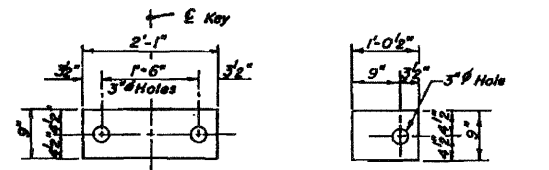


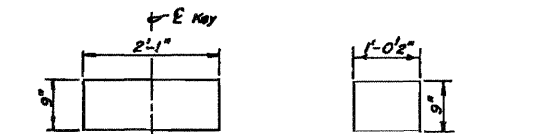
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5
R.A. 18	BR-2	JO DAVIESS	18	11	SHEETS 7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Sheet 98 of 126

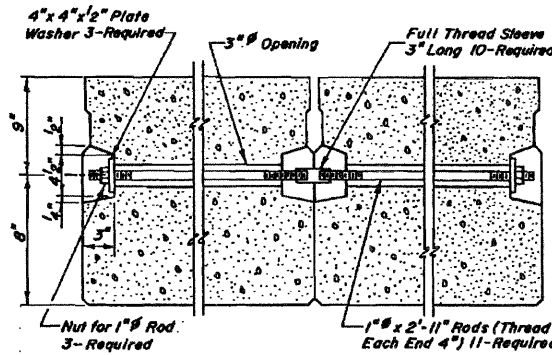
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



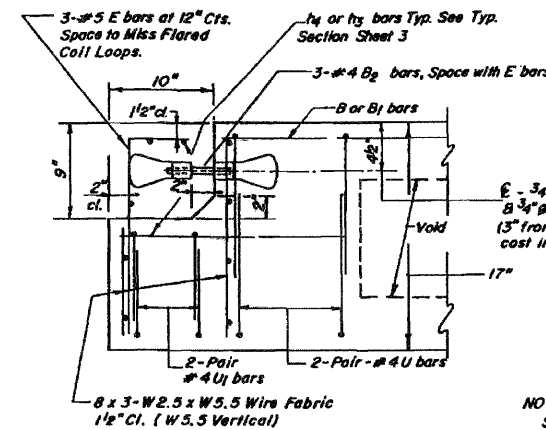
FABRIC BEARING PAD (Interior) FABRIC BEARING PAD (Exterior)



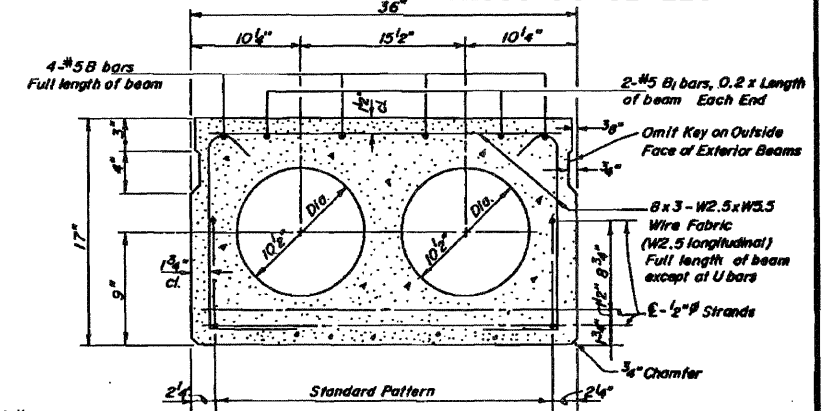
GRAPHITED ASBESTOS BEARING PAD (Interior) GRAPHITED ASBESTOS BEARING PAD (Exterior)



SECTION AT TIE ROD

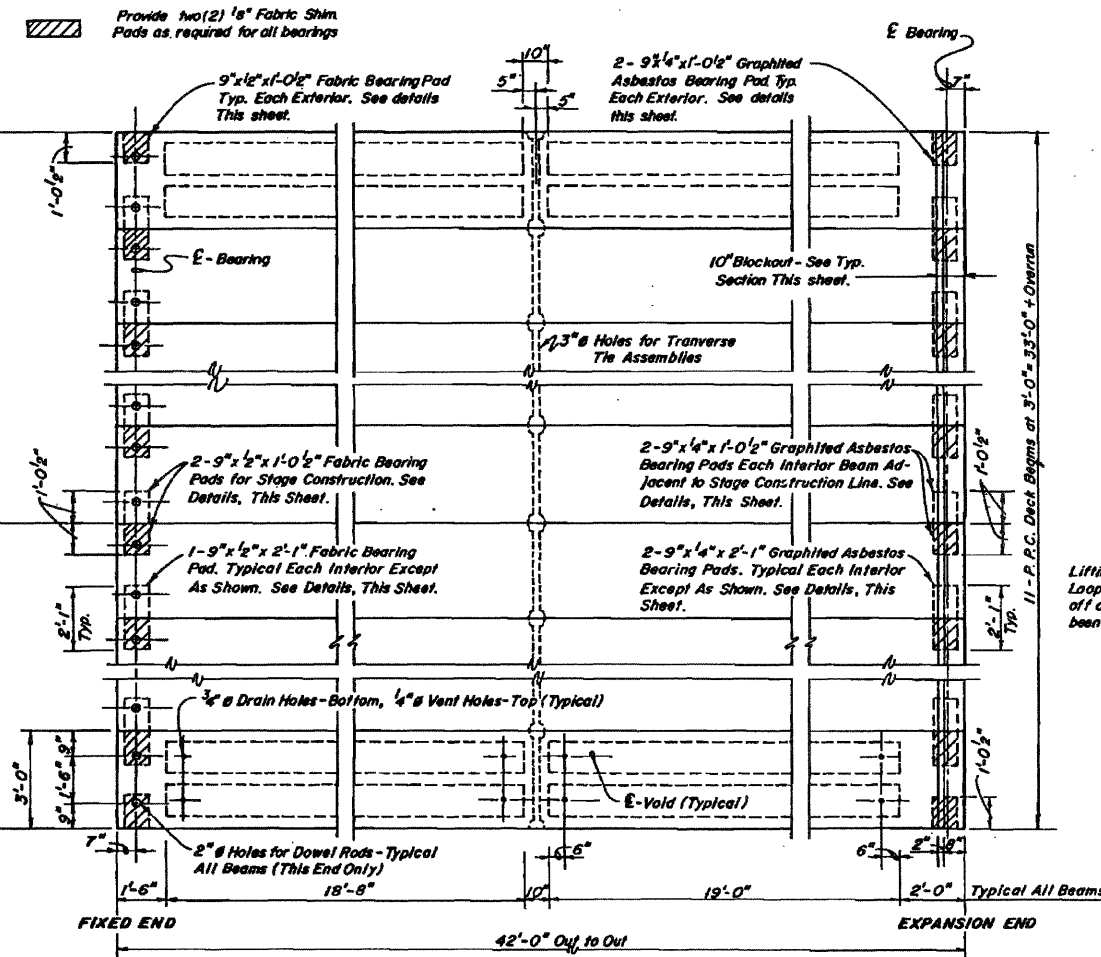


END OF BEAM SECTION AT EXP. END

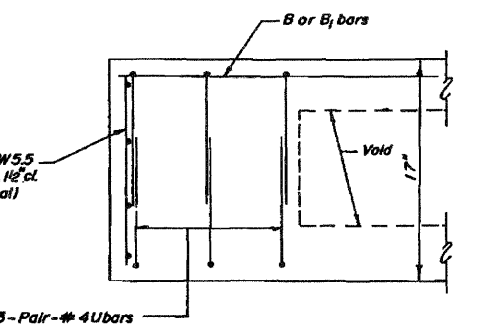


TYPICAL SECTION

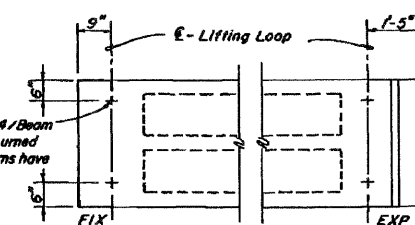
2" Strands, Each Strand Stressed to 28,900 Lbs.
10-Strands 1 1/4" up, 2-Strands 3/4" up, 2-Strands 1/2" up.
Place Strands Symmetrically About E-Beams.



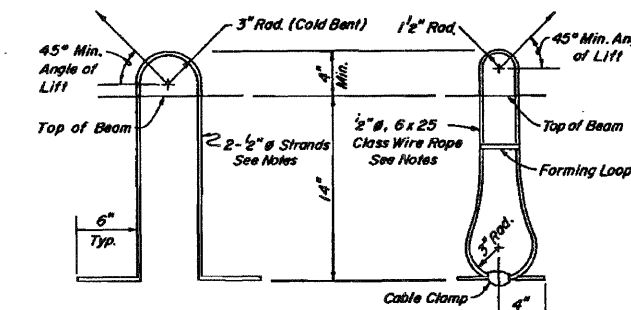
PLAN



END OF BEAM SECTION AT FIXED END



END OF BEAM PLAN
LIFTING LOOPS LOCATION



ALTERNATE LIFTING LOOP DETAIL

FOR INFORMATION ONLY

NOTES

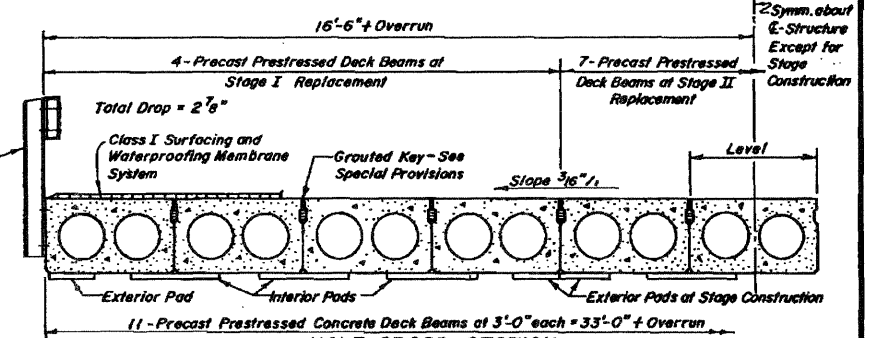
Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 1/2" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 21,000 lbs. or 2-1/2" - 270 ksi strands.

Reinforcement bars shall conform to AASHTO: M-31 or M-53, Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

The 1" 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. Number of nuts and washers shown includes one additional of each for Stage Construction.

Keyway surfaces shall be cleaned to remove form oil or other bonding breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting 1/4" keyway areas between the top of the beam and the bottom edge of the key.



HALF CROSS SECTION (LOOKING NORTH)

16'-6" ± Overrun

2 Sym. about E-Structure Except for Stage Construction

ANTICIPATED CAMBER DIAGRAM

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
B	44	#5	40'-10"	—
B1	44	#5	8'-5"	—
B2	33	#4	1'-8"	—
E	33	#5	1'-8"	—
U	110	#4	5'-1"	—
U1	44	#4	3'-7"	—
Precast Prestressed Concrete Deck Beams		Sq. Ft	1386	

NOTE: Bars B1 and B2 are listed on Sheet 3.

BEAM DETAILS

PROJECT GR-18 (IIS) SEC. 103 BR-2

FA 18 (I.I. 84) OVER DUKE CREEK

JO DAVIESS COUNTY

STA. 242 + 45.5