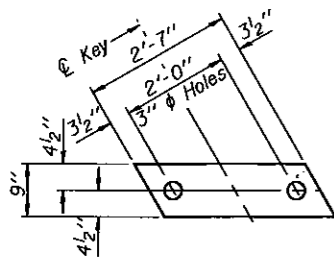


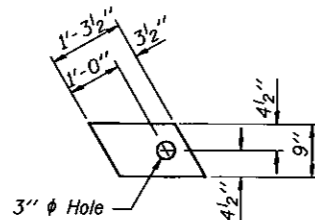
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 3
OF 5

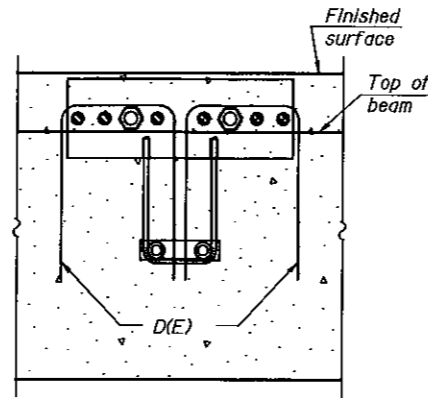
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
516	241BR	CHAMPAIGN	82	17
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			CONTRACT NO. 70359	



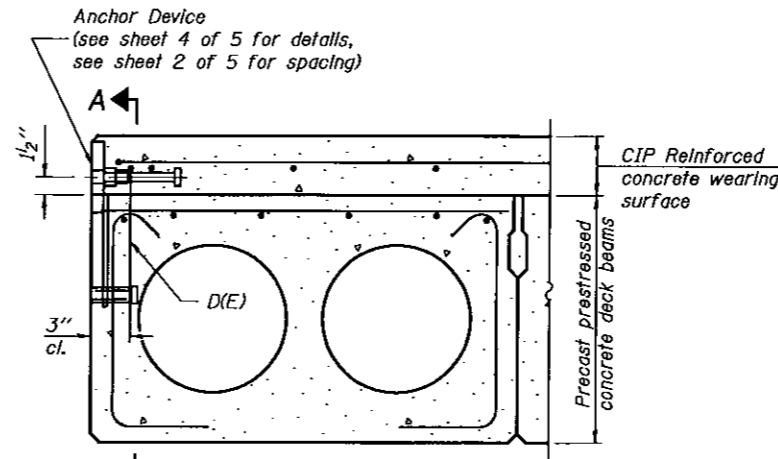
FABRIC BEARING PAD
(Interior)



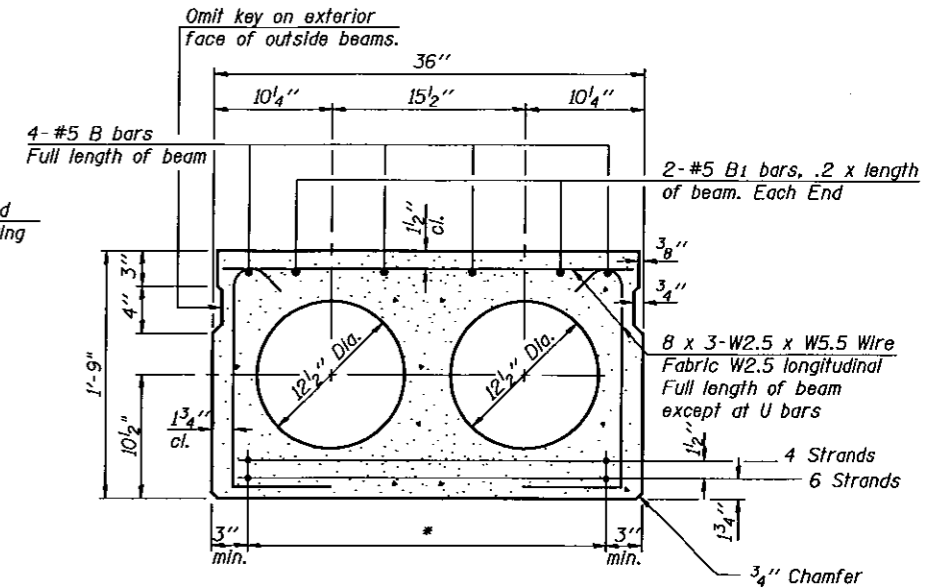
FABRIC BEARING PAD
(Exterior)



SECTION A-A



CROSS SECTION AT EXTERIOR BEAM



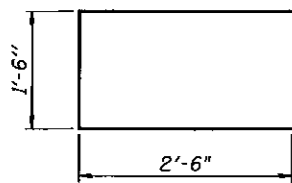
TYPICAL SECTION
10-1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
6-Strands 1 3/4" up, 4-Strands 3 1/4" up

Notes:
The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.

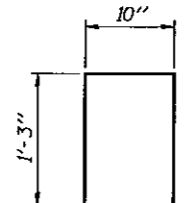
* TRANSVERSE STRAND PLACEMENT GUIDELINES

1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1/2".

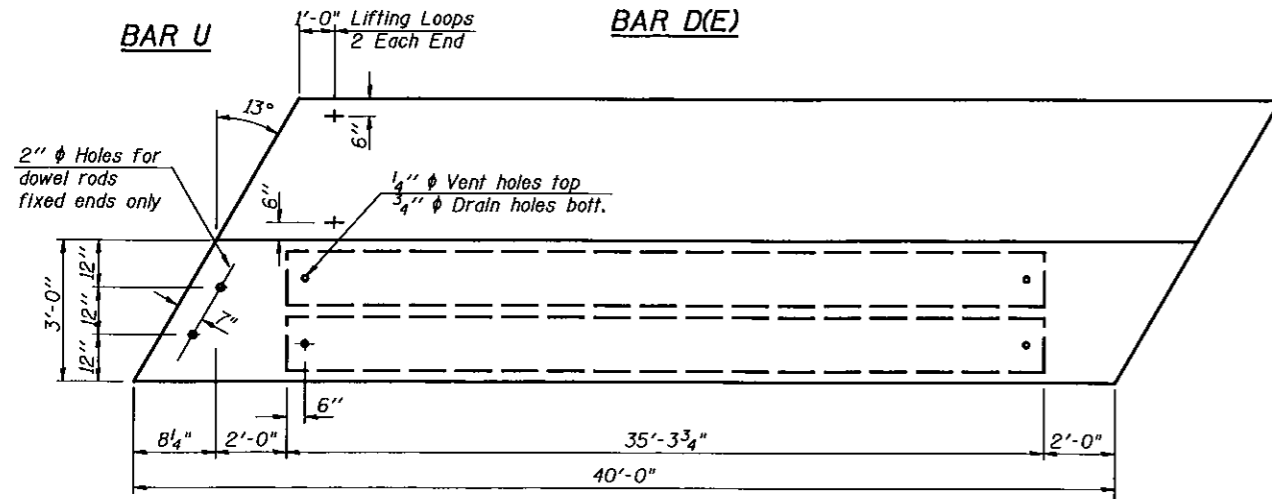
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



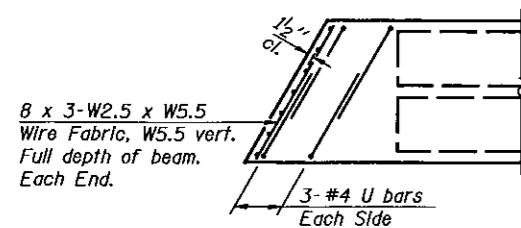
BAR U



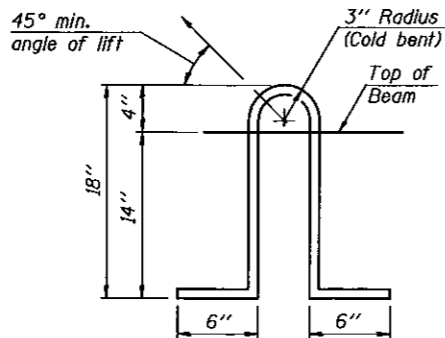
BAR D(E)



PLAN



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 2 - 1/2" ϕ -270 ksi strands, as shown. 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'cl, shall be 4,000 p.s.i. The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

Johnson, Depp & Quisenberry CONSULTING ENGINEERS Springfield, Illinois			
DESIGNED:	CDB	DRAWN:	SJS
CHECKED:	DCD	CHECKED:	CDB/DCD

PD-3-LA

10-22-04

BEAM DETAILS
FAS 516 (CH 12) OVER
UPPER SALT FORK DITCH
FAS ROUTE 516 SECTION 241BR
CHAMPAIGN COUNTY
STATION 3+56.00
STRUCTURE NO. 010-0221