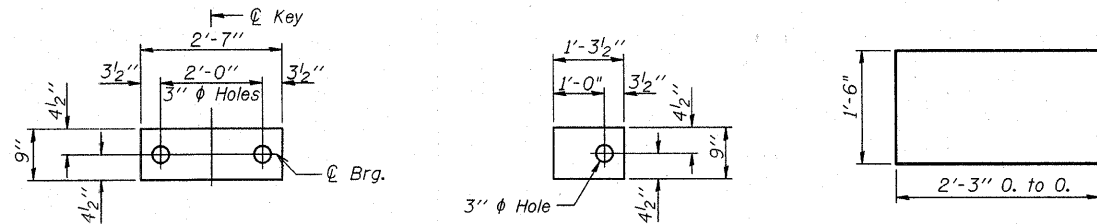


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. FAP 330	SECTION 105B-1R	COUNTY WILL	TOTAL SHEETS 33	SHEET NO. 13	SHEET NO. 4 9 SHEETS
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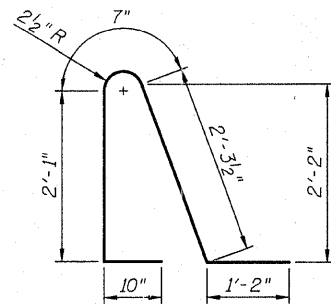
Contract # 60D50



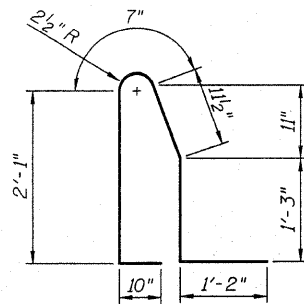
FABRIC BEARING PAD
(Interior)
(26-Required)

FABRIC BEARING PAD
(Exterior)
(4-Required)

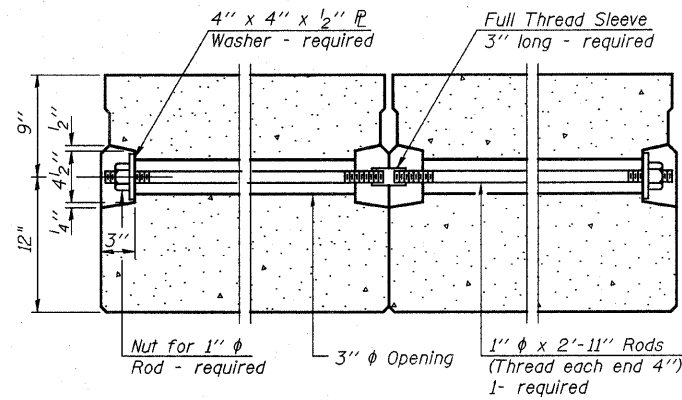
BAR U



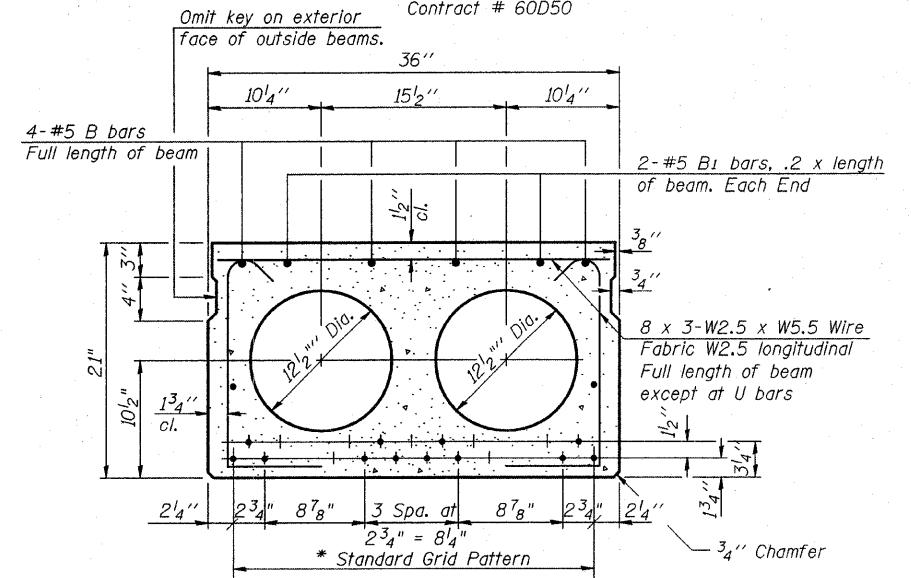
BAR D(E)



BAR D1



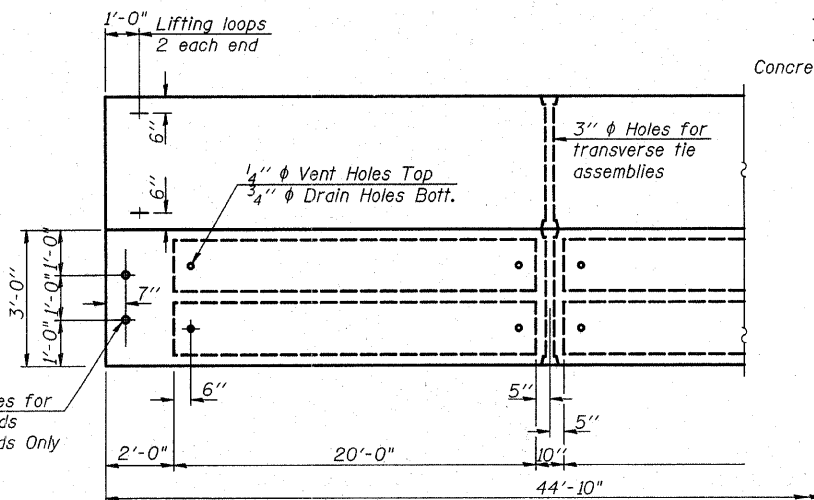
TYPICAL TRANSVERSE TIE ASSEMBLY



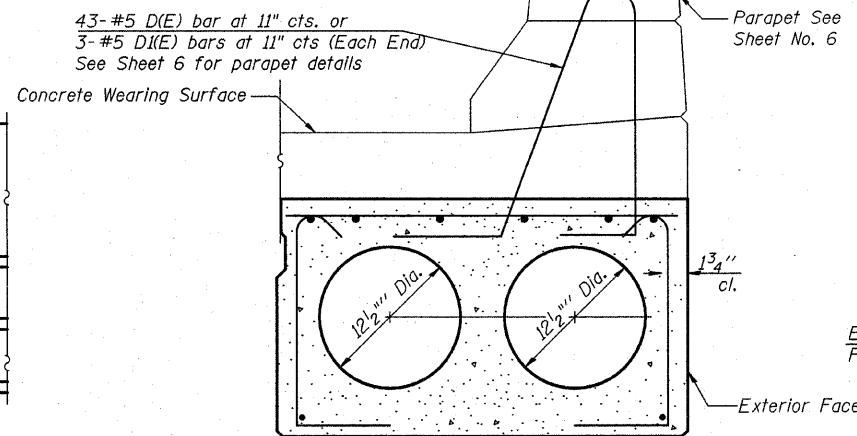
TYPICAL SECTION

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

* Suggested location of strands in the bottom layer to avoid the conflict with dowel rod holes at the ends.
Note:
Place strands symmetrically about ϕ of beam.

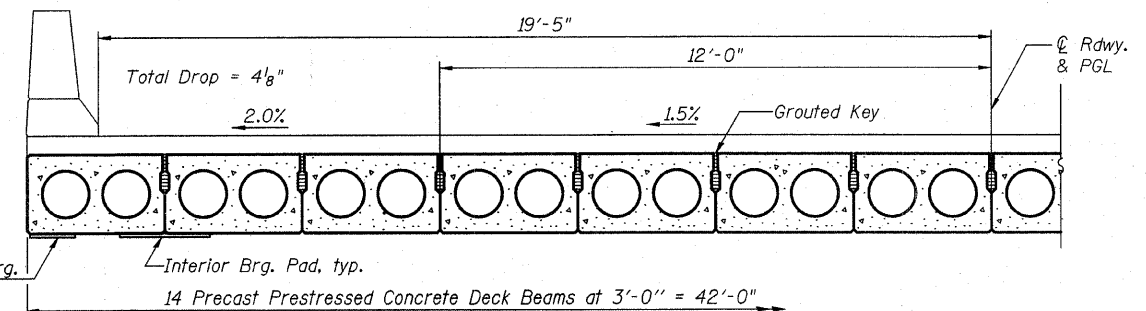


PLAN



SECTION THRU EXTERIOR BEAM

See Typical Section Thru Interior Beam for strand pattern, dimensions and bar call outs.
Parapets shall be poured in the field.



HALF CROSS SECTION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
B	4	#5	44'-7"	—
B1	4	#5	9'-0"	—
D(E)	43	#5	6'-11 1/2"	U
D1(E)	6	#5	6'-10 1/2"	U
U	6	#4	6'-0"	C
Precast Prestressed Conc. Deck Bms. (21")		Sq. Ft.	1,883	

* Exterior beams only

BEAM DETAILS (21"x36")

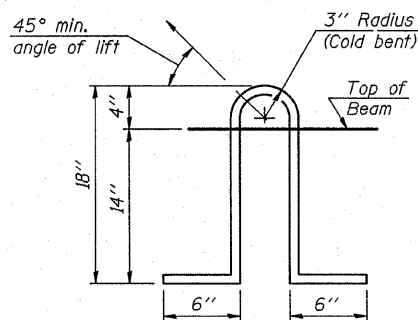
US RTE 45 OVER NORTH
BRANCH OF PRAIRIE CREEK

F.A.P. RT. 330
SECTION 105B-1R

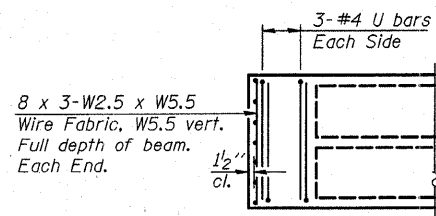
WILL COUNTY
STA. 259+37.00
S.N. 099-0118

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 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, 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.



LIFTING LOOP DETAIL



END PLAN

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter



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