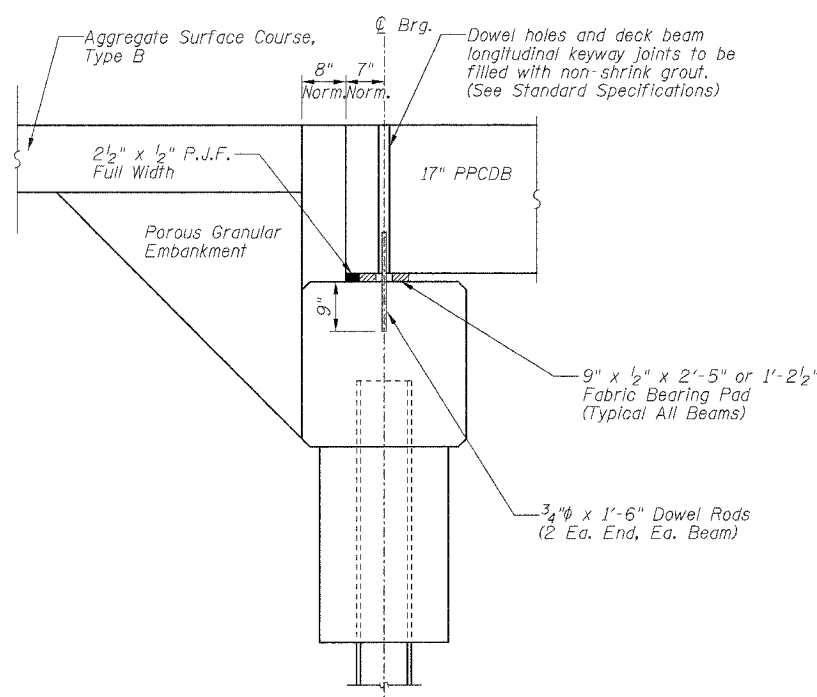
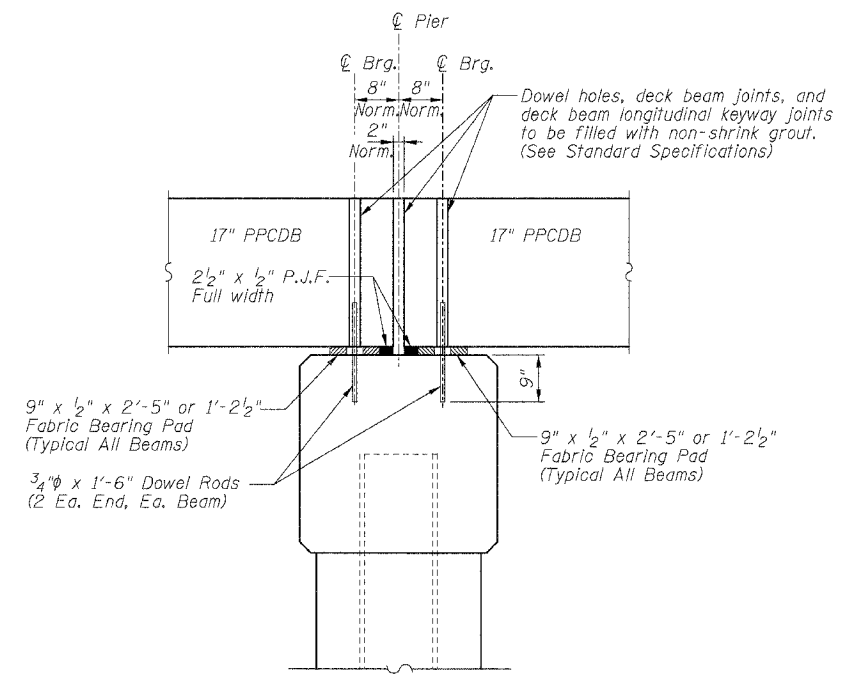


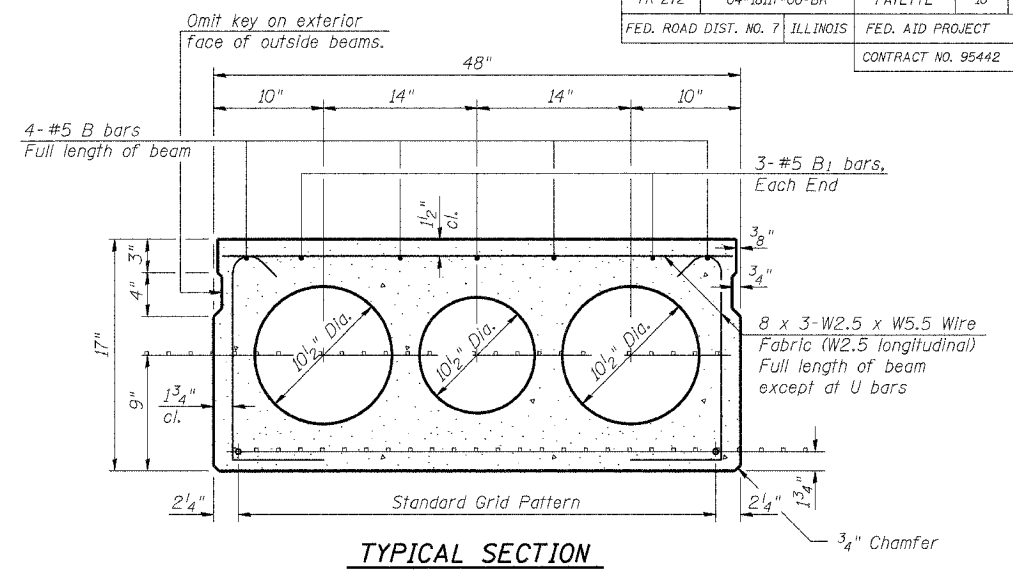
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 272	04-18117-00-BR	FAYETTE	10	7
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 95442				



RESTRAINED BEARING ABUTMENT



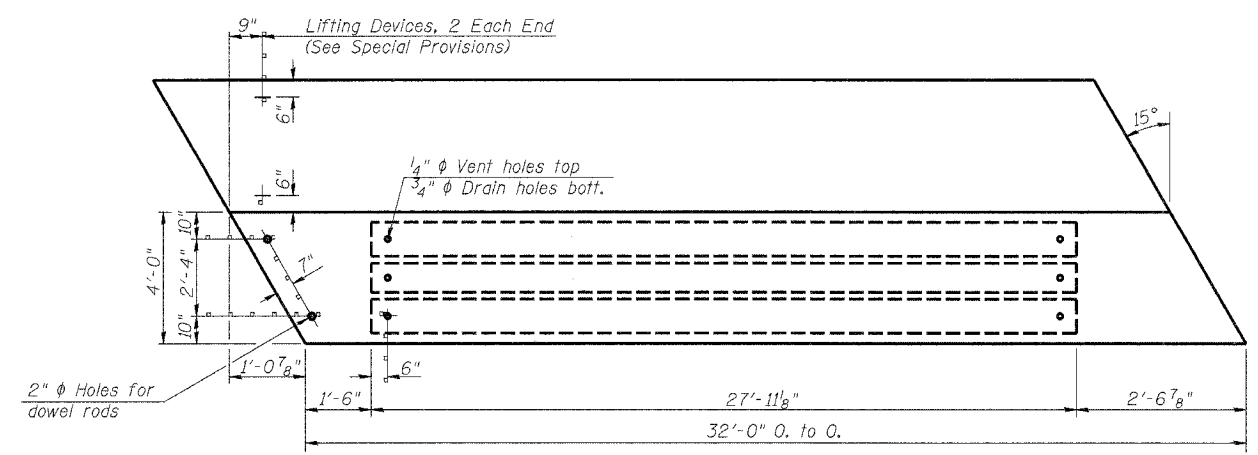
RESTRAINED BEARING PIER



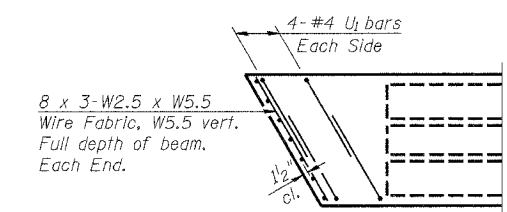
TYPICAL SECTION

9 - 1/2" ϕ Strands, Each Strand Stressed to 28,900 Lbs.
9 - Strands 1 3/4" up

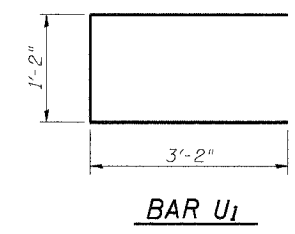
Note:
Place strands symmetrically about \bar{C} of beam.



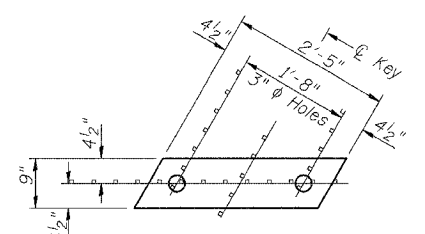
PLAN



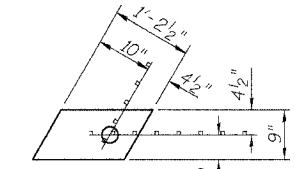
END PLAN



BAR U1



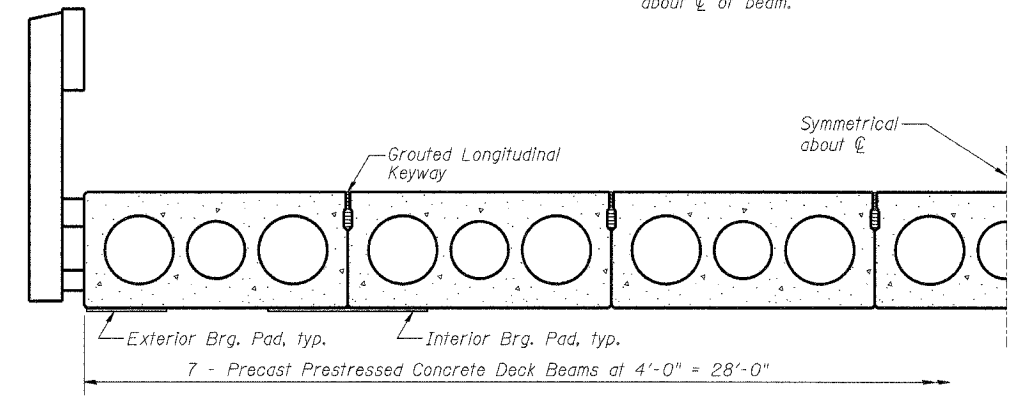
FABRIC BEARING PAD (Interior)



FABRIC BEARING PAD (Exterior)

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.
- See Special Provisions for lifting devices.
- Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
- The bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, 1/2" 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.



HALF CROSS SECTION

BILL OF MATERIAL FOR ONE BEAM

Bar	No.	Size	Length	Shape
B	4	#5	31'-8"	—
B1	6	#5	6'-6"	—
U1	16	#4	7'-6"	U
Precast Prestressed Conc. Deck Bms.			Sq. Ft.	128
* Reinforcement Bars			Pound	255
Total Weight			Pound	19,660

* Does not include WWF weight

PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS
PROPOSED BRIDGE CARRYING TR 272 OVER SANDY RUN SECTION 04-18117-00-BR FAYETTE COUNTY, ILLINOIS

10/07/2005