

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SBI 82		HENRY	10	2 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract No. 64C67

**GENERAL NOTES**

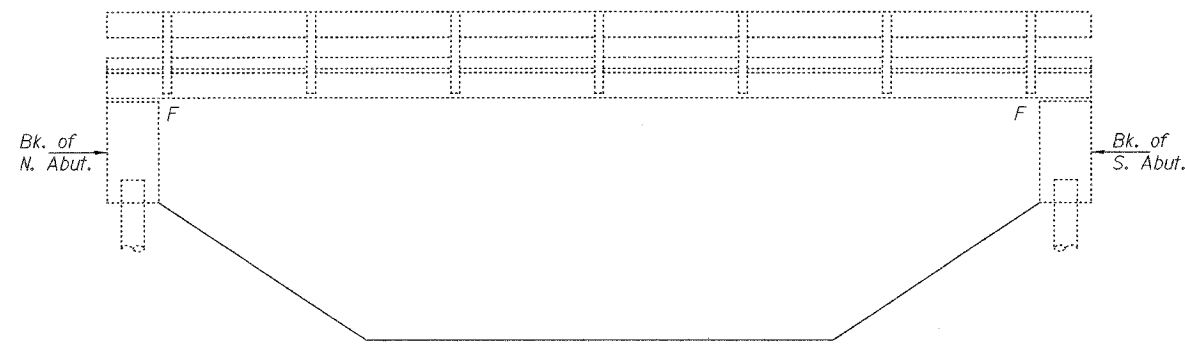
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction 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.

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".

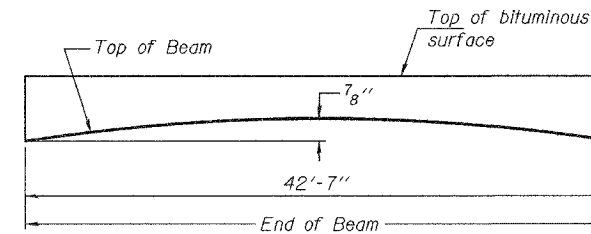
The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".

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.

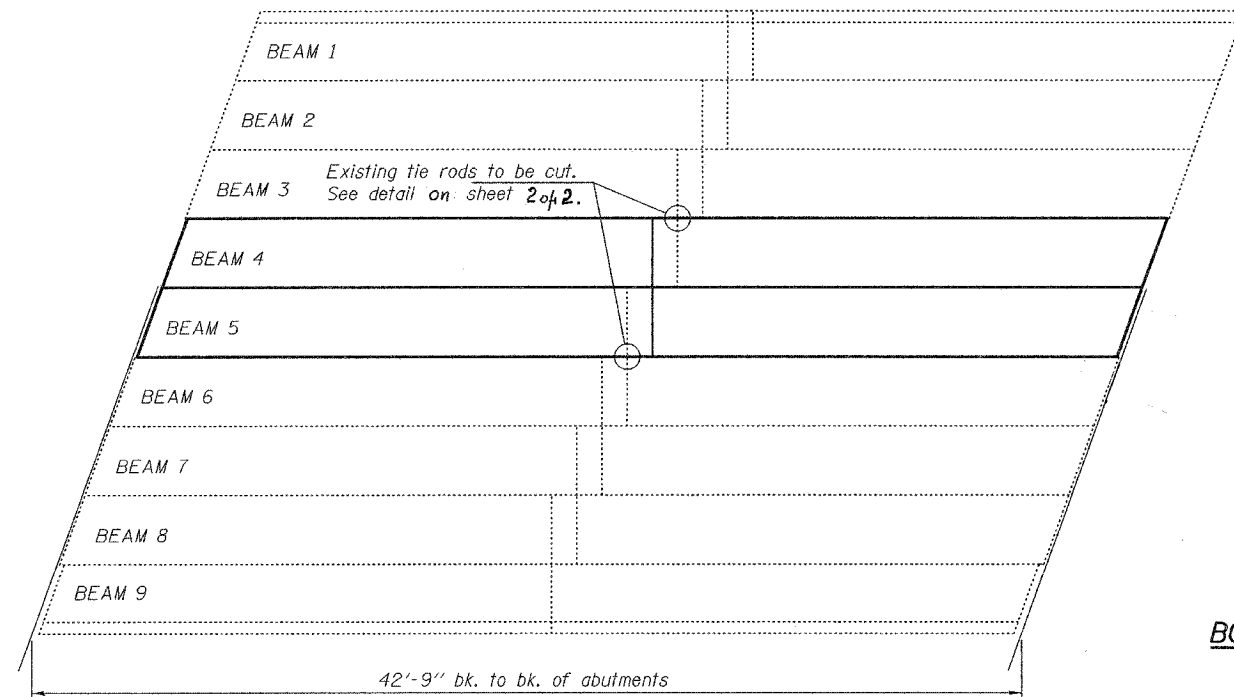
Precast prestressed concrete deck beams shall be erected according to the requirements of Article 504.06(e) of the Standard Specifications except that shear key clamping between new and existing construction will be required as shown on the plans and as herein specified. After the new deck beams are erected, the clamping devices shall be installed and pulled up tight so that a full, firm bearing is obtained between the clamping plates and the deck beam concrete. The Contractor shall furnish all material for the clamping devices, including sufficient 1/6" and 1/8" steel shims to adjust for differential elevations between the two deck beams. The 1/4" holes for the clamping devices shall be drilled at the locations shown on the plans. Care shall be taken to drill the holes perpendicular to the beams. After the shear key clamping devices are fully secured, the keyways shall be grouted. The clamping devices shall not be loosened or removed. Complete the wearing surface installation. This work, including the furnishing of clamping devices and shims, shall be included in the cost for Precast Prestressed Concrete Deck Beams (21" Depth).



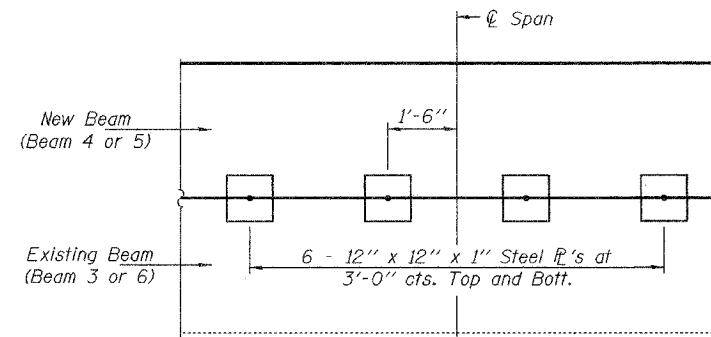
**ELEVATION**



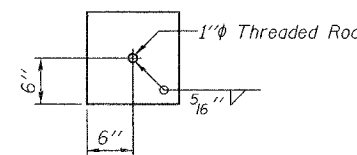
**ANTICIPATED INITIAL CAMBER DIAGRAM**



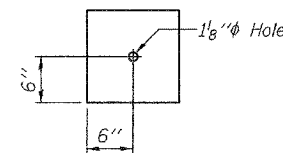
**FRAMING PLAN**



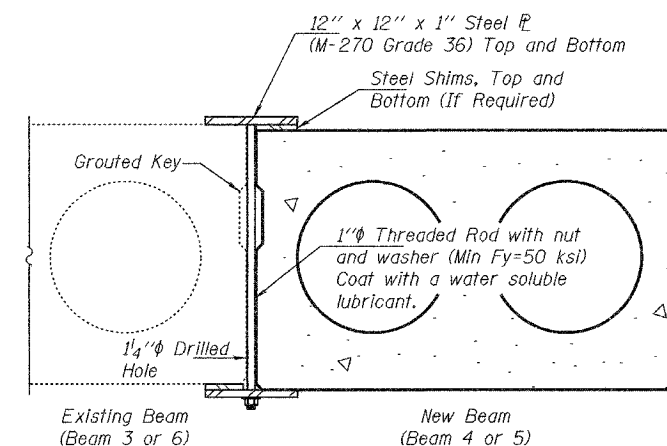
**PLAN**



**TOP CLAMPING R**

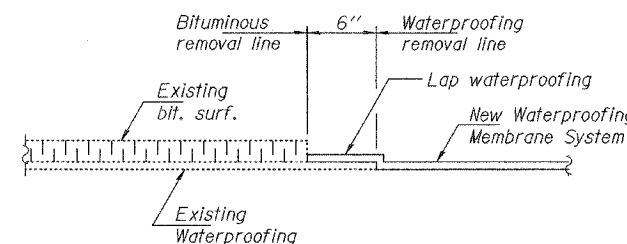


**BOTTOM CLAMPING R**



**SHEAR KEY CLAMPING DEVICE**

Cost included with Precast Prestressed Concrete Deck Beams (21" Depth) (12 Required)



**WATERPROOFING TREATMENT**

**DESIGN STRESSES  
PRESTRESS UNITS**

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

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Bituminous Concrete Surface Course, Superpave Mix "D" N50	Tons	8.5
Bituminous Concrete Surface Removal	Sq. Yd.	5
Removal of Existing PPC Deck Beams	Sq. Ft.	256
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	252
Waterproofing Membrane System	Sq. Yd.	34
PC Mortar Fairing Course	Foot	129

**PLAN AND ELEVATION**

SBI RT. 82  
HENRY COUNTY  
STA. 636+24  
SN 037-0106

DESIGNED	<i>Rini A. Belic</i>
CHECKED	<i>Paul S. Johnson</i>
DRAWN	<i>baliva</i>
CHECKED	<i>PSJ</i>

EXAMINED	<i>John A. Morris</i>	JULY 17, 2006
PASSED	<i>Ralph E. Anderson</i>	



EXPIRES 11-30-2006