

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR338	01-16117-00-BR	SHELBY	15	1

INDEX OF SHEETS

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES
- 3 PLAN AND PROFILE
- 4 BRIDGE PLAN AND ELEVATION
- 5 DECK BEAM DETAILS
- 6 TYPE S-1 STEEL RAILING
- 7 ABUTMENT DETAILS
- 8 PILING SPlice DETAIL
- 9 EROSION CONTROL PLAN
- 10-15 CROSS SECTIONS

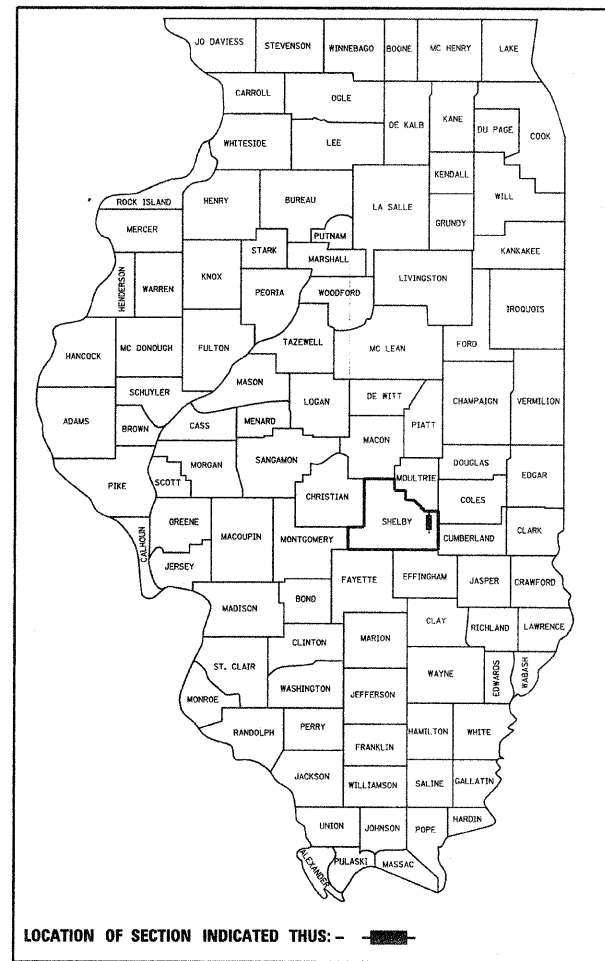
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY BRIDGE PROGRAM

SECTION 01-16117-00-BR
RICHLAND TOWNSHIP
TR 338
SHELBY COUNTY

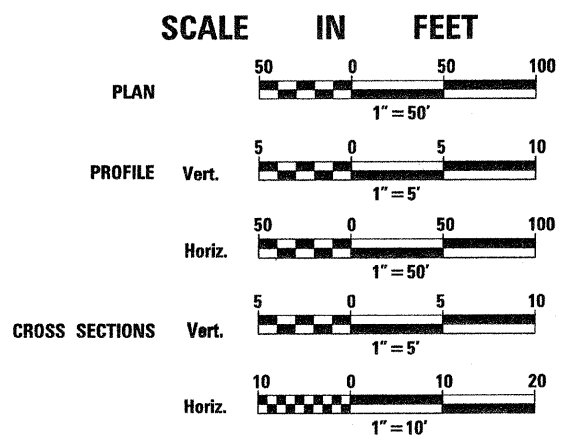
JOB NO. C-97-072-09
PROJECT NO. BROS-173(162)

R 8E , 3 P.M.



STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS.
280001-04	TEMPORARY EROSION CONTROL SYSTEMS.
515001-03	NAME PLATES FOR BRIDGES.
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701901-01	TRAFFIC CONTROL DEVICES.
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS.



UTILITIES:

Shelby Electric Coop
Rt. 128 N
Shelbyville Illinois
(217) 774-3986

Consolidated Telephone Co.
121 S. 17th Street
Mattoon Illinois
(217) 235-3311

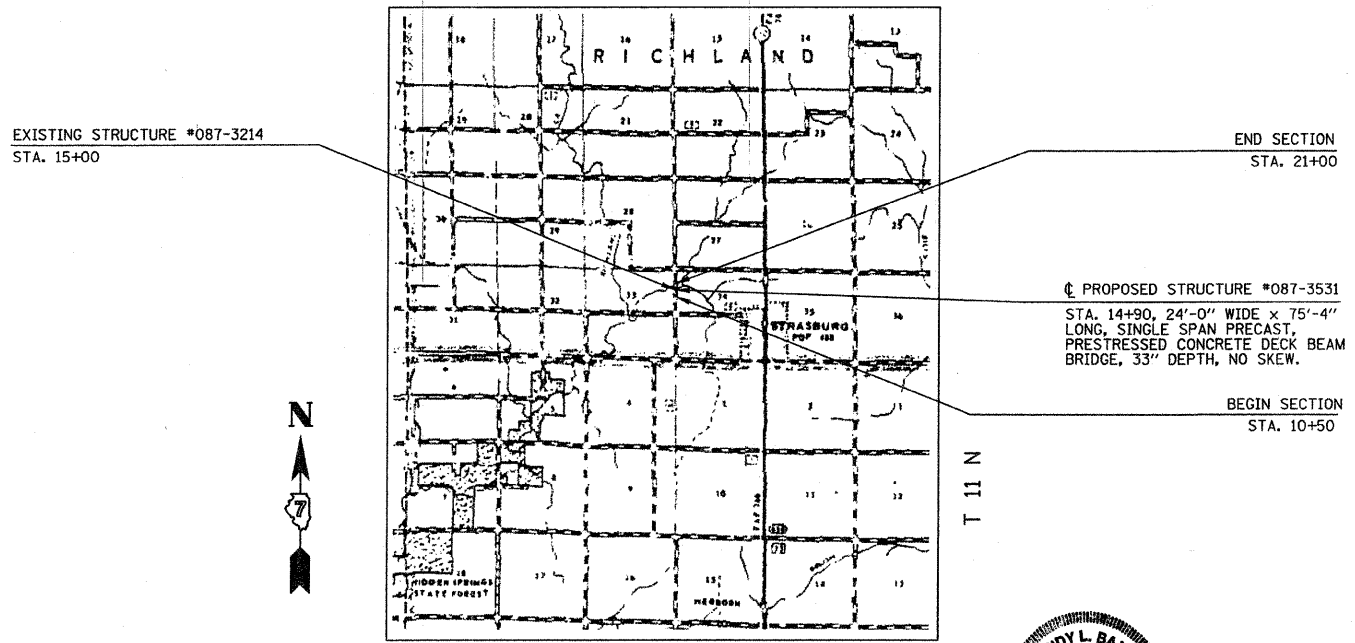
Lincoln Prairie Water
(217) 774-3986

ADT-CURRENT 75 DESIGN ADT 100
CLASS-LOCAL ROAD
DESIGN SPEED-30 MPH
DESIGN YEAR 2030

CONTRACT NO 95573

THE UPCHURCH GROUP
architects engineers surveyors environmental consultants

HILLSIDE, IL. (708) 449-2321
MATTOON, IL. (217) 235-3177



TOTAL LENGTH OF PROJECT = 1200 FT. = 0.22 MILES
NET LENGTH OF PROJECT = 1050 FT. = 0.20 MILES

ANDY L. BAKER
062-057920
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS
3.9.09

ANDY L. BAKER, P.E. LICENSE EXPIRATION DATE 11-30-09

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

APPROVED ^{3-17 20 09} [Signature]
COUNTY ENGINEER

APPROVED ^{3-17 20 09} [Signature]
HIGHWAY COMMISSIONER

PASSED ^{4/3 20 09} [Signature]
DISTRICT SEVEN ENGINEER OF LOCAL ROADS AND STREETS

Releasing For Bid Based on Limited Review ^{4/3 20 09} [Signature]
DEPUTY DIRECTOR OF HIGHWAYS
REGION FOUR ENGINEER
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COVER ALB 02-09-09 1:1

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	01-16117-00	Shelby	15	2
STA. 9+00		TO STA. 21+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE	ITEM	UNIT	QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	110
20200100	EARTH EXCAVATION	CUYD	1831
20300100	CHANNEL EXCAVATION	CUYD	522
20400800	FURNISHED EXCAVATION	CUYD	2045
20800150	TRENCH BACKFILL	CUYD	80
25000200	SEEDING, CLASS 2	ACRE	1.4
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	126
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	126
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	126
25100115	MULCH, METHOD 2	ACRE	1.4
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150
28000300	TEMPORARY DITCH CHECKS	EACH	10
28000400	PERIMETER EROSION BARRIER	FOOT	160
28000500	INLET PIPE PROTECTION	EACH	6
28100207	STONE RIPRAP, CLASS A4	TON	448
28200200	FILTER FABRIC	SQYD	668
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	1051
50100200	REMOVAL OF EXISTING STRUCTURES	LSUM	1
50200100	STRUCTURE EXCAVATION	CUYD	13
50300225	CONCRETE STRUCTURES	CUYD	19
50300280	CONCRETE ENCASEMENT	CUYD	2.8
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAM (33"DEPTH)	SQFT	1776
50800105	REINFORCEMENT BARS	POUND	2572
50900205 *	STEEL RAILING, TYPE S1	FOOT	156
51201400	FURNISHING STEEL PILES HP 10 X 42	FOOT	192
51202305	DRIVING PILES	FOOT	192
51203400	TEST PILE STEEL HP 10 X 42	EACH	2
51500100	NAME PLATES	EACH	1
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	109
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	32
542D1060	PIPE CULVERTS, CLASS D, TYPE 2 15"	FOOT	50
542D1069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	75
67100100	MOBILIZATION	LSUM	1
78201000 *	TERMINAL MARKER-DIRECT APPLIED	EACH	4

* SPECIALTY ITEMS

EARTHWORK SCHEDULE

1 LOCATION	2 EARTH EXCAVATION	3 EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	4 EMBANKMENT	5 EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	Cubic Yard	Cubic Yard	Cubic Yard	Cubic Yard
Sta. 10+50 to Sta. 14+52	1419	1064	821	243
Sta. 15+28 to Sta. 21+00	412	309	2597	-2288
Total	1831	1373	3418	-2045*

* Channel Ex. Unsuitable for use as fill.

Column 1, 2, & 4 - Location and Quantities from Cross Sections.
Cut = Earth Excavation Fill = Embankment

Column 3 - Quantity of Earth Excavation (Cut) Adjusted for a shrinkage factor of 25%.

Column 5 - Earthwork Balance (-) = Quantity of Furnished Excavation needed
Earthwork Balance (+) = Quantity of Earth Excavation Adjusted for shrinkage to be wasted

GENERAL NOTES

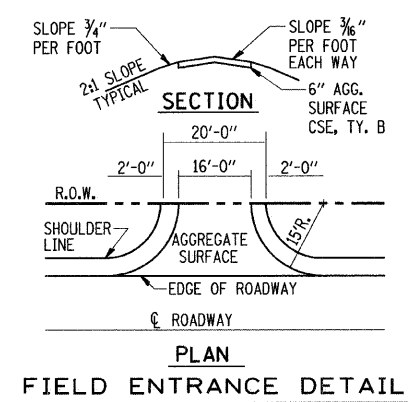
- Temporary erosion control to be implemented per the plans and as directed by the engineer.
- The contractor shall provide positive drainage at all times within the construction areas and prevent drainage or ponding of water onto private property.
- The following application rates have been used to calculate the items necessary for seeding class 2 :
Fertilizer Nutrients:
Nitrogen 90 lbs per acre
Phosphorous 90 lbs per acre
Potassium 90 lbs per acre
Mulch 2 tons per acre
The seeding mixture shall conform to roadside mixture type 2, during the period between November 1 and December 1. The contractor shall substitute 10 pounds of perennial rye for 48 pounds of oats, spring.
- Only trees or shrubs marked for removal by the engineer shall be removed by the contractor.
- All disturbed earth surfaces within the limits of the R.O.W. and easements shall be seeded as directed by the engineer.
- Where section or subsection monuments are encountered, the engineer shall be notified before such monuments are removed. The contractor shall protect and carefully preserve all property marks and monuments until the owner, an authorized surveyor or agent has witnessed or otherwise referenced their location.
- The contractor shall consult with the engineer in regard to the exact lengths of pipe culverts prior to ordering these items.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
TR 338 TRIBUTARY RICHLAND CREEK
SECTION 01-16117-00-BR
SHELBY COUNTY
STA 14+90
STRUCTURE NO. 087-3531

SCALE: DRAWN BY
DATE CHECKED BY

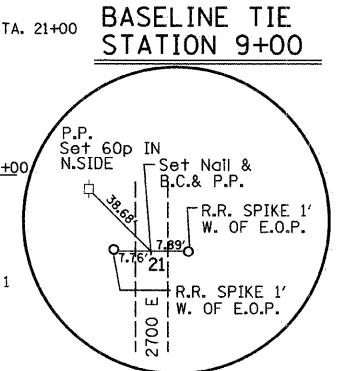
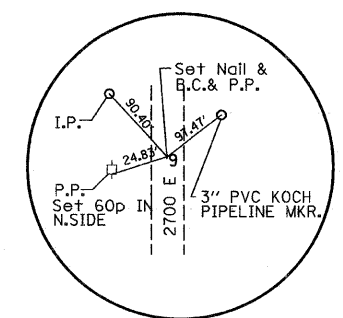
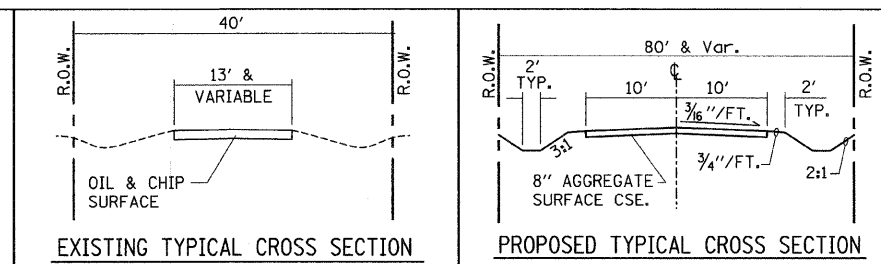
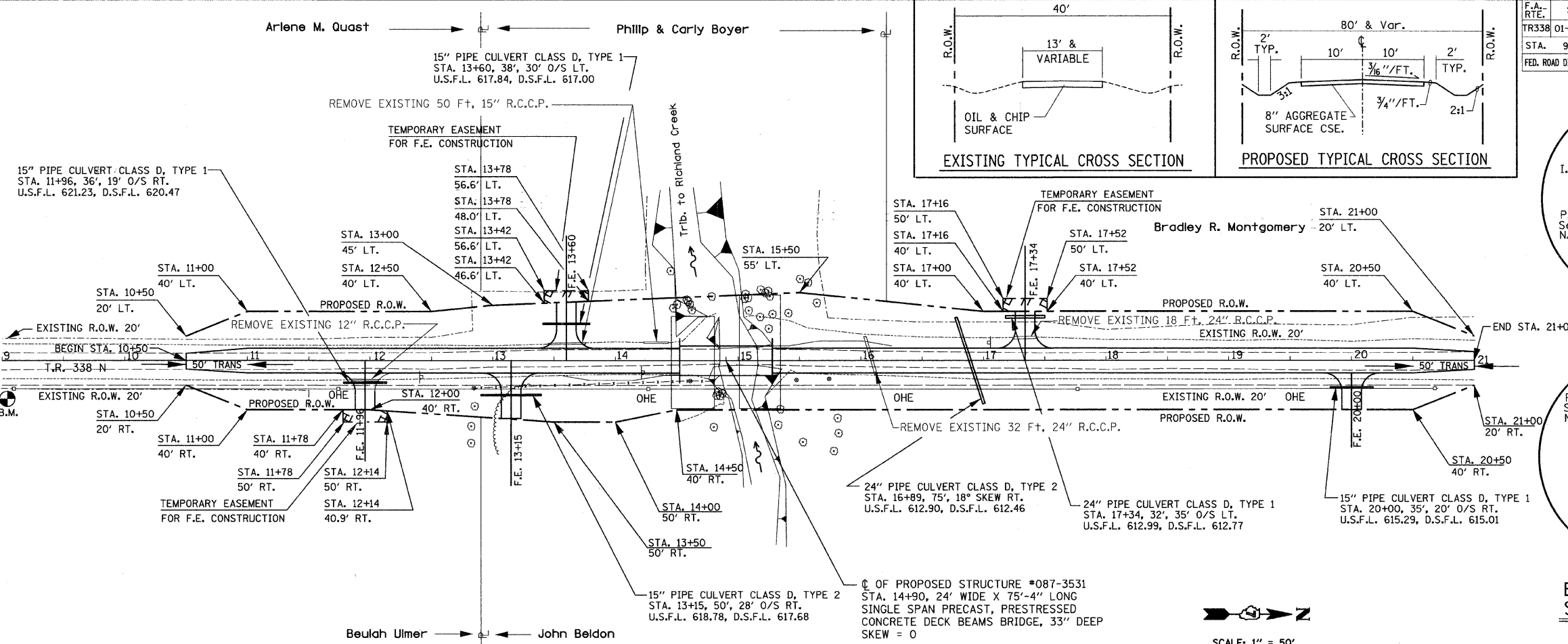
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR338	01-16117-00-BR	SHELBY	15	3
STA. 9+00	TO STA. 21+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



- TREE REMOVAL 6 TO 15 UNITS DIAMETER**
- STA. 14+85, 27' LT. 4 @ 8"-32 UNITS
 - STA. 15+06, 50' LT. 2 @ 12"-24 UNITS
 - STA. 15+08, 41' LT. 8 UNITS
 - STA. 15+18, 35' LT. 8 UNITS
 - STA. 15+25, 26' LT. 8 UNITS
 - STA. 15+26, 78' LT. 12 UNITS
 - STA. 15+28, 38' LT. 6 UNITS
 - STA. 15+40, 39' LT. 6 UNITS
 - STA. 15+64, 47' LT. 6 UNITS
- TOTAL = 110 UNITS
- TRENCH BACKFILL**
- STA. 16+10 50.0 CU YD
 - STA. 16+89 30.0 CU YD
- TOTAL = 80.0 CU YD

REMOVAL OF EXISTING STRUCTURE #087-3214
 16' WIDE x 32' LONG 1-SPAN CONCRETE DECK ON STEEL STRINGERS WITH CONCRETE ABUTMENTS AT STA. 15+00

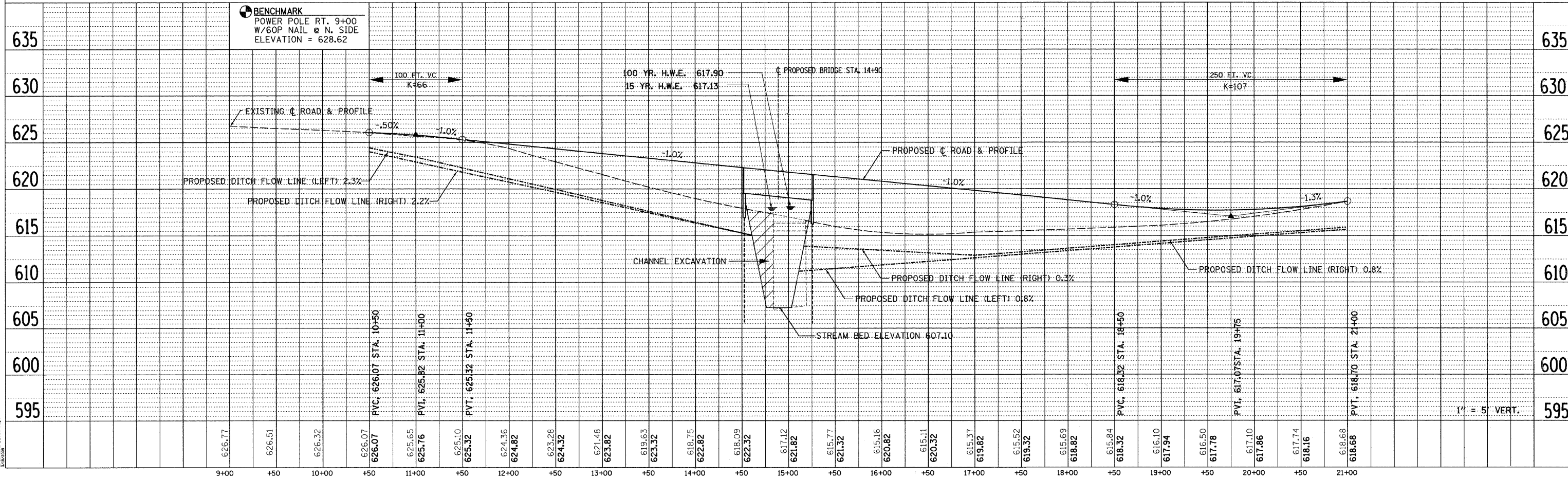
TOTAL = 1 LSUM



SCALE: 1" = 50'

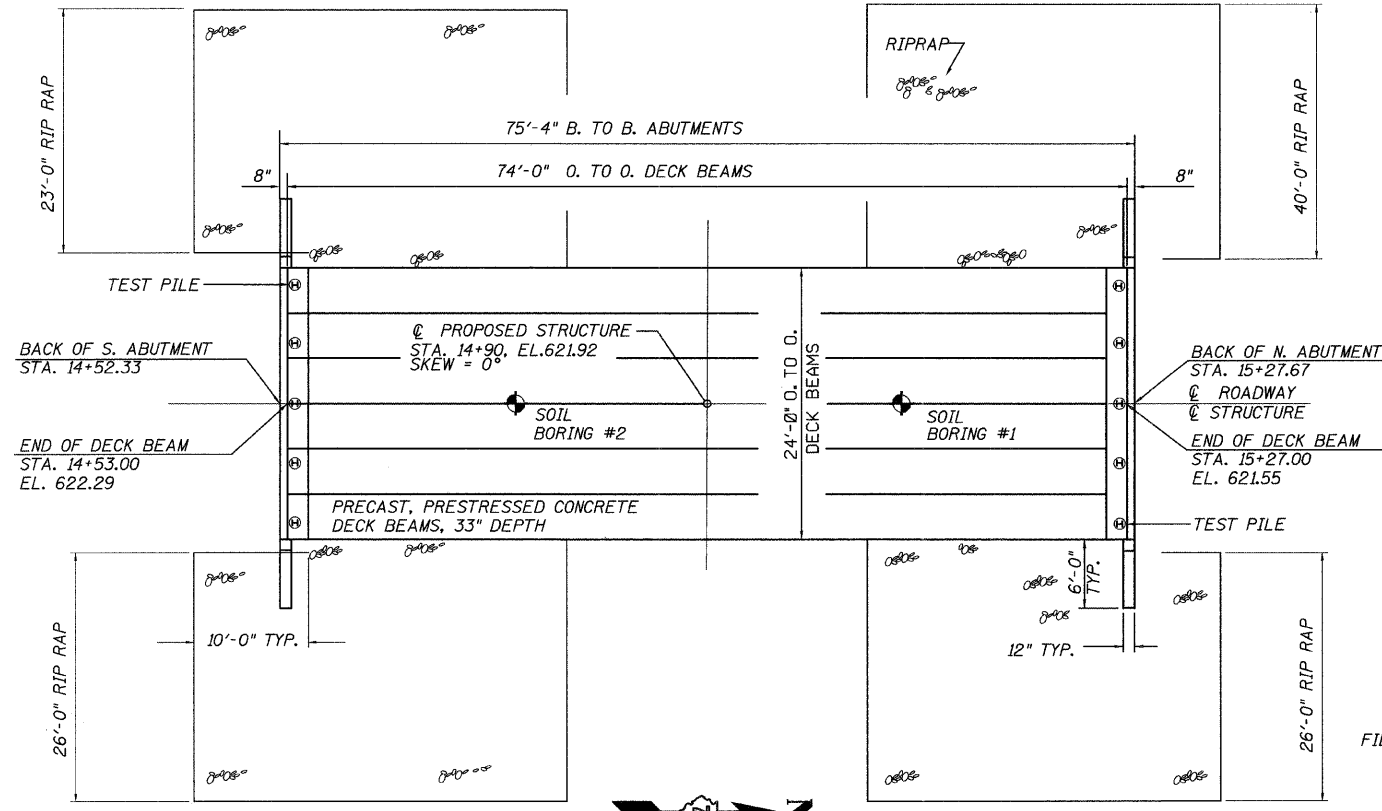
PLAN	SURVEYED	DATE

PROFILE	SURVEYED	DATE

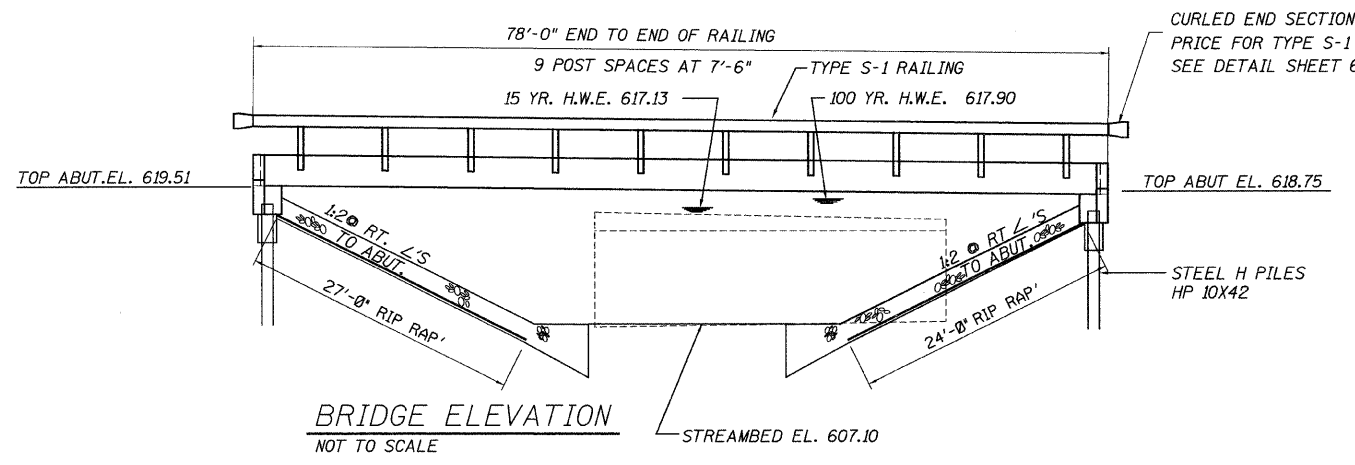


NO.	STRUCTURE	NOTATION	CHRD

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	01-16117-00	Shelby	15	4
STA. 14+52.33		TO STA. 15+27.67		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



BRIDGE PLAN
NOT TO SCALE



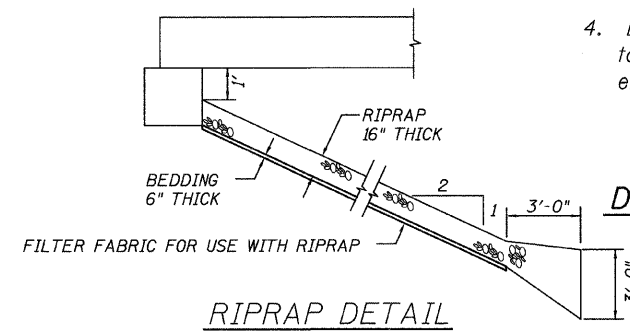
BRIDGE ELEVATION
NOT TO SCALE

TOTAL BILL OF MATERIAL				
ITEM	UNIT	SUBSTR.	SUPER	TOTAL
STONE RIPRAP, CLASS A4	TON	448		448
FILTER FABRIC	SQYD	668		668
REMOVAL OF EXISTING STRUCTURES	LSUM	1		1
STRUCTURE EXCAVATION	CU. YD.	13		13
CONCRETE STRUCTURES	CU. YD.	19.0		19.0
CONCRETE ENCASEMENT	CU. YD.	2.8		2.8
PRECAST, PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ. FT.		1776	1776
REINFORCEMENT BARS	POUNDS	2572		2572
STEEL RAILING, TYPE S1	LIN. FT.		156	156
FURNISHING STEEL PILES HP 10X42	LIN. FT.	192		192
DRIVING PILES	LIN. FT.	192		192
TEST PILES STEEL HP 10X42	EACH	2		2
NAME PLATE	EACH		1	1

WATERWAY INFORMATION									
DRAINAGE AREA = 7.4 SQ. MI. LOW GRADE ELEV. = 618.82 @ STA. 14+90									
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT. EXIST.	OPENING SQ. FT. PROP.	NAT. H.W.E.	HEAD - FT. EXIST.	HEAD - FT. PROP.	HEADWATER EL. EXIST.	HEADWATER EL. PROP.
DESIGN	15	2729	240	532	617.13	0.30	0.65	617.40	617.78
BASE	100	3767	240	532	617.90	0.50	0.33	618.38	618.23
MAX. CALC.	500	4564	240	532	618.34	--	0.10	-----	618.43

GENERAL NOTES

- The contractor shall drive (2) test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the engineer before ordering the remainder of the piles.
- Boring data is shown in the special provisions only as a guide to the bidders in estimating soil conditions that may be encountered.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (II Modified).
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the engineer.



RIPRAP DETAIL

DESIGN STRESSES:

SUBSTRUCTURE

$F_y = 60,000$ p.s.i. (REINFORCEMENT)
 $F'_c = 3,500$ p.s.i.
 $n = 9$

P.P.C. SUPERSTRUCTURE

$F_y = 60,000$ p.s.i. (REINFORCEMENT)
 $F'_c = 5,000$ p.s.i.
 $F'_{ci} = 4,000$ p.s.i.
 $F'_s = 270,000$ p.s.i. (1/2" STRANDS)
 $F'_{si} = 189,000$ p.s.i. (1/2" STRANDS)

DESIGN LOADING

HS 20-44

DESIGN SPECIFICATIONS

2002 A.A.S.H.T.O., STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (17th Edition)

TRIBUTARY TO RICHLAND CREEK
 BUILT 2000 BY
 SHELBY COUNTY
 RICHLAND TOWNSHIP
 SEC. 01-16117-00-BR
 STATION 14+90 PROJECT NO. BROS-173(162)
 STR. NO. 087-3531 LOADING HS20

LETTERING FOR NAME PLATE
 LOCATE ON THE SE WINGWALL.

THIS STRUCTURE HAS BEEN DESIGNED TO BE STABLE FOR SCOUR CONDITIONS IN ACCORDANCE WITH THE FHWA TECHNICAL ADVISORY - T 5140.23, "EVALUATING SCOUR AT BRIDGES" AND HYDRAULIC ENGINEERING CIRCULAR 18 - EVALUATING SCOUR AT BRIDGES.

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 THE REQUIREMENTS OF THE CURRENT "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES".



MARTIN J. SILVESTER
 STRUCTURAL ENGINEER
 LICENSE EXP. DATE: 11-30-10

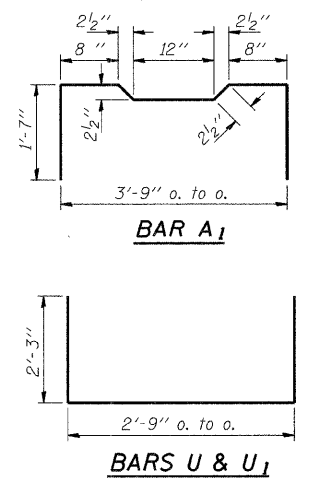
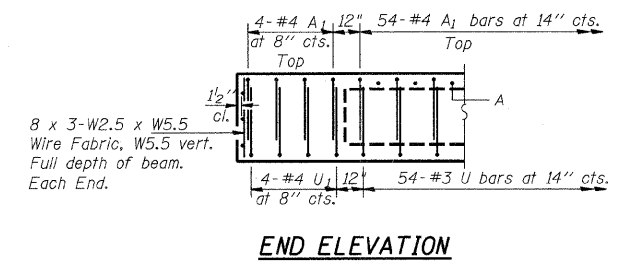
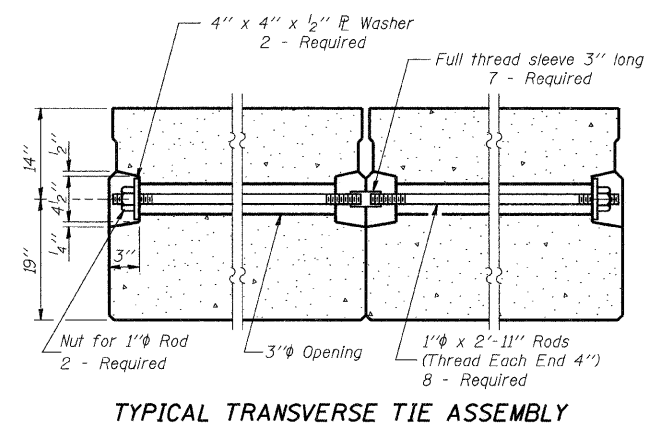
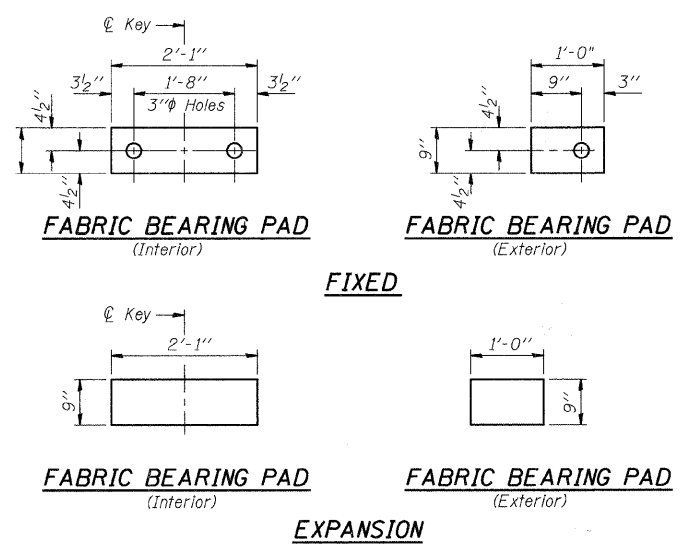
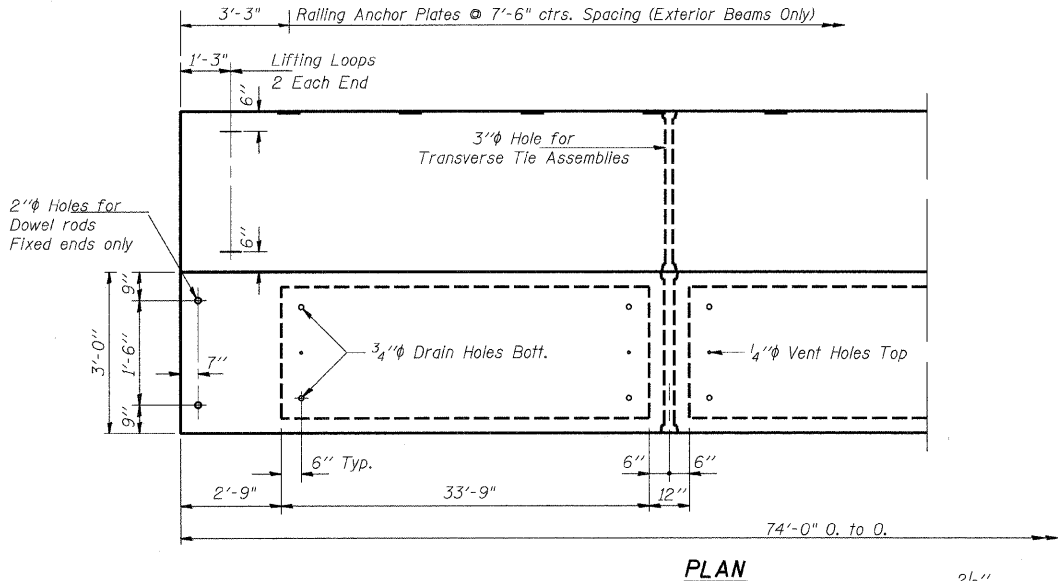
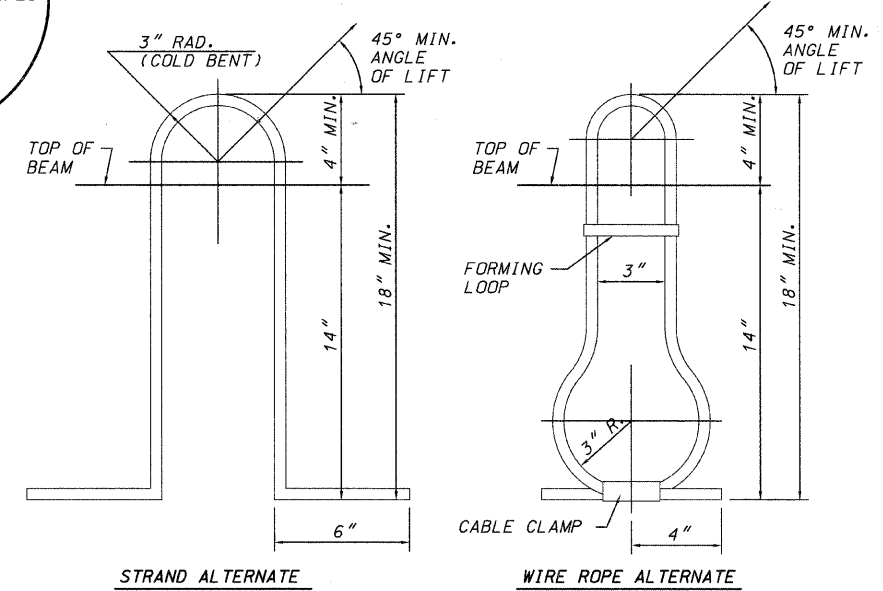
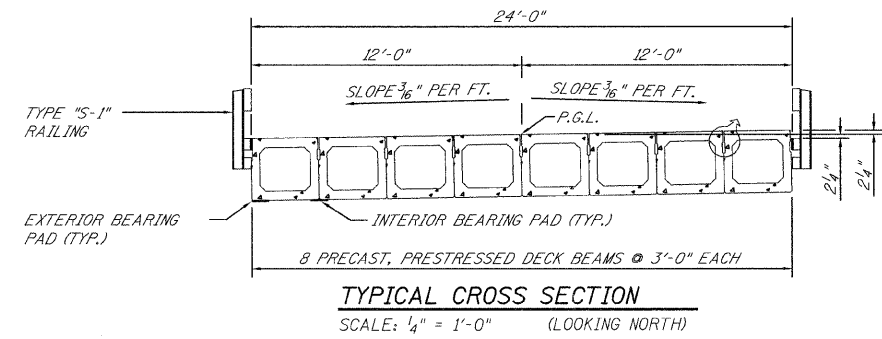
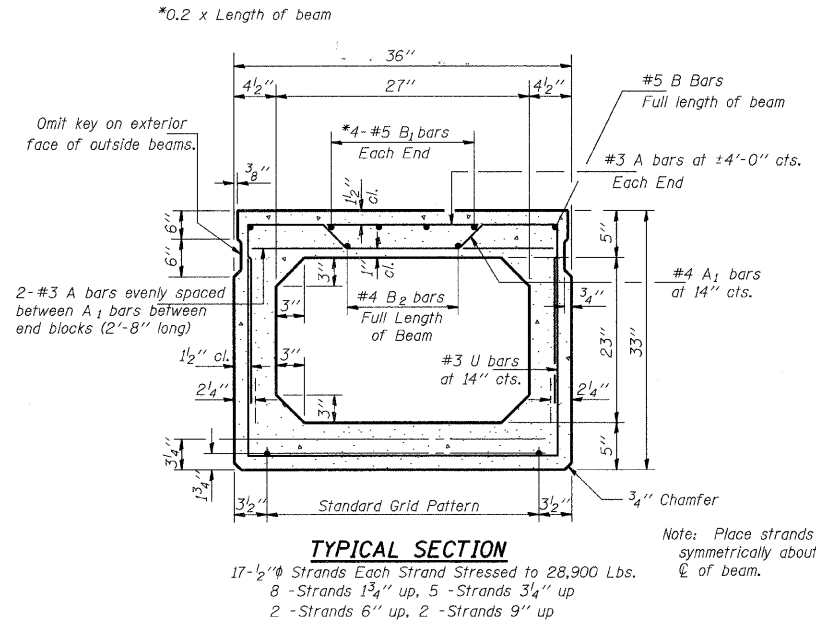
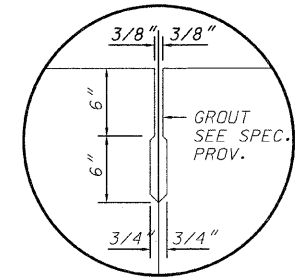
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 BRIDGE PLAN & ELEVATION
 TR 338 OVER TRIBUTARY TO RICHLAND CREEK
 SECTION 01-16117-00-BR
 SHELBY COUNTY
 STA 14+90
 STRUCTURE NO. 087-3531

SCALE: NTS
 DATE: _____ DRAWN BY Baker
 CHECKED BY MJS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	01-16117-00	Shelby	15	5
STA. 14+53		TO STA. 15+27		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
33" Precast Prestressed Concrete Deck Beam	Sq. Ft.	1776



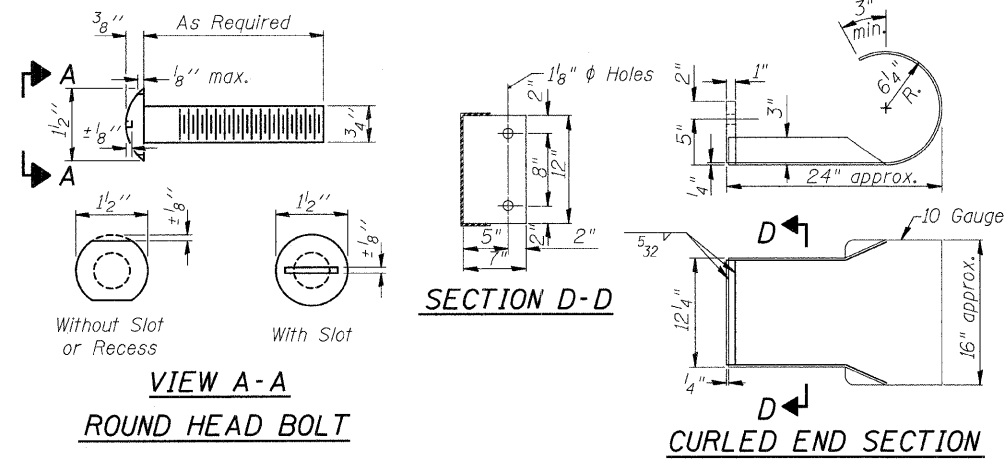
- NOTES**
1. Prestressing steel shall be uncoated high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
 2. Lifting loops shall be 3/4" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 46,000 lbs. or three 1/2" 270 ksi strands, as shown.
 3. Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
 4. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/2" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
 5. 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.
 6. Required Release Strength, f'ci, shall be 4000 p.s.i.
 An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted.

REVISIONS	
NAME	DATE

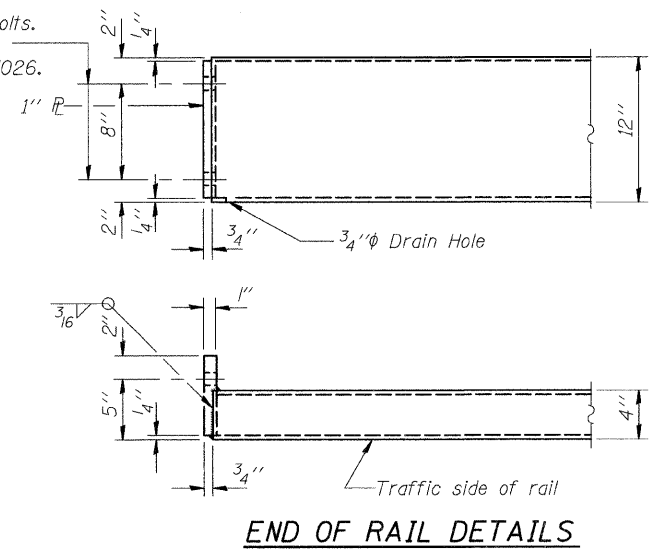
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DECK BEAM DETAILS
 TR 338 TRIBUTARY RICHLAND CREEK
 SECTION 01-16117-00-BR
 SHELBY COUNTY
 STA 14+90
 STRUCTURE NO. 087-3531

SCALE: NTS
 DATE: _____
 DRAWN BY Baker
 CHECKED BY MJS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	01-16117-00	Shelby	15	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



1/8" φ Holes for 1" φ x 4" Round Head Bolts. Provide 2 flat washers & locknuts for guard rail connection shown on Std. 631026.



NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM 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 AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted.

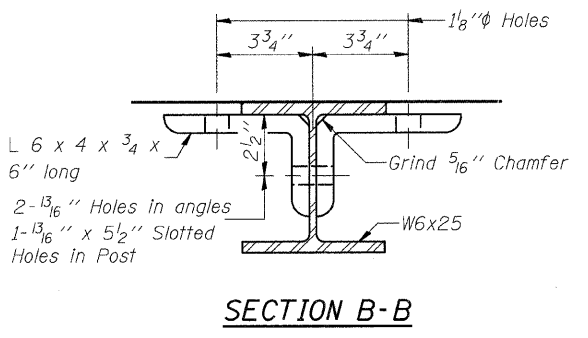
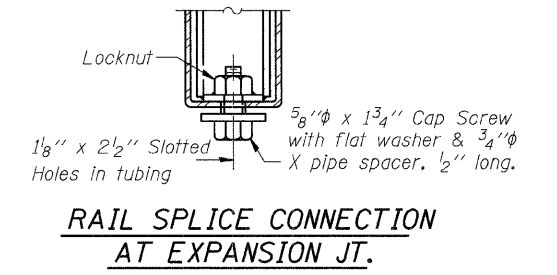
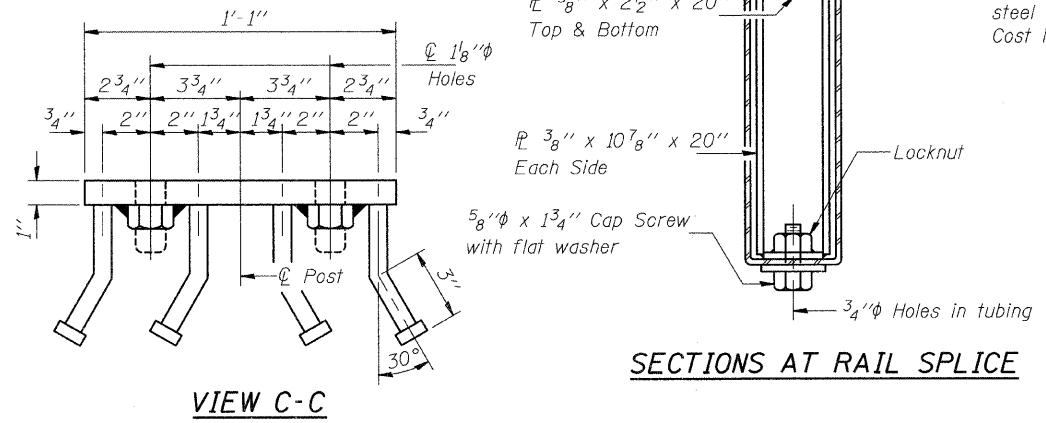
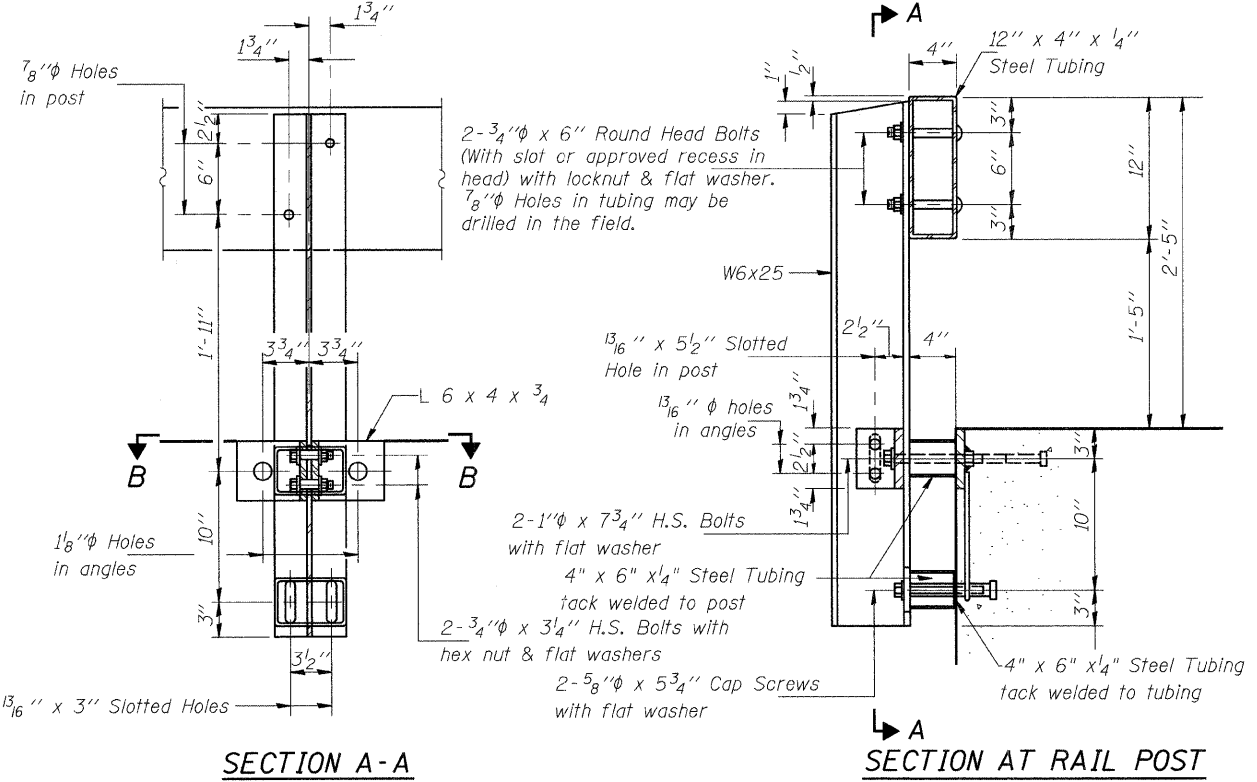
Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for STEEL RAILING, TYPE S-1.

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

The lower portion of the post flange in contact with concrete shall receive two coats of asphalt paint conforming to Section 1060.07 Type II or place 1/8" fabric bearing pad between the post and concrete.

The 3/4" φ high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04(f)(2) of the Standard Specifications. The 1" φ 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" φ cap screws in bottom of posts shall be tightened to a snug fit only.

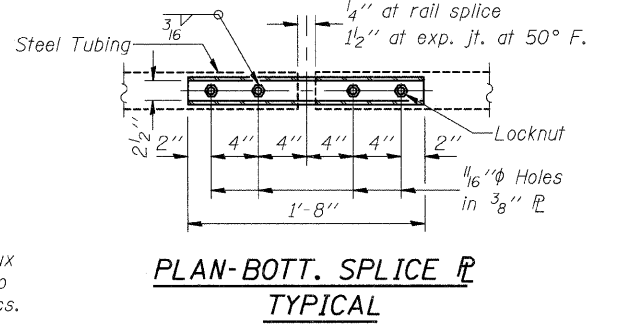
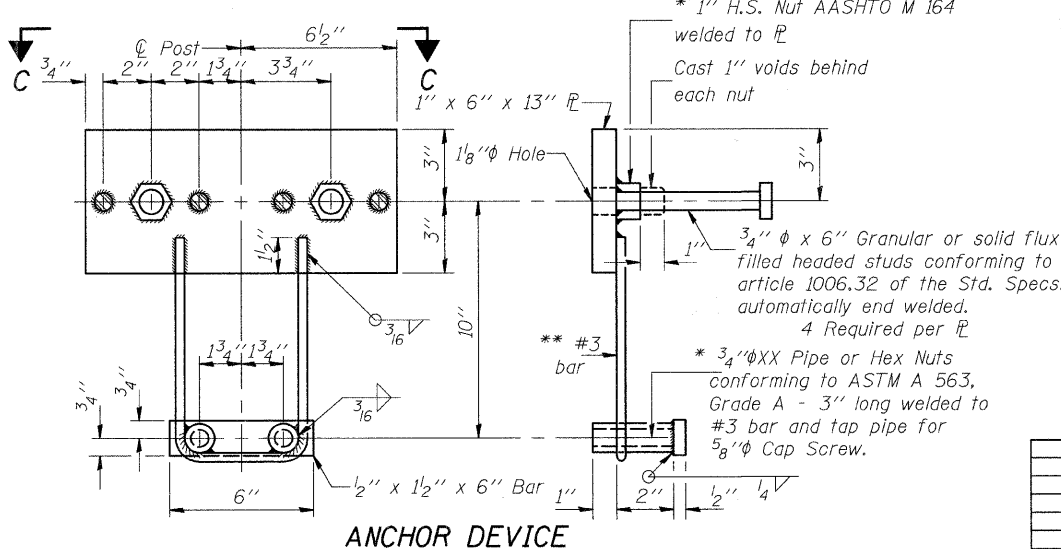
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with STEEL RAILING, TYPE S-1.



BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing Type S-1	Foot	156

** 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".



REVISIONS

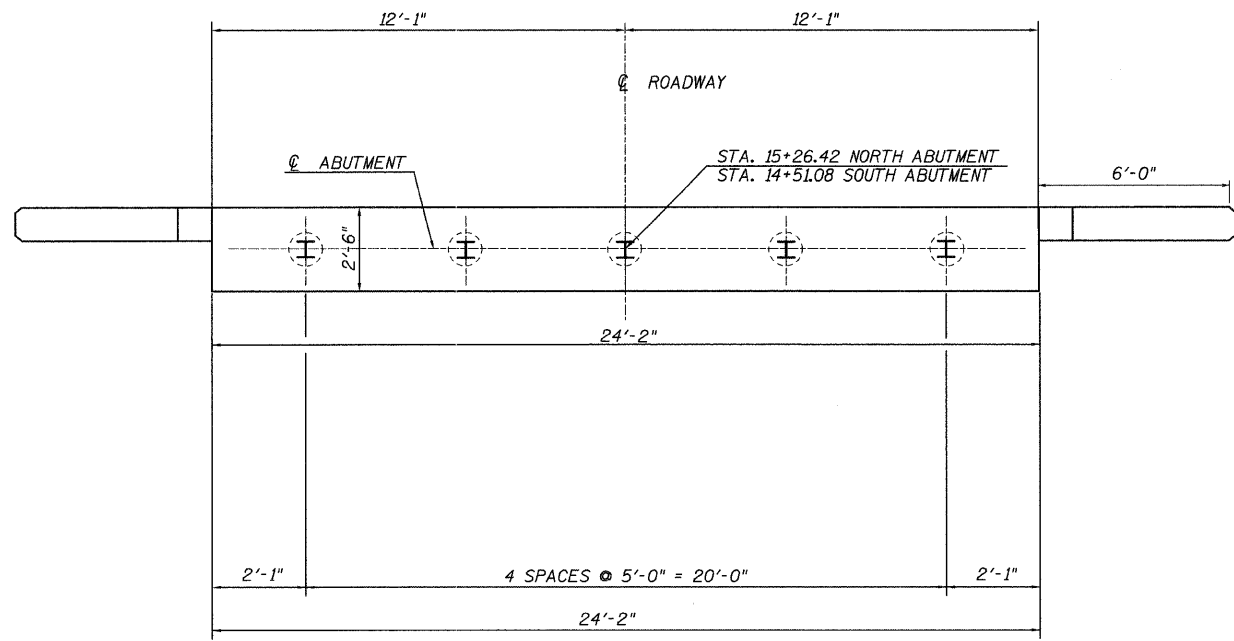
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPE S-1 STEEL RAILING
 TR 338 TRIBUTARY RICHLAND CREEK
 SECTION 01-16117-00-BR
 SHELBY COUNTY
 STA 14+90
 STRUCTURE NO. 087-3531

SCALE: NTS
 DATE: _____
 DRAWN BY Baker
 CHECKED BY WAB

S-1 RAIL ALB 02/09/2009

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	01-16117-00	Shelby	15	7
STA. 14+54.33		TO STA. 15+25.67		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



PLAN
SCALE: 3/8" = 1'-0"

BILL OF MATERIAL				
ONE ABUTMENT (INCLUDES BOTH WINGS)				
BAR	SIZE	NO. REQ'D.	LENGTH	SHAPE
h	#5	28	8'-6"	—
h ₁	#5	3	23'-8"	—
p	#7	6	23'-8"	—
s	#4	26	9'-5"	□
u	#6	8	12'-1"	—
v	#5	28	8'-1"	—
v ₁	#5	25	4'-11"	—
STRUCTURE EXCAVATION		CU. YDS.	6.5	
CONCRETE STRUCTURES		CU. YDS.	9.5	
CONCRETE ENCASEMENT		CU. YDS.	1.4	
REINFORCEMENT BARS		POUNDS	1286	
STEEL PILES HP 10X42 (S. ABUT.)		LIN. FT.	100	
STEEL PILES HP 10X42 (N. ABUT.)		LIN. FT.	92	
TEST PILE (N.&S ABUTMENT)		EACH	2	

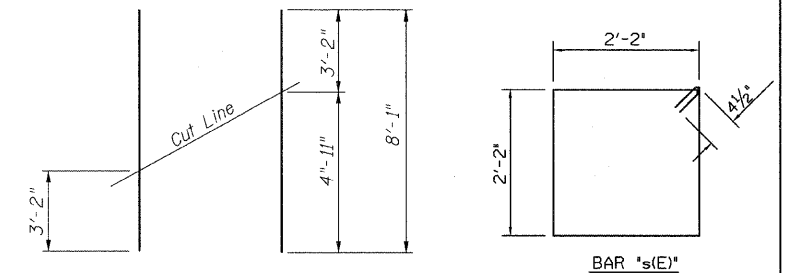
PILE DATA

Type: Steel HP 10X42
No. Required: 10*
Nominal Required Bearing: 335 kips
Allowable Resistance Available: 112 kips
Est. Length (N. Abut.): 25 Ft.
Est. Length (S. Abut.): 23 Ft.

*Includes one Test Pile at North Abutment and one Test Pile at South Abutment

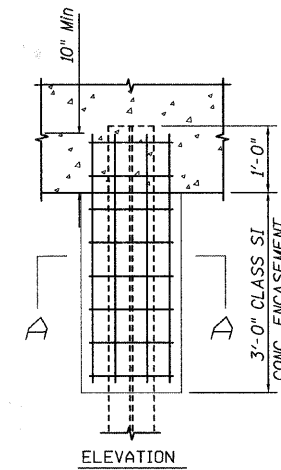
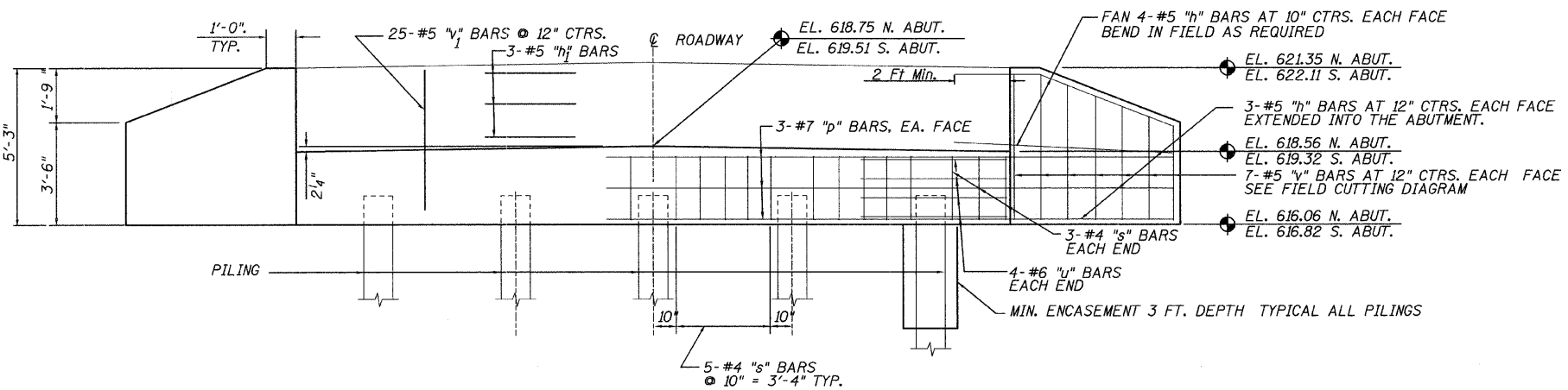
NOTES

The steel H-piles shall be according AASHTO M 270 Grade 50
When test piles are specified, the following note shall be added:
The test pile(s) shall be driven to 110% of the normal required bearing indicated in the pile data information.

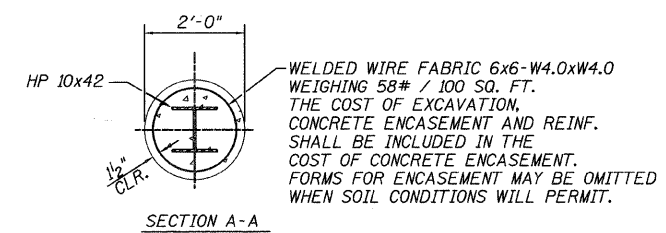


FIELD CUTTING DIAGRAM

Order v(E) bars full length. Cut as shown and use remainder of bars in opposite face.



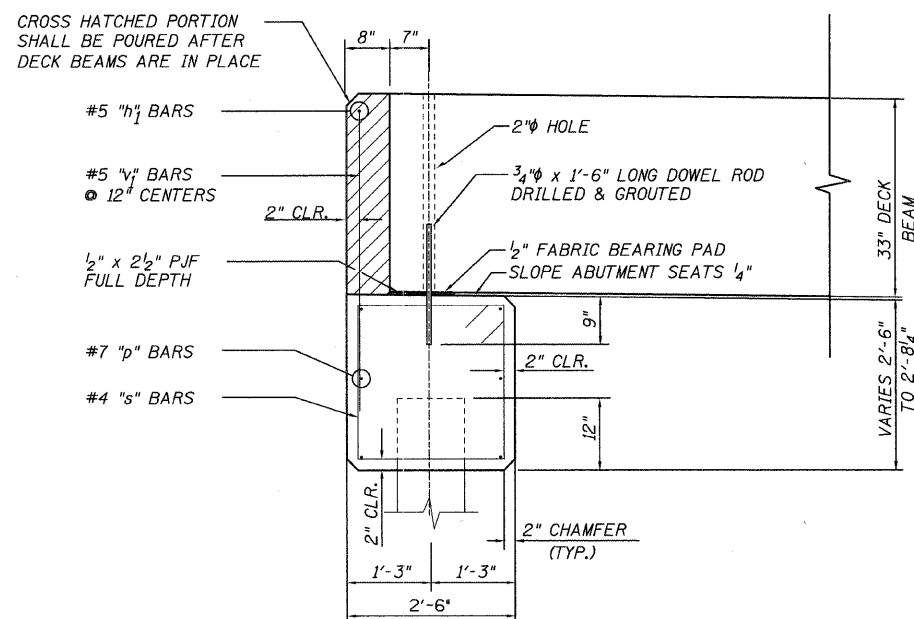
ELEVATION



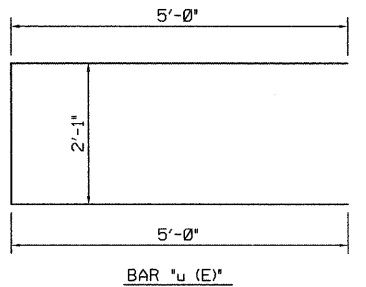
SECTION A-A

PILE ENCASEMENT DETAILS

SCALE: 3/4" = 1'-0"



SECTION THRU ABUTMENT
SCALE: 3/4" = 1'-0"



REINFORCEMENT BARS
SCALE: 3/4" = 1'-0"

REVISIONS	
NAME	DATE

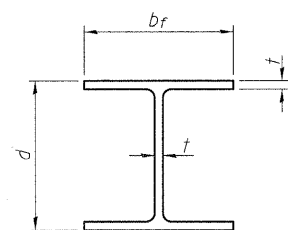
ILLINOIS DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
OVER TRIBUTARY TO RICHLAND CREEK
SECTION 01-16117-00-BR
SHELBY COUNTY
STA 14+90
STRUCTURE NO. 087-3531

SCALE: _____
DATE _____

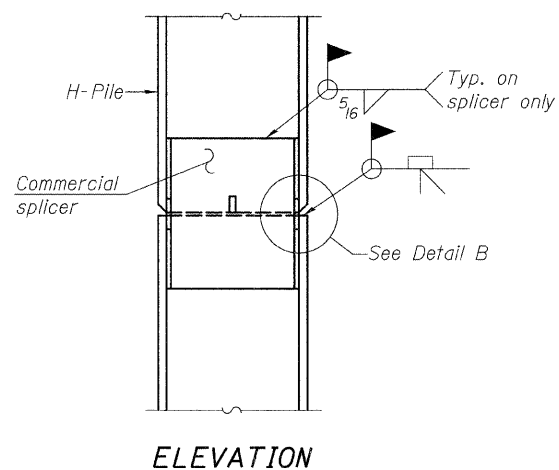
DRAWN BY Baker
CHECKED BY MJS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	01-16117-00	Shelby	15	8
STA. 14+54.33		TO STA. 15+25.67		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

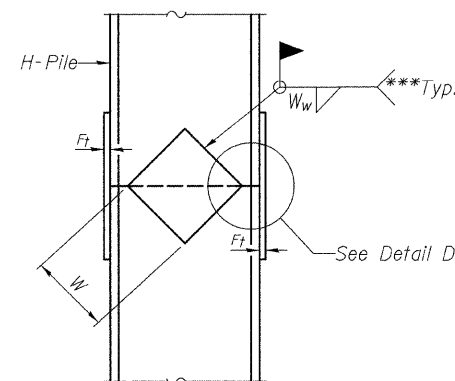


STEEL PILE TABLE

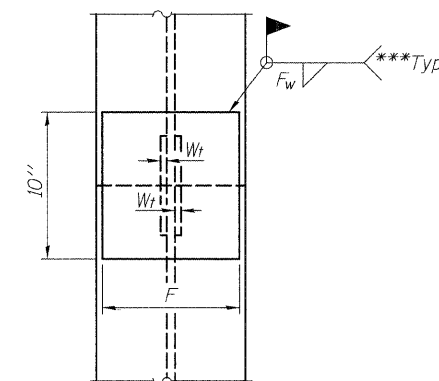
Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53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

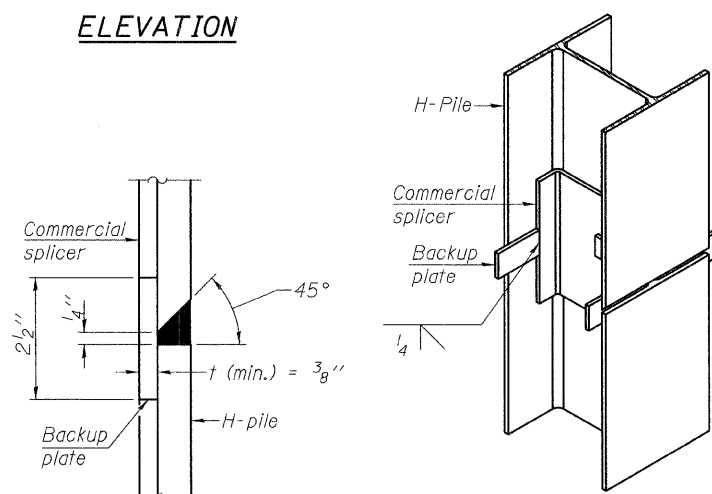


ELEVATION

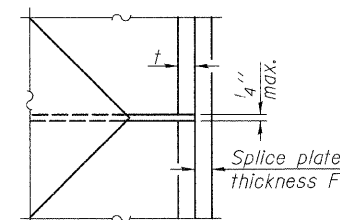


END VIEW

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"	1/16"	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"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	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"



ISOMETRIC VIEW



DETAIL D

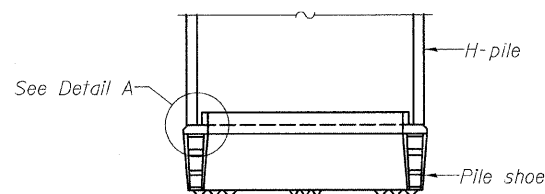
WELDED PLATE FIELD SPLICE

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

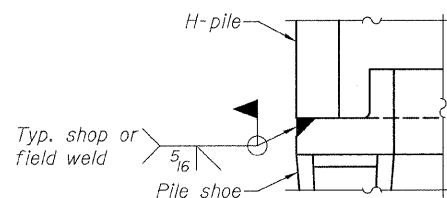
*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

**Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

***Interrupt welds 1/4" from end of each pile.

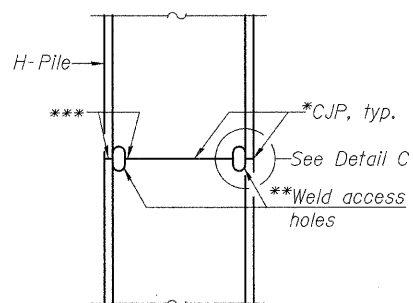


ELEVATION

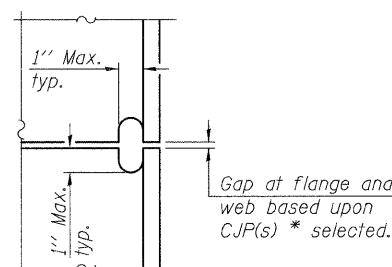


DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION



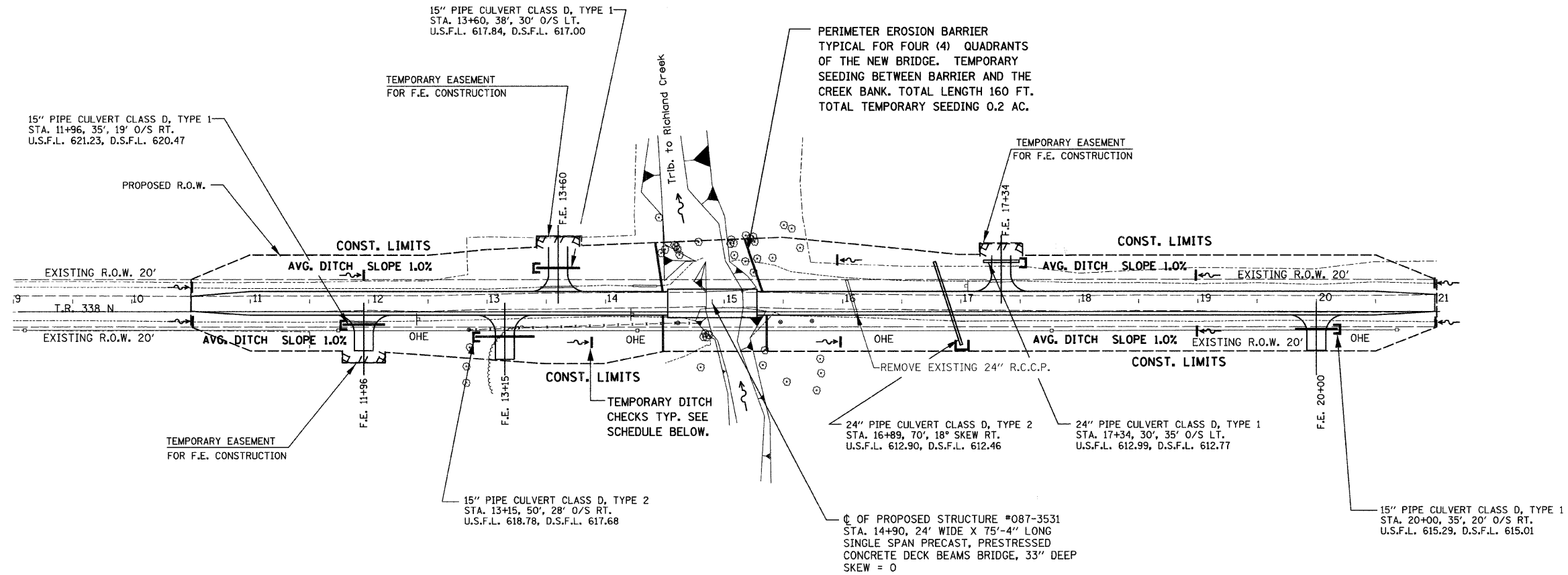
DETAIL C

COMPLETE PENETRATION WELD SPLICE

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TR 338 PILING SPLICE DETAIL
 OVER TRIBUTARY TO RICHLAND CREEK
 SECTION 01-16117-00-BR
 SHELBY COUNTY
 STA 14+90
 STRUCTURE NO. 087-3531
 SCALE: DRAWN BY
 DATE CHECKED BY

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR338	01-16117-00-BR	SHELBY	15	9
STA. 10+50		TO STA. 21+00		



GENERAL NOTES:

1. SEE STANDARD 280001-04
2. SEEDING CL.2 WITH FERTILIZER AND MULCH WITHIN CONSTRUCTION LIMITS AND ALL DISTURBED AREAS.
3. PERIMETER EROSION BARRIER NEEDS TO BE ERECTED BEFORE ANY WORK BEGINS SEE STD. 280001-04.
4. MAINTENANCE OF ALL EROSION CONTROL DEVICES WILL BE PERFORMED IMMEDIATELY AFTER A RAIN EVENT OR ANY DISTURBANCE OF THE CONTROL.
5. REMOVAL AND PROPER CLEAN UP OF ALL TEMPORARY EROSION DEVICES WILL BE REQUIRED AFTER PERMANENT EROSION CONTROL IS IN PLACE AND FUNCTIONING.

TOTAL AREA OF CONSTRUCTION : 1.4 AC.

ESTIMATED RUNOFF COEFFICIENT AFTER CONSTRUCTION:

COURSE TEXTURED GRASS
 SOIL GREATER THAN 40% CLAY
 MODERATE SLOPE
 C=.25

TEMPORARY DITCH CHECK SCHEDULE

Station	Lt.	Rt.
10+50	12'	12'
12+00	25'	25'
13+75	30'	30'
16+00	40'	35'
19+00	25'	25'
21+00	15'	15'

INLET & PIPE PROTECTION

Station	Lt.	Rt.
11+75		19'
12+85		28'
13+39	30'	
17+00		38'
17+55	35'	
20+20		20'

BILL OF MATERIAL

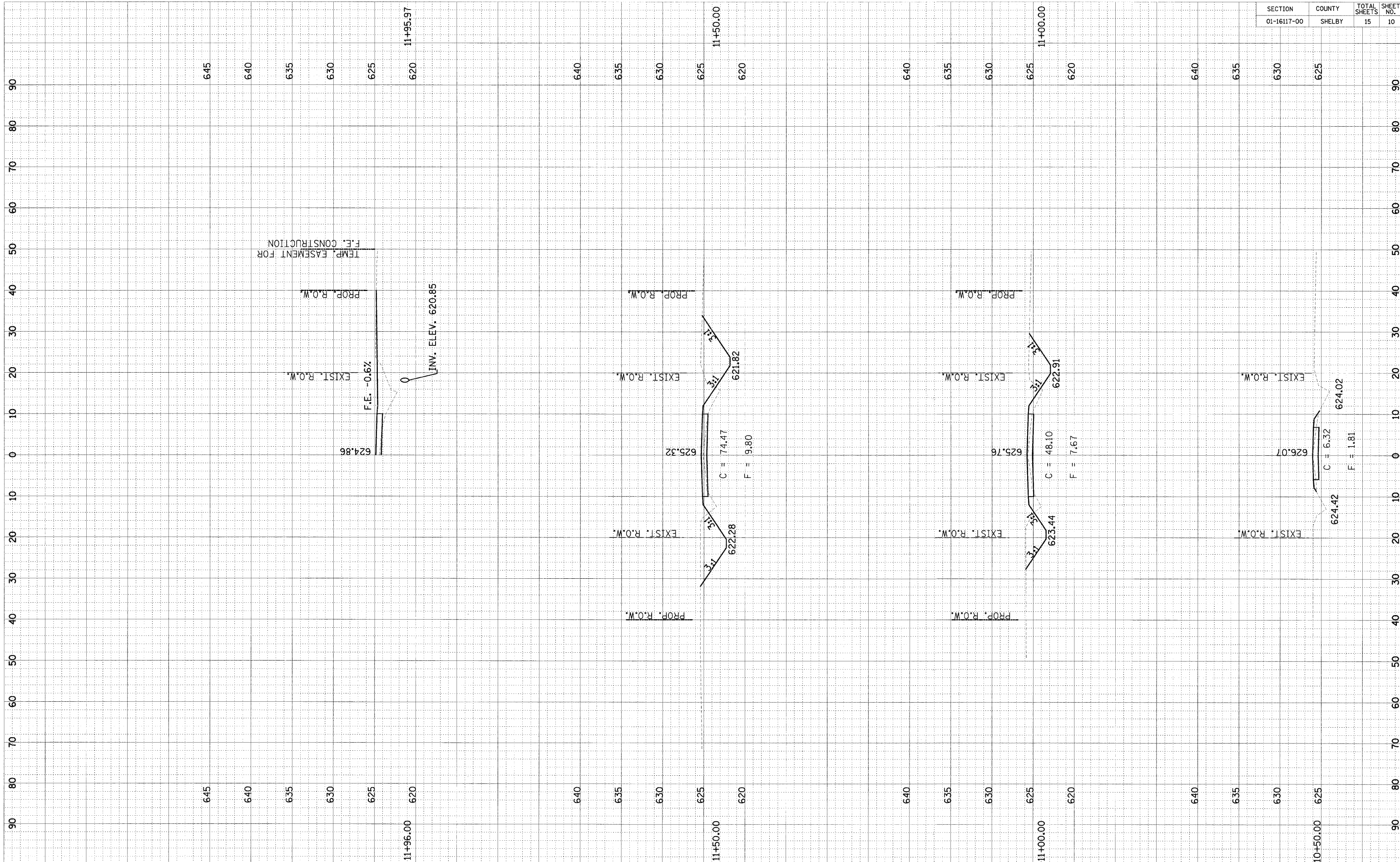
Item	Unit	Qty.
Temporary Erosion Control Seeding	Pound	150
Temporary Ditch Checks	Each	10
Inlet & Pipe Protection	Each	6
Perimeter Erosion Barrier	Foot	160

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EROSION CONTROL PLAN
 TR 338 TRIBUTARY RICHLAND CREEK
 SECTION 01-16117-00-BR
 SHELBY COUNTY STA. 14+90
 STRUCTURE NO. 087-3531

SCALE: N.T.S. DRAWN BY BAKER
 DATE CHECKED BY WAB

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01-16117-00	SHELBY	15	10

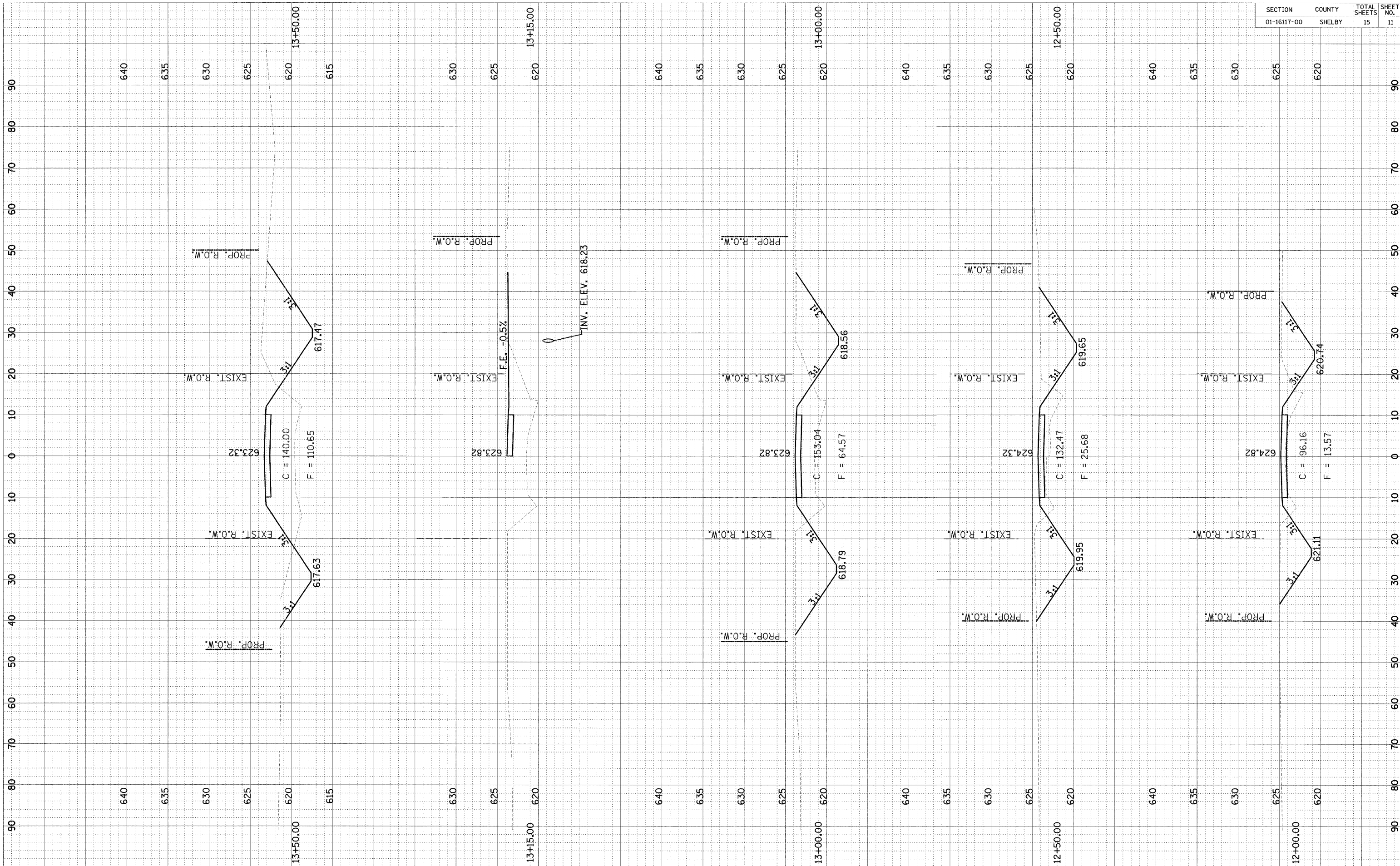


CROSS SECTIONS STA. 10+50.00 TO STA. 11+96.00

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

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

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01-16117-00	SHELBY	15	11



CROSS SECTIONS STA. 12+00.00 TO STA. 13+50.00

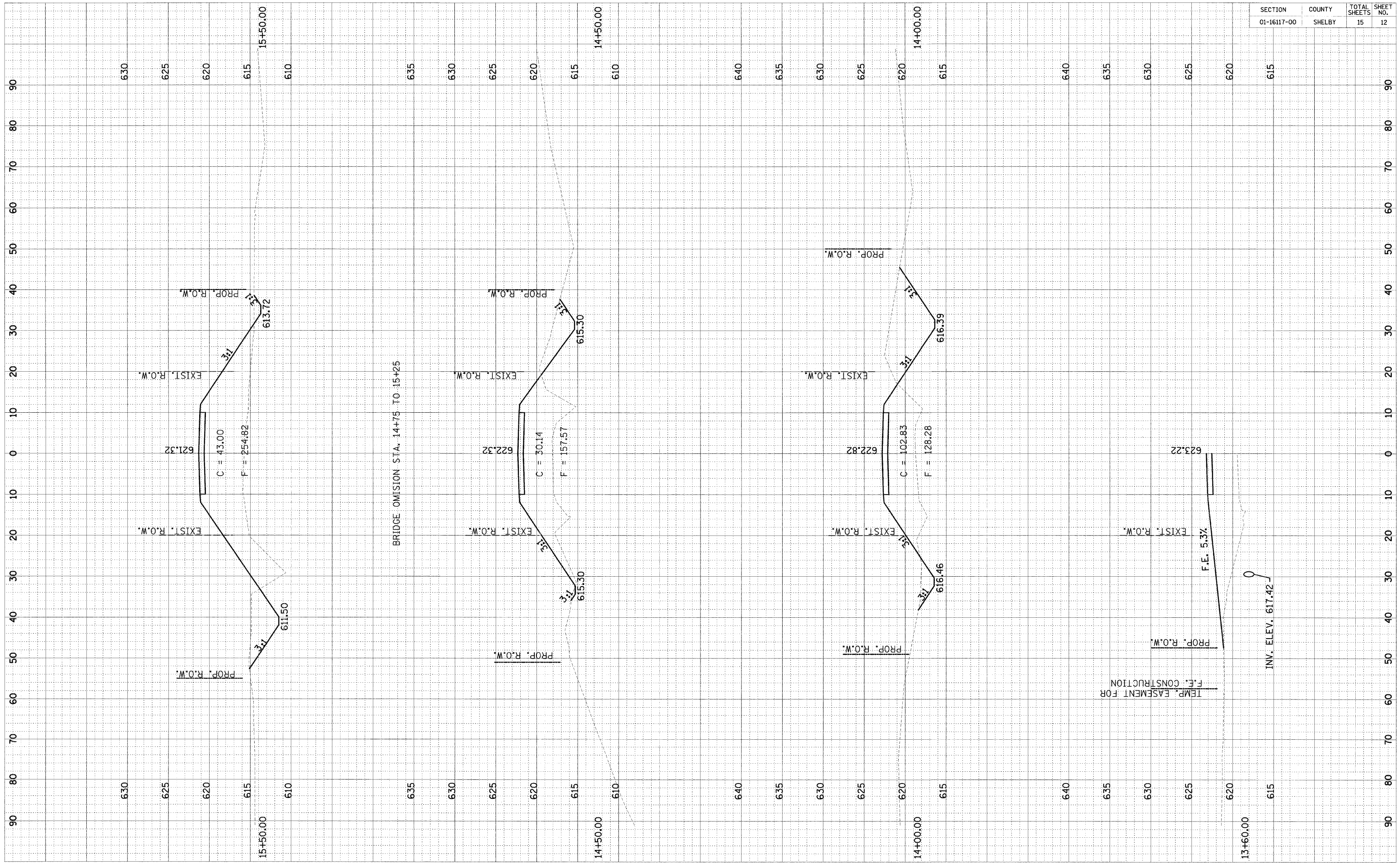
FINAL SURVEY SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS CHECKED

ORIGINAL SURVEY SURVEYED, PLOTTED, NOTE BOOK, TEMPLATE, AREAS CHECKED

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01-16117-00	SHELBY	15	12

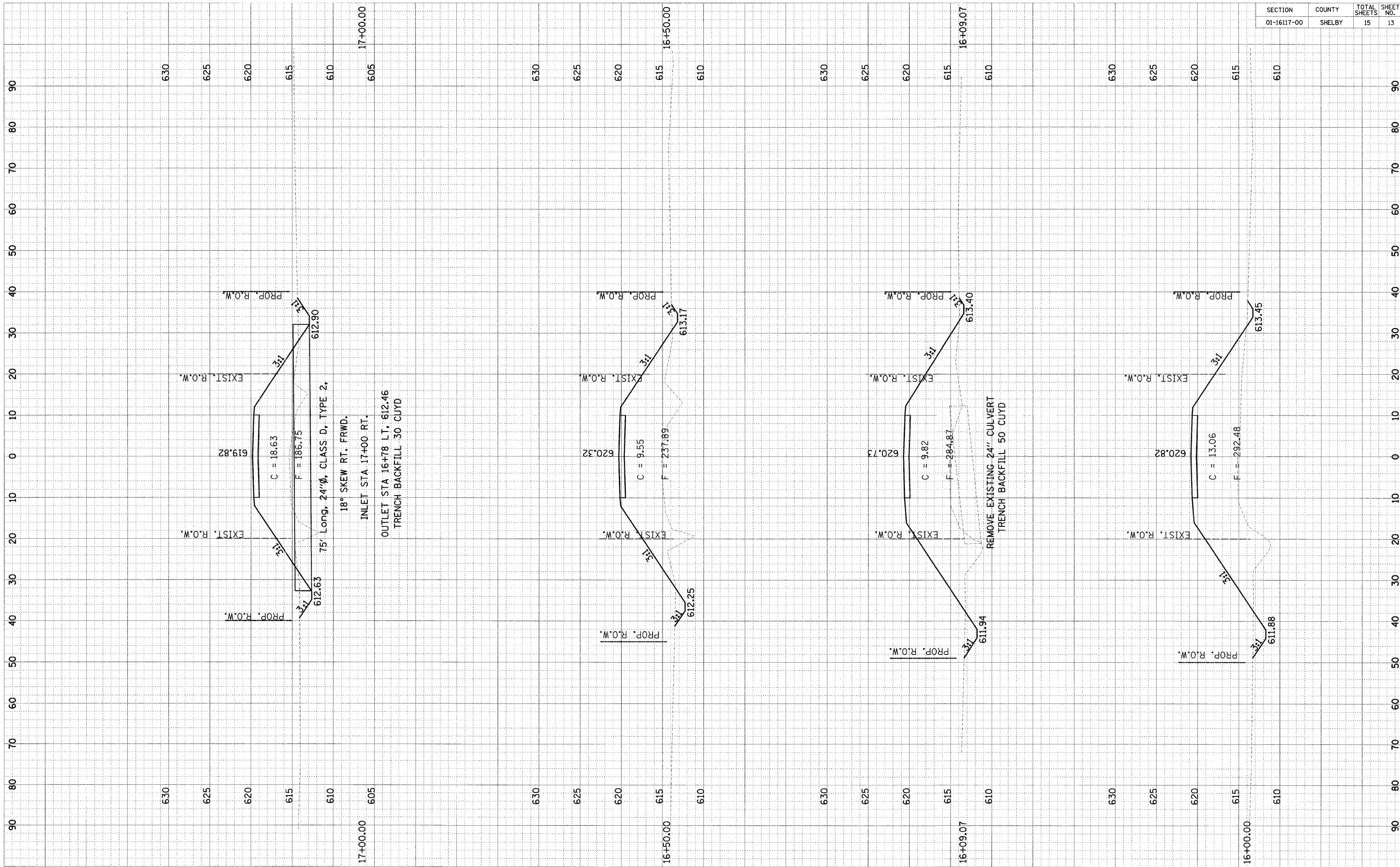
FINAL SURVEY	SURVEYED	PLOTTED	DATE
NOTE BOOK	TEMP. DATE	AREAS CHECKED	
NO.			

ORIGINAL SURVEY	SURVEYED	PLOTTED	DATE
NOTE BOOK	TEMP. DATE	AREAS CHECKED	
NO.			



CROSS SECTIONS STA. 13+60.00 TO STA. 15+50.00

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01-16117-00	SHELBY	15	13

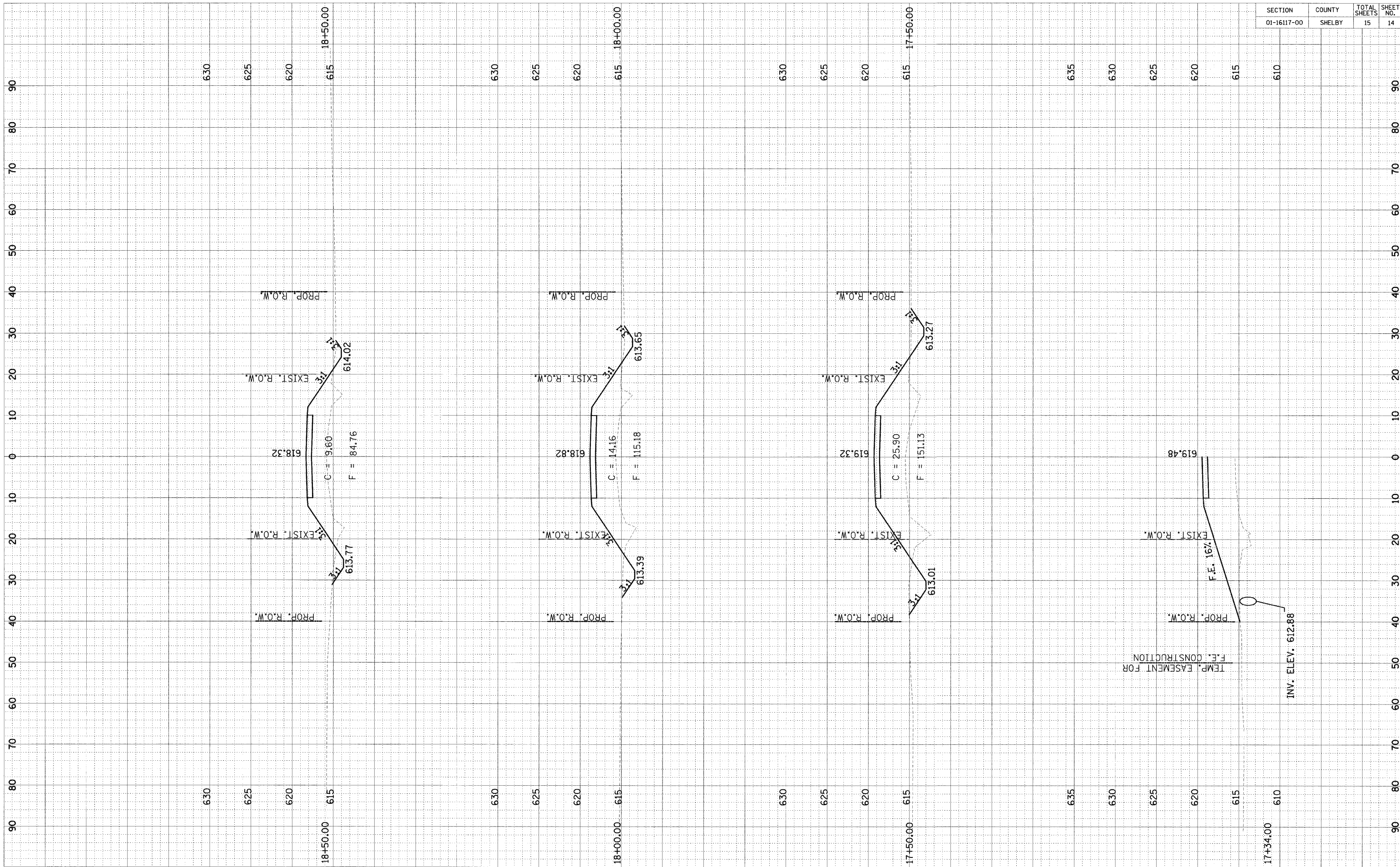


CROSS SECTIONS STA. 16+00.00 TO STA. 17+00.00

FINAL SURVEYED SURVEY PLOTTED NOTE BOOK TEMPLATE AREAS CHECKED

ORIGINAL SURVEY PLOTTED NOTE BOOK TEMPLATE AREAS CHECKED

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01-16117-00	SHELBY	15	14

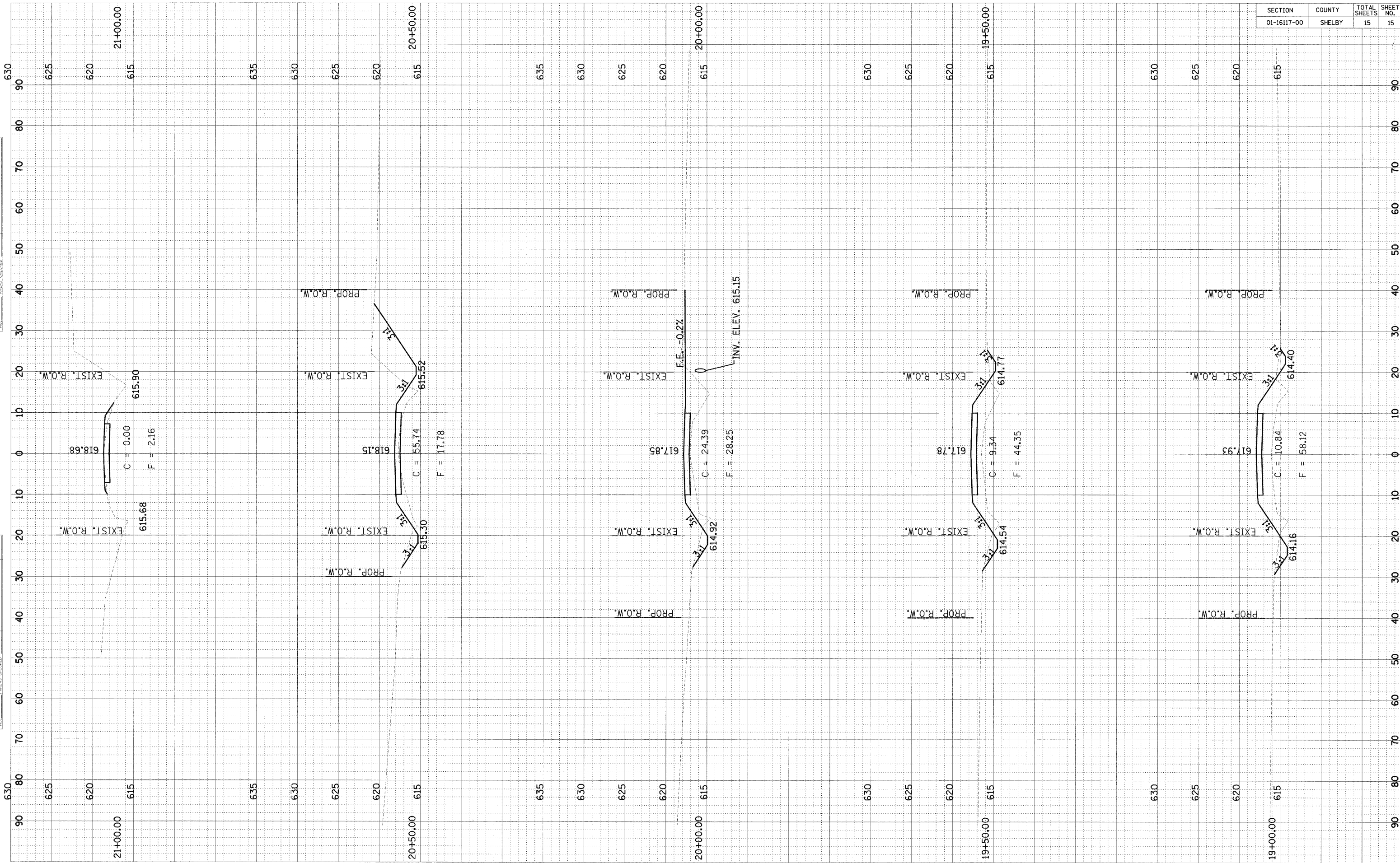


CROSS SECTIONS STA. 17+34.00 TO STA. 18+50.00

FINAL SURVEY SURVEYED PLOTTED TEMPLATE NOTE BOOK NO. AREAS CHECKED

ORIGINAL SURVEY SURVEYED PLOTTED TEMPLATE NOTE BOOK NO. AREAS CHECKED

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
01-16117-00	SHELBY	15	15



CROSS SECTIONS STA. 19+00.00 TO STA. 21+00.00

FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

ORIGINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED