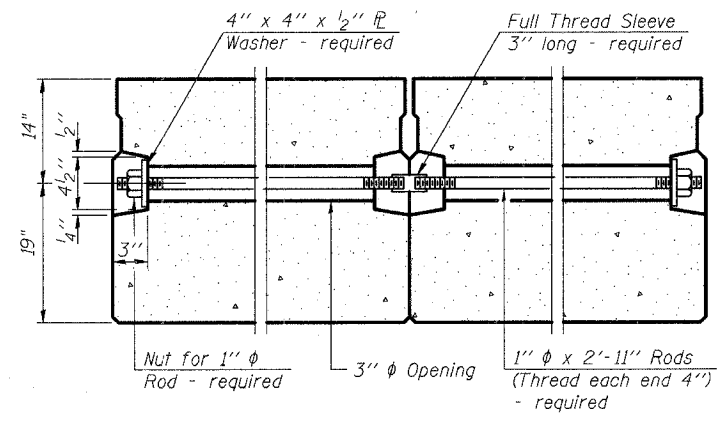
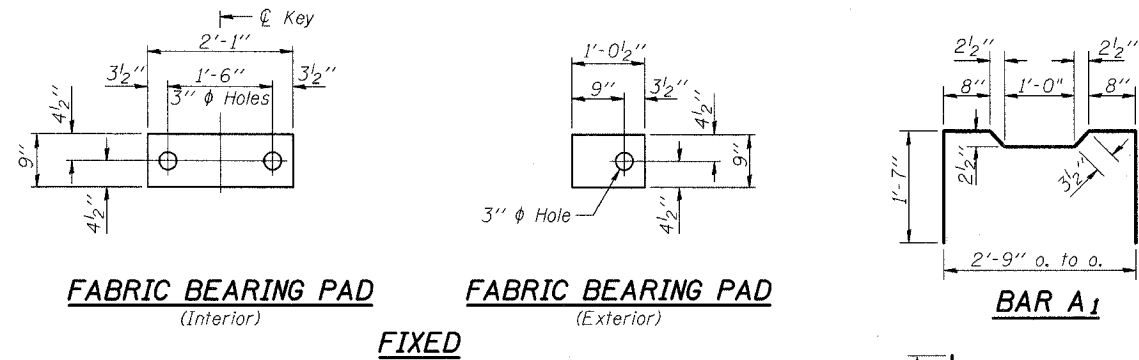


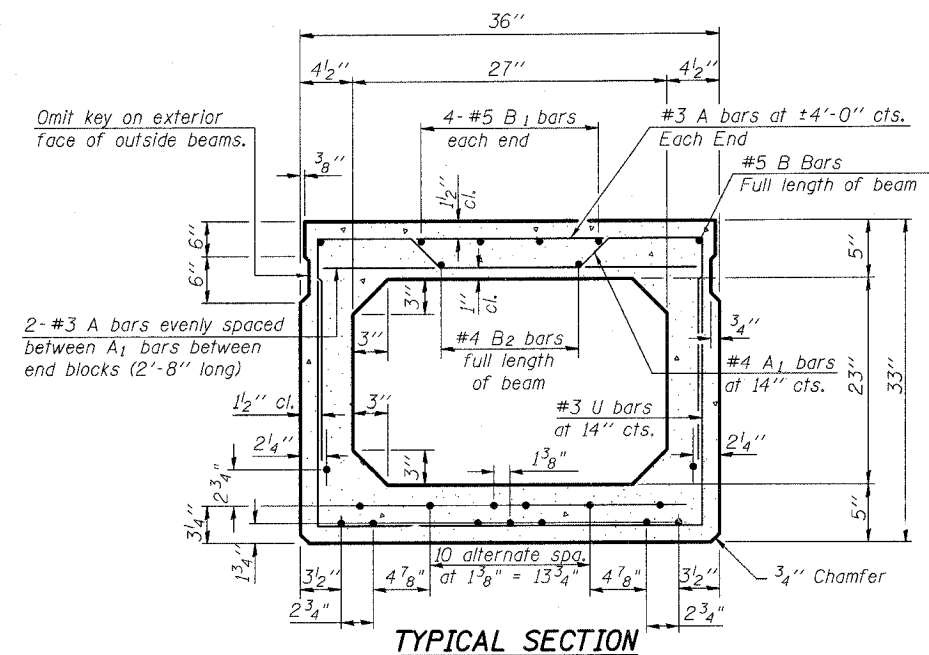
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET	SHEET NO. 2 6 SHEETS
0083	02-00270-00-BR	McHENRY	37	24	
FEDERAL ROAD DISTRICT NUMBER 7		ILLINOIS	FEDERAL AID PROJECT		

CONTRACT NO.: 83872

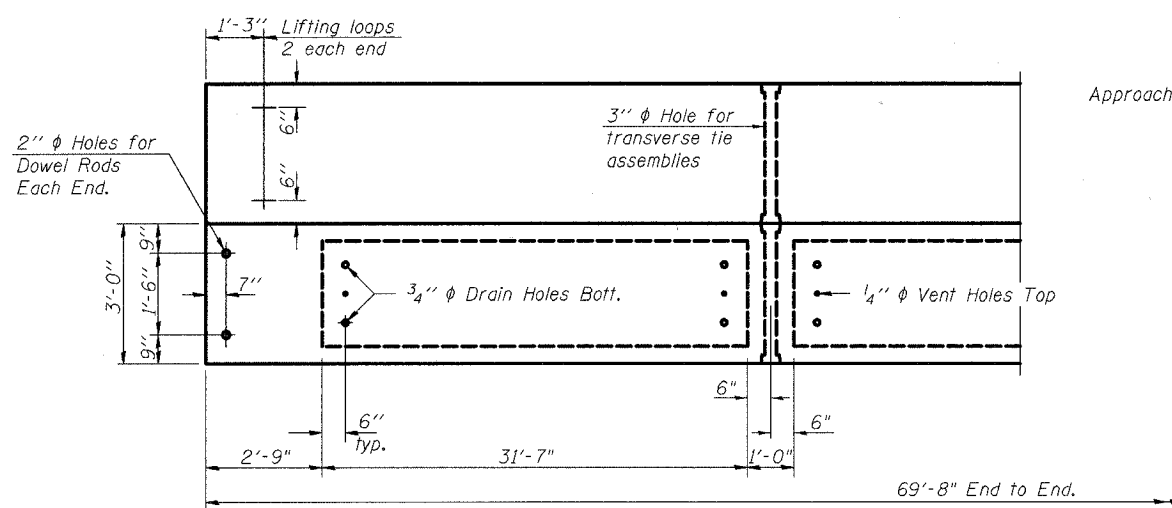


TYPICAL TRANSVERSE TIE ASSEMBLY

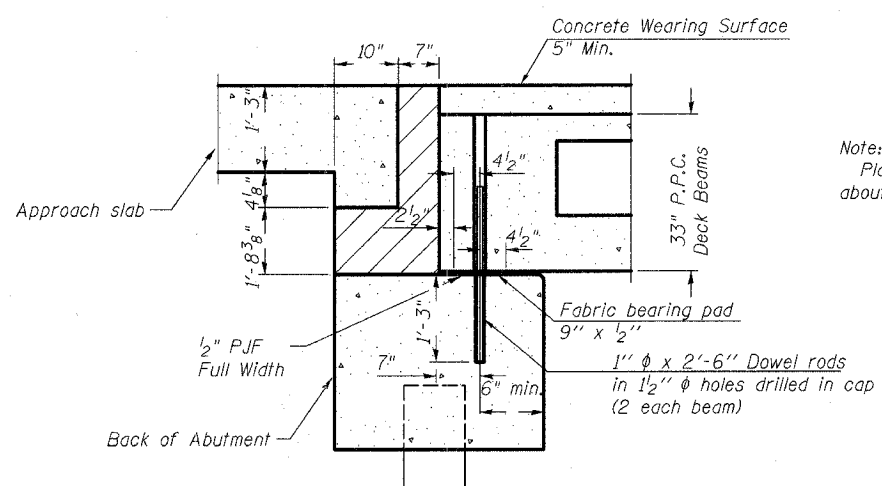


TYPICAL SECTION

1/2 inch diameter Strands, Each Strand Stressed to 30,900 Lbs.
7 - Strands 1 3/4 inch up, 6 - Strands 3/4 inch up, 2 - Strands 6 inch up



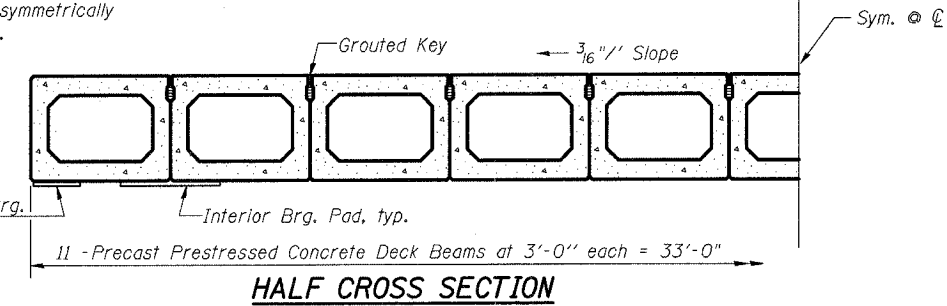
PLAN



SECTION THRU ABUTMENT

Notes:
After beams are in place, 1/2 inch holes shall be drilled into the cap, and the dowel rods grouted in place and allowed to cure min. 24 hrs. prior to grouting the shear keys.
Thatched area to be poured after beams are in place.

Note:
Place strands symmetrically about centerline of beam.



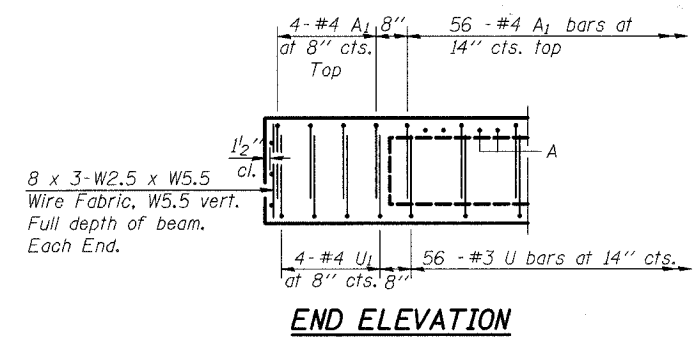
HALF CROSS SECTION

BILL OF MATERIAL

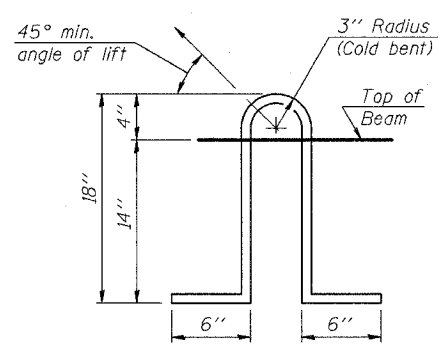
Bar	No.	Size	Length	Shape	
A	120	3	2'-8"	U	
A1	64	4	6'-1"	U	
B	2	5	69'-4"	—	
B1	8	5	13'-9"	—	
B2	2	5	69'-4"	—	
U	56	3	7'-3"	U	
U1	8	4	7'-3"	U	
Precast Prestressed Concrete Deck Beams				Sq. Ft.	2300

Estimated Total Weight (One Beam) = 42845 lbs.

Note:
Reinforcement Bars included in Precast, Prestressed Concrete Deck Beams.



END ELEVATION



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 inch and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 3 - 1/2 inch diameter 270 ksi strands, as shown.
The 1 inch 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 AASHTO M-31, M-42 or M-53 Grade 60.
The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8 inch 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'ci, shall be 4000 p.s.i.

DESIGNED	EAK
CHECKED	AJS
DRAWN	RAP
CHECKED	JAR



ILLINOIS DEPARTMENT OF TRANSPORTATION
SUPERSTRUCTURE PLAN AND DETAILS
T.R. 0083 (STREIT ROAD) OVER
NORTH BRANCH OF THE KISHWAUKEE RIVER
T.R. 0083 SECTION 02-00270-00-BR
McHENRY COUNTY
S.N. 056-3171

SCALE: DATE: 8/8/2006