

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
91	D7 BEAM REPAIR 2008-3	COLES	6	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 74291	

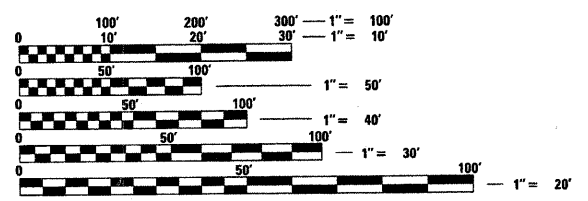
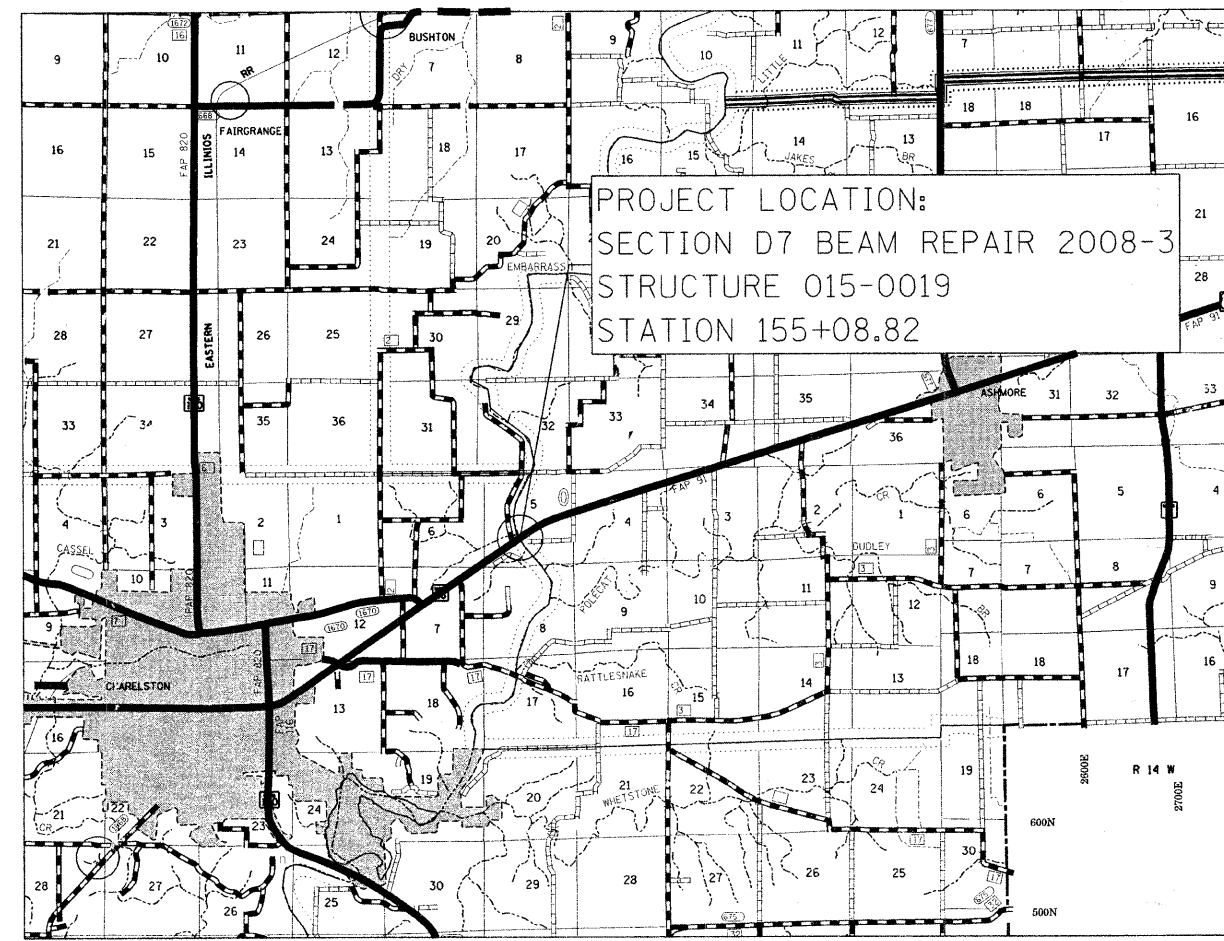
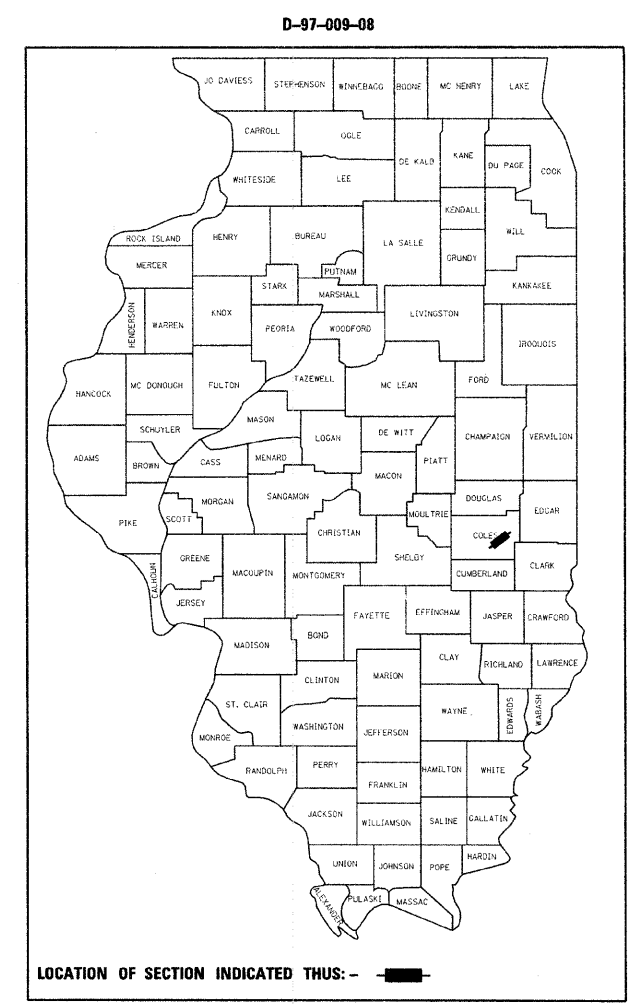
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**

**PROPOSED**  
**HIGHWAY PLANS**

FAP 91 (IL 16)  
**SECTION D7 BEAM REPAIR 2008-3**

**COLES COUNTY**  
C-97-037-08

FOR INDEX OF SHEETS, SEE SHEET NO. 2



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

**PROJECT ENGINEER: MARK DAUGHERTY**  
**PROJECT MANAGER: SARAH KREKE**

**CONTRACT NO. 74291**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED February 15 2008

*Christine M. Reed*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 21, 2008  
*Eric E. Horn*  
ENGINEER OF DESIGN AND ENVIRONMENT

March 21, 2008  
*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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**OF THE STATE OF ILLINOIS**

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO THE CONSTRUCTION OR ORDERING OF MATERIAL. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION OR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTION & PLAN VIEW
5-6	BRIDGE PLANS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 6:

STD. NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-01	OFF-RD OPERATIONS, 2L, 2W MORE THAN 15' AWAY
701006-02	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701901	TRAFFIC CONTROL DEVICES

FILE NAME = c:\projects\74291d\shcover_74291.dgn	USER NAME = scheinmk	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL NOTES &amp; INDEX OF SHEETS</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 28.8000" = 1"	CHECKED -	REVISED -			91	D7 BEAM REPAIR 2008-3	COLES	6	2	
	PLOT DATE = 2/15/2008	DATE -	REVISED -			CONTRACT NO. 74291					
						SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

SUMMARY OF QUANTITIES			100% STATE	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	SFTY-2A	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	17,900	17,900	
67100100	MOBILIZATION	L SUM	1	1	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	

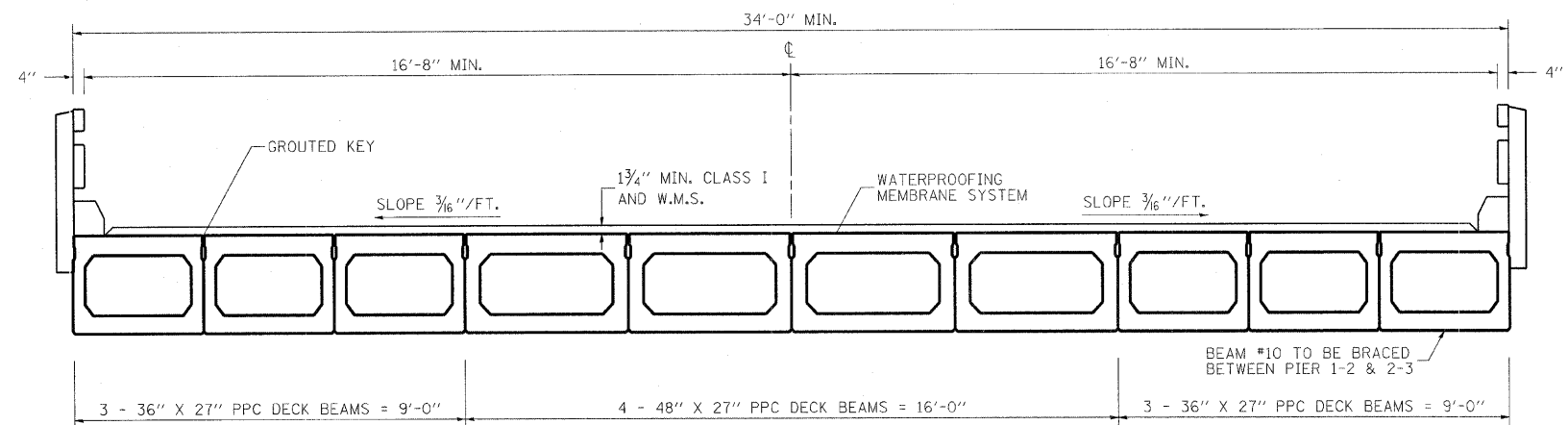
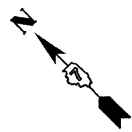
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		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

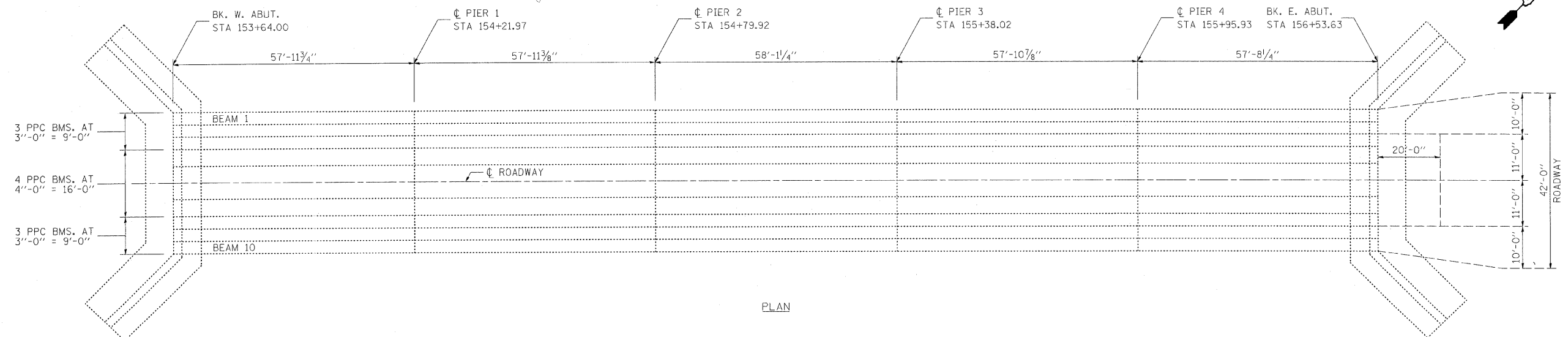
**SUMMARY OF QUANTITIES**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

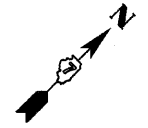
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	Rev SHEET NO.
91	D7 BEAM REPAIR 2008-3	COLES	6	3
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74291	



TYPICAL SECTION



PLAN



FILE NAME = c:\projects\74291d\sh\typ.74291.dgn	USER NAME = steffenik	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL SECTION AND PLAN VIEW</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = 2/15/2008	CHECKED -	REVISED -					CONTRACT NO. 74291				
	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1 2 SHEETS
FA 91		COLES	6	5	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract Number: 74291		

\* Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth = 36". No additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans.

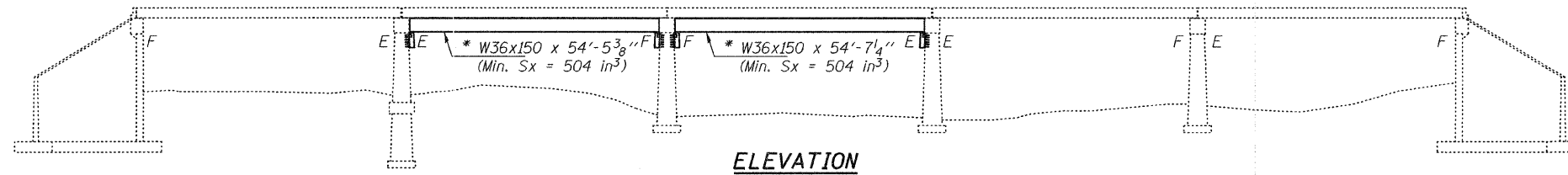
**GENERAL NOTES**

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 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.

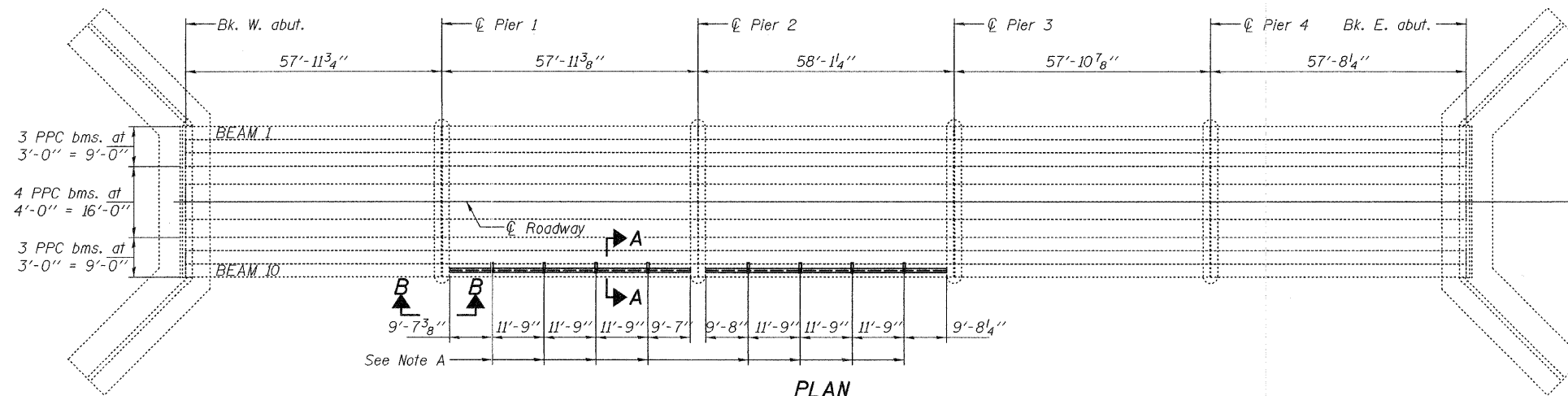
See Section 584 of the Standard Specifications for Epoxy Grouting of threaded rods; minimum embedment = 9".  
The cost of epoxy grouting threaded rods shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See special provisions.  
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 placement of 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 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.



**ELEVATION**



**PLAN**

For Sections A-A and B-B, see sheet 2 of 2.

Note A:  
⊕ Transverse tie plates. Place additional shims at midpoints between tie plates. Securely weld shims to top flange of support beam. Min. shim size is 6" x flange width.

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	17900

DESIGNED	Victor H. Veliz
CHECKED	<i>[Signature]</i>
DRAWN	baliva
CHECKED	ASB VHV

MARCH 4, 2008  
EXAMINED *[Signature]*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *[Signature]*  
ENGINEER OF BRIDGES AND STRUCTURES

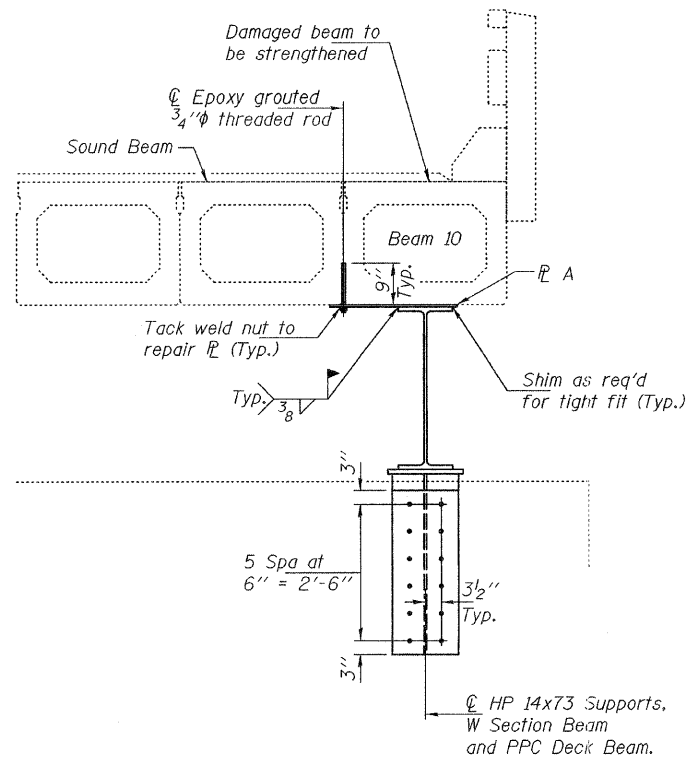


Expires: November 30, 2008

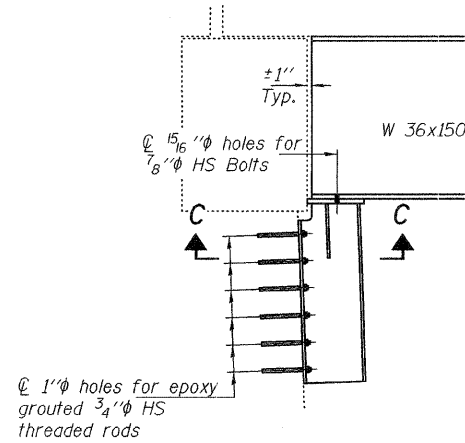
**PLAN AND ELEVATION**  
FA 91  
COLES COUNTY  
SN 015-0019

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

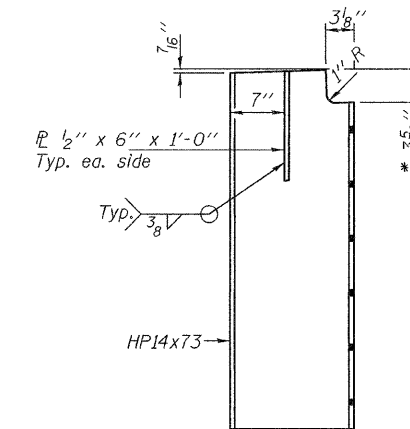
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2 2 SHEETS
FA 91		COLES	6	6	
FED. AID DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract Number: 74291		



**SECTION A-A**

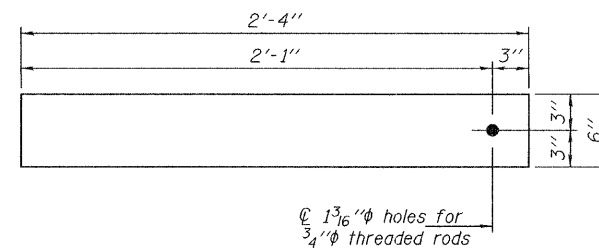


**SECTION B-B**

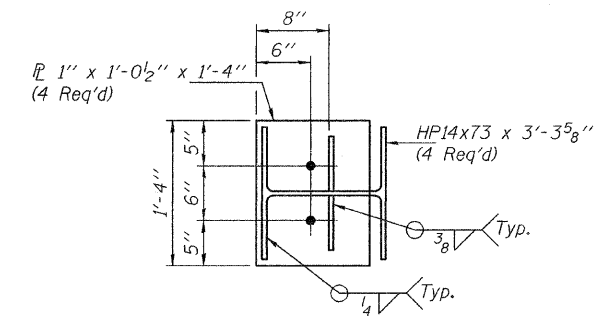


**NOTCH AND STIFFENER DETAIL**

\* This dimension can be reduced if existing field conditions allow it.



**TRANSVERSE TIE R'S**  
R A 1/2" x 2'-4" x 6" (8 Req'd)



**SECTION C-C**

DESIGNED	VHV
CHECKED	AJB
DRAWN	ballva
CHECKED	VHV AJB

MARCH 4, 2008

EXAMINED *Carl Hines*  
ENGINEER OF STRUCTURAL SERVICES

PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

**REPAIR DETAILS**  
FA 91  
COLES COUNTY  
SN 015-0019