STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

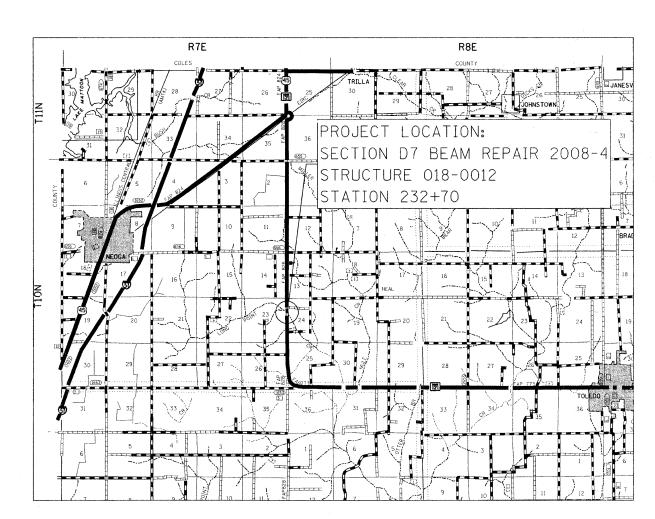
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP ROUTE 828 (IL 121) SECTION D7 BEAM REPAIR 2008-4

CUMBERLAND COUNTY

C-97-052-08







STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

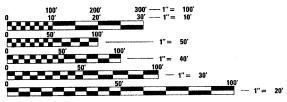
Christine M. Leef of DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINE

Eric E. Harufa Jubrian ENGINEER OF DESIGN AND ENVIRONMEN

March 21, 2008

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



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 ENGINEER SARAH KREKE

CONTRACT NO. 74301

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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

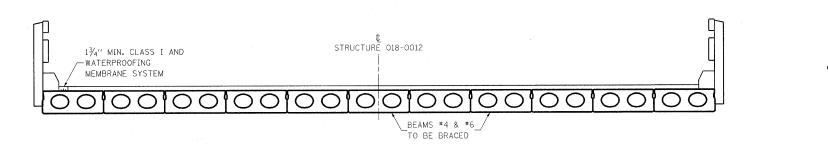
| SHEET NO. | ITEM |
|--|---|
| 1 2 3 4 5-6 | COVER SHEET INDEX OF SHEETS, AND GENERAL NOTES SUMMARY OF QUANTITIES TYPICAL SECTION & PLAN VIEW BRIDGE PLANS |
| THE FOLLOWING INCLUDED AFTER | STANDARDS ARE A PART OF THESE PLANS AND ARE |
| STD. NO. | DESCRIPTION |
| 000001-05 701001-01 701006-02 701201-02 701901 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS' OFF-RD OPERATIONS, 2L, 2W MORE THAN 15' AWAY OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH TRAFFIC CONTROL DEVICES |

| - 1 | | | | | | 1 | |
|-----|---|------------------------------|------------|-----------|------------------------------|--------|------|
| - 1 | ET C MANE - | USER NAME = steffenmk | DESIGNED - | REVISED - | | | GE |
| | FILE NAME = c:\projects\74301d\shtcover_74301.dgn | | DRAWN - | REVISED - | STATE OF ILLINOIS | | GL |
| - 1 | c:\projects\/43016\antcover_/43016gi | PLOT SCALE = 20.0000 ' / IN. | CHECKED | REVISED - | DEPARTMENT OF TRANSPORTATION | 00115 | SHEE |
| - 1 | | PLOT DATE = 2/5/2008 | DATE - | REVISED - | · | SCALE: | SHEE |
| - 1 | | PLUI DHIC - 27072800 | 101112 | | | | |

| | | | | | | | F.A.P RTE. | | SEC | CTION | | COUNTY | SHEETS | S SHE | Ĵ. |
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| | GENERAL | NOTES | & IND | EX OF | SHEETS | | | D7 B | EAM F | REPAIR | 2008-4 | CUMBERLAND | 6 | | 2 |
| | | | | | | | | | | | | CONTRAC | T NO. | 743 | 0 |
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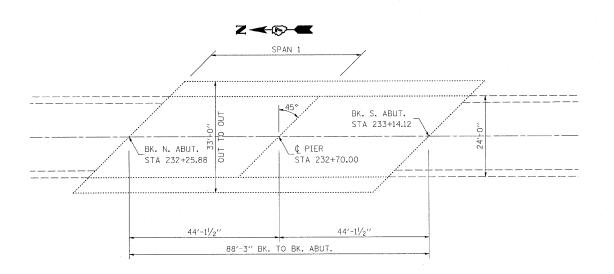
| | | SUMMARY OF QUANTITIES | | | CONSTRUCTIO | N TYPE CODE |
|---|--|--|-------|------------|-------------|-------------|
| | CODE NO | | ſ | TOTAL | SFTY-2A | |
| | | ITEM | UNIT | QUANTITIES | 100% STATE | |
| | 50500405 | FURNISHING AND ERECTING STRUCTURAL STEEL | POUND | 10740 | 10740 | |
| | 67100100 | MOBILIZATION | L SUM | 1 | 1 | |
| | 70100450 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701201 | L SUM | 1 | 1 | |
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| c:\projects\74301d\shtsoq_74301.dgn | | DRAWN - | REVISED - · | STATE OF ILLINOIS | | SUMMARY OF QUANTITIES | | RTE. | SECTION | COUNTY SHEETS | |
| | PLOT SCALE = 20.0000 '/ IN. | CHECKED - | REVISED - | DEPARTMENT OF TRANSPORTATION | SUMINIANT OF QUANTITIES 828 | | | | 07 BEAM REPAIR 2008-4 | OUNDERTEASED O | 3 |
| | PLOT DATE = 2/5/2008 | DATE - | REVISED - | | SCALE: | SHEET NO. OF SHEETS STA. | TO STA | | | CONTRACT NO. | 74301 |
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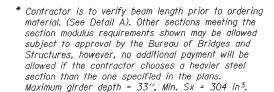
11 - 21" PPC DECK BEAMS @ 3'-0" = 33'-0"

TYPICAL SECTION OF SPAN 1



PLAN

| FILE NAME = | USER NAME = steffenmk | DESIGNED - | REVISED - | | | | | | | | F.A.P RTE. | SECTION | COUNTY | TOTAL SHEET SHEETS NO. |
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| c:\projects\74301d\shttyp_74301.dgn | | DRAWN - | REVISED - | STATE OF ILLINOIS | | TYPICA | AL SEC | TION A | ND PLAN | VIEW | 828 | D7 BEAM REPAIR 2008-4 | CUMBERLAND | D 6 4 |
| | PLOT SCALE = 20.0000 '/ IN. | CHECKED - | REVISED - | DEPARTMENT OF TRANSPORTATION | | | | | , | | | | CONTRAC | CT NO. 74301 |
| | PLOT DATE = 2/5/2008 | DATE - | REVISED | | SCALE: | SHEET NO. | 0F | SHEETS | S STA. | TO STA. | FED. RO | DAD DIST. NO. ILLINOIS FED. A | ID PROJECT | |



N. Abut.

* W30x116

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

39'-734"

40'-64"

DETAIL A

beam

S. Abut.



Contract Number: 74301

GENERAL NOTES

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

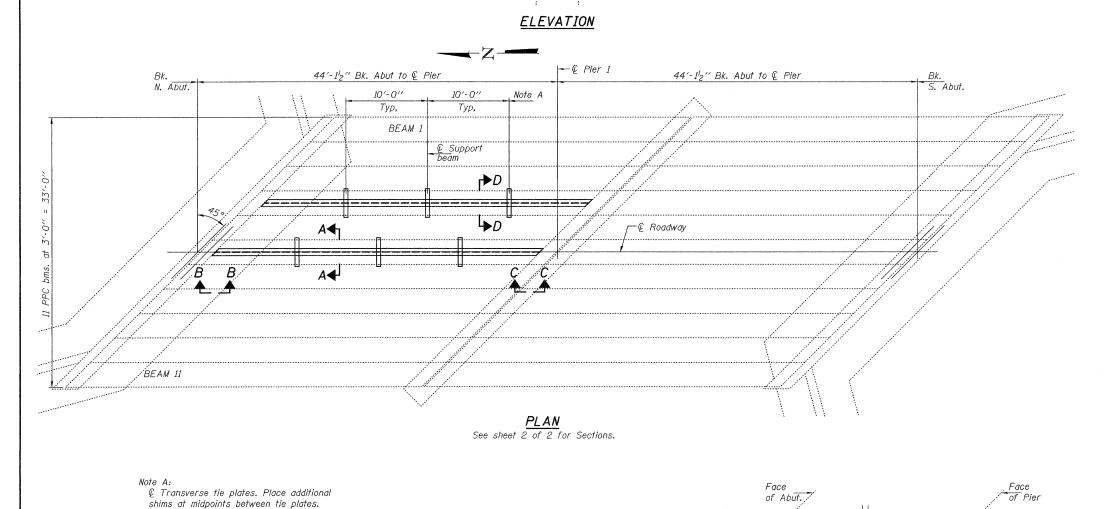
Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause 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.



3'-6" 3'-0" © ¹³16 ''¢ holes for ³4''¢ threaded rods

TRANSVERSE TIE P'S P A '2" x 3'-6" x 6" (6 Req'd)

TOTAL BILL OF MATERIAL

| ITEM | UNIT | QUANTITY |
|--|-------|----------|
| Furnishing and Erecting Structural Steel | Pound | 10740 |
| | | |

PLAN AND ELEVATION FAP 828 OVER LONG POINT CREEK CUMBERLAND COUNTY SN 018-0012

DESIGNED Victor H. Veliz

CHECKED VHV MB FEBRUARY 22, 2008

Securely weld shims to top flange of support beam. Minimum shim size is

6" x flange width.

Ralah E. ander



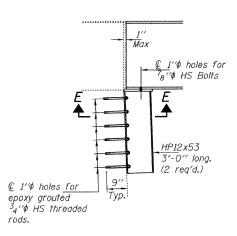
Expires: November 30, 2008

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

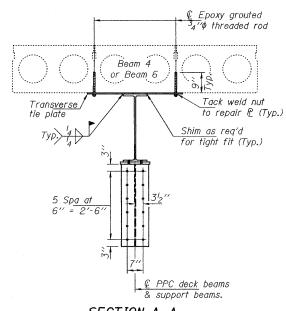


Contract Number: 74301

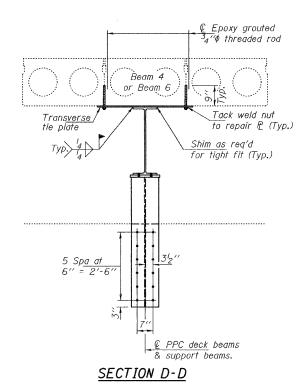
 $\frac{Q}{2}$ 1'' ϕ holes for epoxy grouted $^34''\phi$ HS threaded



SECTION B-B



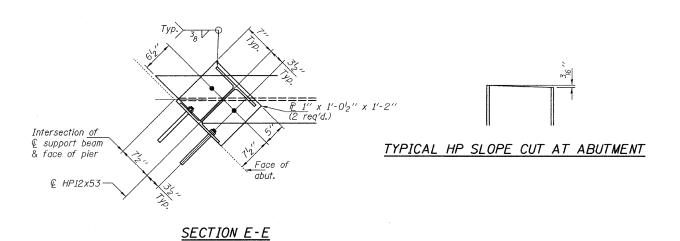
SECTION A-A

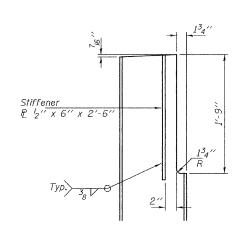


SECTION C-C

© 1"\$ holes for 78"\$ HS Bolts

HP12x5<u>3</u> 4'-9'' long. (2 req'd.)





PARTIAL HP SECTION AT PIER

| Face of pier $\frac{1}{2}$ Intersecting support & face of (2 req'd.) | on of beam |
|--|---------------|
| SECTION F-F | |

REPAIR DETAILS FAP 828 OVER LONG POINT CREEK CUMBERLAND COUNTY SN 018-0012

| DESIGNED | VHV |
|----------|---------|
| CHECKED | AJB |
| DRAWN | baliva |
| CHECKED | VHV AJB |
| | |

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