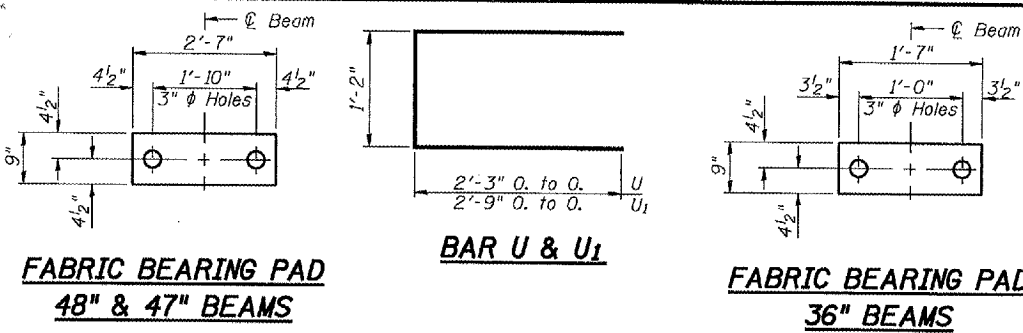


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

****Existing dowel rods are to be burned off, ground flush, and sealed with epoxy prior to placement of new beams. Cost included in Removal of Existing PPC Deck Beams. After beams have been erected holes shall be drilled into cap and dowel rods placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys.

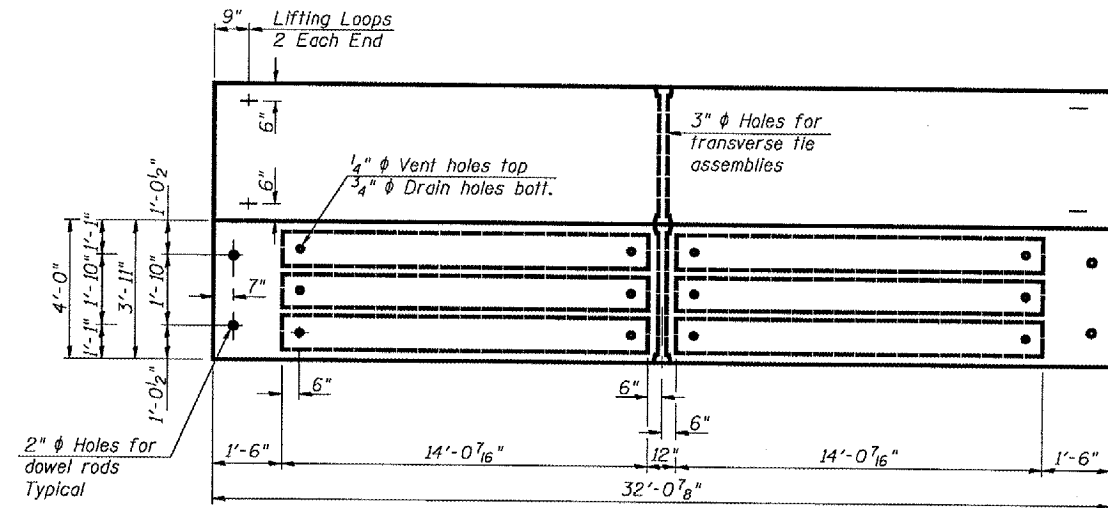
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 3 SHEETS
		Hardin	11	6	
FED. ROAD DIST. NO. 7					
ILLINOIS					
FED. ROAD PROJECT					
Contract Number: 18011					



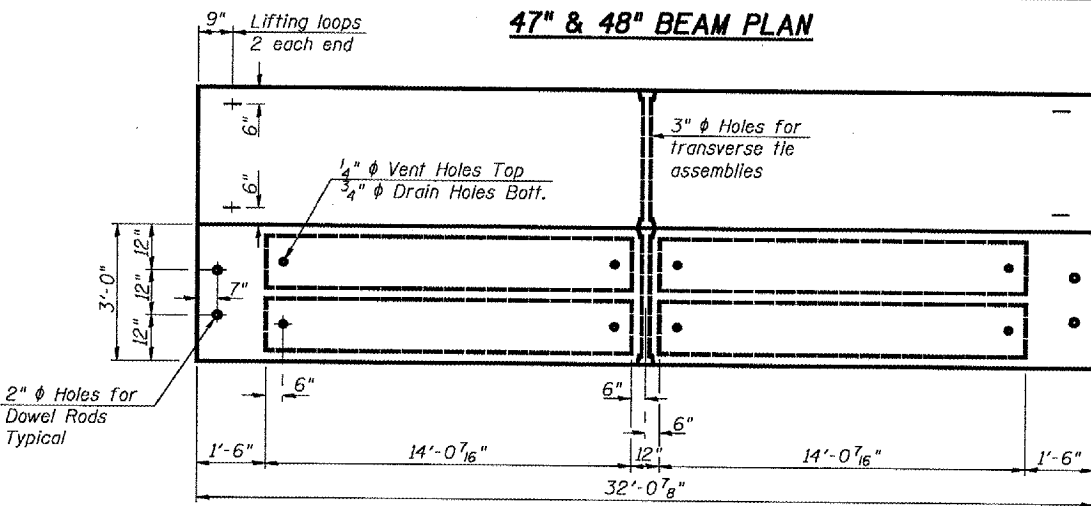
FABRIC BEARING PAD
48" & 47" BEAMS

BAR U & U₁

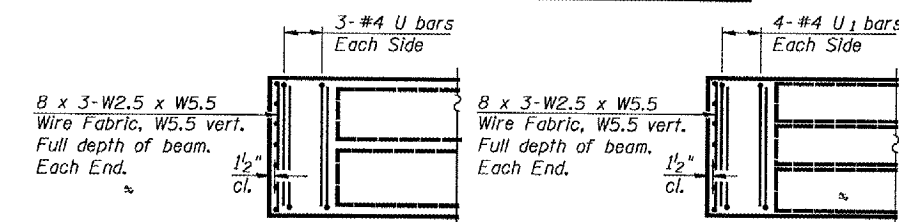
FABRIC BEARING PAD
36" BEAMS



47" & 48" BEAM PLAN



36" BEAM PLAN



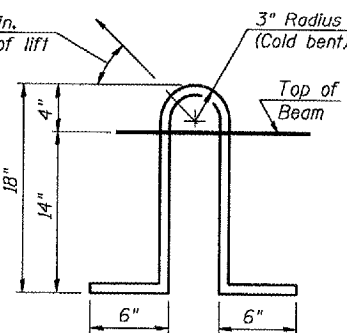
END PLAN 36" BEAMS

END PLAN 47" & 48" BEAMS

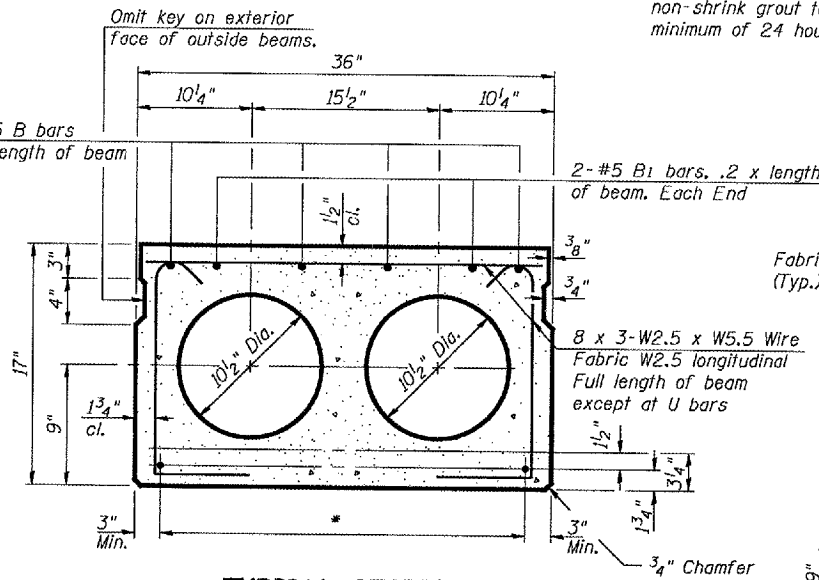
DESIGNED	A.T.H.
CHECKED	V.H.V.
DRAWN	Drew Christopher
CHECKED	A.T.H. V.H.V.

June 15, 2007
EXAMINED *Carl Perry*
PASSED *Ralph E. Anderson*
REPAIR PLANS UNIT CHIEF
ENGINEER OF BRIDGES AND STRUCTURES

PD-3-S 11-1-06

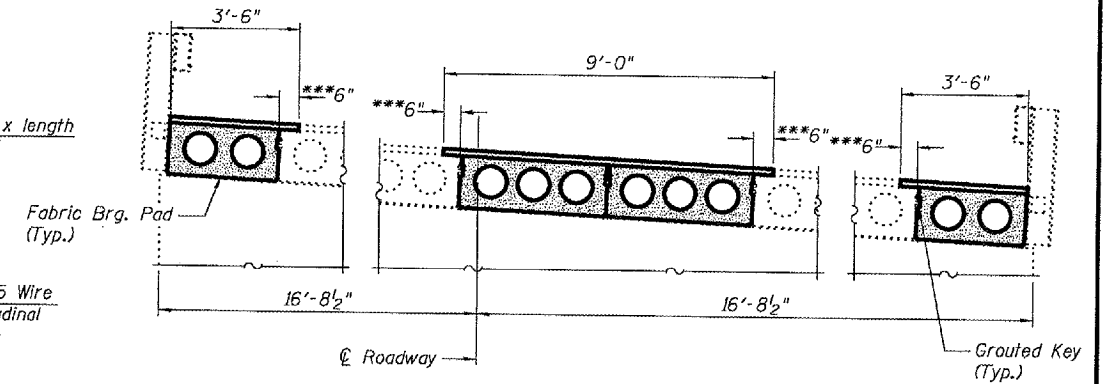


LIFTING LOOP DETAIL



TYPICAL SECTION

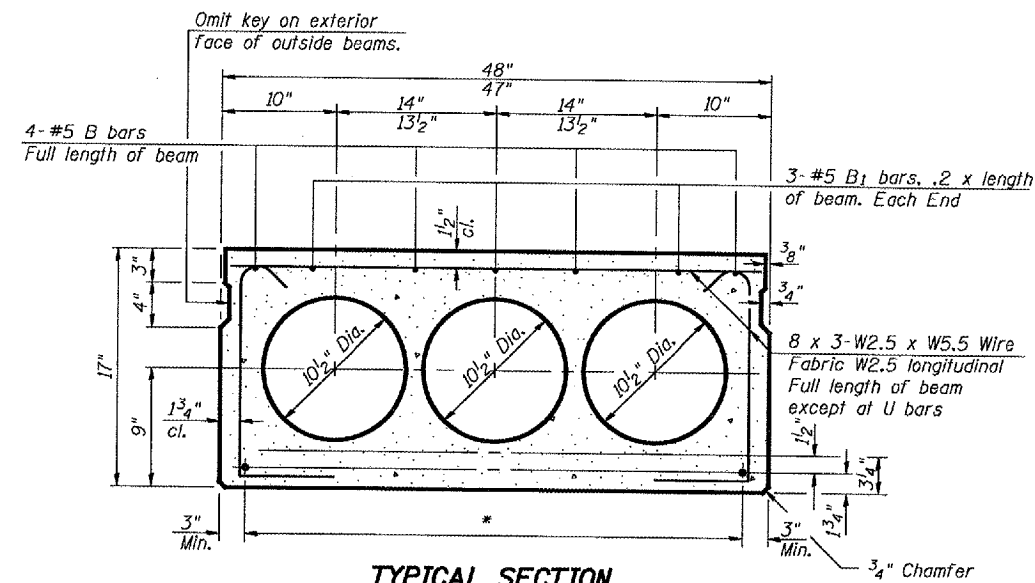
1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
5-Strands 1 3/4" up, 4-Strands 3/4" up



DECK CROSS-SECTION
(Looking East)

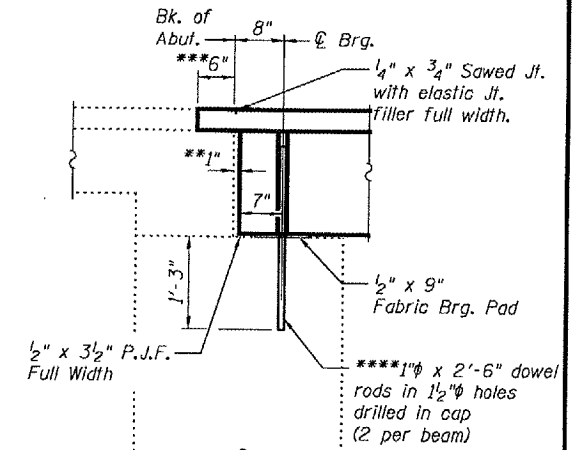
**1" Joint shall be filled with non-shrink grout. Dimension may vary to accommodate tolerance in beam lengths.
***Limits of HMA removal and replacement Existing water-proofing to remain. Lap new W.P.M.S. with exist. W.P.M.S.

ADJUSTING SHIMS



TYPICAL SECTION

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



TYPICAL SECTION
AT ABUTMENTS

* TRANSVERSE 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.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	449
PPC Deck Beams (17" Depth)	Sq. Ft.	446
Waterproofing Membrane System	Sq. Yd.	59
PC Mortar Fairing Course	Foot	160

BEAM DETAILS
F.A. RT. 885 IL RT 34
HARDIN COUNTY
SN 035-0009

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 1" ϕ 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 ASTM A 706 (IL MOD), 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 shown 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, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4,000 p.s.i.