STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 752 (US 40 / IL 185) SECTION D7 BEAM REPAIR 2008–1 FAYETTE COUNTY

C-97-002-08

2005 ADT = 4050

0 100' 200' 300'—1"= 100'
0 10' 20' 30'—1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' — 100' — 1"= 20'

FOR INDEX OF SHEETS, SEE SHEET NO. 2

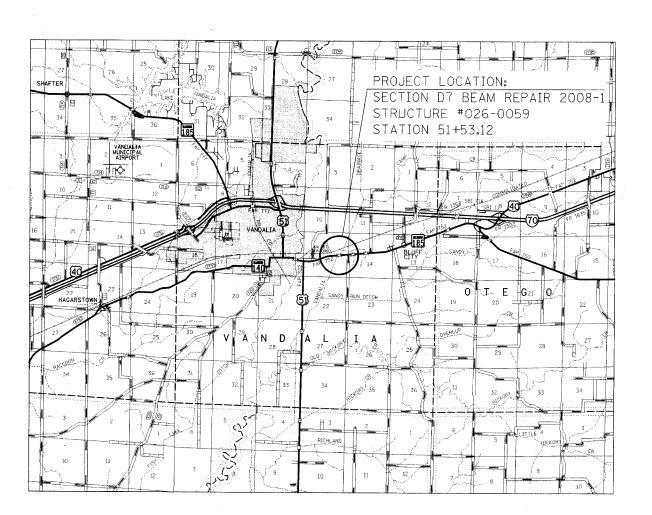
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

TOWNSHIP: VANDALIA

CONTRACT NO. 74283



| CONTRACT NO. 74283 | F.A.P. | SECTION | COUNTY | TOTAL | SHEET | NO. | 752 | FAYETTE | 5 | SHEET | NO. |

* D7 BEAM REPAIR 2008-1

D-97-002-08



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED

August 13 20 07

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 12, 20 07

Enric E. Harry D

Saturing ENGINEER OF DESIGN AND ENVIRONMENT
October 12, 20 07

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER; WILLIAM E. STANLEY SQUAD LEADER; JENNIFER WENTHE DESIGNER; JENNIFER WENTHE TELEPHONE; 2177342-3951 FX 361

		CONTRAC	I NO. 77	203
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	•	FAYETTE	5	2
STA.		TO STA.		
FED. RO	AD DIST, NO.	ILLINOIS FED. AT	ID PROJECT	•

• D7 BEAM REPAIR 2008-1

100% STATE CONSTRUCTION SUMMARY OF QUANTITIES TYPE CODE TOTAL UNIT QUANTITIES SFTY-2A ITEM CODE NO FURNISHING AND ERECTING STRUCTURAL STEEL POUND 50500405 42810 42810 L SUM 67100100 MOBILIZATION TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 L SUM 70100450

INDEX OF SHEETS

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

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 5:

STD. NO.	DESCRIPTION
000001-04 701001-01	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 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
702001-06	TRAFFIC CONTROL DEVICES

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS; THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007; AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

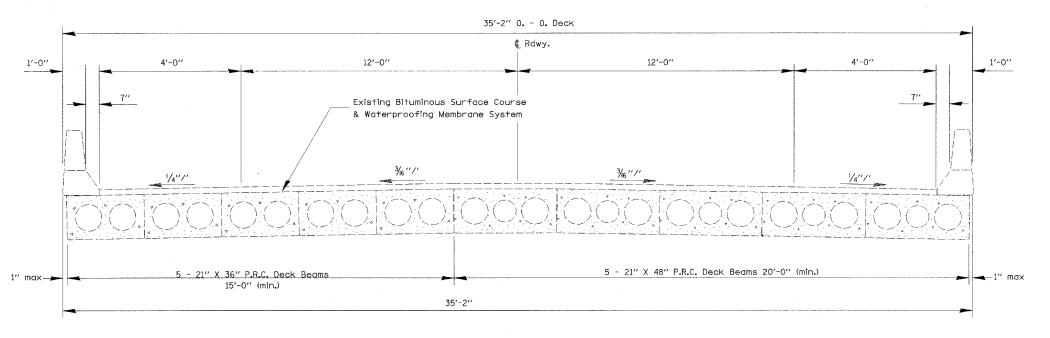
THE WORK INCLUDED IN THIS SECTION CONSISTS OF REHABILITATING STRUCTURE NUMBER 026-0059 OVER CAMP CREEK LOCATED O. 8 MILES EAST OF US ROUTE 51. DECK BEAMS SHALL BE BRACED TO MAINTAIN/IMPROVE THE LOAD CAPACITY.

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 CONTRACTOR RESPONSIBILITY 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.

	REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION		
	NAME	DATE	LEINOIS DEI AN	IMENT OF TRANSPORTATION	
			INDEX	Y OF QUANTITIES, OF SHEETS AND ERAL NOTES	
·.			SCALE: VERT. HORIZ. DATE	DRAWN BY CHECKED BY	

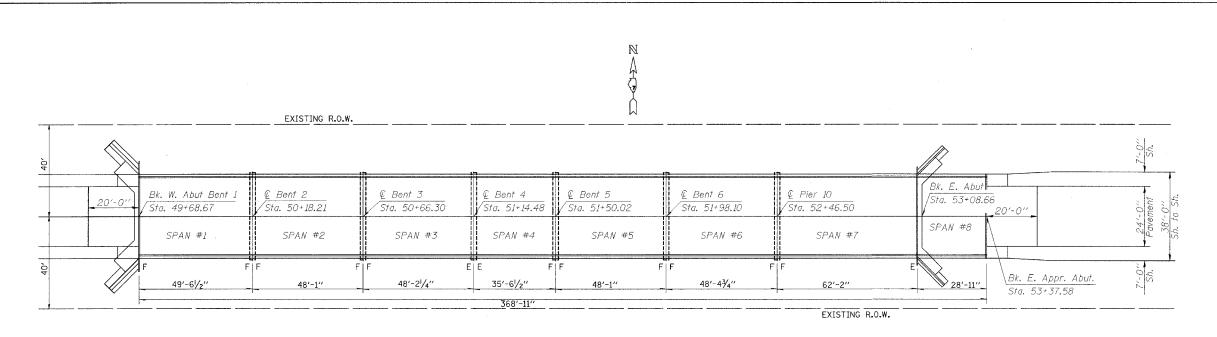
CONTRACT NO. 74283

COUNTY TOTAL SHEET NO. F.A.P. RTE SECTION 752 FAYETTE STA. TO STA. FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT • D7 BEAM REPAIR 2008-1



TYPICAL SECTION

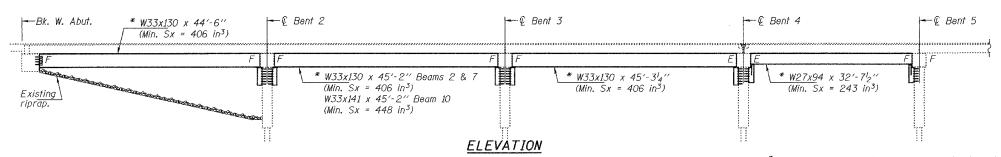
SPANS 1-6 (LOOKING EAST)



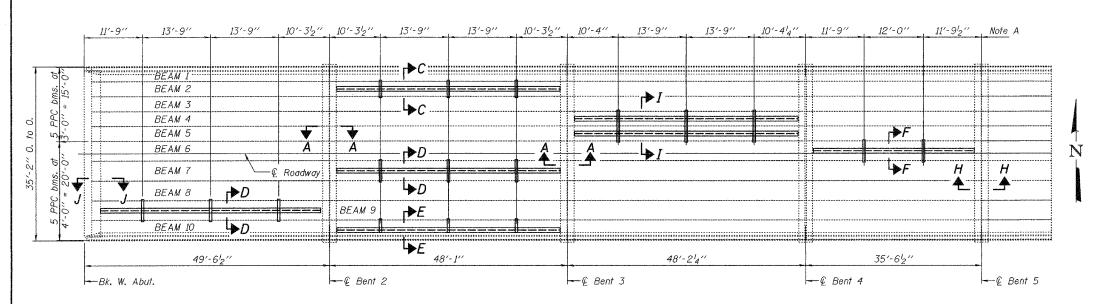
<u>PLAN</u>

ILLINOIS DEPARTMENT OF TRANSPORTATION		
ILLINOIS DEPARTMENT OF TRANSPORTATION		
TYPICAL SECTION		
AND		
PLAN VIEW		
CALE: VERT. DRAWN BY		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



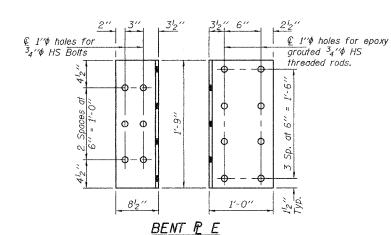
* Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures, however, no additional payment will be allowed if the contractor chooses a heavier steel section than the one specified in the plans. Maximum girder depth = 36", except Span 1, maximum girder depth = 33".



flange width.

shims at midpoints between tie plates. Securely weld shims to top flange of support beam. Min. shim size is 6" x

PLAN For Sections A-A thru J-J, see



P 2" x 1'-8" x 1'-9"

(2 Req'd)

DESIGNED Victor H. Veliz OCTOBER 9, 2007 PASSED Roll E. Allinon
ENGINEER OF BRIDGES AND STRUCTURES baliva AJB VHV



Expires: November 30, 2008

SHEET NO. 1 FA 752 5 4 Fayette FEO. ROAD DIST, NO. 7 ILLINOIS FEO. AID P

2 SHEETS

Contract Number: 74283

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.

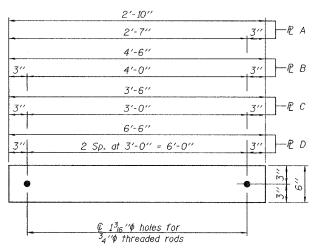
The cost of epoxy grouting threaded rods shall be included with

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 contractors 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.



TRANSVERSE TIE P'S

P A 2" x 2'-10" x 6" (3 Req'd) ½" x 4'-6" x 6" (8 Req'd) C 2" x 3'-6" x 6" (3 Req'd) $\frac{R}{L} D \frac{T_2}{2}$ x 6'-6" x 6" (3 Req'd)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	42810

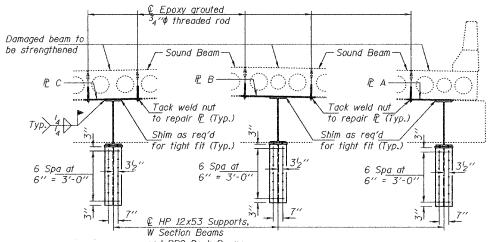
PLAN AND ELEVATION FA 752 FAYETTE COUNTY SN 026-0059

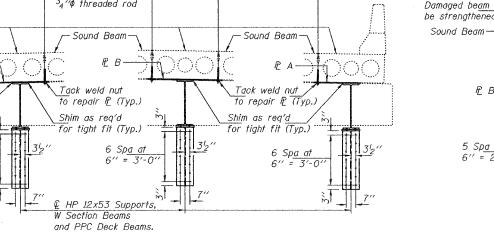
CHECKED

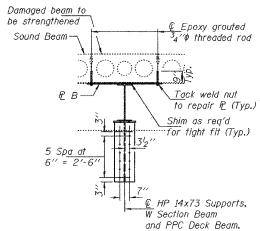
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



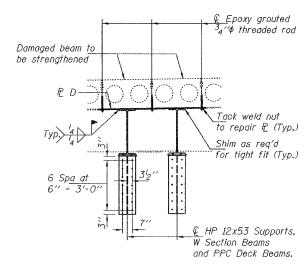
Contract Number: 74283







SECTION F-F

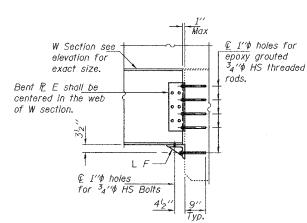


SECTION C-C

SECTION D-D

SECTION E-E

SECTION I-I



SECTION J-J

W section per elevation Typ. © ¹⁵16 ''∮ holes <u>for</u> ⁷8''∮ HS Bolts € 1'\$ holes for epoxy grouted 34"\$ HS threaded rods

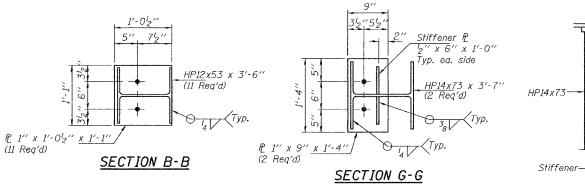
€ 1"¢ holes for epoxy

grouted 3414 HS

threaded rods

SECTION A-A

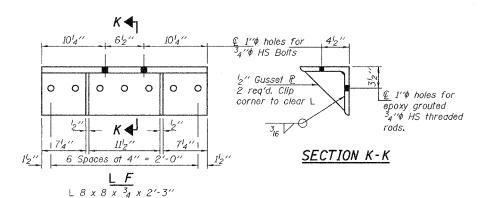
SECTION H-H



(1 Req'd)

NOTCH AND STIFFENER DETAIL

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



VHV DESIGNED AJBCHECKED baliva DRAWN VHV AJB CHECKED

W section

per elevation

© ¹⁵16 "\$ holes for 78"\$ HS Bolts

Typ. В

В

OCTOBER 9, 2007 PASSED

REPAIR DETAILS FA 752 FAYETTE COUNTY SN 026-0059