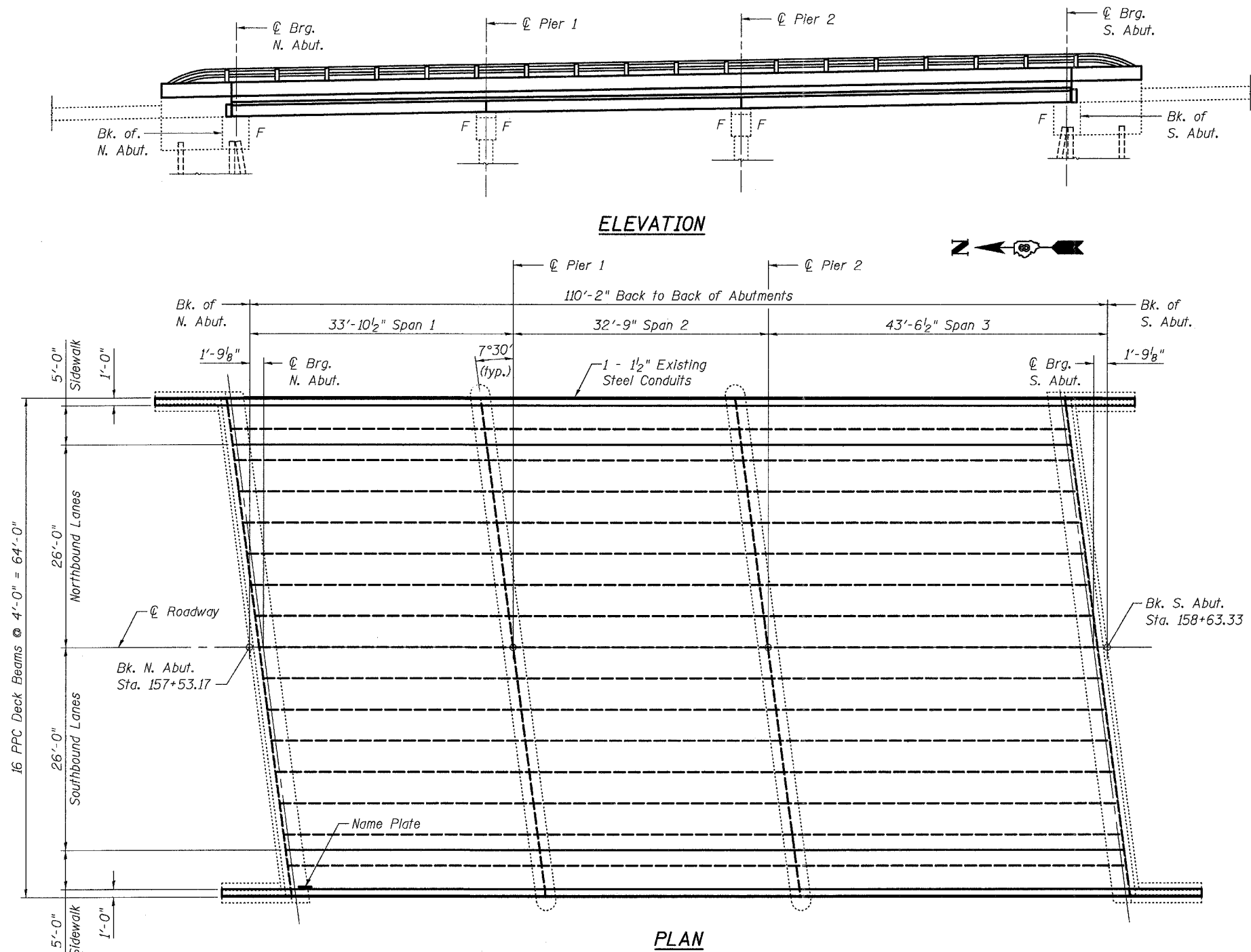


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET
FAP 600	1-1BR-1	ST. CLAIR	29	15	13 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract # 76962



GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Existing name plate shall be cleaned and relocated adjacent to the new name plate. Cost included with Name Plates.

The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A 780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

Repair of the substructure shall be completed prior to placement of the new deck beams.

The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

If the Contractor's procedure for existing beam removal or placement of new beams involves placement of cranes or other heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new beams. To distribute load to multiple beams and protect the concrete, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. Prior to placement of the timber mats the following shall be done: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys. A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.

Any damage done to the bridge during beam removal shall be repaired by the Contractor. Cost to be included in the cost of Removal of Existing Superstructures.

The minimum thickness of concrete overlay shall be 5" and varies as required to adjust for the profile grade and camber.

No instream work will be allowed on this project. All construction joints shall be bonded.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1	—	1
Concrete Removal	Cu. Yd.	7.3	—	7.3
Concrete Superstructure	Cu. Yd.	62.3	—	62.3
Bridge Deck Grooving	Sq. Yd.	607	—	607
Protective Coat	Sq. Yd.	840	—	840
Concrete Wearing Surface, 5"	Sq. Yd.	767	—	767
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	—	276	276
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	6,891	—	6,891
Reinforcement Bars, Epoxy Coated	Pound	17,700	—	17,700
Temporary Bridge Rail	Foot	220	—	220
Name Plates	Each	1	—	1
Bar Splicers	Each	234	—	234
Removing and Re-Erecting Existing Railing	Foot	248	—	248

LOADING HS20-44
No allowance for future wearing surface.
DESIGN SPECIFICATIONS
2002 AASHTO

FIELD UNITS

$f'_c = 5,000$ psi (Concrete Wearing Surface)
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

DESIGN STRESSES

PRECAST PRESTRESSED UNITS (SPANS 1 & 2)		PRECAST PRESTRESSED UNITS (SPAN 3)	
$f'_c = 5,000$ psi	$f'_c = 6,000$ psi	$f'_c = 6,000$ psi	$f'_c = 6,000$ psi
$f_{ci} = 4,000$ psi	$f_{ci} = 5,000$ psi	$f_{ci} = 5,000$ psi	$f_{ci} = 5,000$ psi
$f'_s = 270,000$ psi ($1/2$ " ϕ low lax. strands)	$f'_s = 270,000$ psi ($1/2$ " ϕ low lax. strands)	$f'_s = 270,000$ psi ($1/2$ " ϕ low lax. strands)	$f'_s = 270,000$ psi ($1/2$ " ϕ low lax. strands)
$f_{si} = 201,960$ psi ($1/2$ " ϕ low lax. strands)	$f_{si} = 201,960$ psi ($1/2$ " ϕ low lax. strands)	$f_{si} = 201,960$ psi ($1/2$ " ϕ low lax. strands)	$f_{si} = 201,960$ psi ($1/2$ " ϕ low lax. strands)

WATERWAY INFORMATION

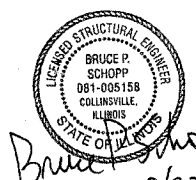
Drainage Area = 14.2 Sq. Mi. Low Grade Elev. 495.8 @ Sta. 154+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	8,020	1,443		497.0	0.6		497.6	
Base	100	9,060	1,878		497.9	0.5		498.4	
Overtopping	30	7,350	1,162		496.1	0.2		496.3	
Max. Calc.	500								

STATION 158+08
BUILT 200 BY
STATE OF ILLINOIS
FAP ROUTE 600 - SEC 1-1BR-1
LOADING HS20
STR. NO. 082-0265

NAME PLATE
See Std. 515001

Plans Prepared By:
Oates Associates, Inc.



Bruce P. Schopp
8/22/06
EXPIRES 11/30/06

GENERAL PLAN & ELEVATION
IL ROUTE 159 OVER RICHLAND CREEK
F.A.P. ROUTE 600 - SECTION 1-1BR-1
ST. CLAIR COUNTY
STA. 158+08
STRUCTURE NO. 082-0265

PLOT DATE = #DATE#
FILE NAME = #FILE#
PLOT SCALE = #SCALE#
USER NAME = #USER#