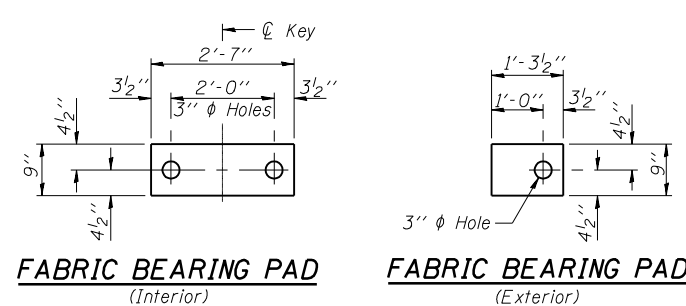
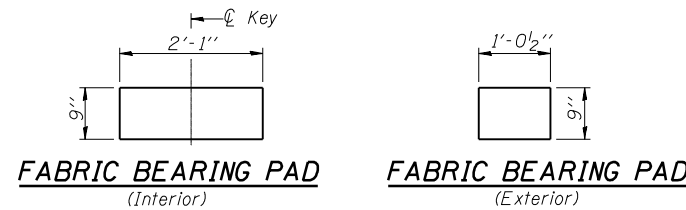


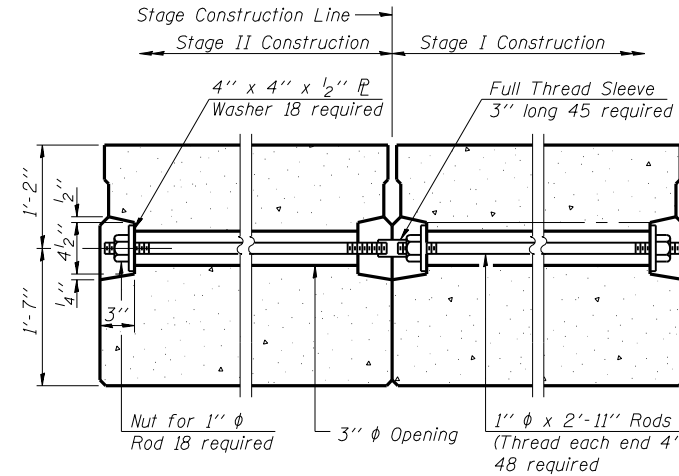
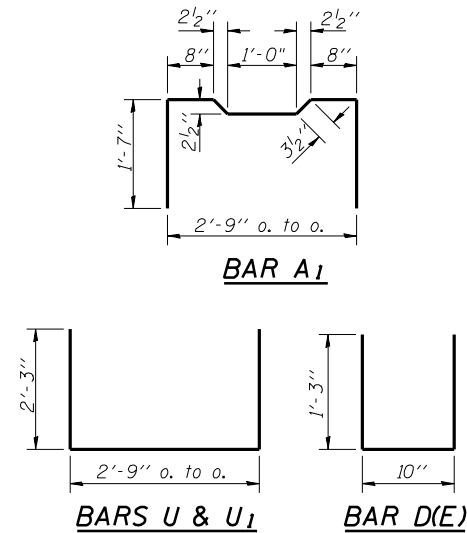
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET
F.A.P. 753	142 BR-4	SANGAMON	24	19
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	



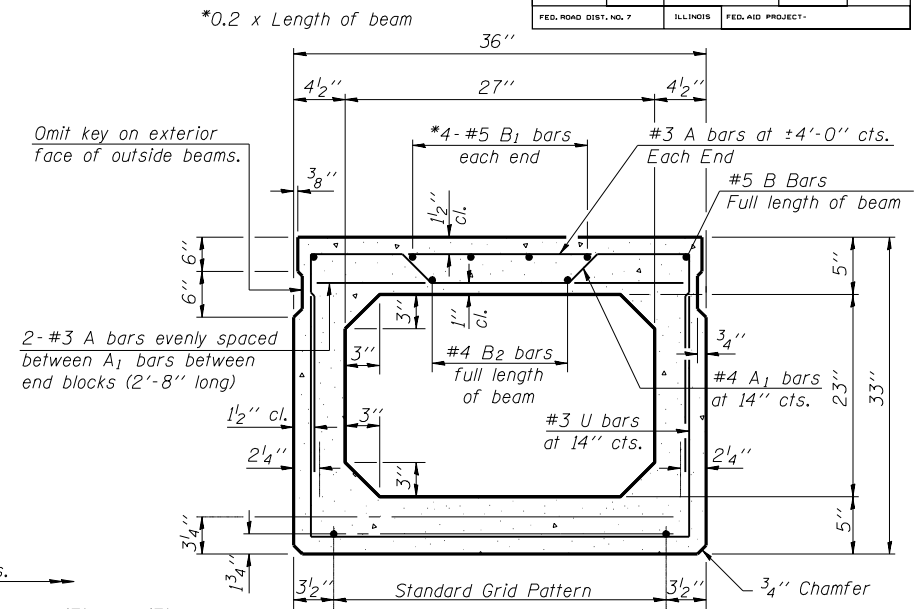
FIXED



EXPANSION

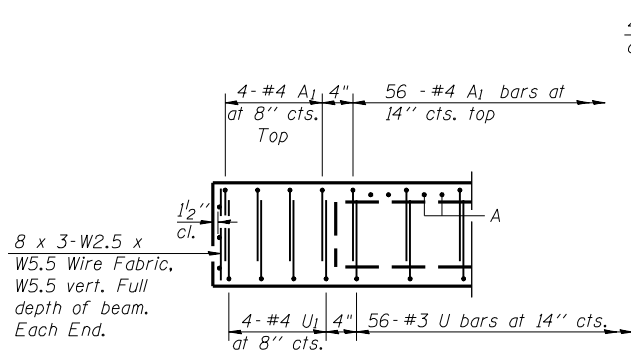


TYPICAL TRANSVERSE TIE ASSEMBLY

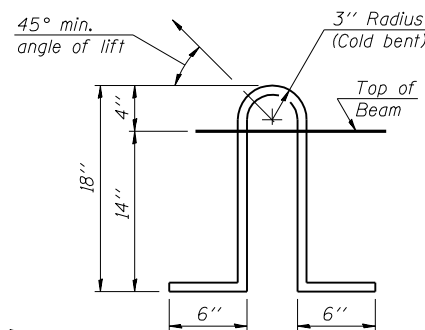


TYPICAL SECTION

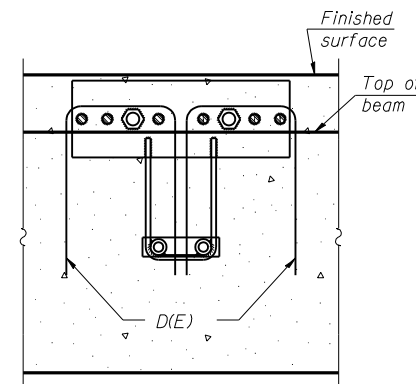
Note: Place strands symmetrically about centerline of beam.
1/2" diameter Strands, Each Strand Stressed to 30,900 Lbs.
8-Strands 1 3/4" up, 6-Strands 3/4" up, 2-Strands 9" up



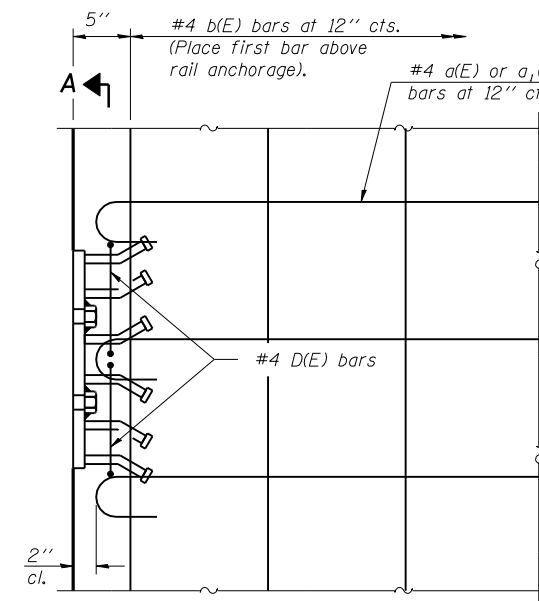
END ELEVATION



LIFTING LOOP DETAIL



SECTION A-A

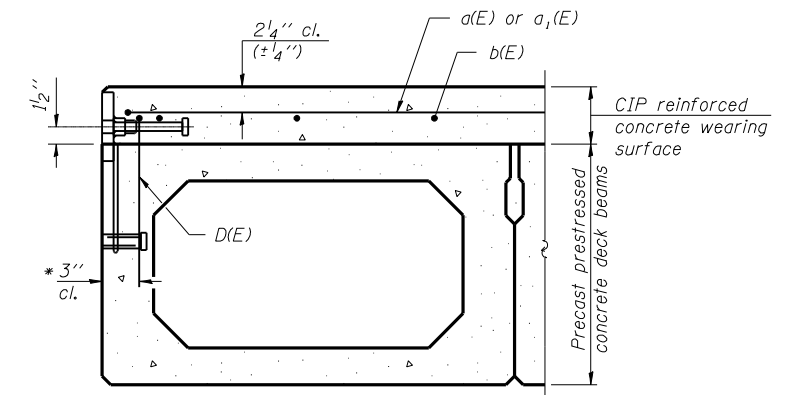


PLAN

NOTES:
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.

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" diameter-270 ksi strands, as shown. The 1" diameter 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 4000 p.s.i.



CROSS SECTION

* May need to tilt D(E) bar to miss bottom rail anchorage.

BILL OF MATERIAL

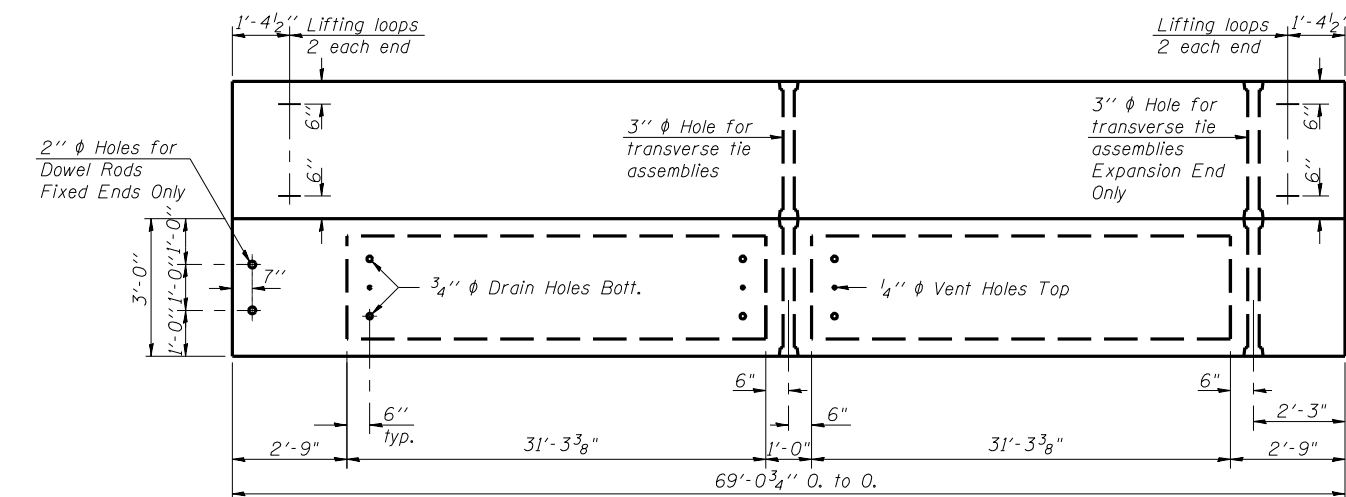
Precast Prestressed Conc. Deck Bms. (33" Depth)	Sq. Ft.	9945
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K+ K-Plus Engineering, Ltd.

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CHARLESTON, IL 61920
(217) 348-1900
WWW.K-PLUSENGINEERING.LTD.COM
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184-003685

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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	SUPERSTRUCTURE DETAILS	
		IL RTE. 104 OVER HORSE CREEK FAP 753 - SECTION 142BR-4 SANGAMON COUNTY STA 989+90.00 SN 084-0176	
		DATE: 08-01-07	DRAWN BY: ADG CHECKED BY: OF



PLAN