

DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
 FEDERAL AID – S.T.P. BRIDGE**

T.R. 87 WABASH COUNTY SECTION 14-01114-00-BR

PROJECT NO. BROS-0185(038) JOB NO. C-97-057-15

CONTRACT #95783 CRAWFISH CREEK

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
87	14-01114-00-BR	WABASH	12	1
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		
PROJECT * BROS-0185(038)		CONTRACT * 95783		
LEC JOB # H41016WB		CRAWFISH CREEK		

323 W. 3RD ST.
 P.O. BOX 160
 MT. CARMEL, IL
 62863
 PHONE:
 (618)-262-8651
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 (618)-263-3327

ILLINOIS
 PROFESSIONAL
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 LAND SURVEY:
 PROFESSIONAL
 ENGINEERING &
 STRUCTURAL
 ENGINEERING
 CORPORATION
 184-00959

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AARON M. MEFFORD
 NAME
 Signature
 SIGNATURE
 DATE
 2-3-16
 11-30-17
 EXPIRES

TOWNSHIP ROUTE 87
 OVER CRAWFISH CREEK
 WABASH COUNTY, ILLINOIS

SHEET TITLE:
 TITLE SHEET
 SCALE: VARS
 BY: A.M.M.
 DATE: 2016
 REV:
 1 OF 12
 SHEETS
 SHEET NO.
 1

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET & SUMMARY OF QUANTITIES
2	PLAN & PROFILE, TYPICAL SECTIONS, & GENERAL NOTES
3-4	ROADWAY CROSS SECTIONS
5-12	BRIDGE DESIGN

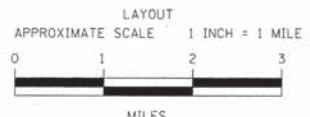
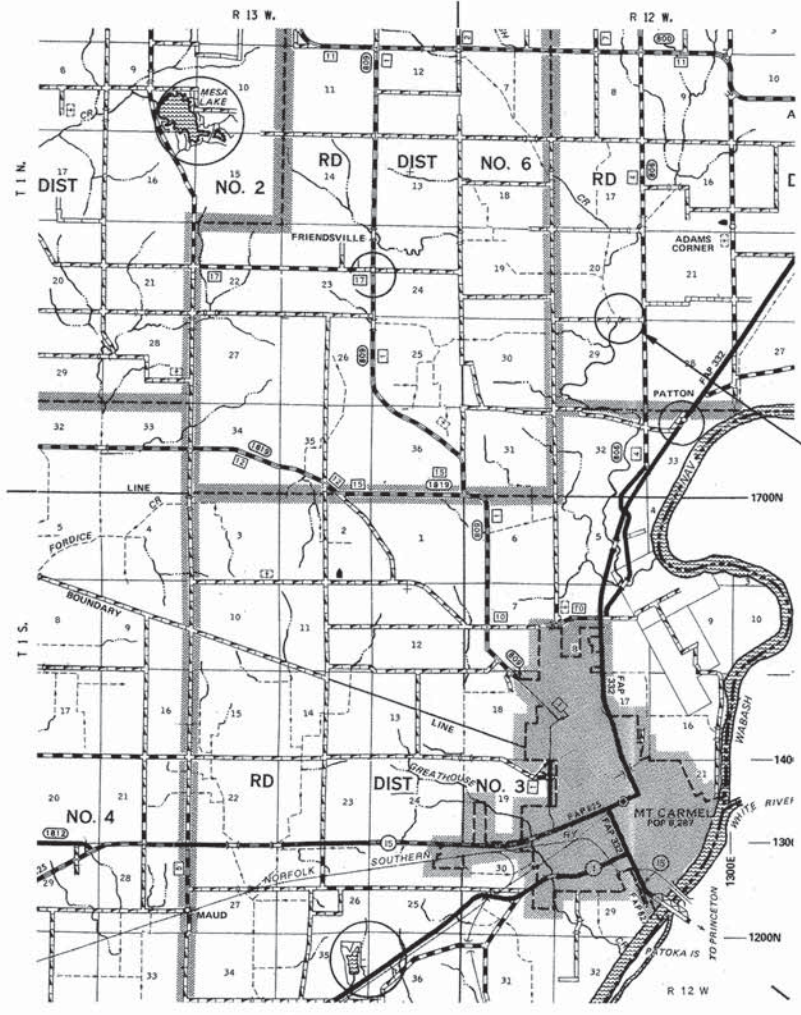
HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
701901-05	TRAFFIC CONTROL DEVICES
725001	OBJECT AND TERMINAL MARKERS
B.L.R. 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEM	CODE NO.
68.0	UNIT	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	20100110
82.0	UNIT	TREE REMOVAL (OVER 15 UNITS DIAMETER)	20100210
241.0	CU YD	EARTH EXCAVATION	20200100
430.0	CU YD	CHANNEL EXCAVATION	20300100
2700.0	CU YD	FURNISHED EXCAVATION	20400800
28.0	FOOT	TEMPORARY DITCH CHECKS	28000305
460.0	TON	STONE DUMPED RIPRAP, CLASS A4	28100807
600.0	TON	AGGREGATE SURFACE COURSE, TYPE B	40200800
1.0	EACH	REMOVAL OF EXISTING STRUCTURES	50100100
29.4	CU YD	CONCRETE STRUCTURES	50300225
2280.0	SQ FT	PRECAST PRESTRESSED CONCRETE DECK BEAMS (42" DEPTH)	50400705
4340.0	POUND	REINFORCEMENT BARS, EPOXY COATED	50800205
186.0	FOOT	STEEL RAILING, TYPE S1	50900205 Δ
300.0	FOOT	FURNISHING STEEL PILES HP12X53	51201600
300.0	FOOT	DRIVING PILES	51202305
10.0	EACH	PILE SHOES	51204650
1.0	EACH	NAME PLATES	51500100
70.0	FOOT	PIPE CULVERTS, CLASS D, TYPE 1 24"	54200229
60.0	FOOT	PIPE CULVERTS, CLASS D, TYPE 1 36"	54200241
96.0	SQ FT	CONCRETE SEALER	58700300
1.0	L SUM	MOBILIZATION	67100100
4.0	EACH	TERMINAL MARKER - DIRECT APPLIED	78201000 Δ
0.8	ACRE	SEEDING, CLASS 2 (SPECIAL)	X2501000
101.0	TON	STONE LINED DITCH	Z0068900

Δ SPECIALTY ITEMS



GROSS LENGTH	750.00 FT	0.142 MILES
OMISSIONS	0.00 FT	0.000 MILES
NET LENGTH	750.00 FT	0.142 MILES

PLAN	1" = 50'	0 50' 100'
PROFILE	1" = 50'	0 50' 100'
PROFILE VERT.	1" = 5'	0 5' 10'
CROSS SECTION	1" = 5'	0 5' 10'

SECTION 14-01114-00-BR
 BEGINS STATION 1+25

STATION 5+00, STRUCTURE NO. 093-3137
 A 95' LONG SINGLE SPAN P.P.C.D.B. BRIDGE WITH
 24' ROADWAY, 0.00% GRADE, 15° RIGHT FORWARD SKEW.

SECTION 14-01114-00-BR
 ENDS STATION 8+75

APPROVED FEBRUARY 3RD 20 16
 Signature
 COUNTY ENGINEER

PASSED 2-16 20 16
 Signature
 DISTRICT SEVEN ENGINEER OF
 LOCAL ROADS & STREETS

Releasing For
 Bid Based on
 Limited Review 2/8 20 16
 Signature
 DEPUTY DIRECTOR OF HIGHWAYS,
 REGION FOUR ENGINEER

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DESIGN DESIGNATION:
 DESIGN SPEED: 30 MPH
 HIGHWAY CLASS - LOCAL ROAD
 EXISTING STRUCTURE NO.: 093-3079
 PROPOSED STRUCTURE NO.: 093-3137
 CURRENT A.D.T. = 75



GENERAL NOTES:

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016.

THE WORK INVOLVED ON THIS SECTION CONSISTS OF THE REMOVAL OF THE EXISTING STRUCTURE, THE CONSTRUCTION OF A 95 FOOT LONG SINGLE SPAN PRECAST, PRESTRESSED CONCRETE DECK BEAM BRIDGE, EARTH APPROACHES, AGGREGATE SURFACE COURSE AND OTHER MISCELLANEOUS ITEMS NECESSARY TO COMPLETE THIS SECTION.

ALL ELEVATIONS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM.

UTILITIES SHOWN WERE LOCATED PER QUALITY LEVEL "C", A.S.C.E. STANDARD C1/38-02, STANDARD GUIDELINE FOR COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA FROM SURFACE MARKINGS ONLY. UTILITIES SHALL BE FIELD LOCATED HORIZONTALLY AND VERTICALLY PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR IS RESPONSIBLE FOR THE FIELD LOCATION OF THESE UTILITIES.

THE CONCRETE SLABS AND I-BEAMS SHALL REMAIN THE PROPERTY OF THE COUNTY.

NOTE: CONSTRUCTION TRANSITION
STA 1+25 TO STA 1+75
STA 8+25 TO STA 8+75
ALL QUANTITIES ARE INCLUDED IN THE PROPOSAL

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B7	14-01114-00-BR	WABASH	12	2
FED. ROAD DIST. NO. 7		ILLINOIS	CRAWFISH CREEK	
PROJECT # BR05-0185103B		CONTRACT # 95783		
H.R. JOB # 15.1131.130		LEC JOB # HW410166B		

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AARON M. MEFFORD
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS

NAME
SIGNATURE
DATE
11-30-17
EXPIRES

TOWNSHIP ROUTE 87
OVER CRAWFISH CREEK
WABASH COUNTY, ILLINOIS

SHEET TITLE:

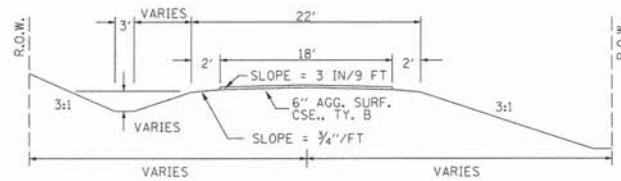
PLAN & PROFILE

SCALE: VRIES
BY: A.M.M.
DATE: 1/1/14
REV:

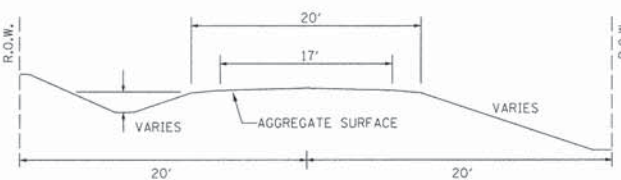
2 OF 12
SHEETS

SHEET NO.
2

TYPICAL CROSS SECTION PROPOSED



TYPICAL CROSS SECTION EXISTING



NOTE: CONSTRUCT STONE LINED DITCH

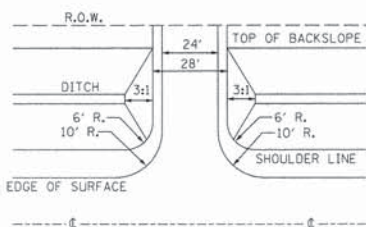
NOTE: CONSTRUCT SPECIAL DITCH

STA 1+50 TO STA 4+58 LT
STA 1+50 TO STA 4+59 RT
STA 5+40 TO STA 8+50 LT
STA 5+39 TO STA 8+50 RT

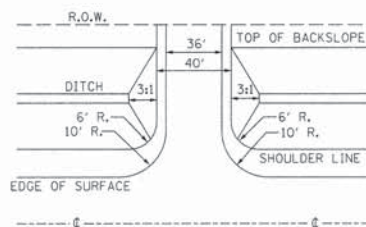
STA 4+33 TO STA 4+58 LT (0.62 TON/LIN FT)
STA 4+34 TO STA 4+59 RT (0.62 TON/LIN FT)
STA 5+39 TO STA 5+98 LT (0.62 TON/LIN FT)
STA 5+40 TO STA 5+95 RT (0.62 TON/LIN FT)

101 TON STONE LINED DITCH ALLOWED IN PROPOSAL.
SEE STONE LINED DITCH DETAIL.

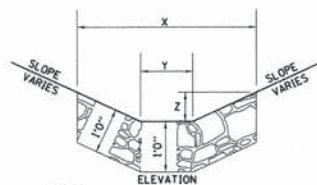
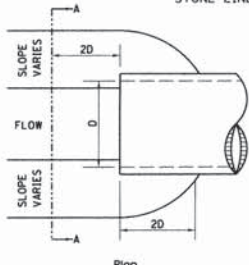
FIELD ENTRANCE DETAIL STA 6+25 RT



FIELD ENTRANCE DETAIL STA 6+33 LT



STONE LINED DITCH DESIGN



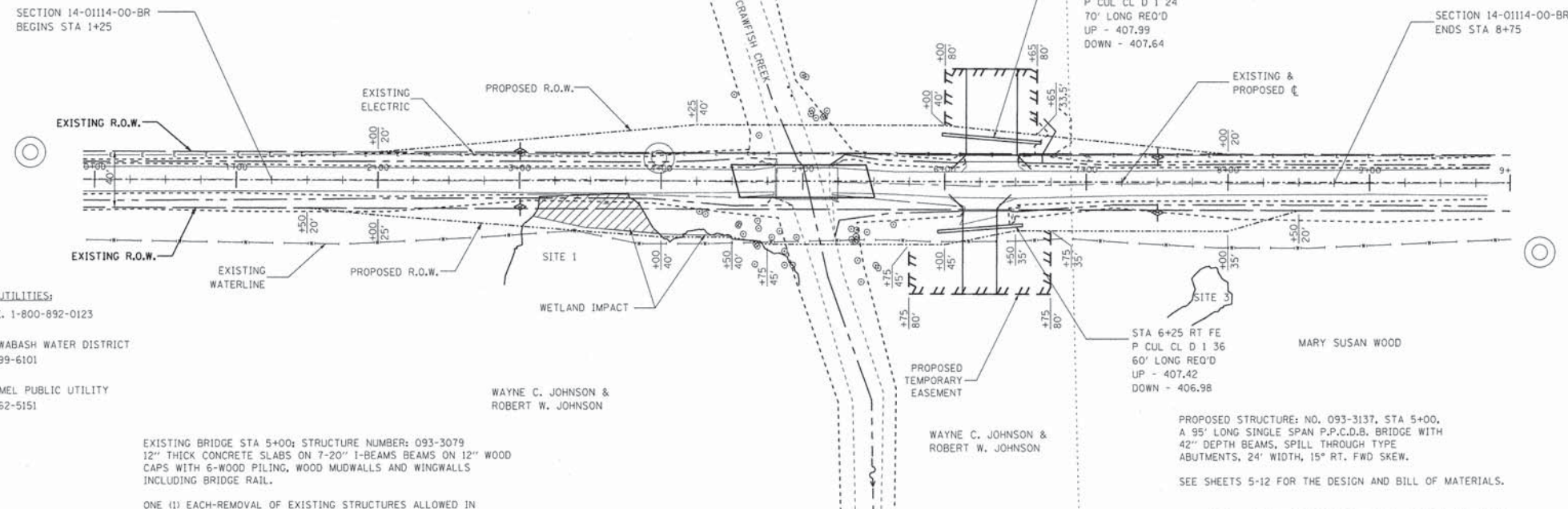
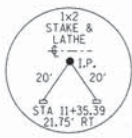
NOTE:

BOTTOM OF DITCH

SLOPE

	1 1/2:1	2:1	3:1	
X	5 FT	6 FT	8 FT	
Y	2 FT	2 FT	2 FT	
Z	1 FT	1 FT	1 FT	
	0.40	0.48	0.62	TON/LIN. FT

NOTE: FOR PLACEMENT, QUALITY GRADATION AND OTHER MISCELLANEOUS REQUIREMENTS FOR STONE LINED DITCH-SEE SPECIAL PROVISIONS.

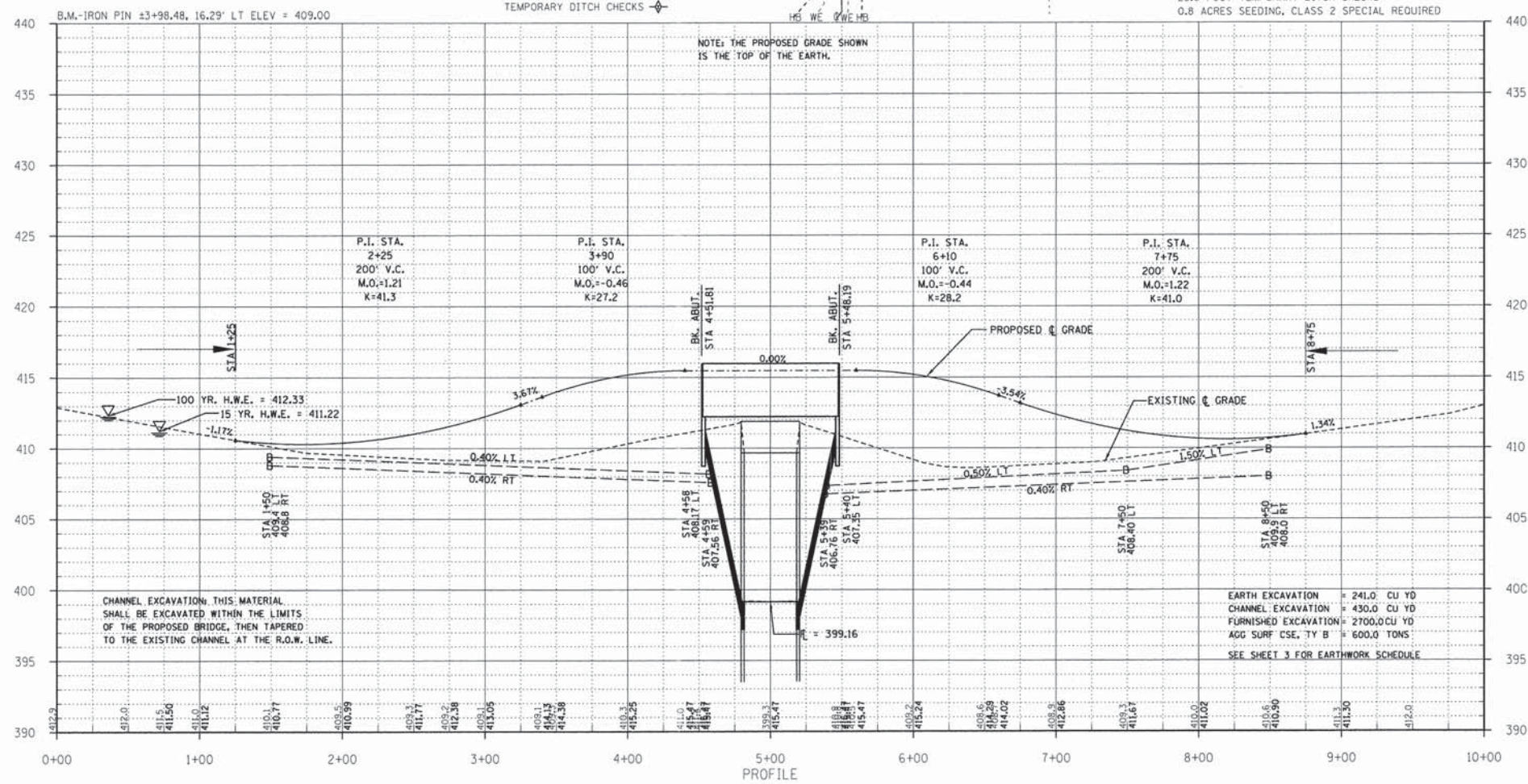


EXISTING BRIDGE STA 5+00; STRUCTURE NUMBER: 093-3079
12" THICK CONCRETE SLABS ON 7-20" I-BEAMS BEAMS ON 12" WOOD CAPS WITH 6-WOOD PILING, WOOD MUDWALLS AND WINGWALLS INCLUDING BRIDGE RAIL.

ONE (1) EACH-REMOVAL OF EXISTING STRUCTURES ALLOWED IN THIS PROPOSAL.

NOTE: FILL NEXT TO BRIDGE TO BE AGGREGATE SURFACE COURSE

68.0 UNIT OF TREE REMOVAL (6 TO 15 UNITS DIAMETER)
82.0 UNIT OF TREE REMOVAL (OVER 15 UNITS DIAMETER)
28.0 FOOT TEMPORARY DITCH CHECKS
0.8 ACRES SEEDING, CLASS 2 SPECIAL REQUIRED



CHANNEL EXCAVATION: THIS MATERIAL SHALL BE EXCAVATED WITHIN THE LIMITS OF THE PROPOSED BRIDGE, THEN TAPERED TO THE EXISTING CHANNEL AT THE R.O.W. LINE.

EARTH EXCAVATION = 241.0 CU YD
CHANNEL EXCAVATION = 430.0 CU YD
FURNISHED EXCAVATION = 2700.0 CU YD
AGG SURF CSE, TY B = 600.0 TONS
SEE SHEET 3 FOR EARTHWORK SCHEDULE

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
87	14-01114-00-BR	WABASH	12	3
FED. ROAD DIST. NO. 7		ILLINOIS	CRAWFISH CREEK	
PROJECT # BROS-0185(038)		CONTRACT # 95783		
H.R. JOB # 15.1131.130		LEC JOB # H44016WB		

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AARON M. MEFFORD
NAME
Aaron M. Mefford
SIGNATURE
2-3-16
DATE
11-30-17
EXPIRES

TOWNSHIP ROUTE 87
OVER CRAWFISH CREEK
WABASH COUNTY, ILLINOIS

SHEET TITLE:

CROSS-SECTIONS

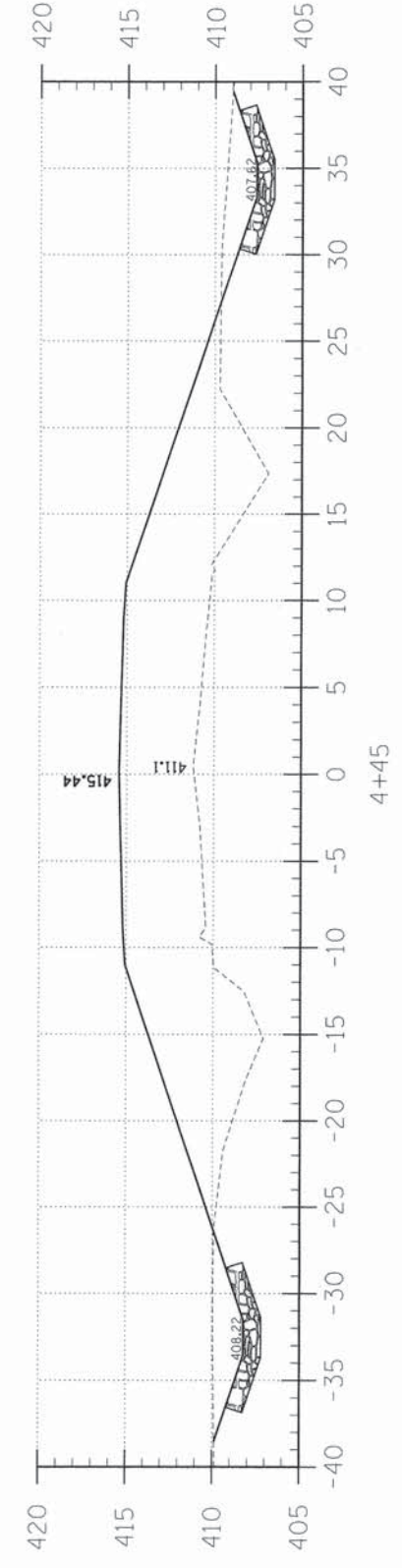
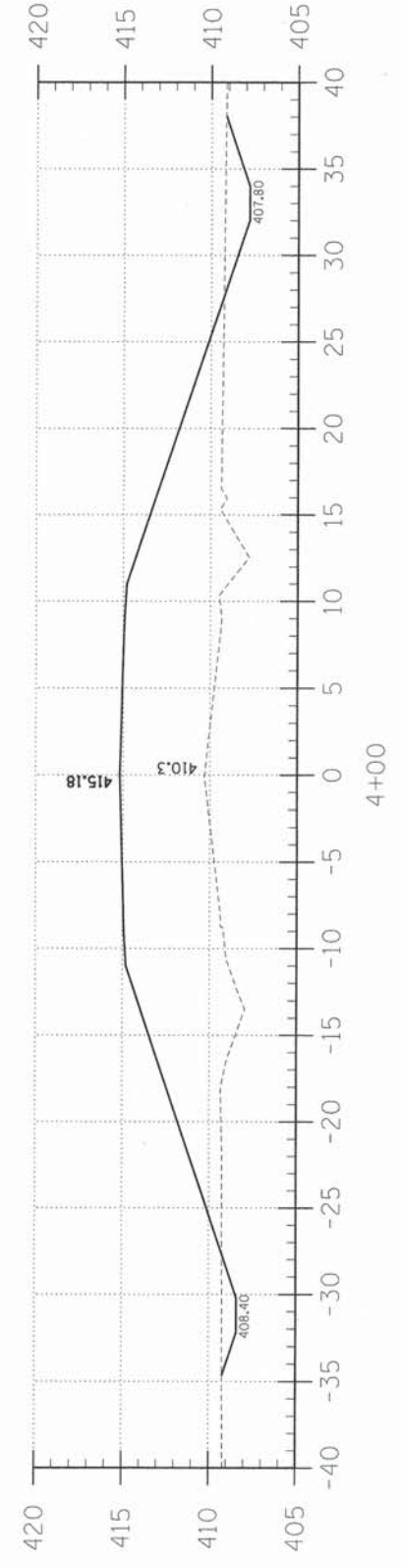
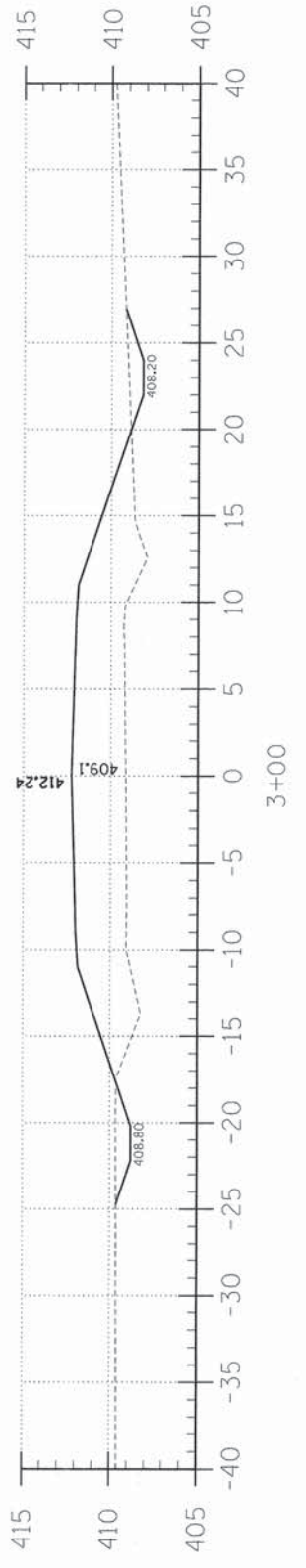
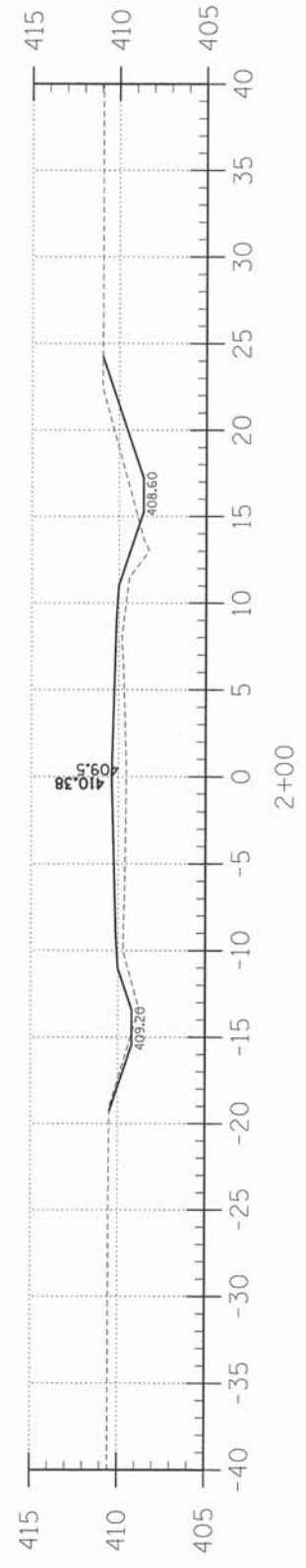
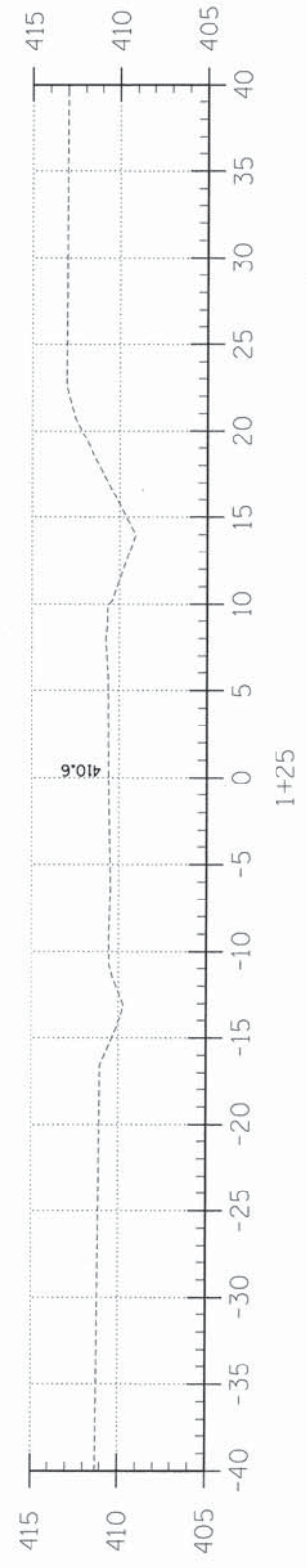
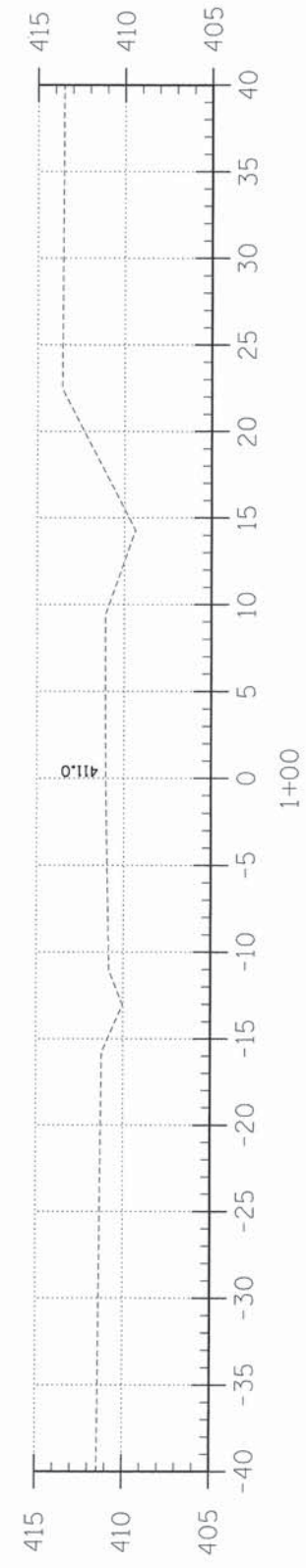
SCALE: 1" = 5'
BY: AMM
DATE: 2/2/16
REV:

3 OF 12
SHEETS

SHEET NO.
3

LOCATION	EARTH EXCAVATION		CHANNEL EXCAVATION		ESTIMATED UNSUITABLE MATERIAL		SUITABLE MATERIAL ADJUSTED FOR SHRINKAGE		EMBANKMENT		EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	
	CUBIC YARD		CUBIC YARD		CUBIC YARD		CUBIC YARD		CUBIC YARD		CUBIC YARD	
STA 0+00 TO 4+51.8	105.9		0.0		0.0		79.4		1162.2		-1082.8	
STA 4+51.8 TO 5+48.2	0.0		430.0		215.0		161.3		0.0		+161.3	
STA 5+48.2 TO 10+00	134.8		0.0		0.0		101.1		1432.2		-1331.1	
2 FIELD ENTRANCES	0.0		0.0		0.0		0.0		447.4		-447.7	
TOTAL	240.7		430.0		215.0		341.8		3041.8		-2700.3	

EARTHWORK SCHEDULE

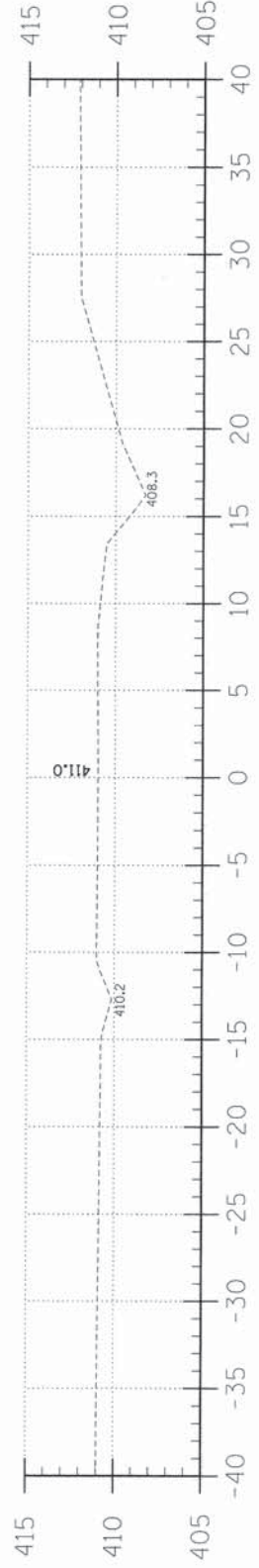


C = 24.9
F = 215.9

C = 12.5
F = 215.8

C = 7.5
F = 94.1

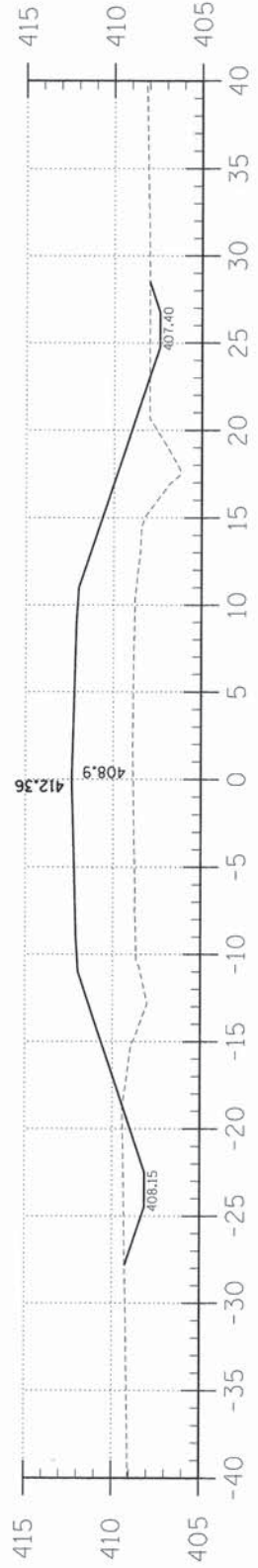
C = 6.6
F = 16.7



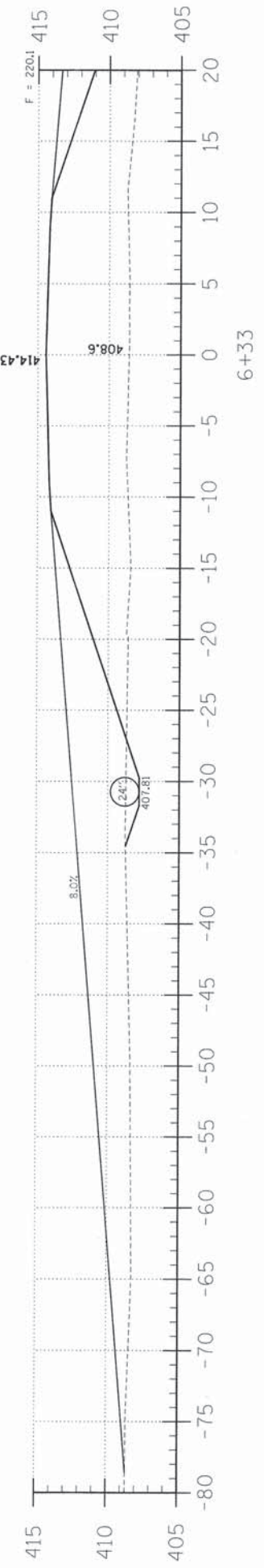
8+75



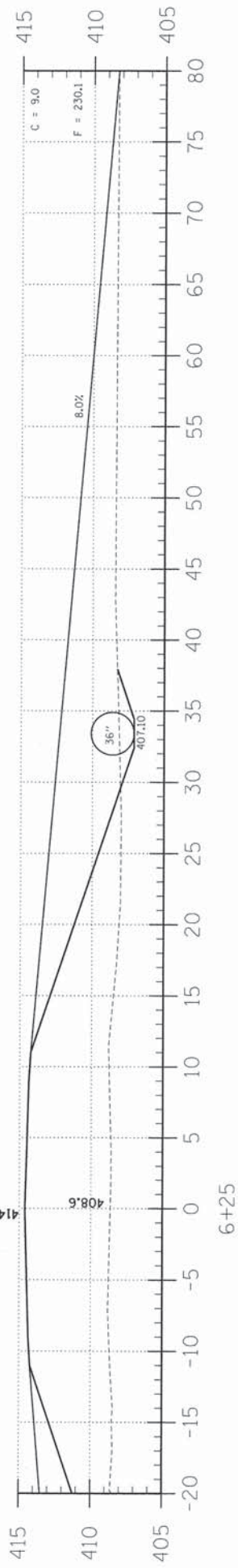
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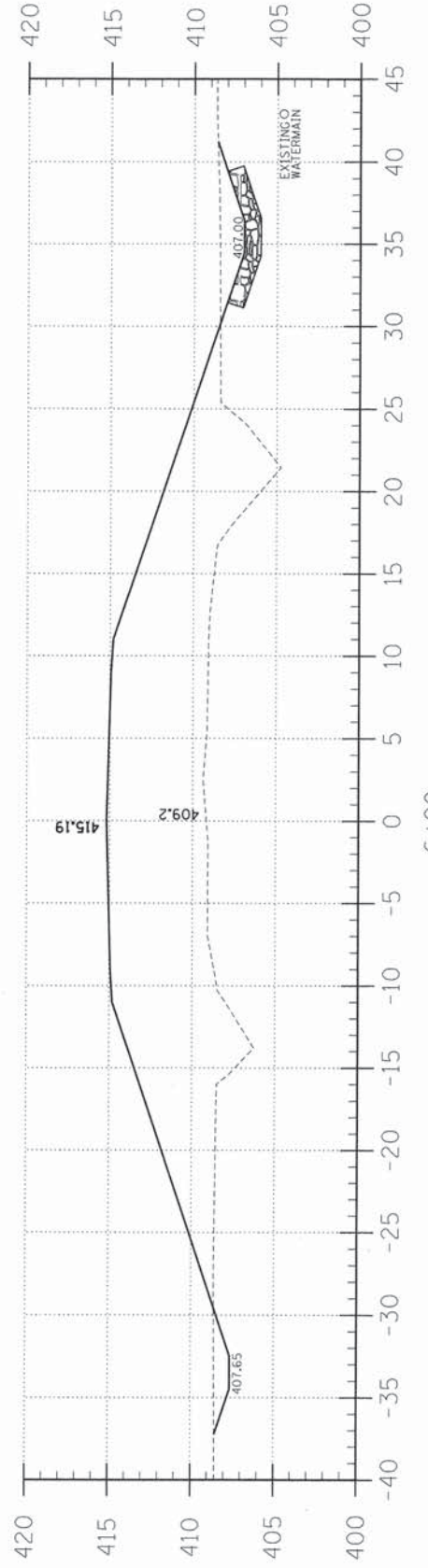
7+00



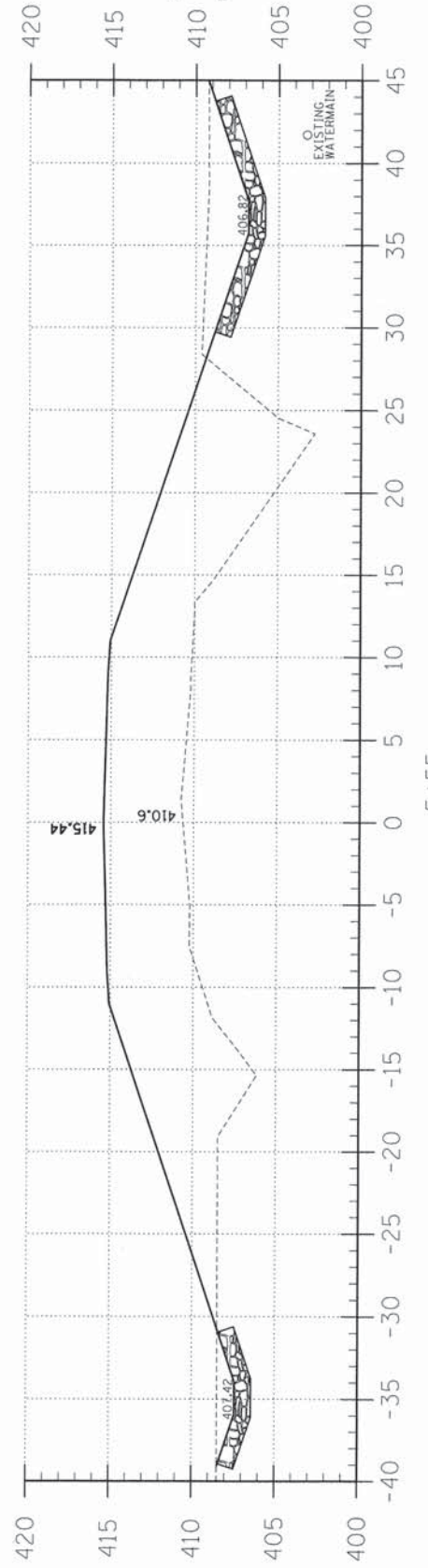
6+33



6+25



6+00



5+55

C = 18.0
F = 14.7

C = 8.8
F = 116.6

C = 8.9
F = 220.1

C = 9.0
F = 230.1

C = 14.0
F = 271.1

C = 29.4
F = 274.1

TR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B7	14-01114-00-BR	WABASH	12	4
FED. ROAD DIST. NO. 7		ILLINOIS	CRAWFISH CREEK	
PROJECT * BROS-018510381		CONTRACT * 95783		
H.R. JOB * 15.1131.130		LEC JOB * 114101688		

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TOWNSHIP ROUTE 87
OVER CRAWFISH CREEK
WABASH COUNTY, ILLINOIS

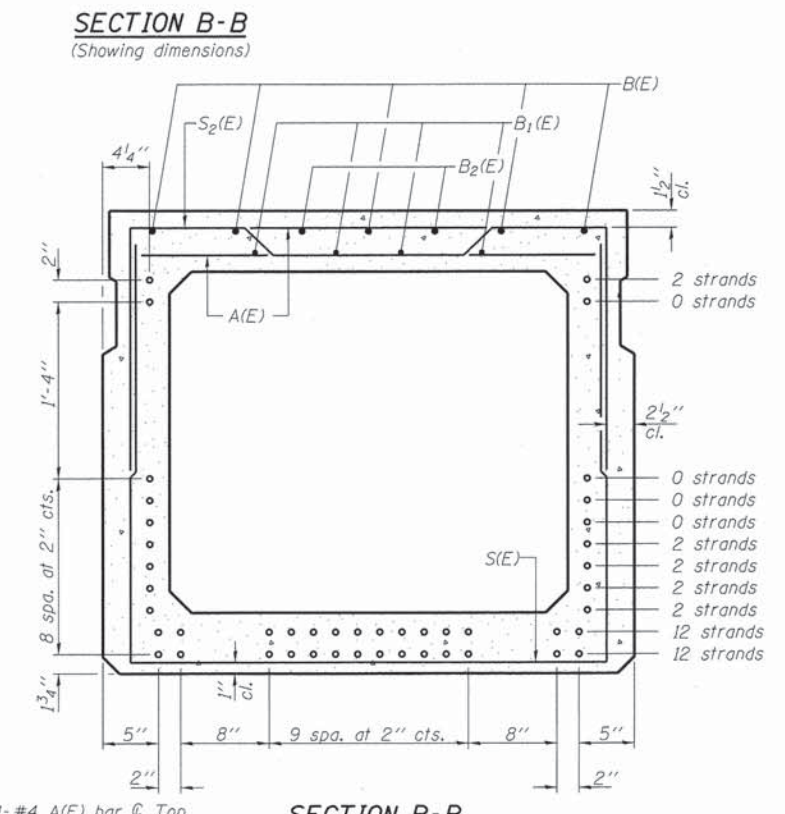
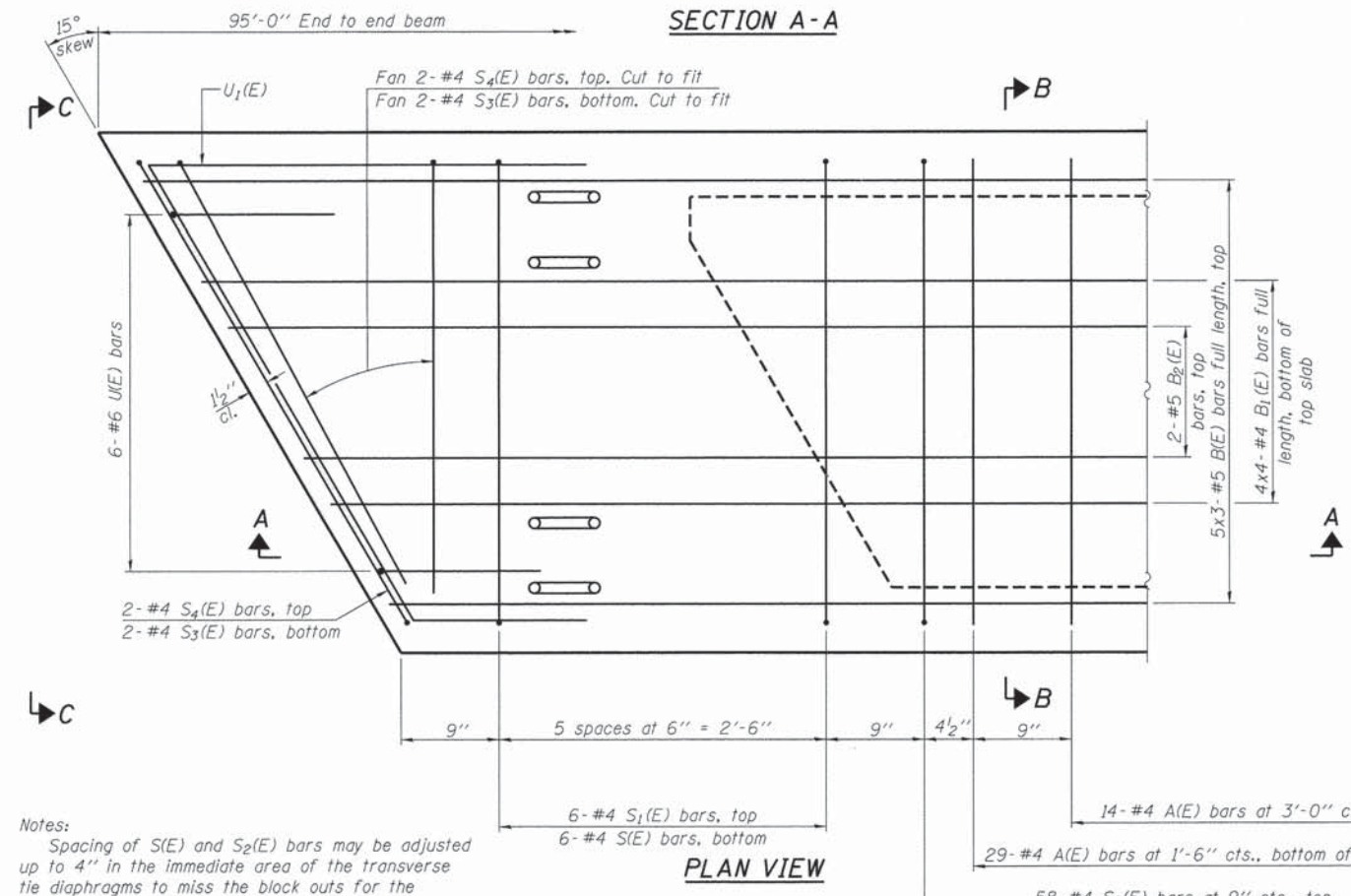
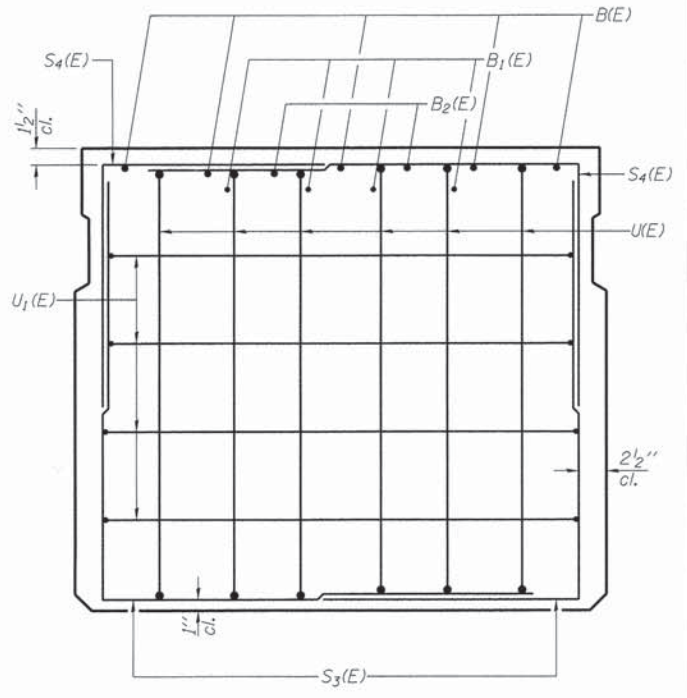
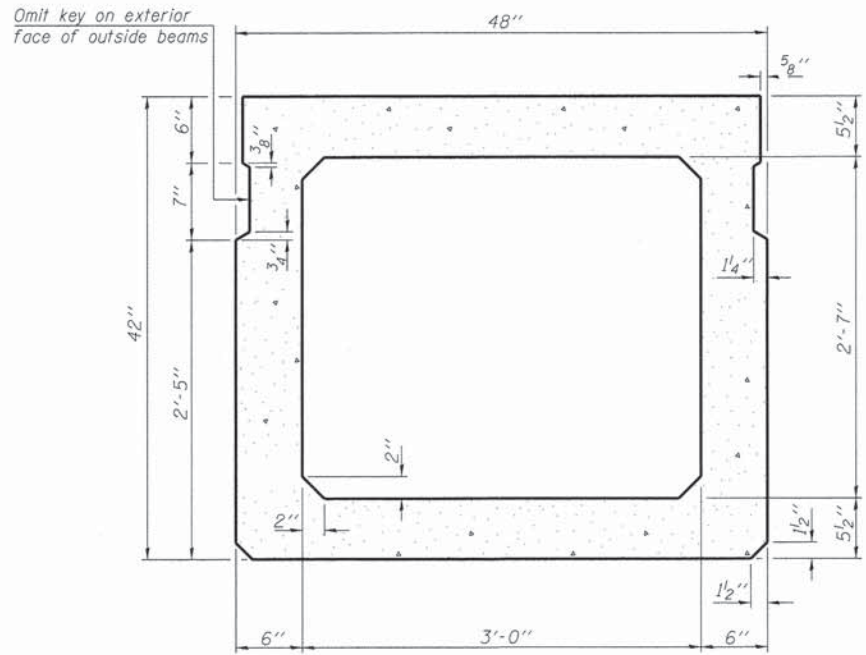
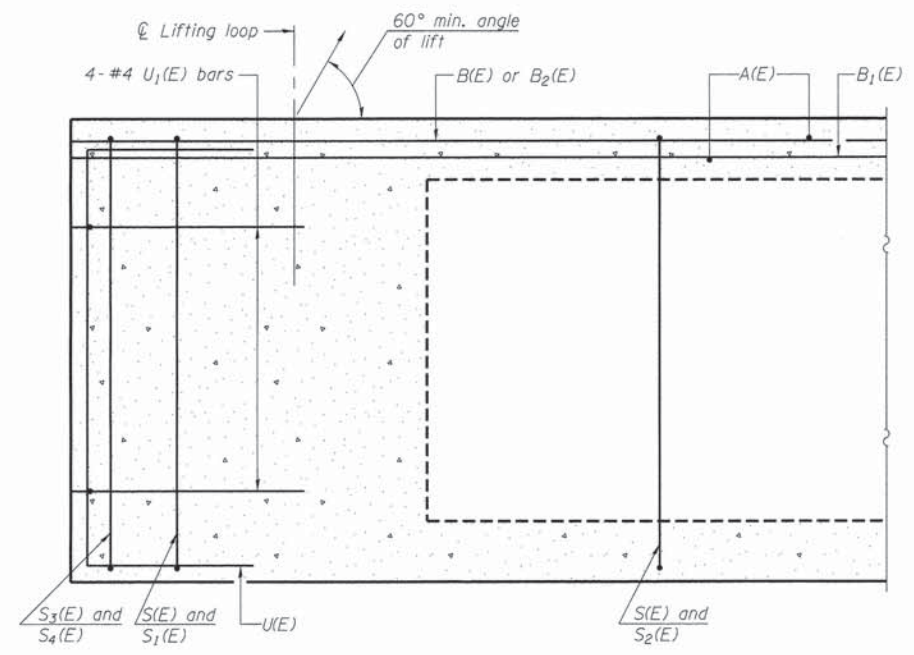
SHEET TITLE:

CROSS-SECTIONS

SCALE: 1" = 5'
BY: A.M.M.
DATE: 2016
REV:

4 OF 12
SHEETS

SHEET NO.
4



BAR LIST
ONE BEAM ONLY
(For information only)

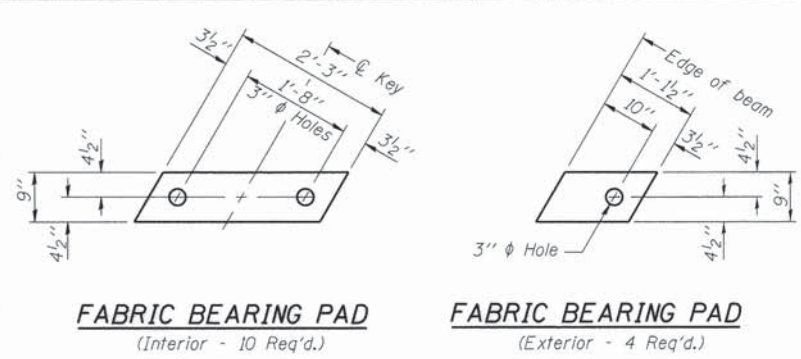
Bar	No.	Size	Length	Shape
A(E)	87	#4	3'-7"	—
B(E)	15	#5	33'-3"	—
B1(E)	16	#4	25'-2"	—
B2(E)	4	#5	10'-0"	—
S(E)	128	#4	10'-2"	—
S1(E)	12	#4	7'-5"	U
S2(E)	116	#4	7'-8"	U
S3(E)	8	#4	6'-3"	J
S4(E)	8	#4	4'-10"	J
U(E)	12	#6	5'-9"	C
U1(E)	8	#4	7'-1"	C

Note: See sheet 3 of 8 for additional details and Bill of Material.

Notes:
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.
Bars indicated thus 5x3-#5 etc. indicates 5 lines of bars with 3 lengths per line.

SECTION B-B (Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

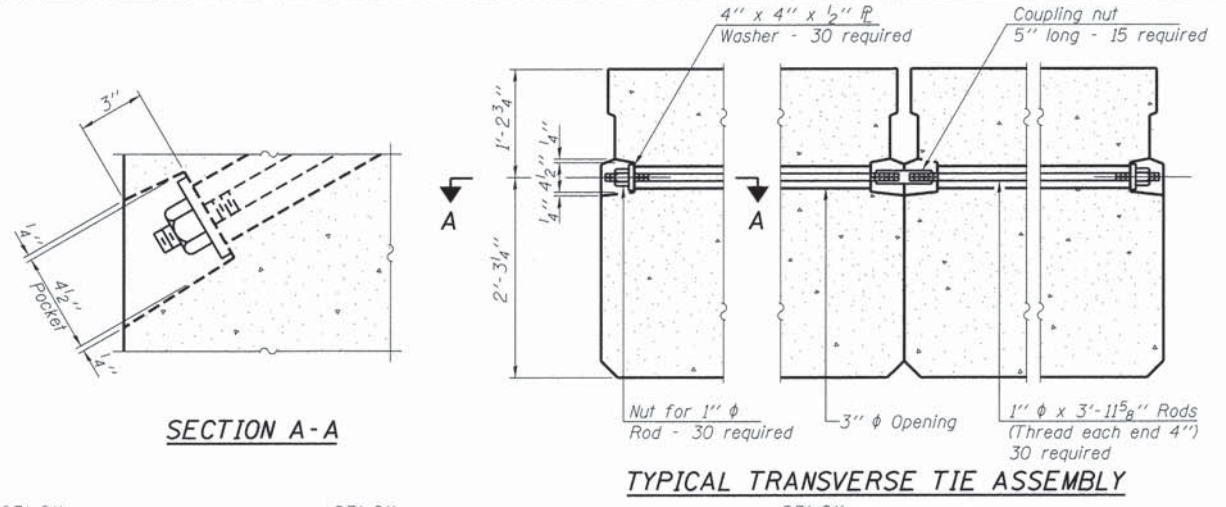


FABRIC BEARING PAD
(Interior - 10 Req'd.)

FABRIC BEARING PAD
(Exterior - 4 Req'd.)

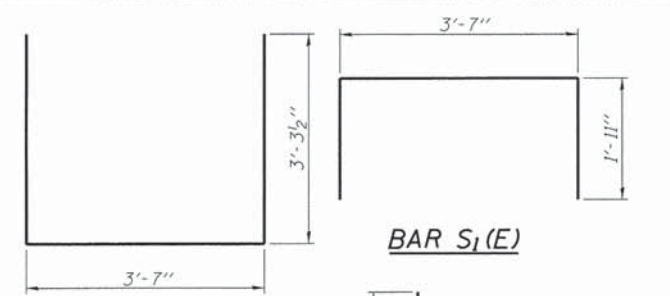
FIXED

Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.

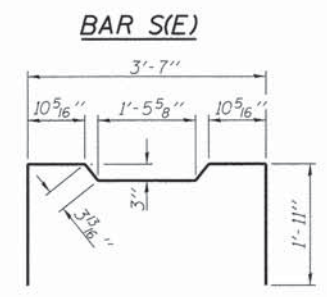


SECTION A-A

TYPICAL TRANSVERSE TIE ASSEMBLY



BAR S₁(E)

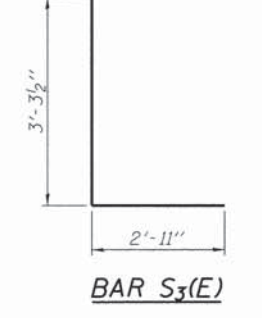


BAR S(E)

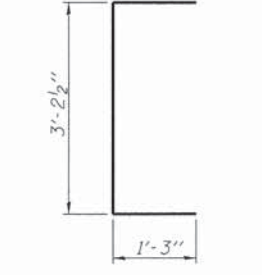


BAR S₂(E)

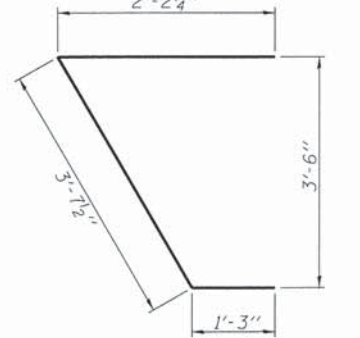
BAR S₄(E)



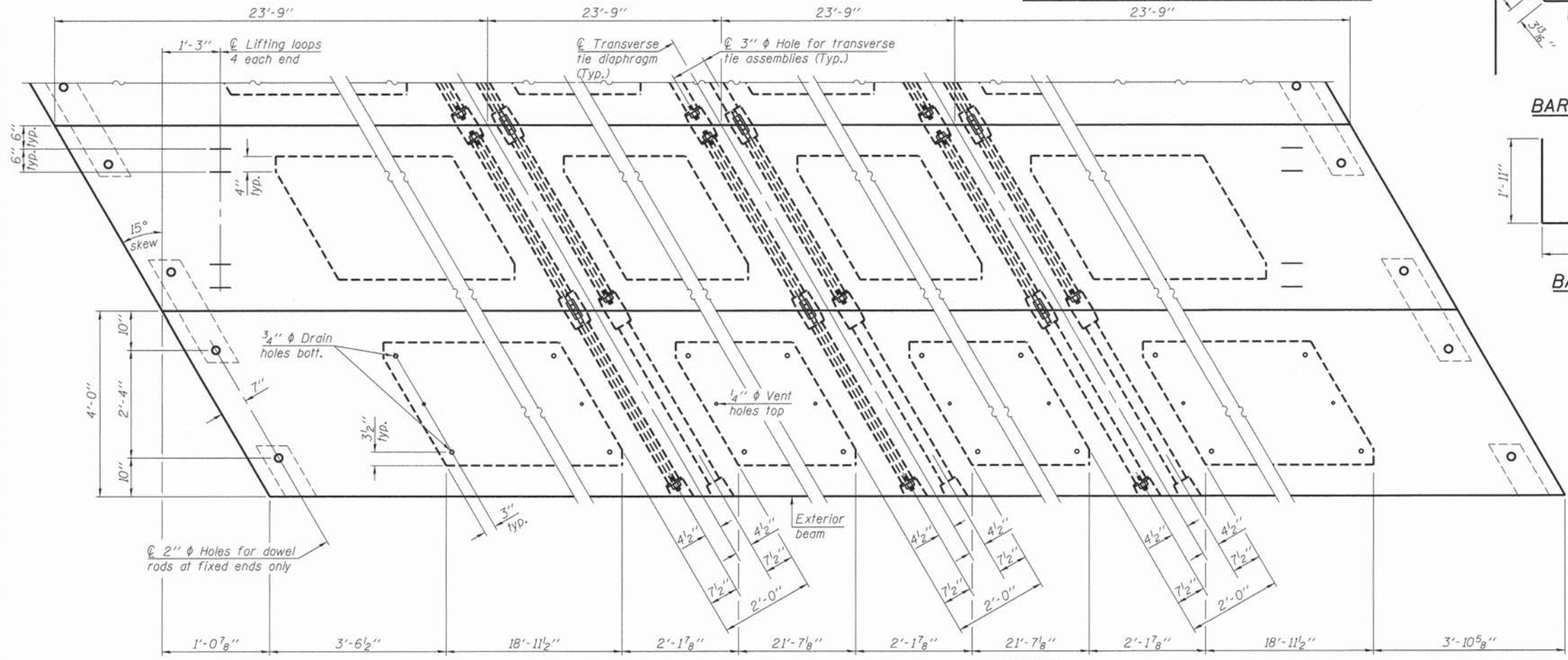
BAR S₃(E)



BAR U(E)



BAR U₁(E)



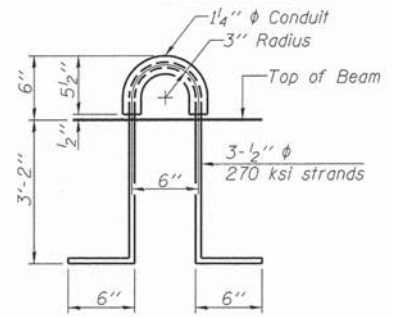
PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES
 Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
 The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
 Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
 Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
 A minimum 2 1/2" lifting pin shall be used to engage the lifting loops during handling.
 Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
 Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
 Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.
 Reinforcement bars designated (E) shall be epoxy coated.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (42" depth)	Sq. Ft.	2,280
---	---------	-------



LIFTING LOOP DETAIL

PD-4248-RD 1-28-16
 FILE NAME = 148322-shr-bridge.dgn
 USER NAME =
 DESIGNED - D.W.T.
 CHECKED - S.W.M.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 PLOT SCALE =
 PLOT DATE = 2/2/2016

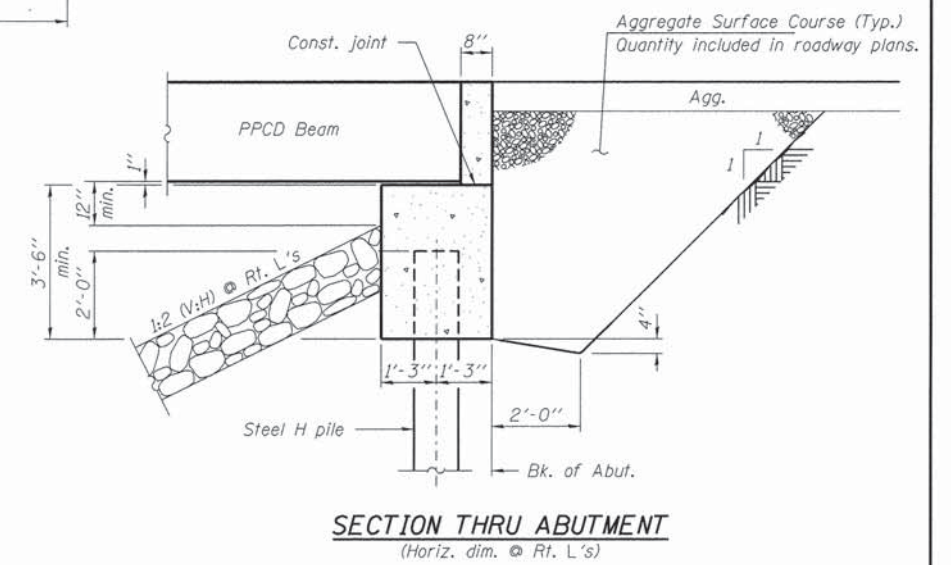
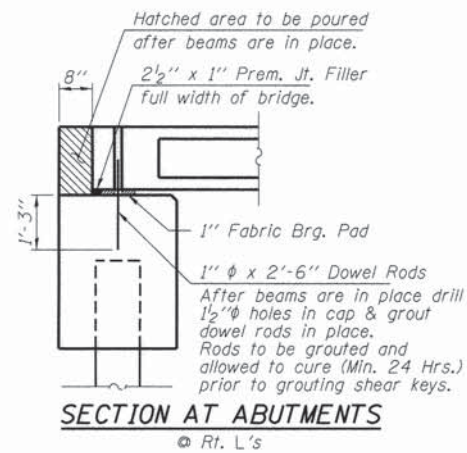
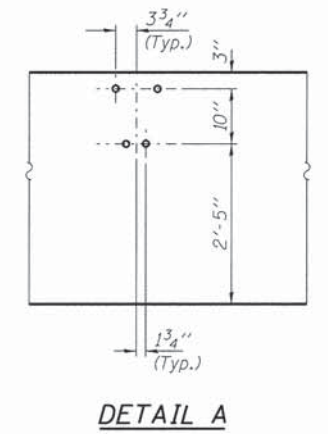
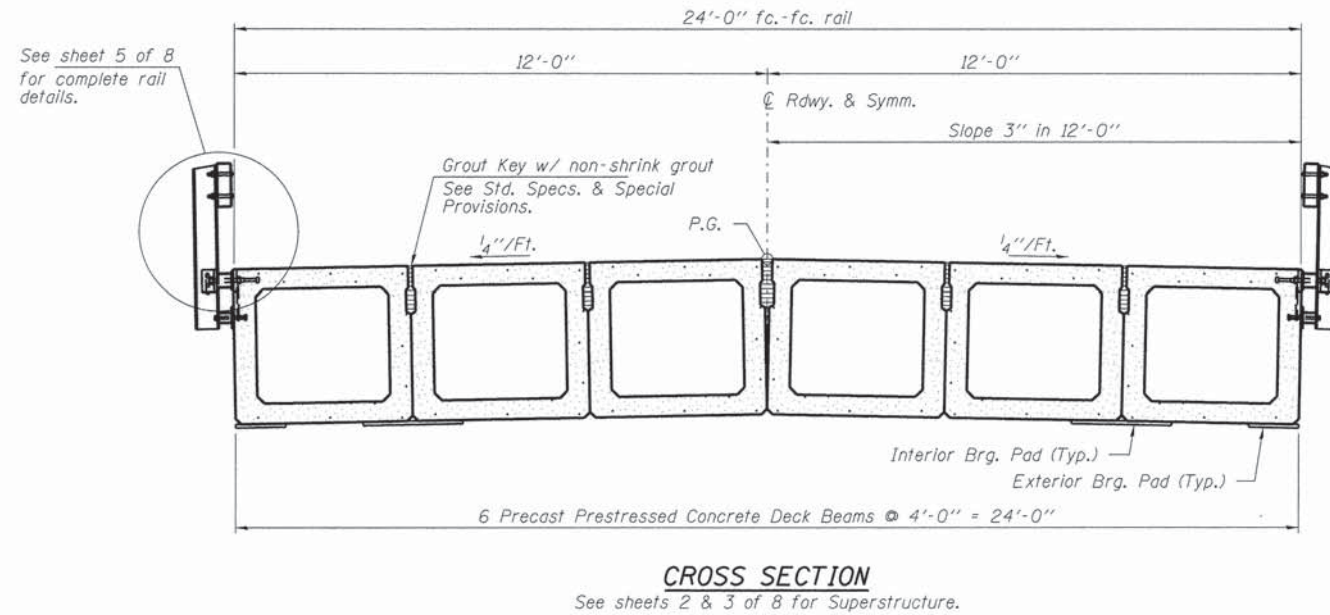
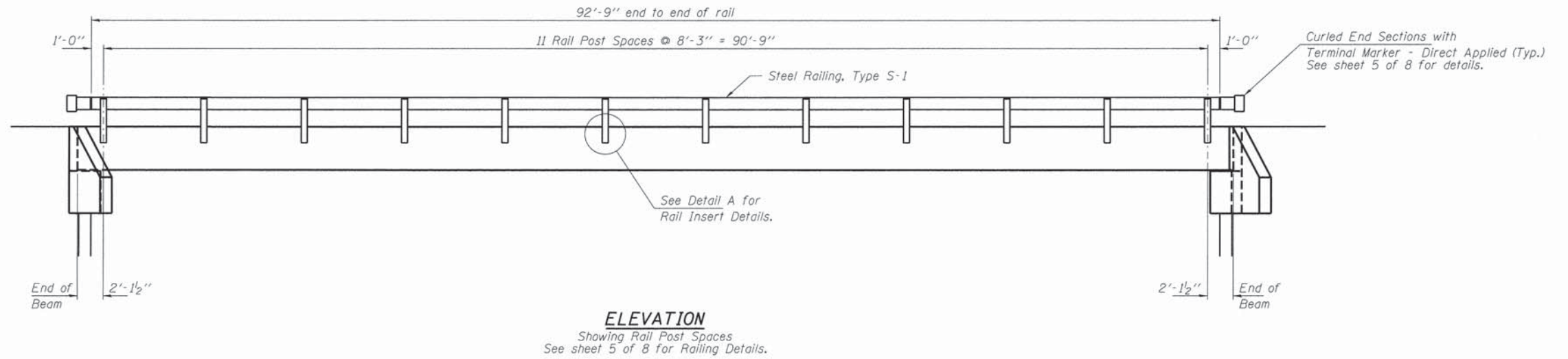
DESIGNED - D.W.T.
 CHECKED - S.W.M.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
WABASH COUNTY HIGHWAY DEPARTMENT

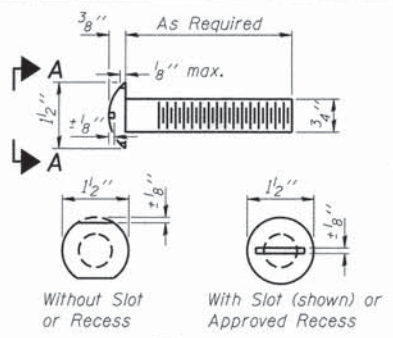
42" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 093-3137

SHEET NO. 3 OF 8 SHEETS

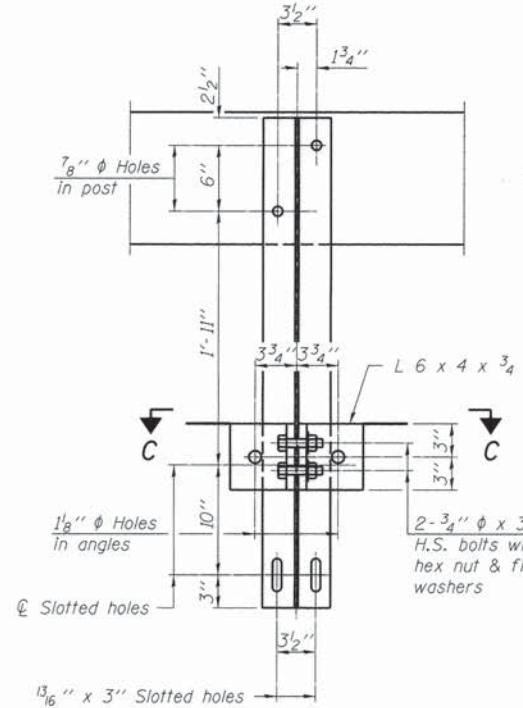
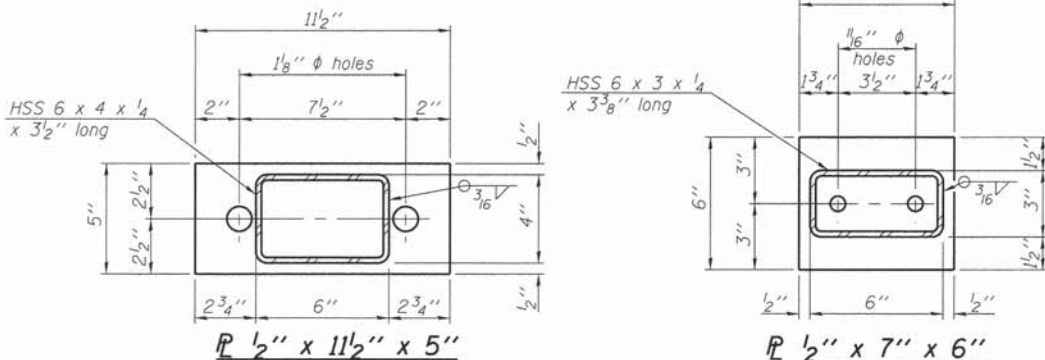
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
87	14-01114-00-BR	WABASH	12	7
ROAD DISTRICT #1			CONTRACT NO. 95783	
ILLINOIS FED. AID PROJECT				



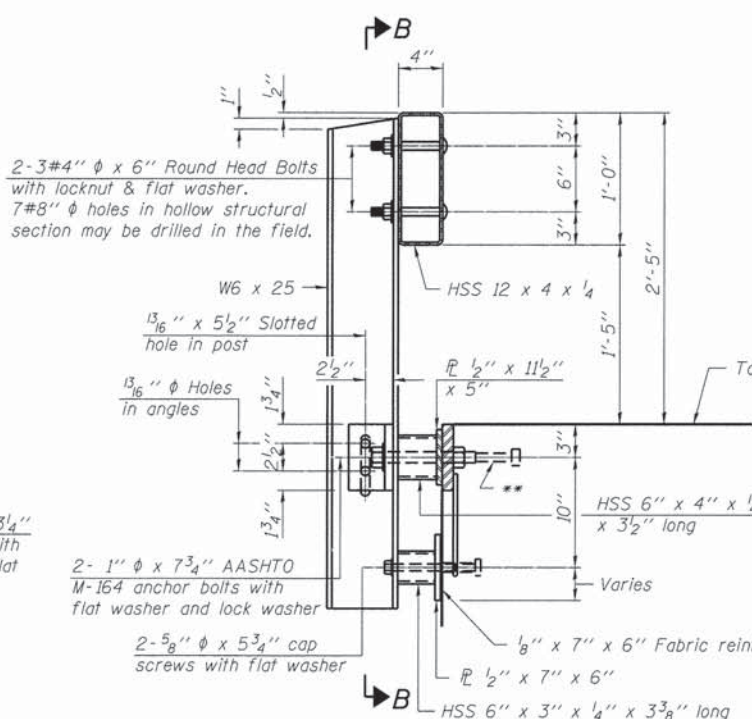
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HAMPTON, LENZINI AND RENWICK, INC. 200 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - S.W.M.	REVISED -			87	14-01114-00-BR	WABASH	12	8	
ILR ILLINOIS PROFESSIONAL DESIGN FIRM L1 / P1 / SE COMP. 184-000959	PLOT DATE = 2/2/2016	DRAWN - R.D.H.	REVISED -			ROAD DISTRICT #1	CONTRACT NO. 95783		ILLINOIS FED. AID PROJECT		
		CHECKED - S.W.M.	REVISED -			SHEET NO. 4 OF 8 SHEETS					



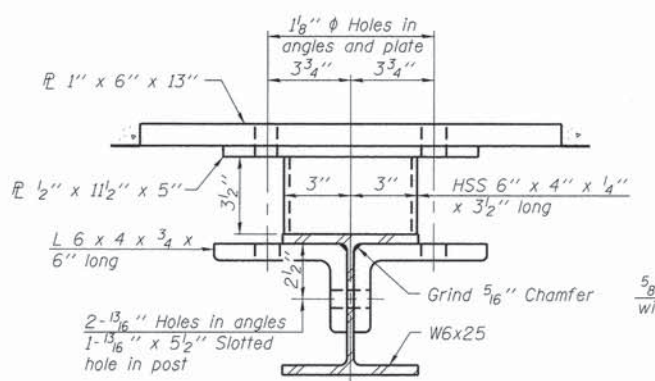
**VIEW A-A
ROUND HEAD BOLT**



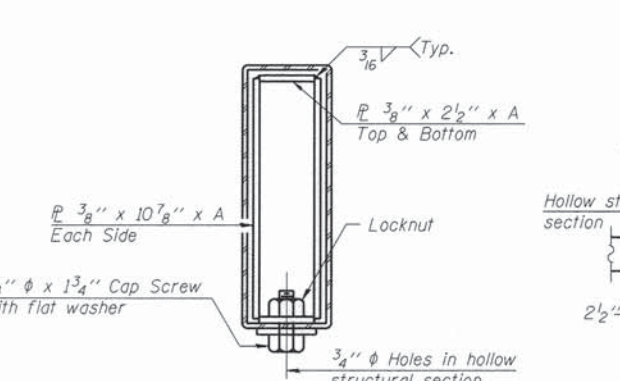
SECTION B-B



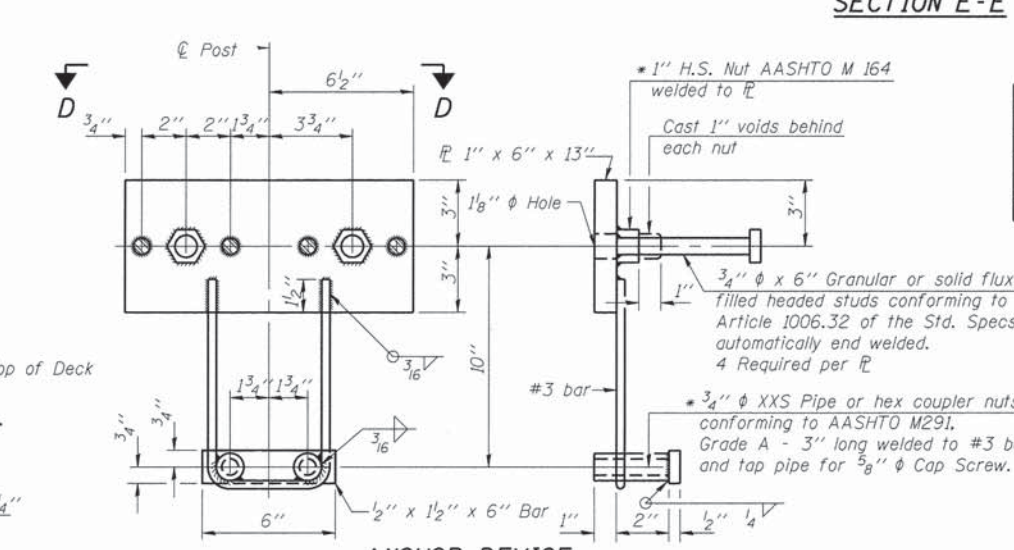
SECTION AT RAILING POST



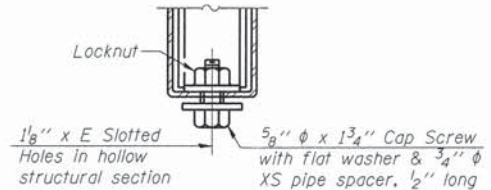
SECTION C-C



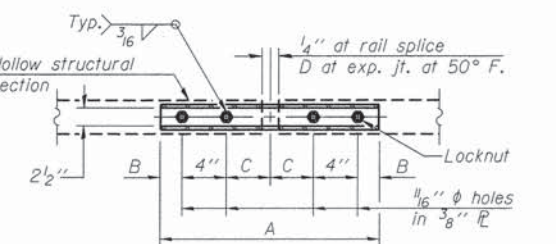
SECTIONS AT RAIL SPLICE



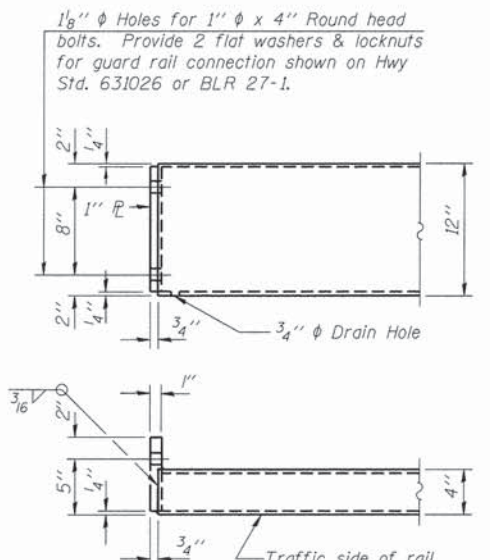
ANCHOR DEVICE



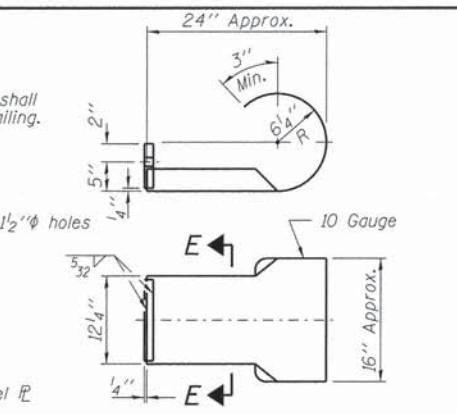
**RAIL SPLICE CONNECTION
AT EXPANSION JT.**



**PLAN-BOTT. SPLICE R
TYPICAL**



END OF RAIL DETAILS



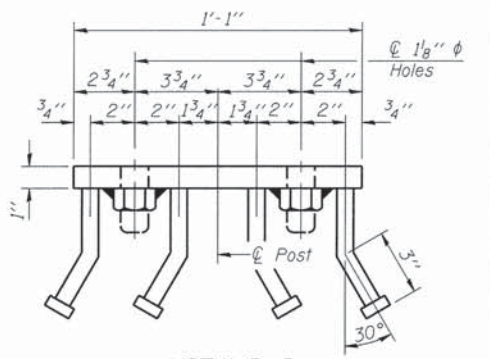
**SECTION E-E
CURLLED END SECTION DETAILS**

SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1 1/4"	1'-8"	2"	4"	

T = Total movement at expansion joint as shown on the design plans.

Notes:
 For multi-span bridges, sufficient 1/4 inch x 6 inch x 1'-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



VIEW D-D

BILL OF MATERIAL

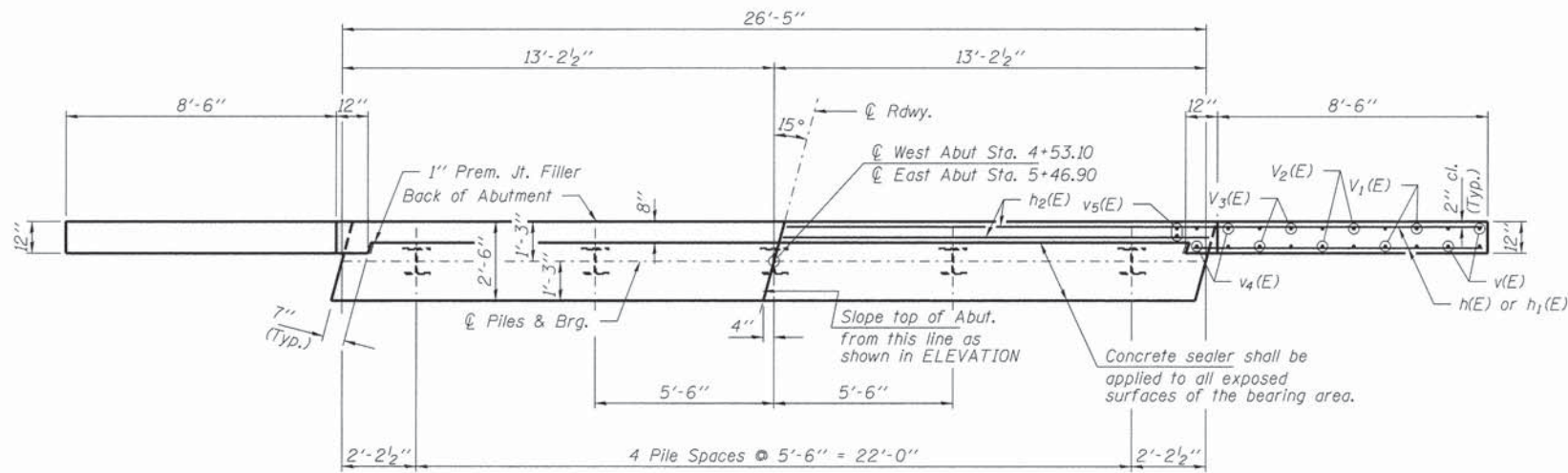
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	186

R-23A 1-12-15 (10'-9" Maximum Post Spacing)
 FILE NAME = 148322-sh-t-bridge.dgn
 USER NAME =
 DESIGNED - D.W.T.
 CHECKED - S.W.M.
 DRAWN - R.D.H.
 CHECKED - S.W.M.
 PLOT SCALE =
 PLOT DATE = 2/2/2016

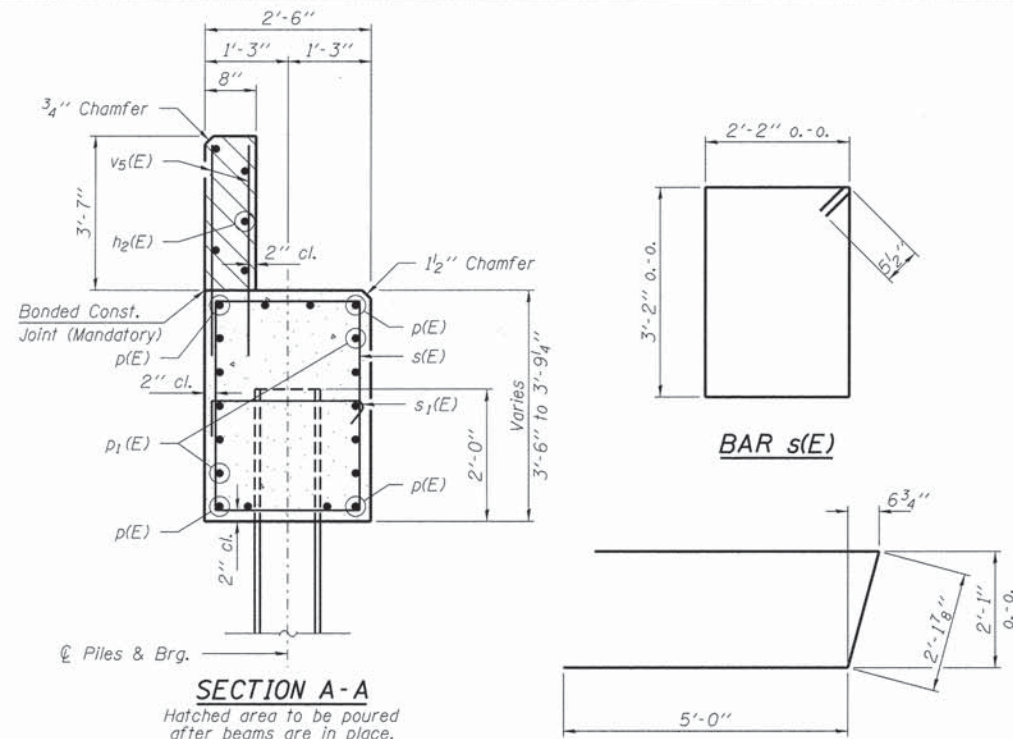
STATE OF ILLINOIS
 WABASH COUNTY HIGHWAY DEPARTMENT

STEEL RAILING, TYPE S-1
 STRUCTURE NO. 093-3137
 SHEET NO. 5 OF 8 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
87	14-01114-00-BR	WABASH	12	9
ROAD DISTRICT #1			CONTRACT NO. 95783	
ILLINOIS FED. AID PROJECT				

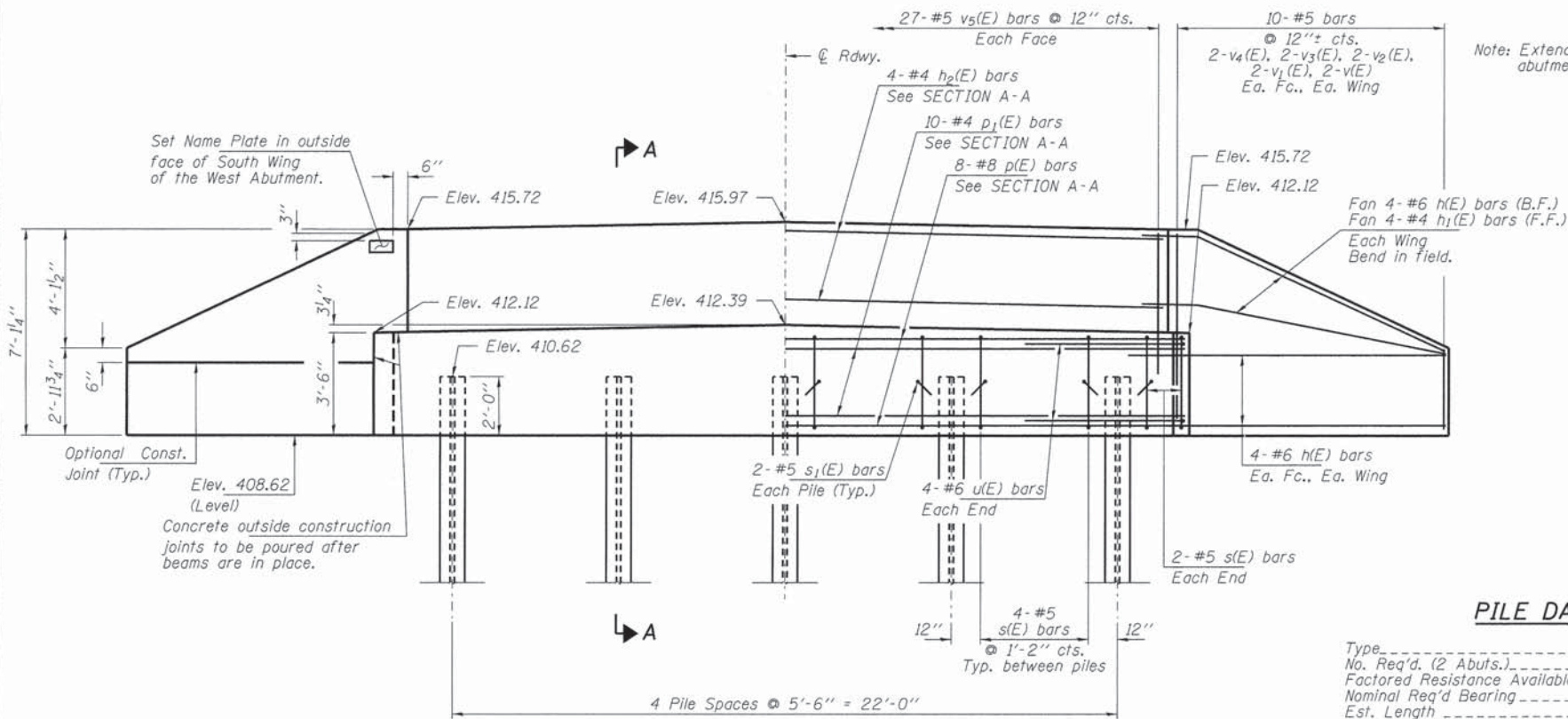


PLAN



SECTION A-A

Hatched area to be poured after beams are in place.



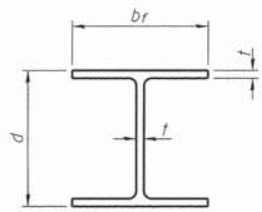
ELEVATION

PILE DATA

Type: Steel HP12x53 w/Pile Shoes
 No. Req'd. (2 Abuts.): 10
 Factored Resistance Available: 230 Kips/Pile
 Nominal Req'd Bearing: 419 Kips/Pile
 Est. Length: 30 Ft/Pile

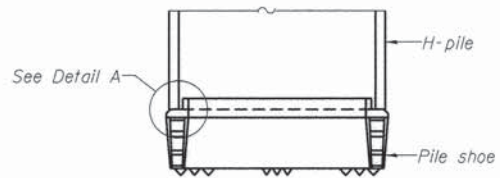
BILL OF MATERIAL - 2 ABUTS.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	48	#6	10'-9"	—
h1(E)	16	#4	9'-3"	—
h2(E)	8	#4	26'-1"	—
p(E)	16	#8	26'-1"	—
p1(E)	20	#4	26'-1"	—
s(E)	40	#5	11'-7"	□
s1(E)	20	#5	3'-2"	┌
u(E)	16	#6	12'-2"	—
v(E)	16	#5	2'-9"	—
v1(E)	16	#5	3'-9"	—
v2(E)	16	#5	4'-9"	—
v3(E)	16	#5	5'-9"	—
v4(E)	16	#5	6'-8"	—
v5(E)	108	#5	5'-7"	—
Concrete Structures			Cu. Yd.	29.4
Reinforcement Bars, Epoxy Coated			Pound	4,340
Furnishing Steel Piles HP12x53			Foot	300
Pile Shoes			Each	10
Name Plates			Each	1
Concrete Sealer			Sq. Ft.	96

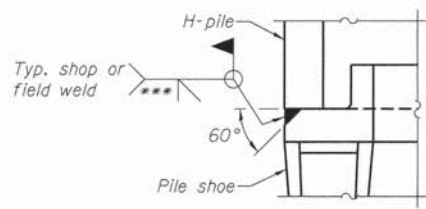


STEEL PILE TABLE

Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"

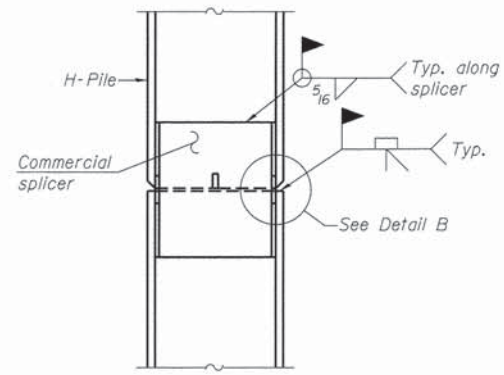


ELEVATION

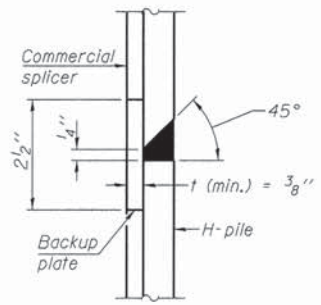


DETAIL A

H-PILE SHOE ATTACHMENT

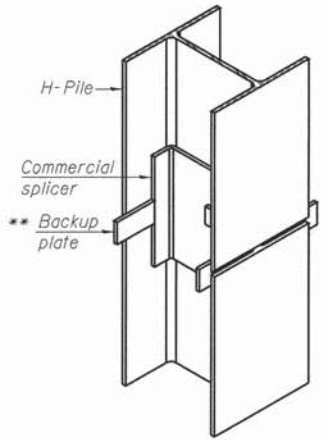


ELEVATION

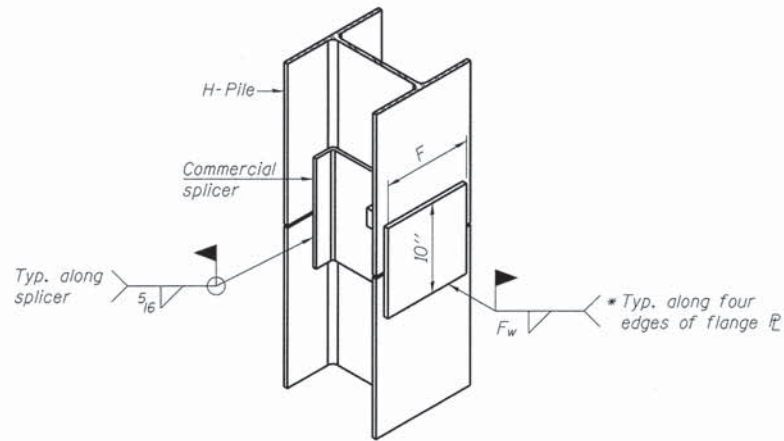


DETAIL "B"

WELDED COMMERCIAL SPLICE



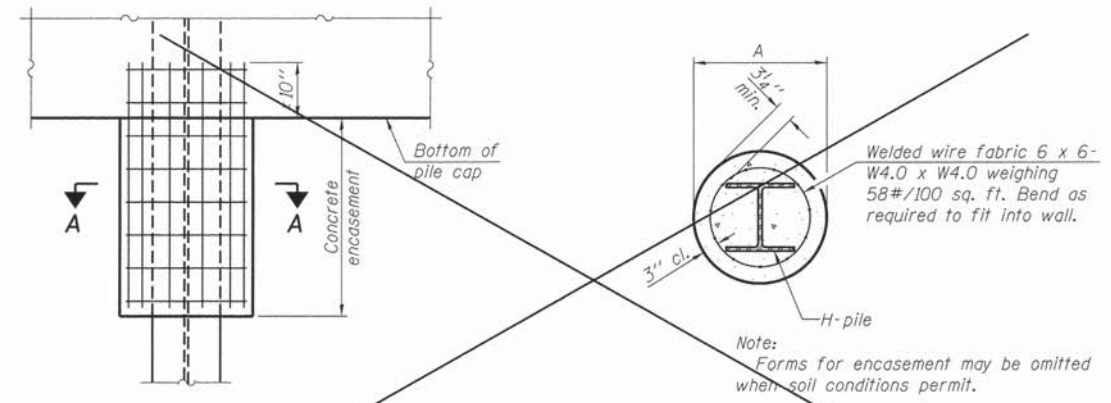
ISOMETRIC VIEW



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

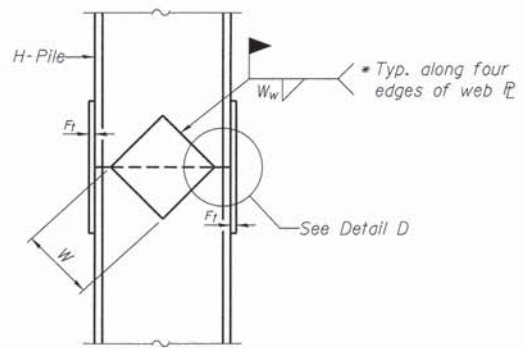
- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



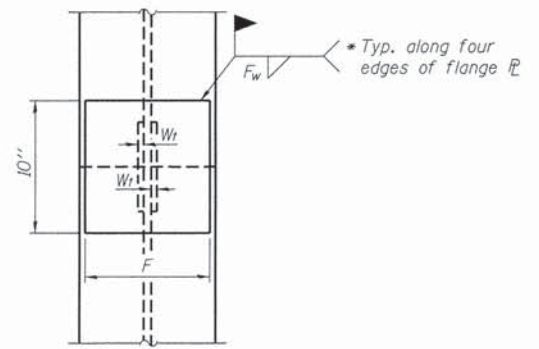
ELEVATION

SECTION A-A

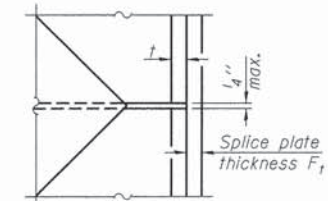
PILE ENCASEMENT (Not Required)



ELEVATION



END VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/2"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/2"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/2"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 1-27-12

FILE NAME = 140322-shr-bridge.dgn	USER NAME =
DESIGNED - D.W.T.	
CHECKED - S.W.M.	
DRAWN - R.D.H.	
CHECKED - S.W.M.	
PLOT SCALE =	
PLOT DATE = 2/2/2016	

DESIGNED - D.W.T.	REVISED
CHECKED - S.W.M.	REVISED -
DRAWN - R.D.H.	REVISED -
CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
WABASH COUNTY HIGHWAY DEPARTMENT

HP PILE DETAILS
STRUCTURE NO. 093-3137

SHEET NO. 7 OF 8 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
87	14-01114-00-BR	WABASH	12	11
ROAD DISTRICT #1			CONTRACT NO. 95783	
ILLINOIS FED. AID PROJECT				

