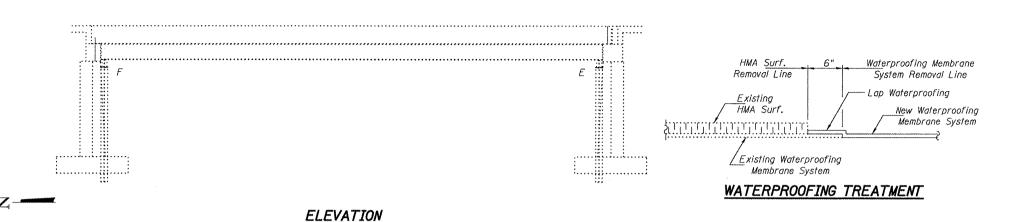
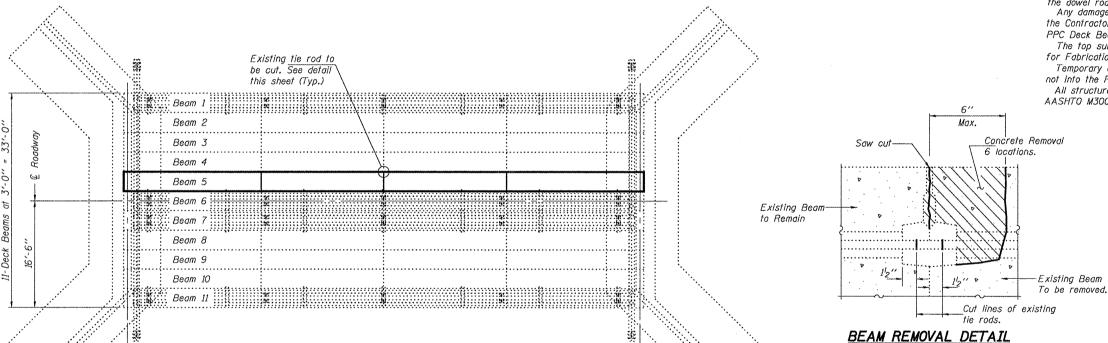
## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



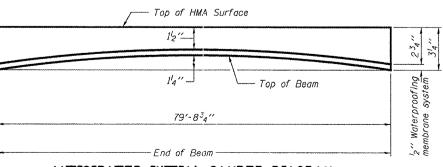


## PLAN

78'-634"



Expires: November 30, 2010



AT TRANSVERSE TIES

ANTICIPATED INITIAL CAMBER DIAGRAM

GENERAL NOTES

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

Plan dimensions and details relative to existing plans are subject to nominal construction 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 at the unit price bid for the work.

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.

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.

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.

Temporary concrete barrier shall only be anchored into the overlay and not into the PPC Deck Beams.

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with PPC Deck Beams.

## **DESIGN STRESSES**

PRECAST PRESTRESSED UNITS f'c = 6,000 psi f'ci = 5,000 psi  $f's = 270,000 \text{ psi} (^{1}_{2}''\phi \text{ low lax strands})$   $f'si = 201,960 \text{ psi} (^{1}_{2}''\phi \text{ low lax strands})$ 

## TOTAL BILL OF MATERIAL

TOTAL BILL OF MATE	TUTAL	
ITEM	UNIT	QUANTITY
Removal of Existing PPC Deck Beams	Sq. Ft.	239
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	233
Hot-Mix Asphalt Surface Removal	Sq. Yd.	9.1
HMA Surface Course Mix "D" N50	Tons	4.3
PC Mortar Fairing Course	Foot	160
Waterproofing Membrane System	Sq. Yd.	35.7
Asbestos Bearing Pad Removal	Each	1

PLAN & ELEVATION
IL ROUTES 94 & 116
OVER ELLISON CREEK
SN 036-0004

SHEET NO.1	F.A.P. RTE.	SECTION			COUNTY	TOTAL	SHEE NO.
	534	(109BR)I			HENDERSON	11	9
3 SHEETS					CONTRACT	NO. 6	8848
	FED. RO	AD DIST. NO.	ILLINOIS F	ED. AII	PROJECT		

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Kyle M. Steffen

DESIGNED Adrian Hallowa

CHECKED ATH AB