

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82	03-18108-00-BR	WAYNE	12	1
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		
PROJECT# BROS-191(49)		CONTRACT# 95476		
LEC JOB # HD41017WA		TURNER CREEK		

323 W. 3RD ST.
P.O. BOX 180
MT. CARMEL, IL
62863
PHONE:
(618)-262-8651
FAX:
(618)-263-3327

405 W. STATE ST
SUITE 1
PRINCETON, IN
47670
PHONE:
(812)-386-7611
FAX:
(812)-385-2612

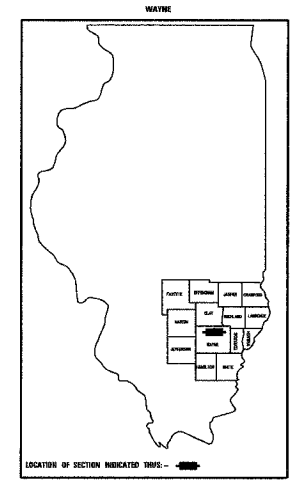
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET & SUMMARY OF QUANTITIES
2	PLAN & PROFILE, TYPICAL SECTIONS & GENERAL NOTES
3-4	ROADWAY CROSS SECTIONS
5-11	BRIDGE DESIGN
12	CURLED END SECTIONS & STONE RIPRAP DITCH DESIGN

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PLANS FOR PROPOSED FEDERAL AID - H.B.P. PROJECT

T.R. 82 WAYNE COUNTY SECTION 03-18108-00-BR
PROJECT NO. BROS-191(49) CONTRACT NO. 95476

JOB NO. C-97-131-06

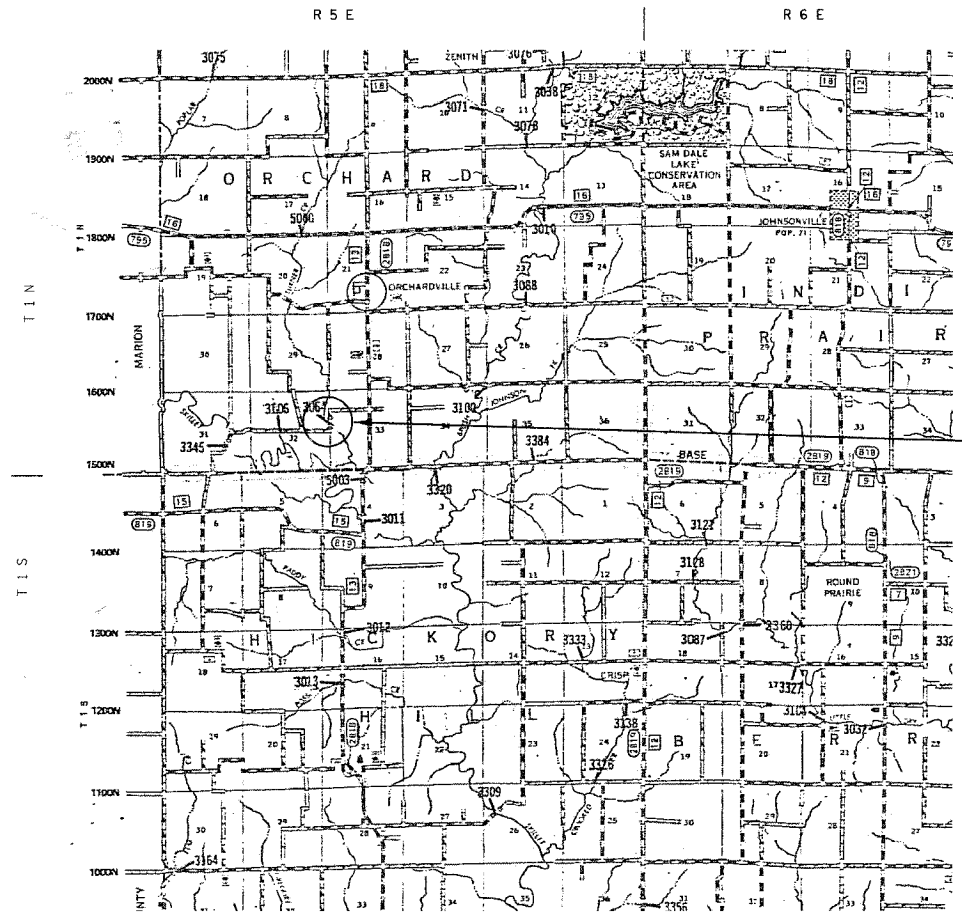


THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED IN THE PROPOSAL:

000001-04	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
702001-06	TRAFFIC CONTROL DEVICES
B.L.R. 21-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
B.L.R. 22-4	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO-WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	10.00
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	38.00
20200100	EARTH EXCAVATION	CU YD	495.00
20300100	CHANNEL EXCAVATION	CU YD	465.00
20400800	FURNISHED EXCAVATION	CU YD	1718.00
25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.70
28000300	TEMPORARY DITCH CHECKS	EACH	6.00
28001000	AGGREGATE (EROSION CONTROL)	TON	20.00
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	430.00
28102600	STONE RIPRAP DITCH	TON	15.00
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	465.00
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1.00
50300225	CONCRETE STRUCTURES	CU YD	22.60
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	1800.00
50800105	REINFORCEMENT BARS	POUND	2680.00
50900205	STEEL RAILING, TYPE S1	FOOT	150.00
51201400	FURNISHING STEEL PILES HP10X42	FOOT	180.00
51202700	DRIVING STEEL PILES	FOOT	180.00
51203400	TEST PILE STEEL HP10X42	EACH	1.00
51204315	CONCRETE ENCASEMENT	CU YD	2.60
51500100	NAME PLATES	EACH	1.00
67/00/00	MOBILIZATION	L.SUM	1.00

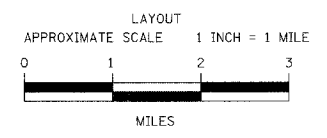


PLAN	1" = 50'	
PROFILE	1" = 50'	
PROFILE VERT.	1" = 5'	
CROSS SECTION	1" = 5'	

SECTION 03-18108-00-BR
BEGINS STATION 1+00

STATION 5+00, STRUCTURE NO. 096-3442
A 75' LONG SINGLE SPAN PRECAST
PRESTRESSED CONCRETE DECK BEAM
BRIDGE (33" DEPTH), 24' ROADWAY, 0.00%
GRADE, 30° LT FWD SKEW.

SECTION 03-18108-00-BR
ENDS STATION 8+85



	FEET	MILES
GROSS LENGTH	785.00 FT	0.15 MILES
OMISSIONS	0.00 FT	0.00 MILES
NET LENGTH	785.00 FT	0.15 MILES

DESIGN DESIGNATION:
DESIGN SPEED: 40 MPH
HIGHWAY CLASS - LOCAL ROAD
EXISTING STRUCTURE NO.: 096-3064
PROPOSED STRUCTURE NO.: 096-3442
CURRENT A.D.T. = 75
CONTRACT NO. 95476

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



PROFESSIONAL DESIGN FIRM
LAND SURVEY & PROFESSIONAL ENGINEERING CORPORATION
184-000887
(62-032435)(35-002769)



AARON M. MEFFORD
NAME
SIGNATURE
DATE
7-11-06
11-30-07
EXPIRES

TOWNSHIP ROUTE 82
TURNER CREEK
WAYNE COUNTY, ILLINOIS

APPROVED June 16 20 06
Arthur D. P...
COUNTY ENGINEER

PASSED 8/18 20 06
Maureen El...
DISTRICT SEVEN ENGINEER OF
LOCAL ROADS & STREETS

Releasing For
Bid Based on
Limited Review
8/18 20 06
Christina M. Reed...
DEPUTY DIRECTOR OF HIGHWAYS,
REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET TITLE:
TITLE SHEET

SCALE: VARS

BY: AMM

DATE: 6/5/06

REV:

1 OF 12
SHEETS
SHEET NO.
1

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82	03-18108-00-BR	WAYNE	12	2
PROJECT# BROS-19149		CONTRACT# 95476		
LEC JOB # H041017WA				

323 W. 3RD ST.
P.O. BOX 160
MT. CARMEL, IL
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AARON M. MEFFORD
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SIGNATURE
DATE
11-90-07
EXPIRES

ORCHARD TOWNSHIP
TOWNSHIP ROUTE 82
WAYNE COUNTY, ILLINOIS

SHEET TITLE:

PLAN & PROFILE

SCALE:	VARIES
BY:	AMM
DATE:	6/06
REV:	

2 OF 12 SHEETS

SHEET NO. 2

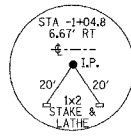
GENERAL NOTES:

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2002.

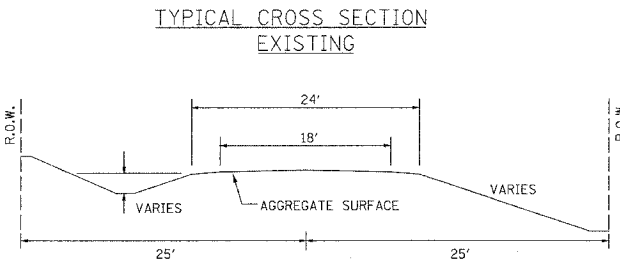
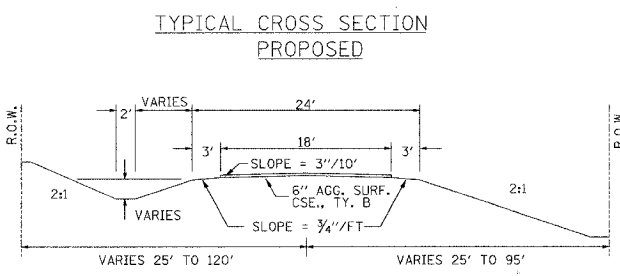
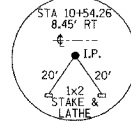
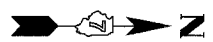
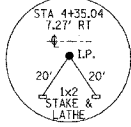
THE WORK INVOLVED ON THIS SECTION CONSISTS OF THE REMOVAL OF THE EXISTING STRUCTURE, THE CONSTRUCTION OF A 75 FOOT LONG SINGLE SPAN PRECAST, PRESTRESSED CONCRETE DECK BEAM BRIDGE, EARTH APPROACHES, AGGREGATE SURFACE COURSE AND OTHER MISCELLANEOUS ITEMS NECESSARY TO COMPLETE THIS SECTION.

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

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL THE UTILITIES, AFFECTING THE PROJECT, PRIOR TO CONSTRUCTION.



SECTION END TRANSITIONS
STA. 0 + 50 TO STA 1 + 00
STA 8 + 65 TO STA 9 + 35



UTILITIES:

J.U.L.I.E. 1-800-892-0123

WABASH TELEPHONE CO-OP
P.O. BOX 299
210 S. CHURCH
LOUISVILLE, IL 62858
618-665-3311

WAYNE-WHITE ELECTRIC CO-OP
ROUTE 45 WEST
FAIRFIELD, IL 62837
618-842-2196

WESTERN WAYNE
WATER DISTRICT
MAIN ST.
WAYNE CITY, IL 62895
618-895-2813

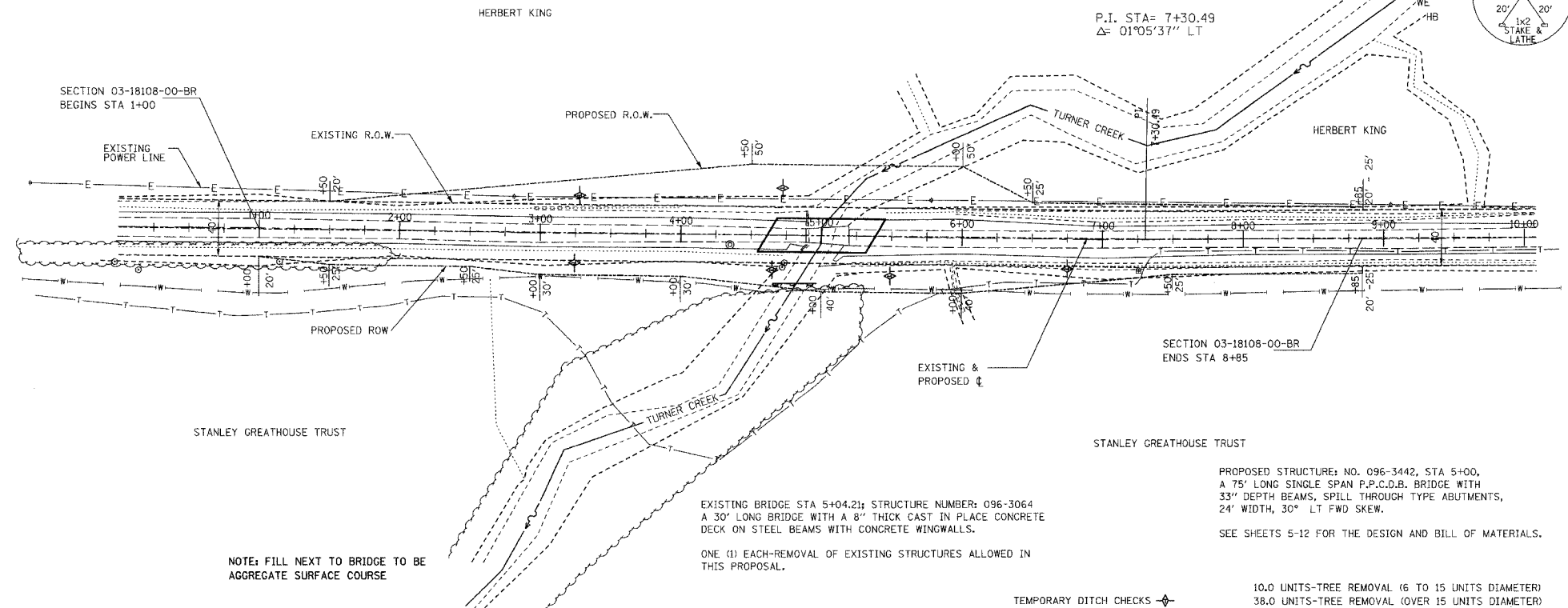
NOTE: CONSTRUCT SPECIAL DITCH

STA 0+50 TO STA 4+69 LT
STA 1+00 TO STA 4+69 RT
STA 5+50 TO STA 9+00 LT
STA 5+31 TO STA 8+50 RT

NOTE: CONSTRUCT STONE RIPRAP DITCH

STA 4+59 TO STA 4+69 LT & RT (0.48 TON/LIN FT)
STA 5+31 TO STA 5+41 RT (0.48 TON/LIN FT)
15 TON TON STONE RIPRAP DITCH ALLOWED IN PROPOSAL.

SEE SHEET NO. 13 FOR STONE RIPRAP DITCH DETAIL.



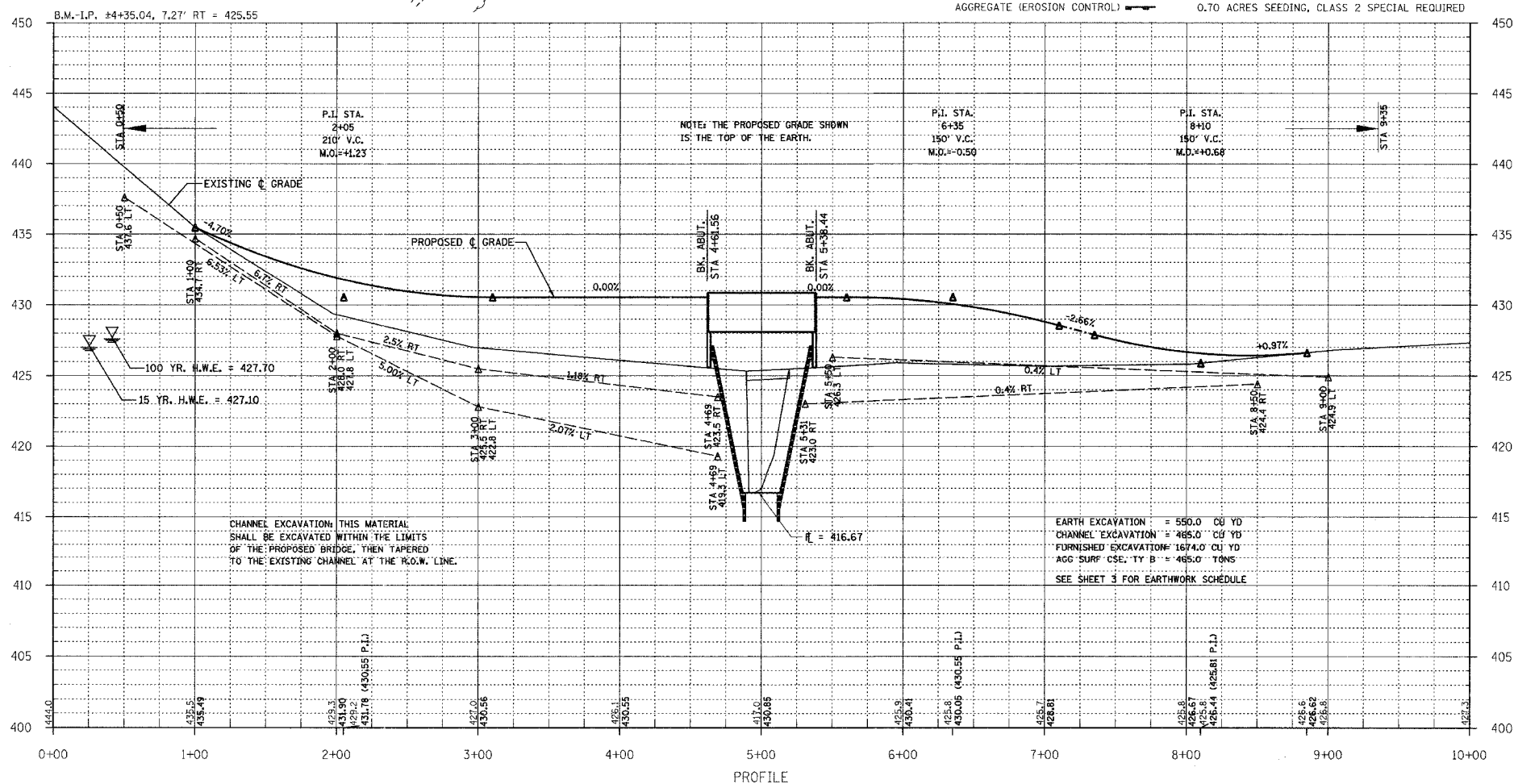
NOTE: FILL NEXT TO BRIDGE TO BE AGGREGATE SURFACE COURSE

EXISTING BRIDGE STA 5+04.21; STRUCTURE NUMBER: 096-3064
A 30' LONG BRIDGE WITH A 8" THICK CAST IN PLACE CONCRETE DECK ON STEEL BEAMS WITH CONCRETE WINGWALLS.

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

PROPOSED STRUCTURE: NO. 096-3442, STA 5+00,
A 75' LONG SINGLE SPAN P.P.C.D.B. BRIDGE WITH
33" DEPTH BEAMS, SPILL THROUGH TYPE ABUTMENTS,
24' WIDTH, 30° LT FWD SKEW.

SEE SHEETS 5-12 FOR THE DESIGN AND BILL OF MATERIALS.



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 = 550.0 CU YD
CHANNEL EXCAVATION = 465.0 CU YD
FURNISHED EXCAVATION = 1674.0 CU YD
AGG SURF CSE. 1Y B = 465.0 TONS
SEE SHEET 3 FOR EARTHWORK SCHEDULE

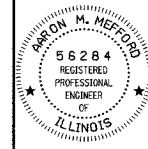
TEMPORARY DITCH CHECKS
AGGREGATE (EROSION CONTROL)
10.0 UNITS-TREE REMOVAL (6 TO 15 UNITS DIAMETER)
38.0 UNITS-TREE REMOVAL (OVER 15 UNITS DIAMETER)
0.70 ACRES SEEDING, CLASS 2 SPECIAL REQUIRED

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82	03-18108-CO-BR	WAYNE	12	3
FED. ROAD DIST. NO. 7 ILLINOIS		TURNER CREEK		323 W. 3RD. ST. P.O. BOX 160 MT. CARMEL, IL 62863
PROJECT# BR05-191(49)		CONTRACT# 95476		PHONE: (618)-262-8661 FAX: (618)-263-3327
LEC JOB # RD41.017WA				

405 W. STATE ST.
SUITE 1
SPRINGETON, IN
47670
PHONE:
(812)-386-7611
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(812)-385-2812



PROFESSIONAL
DESIGN FIRM
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ENGINEERING
CORPORATION
184-000887
(82-032435)(05-002769)



AARON M. MEFFORD
NAME
Aaron Mefford
SIGNATURE
7-11-06
DATE
11-30-07
EXPIRES

ORCHARD TOWNSHIP
TOWNSHIP ROUTE 82
WAYNE COUNTY, ILLINOIS

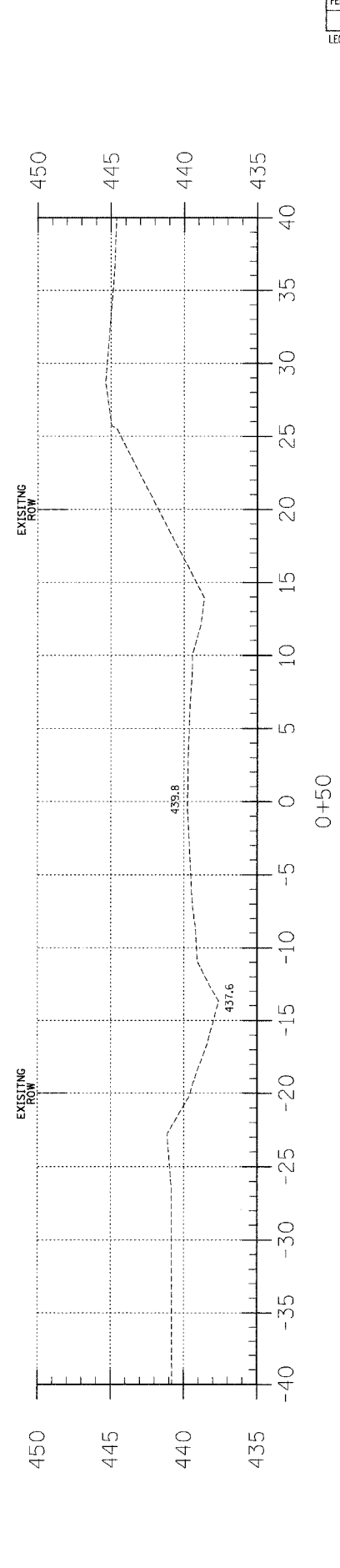
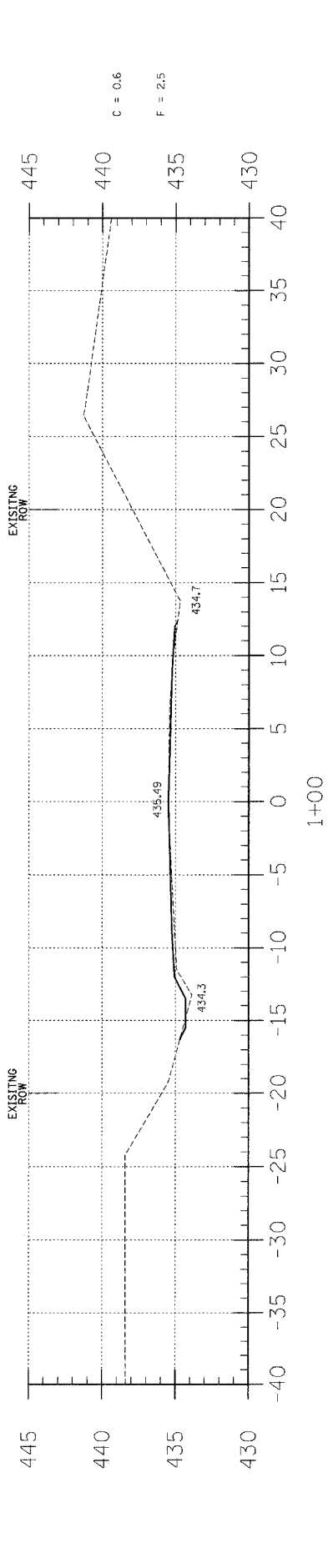
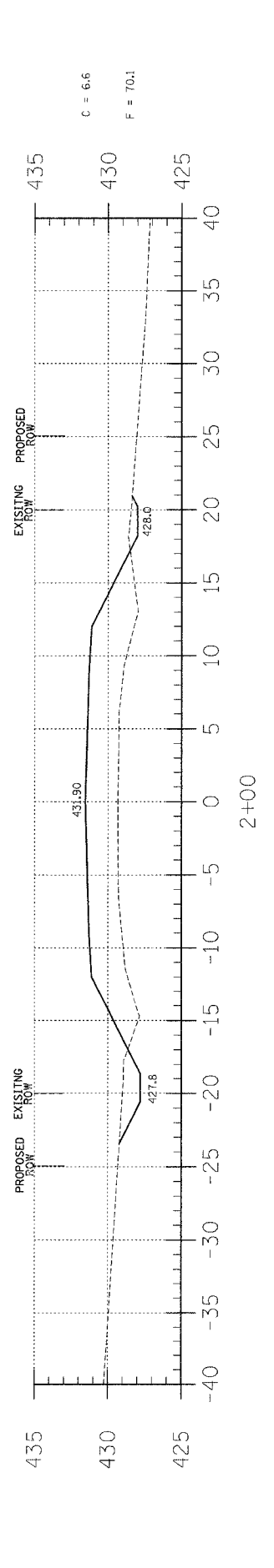
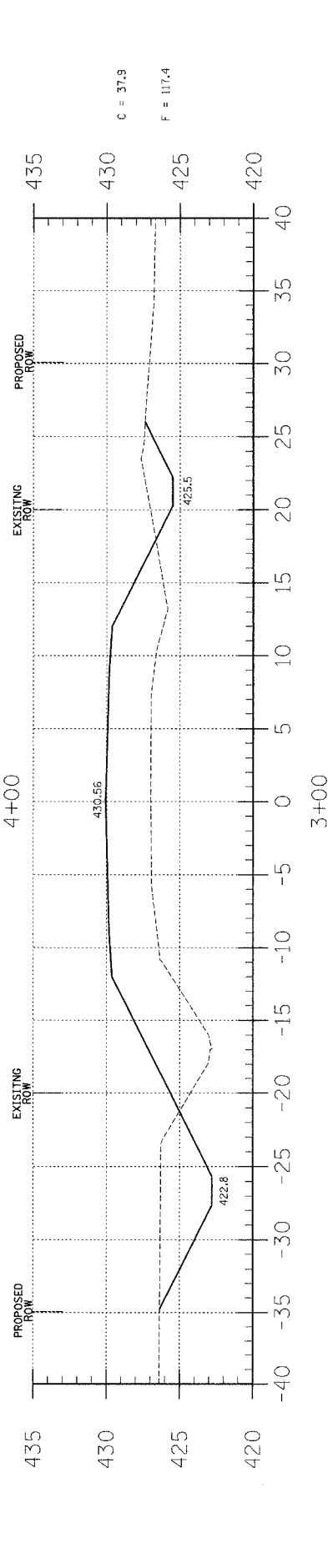
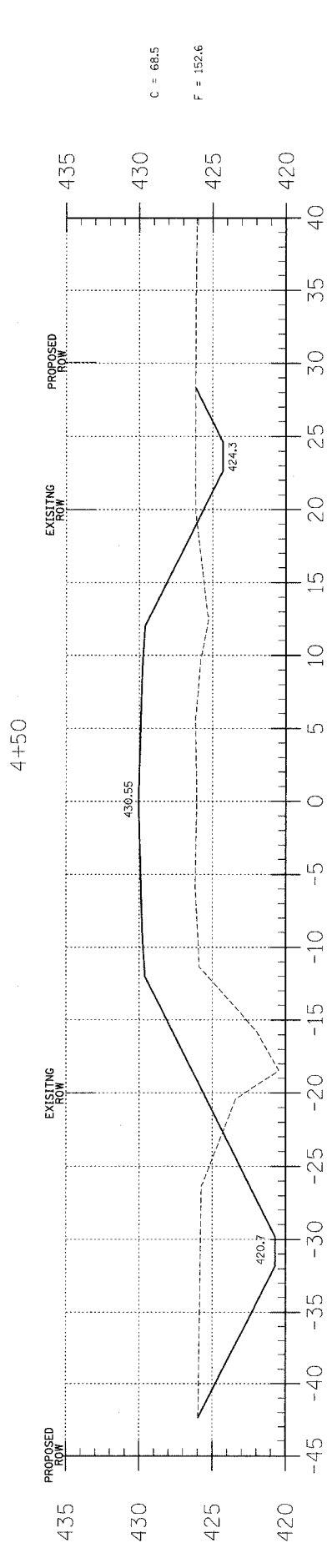
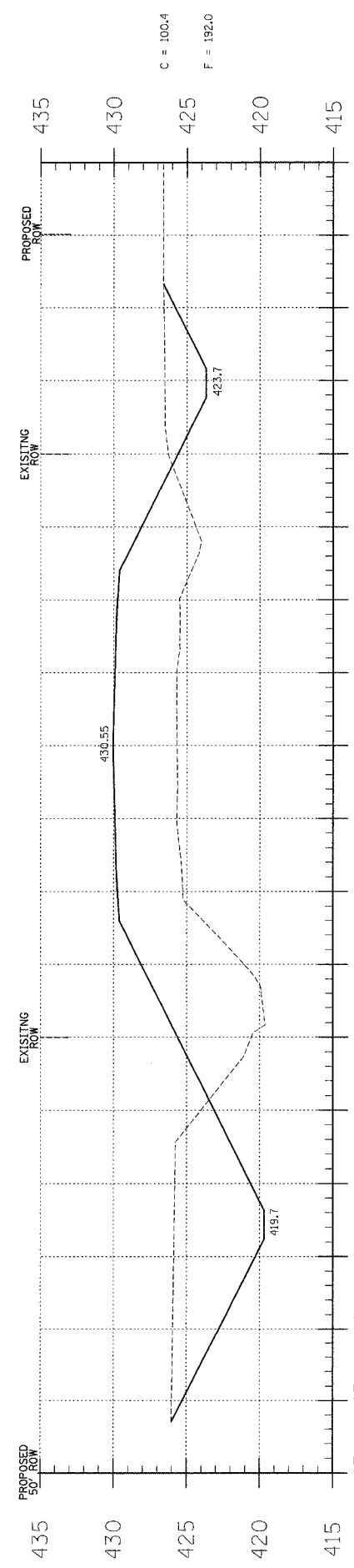
SHEET TITLE:

CROSS-SECTIONS

SCALE: 1" = 5'
BY: AMM
DATE: 06/06
REV: MLG

3 OF 12
SHEETS

SHEET NO.
3



EARTHWORK SCHEDULE

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+61.6	450.0	0.0	0.0	337.5	1303.2	-965.7
STA 4+61.6 TO 5+38.4	0.0	465.0	232.5	174.4	0.0	-174.4
STA 5+38.4 TO 10+00	45.0	0.0	0.0	33.8	960.5	-926.7
0 FIELD ENTRANCES	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	495.0	465.0	232.5	545.7	2263.7	-1718.0

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82	03-18108-00-BR	WAYNE	12	4
FED. ROAD DIST. NO. 7		ILLINOIS	TURNER CREEK	
PROJECT # BR05-191(49)		CONTRACT # 95476		
LEC JOB # H041.011HM				

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ENGINEERING
CORPORATION

184-000687
(62-032435)(35-002769)



AARON M. MEFFORD
NAME

Aaron Mefford
SIGNATURE

7-11-06
DATE

11-30-07
EXPIRES

ORCHARD TOWNSHIP
TOWNSHIP ROUTE 82
WAYNE COUNTY, ILLINOIS

SHEET TITLE:

CROSS-SECTIONS

SCALE: 1" = 5'

BY: AMM

DATE: 8/08

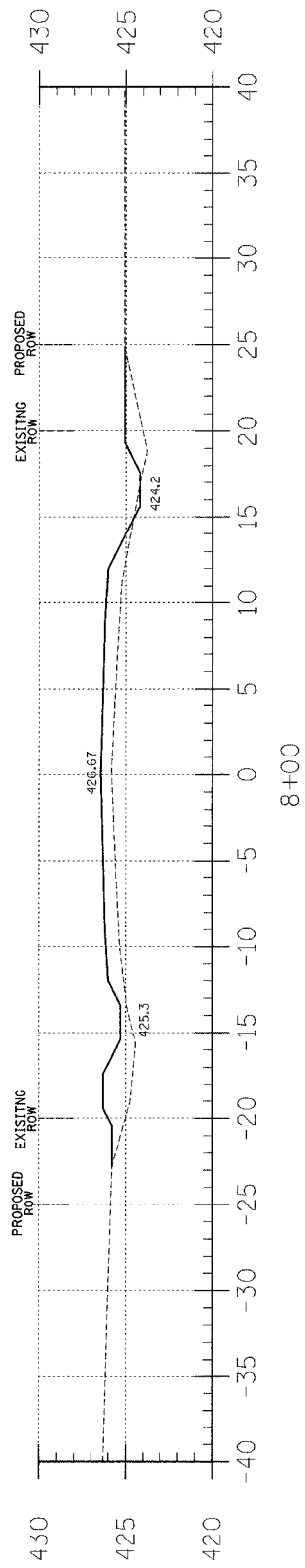
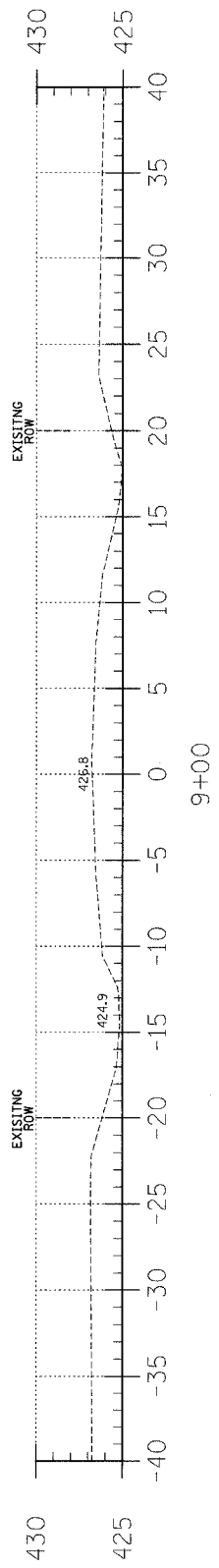
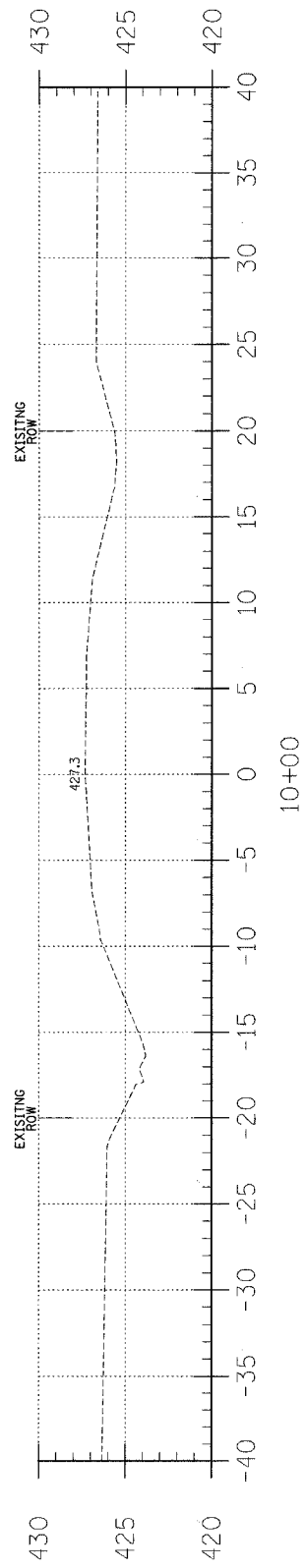
REV: MLG

4 OF 12

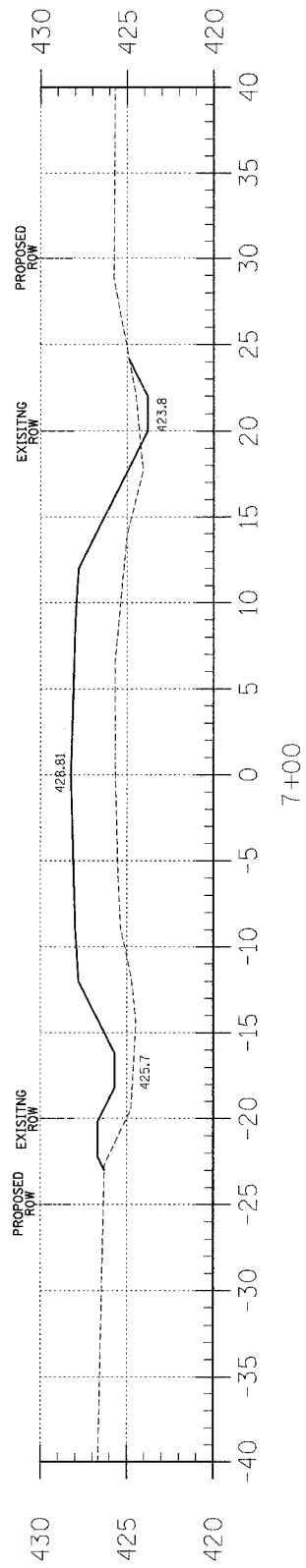
SHEETS

SHEET NO.

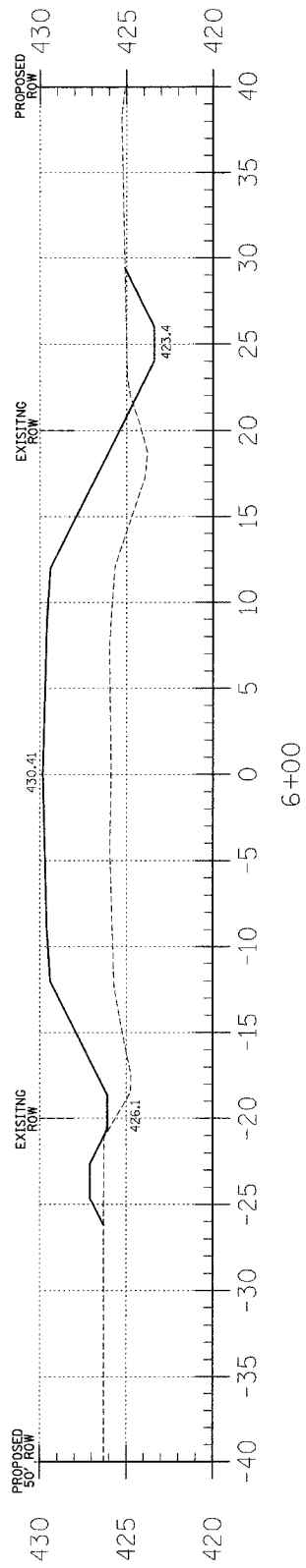
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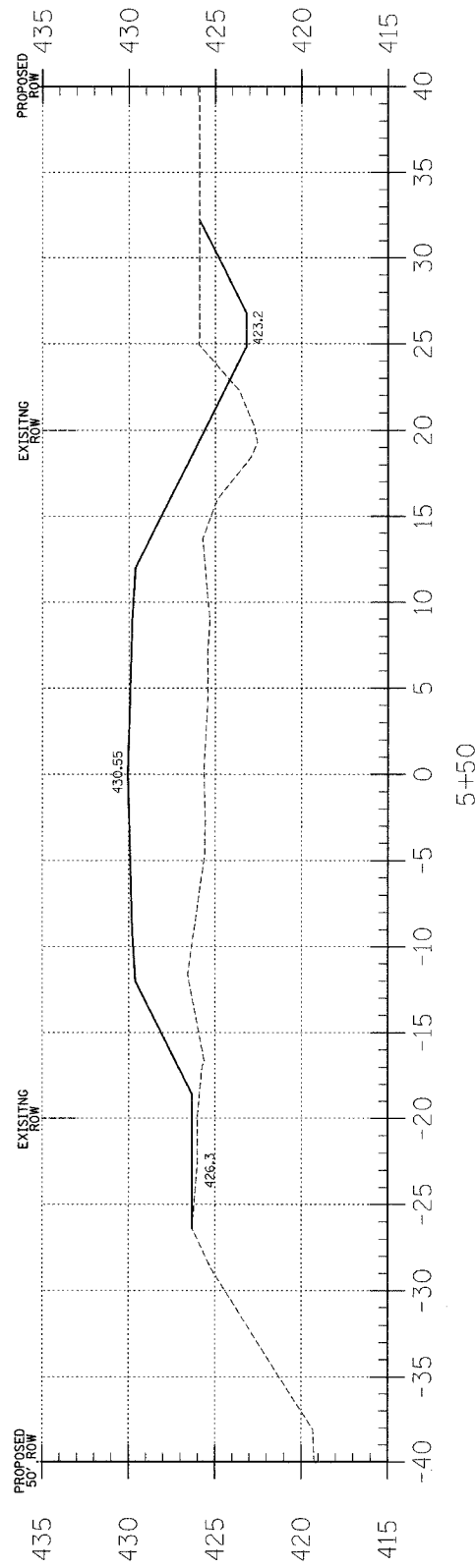
C = 0.2
F = 33.0



C = 2.1
F = 87.9

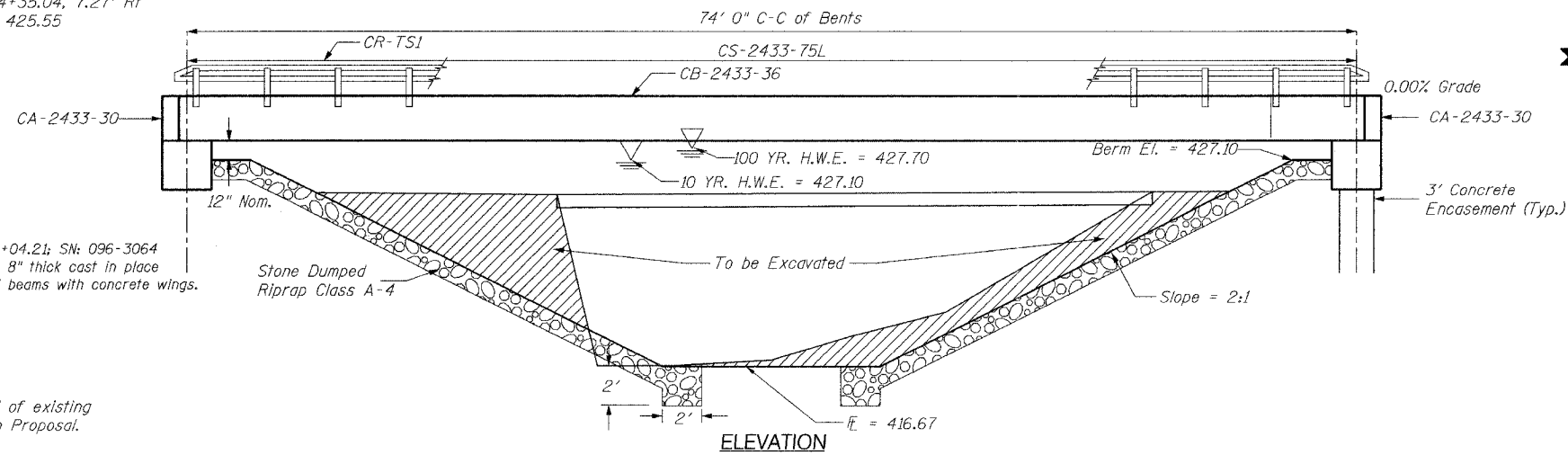


C = 8.1
F = 136.2



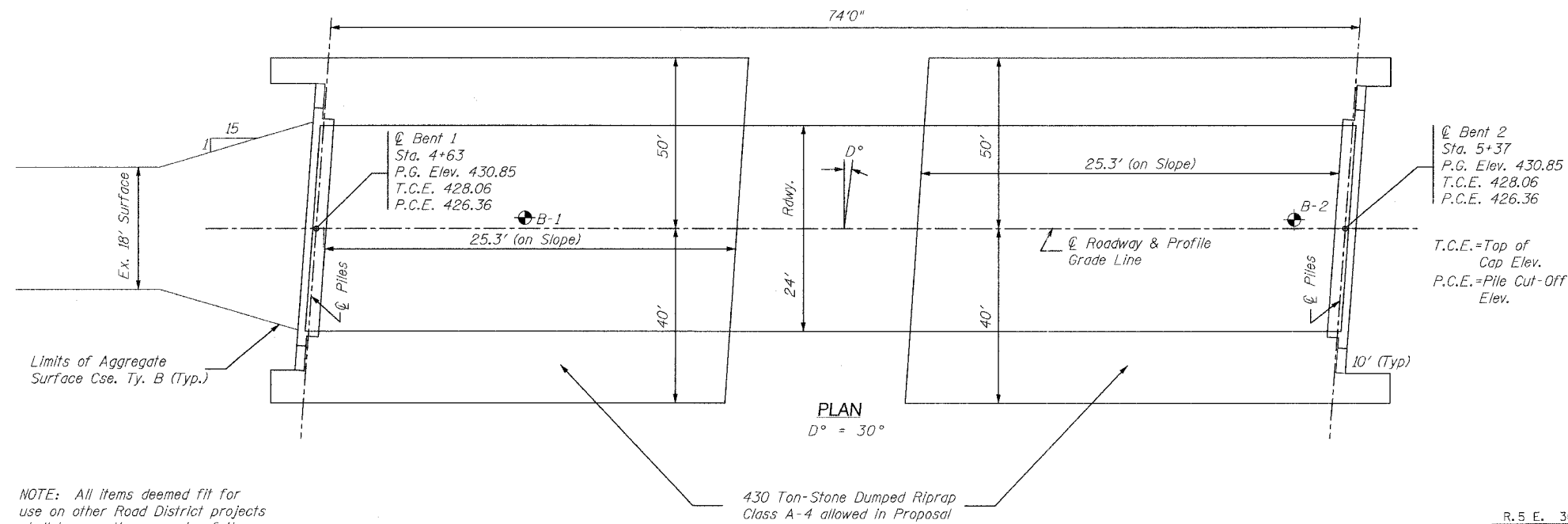
C = 15.3
F = 145.1

T.B.M. I.P. ±Sta. 4+35.04, 7.27' Rt
Elevation = 425.55



Existing Bridge STA 5+04.21; SN: 096-3064
A 30' long bridge with 8" thick cast in place
concrete deck on steel beams with concrete wings.

One (1) each removal of existing
structures allowed in Proposal.



Limits of Aggregate
Surface Cse. Ty. B (Typ.)

NOTE: All items deemed fit for
use on other Road District projects
shall become the property of the
said Road District. These items
shall be stored along the R.O.W.
at no additional cost to the project.

NOTE:
The Article or Section Numbers Referencing the Standard
Specifications for Road and Bridge Construction as shown
on the Standard Bridge Plan Sheets included with the
contract plans should be interpreted as referring to the
current edition of the Standard Specification (Adopted
January 1, 2002) as shown in the "Article/Section No.
Reference Table."

ARTICLE/SECTION NO. REFERENCE TABLE	
Previous No.	Current No.
504.06	504.06
505.04	505.04
706.05	1006.05
706.32	1006.32
760.07	1060.07
STD 2340	STD 631026

DESIGN SPECIFICATIONS
2002 AASHTO
HS 20-44 Loading, Load Factor Design

PILE DATA (2-ABUTS.)
Type: Steel Piles HP10X42
Capacity: Drive to Refusal
Estimated Length: 20 Feet
Number Required: 10 *Includes 1 Test
Pile in Bent #1*

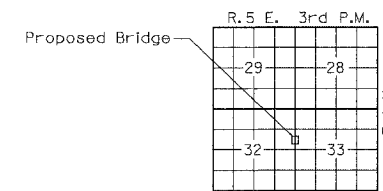
STATION 5+00
TURNER CREEK
SEC. 03-18108-00-BR BUILT 20
PROJECT NO. BROS-191(49)
WAYNE COUNTY
LOADING HS20-44
STR. NO. 096-3442

LETTERING FOR NAME PLATE
Locate Name Plate at the Southeast
Corner of the Bridge (See Sd. CN)

WATERWAY INFORMATION

Drainage Area = 6.8 Sq. Mi. Low Grade Elev. = 426.62 At Sta. 8+85									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Natural H.W.E.	Head-Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	1300	180*	424.8**	427.10	0.23	0.23	427.33	427.33
Base	100	2300	180**	461.9***	427.70	2.39	0.93	430.09	428.63
Overtopping									
Max. Calc.	500	3005							

* Area Over Road = 705 Sq Ft
** Area Over Road = 1513 Sq Ft
*** Area Over Road = 73 Sq Ft
**** Area Over Road = 411 Sq Ft



LOCATION SKETCH

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	L Sum				1
Bit. Conc. Surf. Cse. Class 1	Tons				
Waterproofing Membrane System	Sq.Yds.				
Concrete Structures	Cu.Yds.		22.6		22.6
P.P. Conc. Dk. Bm. 33" Dp.	Sq.Ft.	1800			1800
Steel Railing, Type S1	Lin.Ft.	150			150
Reinforcement Bars	Lbs.		2680		2680
Furnishing Steel Piles HP10X42	Lin.Ft.		180		180
Driving Steel Piles	Lin.Ft.		180		180
Test Pile Steel HP10X42	Each		1		1
Name Plates	Each		1		1
Concrete Encasement	Cu.Yds.		2.6		2.6

NOTE: Four (4) Each Curled End Sections required. Item
to be included in the Steel Railing.

INDEX OF SHEETS

1. General Plan & Elevation
2. Standard CS-2433-75L
3. Standard CB-2433-36
4. Standard CA - 2433-30
5. Standard CR -TS1
6. Standard CN
7. Standard CX-1

GENERAL PLAN & ELEVATION	
TOWNSHIP	ROUTE 82
OVER	TURNER CREEK
SECTION	03-18108-00-BR
	WAYNE COUNTY
STATION	5+00

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82	03-18108-00-BR	WAYNE	12	5

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LAMAC ENGINEERING CO.

PROFESSIONAL DESIGN FIRM
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184-00087
(62-032435)(35-002769)

AARON M. MEFFORD
NAME
SIGNATURE
7-11-06
DATE
11-30-07
EXPIRES

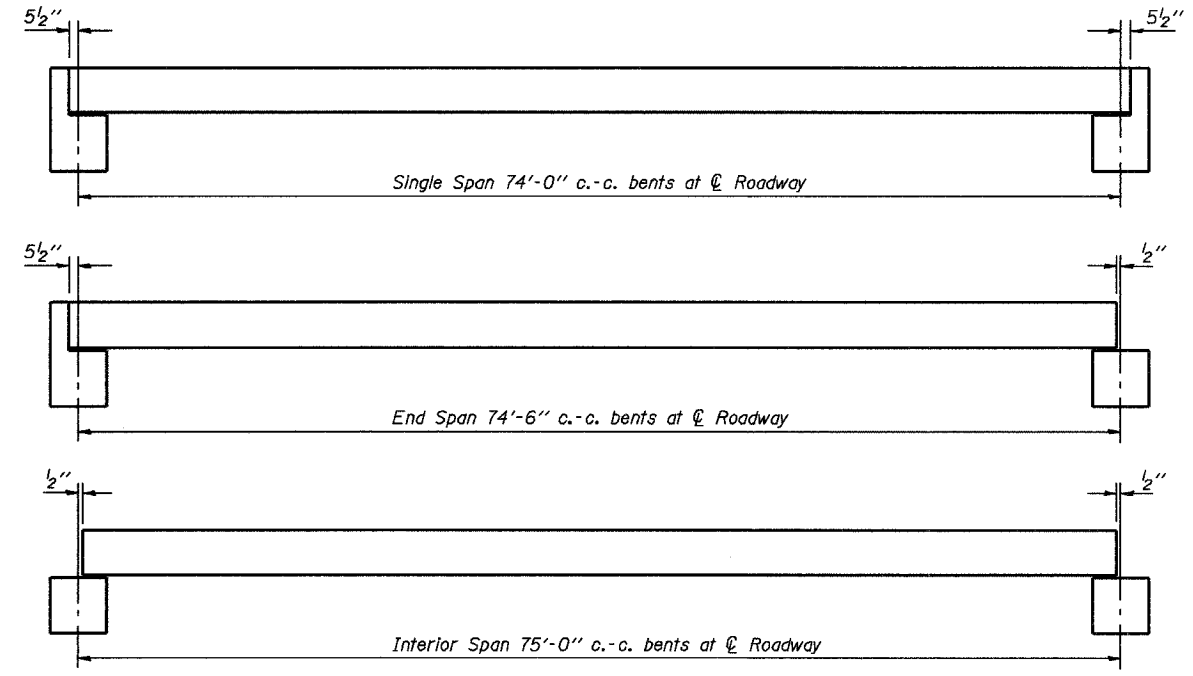
ORCHARD TOWNSHIP
TOWNSHIP ROUTE 82
WAYNE COUNTY, ILLINOIS

SHEET TITLE:
GENERAL PLAN AND ELEVATION

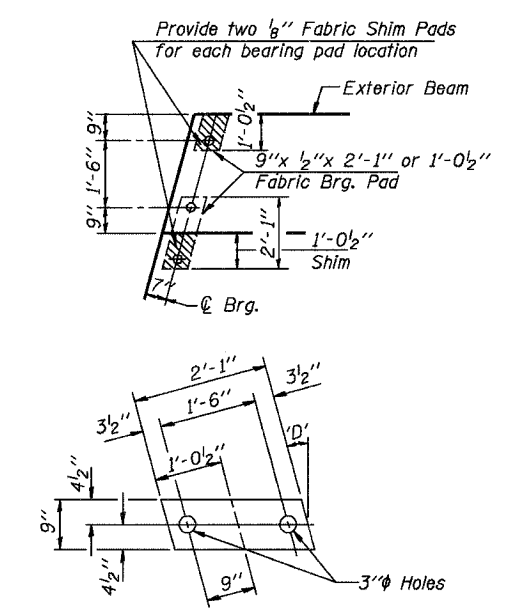
SCALE: NONE
BY: AMM
DATE: 05/06
REV:

5 OF 12 SHEETS

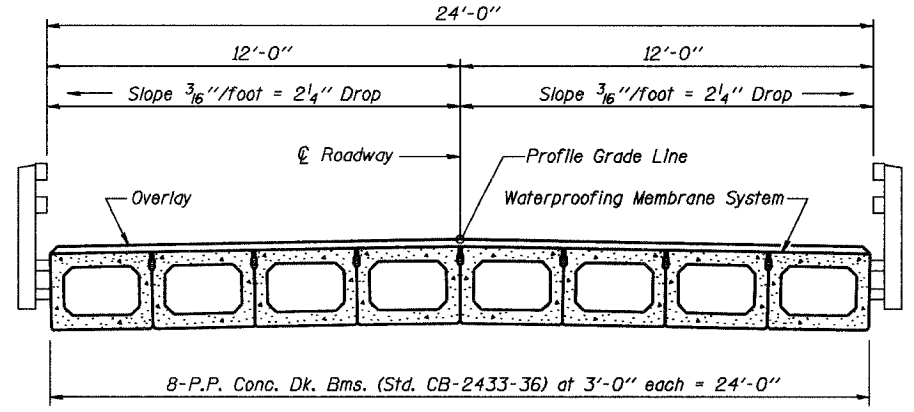
SHEET NO.
5



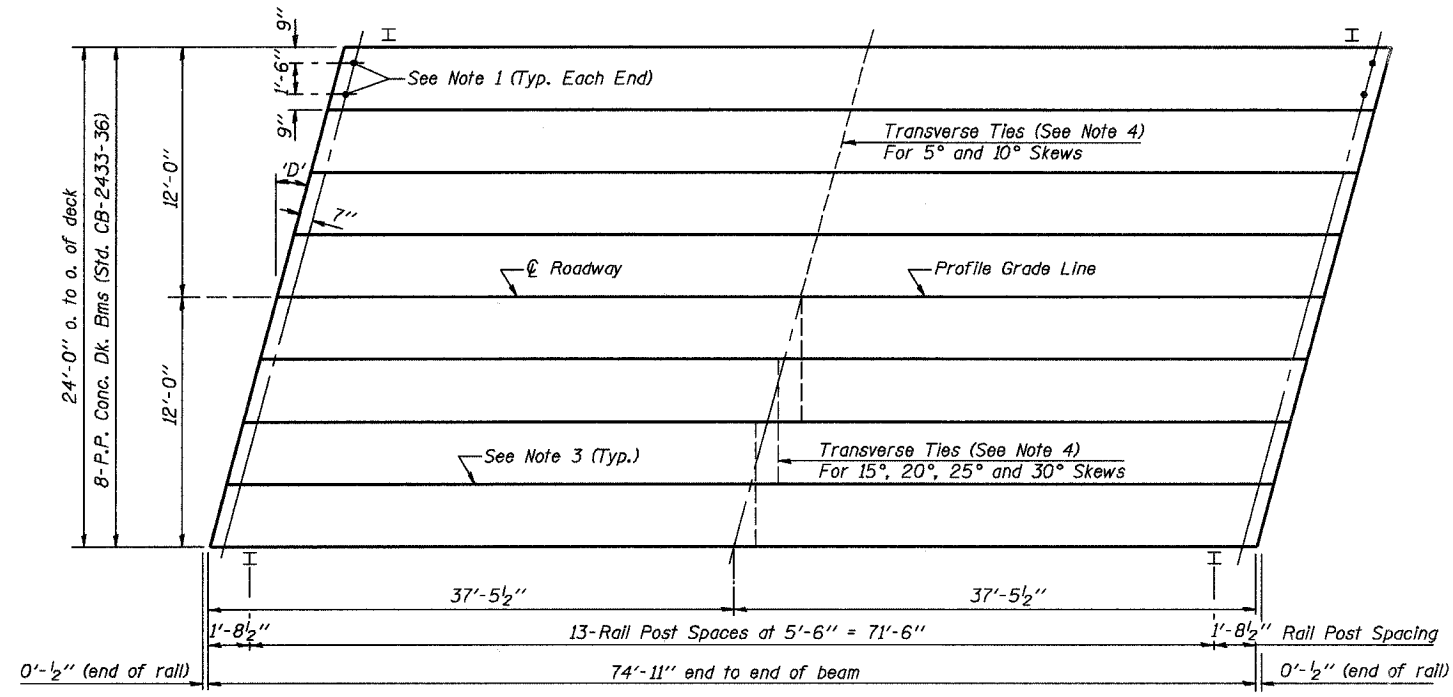
TYPICAL ELEVATIONS



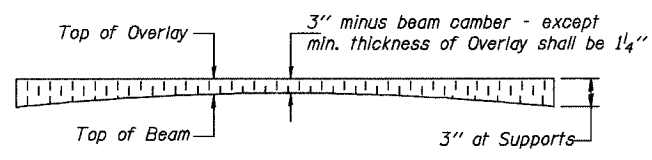
1/2" FABRIC BRG. PAD DETAILS



CROSS SECTION



PLAN
(D' = Designated Skew Angle)

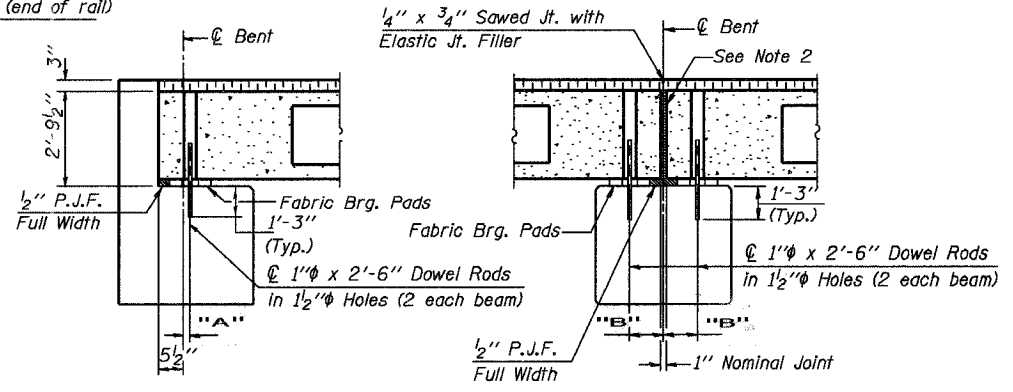


PROFILE OF OVERLAY

DIMENSIONS 'A' AND 'B'

D'	5°	10°	15°	20°	25°	30°
A	1 1/2"	1 5/8"	1 3/4"	1 7/8"	2 1/4"	2 5/8"
B	7 1/2"	7 5/8"	7 3/4"	8"	8 1/4"	8 5/8"

- NOTES**
1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
 2. Nominal 1" joint at centerline pier shall be filled with non-shrink grout.
 3. Longitudinal keys shall be grouted.
 4. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar outside shall be filled with grout after transverse tie assembly is in place.



SECTION AT ABUTS.
(Along centerline Beams)

SECTION AT PIERS
(Along centerline Beams)

QUANTITIES FOR ONE SPAN

P.P. Conc. Dk. Bm. 33" Dp.	1800 Sq. Ft.
Steel Railing	150 Ft.
Waterproofing Membrane System	200.0 Sq. Yds.
Portland Cement Mortar Fairing Course	525 Ft.

Note: Quantity of overlay for one span = 23.0 Tons

P.P.C. DECK BEAM SUPERSTRUCTURE			
24' RDWY.	33" BMS.	75' SPAN	LEFT
STANDARD CS-2433-75L			

Illinois Department of Transportation

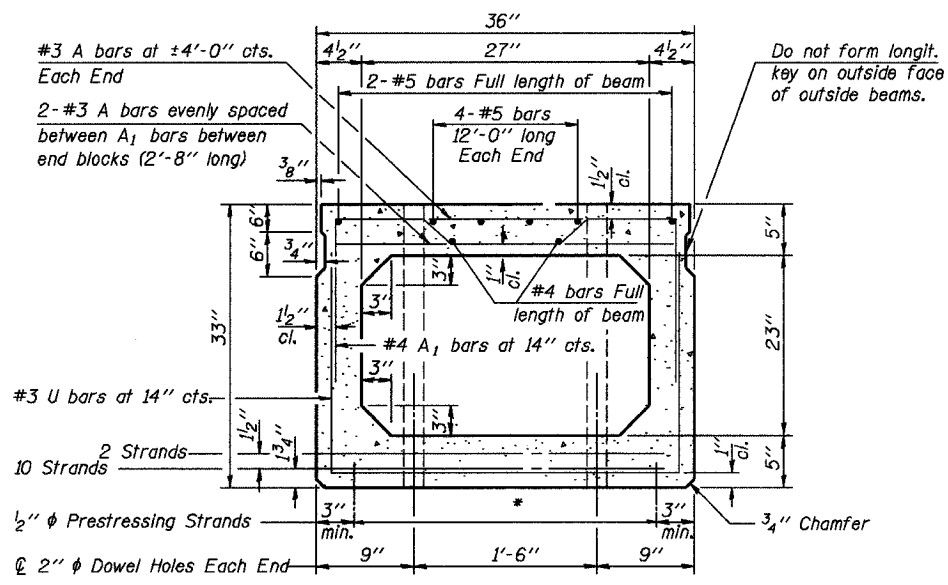
PASSED APRIL 4, 2005

Theresa S. Romagnolo
Engineer of Bridge Design

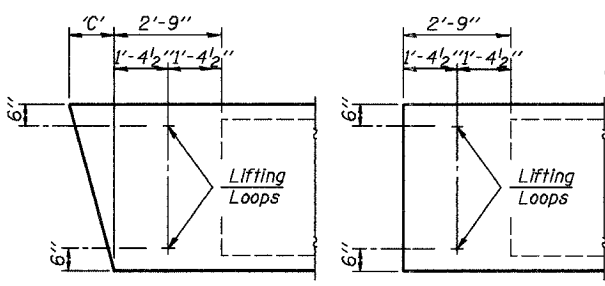
APPROVED APRIL 4, 2005

Ralph E. Anderson
Engineer of Bridges and Structures

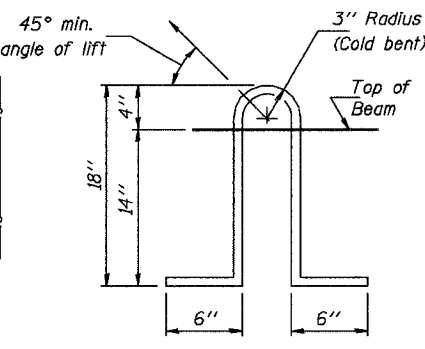
ISSUED



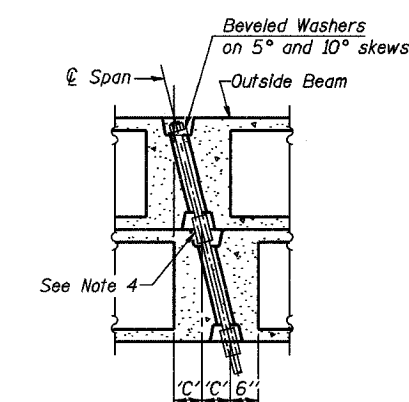
CROSS SECTION
(60' SPAN)



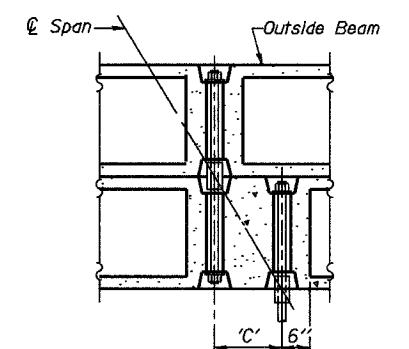
END BLOCK DETAILS



LIFTING LOOP DETAIL



PARTIAL PLAN TRANSVERSE TIE ASSEMBLY
(D=0°, 5° and 10°)



PARTIAL PLAN TRANSVERSE TIE ASSEMBLY
(D=15°, 20°, 25° and 30°)

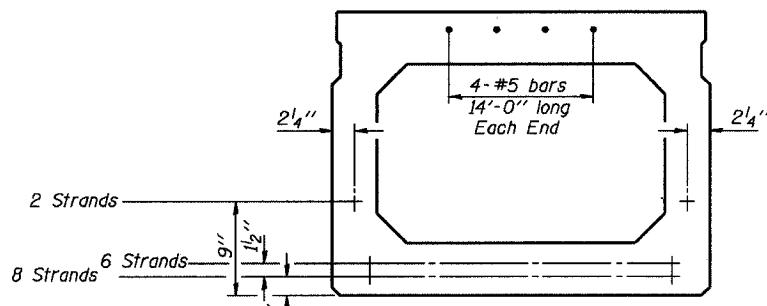
DIMENSION 'C'

Skew Angle 'D'	0°	5°	10°	15°	20°	25°	30°
Dimension 'C' (Inches)	0	3 3/8	6 3/8	9 5/8	13 3/8	16 3/4	20 3/4

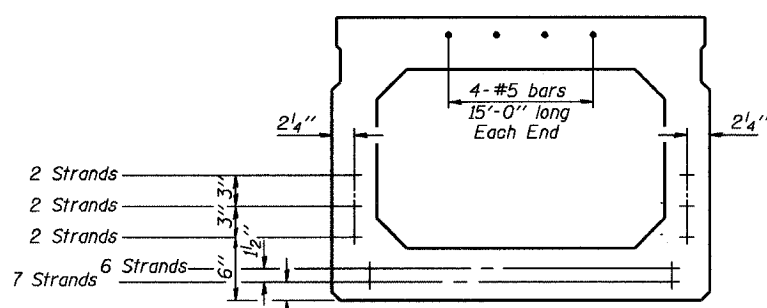
*** TRANSVERSE STRAND PLACEMENT GUIDELINES**

1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1 1/2".

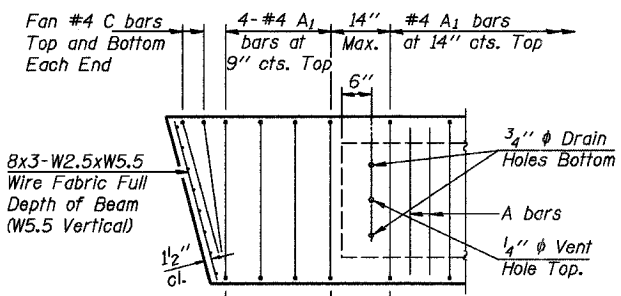
Vertical placement of strands shall not be adjusted to satisfy the above guidelines.



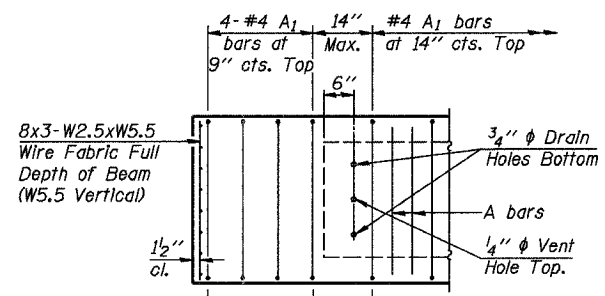
CROSS SECTION
(70' SPAN)



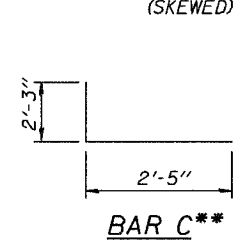
CROSS SECTION
(75' SPAN)



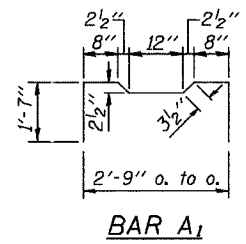
END REINFORCEMENT
(SKEWED)



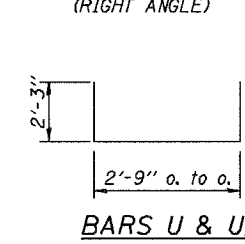
END REINFORCEMENT
(RIGHT ANGLE)



BAR C**



BAR A1



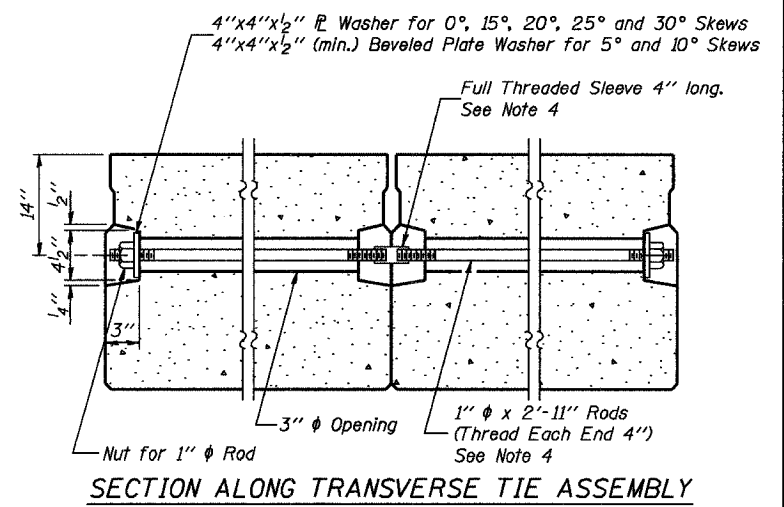
BARS U & U1

DESIGN STRESSES

- $f'_c = 5,000$ p.s.i.
- $f'_{ci} = 4,000$ p.s.i.
- $f'_s = 270,000$ p.s.i. (1/2" ϕ Strand)
- $f_{si} = 201,960$ p.s.i. (1/2" ϕ Strand)
- $f_y = 60,000$ p.s.i.

MIN. BAR LAP

- #4 bars = 1'-4"
- #5 bars = 1'-8"



SECTION ALONG TRANSVERSE TIE ASSEMBLY

NOTES

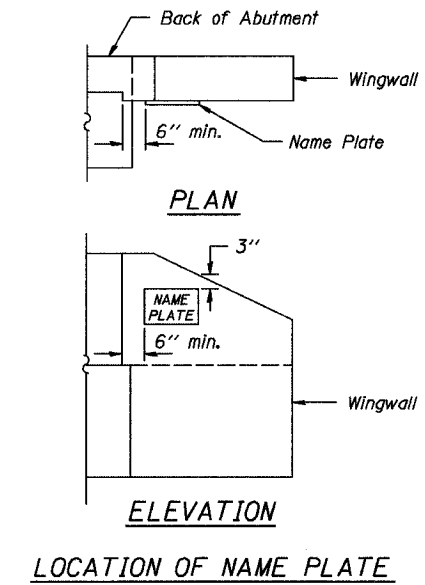
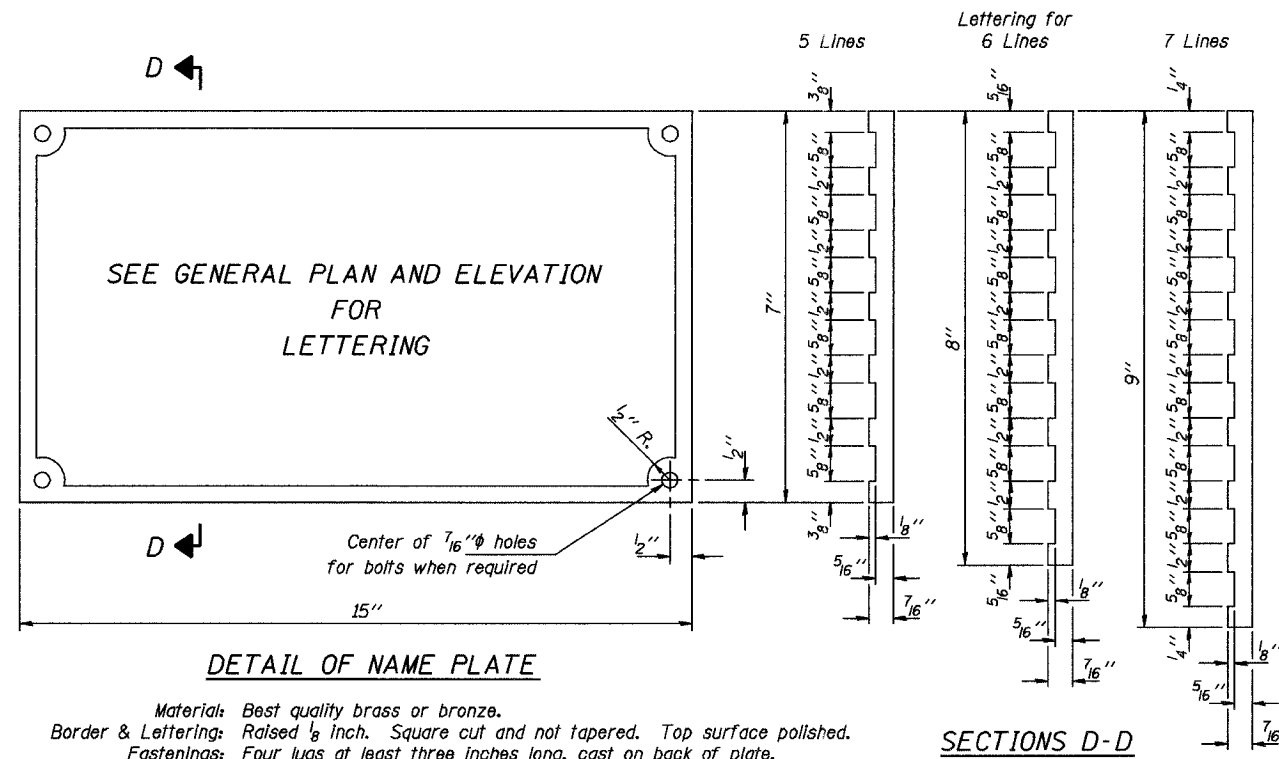
1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
2. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 square inches.
3. Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322, Grade 60.
4. On 0°, 5° and 10° skew angles, alternate approved transverse tie rods of increased segmental length are acceptable.
5. Rail Post anchor devices shall be cast into outside beam as elsewhere specified.
6. When a Waterproofing Membrane System is specified, the top surface of the beams shall be screeded with a straightedge and finished with a hand float. 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".
7. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.

Illinois Department of Transportation
 PASSED APRIL 4, 2005
 Thomas J. Romagnolo
 Engineer of Bridge Design
 APPROVED APRIL 4, 2005
 Ralph E. Anderson
 Engineer of Bridges and Structures

NOTE:
 The std. reinf. and dimensions shown on the 60' span cross section is typical for all spans, except as shown.

****NOTE:**
 The following number of C bars shall be used:
 Skew No.
 5° and 10° — 1
 15° and 20° — 2
 25° and 30° — 3

P.P.C. DECK BEAM DETAILS
 24' ROADWAY | 33" x 36" BEAMS
 STANDARD CB-2433-36



Illinois Department of Transportation

PASSED APRIL 4, 2005

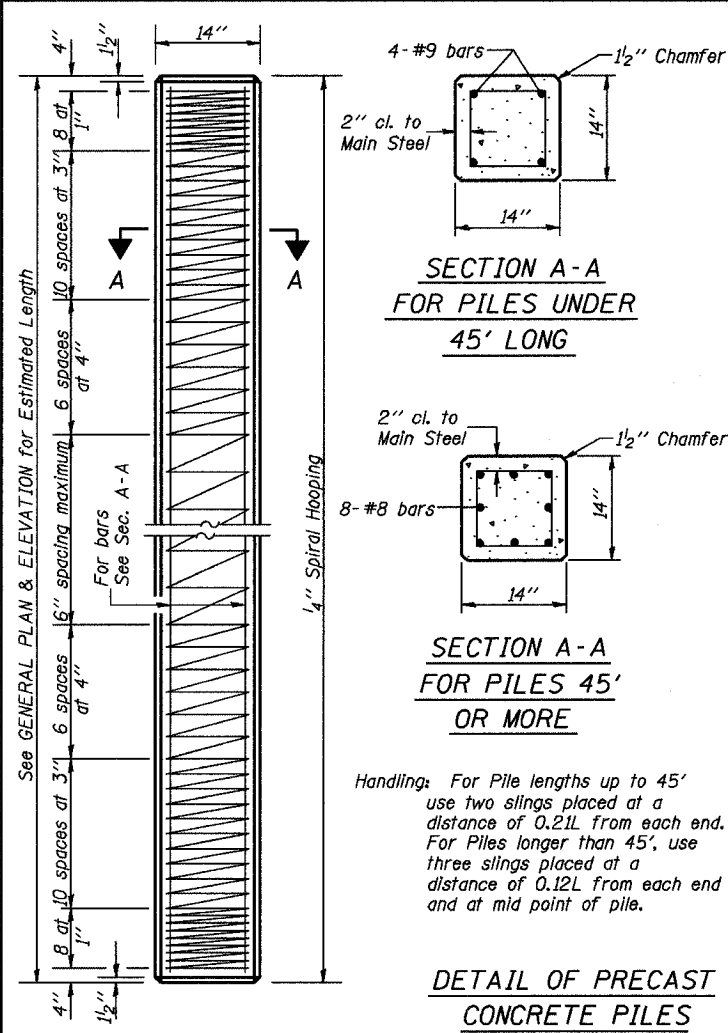
Thomas S. Nimmagadda
 Engineer of Bridge Design

APPROVED APRIL 4, 2005

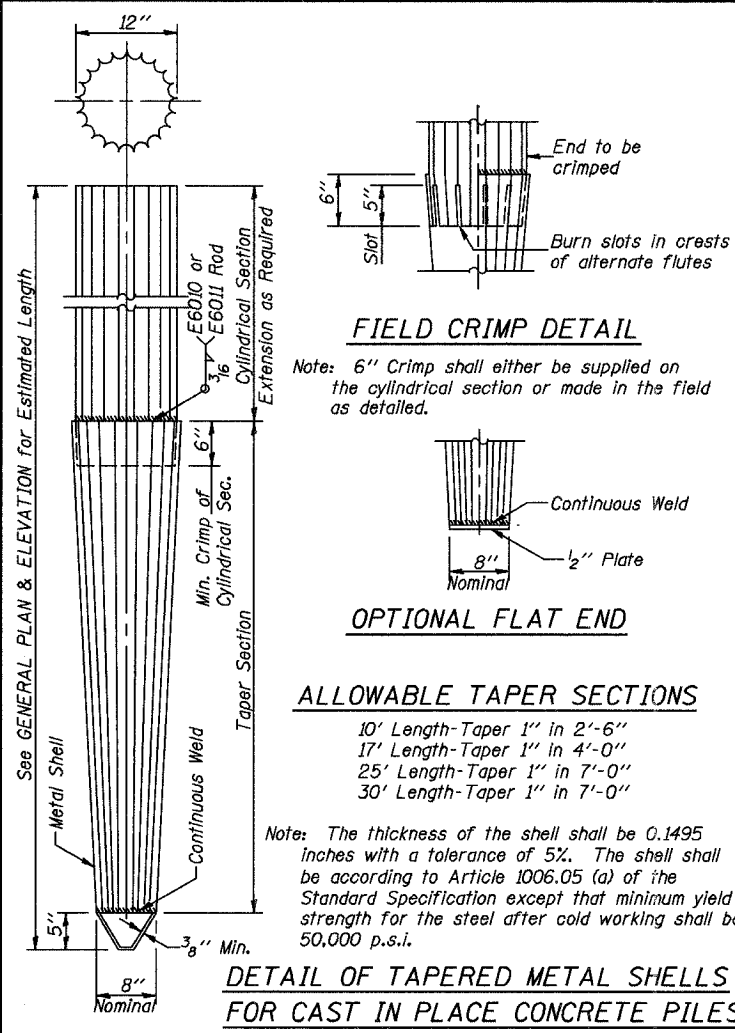
Ralph E. Anderson
 Engineer of Bridges and Structures

ISSUED 7-1-99

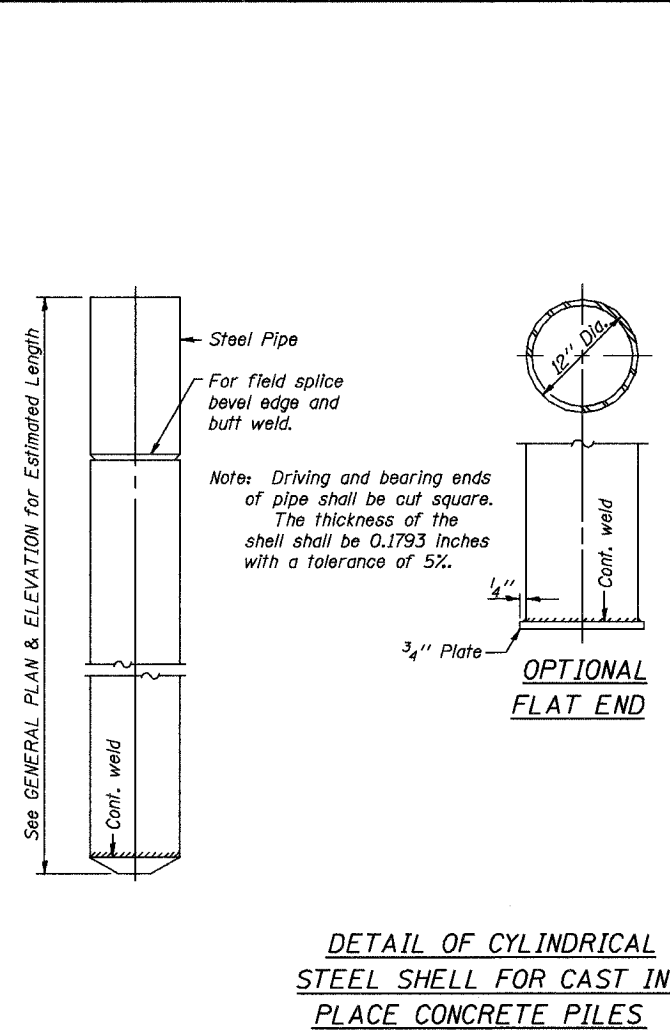
NAME PLATE
STANDARD CN



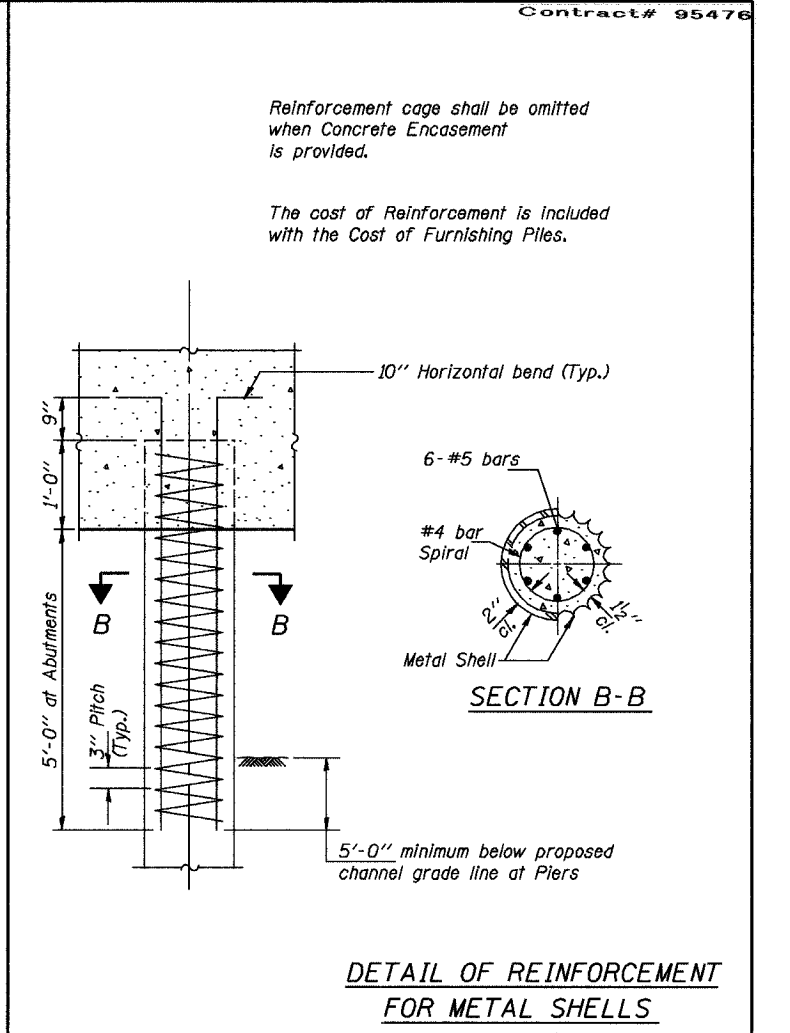
DETAIL OF PRECAST CONCRETE PILES



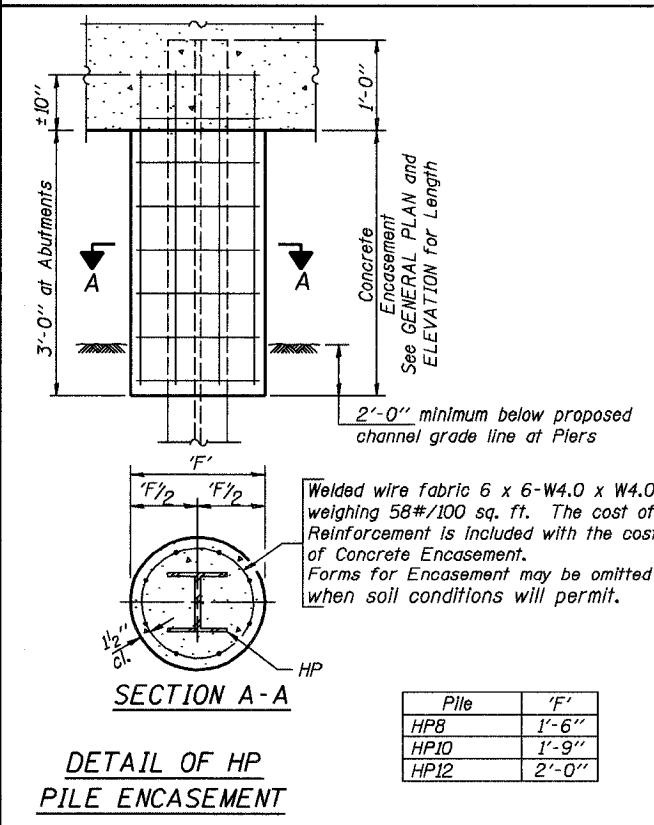
DETAIL OF TAPERED METAL SHELLS FOR CAST IN PLACE CONCRETE PILES



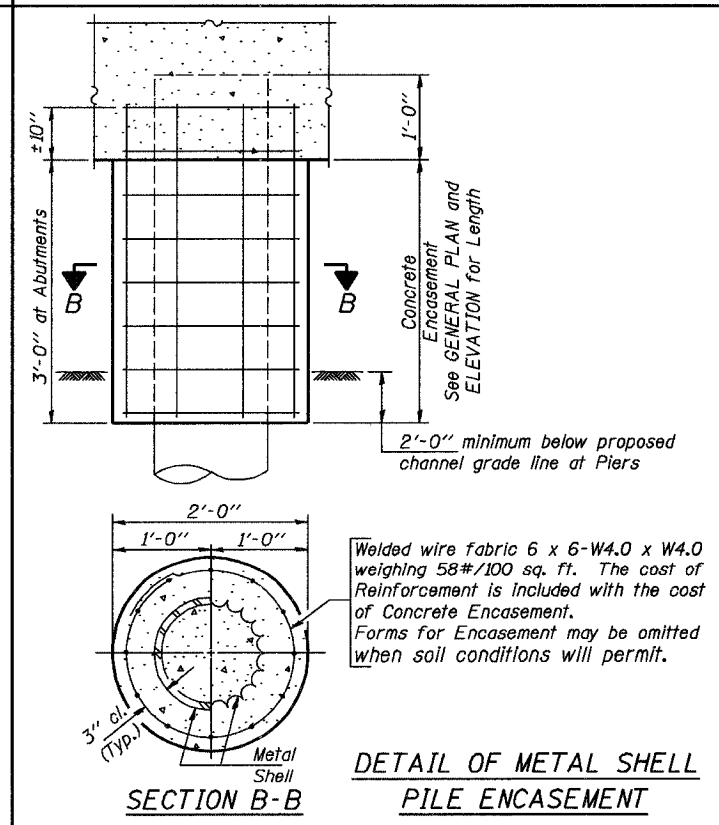
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



DETAIL OF REINFORCEMENT FOR METAL SHELLS



Pile	'F'
HP8	1'-6"
HP10	1'-9"
HP12	2'-0"



QUANTITIES/FT. OF ENCASEMENT (STEEL PILES)

Pile Size	Item	Quantity
HP8	Concrete Encasement	0.063 C.Y.
HP10	Concrete Encasement	0.086 C.Y.
HP12	Concrete Encasement	0.112 C.Y.

(METAL SHELL PILES)

Pile Size	Item	Quantity
12" Dia.	Concrete Encasement	0.087 C.Y.

PILE DETAILS

STANDARD CX-1

Illinois Department of Transportation

PASSED FEBRUARY 1, 2000

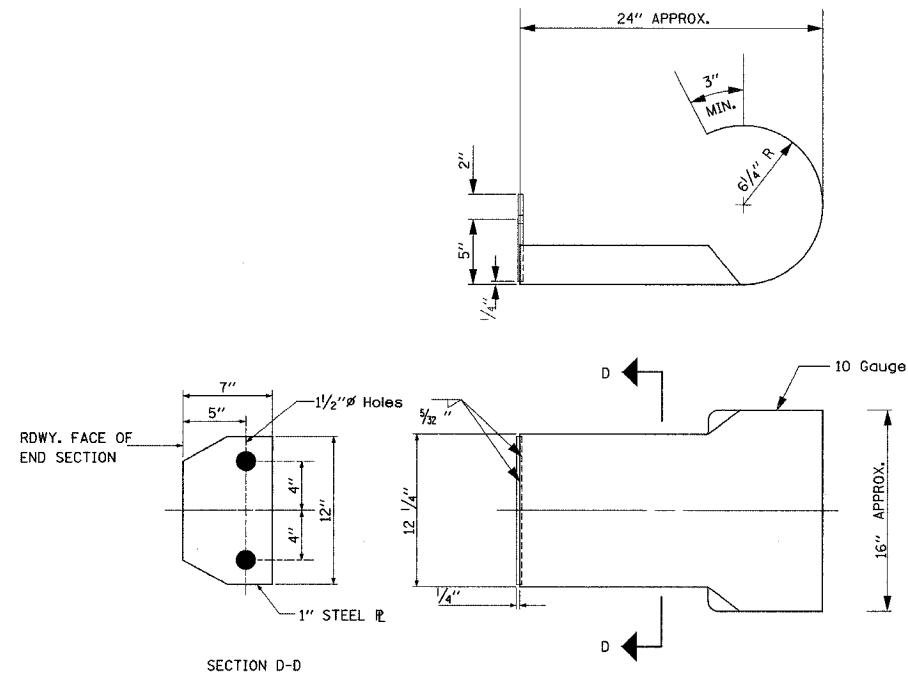
Engineer of Bridge Design

APPROVED FEBRUARY 1, 2000

Engineer of Bridges and Structures

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
82	03-18108-00-BR	WAYNE	12	12
L.E.C. JOB #H041L017WA			TURNER CREEK	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	
PROJECT # BR05-191(49)			CONTRACT NO. 95476	

CURLED END SECTION DETAIL



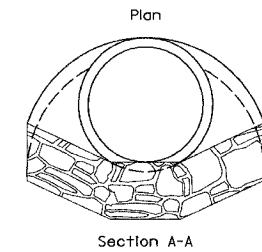
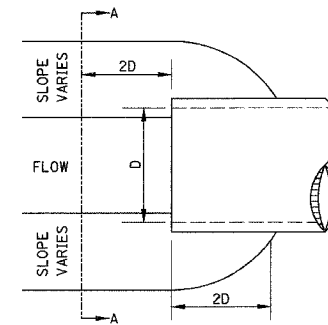
ALL OTHER STEEL SHAPES AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M-183 EXCEPT POSTS AND ANGLES SHALL CONFORM TO A.A.S.H.T.O. M-223, GRADE 50.

BOLTS, CAP SCREWS, AND NUTS SHALL CONFORM TO THE REQUIREMENT OF A.S.T.M. DESIGNATION A-307 EXCEPT FOR HIGH STRENGTH BOLTS, NUTS, AND WASHERS NOTED WHICH SHALL CONFORM TO A.A.S.H.T.O. DESIGNATION M-164.

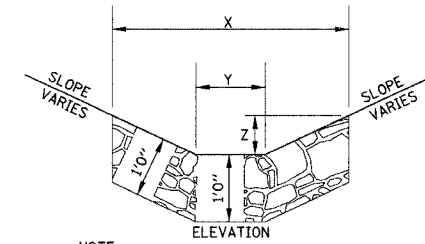
ALL BOLTS, NUTS, CAP SCREWS, WASHERS, AND LOCK WASHERS SHALL BE GALVINIZED IN ACCORDANCE WITH A.A.S.H.T.O. DESIGNATION M-232.

ALL FIELD DRILLED HOLES SHALL BE COATED WITH AN APPROVED ZINC RICH PAINT BEFORE ERRECTION.

STONE RIPRAP DITCH DESIGN



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



NOTE:

BOTTOM OF DITCH	SLOPE		
	1 1/2:1	2:1	3:1
2 FT	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

3 FT	SLOPE		
	1 1/2:1	2:1	3:1
X= 6 FT	7 FT	9 FT	
Y= 3 FT	3 FT	3 FT	
Z= 1 FT	1 FT	1 FT	
	0.48	0.56	0.70 TON/LIN. FT

4 FT	SLOPE		
	1 1/2:1	2:1	3:1
X= 7 FT	8 FT	10 FT	
Y= 4 FT	4 FT	4 FT	
Z= 1 FT	1 FT	1 FT	
	0.56	0.64	0.78 TON/LIN. FT