

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		St. Clair		9
SHEET NO. 1 5 SHEETS				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
Contract Number: --- 76862				

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.

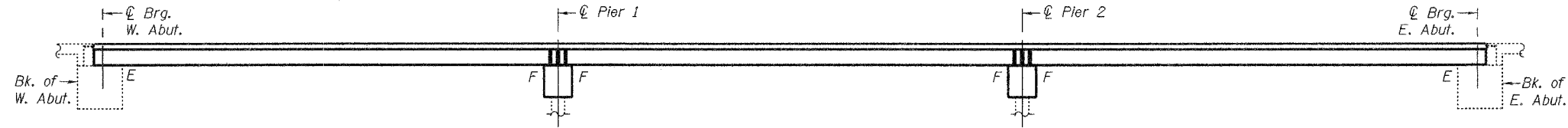
The minimum thickness of the Concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber. Reinforcement bars shall conform to AASHTO M31 or M322, Grade 60. Existing name plate shall be cleaned and relocated adjacent to the new name plate. Cost included with 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 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.

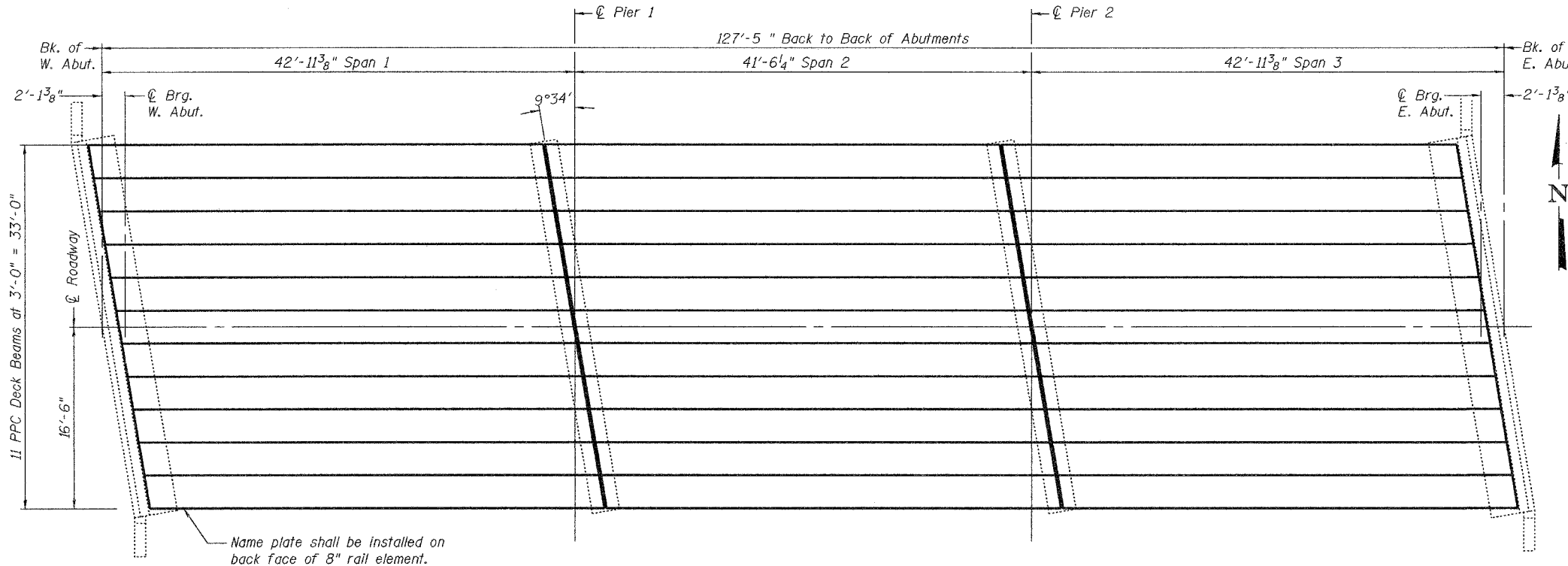
All construction joints shall be bonded. No instream work will be allowed on this project. Repair of the substructure shall be completed prior to placement of the new deck beams.

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

If the contractors 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. If cranes or other heavy equipment will be placed on new beams prior to placement of the concrete wearing surface, it shall be done after the dowel rods are grouted and cured for 24 hours minimum and prior to grouting 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.



ELEVATION



PLAN

LOADING HS20-44
No allowance for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 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)

STATION 11+18.75
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 609 SEC. 76-1BR-2
LOADING HS20
STR. NO. 082-0213

NAME PLATE
(See Std. 515001)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing Superstructures	Each	1
PPC Deck Beams (17" Depth)	Sq. Ft.	4,092
Concrete Structures	Cu. Yd.	18.7
Asbestos Bearing Pad Removal	Each	38
Reinforcement Bars, Epoxy Coated	Pound	7810
Steel Bridge Rail, Type SM	Foot	255
Polymer Concrete	Cu. Ft.	2.3
Silicone Joint Sealer, 1 1/2"	Foot	67
Concrete Wearing Surface, 5"	Sq. Yd.	456
Bridge Deck Grooving	Sq. Yd.	405
Formed Concrete Repair (≤5")	Sq. Ft.	8
Name Plates	Each	1
Concrete Removal	Cu. Yd.	18.7
Protective Coat	Sq. Yd.	456

PLAN AND ELEVATION
IL 163 / HARDING DITCH
F.A.P. RT. 609
SEC. 76-1BR-2
ST. CLAIR COUNTY
STA. 11+18.75
SN 082-0213

DESIGNED *Paul Johnson*
CHECKED *Adrian T. Holloway*
DRAWN *[Signature]*
CHECKED *PSJ ATH*

September 22, 2005
EXAMINED *John A. Morris*
PASSED *Ralph E. Anderson*
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES



Expires: November 30, 2006