CONTRACT NO. 76962

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	1-1BR-1	ST. CLAIR	29	29
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
600	1-1BR	ST. CLAIR	17	6

SHEET NO. 2
IO SHEETS

FABRIC BEARING PAD

U1 BAR

C BAR

C1 BAR

Outside Beam

Nut & washer at Stage I Construction Outside Beam only

3½" x 3½" x ½" Plate Washer 117 Required

Full thread sleeve 3" Long 57 Required

Nut for 1"ø Rod 117 Required

2"ø Opening

1"ø x 2'-11" Rods (Thread each end 4") 30 Required

4-#5 B bars Full length of beam

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

8x3-W2.5xW5.5 Wire Fabric W25 longitudinal full length of beam except of U1 bars

¾" Chamfer

6"ø Prestressing Strands

Note: Place strands symmetrically about ℄ of beam

Note: Omit (¾" x 4") key in outside face of Fascia beams.

¾"ø Coil threaded rods @ 15" cts to be placed in Stage III Const. See Sheet #4

For place- ment see Sheet #4

Cast in bms. @ 14" cts. Space inserts 7" from end of bm.

WEST SIDEWALK BEAMS DETAIL

TYPICAL TRANSVERSE TIE ASSEMBLY

¾" x 3" Sawed Jt. with Elastic Jt. Filler

¾"ø x 16" Dowel Rods (2 Ea. bm.)

1'-9" x ¾" x 2'-1" (36"Bm.) Fabric Brg. Pad

4"x6" B.L.F. Full width

2'-6"

** 1" Jt. shall be packed with a very dry mix of 2:1 sand and P.C. mortar. 1" Dimension may vary plus or minus to accomodate tolerance in beam lengths.

SECTION THRU PIERS
Dimensions @ Rt. angle

See Sheet #4 for Table of dimensions

#5 C1 @ 14" cts.

TYPICAL SECTION

18 ¾" Strands, Each Strand Stressed to 28,900 Lbs.
45°- 4" Bm. 9-Strands 14" up, 7-Strands 34" up, 2-Strands 12" up = 18 Strands
32'-0" Bm. 8-Strands 1¾" up

32'-0" (min.)

5'-0" (4'-0" (min.) 12'-0"

3 grnm. @ ℄ Roadway except as noted

Total Drop = 5⅝" (to insure Pace of Sidewalk)

#5 C bars @ 14" cts.

½" (min.) Class 1 ℄ Waterproofing Membrane Syst. (See Anticipated Camber diagram Sheet #3)

Grouted Key

3 Slope ¾" ft.

8-PPC Deck Bms @ 3'-0" = 24'-0"

64'-0" (min.) O.O. of Deck

8-PPC Deck Bm. @ 4'-0" = 32'-0"

HALF CROSS SECTION
Looking South

* Bars C & C1 to be cast in Bms. for East sidewalk only. Open coil inserts to be cast in Bms. for West sidewalk only. Space bars to miss holes for Transverse Tie Assembly

See sheet #4 for placement & details of d, d1, ab, e, e1, & coil threaded rods.

Note: See Sheet #3 for detail of 48' Bms. & Anticipated Camber Diagrams.

Lifting Loops 2 Each End

2"ø Holes for Dowel rods Ea. End

2"ø Holes for Transverse Tie Assemblies

℄ of Bm.

3'-0"

6" Typ.

4"ø Drain Holes Typical

1'-6"

48'-0" 18'-10⅝"

4'-0"

℄ Span 1 & 2

℄ Span 2 & 3

℄ Span 3

32'-0" O to O 48'-4" O to O

PLAN

4" - ¾" Sawed Jt. with Elastic Jt. Filler-Full Width See Special Provisions

PC C. Pavement Replacement

3'-0"

Waterproof to 2'-0" beyond Abut.

6" 18"

#5 Dowel rods (2.5 Bm.)

¾" R.I.F. (Full width)

1'-9" x ¾" x 2'-1" (36" Bm.) Fabric Brg. Pad

SECTION THRU ABUT.
Dimensions @ Rt. angle

3-#4 U1 bars Each Side

8x3-W2.5xW5.5 Wire Fabric W2.5 Vert. Full depth of beam Each End

END PLAN

Top of Beam

Forming Loop

Cable Clamp

LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq in. Lifting loops shall be ½" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 23,000 lbs.

The 1"ø 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.

Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the substructure and the anchor dowels shall be grouted in place.

Reinforcement Bars Shall Conform To AASHTO: M-31 or M-53, Grade 60.

Cost of reinforcement and accessories cast into the beam, of bearing pads, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

BILL OF MATERIAL

Item	Unit	Total
Precast Prestressed Concrete Deck Beams (17"x36")	Sq. Ft.	5,168

SUPERSTRUCTURE
36" BEAM DETAILS
FA. RTE. 600 SEC. 1-1B
ST. CLAIR COUNTY
STA. 158+08.00

DESIGNED	Ralph E. Anderson
CHECKED	Scott Hugo
DRAWN	A. Barroza
CHECKED	

EXAMINED
PASSED
APPROVED

PD-1-L 11/73

FOR INFORMATION ONLY

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING STRUCTURE PLANS

FAP ROUTE 600
SECTION 1-1BR-1
ST. CLAIR COUNTY

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = 8/17/2006
FILE NAME = c:\projects\std1936\plan\pln01936a.dgn
PLOT SCALE = 50.0000 ' / IN.
REFERENCE = REF