

CONTRACT NO. 6B456				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(45BR)I	PEORIA	82	44
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET NO. 2
OF 12 SHEETS

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions.

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

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 PPC Deck Beams".

The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

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. This work shall be performed by the producer and included with the cost of the beam. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face & 9" on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. Cost included with PPC Deck Beams.

Temporary concrete barrier shall only be anchored into the overlay and not the PPC 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 beams shown.

If the contractor's procedure for existing beam removal or replacement of new beams involves placement of cranes or other heavy equipment on the bridge, 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 or existing 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.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

Existing reinforcement extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Removal.

The proposed concrete wearing surface over the new beams shall be a variable thickness (5" minimum) and shall match the profile of the adjacent existing wearing surface.

Reinforcement bars designated (E) shall be epoxy coated.

LOADING HS20-44

No allowance for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications.

DESIGN STRESSES

FIELD UNITS

$f'c = 3,500$ p.s.i.
 $f'c = 5,000$ p.s.i. (Concrete Wearing Surface)
 $f_y = 60,000$ p.s.i. (Reinforcement)

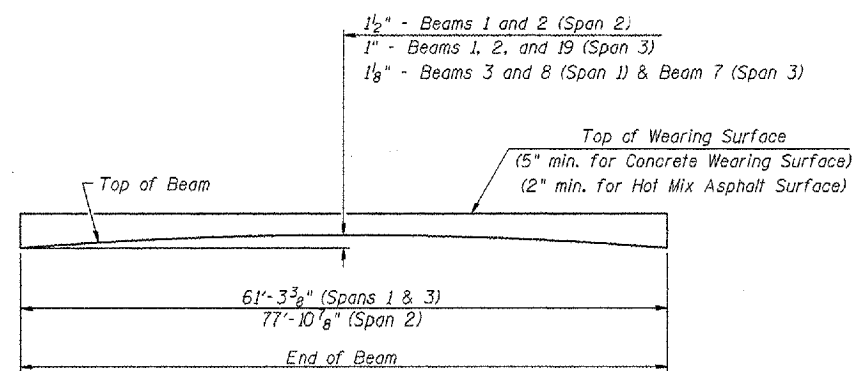
PRECAST PRESTRESSED UNITS

$f'c = 5,000$ p.s.i. (Spans 1 & 3)
 $f'c = 6,000$ p.s.i. (Span 2)
 $f'ci = 4,000$ p.s.i. (Spans 1 & 3)
 $f'ci = 5,000$ p.s.i. (Span 2)
 $f's = 270,000$ p.s.i. ($\frac{1}{2}$ " low lax strands)
 $f'si = 201,960$ p.s.i. ($\frac{1}{2}$ " low lax strands)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
* Polymerized Hot-Mix Asphalt Surface Course, Mix "D", N50	Tons	15.3
Stone Dumped Riprap, Class A5	Ton	70
Removal of Existing PPC Deck Beams	Sq. Ft.	1571
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	1556
Silicone Joint Sealer	Foot	213
Removing and Re-erecting Existing Railing	Foot	201
Asbestos Bearing Pad Removal	Each	28
Concrete Superstructure	Cu. Yd.	35.6
Concrete Removal	Cu. Yd.	35.6
Reinforcement Bars, Epoxy Coated	Pound	3430
Concrete Wearing Surface	Sq. Yd.	51
Mechanical Splicer	Each	246
Protective Coat	Sq. Yd.	178
Furnishing and Erecting Structural Steel	Pound	204

* Includes quantity for work over Beams 1 and 2 in Spans 2 and 3, and Beam 3 in Span 1.



ANTICIPATED INITIAL CAMBER DIAGRAM

GENERAL NOTES
U.S. RTE. 24 / IL RTE. 9
OVER LAMARSH CREEK
F.A.P. RTE. 317 - SECTION (45BR)I
PEORIA COUNTY
STA. 337+87.67
S.N. 072-0010

PLOT DATE = 8/24/05
FILE NAME = 871010