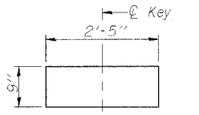
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 68	105 BR-1	LIVINGSTON	45	18
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

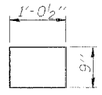
SHEET NO. 7
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Contract #66566

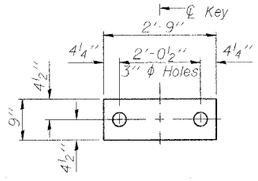


FABRIC BEARING PAD
(Interior - 44 Req'd)

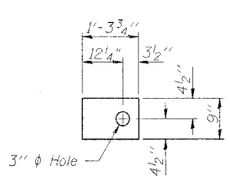


FABRIC BEARING PAD
(Exterior - 8 Req'd)

EXPANSION

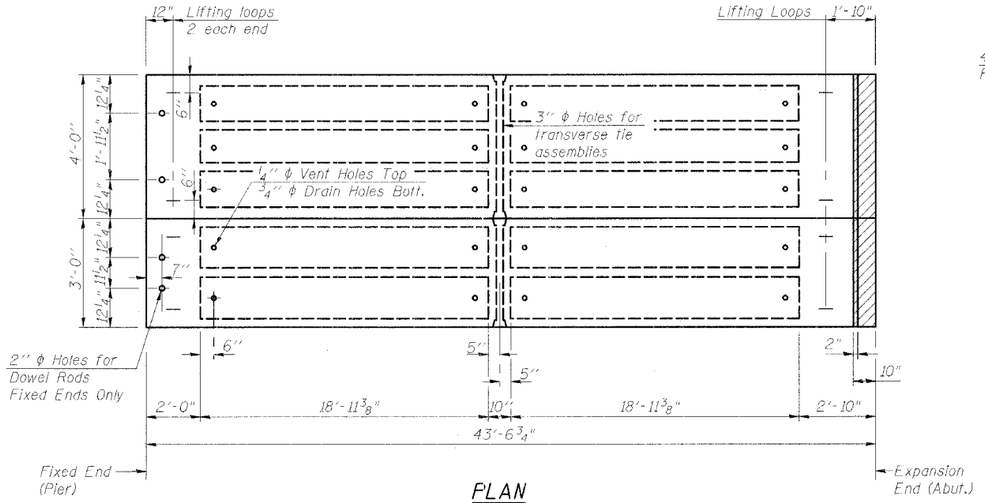


FABRIC BEARING PAD
(Interior - 22 Req'd)

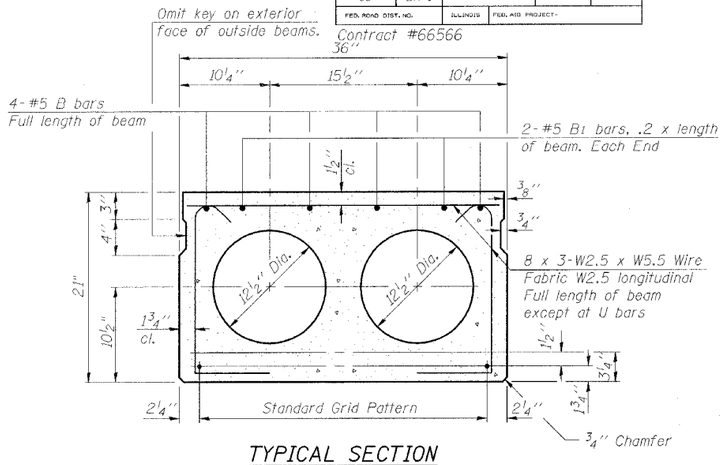


FABRIC BEARING PAD
(Exterior - 4 Req'd)

FIXED



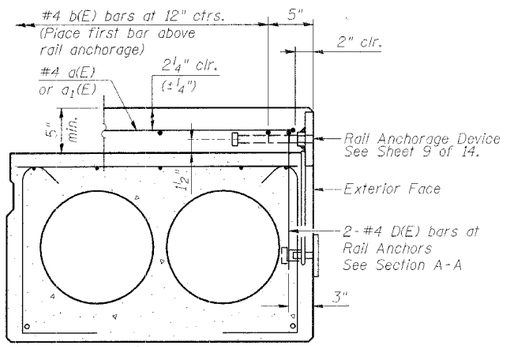
PLAN



TYPICAL SECTION

11 - ½" ϕ Strands, Each Strand Stressed to 30,900 Lbs.
5-Strands 1¾" up, 6-Strands 3¼" up

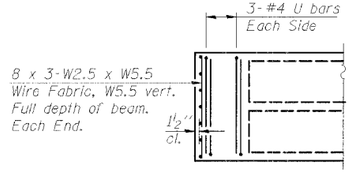
Note:
Place strands symmetrically about ℄ of beam.



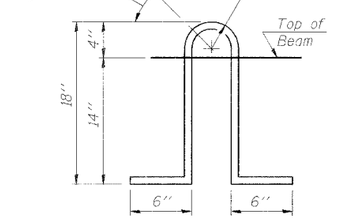
SECTION THRU EXTERIOR BEAMS
AT RAIL ANCHORAGE

See Section Thru Interior Beams for strand pattern, dimensions and bar call outs.

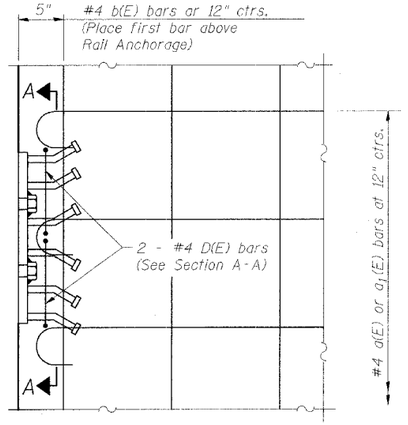
The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.



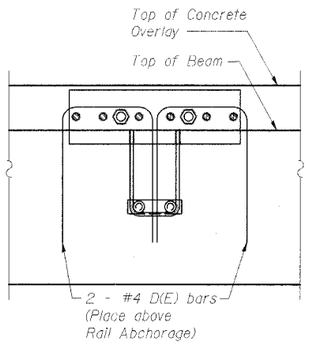
END PLAN (EXTERIOR BEAMS)
(Fixed End)



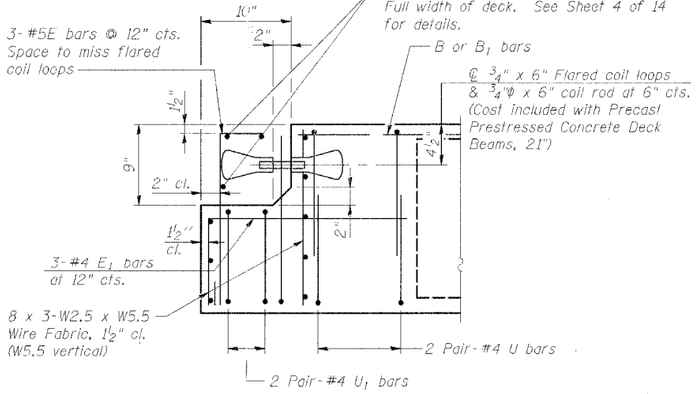
LIFTING LOOP DETAIL



PLAN VIEW



SECTION A-A



END OF EXTERIOR BEAMS
(EXP. END)

(Dimensions are at Rt. L's)

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 AASHTO M-31 or M-322 Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

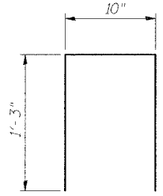
Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.

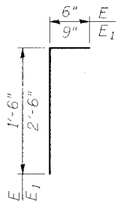
Required Release Strength, f'ci, shall be 4,000 p.s.i.

BILL OF MATERIAL
EXTERIOR BEAMS

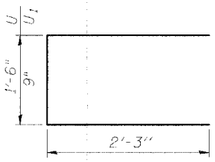
Bar	No.	Size	Length	Shape
Precast Prestressed Conc. Deck Bms. 21"		Sq. Ft.	523	



BAR D



BAR E
& E1



BAR U & U1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

FAP RTE 68 (IL 23) OVER WOLF CREEK
SECTION 105 BR-1
LIVINGSTON COUNTY
STATION 586+62
S.N. 053-0148

SCALE: VERT.
HORIZ.
DATE: 9/6/05

DRAWN BY: LANDREY
DESIGNED BY: SANFORD
CHECKED BY: TRELLO

GREENE & BRADFORD, INC.
OF SPRINGFIELD
CONSULTING ENGINEERS
3501 CONSTITUTION DRIVE
SPRINGFIELD, ILLINOIS 62711
PROFESSIONAL & STRUCTURAL ENGINEERING CORPORATION
(217) 726-9696, (217) 787-1427 FAX E-MAIL - GBSE@WORLDNET.ATT.NET

COMPUTER FILE NO.
SN053-0148_SS2

PROJECT 03236 WO-11
12/16/05-MML

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