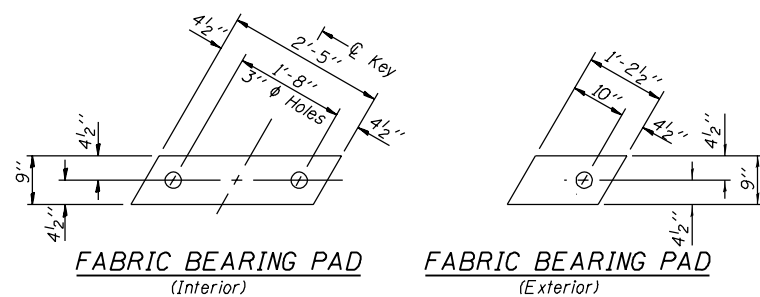


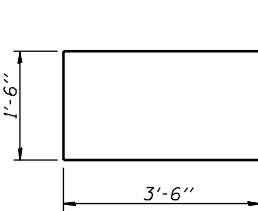
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1671	**	DOUGLAS	181	78
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

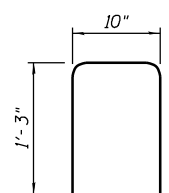
SHEET NO. 8  
14 SHEETS



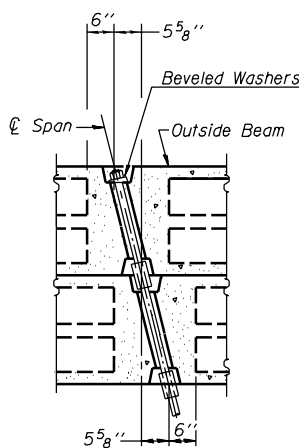
FIXED



BAR U1

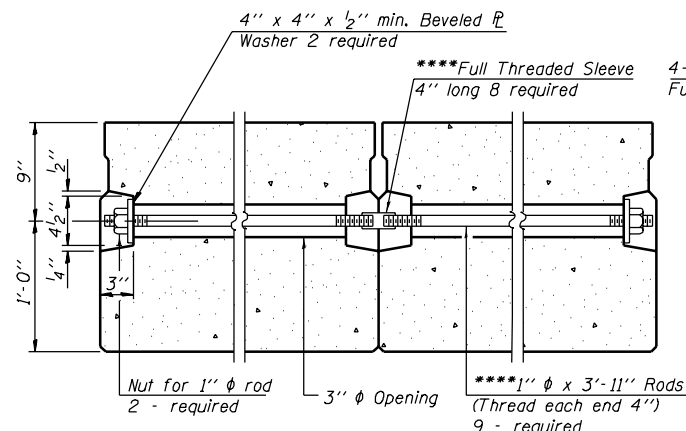


BAR D1(E)

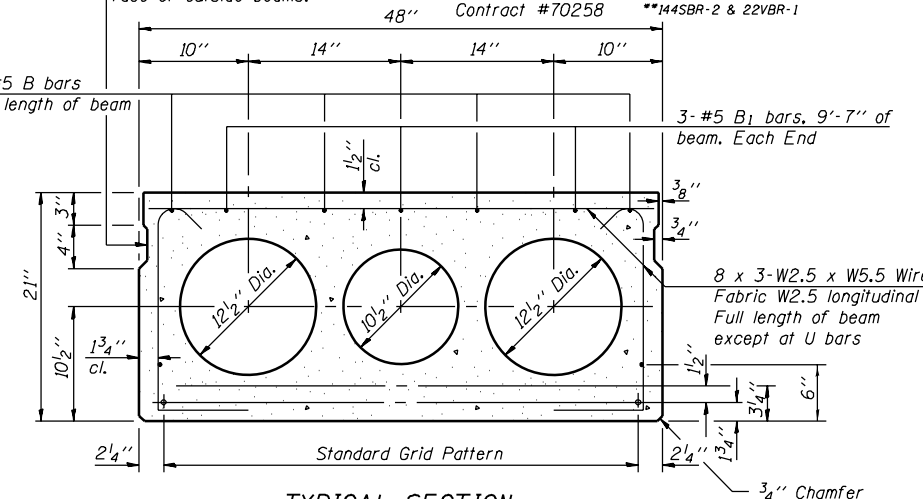


TYPICAL TRANSVERSE TIE ASSEMBLY

\*\*\*\*Alternate approved transverse tie rods of increased segmental length are acceptable.



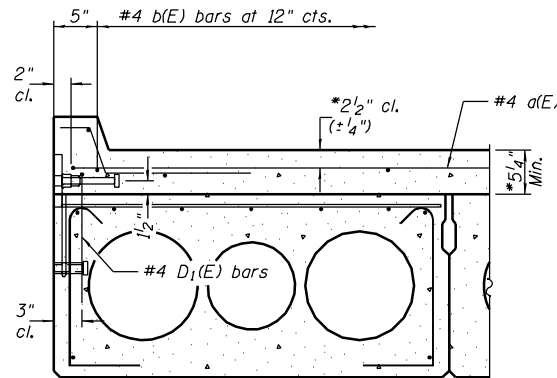
Omit key on exterior face of outside beams.



TYPICAL SECTION

1/2"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs.  
8-Strands 1 3/4" up, 7-Strands 3/4" up, 2-Strands 6" up

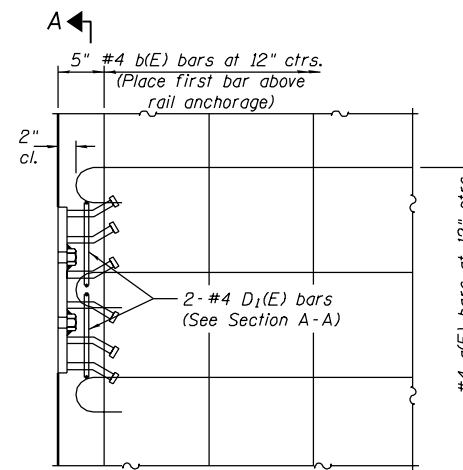
Note:  
Place strands symmetrically about  $\phi$  of beam.



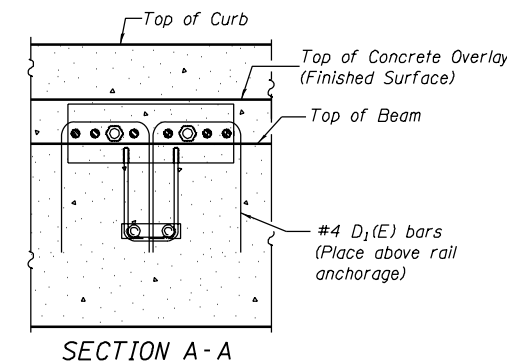
FASCIA BEAM

Rail anchorage shall be cast in precast beams. See typical section for dimensions, strand pattern, and bar callouts not shown. Formwork necessary for the wearing surface may be secured utilizing the bottom rail inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.

\*Prior to grinding



PARTIAL DECK PLAN AT RAIL ANCHORAGE  
(Curb not shown)



SECTION A-A

BAR LIST (ONE BEAM)

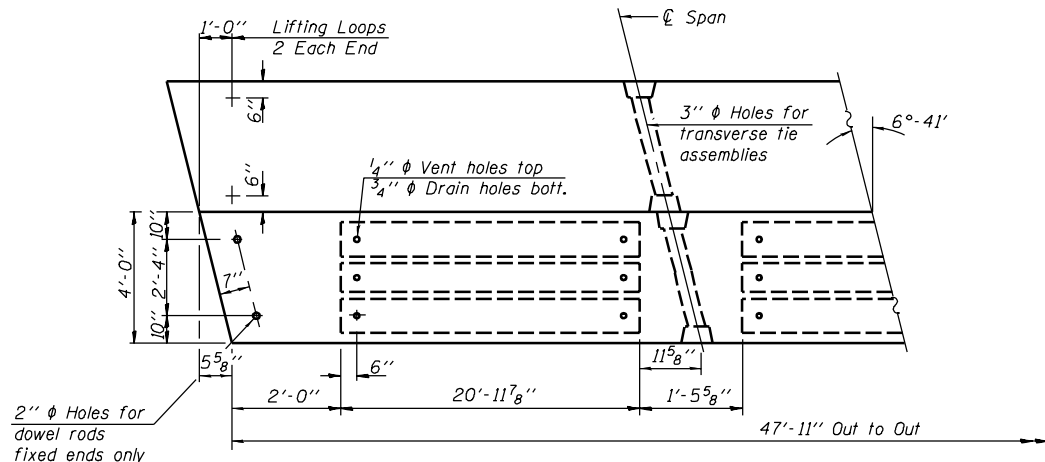
Bar	No.	Size	Length	Shape
B	4	#5	47'-7"	—
B1	6	#5	9'-7"	—
*** D1	16	#4	3'-4"	U
U1	16	#4	8'-6"	U

\*\*\*Exterior beams only

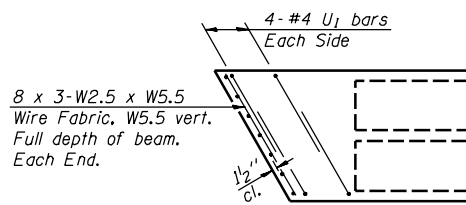
BILL OF MATERIAL

Precast Prestressed Conc. Deck Beams (21" Depth)	Sq. Ft.	1725
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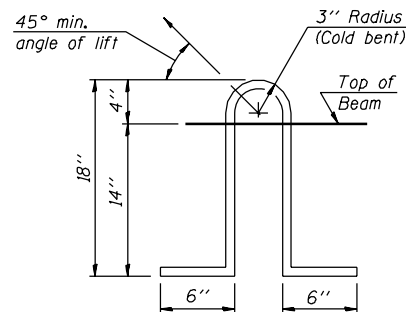
BEAM DETAILS - SPAN 2  
F.A.S. ROUTE 1671 - SECTION 144SBR-2  
DOUGLAS COUNTY  
STATION 1130+72.93  
STRUCTURE NO. 021-0062



PLAN



END PLAN



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" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - 1/2"  $\phi$  -270 ksi strands, as shown. The 1"  $\phi$  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 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, 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. D1(E) bars only in reinforcement of anchorage of SM Railing on exterior beams. See Section A-A.

DESIGNED	SMR
CHECKED	PRL
DRAWN	BECKY M. LEACH
CHECKED	SMR/PRL

August 4, 2006  
EXAMINED *Thomas J. Domagala*  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGES AND STRUCTURES

PD-4-R

10-22-04