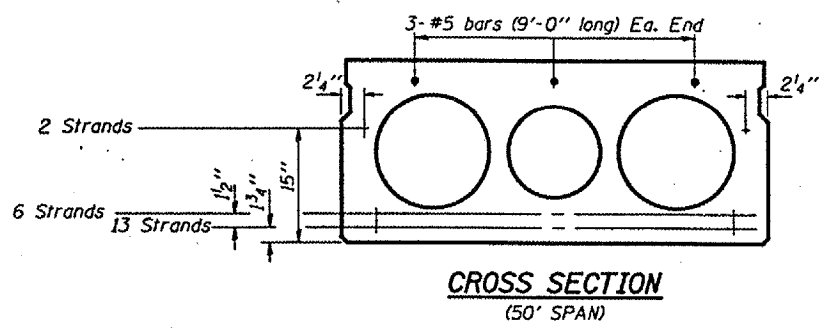
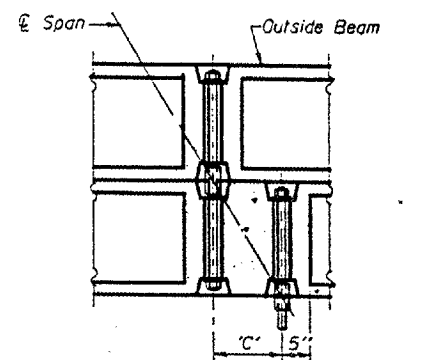
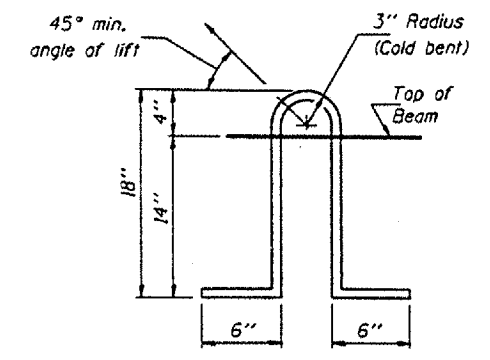
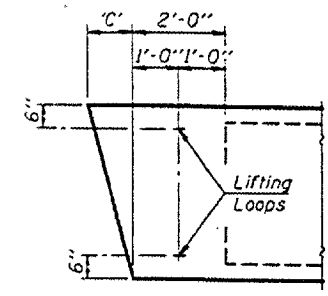
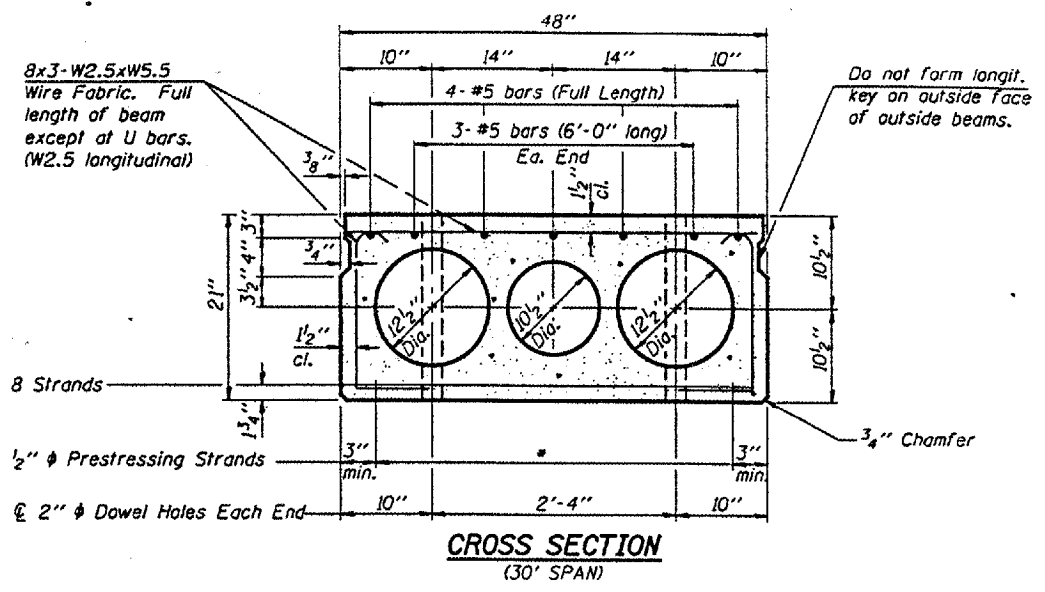
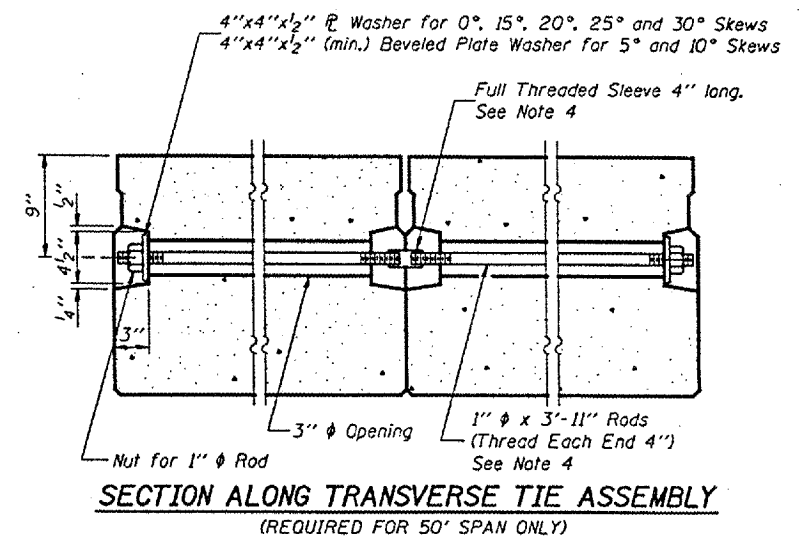
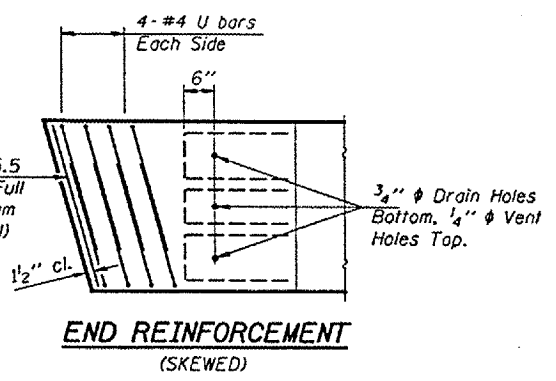


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 110	83-01171-00-BR	MASSAC	15	8
PROJECT NO. BR-OS-127(12)			CONTRACT NO. 99282	



DIMENSION 'C'

Skew Angle 'D'	0°	5°	10°	15°	20°	25°	30°
Dimension 'C' (Inches)	0	4 1/4	8 1/2	12 7/8	17 1/2	22 3/8	27 3/4



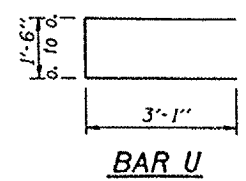
NOTE
The std. reinf. and dimensions shown on the 30' span cross section is typical for all spans, except as shown.

*** TRANSVERSE STRAND PLACEMENT GUIDELINES**

- Place strands symmetrically about centerline of beam.
- The minimum distance from center to center of strands in all directions shall be 2".
- The minimum clearance from strand to dowel hole shall be 1/2".
- The minimum clearance from strand to void shall be 1 1/2".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

MIN. BAR LAP
#5 bars = 1'-8"



DESIGN STRESSES

- $f_c = 5,000$ p.s.i.
- $f'_c = 4,000$ p.s.i.
- $f_s = 270,000$ p.s.i. (1/2" ϕ Strand)
- $f_u = 201,960$ p.s.i. (1/2" ϕ Strand)
- $f_y = 60,000$ p.s.i.

- 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 square inches.
 - Reinforcement bars shall conform to the requirements of IL Modified ASTM A706, Grade 60.
 - On 0°, 5° and 10° skews, alternate approved transverse tie rods of increased segmental length are acceptable.
 - Rail Post anchor devices shall be cast into outside beam as elsewhere specified.
 - When a Waterproofing Membrane System is specified, the top surface of the beams shall be screeded with a straightedge and finished with a hand float. The finished surface shall be free of depressions or high spots with sharp corners and the top edge of keys shall be rounded or chamfered a minimum of 1/4".
 - 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.

DESIGNED	JSB
CHECKED	JFS
DRAWN	SMS
CHECKED	JSB

DECK BEAMS 21" X 48"
TOWNSHIP ROUTE 110
SEVENMILE CREEK
SECTION 83-01171-00-BR
MASSAC COUNTY