

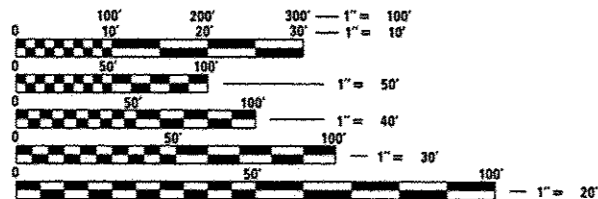
INDEX OF SHEETS

11-08-13 LETTING ITEM 057

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LIST OF STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
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482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
606001-05	CONCRETE CURB TYPE B AND COMBINATION CURB AND GUTTER
J31031-11	TRAFFIC BARRIER TERMINAL, TYPE 6
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635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-RD OPERATIONS, 2L 2W, MORE THAN 15' (4.5M) AWAY
701006-04	OFF-RD OPERATIONS, 2L 2W, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
701011-03	OFF-RD OPERATIONS, MOVING, 2L 2W, DAY ONLY
701301-04	LANE CLOSURE 2L, 2W SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L 2W, UNDIVIDED
701901-02	TRAFFIC CONTROL DEVICES
780001-03	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
B.L.R. 22-7	TYP. APP. OF TRAF. CONTROL DEVICES FOR CONST. ON RURAL LOCAL HIGHWAYS (2L 2W RURAL TRAF.)(ROAD CLOSED TO THRU TRAF.)
B.L.R. 23-4	TRAFFIC BARRIER TERMINAL, TYPE 1
B.L.R. 26-3	STEEL PLATE BEAM GUARDRAIL, 29" (731MM) HEIGHT



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER **JEFF SPILLER**
PROJECT MANAGER **RICK ANDERSON**

CONTRACT NO. 89495
CAT NO. 033796-00

MAURER-STUTZ
ENGINEERS SURVEYORS
3116 DRIES LN STE 100
PEORIA, ILLINOIS 61604
PH. (309) 693-7615
FAX (309) 693-7616
PROFESSIONAL DESIGN FIRM #184-005754

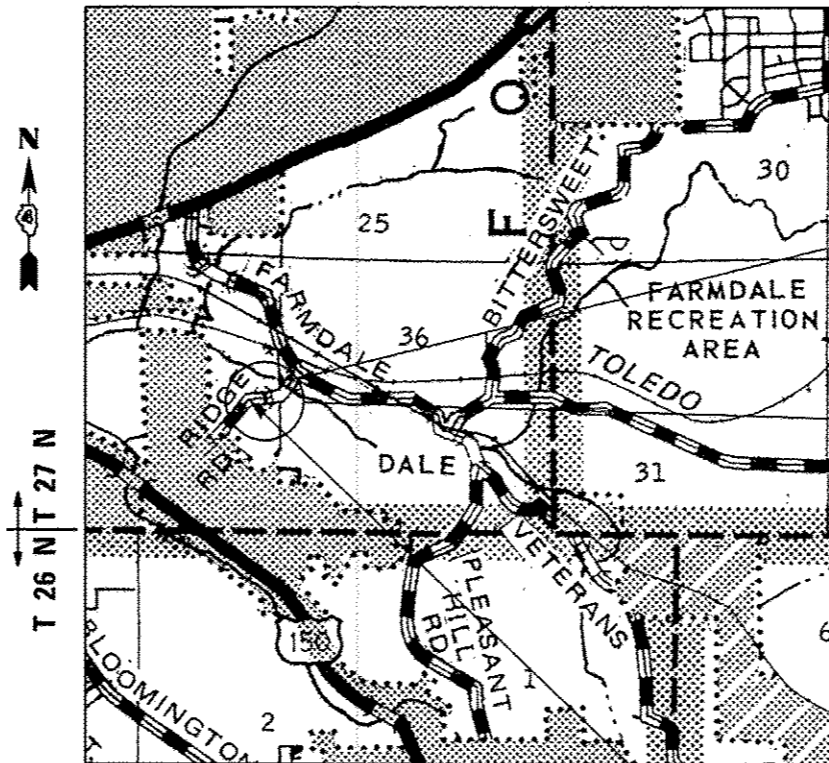
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

ROUTE FAU 6774 (RIDGE ROAD)
SECTION 07-00149-00-BR
PROJECT M-5093(131)
CITY OF EAST PEORIA
FONDULAC ROAD DISTRICT
TAZEWELL COUNTY

C-94-048-08

R 4 W 3rd PM



NOT TO SCALE

IMPROVEMENT ENDS
STATION 16+88.11

PROJECT LOCATION
NEW BRIDGE
CONSTRUCTION
(S.N. 090-6087)
PLACED ON
NEW ALIGNMENT

IMPROVEMENT BEGINS
STATION 12+00.00

GROSS LENGTH = 488.11 FT. = 0.092 MILE
NET LENGTH = 325.81 FT. = 0.062 MILE
FUNCTIONAL CLASSIFICATION: URBAN COLLECTOR
DESIGN SPEED = 35MPH

8/7/2013
Jeffrey D. Spiller, PE
PE No. 062-057630
Exp. Date 11/30/2013

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6774	07-00149-00-BR	TAZEWELL	52	1
		ILLINOIS	CONTRACT NO. 89495	



APPROVED August 14 20 13
Steve Ferguson
DIRECTOR OF PUBLIC WORKS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PASSED 08/16 20 13
Tom Sassine
DISTRICT FOUR ENGINEER OF LOCAL ROADS AND STREETS

RELEASED FOR BID BASED ON 8-16 20 13
Joseph E. Conroy
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

UTILITIES - LOCATIONS/INFORMATION ON PLANS

The locations of existing water mains, gas mains, sewers, 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 they are not guaranteed. Unless elevations are shown --- all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

PLAN ELEVATIONS - U.S.G.S. MEAN SEA LEVEL DATUM

All elevations shown on the plans are established from U.S.G.S. mean sea level datum.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

Mixture Use(s):	Polymerized HMA Surface Course	Polymerized HMA Binder Course	HMA Shoulders
RAP % (Max)**:	10% Max	10% Max	25% Max
AC/PG:	SBS or SBR PG 64-28	SBS or SBR PG 64-28	PG 64-22
Design Air Voids:	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50
Mixture Composition: (Gradation Mixture)	IL 9.5 or IL 12.5	IL 12.5	IL 19.0
Friction Aggregate	MIX C	N/A	N/A

**If the RAP option is selected, the asphalt cement grade may need to be adjusted; this will be determined by the Engineer.

PAVING SURFACE COURSE

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the hot-mix asphalt surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culverts, storm sewers, and/or pipe drains required prior to ordering these items.

SIGNING

Sign locations may vary from the stations shown on the plans in accordance with directions from the Engineer at the time of construction. Sign locations may be adjusted in the field to avoid any found utilities.

STRUCTURE LOCATIONS/ELEVATIONS

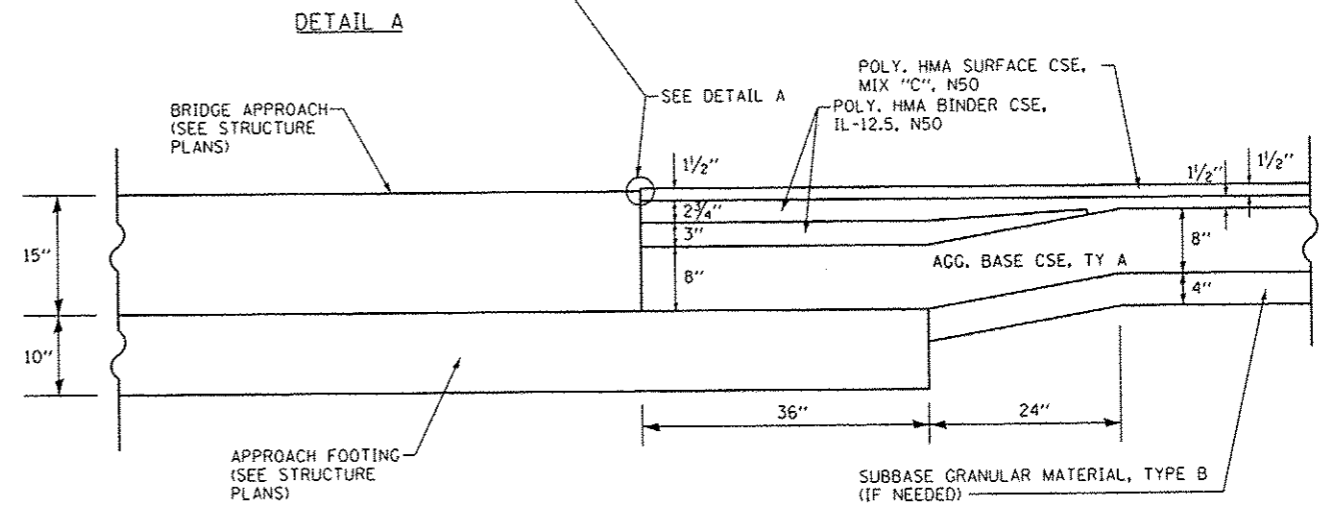
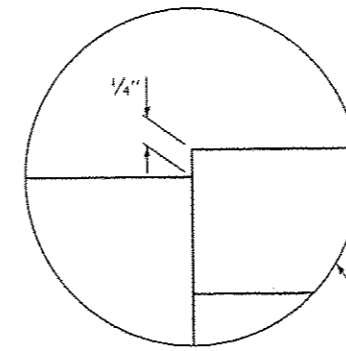
The station, offset, and elevation information in the plans are given at the location where the pavement or shoulder meets the B-6.24 curb and gutter, or the extension of this line longitudinally. This point is indicated on the details for the respective structures in the plans.

ENVIRONMENTAL REVIEWS

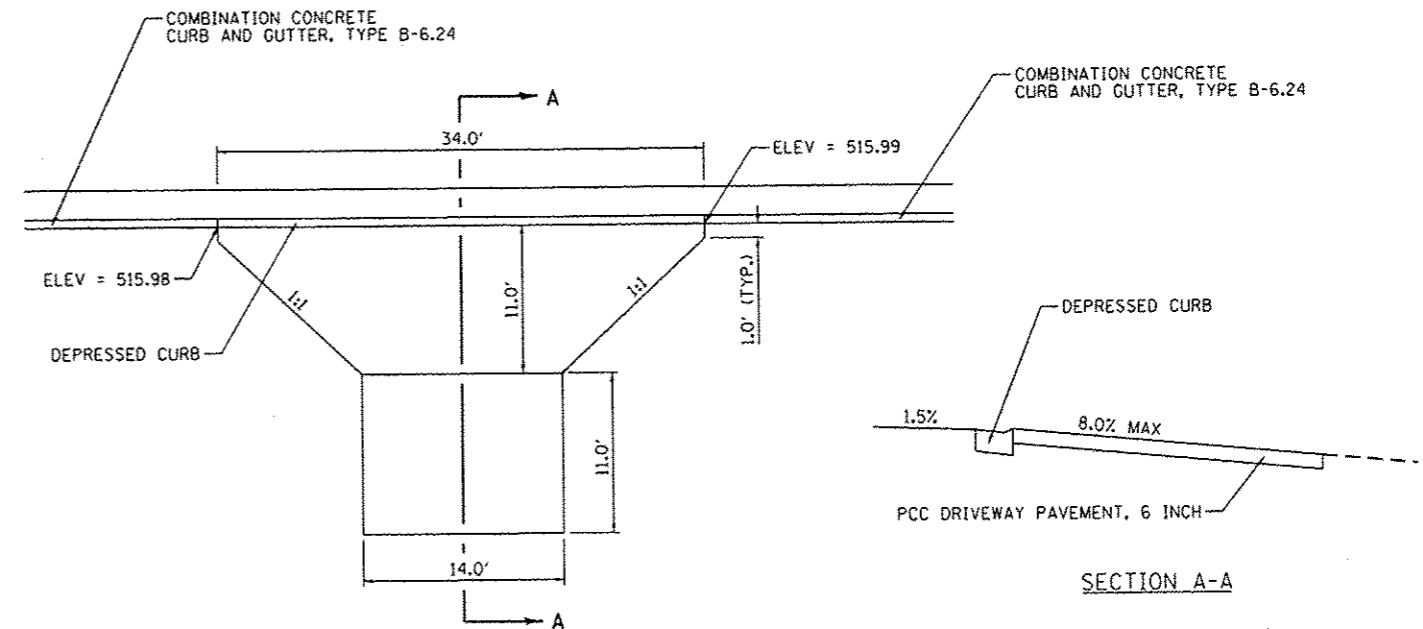
Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site. Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications. Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites. The required environmental resource documentation shall include the following:

- BDE Form 2289 (Environmental Survey Request)
- A location map showing the size limits and location of the use area
- Signed Property Owner Agreement form - D4 PI0100
- Color photographs depicting the use area
- Borrow Area Entry Agreement form - D4 PI0101

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.



PAVEMENT CONNECTOR DETAIL



NOTE:

DUE TO CURRENT RESIDENTIAL CONSTRUCTION, ENTRANCE ELEVATIONS WILL NEED TO BE DETERMINED DURING RIDGE ROAD CONSTRUCTION BY THE RESIDENT ENGINEER.

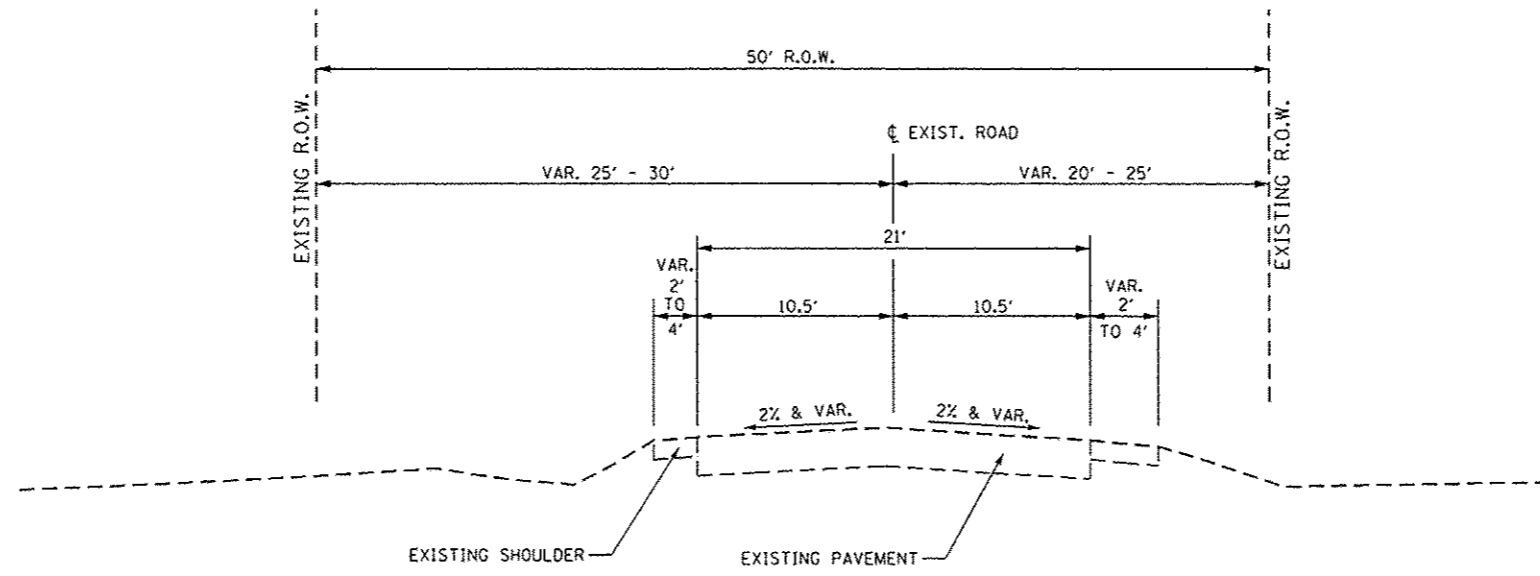
ENTRANCE DETAIL

FILE NAME =	USER NAME = bathner	DESIGNED -	REVISED -	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) GENERAL NOTES AND SPECIAL DETAILS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
5\237\2007\23707008\RidgeRoadBridge\C	DO\CADD Sheets\0489495\shg-gon.dgn	DRAWN -	REVISED -			6774	07-00149-00-BR	TAZEWELL	52	2	
	PLOT SCALE = 48.0000' / 1" =	CHECKED -	REVISED -			SCALE:		SHEET NO. 1 OF 1 SHEETS		STA.	TO STA.
	PLOT DATE = 8/8/2013	DATE -	REVISED -					FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT	
						CONTRACT NO. 89495					

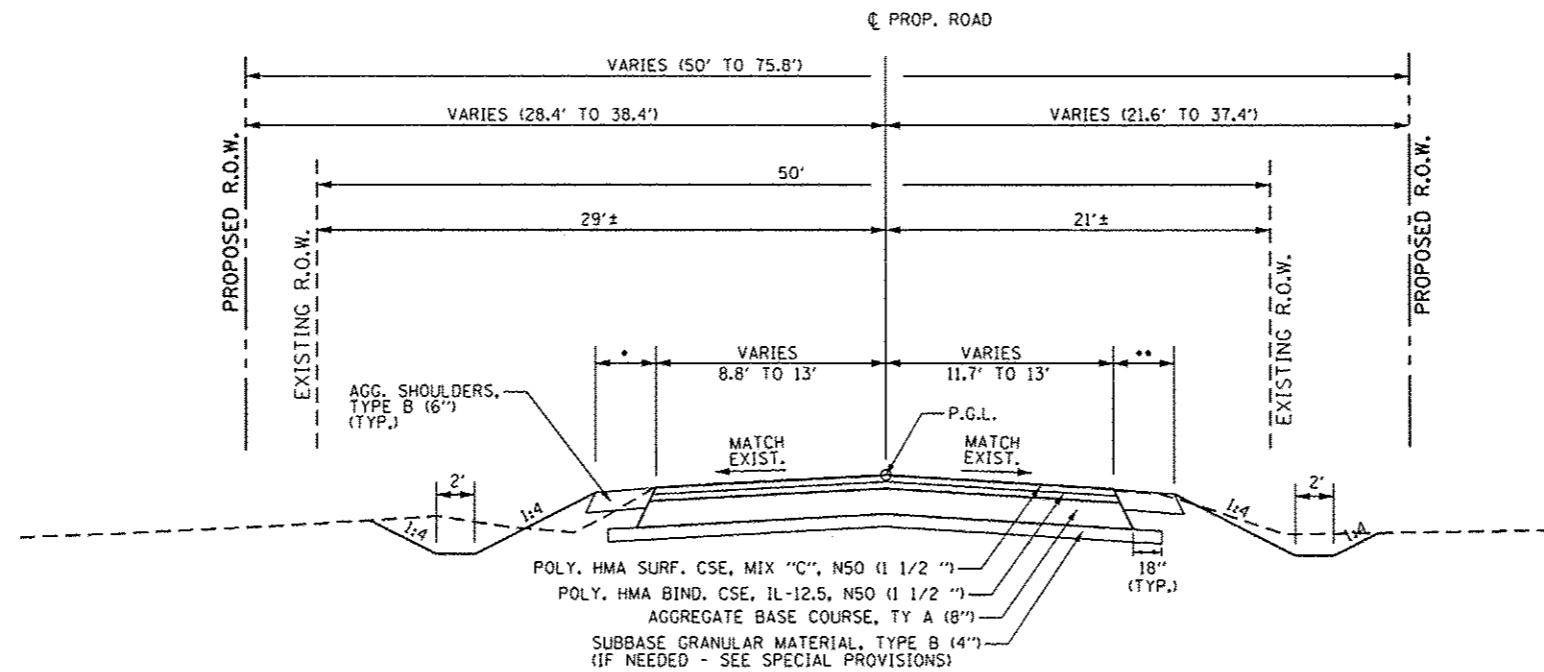
SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE 80% FEDERAL / 20% STATE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	BRIDGE 0011
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	20	20	
20200100	EARTH EXCAVATION	CU YD	645	645	
20300100	CHANNEL EXCAVATION	CU YD	420	420	
20400800	FURNISHED EXCAVATION	CU YD	360	360	
20600150	TRENCH BACKFILL	CU YD	39	39	
25000110	* SEEDING, CLASS 1A	ACRE	0.50	0.50	
25000300	* SEEDING, CLASS 3	ACRE	0.25	0.25	
25000400	* NITROGEN FERTILIZER NUTRIENT	POUND	44	44	
25000500	* PHOSPHORUS FERTILIZER NUTRIENT	POUND	44	44	
25000600	* POTASSIUM FERTILIZER NUTRIENT	POUND	44	44	
25100115	* MULCH, METHOD 2	ACRE	0.50	0.50	
25100630	* EROSION CONTROL BLANKET	SQ YD	324	324	
28000250	* TEMPORARY EROSION CONTROL SEEDING	POUND	148	148	
28000305	TEMPORARY DITCH CHECKS	FOOT	40	40	
28000400	PERIMETER EROSION BARRIER	FOOT	462	462	
28000500	INLET AND PIPE PROTECTION	EACH	6	6	
28100107	STONE RIPRAP, CLASS A4	SQ YD	1020	186	834
28200200	FILTER FABRIC	SQ YD	1020	186	834
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	230	230	
35100100	AGGREGATE BASE COURSE, TYPE A	TON	566	566	
40600115	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)	GALLON	564	564	
40600300	AGGREGATE (PRIME COAT)	TON	1	1	
40603212	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-12.5, N50	TON	97	97	
40603510	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N60	TON	106	106	
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	47	47	
44000100	PAVEMENT REMOVAL	SQ YD	1044	1044	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	20	20	
48203023	HOT-MIX ASPHALT SHOULDERS, 6 1/2"	SQ YD	175	175	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50200100	STRUCTURE EXCAVATION	CU YD	124		124
50201101	COFFERDAM (TYPE 1) (LOCATION - 1)	EACH	1		1
50201102	COFFERDAM (TYPE 1) (LOCATION - 2)	EACH	1		1
50300225	CONCRETE STRUCTURES	CU YD	153.6		153.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	247.0		247.0
50300260	BRIDGE DECK GROOVING	SQ YD	568		568
50300280	CONCRETE ENCASMENT	CU YD	8.2		8.2
50300300	PROTECTIVE COAT	SQ YD	720		720
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	1935		1935
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	76,900		76,900
50800515	BAR SPLICERS	EACH	78		78

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE 80% FEDERAL / 20% STATE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0004	BRIDGE 0011
50800530	MECHANICAL SPLICERS	EACH	48		48
51201600	FURNISHING STEEL PILES HP12X53	FOOT	1002		1002
51202305	DRIVING PILES	FOOT	1002		1002
51203600	TEST PILE STEEL HP12X53	EACH	4		4
51500100	NAME PLATES	EACH	1		1
52100520	ANCHOR BOLTS, 1"	EACH	40		40
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1	
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1	1	
550A0050	STORM SEWERS, CLASS A, TYPE 1, 12"	FOOT	297	297	
550A0070	STORM SEWERS, CLASS A, TYPE 1, 15"	FOOT	14	14	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	51		51
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	454	454	
60605500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (VARIABLE WIDTH GUTTER FLAG)	FOOT	120	120	
63000001	* STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	100	100	
63100167	* TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	142	142	
63301210	* REMOVE AND REERECT STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	63	63	
66600105	* FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	9	9	
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	9	9	
67100100	MOBILIZATION	L SUM	1	1	
70101835	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22	L SUM	1	1	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	14	14	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2075	2075	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	692	692	
78001110	* PAINT PAVEMENT MARKING - LINE 4"	FOOT	2075	2075	
78100100	* RAISED REFLECTIVE PAVEMENT MARKER	EACH	4	4	
78100105	* RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	2	2	
78201000	* TERMINAL MARKER, DIRECT APPLIED	EACH	4	4	
A2001228	* TREE, ACER RUBRUM RED SUNSET (RED SUNSET RED MAPLE), 4" CALIPER, BALLED AND BURLAPPED	EACH	1	1	
X5860010	Granular backfill for structures	CU YD	66.0		66.0
X6020082	INLETS, TYPE G-1	EACH	4	4	
X6021065	INLETS, TYPE G-1, SPECIAL	EACH	2	2	
X6310214	* TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)	EACH	4	4	
XX006086	SIGN TO BE RELOCATED	EACH	6	6	
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	84	84	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0026407	TEMPORARY SHEET PILING	SQ FT	846		846
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	128		128
Z0062456	TEMPORARY PAVEMENT	SQ YD	54	54	

* DESIGNATES SPECIALTY ITEM



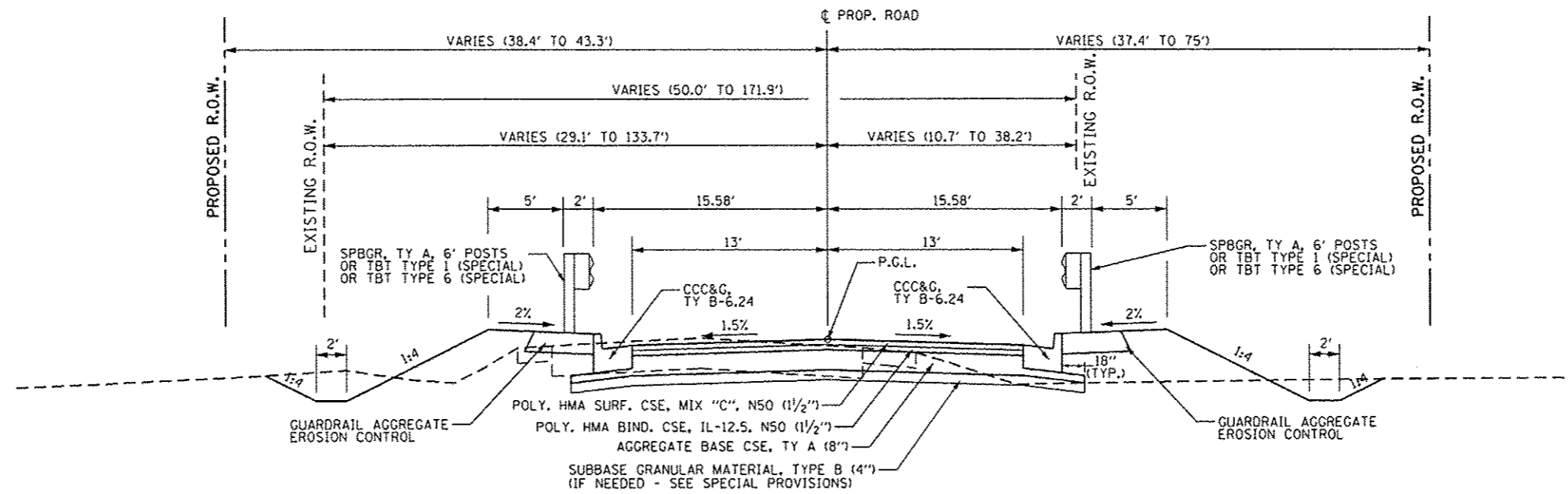
EXISTING TYPICAL SECTION - RIDGE ROAD
NOT TO SCALE



PROPOSED TYPICAL SECTION - RIDGE ROAD
NOT TO SCALE
STA. 12+00.00 TO STA. 12+66.49

NOTE: WIDTH OF PAVEMENT TAPERS FROM 20.6' TO 26'.
 * WIDTH OF AGG. SHOULDERS TAPER FROM 2.1' TO 4.75' LT.
 ** WIDTH OF AGG. SHOULDERS TAPER FROM 4.1' TO 4.75' RT.

FILE NAME *	USER NAME * bethner	DESIGNED - RMB	REVISED -	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) TYPICAL SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
S:\237\2007\23707000\RidgeRoad\ridge\	D:\CADD Sheets\0489495-shr-tyr.dgn	DRAWN - RMB	REVISED -			6774	07-00149-00-BR	TAZEWELL	52	4	
	PLOT SCALE * 2.0000 "/> <td>CHECKED - GBM</td> <td>REVISED -</td> <td colspan="6" style="text-align: center;">CONTRACT NO. 89495</td>	CHECKED - GBM	REVISED -			CONTRACT NO. 89495					
	PLOT DATE * 8/7/2013	DATE - /-/	REVISED -			SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.



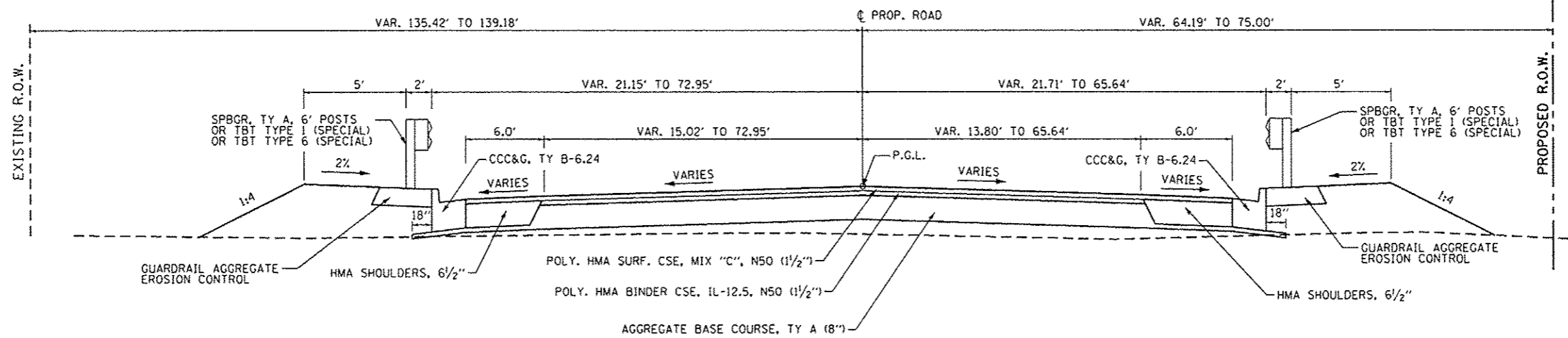
PROPOSED TYPICAL SECTION - RIDGE ROAD

NOT TO SCALE
STA. 12+66.49 TO STA. 14+79.25

NOTE: BRIDGE APPROACH SLAB FROM
STA. 14+79.25 TO STA. 15+09.06 AND
STA. 16+11.74 TO STA. 16+41.55.

BRIDGE OMISSION STA. 15+09.06 TO STA. 16+11.74

NOTE: SEE PLAN SHEETS AND SCHEDULE
OF QUANTITY SHEETS FOR GUARDRAIL,
TERMINALS, AND GUARDRAIL AGGREGATE
EROSION CONTROL LOCATIONS.



PROPOSED TYPICAL SECTION - RIDGE ROAD

NOT TO SCALE
STA. 16+41.55 TO STA. 16+88.11

FILE NAME *	USER NAME * bothierar	DESIGNED -	REVISED -	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) TYPICAL SECTIONS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\237\2007\23707008\RidgeRoadBridge\CADD Sheets\0489495-sh1-plot.dgn	DD\CADD Sheets\0489495-sh1-plot.dgn	DRAWN -	REVISED -					6774	07-00149-00-BR	TAZEWELL	52	5
PLOT SCALE * 2,0000' / in.		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 89495				
PLOT DATE * 8/7/2013		DATE -	REVISED -		FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							

TREE REMOVAL (OVER 15 UNITS DIAMETER)			
LOCATION	DIAMETER (INCHES)	TYPE	20100210 TREE REMOVAL (OVER 15 UNITS)
STA. 15+00.13, 0.23' RT	20"	DECIDUOUS	20
TOTAL			20

PERIMETER EROSION BARRIER		
LOCATION	28000400 PERIMETER EROSION BARRIER	
	FOOT	
STA. 14+50 TO STA. 15+50 LT	120	
STA. 15+00 TO STA. 15+55 RT	67	
STA. 15+68 TO STA. 16+03 LT	120	
STA. 15+67 TO STA. 16+81 RT	155	
TOTAL		462

INLET AND PIPE PROTECTION			
LOCATION	OFFSET	LT/RT	28000500 INLET AND PIPE PROTECTION
	FEET		EACH
STA. 13+25	15	LT	1
STA. 13+25	15	RT	1
STA. 14+68	16	LT	1
STA. 14+74	16	RT	1
STA. 16+52	25	LT	1
STA. 16+50	23	RT	1
TOTAL			6

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24			
LOCATION	OFFSET	LT/RT	60605000 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
	FEET		FOOT
STA. 12+78.49 TO STA. 13+19.11	13'	LT	88.5
STA. 13+31.36 TO STA. 14+33.00	13'	LT	49.0
STA. 12+78.49 TO STA. 13+19.11	13'	RT	93.5
STA. 13+31.36 TO STA. 14+12.68	13'	RT	31.1
STA. 16+41.14 TO STA. 16+45.38	VAR.	LT	4.6
STA. 16+56.52 TO STA. 16+76.59	VAR.	LT	126.1
STA. 16+38.45 TO STA. 16+44.01	VAR.	RT	5.9
STA. 16+56.40 TO STA. 16+84.89	VAR.	RT	54.8
TOTAL			454

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (VARIABLE WIDTH GUTTER FLAG)			
LOCATION	OFFSET	LT/RT	60605500 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (VARIABLE WIDTH GUTTER FLAG)
	FEET		FOOT
STA. 12+66.49 TO STA. 12+78.49	13.0'	LT	12.0
STA. 12+66.49 TO STA. 12+78.49	13.0'	RT	12.0
STA. 14+12.68 TO STA. 14+67.89	13.0'	RT	57.0
STA. 14+33.00 TO STA. 14+61.71	13.0'	LT	29.2
STA. 14+75.10 TO STA. 14+77.06	13.0'	LT	1.9
STA. 14+80.60 TO STA. 14+81.32	13.0'	RT	0.8
STA. 16+83.12	66.2' TO 73.5'	RT	7.1
TOTAL			120

SEEDING SCHEDULE											
LOCATION STATION TO STATION	LT/RT	PLAN AREA X SLOPE FACTOR (1.036)	25000110	25000300	25000400	25000500	25000600	25100115	25100630	28000250	
			SEEDING, CLASS 1A	SEEDING, CLASS 3	NITROGEN (90 LB/ACRE)	PHOSPHORUS (90 LB/ACRE)	POTASSIUM (90 LB/ACRE)	MULCH, METHOD 2	EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING (100 LB/ACRE) (3 APPLICATIONS)	
			SO FT	ACRE	ACRE	POUND	POUND	POUND	ACRE	SO YD	POUND
STA. 12+00.00 TO STA. 14+92.00	LT	4986.56	0.1145			10.30	10.30	10.30	0.1145	177.3	34.34
STA. 12+00.00 TO STA. 14+96.26	RT	5773.61	0.1325			11.93	11.93	11.93	0.1325	146.4	39.76
STA. 14+92.00 TO STA. 15+46.29	LT	1151.67		0.0264	2.38	2.38	2.38	0.0264			7.93
STA. 14+96.26 TO STA. 15+55.58	RT	382.63		0.0088	0.79	0.79	0.79	0.0088			2.64
STA. 15+67.89 TO STA. 16+18.25	LT	2884.04		0.0662	5.96	5.96	5.96	0.0662			19.86
STA. 15+67.03 TO STA. 16+37.98	RT	1655.84		0.0380	3.42	3.42	3.42	0.0380			11.40
STA. 16+18.25 TO STA. 16+75.92	LT	3716.26	0.0853		7.68	7.68	7.68	0.0853			25.59
STA. 16+31.84 TO STA. 16+82.66	RT	924.47	0.0212		1.91	1.91	1.91	0.0212			6.37
TOTALS			0.50	0.25	44	44	44	0.50	324	148	

PAVING SCHEDULE															
LOCATION	SUBBASE GRANULAR MATERIAL, TYPE B	AGGREGATE BASE COURSE, TYPE A	POLYMERIZED BITUMINIOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-12.5, N50	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	AGGREGATE SHOULDERS, TYPE B	HOT-MIX ASPHALT SHOULDERS, 6 1/2"							
									TON	TON	GALLON	TON	TON	TON	SO YD
12+00.00 TO 12+66.49	47.3	82.3	93	0.2	14.7	14.5	19.8								
12+66.49 TO 14+79.25	182.3	301.2	318	0.6	54.4	51.6									
16+41.55 TO 16+88.11		182.9	153	0.5	28.2	39.4		175.1							
TOTALS								230	566	564	1	97	106	20	175

EARTHWORK					
LOCATION	20200100 EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	20400800 FURNISHED EXCAVATION WASTE (+) OR SHORTAGE (-)	
					CU YD
DURING BRIDGE CONSTRUCTION PHASE					
STA. 12+00.00 TO STA. 15+09.06	56.0	42.0			
KPROP. RT DITCH EX. ON SOUTH SIDE OF					
STA. 16+11.74 TO STA. 17+00.00	16.8	12.6	208.6	-196.0	
EMBANKMENT MATERIAL REQUIRED IN CHANNEL				-165.7	
SUBTOTAL	72.8	54.6	208.6	-361.7	
DURING ROADWAY CONSTRUCTION PHASE					
STA. 12+00.00 TO STA. 15+09.06	474.6	356.0	244.2	111.8	
KREMAINING EARTHWORK FOR ROAD AND LT					
ADDITIONAL EXCAVATION OF EXISTING ROADWAY EMBANKMENT (STA. 15+09.06 TO EX. ABUTMENT)	95.4	71.6			
SUBTOTAL	570.0	427.5	244.2	NA	
TOTALS				645	360

STORM SEWERS, CLASS A, TYPE 1, 12"			
LOCATION	LT/RT	550A0050 STORM SEWERS, CLASS A, TYPE 1, 12"	FOOT
STA. 13+25.47 LT TO STA. 13+25.47 RT	AR		28.0
STA. 13+26.93 RT TO STA. 14+72.79 RT	RT		149.9
STA. 14+68.43 LT TO STA. 14+74.25 RT	AR		29.8
STA. 16+09.82 LT TO STA. 16+50.80 LT	LT		42.0
STA. 16+52.35 LT TO STA. 16+50.22 RT	AR		47.3
TOTAL			297

STORM SEWERS, CLASS A, TYPE 1, 15"			
LOCATION	LT/RT	550A0070 STORM SEWERS, CLASS A, TYPE 1, 15"	FOOT
STA. 14+74.25 TO STA. 14+74.25	RT		14.3
TOTAL			14

PAVEMENT REMOVAL		
LOCATION	AREA	44000100 PAVEMENT REMOVAL
		SO FT
STA. 12+00.00 TO STA. 12+66.49	1370.89	152.3
STA. 12+66.49 TO STA. 15+22.39	5398.8	599.9
STA. 16+11.57 TO STA. 16+87.38	2142.0	238.0
TEMPORARY PAVEMENT		54.0
TOTAL		1044

TREE, ACER RUBRUM RED SUNSET (RED SUNSET RED MAPLE), 4" CALIPER, BALLED AND BURLAPPED		
LOCATION	A2001228	44000100 PAVEMENT REMOVAL
	EACH	
TO BE DETERMINED	1	
TOTAL		1

PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"			
LOCATION	OFFSET	LT/RT	54213657 PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"
			EACH
STA. 16+09.82	45.2	LT	1
TOTAL			1

PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"			
LOCATION	OFFSET	LT/RT	54213660 PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"
			EACH
STA. 14+74.25	31.4	RT	1
TOTAL			1

INLETS, TYPE G-1			
LOCATION	OFFSET	LT/RT	X6020082 INLETS, TYPE G-1
			EACH
STA. 14+68.45	13.0'	LT	1
STA. 14+74.25	13.0'	LT	1
STA. 16+50.24	21.9'	RT	1
STA. 16+52.41	25.2'	LT	1
TOTAL			4

INLETS, TYPE G-1, SPECIAL			
LOCATION	OFFSET	LT/RT	X6021065 INLETS, TYPE G-1, SPECIAL
			EACH
STA. 13+25.47	13.0'	LT	1
STA. 13+25.48	13.0'	RT	1
TOTAL			2

GUARDRAIL AGGREGATE EROSION CONTROL					
LOCATION	WIDTH	LT/RT	DEPTH	CONV.	Z0001002 GUARDRAIL AGGREGATE EROSION CONTROL
					TONS/CU YD
STA. 13+77.56 TO STA. 14+92.07	3' - 4'	LT	8	2.05	18.8
STA. 13+77.44 TO STA. 14+96.26	3' - 4'	RT	8	2.05	20.3
STA. 16+28.51 TO STA. 16+75.92	3' - 4'	LT	8	2.05	19.9
STA. 16+24.18 TO STA. 16+87.46	3' - 4'	RT	8	2.05	25.5
TOTAL					84

STONE RIPRAP, CLASS A4				
LOCATION	OFFSET	LT/RT	SIZE	28100107 STONE RIPRAP, CLASS A4
	FEET			SO YD
STA. 14+65 TO STA. 15+02	26' TO 47'	RT	40'x15'	66.4
STA. 15+68 TO STA. 16+28	35' TO 60'	LT	54'x20'	120.0
TOTAL				186

GUARDRAIL REMOVAL			
LOCATION	OFFSET	LT/RT	63200310 GUARDRAIL REMOVAL
	FEET		FOOT
STA. 14+88.65 TO STA. 15+14.36	45' TO 59'	LT	26.6
STA. 14+75.51 TO STA. 15+30.68	3' TO 38'	LT	63.2
STA. 16+04.74 TO STA. 16+28.63	102' TO 118'	LT	26.4
STA. 16+17.83 TO STA. 16+46.75	79' TO 74'	LT	26.1
TOTAL			142

STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS			
LOCATION	OFFSET	LT/RT	63000001 STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS
	FEET		FOOT
STA. 14+21.62 TO STA. 14+47.42	VAR.	LT	25
STA. 14+30.49 TO STA. 14+54.61	VAR.	RT	25
STA. 16+65.48 TO STA. 16+75.53	VAR.	LT	25
STA. 16+63.77 TO STA. 16+78.62	VAR.	RT	25
TOTAL			100

FILTER FABRIC				
LOCATION	OFFSET	LT/RT	SIZE	28200200 FILTER FABRIC
	FEET			SO YD
STA. 14+65 TO STA. 15+02	26' TO 47'	RT	40'x15'	66.4
STA. 15+68 TO STA. 16+28	35' TO 60'	LT	54'x20'	120.0
TOTAL				186

TEMPORARY PAVEMENT		
LOCATION	LT/RT	Z0062456
		SQ YD
STA. 14+11.62 TO STA. 14+83.36	LT	54.4
TOTAL		54

TERMINAL MARKER, DIRECT APPLIED			
LOCATION	OFFSET	LT/RT	78201000 TERMINAL MARKER, DIRECT APPLIED
	FEET		EACH
STA. 13+93.83	17.5'	LT	1
STA. 14+04.40	17.5'	RT	1
STA. 16+78.44	75.5'	RT	1
STA. 16+67.19	89.3'	LT	1
TOTAL			4

FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS				
LOCATION	OFFSET	LT/RT		66600105 FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS
	FEET			EACH
STA. 12+00.00	28.4	LT		1
STA. 12+00.00	21.6	RT		1
STA. 12+25.00	35.0	LT		1
STA. 12+25.00	35.0	RT		1
STA. 13+00.00	40.0	RT		1
STA. 13+50.00	40.0	LT		1
STA. 14+50.00	42.1	LT		1
STA. 15+00.00	50.0	RT		1
STA. 16+67.49	75.0	RT		1
TOTAL				9

CHANNEL EXCAVATION		
LOCATION		Z0300100
		CHANNEL EXCAVATION
		CU YD
STA. 15+09.06 TO STA. 16+11.74		420
TOTALS		420

TEMPORARY DITCH CHECKS			
LOCATION	OFFSET	LT/RT	28000305 TEMPORARY DITCH CHECKS
	FEET		FOOT
STA. 14+00	30.3	LT	20
STA. 14+00	34.4	RT	20
TOTAL			40

TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)			
LOCATION	OFFSET	LT/RT	X6310214 TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)
	FEET		EACH
STA. 14+47.42 TO STA. 14+94.60	VAR.	LT	1
STA. 14+54.61 TO STA. 14+98.72	VAR.	RT	1
STA. 16+26.25 TO STA. 16+65.48	VAR.	LT	1
STA. 16+21.93 TO STA. 16+63.77	VAR.	RT	1
TOTAL			4

SIGN TO BE RELOCATED		
LOCATION		XX006066 SIGN TO BE RELOCATED
		EACH
STA. 14+14.67, 14' RT	CHEVRON SIGN	1
STA. 14+51.86, 26' RT	NO DUMPING SIGN	1
STA. 14+69.10, 40' LT	SPEED LIMIT SIGN	1
STA. 16+26.70, 78' LT	STOP SIGN	1
STA. 17+00.00, 115' LT	STREET NAME SIGN AND ARROW SIGN	2
TOTAL		6

TRENCH BACKFILL					
LOCATION	OFFSET	WIDTH OF TRENCH	DEPTH (SUBGRADE TO HALF OF PIPE)	LENGTH OF TRENCH	20800150 TRENCH BACKFILL
	FEET	FEET	FEET	FEET	CU YD
STA. 13+25.47, CROSS-ROAD	13.5' LT TO 13.5' RT	2.8	1.1	27.0	3.6
STA. 13+25.47 TO STA. 14+72.31	0' 13' TO 16' RT	2.8	1.6	149.9	19.8
STA. 14+68.54 TO STA. 14+74.15	14.1' LT TO 14.1' RT	2.8	1.2	28.8	3.8
STA. 14+74.25 (INLET TO 2' BEHIND INLET)	17.6' RT TO 19.6' RT	3.1	3.5	2	0.7
STA. 16+48.71 TO STA. 16+50.28 (INLET TO 2' BEHIND INLET)	28.3' LT TO 27.5' LT	2.8	2.3	2	0.4
STA. 16+52.31 TO STA. 16+50.24	24.6' LT TO 21.5' RT	2.8	2.4	46.2	10.4
TOTALS					38.7

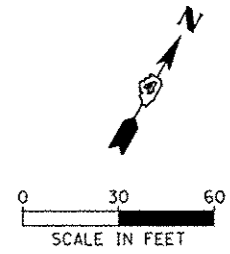
TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT			
LOCATION	OFFSET	LT/RT	63100167 TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT
	FEET		EACH
STA. 13+95.75 TO STA. 14+21.62	VAR.	LT	1
STA. 14+06.26 TO STA. 14+30.49	VAR.	RT	1
STA. 16+75.53 TO STA. 16+69.82	VAR.	LT	1
STA. 16+78.62 TO STA. 16+80.01	VAR.	RT	1
TOTAL			4

PAVEMENT MARKING					
LOCATION	PAINT PAVEMENT MARKING - LINE 4"	SHORT-TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)
	FOOT	FOOT	SO FT	EACH	EACH
12+00.00 TO 16+50.00	78001110	70300100	70301000	78100100	78100105
CENTERLINE	900.0	900.0	300.0	4	2
12+00.00 TO 17+00.00	EDGELINE	1175.1	391.7		
TOTALS:	2075	2075	692	4	2

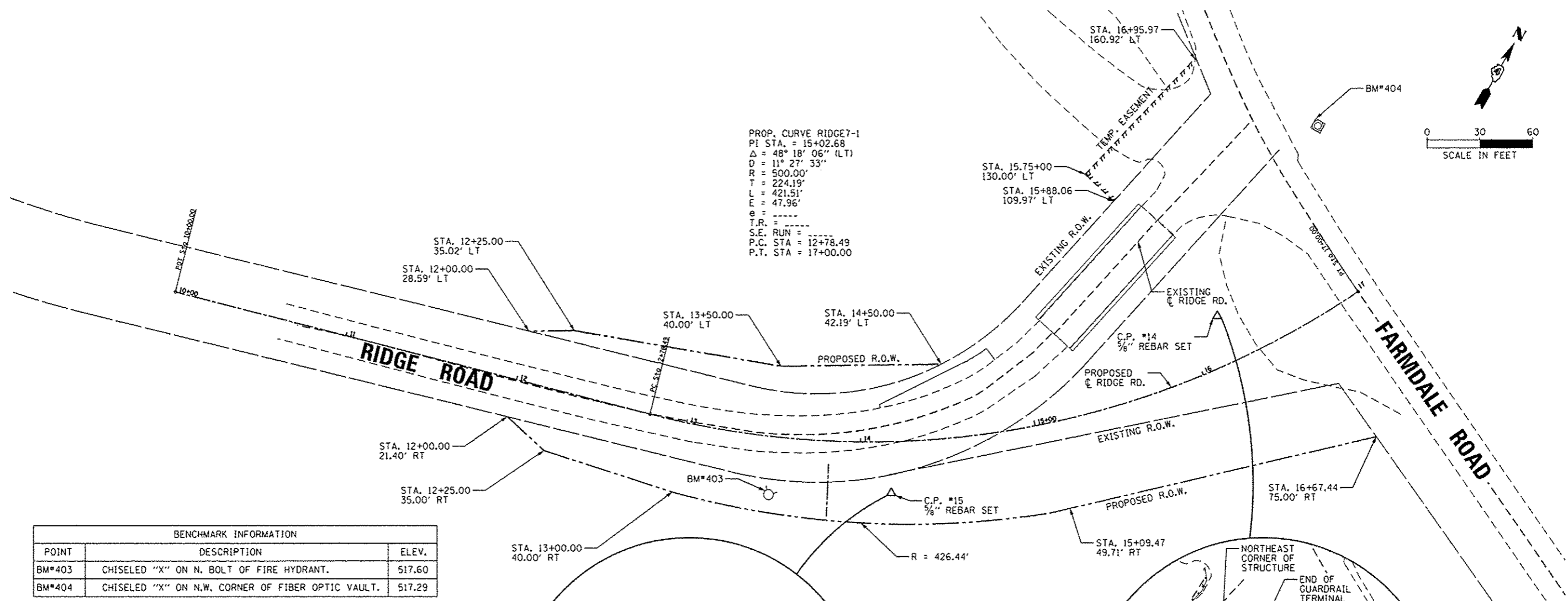
REMOVE AND REERECT STEEL PLATE BEAM GUARD RAIL, TYPE A			
LOCATION	OFFSET	LT/RT	63301210 REMOVE AND REERECT STEEL PLATE BEAM GUARD RAIL, TYPE A
	FEET		FOOT
STA. 14+75.51 TO STA. 15+30.68	3' TO 38'	LT	63.2
TOTAL			63

PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH		
LOCATION		42300200 PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH
		SO YD
STA. 13+82.19 RT		47
TOTAL		47

ENGINEER'S FIELD OFFICE, TYPE B		
LOCATION		67000500 ENGINEER'S FIELD OFFICE, TYPE B
		CAL MO
ENTIRE PROJECT		9
TOTAL		9

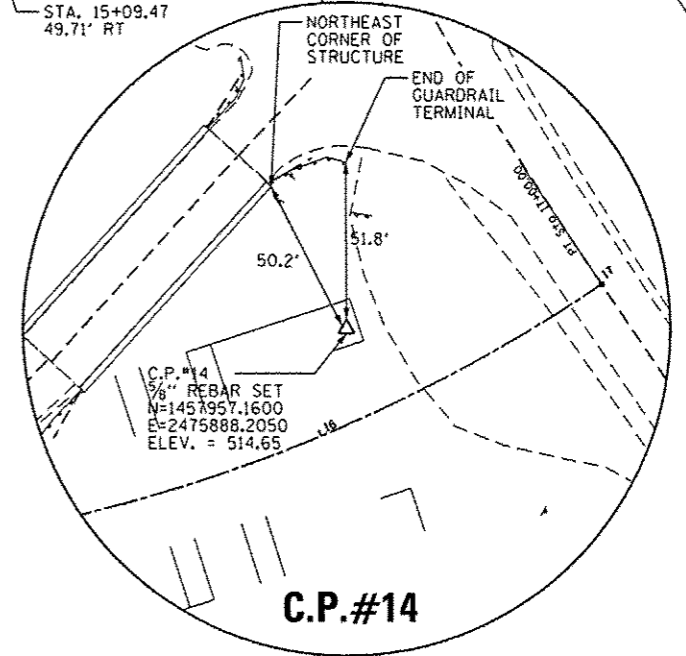
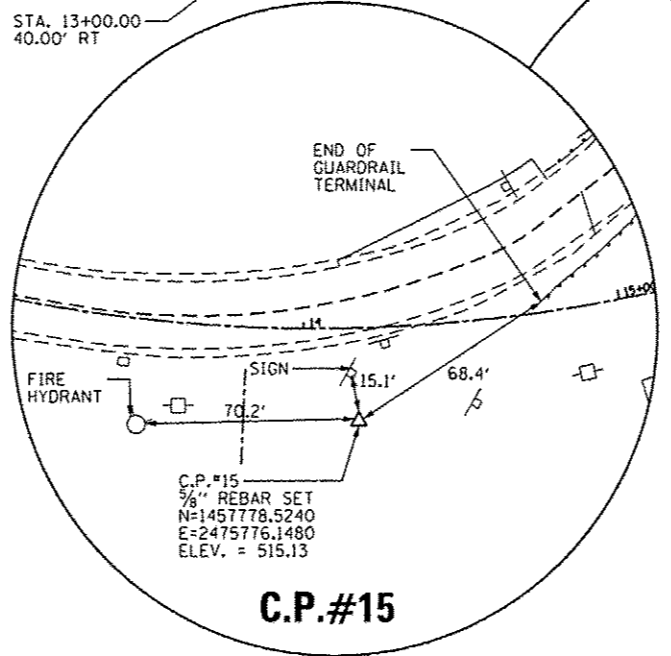


PROP. CURVE RIDGE7-1
 PI STA. = 15+02.68
 $\Delta = 48^\circ 18' 06''$ (LT)
 $D = 11^\circ 27' 33''$
 $R = 500.00'$
 $T = 224.19'$
 $L = 421.51'$
 $E = 47.96'$
 $e = \text{---}$
 $T.R. = \text{---}$
 $S.E. \text{ RUN} = \text{---}$
 $P.C. \text{ STA} = 12+78.49$
 $P.T. \text{ STA} = 17+00.00$

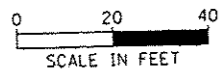


BENCHMARK INFORMATION		
POINT	DESCRIPTION	ELEV.
BM#403	CHISELED "X" ON N. BOLT OF FIRE HYDRANT.	517.60
BM#404	CHISELED "X" ON N.W. CORNER OF FIBER OPTIC VAULT.	517.29

PROPOSED ALIGNMENT INFORMATION			
Point RIDGE71	N	1,457,676.5700	E 2,475,365.6708 Sta 10+00.0000
Course from RIDGE71 to PC RIDGE7-1 $74^\circ 50' 02.2436''$ Dist 278.4890			
Curve Data			
Curve RIDGE7-1			
P.I. Station	15+02.6821	N 1,457,808.0803	E 2,475,850.8453
Delta	$48^\circ 18' 05.7838''$ (LT)		
Degree	$11^\circ 27' 32.9612''$		
Tangent	224.1931		
Length	421.5110		
Radius	500.0000		
External	47.9622		
Long Chord	409.1397		
Mid. Ord.	43.7641		
P.C. Station	12+78.4890	N 1,457,749.4275	E 2,475,634.4605
P.T. Station	17+00.0001	N 1,458,008.6618	E 2,475,950.9931
C.C.		N 1,458,232.0134	E 2,475,503.6519
Back	$74^\circ 50' 02.2436''$		
Ahead	$26^\circ 31' 56.4598''$		
Chord Bear	$50^\circ 40' 59.3517''$		

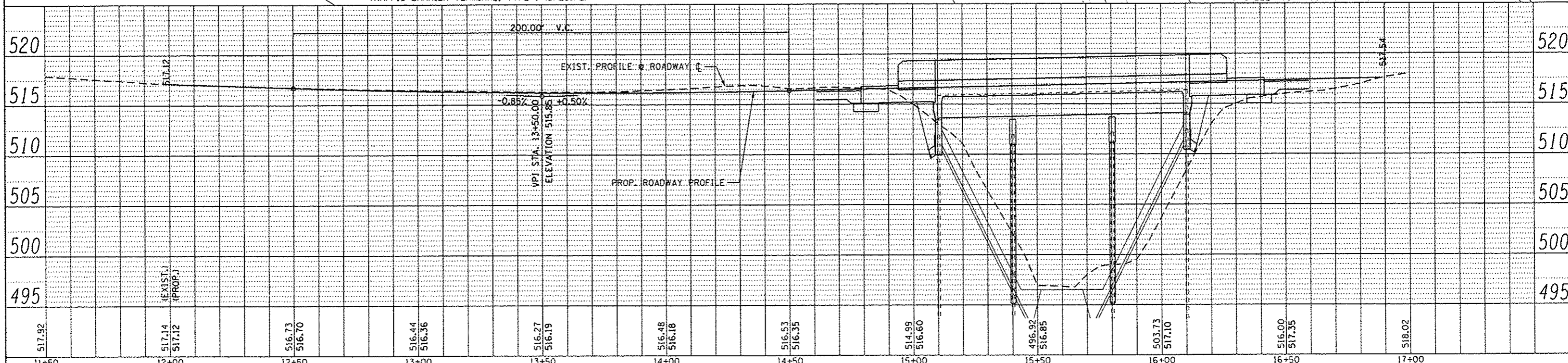
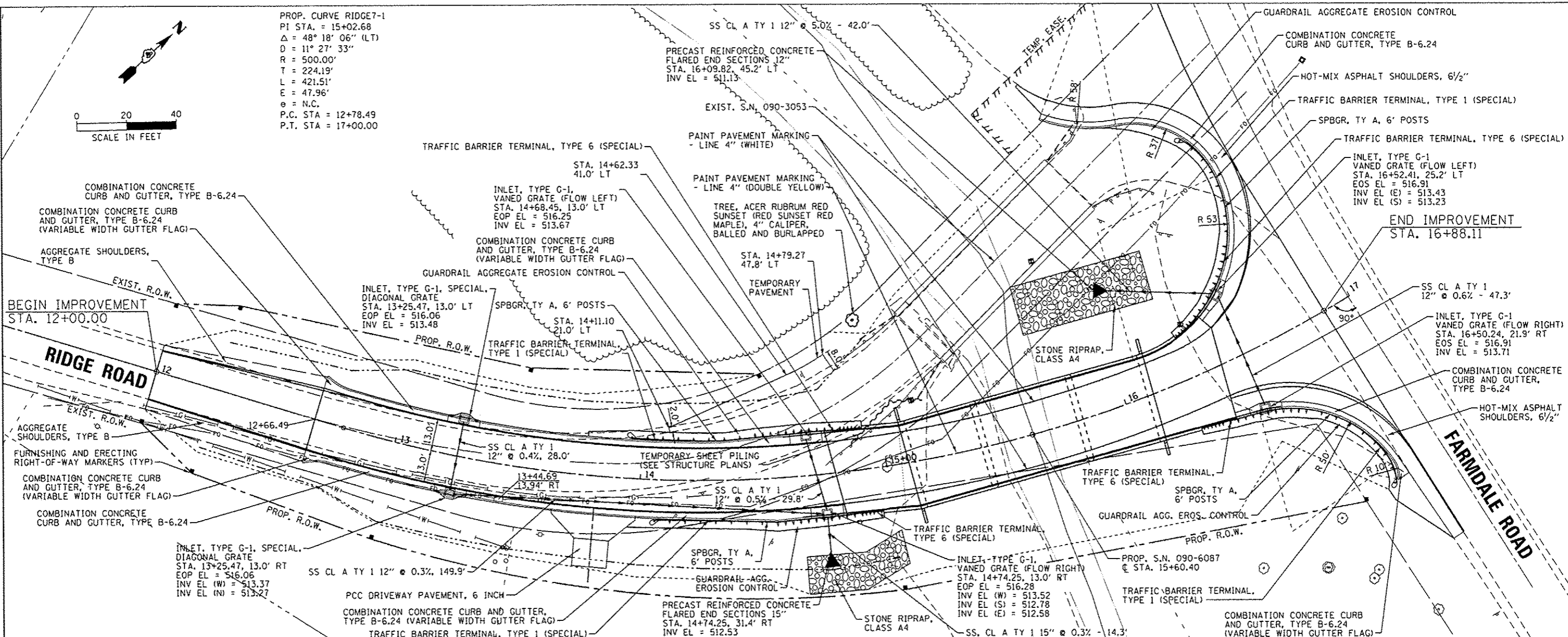


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 P.C. STA = 12+78.49
 P.T. STA = 17+00.00

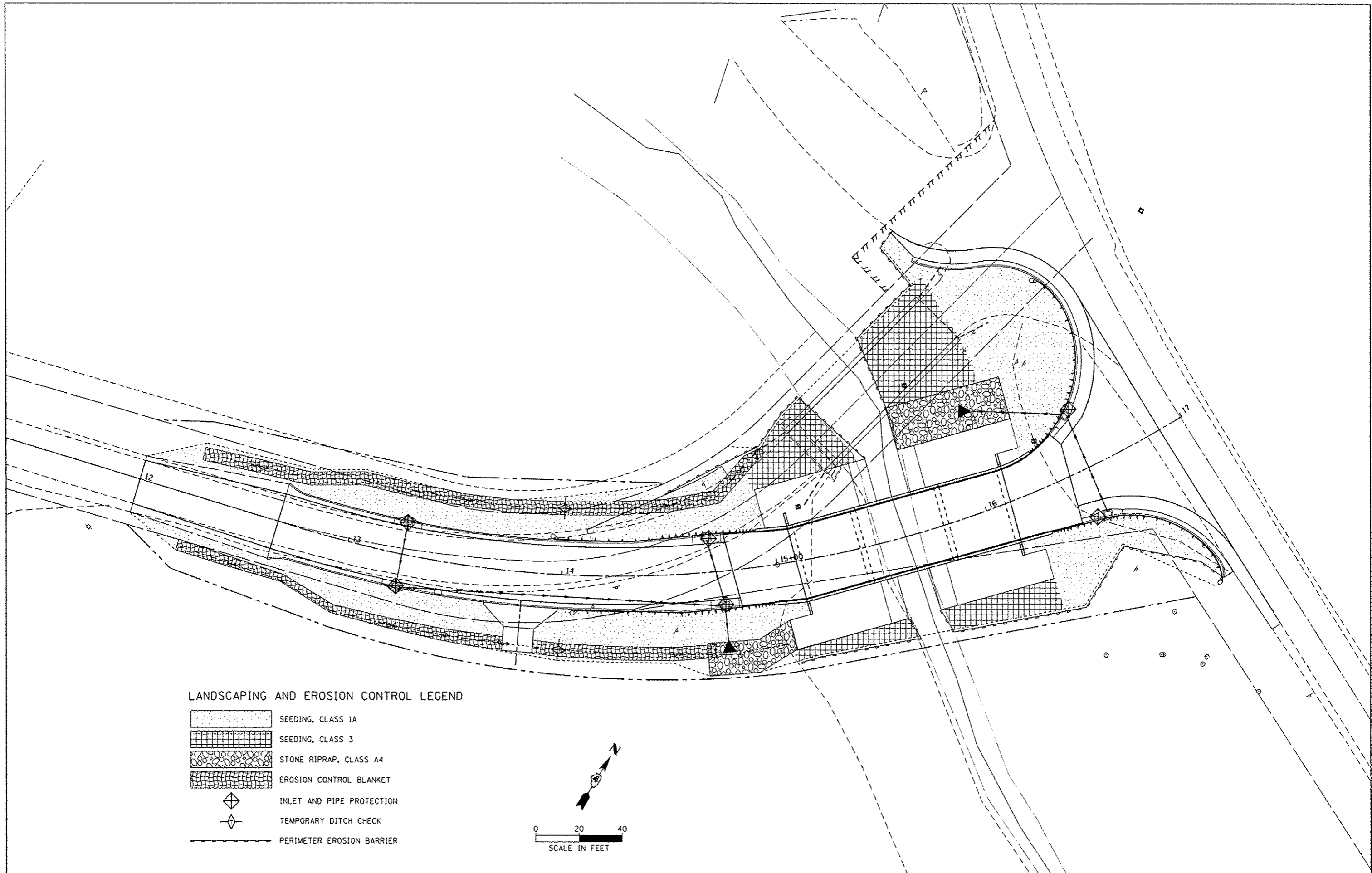


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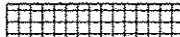
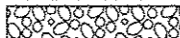
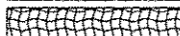


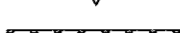
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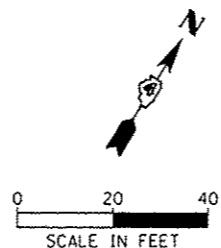


FILE NAME	USER NAME	DESIGNED	REVISED	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT				ROUTE FAU 6774 (RIDGE ROAD) PLAN & PROFILE				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\237\2007\2370208\RidgeRoadBridge\CADD	bathner	-	-	MAURER-STUTZ ENGINEERS SURVEYORS				SCALE: SHEET NO. OF SHEETS STA. TO STA.				6774	07-00149-00-BR	TAZEWELL	52	10
PLT SCALE	PLT DATE	CHECKED	DATE	CONTRACT NO. 89495				ILLINOIS FED. AID PROJECT								

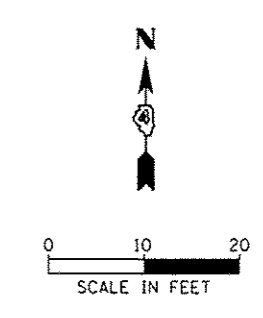
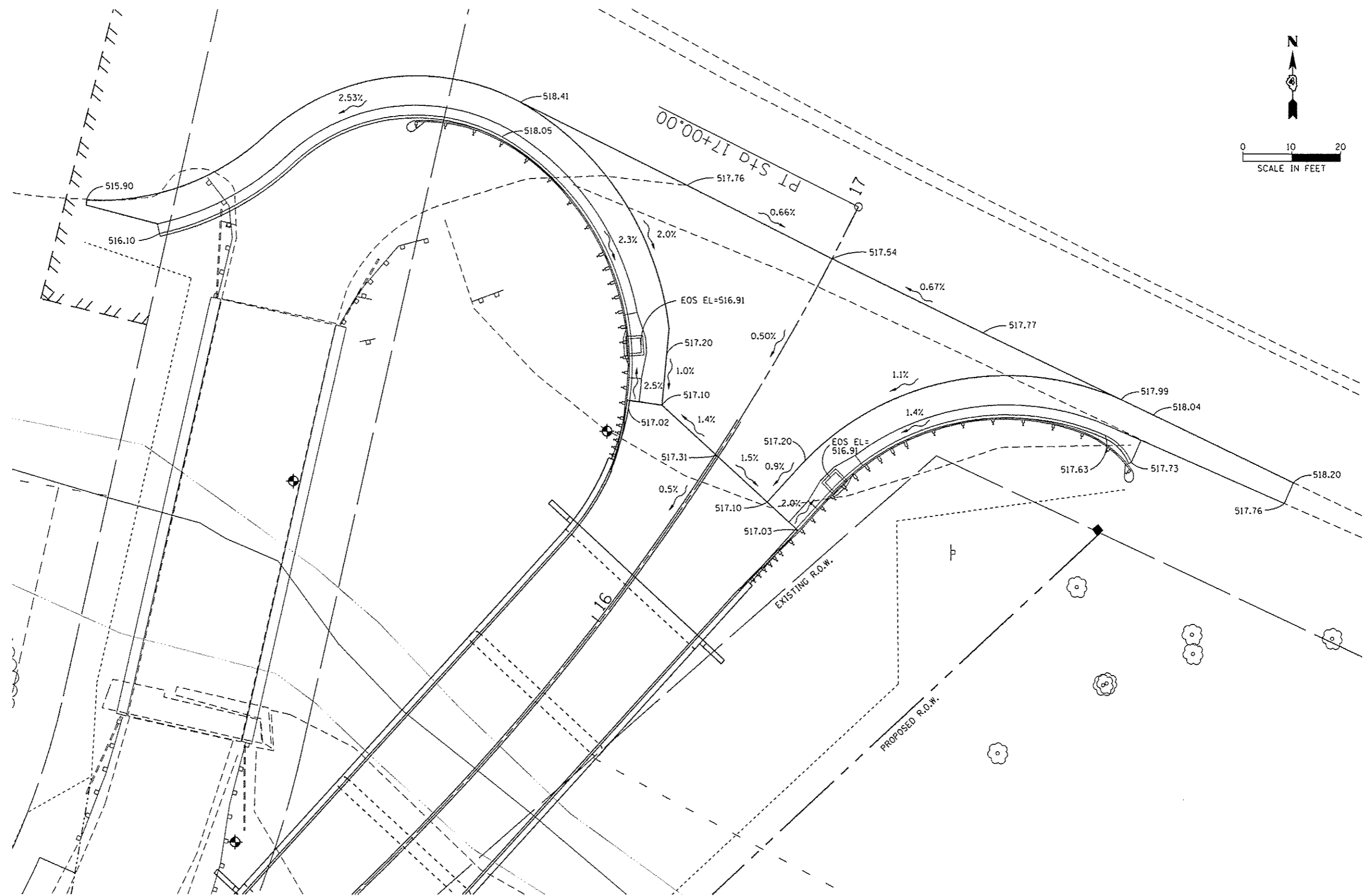


LANDSCAPING AND EROSION CONTROL LEGEND

-  SEEDING, CLASS 1A
-  SEEDING, CLASS 3
-  STONE RIPRAP, CLASS A4
-  EROSION CONTROL BLANKET
-  INLET AND PIPE PROTECTION
-  TEMPORARY DITCH CHECK
-  PERIMETER EROSION BARRIER



FILE NAME * S:\237\2007\237070008(RidgeRoad@ridge)	USER NAME * bathjor D:\CADD Sheets\0489495-shr-erose-tri.dgn PLOT SCALE * 48.0000' / in. PLOT DATE * 8/7/2013	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) EROSION CONTROL PLAN	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>F.A.U. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>6774</td> <td>07-00149-00-BR</td> <td>TAZEWELL</td> <td>52</td> <td>11</td> </tr> <tr> <td colspan="5" style="text-align: center;">CONTRACT NO. 89495</td> </tr> </table>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	6774	07-00149-00-BR	TAZEWELL	52	11	CONTRACT NO. 89495				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																	
6774	07-00149-00-BR	TAZEWELL	52	11																	
CONTRACT NO. 89495																					
					SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT															



FILE NAME * S:\237\2007\23707088\RidgeRoad\Bridget\	USER NAME * bathyar	DESIGNED -	REVISED -	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) INTERSECTION DETAIL			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DD\CADD Sheets\0489495-sh1-int.dgn	DRAWN -	REVISED -					6774	07-00149-00-BR	TAZEWELL	52	12
	PLOT SCALE * 20.0000' / in.	CHECKED -	REVISED -					CONTRACT NO. 89495				
	PLOT DATE * 8/7/2013	DATE -	REVISED -					SCALE:	SHEET NO.	OF	SHEETS	STA.

Benchmark: TBM #403; Chiseled "X" on north cap bolt of fire hydrant at Sta. 13+50.64, 32.96' Rt., Elev. 517.60.

Existing Structure: S.N. 090-3053 was originally built in 1964. The existing structure consists of a two-span continuous steel girder bridge supported on pile bent abutments and a pile-supported steel beam pier. The bridge measures 87 feet back to back of abutments and 28.5 feet wide. Traffic will be maintained on the existing structure during construction of the proposed bridge, after which existing structure will be removed.

No salvage.

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
- 3-4. Top of Slab Elevations
5. Top of Approach Slab Elevations
6. Superstructure
7. Superstructure Details
8. Integral Abutment Diaphragm Details
- 9-11. Bridge Approach Slab Details
12. Structural Steel
13. Structural Steel Details
14. South Abutment
15. North Abutment
16. Pier 1
17. Pier 2
18. HP Pile Details
19. Bar Splicer Assembly and Mechanical Splicer Details
20. Cantilever Forming Brackets
- 21-23. Soil Borings

FARM CREEK
BUILT 20... BY
CITY OF EAST PEORIA
SEC. 07-00149-00-BR
F.A.U. RTE. 6774 STA. 15+60.40
STRUCTURE NO. 090-6087
LOADING HL-93

NAME PLATE
See Std. 515001

CURVE DATA

$\Delta = 48^\circ 18' 06''$ (LT)
D = $11^\circ 27' 33''$
T = 224.19'
L = 421.51'
E = 47.96'
R = 500.00'
S.E. = --
P.C. = Sta. 12+78.49
P.T. = Sta. 17+00.00
P.I. = Sta. 15+02.68

PROFILE GRADE
(*along \odot Roadway)

The Profile Grade follows the crown of roadway along \odot bridge and approaches.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	Pier 1	Pier 2	N. Abut.
	507.0	486.4	486.4	507.5

LOADING HL-93

Allow 50#/#sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

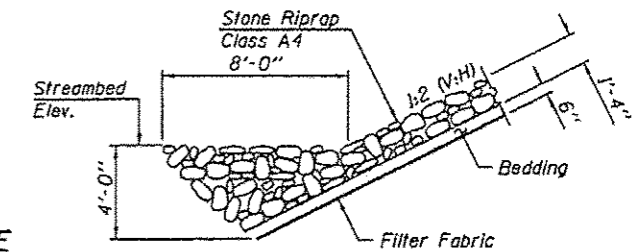
DESIGN STRESSES

FIELD UNITS

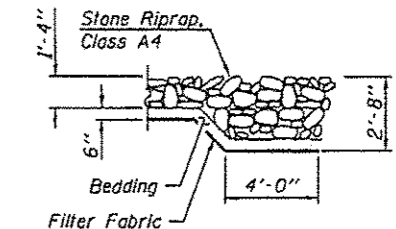
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50)
 $f_y = 36,000$ psi (M270 Grade 36)

SEISMIC DATA

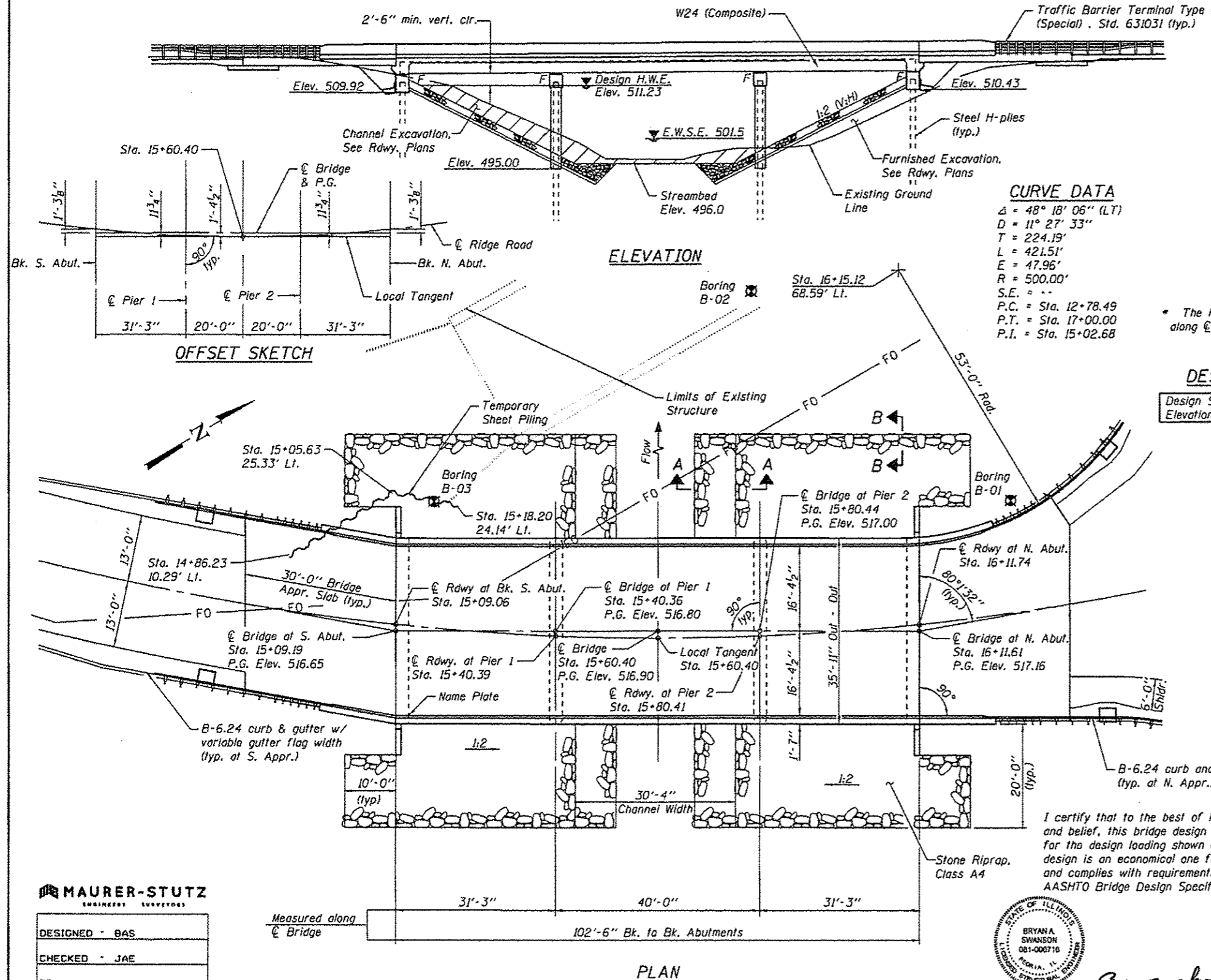
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{d1}) = 0.114g
Design Spectral Acceleration at 0.2 sec. ($S_{d0.2}$) = 0.179g
Soil Site Class = D



SECTION A-A



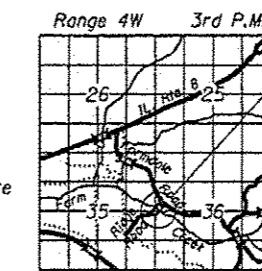
SECTION B-B



I certify that to the best of 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 Bridge Design Specifications.



Bryan Swanson
Date Signed: 10/02/2013
Exp. Date: 11/30/2014



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
RIDGE ROAD OVER FARM CREEK
F.A.U. 6774 SEC. 07-00149-00-BR
TAZEWELL COUNTY
STATION 15+60.40
STRUCTURE NO. 090-6087

MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED -	BAS
CHECKED -	JAE
DRAWN -	SGM
CHECKED -	BAS

SHEET NO. 1	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23 SHEETS	6774	07-00149-00-BR	TAZEWELL	52	13
CONTRACT NO. 89495					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{13}{16}$ in. ϕ , unless otherwise noted.

Calculated weight of Structural Steel = 37,410 lbs (AASHTO M 270 Grade 50)
5,200 lbs (AASHTO M 270 Grade 36)

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

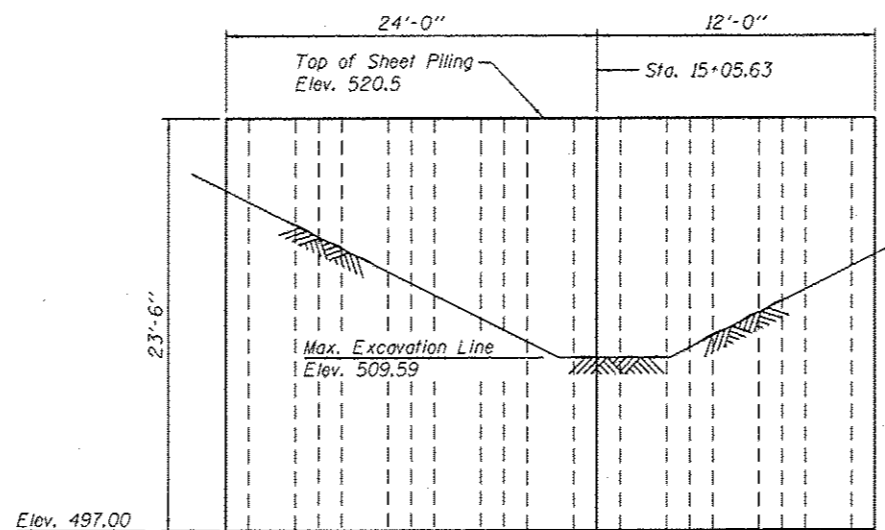
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell No. 7.5G 4/8.

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Slipforming of the parapets is not allowed.



TEMPORARY SHEET PILING ELEVATION

Note:
Minimum Effective Section Modulus of the sheet piling shall be 10.0 in³.
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

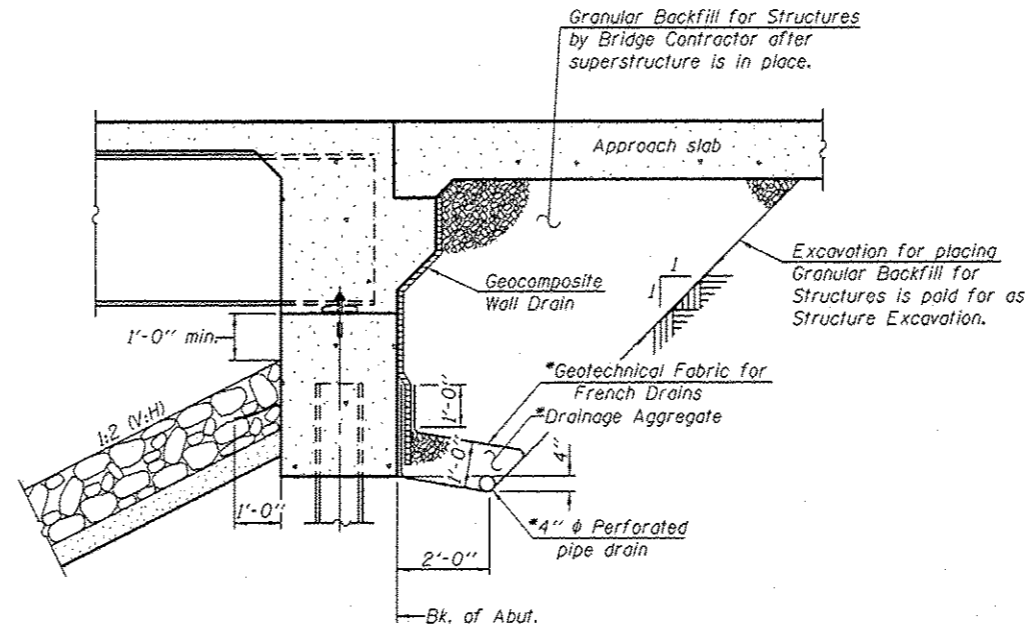
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Granular Backfill for Structures	Cu. Yd.	-	66	66
Stone Riprap, Class A4	Sq. Yd.	-	834	834
Filter Fabric	Sq. Yd.	-	834	834
Removal of Existing Structures	Each	-	-	1
Structure Excavation	Cu. Yd.	-	124	124
Concrete Structures	Cu. Yd.	-	153.6	153.6
Concrete Superstructure	Cu. Yd.	247.0	-	247.0
Bridge Deck Grooving	Sq. Yd.	568	-	568
Concrete Encasement	Cu. Yd.	-	8.2	8.2
Protective Coat	Sq. Yd.	720	-	720
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	1935	-	1935
Reinforcement Bars, Epoxy Coated	Pound	60340	16560	76900
Bar Splicers	Each	78	-	78
Furnishing Steel Piles HP12x53	Foot	-	1002	1002
Driving Piles	Foot	-	1002	1002
Test Pile Steel HP12x53	Each	-	4	4
Temporary Sheet Piling	Sq. Ft.	-	846	846
Name Plates	Each	1	-	1
Anchor Bolts, 1"	Each	-	40	40
Geocomposite Wall Drain	Sq. Yd.	-	51	51
Pipe Underdrains for Structures, 4"	Foot	-	128	128
Mechanical Splicers	Each	-	48	48
Cofferdam (Type 1) (Location - 1)	Each	-	1	1
Cofferdam (Type 1) (Location - 2)	Each	-	1	1

WATERWAY INFORMATION

Drainage Area - 39.3 sq. mi.		Exist. Low Grade Elev. 515.82 @ Sta. 13+75 Prop. Low Grade Elev. 516.16 @ Sta. 13+75.93									
Flood	Freq. Yr.	Q	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.		
		C.F.S.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Design	10	3014	542	627	508.02	508.32	1.14	1.15	509.2	509.5	
Base	50	5231	732	864	510.83	511.23	1.50	0.74	512.3	512.0	
Overtopping	100	6315	809	964	511.91	512.34	1.62	0.61	513.5	513.0	
Max. Calc.	500	9226	994	1089	514.26	514.79	1.85	0.88	516.1	515.7	

10-Year Velocity through Existing Structure = 4.9 fps
10-Year Velocity through Proposed Structure = 4.7 fps



SECTION THRU INTEGRAL ABUTMENT

*Included in the cost of Pipe Underdrains for Structures.

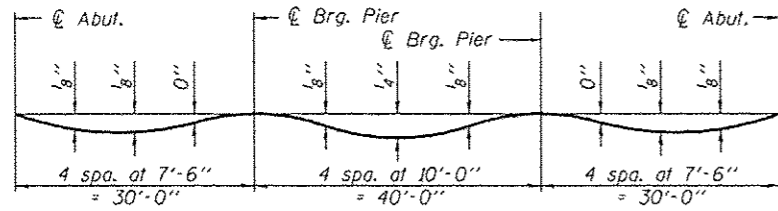
Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

**GENERAL DATA
STRUCTURE NO. 090-6087**

SHEET NO. 2	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23 SHEETS	6774	07-00149-00-BR	TAZEWELL	52	14
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 89495					

MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

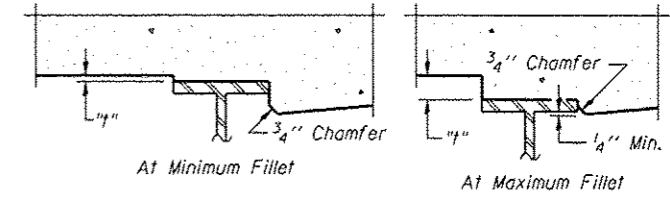


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

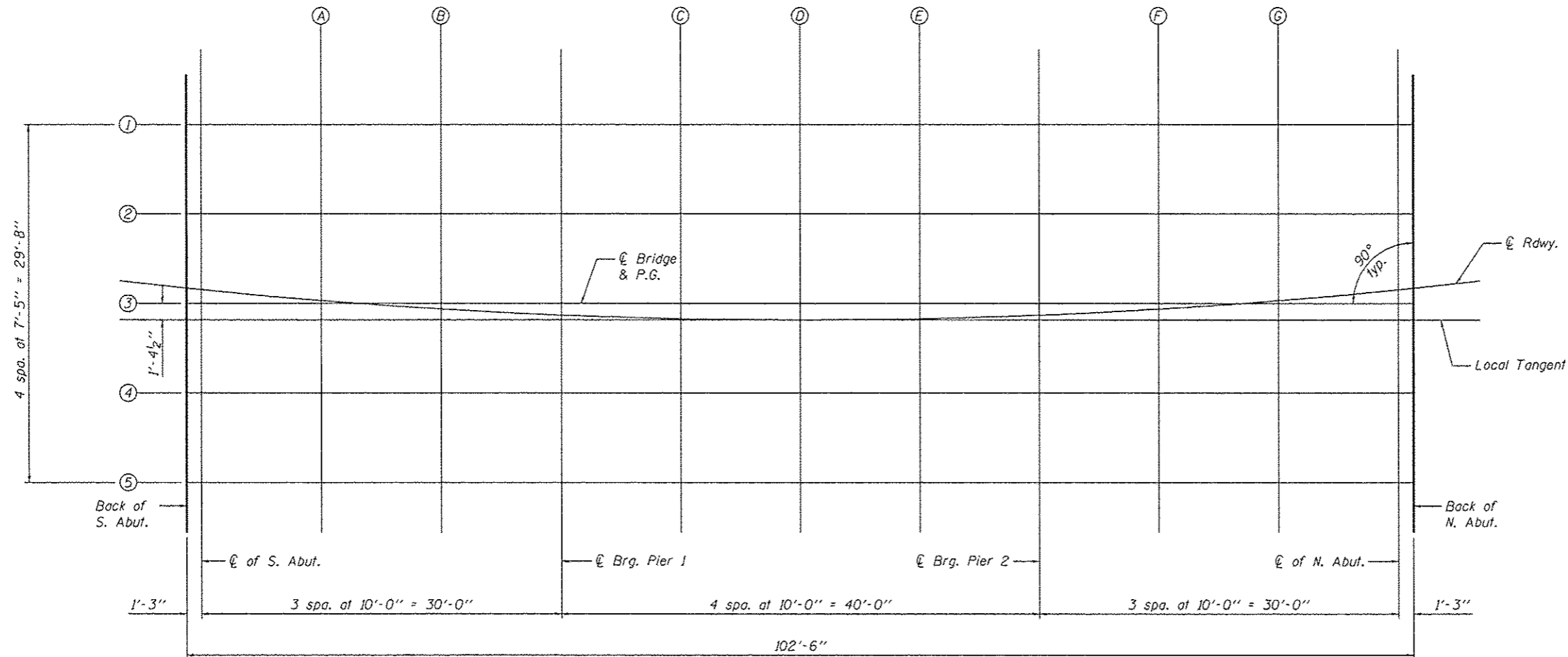
Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet 4 of 23.

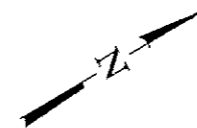


To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheet 4 of 23, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN



MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

E-S

10-1-08

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 090-6087**

SHEET NO. 3 23 SHEETS	F.A.U. RTE. 6774	SECTION 07-00149-00-BR	COUNTY TAZEWELL	TOTAL SHEETS 52	SHEET NO. 15
	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	15+07.63	-13.50	516.40	516.40
☉ Brg. S. Abut.	15+08.91	-13.63	516.41	516.41
A	15+19.15	-14.56	516.45	516.46
B	15+29.43	-15.28	516.50	516.51
☉ Brg. Pier 1	15+39.74	-15.79	516.55	516.55
C	15+50.07	-16.10	516.60	516.61
D	15+60.40	-16.21	516.66	516.67
E	15+70.73	-16.10	516.71	516.72
☉ Brg. Pier 2	15+81.06	-15.79	516.76	516.76
F	15+91.37	-15.28	516.81	516.81
G	16+01.65	-14.56	516.86	516.86
☉ Brg. N. Abut.	16+11.89	-13.63	516.90	516.90

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	15+08.42	-6.13	516.53	516.53
☉ Brg. S. Abut.	15+09.68	-6.25	516.54	516.54
A	15+19.77	-7.17	516.59	516.59
B	15+29.90	-7.88	516.64	516.64
☉ Brg. Pier 1	15+40.05	-8.38	516.69	516.69
C	15+50.22	-8.69	516.74	516.75
D	15+60.40	-8.79	516.79	516.80
E	15+70.58	-8.69	516.84	516.85
☉ Brg. Pier 2	15+80.75	-8.38	516.89	516.89
F	15+90.90	-7.88	516.94	516.94
G	16+01.03	-7.17	516.99	516.99
☉ Brg. N. Abut.	16+11.12	-6.25	517.04	517.04

BEAM 3, P.G., AND ☉ BRIDGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	15+09.19	1.25	516.65	516.65
☉ Brg. S. Abut.	15+10.43	1.13	516.65	516.65
A	15+20.38	0.23	516.70	516.71
B	15+30.35	-0.47	516.75	516.76
☉ Brg. Pier 1	15+40.36	-0.97	516.80	516.80
C	15+50.37	-1.27	516.85	516.86
D	15+60.40	-1.38	516.90	516.92
E	15+70.43	-1.27	516.95	516.96
☉ Brg. Pier 2	15+80.44	-0.97	517.00	517.00
F	15+90.45	-0.47	517.05	517.06
G	16+00.42	0.23	517.10	517.11
☉ Brg. N. Abut.	16+10.37	1.13	517.15	517.15

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	15+09.93	8.63	516.53	516.53
☉ Brg. S. Abut.	15+11.16	8.51	516.54	516.54
A	15+20.96	7.62	516.59	516.59
B	15+30.79	6.93	516.64	516.64
☉ Brg. Pier 1	15+40.65	6.44	516.69	516.69
C	15+50.52	6.14	516.74	516.75
D	15+60.40	6.04	516.79	516.80
E	15+70.28	6.14	516.84	516.85
☉ Brg. Pier 2	15+80.15	6.44	516.89	516.89
F	15+90.01	6.93	516.94	516.94
G	15+99.84	7.62	516.99	516.99
☉ Brg. N. Abut.	16+09.64	8.51	517.04	517.04

BEAM 5

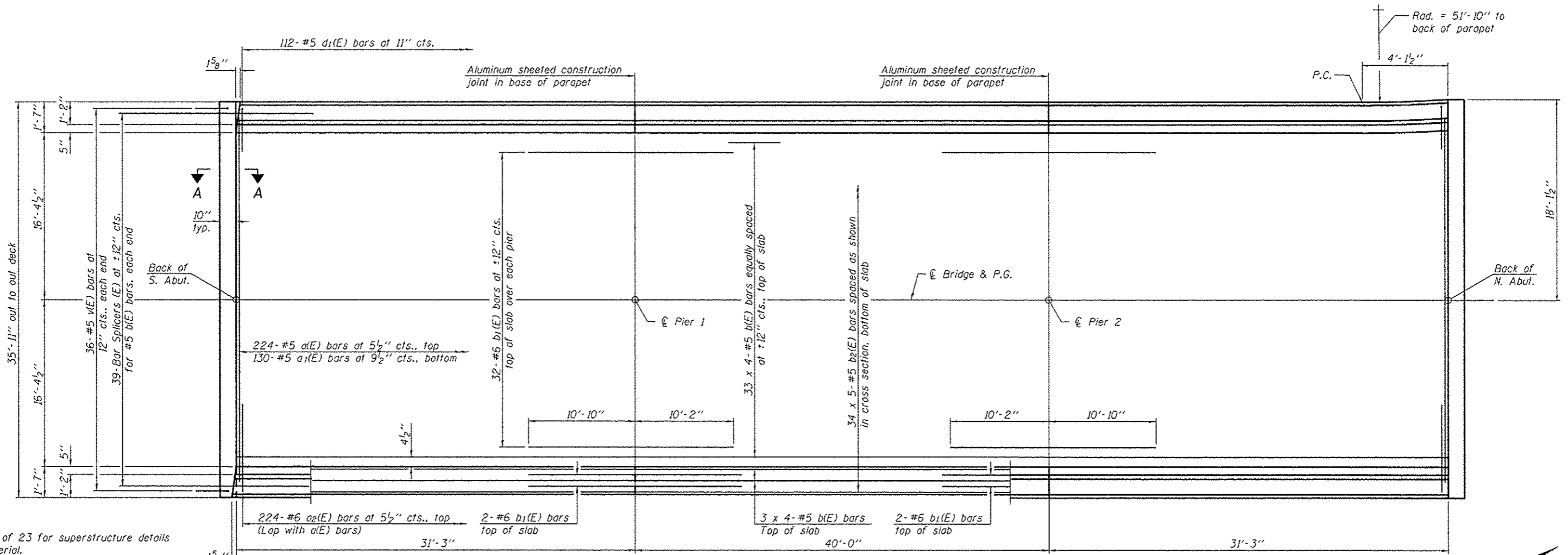
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of South Abut.	15+10.66	16.01	516.40	516.40
☉ Brg. S. Abut.	15+11.86	15.89	516.41	516.41
A	15+21.53	15.01	516.45	516.46
B	15+31.22	14.33	516.50	516.51
☉ Brg. Pier 1	15+40.93	13.85	516.55	516.55
C	15+50.66	13.56	516.60	516.61
D	15+60.40	13.46	516.66	516.67
E	15+70.14	13.56	516.71	516.72
☉ Brg. Pier 2	15+79.87	13.85	516.76	516.76
F	15+89.58	14.33	516.81	516.81
G	15+99.27	15.01	516.86	516.86
☉ Brg. N. Abut.	16+08.94	15.89	516.90	516.90



DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 090-6087**

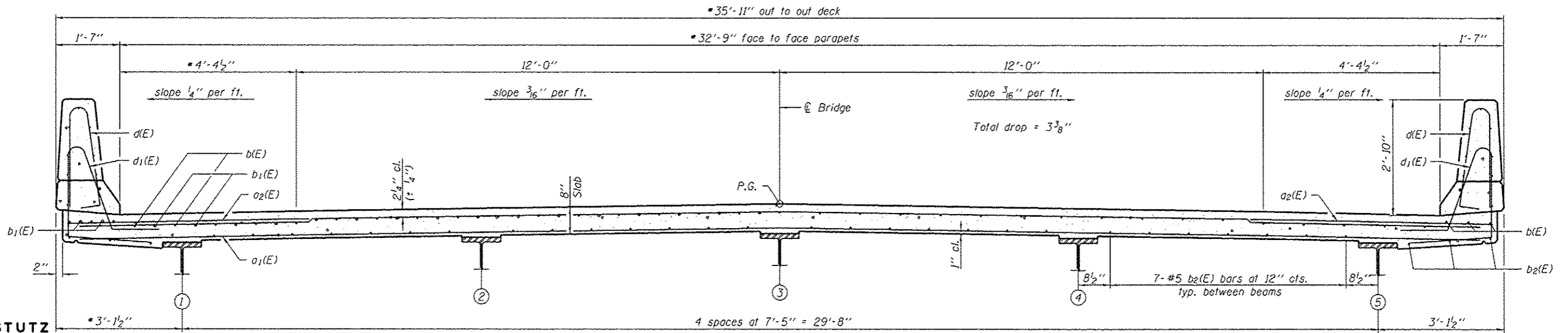
SHEET NO. 4 23 SHEETS	F.A.U. RTE. 6774	SECTION 07-00149-00-BR	COUNTY TAZEWELL	TOTAL SHEETS 52	SHEET NO. 16
	CONTRACT NO. 89495			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	



Notes:
 See Sheet 7 of 23 for superstructure details and Bill of Material.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See Sheet 7 of 23 for parapet reinforcement.
 See Sheet 19 of 23 for Bar Splicer details.
 See Sheet 8 of 23 for Section A-A and diaphragm details.

PARTIAL PLAN

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



NEAR PIER

CROSS SECTION
 (Looking North)

NEAR MIDSPAN

SUPERSTRUCTURE
STRUCTURE NO. 090-6087

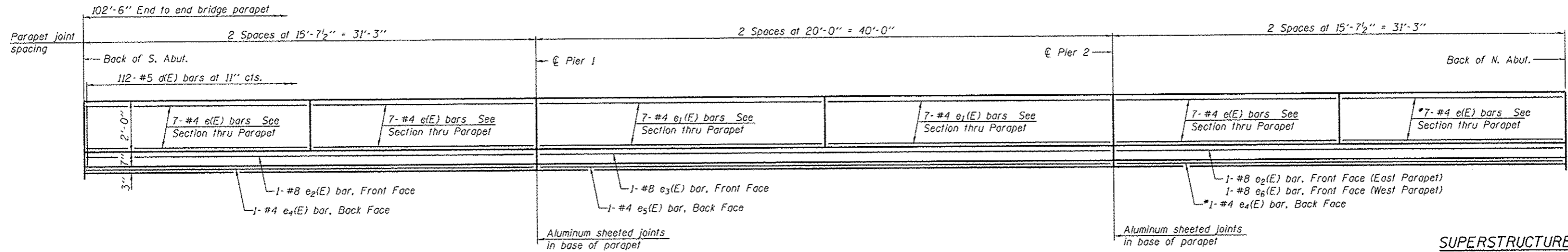
MAURER-STUTZ
 ENGINEERS SURVEYORS

DESIGNED	BAS
CHECKED	JAE
DRAWN	SGM
CHECKED	BAS

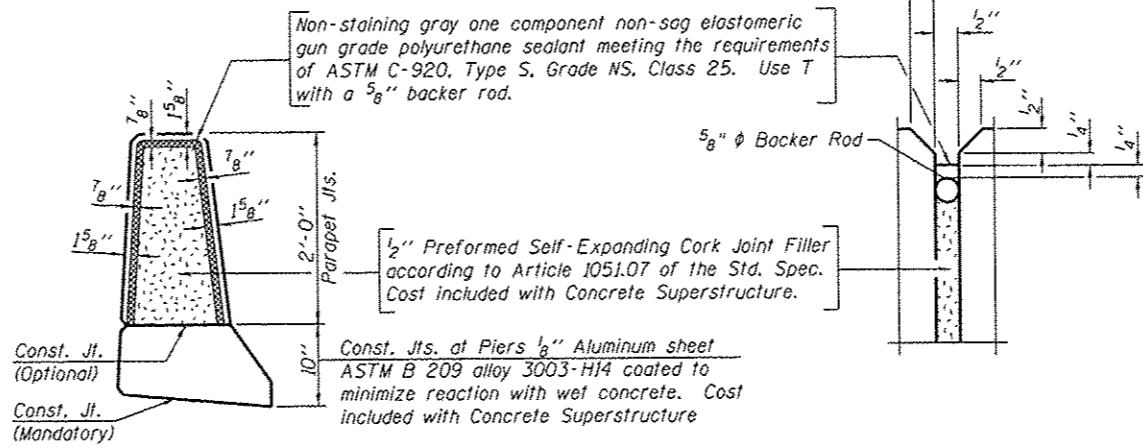
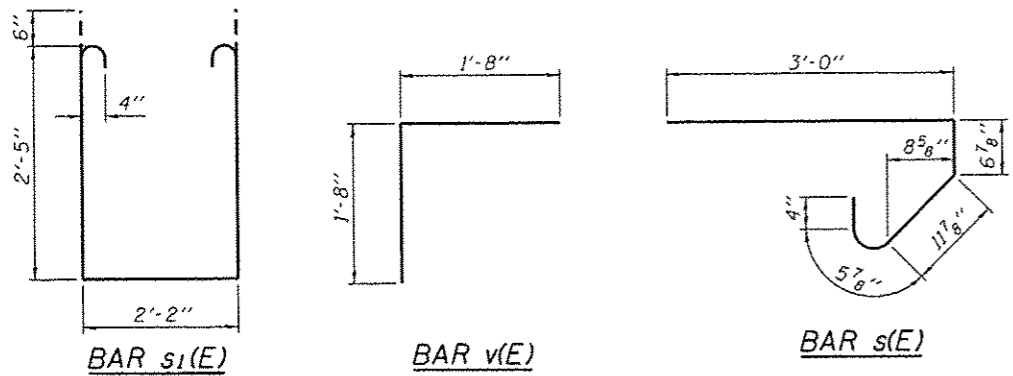
* Bridge width varies 2" at north end, see plan view.

SHEET NO. 6 23 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	18
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 89495					

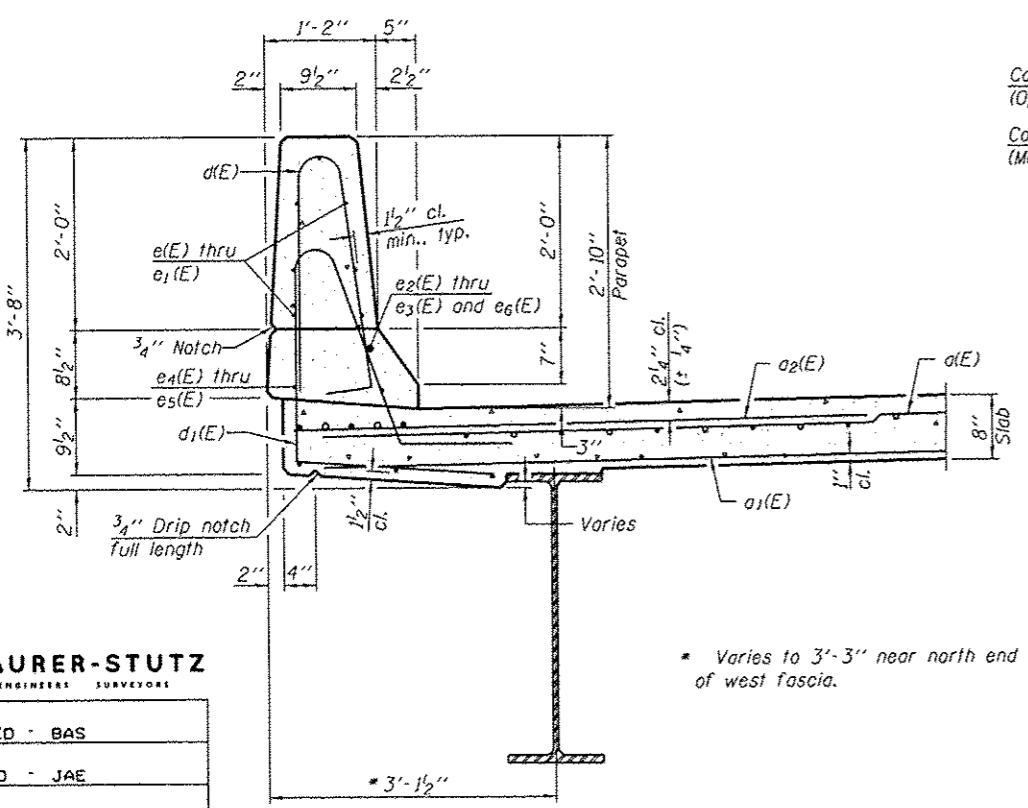
*#4 e(E) and e₄(E) bars shall be bent in field to fit flare at northwest corner of bridge



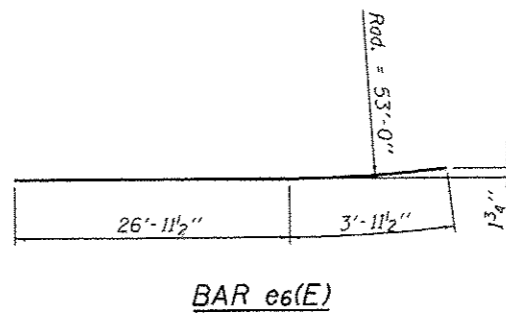
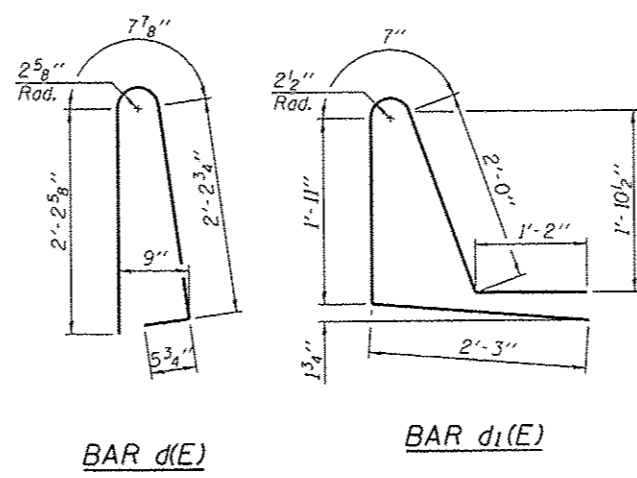
INSIDE ELEVATION OF PARAPET



PARAPET JOINT DETAILS



SECTION THRU PARAPET



SUPERSTRUCTURE BILL OF MATERIAL

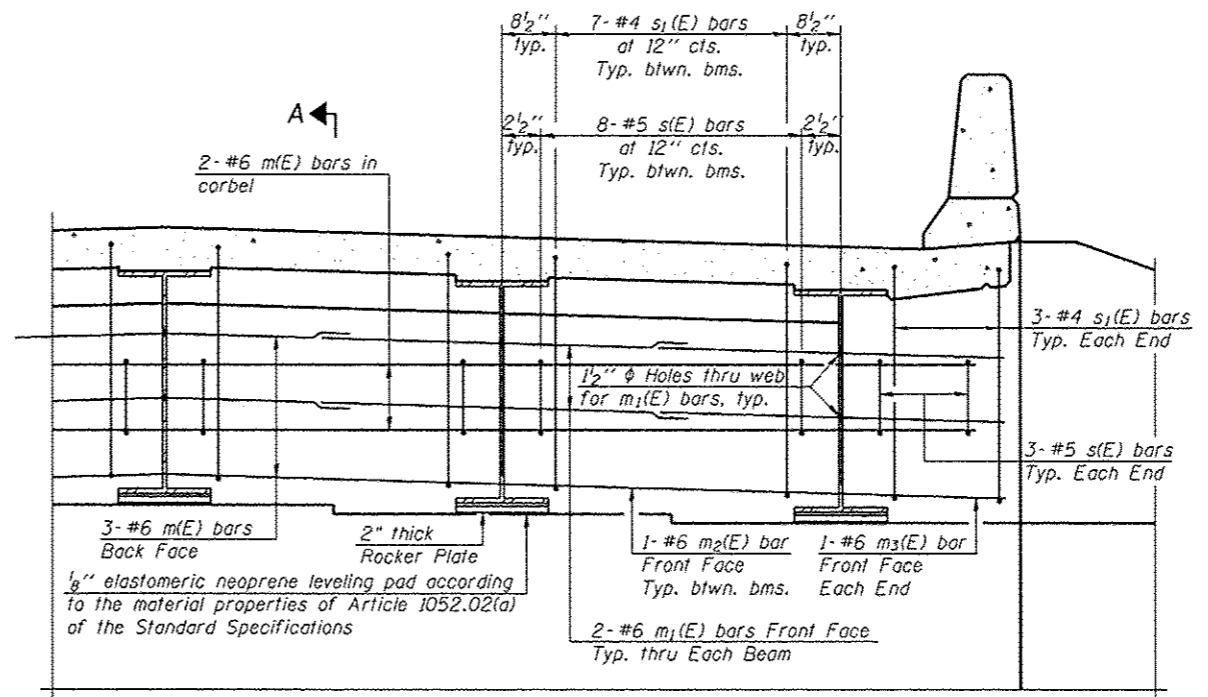
Bar	No.	Size	Length	Shape
a(E)	#5	224	35'-3"	—
a ₁ (E)	#5	130	33'-11"	—
a ₂ (E)	#6	448	6'-0"	—
b(E)	#5	156	27'-6"	—
b ₁ (E)	#6	72	21'-0"	—
b ₂ (E)	#5	170	22'-6"	—
d(E)	#5	224	5'-7"	⌋
d ₁ (E)	#5	224	7'-11"	⌋
e(E)	#4	56	15'-4"	—
e ₁ (E)	#4	28	19'-8"	—
e ₂ (E)	#8	3	30'-11"	—
e ₃ (E)	#8	2	39'-8"	—
e ₄ (E)	#4	4	30'-11"	—
e ₅ (E)	#4	2	39'-8"	—
e ₆ (E)	#8	1	30'-11"	—
m(E)	#6	10	35'-7"	—
m ₁ (E)	#6	20	9'-10"	—
m ₂ (E)	#6	8	7'-1"	—
m ₃ (E)	#6	4	2'-9"	—
s(E)	#5	76	5'-5"	⌋
s ₁ (E)	#4	68	8'-0"	⌋
v(E)	#5	72	3'-4"	⌋
Reinforcement Bars, Epoxy Coated			Pound	34350
Concrete Superstructure			Cu. Yd.	134.1

**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 090-6087**

MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

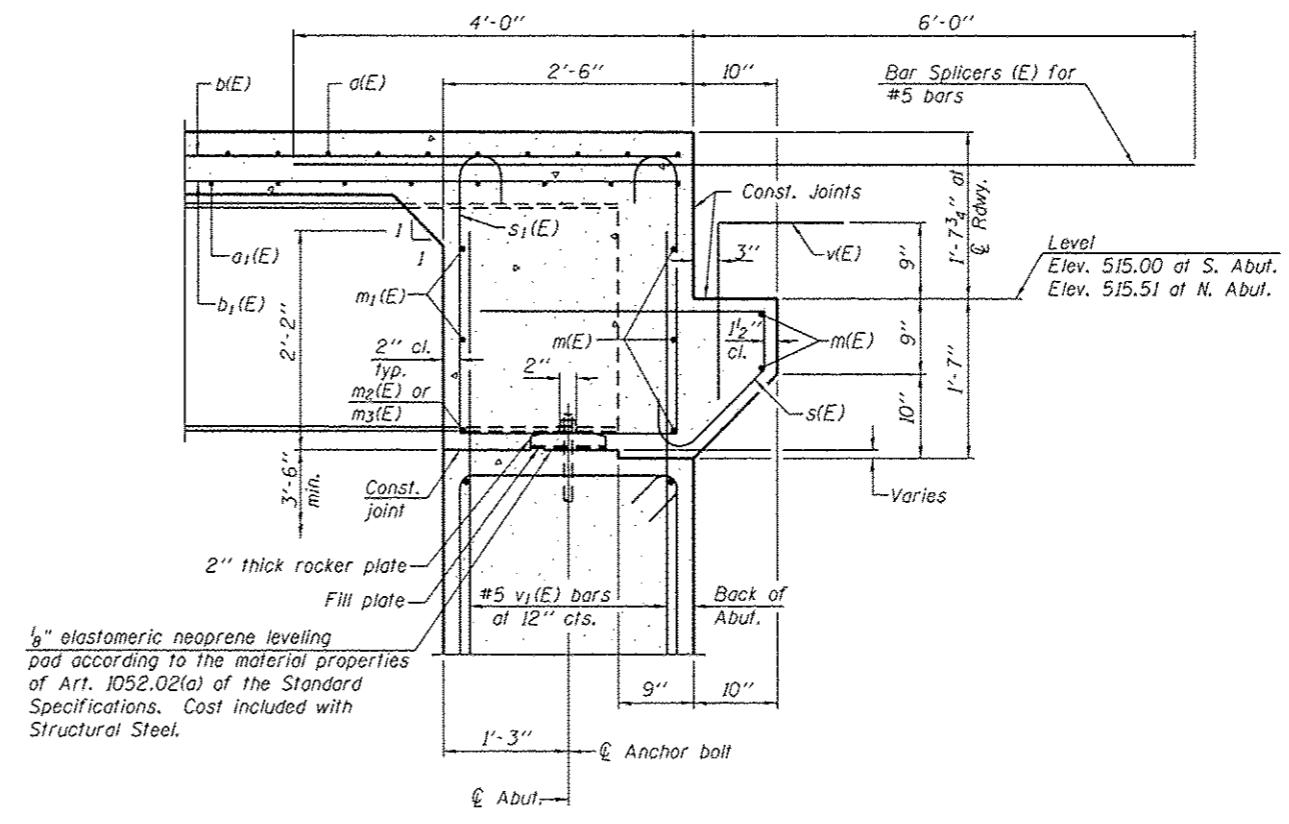
SHEET NO. 7 23 SHEETS	F.A.U. RTE. 6774	SECTION 07-00149-00-BR	COUNTY TAZEWELL	TOTAL SHEETS 52	SHEET NO. 19
	CONTRACT NO. 89495			ILLINOIS FED. AID PROJECT	



DIAPHRAGM ELEVATION AT ABUTMENT

Notes:
 Reinforcement bars in diaphragm are billed with superstructure on sheet 7 of 23.
 Concrete in diaphragm is included with Concrete Superstructure on sheet 7 of 23.

MIN. BAR LAP
 #6 bar = 3'-4"



SECTION A-A
 Dimensions at right angles to abutment

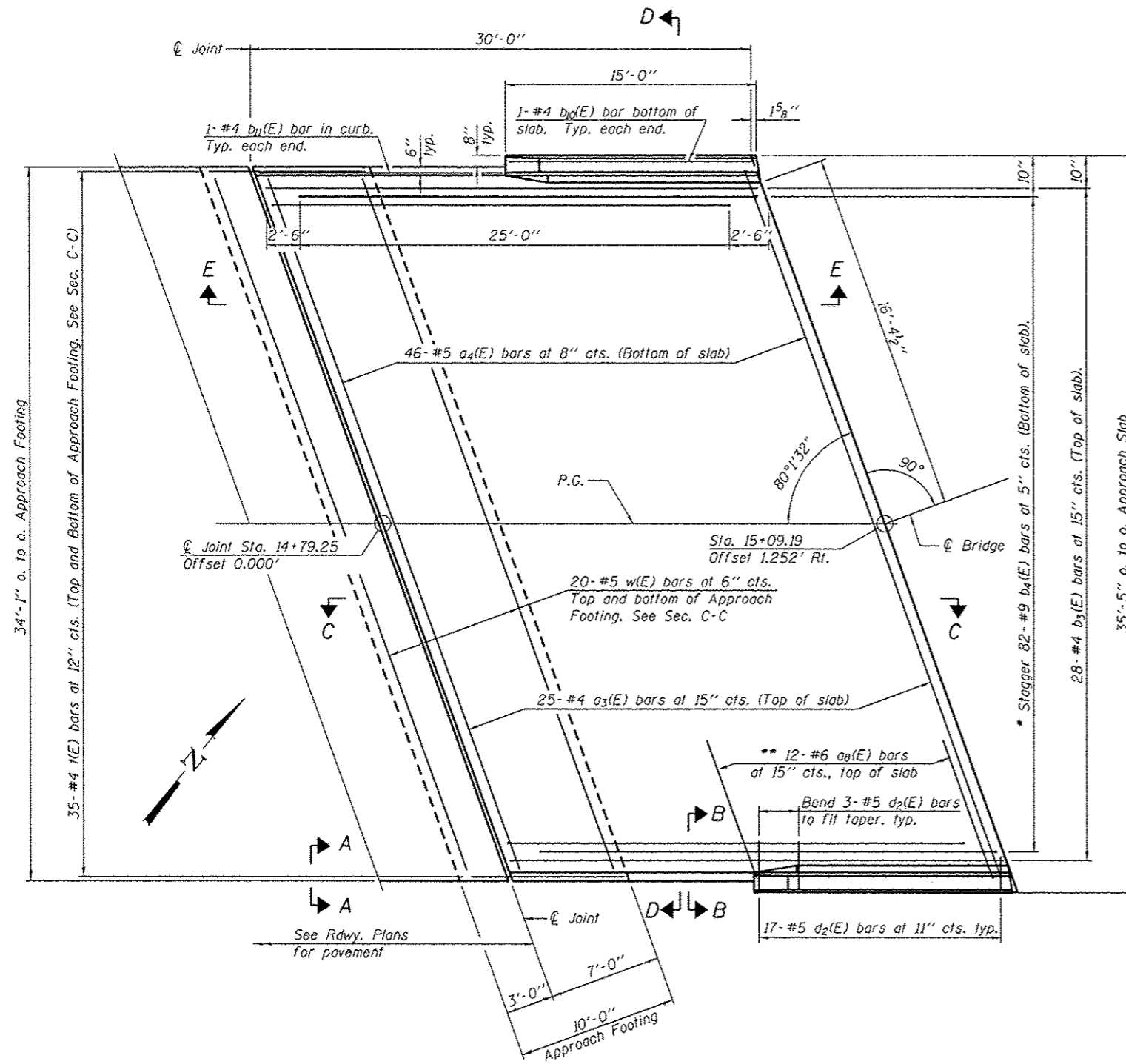
**INTEGRAL ABUTMENT
 DIAPHRAGM DETAILS
 STRUCTURE NO. 090-6087**

MAURER-STUTZ
 ENGINEERS SURVEYORS

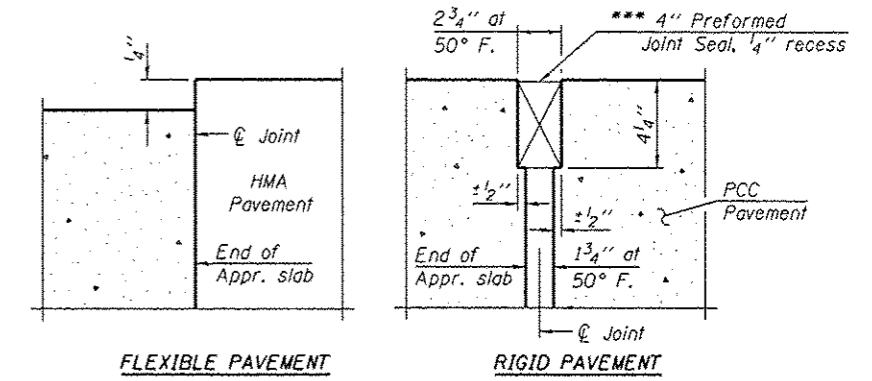
DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

SHEET NO. 8	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	20
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

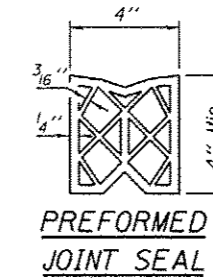
Notes:
See sheet 11 of 23 for Sections C-C & D-D and View E-E.
 $a_3(E)$ and $a_4(E)$ bar spacings measured along P.G. line.



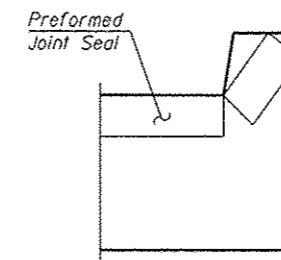
SOUTH APPROACH SLAB PLAN



DETAIL F

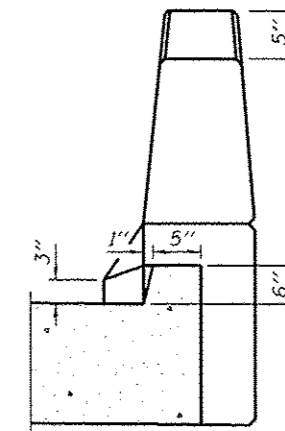


PREFORMED JOINT SEAL



VIEW A-A

Angle Preformed Joint Seal at 45° at curbs



VIEW B-B

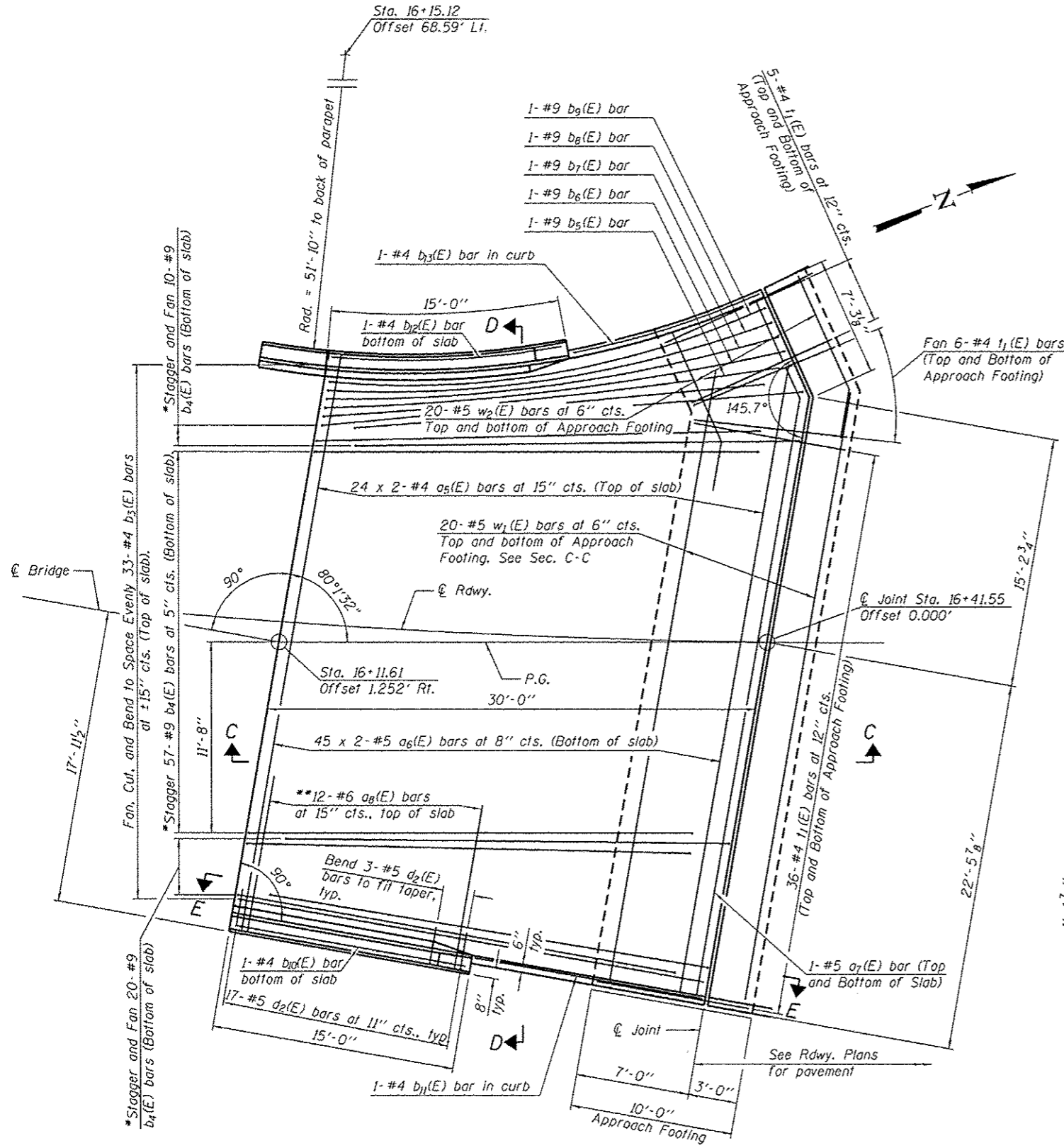
* Tilt #9 $b_4(E)$ bars as required to maintain clearance.
** Space between $a_3(E)$ bars, typ. each parapet.

MAURER-STUTZ
ENGINEERS SURVEYORS

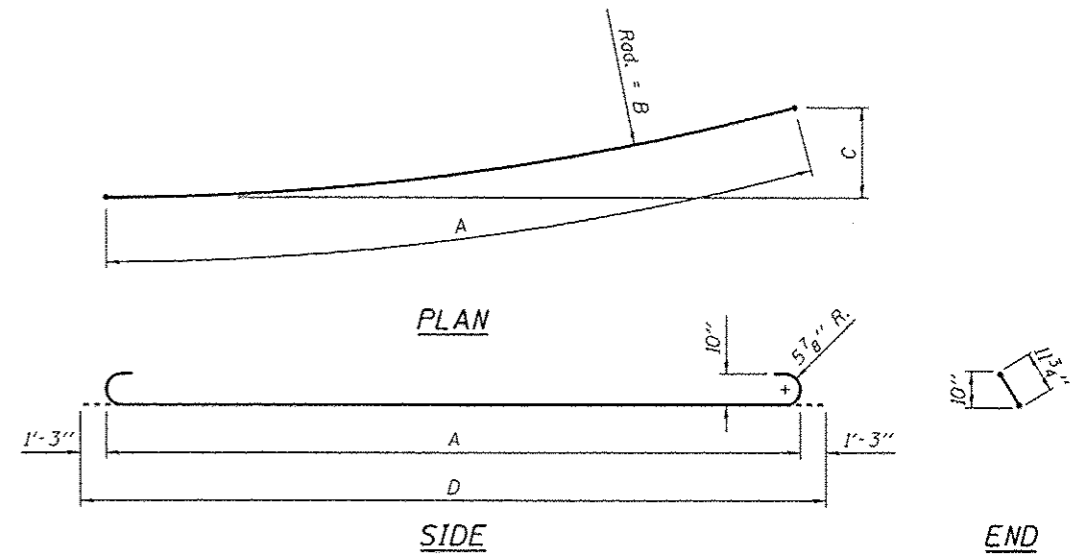
DESIGNED	- BAS
CHECKED	- JAE
DRAWN	- SGM
CHECKED	- BAS

(Sheet 1 of 3)
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 090-6087

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9	6774	07-00149-00-BR	TAZEWELL	52	21
23 SHEETS					
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 89495					

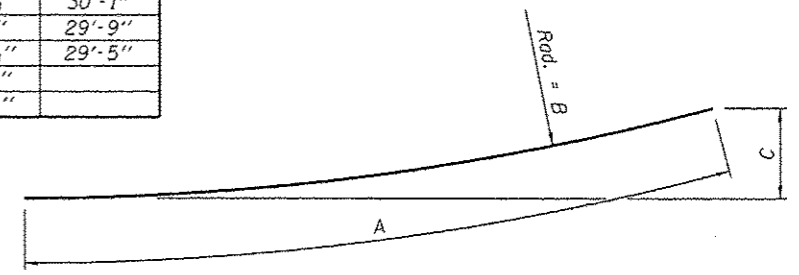


NORTH APPROACH SLAB PLAN



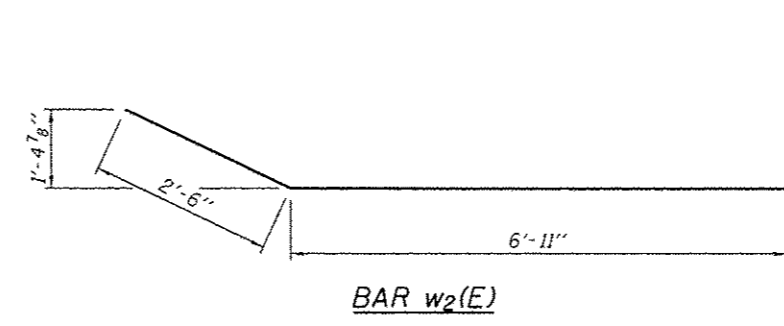
BARS b₅(E) THRU b₉(E)

Bar	A	B	C	D
b ₅ (E)	28'-4"	297'-3"	1'-4 1/4"	30'-10"
b ₆ (E)	27'-11"	143'-5"	2'-8 1/2"	30'-5"
b ₇ (E)	27'-7"	92'-9"	4'-0 7/8"	30'-1"
b ₈ (E)	27'-3"	67'-7"	5'-5"	29'-9"
b ₉ (E)	26'-11"	52'-9"	6'-8 5/8"	29'-5"
b ₁₂ (E)	14'-4"	52'-1"	1'-11 1/2"	
b ₁₃ (E)	12'-3"	52'-9"	1'-6 3/8"	

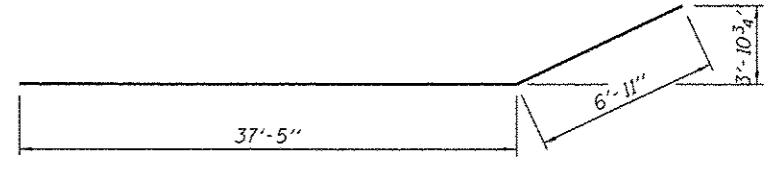


BARS b₁₂(E) AND b₁₃(E)

* Tilt #9 b₄(E) bars as required to maintain clearance.
 ** Space between a₅(E) bars, typ. each parapet.

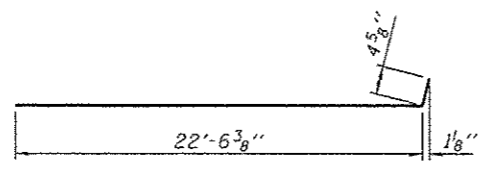


BAR w₂(E)

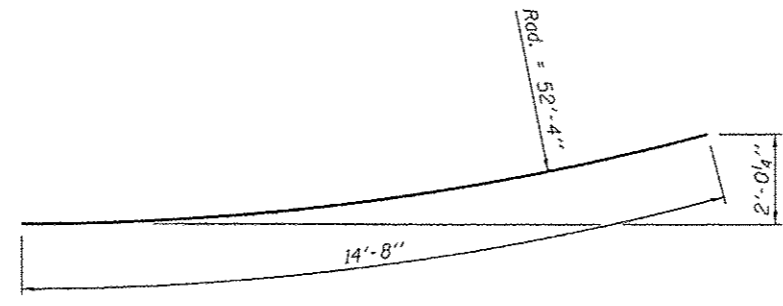


BAR a₇(E)

Notes:
 See sheet 9 of 23 for Views A-A & B-B.
 See sheet 11 of 23 for Sections C-C & D-D and View E-E.
 a₅(E) and a₆(E) bar spacings measured along P.G. line.
 Bars indicated thus 24 x 2-#5 etc. indicates 24 lines of bars with 2 lengths per line.



BAR a₅(E)



BARS e₉(E) AND e₁₀(E)

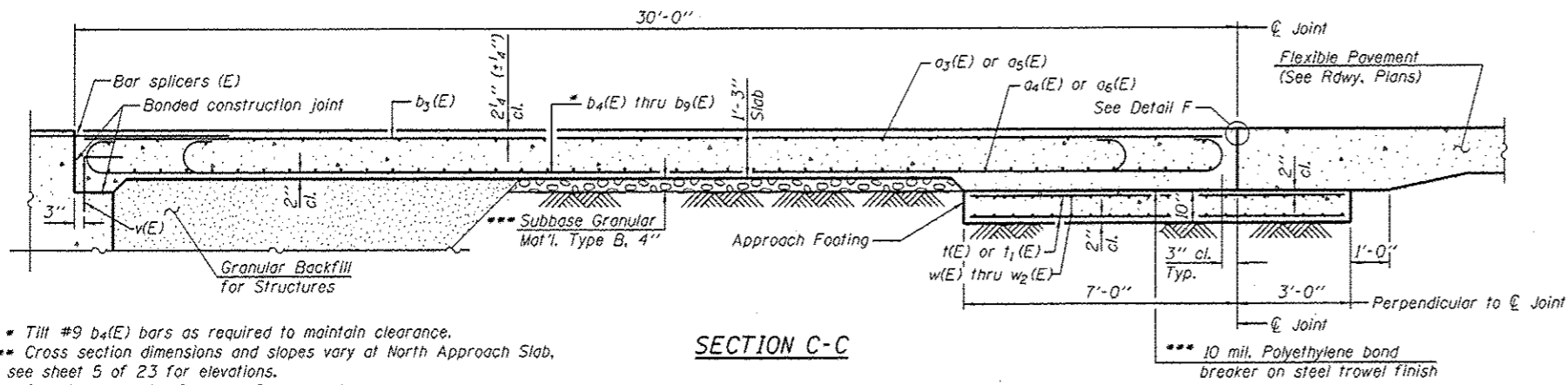
MAURER-STUTZ
 ENGINEERS SURVEYORS

DESIGNED -	BAS
CHECKED -	JAE
DRAWN -	SGM
CHECKED -	BAS

(Sheet 2 of 3)
 BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 090-6087

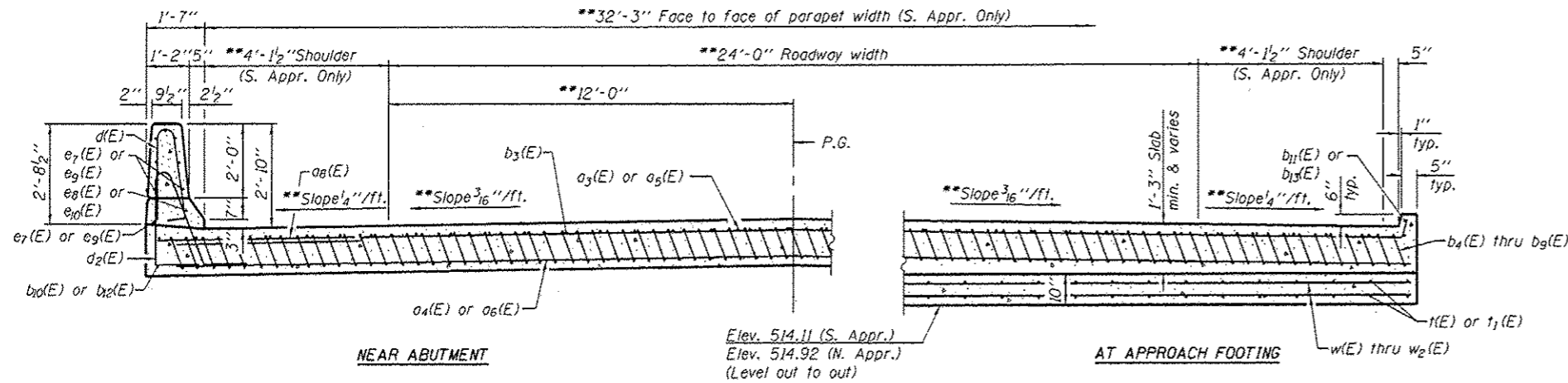
SHEET NO. 10 23 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	22
			CONTRACT NO. 89495		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

Notes:
 See sheet 9 of 23 for Detail F.
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 7 of 23.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 For bar splicer details, see sheet 19 of 23.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 23.
 For additional parapet details, see sheet 7 of 23.



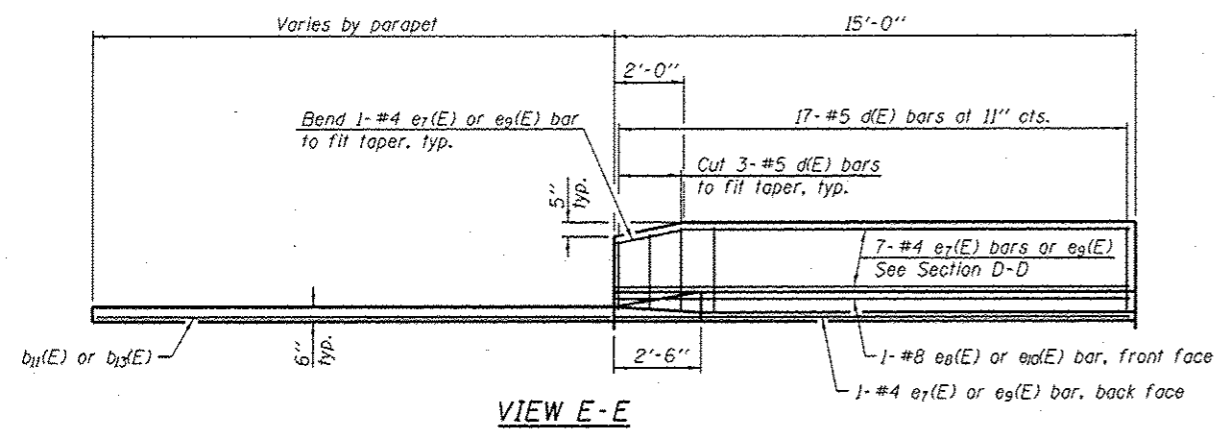
- * Tilt #9 b4(E) bars as required to maintain clearance.
- ** Cross section dimensions and slopes vary at North Approach Slab, see sheet 5 of 23 for elevations.
- *** Cost included with Concrete Superstructure.

SECTION C-C

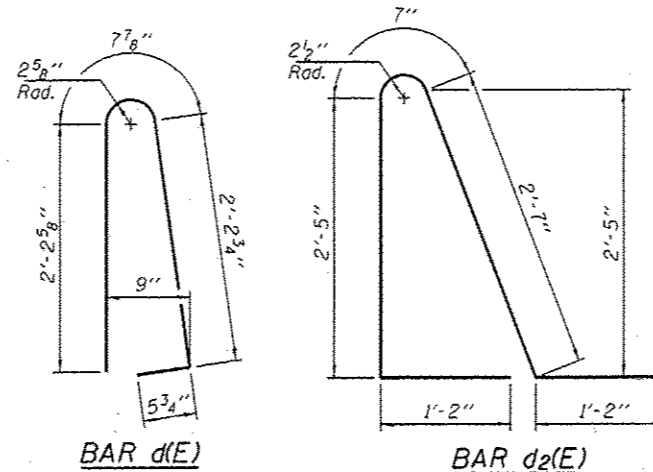


SECTION D-D

(See Plan for dimensions not shown)

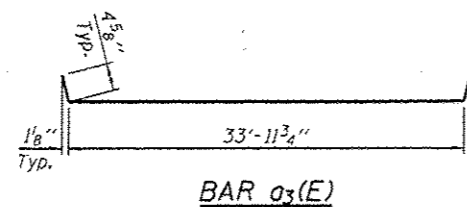


VIEW E-E

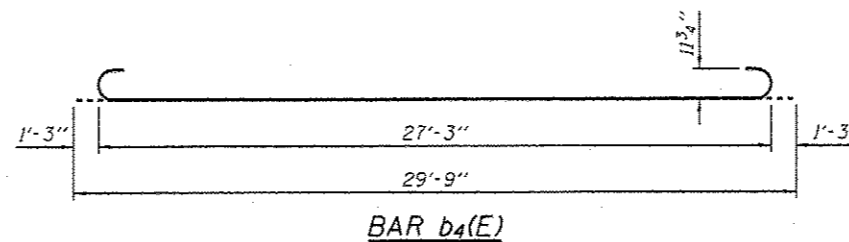


BAR d(E)

BAR d2(E)



BAR a3(E)



BAR b4(E)

TWO APPROACHES
 BILL OF MATERIAL

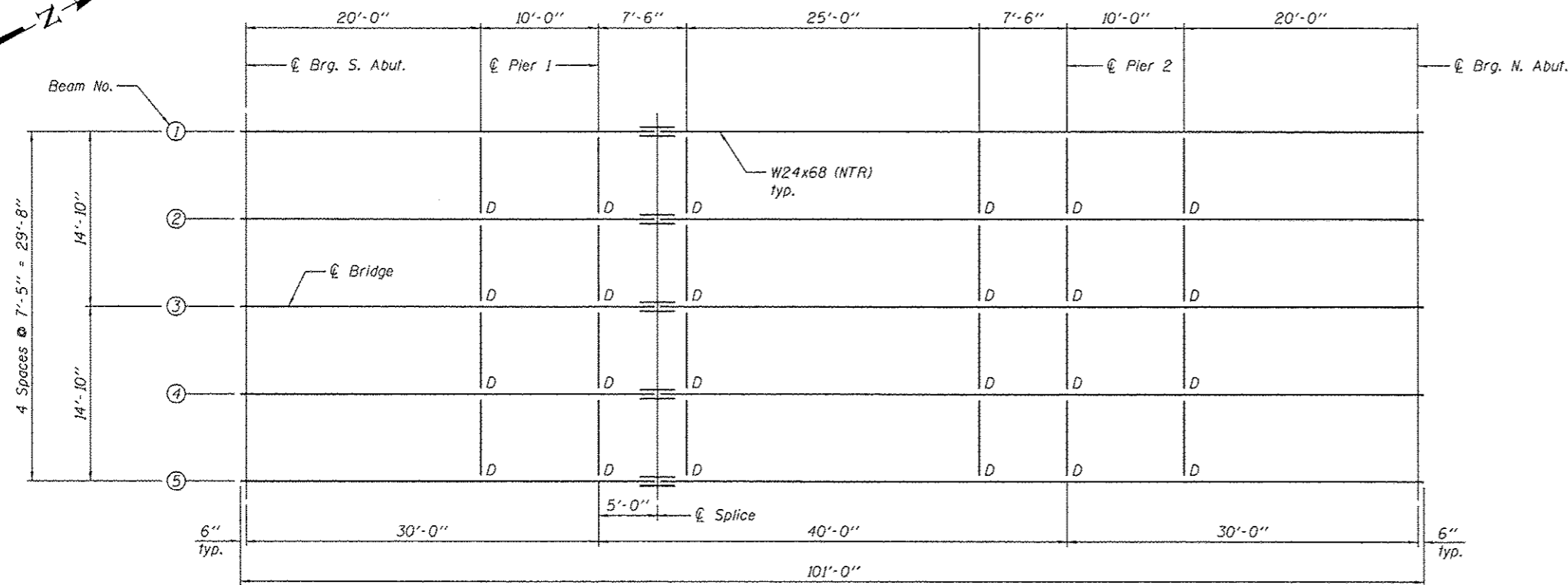
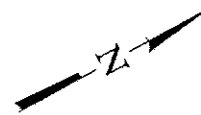
Bar	No.	Size	Length	Shape
a3(E)	#4	25	34'-9"	—
a4(E)	#5	46	34'-3"	—
a5(E)	#4	48	22'-11"	—
a6(E)	#5	90	22'-11"	—
a7(E)	#5	2	44'-4"	—
a8(E)	#6	48	6'-6"	—
b3(E)	#4	61	29'-8"	—
b4(E)	#9	169	29'-9"	—
b5(E)	#9	1	30'-10"	—
b6(E)	#9	1	30'-5"	—
b7(E)	#9	1	30'-1"	—
b8(E)	#9	1	29'-9"	—
b9(E)	#9	1	29'-5"	—
b10(E)	#4	3	14'-8"	—
b11(E)	#4	3	14'-4"	—
b12(E)	#4	1	14'-4"	—
b13(E)	#4	1	12'-3"	—
d(E)	#5	68	5'-7"	—
d2(E)	#5	68	7'-11"	—
e7(E)	#4	24	14'-8"	—
e8(E)	#8	3	14'-8"	—
e9(E)	#4	8	14'-8"	—
e10(E)	#8	1	14'-8"	—
t(E)	#4	70	9'-10"	—
t1(E)	#4	94	9'-8"	—
w(E)	#5	40	34'-3"	—
w1(E)	#5	40	37'-5"	—
w2(E)	#5	40	9'-5"	—
Concrete Superstructure	Cu. Yd.		112.9	
Concrete Structures	Cu. Yd.		24.1	
Reinforcement Bars, Epoxy Coated	Pound		30440	

MAURER-STUTZ
 ENGINEERS SURVEYORS

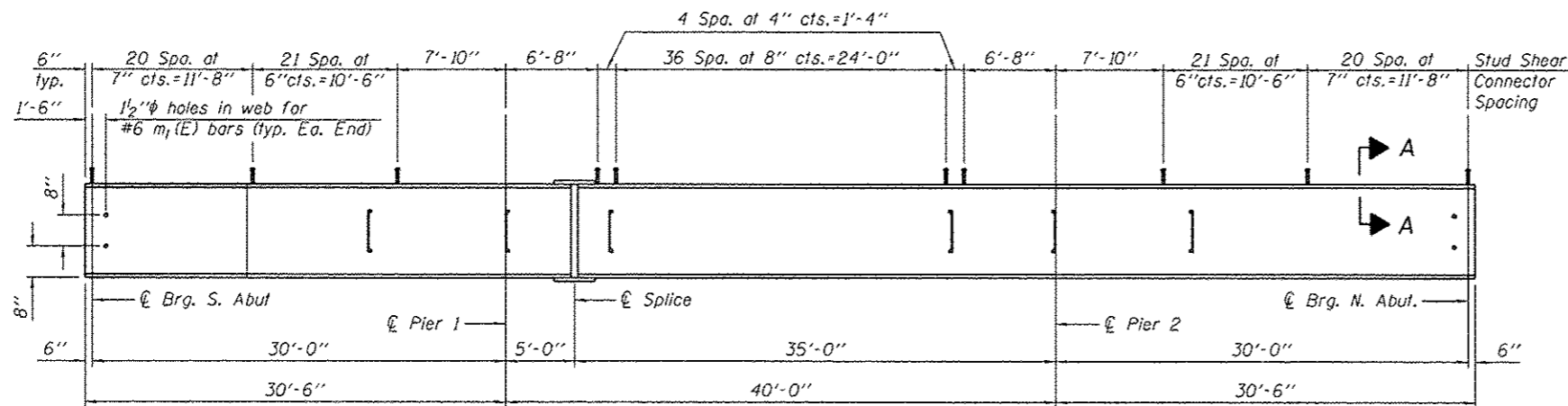
DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

(Sheet 3 of 3)
 BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 090-6087

SHEET NO. 11 23 SHEETS	F.A.U. RTE. 6774	SECTION 07-00149-00-BR	COUNTY TAZEWELL	TOTAL SHEETS 52	SHEET NO. 23
	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			



PLAN



ELEVATION

TOP OF BEAM ELEVATIONS

(For Fabrication Only)

	℄ Brg. S. Abut.	℄ Pier 1	℄ Splice	℄ Pier 2	℄ Brg. N. Abut.
Beam 1	515.680	515.790	515.808	516.008	516.180
Beam 2	515.810	515.920	515.938	516.138	516.310
Beam 3	515.930	516.040	516.058	516.258	516.430
Beam 4	515.810	515.920	515.938	516.138	516.310
Beam 5	515.680	515.790	515.808	516.008	516.180

		0.4 Sp. 1 or 0.6 Sp. 3	Pier	.5 Span 2
I_s	(in ⁴)	1830	1830	1830
$I_e(n)$	(in ⁴)	6278	-	6278
$I_e(3n)$	(in ⁴)	4836	-	4836
S_s	(in ³)	154	154	154
$S_e(n)$	(in ³)	256	-	256
$S_e(3n)$	(in ³)	232	-	232
Z	(in ³)	-	177	-
DC1	(k/ft)	.829	.829	.829
M _{DC1}	(k)	47.6	104.8	61.0
DC2	(k/ft)	.180	.180	.180
M _{DC2}	(k)	12.8	16.5	19.5
DW	(k/ft)	.328	.328	.328
M _{DW}	(k)	23.4	30.1	35.5
M _{℄ + IM}	(k)	328.2	186.9	385.5
M _u (Strength I)	(k)	685.0	523.9	828.5
* $\phi_r M_n, \phi_r M_{nc}$	(k)	1312.4	737.5	1330.4
f_s DC1	(ksi)	3.71	8.17	4.75
f_s DC2	(ksi)	0.66	1.29	1.01
f_s DW	(ksi)	1.21	2.35	1.84
f_s 1.3(℄ + IM)	(ksi)	20.00	18.93	23.49
f_s (Service II)	(ksi)	25.58	30.74	31.09
** f_s (Total)(Strength I)	(ksi)	-	-	-
V _r	(k)	18.3	-	17.5

* Compact sections
** Non-Compact and slender sections

		Abut.	Pier
R _{DC1}	(k)	8.9	32.5
R _{DC2}	(k)	2.2	6.9
R _{DW}	(k)	3.9	12.5
R _{℄ + IM}	(k)	55.9	83.5
R _{Total}	(k)	70.9	135.4

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).
- $I_e(n), S_e(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in⁴ and in³).
- $I_e(3n), S_e(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio. "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in⁴ and in³).
- Z: Plastic Section Modulus of the steel section in non-composite areas (in³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M_{℄ + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{℄ + IM}$
- $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
- $\phi_r M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
- f_s (Service II): Sum of stresses as computed from the moments below (ksi).
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_{℄ + IM}$
- f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{℄ + IM}$
- V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

Notes:
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms may be temporarily disconnected to install bearing anchor rods.

All structural steel beams shall conform to the requirements of AASHTO M270 Grade 50.

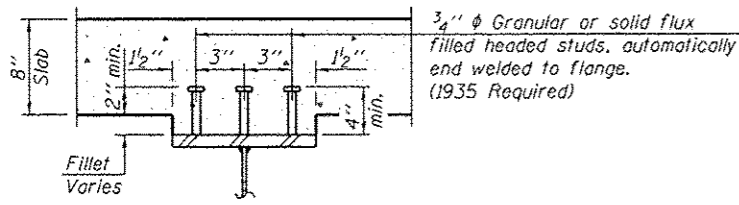
See sheet 13 of 23 for Section A-A, splice, bearing, and diaphragm details.

MAURER-STUTZ
ENGINEERS SURVEYORS

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CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

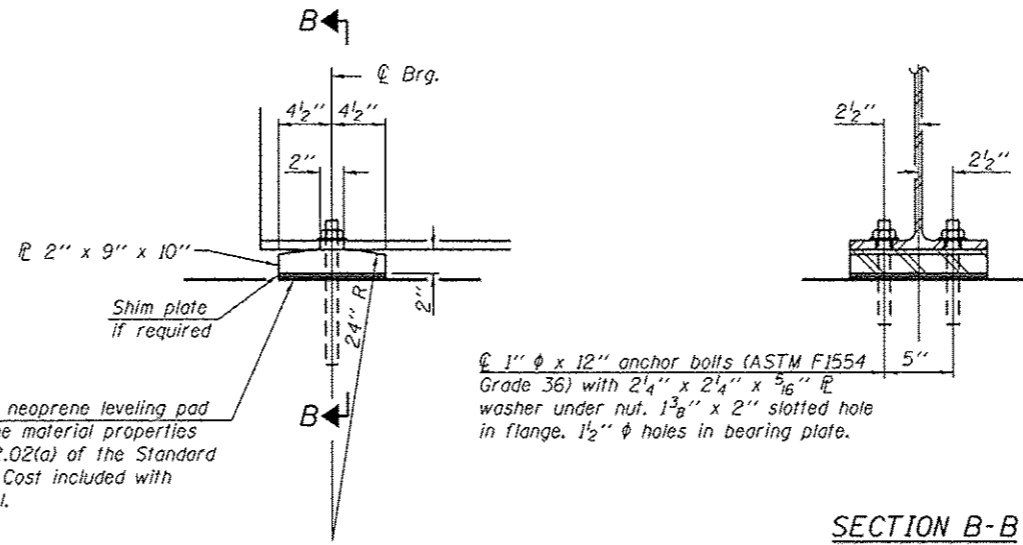
STRUCTURAL STEEL
STRUCTURE NO. 090-6087

SHEET NO. 12	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	24
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			



SECTION A-A

Notes:
 Splice plates shall conform to the requirements of AASHTO M270 Gr. 50.
 Load carrying components designated "NTR" shall conform to the Supplemental Provisions for Notch Toughness, Zone 2.

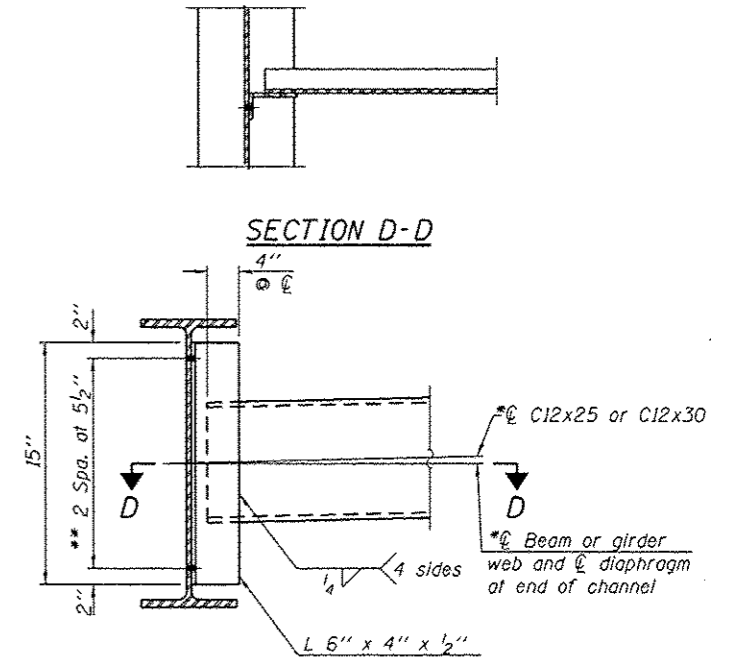


ELEVATION AT ABUTMENT

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

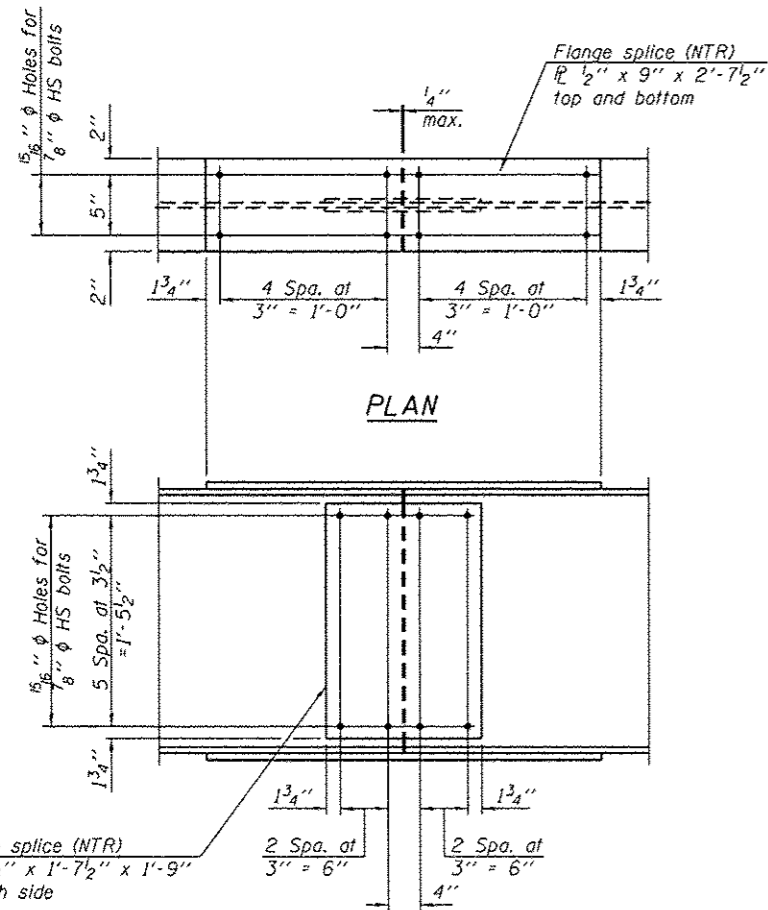
1" x 12" anchor bolts (ASTM F1554 Grade 36) with 2 1/4" x 2 1/4" x 5/16" R washer under nut. 1 3/8" x 2" slotted hole in flange. 1 1/2" holes in bearing plate.

SECTION B-B



DIAPHRAGM D

Note:
 Two hardened washers required for each set of oversized holes.
 *Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
 The alternate, if utilized, shall be provided at no additional cost to the Department.
 **3/4" HS bolts, 5/16" holes



PLAN

Web splice (NTR)
 1/2" x 1'-7 1/2" x 1'-9" each side

ELEVATION

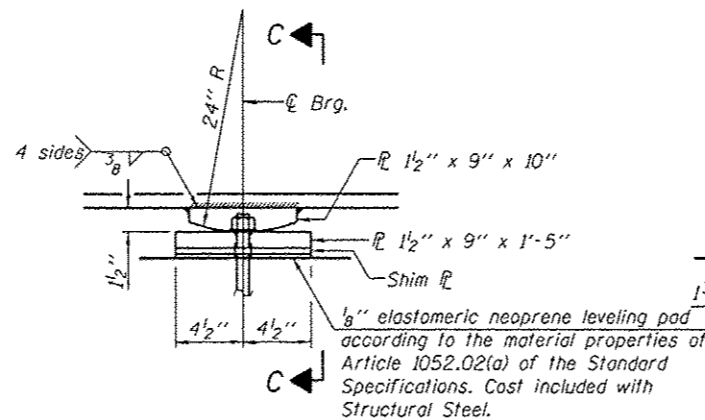
SPLICE DETAIL
 (5 Required)

Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Drilled and set anchor bolts shall be installed according to Article 521.05 of the Standard Specifications.
 All bearing plates and pintles shall conform to the requirements of AASHTO M270, Grade 50.
 Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

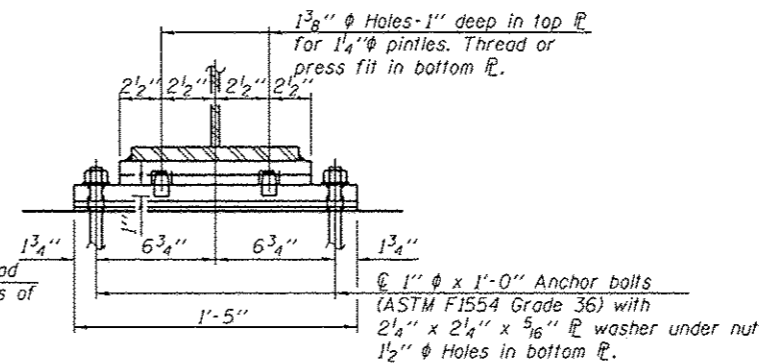
FIXED BEARING AT ABUTMENTS

BILL OF MATERIAL

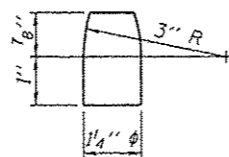
ITEM	UNIT	TOTAL
Anchor Bolts, 1"	Each	40



ELEVATION AT PIER



SECTION C-C



PINTLE

FIXED BEARING AT PIERS

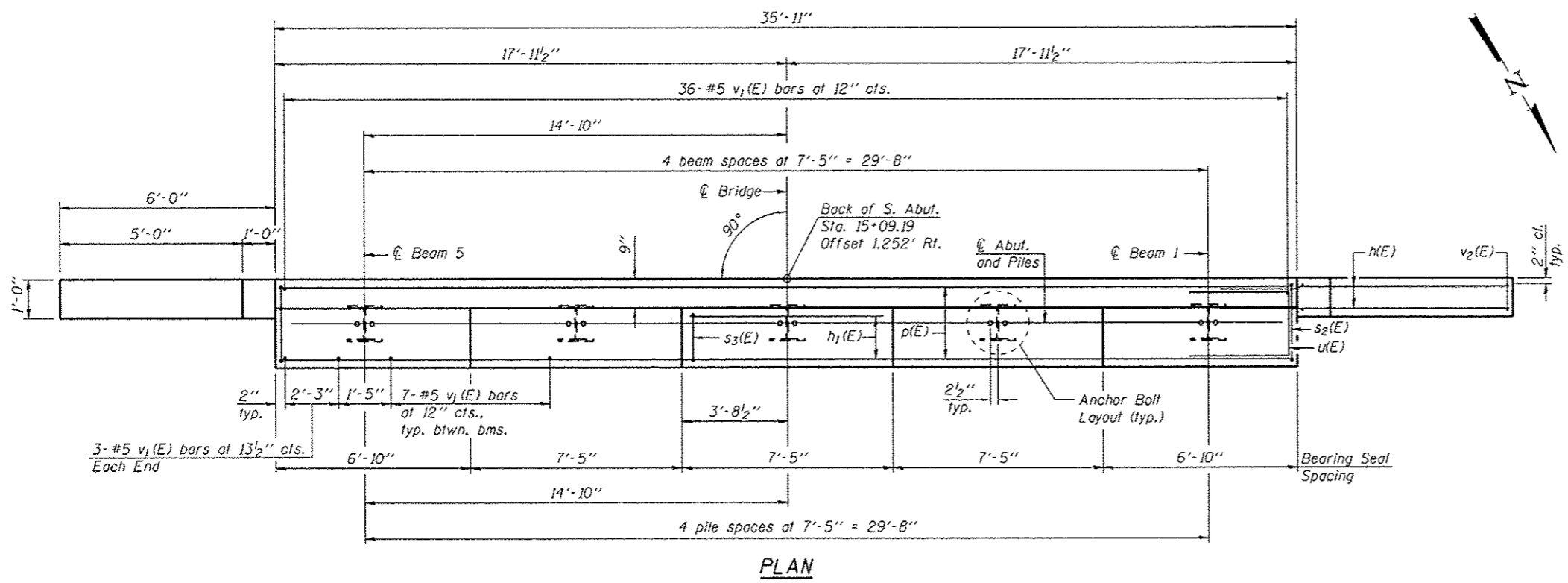
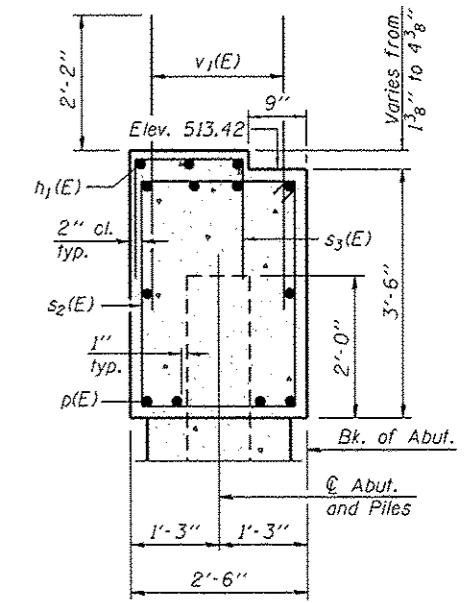
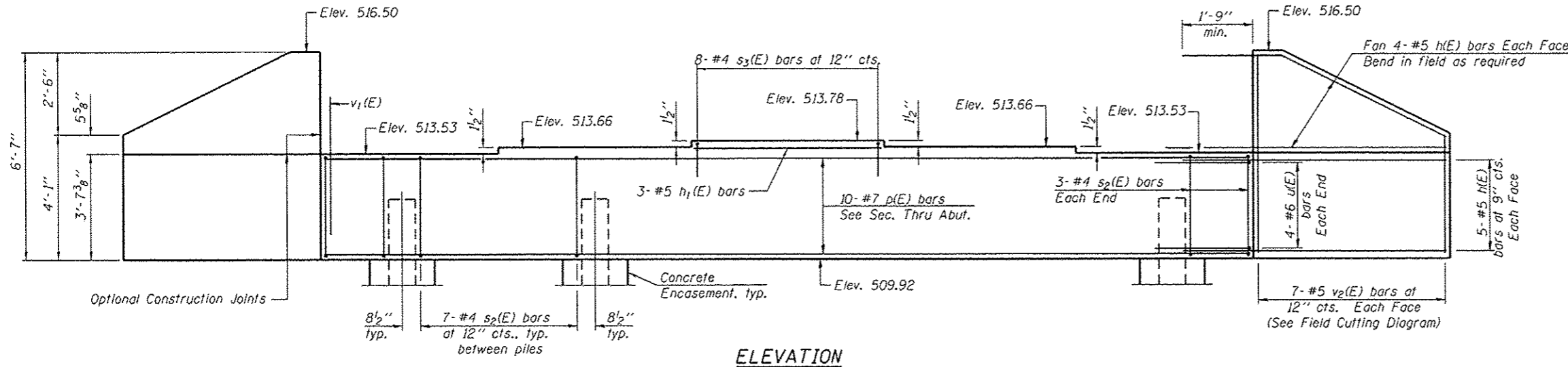
MAURER-STUTZ
 ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

STRUCTURAL STEEL DETAILS
 STRUCTURE NO. 090-6087

SHEET NO.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
13	6774	07-00149-00-BR	TAZEWELL	52	25
23 SHEETS			CONTRACT NO. 89495		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

Notes:
 Pour steps monolithically with cap.
 Space reinforcement in cap to miss anchor bolts.



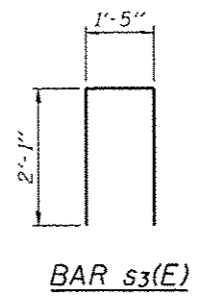
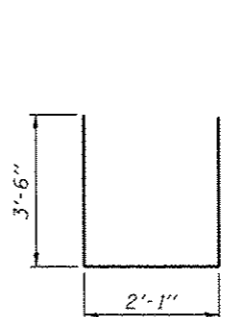
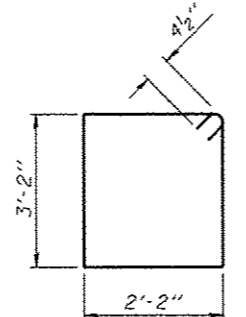
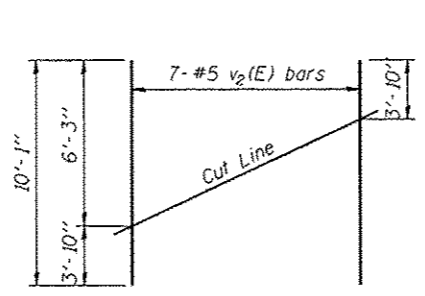
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#5	8'-2"	—
h ₁ (E)	3	#5	7'-1"	—
p(E)	10	#7	35'-7"	—
s ₂ (E)	34	#4	11'-5"	□
s ₃ (E)	8	#4	5'-7"	□
u(E)	8	#6	9'-1"	□
v ₁ (E)	70	#5	4'-4"	—
v ₂ (E)	14	#5	10'-1"	—
Structure Excavation		Cu. Yd.	63	
Concrete Structures		Cu. Yd.	14.6	
Reinforcement Bars, Epoxy Coated		Pound	1920	
Furnishing Steel Piles, HP12x53		Foot	192	
Driving Piles		Foot	192	
Test Pile, Steel HP12x53		Each	1	
Concrete Encasement		Cu. Yd.	1.7	

For details of Bar Splicers, see sheet 19 of 23.
 For details of piles and Concrete Encasement, see sheet 18 of 23.

PILE DATA

Type: Steel-HP12x53
 Nominal Required Bearing: 304 kips
 Factored Resistance Available: 152 kips
 Est. Length: 48 feet
 No. Production Piles: 4
 No. Test Piles: 1



MAURER-STUTZ
 ENGINEERS SURVEYORS

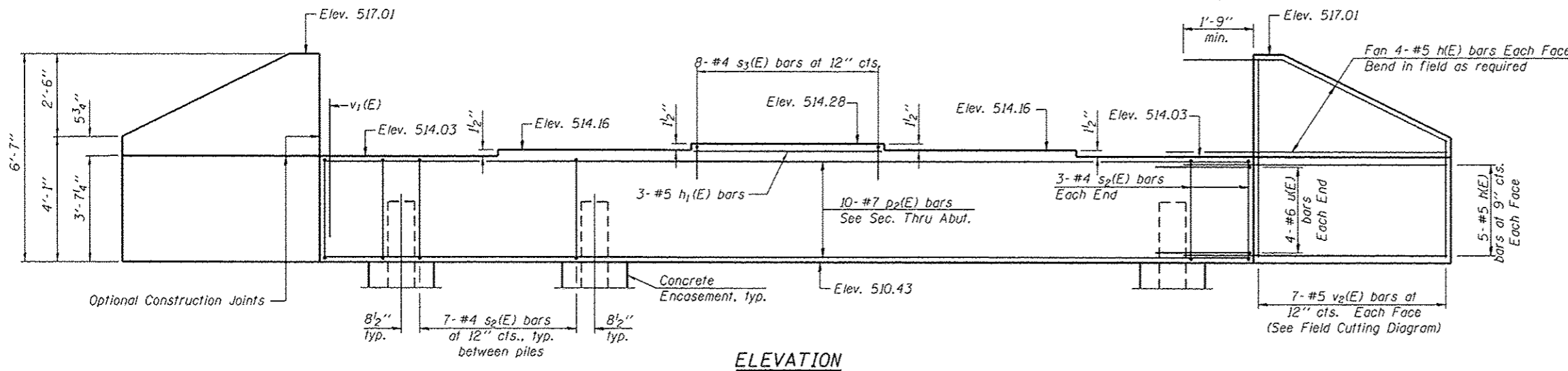
DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

**SOUTH ABUTMENT
 STRUCTURE NO. 090-6087**

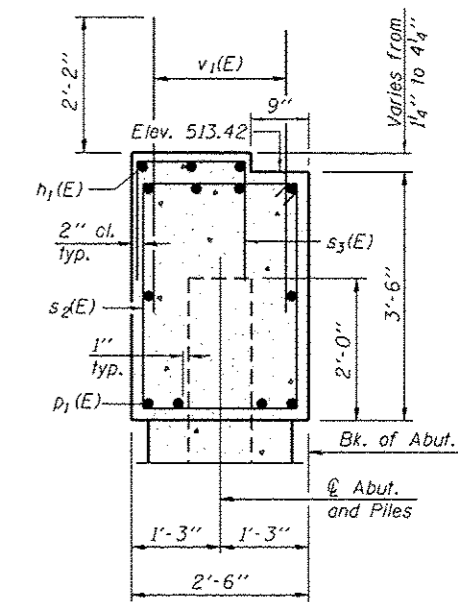
SHEET NO. 14 23 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	26
			CONTRACT NO. 89495		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

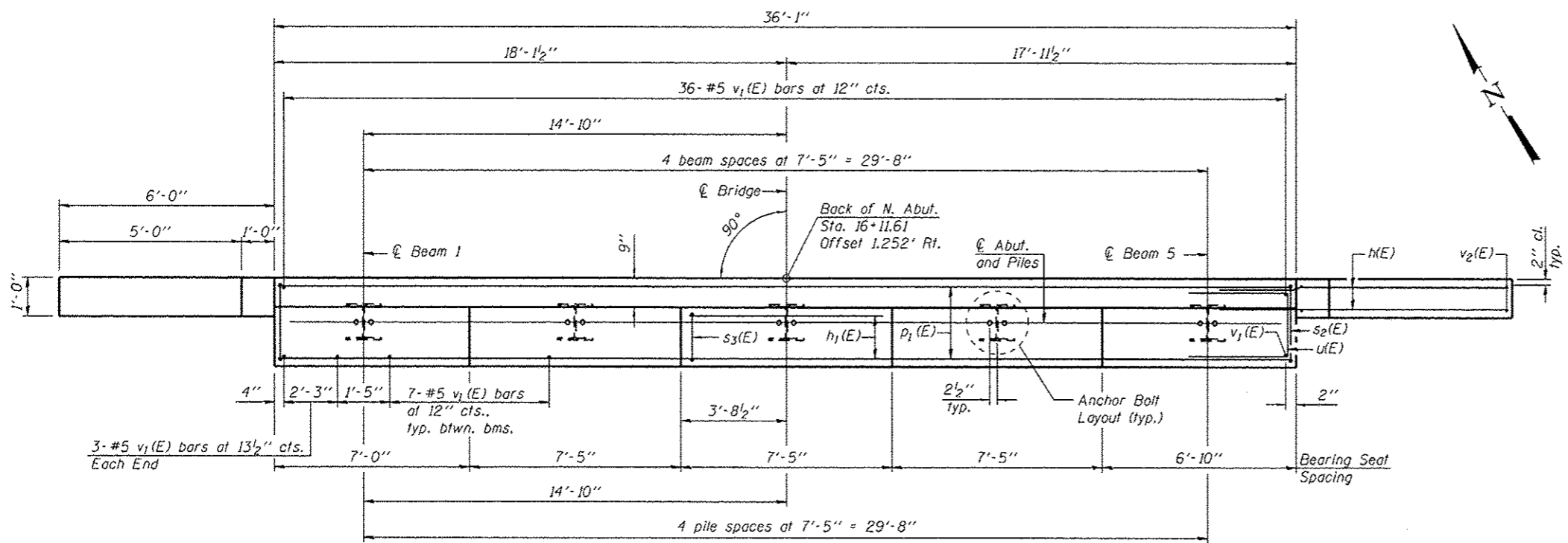
Notes:
Pour steps monolithically with cap.
Space reinforcement in cap to miss anchor bolts.



ELEVATION



SEC. THRU ABUT.



PLAN

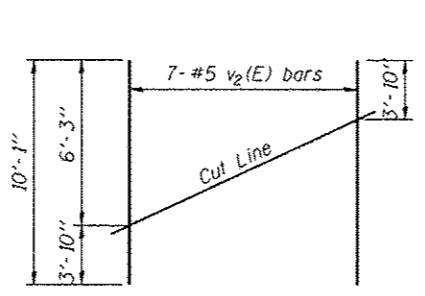
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#5	8'-2"	—
h1(E)	3	#5	7'-1"	—
p1(E)	10	#7	35'-9"	—
s2(E)	34	#4	11'-5"	□
s3(E)	8	#4	5'-7"	□
u(E)	8	#6	9'-1"	□
v1(E)	70	#5	4'-4"	—
v2(E)	14	#5	10'-1"	—
Structure Excavation		Cu. Yd.		2
Concrete Structures		Cu. Yd.		14.6
Reinforcement Bars, Epoxy Coated		Pound		1920
Furnishing Steel Piles, HP12x53		Foot		228
Driving Piles		Foot		228
Test Pile, Steel HP12x53		Each		1
Concrete Encasement		Cu. Yd.		1.7

For details of Bar Splicers, see sheet 19 of 23.
For details of piles and Concrete Encasement, see sheet 18 of 23.

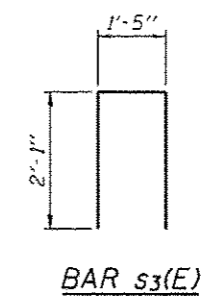
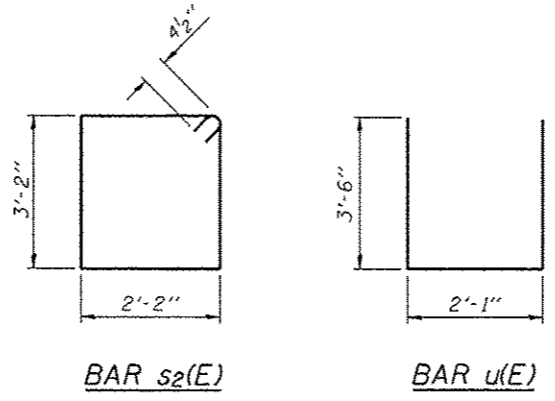
PILE DATA

Type: Steel-HP12x53
Nominal Required Bearing: 304 kips
Factored Resistance Available: 152 kips
Est. Length: 57 feet
No. Production Piles: 4
No. Test Piles: 1



FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



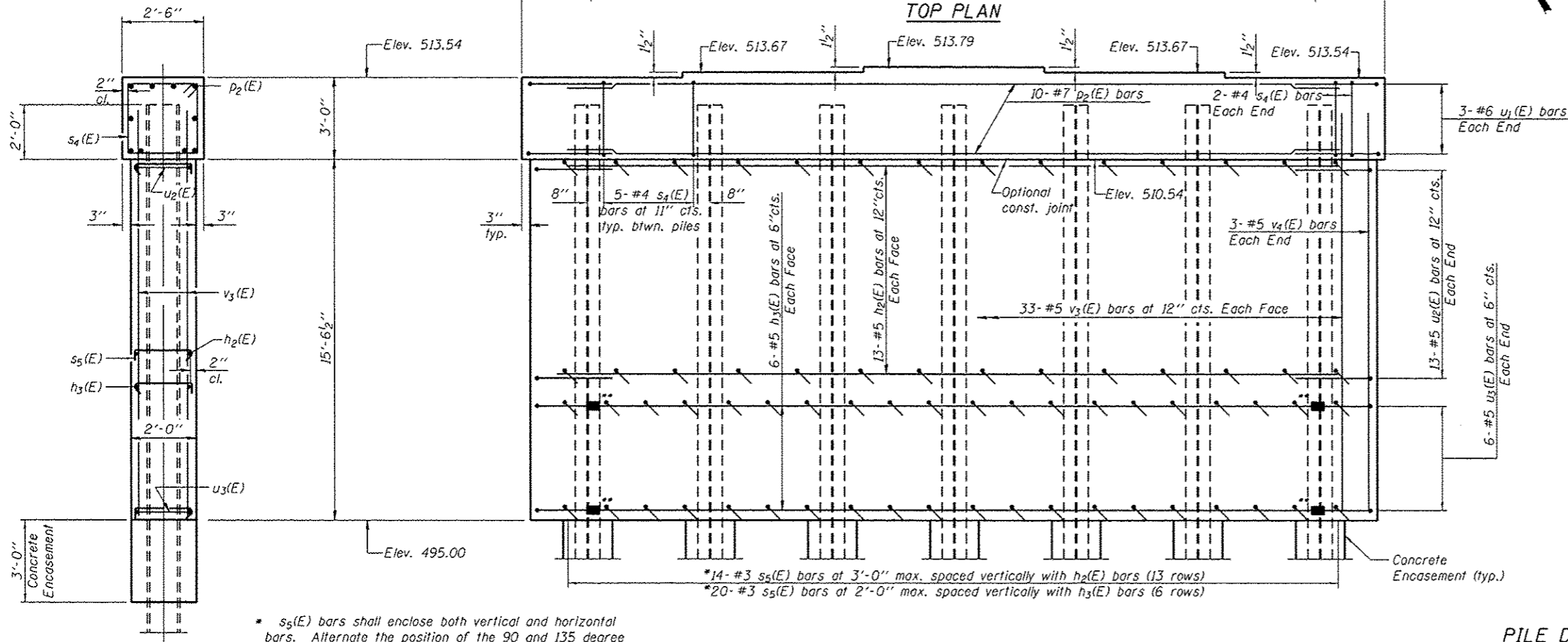
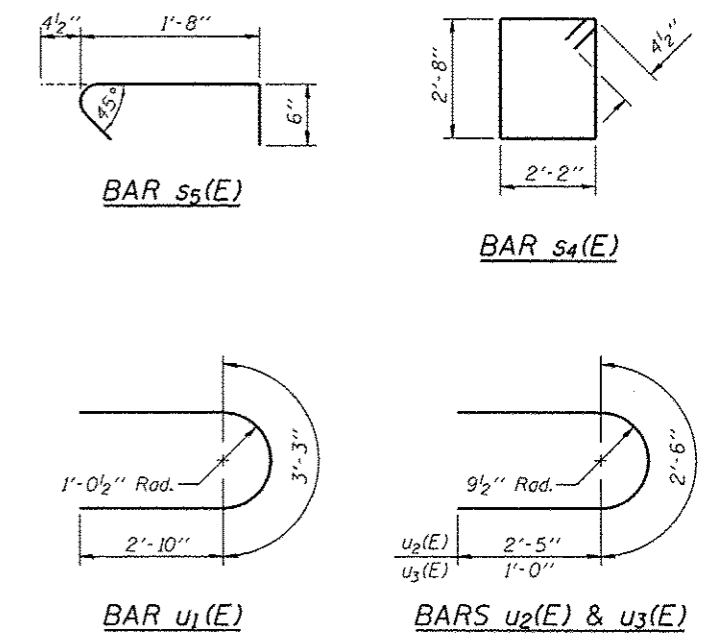
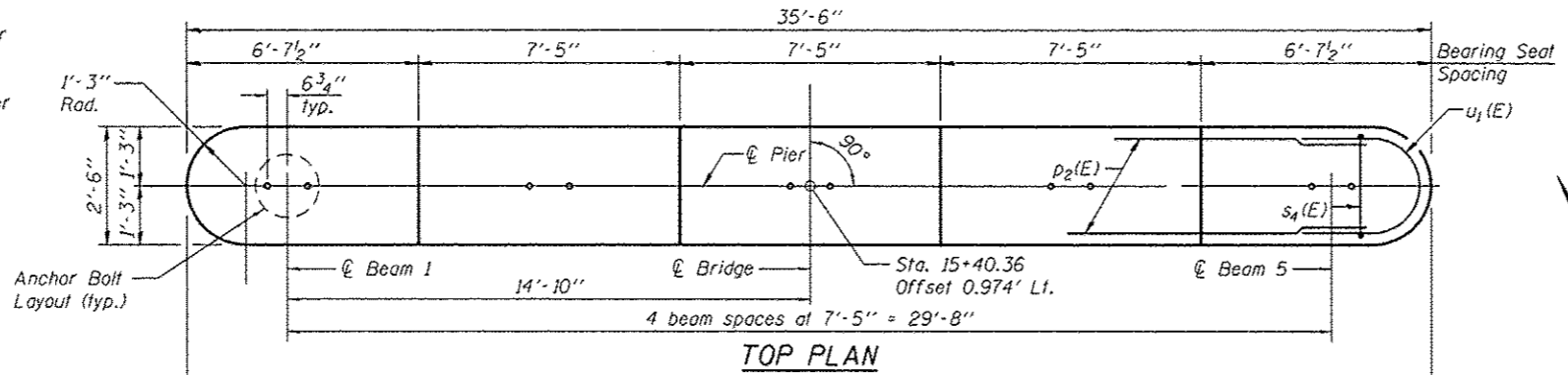
MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

NORTH ABUTMENT
STRUCTURE NO. 090-6087

SHEET NO. 15 23 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	27
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		

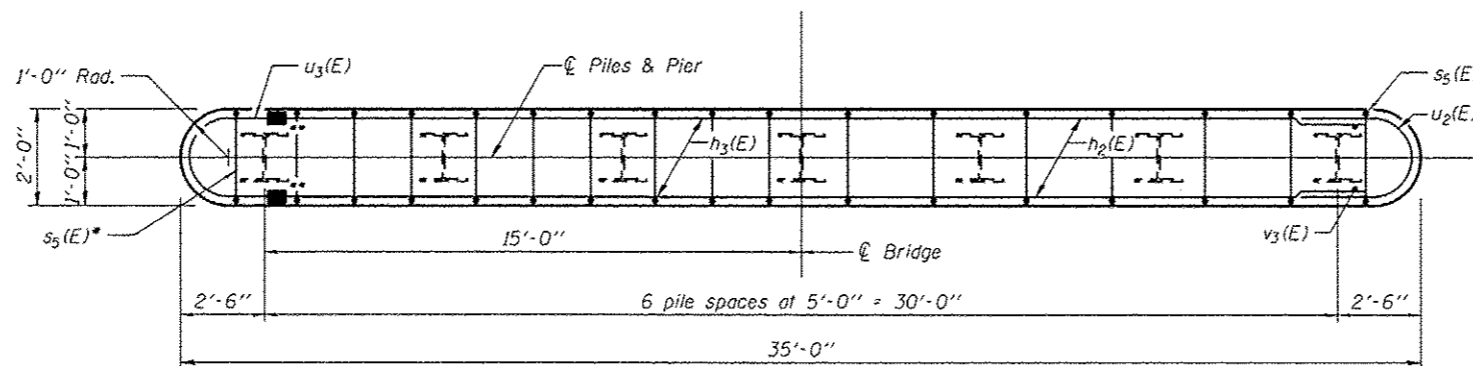
Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles and Concrete Encasement, see sheet 18 of 23.
 If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms.
 Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



END VIEW

- * s₅(E) bars shall enclose both vertical and horizontal bars. Alternate the position of the 90 and 135 degree hooked ends both vertically and horizontally.
- ** Mechanical Splicers (Typ. for h₃(E) and u₃(E) bars).

ELEVATION
(Looking North)



LOWER PORTION
(bottom 3'-0')

UPPER PORTION

STEM WALL PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₂ (E)	26	#5	33'-0"	—
h ₃ (E)	12	#5	31'-0"	—
p ₂ (E)	10	#7	33'-0"	—
s ₄ (E)	34	#4	10'-5"	□
s ₅ (E)	302	#3	2'-7"	┌
u ₁ (E)	6	#6	10'-3"	U
u ₂ (E)	26	#5	8'-4"	U
u ₃ (E)	12	#5	4'-6"	U
v ₃ (E)	72	#5	16'-11"	—
Structure Excavation		Cu. Yd.	27	
Concrete Structures		Cu. Yd.	49.9	
Reinforcement Bars, Epoxy Coated		Pound	4130	
Furnishing Steel Piles, HP12x53		Foot	288	
Driving Piles		Foot	288	
Test Pile, Steel HP12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.4	
Mechanical Splicers		Each	24	
Cofferdam (Type 1) (Location - 1)		Each	1	

PILE DATA

Type: Steel-HP12x53
 Nominal Required Bearing: 299 kips
 Factored Resistance Available: 133 kips
 Est. Length: 48 feet
 No. Production Piles: 6
 No. Test Piles: 1

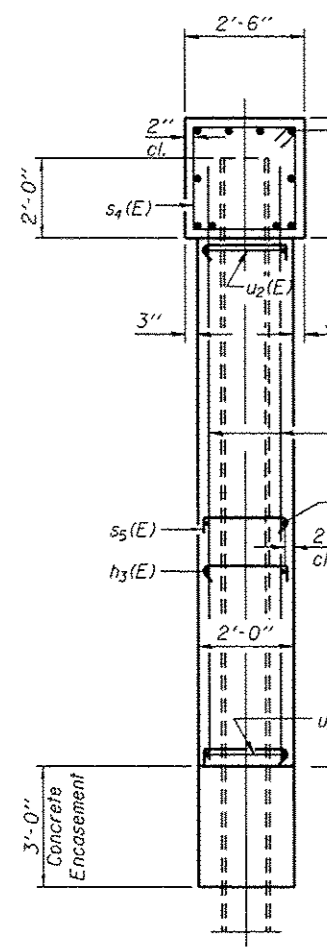
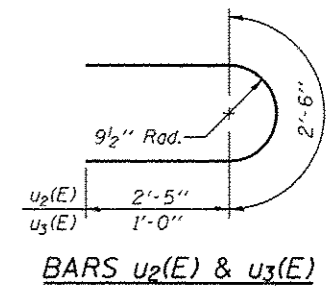
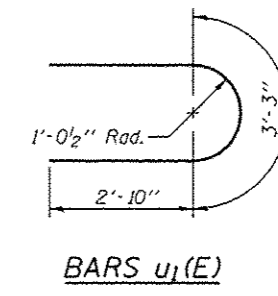
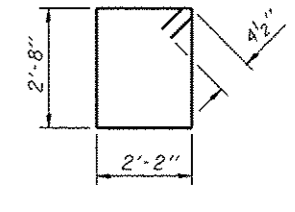
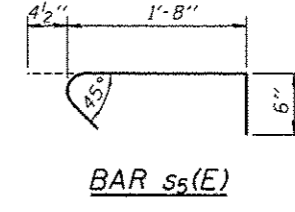
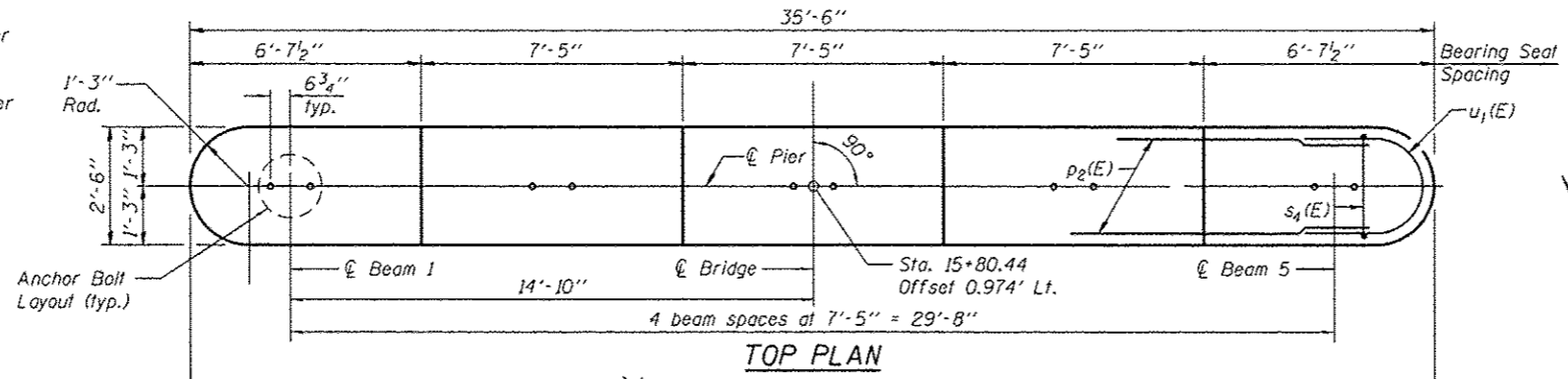
PIER 1
STRUCTURE NO. 090-6087

MAURER-STUTZ
 ENGINEERS SURVEYORS

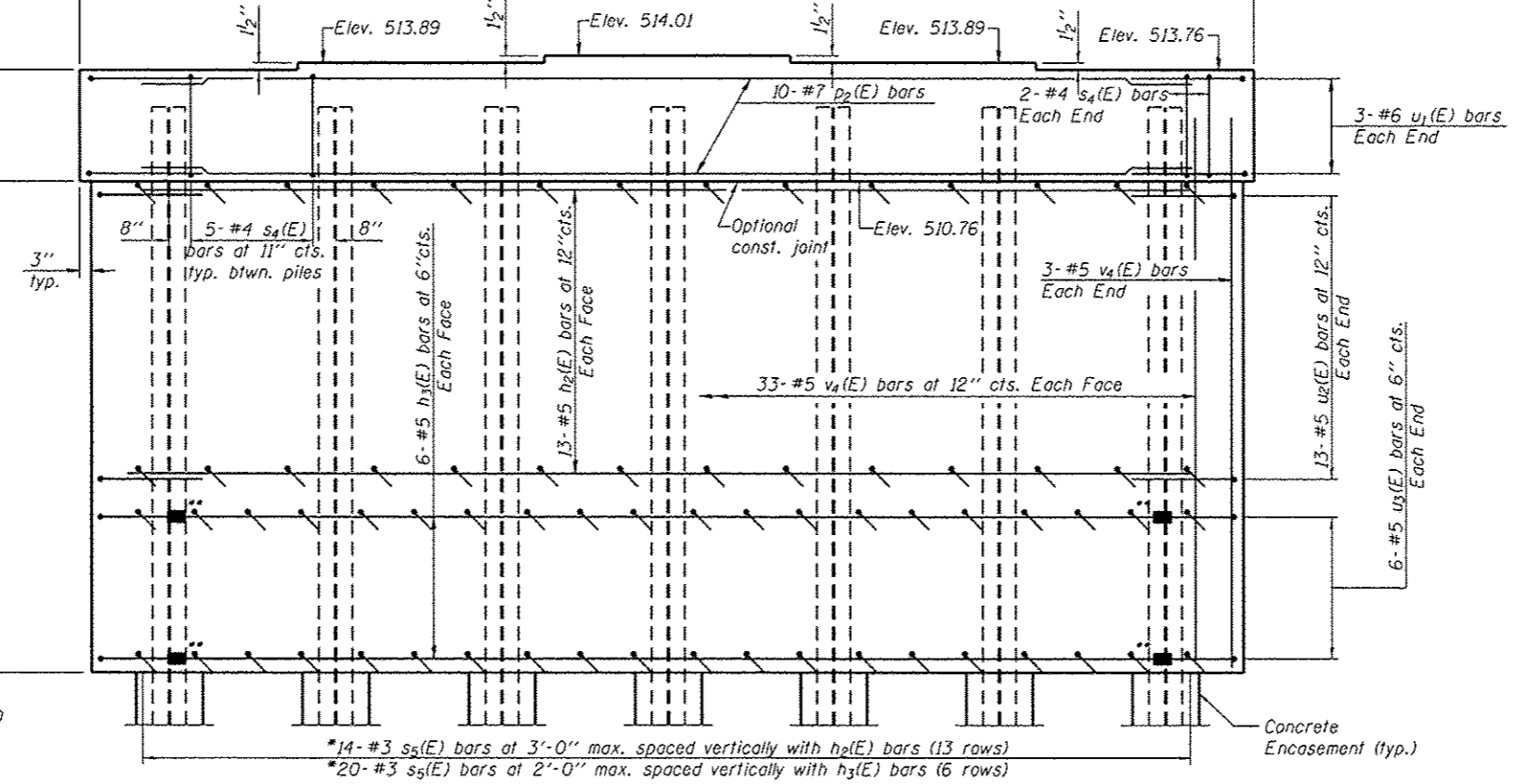
DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

SHEET NO. 16 23 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	28
CONTRACT NO. 89495			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles and Concrete Encasement, see sheet 18 of 23.
 If a portion of the pier wall or concrete encasement is under water, reinforcement may be placed underwater into forms.
 Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.



* s₅(E) bars shall enclose both vertical and horizontal bars. Alternate the position of the 90 and 135 degree hooked ends both vertically and horizontally.
 ** Mechanical Splicers (Typ. for h₃(E) and u₃(E) bars).



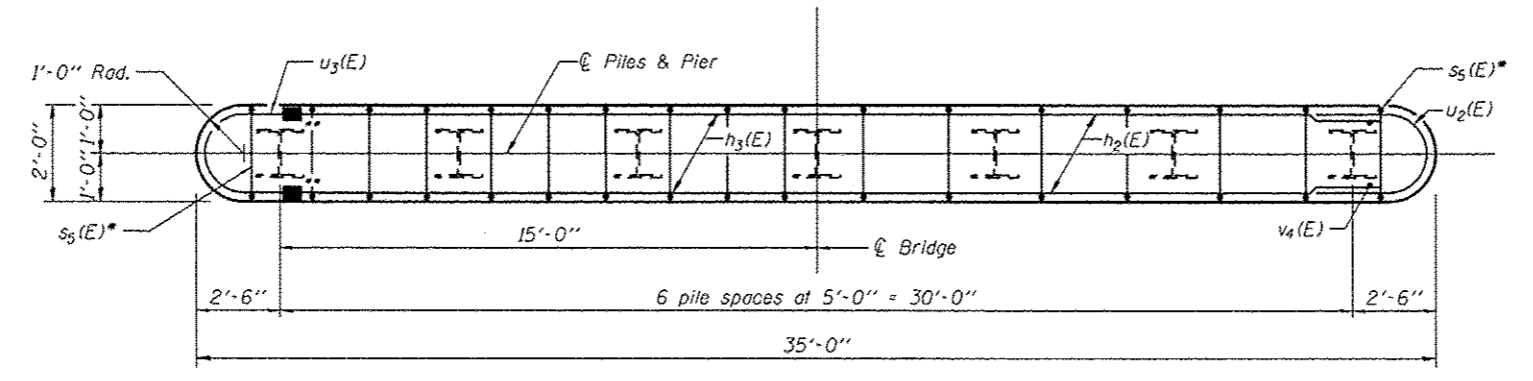
ELEVATION
(Looking North)

PILE DATA

Type: Steel-HP12x53
 Nominal Required Bearing: 299 kips
 Factored Resistance Available: 133 kips
 Est. Length: 49 feet
 No. Production Piles: 6
 No. Test Piles: 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₂ (E)	26	#5	33'-0"	—
h ₃ (E)	12	#5	31'-0"	—
p ₂ (E)	10	#7	33'-0"	—
s ₄ (E)	34	#4	10'-5"	□
s ₅ (E)	302	#3	2'-7"	┌
u ₁ (E)	6	#6	10'-3"	U
u ₂ (E)	26	#5	8'-4"	U
u ₃ (E)	12	#5	4'-6"	U
v ₄ (E)	72	#5	17'-1"	—
Structure Excavation		Cu. Yd.	32	
Concrete Structures		Cu. Yd.	50.4	
Reinforcement Bars, Epoxy Coated		Pound	4140	
Furnishing Steel Piles, HP 12x53		Foot	294	
Driving Piles		Foot	294	
Test Pile, Steel HP 12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.4	
Mechanical Splicers		Each	24	
Cofferdam (Type 1) (Location - 2)		Each	1	



LOWER PORTION
(bottom 3'-0")

UPPER PORTION

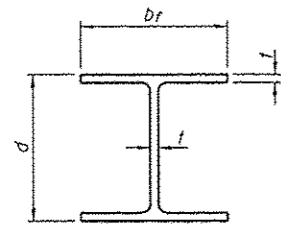
STEM WALL PLAN

MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

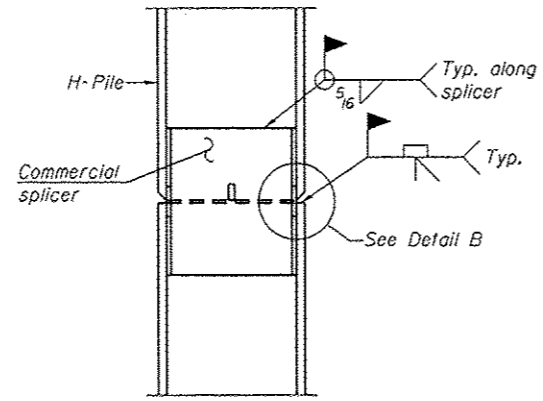
PIER 2
STRUCTURE NO. 090-6087

SHEET NO. 17 23 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	29
CONTRACT NO. 89495			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

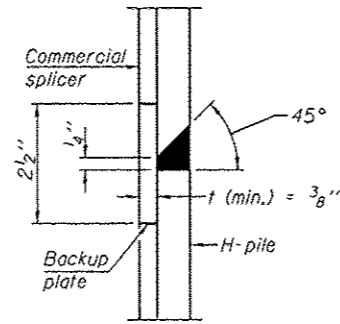


STEEL PILE TABLE

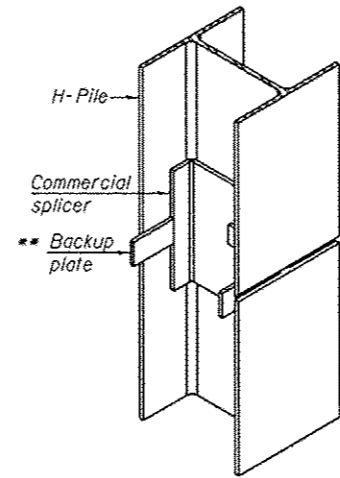
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

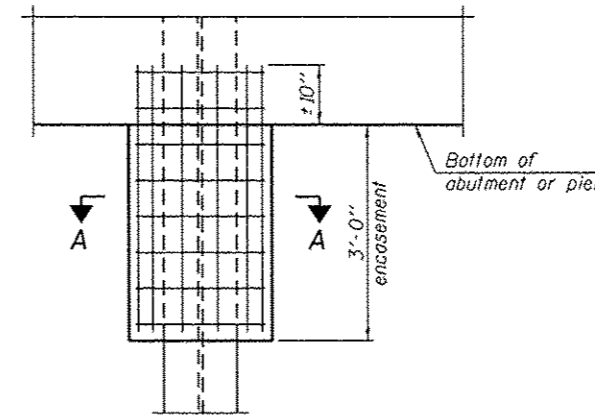


DETAIL "B"



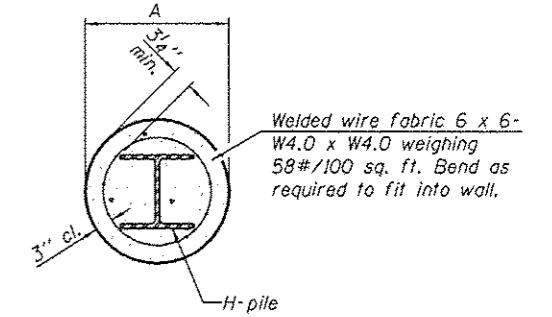
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



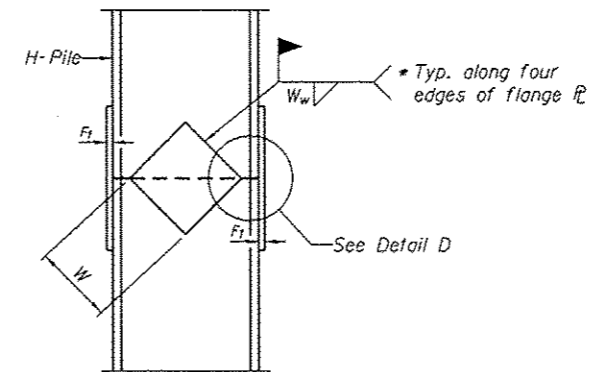
ELEVATION

PILE ENCASEMENT

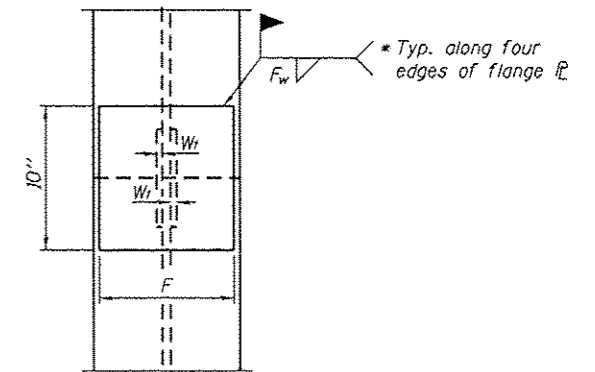


SECTION A-A

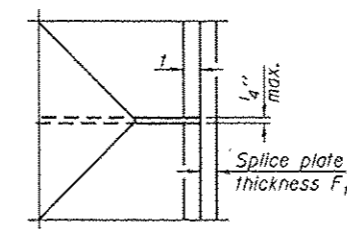
Note:
Forms for encasement may be omitted when soil conditions permit.



ELEVATION



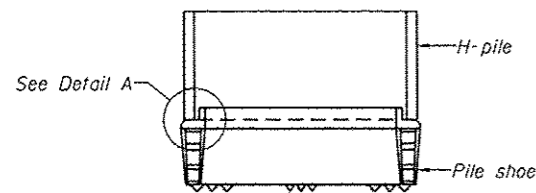
END VIEW



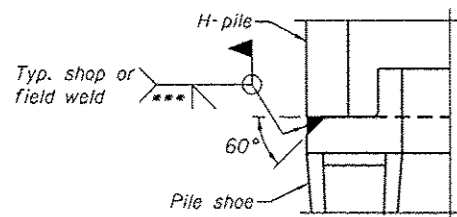
DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F ₁	F _w	W	W ₁	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 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 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 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"

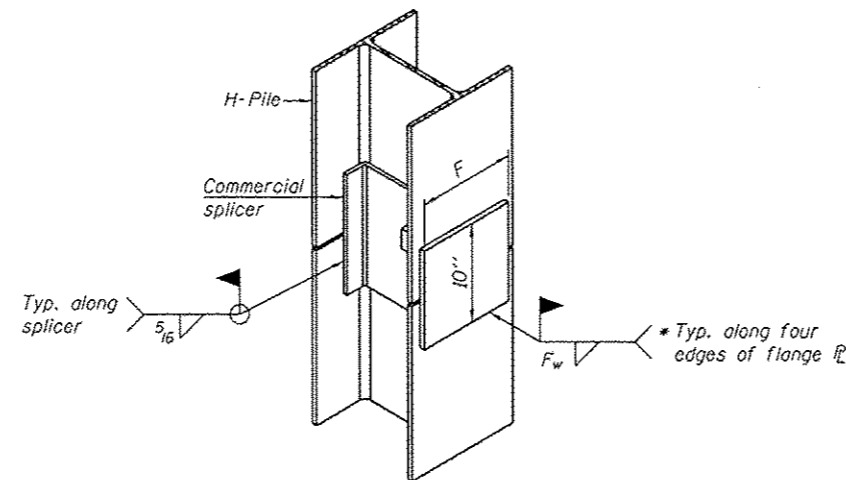


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

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

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

MAURER-STUTZ
ENGINEERS SURVEYORS

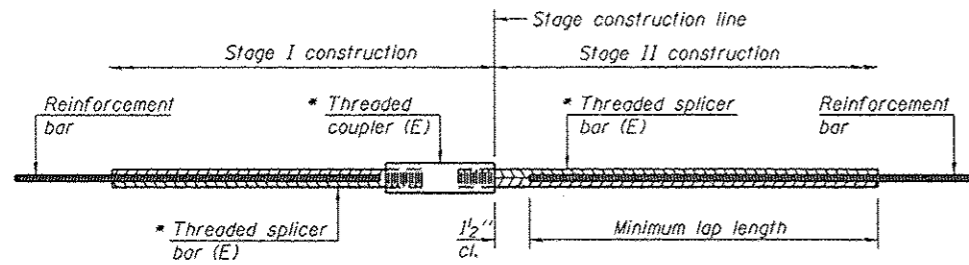
DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

F-HP

11-1-09

HP PILE DETAILS
STRUCTURE NO. 090-6087

SHEET NO. 18	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	30
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		



STANDARD BAR SPLICER ASSEMBLY

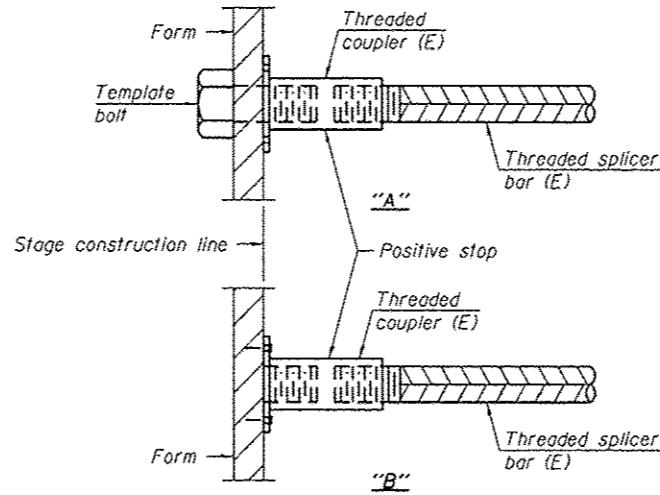
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

Table 1: Black bar, 0.8 Class C
 Table 2: Black bar, Top bar lap, 0.8 Class C
 Table 3: Epoxy bar, 0.8 Class C
 Table 4: Epoxy bar, Top bar lap, 0.8 Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

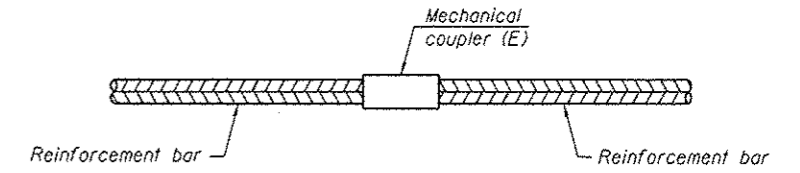
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



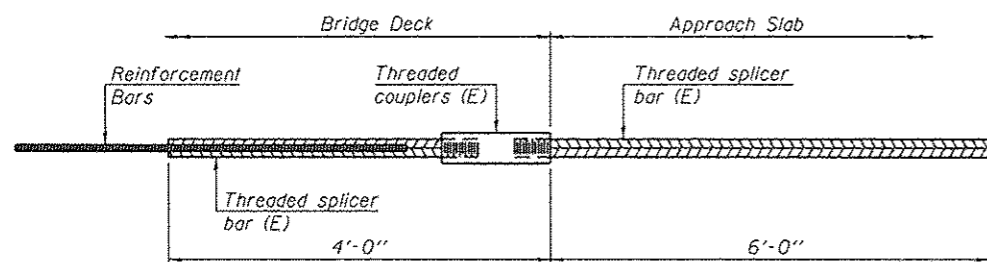
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
 "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E): Indicates epoxy coating.



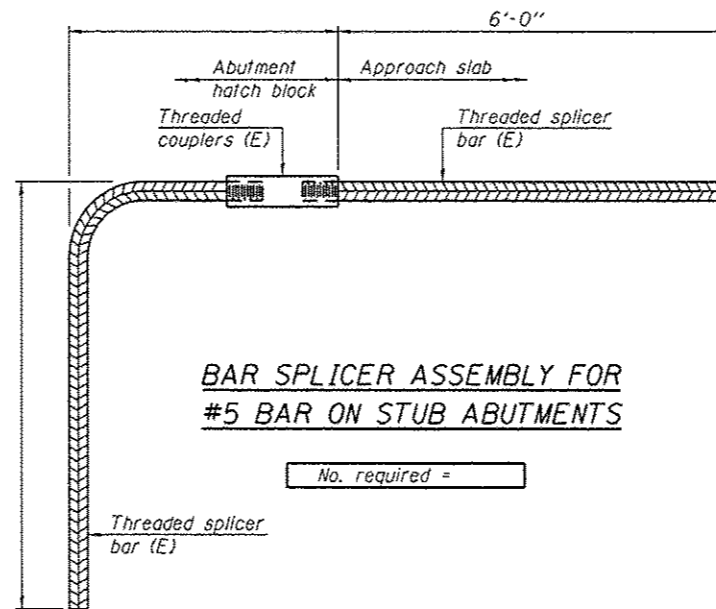
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1	#5	24
Pier 2	#5	24



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 78



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See special provision for Mechanical Splicers.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

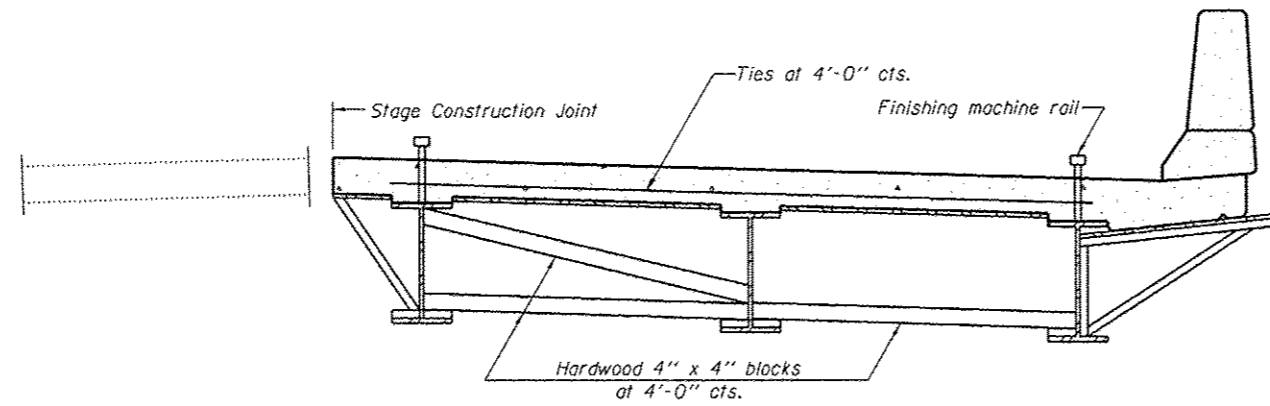
BSD-1

11-1-09

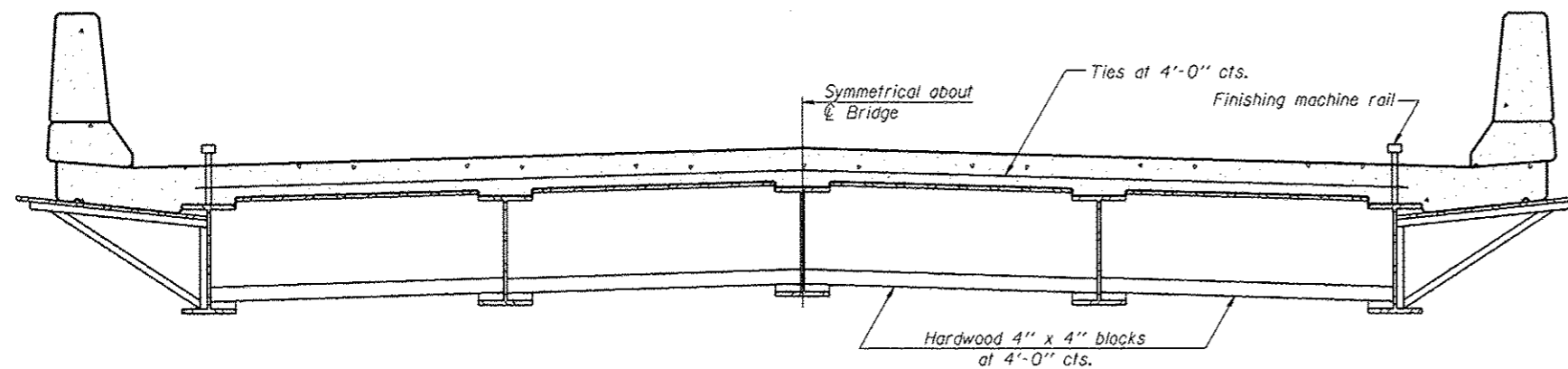
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 090-6087

SHEET NO. 19	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	31
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.
 The finishing machine rails shall be placed on the top flange of the exterior beams.
 The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.
 For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

CANTILEVER FORMING BRACKETS
FOR SUPERSTRUCTURES WITH
W27 BEAMS AND SMALLER
STRUCTURE NO. 090-6087

MAURER-STUTZ
ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

SB-1

11-1-09

SHEET NO. 20	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	32
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

BORING NO. B-01
 DATE 12-21-07
 W. & A. FILE NO. 4376
 SHEET 1 OF 6



WHITNEY & ASSOCIATES
 INCORPORATED
 2406 West Nebraska Avenue
 PEORIA, ILLINOIS 61604

BORING LOG

PROJECT RIDGE ROAD BRIDGE LOCATION East Peoria, Illinois
 BORING LOCATION Sta. 15+14; 24' Left of Centerline (New) DRILLED BY Fehl
 BORING TYPE Hollow Stem Auger WEATHER CONDITIONS Partly Cloudy & Mild
 SOIL CLASSIFICATION SYSTEM U.S.B.S.C. SEEPAGE WATER ENCOUNTERED AT ELEVATION (-)18.5 Ft.
 GROUND SURFACE ELEVATION 515.2± GROUND WATER ELEVATION AT _____ HRS. _____
 BORING DISCONTINUED AT ELEVATION 464.2± GROUND WATER ELEVATION AT COMPLETION (-)14.4 Ft. CAVE-IN

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
Brown, Medium-Grained SAND And GRAVEL With Some Bituminous Concrete Millings	12"						
Medium, Brown SANDY CLAY With Some Fine-Grained Gravel (Fill)	04	SS	4 5(10)	0.8	0.6	102	15
Stiff, Brown SANDY CLAY With Crushed Limestone (Fill)	08	SS	5 10 8(18)	2.0	-	-	12
Medium-Density, Brown, Medium- To Coarse-Grained SAND With Fine- To Medium-Grained Gravel	12	SS	7 8 10(18)	1.5	-	-	11
Medium-Density, Brown, Fine- To Medium-Grained SAND	16	SS	8 10 12(22)	-	-	-	7
Medium-Density, Brown, Medium- To Coarse-Grained SAND With Some Fine-Grained Gravel	20	SS	6 5 9(14)	-	-	-	10
Medium-Density, Brown, Fine-Grained SAND With Considerable Silt	24	SS	8 9 12(21)	-	-	-	9
		SS	4 6 6(12)	-	-	-	21
		SS	4 5 7(12)	-	-	-	-
		SS	8 9 12(21)	-	-	-	-
		SS	8 10 13(23)	-	-	-	-

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
 SS - SPLIT SPOON SAMPLE
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
 Dd - NATURAL DRY DENSITY - P.C.F.
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
 PEORIA, ILLINOIS

BORING NO. B-01

BORING LOG
 (CONTINUATION)

DATE 12-21-07

PROJECT Ridge Road Bridge
 LOCATION East Peoria, Illinois

SHEET 2 OF 6
 W. & A. FILE NO. 4376

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
See Sheet 1 of 6			7				
Medium-Density, Brown, Fine- To Medium-Grained SAND	30	SS	8 10(18)	-	-	-	-
Dense, Brown, Medium- To Coarse-Grained SAND With Some Fine-Grained Gravel	34	SS	8 15 18(33)	-	-	-	-
	38	SS	10 15 25(40)	-	-	-	-
Dense, Brown, Medium- To Coarse-Grained SAND With Fine-Grained Gravel	42	SS	13 17 18(35)	-	-	-	-
	46	SS	15 15 19(34)	-	-	-	-
	50	SS	15 18 21(39)	-	-	-	-
EXPLORATORY BORING DISCONTINUED	54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
 SS - SPLIT SPOON SAMPLE
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
 Dd - NATURAL DRY DENSITY - P.C.F.
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
 PEORIA, ILLINOIS

MAURER-STUTZ
 ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

SOIL BORINGS
 STRUCTURE NO. 090-6087

SHEET NO. 21	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	33
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

BORING NO. B-02
 DATE 12-21-07
 W. & A. FILE NO. 4376
 SHEET 3 OF 6



WHITNEY & ASSOCIATES
 INCORPORATED
 2406 West Nebraska Avenue
 PEORIA, ILLINOIS 61604

BORING LOG

PROJECT RIDGE ROAD BRIDGE LOCATION East Peoria, Illinois
 BORING LOCATION Sta. 15+82; 67' Left of Centerline (New) DRILLED BY Fehl
 BORING TYPE Hollow Stem Auger WEATHER CONDITIONS Partly Cloudy & Mild
 SOIL CLASSIFICATION SYSTEM U.S.B.S.C. SEEPAGE WATER ENCOUNTERED AT ELEVATION (-)20.0 Ft.
 GROUND SURFACE ELEVATION 517.5+ GROUND WATER ELEVATION AT 24+ HRS (-)20.0 Ft.
 BORING DISCONTINUED AT ELEVATION 461.5+ GROUND WATER ELEVATION AT COMPLETION (-)20.0 Ft.

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
CONCRETE BRIDGE DECK	10'						
	04						
	08						
	12						
	16						
Bottom of Creek Bed (-)21.0 Feet	20						
Medium-Density, Brown, Medium- To Coarse-Grained SAND With Considerable Medium-Grained Gravel	24	SS	5 6 7	-	-	-	16
Medium-Density, Brown, Medium- To Coarse-Grained SAND With Some Fine-Grained Gravel		SS	8 9(17)	-	-	-	-

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
 SS - SPLIT SPOON SAMPLE
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
 Dd - NATURAL DRY DENSITY - P.C.F.
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
 PEORIA, ILLINOIS

BORING NO. B-02

BORING LOG
 (CONTINUATION)

DATE 12-21-07

PROJECT Ridge Road Bridge
 LOCATION East Peoria, Illinois

SHEET 4 OF 6
 W. & A. FILE NO. 4376

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
See Sheet 3 of 6							
	30	SS	8 9 10(19)	-	-	-	-
	34	SS	8 9 10(19)	-	-	-	-
Dense, Brown, Medium- To Coarse-Grained SAND With Fine-Grained Gravel							
	38						
	42	SS	20 22 28(50)	-	-	-	-
	46	SS	18 21 22(43)	-	-	-	-
	50	SS	17 20 24(44)	-	-	-	-
	54	SS	12 18 24(42)	-	-	-	-
EXPLORATORY BORING DISCONTINUED							

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
 SS - SPLIT SPOON SAMPLE
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
 Dd - NATURAL DRY DENSITY - P.C.F.
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
 PEORIA, ILLINOIS

MAURER-STUTZ
 ENGINEERS SURVEYORS

DESIGNED - BAS
CHECKED - JAE
DRAWN - SGM
CHECKED - BAS

SOIL BORINGS
 STRUCTURE NO. 090-6087

SHEET NO. 22	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	34
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

BORING NO. B-03
DATE 12-21-07
W. & A. FILE NO. 4376
SHEET 5 OF 6

WHITNEY & ASSOCIATES
 INCORPORATED
 2406 West Nebraska Avenue
 PEORIA, ILLINOIS 61604

BORING LOG

PROJECT RIDGE ROAD BRIDGE
LOCATION East Peoria, Illinois
BORING LOCATION Sta. 16+33; 22' Left of Centerline (New)
DRILLED BY Feh1
BORING TYPE Hollow Stem Auger
WEATHER CONDITIONS Partly Cloudy & Mild
SOIL CLASSIFICATION SYSTEM U.S.B.S.C.
SEEPAGE WATER ENCOUNTERED AT ELEVATION (-)18.5 Ft.
GROUND SURFACE ELEVATION 517+
GROUND WATER ELEVATION AT HRS
BORING DISCONTINUED AT ELEVATION 466+
GROUND WATER ELEVATION AT COMPLETION (-)20.1 Ft.

DEPTH IN FEET	SAMPLE TYPE	N	Q _p	Q _u	D _d	M _c
6						
BITUMINOUS CONCRETE						
20						
Brown, Medium-Grained SAND And GRAVEL						
04	SS	3 3(6) 3	-	-	-	6
	SS	3 4(7)	-	-	-	5
Loose, Brown, Medium- To Coarse-Grained SAND With Some Medium-Grained Gravel						
08	SS	6 8 9(17)	-	-	-	5
Medium-Density, Brown, Medium- To Coarse-Grained SAND And Fine-Grained GRAVEL						
12	SS	7 10 12(22)	-	-	-	6
Medium-Density, Brown, Fine- To Medium-Grained SAND						
16	SS	7 8 6 7(13)	-	-	-	4
	SS	7 7 7(14)	-	-	-	19
20	SS	6 7 8(15)	-	-	-	21
Medium-Density, Brown, Fine- To Medium-Grained SAND With Some Fine-Grained Gravel						
24	SS	7 8 9(17)	-	-	-	15
	SS	7 8 10(18)	-	-	-	14

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
 SS - SPLIT SPOON SAMPLE
 ST - SHELBY TUBE SAMPLE
 Q_p - CALIBRATED PENETROMETER READING - T.S.F. FALLING 30 INCHES
 Q_u - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
 D_d - NATURAL DRY DENSITY - P.C.F.
 M_c - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
 PEORIA, ILLINOIS

BORING NO. B-03
DATE 12-21-07
PROJECT Ridge Road Bridge
LOCATION East Peoria, Illinois

BORING LOG
 (CONTINUATION)
SHEET 6 OF 6
W. & A. FILE NO. 4376

DEPTH IN FEET	SAMPLE TYPE	N	Q _p	Q _u	D _d	M _c
See Sheet 5 of 6						
30	SS	11 13 16(29)	-	-	-	-
Very Dense, Brown, Fine- To Medium-Grained SAND With Some Fine-Grained Gravel						
34	SS	21 27 31(58)	-	-	-	-
38	SS	20 25 26(51)	-	-	-	-
Very Dense, Brown, Fine- To Medium-Grained SAND With Fine- To Medium-Grained Gravel						
42	SS	18 15 17(32)	-	-	-	-
46	SS	13 14 16(30)	-	-	-	-
50	SS	18 22 25(47)	-	-	-	-
EXPLORATORY BORING DISCONTINUED						
54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES
 SS - SPLIT SPOON SAMPLE
 ST - SHELBY TUBE SAMPLE
 Q_p - CALIBRATED PENETROMETER READING - T.S.F. FALLING 30 INCHES
 Q_u - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.
 D_d - NATURAL DRY DENSITY - P.C.F.
 M_c - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES
 PEORIA, ILLINOIS

MAURER-STUTZ
 ENGINEERS SURVEYORS

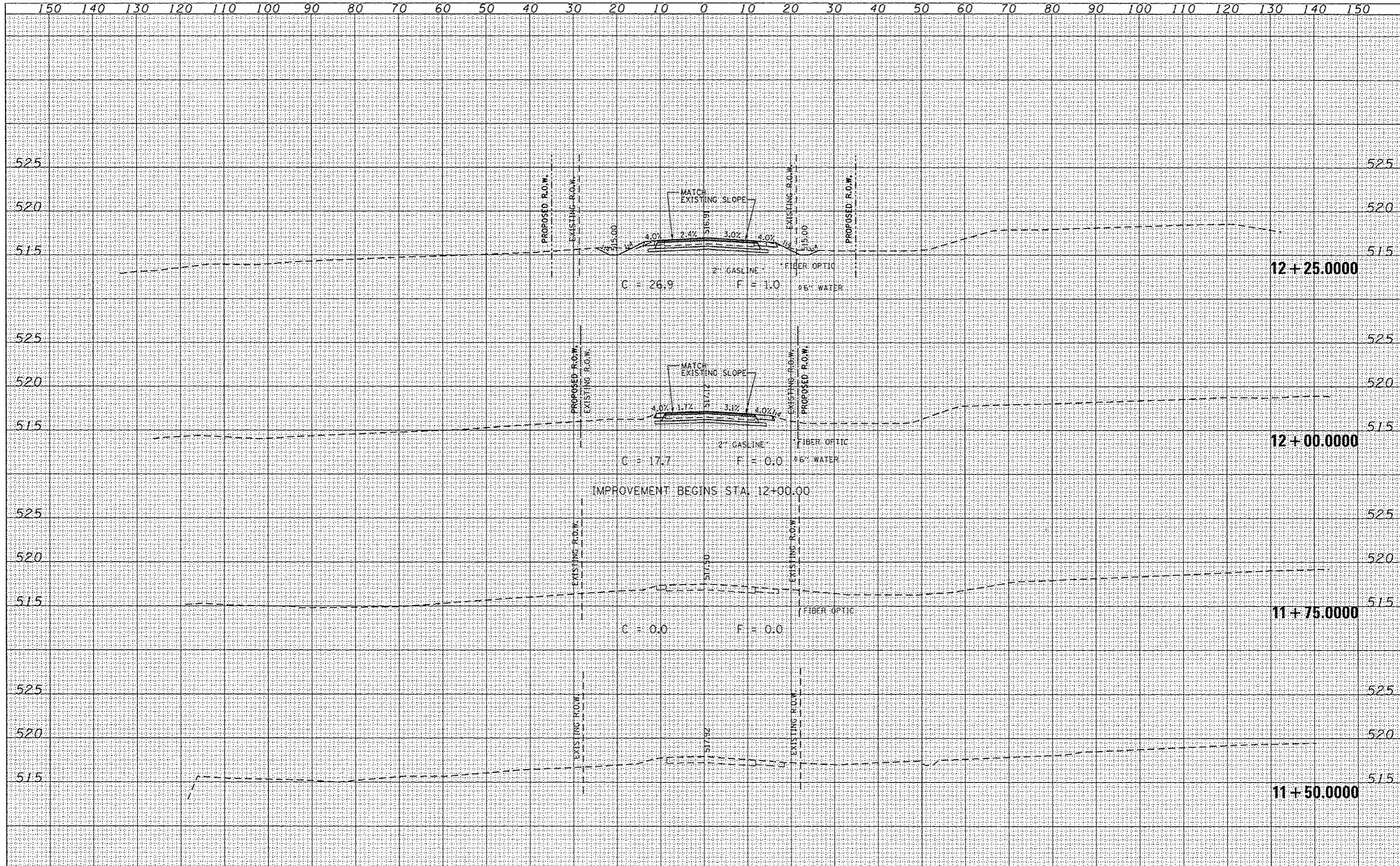
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DRAWN	SGM
CHECKED	BAS

SOIL BORINGS
STRUCTURE NO. 090-6087

SHEET NO. 23	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	6774	07-00149-00-BR	TAZEWELL	52	35
23 SHEETS	CONTRACT NO. 89495				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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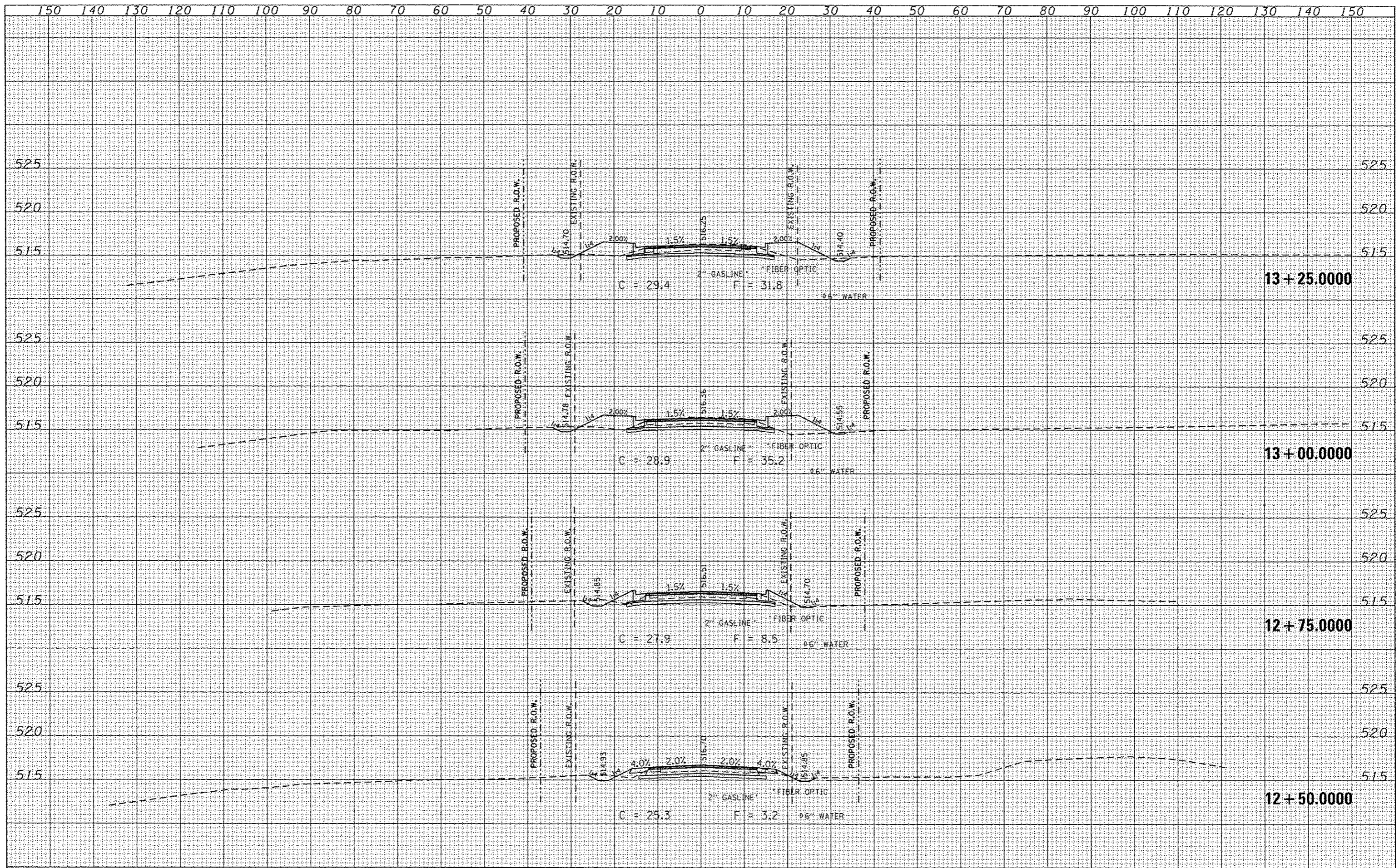
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FILE NAME	USER NAME	DESIGNED	REVISED	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) CROSS SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\237\2807\237070008\ridge\road\ridge\cadd\cadd	Sheets\0489495-shl-xsec.dgn	DRAWN	REVISED			6774	07-00149-00-BR	TAZEWELL	52	36
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	PLOT DATE = 8/7/2013	DATE	REVISED							

DATE	
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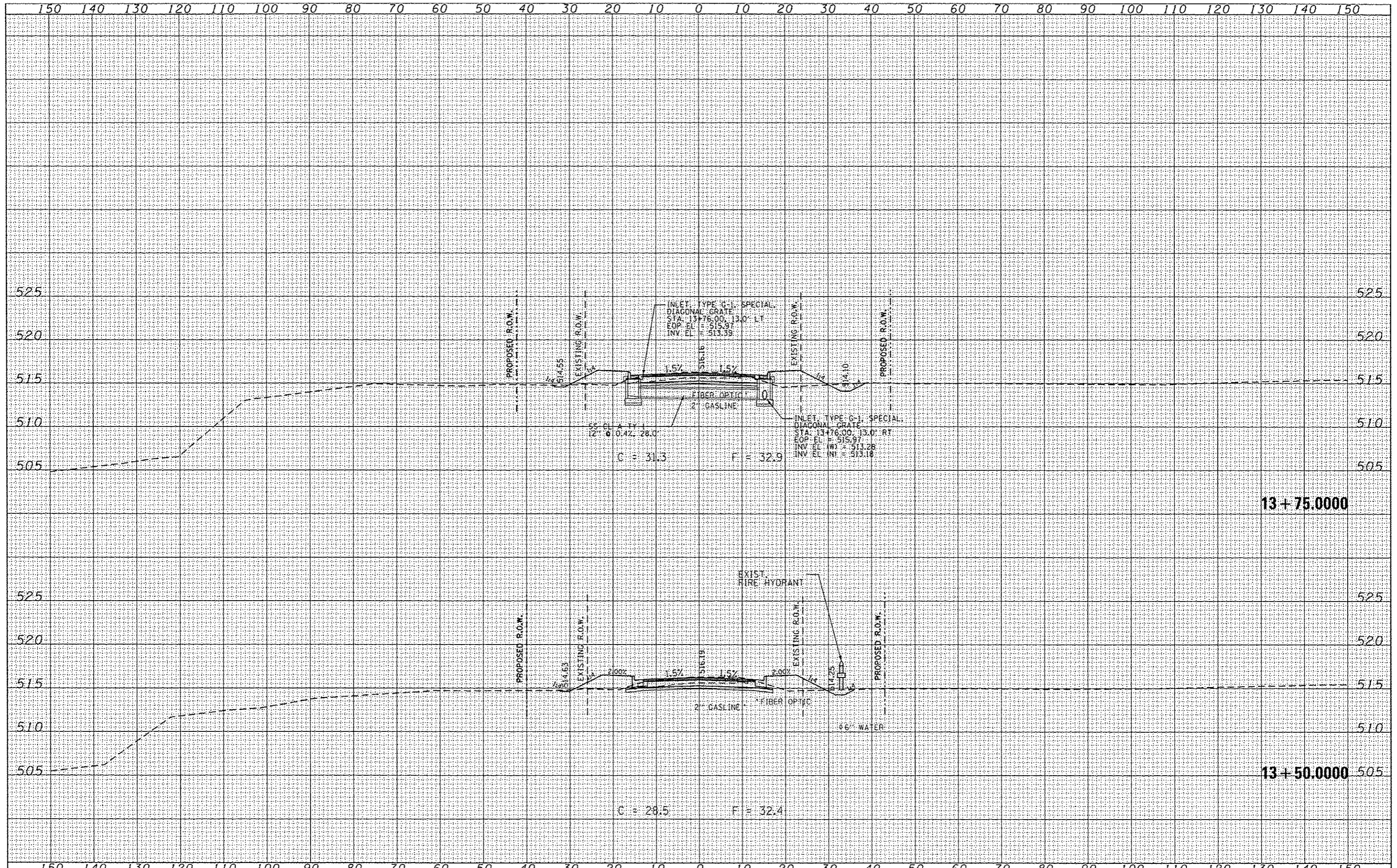


FILE NAME	USER NAME	DESIGNED	REVISED	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) CROSS SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
S:\237\2007\23707008\RidgeRoad\Bridges\CADD\CADD Sheets\0489475-sh1-nso.dgn	botharer	DRAWN	REVISED			6774	07-00149-00-BR	TAZEWELL	52	37	
Default		CHECKED	REVISED			CONTRACT NO. 89495					
		DATE	REVISED			ILLINOIS FED. AID PROJECT					

SCALE: SHEET 2 OF 9 SHEETS STA. 12+50.000 TO STA. 13+25.000.

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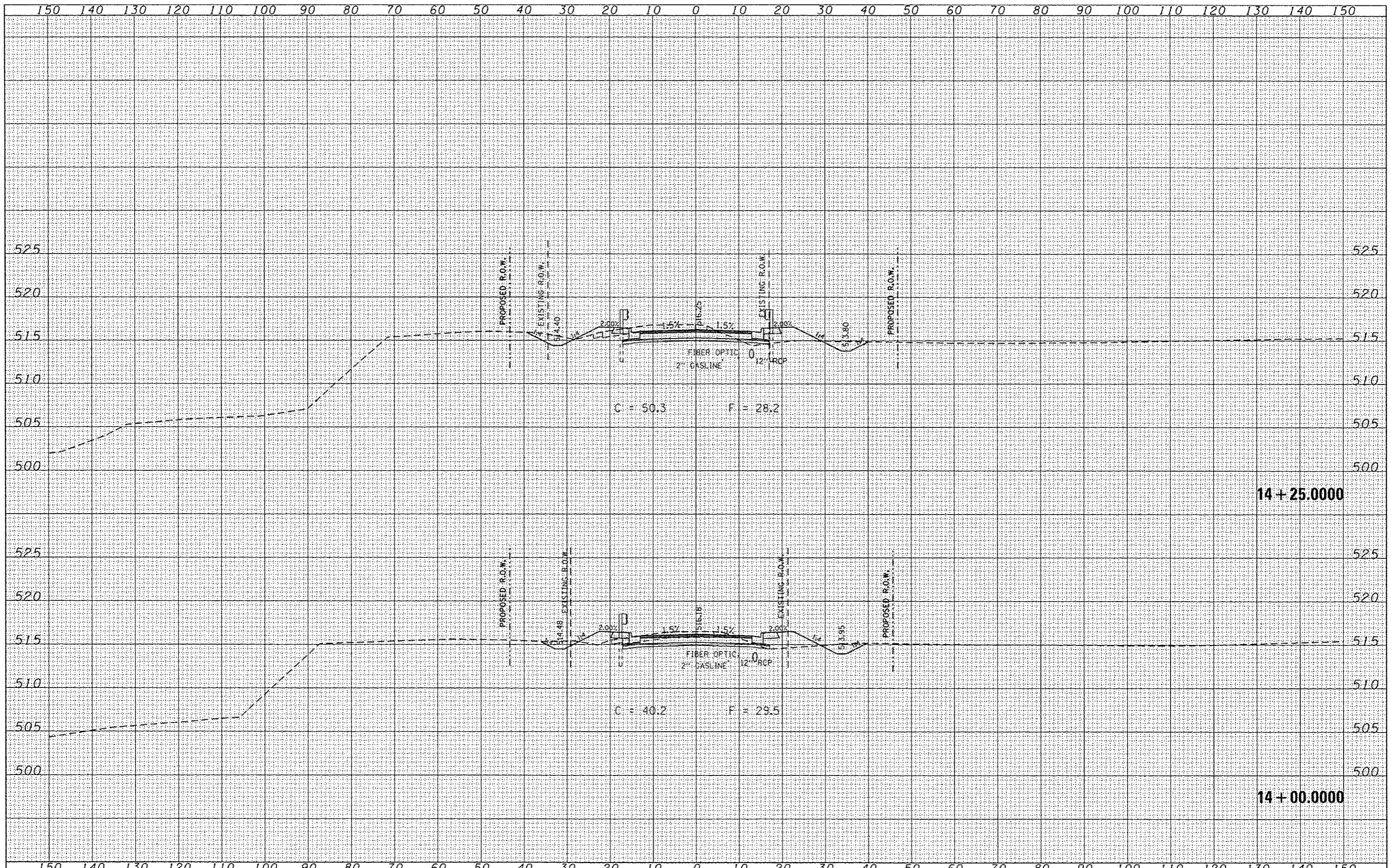
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FILE NAME	USER NAME	DESIGNED	REVISED	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) CROSS SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT DATE = 8/7/2013	DATE	REVISED			ILLINOIS FED. AID PROJECT					

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BY	
ORIGINAL SURVEY	
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 PLOT DATE * 8/7/2013

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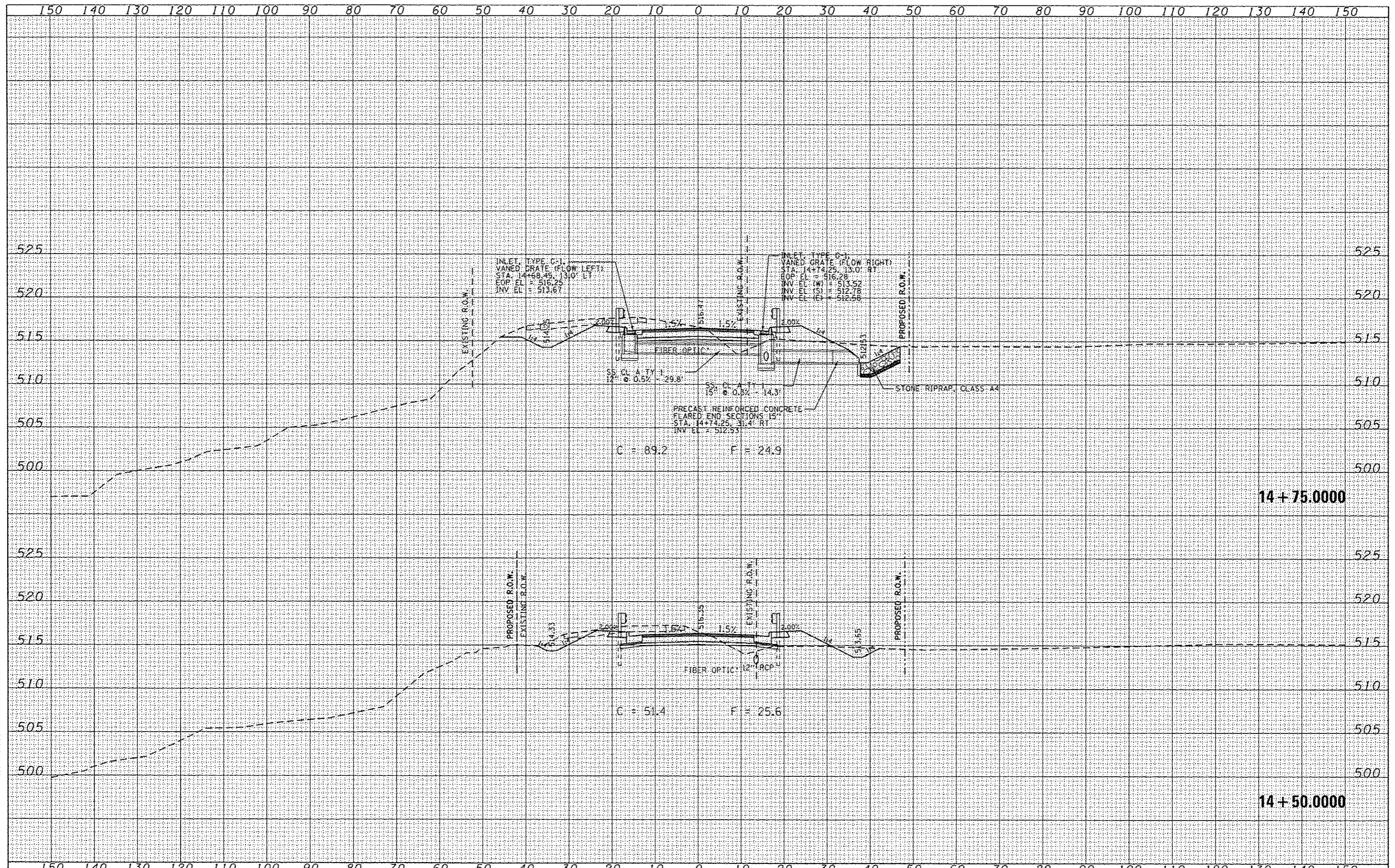
**CITY OF EAST PEORIA
 FONDULAC ROAD DISTRICT
 TAZEWELL COUNTY HIGHWAY DEPARTMENT**

**ROUTE FAU 6774 (RIDGE ROAD)
 CROSS SECTIONS**
 SCALE: SHEET 4 OF 9 SHEETS STA. 14+00.0000 TO STA. 14+25.0000.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6774	07-00149-00-BR	TAZEWELL	52	39
CONTRACT NO. 89495			ILLINOIS FED. AID PROJECT	

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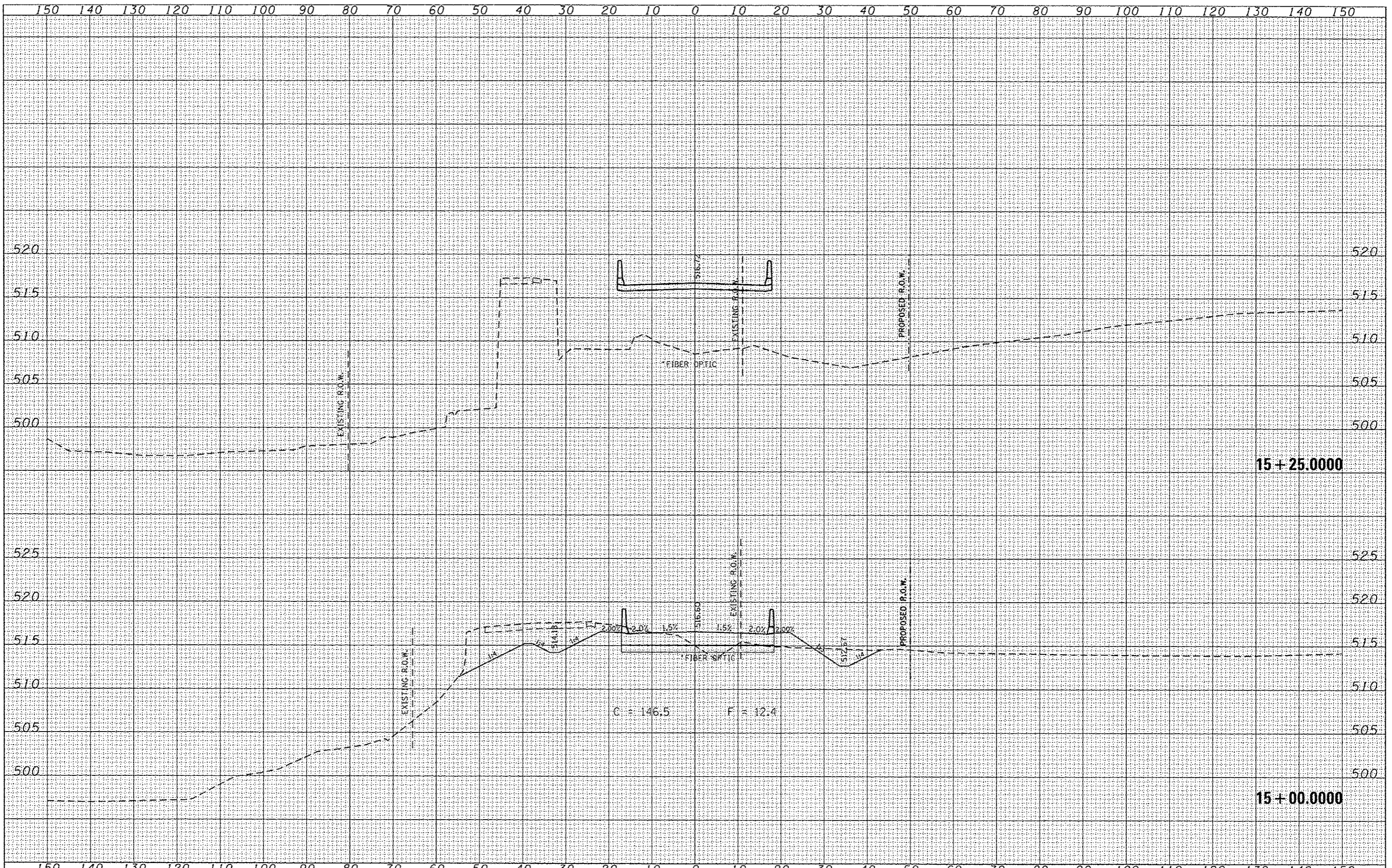
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FILE NAME	USER NAME	DESIGNED	REVISED	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) CROSS SECTIONS	F.A.U. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\237\2007\23707008RidgeRoadBridge\CADD\CADD	Shanta\0489495-sht-asec.dgn	DRAWN	REVISED			6774	07-00149-00-BR	TAZEWELL	52	40
Default	PLOT SCALE = 20.0000' / in.	CHECKED	REVISED			SCALE: SHEET 5 OF 9 SHEETS STA. 14+50.0000 TO STA. 14+75.0000.		CONTRACT NO. 89495		ILLINOIS FED. AID PROJECT
	PLOT DATE = 8/7/2013	DATE	REVISED							

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TEMP. DATE	
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DATE	8/7/2013

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CITY OF EAST PEORIA
FONDULAC ROAD DISTRICT
TAZEWELL COUNTY HIGHWAY DEPARTMENT

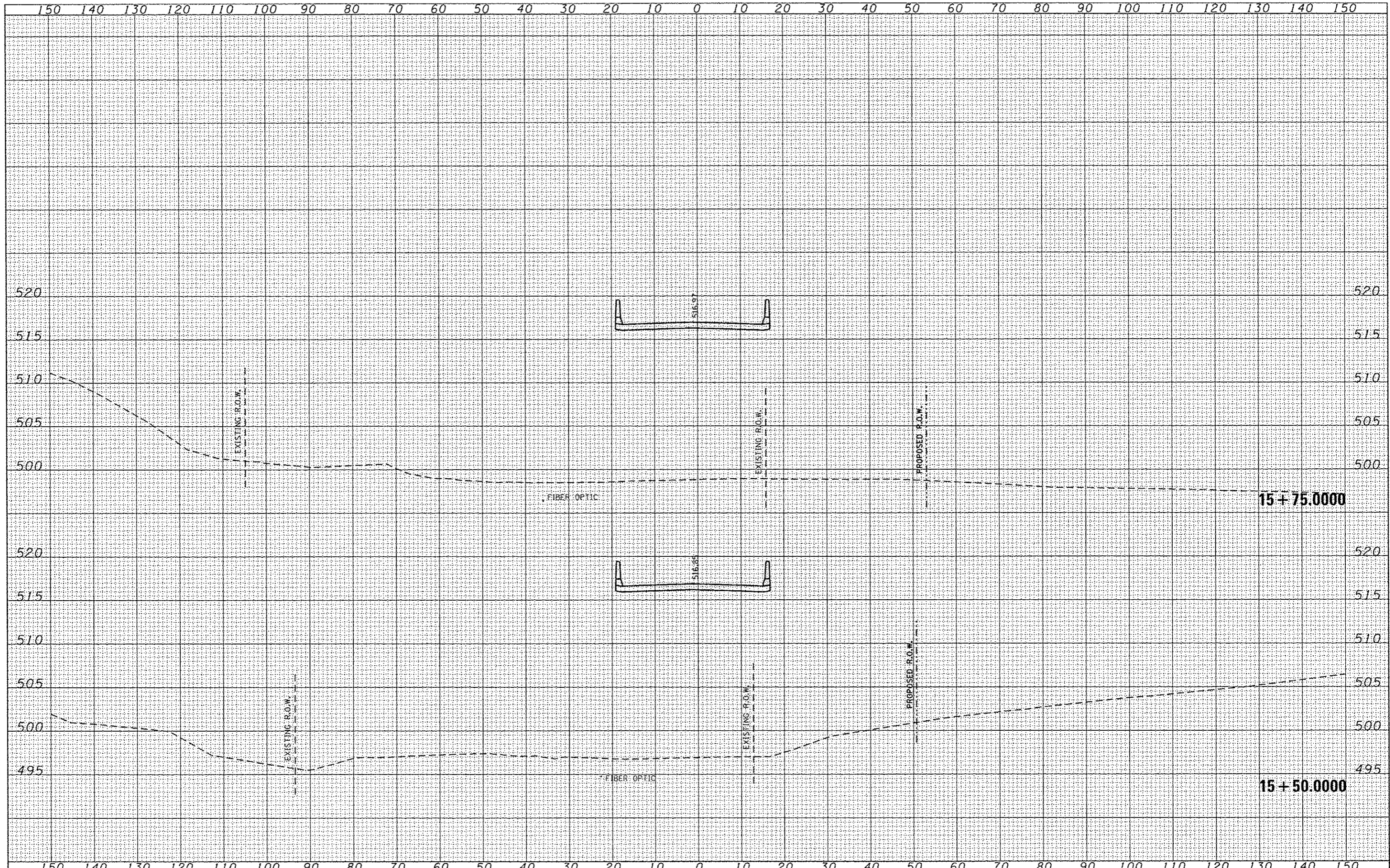
ROUTE FAU 6774 (RIDGE ROAD)
CROSS SECTIONS

SCALE: SHEET 6 OF 9 SHEETS STA. 15+00.0000 TO STA. 15+25.0000.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6774	07-00149-00-BR	TAZEWELL	52	41
CONTRACT NO. 89495			ILLINOIS FED. AID PROJECT	

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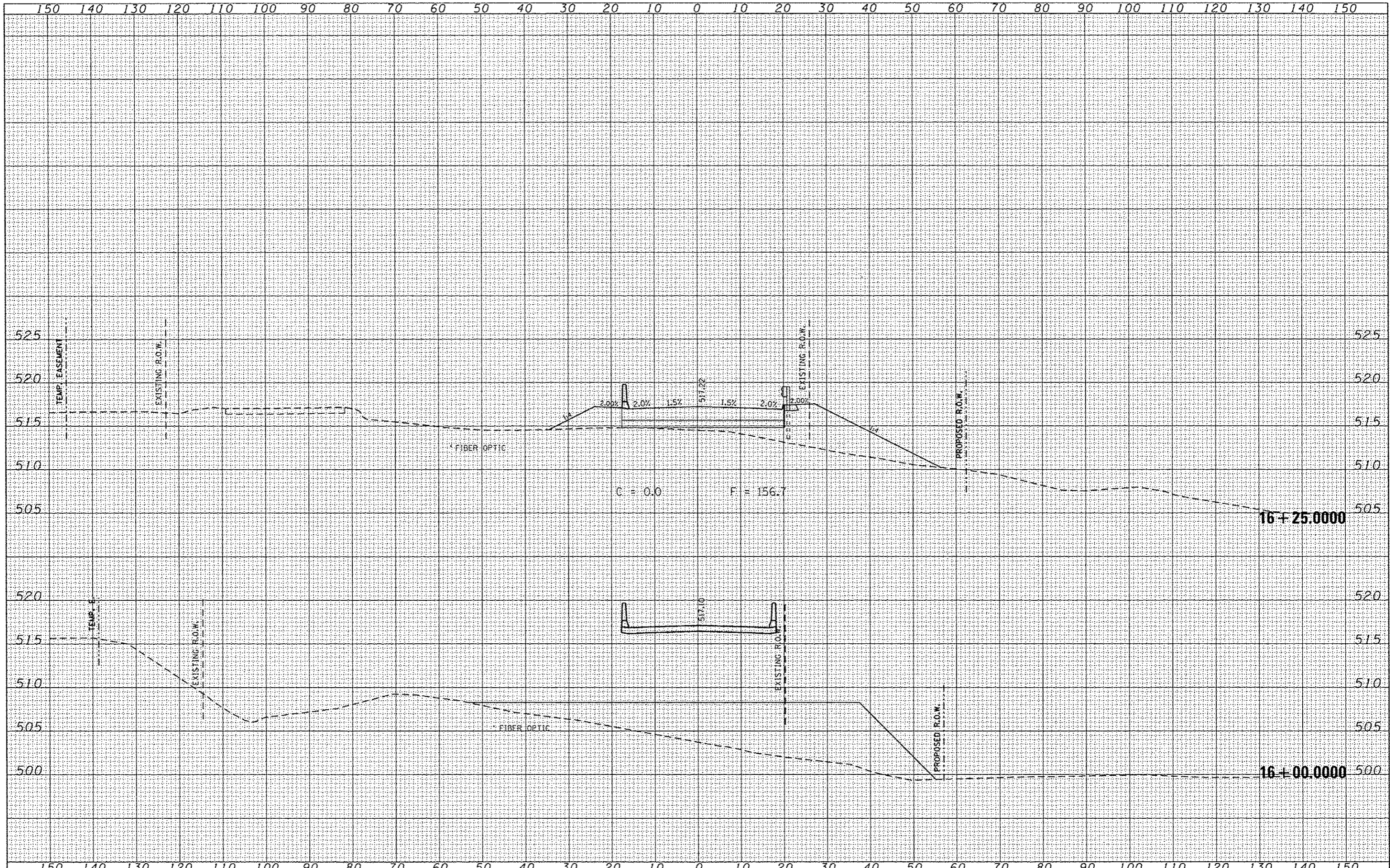
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FILE NAME *	USER NAME *	DESIGNED -	REVISED -	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) CROSS SECTIONS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\237\2087\23707088\15+50.000\15+75.000\CADD\CADD	Sheets\0489495-sh1-asec.dgn	DRAWN -	REVISED -			6774	07-00149-00-BR	TAZEWELL	52	42
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	PLLOT DATE * 8/7/2013	DATE -	REVISED -			SCALE:	SHEET 7 OF 9 SHEETS	STA. 15+50.000 TO STA. 15+75.000.		

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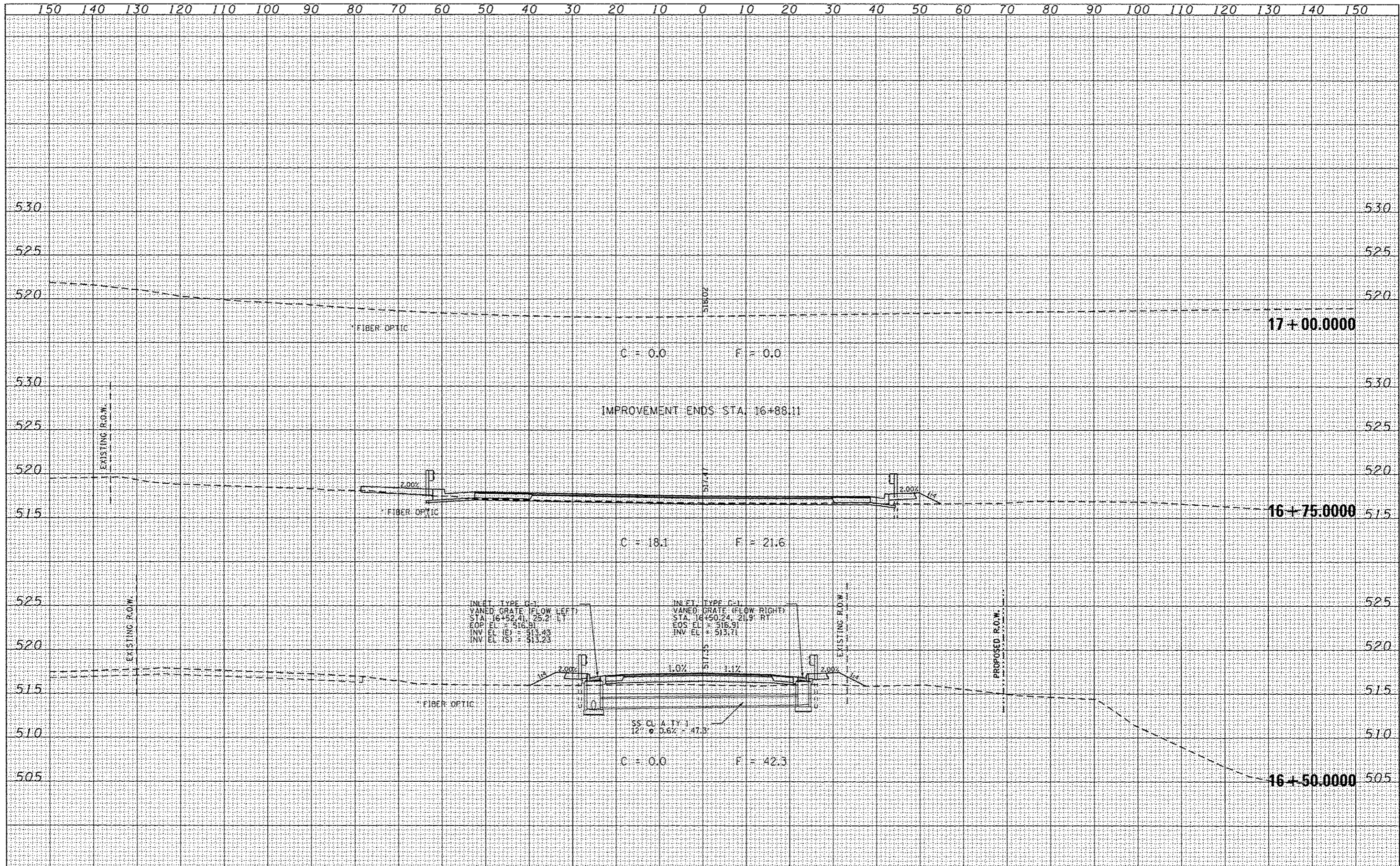
**CITY OF EAST PEORIA
 FONDULAC ROAD DISTRICT
 TAZEWELL COUNTY HIGHWAY DEPARTMENT**

**ROUTE FAU 6774 (RIDGE ROAD)
 CROSS SECTIONS**
 SCALE: SHEET 8 OF 9 SHEETS STA. 16+00.0000 TO STA. 16+25.0000.

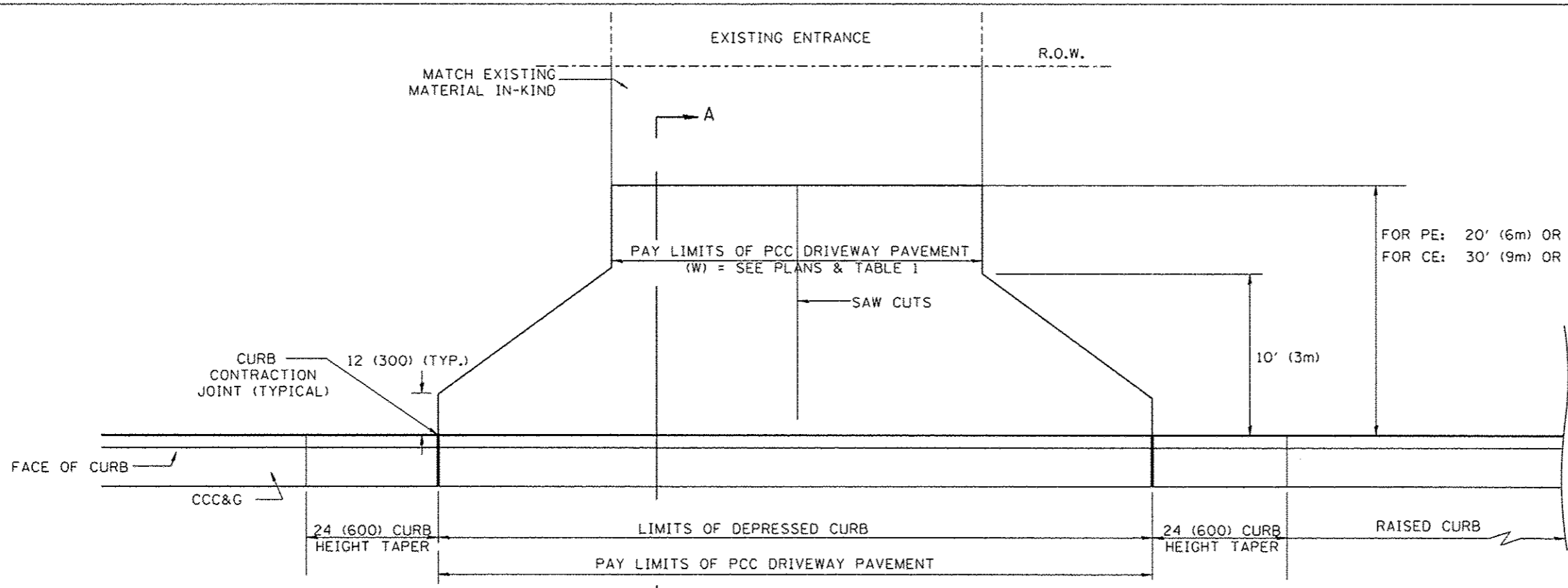
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6774	07-00149-00-BR	TAZEWELL	52	43
CONTRACT NO. 89495				
ILLINOIS FED. AID PROJECT				

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NOTE BOOK	
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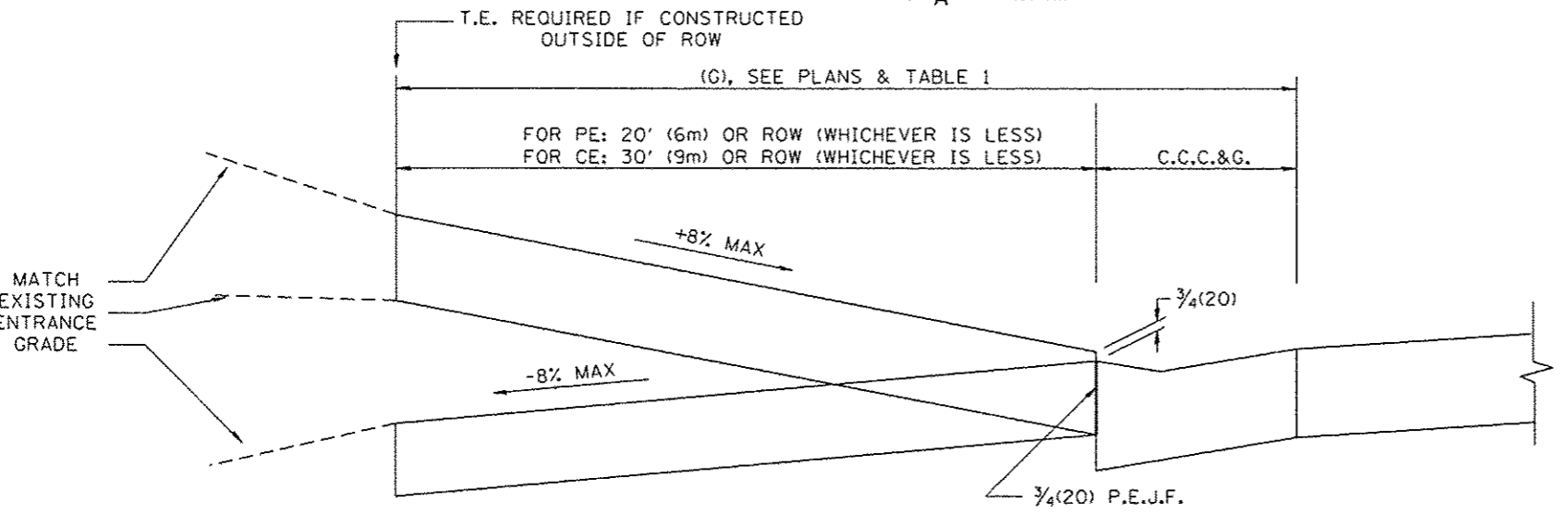
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FILE NAME = S:\237\2887\23707888\RidgeRoadBridge\CADD\CADD	USER NAME = bothner	DESIGNED -	REVISED -	CITY OF EAST PEORIA FONDULAC ROAD DISTRICT TAZEWELL COUNTY HIGHWAY DEPARTMENT	ROUTE FAU 6774 (RIDGE ROAD) CROSS SECTIONS	F.A.U. RTE. = 6774	SECTION = 07-00149-00-BR	COUNTY = TAZEWELL	TOTAL SHEETS = 52	SHEET NO. = 44		
Default	PLT SCALE = 20.0000' / in.	CHECKED -	REVISED -			SCALE: SHEET 9 OF 9 SHEETS	STA. 16+50.0000 TO STA. 17+00.0000.	CONTRACT NO. 89495				
	PLT DATE = 8/7/2013	DATE -	REVISED -			ILLINOIS FED. AID PROJECT						



PLAN



SECTION A-A

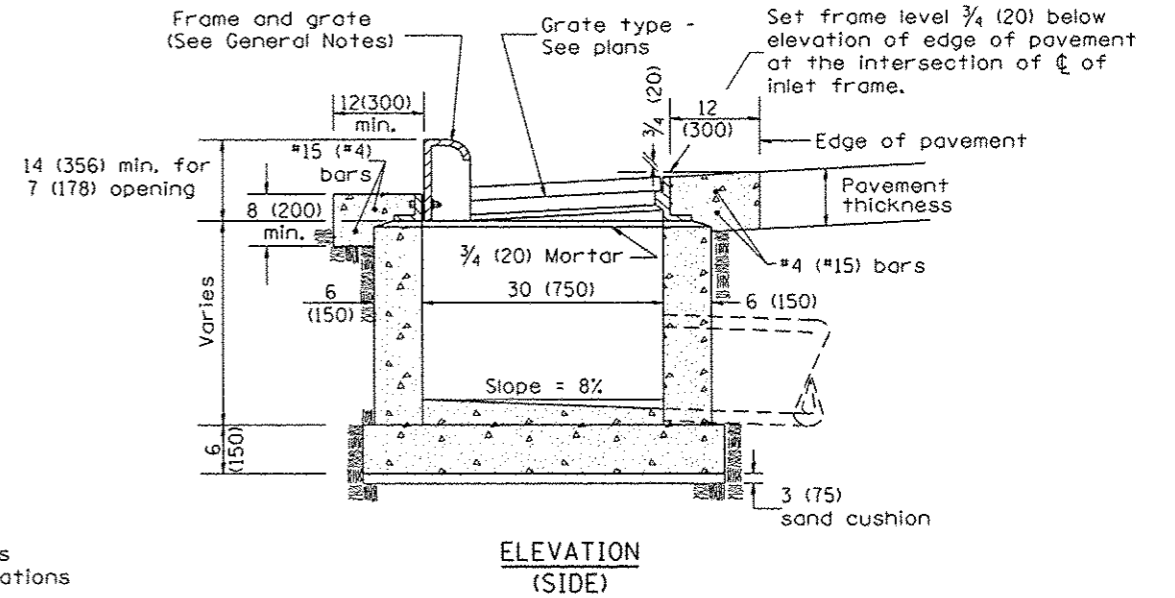
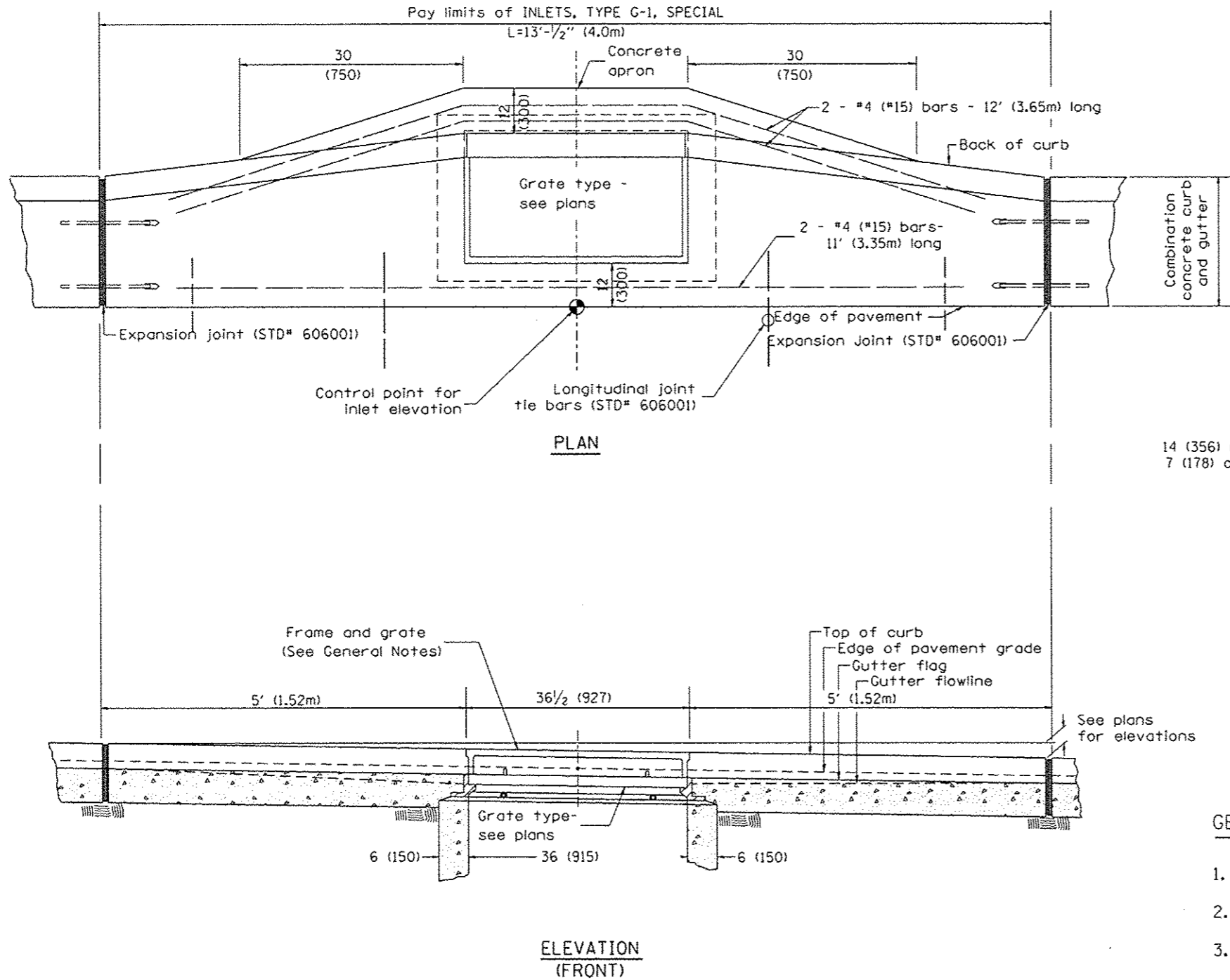
GENERAL NOTES

1. COMBINATION CONCRETE CURB & GUTTER SHALL BE DEPRESSED IN ACCORDANCE WITH STANDARD 606001.
2. C.C.C. & G. WILL BE MEASURED FOR PAYMENT AS SPECIFIED IN ARTICLE 606.13 OF THE STANDARD SPECIFICATIONS.
3. C.C.C. & G. CONSTRUCTION JOINTS WILL BE AS SHOWN ON STANDARD 606001.
4. EXCEPTIONS TO THE RADIUS FLARE/PROPERTY LINE RELATIONSHIP ARE AS SHOWN IN THE PLANS FOR COMMON ENTRANCES, WITH JOINTLY EXECUTED ACCESS PERMITS.

TABLE 1						
URBAN ENTRANCE DESIGN CONTROLS						
ELEMENT	NON-COMMERCIAL		COMMERCIAL			
			1-WAY OPERATION		2-WAY OPERATION	
WIDTH (W)	12' (3.6m)MIN.	24' (7.2m)MAX.	14' (4.3m)MIN.	24' (7.2m)MAX.	24' (7.2m)MIN.	35' (10.7m)MAX.
RADIUS EQUIVALENT 1:1 FLARE (F)	5' (1.5m)MIN.	25' (7.6m)MAX.	15' (4.6m)MIN.	40' (12.0m)MAX.	15' (4.6m)MIN.	40' (12.0m)MAX.
MAX. GRADE (G)	8%		6%			

All dimensions are in inches (millimeters) unless otherwise noted.

DESIGNER NOTES: 1. Include State Standard 606001 for combination concrete curb and gutter details.
 2. Include State Standard 420001 for pavement joints.
 3. Include District CADD Standard for frame and grates.
 4. Include District Special Provision. Pay item includes transitional c.c.c & g., inlet and frame and grate. All work within pay limits.
 5. Specify grate type in plans



GENERAL NOTES

1. Inlet construction shall be in accordance with Section 602 of the Standard Specifications.
2. Combination Concrete Curb and Gutter shall be constructed in accordance with Section 606 of the Standard Specifications.
3. See District CADD Standard 604001-D4 for frame and grates.

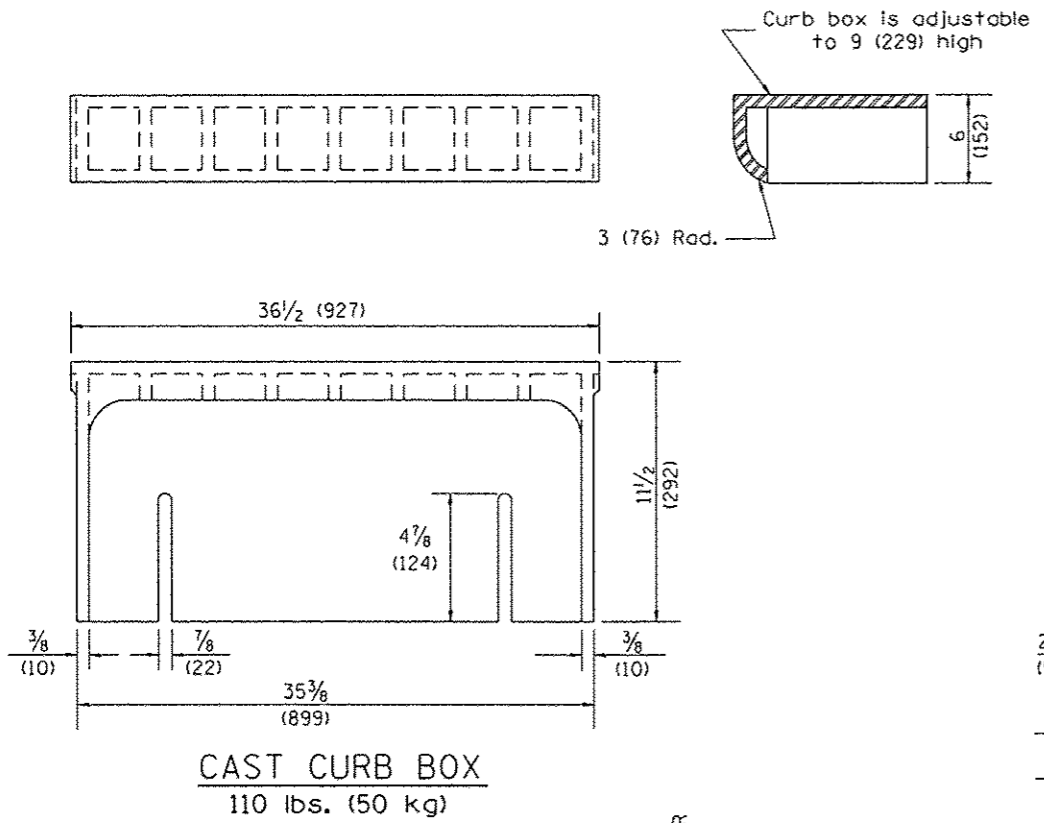
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. B-4.02, NEW REVISION BOX				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INLETS, TYPE G-1, SPECIAL	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
12-01-98	CORRECT E.O.P. NOTE	J.A.					6774	07-00149-00-BR	TAZEWELL	52	47	
10-99	REVISION TO GENERAL NOTES	J.A.					CONTRACT NO.					
10-16-06	REVISED TO 2007 SPEC.	M.A.					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

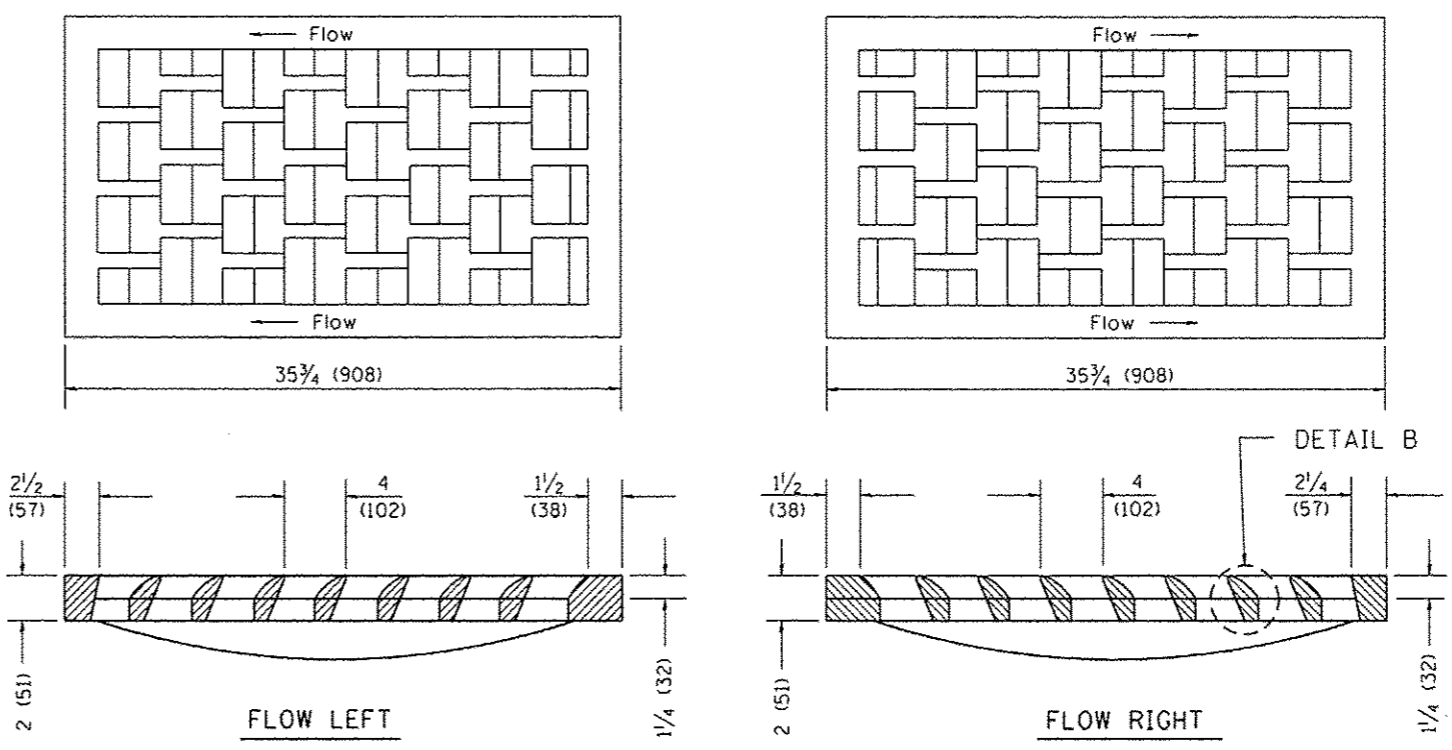
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CADD STD. 602006-D4

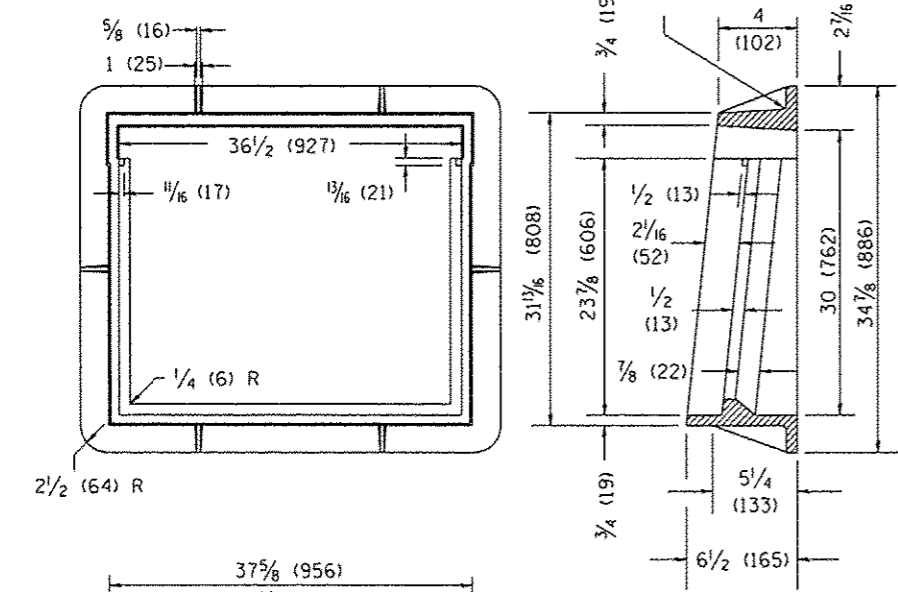
1. Include this standard with all type G-1 and type G-1, special drainage structures.
 2. Specify grate types and flow directions in plans.
 3. These castings are included in the cost of the drainage structures as per District Special Provision.
 4. This drawing based upon "NEENAH" designs as follows: Inlet Frame: R-3246-A, Curb Box: R-3290
 Reversible Diagonal Grate: R-3246-A
 Vane Grates: R-3246-AL(flow left)
 R-3246-AR(flow right)



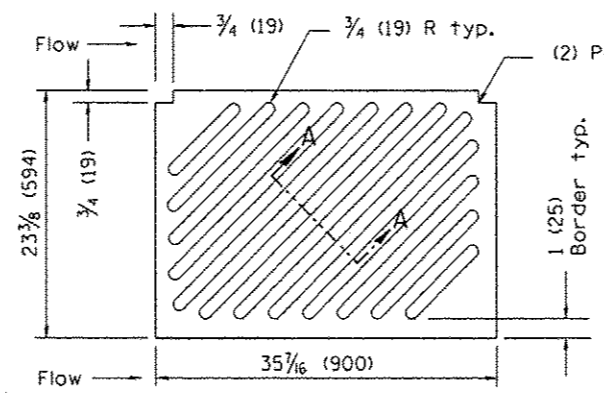
CAST CURB BOX
110 lbs. (50 kg)



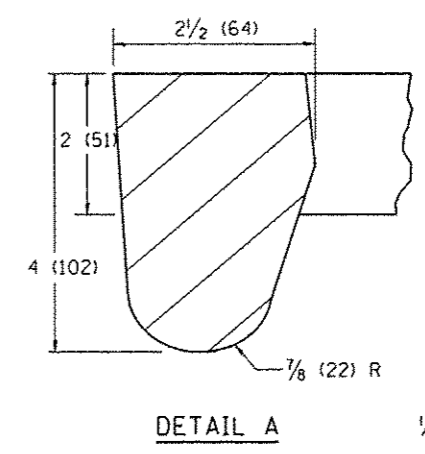
CAST VANE GRATES
(SPECIFY LEFT OR RIGHT FLOW)
230 lbs. (104 KG)



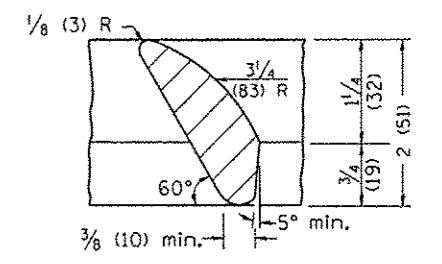
CAST FRAME
271 lbs. (123 kg)



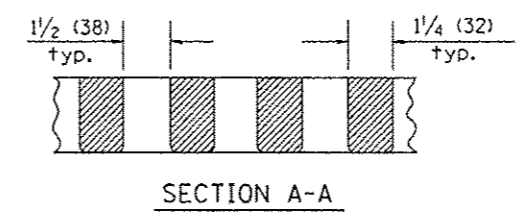
CAST DIAGONAL GRATE
(Reversible for flow)
217 lbs. (98 kg)



DETAIL A



DETAIL B



SECTION A-A

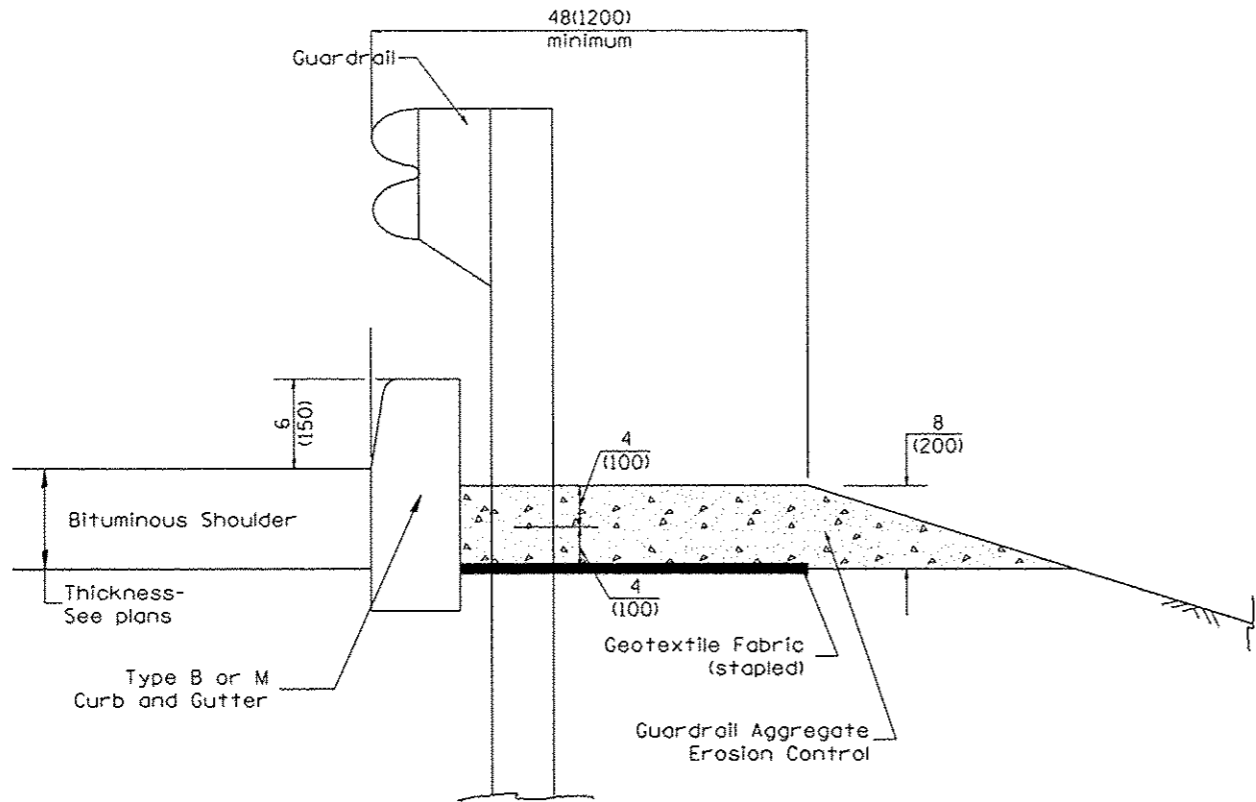
GENERAL NOTES

1. The frame and grate shown on this drawing are for use with all TYPE G-1 and TYPE G-1, SPECIAL DRAINAGE STRUCTURES. See plans for grate type and flow direction.
2. Flow direction: As viewed from street side.
3. Material: cast gray iron.

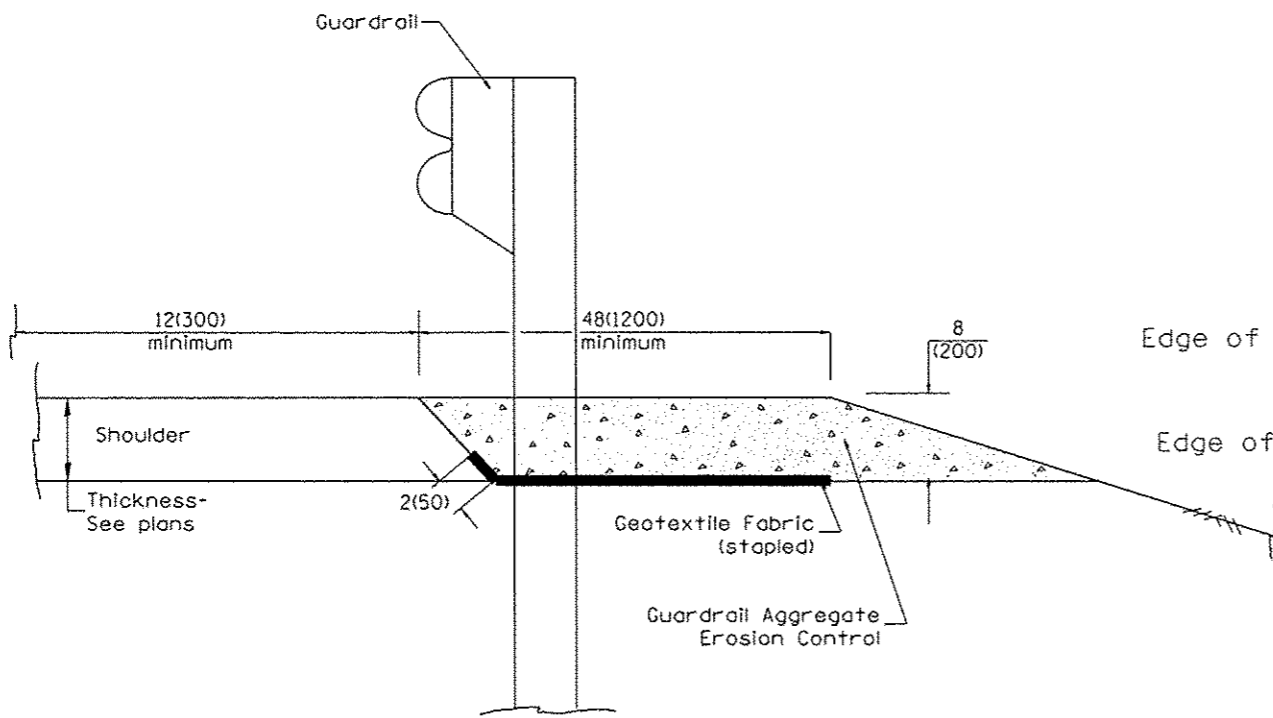
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. 8-10.01, NEW REVISION BOX	T.P.																		
10-16-06	REVISED TO 2007 SPEC.	M.A.																		
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION										FRAME & GRATES FOR TYPE G-1 AND TYPE G-1, SPECIAL DRAINAGE STRUCTURES										
NOT TO SCALE										CADD STD. 604001-D4										
F.A. RTE. 6774		SECTION 07-00149-00-BR		COUNTY TAZEWELL		TOTAL SHEETS 52		SHEET NO. 48		CONTRACT NO.		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT						

DESIGNER NOTES:
 1. Consider using a "B" curb pay item at guardrail installations where grades are equal to or greater than 1% and at inlets. [Include District Special Provision]
 2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1%. [Include District Special Provision]
 3. Include State Standards 609001, 609006 or 610001 if applicable.
 4. Include the following District Cadd Standards as needed: Slope Drains for Exposed Pipes; Slope Drains for Buried Pipes; Seepage Collars for Buried Pipes; Seepage Collars for Exposed Pipes; Concrete Thrust Blocks and Pipe Elbow.
 5. Include District Special Provision "Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.



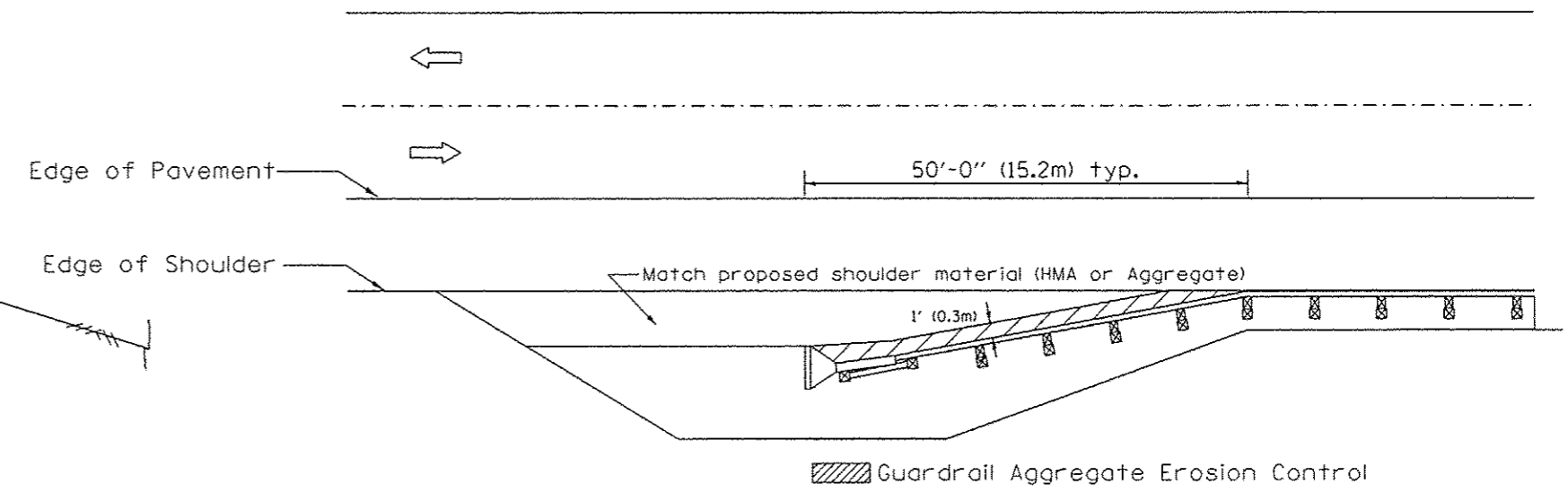
TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
 - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
 - B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.	3-7-11	Added Detail showing plan view	R.D.
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.	8-10-12	Revised curb "B" and aggregate	R.D.
11-03-00	CORRECTION TO NOTES	M.A.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

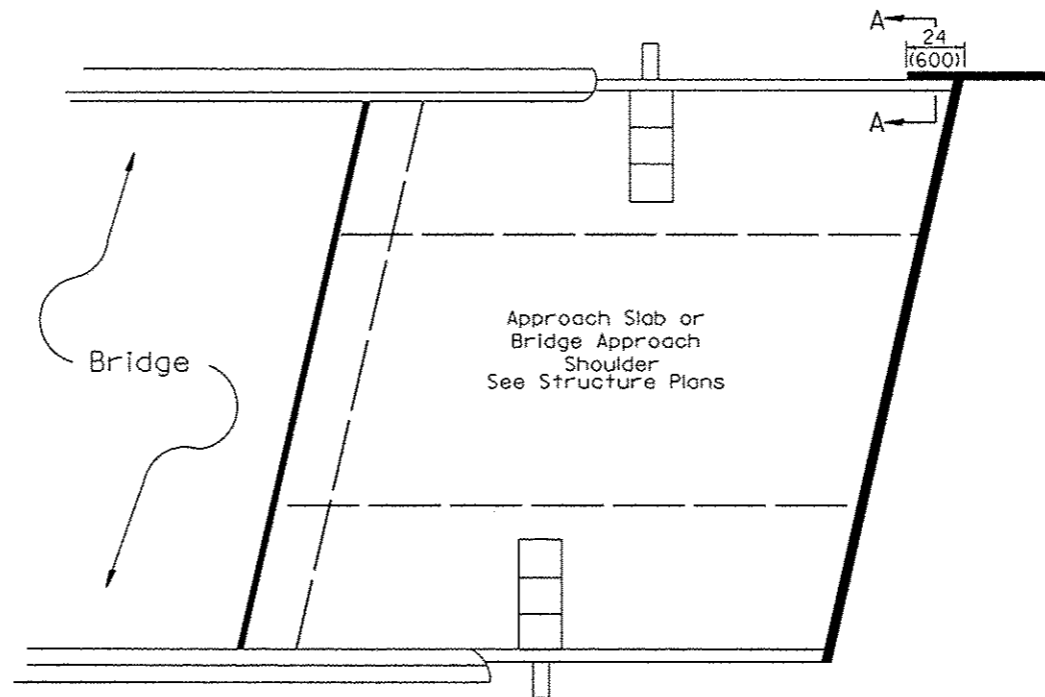
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

NOT TO SCALE

SHT. 1 OF 2
CADD STD. 630101-04

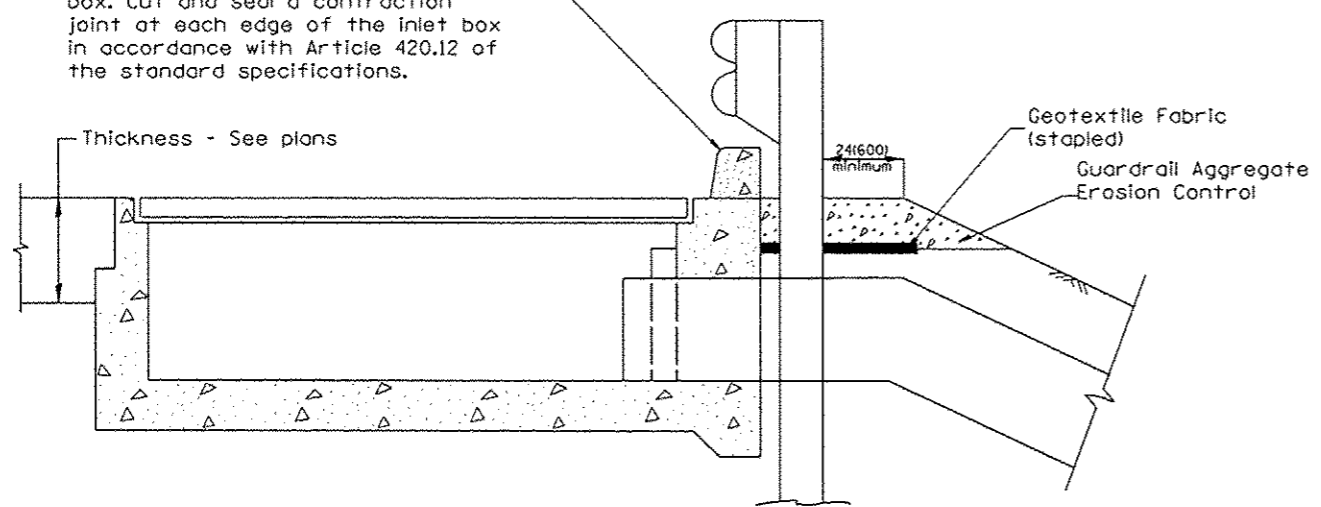
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6774	07-00149-00-BR	TAZEWELL	52	49
CONTRACT NO.				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



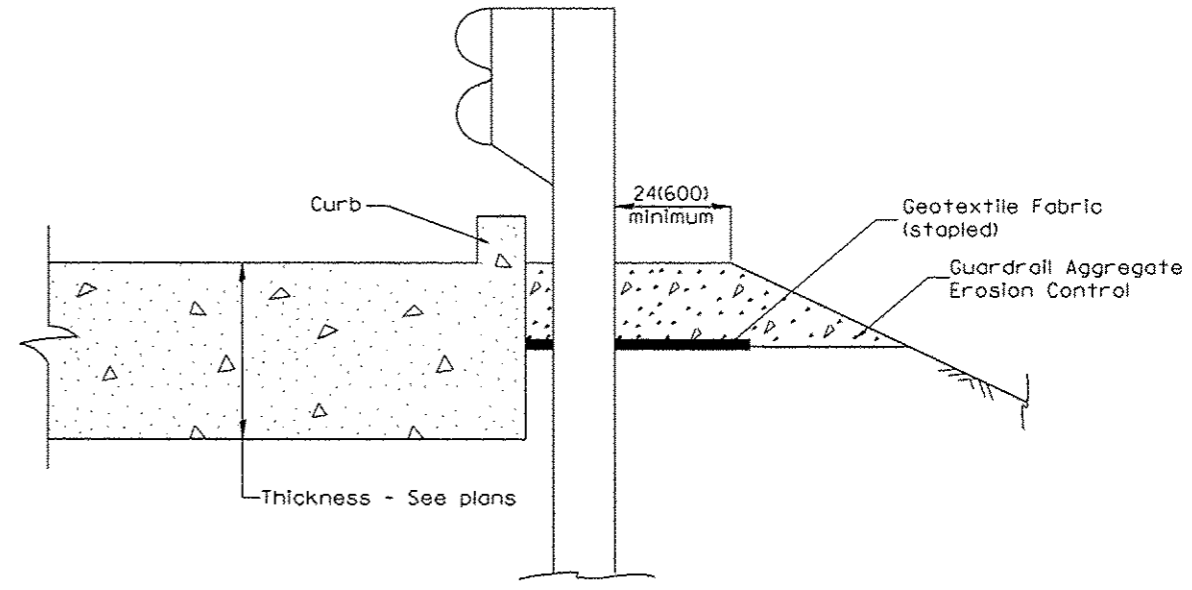
PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)

Type B or M curb.
Install an 8' long #4 epoxy coated reinforcement bar across the inlet box. Cut and seal a contraction joint at each edge of the inlet box in accordance with Article 420.12 of the standard specifications.



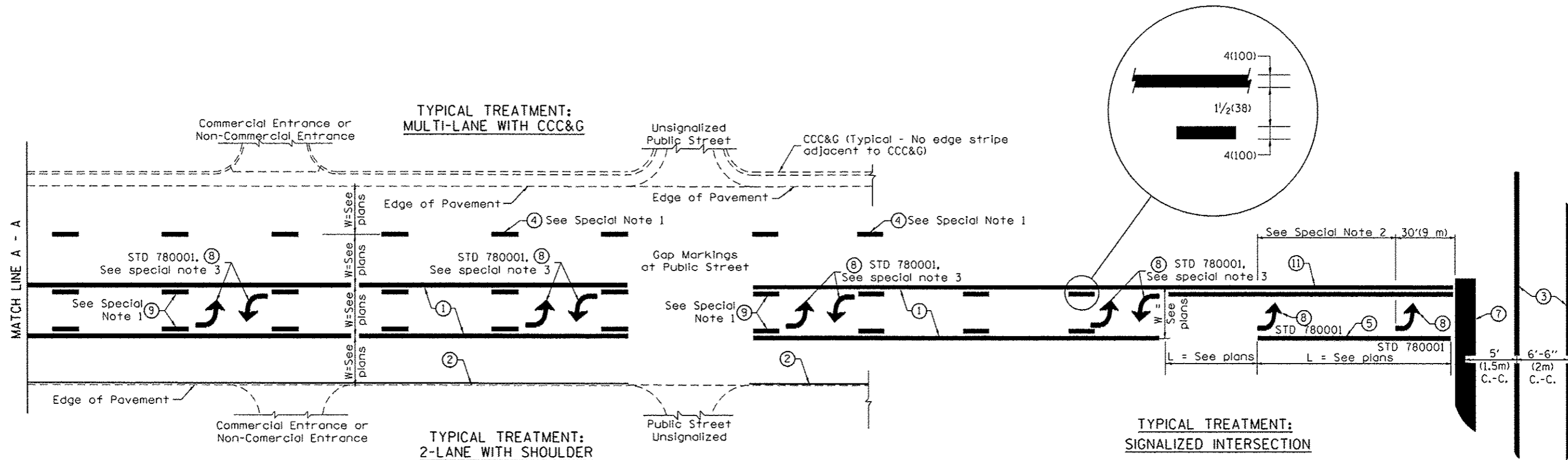
TYPICAL SECTION AT INLETS
TYPE E & F (STANDARD 610001)



SECTION A-A
TYPICAL SECTION WITH BRIDGE APPROACH CURB

All dimensions are in inches (millimeters) unless otherwise noted.

				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		GUARDRAIL EROSION CONTROL TREATMENTS				<table border="1"> <tr> <th>F.A. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td>6774</td> <td>07-00149-00-BR</td> <td>TAZEWELL</td> <td>52</td> <td>50</td> </tr> </table>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	6774	07-00149-00-BR	TAZEWELL	52	50
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																	
6774	07-00149-00-BR	TAZEWELL	52	50																	
				NOT TO SCALE		SHT. 2 OF 2 CADD STD. 630101-D4				<table border="1"> <tr> <th colspan="2">CONTRACT NO.</th> <th>FED. ROAD DIST. NO.</th> <th>ILLINOIS FED. AID PROJECT</th> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> </tr> </table>		CONTRACT NO.		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT						
CONTRACT NO.		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT																		



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
 - A. A minimum of two (2) arrows is required.
 - B. The maximum spacing between arrows is 80' (24 m).
 - C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
 - A. A minimum of two (2) arrow pairs is required.
 - B. The maximum spacing between arrow pairs is 200' (61 m).
 - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
 - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.		
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.		
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.		

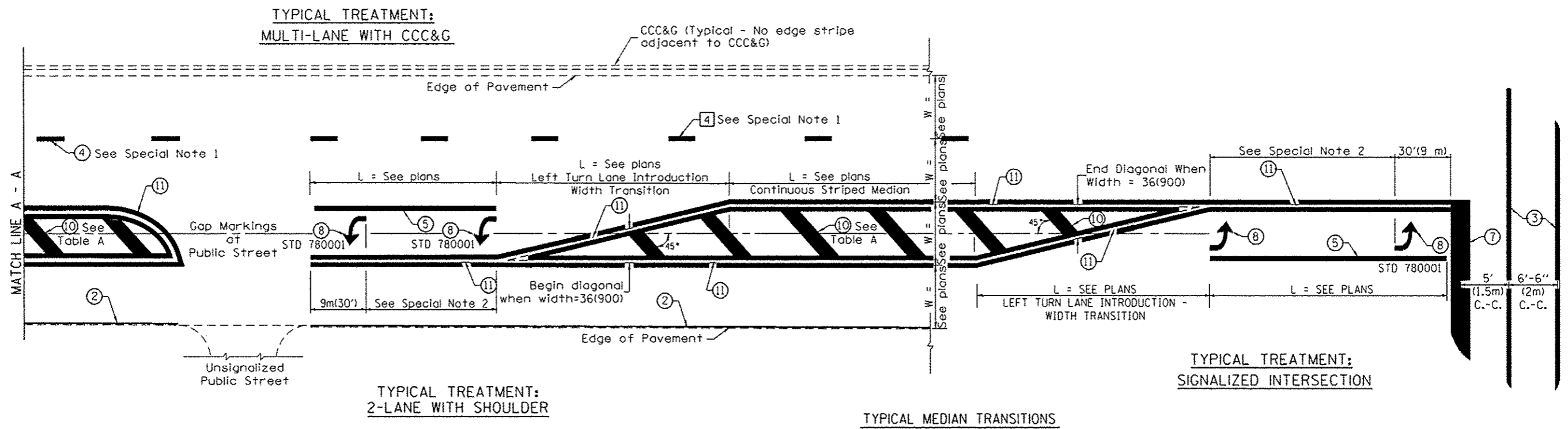
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

SHT. 1 OF 2
CADD STD. 780001-D4

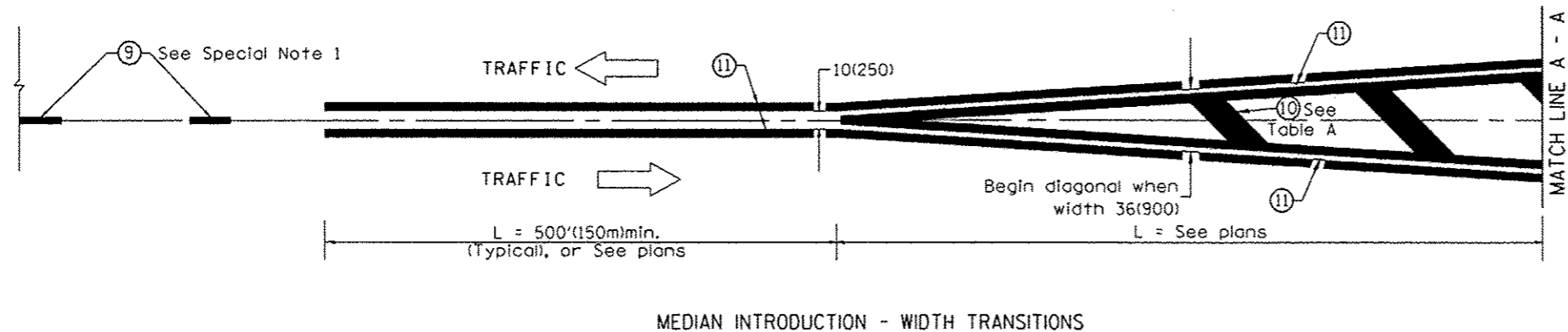
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6774	07-00149-00-BR	TAZEWELL	52	51
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



All dimensions are in inches (millimeters) unless otherwise noted.