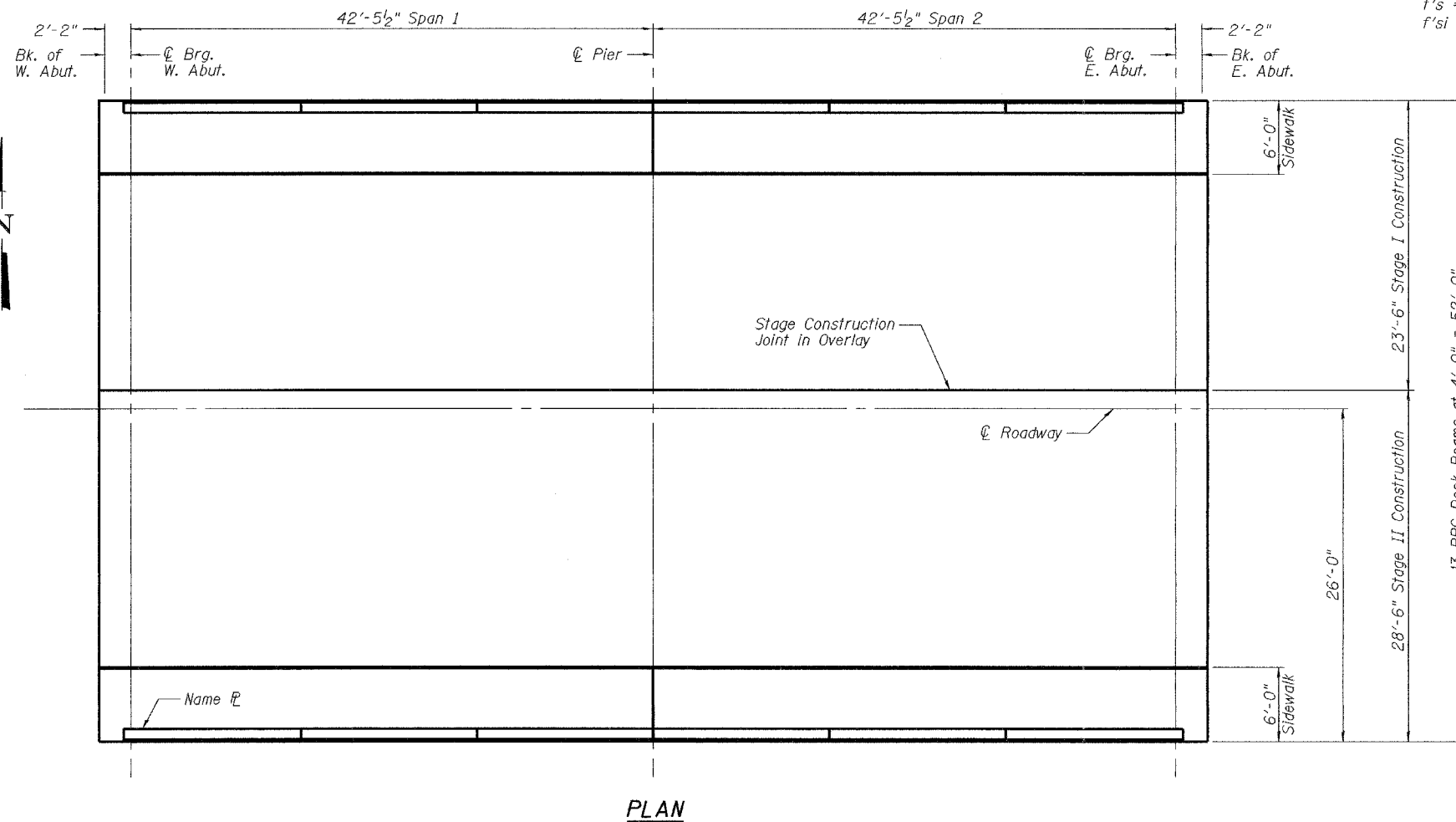
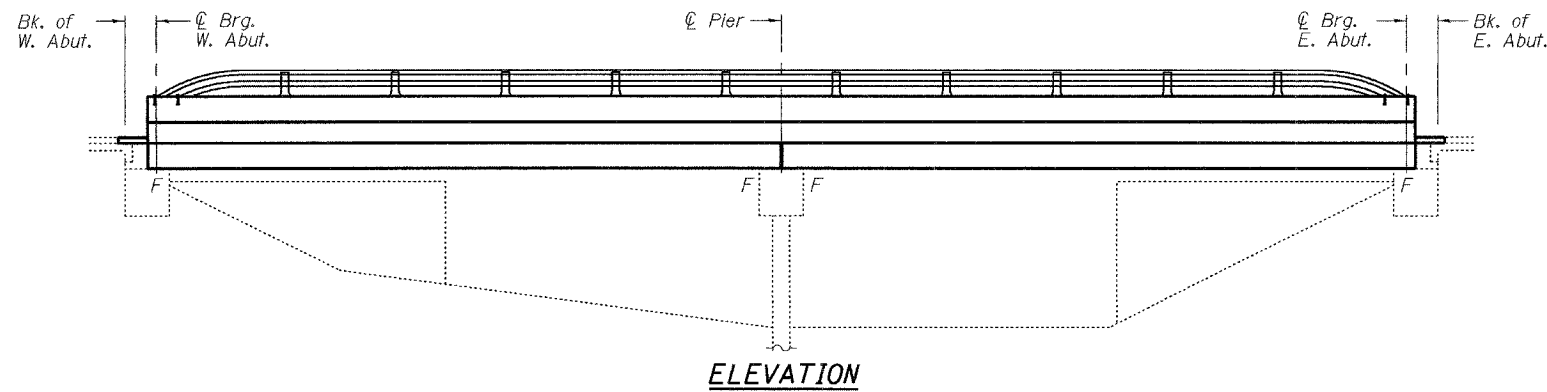


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO. 1
		Lake	17	9	7 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract Number: 62768



LOADING HS20-44

No allowance for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

$f'c = 5,000$ psi
 $f'ci = 4,000$ psi
 $f's = 270,000$ psi (1/2" ϕ low lax strands)
 $f'si = 201,960$ psi (1/2" ϕ low lax strands)

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 the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber. The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to 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 each fascia beam. 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.

All construction joints shall be bonded. 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.

Attach new Name plate to the inside face of parapet, southwest corner. Existing name plate is to be removed, cleaned and relocated adjacent to new name plate. Cost included in the cost of Name Plates.

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 the 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.

Weight restrictions will be required for Stage I Traffic. See Roadway plans for sign details and placement locations. Signs must be placed prior to installation of Stage I traffic control.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Protective Coat	Sq. Yd.	565.8
Removal of Existing Superstructures	Each	1
PPC Deck Beams (21" Depth)	Sq. Ft.	4,476
Reinforcement Bars, Epoxy Coated	Pound	12,030
Aluminum Railing Type L	Foot	170
Concrete Wearing Surface, 5"	Sq. Yd.	521
Bridge Deck Grooving	Sq. Yd.	383.9
Name Plates	Each	1
Bar Splacers	Each	91
Concrete Structures	Cu. Yd.	0.5
Concrete Superstructure	Cu. Yd.	46.8
Concrete Removal	Cu. Yd.	0.5

STATION 65+88.00
RE-BUILT 20 BY
STATE OF ILLINOIS
F.A.U. ROUTE 1253
SEC. Y-B-R-2
LOADING HS20
STR. NO. 049-0011

NAME PLATE
(See Std. 515001)

PLAN AND ELEVATION
F.A.U. RT. 1253
HALF DAY RD / EAST
BRANCH OF SKOKIE DITCH
LAKE COUNTY
SN 049-0011

DESIGNED *Adrian T. Holloway*
CHECKED *John A. Morrison*
DRAWN *John A. Morrison*
CHECKED *ATH* *STB*

September 21, 2006
EXAMINED *John A. Morrison*
PASSED *Ralph E. Andino*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2006