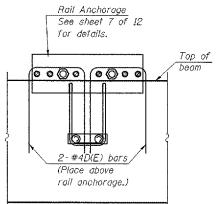
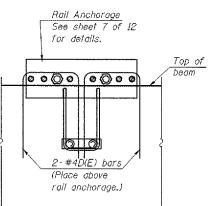


# TYPICAL TRANSVERSE TIE ASSEMBLY



### SECTION A-A

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 beam. Drilling into the beam will not be permitted.



The nominal diameter shall be 2'' and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be  $2 \cdot 2'' \ \phi \cdot 270$  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 ASTM A 706 (IL MOD), Grade 60.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two solutions of the Exterior Bearing Pad shall be provided for each

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.

See Typical Secton for strand pattern, dimensions and bar locations.

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 4,000 p.s.i. See Sheet 6 and 7 of 12 for rail anchorage locations.

SECTION THRU EXTERIOR BEAMS

Omit key on exterior

15%

Standard Grid Pattern

TYPICAL SECTION 13 -½"  $\phi$  Strands, Each Strand Stressed to 30,900 Lbs, 7-Strands 134" up, 4-Strands  $^3_4$ " up, 2-Strands 12" up

The Contractor shall ensure that neither

the Rail Anchorage Device nor the Deck

Beam is damaged during transportation.

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# DATE

## ILLINOIS DEPARTMENT OF TRANSPORTATION

CONTRACT NO. 68692

McDONOUGH 38 13

SHEET 4 OF 12 SHEETS

COLINTY

TO STA.

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

TOTAL SHEE SHEETS NO.

F.A.P. RTE. 310

STA.

SECTION

2-#5 B1 bars, .2 x length of beam. Each End

x 3-W2.5 x W5.5 Wire Fabric W2.5 longitudina Full length of beam

3₄′′ Chamfer

Place strands symmetrically about © of beam.

Exterior Face

-#4 D(E) bars

except at U bars

(398)1

DECK BEAM DETAILS US 67 OVER TROUBLESOME CREEK FAP 310 SECTION (39B)I McDONOUGH COUNTY STR. 055-0005

DATE DEC 2007

DRAWN BY CHECKED BY

## BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Conc. Deck Bms.	Sq. Ft.	2500