

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
		Peoria	20	17	4 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract Number: 6B751

GENERAL NOTES

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.

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.

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.

Temporary Concrete Barrier should only be anchored into the overlay and not into 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.

If the contractor's procedure for existing beam removal or placement 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 existing surface, 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 heavy equipment will be placed on new PPC deck beams, the following shall be done prior to placement of the timber mats: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum and grouting and curing the shear keys.

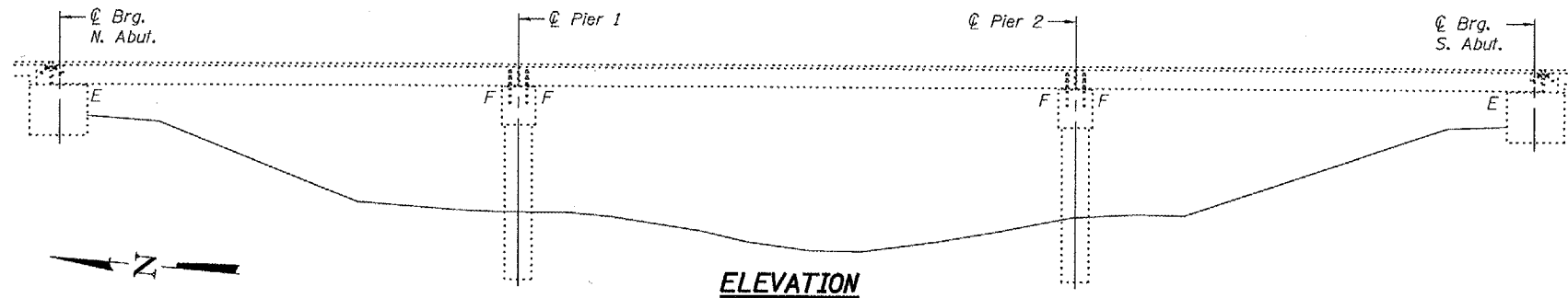
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

Protective coat shall not be applied to surfaces to which waterproofing membrane system is applied. Protective coat shall be applied to the curb and exposed vertical surfaces of the fascia beams that require replacement.



ELEVATION

	34'-0 1/4" Span 1	41'-3" Span 2	34'-0 1/4" Span 3
	E Brg. N. Abut.	Pier 1	Pier 2
	E Brg. S. Abut.		
Beam 1	36" Beam		36" Beam
Beam 2	36" Beam		36" Beam
Beam 3			
Beam 4			
Beam 5			36" Beam
Beam 6			36" Beam
Beam 7			35" Beam
Beam 8			
Beam 9			
Beam 10			
Beam 11			
Beam 12			
Beam 13	36" Beam		
Beam 14	36" Beam		
Beam 15	35" Beam		
Beam 16			36" Beam

PLAN

16 PPC Deck Beams at 3'-0" = 48'-0"

24'-0" Roadway

Existing WT section to be cut flush with face of beam to remain. (Typ.)

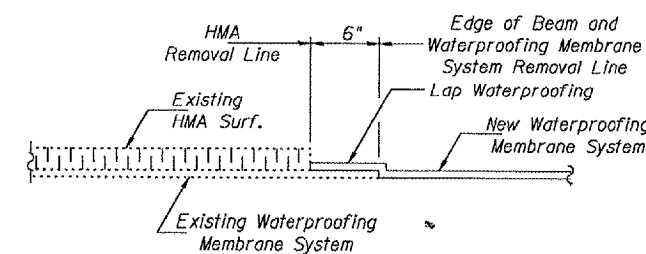
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

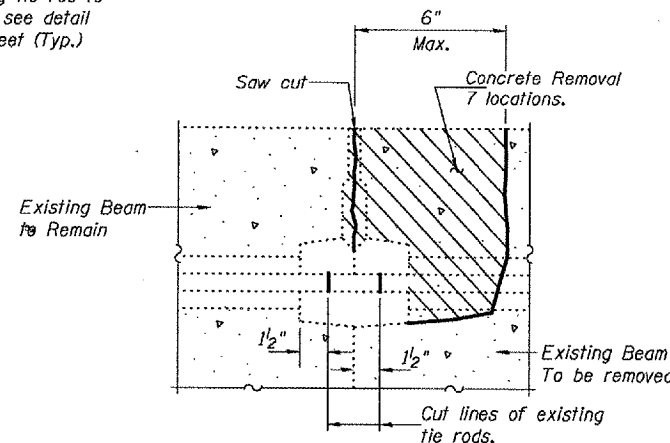
PRECAST PRESTRESSED UNITS

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)

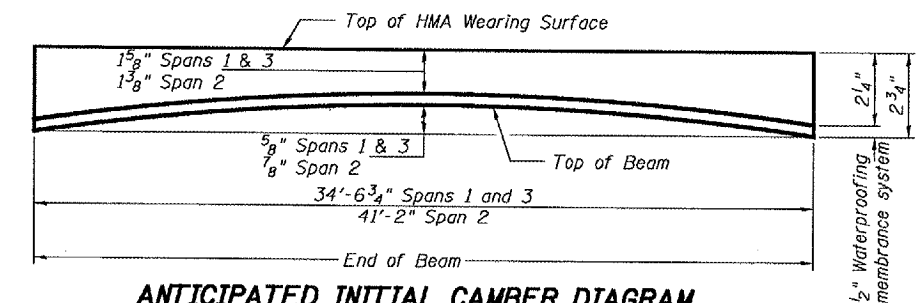


WATERPROOFING TREATMENT

Existing tie rod to be cut see detail this sheet (Typ.)



BEAM REMOVAL DETAIL AT TRANSVERSE TIES



ANTICIPATED INITIAL CAMBER DIAGRAM

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	1,160
PPC Deck Beams (17" Depth)	Sq. Ft.	1,155
HMA Surface Removal	Sq. Yd.	14.0
HMA Surface Course, Mix "D", N50	Tons	14.4
Waterproofing Membrane System	Sq. Yd.	132.5
PC Mortar Fairing Course	Foot	456
Asbestos Bearing Pad Removal	Each	10
Furnishing and Erecting Structural Steel	Pound	1,070
Removing and Re-erecting Existing Railing	Foot	110.5
Concrete Superstructures	Cu. Yd.	3.7
Protective Coat	Sq. Yd.	50
Reinforcement Bars Epoxy Coated	Pound	80

PLAN AND ELEVATION
F.A.S. RT. 384
PEORIA COUNTY
SN 072-0137



Expires: November 30, 2008

DESIGNED Victor H. Velj
CHECKED [Signature]
DRAWN [Signature]
CHECKED VHV SJR

EXAMINED [Signature] June 21, 2007
PASSED [Signature]
ENGINEER OF BRIDGES AND STRUCTURES