

STATE OF ILLINOIS

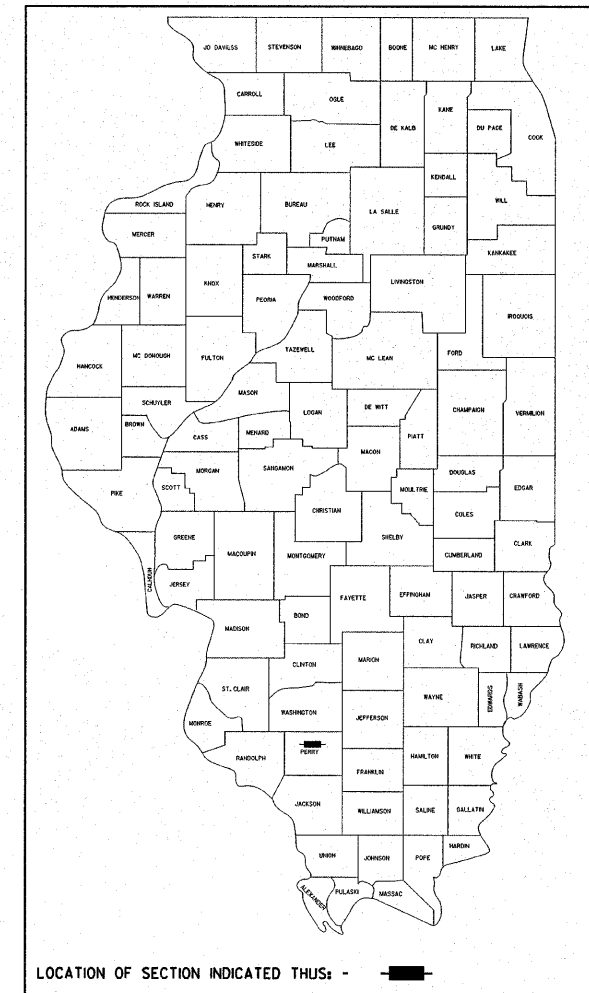
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY BRIDGE PROGRAM

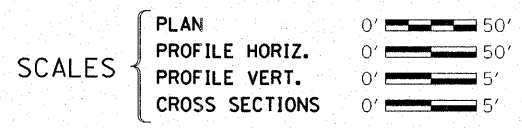
ROUTE NO. T.R. 49	SECTION 02-07119 -00-BR	COUNTY PERRY	SHEET 12	SHEET 1
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CONTRACT NO. 99250



- INDEX OF SHEETS**
1. COVER SHEET
 2. SUMMARY OF QUANTITIES AND TYPICAL CROSS SECTIONS
 3. PLAN AND PROFILE
 - 4.-7. STATION CROSS SECTIONS
 - 8.-11. BRIDGE PLANS
 12. BORINGS

HIGHWAY STANDARDS:
 515001-02 NAME PLATE FOR BRIDGES
 702001-06 TRAFFIC CONTROL DEVICES
 BLR 21-6 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS



SECTION 02-07119-00-BR

ROAD DISTRICT #4-3

PERRY COUNTY

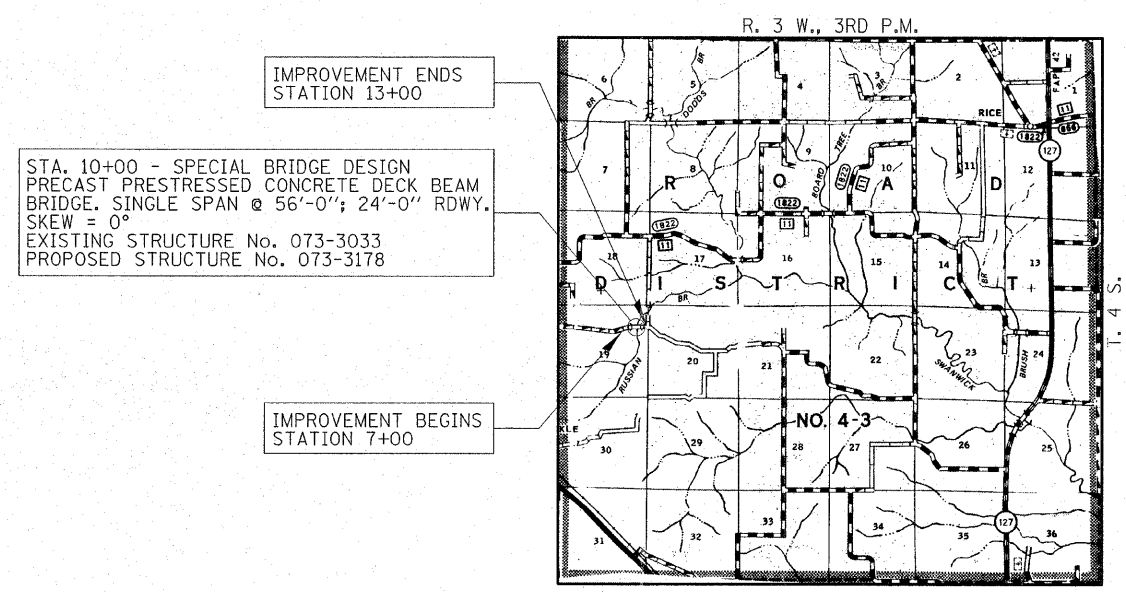
T.R. 49 / OAK RIDGE ROAD

PROJECT BROS-145(33)

C-99-522-06

UTILITIES
 EGYPTIAN ELECTRIC COOPERATIVE
 P.O. BOX 38
 STEELVILLE, ILLINOIS 62288
 ILLINOIS POWER
 2610 BROADWAY
 MT. VERNON, ILLINOIS 62864

DESIGN FUNCTIONAL CLASSIFICATION:
 LOCAL ROAD 0-250 ADT
 DESIGN TRAFFIC: 50
 DESIGN SPEED: 30 M.P.H.



LAYOUT

APPROXIMATE SCALE: 0' = 1" = 1 MILE

NET LENGTH OF SECTION = 600 FEET = 0.114 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED October 31 2006
Douglas P. Hillis
 LOCAL AGENCY REPRESENTATIVE

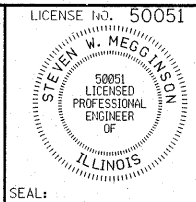
PASSED NOVEMBER 9 2006
Dennis W. Hillis
 ENGINEER OF LOCAL ROADS & STREETS

APPROVED Nov 9th 2006
Mary C. Lamie
 MARY C. LAMIE, P.E.
 DEPUTY DIRECTOR OF HIGHWAYS
 REGION FIVE ENGINEER

DATE: October 23, 2006

BY: *Steven W. Maggiora*

LICENSE EXPIRES: NOVEMBER 30, 2007



HAMPTON, LENZINI & RENWICK, INC.
 CIVIL & STRUCTURAL ENGINEERS

HLR

3085 STEVENSON DRIVE, SUITE 201
 SPRINGFIELD, ILLINOIS 62703
 (217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-74-0006-1 | DATE: 10/20/06

SUMMARY OF QUANTITIES			
CODE NO	ITEM	UNIT	QUANTITY
		CONSTRUCTION CODE X081-2A	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	20
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	40
20200100	EARTH EXCAVATION	CU YD	370
20300100	CHANNEL EXCAVATION	CU YD	140
20400800	FURNISHED EXCAVATION	CU YD	480
> 20900330	GRANULAR BACKFILL	TON	70
> 25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.5
> 28101700	RIPRAP, SPECIAL	TON	140
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	495
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	18.2
50300280	CONCRETE ENCASEMENT	CU YD	2.0
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1,344
50500505	STUD SHEAR CONNECTORS	EACH	16
50800105	REINFORCEMENT BARS	POUND	2,430
50900205	STEEL RAILING, TYPE S1	FOOT	113
51201400	FURNISHING STEEL PILES HP10X42	FOOT	360
51202305	DRIVING PILES	FOOT	360
51500100	NAME PLATES	EACH	1
> 54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	34
67100100	MOBILIZATION	L SUM	1

> SEE SPECIAL PROVISIONS

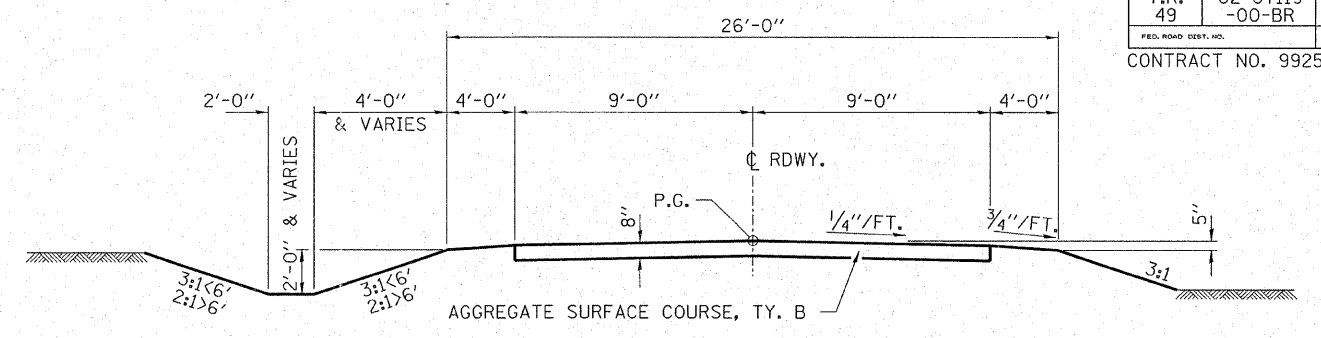
GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007," THESE PLANS AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- ALL CLEARING AND GRUBBING AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE CONTRACT.
- THE LOCATIONS OF EXISTING ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THE LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
- THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS UNTIL THE OWNER, HIS AGENT OR A PROFESSIONAL LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- THE REVISION NUMBER INDICATED FOR THE STANDARDS LISTED IN THE INDEX OF SHEETS SHALL BE USED IN THE CONSTRUCTION OF THIS SECTION.
- THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES

AGGREGATE SURFACE CSE.	2.05	TON/CU YD
RIPRAP SPECIAL	1.75	TON/CU YD
GRANULAR BACKFILL	2.00	TON/CU YD
- THE AREA TO BE SEEDDED SHALL CONSIST OF ALL EARTH SURFACES DISTURBED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. **ESTIMATED QUANTITY = 0.5 ACRE**
- THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF PIPE CULVERTS BEFORE ORDERING THESE ITEMS.
- TREES WITHIN THE RIGHT-OF-WAY WHICH INTERFERE WITH CONSTRUCTION SHALL BE REMOVED ONLY AT THE DIRECTION OF THE ENGINEER.

EARTHWORK SCHEDULE						
LOCATION	EARTH EXCAVATION (CU YD)	SHRINKAGE FACTOR	PERCENT USED	AVAILABLE* EXCAVATION (CU YD)	EMBANKMENT REQUIRED (CU YD)	EARTHWORK BALANCE (CU YD)
STA. 7+00 TO STA. 9+71.33	240	25%	100%	180	227	-47
STA. 9+71.33 TO STA. 10+28.67	-	25%	100%	-	-	-
STA. 10+28.67 TO STA. 13+00	129	25%	100%	97	575	-478
CHANNEL EXCAVATION ENTRANCES	270	25%	70%	74	28	74
TOTAL	349			350	821	-480
USE:	370					480

* AVAILABLE EXCAVATION = EXC. x (1-SHRINKAGE FACTOR) x % USED (FURN. EXC.)



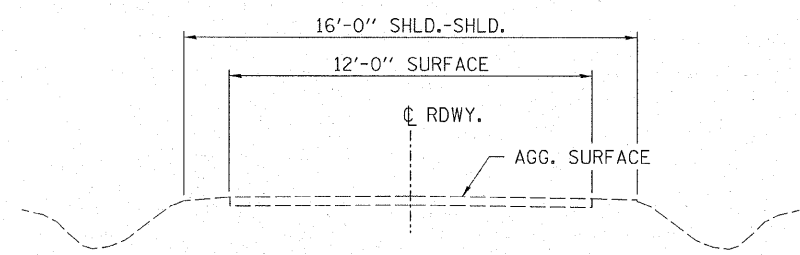
SUGGESTED CUT SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

SUGGESTED FILL SECTION
CONSTRUCT AS SHOWN IN
STATION CROSS SECTIONS

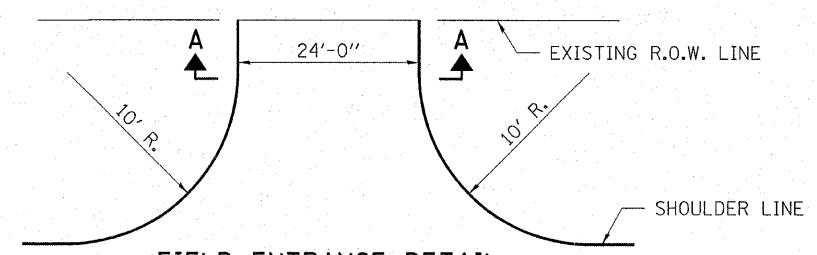
ROAD CLASSIFICATION - LOCAL ROAD ADT 0-250
CURRENT ADT 0-150
DESIGN SPEED: 30 M.P.H.

TYPICAL CROSS SECTION
STA. 7+50 TO STA. 12+50

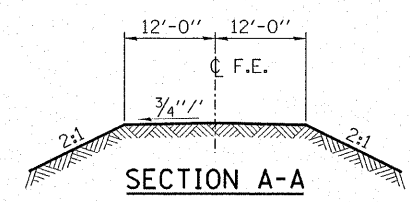
TRANSITION FROM PROPOSED TO EXISTING ROADWAY
TO BE CONSTRUCTED FROM STA. 7+00 TO 7+50 AND
FROM STA. 12+50 TO STA. 13+00, SEE SHEET 8 FOR
TRANSITION AT BRIDGE.



EXISTING CROSS SECTION



FIELD ENTRANCE DETAIL



SECTION A-A

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 548-3400

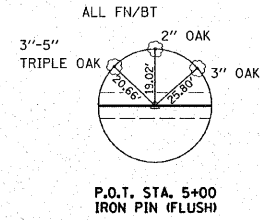
ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-74-0006-1 DATE: 10/30/06
DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

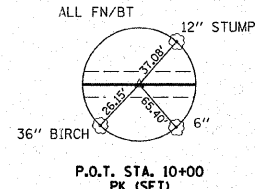
**SUMMARY OF QUANTITIES
AND TYPICAL SECTIONS**
SECTION 02-07119-00-BR
ROAD DISTRICT NO. 4-3
PERRY COUNTY

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	02-07119-00-BR	PERRY	12	3
STA. 5+00.00		TO STA. 14+64.11		
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99250	
ROAD DISTRICT NO 4-3				

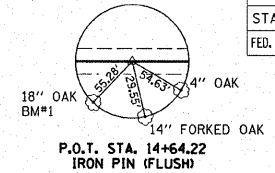
ROGER A. KUHNERT
SE 1/4, NE 1/4, SEC 19, T. 4 S., R. 3 W., 3RD P.M.



P.O.T. STA. 5+00
IRON PIN (FLUSH)

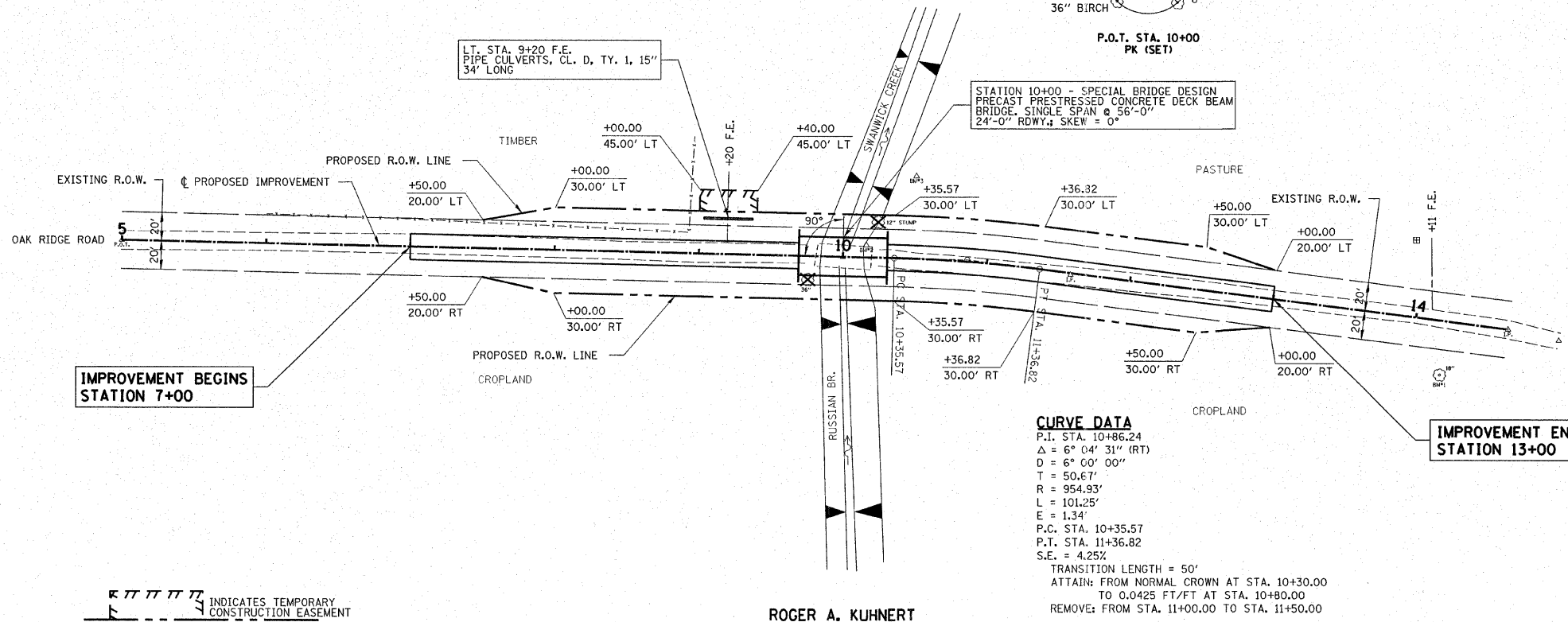


P.O.T. STA. 10+00
PK (SET)



P.O.T. STA. 14+64.22
IRON PIN (FLUSH)

PLAN	DATE
BY	
CHECKED	
DATE	
NO.	



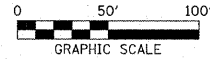
CURVE DATA
 P.I. STA. 10+86.24
 $\Delta = 6^\circ 04' 31''$ (RT)
 $D = 6^\circ 00' 00''$
 $T = 50.67'$
 $R = 954.93'$
 $L = 101.25'$
 $E = 1.34'$
 P.C. STA. 10+35.57
 P.T. STA. 11+36.82
 $S.E. = 4.25\%$
 TRANSITION LENGTH = 50'
 ATTAIN: FROM NORMAL CROWN AT STA. 10+30.00
 TO 0.0425 FT/FT AT STA. 10+80.00
 REMOVE: FROM STA. 11+00.00 TO STA. 11+50.00

- TREE REMOVAL** ✕
- ENTRANCES TO BE BUILT**
 LT. STA. 9+20 F.E. -10.8% EARTH 16' SURF.
 QUANTITY INCLUDED IN EARTHWORK TABLE
- CHANNEL EXCAVATION**
 THE CHANNEL SHALL BE EXCAVATED AS SHOWN IN THE PLANS WITH 2:1 SIDE SLOPES WITHIN THE LIMITS OF THE PROPOSED STRUCTURE, THEN TAPER TO THE EXISTING CHANNEL AT THE R.O.W. LINES. ONLY SUITABLE EXCAVATED MATERIAL SHALL BE USED IN THE EMBANKMENT.

EXISTING STRUCTURE NO. 073-3033
 STATION 10+00 - SINGLE SPAN T-BEAM BRIDGE WITH CONCRETE DECK ON SPILL THRU ABUTMENTS. 32.0' FC-FC. ABUTS; 16.2' o-o. DECK

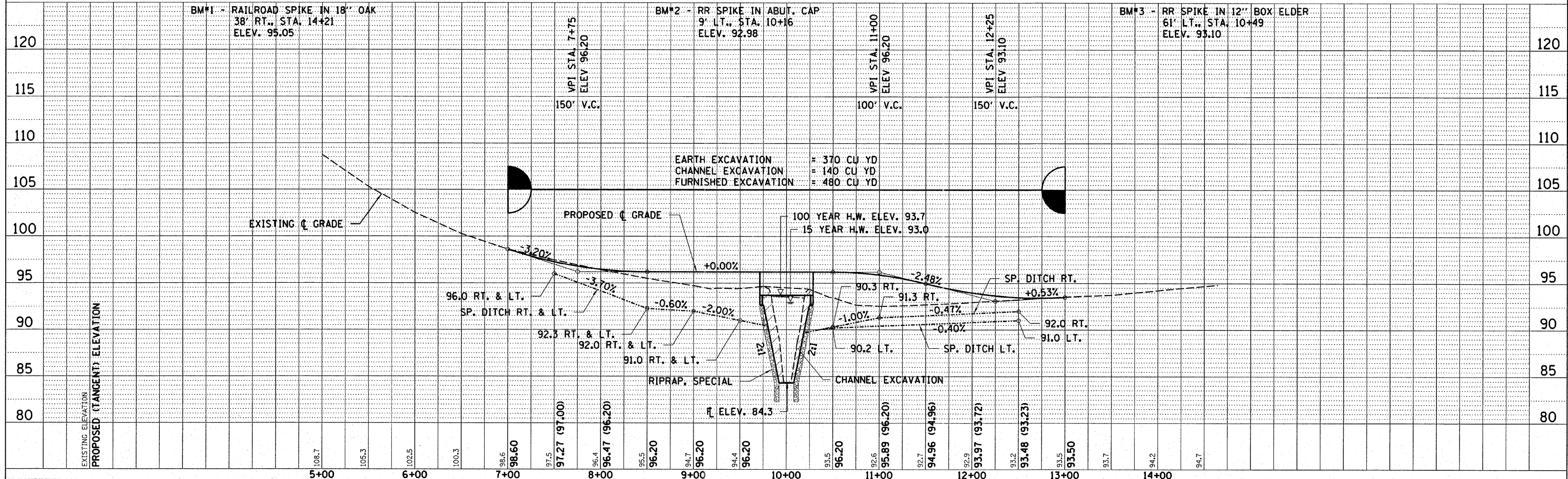
REMOVAL OF EXISTING STRUCTURES = 1 EACH

ROGER A. KUHNERT
SE 1/4, NE 1/4, SEC 19, T. 4 S., R. 3 W., 3RD P.M.



INDICATES TEMPORARY CONSTRUCTION EASEMENT

PROFILE	DATE
BY	
CHECKED	
DATE	
NO.	

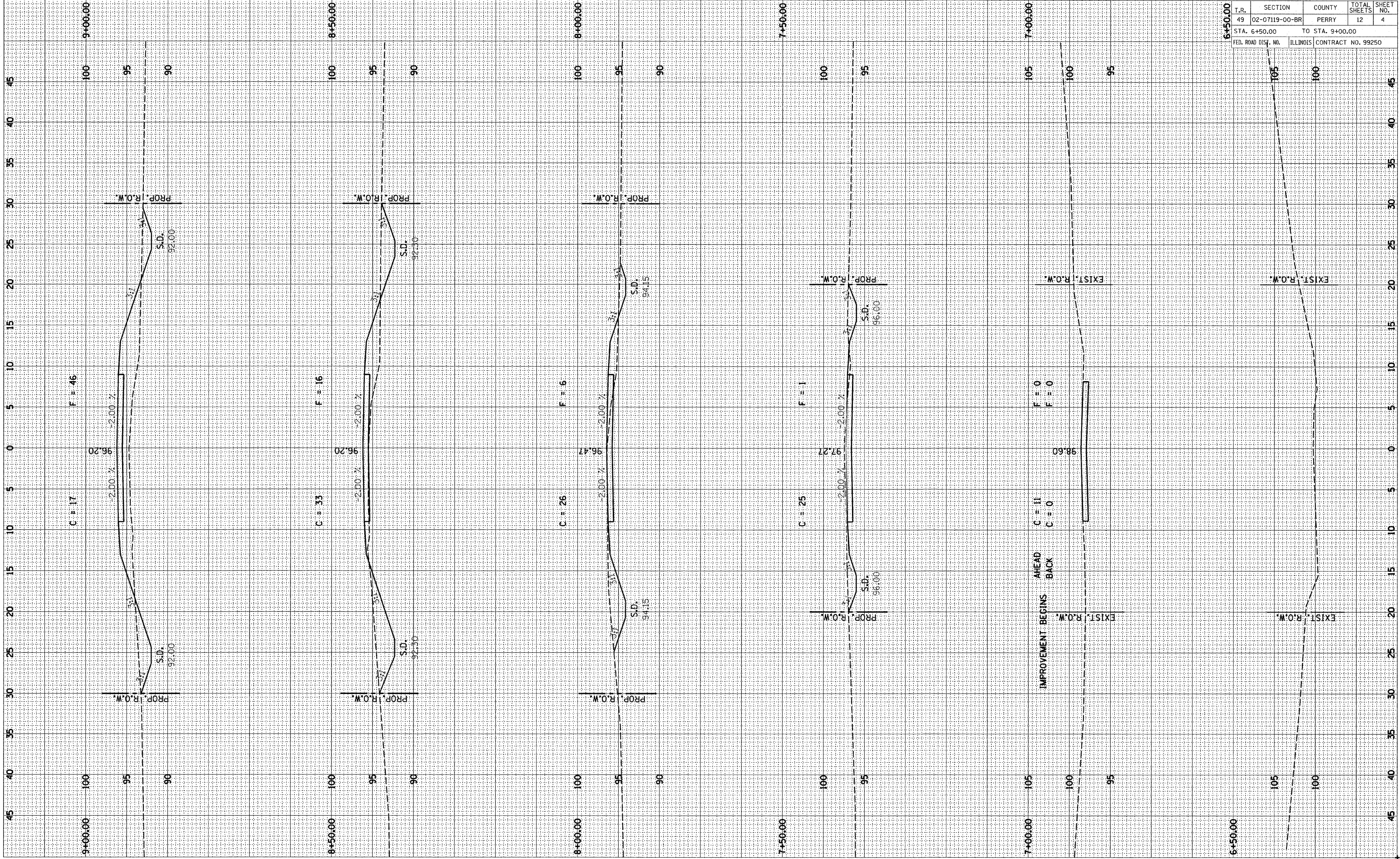


EARTH EXCAVATION = 370 CU YD
 CHANNEL EXCAVATION = 140 CU YD
 FURNISHED EXCAVATION = 480 CU YD

STATION	ELEVATION	REMARKS
5+00	106.7	
6+00	105.3	
7+00	102.5	
7+00	100.3	
7+00	98.6	BM#1 - RAILROAD SPIKE IN 18" OAK 38' RT., STA. 14+21 ELEV. 95.05
7+00	98.60	
7+50	97.5	
7+50	97.27 (97.00)	
8+00	96.4	
8+00	96.47 (96.20)	
8+50	95.5	
8+50	96.20	
9+00	94.7	
9+00	96.20	
9+50	94.4	
9+50	96.20	
10+00	93.5	
10+00	96.20	
10+50	92.6	
10+50	95.89 (96.20)	
11+00	92.7	
11+00	94.96 (94.96)	
11+50	92.9	
11+50	93.97 (93.72)	
12+00	93.2	
12+00	93.48 (93.23)	
12+50	93.5	
12+50	93.50	
13+00	93.7	
13+00	94.2	
14+00	94.7	

FINAL SURVEY SURVEYED PLOTTED NOTE BOOK NO. BY DATE

ORIGINAL SURVEY SURVEYED PLOTTED NOTE BOOK NO. BY DATE

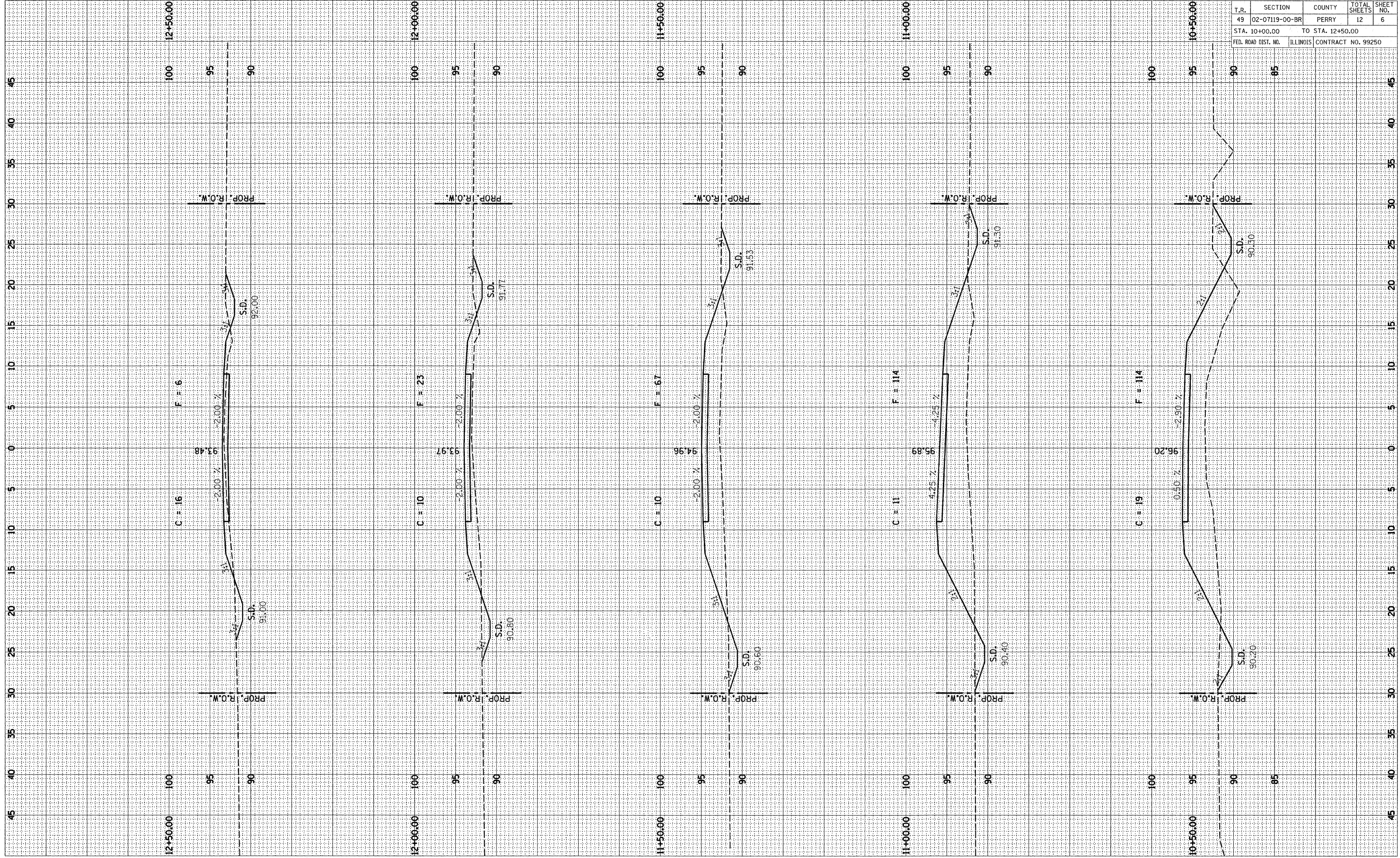


T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	02-07119-00-BR	PERRY	12	4
STA. 6+50.00		TO STA. 9+00.00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 99250		

ORIGINAL SURVEYED PLOTTED
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREAS CHECKED

FINAL SURVEYED PLOTTED
 SURVEY PLOTTED
 NOTE BOOK TEMPLATE
 NO. AREAS CHECKED

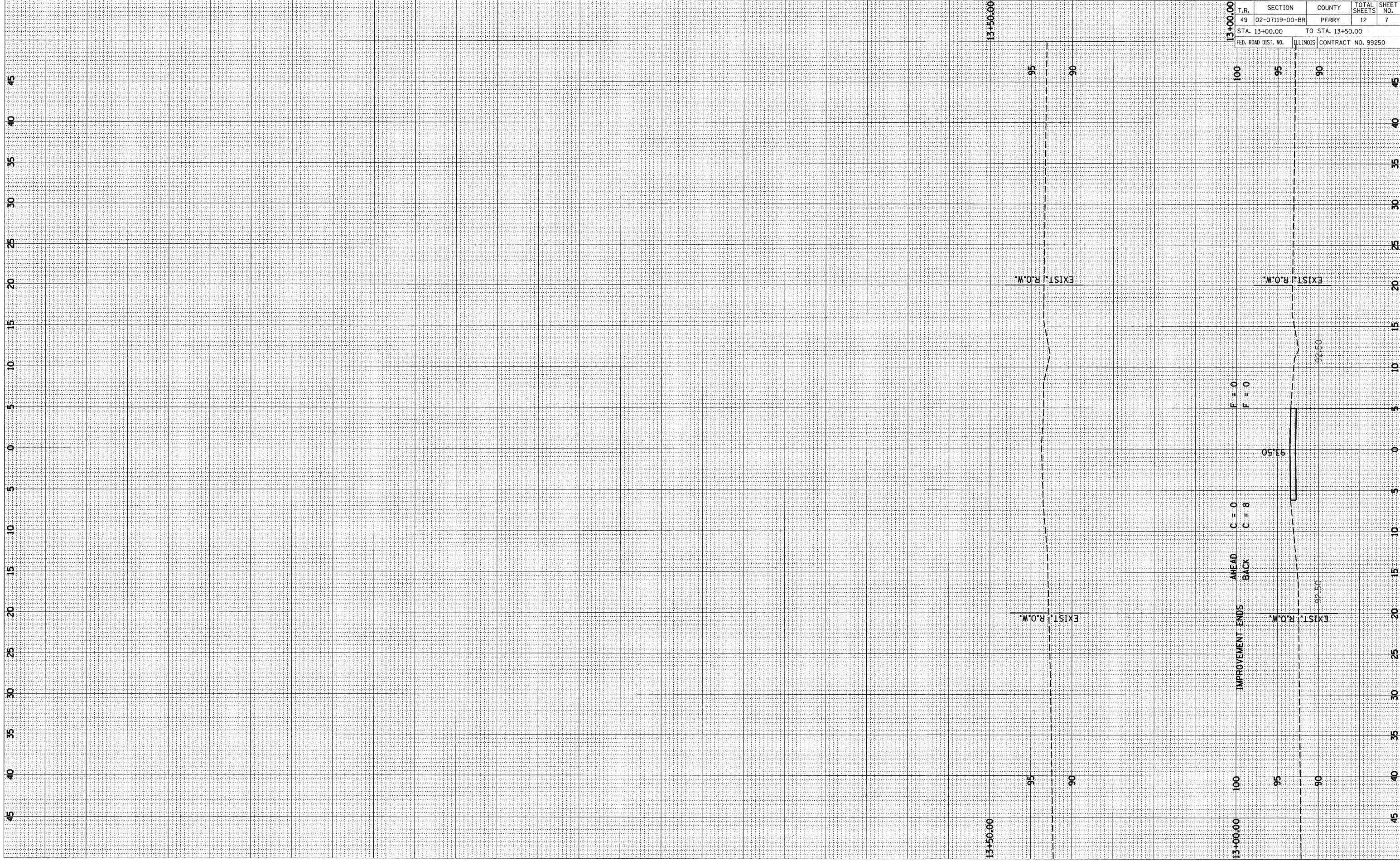
BY DATE



T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	02-07119-00-BR	PERRY	12	6
STA. 10+00.00		TO STA. 12+50.00		
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 99250	

FINAL SURVEY
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 TEMPLATE
 AREAS
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ORIGINAL SURVEY
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 PLOTTED
 TEMPLATE
 AREAS
 CHECKED



T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	02-07119-00-BR	PERRY	12	7
STA. 13+00.00		TO STA. 13+50.00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 99250		

F = 0
 F = 0

AHEAD C = 0
 BACK C = 8

IMPROVEMENT ENDS

EXIST. R.O.W.

EXIST. R.O.W.

EXIST. R.O.W.

EXIST. R.O.W.

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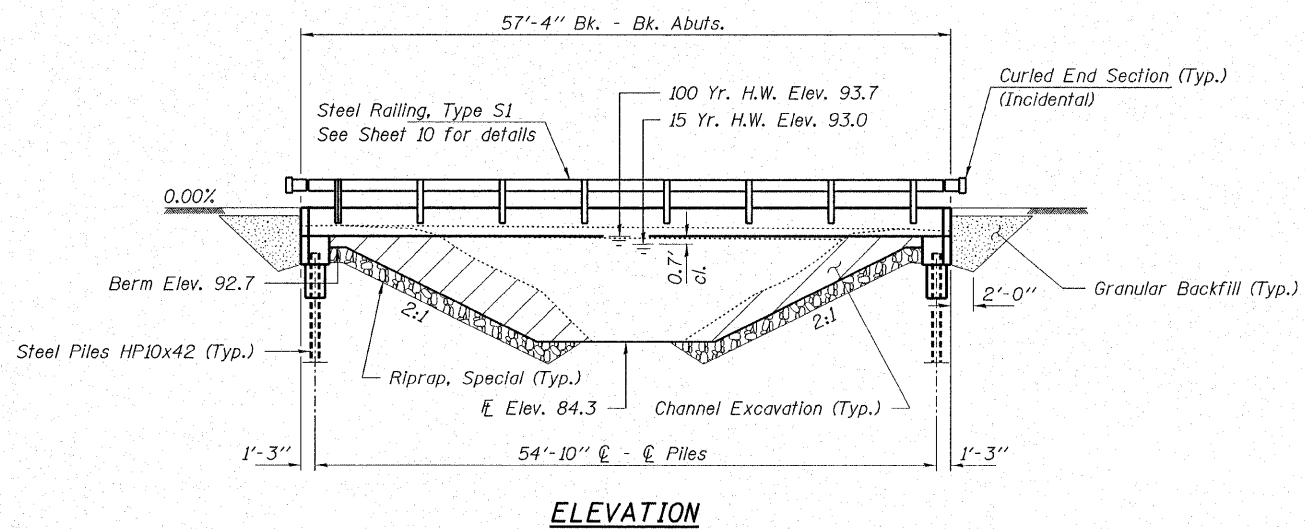
92.50

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ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
T.R. 49	02-07119-00-BR	PERRY	12	8

CONTRACT NO. 99250



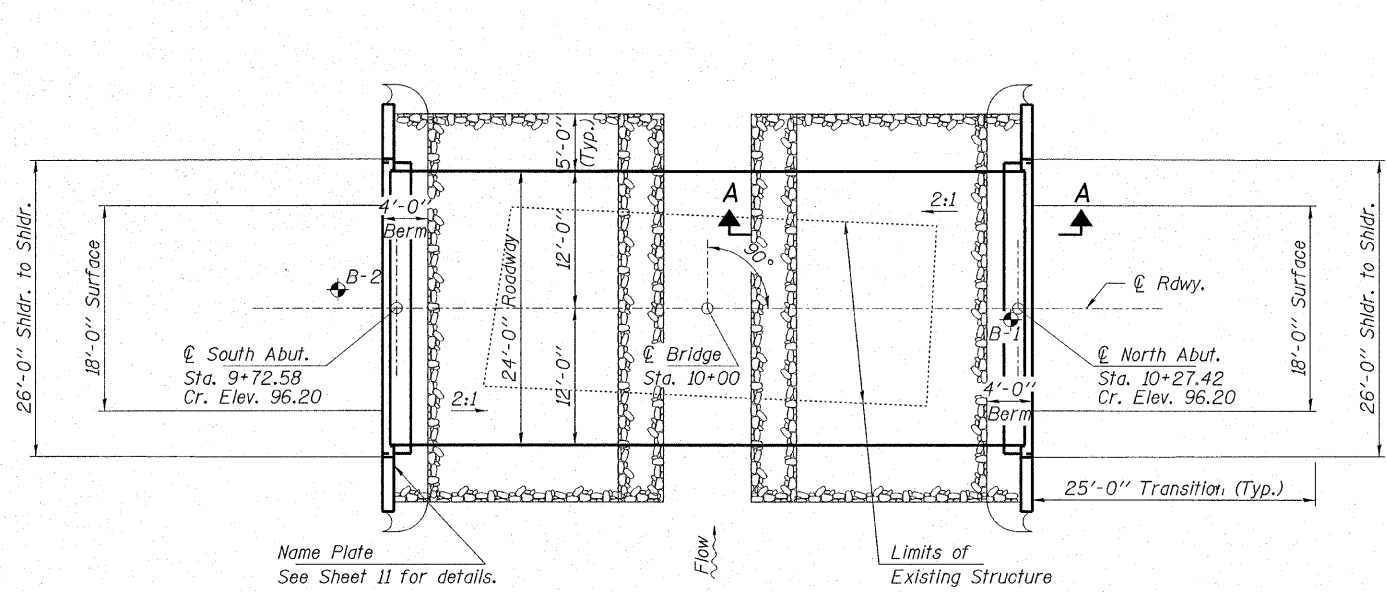
ELEVATION

GENERAL NOTES

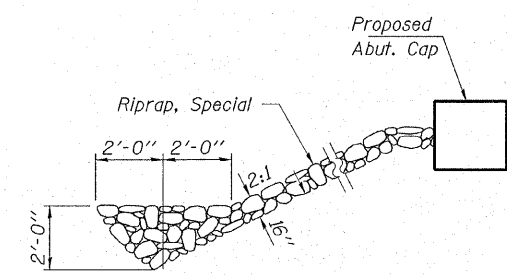
Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 Excavation required to construct the abutments shall be included in Concrete Structures. No additional compensation will be allowed for structure excavation.
 All proposed construction activity shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.
 The Contractor shall backfill behind the abutments as shown on the plans. The backfill shall be placed 2 feet outside the limits of the Aggregate Surface Course. Cost of excavation for backfill considered included in Granular Backfill.
 See Sheet 12 for Borings.

BUILT 200_ BY
 PERRY COUNTY
 SEC. 02-07119-00-BR
 FA. PROJ. BROS.-145(33)
 STR. NO. 073-3178
 LOADING HS 20

NAME PLATE
 See Std. 515001

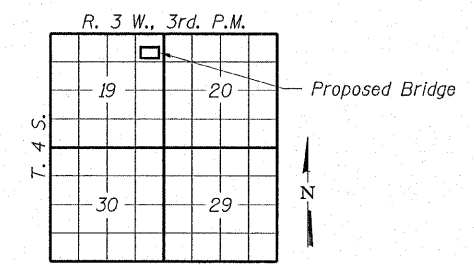


PLAN



SECTION A-A

Note: See Special Provisions for Riprap, Special.



LOCATION SKETCH

SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 0.12g
 Site Coefficient (S) = 1.5

WATERWAY INFORMATION

Drainage Area = 3.0 Sq. Mi.		Low Grade Elev. 93.5 @ Sta. 12+50							
Flood	Freq. Yr.	Q C.F.S.	Opening Exst.	Sq. Ft. Prop.	Natural H.W.E.	Head - Ft. Exst.	Head - Ft. Prop.	Headwater El. Exst.	Headwater El. Prop.
Design	15	1230	125	290	93.0	0.0	0.0	93.0	93.0
Base	100	1950	125(1)	325	93.7	0.9	0.7	94.6	94.4
Overtopping									
Max. Calc.	500	2540	125(2)	325(3)	94.2	1.0	0.6	95.2	94.8

Approach Flow
 ① 210 Sq. Ft.
 ② 355 Sq. Ft.
 ③ 65 Sq. Ft.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinf.)

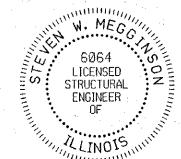
PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
 f'ci = 4,000 psi
 f's = 270,000 psi (1/2" low lax. strands)
 f'si = 201,960 psi (1/2" low lax. strands)
 fy = 60,000 psi (Reinf.)

Loading HS 20-44
 Design Specifications: 2002 AASHTO & all applicable Interims.
 25#/Sq. Ft. Included in dead load for future wearing surface.

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Steven W. Megginson 10-23-06
 ILLINOIS STRUCTURAL NO. 6064



Expires 11-30-08

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,344		1,344
Concrete Structures	Cu. Yd.		18.2	18.2
Reinforcement Bars	Pound		2,430	2,430
Steel Railing, Type S1	Foot	113		113
Name Plates	Each		1	1
Riprap, Special	Ton			140
Steel Piles HP10x42	Foot		360	360
Concrete Encasement	Cu. Yd.		2.0	2.0
Granular Backfill	Ton		70	70
Stud Shear Connectors	Each		16	16

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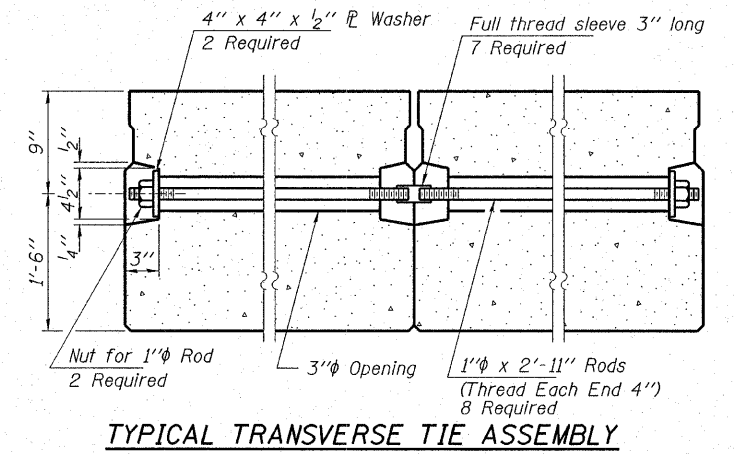
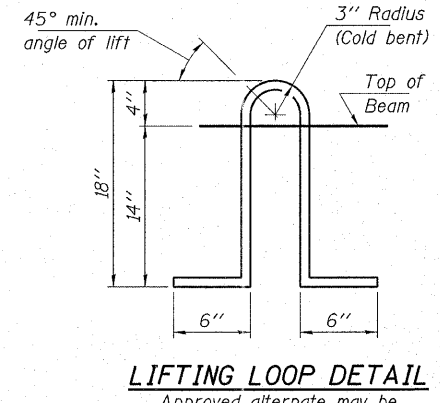
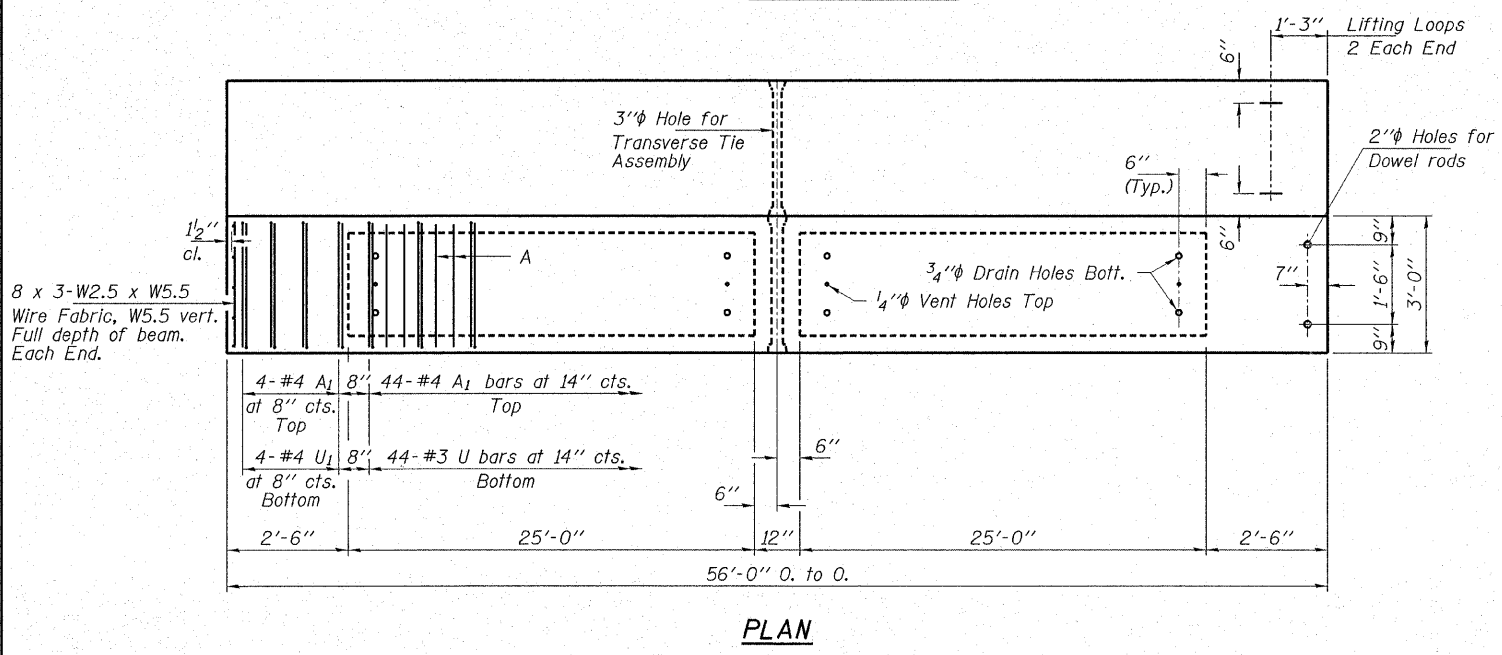
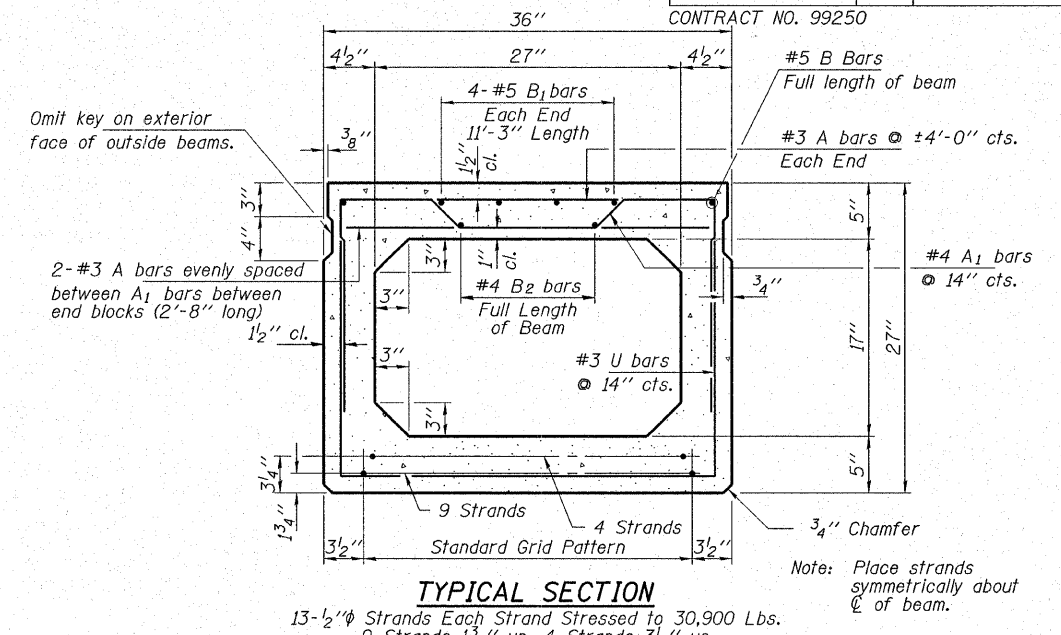
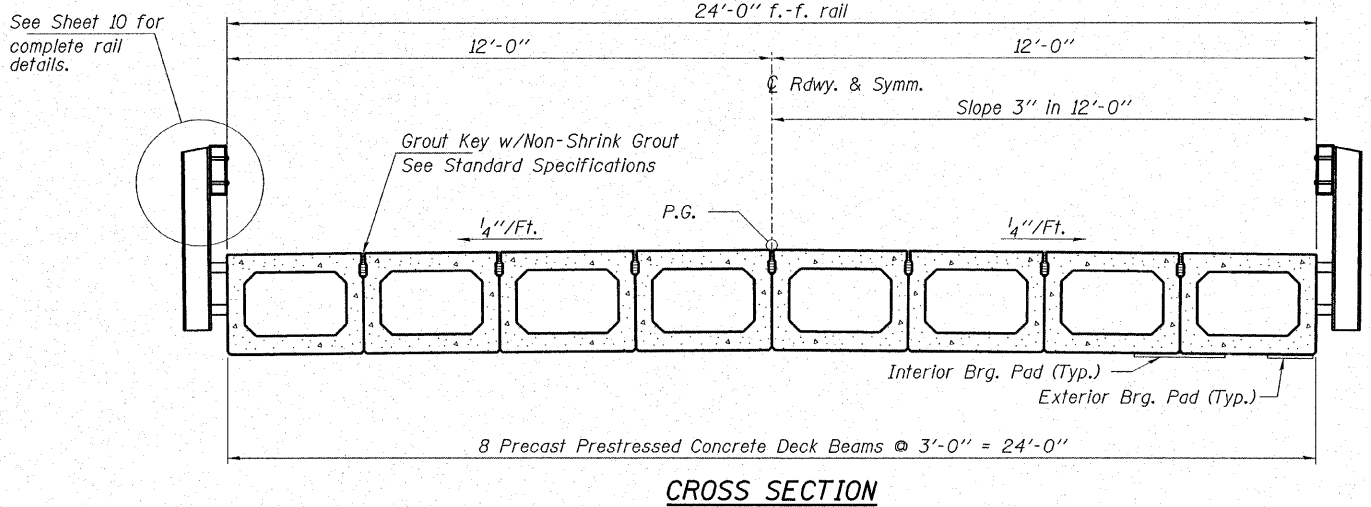
3085 STEVENSON DRIVE, SUITE 201
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 (217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-74-0006-1 DATE: 10/20/06
 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

GENERAL PLAN AND ELEVATION

SECTION 02-07119-00-BR
ROAD DISTRICT NO. 4-3
PERRY COUNTY
STR. NO. 073-3178 / STATION 10+00



NOTES

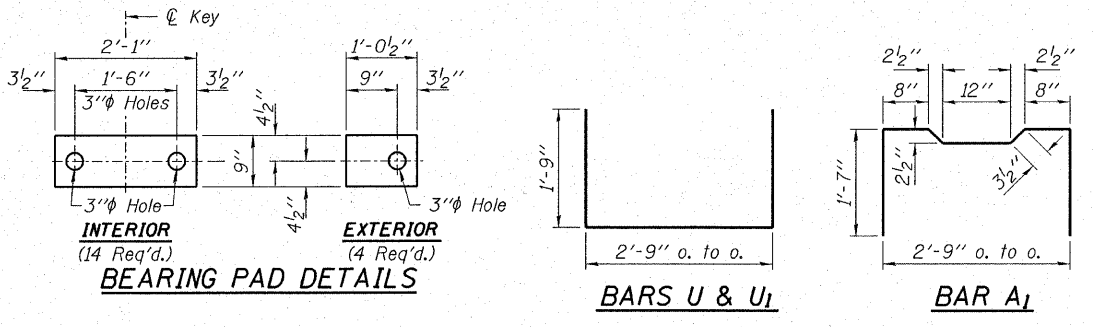
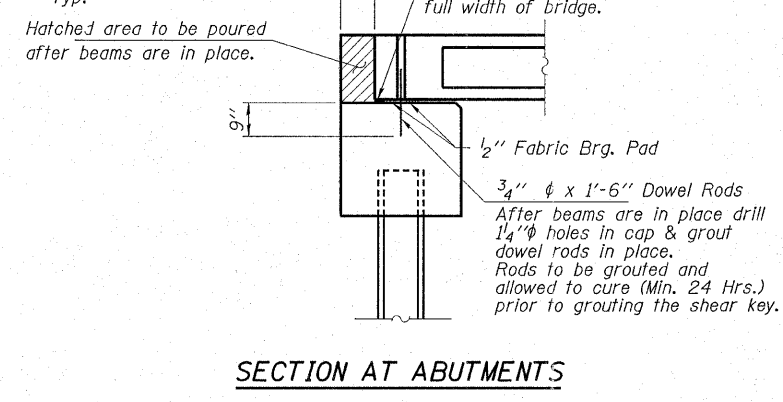
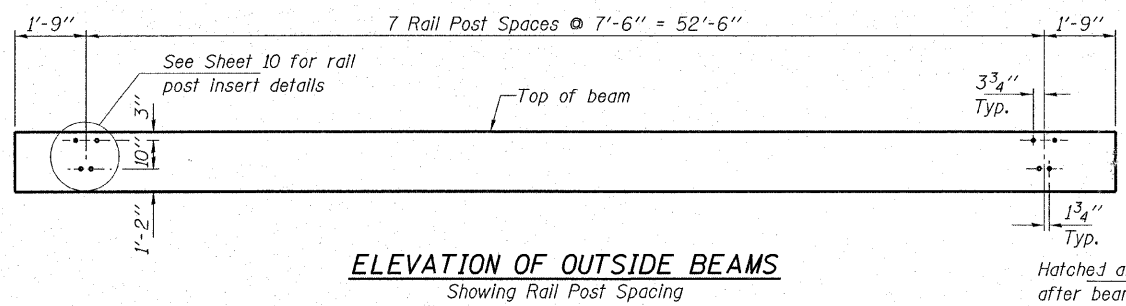
Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-1/2" 270 ksi strands, as shown.

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 on outside shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to the requirements of AASHTO M-31, or M-322 Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

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 top of the beam and the bottom edge of the key.

Required Release Strength, f'ci, shall be 4,000 p.s.i.



BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1,344

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ELGIN • SPRINGFIELD

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SUPERSTRUCTURE

SECTION 02-07119-00-BR

ROAD DISTRICT NO. 4-3

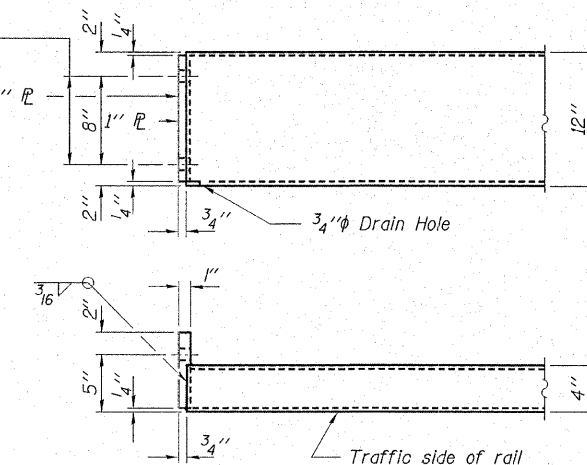
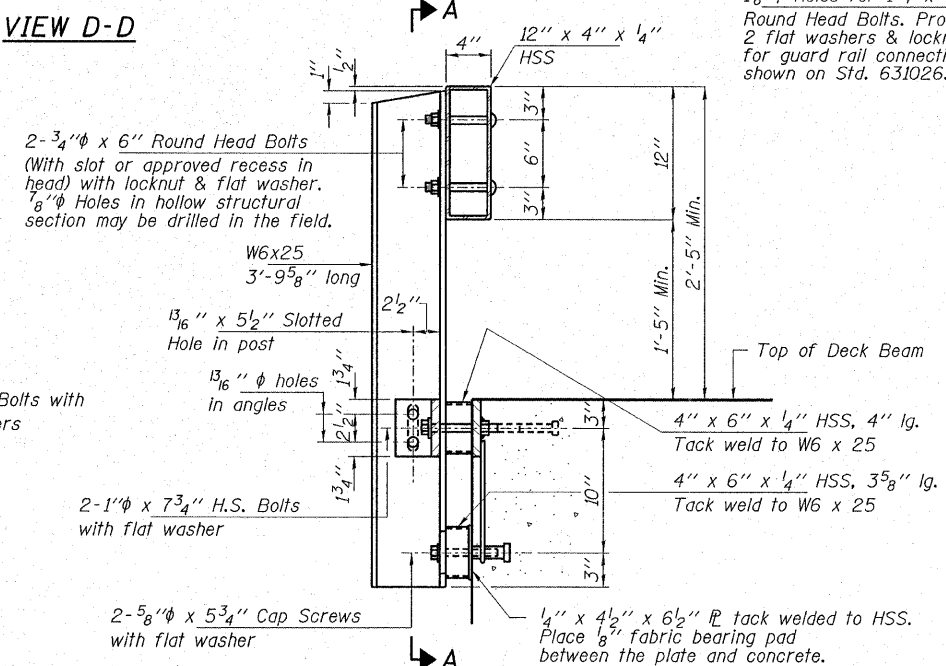
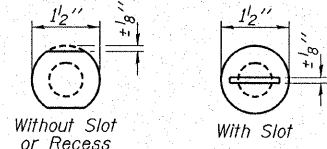
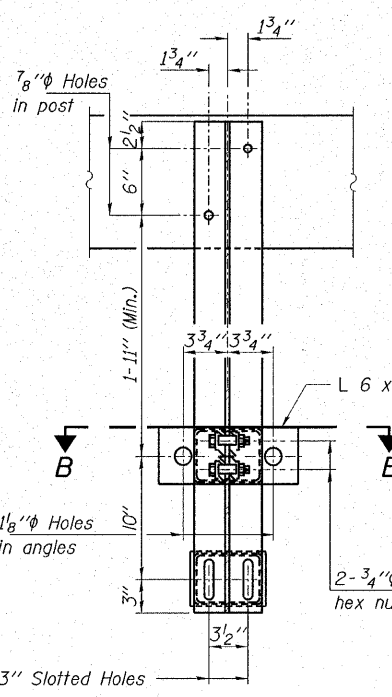
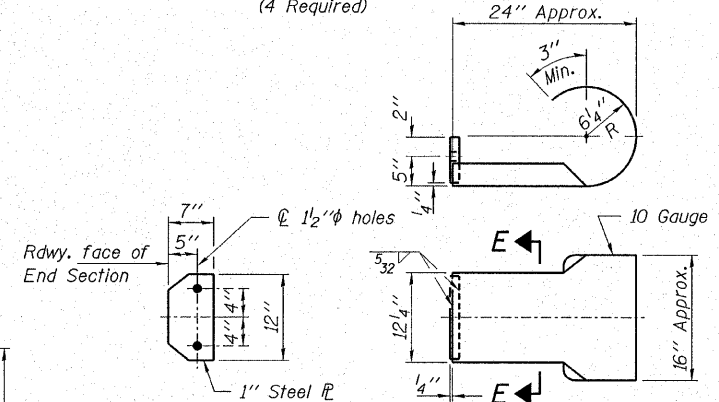
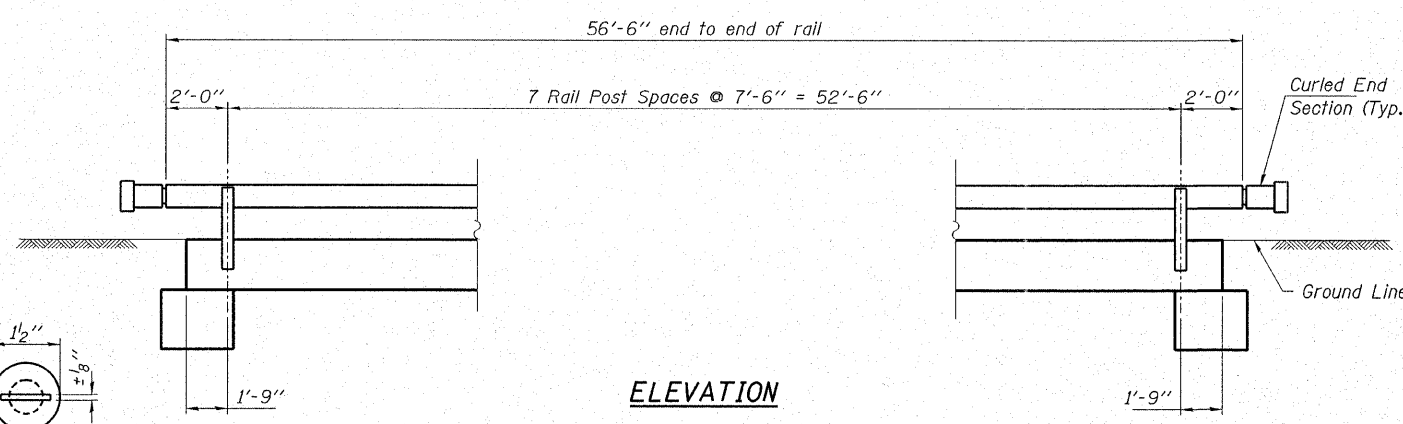
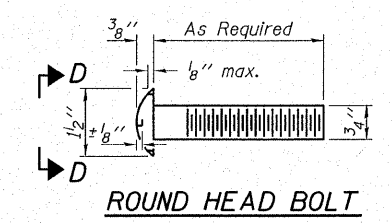
PERRY COUNTY

STR. NO. 073-3178 / STATION 10+00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 49	02-07119-00-BR	PERRY	12	10

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT-

CONTRACT NO. 99250
 Note: Cost of curled end sections shall be included with the Steel Railing.
 (4 Required)



SECTION E-E CURLED END SECTION DETAILS

NOTES

Hollow structural sections shall conform to the requirements of A.S.T.M. designation A-500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.

All other steel shapes and plates shall conform to the requirements of A.A.S.H.T.O. designation M-270 Grade 36 except posts and angles shall conform to A.A.S.H.T.O. M-270 Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements 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 lockwashers shall be galvanized in accordance with A.A.S.H.T.O. designation M-232.

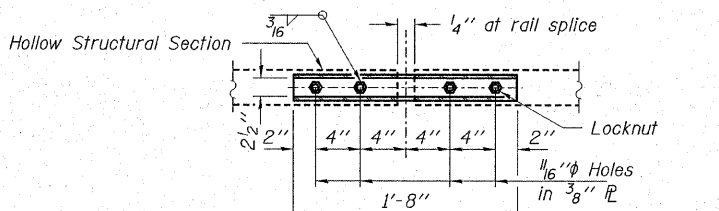
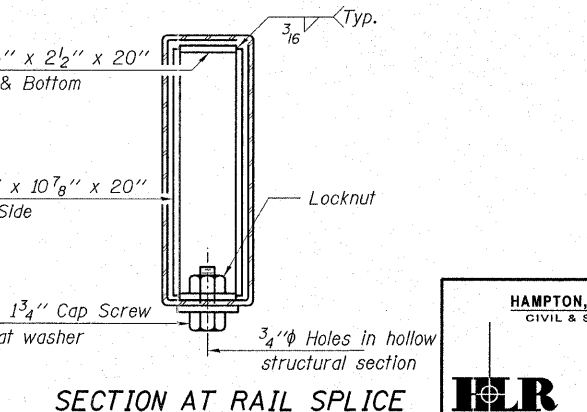
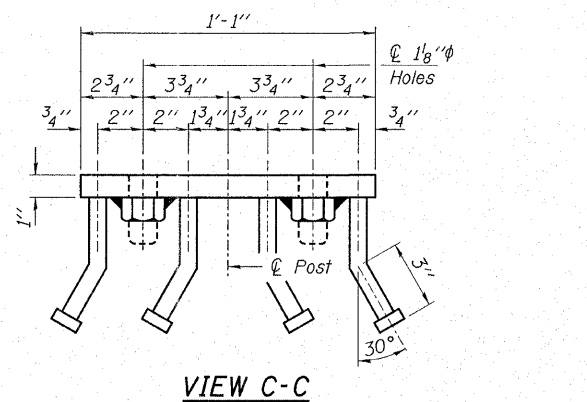
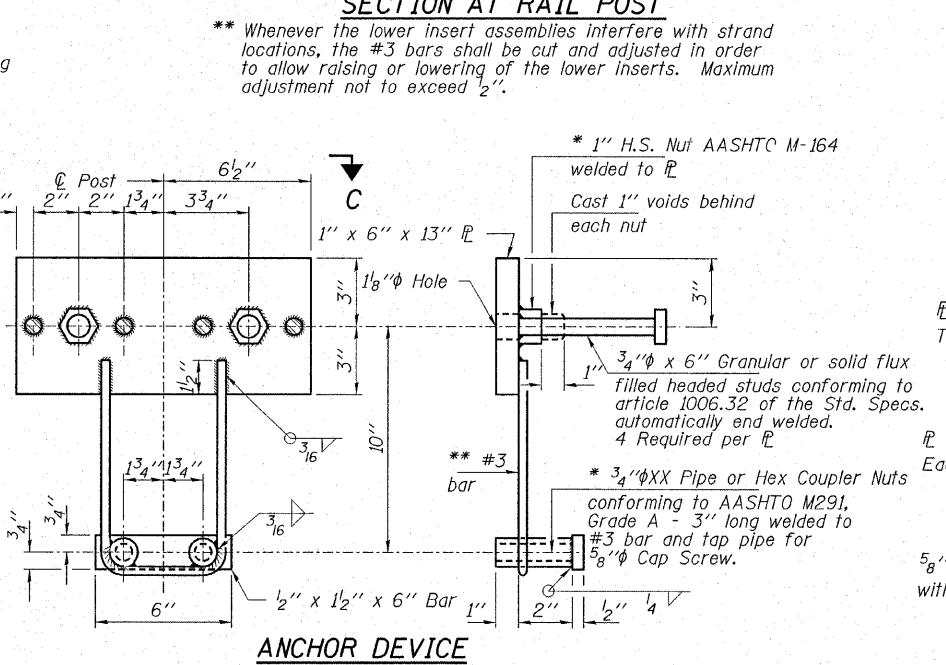
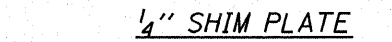
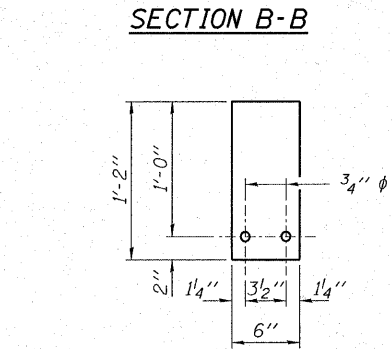
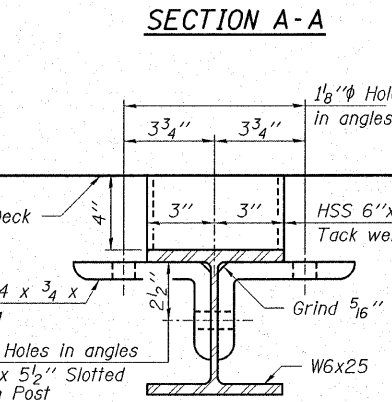
All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with A.S.T.M. A-385 and A.A.S.H.T.O. M-111. Galvanized rail shall not be painted.

Railing shall be in accordance with Section 509 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per foot for STEEL RAILING, TYPE S1.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

The 3/4 inch high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened in accordance with Art. 505.04(f)(2) of the Standard Specifications. The 1 inch high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8 inch cap screws in bottom of posts shall be tightened to a snug fit only.

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 S1.



BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	113

** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2 inch.

* Threaded areas shall be plugged or blocked off during casting of beam.

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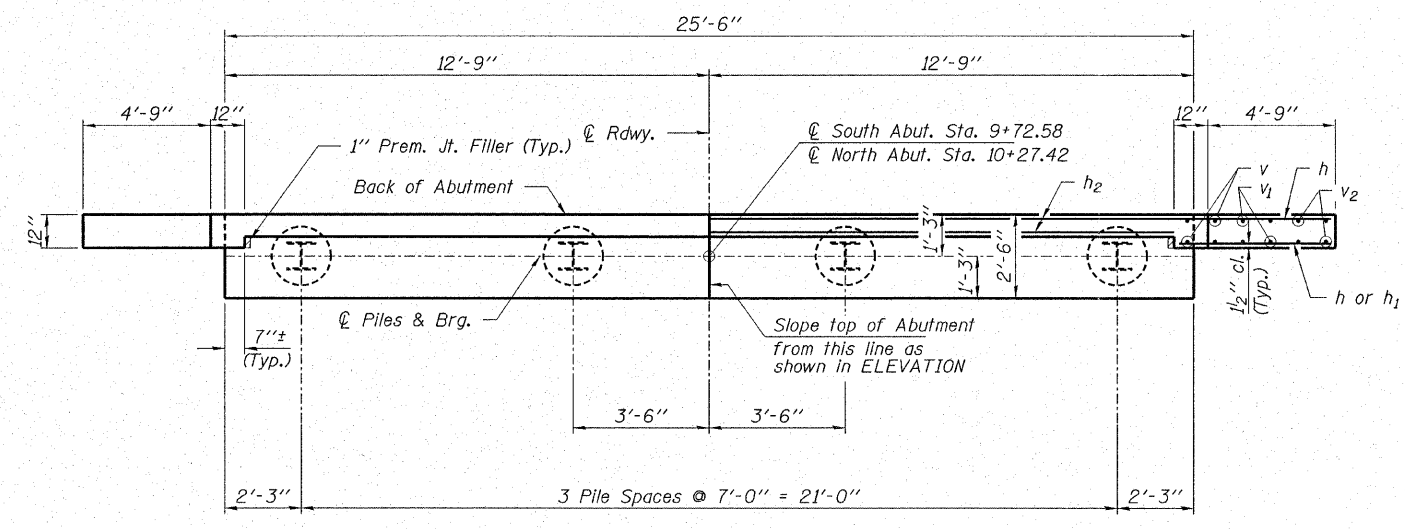
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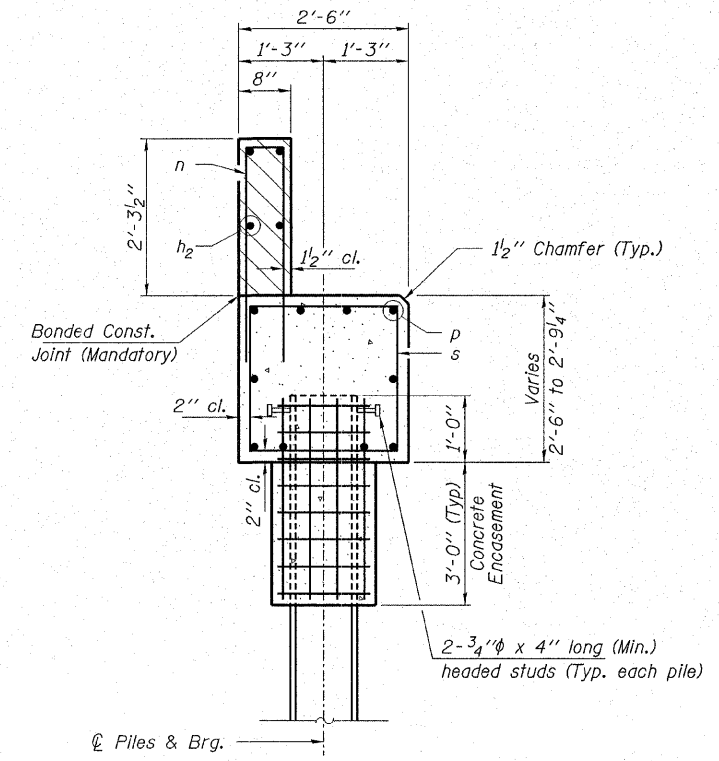
PROJECT NUMBER: 12-74-0006-1 DATE: 10/20/06
 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

RAILING DETAILS
 SECTION 02-07119-00-BR
 ROAD DISTRICT NO. 4-3
 PERRY COUNTY
 STR. NO. 073-3178 / STATION 10+00

CONTRACT NO. 99250

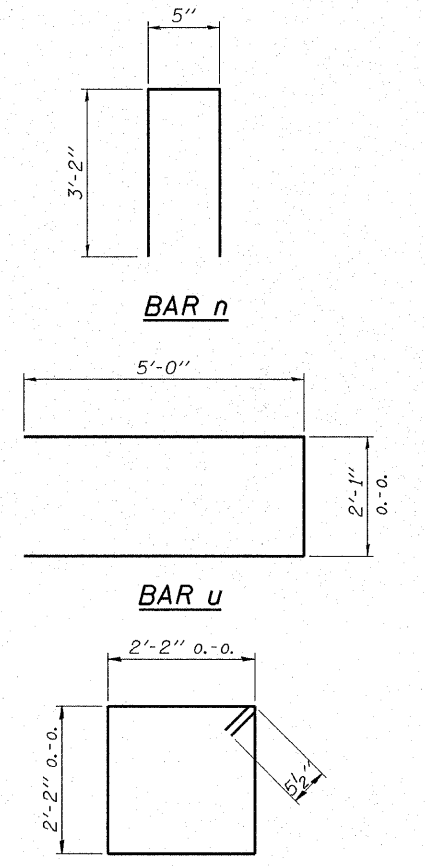


PLAN

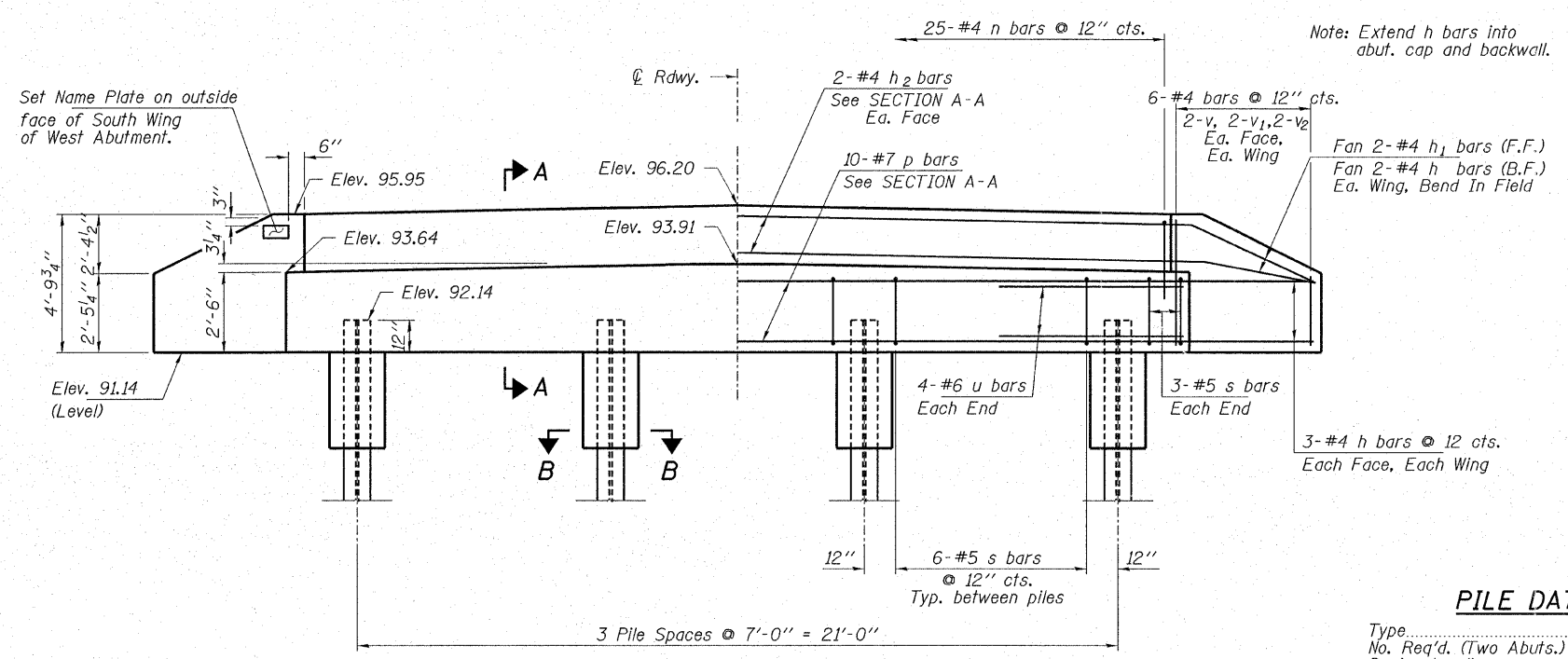


SECTION A-A

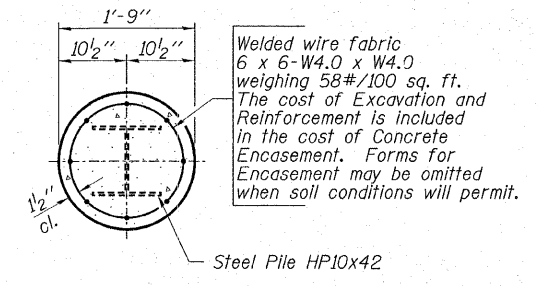
Hatched area to be poured after beams are in place.



BAR s



ELEVATION



SECTION B-B

Note: Extend h bars into abut. cap and backwall.

3- #4 h bars @ 12 cts. Each Face, Each Wing

PILE DATA

Type.....	Steel Piles HP10x42
No. Req'd. (Two Abuts.).....	8
Design Loading.....	39 Tons/Pile
Capacity.....	Drive to Refusal
Est. Length.....	45 Feet/Pile

BILL OF MATERIAL - 2 ABUTS.

BAR	NO.	SIZE	LENGTH	SHAPE
h	32	#4	6'-6"	—
h1	8	#4	5'-6"	—
h2	8	#4	25'-9"	—
n	50	#4	6'-9"	□
p	20	#7	25'-2"	—
s	48	#5	9'-7"	□
u	16	#6	12'-1"	—
v	16	#4	4'-2"	—
v1	16	#4	3'-2"	—
v2	16	#4	2'-2"	—
Concrete Structures			Cu. Yd.	18.2
Reinforcement Bars			Pound	2,430
Steel Piles HP10x42			Foot	360
Name Plates			Each	1
Concrete Encasement			Cu. Yd.	2.0
Stud Shear Connectors			Each	16

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HLR
 ELGIN • SPRINGFIELD
 PROJECT NUMBER: 12-74-0006-1 DATE: 10/20/06
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ABUTMENTS
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ROAD DISTRICT NO. 4-3
PERRY COUNTY
STR. NO. 073-3178 / STATION 10+00

