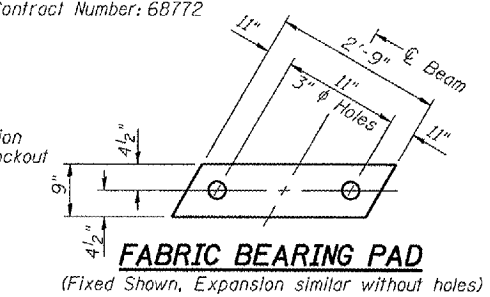
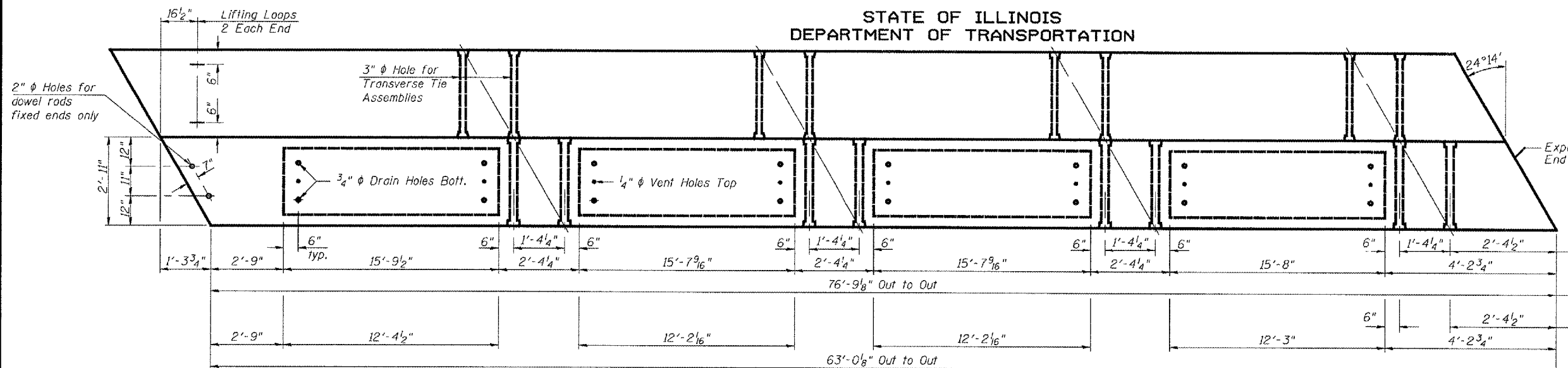


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

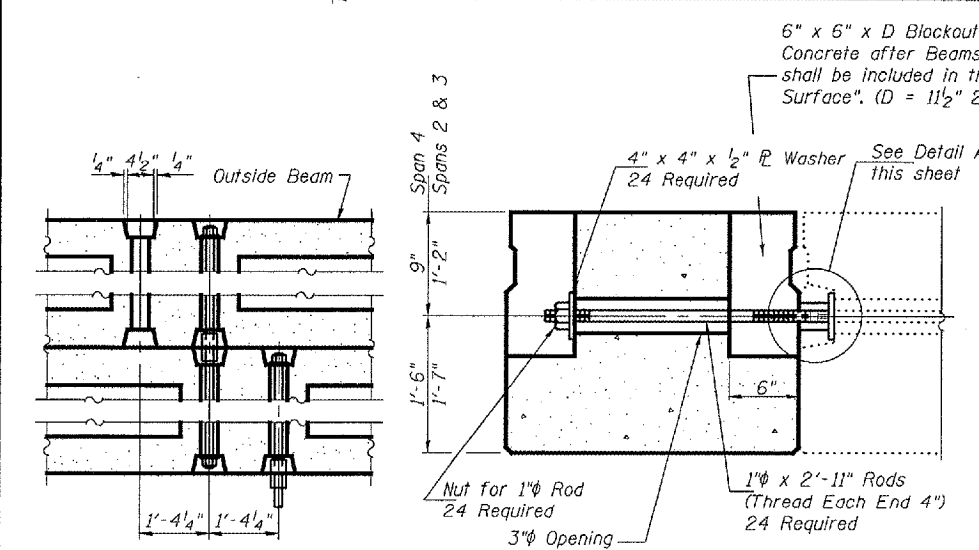
ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
639		Mercer	15	14
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

Contract Number: 68772

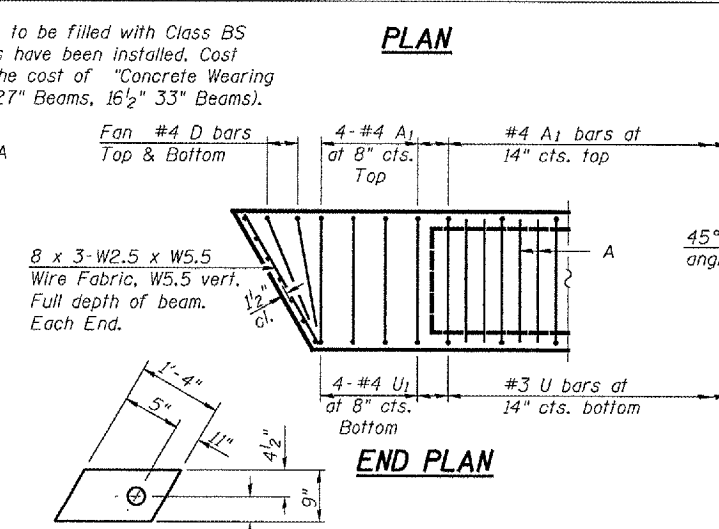
SHEET NO. 2
3 SHEETS



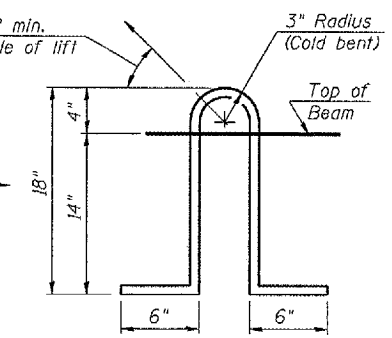
FABRIC BEARING PAD
(Fixed Shown, Expansion similar without holes)



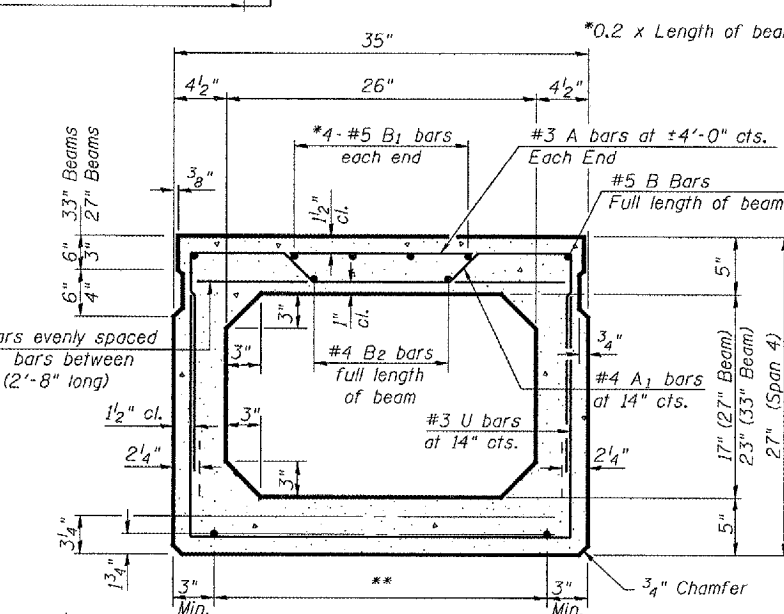
TYPICAL TRANSVERSE TIE ASSEMBLY



END PLAN

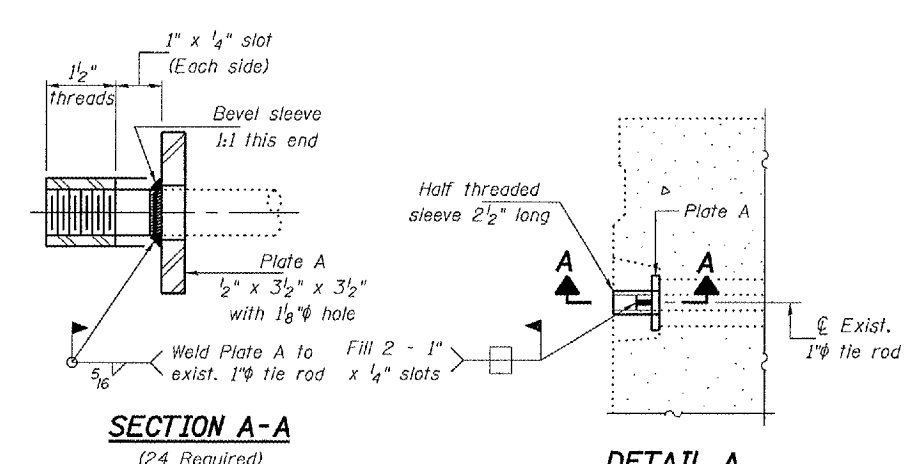


LIFTING LOOP DETAIL



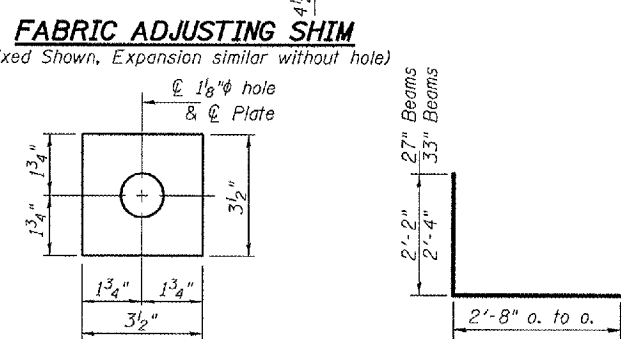
TYPICAL SECTION

1/2" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
Spans 2 & 3 - 8-Strands 1 3/4" up, 5-Strands 3/4" up,
2-Strands 6" up, 2-Strands 9" up
Span 4 - 6-Strands 1 3/4" up, 6-Strands 3/4" up,
2-Strands 4 1/2" up



SECTION A-A
(24 Required)

DETAIL A



FABRIC ADJUSTING SHIM
(Fixed Shown, Expansion similar without hole)

PLATE A
(24 Required)

BAR D

BARS U & U1

BAR A1

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 3 - 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.

BILL OF MATERIAL

PPC Deck Beams (27" Depth)	Sq. Ft.	184
PPC Deck Beams (33" Depth)	Sq. Ft.	448

**** 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.

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

February 26, 2008
EXAMINED *Carl Purvis*
PASSED *Ralph E. Anderson*

BEAM DETAILS
F.A.P. RT. 639
MERCER COUNTY
SN 066-0006