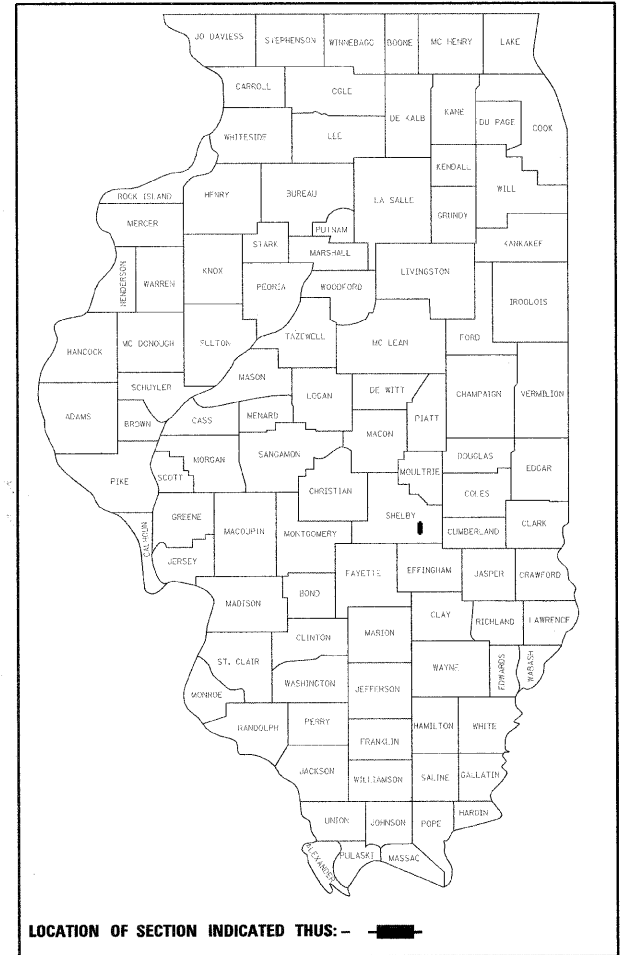


T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	1
CONTRACT NO. 95586				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLANS FOR PROPOSED HIGHWAY BRIDGE PROGRAM

**PROJECT NO. BROS-173(167)
T.R. 336A OVER WOLF CREEK
PRAIRIE ROAD DISTRICT
SECTION 08-15131-00-BR
SHELBY COUNTY
JOB NO. C-97-087-09**



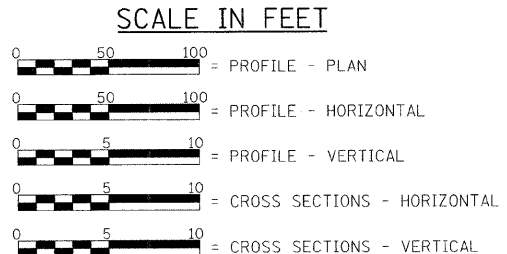
- INDEX OF SHEETS**
- 1 - TITLE SHEET
 - 2 - SUMMARY OF QUANTITIES, GENERAL NOTES, DETAILS, & TYPICAL SECTIONS
 - 3 - PLAN & PROFILE
 - 4 - GENERAL PLAN & ELEVATION
 - 5 - 6 - SUPERSTRUCTURE
 - 7 - RAILING
 - 8 - ABUTMENTS
 - 9 - HP PILE DETAILS
 - 10-13 - CROSS SECTIONS

STANDARDS	DESCRIPTION
STANDARD 000001-05	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
STANDARD 280001-04	TEMPORARY EROSION CONTROL SYSTEMS
STANDARD 515001-03	NAME PLATES FOR BRIDGES
STANDARD 701901-01	TRAFFIC CONTROL DEVICES
STANDARD BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

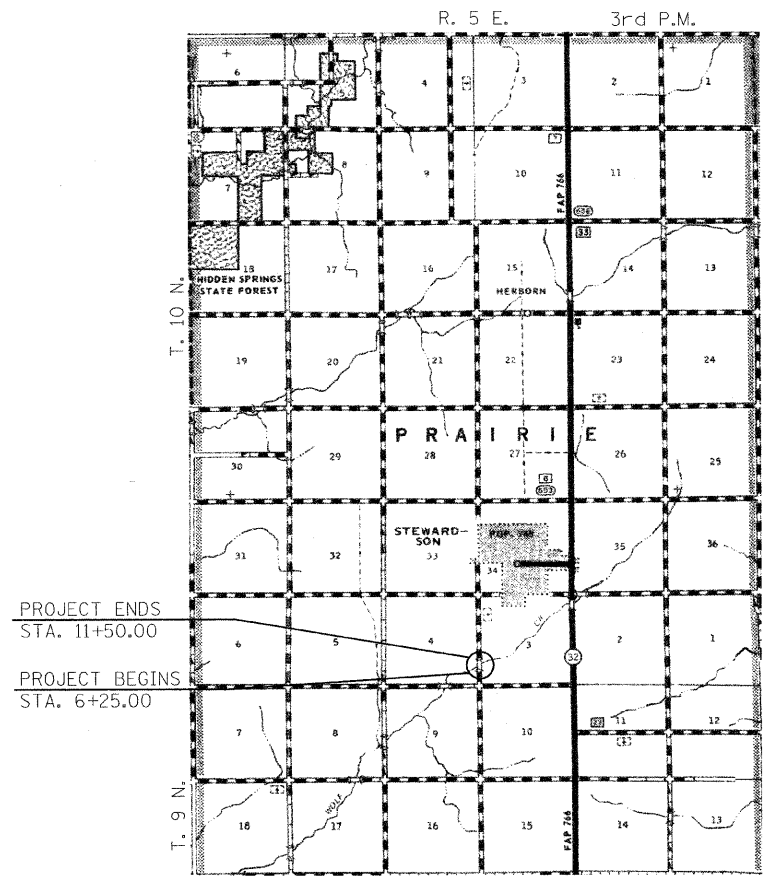
LIST OF UTILITIES

SHELBY ELECTRIC COOPERATIVE
NORTH ROUTE 128
SHELBYVILLE, ILLINOIS 62565

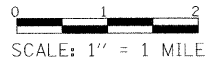
CONSOLIDATED COMMUNICATIONS INC.
121 SOUTH 17TH STREET
MATTOON, ILLINOIS 61938-3915
217-234-9971



LAND SECTIONS - 3 & 4
LAND QUARTER SECTION - S.W. & S.E.
FUNCTIONAL CLASSIFICATION: LOCAL ROAD (NON-URBAN)
A.D.T. - 250 (2008)
A.D.T. - 325 (2031)
40 M.P.H. DESIGN SPEED



LOCATION PLAN
LENGTH OF SECTION - 525.00 FEET = 0.099 MILES



EXISTING STRUCTURE:
TWO SPAN PRECAST CONCRETE DECK BEAMS SUPPORTED BY TIMBER ABUTMENTS AND TIMBER WINGWALLS ±40'-0" BK. - BK. ABUTMENTS, ±22'-4" CLEAR DECK WIDTH. EXISTING STRUCTURE NO. 087-3213

PROPOSED STRUCTURE:
SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAMS (27") ON OPEN CONCRETE ABUTMENTS. 64'-0" BK. - BK. ABUTMENTS, 24'-0" OUT - OUT DECK TYPE S-1 RAILING 20° SKEW RT. FWD. PROPOSED STRUCTURE NO. 087-3566



Christopher P. Hohlins 3/24/09
EXPIRATION: 11/30/2009

APPROVED 3-24 2009
L. Al...
COUNTY ENGINEER

APPROVED 3-24 2009
Richard Shuman
ROAD DISTRICT COMMISSIONER

PASSED 4-14 2009
M...
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

Releasing For Bid Based on Limited Review 4/14 2009
Roger K. Driskell
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER

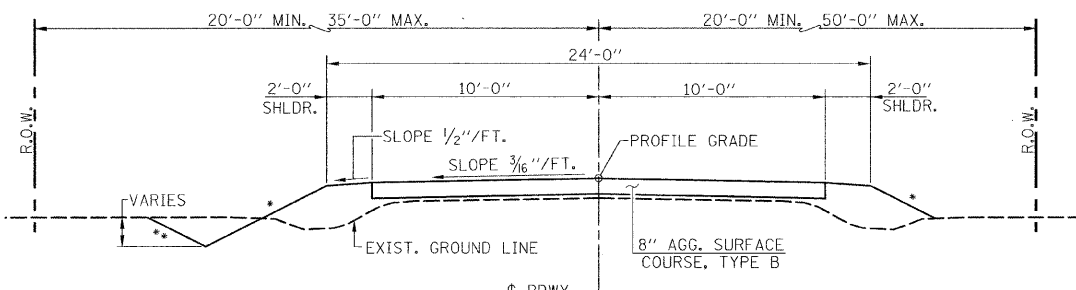
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOLL FREE
"JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS"
(J.U.L.I.E.) TELEPHONE NUMBER
1-800-892-0123

CONTRACT NO. 95586

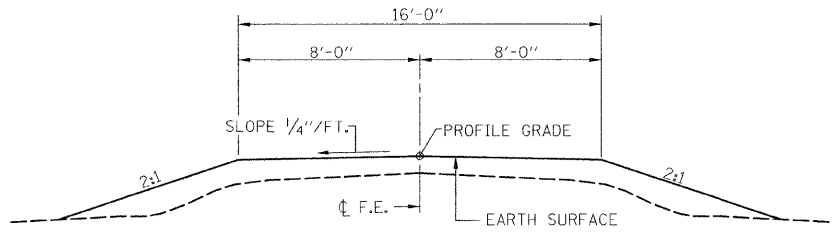
FILE NAME	USER NAME	DESIGNED	REVISED	<p>Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907</p>	<p align="center">TITLE SHEET</p> <p>SCALE: 1" = 1 MILE SHEET NO. 1 OF 13 SHEETS STA. 6+25.00 TO STA. 11+50.00</p>	T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#	PLOT SCALE	DRAWN	REVISED			336A	08-15131-00-BR	SHELBY	13	1
PLOT DATE	DATE	CHECKED	REVISED			CONTRACT NO.				
						FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	2
CONTRACT 95586				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

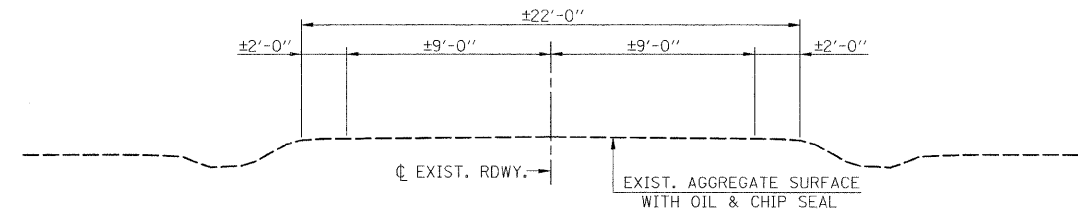


- 3:1 FILL < 6'
- 2:1 FILL > 6'
- 3:1 CUT < 10'
- 2:1 CUT > 10'

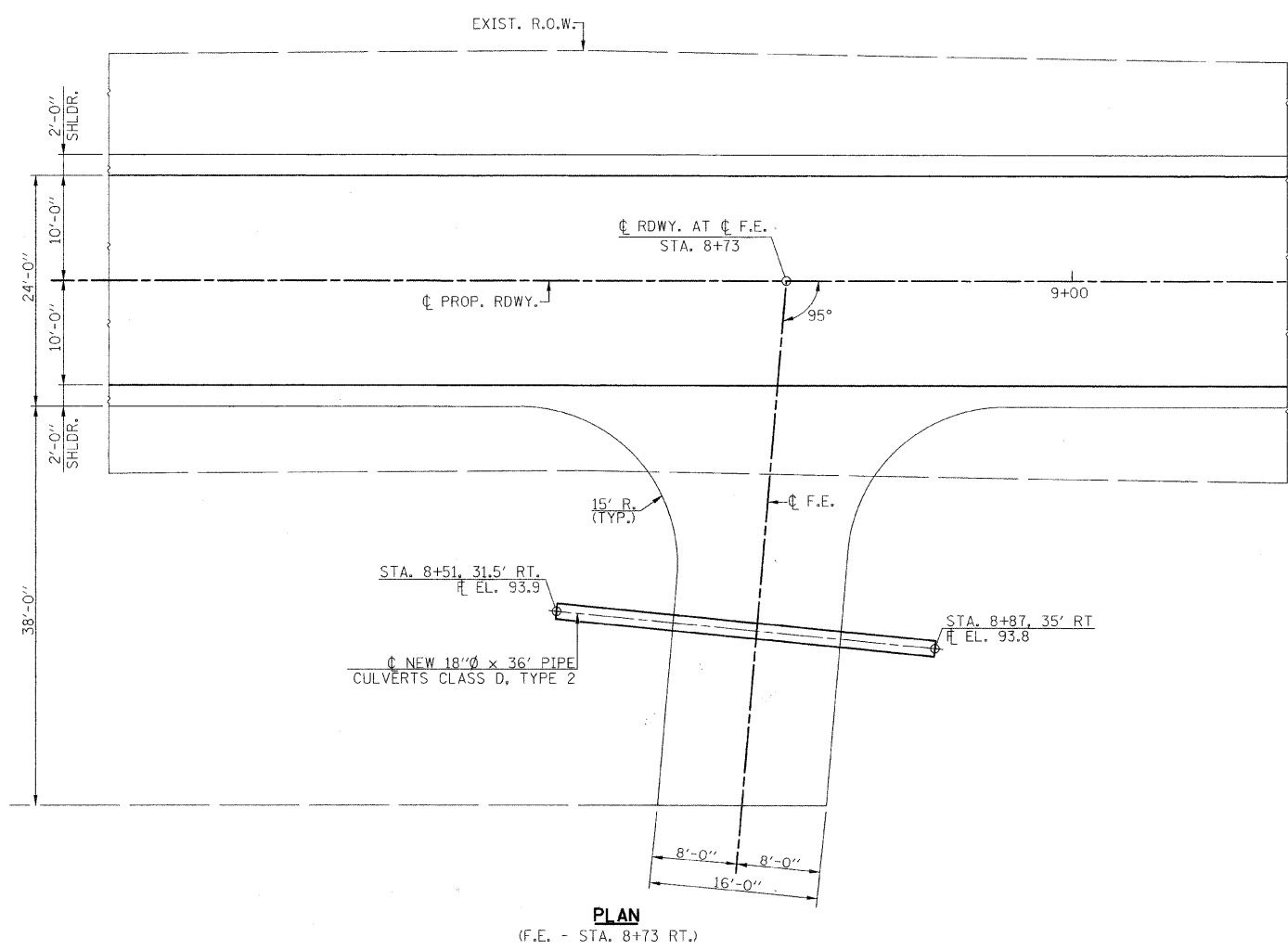
PROPOSED CROSS SECTION



TYPICAL FIELD ENTRANCE
(STA. 8+73 RT.)



EXISTING CROSS SECTION



PLAN
(F.E. - STA. 8+73 RT.)

SUMMARY OF QUANTITIES

ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU. YD. 244
20300100	CHANNEL EXCAVATION	CU. YD. 255
20400800	FURNISHED EXCAVATION	CU. YD. 858
25000200	SEEDING, CLASS 2	ACRE 0.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND 45
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND 45
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND 45
25100115	MULCH, METHOD 2	ACRE 0.5
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND 100
28000300	TEMPORARY DITCH CHECKS	EACH 4
28000500	INLET AND PIPE PROTECTION	EACH 1
28100807	STONE DUMPED RIPRAP, CLASS A4	TON 432
28200200	FILTER FABRIC	SQ. YD. 548
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON 500
50100100	REMOVAL OF EXISTING STRUCTURES	EACH 1
50200100	STRUCTURE EXCAVATION	CU. YD. 125
50300225	CONCRETE STRUCTURES	CU. YD. 30.4
50300280	CONCRETE ENCASEMENT	CU. YD. 2.8
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ. FT. 1502
50800105	REINFORCEMENT BARS	POUND 4030
50900205	STEEL RAILING, TYPE S-1	FOOT 128
51201600	FURNISHING STEEL PILES HP 12X53	FOOT 348
51202305	DRIVING PILES	FOOT 348
51203600	TEST PILE STEEL HP 12X53	EACH 2
51500100	NAME PLATES	EACH 1
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT 36
67100100	MOBILIZATION	L. SUM 1
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH 4

* SEE SPECIAL PROVISIONS
 Δ SPECIALTY ITEMS
 CONSTRUCTION TYPE CODE: X080

GENERAL NOTES

SEEDING: FERTILIZER NUTRIENTS SHALL BE APPLIED AT A RATIO OF 1:1:1 AND AT A RATE OF 90 POUNDS PER ACRE FOR EACH NUTRIENT.
 MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE.
 AREAS TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AS DIRECTED BY THE ENGINEER.
 NO COMMITMENTS.

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU. YD.	CU. YD.	CU. YD.	CU. YD.
STA. 6+25 TO STA. 6+50	16	12	6	+6
STA. 6+50 TO STA. 7+00	31	23	22	+1
STA. 7+00 TO STA. 7+50	30	23	56	-33
STA. 7+50 TO STA. 8+00	35	26	129	-103
STA. 8+00 TO STA. 8+50	48	36	222	-186
STA. 8+50 TO STA. 9+00	43	32	337	-305
STA. 9+00 TO STA. 9+33	20	15	215	-200
BRIDGE OMISSION - STA. 9+33 TO STA. 9+97				
STA. 9+97 TO STA. 10+00	0	0	0	-1
STA. 10+00 TO STA. 10+50	5	4	22	-18
STA. 10+50 TO STA. 11+00	7	5	18	-13
STA. 11+00 TO STA. 11+50	9	7	13	-6
TOTAL	244	183	1041	858

FILE NAME =	USER NAME = #USER#	DESIGNED - F.L.L.	REVISED - ---
#FILE#		DRAWN - M.J.S.	REVISED - ---
		CHECKED - M.A.H.	REVISED - ---
		DATE -	REVISED - ---

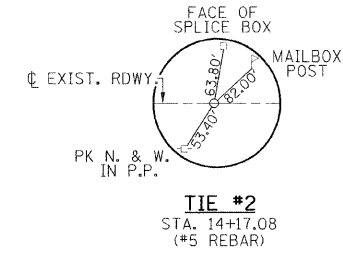
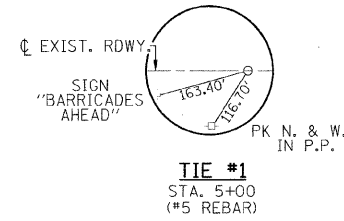
Allen Henderson & Associates, Inc.
 Civil and Structural Engineers Springfield, IL
 62703 Phone: (217)544-8033 IL Design Firm
 No. 184-001907

SUMMARY OF QUANTITIES, DETAILS & TYPICAL SECTIONS

SCALE: NONE SHEET NO. 2 OF 13 SHEETS STA. 10+50.00 TO STA. 14+10.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	2
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

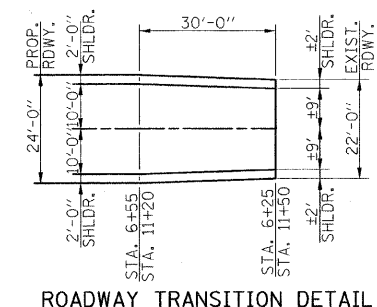
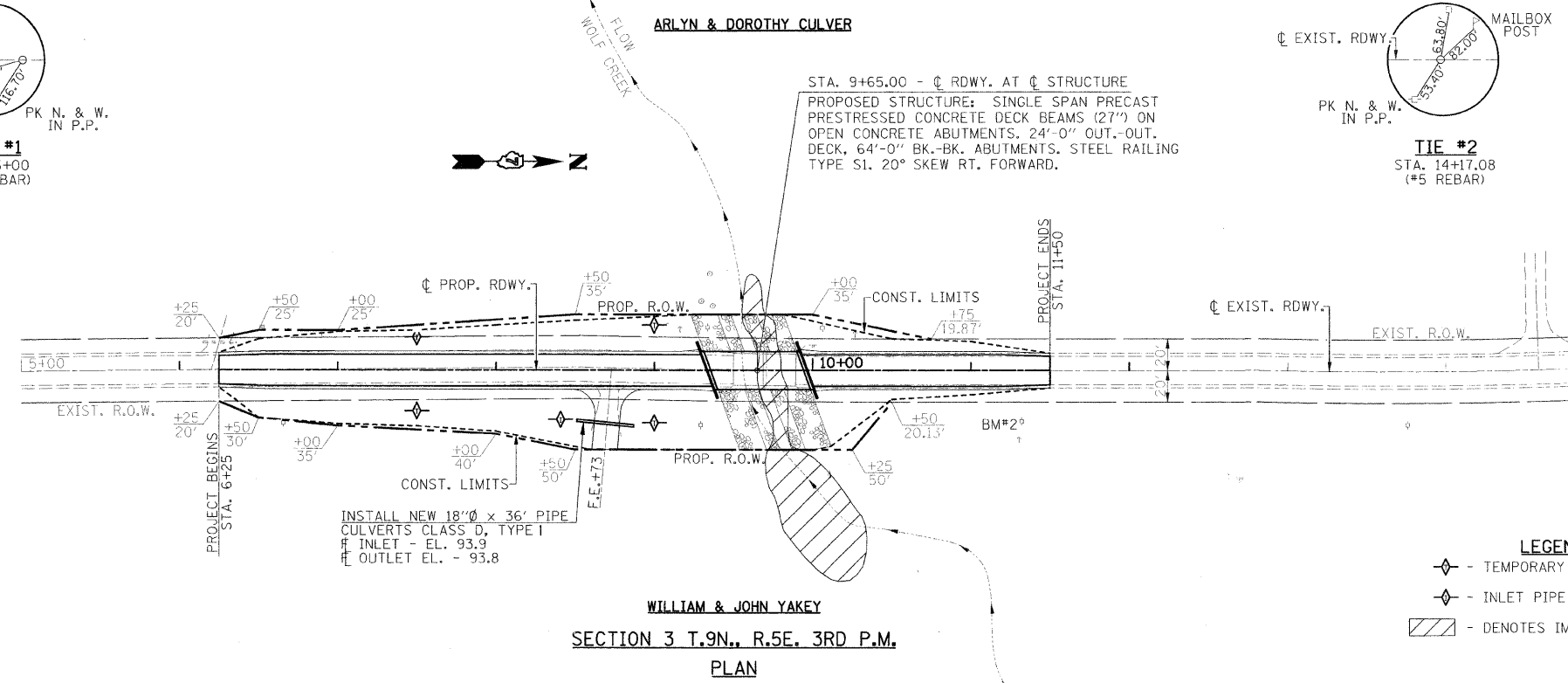
SECTION 4 T.9N., R.5E. 3RD P.M.



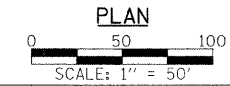
T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	3
CONTRACT NO. 95586				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

REVISION	DATE
BY	
NO.	

REVISION	DATE
BY	
NO.	



SECTION 3 T.9N., R.5E. 3RD P.M.



SCHEDULE
TEMPORARY DITCH CHECKS

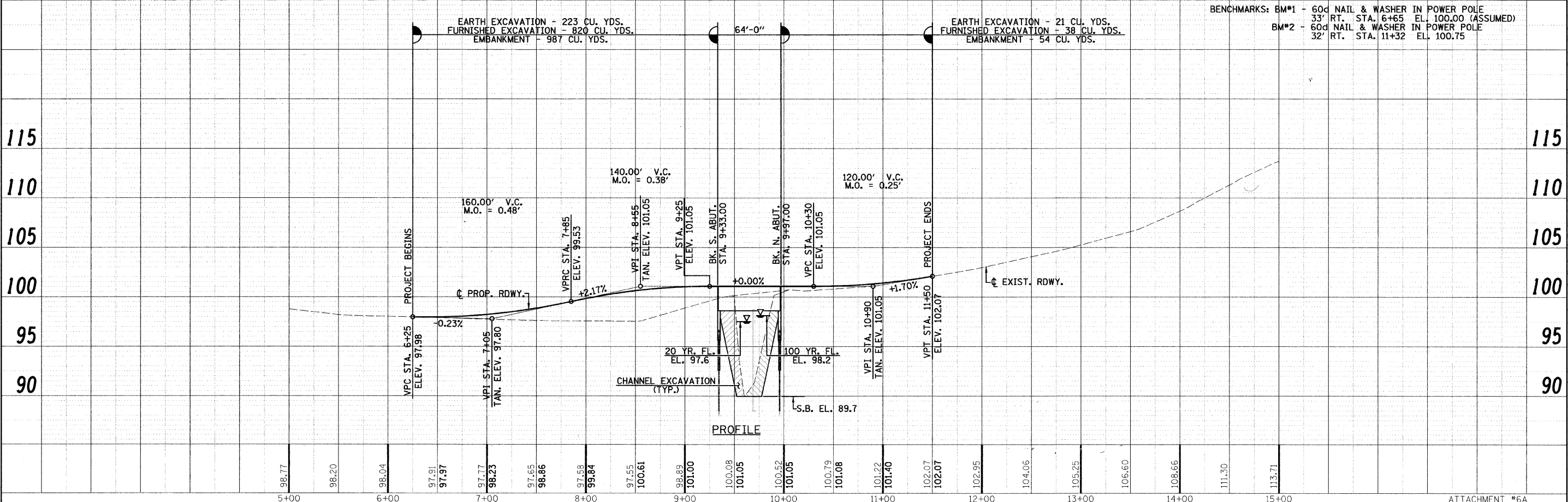
LOCATION	QUANTITY (EACH)
STA. 7+50 21' LT. & 25.5' RT.	2
STA. 9+00 28.5' LT. & 33' RT.	2
TOTAL	4

SCHEDULE
INLET PIPE PROTECTION

LOCATION	QUANTITY (EACH)
STA. 8+45 31' RT.	1
TOTAL	1

- LEGEND**
- ◆ - TEMPORARY DITCH CHECKS
 - ◆ - INLET PIPE PROTECTION
 - ▨ - DENOTES IMPACTED WETLAND AREA

SEEDING, CLASS 2 - STA. 6+25 TO STA. 11+50, R.O.W. TO R.O.W. - 0.50 ACRE



FILE NAME	USFR NAME	DESIGNED	F.L.L.	REVISED	
FILE#		DRAWN	M.J.S.	REVISED	
		CHECKED	M.A.H.	REVISED	
		DATE		REVISED	

Allen Henderson & Associates, Inc.
Civil and Structural Engineers Springfield, IL
62703 Phone: (217)544-8033 IL Design Firm
No. 184-001907

PLAN & PROFILE

SCALE: 1" = 50' SHEET NO. 3 OF 13 SHEETS STA. 6+25 TO STA. 11+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	3
CONTRACT NO.				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

Existing Structure: Two Span Precast Concrete Deck Beam Bridge on Closed Timber Abutments with Timber Wingwalls and Timber Pier. ±40'-0" Bk.-Bk. Abutments, ±22'-4" Out.-Out. Deck. Concrete Curbs with Steel Railings. ±0° Skew.

Benchmarks: BM#1 - 60d Nail & Washer in Power Pole
33' Rt. Sta. 6+65 El. 100.00 (Assumed)
BM#2 - 60d Nail & Washer in Power Pole
32' Rt. Sta. 11+32 El. 100.75

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	4
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 9558L	

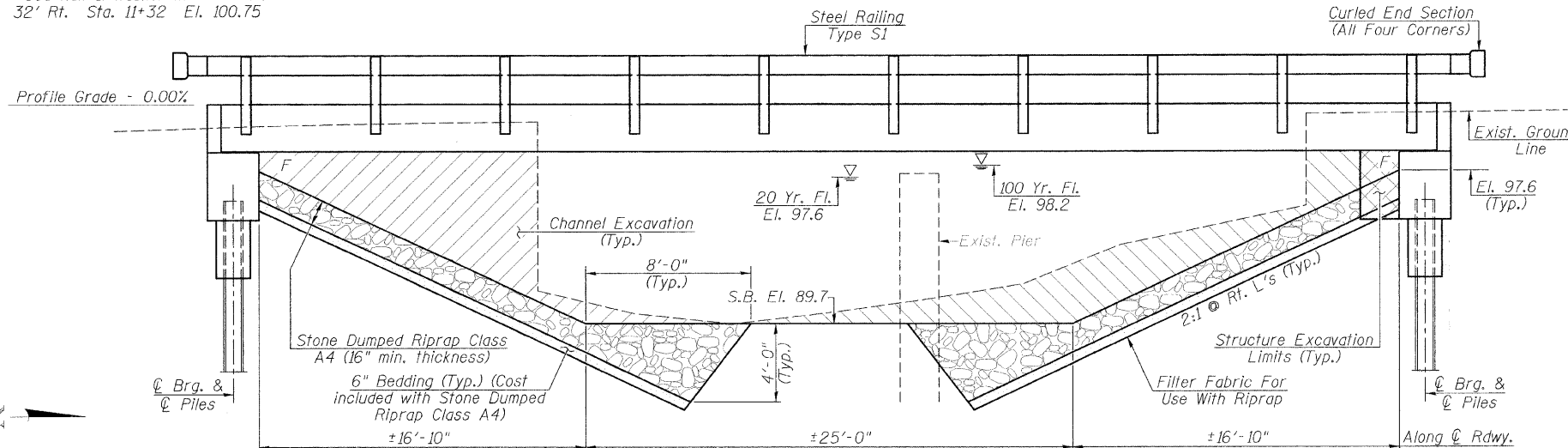
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			255
Stone Dumped Riprap, Class A4	Ton			432
Filter Fabric	Sq. Yd.			548
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		125	125
Concrete Structures	Cu. Yd.		30.4	30.4
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1502		1502
Reinforcement Bars	Pound		4030	4030
Steel Railing, Type S-1	Foot	128		128
Furnishing Steel Piles HP 12x53	Foot		348	348
Driving Piles	Foot		348	348
Test Pile Steel HP 12x53	Each		2	2
Name Plates	Each		1	1

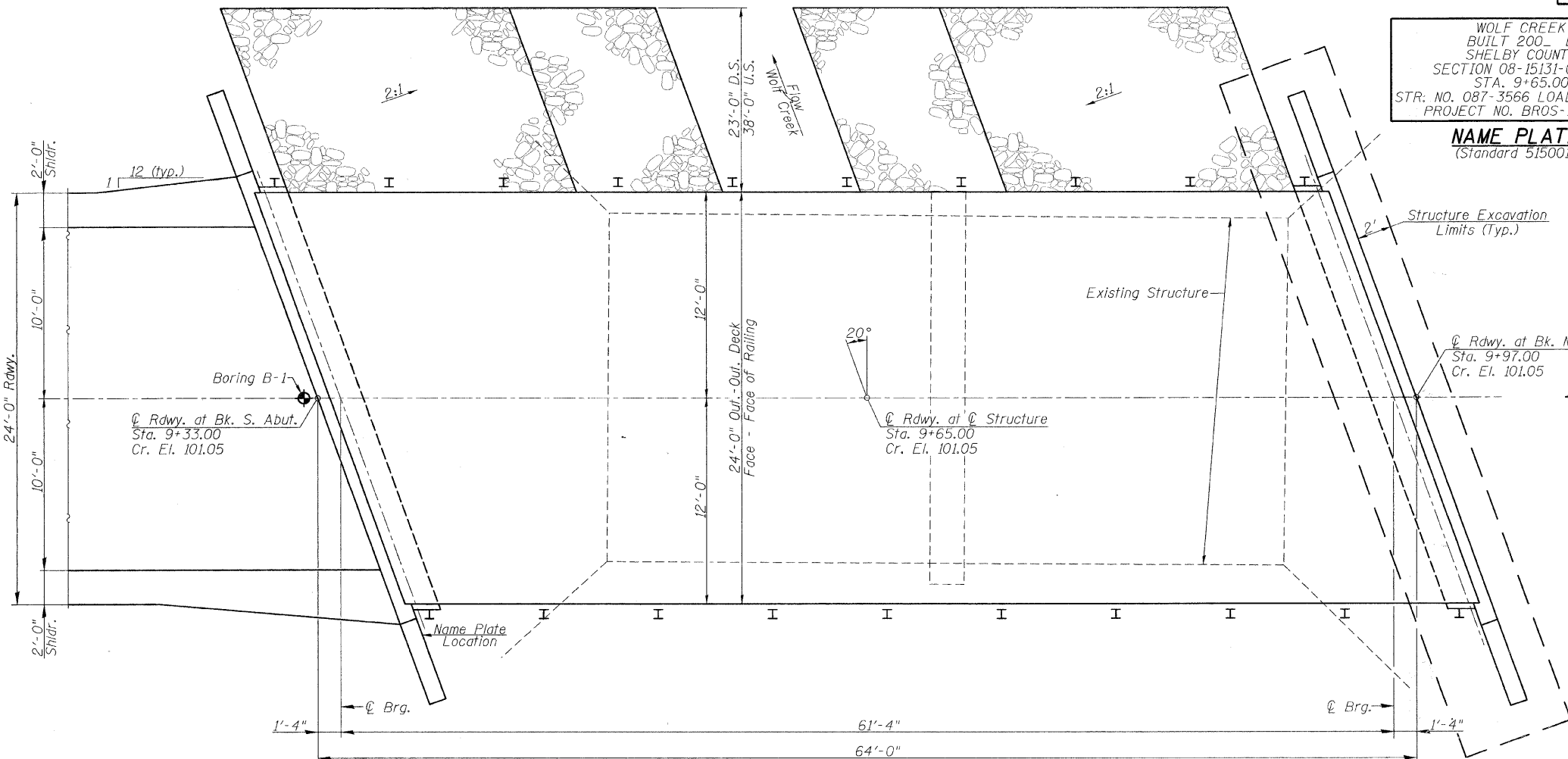
WATERWAY INFORMATION

Drainage Area = 5.19 Sq. Mi. Low Grade Elev. = 98.05 @ Sta. 6+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	20	1001	214	293	97.6	0.3	0.0	97.9
Base	100	1498	238	326	98.2	0.7	0.3	98.9
Exist. Overtop.	16	975						
Prop. Overtop.	47	1315						
Max. Calc.	500	1988	267	366	98.7	0.7	0.7	99.4



ELEVATION



PLAN

WOLF CREEK
BUILT 200... BY
SHELBY COUNTY
SECTION 08-15131-00-BR
STA. 9+65.00
STR. NO. 087-3566 LOADING HL-93
PROJECT NO. BROS-173()

NAME PLATE
(Standard 515001)

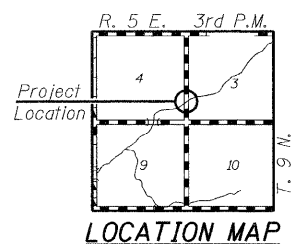
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications, with 2008 Interims

DESIGN STRESSES
FIELD UNITS
f'c = 3500 psi
fy = 60000 psi (Reinforcement)
PRECAST PRESTRESSED UNITS
f'c = 6000 psi
f'ci = 5000 psi
fpu = 270000 psi (1/2" low lax strands)
fpbt = 201960 psi (1/2" low lax strands)

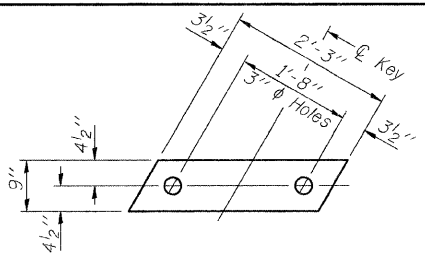
GENERAL NOTES
See Proposal for Boring Data.
Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60. See Special Provisions.
The layout of the riprap slopewall may be varied to suit ground conditions in the field as determined by the Engineer.
The contractor shall drive one test pile in a permanent location at both abutments as directed by the Engineer in the field prior to ordering the remainder of piles.

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 "A.A.S.H.T.O. LRFD Bridge Design Specifications."

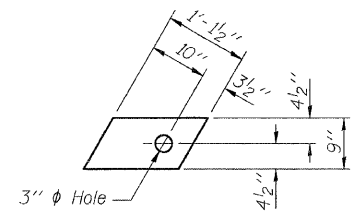
Mark A. Henderson 3/26/09
Expiration Date 11/30/2010



T.R. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 45586				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

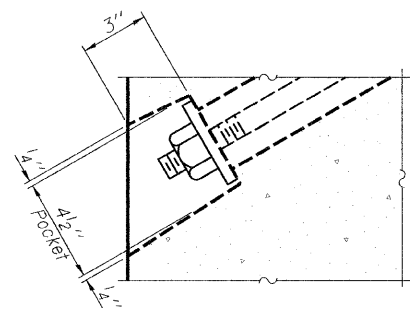


FABRIC BEARING PAD
(Interior)

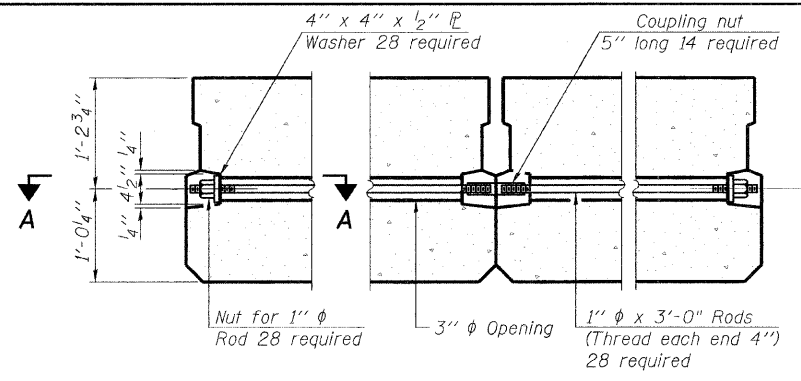


FABRIC BEARING PAD
(Exterior)

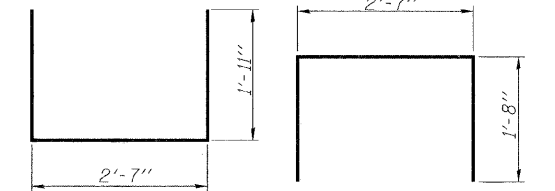
FIXED



SECTION A-A

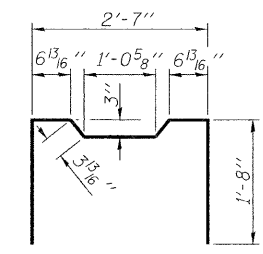


TYPICAL TRANSVERSE TIE ASSEMBLY

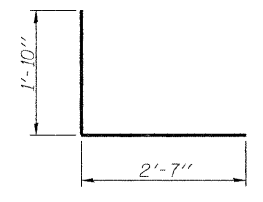


BAR S1(E)

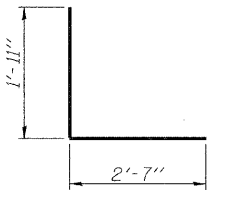
BAR S(E)



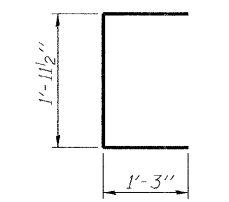
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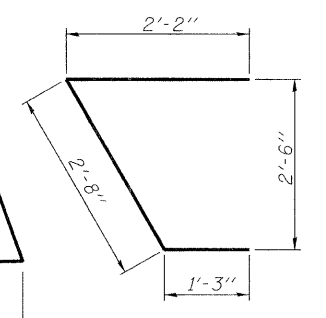
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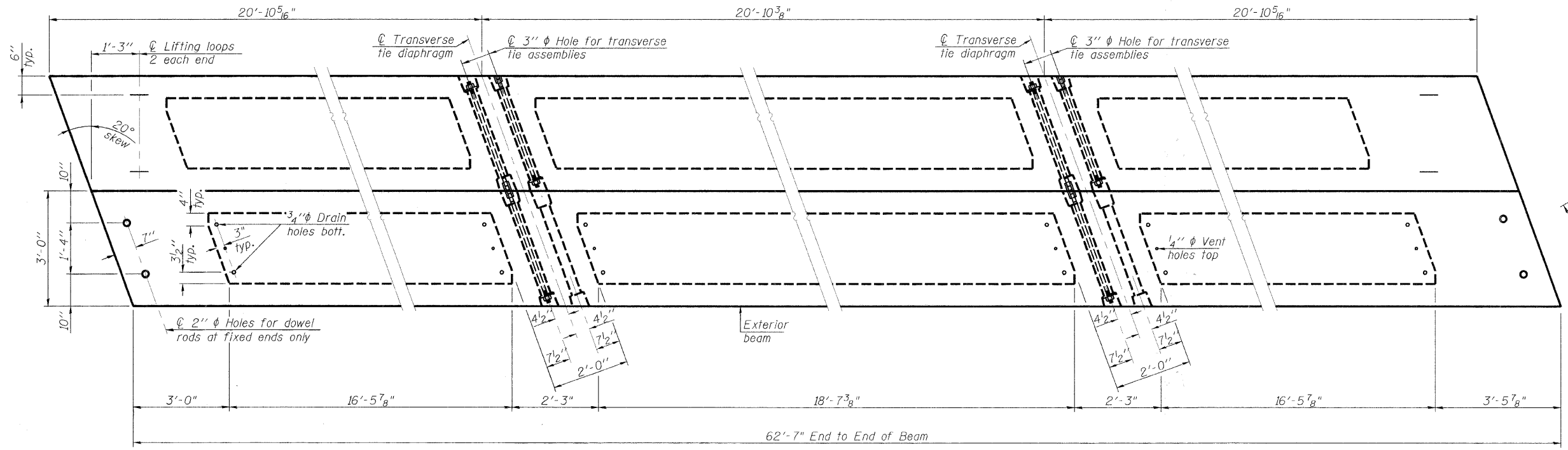
BAR S3(E)



BAR UE(E)



BAR U1(E)

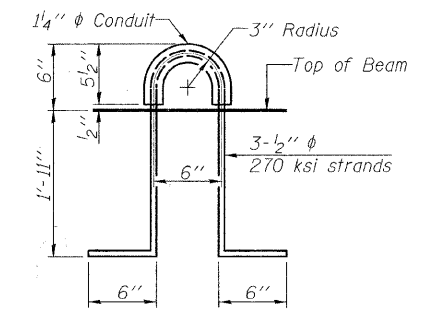


PLAN VIEW

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" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 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.

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

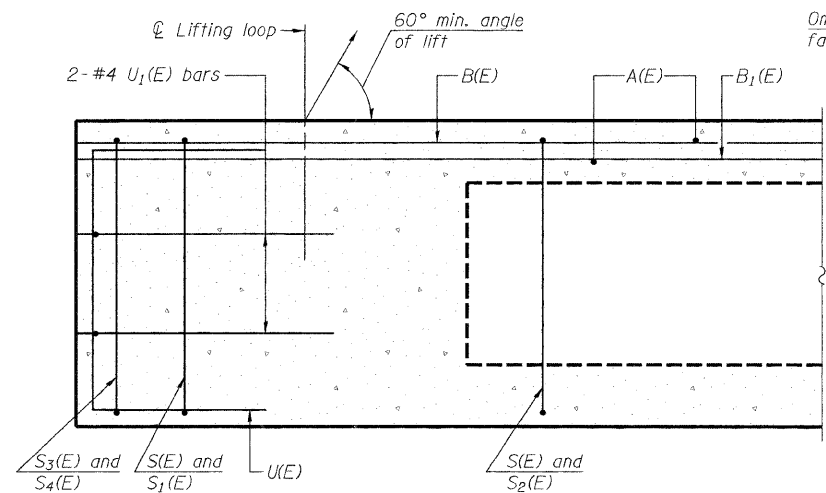


LIFTING LOOP DETAIL

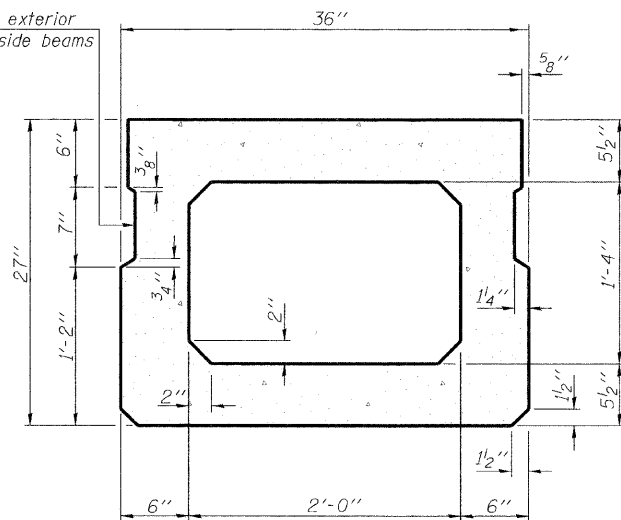
BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1502
---	---------	------

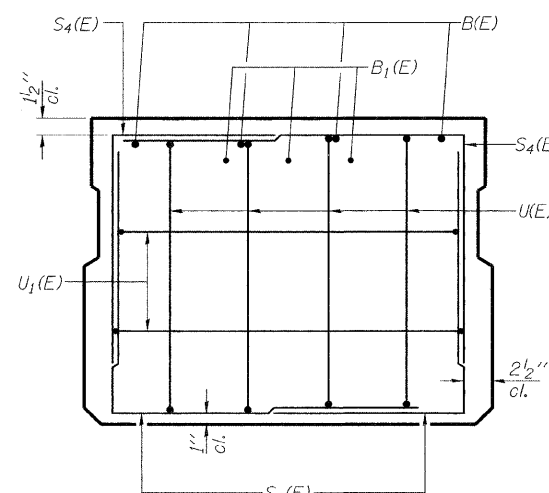
FILE NAME -	USER NAME - #USER#	DESIGNED - F.L.L.	REVISED -	Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907	SUPERSTRUCTURE SCALE: NONE SHEET NO. 5 OF 13 SHEETS STA. 6+25.00 TO STA. 11+50.00	T.R. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = #DATE#		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					



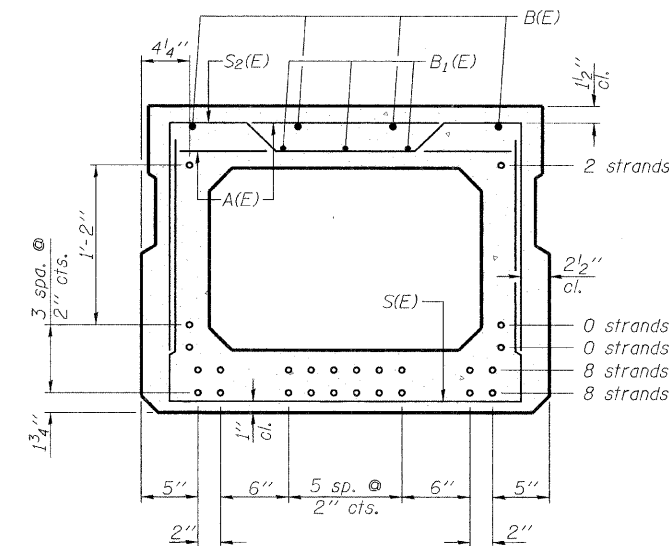
SECTION C-C



SECTION A-A
(Showing dimensions)

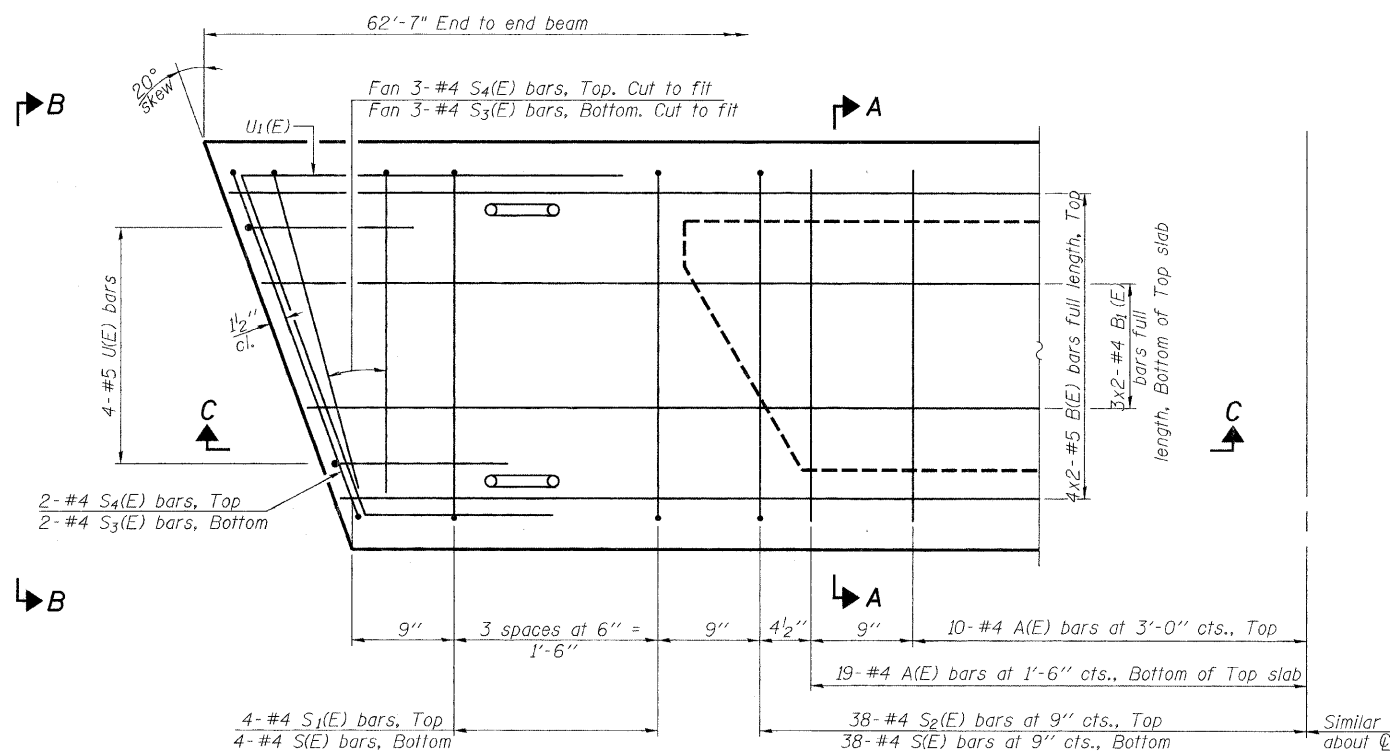


VIEW B-B



SECTION A-A

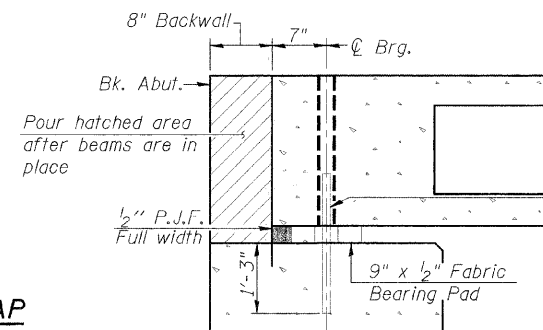
(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.



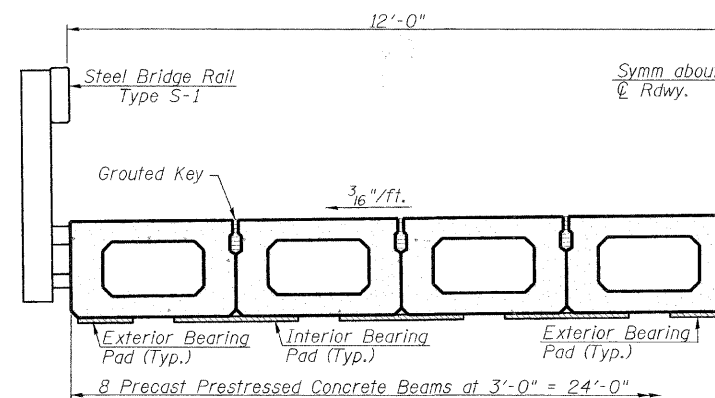
PLAN VIEW

Note: 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.

MIN. BAR LAP
#4 bar = 1'-10"
#5 bar = 2'-2"



SECTION THRU ABUTMENT
(At Right Angles)



HALF CROSS SECTION

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	56	#4	2'-7"	—
B(E)	8	#5	32'-3"	—
B1(E)	6	#4	32'-1"	—
S(E)	83	#4	6'-5"	U
S1(E)	8	#4	5'-11"	U
S2(E)	75	#4	6'-2"	U
S3(E)	10	#4	4'-6"	U
S4(E)	10	#4	4'-5"	U
U(E)	8	#5	4'-6"	U
U1(E)	4	#4	6'-1"	U

Note: See sheet 5 of 13 for additional details and Bill of Material.

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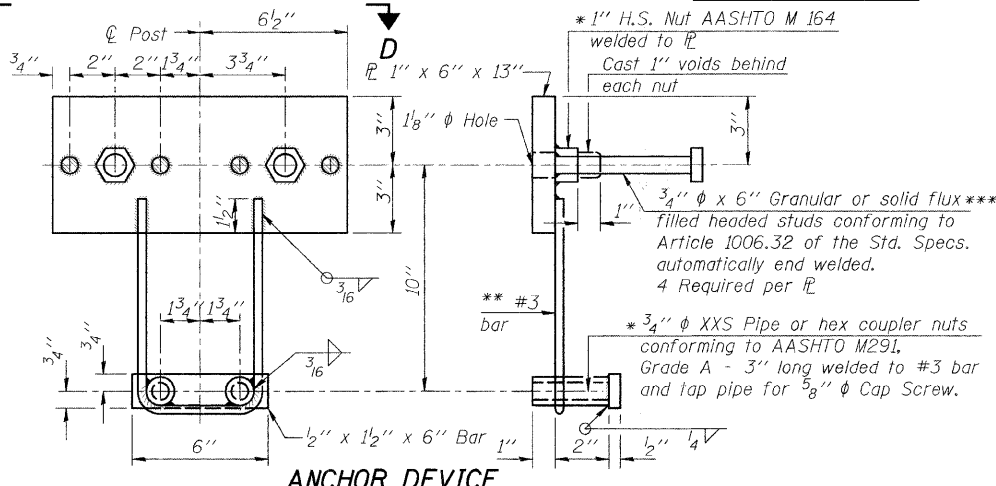
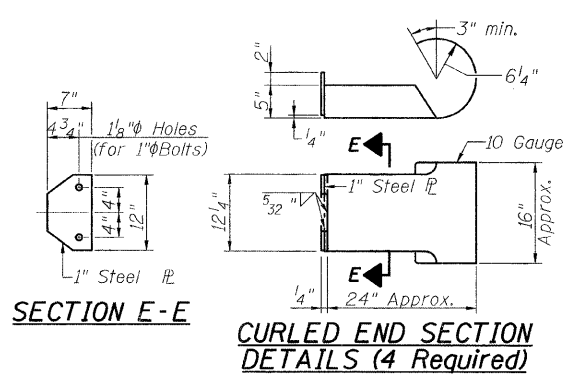
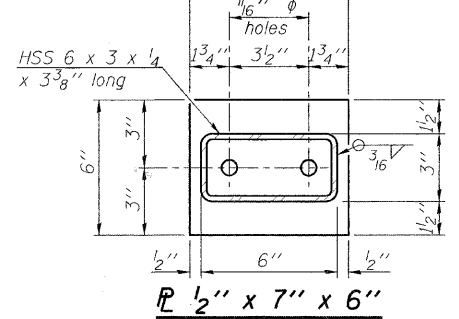
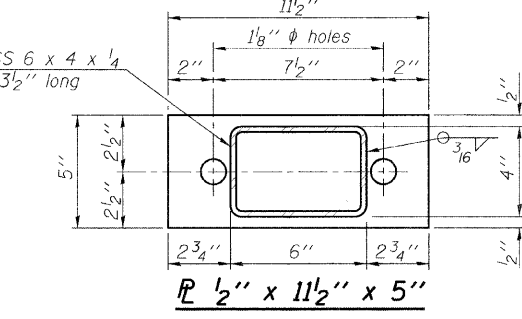
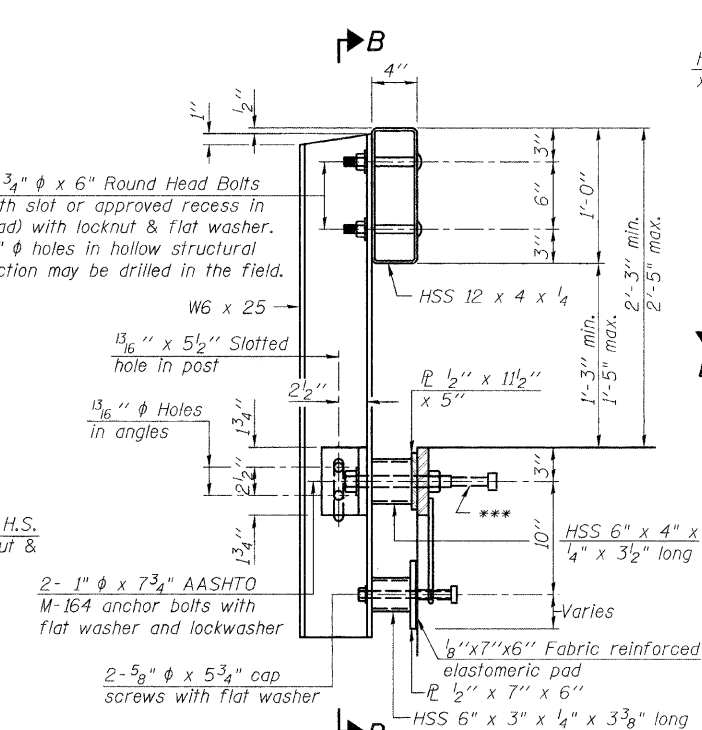
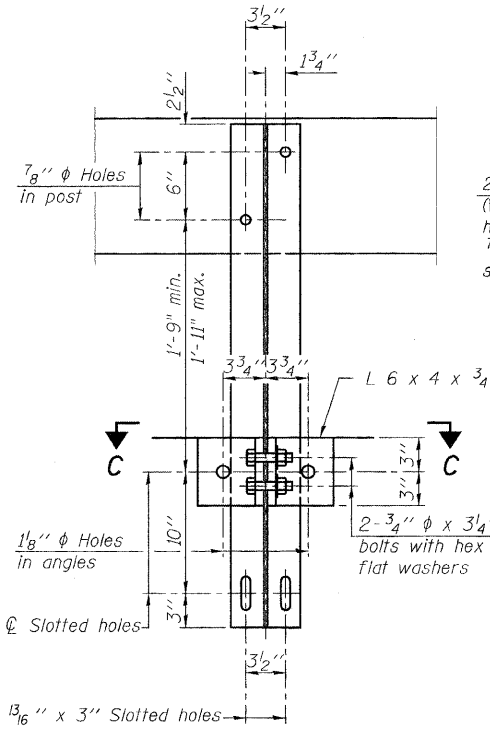
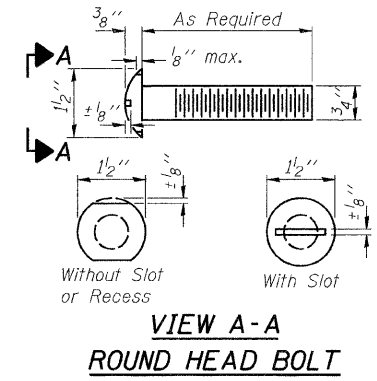
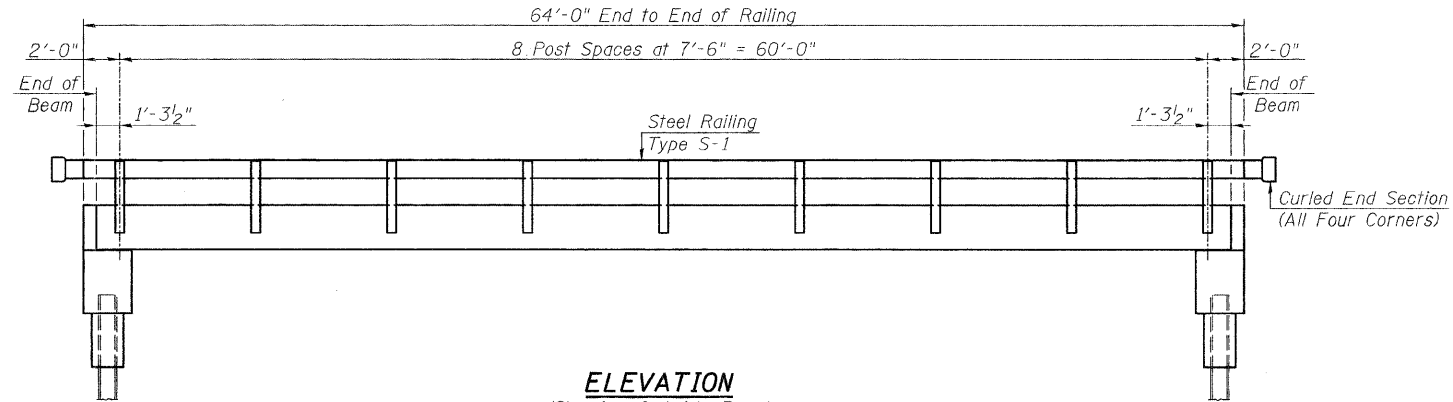


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No. 184-001907

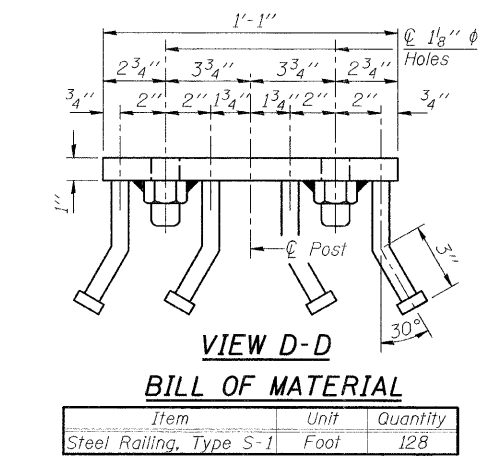
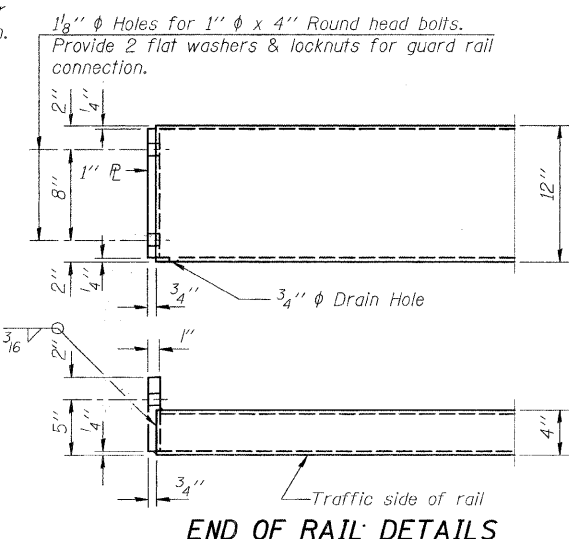
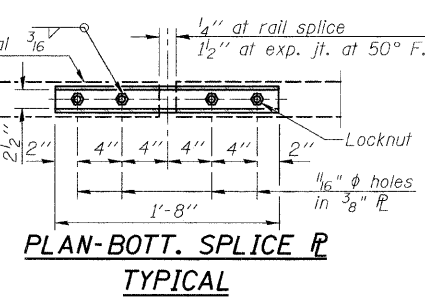
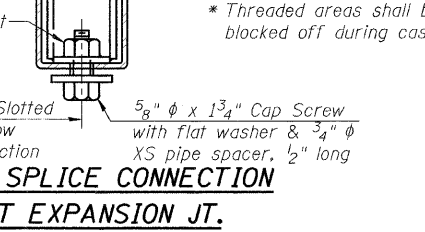
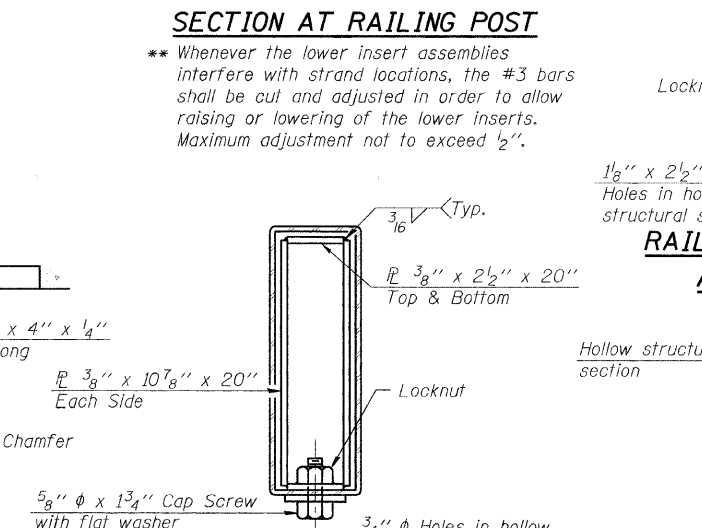
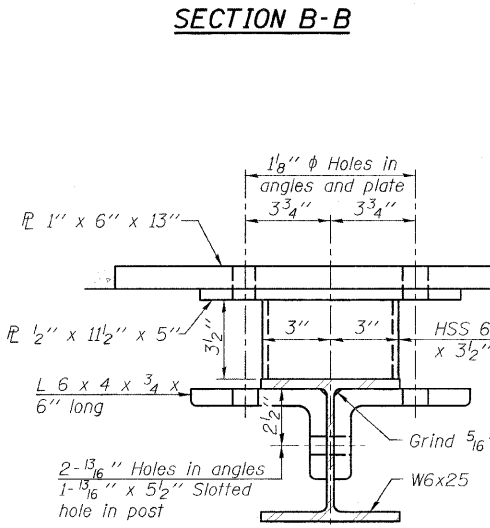
SUPERSTRUCTURE

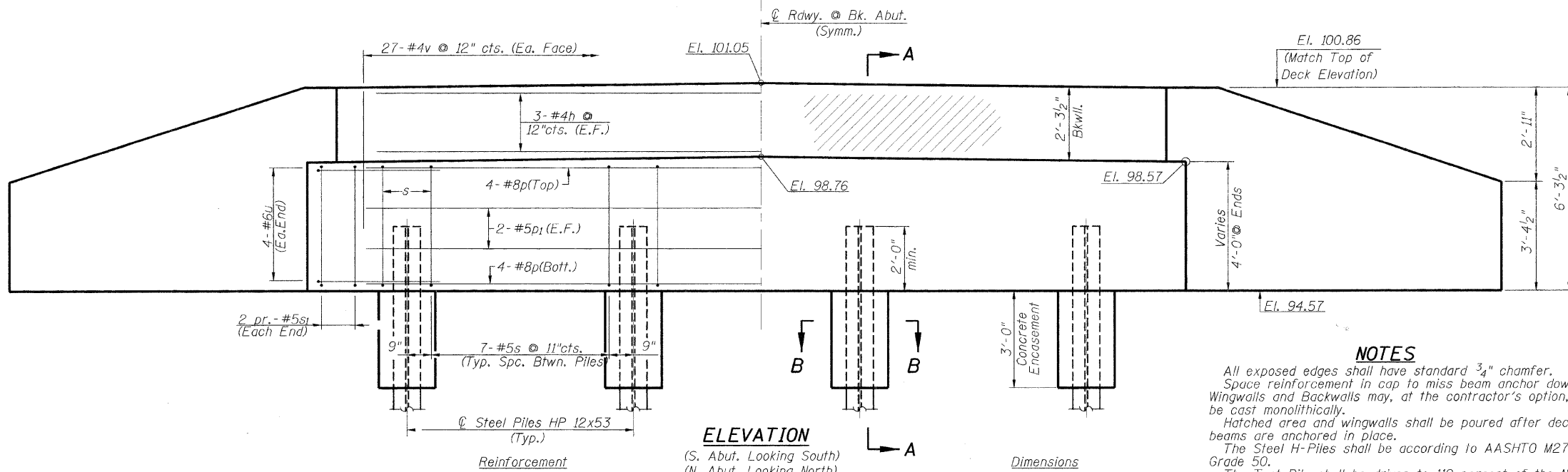
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T.R. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	7
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 95580	



Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" 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.
 Railing shall be in accordance with Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Railing, Type S-1.
 The cost of curled end sections shall be included in the cost of Steel Railing, Type S1.



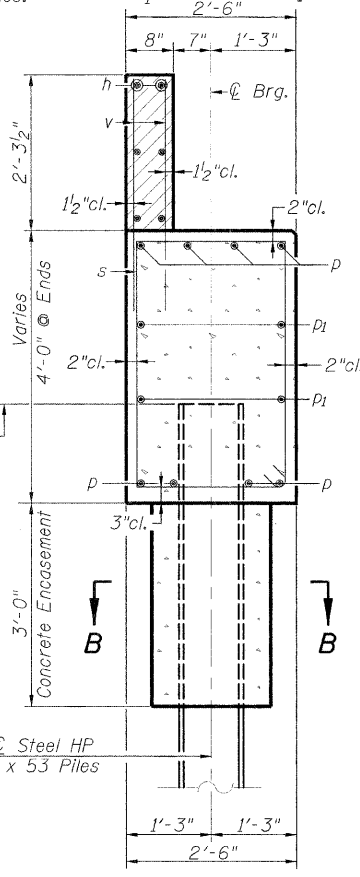


ELEVATION
(S. Abut. Looking South)
(N. Abut. Looking North)

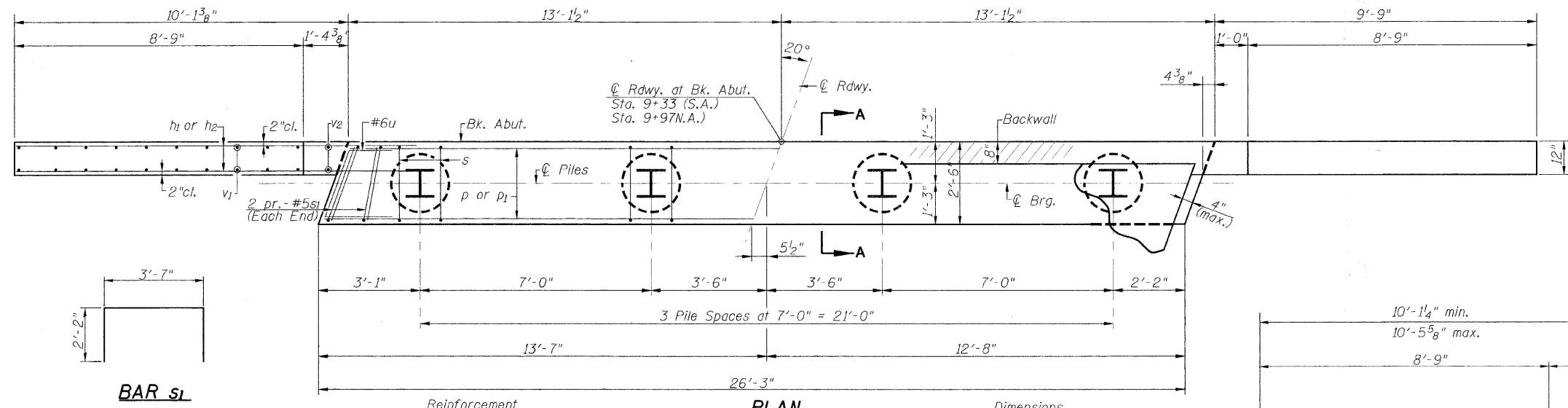
NOTES
All exposed edges shall have standard $\frac{3}{4}$ " chamfer. Space reinforcement in cap to miss beam anchor dowels. Wingwalls and Backwalls may, at the contractor's option, be cast monolithically. Hatched area and wingwalls shall be poured after deck beams are anchored in place. The Steel H-Piles shall be according to AASHTO M270, Grade 50. The Test Pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

PILE DATA

	S. Abut.	N. Abut.
Pile Type & Size:	Steel HP 12x53	Steel HP 12x53
Nominal Required Bearing:	418 Kips	418 Kips
Factored Resistance Available:	209 Kips	209 Kips
Estimated Pile Length:	50'	66'
Number of Production:	3	3
Number of Test Piles:	1	1



SECTION A-A

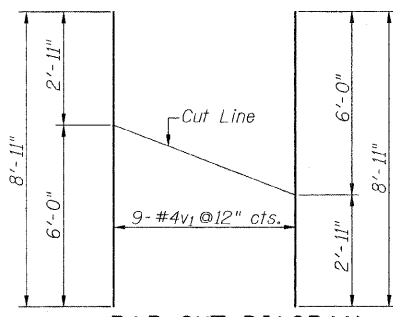


PLAN

TWO ABUTMENTS BILL OF MATERIAL

BAR NO.	SIZE	LENGTH	SHAPE
h	#4	28'-3"	—
h1	#6	12'-6"	—
h2	#5	9'-5"	—
p	#8	25'-11"	—
p1	#5	25'-11"	—
s	#5	12'-5"	□
s1	#5	7'-11"	□
u	#6	10'-3"	∟
v	#4	3'-9"	—
v1	#4	8'-11"	—
v2	#4	6'-0"	—
Concrete Structures	Cu. Yd.	30.4	
Reinforcement Bars	Pound	4030	
Furnishing Steel Piles HP 12x53	Foot	348	
Driving Piles	Foot	348	
Test Pile Steel HP 12x53	Each	2	
Concrete Encasement	Cu. Yd.	2.8	
Structure Excavation	Cu. Yd.	125	

BAR s1

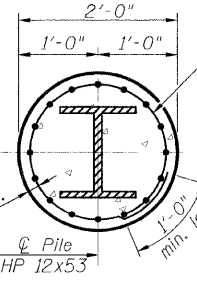


v1 - BAR CUT DIAGRAM

Order v1 bars full length. Layout in field according to diagram. Cut v1 bars along cut line. Use remainder of each bar in opposite face.

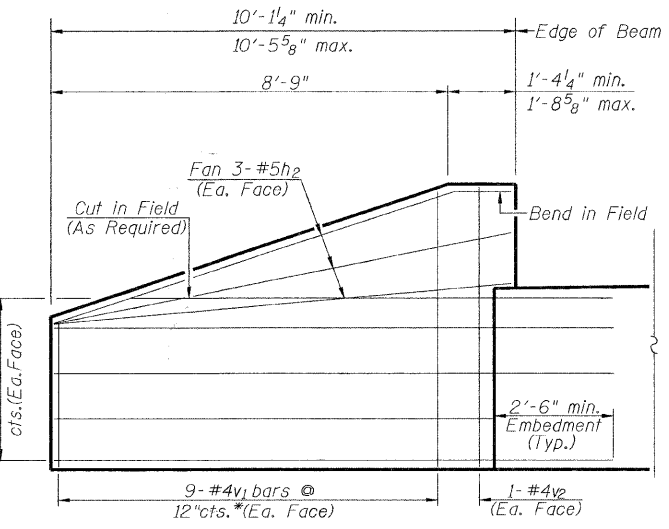
BAR u

BAR s



SECTION B-B

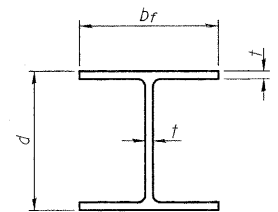
Welded Wire Fabric 6x6-W4.0-W4.0 weighing 58#/100 sq.ft. Cost included with Concrete Encasement. (Excavation for placement of Encasement shall be included with Concrete Encasement. (Extend W.W.F. 10" min. into cap). (Forms for Encasement may be omitted when soil conditions permit).



WINGWALL ELEVATION

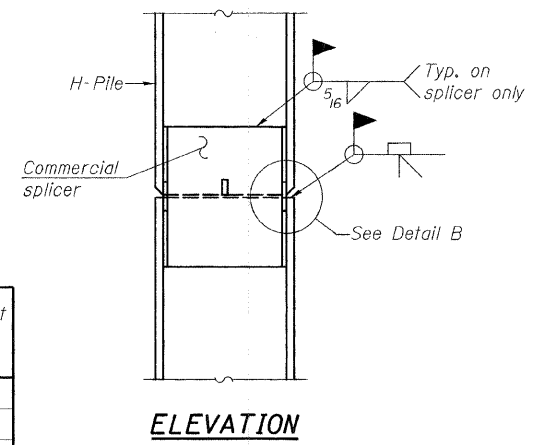
(Showing Reinforcement)
* See v1-bar cut diagram

ABUTMENTS

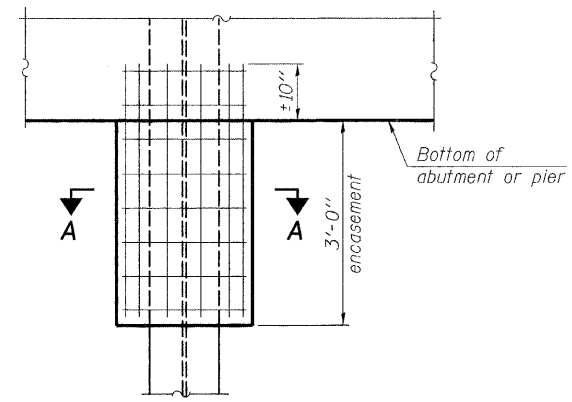


STEEL PILE TABLE

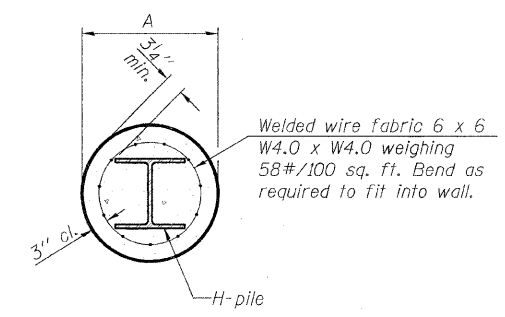
Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	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



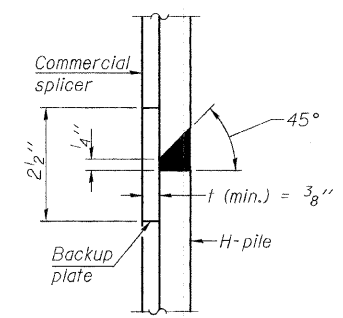
ELEVATION



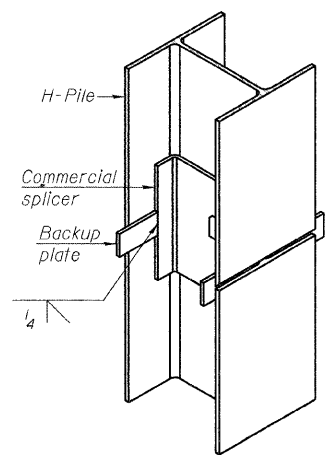
SECTION A-A

Note: Forms for encasement may be omitted when soil conditions permit.

PILE ENCASEMENT

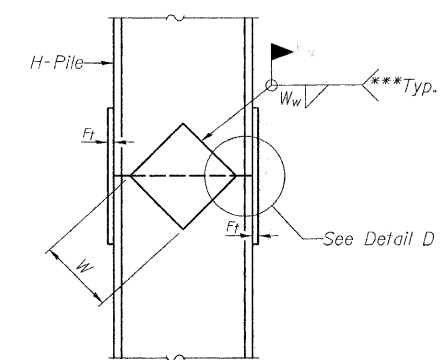


DETAIL "B"

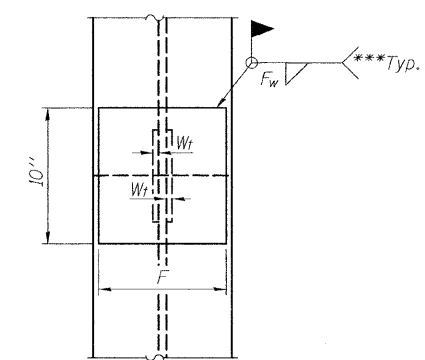


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



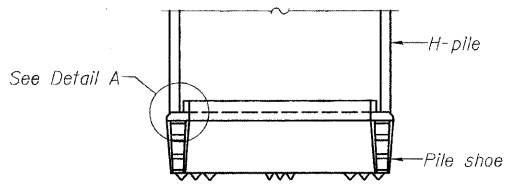
ELEVATION



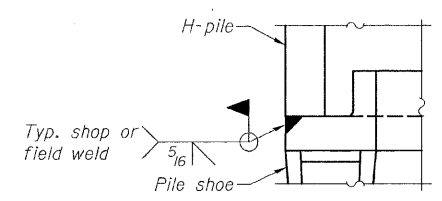
END VIEW

Designation	F	F _t	F _w	W	W _t	W _w
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"	11/16"	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"

WELDED PLATE FIELD SPLICE

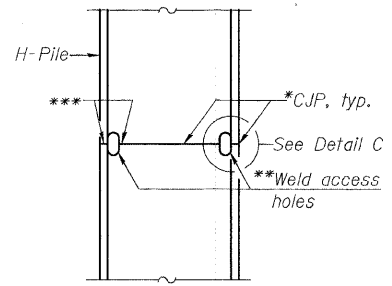


ELEVATION



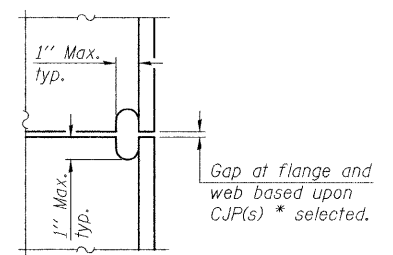
DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION

COMPLETE PENETRATION WELD SPLICE



DETAIL C

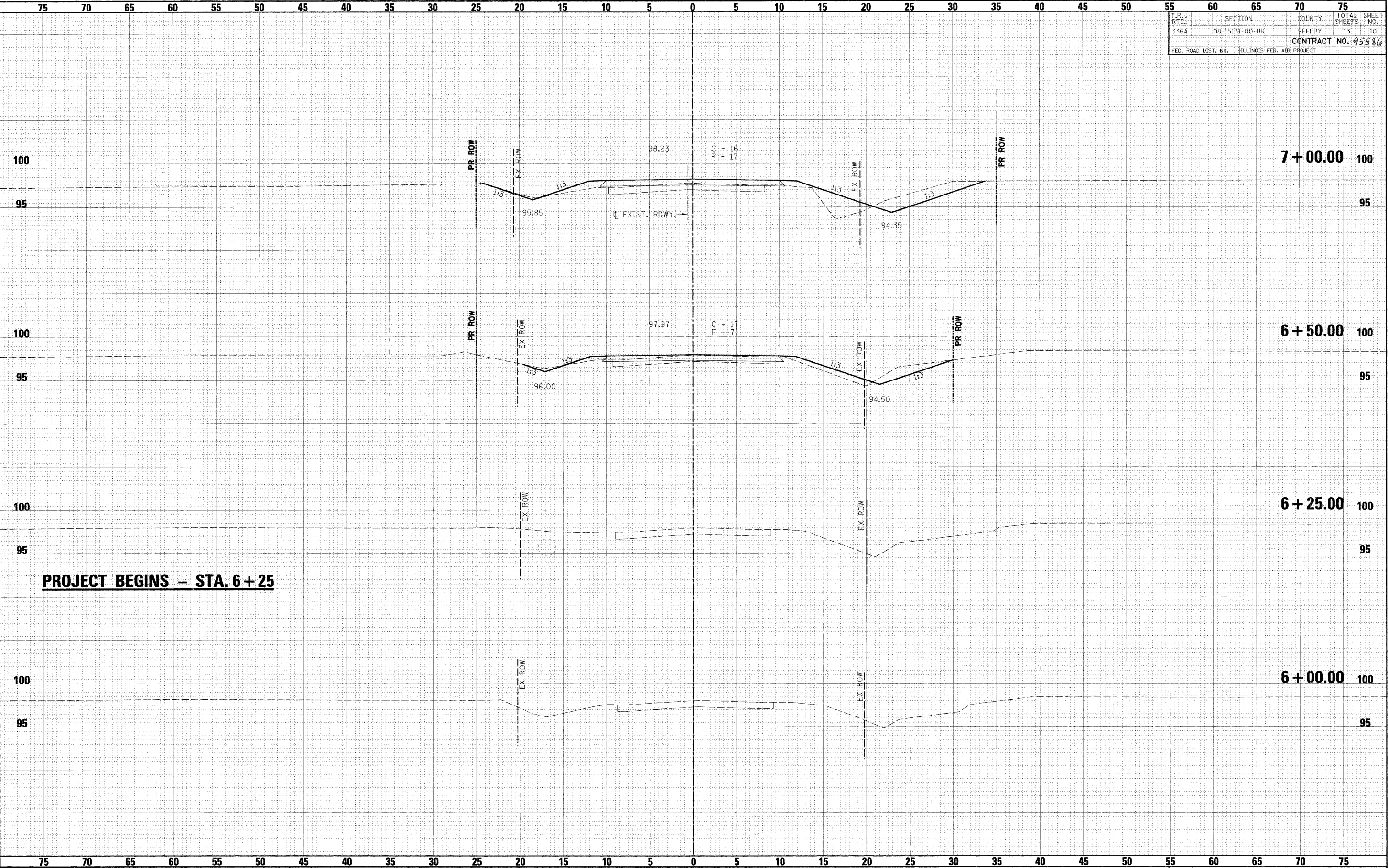
*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code-Steel.
 **Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code-Steel.
 ***Interrupt welds 1/4" from end of each pile.

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

T.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	10
CONTRACT NO. 95586				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	BY

DATE	BY



PROJECT BEGINS - STA. 6+25

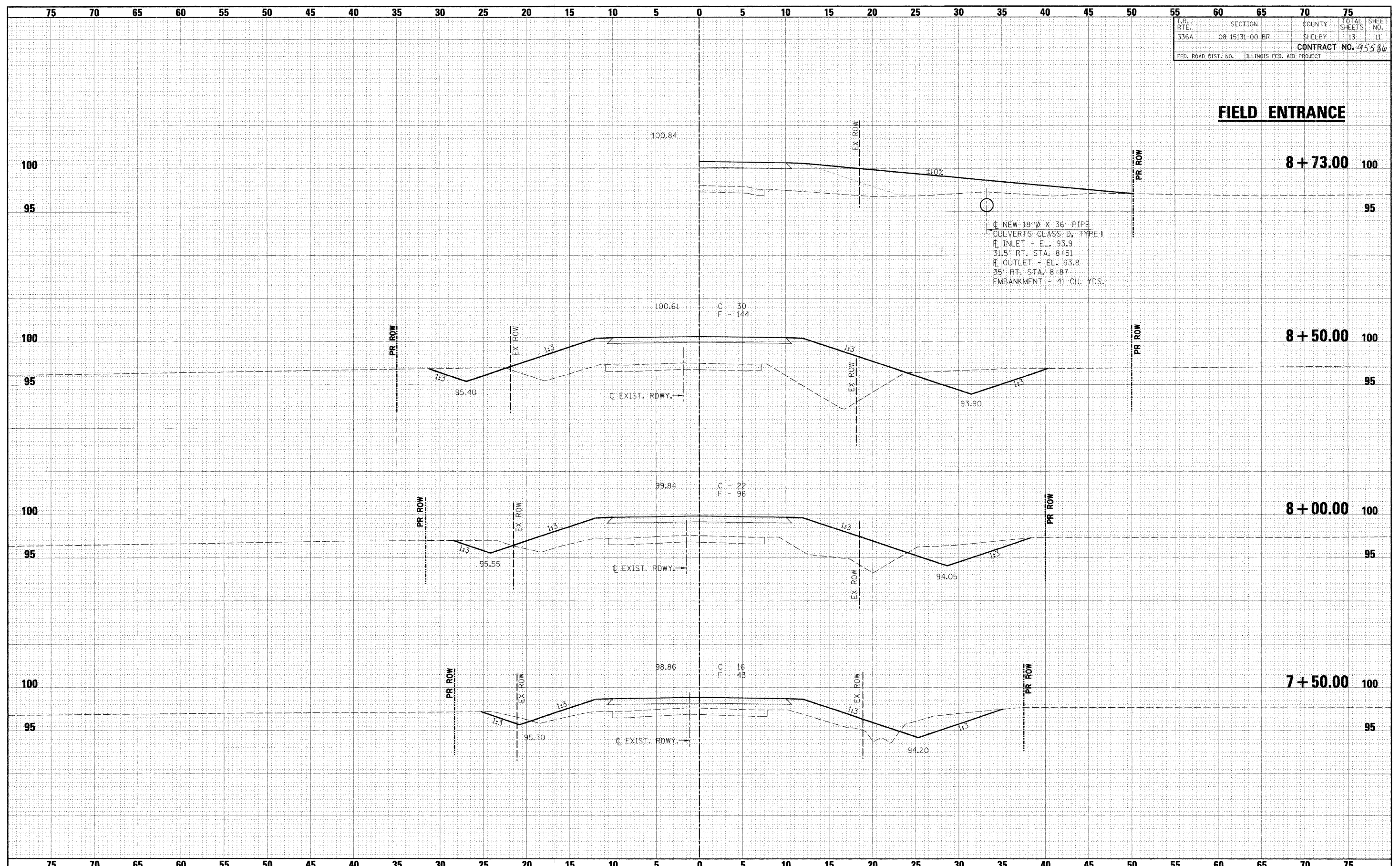
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		DATE -	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	11
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 95586				


FIELD ENTRANCE

DATE	BY

DATE	BY



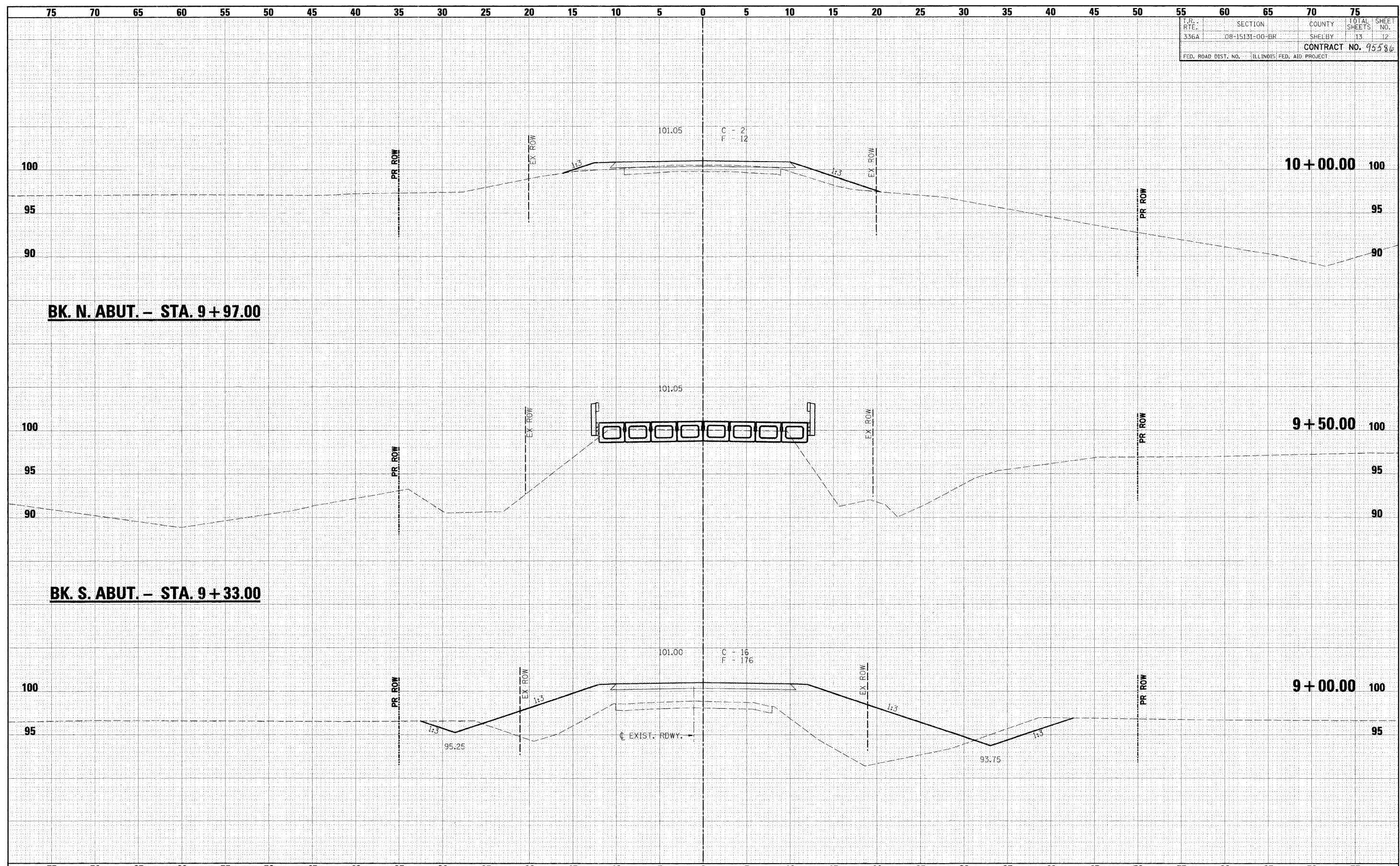
NEW 18" Ø X 36' PIPE
 CULVERTS CLASS D, TYPE I
 INLET - EL. 93.9
 31.5' RT. STA. 8+51
 OUTLET - EL. 93.8
 35' RT. STA. 8+87
 EMBANKMENT - 41 CU. YDS.


FILE NAME =	USER NAME = #USER#	DESIGNED - F.L.L.	REVISED -	 Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907	T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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								CONTRACT NO.	

T.R. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 95586	

DATE	BY
FINISH SURVEY	DATE
PLOTTED	BY
TEMPLATE	
AREAS	
CHECKED	

DATE	BY
ORIGINAL SURVEY	DATE
PLOTTED	BY
TEMPLATE	
AREAS	
CHECKED	

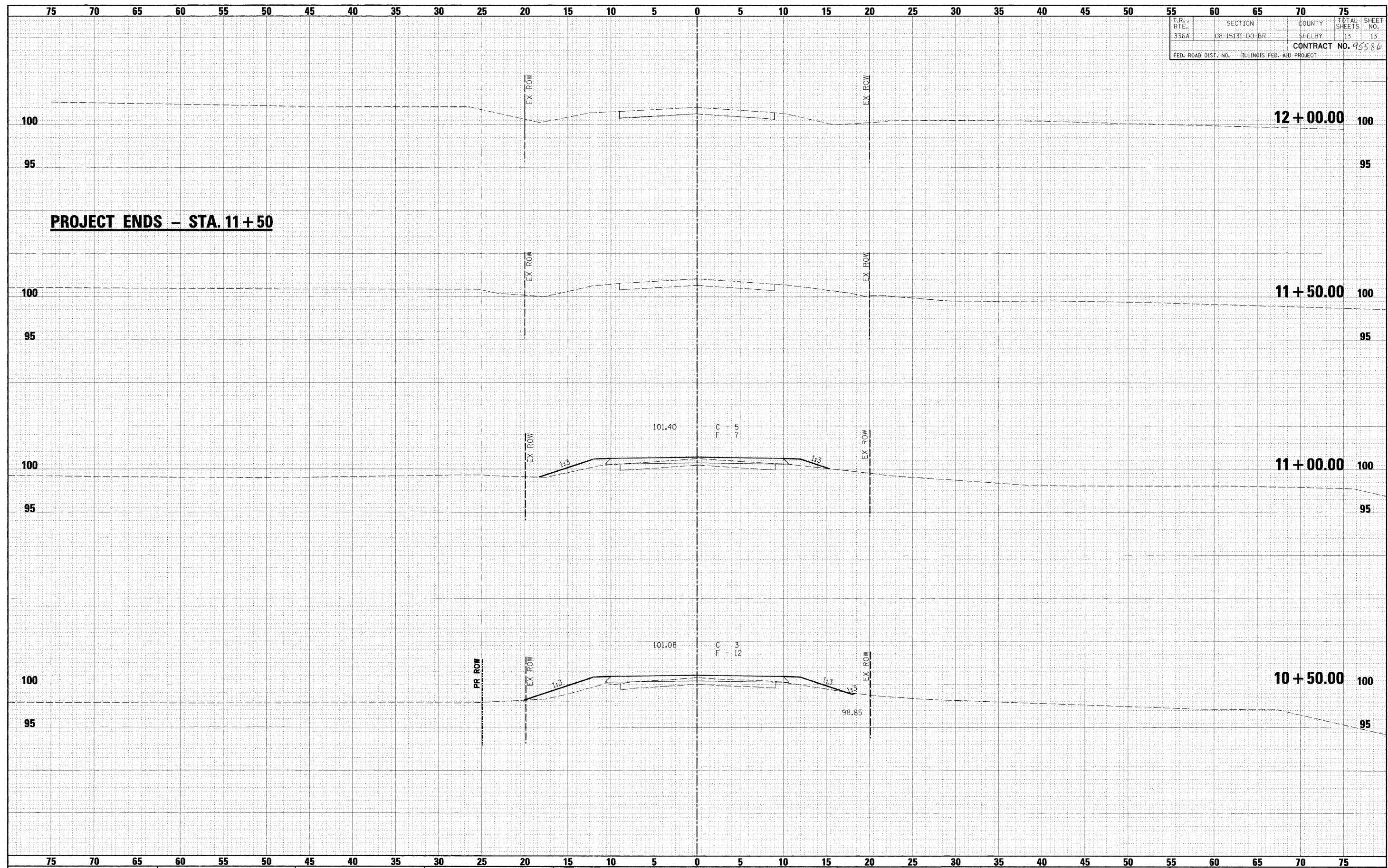



FILE NAME	USER NAME	DESIGNED	REVISED	 Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907	CROSS SECTIONS SCALE: 1" = 5' SHEET NO. 12 OF 13 SHEETS STA. 9+00.00 TO STA. 10+00.00		T.R. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		DATE	REVISED		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336A	08-15131-00-BR	SHELBY	13	13
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 95586				

DATE	BY
DESIGNED	
DRAWN	
CHECKED	
DATE	

DATE	BY
DESIGNED	
DRAWN	
CHECKED	
DATE	



FILE NAME	USER NAME	DESIGNED	REVISOR	 Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907	CROSS SECTIONS SCALE: 1" = 5' SHEET NO. 13 OF 13 SHEETS STA. 10+50.00 TO STA. 12+00.00	T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN	REVISOR			336A	08-15131-00-BR	SHELBY	13	13
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		DATE	REVISOR			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				