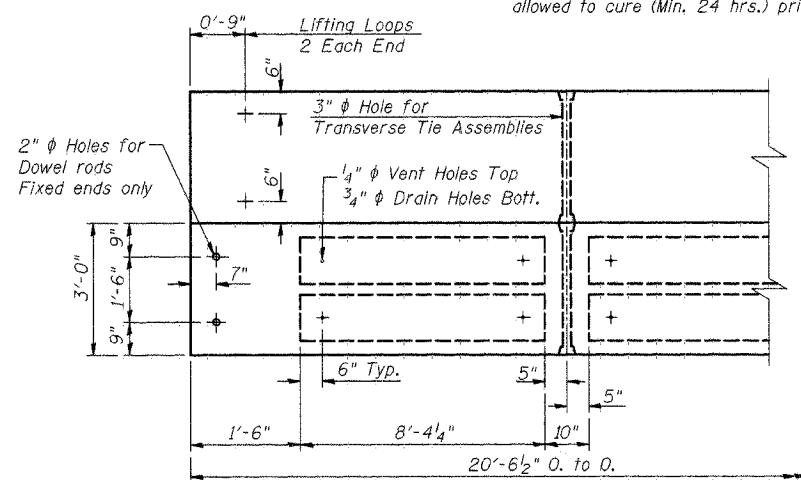
TYPICAL TRANSVERSE TIE ASSEMBLY



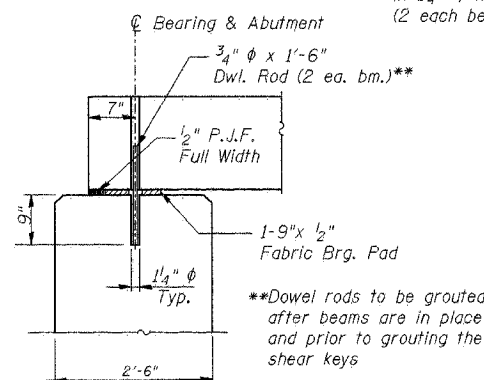
SEC. THRU PIER

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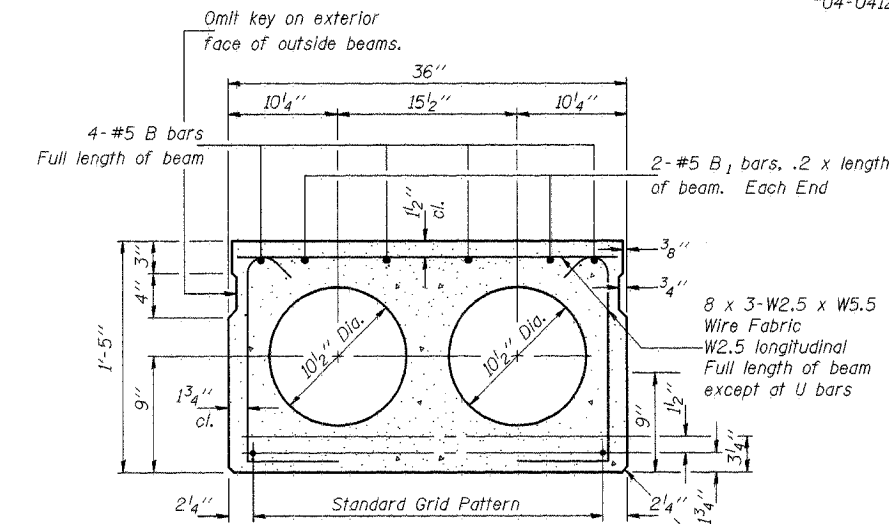


PLAN



SECTION AT ABUTMENTS

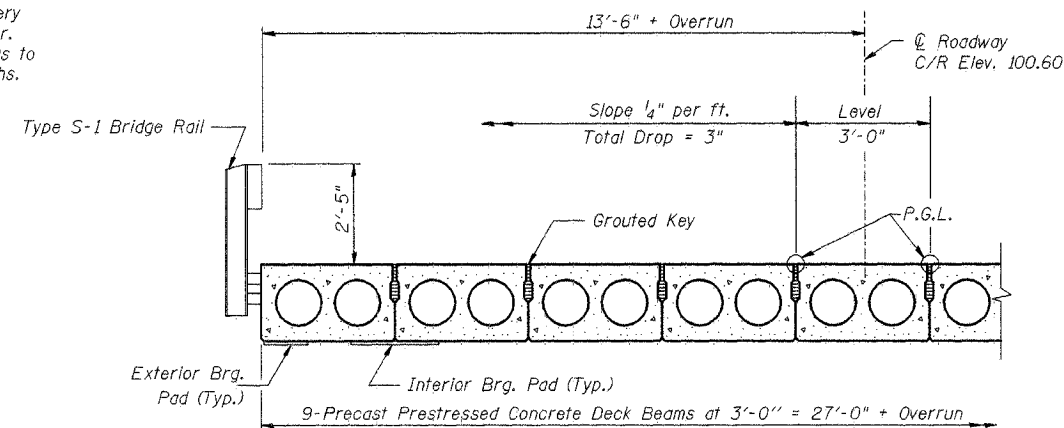
\*\*Dowel rods to be grouted after beams are in place and prior to grouting the shear keys



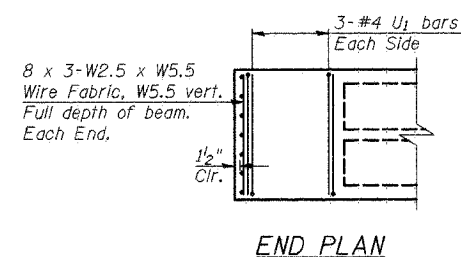
TYPICAL SECTION

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

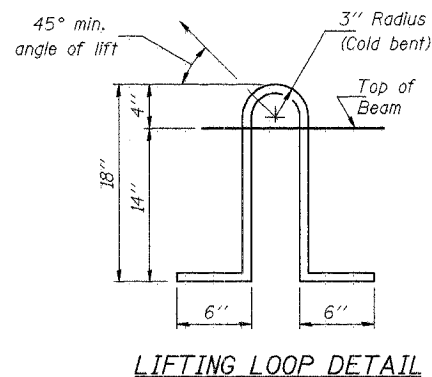
Note: Place strands symmetrically about center of beam.



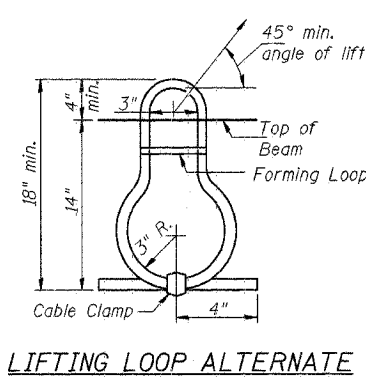
HALF CROSS SECTION



END PLAN



LIFTING LOOP DETAIL



LIFTING LOOP ALTERNATE

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 3/4" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 46,000 lbs. or 3-1/2" φ 270 ksi strands, as shown.

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.

Reinforcement bars shall conform to the requirements of 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. 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.

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

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

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

BILL OF MATERIAL (One Beam)

Bar	No.	Size	Length	Shape	
B	4	5	20'-1"	—	
B1	4	5	4'-2"	—	
U	12	4	5'-8"	□	
Precast Prestressed Conc. Deck Bms.				Sq. Ft.	1109*

\*Total Quantity of Beams

DSGN	R.T. Mumm				
DR	R.T. Mumm				
CHK	K.E. Brandau				
APVD	K.E. Brandau	NO.	DATE	REVISION	BY

FRAUENHÖFFER

Frauenhoffer and Associates, P.C. Consulting Engineers  
3002 Crossing Court Champaign, Il. 61822 217-351-6268

SUPERSTRUCTURE-SPANS 1 & 3

GOOSE CREEK ROAD DISTRICT  
SECTION 04-04124-00-BR  
PIATT COUNTY

SHEET	7
DWG NO.	4067-sup1.dgn
DATE	DEC 2004
PROJ NO.	4067