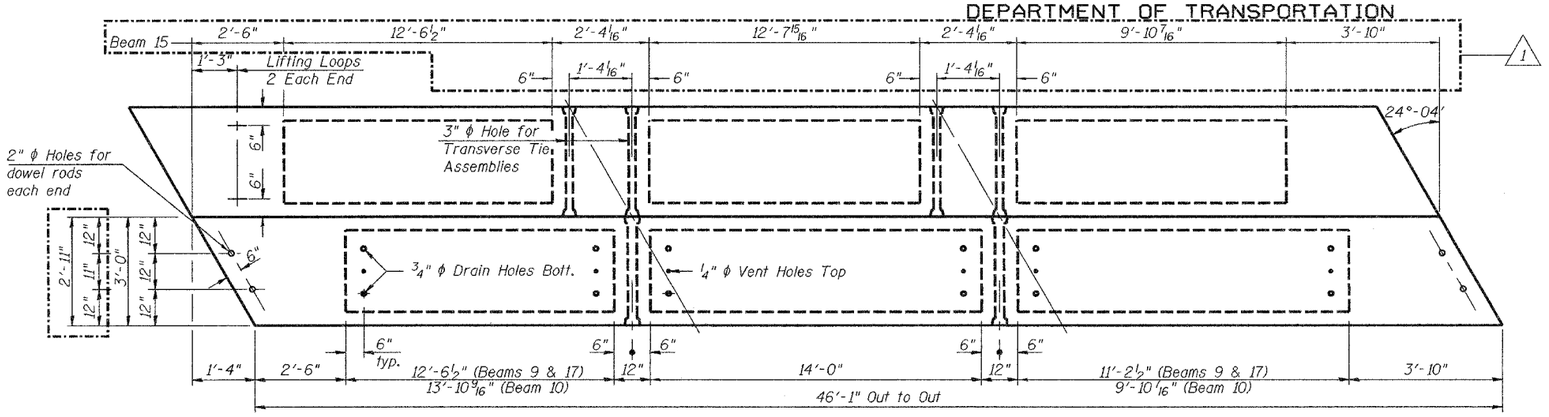
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		Cook	11	7
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

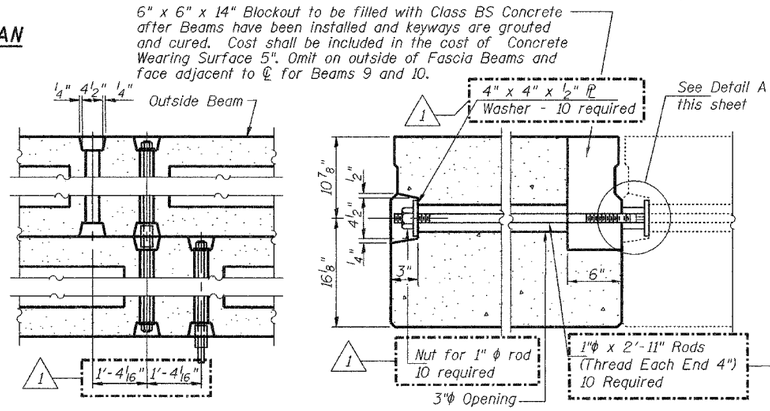
SHEET NO. 2
3 SHEETS

Contract Number: 60D24

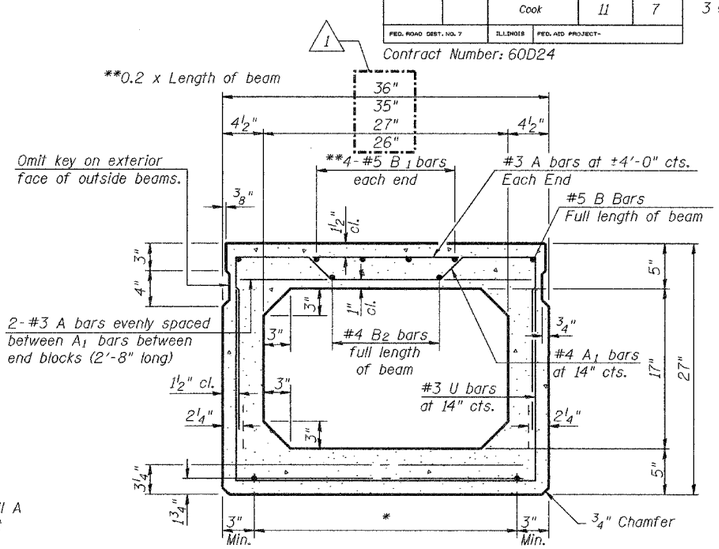
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



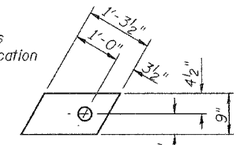
TYPICAL TRANSVERSE TIE ASSEMBLY



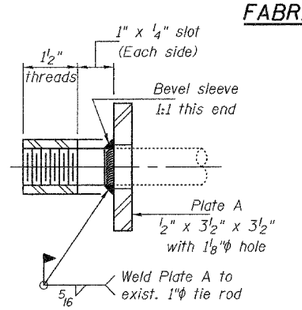
TYPICAL SECTION

½" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
7-Strands 1¾" up, 4-Strands 3¼" up, 2-Strands 4½" up

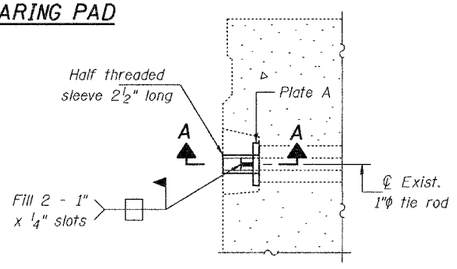
Contractor MUST field verify locations of transverse tie rods prior to fabrication of the PPC Deck Beams.



FABRIC BEARING PAD



SECTION A-A
(10 Required)



DETAIL A

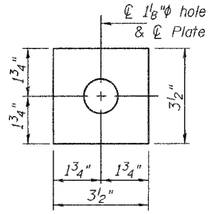
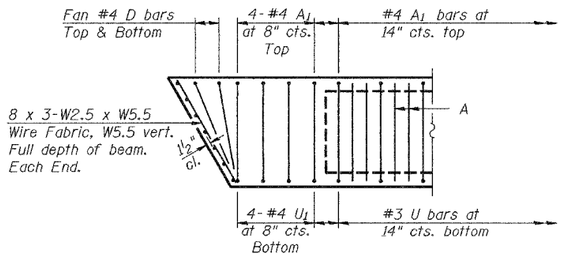
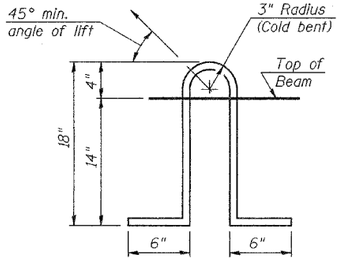


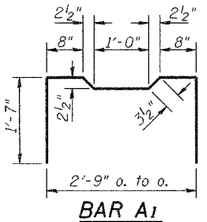
PLATE A
(10 Required)



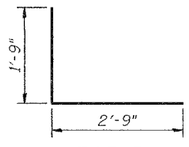
END PLAN



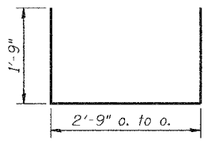
LIFTING LOOP DETAIL



BAR A1



BAR D



BARS U & U1

* 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 ½".
4. The minimum clearance from strand to void shall be 1½".

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

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - ½" 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 9" x 9" x ⅛" fabric adjusting shims 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

Precast Prestressed Conc. Deck Bms. (27" Depth)	Sq. Ft.	549.2

DESIGNED	S.J.B.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	S.J.B. A.T.H.

September 17, 2007
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

PD-5-R 11-1-06

BEAM DETAILS
F.A.U. RT. 3597
COOK COUNTY
SN 016-0771

SLT-91-001-07

1 Revised S.J.B. M.A.C. 10/16/07

...\archives\0160771.dgn 10/17/2007 11:25:08 AM