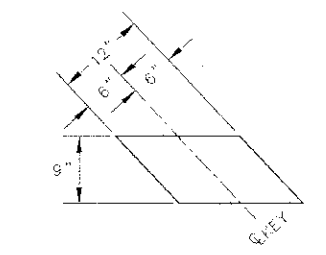
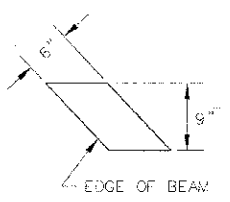


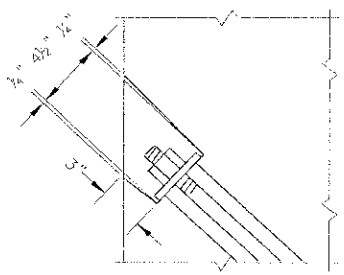
SECTION NO.	COUNTY HIGHWAY	COUNTY	SHEET OF SHEETS
08-00087-06-08	CH 48	ST. CLAIR	10 OF 15
FHWA REG. NO. 7	ILL. NOTES	PROJ. BROS-0163(03)	
52' BEAM DETAILS		CONTRACT 97525	



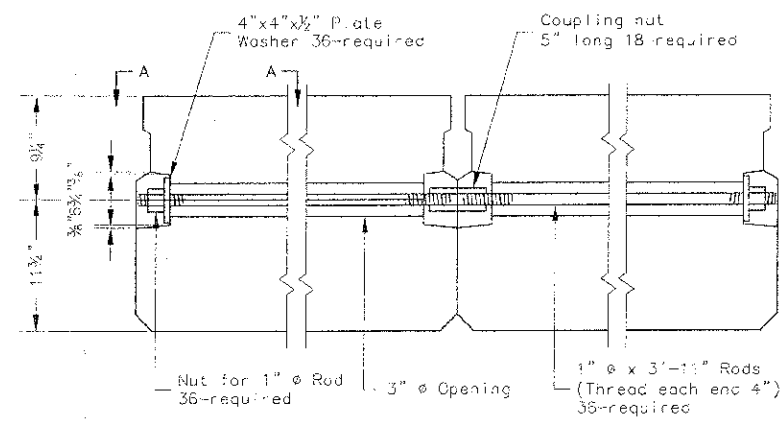
FABRIC BEARING PAD  
(INTERIOR)



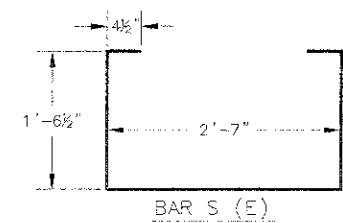
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(EXTERIOR)



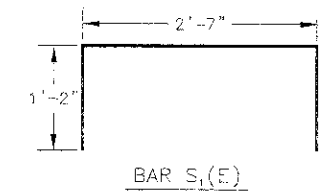
SECTION A-A



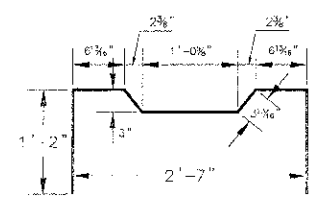
TYPICAL TRANSVERSE TIE ASSEMBLY



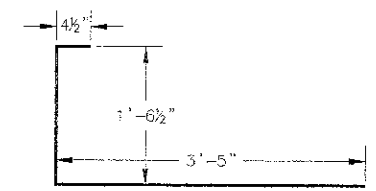
BAR S (E)



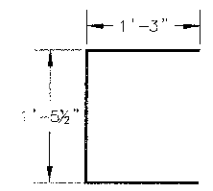
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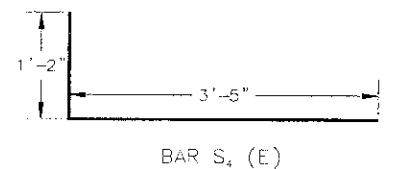
BAR S2 (E)



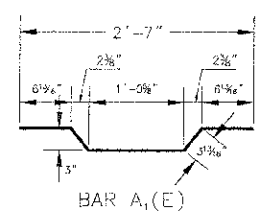
BAR S3 (E)



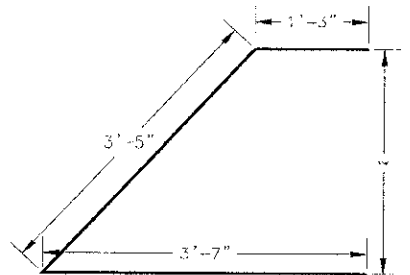
BAR U (E)



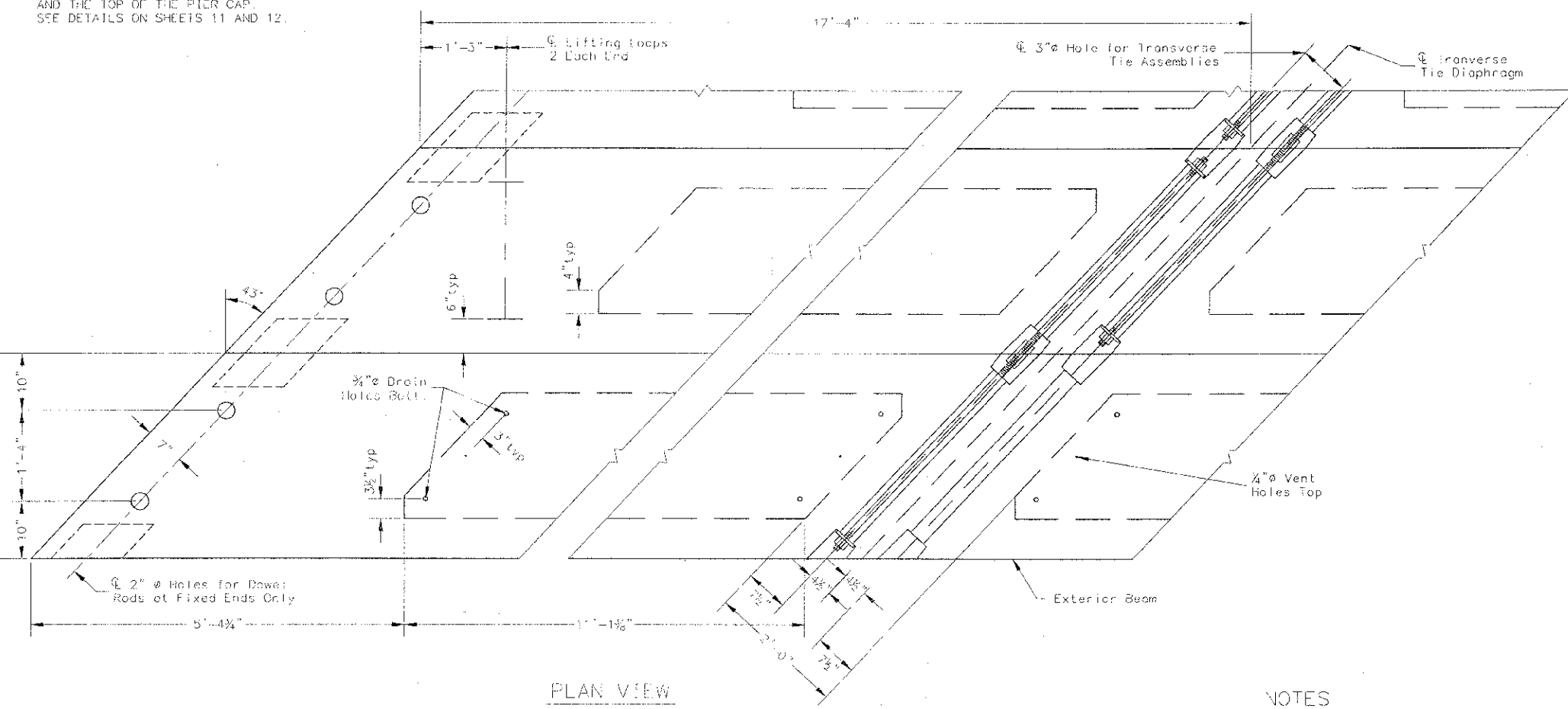
BAR S4 (E)



BAR A1 (E)



BAR U1 (E)



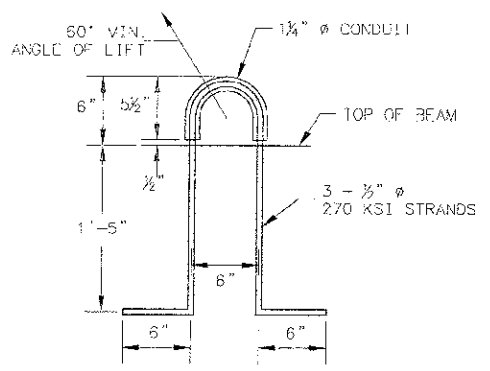
PLAN VIEW

NOTES

1. 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 square inches.
2. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
3. Reinforcement bars shall conform to ASTM A 706, grade 60.
4. Two 3/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
5. A minimum 2 1/2" lifting pin shall be used to engage the lifting loops during handling.
6. Corrosion inhibitor, per article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
7. Rail post anchor devices shall be cast into outside beam as elsewhere specified.
8. 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 the top of the beam and the bottom edge of the key.
9. Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
10. Compressive strength of prestressed concrete at release, f'ci shall be 5000 psi.
11. Connect beams in pairs with the transverse tie configuration shown.

DESIGN STRESSES

f'c = 6000 psi  
 f'ci = 5000 psi  
 f's = 270000 psi (1/2" STRAND)  
 f'si = 185000 psi (1/2" STRAND)  
 fy = 60000 psi



P.P.C. DECK BEAM DETAILS

21" x 36" x 52' BEAMS

30' ROADWAY

DESIGNED	WES	10/12
CHECKED	AMC	3/13
DRAWN	WES	10/12
CHECKED	AMC	3/13
PREPARED BY ST. CLAIR COUNTY CADD DRAWING FILE BEAM DETAIL		