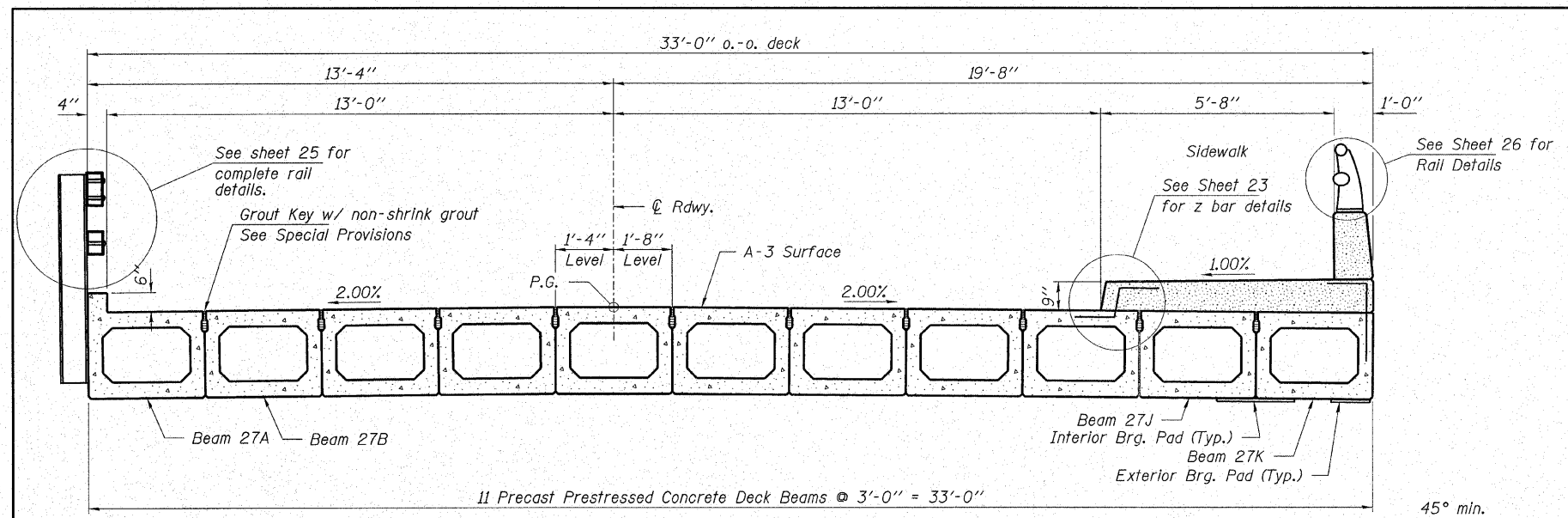
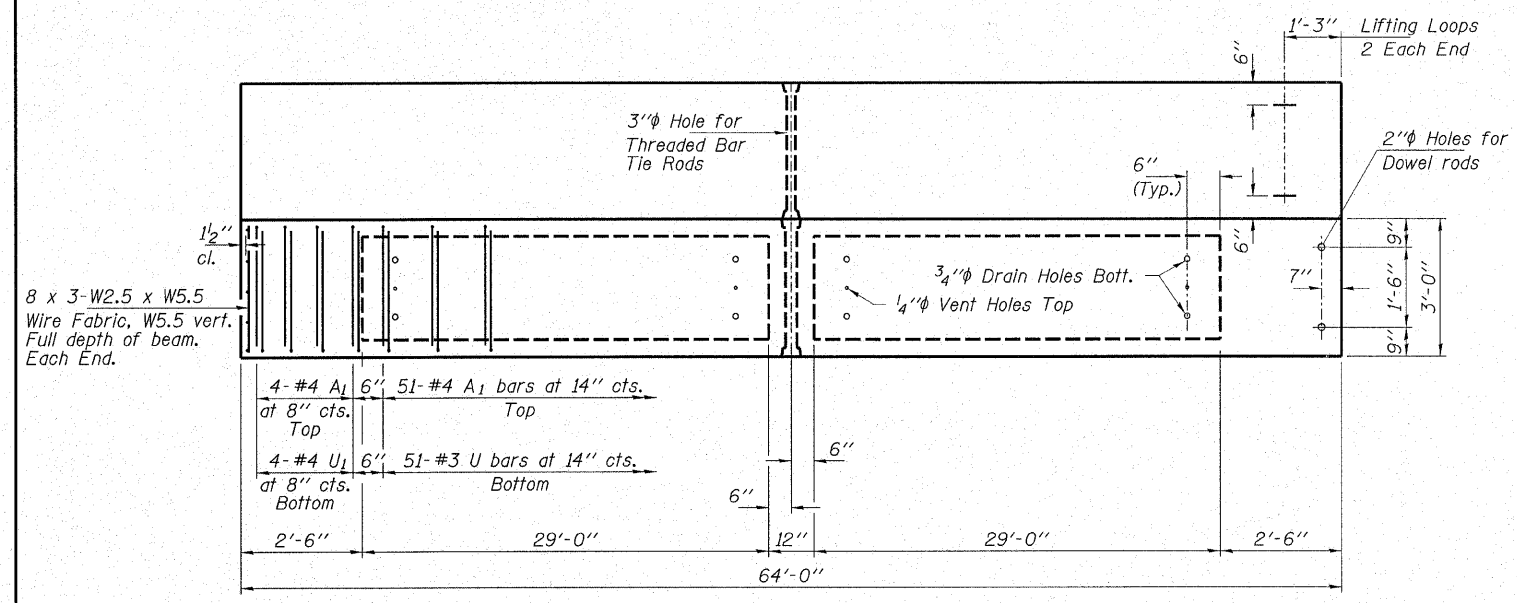


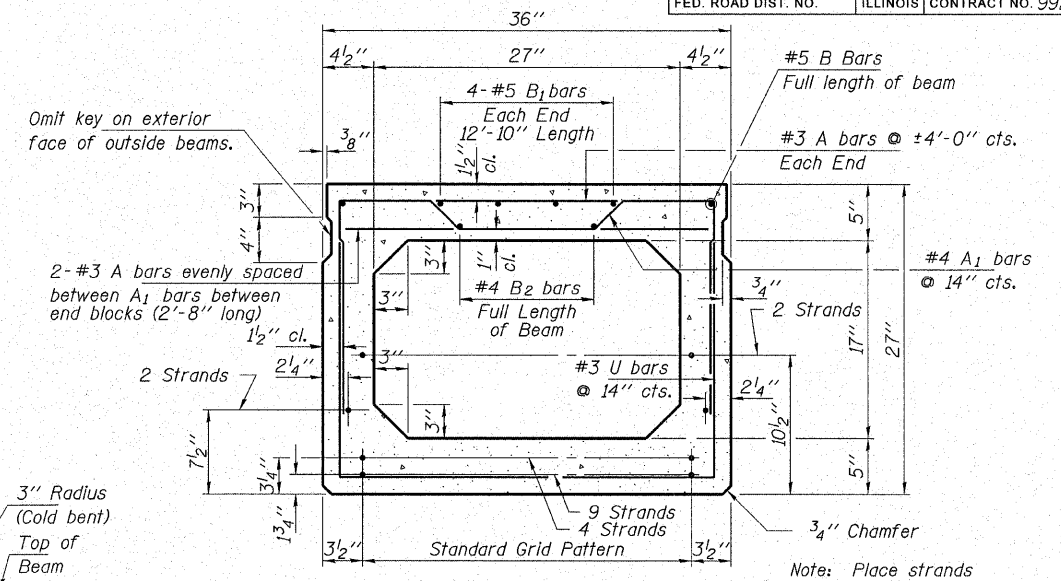
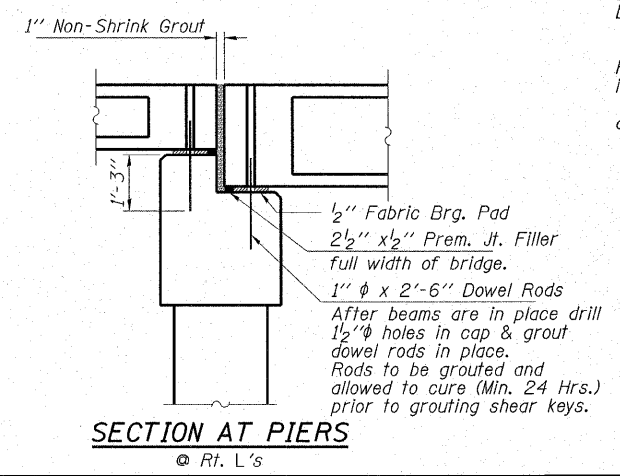
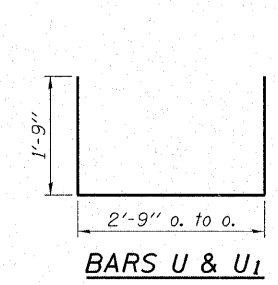
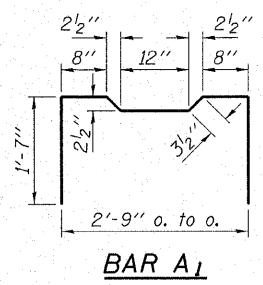
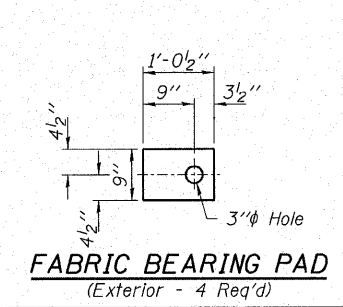
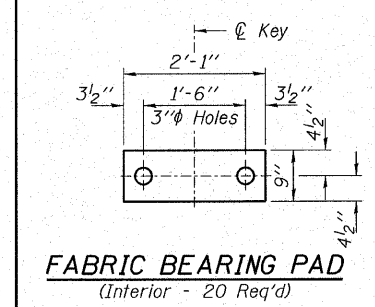
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
M.S. 2700	05-00186-00-BR 06-00001-00-BR	JEFFERSON	31	22
FED. ROAD DIST. NO.	ILLINOIS CONTRACT NO. 99297			



CROSS SECTION
(Looking East)

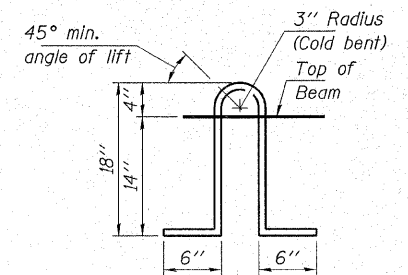


PLAN

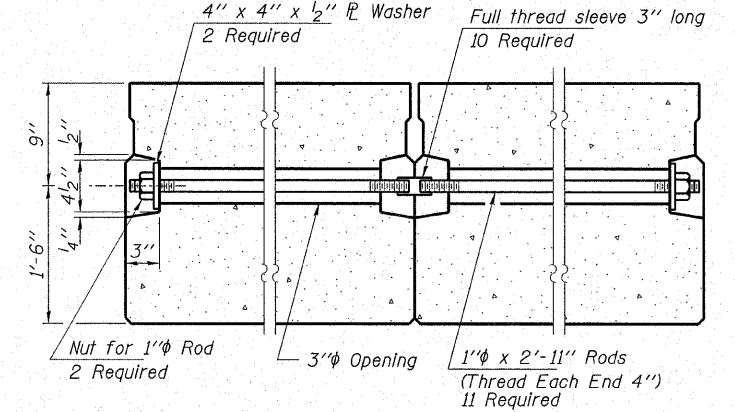


TYPICAL SECTION

17-1/2" Strands Each Strand Stressed to 30,900 Lbs.
9-Strands 1 3/4" up, 4-Strands 3/4" up, 2-Strands 7/2" up, 2-Strands 10 1/2" up
Expected Camber = 1/2"



Note: The loop shall be formed in a manner such that all strands are engaged during lifting. Loops shall be cut off after beams have been erected.



TYPICAL TRANSVERSE TIE ASSEMBLY

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 2-2" phi-270 ksi strands, as shown. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

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.

Required Release Strength, f'ci, shall be 4,000 p.s.i.

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.

A calcium nitrate corrosion inhibitor shall be used in the concrete for precast prestressed concrete deck beams.

See Sheet 23 for additional beam details.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2,112

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-49-0005-1 DATE: 03/21/07
DESIGNED: R.J.P. CHECKED: S.W.M. DRAWN: D.B.

SUPERSTRUCTURE - SPAN 2
SECTIONS 05-00186-00-BR / 06-00001-00-BR
VILLAGE OF BLUFORD
JEFFERSON COUNTY
STRUCTURE NO. 041-9931 / STATION 10+00