CONTRACT # 95552

HIGH PRIORITY SAFETEA – LU AND HIGHWAY BRIDGE PROGRAM

F.A.S. 662 EXTENSION OVER EMBARRAS RIVER TO IL 130
CUMBERLAND COUNTY, ILLINOIS

SECTION # 01–00061–00–BR
PROJECT # HPP-RS–1815(002)
CONTRACT # 95552
JOB # C–97–068–08

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280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420401-06	BRIDGE APPROACH PAVEMENT
515001-02	NAME PLATE FOR BRIDGES
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542306-01	PRECAST REINFORCED CONCRETE ELLIPTICAL END SECTION
542401	METAL END SECTION FOR PIPE CULVERTS
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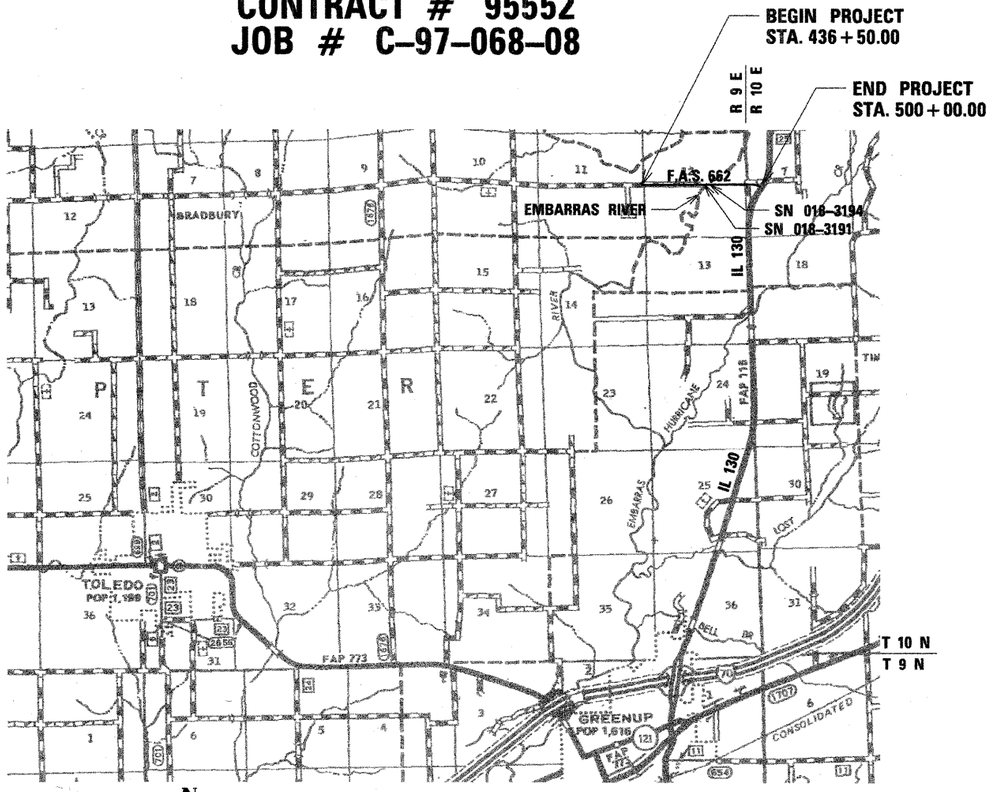
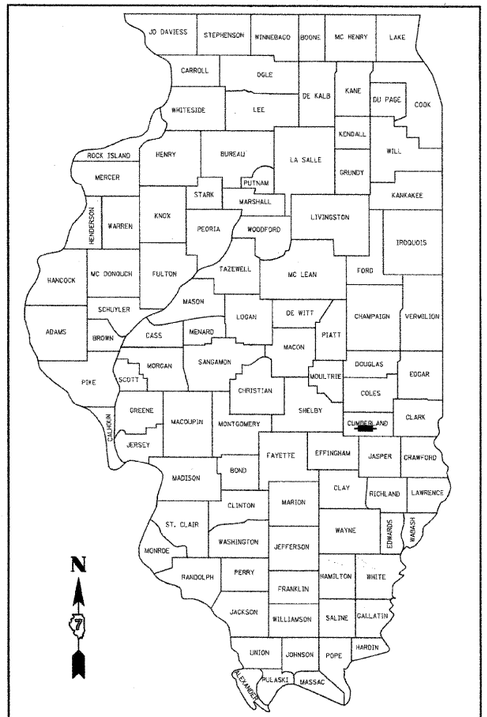
602301-01	INLET - TYPE A
604006-03	FRAME AND GRATE TYPE 3
606001-03	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-03	PC CONCRETE ISLANDS AND MEDIANS
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-04	TRAFFIC BARRIER TERMINAL, TYPE 2
701001-01	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 4.5M (15') AWAY
701006-02	OFF-RD OPERATIONS, 2L, 2W, 4.5M (15') TO 600MM (24") FROM EDGE OF PAVEMENT
701201-02	LANE CLOSURE, 2L, 2W DAY ONLY, FOR SPEEDS >= 45 MPH
701901	TRAFFIC CONTROL DEVICES
720001	SIGN PANEL MOUNTING DETAILS
720006-01	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001	TELESCOPING STEEL SIGN SUPPORT
729001	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
731001	BASE FOR TELESCOPING STEEL SIGN SUPPORTS
B.L.R. 21-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
B.L.R. 22-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (2L2W-ROAD CLOSED TO THRU TRAFFIC)
B.L.R. 24-1	MAILBOX TURNOUT FOR LOCAL ROADS
B.L.R. 26	STEEL PLATE BEAM GUARDRAIL (27.5) INCH HEIGHT
B.L.R. 27	TRAFFIC BARRIER TERMINAL TYPE 5A



AREA LOCATION PLAN

NOT TO SCALE

FUNCTIONAL CLASSIFICATION = MAJOR COLLECTOR
DESIGN DESIGNATION ADT = 500 (2028)
DESIGN SPEED = 40 mph
GROSS LENGTH OF PROJECT = 1.20 mi. (6,350 FT)
NET LENGTH OF PROJECT = 1.20 mi. (6,350 FT)



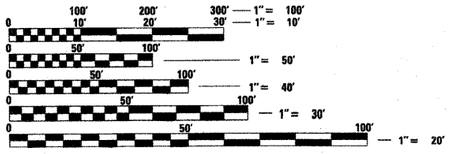
LOCATION OF SECTION INDICATED THUS: –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 04/08/ 2008
CUMBERLAND COUNTY, COUNTY ENGINEER

PASSED 6/10 2008
DISTRICT 7 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW
6/10 20 08
DEPUTY DIRECTOR OF HIGHWAYS, REGION 4 ENGINEER



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.

UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES, REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

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

LICENSED PROFESSIONAL ENGINEER — MICHAEL MENDENHALL — 062-059499 — STATE OF ILLINOIS

SIGNATURE
04/04/08
DATE
LIC. EXP. DATE : 11/30/09

PROJECT ENGINEER – MICHAEL MENDENHALL (217)788–2450
PROJECT MANAGER – JIM MOLL (217)788–2450

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GENERAL NOTES

1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS.
MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

COLES-MOULTRIE ELECTRIC COOPERATIVE
MEDIACOM
VERIZON NORTH, INC.
FOR CONTACTS, SEE CONTACT INFORMATION BELOW.

ANY DAMAGE TO THE UNDERGROUND FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE, INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS.
UTILITY ADJUSTMENTS SHALL BE MADE BY THE UTILITY COMPANIES UNLESS NOTED OTHERWISE.

2 SEEDING WILL BE DONE BY THE CUMBERLAND COUNTY HIGHWAY DEPARTMENT. ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDED AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE. TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE ACCORDING TO THE PLANS AND SECTION 280.04(f) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

3 ACCESS TO ALL ENTRANCES SHALL BE MAINTAINED AT ALL TIMES.

4 IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16, THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT, AS DEFINED IN ARTICLE 101.17, REGARDLESS IF TRACK MOUNTED OR WHEELED.

5 BEFORE ORDERING PIPE CULVERTS, PIPE DRAINS, END SECTIONS OR INLETS THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR EXACT LENGTHS AND QUANTITIES REQUIRED.

6 EXCAVATION IN GRAVEL OR OIL AND CHIP ROADWAYS IS TO BE PAID AS EARTH EXCAVATION.

7 ALL DRAINAGE STRUCTURES SHALL BE FREE OF SILT, DEBRIS, OR OTHER SUCH OBSTRUCTIONS AT THE TIME OF FINAL INSPECTION. THE CLEANING OF THESE DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS INVOLVED.

8 TREES THAT INTERFERE WITH THE CONSTRUCTION OPERATIONS SHALL BE REMOVED BY CUMBERLAND COUNTY HIGHWAY DEPARTMENT AS DIRECTED BY THE ENGINEER. ANY TREE DUE TO ITS LOCATION AND DEEMED SUITABLE FOR SAVING BY THE ENGINEER SHALL BE PROTECTED DURING CLEARING AND SUBSEQUENT CONSTRUCTION OPERATIONS. THIS WILL NOT BE PAID FOR, BUT SHALL BE CONSIDERED AS PART OF CONSTRUCTION OPERATIONS.

9 GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENTS AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

10 WHERE SMALL QUANTITIES OF LIME STABILIZATION ARE SHOWN IN THE PLANS, SUBBASE GRANULAR MATERIAL, TYPE B MAY BE SUBSTITUTED AND CONSTRUCTED ACCORDING TO THE APPLICABLE PORTIONS OF SECTION 311. THE DEPTH OF THE SUBBASE GRANULAR MATERIAL SHALL BE THE SAME AS THE PROPOSED DEPTH OF THE LIME STABILIZATION. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PROCESSING LIME MODIFIED SOIL MIXTURE OF THE DEPTH SPECIFIED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

11 AT LOCATIONS WHERE END SECTIONS ARE SPECIFIED, CAST-IN-PLACE CONCRETE HEADWALLS WILL NOT BE ALLOWED.

12 ALL THE ENTRANCE CULVERT LENGTHS SHOWN IN THE PLANS WERE CALCULATED WITH THE ASSUMPTION THAT METAL PIPES AND METAL END SECTION WOULD BE USED.

13 COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

14 THESE PLANS HAVE BEEN PREPARED USING STANDARD SYMBOLS AS INDICATED IN THESE PLANS, AND THEY SHALL TAKE PRECEDENCE OVER THOSE SHOWN ON STANDARD 000001 IF THERE IS A CONFLICT.

15 ADDITIONAL DEPTH REQUIRED IN DRAINAGE STRUCTURES DUE TO CONFLICTS WITH OTHER UTILITY LINES WILL BE CONSIDERED INCLUDED WITH THE UNIT PRICE BID FOR DRAINAGE STRUCTURES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

16 ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

17 A 12" LAYER OF LIME STABILIZED SUBGRADE WITH A TREATMENT RATE OF 7.0% (70 LBS. OF BY-PRODUCT LIME PER SQUARE YARD OF SUBGRADE SOIL PROCESSED 1 FOOT DEEP) WAS USED FOR ESTIMATING QUANTITIES. THE EXACT PERCENT OF LIME WILL BE DETERMINED BY TESTING REPRESENTATIVE SUBGRADE SOIL SAMPLES WITH THE BY-PRODUCT LIME TO BE USED ON THE JOB.

18 ELEVATION DATA IS BASED ON NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD29).

WORK TO BE COMPLETED BY CUMBERLAND COUNTY

TREE REMOVAL
PERMANENT SEEDING
FERTILIZING
MOWING
MULCHING FOR PERMANENT SEEDING
A-3 SURFACE
2" PAVEMENT SURFACE
FIELD TILE ADJUSTMENTS
FENCE REMOVAL AND RE-ERECTING
FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS
PERMANENT SURVEY MARKERS
GUARDRAIL REFLECTORS
TERMINAL MARKER - DIRECT APPLIED
TREE PLANTING
CONSTRUCTION LAYOUT
PAVEMENT STRIPING

UTILITY CONTACT INFORMATION

COLES-MOULTRIE ELECTRIC COOPERATIVE
ATTENTION: MR. STEVE UNDERWOOD
DIRECTOR OF ENGINEERING
104 DEWITT AVE. E. MATTOON
P.O. BOX 709
MATTOON, ILLINOIS 61938-0709
PHONE: (217)258-5803 OR (217)235-0341
TOLL FREE: 1(888)661-2632

MEDIACOM
ATTENTION: MR. DEL LINGAFELTER
4290 BLUESTEM ROAD
CHARLESTON, ILLINOIS 61920
PHONE: (217)348-5533 EXT. 9

VERIZON NORTH, INC.
ATTENTION: MS. MARY RUTH WILLIS
110 EAST MONROE
P.O. BOX 2675
BLOOMINGTON, ILLINOIS 61702-2675
PHONE: (309)827-1617

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JRM	02/04/08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES /COMMITMENTS

SCALE: | SHEET NO. 1 OF 1 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	2
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

	CODE #	ITEM	UNIT	TOTAL QUANTITY
	20200100	EARTH EXCAVATION	CU YD	27965
	20400100	BORROW EXCAVATION	CU YD	20085
	25100105	MULCH, METHOD 1	ACRE	2.25
	25100630	EROSION CONTROL BLANKET	SQ YD	2439
*	28000255	TEMPORARY EROSION CONTROL SEEDING	ACRE	19
	28000300	TEMPORARY DITCH CHECKS	EACH	37
	28000400	PERIMETER EROSION BARRIER	FOOT	6199
	28000500	INLET AND PIPE PROTECTION	EACH	10
	28200200	FILTER FABRIC	SQ YD	2344
	31001500	LIME	TON	615.3
	31000600	PROCESSING LIME STABILIZED SOIL MIXTURE 12"	SQ YD	17580
	42001165	BRIDGE APPROACH PAVEMENT	SQ YD	200
	42001300	PROTECTIVE COAT	SQ YD	200
	50105220	PIPE CULVERT REMOVAL	FOOT	130
	50300225	CONCRETE STRUCTURES	CU YD	297.6
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	389.6
	50300260	BRIDGE DECK GROOVING	SQ YD	1478
	50300280	CONCRETE ENCASEMENT	CU YD	47.8
	50300300	PROTECTIVE COAT	SQ YD	1511
	50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	5441.5
	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
	50500505	STUD SHEAR CONNECTORS	EACH	3144
	50800105	REINFORCEMENT BARS	POUND	38460
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	147300
	50800515	BAR SPLICERS	EACH	62
Δ	50900205	STEEL RAILING, TYPE S1	FOOT	1264
	51201400	FURNISHING STEEL PILES HP10X42	FOOT	1876
	51201900	FURNISHING STEEL PILES HP14X89	FOOT	952
	51202305	DRIVING PILES	FOOT	2828
	51203400	TEST PILE STEEL HP10X42	EACH	4
	51203900	TEST PILE STEEL HP14X89	EACH	2
	51500100	NAME PLATES	EACH	2
	51603000	DRILLED SHAFT IN SOIL	CU YD	198.6
	51604000	DRILLED SHAFT IN ROCK	CU YD	12.6
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	83.5
	52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	8
	52100400	STEEL BEARING ASSEMBLY	EACH	8
	52100530	ANCHOR BOLTS, 1 1/4"	EACH	16
	52100540	ANCHOR BOLTS, 1 1/2"	EACH	16
	54200475	PIPE CULVERTS, TYPE 1 RCCP 60"	FOOT	71
	54200643	PIPE CULVERTS, TYPE 1, CORRUGATED STEEL OR ALUMINUM CULVERT PIPE 18"	FOOT	131
	54201291	PIPE CULVERTS, TYPE 2 RCCP 36"	FOOT	136
	54205893	PIPE CULVERTS, TYPE 1, CORRUGATED STEEL, EQUIVALENT ROUND-SIZE 18"	FOOT	32
	54206733	PIPE CULVERTS, TYPE 1, REINFORCED CONCRETE, EQUIVALENT ROUND-SIZE 18"	FOOT	165
	54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	4
	54213705	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 60"	EACH	2
	54214503	PRECAST REINFORCED CONCRETE FLARED END SECTIONS, EQUIVALENT ROUND-SIZE 18"	EACH	2
	54215553	METAL END SECTIONS 18"	EACH	10
*	54215763	METAL END SECTIONS, EQUIVALENT ROUND-SIZE 18"	EACH	2
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	60
	58700300	CONCRETE SEALER	SQ FT	342
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	108
	60100060	CONCRETE HEADWALL FOR PIPE DRAINS	EACH	1
	60100945	PIPE DRAINS 12"	FOOT	6
	60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	206
	60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	2
	60600095	CLASS SI CONCRETE (OUTLET)	CU YD	2

X071-2A

		CODE #	ITEM	UNIT	TOTAL QUANTITY
		60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	278
		60608600	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.06	FOOT	16
		60610400	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.24	FOOT	59
		60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	132
Δ		63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	2525
Δ		63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	5
Δ		63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	8
*	Δ	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	EACH	2
*	Δ	63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (FLARED)	EACH	3
		67100100	MOBILIZATION	L SUM	1
		70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
*		70103700	TRAFFIC CONTROL COMPLETE	L SUM	1
		72000100	SIGN PANEL - TYPE 1	SQ FT	28
		72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	8
		72900100	METAL POST - TYPE A	FOOT	26
		72900200	METAL POST - TYPE B	FOOT	24
		73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	1
*		78300105	PAVEMENT MARKING REMOVAL	FOOT	252
*		X0322903	SAW CUTTING, (FULL DEPTH)	FOOT	252
*		XX007568	FURNISHED EXCAVATION "INSTALL ONLY"	CU YD	16165
*		XX007569	POROUS GRANULAR EMBANKMENT, SPECIAL "INSTALL ONLY"	CU YD	243
*		XX007570	TRENCH BACKFILL "INSTALL ONLY"	CU YD	173
*		XX007571	STONE RIPRAP, CLASS A4 "INSTALL ONLY"	SQ YD	2015
*		XX007572	STONE DUMPED RIPRAP, CLASS A4 "INSTALL ONLY"	SQ YD	176
*		XX007573	STONE DUMPED RIPRAP, CLASS A6 "INSTALL ONLY"	SQ YD	160
*		XX007574	AGGREGATE SURFACE COURSE, TYPE B "INSTALL ONLY"	TON	205
*		XX007575	AGGREGATE SHOULDERS, TYPE B 6" "INSTALL ONLY"	SQ YD	4936
*		XX007576	AGGREGATE BASE COURSE, TYPE B 18" "INSTALL ONLY"	SQ YD	15736

*** PAY ITEM REQUIRES SPECIAL PROVISION** Δ SPECIALTY ITEMS

LAYOUT	MNM/DJP	10/10/07	
DRAWN	DJP	10/10/07	
REVIEWED	JRM	02/04/08	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 1 OF 1 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	3
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION CU YD	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25%	EMBANKMENT CU YD	FURNISHED EXCAVATION "INSTALL ONLY" OR WASTE (-) CU YD	BORROW EXCAVATION "INSTALL ONLY" OR WASTE (-) CU YD
F.A.S. 662					
Sta. 436+50.00 to Sta 468+50.29	3029	2272	18392	16120	
Sta. 472+99.71 to Sta. 476+69.50	2	2	9397		9395
Sta. 478+54.50 to Sta. 498+23.44	22287	16715	26707		9992
NORTH SIGHT GRADING					
Sta. 12+00.00 to Sta. 21+00.00	905	679			-679
SOUTH SIGHT GRADING					
Sta. 48+00.00 to Sta. 52+00.00	992	744		-744	
INTERSECTION					
Intersection @ IL 130	723	542	193		-349
BRIDGE CONES					
River Bridge (East Cones)	14	11	168	157	
River Bridge (West Cones)	2	2	72		70
Overflow (East Cones)	0	0	118		118
Overflow (West Cones)	1	1	280		279
ENTRANCES					
440+12.92, RT	0	0	17	17	
440+15.00, LT	0	0	27	27	
446+72.00, LT	5	4	16	12	
446+81.00, RT	1	1	17	16	
465+76.00, LT	0	0	561	561	
475+00.00, RT	2	2	565		563
475+00.00, LT	2	2	565		563
487+00.00, LT	0	0	34		34
487+00.00, RT	1	1	39		38
491+16.60, LT	0	0	28		28
491+16.60, RT	0	0	35		35
PROJECT TOTAL	**27965**	**20980**	**57230**	**16165**	**20085**

CURB AND GUTTER SCHEDULE

LOCATION	OFFSET	COMBINATION CURB AND GUTTER, TYPE B-6.24 FOOT	COMBINATION CURB AND GUTTER, TYPE M-6.24 FOOT	COMBINATION CURB AND GUTTER, TYPE M-6.06 FOOT	CLASS SI CONCRETE (OUTLET) CU YD
ROADWAY					
INTERSECTION @ IL 130	LT	168			1.02
INTERSECTION @ IL 130	RT	110			1.02
MEDIAN					
INTERSECTION @ IL 130	RT			16	
INTERSECTION @ IL 130	RT		59		
PROJECT TOTAL		**278**	**59**	**16**	**2.0**

EROSION CONTROL SCHEDULE

	OFFSET	EROSION CONTROL BLANKET SQ YD	TEMPORARY DITCH CHECK EACH	PERIMETER EROSION BARRIER FOOT	INLET AND PIPE PROTECTION EACH	MULCH METHOD 1 ACRE
F.A.S. 662						
Sta. 440+32.88 - Sta. 446+56.11	LT	576.5				
Sta. 440+34.45 - Sta. 446+69.75	RT	587.0				
Sta. 447+07.94 - Sta. 448+00.00	LT	85.5				
Sta. 447+10.58 - Sta. 447+50.00	RT	36.3				
Sta. 480+00.00 - Sta. 481+00.00	RT	104.3				
Sta. 480+00.00 - Sta. 482+00.00	LT	208.7				
Sta. 484+00.00 - Sta. 486+80.00	LT	312.2				
Sta. 484+00.00 - Sta. 486+80.00	RT	312.2				
Sta. 490+15.00 - Sta. 490+78.57	RT	59				
Sta. 490+50.00 - Sta. 490+84.04	LT	32				
Sta. 491+32.30 - Sta. 492+00.00	RT	63				
Sta. 491+31.20 - Sta. 492+00.00	LT	64				
439+50.00	RT		1			
441+50.00	RT		1			
443+10.00	RT		1			
443+50.00	RT		1			
443+90.00	RT		1			
444+30.00	RT		1			
444+70.00	RT		1			
445+20.00	RT		1			
445+80.00	RT		1			
446+40.00	RT		1			
448+50.00	RT		1			
484+00.00	RT		1			
484+25.00	RT		1			
484+75.00	RT		1			
485+25.00	RT		1			
485+75.00	RT		1			
486+25.00	RT		1			
488+25.00	RT		1			
492+50.00	RT		1			
442+00.00	LT		1			
443+25.00	LT		1			
443+75.00	LT		1			
444+25.00	LT		1			
444+75.00	LT		1			
445+25.00	LT		1			
445+75.00	LT		1			
446+25.00	LT		1			
447+75.00	LT		1			
484+00.00	LT		1			
484+25.00	LT		1			
484+75.00	LT		1			
485+25.00	LT		1			
485+75.00	LT		1			
486+25.00	LT		1			
492+50.00	LT		1			
Sta. 450+00.00 - Sta. 469+00.00	RT			1942		
Sta. 450+00.00 - Sta. 470+20.00	LT			2120		
Sta. 469+00.00 - Sta. 470+20.00	RT/LT			154		
Sta. 471+30.00 - Sta. 480+00.00	RT			975		
Sta. 473+00.00 - Sta. 480+00.00	LT			813		
Sta. 471+30.00 - Sta. 473+00.00	RT/LT			195		
439+96.72	LT				1	
440+06.28	RT				1	
446+56.11	LT				1	
446+69.75	RT				1	
464+76.00	LT				2	
490+23.47	LT				1	
491+31.20	LT				1	
491+32.30	RT				1	
499+85.07	LT				1	
Sta. 436+50.00 - Sta. 498+23.44						2.25
ALONG IL 130						
13+00.00			1			
17+00.00			1			
PROJECT TOTAL		**2439**	**37**	**6199**	**10**	**2.25**

STONE DUMPED RIPRAP, CLASS A4 "INSTALL ONLY"

LOCATION	ROADWAY STATION	OFFSET	AREA (SQ YD)
CULVERT	446+72.00	LT	26
CULVERT	446+81.00	RT	26
CULVERT	464+76.00	RT	52
CULVERT	491+16.60	LT	26
CULVERT	491+16.60	RT	26
CULVERT	499+65.65	RT	20
PROJECT TOTAL			**176**

STONE RIPRAP, CLASS A4 "INSTALL ONLY"

STRUCTURE	STRUCTURE #	AREA (SQ YD)
RIVER	018-3191	703
OVERFLOW	018-3194	309
SUBTOTAL		1012

LOCATION	ROADWAY STATION	OFFSET	AREA (SQ YD)
DITCH SLOPE	482+00 - 484+00	LT	312
DITCH SLOPE	481+00 - 484+00	RT	462
DITCH SLOPE	490+00 - 490+50	LT	82
DITCH SLOPE	489+25 - 490+15	RT	147
SUBTOTAL			1003
PROJECT TOTAL			**2015**

STONE DUMPED RIPRAP, CLASS A6 "INSTALL ONLY"

LOCATION	ROADWAY STATION	OFFSET	AREA (SQ YD)
CULVERT	489+98.00	LT	80
CULVERT	489+98.00	RT	80
PROJECT TOTAL			**160**

PROTECTIVE COAT

RIVER BRIDGE STRUCTURE	AREA (SQ YD)
EAST APPROACH	100
WEST APPROACH	100
PROJECT TOTAL	**200**

FILTER FABRIC

STRUCTURE	STRUCTURES STRUCTURE #	AREA (SQ YD)
RIVER	018-3191	703
OVERFLOW	018-3194	309
SUBTOTAL		1012

LOCATION	ROADWAY STATION	OFFSET	AREA (SQ YD)
DITCH SLOPE	482+00 - 484+00	LT	311
DITCH SLOPE	481+00 - 484+00	RT	467
DITCH SLOPE	490+00 - 490+50	LT	78
DITCH SLOPE	489+25 - 490+15	RT	140
CULVERT	446+72.00	LT	26
CULVERT	446+81.00	RT	26
CULVERT	464+76.00	RT	52
CULVERT	489+98.00	LT	80
CULVERT	489+98.00	RT	80
CULVERT	491+16.60	LT	26
CULVERT	491+16.60	RT	26
CULVERT	499+65.65	RT	20
SUBTOTAL			1332
PROJECT TOTAL			**2344**

TEMPORARY EROSION CONTROL SEEDING

	TEMPORARY EROSION CONTROL SEEDING ACRE
Station 436+50.00 to Station 498+23.44	15.6
IL 130 Intersection - Sta. 498+23.44 to IL 130	1.0
North Grading along IL 130 Sta. 12+00.00 to Sta. 21+00.00	2.0
South Grading along IL 130 Sta. 40+00.00 to Sta. 53+00.00	0.4
PROJECT TOTAL	**19.00**

AGGREGATE SURFACE COURSE, TYPE B "INSTALL ONLY"

PRIVATE ENTRANCES	OFFSET	TONS
STA. 440+12.92	RT	21.0
STA. 440+15.00	LT	35.0
STA. 491+16.60	LT	21.0
WEST APPR. STA. 468+21.00		1.5
EAST APPR. STA. 473+29.00		1.5
WEST ABUT. STA. 476+69.50		1.5
EAST ABUT. STA. 478+54.50		1.5
IL 130 INTERSECTION		122.0
PROJECT TOTAL		**205**

AGGREGATE SHOULDERS, TYPE B 6" "INSTALL ONLY"

F.A.S. 662	OFFSET	AREA (SQ YD)
STA. 436+50.00 - STA. 468+21.00	LT/RT	2819
STA. 473+29.00 - STA. 476+69.50	LT/RT	303
STA. 478+54.50 - STA. 498+23.44	LT/RT	1750
STA. 498+23.44 - STA. 498+74.20	RT	23
SHOULDER THROUGH INTERSECTION	RT	25
SHOULDER THROUGH INTERSECTION	LT	17
PROJECT TOTAL		**4936**

PIPE CULVERT REMOVAL

F.A.S. 662	OFFSET	FOOT
STA. 440+15.00	LT	30
STA. 446+72.00	LT	16
STA. 489+98.00		45
STA. 491+00.00	LT	39
PROJECT TOTAL		**130**

PROCESSING LIME STABILIZED SOIL MIXTURE 12"

F.A.S. 662	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)
STA. 436+50.00 - STA. 468+21.00	3171.00	27.00	9513.0
STA. 473+29.00 - STA. 476+69.50	340.50	27.00	1021.5
STA. 478+54.50 - STA. 498+23.44	1968.94	27.00	5906.8
IL 130 INTERSECTION			1139.0
PROJECT TOTAL			**17580**

BRIDGE APPROACH PAVEMENT

RIVER BRIDGE STRUCTURE	AREA (SQ YD)
EAST APPROACH	100
WEST APPROACH	100
PROJECT TOTAL	**200**

LIME

F.A.S. 662	AREA (SQ YD)	RATE (LBS/ SQ YD)	TONS
STA. 436+50.00 - STA. 468+21.00	9513.0	70.0	333.0
STA. 473+29.00 - STA. 476+69.50	1021.5	70.0	35.8
STA. 478+54.50 - STA. 498+23.44	5906.8	70.0	206.7
IL 130 INTERSECTION	1139.0	70.0	39.9
PROJECT TOTAL			**615.3**

HANSON
Hanson Professional Services Inc.

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JWM	02/04/08

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PLOT DATE = 06\02\2008, 02:19 PM

DESIGNED - MNM/DJP	REVISED -	
DRAWN - DJP	REVISED -	
CHECKED - MNM	REVISED -	
DATE - 10/10/07	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 1 OF 2 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	4
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

CONCRETE MEDIAN SURFACE, 4"	
F.A.S. 662	AREA (SQ FT)
IL 130 INTERSECTION	132
PROJECT TOTAL	**132**

PAVEMENT MARKING REMOVAL				
ALONG IL. 130				
FROM		TO		FOOT
STATION	OFFSET	STATION	OFFSET	
499+43.13	146.34 (RT)	500+09.87	95.96 (LT)	252
PROJECT TOTAL				**252**

SAW CUTTING (FULL DEPTH				
ALONG IL. 130				
FROM		TO		FOOT
STATION	OFFSET	STATION	OFFSET	
499+43.13	146.34 (RT)	500+09.87	95.96 (LT)	252
PROJECT TOTAL				**252**

BARRIER SCHEDULES

LOCATION	OFFSET	STEEL PLATE BEAM GUARDRAIL, TYPE A FOOT	TRAFFIC BARRIER TERMINAL, TYPE 2 EACH	TRAFFIC BARRIER TERMINAL, TYPE 5A EACH	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT) EACH	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (FLARED) EACH
STA. 462+50.00 - STA. 463+00.00	RT				1	
STA. 463+00.00 - STA. 468+22.00	RT	522.0				
STA. 468+22.00 - STA. 468+35.25 (ON STR.)	RT			1		
STA. 463+87.50 - STA. 464+00.00	LT		1			
STA. 464+00.00 - STA. 465+06.00	LT	106.0				
STA. 465+06.00 - STA. 465+56.00	LT					1
STA. 465+94.83 - STA. 466+07.33	LT		1			
STA. 466+07.33 - STA. 468+53.50	LT	246.2				
STA. 468+53.50 - STA. 468+66.75 (ON STR.)	LT			1		
STA. 472+83.26 (ON STR.) - STA. 472+96.51	RT			1		
STA. 472+96.51 - STA. 474+67.65	RT	171.1				
STA. 474+67.65 - STA. 474+80.15	RT		1			
STA. 473+14.76 (ON STR.) - STA. 473+28.01	LT			1		
STA. 473+28.01 - STA. 474+32.95	LT	104.9				
STA. 474+32.95 - STA. 474+82.95	LT					1
STA. 475+19.66 - STA. 475+32.06	LT		1			
STA. 475+32.06 - STA. 476+65.41	LT	133.4				
STA. 476+65.41 - STA. 476+78.66.00 (ON STR.)	LT			1		
STA. 475+18.00 - STA. 475+68.00	RT					1
STA. 475+68.00 - STA. 476+48.09	RT	80.1				
STA. 476+48.09 - STA. 476+61.34 (ON STR.)	RT			1		
STA. 478+45.34 (ON STR.) - STA. 478+58.59	RT			1		
STA. 478+58.59 - STA. 484+00.00	RT	541.4				
STA. 484+00.00 - STA. 484+12.50	RT		1			
STA. 478+62.66 (ON STR.) - STA. 478+75.91	LT			1		
STA. 478+75.91 - STA. 485+00.00	LT	624.1				
STA. 485+00.00 - STA. 485+50.00	LT				1	
PROJECT TOTAL		**2525**	**5**	**8**	**2**	**3**

TRAFFIC BARRIER TERMINAL, TYPE 2 WILL TRANSITION DOWN TO CONNECT TO STEEL PLATE BEAM GUARDRAIL, TYPE A (27.5) INCH HEIGHT

SIGNING SCHEDULE

ROADWAY	STATION	OFFSET	SIGN TYPE	PANEL SIZE	SIGN PANEL TYPE 1	METAL POST TYPE A	METAL POST TYPE B	TELESCOPING STEEL SIGN SUPPORT	BASE FOR TELESCOPING STEEL SIGN SUPPORT
				IN X IN	SQ FT	FOOT	FOOT	FOOT	EACH
F.A.S. 662	491+35.00	22' RT	R1-1	30X30	6.3		12		
F.A.S. 662	495+00.00	24.13' RT	W3-1	36"X36"	9.0	26			
F.A.S. 662	499+35.00	50' RT	R1-1	30X30	6.3			8	1
F.A.S. 662	499+67.00	20' RT	R1-1	30X30	6.3		12		
PROJECT TOTALS					28	26	24	8	1

AGGREGATE BASE COURSE, TYPE B 18" "INSTALL ONLY"			
F.A.S. 662	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)
STA. 436+50.00 - STA. 468+21.00	3171.00	24.00	8456.0
STA. 473+29.00 - STA. 476+69.50	340.50	24.00	908.0
STA. 478+54.50 - STA. 498+23.44	1968.94	24.00	5250.5
STA. 491+16.60 (TR 230)			53.2
IL 130 INTERSECTION			1068.0
PROJECT TOTAL			**15736**

HANSON
Hanson Professional Services Inc.

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JWK	02/04/08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 2 OF 2 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	5
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
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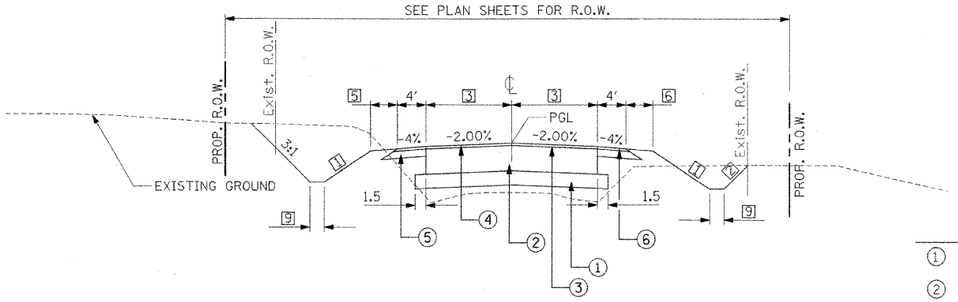
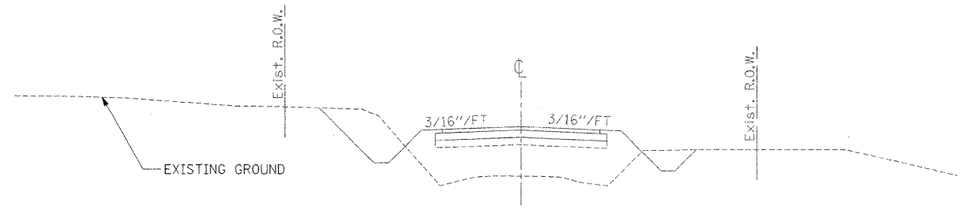


F.A.S. 662

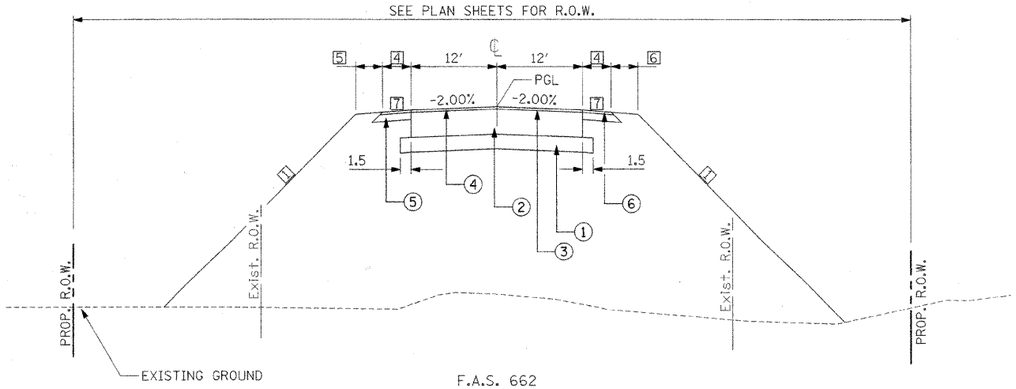
BEGINNING OF PROJECT STA. 436+50.00 TO STA. 450+00.00
STA. 479+00.00 TO STA. 495+32.72



F.A.S. 662

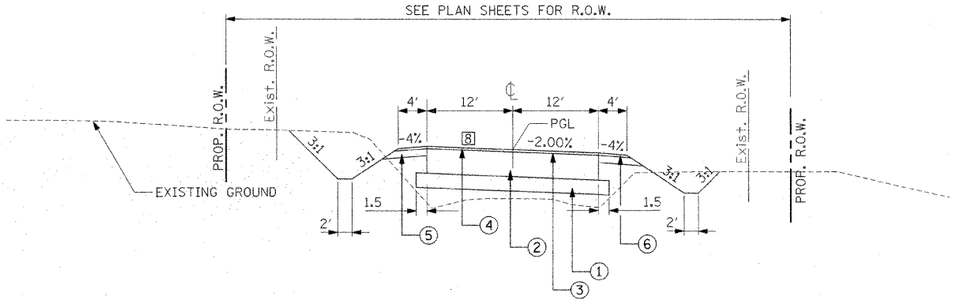
EXISTING SECTION

ITEM	
1	PROCESSING LIME STABILIZED SOIL MIXTURE, 12"
2	AGGREGATE BASE COURSE, TYPE B 18"
3	SURFACE TREATMENT (CLASS A-3) - CUMBERLAND COUNTY
4	2" SURFACE - CUMBERLAND COUNTY
5	AGGREGATE SHOULDERS TYPE B, 6"
6	2" SHOULDERS - CUMBERLAND COUNTY



F.A.S. 662

STA. 450+00.00 TO STA. 479+00.00
(BRIDGE OMISSION STA. 468+21.00 TO STA. 473+29.00)
(BRIDGE OMISSION STA. 476+69.50 TO STA. 478+54.50)



F.A.S. 662

STA. 495+32.72 TO STA. 498+23.44

[1] STATION 436+50.00 TO STATION 462+00.00 = 3:1

STATION 462+00.00 TO STATION 463+00.00
TRANSITION 3:1 TO 2:1

STATION 463+00.00 TO STATION 483+00.00 = 2:1

STATION 483+00.00 TO STATION 484+00.00
TRANSITION 2:1 TO 3:1

STATION 484+00.00 TO STATION 495+32.72 = 3:1

[2] STATION 436+50.00 TO STATION 439+00.00 = 2:1

STATION 439+00.00 TO STATION 440+00.00
TRANSITION 2:1 TO 3:1

STATION 440+00.00 TO STATIO 450+00.00 = 3:1

STATION 479+00.00 TO STATION 495+32.72 = 3:1

[3] STATION 436+50.00 TO STATION 437+00.00
TRANSITION 10.00' TO 12.00'

STATION 437+00.00 TO STATION 450+00.00 = 12.00'

STATION 479+00.00 TO STATION 495+32.72 = 12.00'

[4] STATION 450+00.00 TO STATION 467+80.00 = 4.00'

STATION 467+80.00 TO STATION 468+05.00
TRANSITION 4.00' TO 3.00'

STATION 468+05.00 TO STATION 468+21.00 = 3.00'

STATION 473+29.00 TO STATION 473+45.00 = 3.00'

STATION 473+45.00 TO STATION 473+70.00
TRANSITION 3.00' TO 4.00'

STATION 473+70.00 TO STATION 476+30.00 = 4.00'

STATION 476+30.00 TO STATION 476+55.00
TRANSITION 4.00' TO 3.00'

STATION 476+55.00 TO STATION 476+69.50 = 3.00'

STATION 478+54.50 TO STATION 478+65.00 = 3.00'

STATION 478+65.00 TO STATION 478+90.00
TRANSITION 3.00' TO 4.00'

STATION 478+90.00 TO STATION 479+00.00 = 4.00'

[5] STATION 436+50.00 TO STATION 463+87.50 = 0.00'

STATION 463+87.50 TO STATION 485+50.00 = 3.76'

STATION 485+50.00 TO STATION 495+32.72 = 0.00'

[6] STATION 436+50.00 TO STATION 462+50.00 = 0.00'

STATION 462+50.00 TO STATION 484+12.00 = 3.76'

STATION 484+12.50 TO STATION 495+32.72 = 0.00'

[7] STATION 450+00.00 TO STATION 467+55.00 = -4.00%

STATION 467+55.00 TO STATION 468+05.00
TRANSITION -4.00% TO -2.00%

STATION 468+05.00 TO STATION 468+21.00 = -2.00%

STATION 473+29.00 TO STATION 473+45.00 = -2.00%

STATION 473+45.00 TO STATION 473+95.00
TRANSITION -2.00% TO -4.00%

STATION 473+95.00 TO STATION 476+05.00 = -4.00%

STATION 476+05.00 TO STATION 476+55.00
TRANSITION -4.00% TO -2.00%

STATION 476+55.00 TO STATION 476+69.50 = -2.00%

STATION 478+54.50 TO STATION 478+65.00 = -2.00%

STATION 478+65.00 TO STATION 479+15.00
TRANSITION -2.00% TO -4.00%

STATION 479+15.00 TO STATION 479+00.00 = -4.00%

[8] STATION 495+32.72 TO STATION 496+57.72
TRANSITION -2.00% TO 2.00%

STATION 496+57.72 TO STATION 498+23.44 = 2.00%

[9] STATION 436+50.00 TO STATION 450+00.00 = 2.00'

STATION 479+00.00 TO STATION 486+00.00 = 4.00'

STATION 486+00.00 TO STATION 487+00.00
TRANSITION 4.00' TO 2.00'

STATION 487+00.00 TO STATION 495+32.72 = 2.00'

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. 436+50.00 TO STA. 500+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	6
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PIPE CULVERT SCHEDULE

ROADWAY	STATION	OFFSET	P CUL 1 CS/A EQ RS 18	P CUL 1 CS/A CP 18	P CUL 1 RC EQV R-S 18	P CUL 1 RCCP 60	P CUL 2 RCCP 36	METAL END SECTIONS 18"	MET END SEC EQV RS 18	PRC FL END S EQ RS 18	PRC FLAR END SEC 36	PRC FLAR END SEC 60	TRENCH BACKFILL "INSTALL ONLY"
			FEET	FEET	FEET	FEET	FEET	EACH	EACH	EACH	EACH	EACH	CU YD
F.A.S. 662	440+12.92	RT		23				2					
F.A.S. 662	440+15.00	LT		31				2					
F.A.S. 662	446+72.00	LT	32						2				
F.A.S. 662	446+81.00	RT		20				2					
F.A.S. 662	464+76.00						136				4		102
F.A.S. 662	489+98.00					71						2	45
F.A.S. 662	491+16.60	LT		26				2					
F.A.S. 662	491+16.60	RT		31				2					
F.A.S. 662	499+65.65				165					2			17
TOTAL			32	131	165	71	136	10	2	2	4	2	164

STORM SEWER SCHEDULE

FROM STRUCTURE NUMBER	INVERT ELEV.	TO STRUCTURE NUMBER	INVERT ELEV.	PIPE DRAINS 12"	STORM SEWERS CLASS A TYPE 1 12"	TRENCH BACKFILL "INSTALL ONLY"
				FOOT	FOOT	CU YD
1	591.00	2	590.49		60	9
2	590.47	3	590.44	6		
TOTAL				6	60	9

DRAINAGE STRUCTURE SCHEDULES

STRUCTURE NUMBER	ROADWAY	STATION	OFFSET		REFERENCE ELEV.	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	CONCRETE HEADWALL FOR PIPE DRAINS
			FEET			EACH	EACH
1	F.A.S. 662	499+28.00	29.39	LT	594.19	1	
2	F.A.S. 662	499+28.00	34.26	RT	593.59	1	
3	F.A.S. 662	499+22.00	40.22	RT	590.44		1
TOTAL						2	1

HANSON
Hanson Professional Services Inc.

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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	PLOT DATE = 06\02\2008, 02:19 PM	CHECKED - MNM	REVISED -
		DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCHEDULE

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	7
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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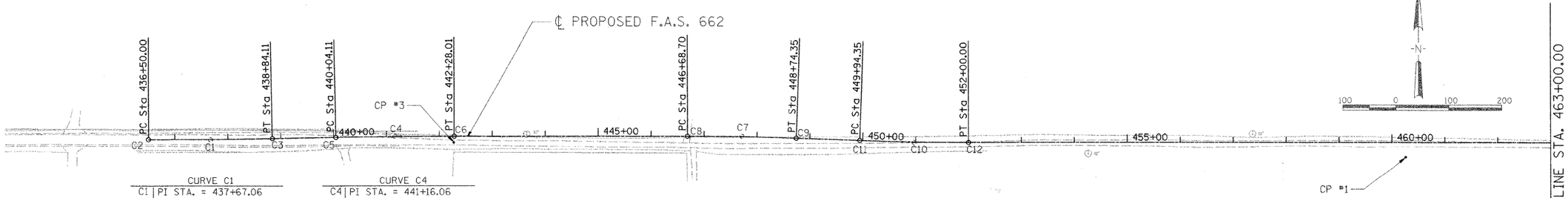
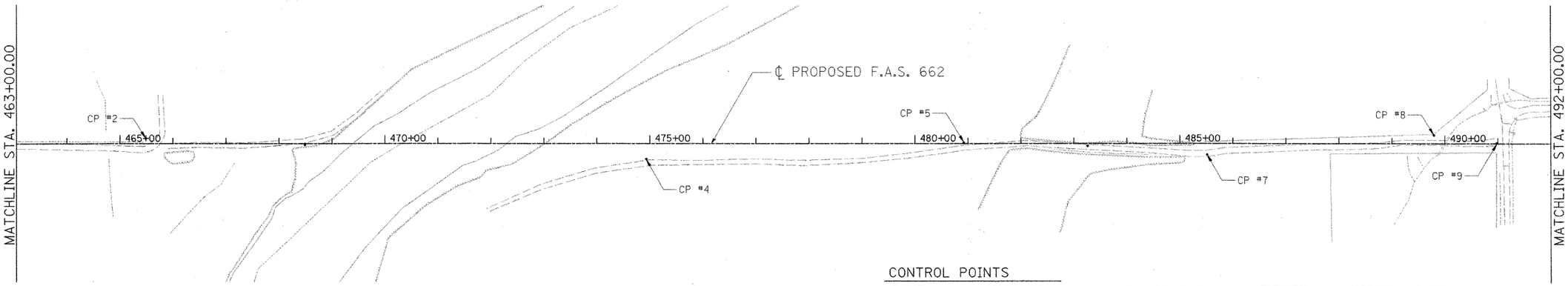


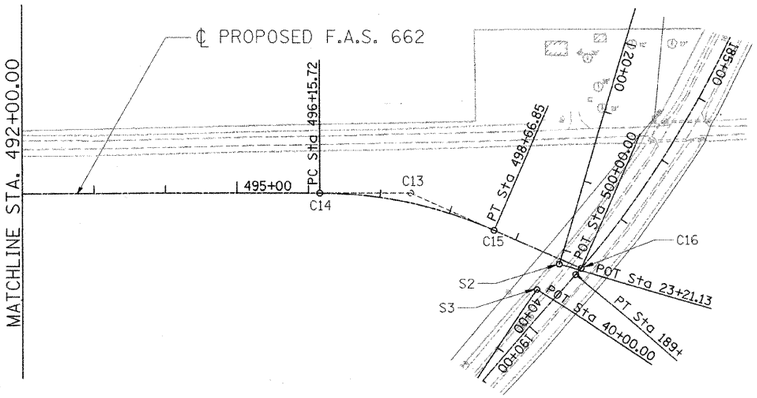
CURVE C1	
C1	PI STA. = 437+67.06
	△ = 01° 07′ 04″ (LT)
	D = 0° 28′ 39″
	R = 12,000.00′
	T = 117.06′
	L = 234.11′
	E = 0.57′
C2	P.C. STA = 436+50.00
C3	P.T. STA = 438+84.11

CURVE C4	
C4	PI STA. = 441+16.06
	△ = 1° 04′ 09″ (RT)
	D = 0° 28′ 39″
	R = 12,000.00′
	T = 111.95′
	L = 223.90′
	E = 0.52′
C5	P.C. STA = 440+04.11
C6	P.T. STA = 442+28.01

CURVE C7	
C7	PI STA. = 447+71.54
	△ = 2° 06′ 42″ (RT)
	D = 1° 01′ 37″
	R = 5,580.00′
	T = 102.84′
	L = 205.65′
	E = 0.95′
C8	P.C. STA = 446+68.70
C9	P.T. STA = 448+74.35

CURVE C10	
C10	PI STA. = 450+97.19
	△ = 2° 06′ 42″ (LT)
	D = 1° 01′ 37″
	R = 5,580.00′
	T = 102.84′
	L = 205.65′
	E = 0.95′
C11	P.C. STA = 449+94.35
C12	P.T. STA = 452+00.00





CURVE C13	
C13	PI STA. = 497+43.15
	△ = 23° 58′ 50″ (RT)
	D = 9° 32′ 57″
	R = 600.00′
	T = 127.43′
	L = 251.12′
	E = 13.38′
	e = 2.00%
	S.E. ATTN: 495+32.72 (-2.00%) TO 496+57.72 (2.00%)
	498+24.85 (2.00%) TO 499+49.85 (-2.00%)
C14	P.C. STA = 496+15.72
C15	P.T. STA = 498+66.85

CONTROL POINTS

POINT	DESCRIPTION	STATION , OFFSET	ELEVATION	NORTHING	EASTING
CP #1	IRON PIN @ END OF LEVEE	STA. 460+26.17, 27.64′ RT.	ELEV: 546.57	24,946.24	34,633.58
CP #2	IRON PIN	STA. 465+48.71, 9.72′ LT.	ELEV: 544.68	24,987.32	35,155.85
CP #3	IRON PIN		ELEV: 567.47	24,961.03	32,834.71
CP #4	IRON PIN	STA. 474+93.38, 29.24′ RT.	ELEV: 544.23	24,955.12	36,100.77
CP #5	IRON PIN	STA. 480+92.08, 1.36′ LT.	ELEV: 545.90	24,990.00	36,699.24
CP #6	IRON PIN		ELEV: 571.96	24,957.90	31,297.53
CP #7	IRON PIN	STA. 485+51.24, 20.78′ RT.	ELEV: 594.37	24,971.14	37,158.54
CP #8	IRON PIN	STA. 489+79.28, 15.76′ LT.	ELEV: 587.97	25,010.75	37,586.31
CP #9	IRON PIN	STA. 490+98.16, 0.62′ LT.	ELEV: 588.98	24,996.45	37,705.30

F.A.S. 662

POINT	NORTHING	EASTING
C1	24,963.21	32,374.52
C2	24,962.47	32,257.46
C3	24,966.23	32,491.54
C4	24,972.22	32,723.41
C5	24,969.33	32,611.50
C6	24,973.02	32,835.36
C7	24,976.90	33,378.87
C8	24,976.17	33,276.04
C9	24,973.85	33,481.66
C10	24,967.23	33,704.40
C11	24,970.28	33,601.61
C12	24,967.96	33,807.24
C13	25,000.44	38,350.27
C14	24,999.53	38,222.85
C15	24,949.49	38,467.07
C16	24,896.24	38,589.11

SIGHT GRADING LINE (NORTH)

POINT	NORTHING	EASTING
S1	26,169.19	38,931.76
S2	24,901.90	38,558.45

SIGHT GRADING LINE (SOUTH)

POINT	NORTHING	EASTING
S3	24,865.46	38,527.44
S4	23,767.98	37,806.64

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVISED	JNM	02/04/08

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	PLOT DATE = 04\04\2008, 12:12 PM	DATE - 10/10/07	REVISED -	

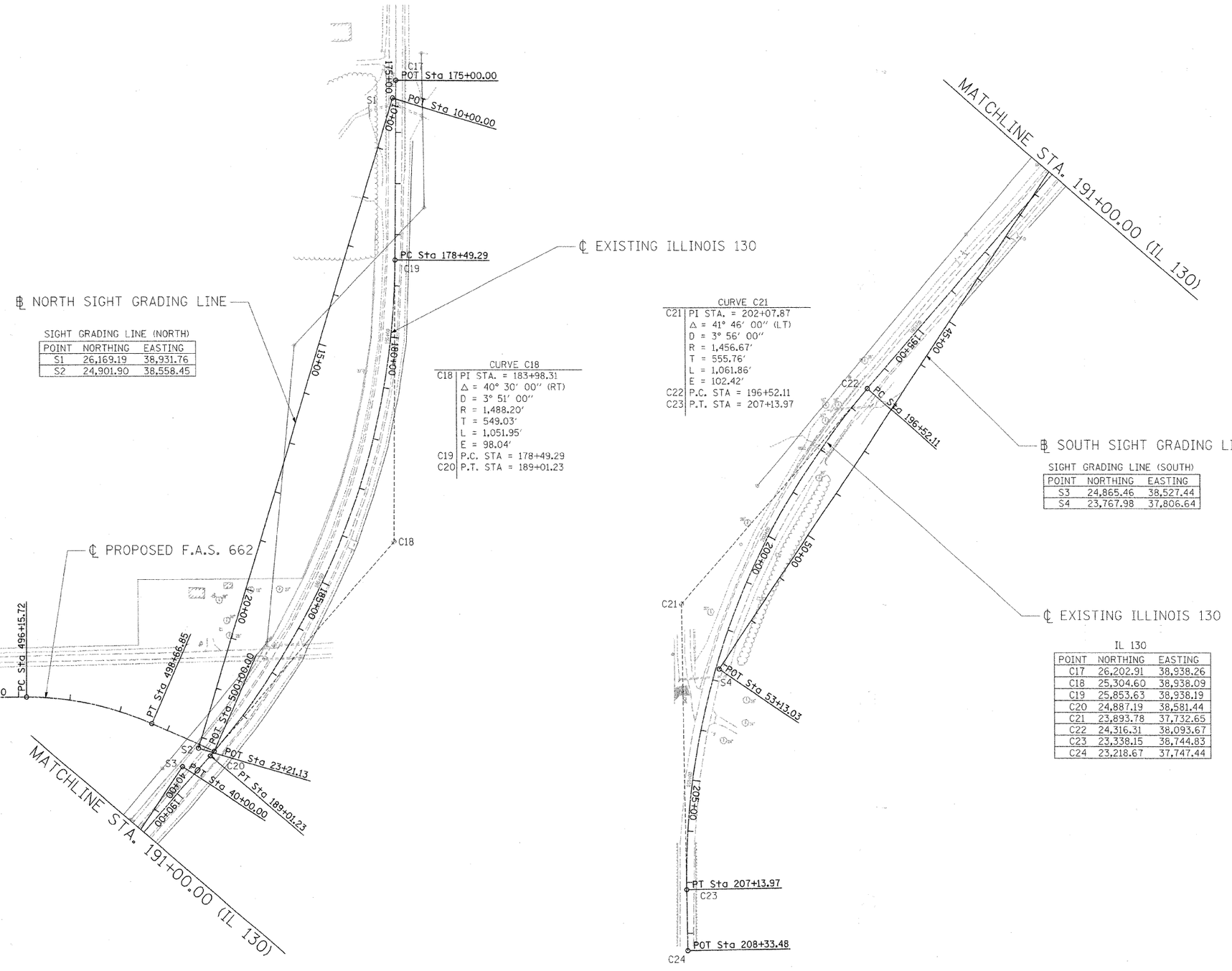
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GEOMETRIC CONTROL SHEET

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. 436+50.00 TO STA. 500+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	8
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.



SIGHT GRADING LINE (NORTH)

POINT	NORTHING	EASTING
S1	26,169.19	38,931.76
S2	24,901.90	38,558.45

CURVE C18

C18	PI STA. = 183+98.31
	Δ = 40° 30′ 00″ (RT)
	D = 3° 51′ 00″
	R = 1,488.20′
	T = 549.03′
	L = 1,051.95′
	E = 98.04′
C19	P.C. STA = 178+49.29
C20	P.T. STA = 189+01.23

CURVE C21

C21	PI STA. = 202+07.87
	Δ = 41° 46′ 00″ (LT)
	D = 3° 56′ 00″
	R = 1,456.67′
	T = 555.76′
	L = 1,061.86′
	E = 102.42′
C22	P.C. STA = 196+52.11
C23	P.T. STA = 207+13.97

SIGHT GRADING LINE (SOUTH)

POINT	NORTHING	EASTING
S3	24,865.46	38,527.44
S4	23,767.98	37,806.64

IL 130

POINT	NORTHING	EASTING
C17	26,202.91	38,938.26
C18	25,304.60	38,938.09
C19	25,853.63	38,938.19
C20	24,887.19	38,581.44
C21	23,893.78	37,732.65
C22	24,316.31	38,093.67
C23	23,338.15	38,744.83
C24	23,218.67	37,747.44

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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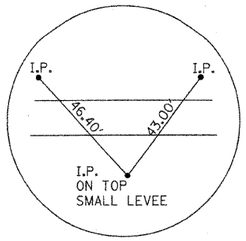
	PLOT DATE = 04\04\2008. 12:12 PM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

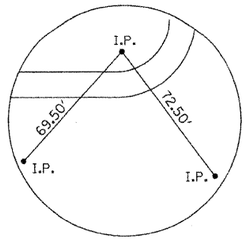
GEOMETRIC CONTROL SHEET

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. 175+00.00 TO STA. 208+33.48

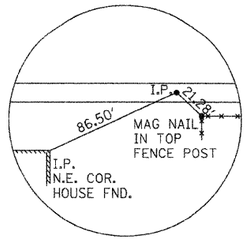
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	9
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



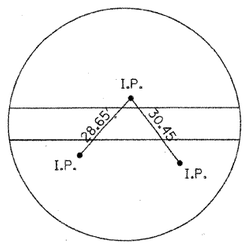
CP #1
N - 24,946.24
E - 34,633.58



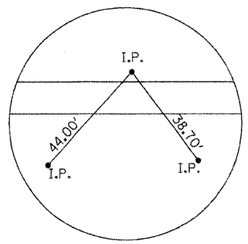
CP #2
N - 24,987.32
E - 35,155.85



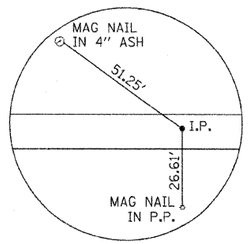
CP #3
N - 24,961.03
E - 32,834.71



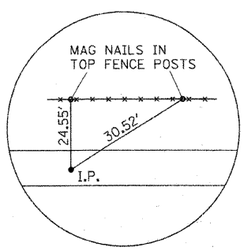
CP #4
N - 24,955.12
E - 36,100.77



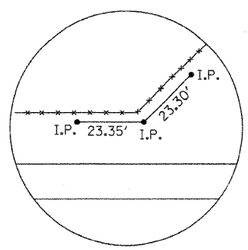
CP #5
N - 24,990.00
E - 36,699.24



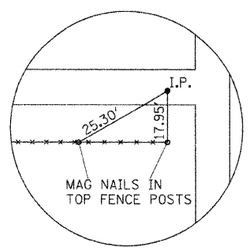
CP #6
N - 24,957.90
E - 31,297.53
BENCHMARK



CP #7
N - 24,971.14
E - 37,158.54



CP #8
N - 25,010.75
E - 37,586.31



CP #9
N - 24,996.45
E - 37,705.30

NOT TO SCALE

BENCHMARKS

0.1 MILES SOUTH OF THE CENTER OF THE S.E. 1/4 SECTION 26, 110.00' SOUTH OF JUNCTION OF T-ROAD EAST, ON TOP OF NORTH END HEADWALL OF CONCRETE CULVERT UNDER ROAD SOUTH. CHISLED SQUARE ELEVATION = 618.00

CP #6 N - 24,957.90 E - 31,297.53 ELEVATION = 571.96

HANSON
Hanson Professional Services Inc.

LAYOUT	MNM/DJP	03/30/07
DRAWN	DJP	03/30/07
REVIEWED	JMW	02/04/08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SURVEY TIES / BENCHMARKS

SCALE: | SHEET NO. 1 OF 1 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	01-00061-00-BR	CUMBERLAND	85	10
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552

PROP. CURVE C1
PI STA. = 437+67.06
Δ = 1° 07′ 04″ (LT)
D = 0° 28′ 39″
R = 12,000.00′
T = 117.06′
L = 234.11′
E = 0.57′
P.C. STA. = 436+50.00
P.T. STA. = 438+84.11

HEUERMAN LAND DEVELOPMENT LLC

EXISTING OIL & CHIP SURFACE

+50.00 20.30, LT
+00.00 35.00, LT
+84.11 35.00, LT
+50.00 24.70, RT
+08.00 31.9, RT

P.C. Sta 436+50.00
P.T. Sta 438+84.11
P.C. Sta 440+04.11
P.T. Sta 442+28.01
P.C. Sta 446+68.70
P.T. Sta 448+74.35

EAST LINE SECTION 11 / WEST LINE SECTION 12

P.E. +15.00
P.E. +12.92
F.E. +72.00
F.E. +81.00

EXISTING R.O.W.
PROPOSED R.O.W.

440+00
445+00

BEGIN IMPROVEMENT
STA. 436+50.00
MATCH EXISTING

PIPE CULVERT, TYPE 1, CS/A CP, 18″, 23 L.F.
U.S.F.L. 440+06.28, 24.70′ RT., ELEV: 566.94
D.S.F.L. 440+34.45, 24.70′ RT., ELEV: 566.66
2 - METAL END SECTIONS, 18″

LARRY F. SAPPINGTON ETAL

PIPE CULVERT REMOVAL 30 L.F.

PIPE CULVERT, TYPE 1, CS/A CP, 18″, 31 L.F.
U.S.F.L. 439+96.72, 24.60′ LT., ELEV: 567.02
D.S.F.L. 440+32.88, 24.60′ LT., ELEV: 566.67
2 - METAL END SECTIONS, 18″

+00.00 40.00, LT
+00.00 45.00, LT

CP #3

END OF EXISTING OIL & CHIP SURFACE

FENCE TO BE REMOVED AND RE-ERECTED (BY CUMBERLAND COUNTY)

PROP. CURVE C4
PI STA. = 441+16.06
Δ = 1° 04′ 09″ (RT)
D = 0° 28′ 39″
R = 12,000.00′
T = 111.95′
L = 223.90′
E = 0.52′
P.C. STA. = 440+04.11
P.T. STA. = 442+28.01

PIPE CULVERT, TYPE 1, CS/A, EQ RS, 18″ 32 L.F.
U.S.F.L. 446+56.11, 22.90′ LT., ELEV: 550.15
D.S.F.L. 446+91.94, 22.90′ LT., ELEV: 548.81
2 - METAL END SECTIONS EQ RS, 18″

PIPE CULVERT REMOVAL 16 L.F

CONSTRUCTION LIMITS

TREE REMOVAL (BY COUNTY)
6-15 UNITS = 6

+00.00 45.00, LT
LB1

4.00
24′
4.00

CHARLES A. SAPPINGTON

℄ PROPOSED F.A.S. 662

PIPE CULVERT, TYPE 1, CS/A CP, 18″, 20 L.F.
U.S.F.L. 446+69.75, 23.90′ RT., ELEV: 549.17
D.S.F.L. 446+94.58, 23.90′ RT., ELEV: 548.39
2 - METAL END SECTIONS, 18″

P.I. STA. 449+00.00

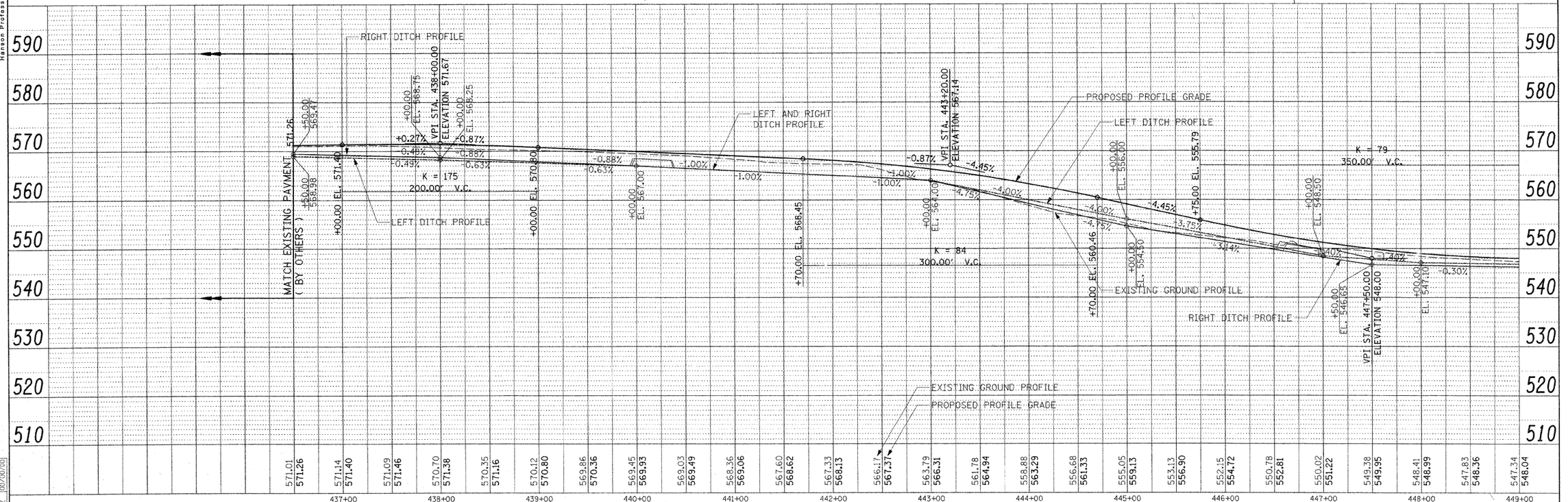
+00.00 35.00, LT

LARRY F. SAPPINGTON ETAL

PROP. CURVE C7
PI STA. = 447+71.54
Δ = 2° 06′ 42″ (RT)
D = 1° 01′ 37″
R = 5,580.00′
T = 102.84′
L = 205.65′
E = 0.95′
P.C. STA. = 446+68.70
P.T. STA. = 448+74.35

50 0 50 100

DITCH FLOW ARROW
SOIL BORING
TREE REMOVAL (BY CUMBERLAND COUNTY)



PLAN

DATE	BY	
		SURVEYED
		PLOTTED
		ALIGNMENT CHECKED
		GRADES CHECKED
		BLM. NO. IRD
		NOTE BOOK
		NO.
		CADD FILE NAME

PROFILE

SURVEYED	
PLOTTED	
GRADES CHECKED	
BLM. NO. IRD	INITIATIVE INDIATHS CHKD
NOTE BOOK	
NO.	

LAYOUT	ZZZ	00/00/00
DRAWN	ZZZ	00/00/00
REVIEWED	ZZZ	00/00/00

HANSON
Hanson Professional Services Inc.

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	PLOT DATE = 04\04\2008, 12:06 PM	DATE - 10/10/07	REVISED -

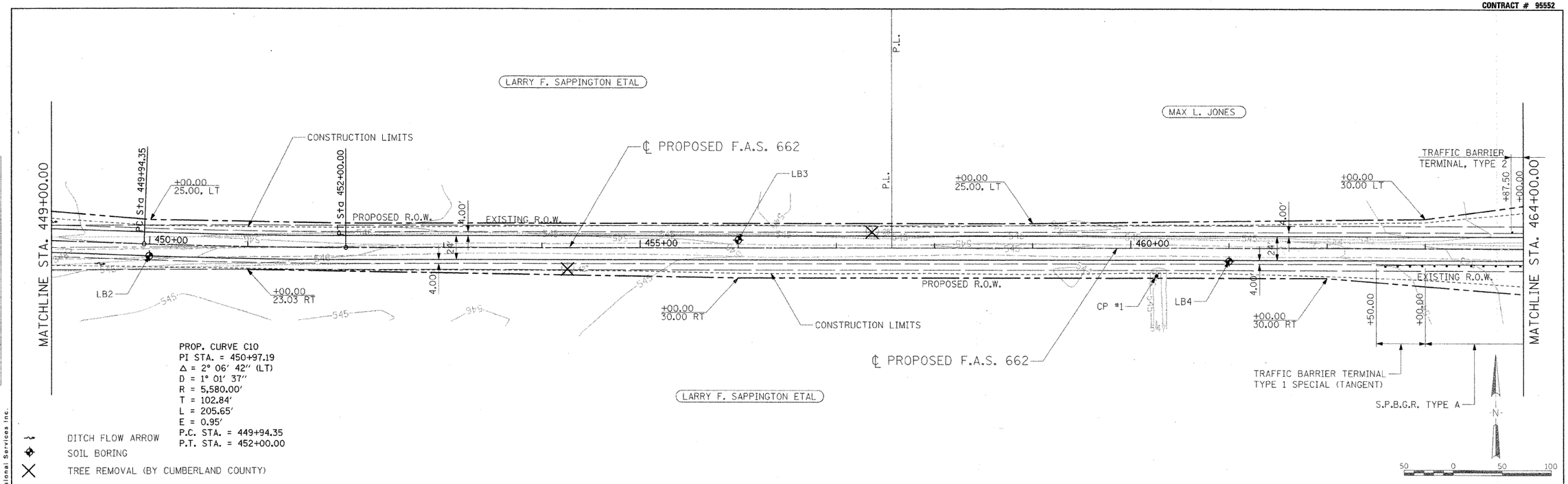
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILES

SCALE: | SHEET NO. 1 OF 5 SHEETS | STA. 436+50.00 TO STA. 449+00.00

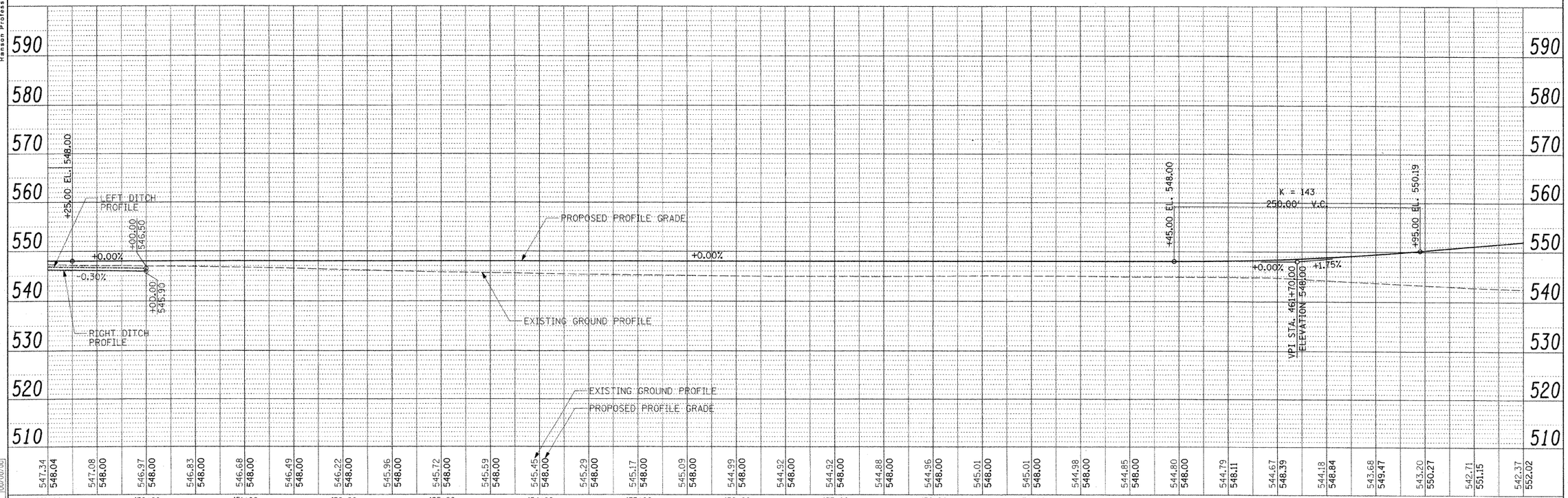
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	11
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552



PROP. CURVE C10
PI STA. = 450+97.19
Δ = 2° 06′ 42″ (LT)
D = 1° 01′ 37″
R = 5,580.00′
T = 102.84′
L = 205.65′
E = 0.95′
P.C. STA. = 449+94.35
P.T. STA. = 452+00.00

DITCH FLOW ARROW
SOIL BORING
TREE REMOVAL (BY CUMBERLAND COUNTY)



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	PLOT DATE = 04\04\2008, 12:06 PM	CHECKED - MNM	REVISED -		SHEET NO. 2 OF 5 SHEETS
		DATE - 10/10/07	REVISED -		STA. 449+00.00 TO STA. 464+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	12
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

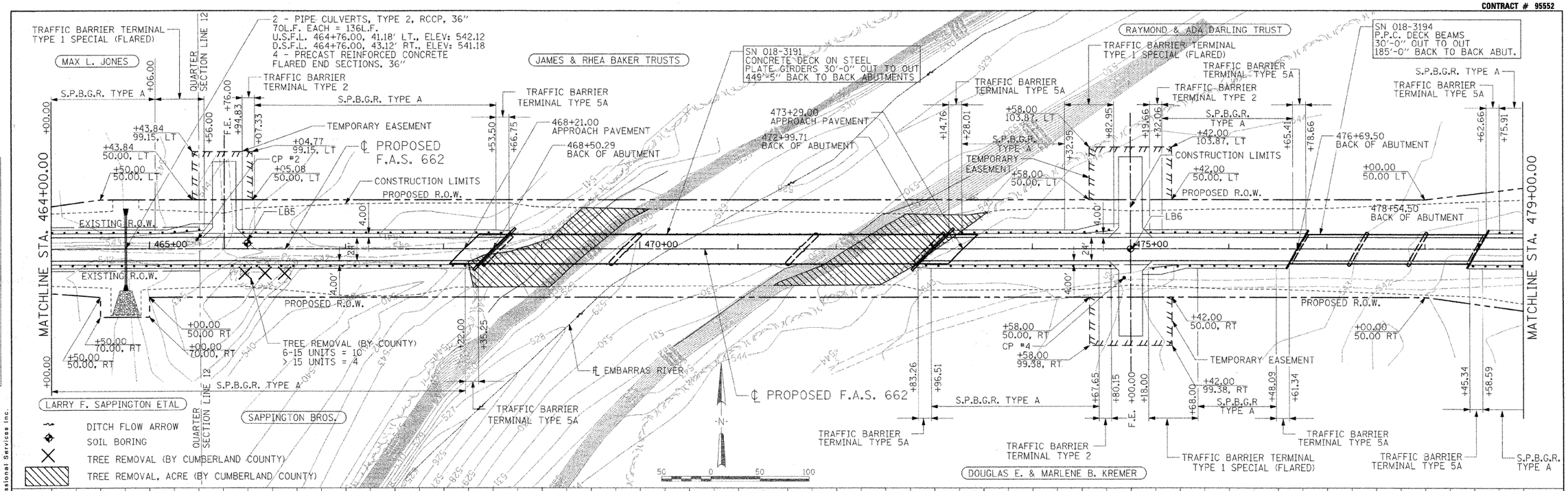
PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, BASE MAP ADDED, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

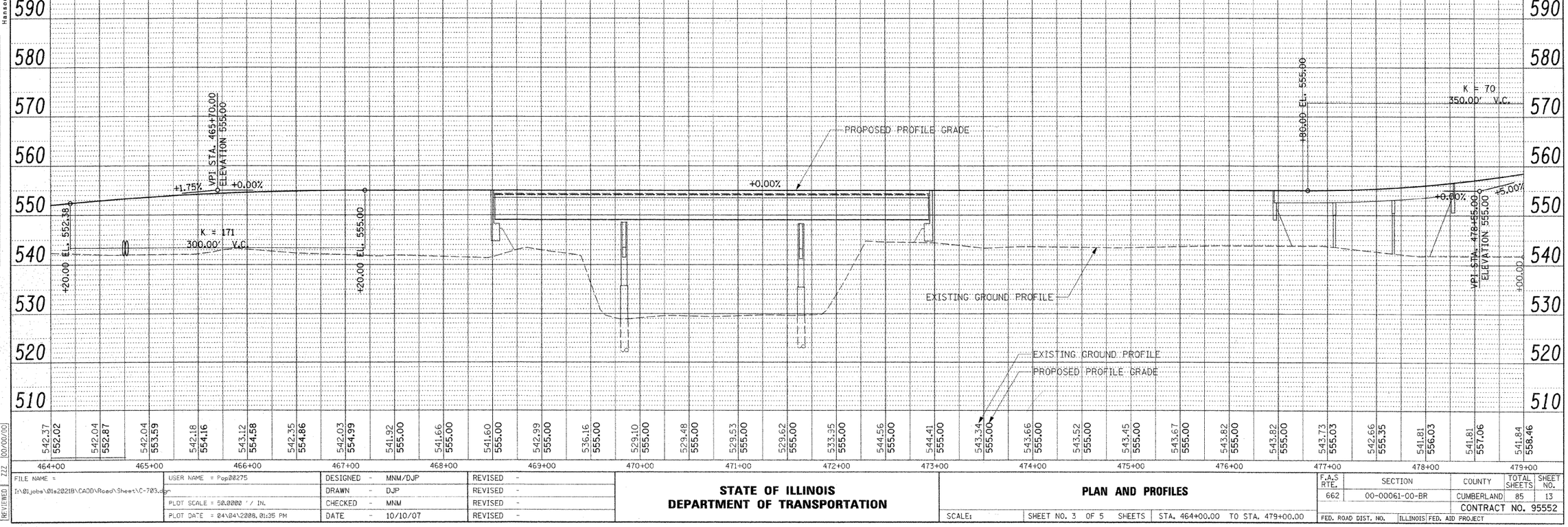
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, BASE MAP ADDED, STRUCTURE NO(S), TAN'S CHKD, NOTE BOOK, NO., BY, DATE

LAYOUT ZZZ 00/00/00
DRAWN ZZZ 00/00/00
REVIEWED ZZZ 00/00/00

HANSON Hanson Professional Services Inc.

CONTRACT # 95552





HANSON
Hanson Professional Services Inc.

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	PLOT DATE = 04\04\2008, 01:35 PM	CHECKED - MNM	REVISED -		
		DATE - 10/10/07	REVISED -		

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	13
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552

RAYMOND & ADA DARLING TRUST

S.P.B.G.R. TYPE A

TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT)

CONSTRUCTION LIMITS

PROPOSED R.O.W.

℄ PROPOSED F.A.S. 662

MATCHLINE STA. 479+00.00

+00.00 75.00 LT

+00.00 95.00 LT

+00.00 90.00 LT

+50.00

LB7 LB8 LB9

CP #5

480+00

485+00

4.00'

2%

+00.00 90.00 RT

+00.00 140.00 RT

S.P.B.G.R. TYPE A

+00.00 70.00 RT

CP #7

+12.50

TRAFFIC BARRIER TERMINAL, TYPE 2

DOUGLAS E. & MARLENE B. KREMER

PIPE CULVERT, TYPE 1, RCCP, 60",71 L.F.
U.S.F.L. 490+23.47, 30.36' LT., ELEV: 583.86
D.S.F.L. 489+67.55, 36.29' RT., ELEV: 580.85
SKEW ANGLE 40° LT. FORWARD
2 - PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 60"

FENCE TO BE REMOVED AND RE-ERECTED (BY CUMBERLAND COUNTY)

PIPE CULVERT REMOVAL 45 L.F.

F.E. +00.00

+50.00 40.00 LT

+00.00 50.00, LT

+00.00 40.00, LT

+98.41 83.81, LT

+98.75 50.00, LT

CP #8

490+00

+00.00 45.00 RT

P.I.

+25.00 45.00, RT

+25.00 80.00, RT

+75.00 45.00, RT

+99.89 45.00 RT

+75.00 80.00, RT

ARTHUR & SHIRLEY GILES ETAL

FENCE TO BE REMOVED AND RE-ERECTED (BY CUMBERLAND COUNTY)

PIPE CULVERT, TYPE 1, CS/A CP, 18", 31 L.F.
U.S.F.L. 491+32.30, 29.34' RT., ELEV: 587.46
D.S.F.L. 490+94.57, 30.56' RT., ELEV: 587.24
2 - METAL END SECTIONS, 18"

EAST LINE SECTION 12
WEST LINE SECTION 7

F.E. +16.60

EXISTING R.O.W.

TR 230

RAYMOND & ADA DARLING TRUST

PIPE CULVERT TYPE 1, CS/A CP, 18", 26 L.F.
U.S.F.L. 491+31.20, 29.44' LT., ELEV: 588.26
D.S.F.L. 491+00.04, 30.51' LT., ELEV: 587.83
2 - METAL END SECTIONS, 18"

PIPE CULVERT REMOVAL 39 L.F.

MAIL BOX TO BE REMOVED AND RELOCATED BY CUMBERLAND COUNTY

MAILBOX TURNOUT FOR LOCAL ROADS SEE BLR STANDARD 24-1

EXISTING OIL AND CHIP SURFACE TO BE REMOVED AS EARTH EXCAVATION

MATCHLINE STA. 494+00.00

CP #9

+39.90 45.00 RT

CONSTRUCTION LIMITS

DAVID WOOLEVER

EXISTING OIL & CHIP SURFACE

STOP
R1-1
30" X 30"
METAL POST
TYPE B - 12'

DITCH FLOW ARROW

SOIL BORING

TREE REMOVAL, ACRE (BY CUMBERLAND COUNTY)

50 0 50 100

PLAN
SURVEYED
PLOTTED
GRADES CHECKED
NOTE BOOK
NO.
BY
DATE
ALL DIM. VERIFIED BY
CADD FILE NAME

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
NOTE BOOK
NO.
BY
DATE
ALL DIM. VERIFIED BY
STRUCTURE NO(S).
CADD FILE NAME

LAYOUT ZZZ 00/00/00
DRAWN ZZZ 00/00/00
REVIEWED ZZZ 00/00/00

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610 600 590 580 570 560 550 540 530

+30.00 EL. 563.75

+00.00 EL. 570.00

+00.00 EL. 548.00

+00.00 EL. 543.13

+00.00 EL. 541.84

+00.00 EL. 543.25

+50.00 EL. 544.00

+25.00 EL. 578.50

+00.00 EL. 577.00

VPI STA. 485+75.00
ELEVATION 591.00

+00.00 EL. 588.00

+25.00 EL. 591.76

+00.00 EL. 587.00

+10.27 EL. 584.85

+05.15 EL. 586.68

+46.02 EL. 586.91

+70.00 EL. 587.42

+00.00 EL. 588.26

+00.00 EL. 588.28

+5.00%
+3.87%
+1.00%
+2.00%
+4.81%
+0.64%
+0.47%
+1.50%
+0.30%
0.50%
-1.50%
-0.30%
+0.85%
+1.37%

PROPOSED PROFILE GRADE
LEFT DITCH PROFILE
RIGHT DITCH PROFILE
EXISTING GROUND PROFILE
LEFT & RIGHT DITCH PROFILES

K = 106
500.00' V.C.

479+00	480+00	481+00	482+00	483+00	484+00	485+00	486+00	487+00	488+00	489+00	490+00	491+00	492+00	493+00	494+00
541.84 / 558.46	543.25 / 560.21	544.39 / 562.31	544.83 / 564.75	546.08 / 567.25	548.19 / 569.75	549.95 / 572.25	554.45 / 574.75	564.64 / 577.25	575.19 / 579.72	587.24 / 581.99	594.75 / 584.02	595.61 / 585.81	595.25 / 587.37	593.33 / 588.70	591.23 / 589.79	589.48 / 590.65	588.23 / 591.27	587.63 / 591.66	587.42 / 591.84	586.97 / 591.99	587.30 / 592.14	587.16 / 592.29	587.48 / 592.45	588.94 / 592.60	591.68 / 592.75	592.60 / 592.90	592.78 / 593.06	592.93 / 593.21	593.18 / 593.36	593.45 / 593.51

EXISTING GROUND PROFILE
PROPOSED PROFILE GRADE

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	PLOT DATE = 04\04\2008, 12:06 PM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILES

SCALE: | SHEET NO. 4 OF 5 SHEETS | STA. 479+00.00 TO STA. 494+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	14
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552

PROP. CURVE C13
PI STA. = 497+43.15
Δ = 23° 58′ 50″ (RT)
D = 9° 32′ 57″
R = 600.00′
T = 127.43′
L = 251.12′
E = 13.38′
e = 2.00%
S.E. ATTN: 495+32.72 (-2.00%) TO 496+32.72 (2.00%)
498+24.85 (2.00%) TO 499+49.85 (-2.00%)
P.C. STA. = 496+15.72
P.T. STA. = 498+66.85

RAYMOND & ADA DARLING TRUST

DAVID WOOLEVER

DAVID WOOLEVER

LIMITS OF OIL AND CHIP REMOVAL AS EARTH EXCAVATION

EXISTING OIL AND CHIP SURFACE

CONSTRUCTION LIMITS

EXISTING R.O.W.

PROPOSED R.O.W.

MATCHLINE STA. 494+00.00

RC Sta 496+15.72

PT Sta 498+66.85

INTERSECTION DETAIL SHEET STA. 498+23.44

LB11

LB12

495+00

4.00′

24′

44.00′

+00.00 45.00 RT

+00.00 45.00 RT

+00.00 45.00 RT

+00.00 60.00 RT

+02.78 189.97′ LT

+16.74 140.70 RT

SEE

W3-1
36″ X 36″
2-METAL POSTS
TYPE A - 13′ EA.

℄ PROPOSED F.A.S. 662

CONSTRUCTION LIMITS

STOP
R1-1
30″ X 30″
METAL POST
TYPE B - 12′

STOP
R1-1
30″ X 30″
TELESCOPING STEEL
SIGN SUPPORT - 8′
WITH BASE

℄ EXISTING IL. RTE. 130

IL. RTE. 130

QUARTER SECTION LINE

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

EXISTING R.O.W.

END IMPROVEMENT
STA. 500+00.00

PIPE CULVERT, TYPE 1, RCCP EQ. RS, 18″, 165 L.F.
U.S.F.L. 499+85.07, 71.28′ LT., ELEV: 591.65
D.S.F.L. 499+38.54, 99.48′ RT., ELEV: 590.82
SKEW ANGLE 15°15′00″ LT. FORWARD
2 - PRECAST REINFORCED CONCRETE END
SECTIONS, EQ RS, 18″

POT Sta 500+00.00

PT Sta 189+01.23

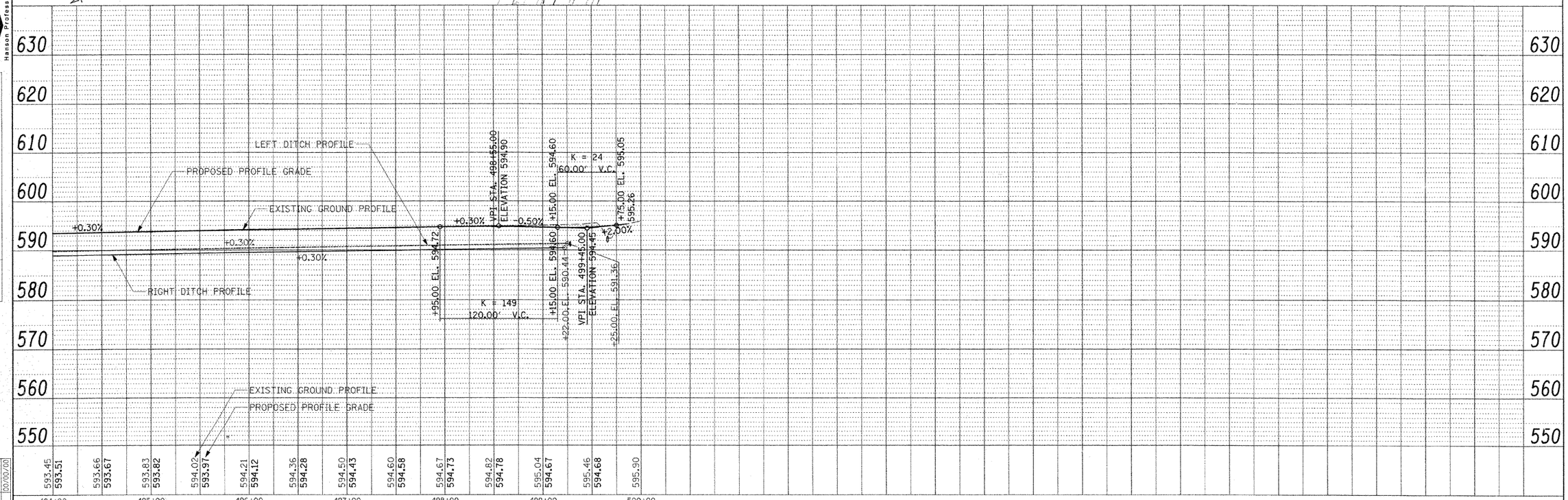
POT Sta 40+00.00

40+00

189+00

DITCH FLOW ARROW
SOIL BORING
TREE REMOVAL (BY CUMBERLAND COUNTY)

50 0 50 100



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PROFILE
SURVEYED
DRAWN
NOTE BOOK GRADES CHECKED
NO. X-SECTIONS CHK'D
SURFACE, NOTATNS CHK'D

LAYOUT	ZZZ	00/00/00
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REVISED	ZZZ	00/00/00

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILES

SCALE: | SHEET NO. 5 OF 5 SHEETS | STA. 494+00.00 TO STA. END

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	15
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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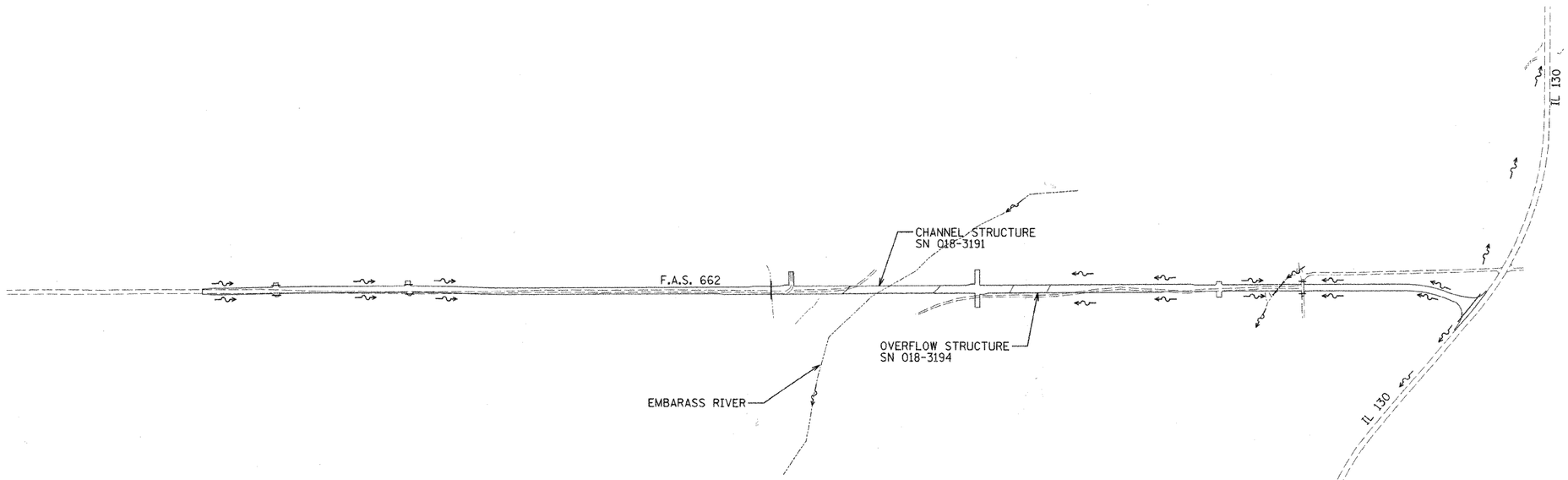

STORM WATER DISCHARGE SCHEMATIC

TEMPORARY EROSION CONTROL NOTES

GENERAL

1. THE EROSION CONTROL PLANS ARE INCLUDED TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

2. PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION WORK ZONE AS SOON AS POSSIBLE TO STABILIZE EXPOSED SOILS AND PREVENT ON-SITE DAMAGE. THIS WORK MAY BE CONSTRUCTED OF HAY OR STRAW BALES, SILT FILTER FENCE, SEEDING, OR OTHER APPROPRIATE METHODS AND MATERIALS, SEPARATELY OR IN COMBINATION AS APPROVED BY THE RESIDENT ENGINEER.

3. EROSION CONTROL DEVICES SHALL BE IN PLACE AND APPROVED BY THE RESIDENT ENGINEER AS TO PROPER PLACEMENT AND INSTALLATION PRIOR TO BEGINNING OTHER WORK.

4. CUMBERLAND COUNTY SHALL PLACE PERMANENT SEEDING WITHIN A REASONABLE AMOUNT OF TIME.

5. THE RESIDENT ENGINEER WILL DETERMINE WHEN TEMPORARY EROSION CONTROL SYSTEMS SHOWN ON THE PLAN MAY BE MOVED TO A DIFFERENT LOCATION OR DELETED.

6. THE WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 280-TEMPORARY EROSION CONTROL OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

7. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE RESIDENT ENGINEER AND AS SHOWN IN STANDARD 280001.

8. TEMPORARY EROSION CONTROL SYSTEMS ARE NOTED ON THE EROSION CONTROL PLAN SHEETS. THE PLAN MAY INCLUDE THE FOLLOWING:

-TEMPORARY DITCH CHECKS
-PERIMETER EROSION BARRIER
-INLET AND PIPE PROTECTION
-TEMPORARY EROSION CONTROL SEEDING
-EROSION CONTROL BLANKET

9. THE EROSION CONTROL PLANS INCLUDE WEEKLY INSPECTIONS TO BE COMPLETED BY THE CONTRACTOR AND RESIDENT ENGINEER.

PRIOR TO CONSTRUCTION

1. PRIOR TO PERFORMING CONSTRUCTION ACTIVITIES RESULTING IN LAND DISTURBANCE, THE CONTRACTOR SHALL INSTALL ITEMS (IF SPECIFIED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER) INTENDED TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THE ITEMS MAY INCLUDE THE FOLLOWING TEMPORARY EROSION CONTROL SYSTEMS:

-TEMPORARY DITCH CHECKS
-INLET AND PIPE PROTECTION
-PERIMETER EROSION BARRIER

2. ALL SIDE SLOPES ARE 3:1 OR 2:1 UNLESS OTHERWISE NOTED.

DURING CONSTRUCTION

1. DURING CONSTRUCTION, THE CONTRACTOR SHALL:

-CLEAN UP AND GRADE THE WORK AREA TO ELIMINATE CONCENTRATION OF RUNOFF.

-INSTALL TEMPORARY DITCH CHECKS AT LOCATIONS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

-INSTALL INLET AND PIPE PROTECTION AT LOCATIONS SPECIFIED IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER FOR CULVERTS AND INLETS AS THEY ARE INSTALLED AND AS WORK PROCEEDS.

-INSTALL PERIMETER EROSION BARRIER AT LOCATIONS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

-COVER THE OPEN ENDS OF PIPES IN TRENCHES AT THE CLOSE OF EACH WORKING DAY.

-PERFORM TEMPORARY EROSION CONTROL SEEDING AS SPECIFIED IN ARTICLE 280.04(f) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER.

2. THE CONTRACTOR SHALL MAINTAIN OR REPLACE (IF SPECIFIED BY THE RESIDENT ENGINEER) SEDIMENT CONTROL ITEMS.

-THE TEMPORARY EROSION CONTROL SYSTEMS INSTALLED BY THE CONTRACTOR SHALL BE PROPERLY MAINTAINED AS DIRECTED BY THE RESIDENT ENGINEER TO CONTROL SILTATION AT ALL TIMES DURING THE LIFE OF THE CONTRACT. THIS WORK SHALL INCLUDE REPAIR OF THE VARIOUS SYSTEMS, REMOVAL OF TRAPPED SEDIMENT AND CLEANING OF ANY SILT FILTER FABRIC AND HAY OR STRAW BALES.

-IF THE CONTRACTOR FAILS TO MAINTAIN THE TEMPORARY EROSION CONTROL SYSTEMS AS DIRECTED BY THE RESIDENT ENGINEER, THE RESIDENT ENGINEER MAY AT THE EXPIRATION OF A PERIOD OF 48 HOURS, AFTER HAVING GIVEN THE CONTRACTOR WRITTEN NOTICE, PROCEED TO MAINTAIN THE SYSTEMS AS DEEMED NECESSARY, AND THE COST THEREOF WILL BE DEDUCTED FROM ANY COMPENSATION DUE, OR WHICH MAY BECOME DUE TO THE CONTRACTOR UNDER THIS CONTRACT.

PRIOR TO LANDSCAPING/RESTORATION

1. IMMEDIATELY PRIOR TO LANDSCAPING/RESTORATION WORK, THE CONTRACTOR SHALL:

-REMOVE AND DISPOSE OF SILT RETAINED BY THE TEMPORARY DITCH CHECKS, REINSTALL THE TEMPORARY DITCH CHECKS AFTER CLEANING, AND REMOVE AND REPLACE PLUGGED OR DAMAGED HAY OR STRAW BALES.

-REMOVE AND DISPOSE OF SILT RETAINED BY THE PERIMETER EROSION BARRIER, REINSTALL THE PERIMETER EROSION BARRIER AFTER CLEANING, AND REMOVE AND REPLACE PLUGGED OR DAMAGED SILT FILTER FENCE.

FOLLOWING LANDSCAPING/RESTORATION

1. AFTER LANDSCAPING/RESTORATION WORK, THE CONTRACTOR SHALL MAINTAIN OR REPLACE (IF SPECIFIED BY THE RESIDENT ENGINEER) SEDIMENT CONTROL ITEMS.

VEGETATION ESTABLISHED

1. AFTER THE VEGETATION IS ESTABLISHED IN THE DISTURBED AREA, THE CONTRACTOR SHALL:

-REMOVE THE REMAINING SEDIMENT CONTROL ITEMS AS DIRECTED BY THE RESIDENT ENGINEER.

-RESTORE THE AREAS DISTURBED BY THE SEDIMENT CONTROL ITEMS BY PERMANENT SEEDING AND MULCHING.

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JWM	02/04/08

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EROSION CONTROL NOTES /DISCHARGE SCHEMATIC

SCALE: | SHEET NO. 1 OF 1 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	16
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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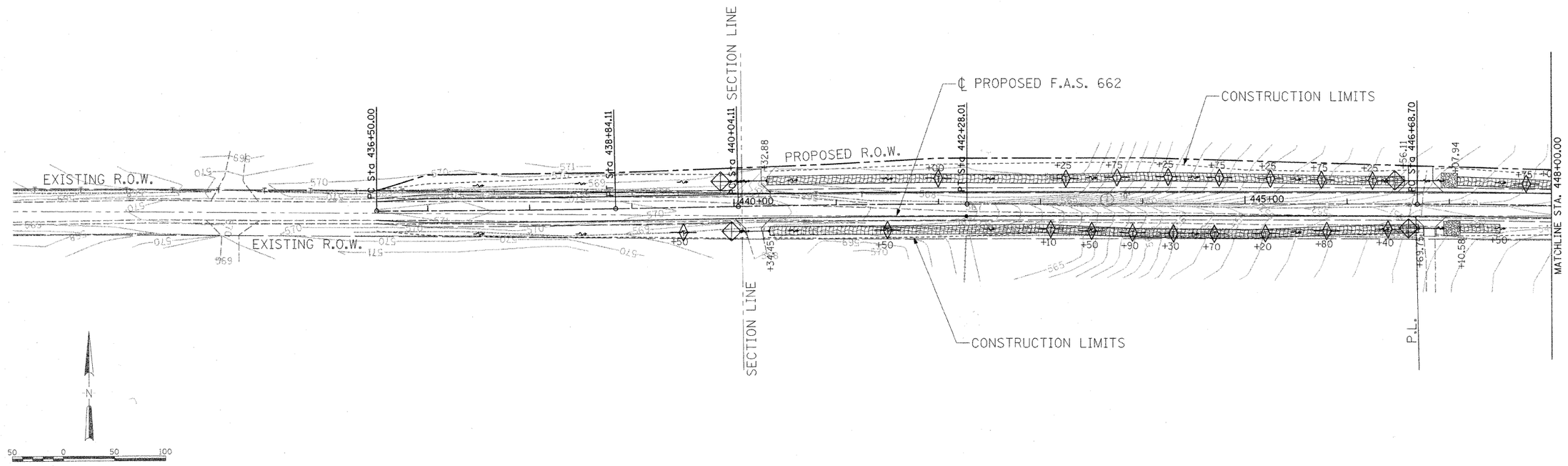

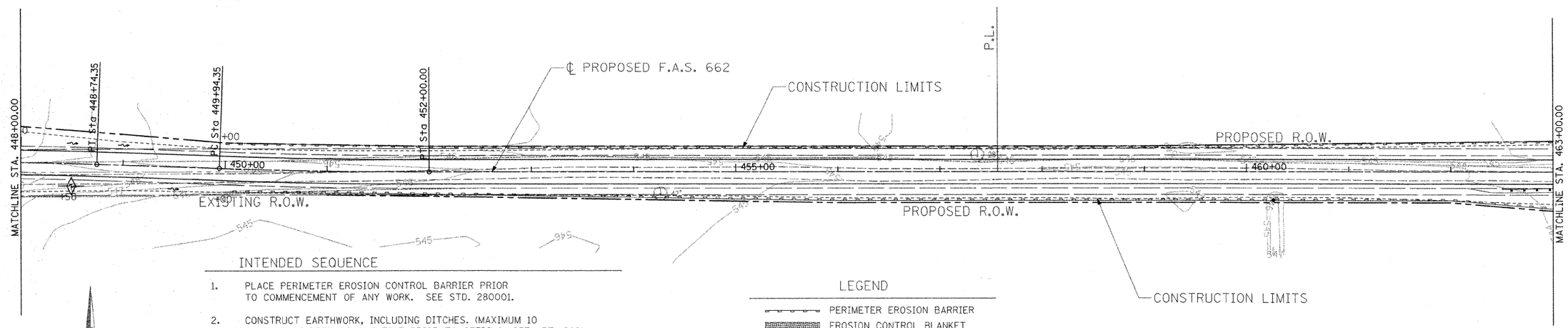

INTENDED SEQUENCE

1. PLACE PERIMETER EROSION CONTROL BARRIER PRIOR TO COMMENCEMENT OF ANY WORK. SEE STD. 280001.
2. CONSTRUCT EARTHWORK, INCLUDING DITCHES. (MAXIMUM 10 ACRES DISTURBED AT ONE TIME PRIOR TO SEEDING. SEE ART. 280).
3. PLACE AND MAINTAIN TEMPORARY AND PERMANENT EROSION CONTROLS AS WORK PROGRESSES, SEED EVERY 7 DAYS. SEE ART. 280.
4. FINAL SHAPE, GRADE, AND PAVE ROADWAY.
5. PLACE REMAINING PERMANENT EROSION CONTROLS.

LEGEND

- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET
- INLET AND PIPE PROTECTION
- TEMPORARY DITCH CHECK
- DITCH FLOW
- DITCH SUMMIT

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REVIEWED	ZZZ	00/00/00

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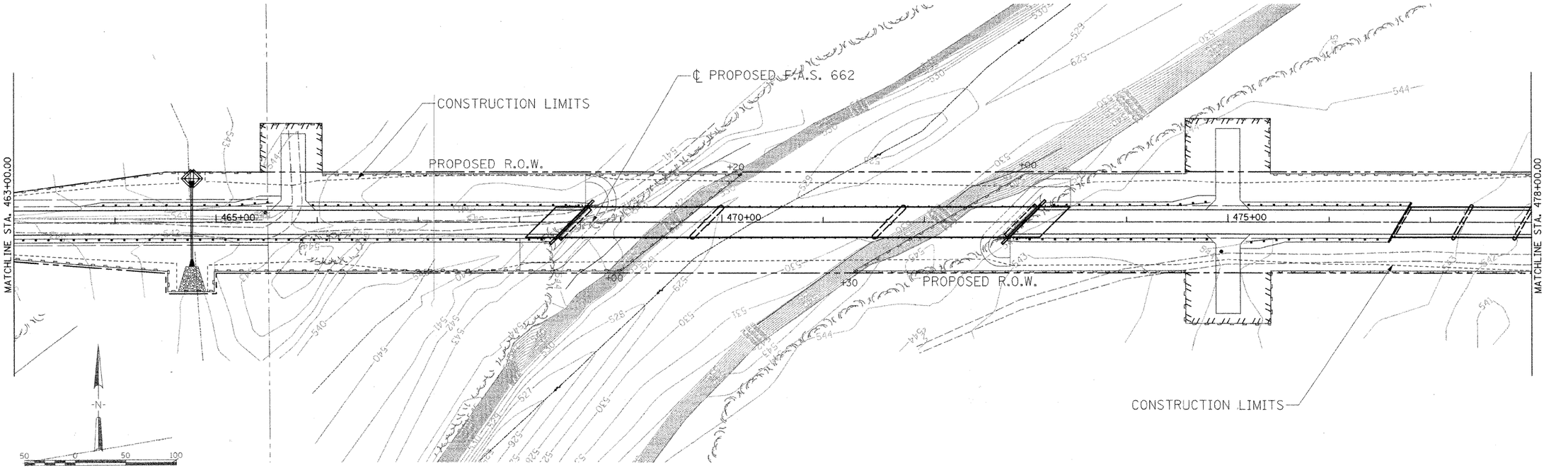
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL SHEETS

SCALE: | SHEET NO. 1 OF 3 SHEETS | STA. 436+50.00 TO STA. 463+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	17
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552



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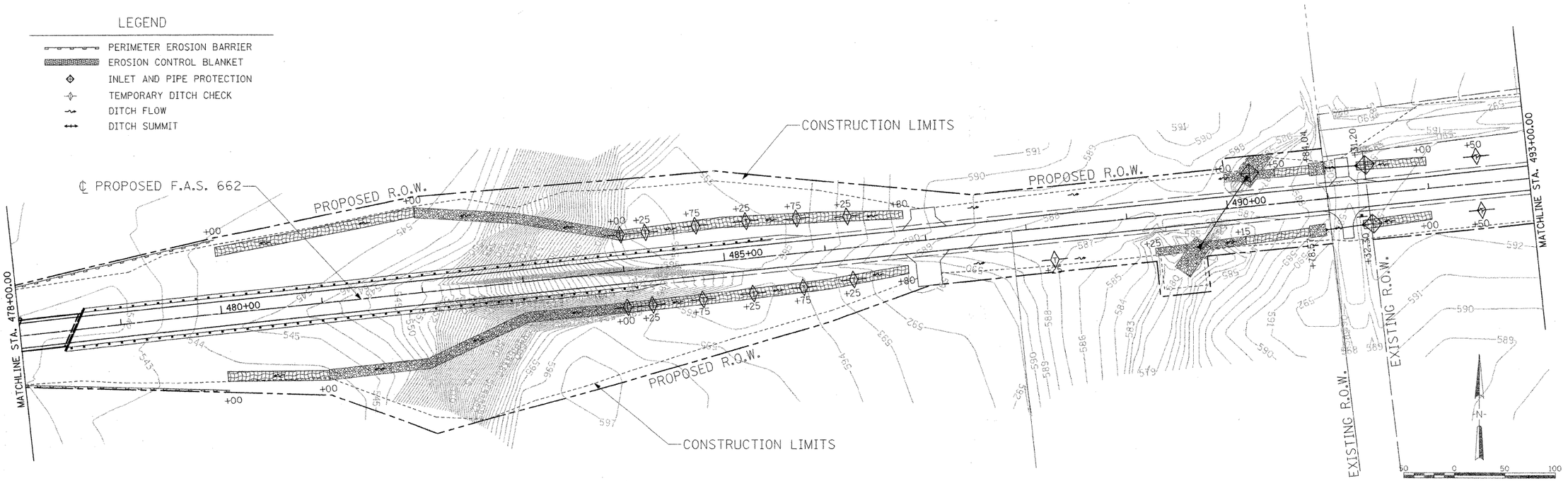
LEGEND

- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET
- INLET AND PIPE PROTECTION
- TEMPORARY DITCH CHECK
- DITCH FLOW
- DITCH SUMMIT



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL SHEETS

SCALE: | SHEET NO. 2 OF 3 SHEETS | STA. 463+00.00 TO STA. 493+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	18
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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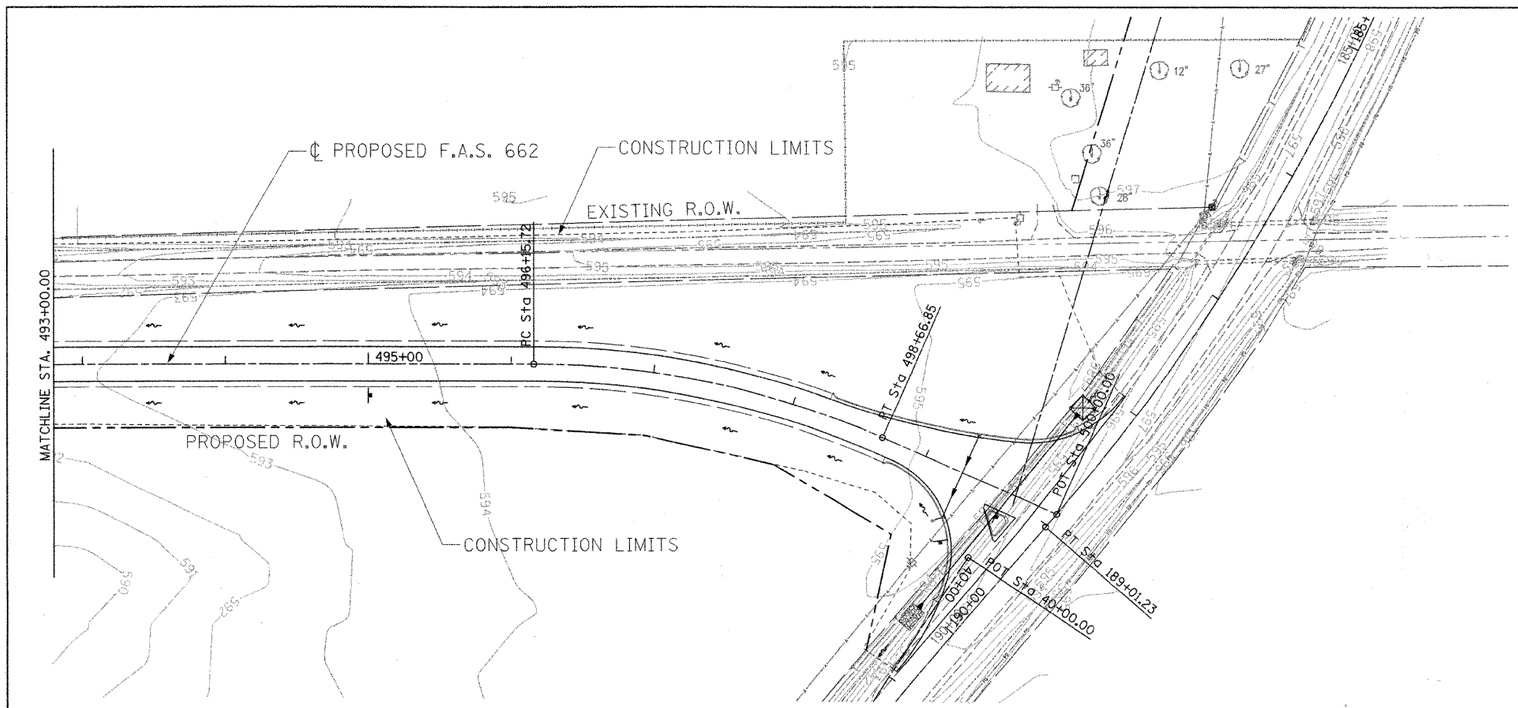
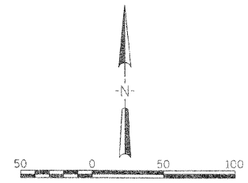
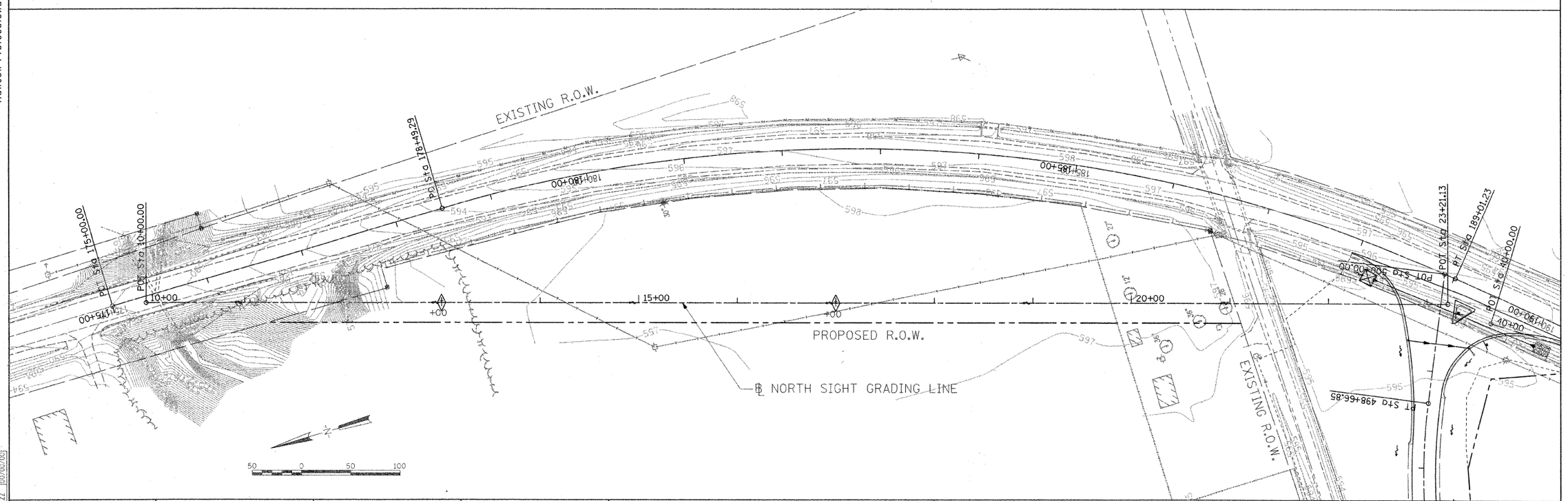


LEGEND

- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET
- INLET AND PIPE PROTECTION
- TEMPORARY DITCH CHECK
- DITCH FLOW
- DITCH SUMMIT





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		DATE - 10/10/07	REVISED -		SCALE: SHEET NO. 3 OF 3 SHEETS STA. 493+00.00 TO STA. END

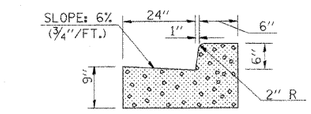
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	19
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAVEMENT POINTS

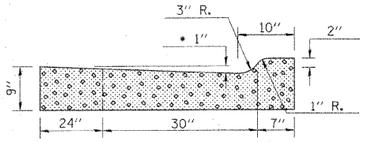
POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET
1	24,976.71	38,430.68	595.02	498+23.44	12.00′ LT
2	24,959.62	38,486.29	594.47	498+80.41	16.98′ LT
3	24,946.98	38,563.46	594.45	499+56.19	36.25′ LT
4	24,954.63	38,604.90	595.05	499+91.13	59.83′ LT
5	24,980.82	38,635.71	595.85	500+08.89	96.15′ LT
6	24,901.73	38,576.53	595.30	499+86.27	0.00
7	24,916.24	38,543.28	594.68	499+50.00	0.00
8	24,949.49	38,467.07	594.76	498+66.85	0.00
9	24,965.39	38,426.69	594.78	498+23.44	0.00
10	24,954.08	38,422.70	594.54	498+23.44	12.00′ RT
11	24,935.55	38,469.01	594.51	498+74.20	12.00′ RT
12	24,833.81	38,507.20	594.39	499+49.88	89.98′ RT
13	24,785.50	38,477.71	594.29	499+42.17	146.05′ RT
14	24,950.26	38,534.63	594.24	499+28.46	27.72′ LT
15	24,894.25	38,511.04	593.64	499+29.24	33.05′ RT
16	24,896.24	38,589.11	595.90	500+00.00	0.00

DITCH POINTS

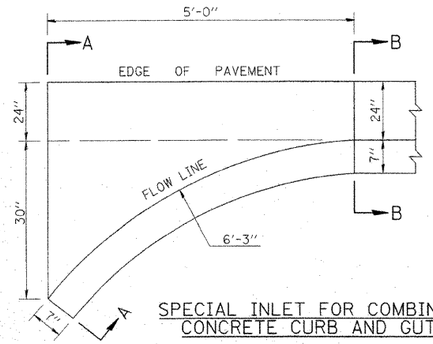
POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET
20	24,989.45	38,440.56	591.08	498+28.30	27.32′ LT
21	24,959.87	38,535.15	591.36	499+25.00	36.74′ LT
22	24,890.95	38,500.43	590.44	499+22.00	40.31′ RT
23	24,938.43	38,422.82	590.16	498+29.01	26.69′ RT



SECTION B-B



SECTION A-A

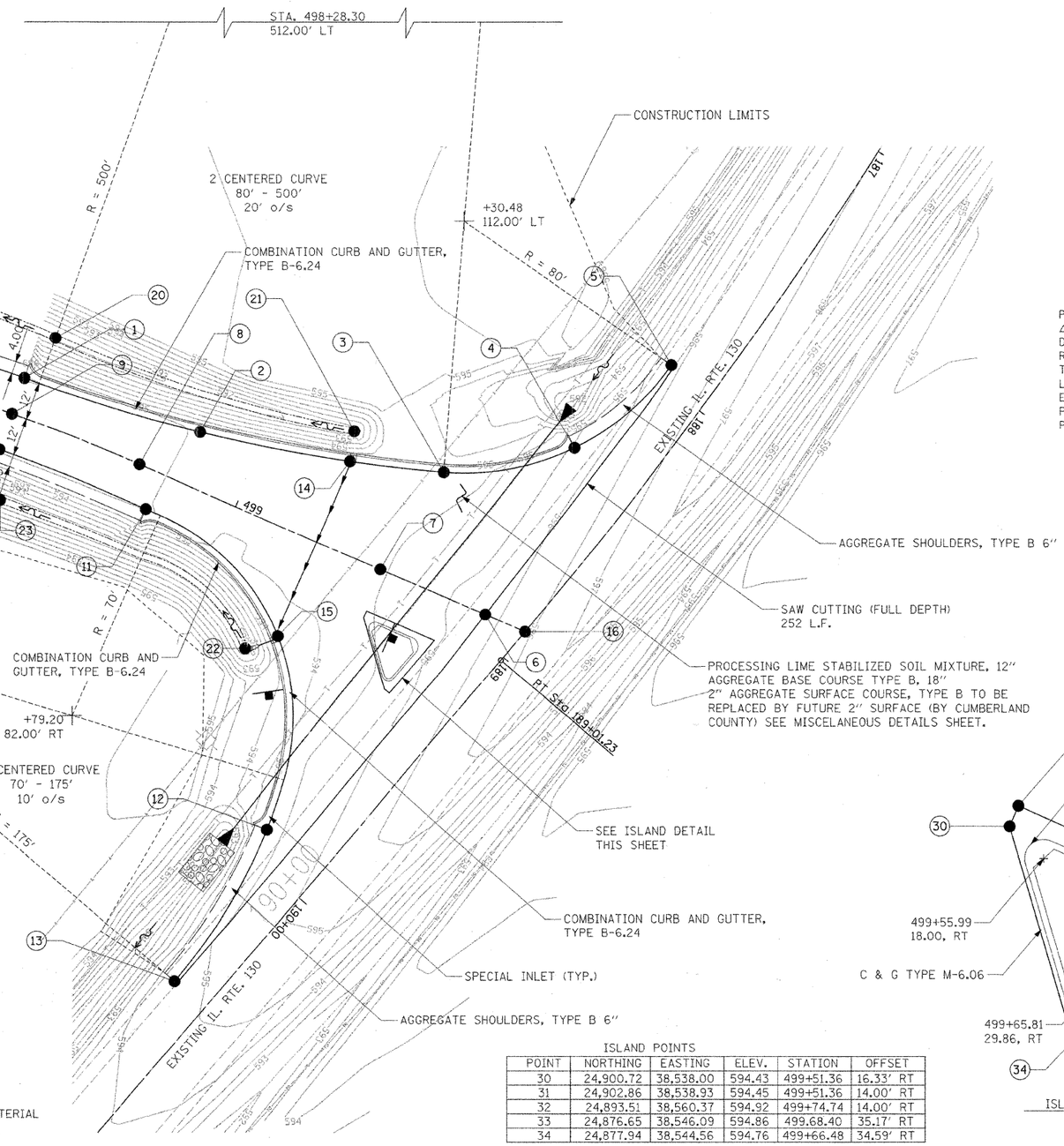


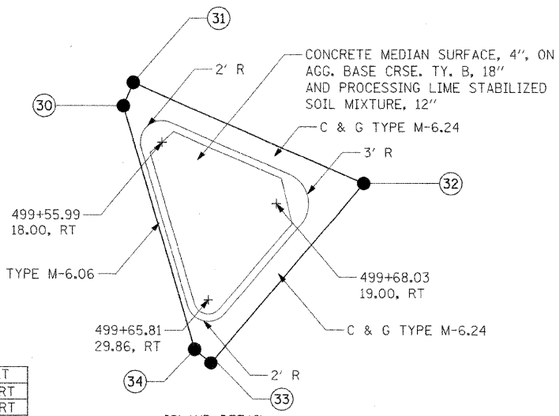
SPECIAL INLET FOR COMBINATION CONCRETE CURB AND GUTTER

- INCREASE TO 2″ WHERE IN THE PLANS IT IS SPECIFIED THAT THESE SPECIAL INLETS ARE TO BE CONSTRUCTED AS OUTLET. ALL OUTLET LOCATIONS WILL BE CONFIRMED BY THE ENGINEER.

NOTES:

1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU. YD. FOR CLASS SI CONCRETE (OUTLET) WHICH PRICE SHALL INCLUDE ALL LABOR AND MATERIAL AS SPECIFIED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.





ISLAND DETAIL

ISLAND POINTS

POINT	NORTHING	EASTING	ELEV.	STATION	OFFSET
30	24,900.72	38,538.00	594.43	499+51.36	16.33′ RT
31	24,902.86	38,538.93	594.45	499+51.36	14.00′ RT
32	24,893.51	38,560.37	594.92	499+74.74	14.00′ RT
33	24,876.65	38,546.09	594.86	499.68.40	35.17′ RT
34	24,877.94	38,544.56	594.76	499+66.48	34.59′ RT

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JNM	02/04/08

FILE NAME =	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERSECTION DETAIL
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	PLOT SCALE = 20.0000 ′ / IN.	CHECKED - MNM	REVISED -		
	PLOT DATE = 04\04\2008, 01:39 PM	DATE - 10/10/07	REVISED -		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	20
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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EXISTING R.O.W.
℄ EXISTING IL 130
EXISTING R.O.W.
EXISTING R.O.W.
EXISTING R.O.W.
FENCE TO BE REMOVED AND
RE-ERECTED (BY CUMBERLAND COUNTY)
℄ NORTH SIGHT GRADING LINE
PROPOSED R.O.W.
STA. 177+64
498+44.44 F.A.S. 662, 1,181.94' LT=
176+44.65 IL 130, 60.00' RT
SEE GRADING CROSS SECTIONS
499+23.62 F.A.S. 662, 198.81' LT=
187+05.22 IL 130, 119.18' RT
RAYMOND & ADA DARLING TRUST
DAVID WOOLEVER
POT STA 10+00.00
POT STA 178+49.29
POT STA 180+00
POT STA 185+00
POT STA 190+00
POT STA 200+00.00
POT STA 40+00.00
POT STA 23+21.13
PT STA 189+01.23
RT STA 498+66.85
10+00
15+00
20+00
40+00
595
596
597
598
STATION 10+00.00
NORTHING 26,169.19
EASTING 38,931.76
STATION 23+21.13
NORTHING 24,901.90
EASTING 38,558.45
℄ PROPOSED F.A.S. 662

TREE REMOVAL (BY CUMBERLAND COUNTY)

TREE REMOVAL, ACRE (BY CUMBERLAND COUNTY)

50 0 50 100

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JNM	02/04/08

FILE NAME =	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
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	PLOT DATE = 04\24\2008, 12:06 PM	DATE - 10/12/07	REVISED -

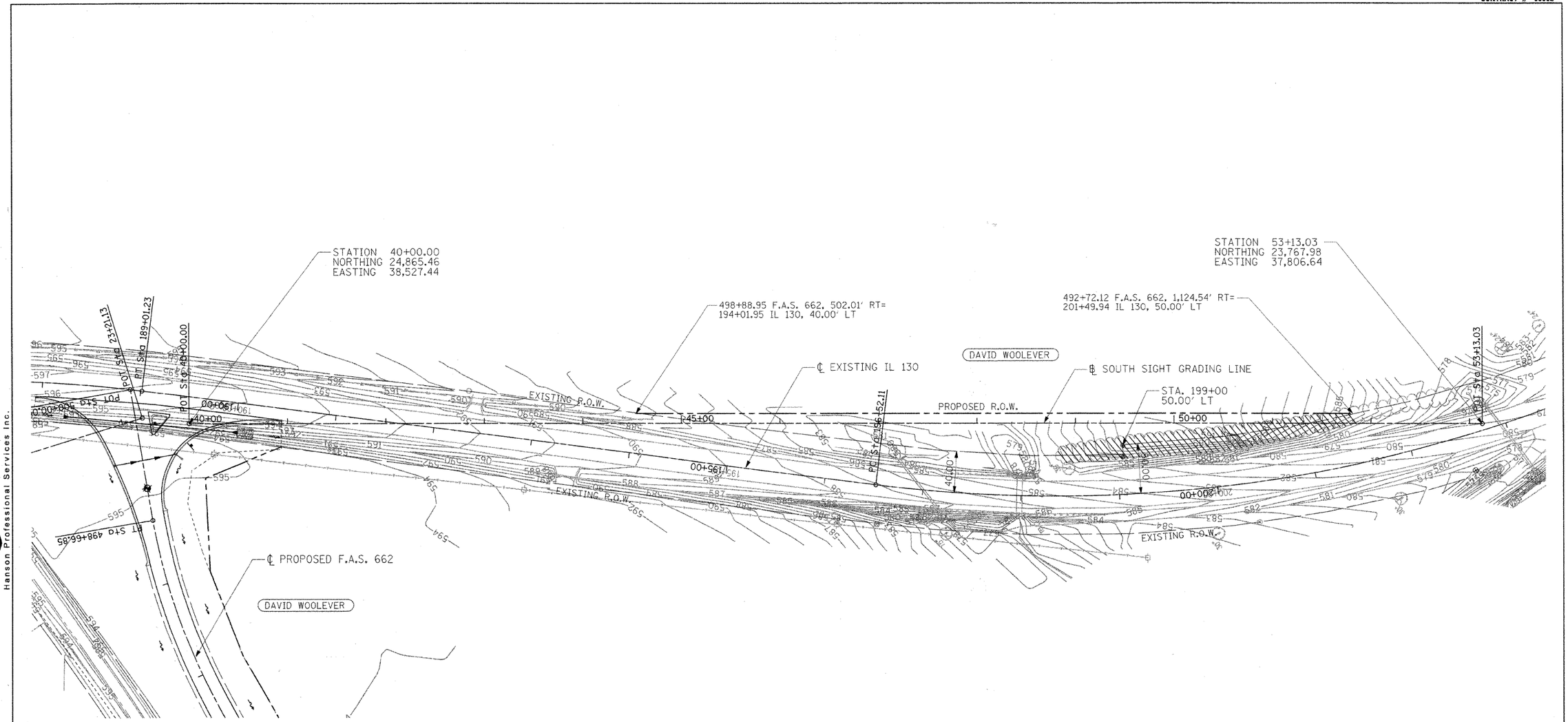
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH SIGHT GRADING PLAN

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. 10+00.00 TO STA. 23+21.13

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	21
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552



× TREE REMOVAL (BY CUMBERLAND COUNTY)

▨ TREE REMOVAL, ACRE (BY CUMBERLAND COUNTY)

50 0 50 100

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LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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	PLOT DATE = 04\04\2008, 12:06 PM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH SIGHT GRADING PLAN

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. 40+00.00 TO STA. 53+13.03

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	22
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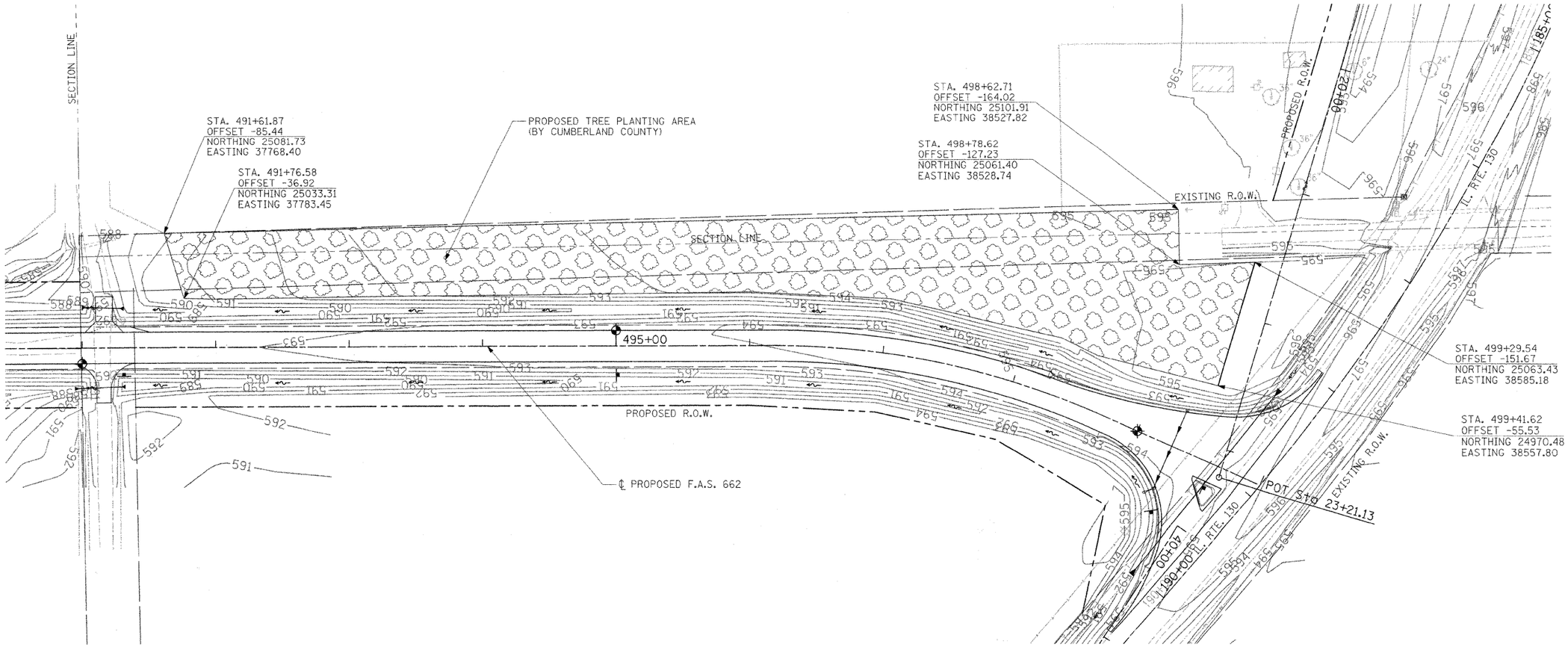
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

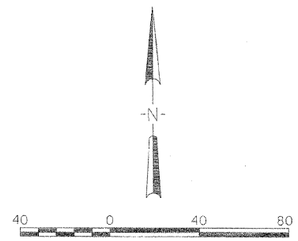
HANSON
Hanson Professional Services Inc.



1.23 ACRES

PLANT NATIVE MAST-PRODUCING TREE SPECIES. PLANT IN EQUAL PARTS AND IN RANDOM ORDER ON 15 FOOT CENTERS. TREE SPECIES TO BE PLANTED INCLUDE PIN OAK, BITTERNUT HICKORY, BLACK OAK, WHITE OAK, AND SHAGBARK HICKORY. IF COMERCIALLY AVAILABLE. (WORK TO BE COMPLETED BY CUMBERLAND COUNTY.)

TYPE		QUANTITY (EA.)
PIN OAK	:	40
BITTERNUT HICKORY	:	40
BLACK OAK	:	40
WHITE OAK	:	40
SHAGBARK HICKORY	:	40
TOTAL		200



LAYOUT	MAM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JRM	02/04/08

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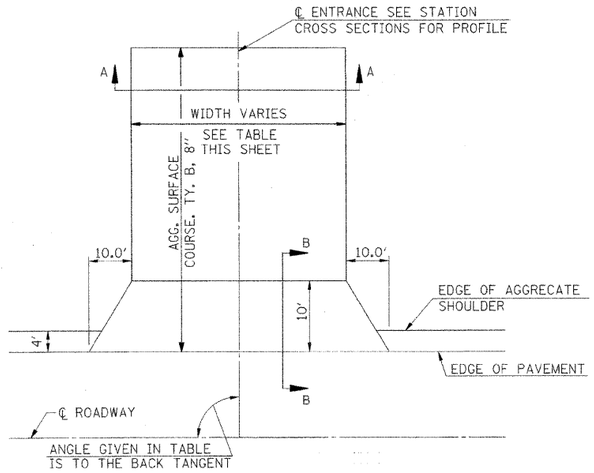
		DATE - 12/07/07	REVISED -	

TREE REPLACEMENT PLAN

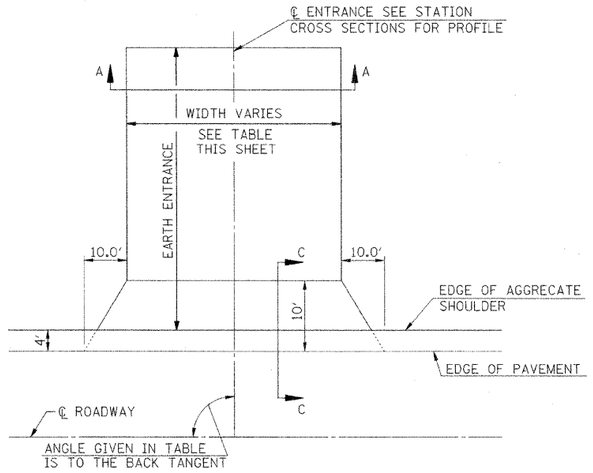
SCALE: | SHEET NO. 1 OF 1 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	23
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

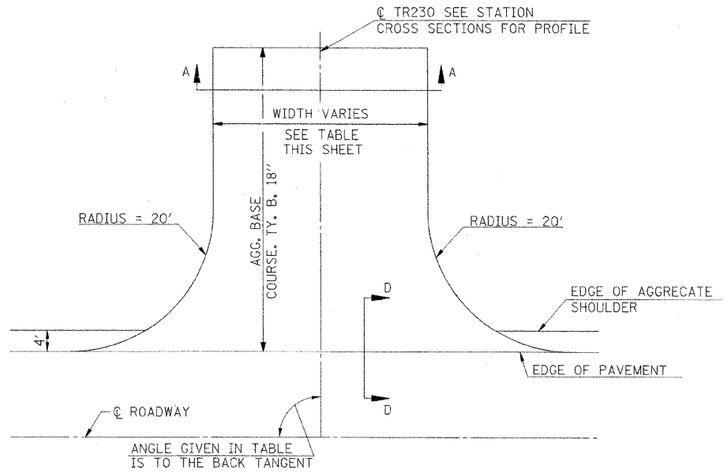
HANSON
Hanson Professional Services Inc.



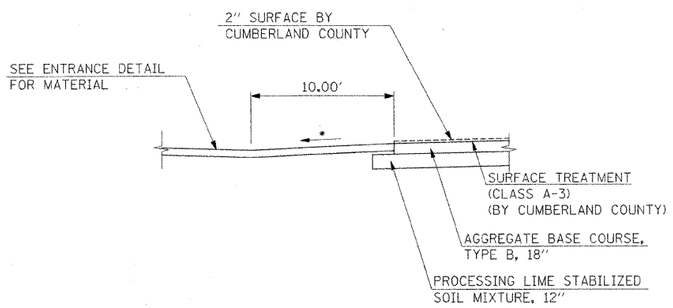
TYPICAL PRIVATE ENTRANCE DETAIL



TYPICAL FIELD ENTRANCE DETAIL

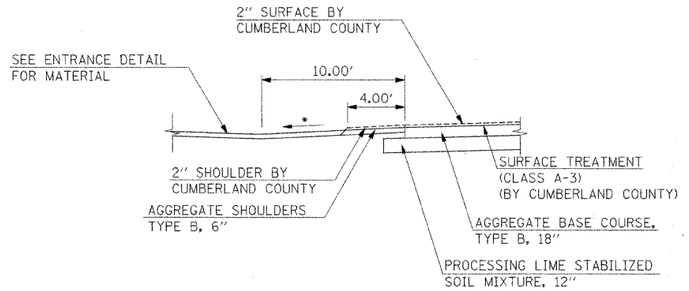


TOWNSHIP ROAD DETAIL



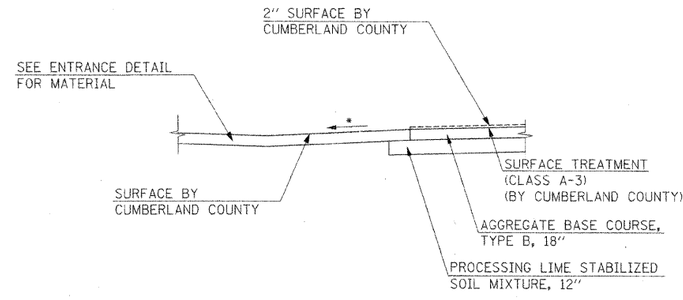
SECTION B-B

* SEE STATION CROSS SECTIONS FOR PROFILE



SECTION C-C

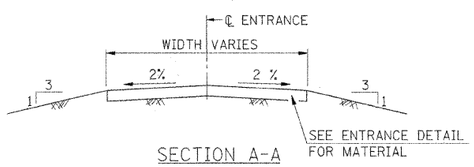
* SEE STATION CROSS SECTIONS FOR PROFILE



SECTION D-D

* SEE STATION CROSS SECTIONS FOR PROFILE

ENTRANCE SCHEDULE					
ROADWAY	STATION	LT/RT	ANGLE	F.E./P.E.	WIDTH
F.A.S. 662	440+12.92	RT	76°	P.E.	15'
F.A.S. 662	440+15.00	LT	90°	P.E.	24'
F.A.S. 662	446+72.00	LT	90°	F.E.	24'
F.A.S. 662	446+81.00	RT	90°	F.E.	12'
F.A.S. 662	465+76.00	LT	90°	F.E.	24'
F.A.S. 662	475+00.00	RT	90°	F.E.	24'
F.A.S. 662	475+00.00	LT	90°	F.E.	24'
F.A.S. 662	487+00.00	LT	90°	F.E.	24'
F.A.S. 662	487+00.00	RT	90°	F.E.	24'
F.A.S. 662	491+16.60	LT	90°	P.E.	12'
F.A.S. 662	491+16.60	RT	90°	TR 230	10.5'



SECTION A-A

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JAM	02/04/08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ENTRANCE DETAILS

SCALE: | SHEET NO. 1 OF 1 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	24
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
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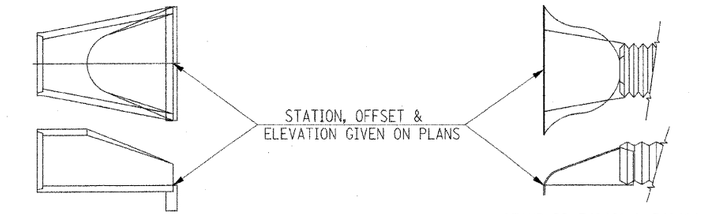
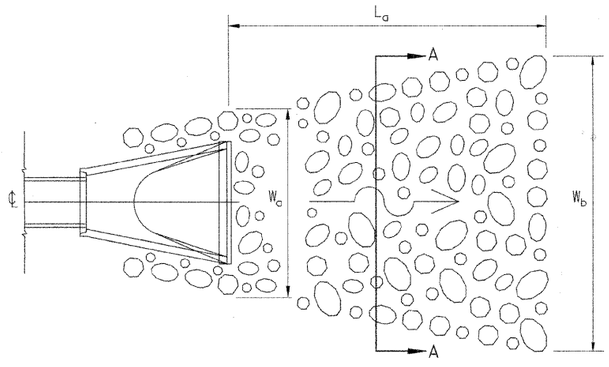
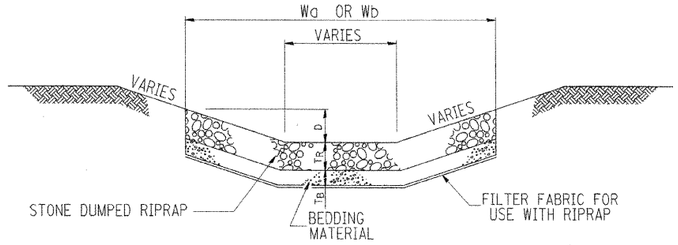


END SECTION OFFSETS



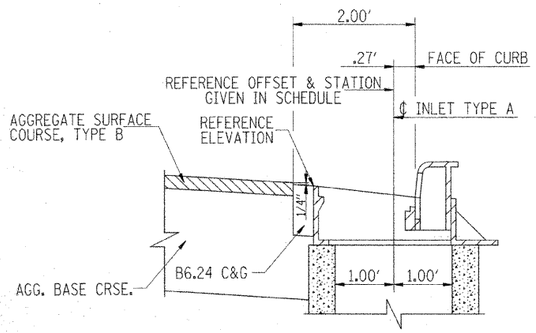
PLAN



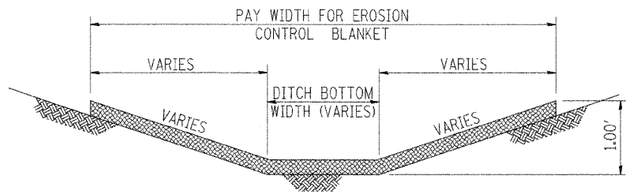
SECTION A-A

ROADWAY	STATION	OFFSET	CULVERT DIAMETER	L_a	D	W_a	W_b	STONE DUMPED RIPRAP	T_R	T_B
			INCHES	FEET	FEET	FEET	FEET	CLASS	INCHES	INCHES
F.A.S. 662	446+72.00	LT	18	16	2	14	14	A4	20	6
F.A.S. 662	446+81.00	RT	18	16	2	14	14	A4	20	6
F.A.S. 662	464+76.00	RT	36	24		12	27	A4	20	6
F.A.S. 662	489+98.00	LT	60	36	4	18	18	A6	32	10
F.A.S. 662	489+98.00	RT	60	36	4	18	18	A6	32	10
F.A.S. 662	491+16.60	LT	18	16	2	14	14	A4	20	6
F.A.S. 662	491+16.60	RT	18	16	2	14	14	A4	20	6
F.A.S. 662	499+65.65	RT	18	16	2	10	10	A4	20	6

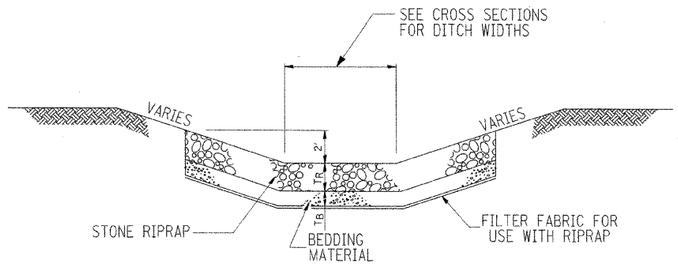
TYPICAL RIPRAP LAYOUT AT CULVERT OUTLETS / INLETS



INLET TYPE A, FRAME AND GRATE TYPE 3
NOT TO SCALE



TYPICAL EROSION CONTROL BLANKET LINING
SEE CROSS SECTIONS FOR DITCH WIDTHS AND SLOPES



STONE RIPRAP	RIPRAP THICKNESS (T_R)	BEDDING THICKNESS (T_B)
A4	18"	6"

TYPICAL STONE RIPRAP DITCH LINING
SEE SCHEDULES FOR INSTALLATION LOCATIONS

LAYOUT	MNM/DJP	10/10/07	
DRAWN	DJP	10/10/07	
REVIEWED	MNM	12/04/08	

FILE NAME = I:\0Ljobs\01s2021B\CADD\Road\Sheet\C-5DRDET.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
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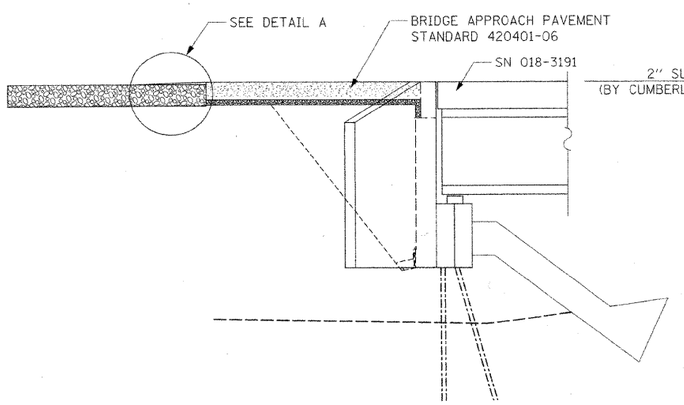
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - MNM	REVISED -	
	PLOT DATE = 04\04\2008, 12:56 PM	DATE - 10/10/07	REVISED -	

DRAINAGE DETAILS

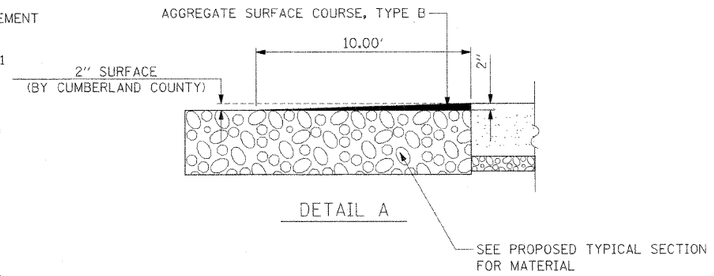
SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	25
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

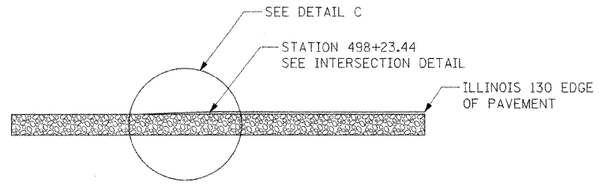


TRANSITION DETAIL TO APPROACH PAVEMENT

WEST APPROACH STATION 468+21.00
EAST APPROACH STATION 473+29.00

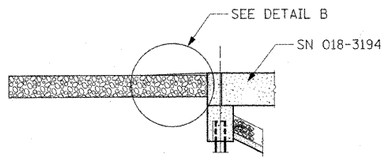


DETAIL A



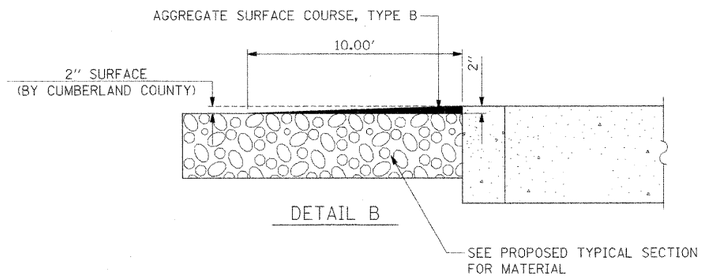
TRANSITION DETAIL TO INTERSECTION

STATION 498+23.44

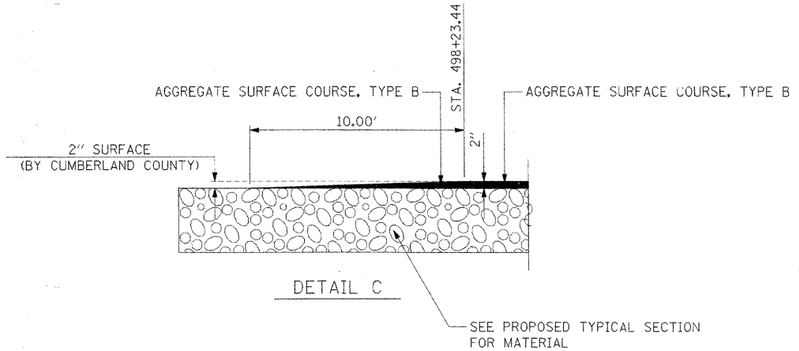


TRANSITION DETAIL TO ABUTMENT

WEST ABUTMENT STATION 476+69.50
EAST ABUTMENT STATION 478+54.50



DETAIL B



DETAIL C

HANSON
Hanson Professional Services Inc.

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVISED	JNM	02/04/08

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	PLOT SCALE = 10.0000 ' / IN.	CHECKED - MNM	REVISED -	
	PLOT DATE = 04\04\2008, 12:15 PM	DATE - 10/12/07	REVISED -	

MISCELANEOUS DETAILS

SCALE: | SHEET NO. 1 OF 1 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	26
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/19/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 1
Station 444+00
Offset 8.00ft Lt
Ground Surface Elev. 558.23 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ___ Hrs. ___ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, very moist, brown, CLAY TILL w/ Coarse Gravel.		+4.5 PP	4
556.23			
Hard, very moist, brown, SANDY LOAM TILL w/ Gravel. Samples powdered - unable to test for Qu.			3
			5
			4
551.23			
Brown, very fine grained, SAND. 8% passing #200 sieve.			
550.23			
Extent of exploration.			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron Pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Latitude W 88 deg 09.375 min, Longitude N 39 deg 19.487 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/19/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 2
Station 450+00
Offset 12.00ft Rt
Ground Surface Elev. 547.32 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ___ Hrs. ___ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff to very stiff, damp, brown, SANDY LOAM.		2.0 PP	10
545.32			
Stiff, damp, brown, SILTY CLAY LOAM. LL = 34.9 PL = 16.7 PI = 18.2		1.5 S	18
		1.8 BS	24
541.02			
Stiff, damp, brown, CLAY LOAM.		1.2 B	23
539.32			
Extent of exploration.			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron Pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Latitude W 88 deg 09.247 min, Longitude N 39 deg 19.486 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

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Date 9/19/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 3
Station 456+00
Offset 8.00ft Lt
Ground Surface Elev. 544.99 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ___ Hrs. ___ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, very moist, brown, CLAY LOAM.		2.5 PP	9
		3.7 PP	12
540.99			
Medium, damp, brown, CLAY LOAM.		0.7 B	19
537.99		0.5 BS	16
Soft to medium, very damp, red, SANDY LOAM. 536.99			
Extent of exploration.			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron Pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Latitude W 88 deg 09.122 min, Longitude N 39 deg 19.488 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MNM/DJP	10/10/07	
DRAWN	DJP	10/10/07	
REVIEWED	JWM	12/04/08	

FILE NAME = I:\01_jobs\01e2021B\CADD\Road\Sheet\C-SLB1.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 12:39 PM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY BORING SHEET

SCALE: | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	27
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/19/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 4
Station 461+00
Offset 13.00ft Rt
Ground Surface Elev. 544.79 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, very moist, brown mottled gray, CLAY LOAM.		4.2 S	16
540.59		3.8 S	20
Stiff, damp, red marbled gray, SANDY LOAM.	-5	1.1 S	14
539.09		0.2 BS	15
Very soft, damp, red, SANDY LOAM w/ Sand.			
536.79			
Extent of exploration.	-10		
Benchmarks: Iron Pin Sta 460+26.17, Rt 27.64' = 546.57' Iron Pin Sta 480+92.08, Lt 1.36' = 545.90' Iron Pin Sta 485+51.24, Rt 20.78' = 594.37' Provided by Cumberland Co. Engineer.	-15		
	-20		

Latitude W 88 deg 09.016 min, Longitude N 39 deg 19.487 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/19/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 5
Station 466+00
Offset 6.00ft Lt
Ground Surface Elev. 543.12 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, brown, SILTY CLAY LOAM.		4.0 PP	9
542.12			
Brown, CLAY LOAM TILL w/ some Sand.			
541.12			
Hard, very moist, brown, SILTY CLAY.		6.8 S	14
539.12			
Hard, very moist, brown, SANDY CLAY.	-5	+4.5 PP	10
537.12			
Hard, damp, brown, CLAY w/ Slit.		4.7 B	19
535.12			
Extent of exploration.	-10		
Benchmarks: Iron Pin Sta 460+26.17, Rt 27.64' = 546.57' Iron Pin Sta 480+92.08, Lt 1.36' = 545.90' Iron Pin Sta 485+51.24, Rt 20.78' = 594.37' Provided by Cumberland Co. Engineer.	-15		
	-20		

Latitude W 88 deg 08.938 min, Longitude N 39 deg 19.693 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

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Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 6
Station 475+00
Offset 0.00ft CL
Ground Surface Elev. 543.45 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Soft, very moist, brown, SANDY LOAM. Non-Plastic		0.4 S	8
541.95			
Loose, light brown, fluffy, fine grained, SAND. 13% passing #200 sieve.			
12% passing #200 sieve.	-5		
537.45			
Soft, damp, brown, SANDY LOAM.		0.3 S	13
535.45			
Extent of exploration.	-10		
Benchmarks: Iron Pin Sta 460+26.17, Rt 27.64' = 546.57' Iron Pin Sta 480+92.08, Lt 1.36' = 545.90' Iron Pin Sta 485+51.24, Rt 20.78' = 594.37' Provided by Cumberland Co. Engineer.	-15		
	-20		

Latitude W 88 deg 08.715 min, Longitude N 39 deg 19.488 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JWM	02/04/08

FILE NAME = I:\01_jobs\01s2021B\CADD\Road\Sheet\C-SLB1.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 12:39 PM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY BORING SHEET

SCALE: | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	28
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 7
Station 480+00
Offset 0.00ft CL
Ground Surface Elev. 544.39 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 529.9 ft
Upon Completion Caved ft
After 24 Hrs. 529.9 ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium, damp, brown, SANDY LOAM.		3		
		2	0.5	18
		3	B	
	-5	2		
539.09				
Stiff, damp, brown, SILTY CLAY.		3	1.2	20
		3	B	
537.39				
Medium, damp, brown, SILTY LOAM.		1		
		2	0.7	21
		2	B	
534.39	-10	1		
Very soft, damp, brown, SANDY LOAM.		2	0.1	21
		1	B	
532.39				
Very loose, very moist, brown, fine grained, SAND. 6% passing #200 sieve.		1		
		2		8
		3		
3% passing #200 sieve.	-15	1		
		1		10
		2		
With Gravel. 2% passing #200 sieve.		1		
		2		24
		4		
524.89				
	-20	5		
Hard, damp, gray, SANDY CLAY TILL. (continued)		16	+4.5	22
523.69		29	PP	
Gray, CLAY LOAM TILL.				
523.39				
Extent of exploration.				
	-25			
	-30			
	-35			
	-40			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron Pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Latitude N 88 deg 08.609 min, Longitude W 89 deg 19.658 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 8
Station 482+00
Offset 10.00ft Lt
Ground Surface Elev. 549.96 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After 24 Hrs. Dry ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Brown, SILTY LOAM.				
549.46				
Hard, very moist, brown, CLAY LOAM TILL.		6		
		11	+4.5	5
		10	PP	
545.46				
Stiff, damp, tan, SANDY LOAM TILL.	-5	4		
		5	1.2	15
		6	S	
		2		
		3	1.5	8
		5	PP	
540.46				
Very stiff, damp, brown, CLAY LOAM TILL.	-10	4		
		5	3.8	15
		8	PP	
		3		
		4	2.1	19
		6	BS	
535.16	-15	2		
Medium, very damp, brown marbled gray, SANDY LOAM.		2	0.6	21
		4	B	
532.96				
Brown, SILTY LOAM.		1		
532.16		1	0.0	24
Very soft, wet, brown, SILTY LOAM w/ Sand.		0	B	
	-20	2		
Hard, very moist, brown, CLAY LOAM TILL.		9	4.6	11
528.96		20	B	
Extent of exploration.				
	-25			
	-30			
	-35			
	-40			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron Pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Latitude N 88 deg 08.573 min, Longitude W 89 deg 19.485 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 9
Station 485+20
Offset 0.00ft CL
Ground Surface Elev. 594.85 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After 24 Hrs. Dry ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, damp, red marbled gray, CLAY TILL.		6		
		8	+4.5	17
		11	PP	
590.35				
Hard, damp, red marbled gray, CLAY LOAM TILL.	-5	7		
		9	4.3	9
		13	BS	
		6		
		8	5.5	11
		12	B	
585.35				
Medium, damp, brown, SANDY CLAY TILL.	-10	4		
		4	0.8	15
		6	B	
582.35		6		
Hard, damp, brown, CLAY LOAM TILL.		15	5.7	9
		20	BS	
	-15	8		
		14	7.1	8
		18	BS	
		7		
		13	7.1	8
		18	BS	
	-20	6		
Hard, damp, brown, CLAY LOAM TILL. (continued)		12	6.8	9
573.85		16	S	
Extent of exploration.				
	-25			
	-30			
	-35			
	-40			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron Pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Latitude N 88 deg 08.502 min, Longitude W 89 deg 19.191 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	MNM	02/04/08

FILE NAME = I:\01_jobs\01s2021B\CADD\Road\Sheet\C-SLB1.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 24\04\2008, 12:39 PM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY BORING SHEET

SCALE: | SHEET NO. 3 OF 4 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	29
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

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Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 10
Station 491+00
Offset 12.00ft Rt
Ground Surface Elev. 588.94 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff, damp, brown, CLAY LOAM.			2.5 S	14
			2.3 B	15
584.94				
Very stiff, damp, red marbled gray, CLAY LOAM TILL.	-5		1.7 B	16
582.64				
Medium, very damp, brown, SANDY CLAY TILL.			0.5 B	19
580.94				
Extent of exploration.				
Benchmarks: Iron Pin Sta 460+26.17, Rt 27.64' = 546.57' Iron Pin Sta 480+92.08, Lt 1.36' = 545.90' Iron Pin Sta 485+51.24, Rt 20.78' = 594.37' Provided by Cumberland Co. Engineer.	-10 -15 -20			

Latitude W 88 deg 08.30± min. Longitude N 39 deg 19.489 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

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Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 11
Station 495+00
Offset 12.00ft Lt
Ground Surface Elev. 593.83 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, very moist, gray, SILTY LOAM.			3.5 PP	11
			4.1 PP	16
589.83				
Very stiff, damp, gray, SILTY CLAY LOAM.	-5		1.1 B	18
587.83				
Medium to soft, damp, gray mottled red, CLAY w/ Sand.			1.0 B	19
585.83				
Extent of exploration.				
Benchmarks: Iron Pin Sta 460+26.17, Rt 27.64' = 546.57' Iron Pin Sta 480+92.08, Lt 1.36' = 545.90' Iron Pin Sta 485+51.24, Rt 20.78' = 594.37' Provided by Cumberland Co. Engineer.	-10 -15 -20			

Latitude W 88 deg 08.295 min. Longitude N 39 deg 19.485 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Line Borings: TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION W 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hydraulic pushed HAMMER TYPE N/A

STRUCT. NO. gINT File
Station 018-TR 61 Embarras

BORING NO. LB 12
Station 499+00
Offset 0.00ft Cl
Ground Surface Elev. 595.04 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After ____ Hrs. ____ ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, very moist, gray marbled brown, SILTY LOAM.			2.5 PP	11
593.04				
Hard, damp, red marbled gray, CLAY LOAM TILL.			6.6 BS	19
	-5		1.7 B	15
			1.7 B	17
587.04				
Extent of exploration.				
Benchmarks: Iron Pin Sta 460+26.17, Rt 27.64' = 546.57' Iron Pin Sta 480+92.08, Lt 1.36' = 545.90' Iron Pin Sta 485+51.24, Rt 20.78' = 594.37' Provided by Cumberland Co. Engineer.	-10 -15 -20			

Latitude W 88 deg 08.210 min. Longitude N 39 deg 19.482 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MNM/DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JWM	02/04/08

FILE NAME = I:\01jobs\01s2021B\CADD\Road\Sheet\C-5L01.dgn	USER NAME = Pap00275	DESIGNED - MNM/DJP	REVISED -	
		DRAWN - DJP	REVISED -	
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - MNM	REVISED -	
	PLOT DATE = 04\04\2008, 12:41 PM	DATE - 10/10/07	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY BORING SHEET

SCALE: | SHEET NO. 4 OF 4 SHEETS

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	30
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

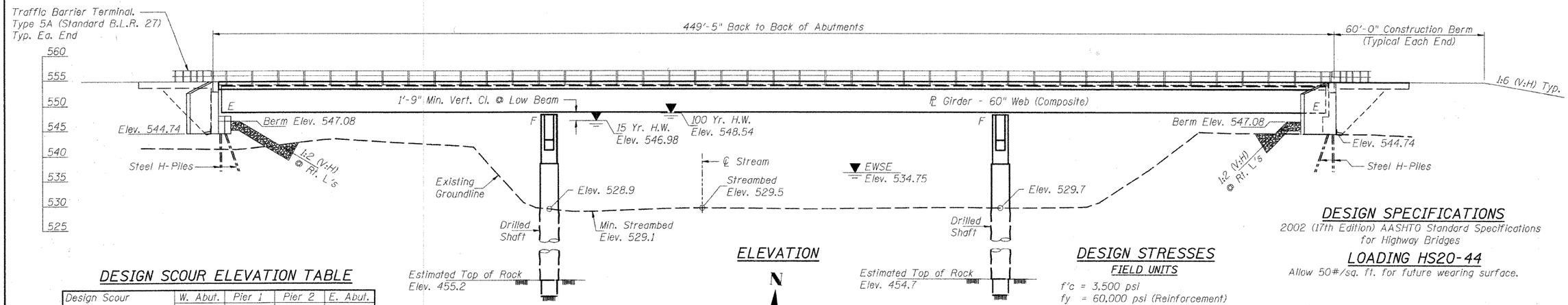
B.M. : Mag nail near west bank, Station 468+48.95, Rt. 2.56', Elev. 541.80
Wood hub, Station 471+78.76, Rt. 43.38', Elev. 545.70
Iron pin, Station 474+93.38, Rt. 29.24', Elev. 544.23

Existing Structure: None

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	31
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
26 SHEETS

*Section 01-00061-00-BR Contract #95552



ELEVATION

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.) 100 Yr.	W. Abut.	Pier 1	Pier 2	E. Abut.
	544.74	520.00	520.00	544.74

DESIGN SPECIFICATIONS

2002 (17th Edition) AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44

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

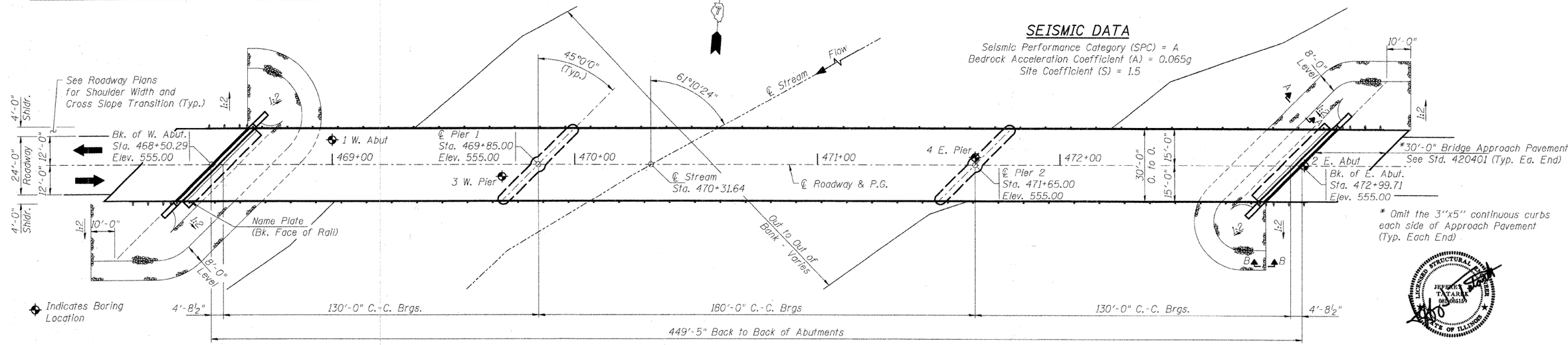
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W Structural Steel)

SEISMIC DATA

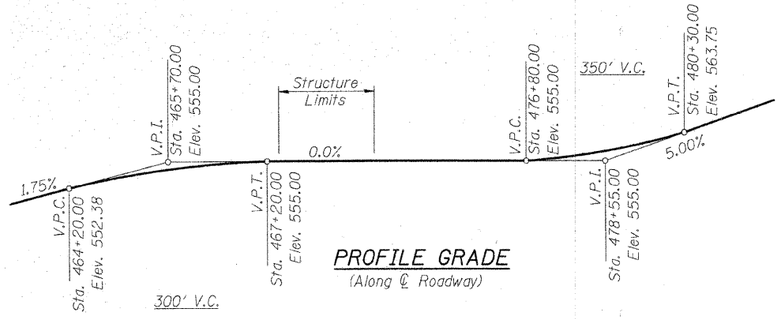
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.065g
Site Coefficient (S) = 1.5



PLAN

Note: See Sheet 2 of 26 for Section A-A & B-B.

* Omit the 3"x5" continuous curbs each side of Approach Pavement (Typ. Each End)

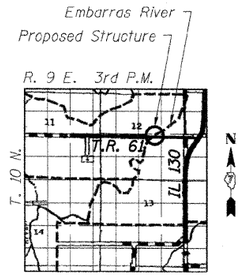


PROFILE GRADE
(Along ℄ Roadway)

WATERWAY INFORMATION

Drainage Area = 933 Sq. Miles Low Grade Elev. 548.00 @ Sta. 460+95.00

Flood	Freq. Yr.	Description	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	15	Overflow Bridge	2630	-	785	546.98	-	0.20	546.98	547.18
		River Bridge	15720	-	2614		-			
		Over-The-Road Flow	0	-	0		-			
		Total	18350	-	3399		-			
Overtopping	50					548.00			548.00	
Base	100	Overflow Bridge	5720	-	1021	548.54	-	0.45	548.54	549.09
		River Bridge	16040	-	2849		-			
		Over-The-Road Flow	4970	-	1787		-			
		Total	26730	-	5657		-			
Max. Calc.	500	Overflow Bridge	6420	-	1176	549.57	-	0.43	549.57	550.00
		River Bridge	15080	-	2849		-			
		Over-The-Road Flow	12390	-	3449		-			
		Total	33890	-	7474		-			



LOCATION SKETCH

JEFFREY TATARKE 062-058139 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

SIGNATURE
4-3-08
DATE

LIC. EXP. DATE : 11-30-08

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

GENERAL PLAN
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/30/07
DRAWN	DAB	12/28/07
REVIEWED	JWN	02/04/08

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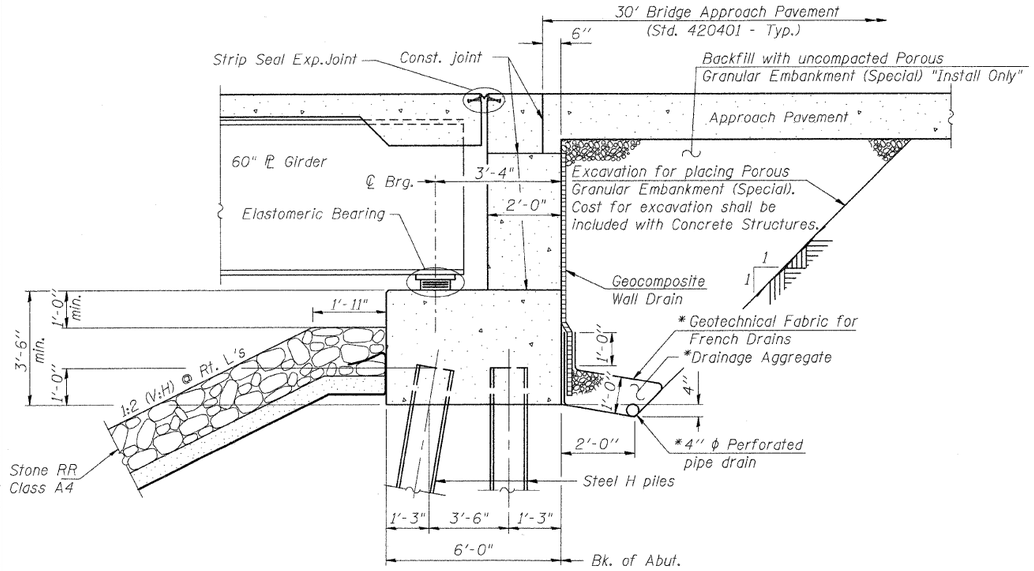
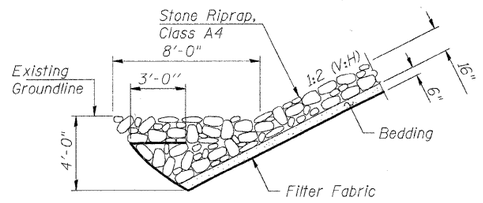


SECTION THRU PILE SUPPORTED ABUTMENT

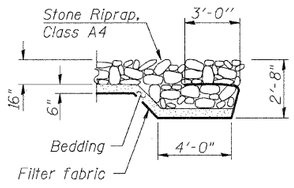
(Horiz. dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures 4".

Note:
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



SECTION A-A



SECTION B-B

Note:
Excavation required for placing Riprap shall be according to Article 502 of the Standard Specifications. Cost for excavation shall be included with Stone Riprap, Class A4.

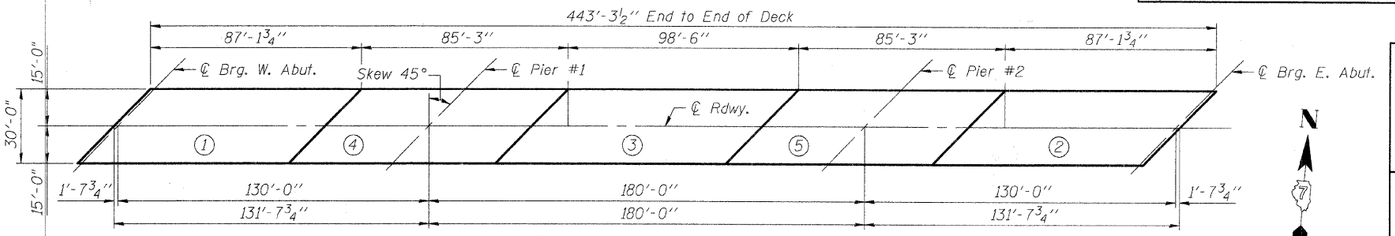
EMBARRAS RIVER
BUILT 20__ BY
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
F.A.S. RT. 662 - STA. 470+75.00
STRUCTURE NO. 018-3191 - LOADING HS20

NAME PLATE

See Std. 515001

GENERAL NOTES

1. Fasteners shall be AASHTO M164 Type 3, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.
2. Calculated weight of Structural Steel: AASHTO M 270 Grade 50W = 428,750 lbs.
3. All structural steel shall be AASHTO M 270 Grade 50W except expansion joints which shall be AASHTO M 270 Grade 36.
4. No field welding is permitted except as specified in the contract documents.
5. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions
6. Reinforcement bars designated (E) shall be epoxy coated.
7. Bearing seat surfaces shall be constructed or adjusted to their 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.
8. Concrete Sealer shall be applied to the seat area of the abutments.
9. Structural steel shall only be painted for a distance of 10 ft. each way from the deck joints. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
10. All exposed structural steel of the bearing shall be cleaned and shop painted as specified in the Special Provisions for "Surface Preparation and Painting Requirements for Weathering Steel."
11. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
12. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
13. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
14. The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.
15. When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
    1) At least 72 hours shall have elapsed from the end of the previous pour.
    2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.
16. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.



DECK POURING SEQUENCE

The concrete deck segments shall be poured in the numerical order shown above.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	32
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
26 SHEETS

* Section 01-00061-00-BR Contract #95552

INDEX OF SHEETS

1. General Plan
2. General Notes
3. Top of Slab Elevations (Sheet 1)
4. Top of Slab Elevations (Sheet 2)
5. Top of Slab Elevations (Sheet 3)
6. Top of West Approach Slab Elevations
7. Top of East Approach Slab Elevations
8. Superstructure
9. Superstructure Details
10. Steel Railing, Type S-1
11. Preformed Joint Strip Seal
12. Structural Steel
13. Structural Steel Details (Sheet 1)
14. Structural Steel Details (Sheet 2)
15. Elastomeric Bearing Assembly, Type II
16. Abutment
17. Abutment Details
18. Pier
19. Pier Details
20. Bar Splicer Assembly Details
21. Steel H-Piles
22. Borings (Sheet 1)
23. Borings (Sheet 2)
24. Borings (Sheet 3)
25. Borings (Sheet 4)
26. Borings (Sheet 5)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special "Install Only"	Cu. Yd.	-	243	243
Stone Riprap, Class A4	Sq. Yd.	-	703	703
Filter Fabric	Sq. Yd.	-	703	703
Concrete Structures	Cu. Yd.	-	234	234
Concrete Superstructure	Cu. Yd.	389.6	-	389.6
Bridge Deck Grooving	Sq. Yd.	1478	-	1478
Concrete Encasement	Cu. Yd.	-	7.6	7.6
Protective Coat	Sq. Yd.	1511	-	1511
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	3144	-	3144
Reinforcement Bars	Pounds	-	38460	38460
Reinforcement Bars, Epoxy Coated	Pounds	102270	37050	139320
Bar Splicers	Each	62	-	62
Steel Railing, Type S-1	Foot	896	-	896
Furnishing Steel Piles, HP10x42	Foot	-	1030	1030
Driving Piles	Foot	-	1030	1030
Test Pile Steel HP 10x42	Each	-	2	2
Name Plates	Each	-	1	1
Drilled Shaft in Soil	Cu. Yd.	-	198.6	198.6
Drilled Shaft in Rock	Cu. Yd.	-	12.6	12.6
Preformed Joint Strip Seal	Foot	83.5	-	83.5
Elastomereic Bearing Assembly, Type II	Each	8	-	8
Steel Bearing Assembly	Each	8	-	8
Anchor Bolts, 1¼"	Each	16	-	16
Anchor Bolts, 1½"	Each	16	-	16
Concrete Sealer	Sq. Ft.	-	342	342
Geocomposite Wall Drain	Sq. Yd.	-	108	108
Pipe Underdrains for Structures 4"	Foot	-	206	206

GENERAL NOTES
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 05/30/08

LAYOUT	MWM	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	JWM	02/04/08

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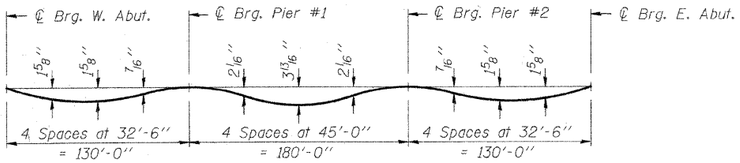
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	33
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 3
26 SHEETS

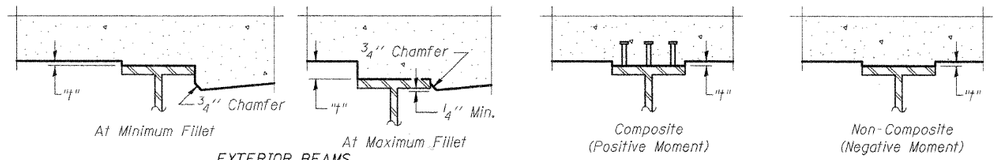
*Section 01-00061-00-BR Contract #95552



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 & 5 of 26.

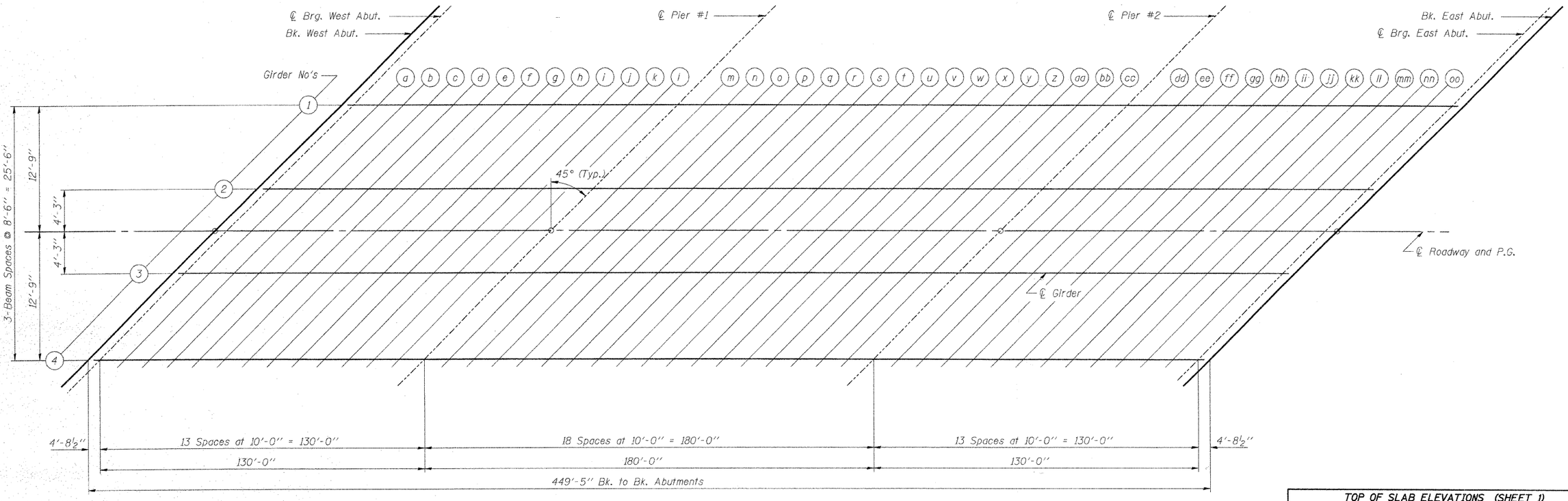


EXTERIOR BEAMS

INTERIOR BEAMS

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 & 5 of 26, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



DIAGRAMMATIC PLAN

LAYOUT	VMW	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	JWM	02/04/08

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TOP OF SLAB ELEVATIONS (SHEET 1)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B

DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	34
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 4
26 SHEETS

*Section 01-00061-00-BR Contract #95552

GIRDER #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	468+63.04	-12.75'	554.75	554.75
℄ Brg. W. Abut.	468+67.75	-12.75'	554.75	554.75
a	468+77.75	-12.75'	554.75	554.79
b	468+87.75	-12.75'	554.75	554.83
c	468+97.75	-12.75'	554.75	554.87
d	469+07.75	-12.75'	554.75	554.88
e	469+17.75	-12.75'	554.75	554.88
f	469+27.75	-12.75'	554.75	554.88
g	469+37.75	-12.75'	554.75	554.87
h	469+47.75	-12.75'	554.75	554.84
i	469+57.75	-12.75'	554.75	554.81
j	469+67.75	-12.75'	554.75	554.78
k	469+77.75	-12.75'	554.75	554.77
l	469+87.75	-12.75'	554.75	554.76
℄ Pier #1	469+97.75	-12.75'	554.75	554.75
m	470+07.75	-12.75'	554.75	554.78
n	470+17.75	-12.75'	554.75	554.82
o	470+27.75	-12.75'	554.75	554.86
p	470+37.75	-12.75'	554.75	554.90
q	470+47.75	-12.75'	554.75	554.93
r	470+57.75	-12.75'	554.75	554.97
s	470+67.75	-12.75'	554.75	555.00
t	470+77.75	-12.75'	554.75	555.03
u	470+87.75	-12.75'	554.75	555.06
v	470+97.75	-12.75'	554.75	555.03
w	471+07.75	-12.75'	554.75	555.00
x	471+17.75	-12.75'	554.75	554.97
y	471+27.75	-12.75'	554.75	554.93
z	471+37.75	-12.75'	554.75	554.90
aa	471+47.75	-12.75'	554.75	554.86
bb	471+57.75	-12.75'	554.75	554.82
cc	471+67.75	-12.75'	554.75	554.78
℄ Pier #2	471+77.75	-12.75'	554.75	554.75
dd	471+87.75	-12.75'	554.75	554.76
ee	471+97.75	-12.75'	554.75	554.77
ff	472+07.75	-12.75'	554.75	554.78
gg	472+17.75	-12.75'	554.75	554.81
hh	472+27.75	-12.75'	554.75	554.84
ii	472+37.75	-12.75'	554.75	554.87
jj	472+47.75	-12.75'	554.75	554.88
kk	472+57.75	-12.75'	554.75	554.88
ll	472+67.75	-12.75'	554.75	554.88
mm	472+77.75	-12.75'	554.75	554.87
nn	472+87.75	-12.75'	554.75	554.83
oo	472+97.75	-12.75'	554.75	554.79
℄ Brg. E. Abut.	473+07.75	-12.75'	554.75	554.75
Bk. E. Abut.	473+12.46	-12.75'	554.75	554.75

GIRDER #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	468+54.54	-4.25'	554.92	554.92
℄ Brg. W. Abut.	468+59.25	-4.25'	554.92	554.92
a	468+69.25	-4.25'	554.92	554.96
b	468+79.25	-4.25'	554.92	555.00
c	468+89.25	-4.25'	554.92	555.04
d	468+99.25	-4.25'	554.92	555.05
e	469+09.25	-4.25'	554.92	555.05
f	469+19.25	-4.25'	554.92	555.05
g	469+29.25	-4.25'	554.92	555.04
h	469+39.25	-4.25'	554.92	555.01
i	469+49.25	-4.25'	554.92	554.98
j	469+59.25	-4.25'	554.92	554.95
k	469+69.25	-4.25'	554.92	554.94
l	469+79.25	-4.25'	554.92	554.93
℄ Pier #1	469+89.25	-4.25'	554.92	554.92
m	469+99.25	-4.25'	554.92	554.95
n	470+09.25	-4.25'	554.92	554.99
o	470+19.25	-4.25'	554.92	555.03
p	470+29.25	-4.25'	554.92	555.07
q	470+39.25	-4.25'	554.92	555.10
r	470+49.25	-4.25'	554.92	555.14
s	470+59.25	-4.25'	554.92	555.17
t	470+69.25	-4.25'	554.92	555.20
u	470+79.25	-4.25'	554.92	555.23
v	470+89.25	-4.25'	554.92	555.20
w	470+99.25	-4.25'	554.92	555.17
x	471+09.25	-4.25'	554.92	555.14
y	471+19.25	-4.25'	554.92	555.10
z	471+29.25	-4.25'	554.92	555.07
aa	471+39.25	-4.25'	554.92	555.03
bb	471+49.25	-4.25'	554.92	554.99
cc	471+59.25	-4.25'	554.92	554.95
℄ Pier #2	471+69.25	-4.25'	554.92	554.92
dd	471+79.25	-4.25'	554.92	554.93
ee	471+89.25	-4.25'	554.92	554.94
ff	471+99.25	-4.25'	554.92	554.95
gg	472+09.25	-4.25'	554.92	554.98
hh	472+19.25	-4.25'	554.92	555.01
ii	472+29.25	-4.25'	554.92	555.04
jj	472+39.25	-4.25'	554.92	555.05
kk	472+49.25	-4.25'	554.92	555.05
ll	472+59.25	-4.25'	554.92	555.05
mm	472+69.25	-4.25'	554.92	555.04
nn	472+79.25	-4.25'	554.92	555.00
oo	472+89.25	-4.25'	554.92	554.96
℄ Brg. E. Abut.	472+99.25	-4.25'	554.92	554.92
Bk. E. Abut.	473+03.96	-4.25'	554.92	554.92

℄ ROADWAY AND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	468+50.29	0.00'	555.00	555.00
℄ Brg. W. Abut.	468+55.00	0.00'	555.00	555.00
a	468+65.00	0.00'	555.00	555.04
b	468+75.00	0.00'	555.00	555.08
c	468+85.00	0.00'	555.00	555.13
d	468+95.00	0.00'	555.00	555.14
e	469+05.00	0.00'	555.00	555.14
f	469+15.00	0.00'	555.00	555.14
g	469+25.00	0.00'	555.00	555.12
h	469+35.00	0.00'	555.00	555.09
i	469+45.00	0.00'	555.00	555.06
j	469+55.00	0.00'	555.00	555.04
k	469+65.00	0.00'	555.00	555.02
l	469+75.00	0.00'	555.00	555.01
℄ Pier #1	469+85.00	0.00'	555.00	555.00
m	469+95.00	0.00'	555.00	555.04
n	470+05.00	0.00'	555.00	555.08
o	470+15.00	0.00'	555.00	555.12
p	470+25.00	0.00'	555.00	555.15
q	470+35.00	0.00'	555.00	555.19
r	470+45.00	0.00'	555.00	555.22
s	470+55.00	0.00'	555.00	555.25
t	470+65.00	0.00'	555.00	555.29
u	470+75.00	0.00'	555.00	555.32
v	470+85.00	0.00'	555.00	555.29
w	470+95.00	0.00'	555.00	555.25
x	471+05.00	0.00'	555.00	555.22
y	471+15.00	0.00'	555.00	555.19
z	471+25.00	0.00'	555.00	555.15
aa	471+35.00	0.00'	555.00	555.12
bb	471+45.00	0.00'	555.00	555.08
cc	471+55.00	0.00'	555.00	555.04
℄ Pier #2	471+65.00	0.00'	555.00	555.00
dd	471+75.00	0.00'	555.00	555.01
ee	471+85.00	0.00'	555.00	555.02
ff	471+95.00	0.00'	555.00	555.04
gg	472+05.00	0.00'	555.00	555.06
hh	472+15.00	0.00'	555.00	555.09
ii	472+25.00	0.00'	555.00	555.12
jj	472+35.00	0.00'	555.00	555.14
kk	472+45.00	0.00'	555.00	555.14
ll	472+55.00	0.00'	555.00	555.14
mm	472+65.00	0.00'	555.00	555.13
nn	472+75.00	0.00'	555.00	555.08
oo	472+85.00	0.00'	555.00	555.04
℄ Brg. E. Abut.	472+95.00	0.00'	555.00	555.00
Bk. E. Abut.	472+99.71	0.00'	555.00	555.00

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LAYOUT	JNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	JNM	02/04/08

TOP OF SLAB ELEVATIONS (SHEET 2)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B

DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	35
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT=	

SHEET NO. 5
26 SHEETS

*Section 01-00061-00-BR Contract #95552

GIRDER #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	468+46.04	4.25'	554.92	554.92
℄ Brg. W. Abut.	468+50.75	4.25'	554.92	554.92
a	468+60.75	4.25'	554.92	554.96
b	468+70.75	4.25'	554.92	555.00
c	468+80.75	4.25'	554.92	555.04
d	468+90.75	4.25'	554.92	555.05
e	469+00.75	4.25'	554.92	555.05
f	469+10.75	4.25'	554.92	555.05
g	469+20.75	4.25'	554.92	555.04
h	469+30.75	4.25'	554.92	555.01
i	469+40.75	4.25'	554.92	554.98
j	469+50.75	4.25'	554.92	554.95
k	469+60.75	4.25'	554.92	554.94
l	469+70.75	4.25'	554.92	554.93
℄ Pier #1	469+80.75	4.25'	554.92	554.92
m	469+90.75	4.25'	554.92	554.95
n	470+00.75	4.25'	554.92	554.99
o	470+10.75	4.25'	554.92	555.03
p	470+20.75	4.25'	554.92	555.07
q	470+30.75	4.25'	554.92	555.10
r	470+40.75	4.25'	554.92	555.14
s	470+50.75	4.25'	554.92	555.17
t	470+60.75	4.25'	554.92	555.20
u	470+70.75	4.25'	554.92	555.23
v	470+80.75	4.25'	554.92	555.20
w	470+90.75	4.25'	554.92	555.17
x	471+00.75	4.25'	554.92	555.14
y	471+10.75	4.25'	554.92	555.10
z	471+20.75	4.25'	554.92	555.07
aa	471+30.75	4.25'	554.92	555.03
bb	471+40.75	4.25'	554.92	554.99
cc	471+50.75	4.25'	554.92	554.95
℄ Pier #2	471+60.75	4.25'	554.92	554.92
dd	471+70.75	4.25'	554.92	554.93
ee	471+80.75	4.25'	554.92	554.94
ff	471+90.75	4.25'	554.92	554.95
gg	472+00.75	4.25'	554.92	554.98
hh	472+10.75	4.25'	554.92	555.01
ii	472+20.75	4.25'	554.92	555.04
jj	472+30.75	4.25'	554.92	555.05
kk	472+40.75	4.25'	554.92	555.05
ll	472+50.75	4.25'	554.92	555.05
mm	472+60.75	4.25'	554.92	555.04
nn	472+70.75	4.25'	554.92	555.00
oo	472+80.75	4.25'	554.92	554.96
℄ Brg. E. Abut.	472+90.75	4.25'	554.92	554.92
Bk. E. Abut.	472+95.46	4.25'	554.92	554.92

GIRDER #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	468+37.54	12.75'	554.75	554.75
℄ Brg. W. Abut.	468+42.25	12.75'	554.75	554.75
a	468+52.25	12.75'	554.75	554.79
b	468+62.25	12.75'	554.75	554.83
c	468+72.25	12.75'	554.75	554.87
d	468+82.25	12.75'	554.75	554.88
e	468+92.25	12.75'	554.75	554.88
f	469+02.25	12.75'	554.75	554.88
g	469+12.25	12.75'	554.75	554.87
h	469+22.25	12.75'	554.75	554.84
i	469+32.25	12.75'	554.75	554.81
j	469+42.25	12.75'	554.75	554.78
k	469+52.25	12.75'	554.75	554.77
l	469+62.25	12.75'	554.75	554.76
℄ Pier #1	469+72.25	12.75'	554.75	554.75
m	469+82.25	12.75'	554.75	554.78
n	469+92.25	12.75'	554.75	554.82
o	470+02.25	12.75'	554.75	554.86
p	470+12.25	12.75'	554.75	554.90
q	470+22.25	12.75'	554.75	554.93
r	470+32.25	12.75'	554.75	554.97
s	470+42.25	12.75'	554.75	555.00
t	470+52.25	12.75'	554.75	555.03
u	470+62.25	12.75'	554.75	555.06
v	470+72.25	12.75'	554.75	555.03
w	470+82.25	12.75'	554.75	555.00
x	470+92.25	12.75'	554.75	554.97
y	471+02.25	12.75'	554.75	554.93
z	471+12.25	12.75'	554.75	554.90
aa	471+22.25	12.75'	554.75	554.86
bb	471+32.25	12.75'	554.75	554.82
cc	471+42.25	12.75'	554.75	554.78
℄ Pier #2	471+52.25	12.75'	554.75	554.75
dd	471+62.25	12.75'	554.75	554.76
ee	471+72.25	12.75'	554.75	554.77
ff	471+82.25	12.75'	554.75	554.78
gg	471+92.25	12.75'	554.75	554.81
hh	472+02.25	12.75'	554.75	554.84
ii	472+12.25	12.75'	554.75	554.87
jj	472+22.25	12.75'	554.75	554.88
kk	472+32.25	12.75'	554.75	554.88
ll	472+42.25	12.75'	554.75	554.88
mm	472+52.25	12.75'	554.75	554.87
nn	472+62.25	12.75'	554.75	554.83
oo	472+72.25	12.75'	554.75	554.79
℄ Brg. E. Abut.	472+82.25	12.75'	554.75	554.75
Bk. E. Abut.	472+86.96	12.75'	554.75	554.75

LAYOUT	MNM	11/30/07
DRAWN	DJP	12/28/07
REVIEWED	JNM	02/04/08

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TOP OF SLAB ELEVATIONS (SHEET 3)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001004

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	36
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 6
26 SHEETS

*Section 01-00061-00-BR Contract #95552

NORTH SHOULDER LINE

Location	Station	Offset	Theoretical Grade Elevations
West End W. Appr. Pav't.	468+36.00	-15.00'	554.70
A	468+46.00	-15.00'	554.70
B	468+56.00	-15.00'	554.70
Bk. W. Abut.	468+65.29	-15.00'	554.70
East End W. Appr. Pav't.	468+66.00	-15.00'	554.70

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End W. Appr. Pav't.	468+33.00	-12.00'	554.76
A	468+43.00	-12.00'	554.76
B	468+53.00	-12.00'	554.76
Bk. W. Abut.	468+62.29	-12.00'	554.76
East End W. Appr. Pav't.	468+63.00	-12.00'	554.76

℄ ROADWAY & PROFILE GRADE LINE

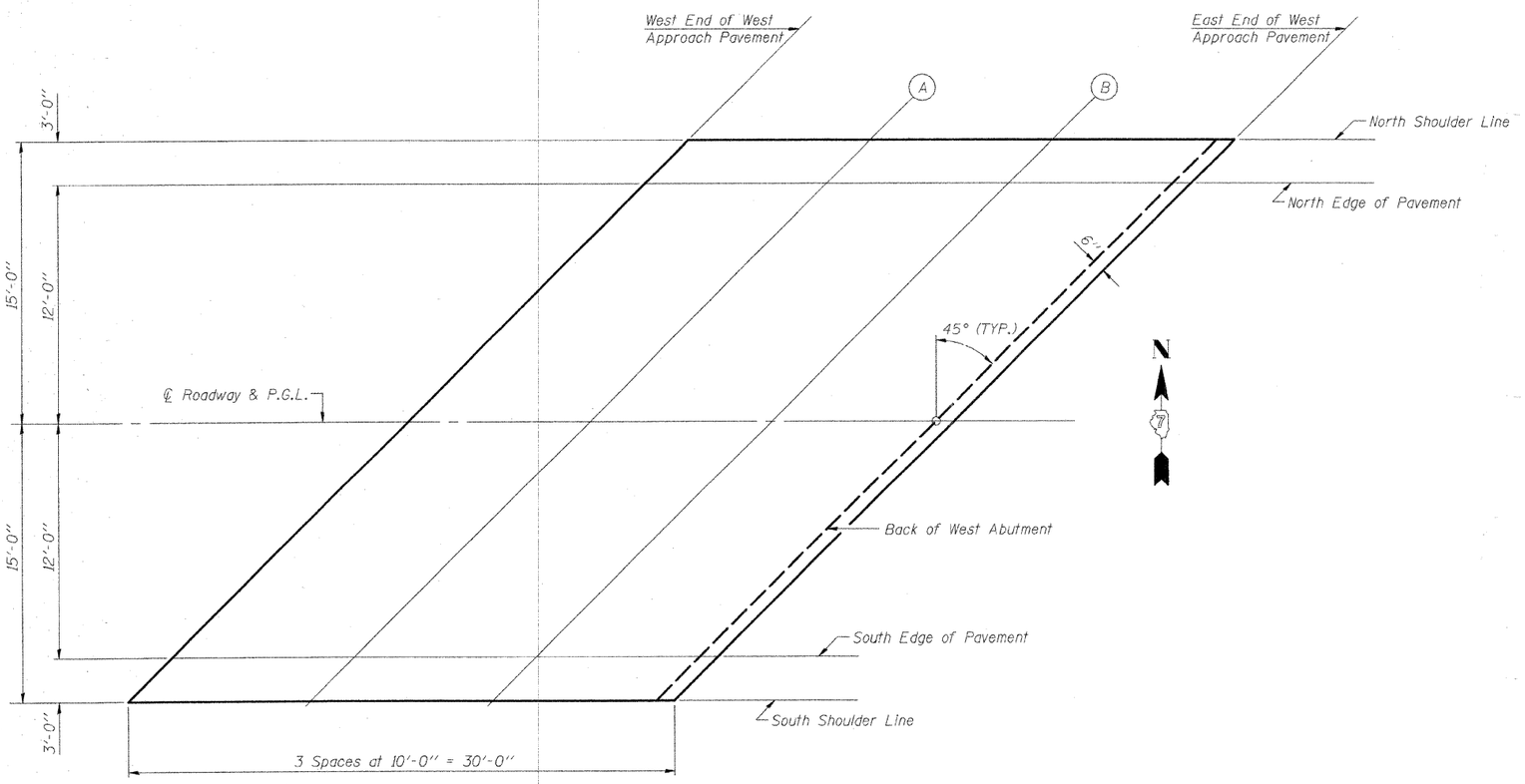
Location	Station	Offset	Theoretical Grade Elevations
West End W. Appr. Pav't.	468+21.00	0.00'	555.00
A	468+31.00	0.00'	555.00
B	468+41.00	0.00'	555.00
Bk. W. Abut.	468+50.29	0.00'	555.00
East End W. Appr. Pav't.	468+51.00	0.00'	555.00

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End W. Appr. Pav't.	468+09.00	12.00'	554.76
A	468+19.00	12.00'	554.76
B	468+29.00	12.00'	554.76
Bk. W. Abut.	468+38.29	12.00'	554.76
East End W. Appr. Pav't.	468+39.00	12.00'	554.76

SOUTH SHOULDER LINE

Location	Station	Offset	Theoretical Grade Elevations
West End W. Appr. Pav't.	468+06.00	15.00'	554.70
A	468+16.00	15.00'	554.70
B	468+26.00	15.00'	554.70
Bk. W. Abut.	468+35.29	15.00'	554.70
East End W. Appr. Pav't.	468+36.00	15.00'	554.70



PLAN

TOP OF WEST APPROACH SLAB ELEVATIONS
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNK	11/30/07
DRAWN	DJP	12/28/07
REVIEWED	JMK	02/04/08

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	37
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 7
26 SHEETS

*Section 01-00061-00-BR Contract #95552

NORTH SHOULDER LINE

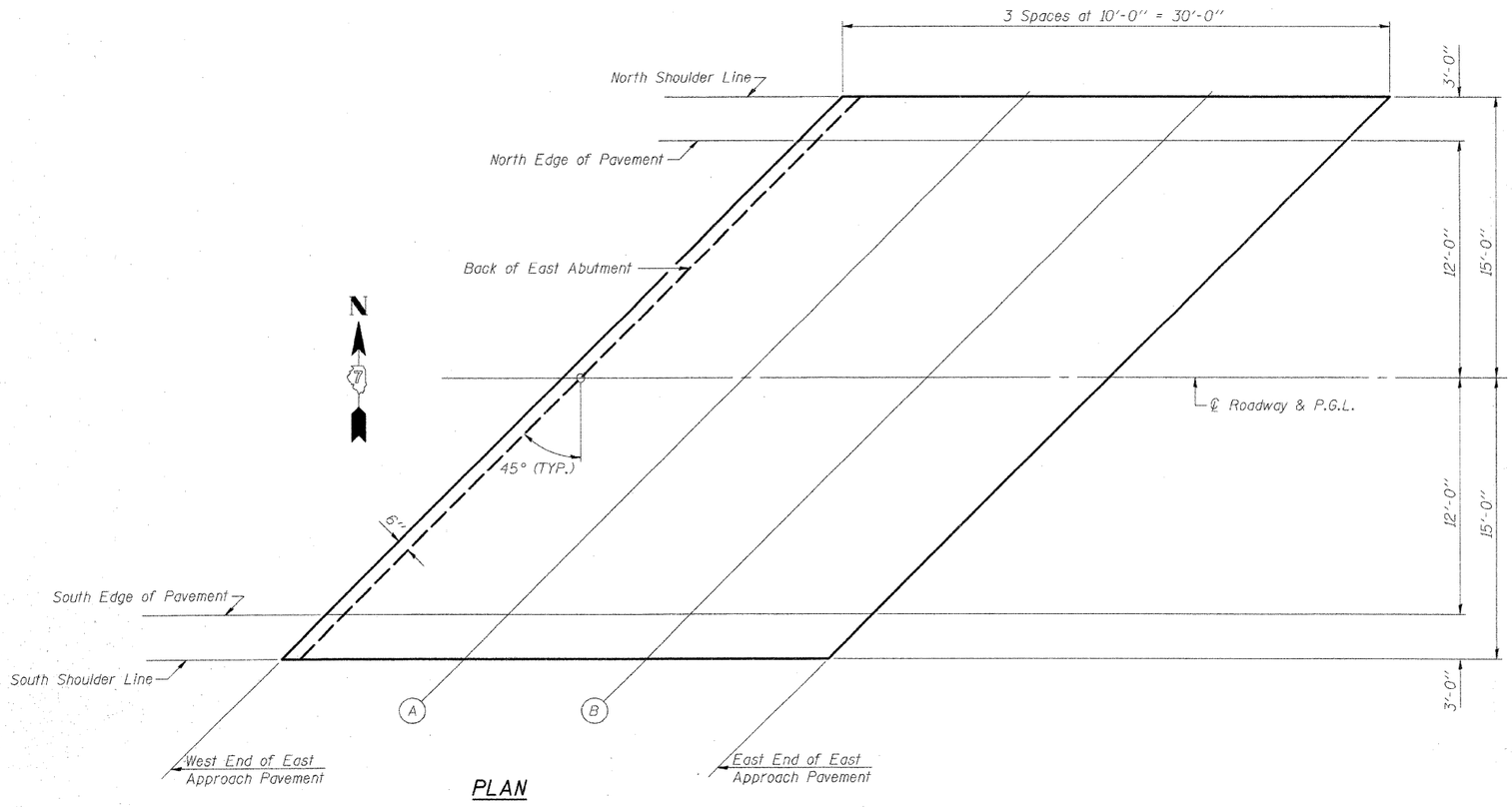
Location	Station	Offset	Theoretical Grade Elevations
West End E. Appr. Pav't.	473+14.00	-15.00'	554.70
Bk. E. Abut.	473+14.71	-15.00'	554.70
A	473+24.00	-15.00'	554.70
B	473+34.00	-15.00'	554.70
East End E. Appr. Pav't.	473+44.00	-15.00'	554.70

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End E. Appr. Pav't.	473+11.00	-12.00'	554.76
Bk. E. Abut.	473+11.71	-12.00'	554.76
A	473+21.00	-12.00'	554.76
B	473+31.00	-12.00'	554.76
East End E. Appr. Pav't.	473+41.00	-12.00'	554.76

℄ ROADWAY & PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations
West End E. Appr. Pav't.	472+99.00	0.00'	555.00
Bk. E. Abut.	472+99.71	0.00'	555.00
A	473+09.00	0.00'	555.00
B	473+19.00	0.00'	555.00
East End E. Appr. Pav't.	473+29.00	0.00'	555.00



PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
West End E. Appr. Pav't.	472+87.00	12.00'	554.76
Bk. E. Abut.	472+87.71	12.00'	554.76
A	472+97.00	12.00'	554.76
B	473+07.00	12.00'	554.76
East End E. Appr. Pav't.	473+17.00	12.00'	554.76

SOUTH SHOULDER LINE

Location	Station	Offset	Theoretical Grade Elevations
West End E. Appr. Pav't.	472+84.00	15.00'	554.70
Bk. E. Abut.	472+84.71	15.00'	554.70
A	472+94.00	15.00'	554.70
B	473+04.00	15.00'	554.70
East End E. Appr. Pav't.	473+14.00	15.00'	554.70

TOP OF EAST APPROACH SLAB ELEVATIONS
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	JWM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	JWM	02/04/08

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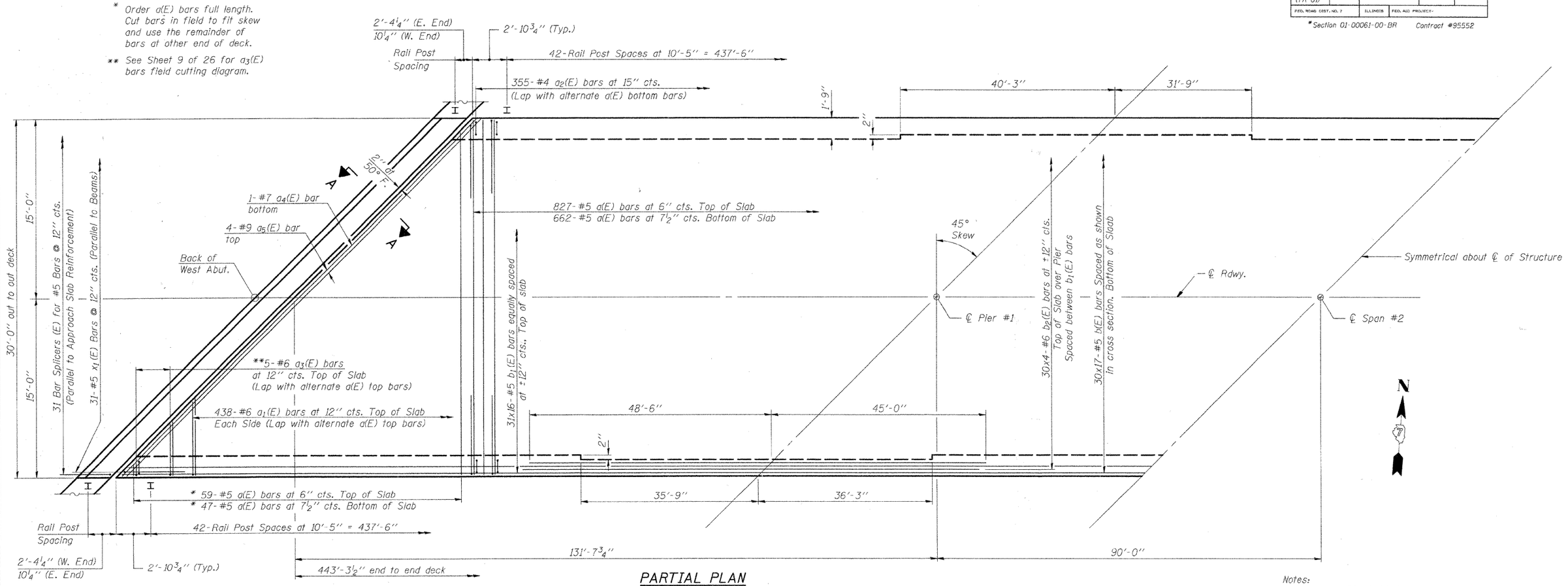
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	38
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 8
26 SHEETS

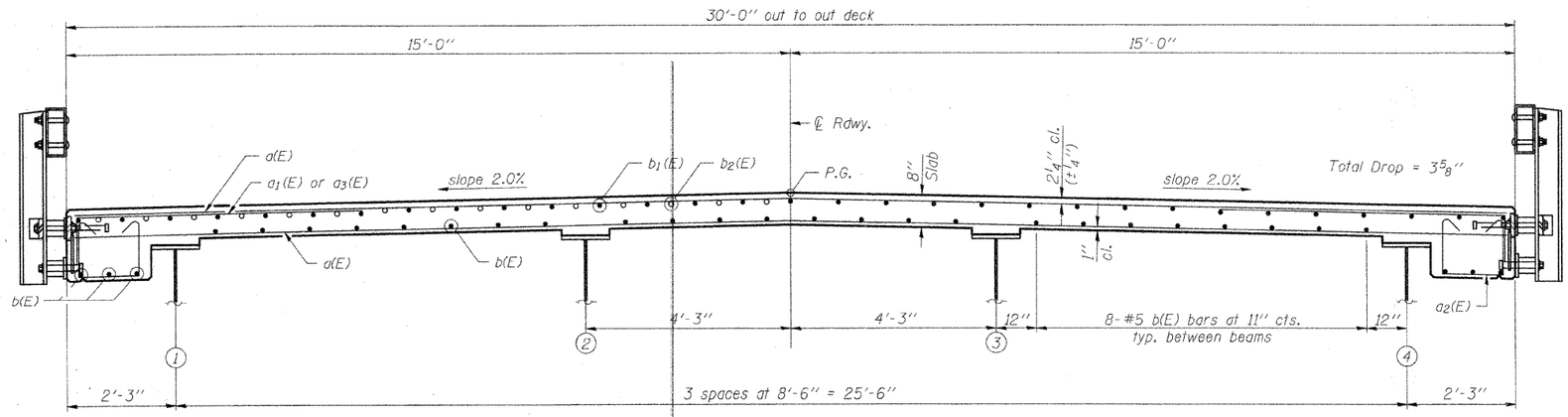
*Section 01-00061-00-BR Contract #95552

* Order a(E) bars full length. Cut bars in field to fit skew and use the remainder of bars at other end of deck.

** See Sheet 9 of 26 for $a_3(E)$ bars field cutting diagram.



PARTIAL PLAN



NEAR PIER — NEAR MIDSPAN

CROSS SECTION
(Looking East)

Notes:
See Sheet 09 of 26 for superstructure details, Bill of Material & Section A-A.
Bars indicated thus 24x17-#5 etc. indicates 24 lines of bars with 17 lengths per line.
Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Base Sheet EJ-SSJ.

MIN. BAR LAPS

#5 Bar - 2'-2"
#6 Bar - 2'-7"

SUPERSTRUCTURE
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNK	11/30/07
DRAWN	DJP	12/28/07
REVIEWED	JWK	02/04/08

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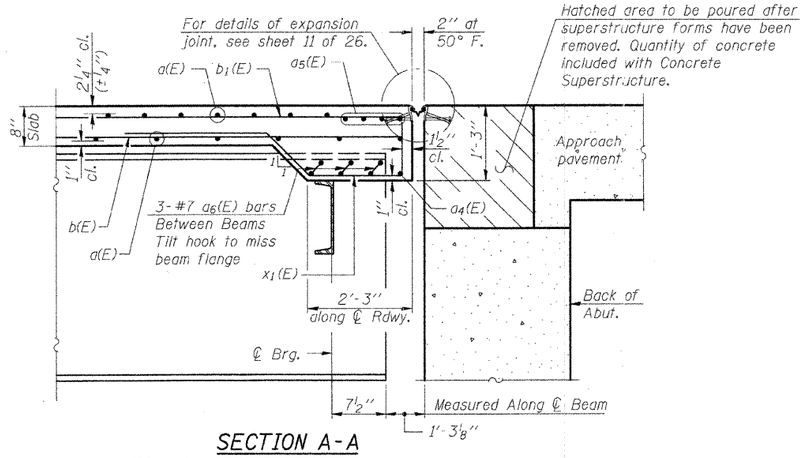
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	39
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT -	

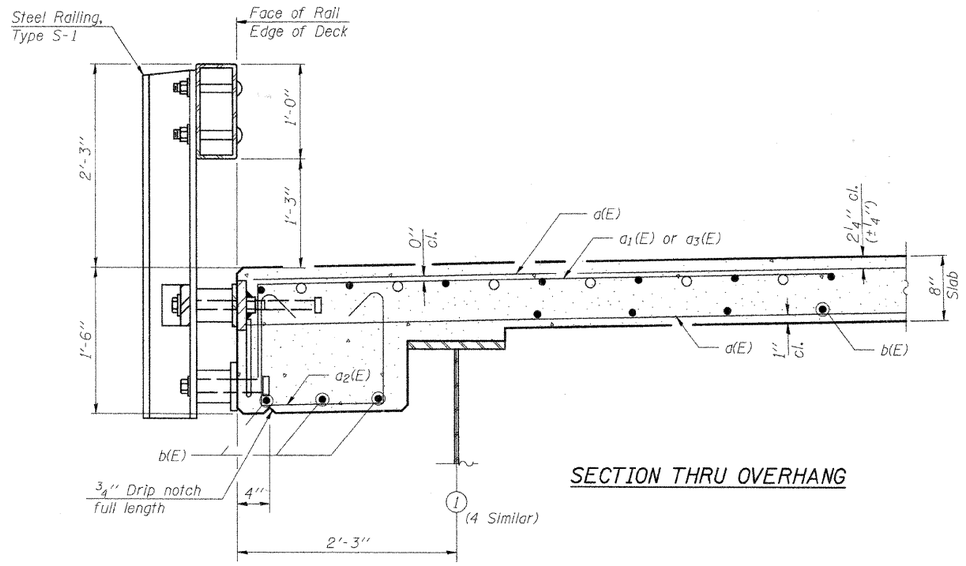
SHEET NO. 9
26 SHEETS

*Section 01-00061-00-BR Contract #95552

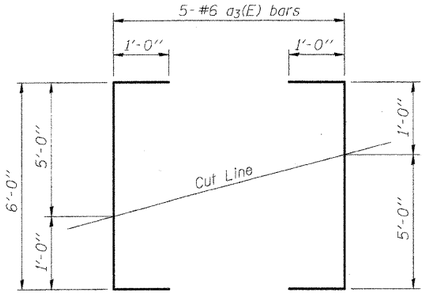


SECTION A-A

(Dimension at Rt. 4's to back of abutment unless otherwise noted)

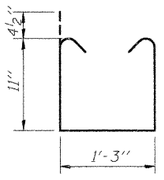


SECTION THRU OVERHANG

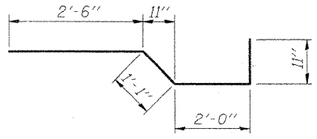


FIELD CUTTING DIAGRAM

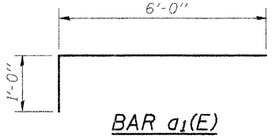
Order $a_3(E)$ full length. Cut as shown and use remainder of bars at opposite end of deck.



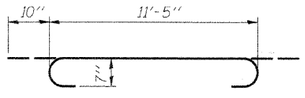
BAR $a_2(E)$



BAR $x_1(E)$



BAR $a_1(E)$



$a_6(E)$ BAR

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	1595	#5	29'-8"	
$a_1(E)$	876	#6	7'-0"	
$a_2(E)$	710	#4	3'-10"	
$a_3(E)$	5	#6	8'-0"	
$a_4(E)$	2	#7	42'-0"	
$a_5(E)$	8	#9	42'-0"	
$a_6(E)$	18	#7	13'-1"	
b(E)	510	#5	28'-3"	
$b_1(E)$	496	#5	29'-9"	
$b_2(E)$	240	#6	25'-6"	
$x_1(E)$	62	#5	6'-6"	
Reinforcement Bars, Epoxy Coated			Pound	102270
Concrete Superstructure			Cu. Yd.	389.6

SUPERSTRUCTURE DETAILS
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MWM	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	MWM	02/04/08

04/04/2008 03:06 PM
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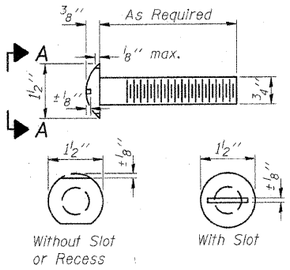
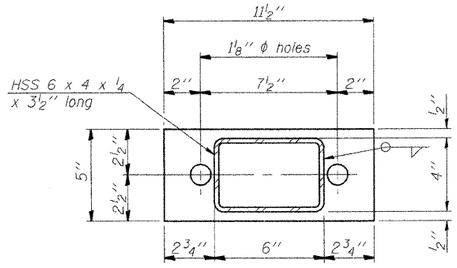
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	40
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10
26 SHEETS

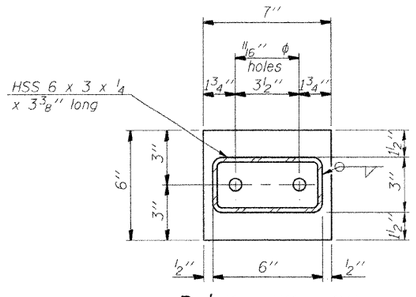
*Section 01-00061-00-BR Contract #95552



VIEW A-A
ROUND HEAD BOLT

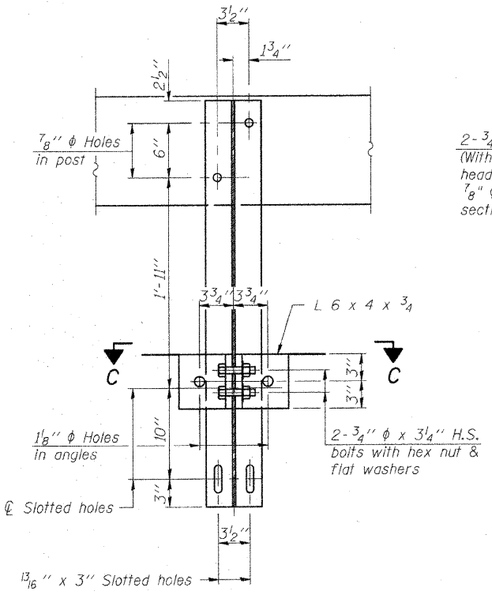


PL 1/2" x 11 1/2" x 5"

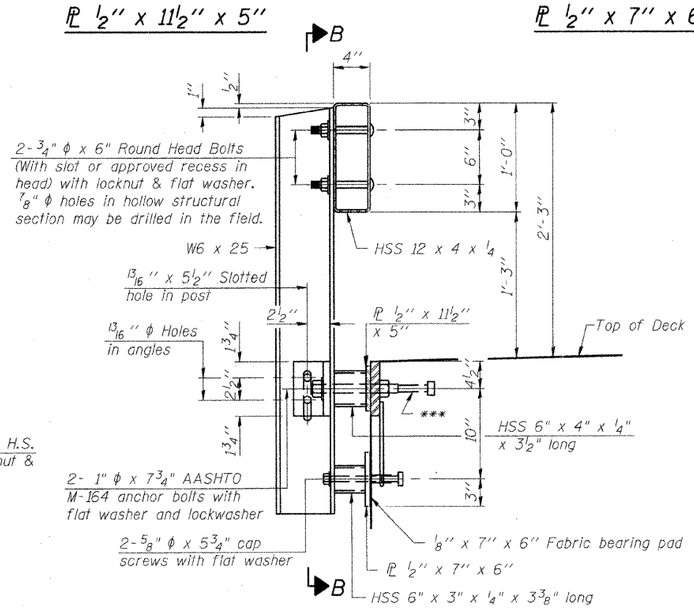


PL 1/2" x 7" x 6"

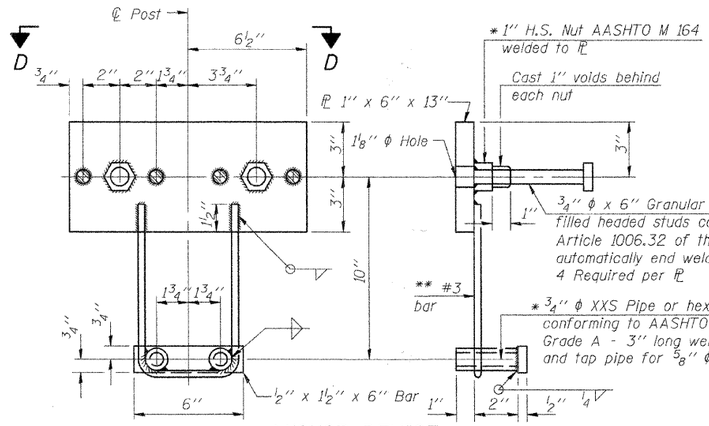
For Rail Post Spacing. See Partial Plan Sheet 8 of 26.



SECTION B-B



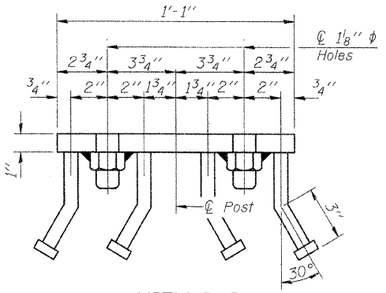
SECTION AT RAILING POST



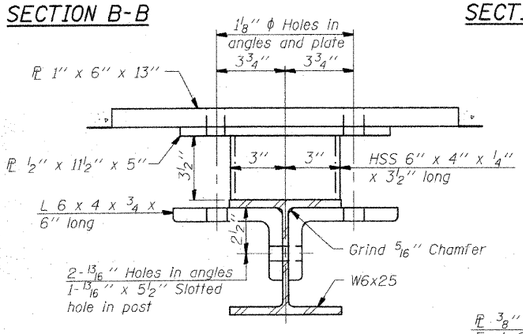
ANCHOR DEVICE

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

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

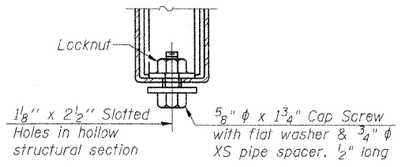


VIEW D-D

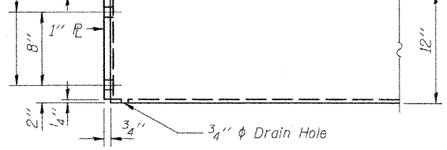


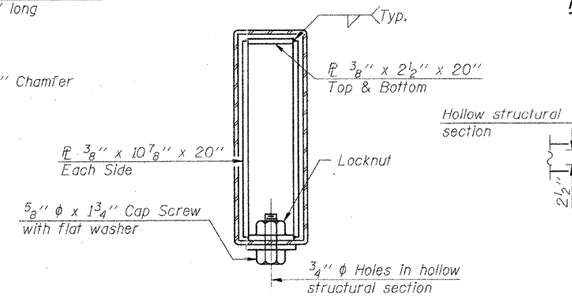
SECTION C-C

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

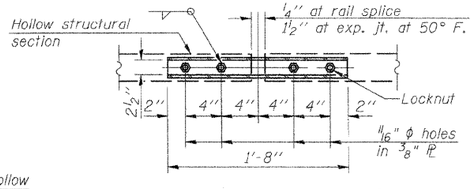


RAIL SPLICE CONNECTION AT EXPANSION JT.

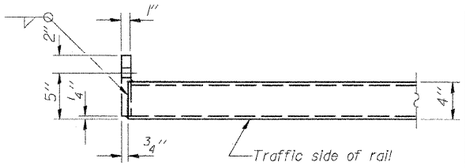




SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE PL TYPICAL



END OF RAIL DETAILS

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	896

STEEL RAILING, TYPE S-1
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MRM	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	JWM	02/04/08

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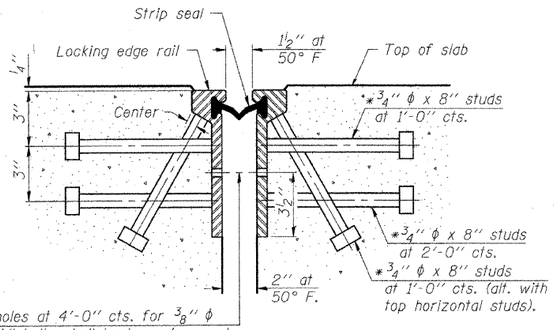
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	41
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

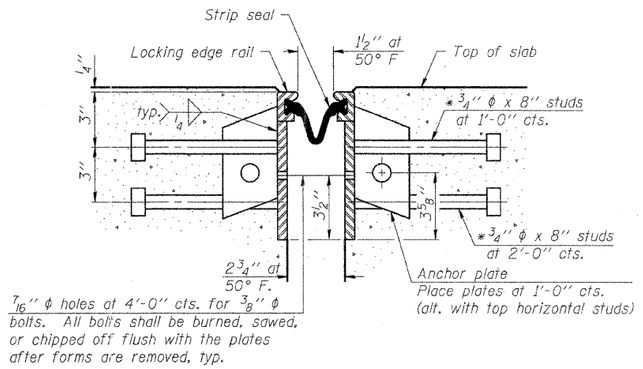
SHEET NO. 11
26 SHEETS

*Section 01-00061-00-BR Contract #95552

*Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SECTION THRU ROLLED RAIL JOINT



SECTION THRU WELDED RAIL JOINT

Notes:

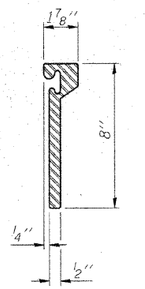
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

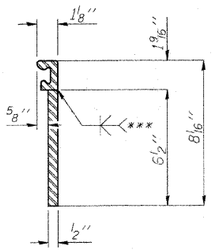
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

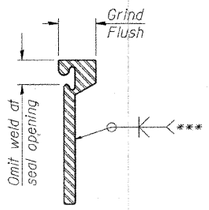
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.



ROLLED (EXTRUDED) RAIL



WELDED RAIL

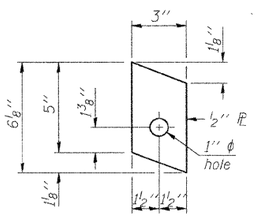


*** Back gouge not required if complete joint penetration is verified by mock-up.

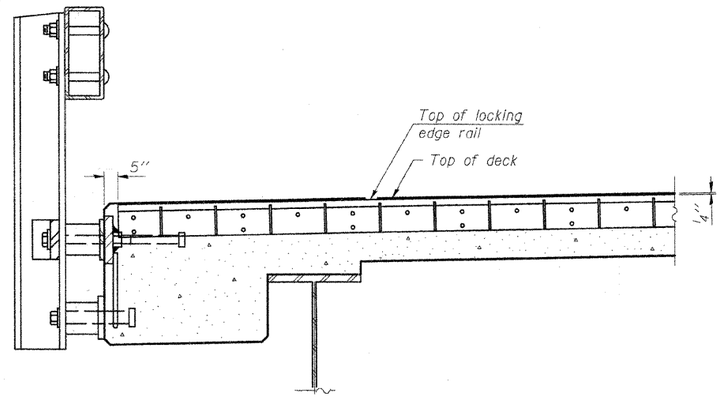
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

LOCKING EDGE RAILS



ANCHOR R
(for welded rail)



TYPICAL END TREATMENT AT OVERHANG

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	83.5

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LAYOUT	VNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	JWM	02/04/08

PREFORMED JOINT STRIP SEAL
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

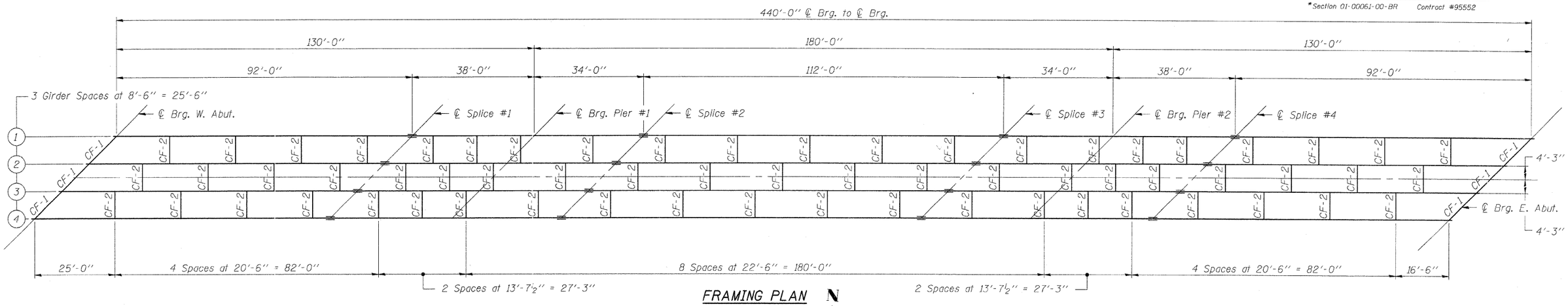
JOB NO. 01S2021B

DATE 02/04/08

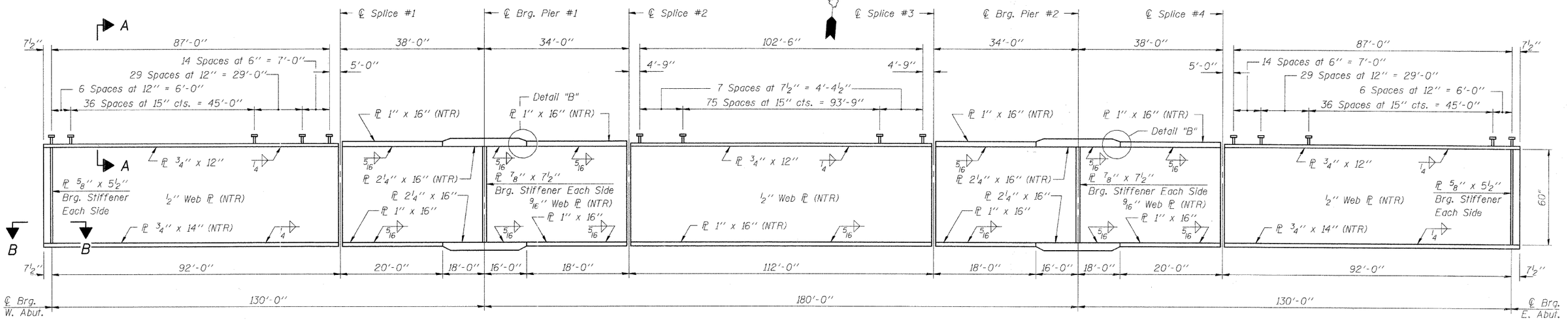
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	42
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 12
26 SHEETS

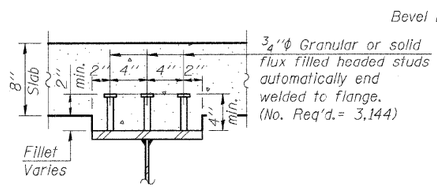
*Section 01-00061-00-BR Contract #95552



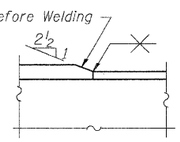
FRAMING PLAN



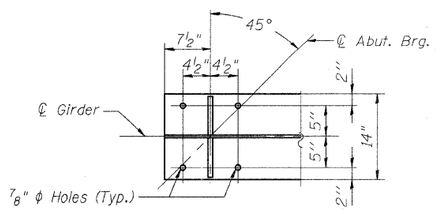
GIRDER ELEVATION



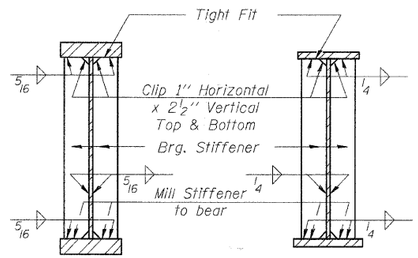
SECTION A-A



DETAIL "B"



SECTION B-B
(Typ. Each End)



SECTION AT PIER

SECTION AT ABUTMENT

Note:
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 at supports may be temporarily disconnected to install bearing anchor rods.
For cross frame details and splice plate details see sheet 13 of 26.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

STRUCTURAL STEEL
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 05/30/08

LAYOUT	MNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	JRM	02/04/08

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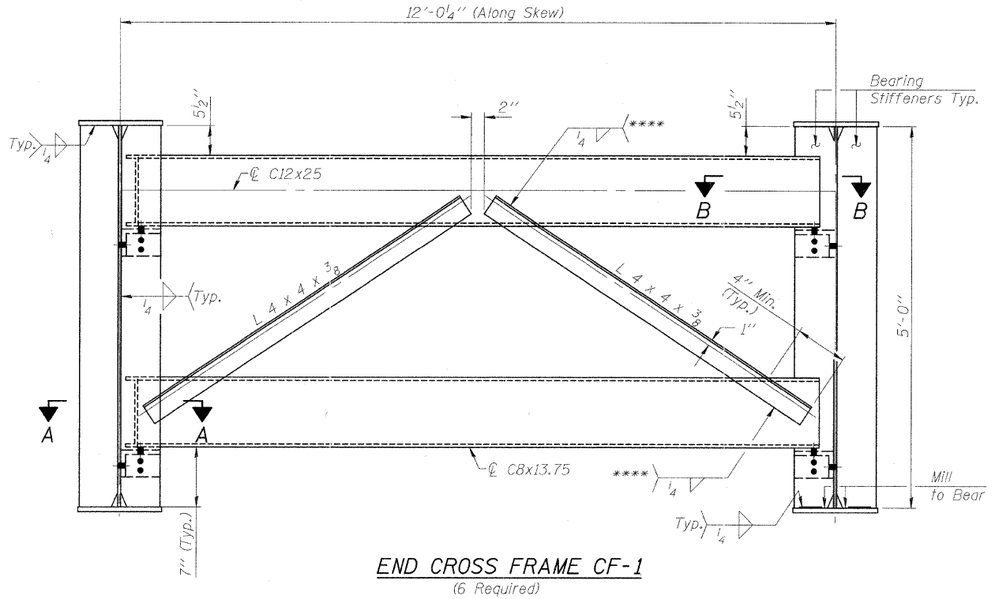
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	43
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 13
26 SHEETS

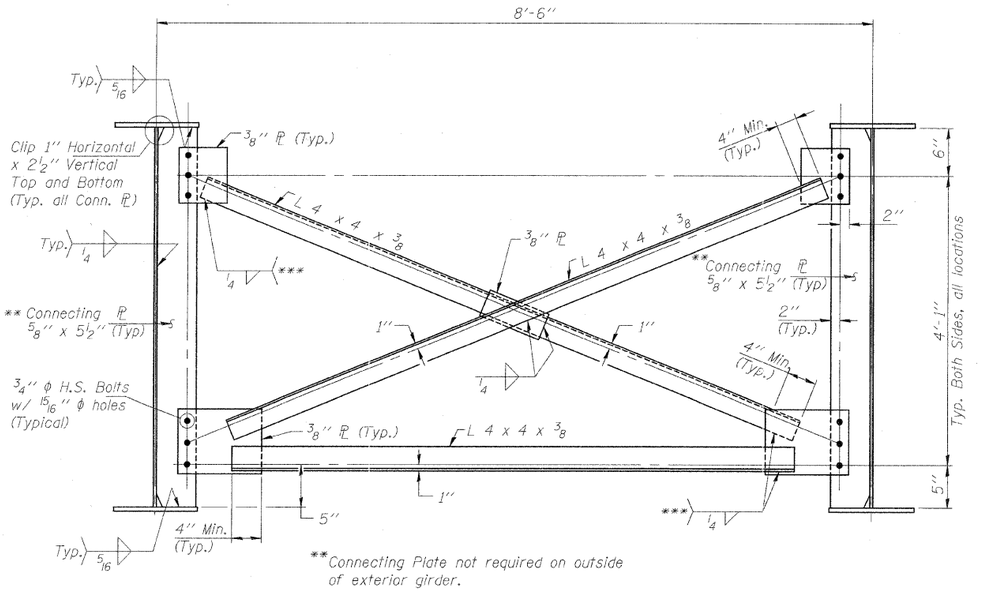
*Section 01-00061-00-BR Contract #95552



END CROSS FRAME CF-1

(6 Required)

**** 3 sides, to back face of channel only, Typ.

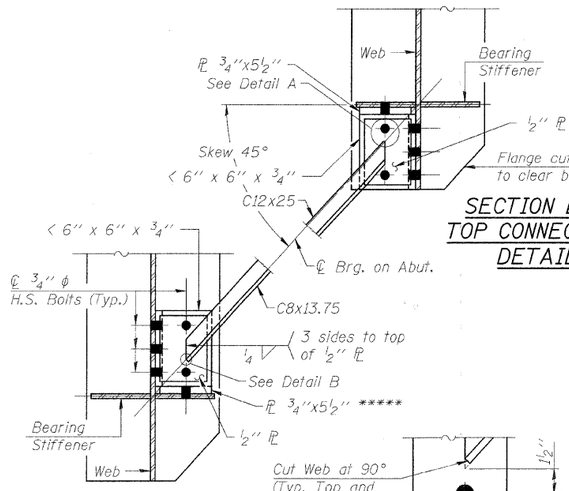


**Connecting Plate not required on outside of exterior girder.

***Fillet weld angles along 3 sides on one face of gusset plate.

INTERIOR CROSS FRAME CF-2

(63 Required)

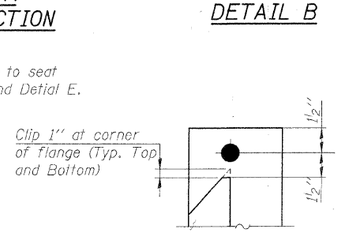


SECTION B-B TOP CONNECTION DETAIL

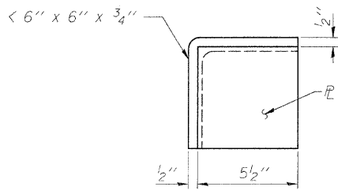
SECTION A-A BOTTOM CONNECTION DETAIL

***** Weld 3/4" x 5 1/2" plate to seat as shown in Detail D and Detial E.

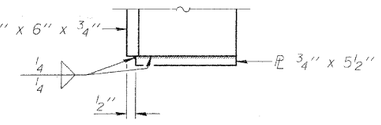
DETAIL B



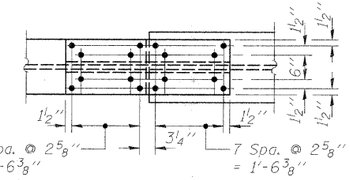
DETAIL A

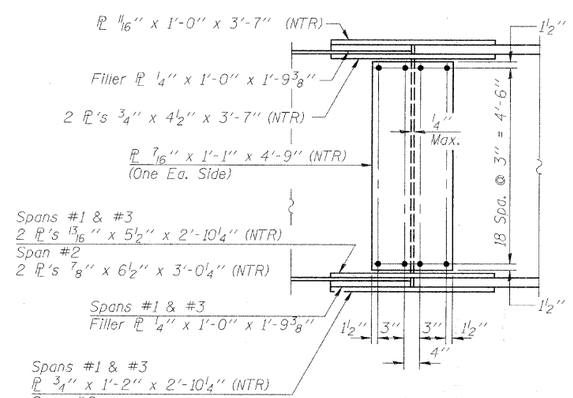


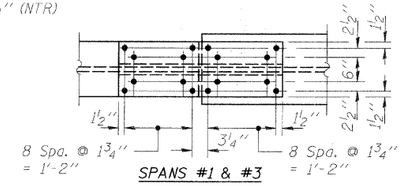
DETAIL D



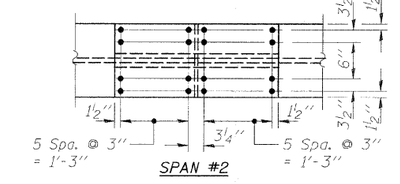
DETAIL E







SPANS #1 & #3



SPAN #2

FIELD SPLICE DETAIL

Notes:
Use 7/8" ϕ H.S. Bolts with 15/16" ϕ holes for all Splice Connections.
Two hardened washers shall be required over all oversized holes.
Load carring components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
Place diaphragm with projected legs outward from abutment backwall.
Use 3/4" ϕ H.S. Bolts with 15/16" ϕ holes for all cross frame connections.

STRUCTURAL STEEL DETAILS (SHEET 1)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 04/30/08

LAYOUT	MNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	JWM	02/04/08

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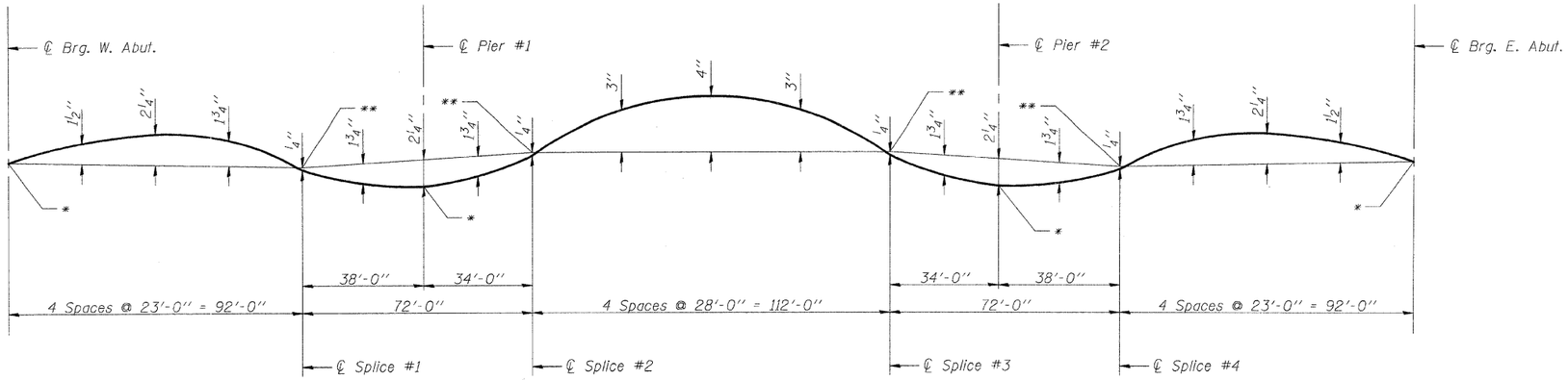
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	44
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 14
26 SHEETS

*Section 01-00061-00-BR Contract #95552



CAMBER DIAGRAM

* See Table for Final Top of Web Elevations at abutments and piers.
** Theoretical Top of Web Elevations before dead load deflection.

***TOP OF WEB ELEVATIONS

	Girder #1	Girder #2	Girder #3	Girder #4
℄ Brg. W. Abut.	553.953	554.123	554.123	553.953
℄ Splice #1	553.920	554.090	554.090	553.920
℄ Pier #1	553.800	553.970	553.970	553.800
℄ Splice #2	554.009	554.179	554.179	554.009
℄ Splice #3	554.009	554.179	554.179	554.009
℄ Pier #2	553.800	553.970	553.970	553.800
℄ Splice #4	553.920	554.090	554.090	553.920
℄ Brg. E. Abut.	553.953	554.123	554.123	553.953

*** For Fabrication ONly

	INTERIOR GIRDER MOMENT TABLE			
		0.4 Sp. 1 or 0.6 Sp. 3	0.5 Sp. 2	Pier 1 & 2
	I_s (in^4)	26951	31352	79907
	$I_c(n)$ (in^4)	67266	81773	-
	$I_c(3n)$ (in^4)	50087	59514	-
	S_s (in^3)	904	1157	2478
	$S_c(n)$ (in^3)	1284	1616	-
	$S_c(3n)$ (in^3)	1169	1478	-
	ℓ (k/')	1.11	1.14	1.56
	M_ℓ ('k)	941	1321	4370
	s_ℓ (k/')	0.42	0.42	-
	$M_s\ell$ ('k)	412	607	-
	M_L ('k)	1306	1598	1714
	M_{Imp} ('k)	256	288	308
	$\frac{5}{3}[M_L + M_{Imp}]$ ('k)	2603	3142	3370
	M_a ('k)	5143	6592	10062
****	M_u ('k)	5453	6995	-
	f_s ℓ non-comp (ksi)	12.50	13.70	21.16
	f_s ℓ (comp) (ksi)	4.23	4.93	-
	f_s $\frac{5}{3}[M_L + M_{Imp}]$ (ksi)	24.33	23.33	16.32
	f_s (Overload) (ksi)	41.07	41.97	37.49
*****	f_s (Total) (ksi)	-	-	48.73
	VR (k)	74	71	-

INTERIOR GIRDER REACTION TABLE			
		Abutments	Piers
R_ℓ	(k)	65.8	273.0
R_L	(k)	55.2	110.6
Imp.	(k)	10.8	19.9
R_{Total}	(k)	131.8	403.5

**** Compact section
***** Braced non-compact and partially braced section

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in.^{4} and in.^{3}).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in.^{4} and in.^{3}).

$I_c(3n)$, $S_c(3n)$: 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 and Overload) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).

ℓ: Un-factored non-composite dead load (kips/ft.).

M_ℓ: Un-factored moment due to non-composite dead load (kip-ft.).

s_ℓ: Un-factored long-term composite (superimposed) dead load (kips/ft.)

$M_s\ell$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_L: Un-factored live load moment (kip-ft.).

M_{Imp}: Un-factored moment due to impact (kip-ft.).

M_a: Factored design moment (kip-ft.).
$1.3\ [\ M_\ell + M_s\ell + \frac{5}{3}\ (M_L + M_{Imp})\ ]$

M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M_\ell + M_s\ell + \frac{5}{3}\ (M_L + M_{Imp})$

f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M_\ell + M_s\ell + \frac{5}{3}\ (M_L + M_{Imp})]$

VR: Maximum L + impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

STRUCTURAL STEEL DETAILS (SHEET 2)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 05/30/08

LAYOUT	MNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	JWM	02/04/08

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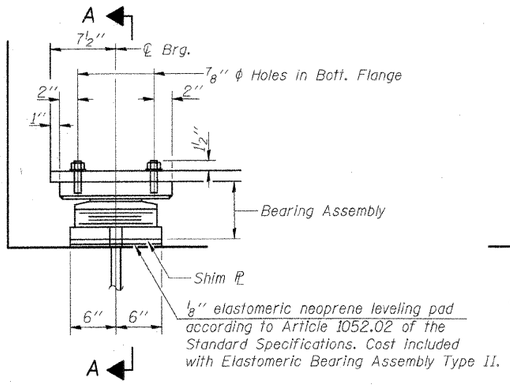
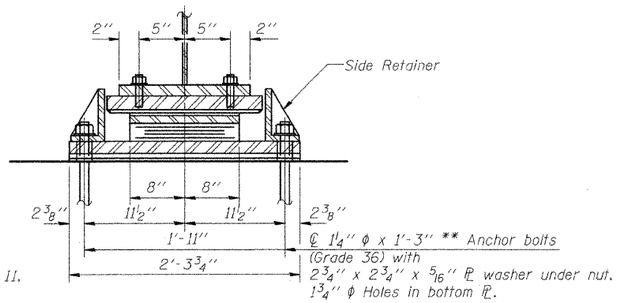
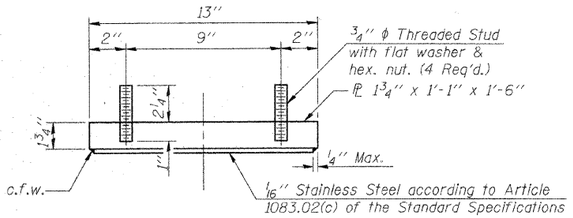


ELEVATION AT ABUT.

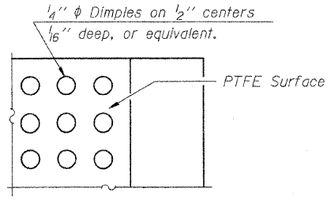


SECTION A-A

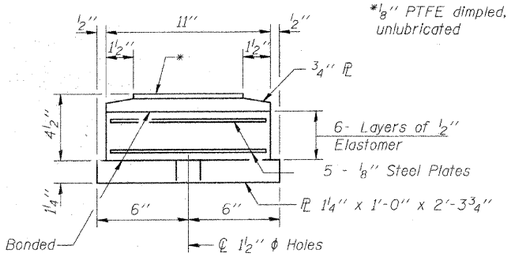
TYPE II ELASTOMERIC EXP. BRG.



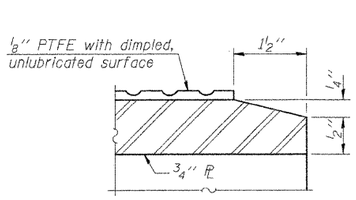
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

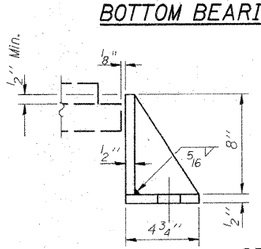


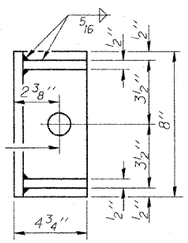
*⅛" PTFE dimpled, unlubricated



SECTION THRU PTFE

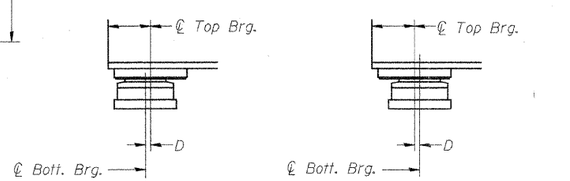
BOTTOM BEARING ASSEMBLY





SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SETTING ANCHOR BOLTS AT EXP. BRG.

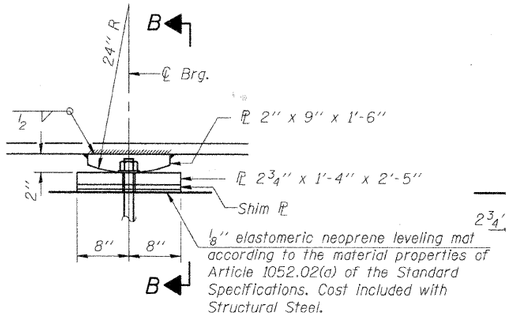
D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

** Lengths show are the required total lengths for cast-in-place headed anchor bolts. The required total length for the sealed capsule alternative anchor bolt shall be according to the manufacturer's recommendations.

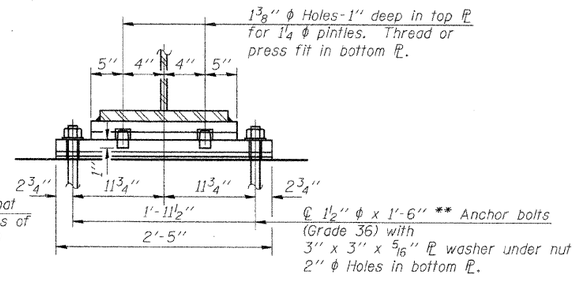
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	45
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 15
26 SHEETS

*Section 01-00061-00-BR Contract #95552

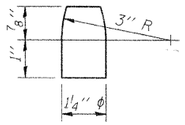


ELEVATION AT PIER



SECTION B-B

FIXED BEARING



PINTLE

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.

Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	8
Steel Bearing Assembly	Each	8
Anchor Bolts, 1¼" ϕ	Each	16
Anchor Bolts, 1½" ϕ	Each	16

ELASTOMERIC BEARING ASSEMBLY, TYPE II
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

Hanson Professional Services Inc.

JOB NO. 015202IB
DATE 02/04/08

LAYOUT	MMM	11/30/07
DRAWN	DAP	12/26/07
REVIEWED	JMM	02/04/08

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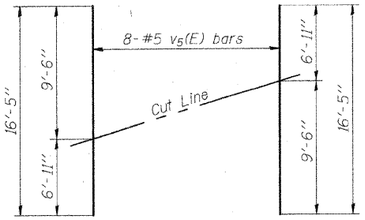
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	46
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 16
26 SHEETS

*Section 01-00061-00-BR Contract #95552

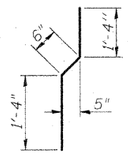
PILE DATA

Type: Steel Piles HP10x42
Nominal Required Bearing: 335 K
Allowable Resistance Available: 111 K
Est. Length: 36' (W. Abut.) - 67' (E. Abut.)
No. Production Piles: 10 Each Abutment
No. Test Piles: 1 Each Abutment

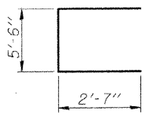


FIELD CUTTING DIAGRAM

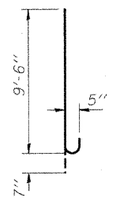
Order v5(E) full length. Cut as shown and use remainder of bars in opposite face.



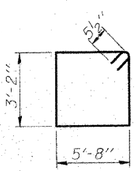
BAR v1(E)



BAR u(E)



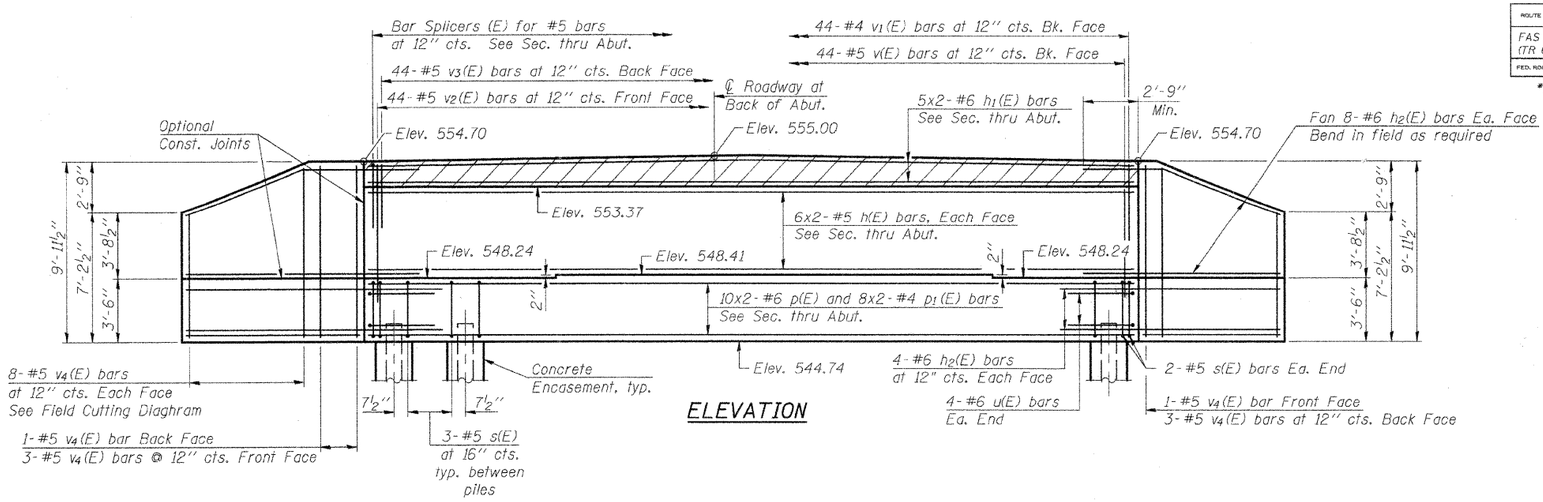
BAR v4(E)



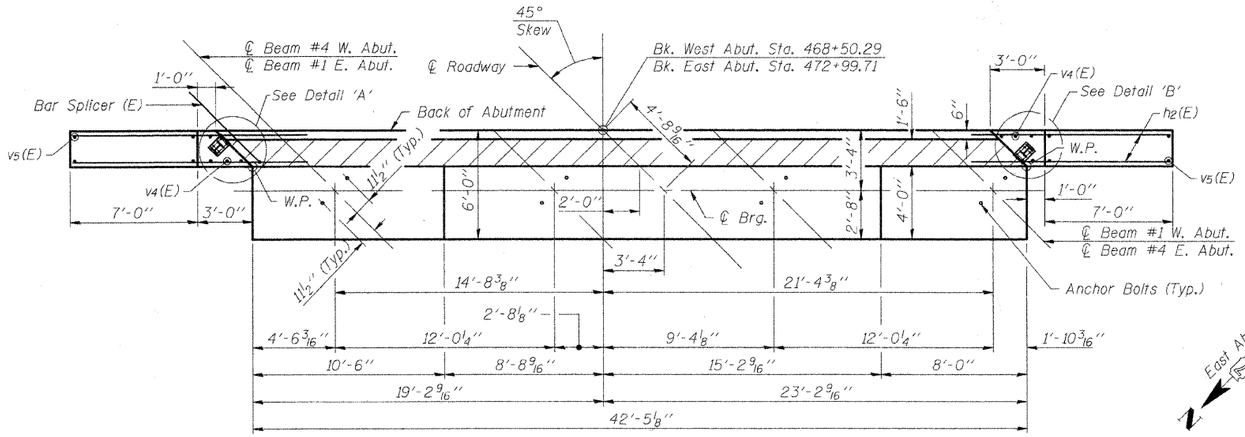
BAR s(E)

MIN. BAR LAPS

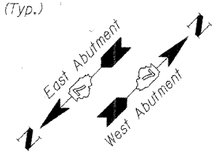
#4 Bar - 1'-8"
#5 Bar - 2'-2"
#6 Bar - 2'-7"

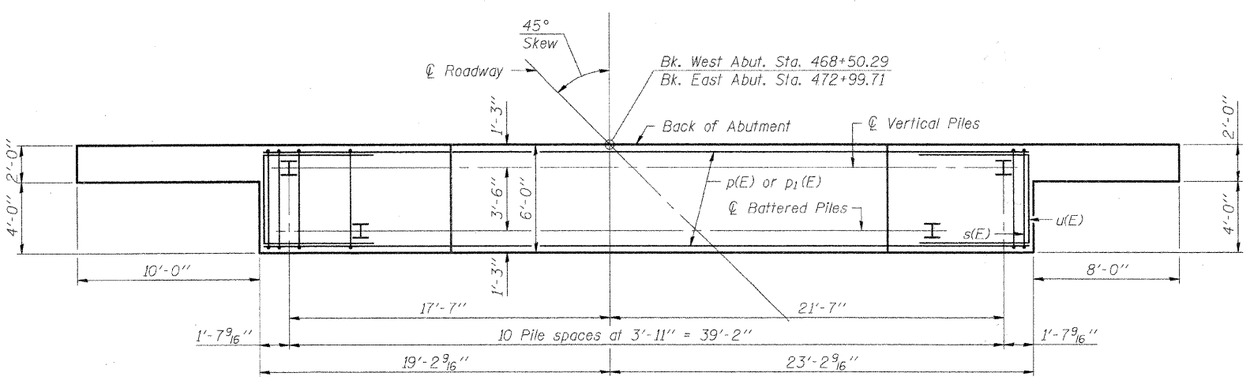


ELEVATION



TOP VIEW





PLAN-PILE CAP

2-ABUTMENTS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	48	#5	22'-3"	
h1(E)	20	#6	22'-6"	
h2(E)	96	#6	10'-2"	
p(E)	40	#6	22'-6"	
p1(E)	32	#4	22'-0"	
s(E)	68	#5	18'-7"	
u(E)	16	#6	10'-8"	
v(E)	88	#5	7'-4"	
v1(E)	88	#4	3'-2"	
v2(E)	88	#5	8'-9"	
v3(E)	88	#5	3'-2"	
v4(E)	16	#5	9'-7"	
v5(E)	32	#5	16'-5"	

Concrete Structures	Cu. Yd.	123.1
Reinforcement Bars, Epoxy Coated	Pound	9310
Furnishing Steel Piles, HP10x42	Foot	1030
Driving Piles	Foot	1030
Test Pile Steel HP10x42	Each	2
Concrete Encasement	Cu. Yd.	7.6
Concrete Sealer	Sq. Ft.	342

For details of Bar Splicers, see sheet 20 of 26.
For details of piles and Concrete Encasement, see sheet 21 of 26.
Bars indicated thus 10x2-#6 etc. indicates 10 lines of bars with 2 lengths per line.
For Section thru Abutment, Section thru Wing and Detail "A" & "B", see sheet 17 of 26.
Structure Excavation required shall be according to Article 502 of the Standard Specifications. Cost for Structure Excavation included with Concrete Structures.

LAYOUT	MNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	JNM	02/04/08

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ABUTMENT
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

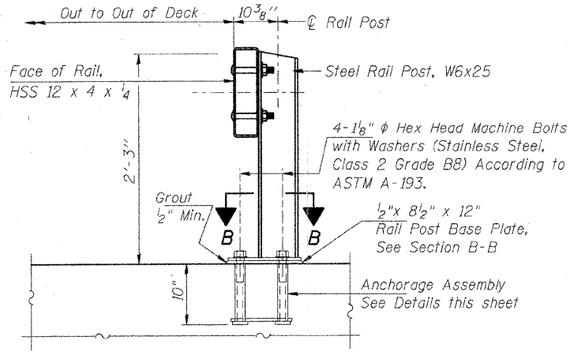
HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

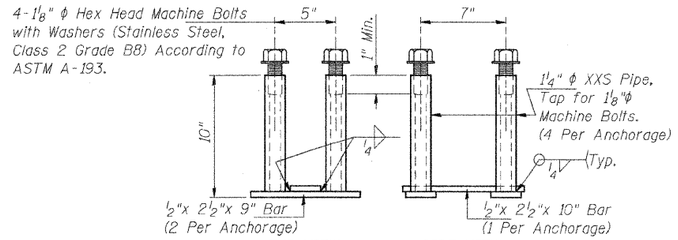
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	47
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 17
26 SHEETS

*Section 01-00061-00-BR Contract #95552



TYPICAL SECTION thru STEEL RAILING ATTACHED TO WINGWALL



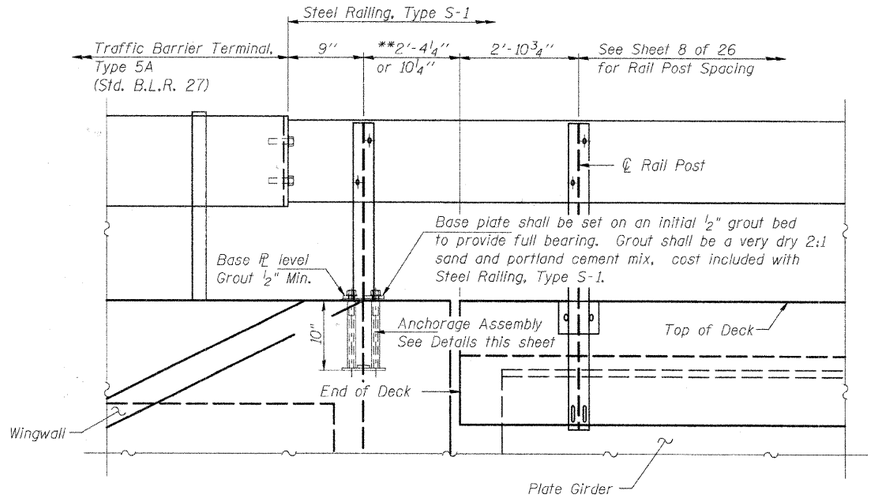
ANCHORAGE ASSEMBLY

(4 REQUIRED)

In lieu of the cast-in-place anchorage assembly shown, the Contractor has the option of drilling and epoxy grouting 1" ϕ anchor rods. Embedment shall be according to the manufacturer's specifications.

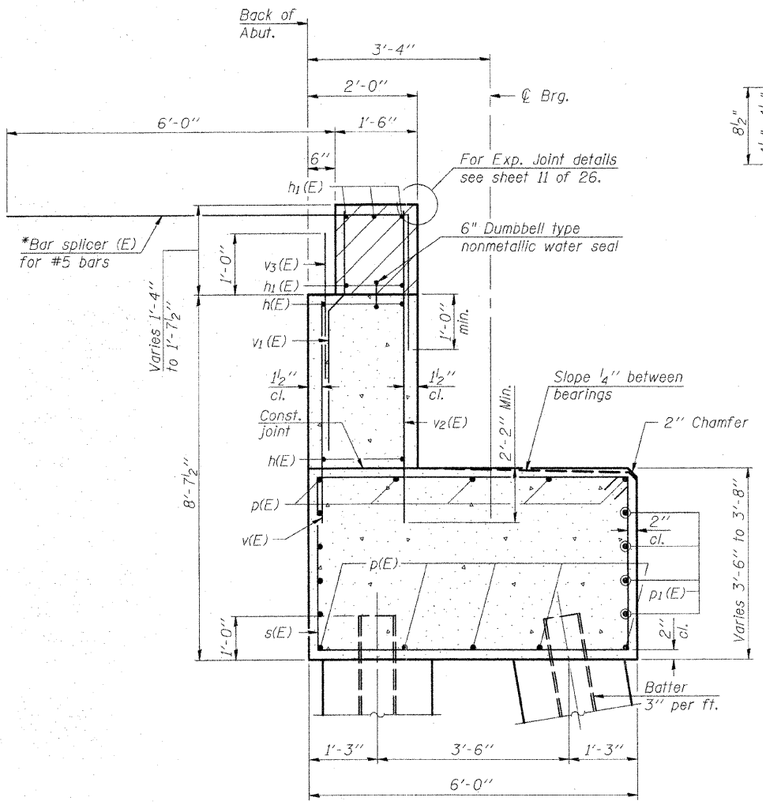
Cost of cast-in-place anchorage assemblies shall be included in the cost of Steel Railing, Type S-1.

Pipe shall conform to the requirements of ASTM designation A53, Grade B. Steel shapes and plates shall conform to the requirements of AASHTO M270, Grade 36.



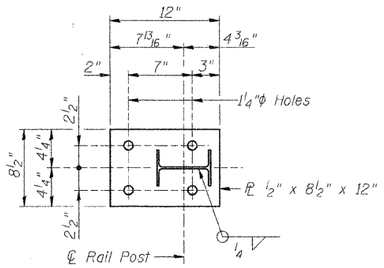
PARTIAL ELEVATION VIEW

(Dimensions shown along ℄ Roadway unless otherwise noted.)
** See sheet 8 of 26 for locations.

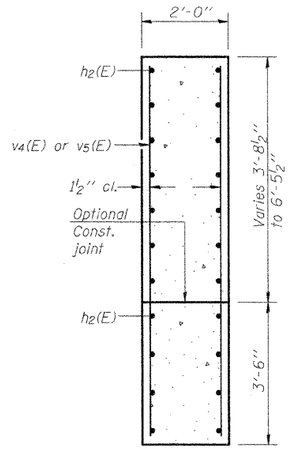


SEC. THRU ABUT.

* Place parallel to approach slab reinforcement.

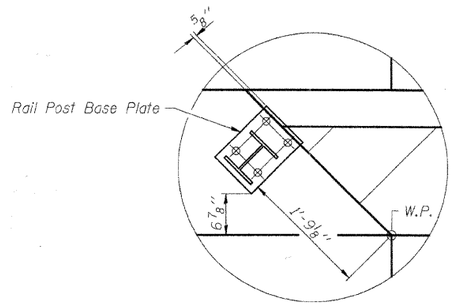


SECTION B-B

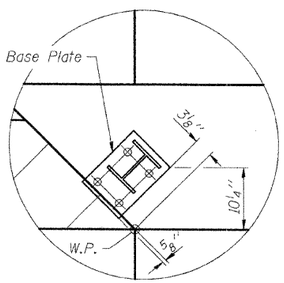


SECTION THRU WING

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For Concrete Encasement details, see sheet 21 of 26.



DETAIL 'A'



DETAIL 'B'

ABUTMENT DETAILS
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	WMM	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	JWM	02/04/08

04/01/2008 03:06 PM
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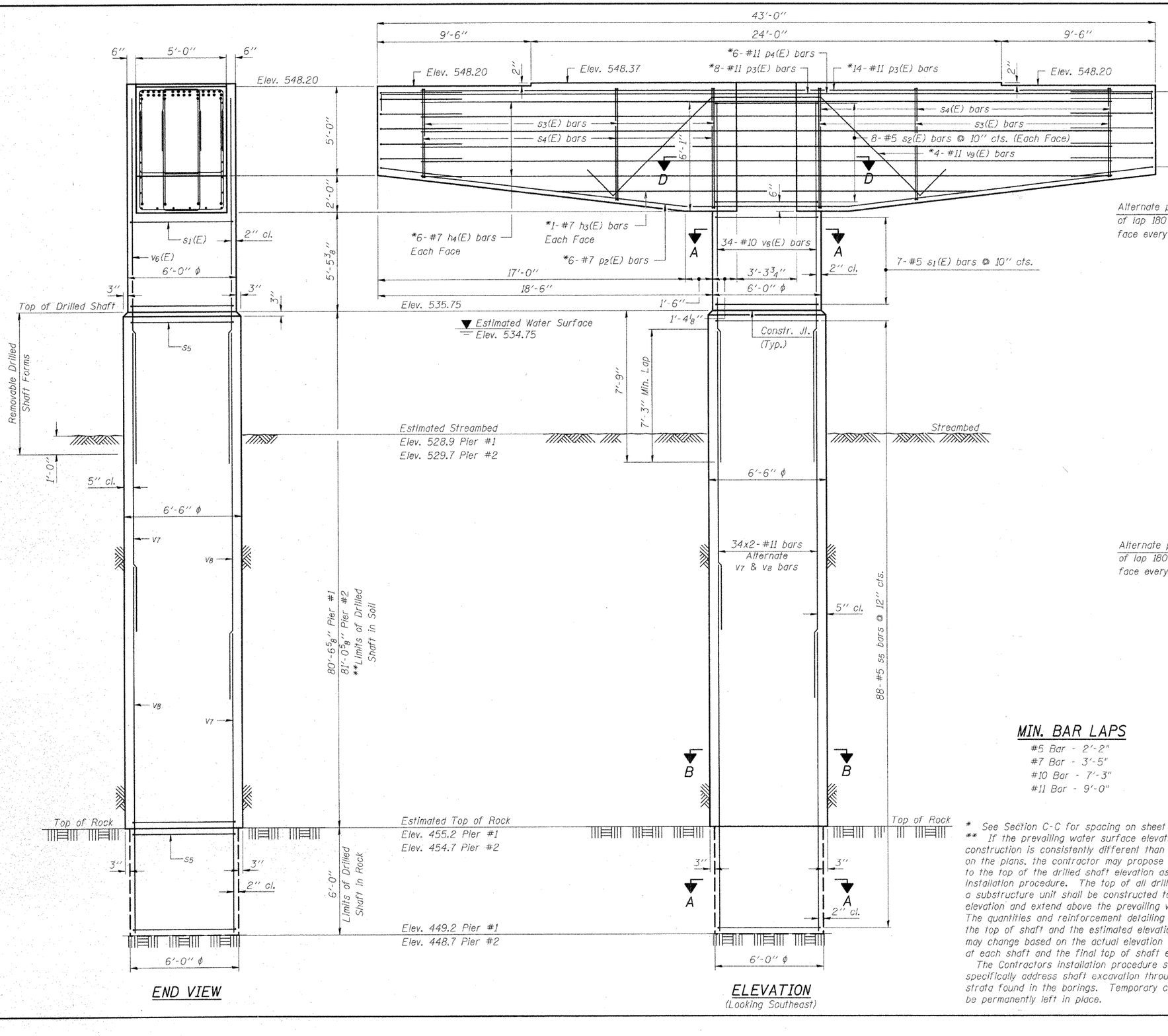
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	48
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

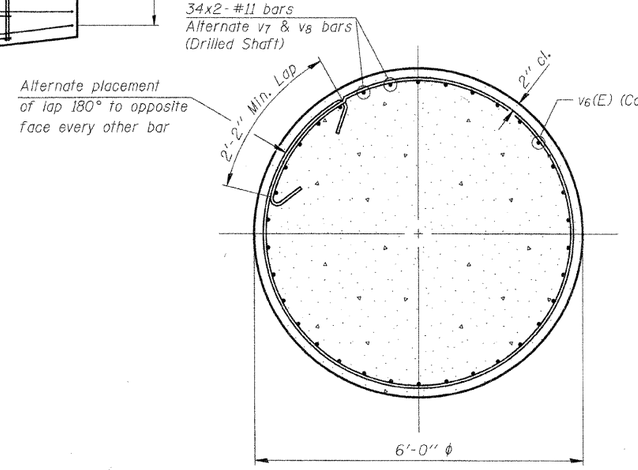
SHEET NO. 18
26 SHEETS

*Section 01-00061-00-BR Contract #95552

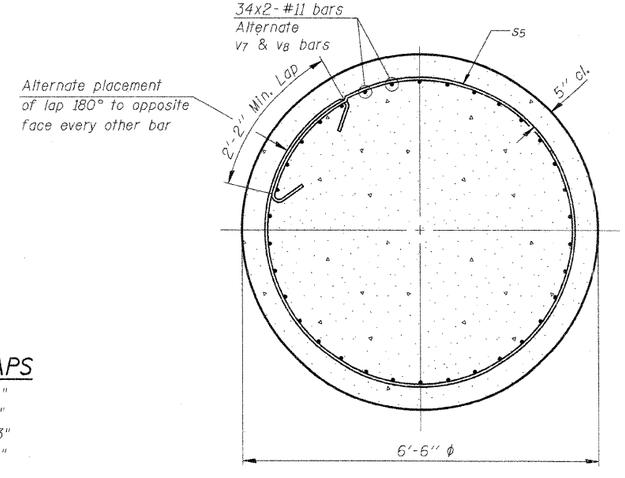


END VIEW

ELEVATION
(Looking Southeast)



SECTION A-A



SECTION B-B

MIN. BAR LAPS

#5 Bar - 2'-2"
#7 Bar - 3'-5"
#10 Bar - 7'-3"
#11 Bar - 9'-0"

* See Section C-C for spacing on sheet 19 of 26.
** If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevation encountered at each shaft and the final top of shaft elevation.
The Contractors installation procedure submittal shall specifically address shaft excavation through the sand strata found in the borings. Temporary casing shall not be permanently left in place.

See Sheet 19 of 26 for Section D-D.

PIER
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	VNM	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	JNM	02/04/08

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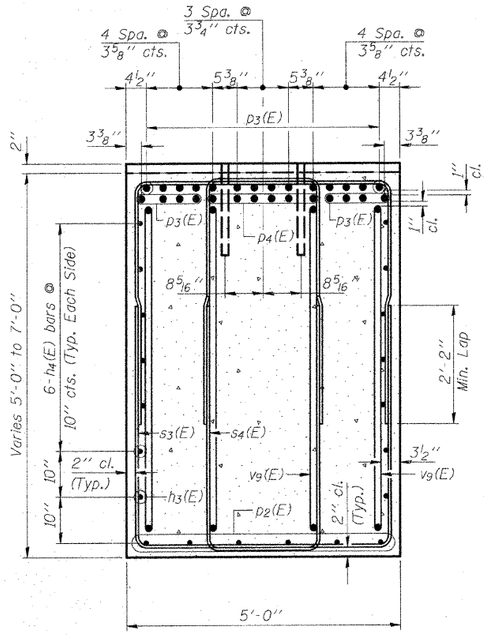
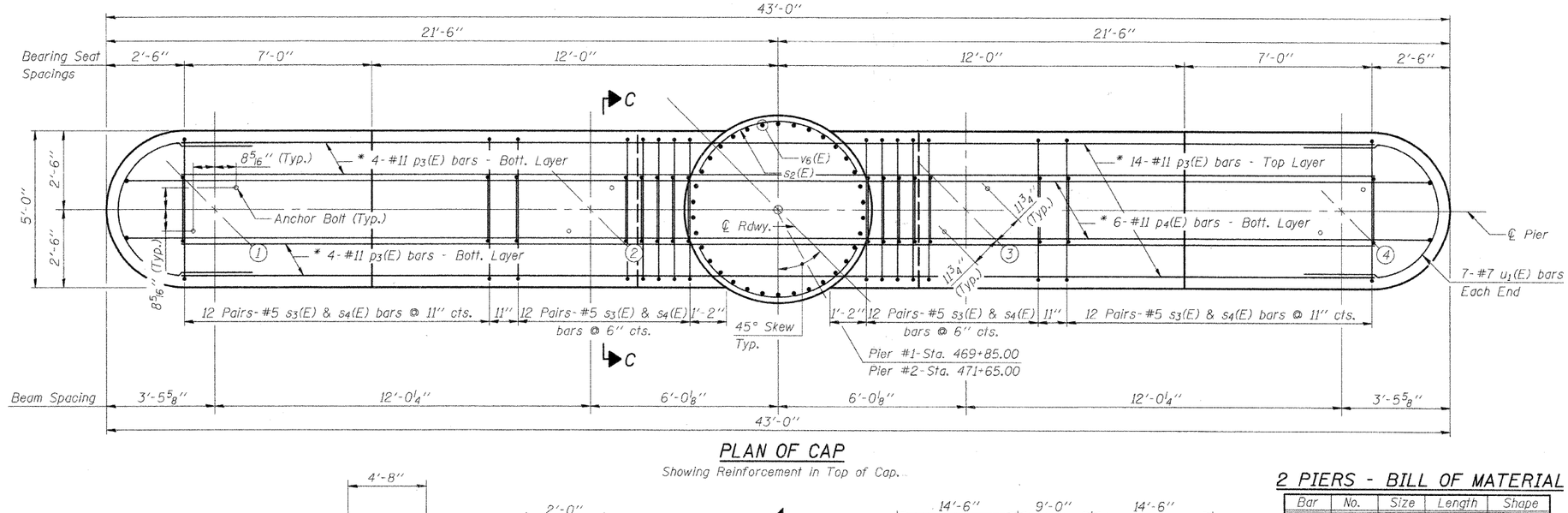
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	49
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 19
26 SHEETS

*Section 01-00061-00-BR Contract #95552

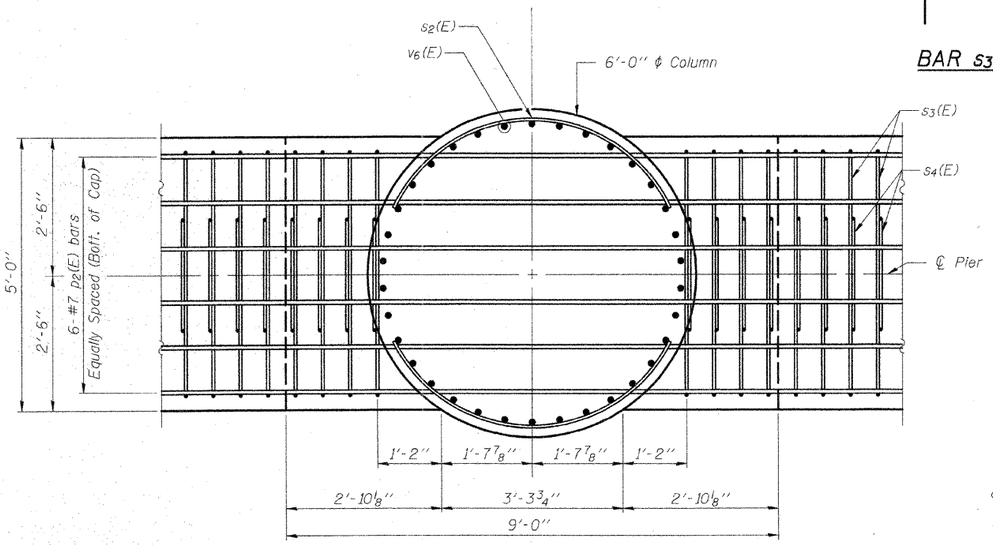


SECTION C-C



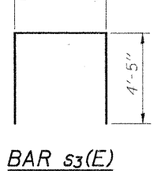
PLAN OF CAP

Showing Reinforcement in Top of Cap.

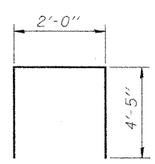


SECTION D-D

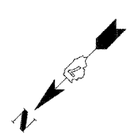
Showing Reinforcement in Bottom of Cap.

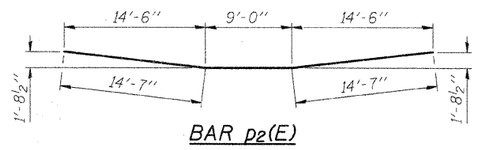


BAR s3(E)

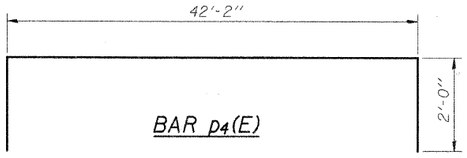


BAR s4(E)

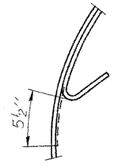




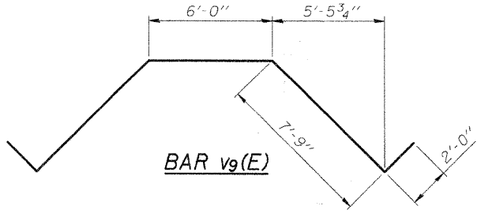
BAR p2(E)



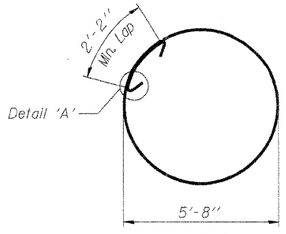
BAR p4(E)



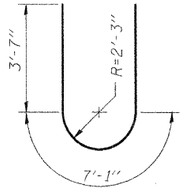
DETAIL 'A'



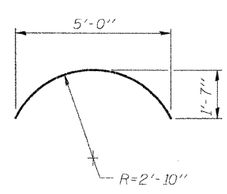
BAR v9(E)



BARS s1(E) or s5



BAR u1(E)



BAR s2(E)

MIN. BAR LAPS

#5 Bar - 2'-2"
#7 Bar - 3'-5"
#10 Bar - 7'-3"
#11 Bar - 9'-0"

2 PIERS - BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	4	#7	23'-2"	
h4(E)	24	#7	38'-0"	
p2(E)	12	#7	38'-2"	
p3(E)	44	#11	38'-0"	
p4(E)	12	#11	46'-2"	
s1(E)	14	#5	20'-11"	
s2(E)	32	#5	6'-4"	
s3(E)	192	#5	13'-6"	
s4(E)	192	#5	10'-10"	
s5	176	#5	20'-11"	
u1(E)	28	#7	14'-3"	
v6(E)	68	#10	19'-3"	
v7	68	#11	43'-5"	
v8	68	#11	52'-5"	
v9(E)	8	#11	25'-6"	
Concrete Structures			Cu. Yd.	110.9
Reinforcement Bars, Epoxy Coated			Pound	27740
Reinforcement Bars			Pounds	38460
Drilled Shaft in Soil			Cu. Yd.	198.6
Drilled Shaft in Rock			Cu. Yd.	12.6

Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.

PIER DETAILS
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/29/07
DRAWN	DAP	12/28/07
REVIEWED	JMM	02/04/08

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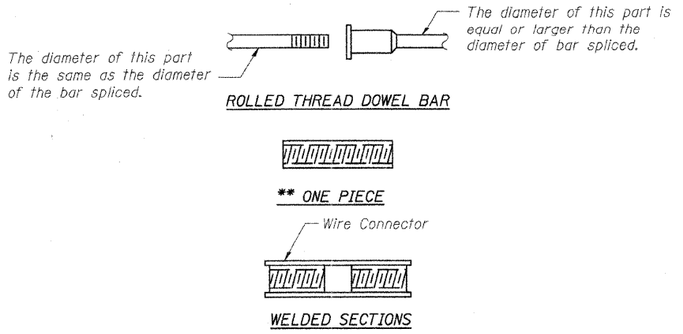
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	50
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

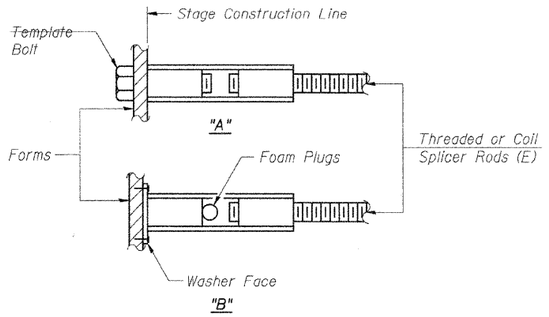
SHEET NO. 20
26 SHEETS

*Section 01-00061-00-BR Contract #95552



BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



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.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

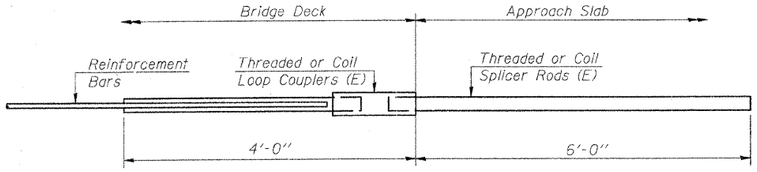
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times fy \times A_t$

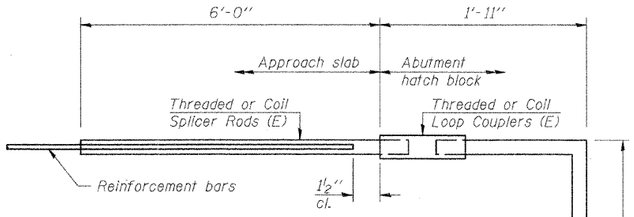
Where fy = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



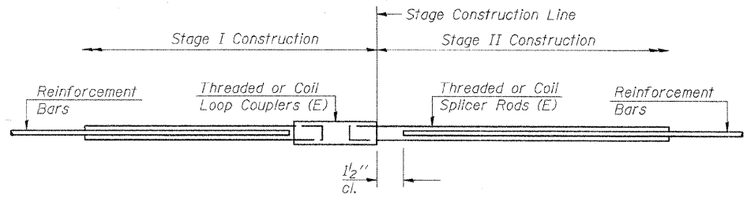
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required =



FOR STUB ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 62



STANDARD

Bar Size	No. Assemblies Required	Location

BAR SPLICER ASSEMBLY DETAILS
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNW	11/30/07
DRAWN	SMF	12/28/07
REVIEWED	JNW	02/04/08

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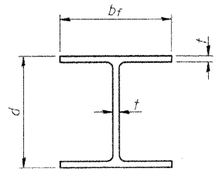
BSD-1

11-1-06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	51
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

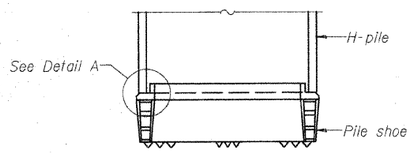
SHEET NO. 21
26 SHEETS

*Section 01-00061-00-BR Contract #95552

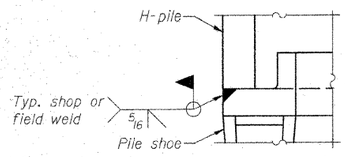


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	$14\frac{1}{4}''$	$14\frac{7}{8}''$	$\frac{13}{16}''$	30''
x102	14''	$14\frac{3}{4}''$	$\frac{11}{16}''$	30''
x89	$13\frac{7}{8}''$	$14\frac{3}{4}''$	$\frac{5}{8}''$	30''
x73	$13\frac{5}{8}''$	$14\frac{5}{8}''$	$\frac{1}{2}''$	30''
HP 12x84	$12\frac{1}{4}''$	$12\frac{1}{4}''$	$\frac{11}{16}''$	24''
x74	$12\frac{1}{8}''$	$12\frac{1}{4}''$	$\frac{5}{8}''$	24''
x63	12''	$12\frac{1}{8}''$	$\frac{1}{2}''$	24''
x53	$11\frac{3}{4}''$	12''	$\frac{7}{16}''$	24''
HP 10x57	10''	$10\frac{1}{4}''$	$\frac{9}{16}''$	24''
x42	$9\frac{3}{4}''$	$10\frac{1}{8}''$	$\frac{7}{16}''$	24''
HP 8x36	8''	$8\frac{1}{8}''$	$\frac{7}{16}''$	18''

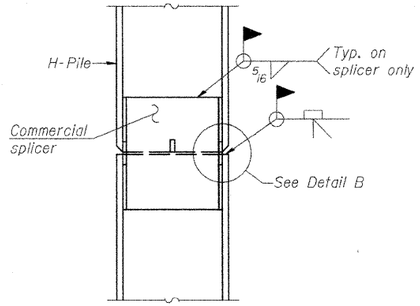


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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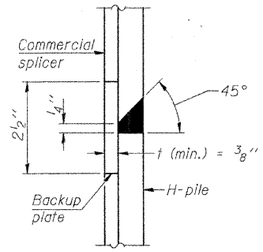
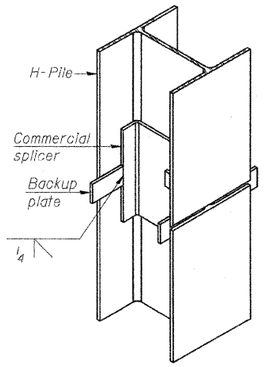
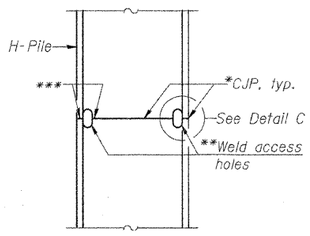


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



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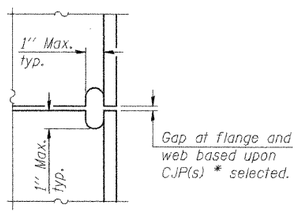
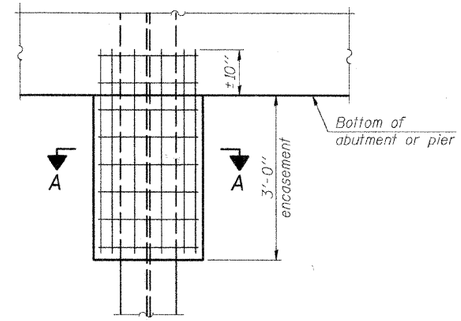


DETAIL C

COMPLETE PENETRATION WELD SPLICE



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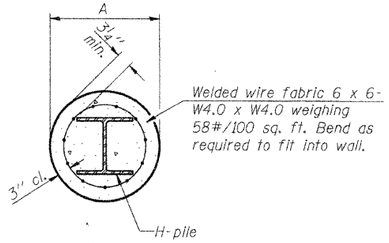
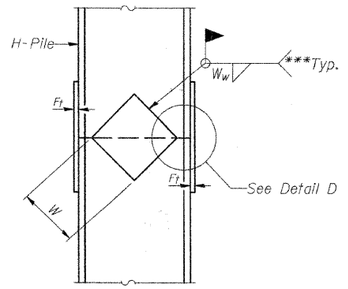


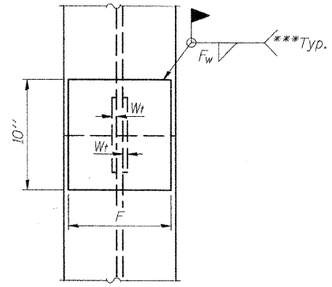
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

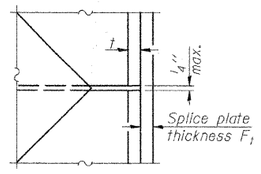
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	$12\frac{1}{2}''$	1''	$\frac{7}{8}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x102	$12\frac{1}{2}''$	$\frac{7}{8}''$	$\frac{3}{4}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x89	$12\frac{1}{2}''$	$\frac{3}{4}''$	$\frac{11}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x73	$12\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{9}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
HP 12x84	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x74	10''	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x63	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x53	10''	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 10x57	8''	$\frac{3}{4}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x42	8''	$\frac{5}{8}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 8x36	7''	$\frac{5}{8}''$	$\frac{7}{16}''$	$4\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$

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

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

***Interrupt welds ¼'' from end of each pile.

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

STEEL H-PILES
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	MNM	02/04/08

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F-HP 9-3-07

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	52
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 22
26 SHEETS

*Section 01-00061-00-BR Contract #95552

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 3

Date 9/19/05

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension - Embarras River Bridge LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-3191
Station

BORING NO. 1 W Abut
Station 469+00
Offset 10.00ft Lt
Ground Surface Elev. 542.99 ft

Surface Water Elev. 531.67 ft
Stream Bed Elev. 529.00 ft

Groundwater Elev.:
First Encounter 533.5 ft
Upon Completion Washed ft
After 24 Hrs. 533.6 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gravel. 542.19			
Very stiff, very moist, brown, SANDY CLAY. Samples pokerchipped.	3		
	4	2.5	14
	4	PP	
538.49			
Medium to stiff, very moist, brown, SANDY LOAM.	3		
	4	1.0	10
	5	PP	
535.99			
Very stiff, damp, brown, CLAY w/ some Sand.	5		
	6	3.5	18
	6	PP	
533.49			
Very loose, wet, brown, fine grained, SAND. 18% passing #200 sieve.	1		
	2		23
	2		
	1		
9% passing #200 sieve.	0		25
	3		
	0		
12% passing #200 sieve.	1		27
	2		
	10		
8% passing #200 sieve. 524.69	17		21
	33		
Brown marbled gray, CLAY TILL w/ one 1.5" rock fragment. 523.49			
	30		
Hard, very moist, gray, SANDY CLAY TILL. (continued)			
	41	5.0	9
	47	S	
520.99			
Very stiff, damp, gray, CLAY TILL.	19		
	32	3.6	10
	33	B	
	14		
	29	8.7	11
	30	B	
	12		
	15	6.4	11
	23	B	
	10		
	19	6.2	11
	30	B	
	11		
	16	4.1	11
	18	B	
	5		

Latitude W 88 deg 08.851 min. Longitude N 39 deg 19.487 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 3

Date 9/19/05

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension - Embarras River Bridge LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-3191
Station

BORING NO. 1 W Abut
Station 469+00
Offset 10.00ft Lt
Ground Surface Elev. 542.99 ft

Surface Water Elev. 531.67 ft
Stream Bed Elev. 529.00 ft

Groundwater Elev.:
First Encounter 533.5 ft
Upon Completion Washed ft
After 24 Hrs. 533.6 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, damp, gray, CLAY TILL. (continued)	9	2.6	13
	14	B	
-45	3		
	6	2.4	14
	11	B	
-50	3		
	6	1.8	14
	9	B	
-55			
	3		
-60			
Very stiff, damp, gray, CLAY TILL. (continued)	6	1.5	22
	8	B	
-65			
	3		
-70			
	6	1.9	22
	9	B	
-75			
Very dense, moist, gray, CLAY SHALE w/ Sand. 466.99	36		
	50/4"		10
Borehole continued with rock coring.	50/2"		
-80			

Latitude W 88 deg 08.851 min. Longitude N 39 deg 19.487 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Page 3 of 3

Date 9/19/05

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension - Embarras River Bridge LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 018-3191
Station

BORING NO. 1 W Abut
Station 469+00
Offset 10.00ft Lt
Ground Surface Elev. 542.99 ft

CORING BARREL TYPE & SIZE NW, conv dbi bbl, split inner

Core Diameter 2.06 In
Top of Rock Elev. 467.99 ft
Begin Core Elev. 466.99 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Gray, slighty weathered, easily scratched, CLAY SHALE. 466.99		68	48	0.7	
Sandstone fragments.					
-80					
461.99					
Gray, SANDY CLAY SHALE.		100	41	1	
458.99					
Gray, LIMESTONE. 458.59					
Gray, SANDY CLAY SHALE.					
-85					
456.99					
Extent of exploration.					
Benchmark: Iron pin Sta 480+92.08, Lt 1.36' = 545.90' Provided by Cumberland County Engineer.					
-90					
-95					

Color pictures of the cores None
Cores will be stored for examination until None
The "Strength" column represents the unioaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

LAYOUT	MNM	11/30/07
DRAWN	DJP	12/28/07
REVIEWED	JWM	02/04/08

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BORINGS (SHEET 1)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01IS2021B

DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	53
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 23
26 SHEETS

*Section 01-00061-00-BR Contract #95552

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Page 1 of 2

Date 11/7/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension-Embarras River Bridge LOGGED BY Ryan Keedy

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3rd PM

COUNTY Cumberland DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto 140#

STRUCT. NO. 081-3191
Station 470+75

BORING NO. 3 W. Pier
Station 469+70
Offset 5.00ft RT.
Ground Surface Elev. 532.20 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 531.2 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Loose, brown silty fine to coarse sand.			
	2		
	2		20.1
	1		
	3		
-5	4		
	4		
526.20 Hard, gray very silty clay, trace gravel.	8		
	17	7.9	10.6
	24	S	
523.70 Hard, gray sandy silt, trace gravel & clay.	6		
	11		12.6
-10	12		
	6		
	11		10.9
-15	17		
516.20 Hard, gray silty clay, trace gravel.			
	6		
	14	12.7	11.4
-20	24	B	
Hard, gray silty clay, trace gravel. (continued)			
	5		
	10	6.6	12.1
-25	16	B	
504.20 Hard, gray silty clay, little sand & trace gravel.	8		
	19	9.7	10.1
-30	22	BS	
500.20 Very stiff, gray silty clay, trace gravel.			
	5		
	14	3.9	13.5
-35	15	B	
	4		
	6	3.3	16.1
-40	9	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Page 2 of 2

Date 11/7/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension-Embarras River Bridge LOGGED BY Ryan Keedy

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3rd PM

COUNTY Cumberland DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto 140#

STRUCT. NO. 081-3191
Station 470+75

BORING NO. 3 W. Pier
Station 469+70
Offset 5.00ft RT.
Ground Surface Elev. 532.20 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 531.2 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, gray silty clay, trace gravel. (continued)			
	8		
	11	8.5	11.2
-45	14	B	
484.20 Stiff to very stiff, gray silty clay, trace gravel, trace wood fragments.	4		
	8	3.5	23.2
-50	9	B	
	3		
	5	3.1	21.9
-55	9	B	
	7		
	10	1.9	28.1
-60	14	B	
Stiff to very stiff, gray silty clay, trace gravel, trace wood fragments. (continued)			
	5		
	8	3.7	23.9
-65	8	B	
	3		
	6	3.1	23.4
-70	9	B	
	5		
	7	3.1	22.7
-75	12	B	
455.20 Very soft, dark gray clayey shale.			
453.45 End of Boring	50/3"		13.7
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MNM	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	JWM	02/04/08

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BORINGS (SHEET 2)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B

DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	54
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 24
26 SHEETS

*Section 01-00061-00-BR Contract #95552

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Date 11/8/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension-Embarras River Bridge LOGGED BY Ryan Keedy

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3rd PM

COUNTY Cumberland DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto 140#

STRUCT. NO. 081-3191
Station 470+75

BORING NO. 4 E. Pier
Station 471+65
Offset 3.00ft LT.
Ground Surface Elev. 531.17 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 530.7 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Disturbed river bottom, loose, brown, very fine, sandy silt trace gravel.	2		
	2		36.0
	2		
527.67			
Very stiff, brown gray sandy silt, little clay & trace gravel.	5		
	6	3.9	9.3
-5	8	BS	
525.17			
Very stiff, gray brown, sandy silt, trace gravel & clay.	9		
	15	3.7	11.1
	17	B	
522.67			
Very stiff to hard, gray fine sandy silt, trace clay & gravel.	5		
	13	4.5	9.3
-10	18	P	
	7		
	15	4.8	12.0
-15	14	BS	
	7		
	12	3.3	13.7
-20	12	B	
Very stiff to hard, gray fine sandy silt, trace clay & gravel. (continued)			
508.17			
Dense, gray, silty, fine to coarse sand.	8		
	16		15.5
-25	14		
	48		
	24		19.2
-30	25		
500.17			
Very stiff to hard, fine sandy, silty clay, trace gravel.	6		
	10	4.1	14.9
-35	12	S	
	4		
	6	3.3	15.8
-40	10	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Hanson Professional Services Inc.

SOIL BORING LOG

Date 11/8/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension-Embarras River Bridge LOGGED BY Ryan Keedy

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3rd PM

COUNTY Cumberland DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto 140#

STRUCT. NO. 081-3191
Station 470+75

BORING NO. 4 E. Pier
Station 471+65
Offset 3.00ft LT.
Ground Surface Elev. 531.17 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 530.7 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff to hard, fine sandy, silty clay, trace gravel. (continued)			
	3		
	7	2.4	19.8
-45	8	B	
484.17			
Very stiff, gray silty clay, trace sand & gravel, trace wood.	3		
	6		18.0
-50	7		
	3		
	7	3.1	23.4
-55	8	B	
473.17			
Very stiff, gray brown, sandy silty clay, trace gravel & organics.	4		
	6	2.8	20.4
-60	9	B	
Very stiff, gray brown, sandy silty clay, trace gravel & organics. (continued)			
469.17			
Very stiff, gray sandy silty clay, trace gravel & organics.	4		
	6	3.9	22.6
-65	9	B	
463.17			
Medium dense, gray silty fine sand, saturated.	5		
	10		18.2
-70	10		
457.67			
Loose, gray fine to medium sand, saturated.	3		
	3		19.3
-75	5		
-24 ft. blowin @ 76 ft. depth; jetted hole.			
454.67			
Very soft, gray shale.			
452.42			
End of Boring	50/3"	4.5	12.3
		P	
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MNM	11/30/07
DRAWN	DAP	12/28/07
REVIEWED	MNM	02/04/08

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BORINGS (SHEET 3)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 015202IB
DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	55
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 25
26 SHEETS

*Section 01-00061-00-BR Contract #95552

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 4

Date 9/17/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension - Embarras River Bridge LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-3191
Station

BORING NO. 2 E Abut
Station 473+00
Offset 0.00ft CL
Ground Surface Elev. 544.41 ft

Surface Water Elev. 531.67 ft
Stream Bed Elev. 529.00 ft

Groundwater Elev.:
First Encounter 529.9 ft
Upon Completion Washed ft
After 48 Hrs. 535.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Soft to medium, damp, brown, SANDY LOAM.			
	6		
	5	0.2	7
	5	PP	
	3		
-5			
539.01	3	0.5	11
Soft to medium, damp, brown, SANDY LOAM. 19% passing #200 sieve.	4	PP	
	3		
	3		6
	3		
11% passing #200 sieve.			
534.91	2		
-10			
Medium, very moist, brown, SANDY LOAM.	3	0.7	15
	4	S	
532.41			
Very loose, wet, brown, fine grained, SAND. 3% passing #200 sieve.	2		4
	2		
	1		
-15			
3% passing #200 sieve.	2		9
	3		
	2		
1% passing #200 sieve.	2		19
	2		
	2		
524.41 -20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	2		15
Very loose, wet, brown, Gravelly SAND. 4% passing #200 sieve.	2		
522.41			
Hard, damp, gray, CLAY LOAM TILL.	2		
	2	4.1	11
	2	B	
-25			
	3		
	8	+4.5	9
	13	PP	
	9		
	16	7.8	9
	23	S	
	8		
-30			
	17	7.3	10
	25	B	
	6		
-35			
Low recovery this trip, gray SANDSTONE fragments w/ CLAY LOAM TILL.	14		1
	19		
504.91			
-40	16		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude N 39 deg 19.489 min, Longitude W 88 deg 58.761 min, Map Datum WGS 84

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 4

Date 9/17/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension - Embarras River Bridge LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-3191
Station

BORING NO. 2 E Abut
Station 473+00
Offset 0.00ft CL
Ground Surface Elev. 544.41 ft

Surface Water Elev. 531.67 ft
Stream Bed Elev. 529.00 ft

Groundwater Elev.:
First Encounter 529.9 ft
Upon Completion Washed ft
After 48 Hrs. 535.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Soft, very damp, gray, CLAY LOAM TILL. (continued)	14	0.3	14
	24	PP	
499.91			
Stiff, damp, gray, CLAY LOAM TILL.	9		
-45			
	12	2.4	14
	17	B	
	4		
-50			
Wood splinters.	6	1.6	16
	9	B	
-55			
484.91			
-60	3		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Gray, SAND/GRAVEL/TILL mixture. (continued) 484.11	6	2.5	8
	8	PP	
Very stiff, damp, dark gray, SILTY CLAY TILL w/ wood splinters.			
-65			
	5		
-70			
	12	2.1	21
	11	B	
-75			
-80	2		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude N 39 deg 19.489 min, Longitude W 88 deg 58.761 min, Map Datum WGS 84

BORINGS (SHEET 4)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B

DATE 02/04/08

LAYOUT	MNM	11/20/07
DRAWN	DAP	12/28/07
REVIEWED	JMM	02/04/08

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	56
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 26
26 SHEETS

*Section 01-00061-00-BR Contract #95552

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 3 of 4

Date 9/17/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension - Embarras River Bridge LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 018-3191
Station

BORING NO. 2 E Abut
Station 473+00
Offset 0.00ft CL
Ground Surface Elev. 544.41 ft

Surface Water Elev. 531.67 ft
Stream Bed Elev. 529.00 ft

Groundwater Elev.:
First Encounter 529.9 ft
Upon Completion Washed ft
After 48 Hrs. 535.2 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
Very stiff, damp, dark gray, SILTY CLAY TILL w/ wood splinters. (continued)	5 8	2.4 B	15	
456.41				
Very dense, moist, gray, SILTY CLAY SHALE.	24 50/3" 50/2"		8	
454.01				
Borehole continued with rock coring.				

Latitude W 88 deg 05.761 min. Longitude N 39 deg 19.429 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Page 4 of 4

Date 9/17/07

ROUTE FAS 662 (TR 61) DESCRIPTION TR 61 Extension - Embarras River Bridge LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E, 3 PM

COUNTY Cumberland CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 018-3191
Station

CORING BARREL TYPE & SIZE NW, conv dbl bbl, split inner

BORING NO. 2 E Abut
Station 473+00
Offset 0.00ft CL
Ground Surface Elev. 544.41 ft

Core Diameter 2.06 in
Top of Rock Elev. 456.41 ft
Begin Core Elev. 454.01 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Gray, slighlty weathered, SILTY CLAY SHALE. 454.01		75	75	1.5	
Rock core B2C1 at 92.4' to 92.9' depth = 31.1 tsf Qu.					
-95		99	97	1.6	
Rock core B2C2 at 98.5' to 99.5' depth = 32.4 tsf Qu.					
-100					
444.01					
Extent of exploration.					
Benchmark: iron pin Sta 480+92.08, Lt 1.36' = 545.90' Provided by Cumberland County Engineer.					
-105					
-110					

Color pictures of the cores Available on request
Cores will be stored for examination until 09/17/08
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

LAYOUT	MNM	11/30/07
DRAWN	DMP	12/28/07
REVIEWED	JMM	02/04/08

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BORINGS (SHEET 5)
F.A.S. 662 (TR 61) OVER EMBARRAS RIVER
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 470+75.00
STRUCTURE NUMBER 018-3191
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B

DATE 02/04/08

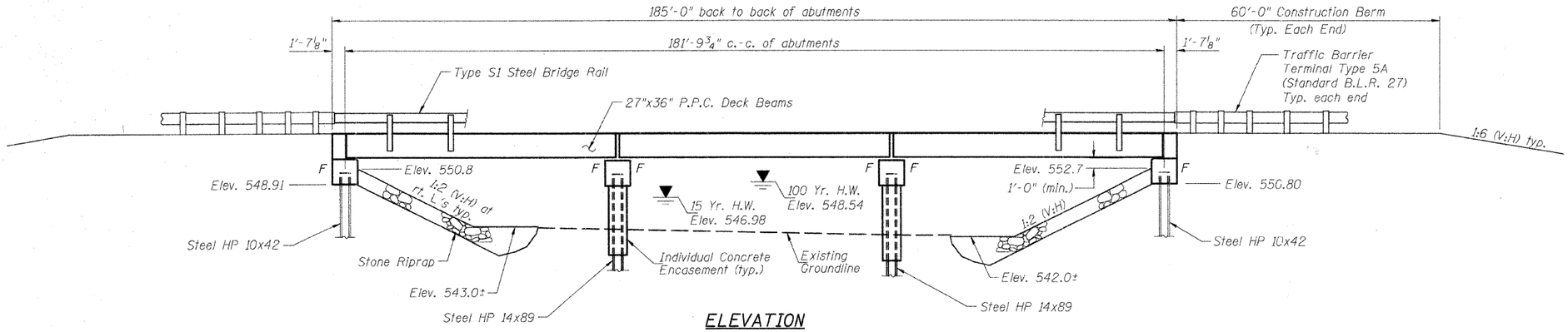
B.M. : Iron Pin, Station 474+93.38, Rt. 29.24', Elev. 544.23
Iron Pin, Station 480+92.08, Lt. 1.36', Elev. 545.90

Existing Structure: None

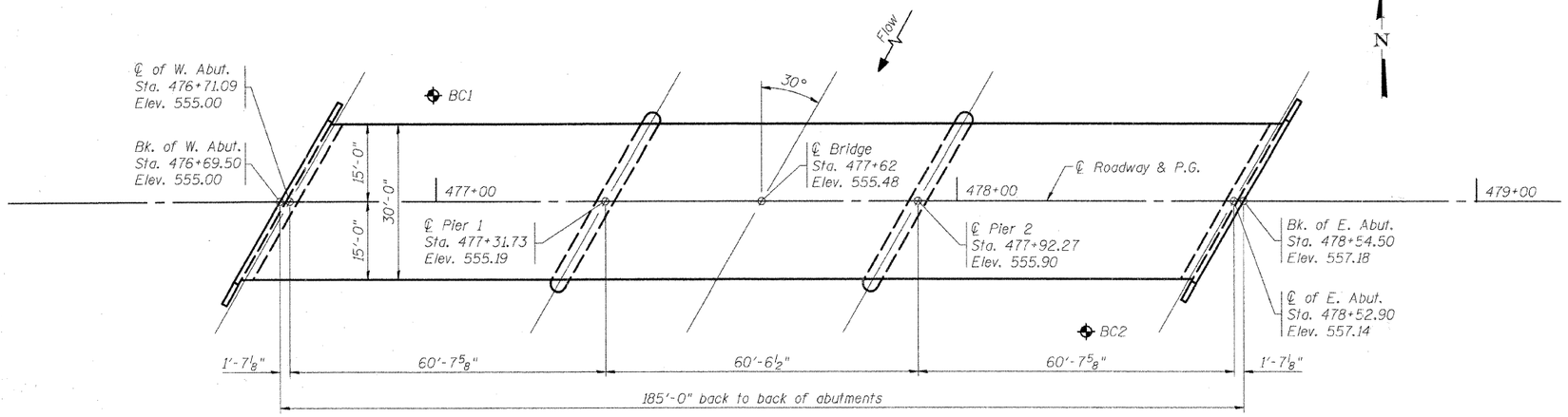
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	57
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
10 SHEETS

*Section 01-00061-00-BR Contract #95552

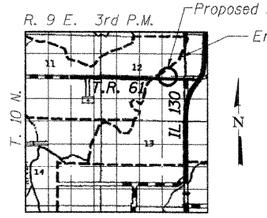


ELEVATION



PLAN

◈ Indicates Boring Location



LOCATION SKETCH

EMBARRAS RIVER
BUILT 200_ BY
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
F.A.S. RT. 662 STATION 477+62
STR. NO. 018-3194 LOADING HS25

NAME PLATE

Locate Name Plate at Southwest Corner of Bridge (See Std. 515001)

DESIGN SPECIFICATIONS

2002 (17th Edition) AASHTO Standard Specifications for Highway Bridges

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.065 g
Site Coefficient (S) = 1.5

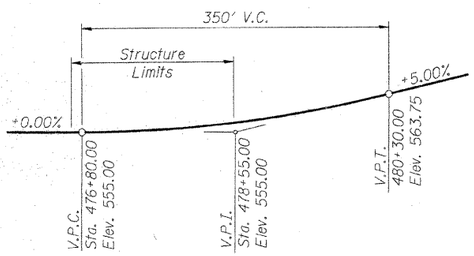
LOADING HS25

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

DESIGN STRESSES

Super: f'c = 6,000 p.s.i. (P.P.C. Deck Beams)
f'ci = 5,000 p.s.i.
f's = 270,000 p.s.i. (1/2" ϕ Strand)
f'si = 201,960 p.s.i. (1/2" ϕ Strand)
fy = 60,000 p.s.i.

Sub: f'c = 3,500 p.s.i.
fy = 60,000 p.s.i.



PROFILE GRADE
(Along ℄ Roadway)

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	E. Abut.
	-	532.0	532.0	-

WATERWAY INFORMATION

Drainage Area = 933 Sq. Miles Low Grade Elev. 548.00 @ Sta. 460+95.00

Flood	Freq. Yr.	Description	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	15	Overflow Bridge	2630	-	785	546.98	-	0.20	546.98	547.18
		River Bridge	15720	-	2614		-			
		Over-The-Road Flow	0	-	0		-			
		Total	18350	-	3399		-			
Overtopping	50					548.00			548.00	
Base	100	Overflow Bridge	5720	-	1021	548.54	-	0.45	548.54	549.09
		River Bridge	16040	-	2849		-			
		Over-The-Road Flow	4970	-	1787		-			
		Total	26730	-	5657		-			
Max. Calc.	500	Overflow Bridge	6420	-	1176	549.57	-	0.43	549.57	550.00
		River Bridge	15080	-	2849		-			
		Over-The-Road Flow	12390	-	3449		-			
		Total	33890	-	7474		-			

JAMES W. MOLL 4378 REGISTERED STRUCTURAL ENGINEER OF ILLINOIS

SIGNATURE
4-3-08
DATE
LIC.EXP.DATE : 11-30-08

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

GENERAL PLAN AND ELEVATION
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S20218
DATE 02/04/08

LAYOUT	MWM	11/16/07
DRAWN	MWM	01/30/08
REVIEWED	MWM	02/04/08

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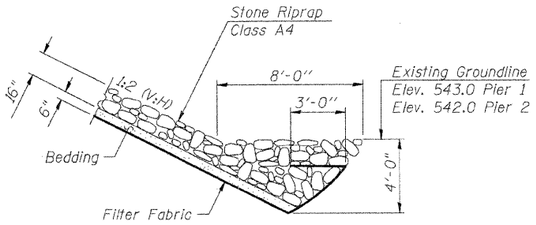
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	58
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
10 SHEETS

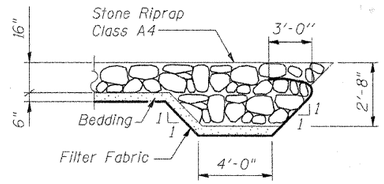
*Section 01-00061-00-BR Contract #95552

INDEX OF BRIDGE SHEETS

1. General Plan & Elevation
2. General Notes, Index of Bridge Sheets, Total Bill of Material, and General Details
3. P.P.C. Deck Beam Superstructure
4. 27" x 36" P.P.C. Deck Beam
5. 27" x 36" P.P.C. Deck Beam Details
6. Steel Railing, Type S1
7. Pile Bent Abutment Details
8. Pile Bent Pier Details
9. Steel H-Pile Details
10. Boring Logs



SECTION B-B



SECTION C-C
FLANK STONE RIPRAP DETAIL

Note:
Excavation required for placing Riprap shall be according to Article 502 of the Standard Specifications. Cost for excavation shall be included with Stone Riprap, Class A4.

GENERAL NOTES

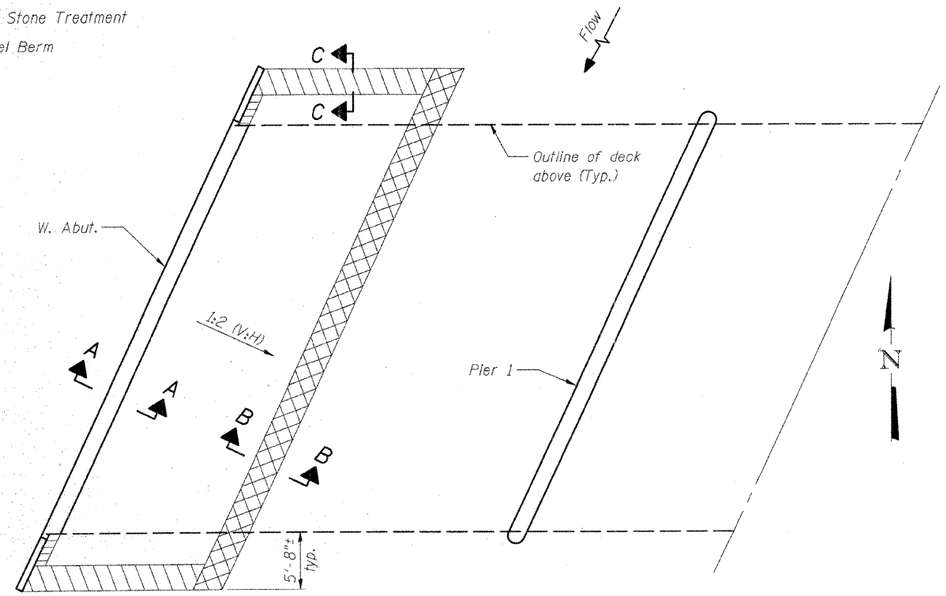
1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
4. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
5. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.

TOTAL BILL OF MATERIAL

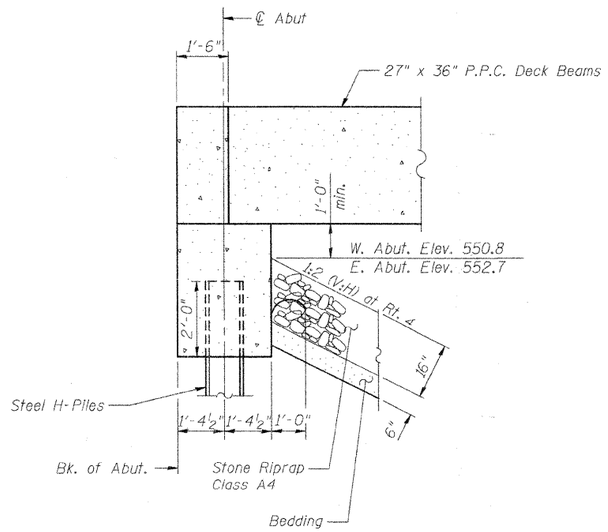
Item	Unit	Super	Sub.	Total
Stone Riprap, Class A4	Sq. Yd.	-	309	309
Filter Fabric	Sq. Yd.	-	309	309
Concrete Structures	Cu. Yd.	-	63.6	63.6
Concrete Encasement	Cu. Yd.	-	40.2	40.2
Precast Prestressed Concrete Deck Beams (27 " Depth)	Sq. Ft.	5441.5	-	5441.5
Steel Railing, Type S1	Foot	368	-	368
Reinforcement Bars, Epoxy Coated	Pound	-	7980	7980
Furnishing Steel Piles, HP 10x42	Foot	-	846	846
Furnishing Steel Piles, HP 14x89	Foot	-	952	952
Driving Piles	Foot	-	1798	1798
Test Pile, Steel HP 10x42	Each	-	2	2
Test Pile, Steel HP 14x89	Each	-	2	2
Name Plates	Each	1	-	1

LEGEND

- Flank Treatment
- Toe Stone Treatment
- Level Berm



RIPRAP LAYOUT PLAN
(West Abutment shown; East Abutment similar)



SECTION A-A
SECTION THRU ABUTMENT
(Horiz. dim. ℄ Rt. L's)

LAYOUT	WNM	11/16/07
DRAWN	WDM	01/30/07
REVIEWED	WNM	01/30/07

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GENERAL NOTES, INDEX OF BRIDGE SHEETS, TOTAL BILL OF MATERIAL, AND GENERAL DETAILS
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

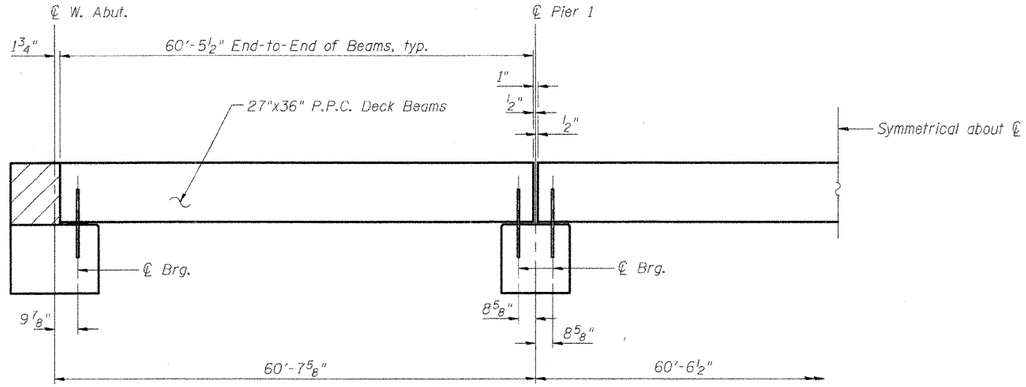
HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	59
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

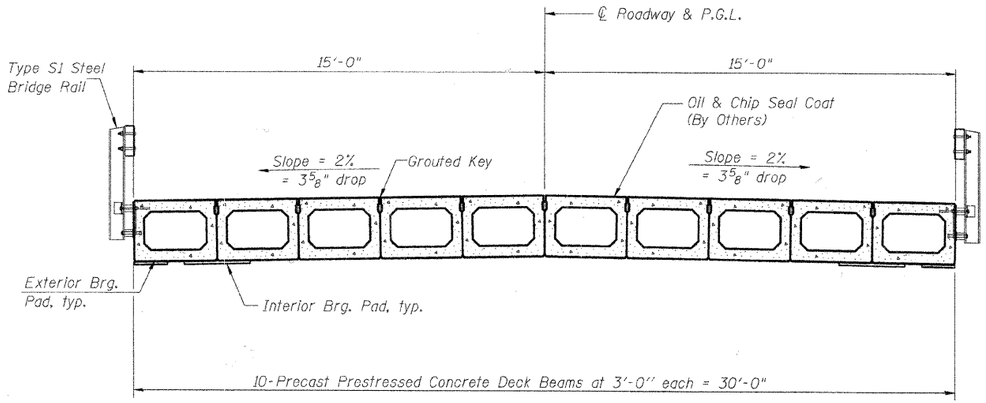
SHEET NO. 3
10 SHEETS

*Section 01-00061-00-BR Contract #95552

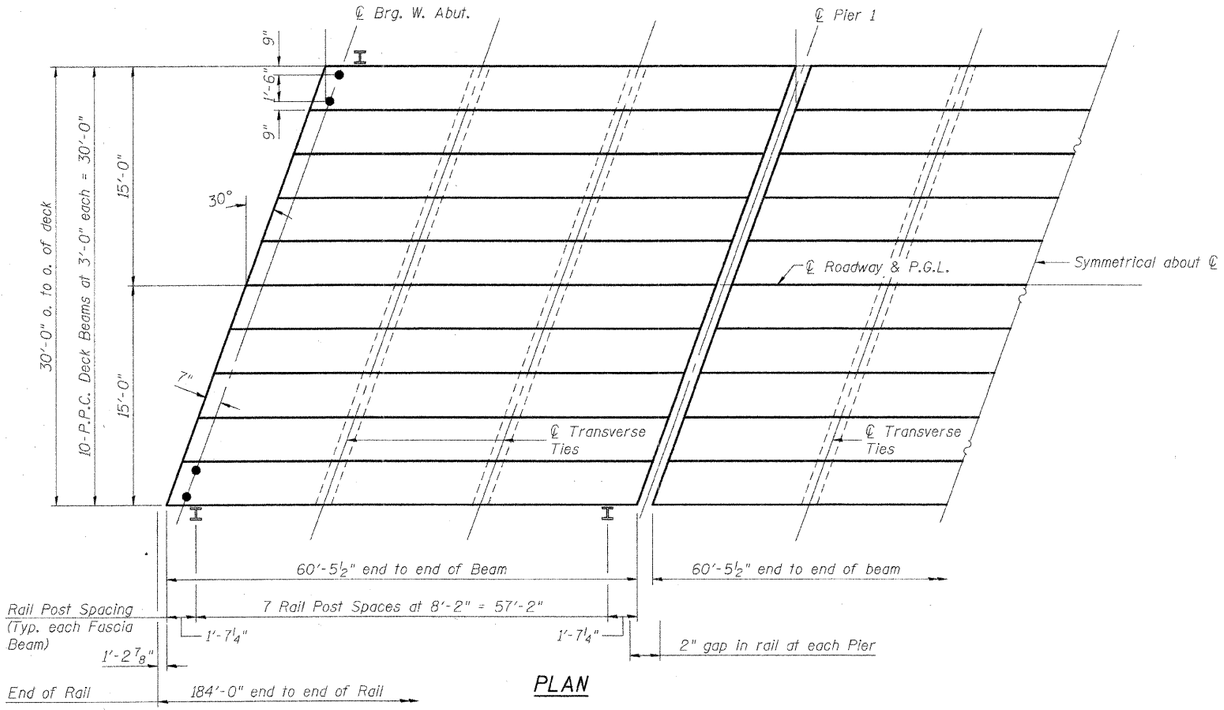


ELEVATION

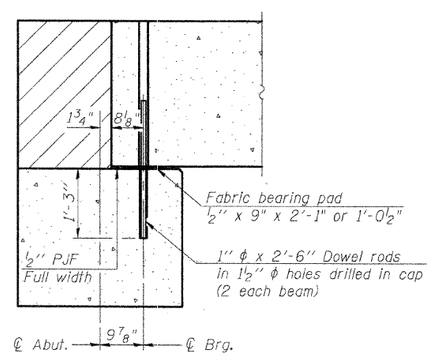
All dimensions along ℄ roadway



CROSS SECTION

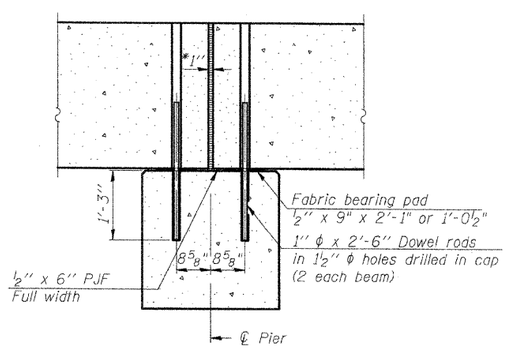


PLAN



SECTION THRU ABUTMENT

All dimensions along ℄ roadway



SECTION THRU FIXED PIER

All dimensions along ℄ roadway

* 1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

NOTES

After beams have been erected, holes shall be drill into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hours prior to grouting the shear keys.

Longitudinal keys shall be grouted.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing.

See sheet 4 of 10 for bearing pad details.

Hatched area to be poured after deck beams are in place, and will be paid for as Concrete Structures.

LAYOUT	MNM	11/16/07
DRAWN	MGH	01/30/08
REVIEWED	MNM	01/30/08

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P.P.C. DECK BEAM SUPERSTRUCTURE
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

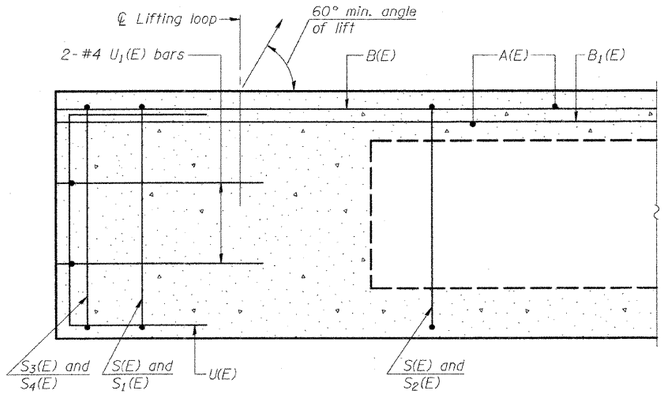
JOB NO. 01S2021B

DATE 02/04/08

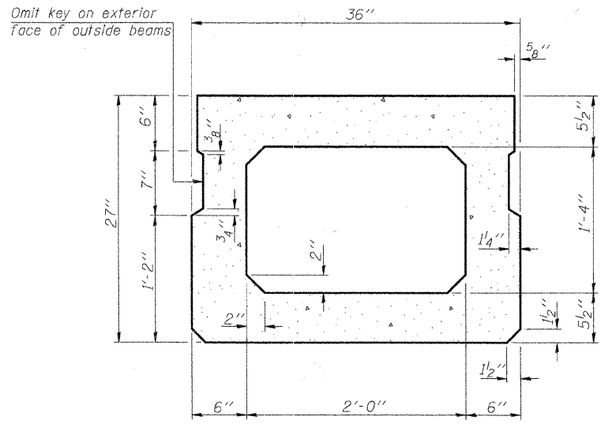
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	60
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 4
10 SHEETS

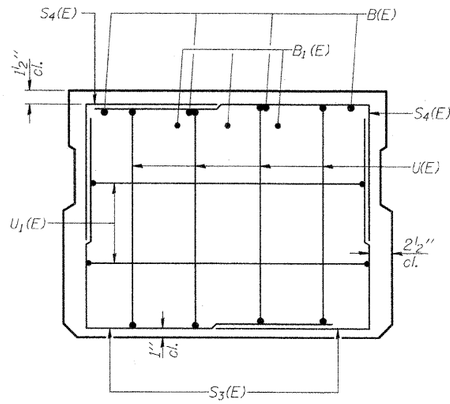
*Section 01-00061-00-BR Contract #95552



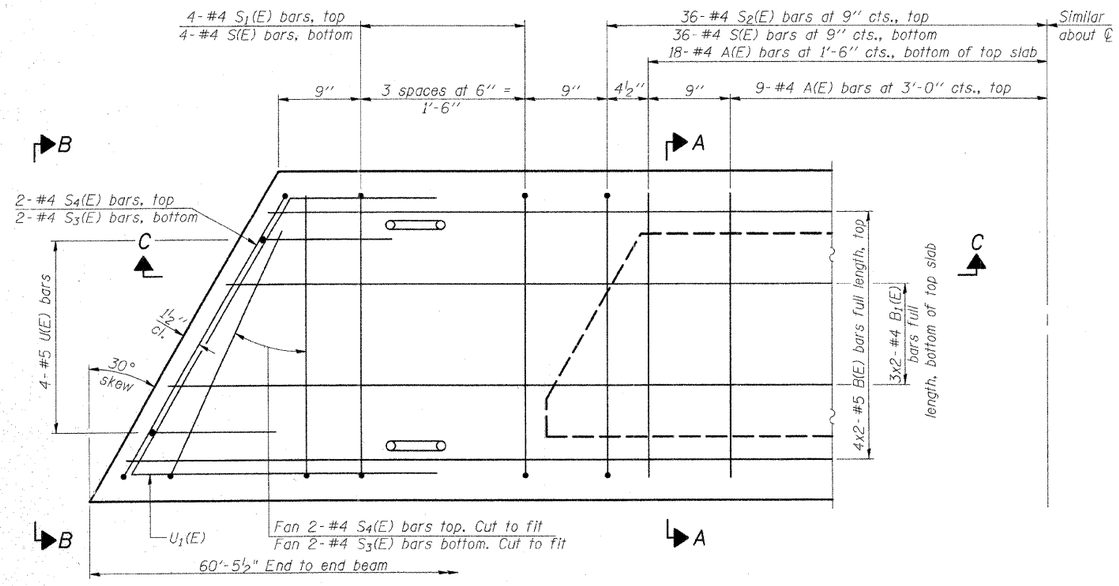
SECTION C-C



SECTION A-A
(Showing dimensions)

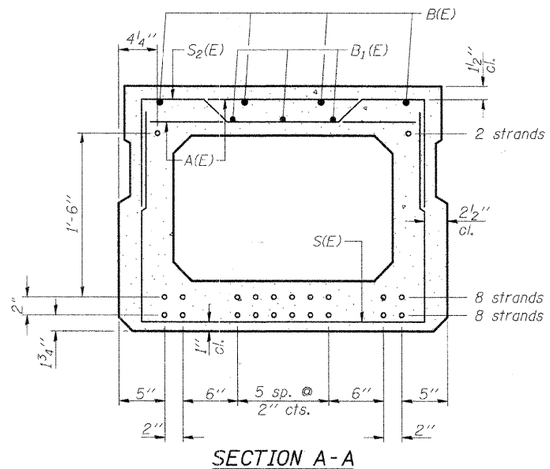


VIEW B-B



PLAN VIEW

Note: Spacing of S(E) and S_2(E) bars may be adjusted up to 4″ in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION A-A
(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissable strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	54	#4	2′-7″	—
B(E)	8	#5	31′-4"	—
B_1(E)	6	#4	30′-11"	—
S(E)	80	#4	6′-5″	⊐
S_1(E)	8	#4	6′-3″	⊐
S_2(E)	72	#4	6′-6″	⊐
S_3(E)	8	#4	4′-5"	⊐
S_4(E)	8	#4	4′-4"	⊐
U(E)	8	#5	4′-6″	⊏
U_1(E)	4	#4	6′-10"	⊿

Note: See sheet 5 of 10 for additional details and Bill of Material.

LAYOUT	WMM	11/16/07
DRAWN	WDM	01/30/08
REVIEWED	WMM	02/30/08

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27″ x 36″ P.P.C. DECK BEAM
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

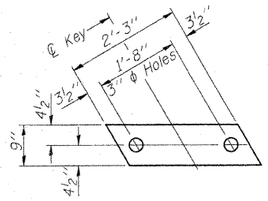
HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

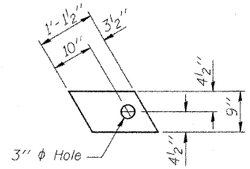
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	61
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
10 SHEETS

*Section 01-00061-00-BR Contract #95552



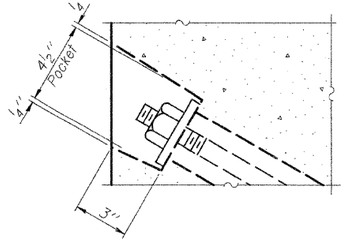
FABRIC BEARING PAD
(Interior)



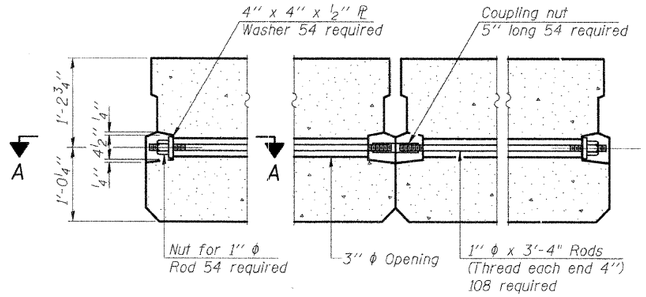
FABRIC BEARING PAD
(Exterior)

FIXED

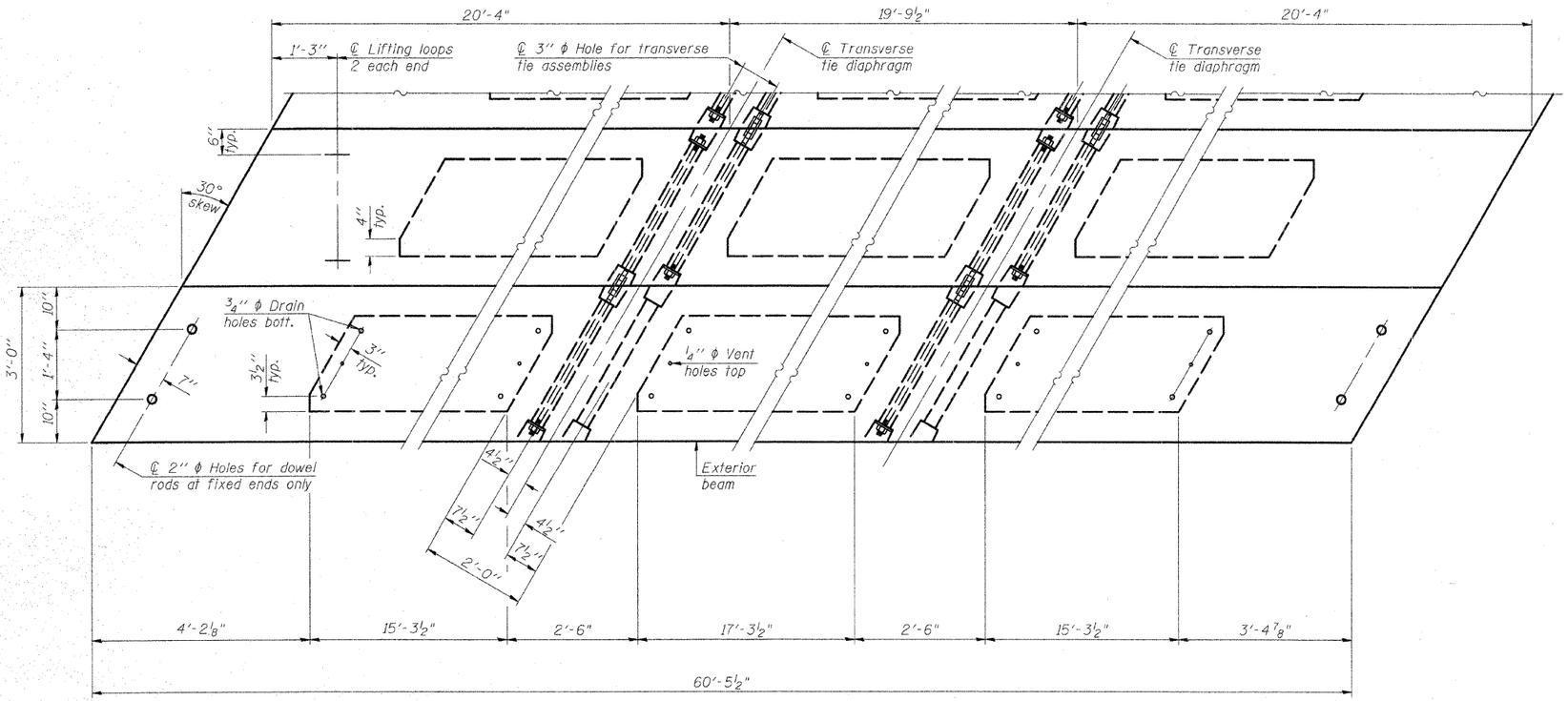
Note: Omit holes when using expansion bearings.



SECTION A-A

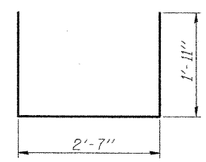


TYPICAL TRANSVERSE TIE ASSEMBLY

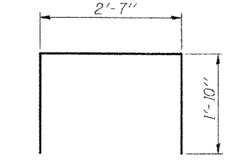


PLAN VIEW

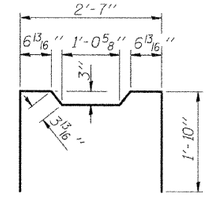
Note: Connect beams in pairs with the transverse tie configuration shown.



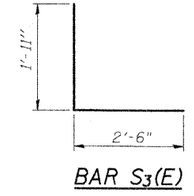
BAR S(E)



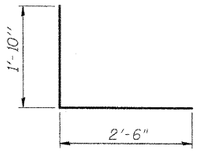
BAR S1(E)



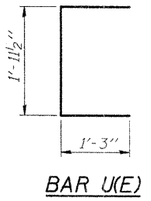
BAR S2(E)



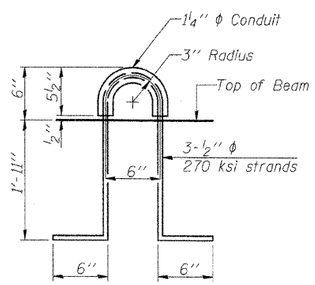
BAR S3(E)



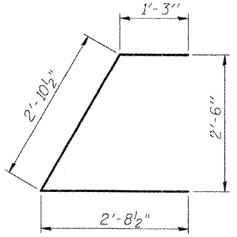
BAR S4(E)



BAR U(E)



LIFTING LOOP DETAIL



BAR U1(E)

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	5441.5

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706 (IL MOD), Grade 60. (See Special Provisions)

Two ⅛" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

27" x 36" P.P.C. DECK BEAM DETAILS
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/16/07
DRAWN	MCM	01/30/08
REVIEWED	MNM	01/30/08

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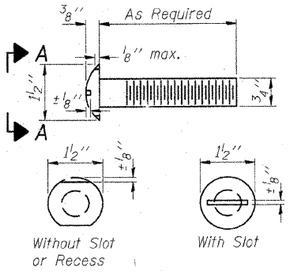
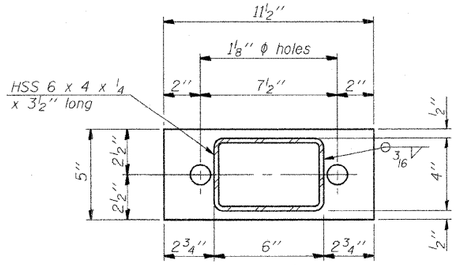
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	62
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 6
10 SHEETS

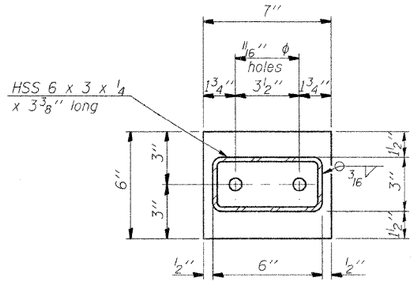
*Section 01-00061-00-BR Contract #95552



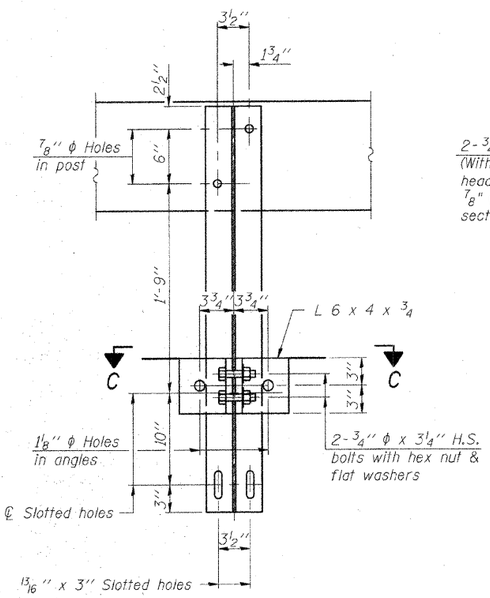
VIEW A-A
ROUND HEAD BOLT



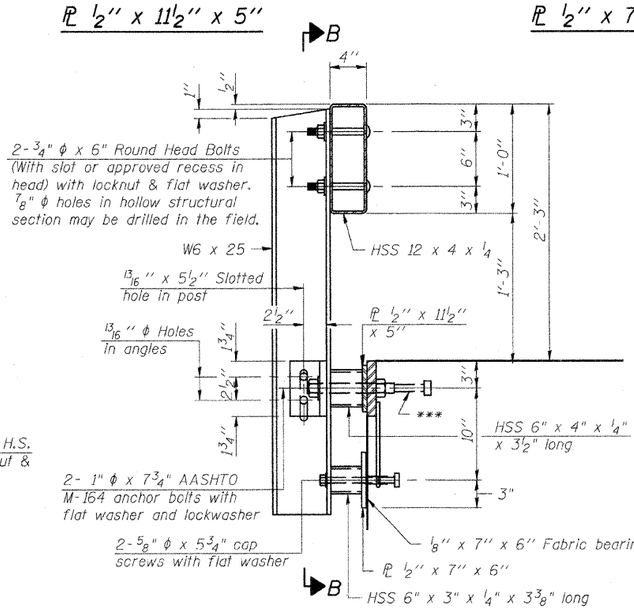
PL 1/2" x 11 1/2" x 5"



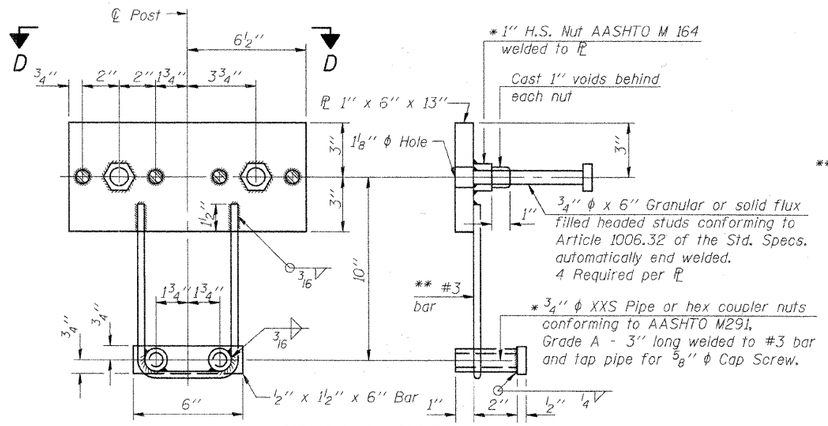
PL 1/2" x 7" x 6"



SECTION B-B

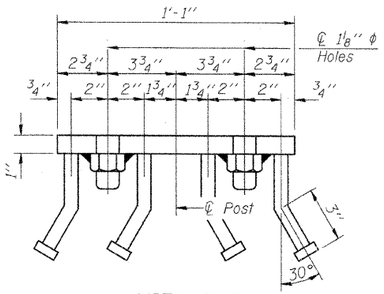


SECTION AT RAILING POST



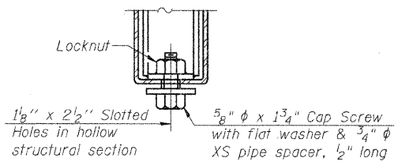
ANCHOR DEVICE
* Threaded areas shall be plugged or blocked off during casting of beam.

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

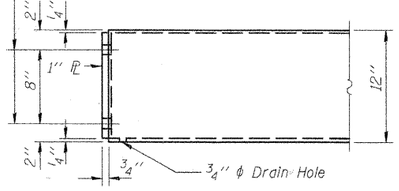


VIEW D-D

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

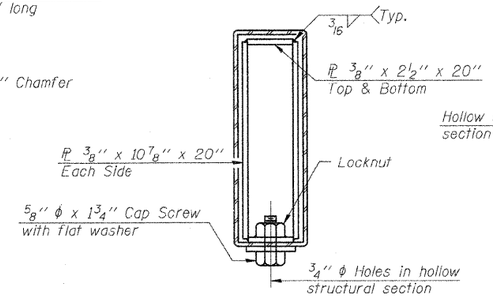


RAIL SPLICE CONNECTION AT EXPANSION JT.

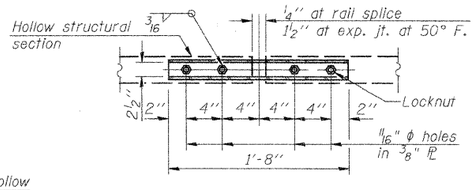


BILL OF MATERIAL

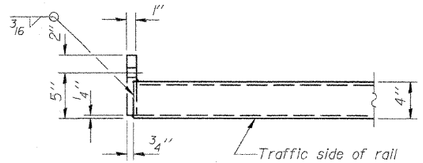
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	368



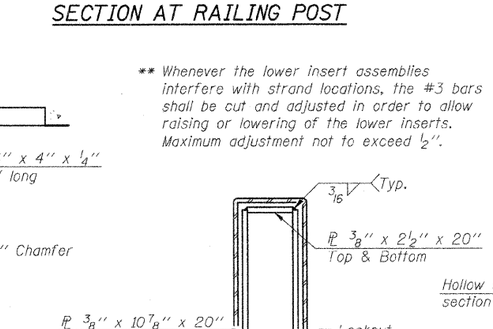
SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE PL TYPICAL



END OF RAIL DETAILS



SECTION C-C

LAYOUT	MNM	11/16/07
DESIGN	MEM	01/30/08
DRAWN	MEM	01/30/08
REVIEWED	MNM	01/30/08

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STEEL RAILING, TYPE S-1
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

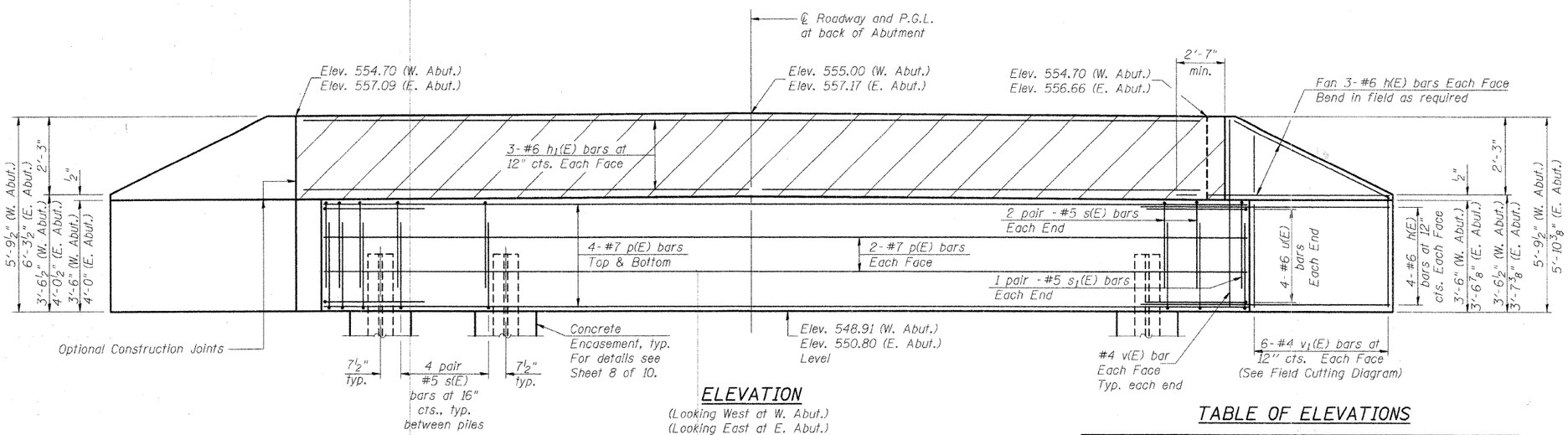
HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	63
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 7
10 SHEETS

*Section 01-00061-00-BR Contract #95552

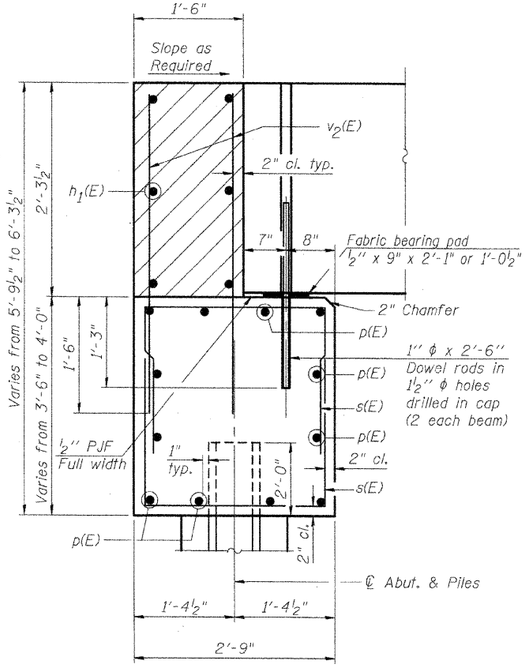


ELEVATION

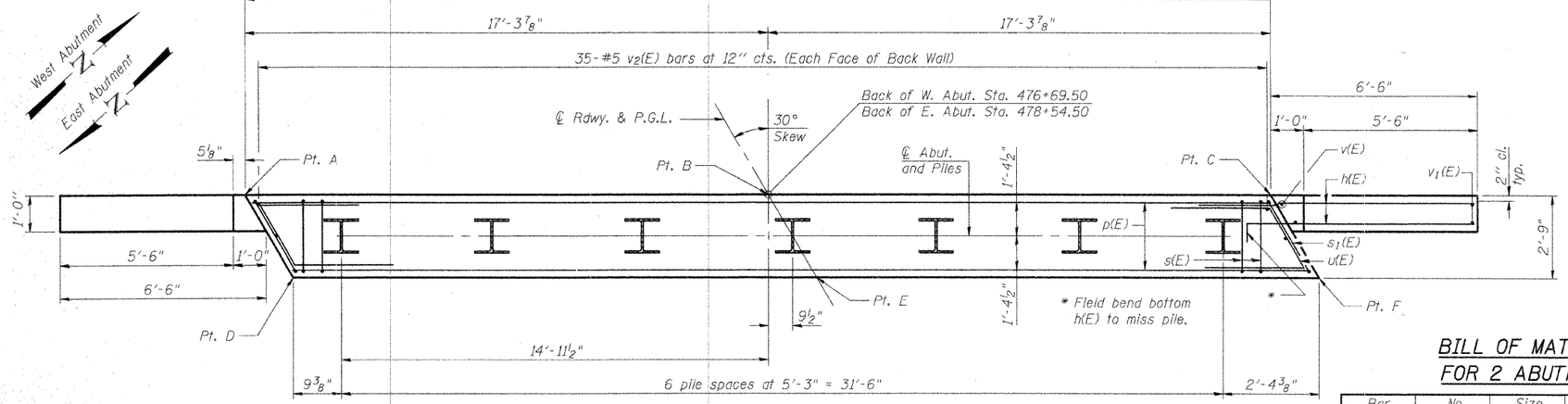
(Looking West at W. Abut.)
(Looking East at E. Abut.)
Elevations given at back of abutment
See Plan for other cap elevations

TABLE OF ELEVATIONS

	Pt. A	Pt. B	Pt. C	Pt. D	Pt. E	Pt. F
W. Abut.	552.41	552.71	552.41	552.41	552.71	552.41
E. Abut.	554.80	554.88	554.37	554.72	554.80	554.30



SECTION THRU ABUTMENT

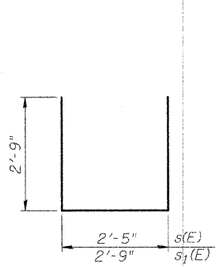


PLAN

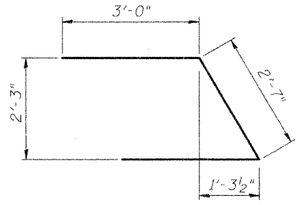
PILE DATA

Type: Steel HP 10x42**
Nominal Required Bearing: 335 Kips
Allowable Resistance Available: 97 Kips (W. Abut.), 92 Kips (E. Abut.)
Est. Length: 75' (W. Abut.), 66' (E. Abut.)
No. Production Piles: 12 (6 at each abutment)
No. Test Piles: 2 (One per abutment)

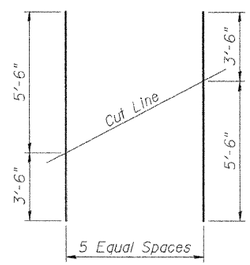
** Piles shall be driven through 2'-0" diameter percored holes extending to natural groundline according to Article 512.09(C) of the Standard Specifications. Cost included in Driving Piles.



BARS s(E) & s1(E)



BAR u(E)



BAR v1(E)

BILL OF MATERIAL FOR 2 ABUTMENTS

Bar	No.	Size	Length	Shape
h(E)	56	#6	9'-4"	
h1(E)	12	#6	34'-4"	
p(E)	24	#7	34'-4"	
s(E)	112	#5	7'-11"	
s1(E)	8	#5	8'-3"	
u(E)	16	#6	8'-7"	
v(E)	8	#4	5'-6"	
v1(E)	24	#4	9'-0"	
v2(E)	140	#5	3'-8"	
Concrete Structures			Cu. Yd.	39.6
Reinforcement Bars, Epoxy Coated			Pound	5000
Furnishing Steel Piles, HP10x42			Foot	846
Driving Piles			Foot	846
Test Pile, Steel HP10x42			Each	2
Concrete Encasement			Cu. Yd.	4.9

For details of piles and Concrete Encasement, see sheet 9 of 10.

NOTES:

After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
All horizontal dimensions are at right angles to beam ends.
Hatched area to be poured after deck beams are in place.
See sheet 5 of 10 for bearing pad details.
Space cap reinforcement to miss Dowel Rods.
Structure Excavation required shall be according to Article 502 of the Standard Specifications. Cost for Structure Excavation included with Concrete Structures.

MIN. BAR LAP

#5 - 2'-2"

PILE BENT ABUTMENT DETAILS
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/16/07
DRAWN	MCM	01/30/08
REVIEWED	MNM	01/30/08

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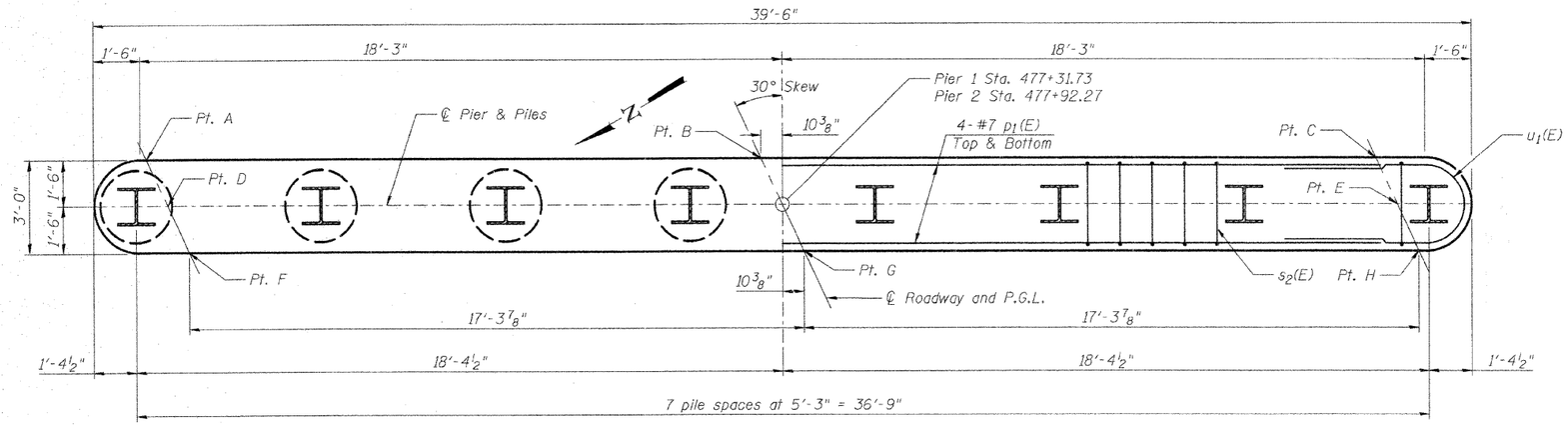
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	64
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 8
10 SHEETS

*Section 01-00061-00-BR Contract #95552



PLAN

MIN. BAR LAP

#5 - 1'-8"

BILL OF MATERIAL FOR TWO PIERS

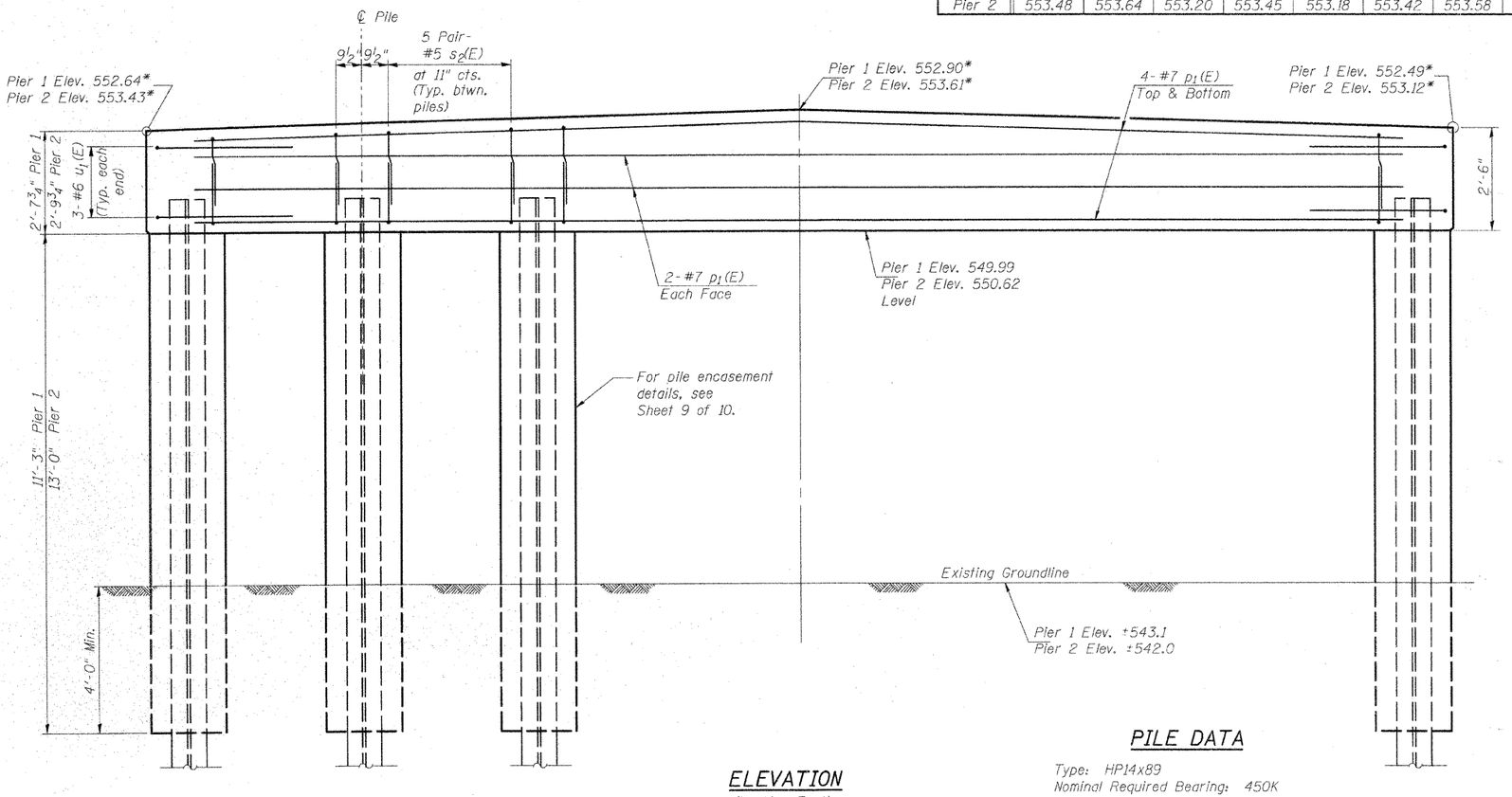
Bar	No.	Size	Length	Shape
$p_1(E)$	24	#7	36'-4"	
$s_2(E)$	140	#5	7'-0"	
$u_1(E)$	12	#6	9'-11"	
Reinforcement Bars, Epoxy Coated		Pound	2980	
Concrete Structures		Cu. Yd.	24	
Concrete Encasement		Cu. Yd.	35.3	
Furnishing Steel Pile, HP14x89		Foot	952	
Driving Piles		Foot	952	
Test Pile, Steel HP 14x89		Each	2	

TABLE OF ELEVATIONS

	Pt. A	Pt. B	Pt. C	Pt. D	Pt. E	Pt. F	Pt. G	Pt. H
Pier 1	552.68	552.91	552.55	552.67	552.54	552.65	552.89	552.53
Pier 2	553.48	553.64	553.20	553.45	553.18	553.42	553.58	553.15

NOTES:

See Sheet 9 of 10 for Pile Details.
Space cap reinforcement to miss Dowel Rods.

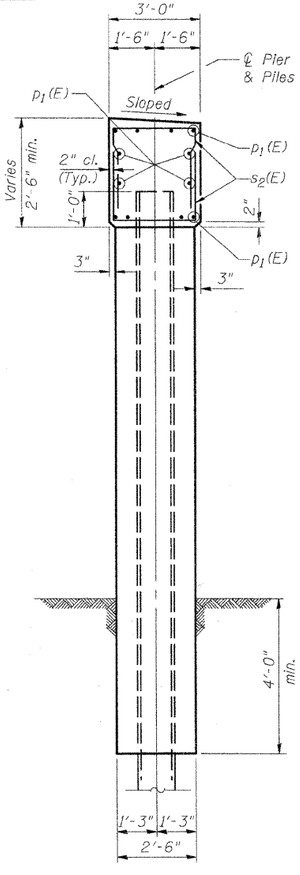


ELEVATION

(Looking East)
*At ℄ of Pier

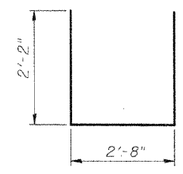
PILE DATA

Type: HP14x89
Nominal Required Bearing: 450K
Allowable Resistance Available: 140K
Est. Length: 70 ft. Pier 1, 66 ft. Pier 2
No. Production Piles: 14 (7 at each pier)
No. Test Piles: 2 (One at each Pier)
Min. Tip Elev. 505.00

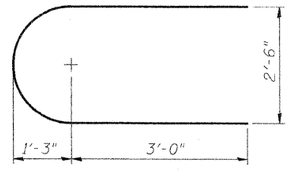


SECTION THRU PIER

(Looking South)



BAR $s_2(E)$



BAR $u_1(E)$

PILE BENT PIER DETAILS
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/16/07
DRAWN	MCM	01/30/08
REVIEWED	MNM	01/30/08

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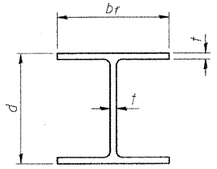
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	65
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

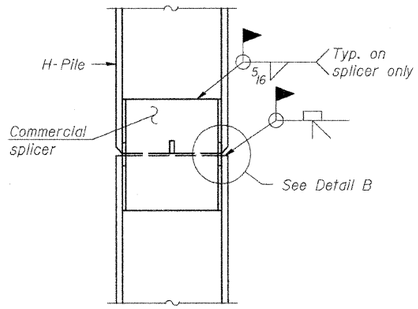
SHEET NO. 9
10 SHEETS

* Section 01-00061-00-BR Contract #95552



STEEL PILE TABLE

Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	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"	11/16"	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"



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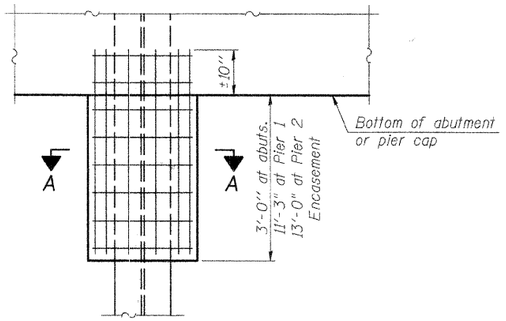

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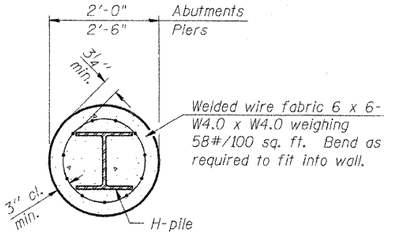
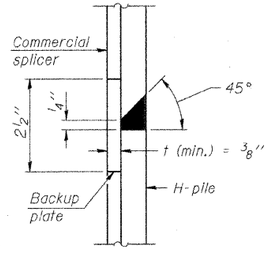


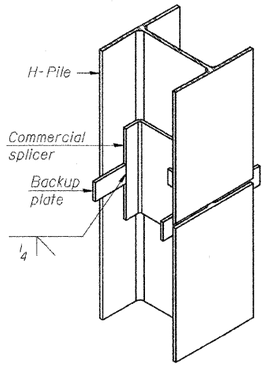
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

PILE ENCASEMENT

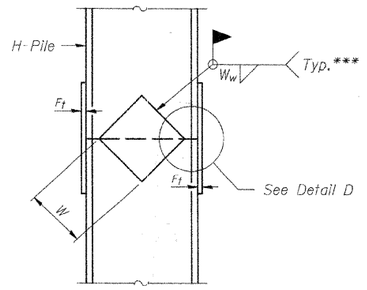


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



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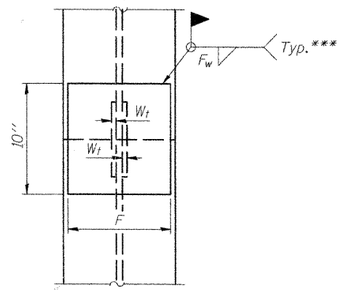
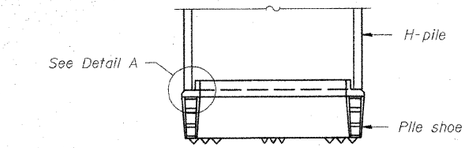


END VIEW



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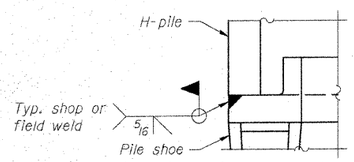
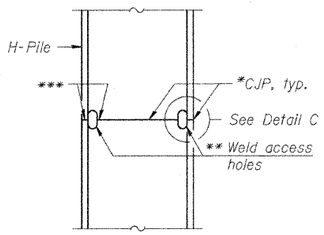


DETAIL A

H-PILE SHOE ATTACHMENT



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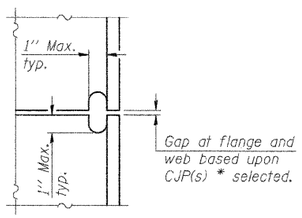
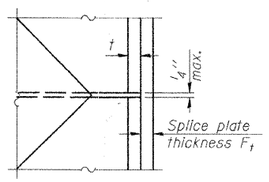


DETAIL C



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	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"

COMPLETE PENETRATION WELD SPLICE

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

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

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

WELDED PLATE FIELD SPLICE

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

STEEL H-PILE DETAILS
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B
DATE 02/04/08

LAYOUT	MNM	11/16/07
DRAWN	MNM	01/30/08
RECHECKED	MNM	01/30/08

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 662 (TR 61)	*	CUMBERLAND	85	66
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10

10 SHEETS

*Section 01-00061-00-BR Contract #95552

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Box Culvert - TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E. 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. N/A
Station

BORING NO. BC 1
Station 477+00
Offset 20.00ft Lt
Ground Surface Elev. 543.73 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 529.2 ft
Upon Completion Caved @ 14.0 ft
After 24 Hrs. 529.7 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very soft to medium, very moist, brown, SANDY LOAM.			
	9		
	7	0.2	6
	9	S	
	4		
-5			-25
	4		
	3	0.8	11
	4	S	
536.53			
	3		
Loose, damp, tan, fine grained, SAND. 8% passing #200 sieve.	2		6
	3		
-10			-30
	2		
3% passing #200 sieve.	3		4
	2		
	2		
4% passing #200 sieve. 530.53	2		4
	2		
Damp, dark brown, SILTY LOAM. 529.23			
-15	1		-35
Loose, wet, brown, fine grained, SAND. 2% passing #200 sieve.	2		22
	3		
526.73			
Medium, wet, brown, gravelly SAND. 3% passing #200 sieve.	2		
	4		15
	8		
523.73 -20	17		-40

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium, wet, brown, gravelly SAND. 5% passing #200 sieve. 522.73	10 7		7
Extent of exploration.			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Map Datum WGS 84 Longitude W 39 deg 19.450 min. Latitude W 88 deg 08.676 min.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/18/07

ROUTE FAS 662 (TR 61) DESCRIPTION Box Culvert - TR 61 Extension LOGGED BY E. Sandschafer

SECTION 01-00061-00-BR LOCATION E 1/2, SEC. 12, TWP. 10 N, RNG. 9 E. 3 PM

COUNTY Cumberland DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. N/A
Station

BORING NO. BC 2
Station 478+25
Offset 20.00ft Rt
Ground Surface Elev. 542.44 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 530.4 ft
Upon Completion 534.8 ft
After 24 Hrs. 534.0 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Soft to medium, damp, brown, SANDY LOAM.			
	4		
	3	0.5	8
	3	S	
-5	2		-25
	3	0.4	20
	2	S	
535.24			
	2		
Medium to very soft, very damp, brown, SILTY LOAM.	1	0.4	23
	2	B	
-10	0		-30
	1	0.1	26
	0	B	
529.94	0		
Brown, SANDY LOAM. 529.44	2	0.1	23
Loose, wet, brown, fine grained, SAND. 5% passing #200 sieve.	3	B	
-15	2		-35
	2		23
	3		
525.44			
Very dense, wet, tan, fined grained, SAND. 12% passing #200 sieve.	35		
	34		18
	25		
522.44 -20	14		-40

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium, wet, tan, fined grained, SAND. 6% passing #200 sieve. 521.44	10 9		8
Extent of exploration.			

Benchmarks:
Iron Pin Sta 460+26.17, Rt 27.64' = 546.57'
Iron pin Sta 480+92.08, Lt 1.36' = 545.90'
Iron Pin Sta 485+51.24, Rt 20.78' = 594.37'
Provided by Cumberland Co. Engineer.

Map Datum WGS 84 Longitude W 39 deg 19.488 min. Latitude W 88 deg 08.668 min.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

LAYOUT	MWM	12/15/07
DRAWN	MGM	01/30/08
REVIEWED	MWM	01/30/08

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BORINGS
F.A.S. 662 (TR 61) EMBARRAS RIVER OVERFLOW STRUCTURE
CUMBERLAND COUNTY
SECTION 01-00061-00-BR
STA. 477+62
STRUCTURE NUMBER 018-3194
PROFESSIONAL DESIGN FIRM LICENSE #184-001084

HANSON
Hanson Professional Services Inc.

JOB NO. 01S2021B

DATE 02/04/08

HANSON
Hanson Professional Services Inc.

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

CONTRACT # 95552

440+15.00

PRIVATE ENTRANCE
AGG. SURFACE CSE., TY. B

CUT=62.00 SQ FT
FILL=3.00 SQ FT
CS/A PIPE CULVERT, 18"

440+12.92

CUT=55.00 SQ FT
FILL=4.00 SQ FT
CS/A PIPE CULVERT, 18"

440+00.00

CUT=52.00 SQ FT
FILL=13.00 SQ FT

439+00.00

CUT=40.00 SQ FT
FILL=17.00 SQ FT

438+00.00

CUT=35.00 SQ FT
FILL=16.00 SQ FT

437+00.00

CUT=41.00 SQ FT
FILL=13.00 SQ FT

436+50.00

CUT=0.00 SQ FT
FILL=0.00 SQ FT

MATCH EXISTING PAVEMENT
STA. 436+50.00

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

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DRAWN	DJP	10/10/07
REVIEWED	JWM	02/04/08

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PLOT DATE = 04\24\2008, 10:58 AM

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DRAWN	-	DJP
CHECKED	-	MNM
DATE	-	10/10/07

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE:
SHEET NO. 1 OF 16 SHEETS
STA. 436+50.00 TO STA. 440+15.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	67
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Professional Services Inc.

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

CONTRACT # 95552

446+72.00

PROP. R.O.W.
EX. R.O.W.
-36.83,552.61
22.00,551.43
FIELD ENTRANCE
EARTH
1.00%
14.60
7.92
5.00
16.00,551.67
2.00%
4.00%
3H
1H
552.07
554.72
549.10
CUT=80.00 SQ FT
FILL=2.00 SQ FT
CS/A PIPE CULVERT
EQ. RS, 18"
30.16,550.65

446+00.00

PROP. R.O.W.
EX. R.O.W.
-31.34,554.63
16.00,554.32
2.00%
4.00%
3H
1H
554.72
552.25
CUT=26.00 SQ FT
FILL=31.00 SQ FT
29.72,552.31

445+00.00

PROP. R.O.W.
EX. R.O.W.
-33.04,558.29
16.00,558.73
2.00%
4.00%
3H
1H
559.13
556.00
CUT=22.00 SQ FT
FILL=99.00 SQ FT
34.02,556.62
554.50

444+00.00

PROP. R.O.W.
EX. R.O.W.
-41.20,564.86
16.00,562.89
2.00%
4.00%
3H
1H
563.29
560.00
CUT=82.00 SQ FT
FILL=88.00 SQ FT
36.49,560.89
559.25

443+00.00

PROP. R.O.W.
EX. R.O.W.
-40.04,569.44
16.00,565.39
2.00%
4.00%
3H
1H
566.31
564.00
CUT=112.00 SQ FT
FILL=15.00 SQ FT
28.28,565.52
564.00

442+00.00

PROP. R.O.W.
EX. R.O.W.
-39.08,569.20
16.00,567.73
2.00%
4.00%
3H
1H
568.13
565.00
CUT=84.00 SQ FT
FILL=0.00 SQ FT
36.10,566.97
565.00

441+00.00

PROP. R.O.W.
EX. R.O.W.
-35.24,568.09
16.00,568.66
2.00%
4.00%
3H
1H
569.06
566.00
CUT=55.00 SQ FT
FILL=5.00 SQ FT
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566.00

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

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DRAWN	DJP	10/10/07
REVIEWED	JMM	02/01/08

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DRAWN - DJP
CHECKED - MNM
DATE - 10/10/07

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE:
SHEET NO. 2 OF 16 SHEETS
STA. 441+00.00 TO STA. 446+72.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	68
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Professional Services Inc.

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

CONTRACT # 95552

452+00.00

451+00.00

450+00.00

449+00.00

448+00.00

447+00.00

446+81.00

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

LAYOUT	DJP	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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	PLOT DATE = 04\04\2008, 10:50 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 3 OF 16 SHEETS | STA. 446+81.00 | TO STA. 452+00.00

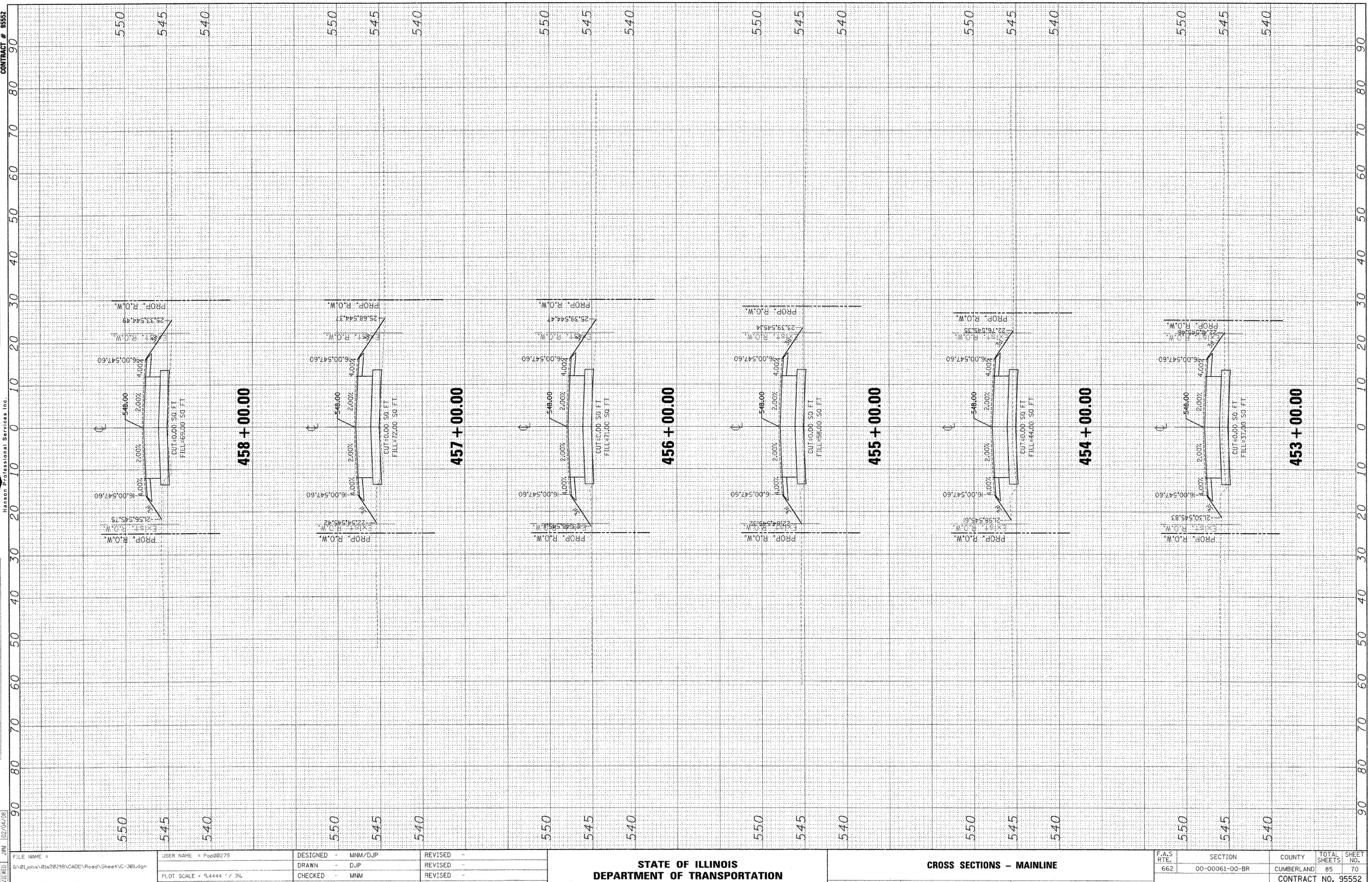
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	69
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

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

BY	DATE

CONTRACT # 95552



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

BY	DATE

LAYOUT	DJP	MNM 10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 4 OF 16 SHEETS | STA. 453+00.00 TO STA. 458+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	70
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

FINAL SURVEY	SURV. BY	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 5 OF 16 SHEETS | STA. 459+00.00 TO STA. 463+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	71
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Professional Services Inc.

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

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

CONTRACT # 95552

465+76.00

554.40 — 2.00% — 4.00% — 2.00% — 4.00% — 2:1 — 2:1 — 2:1 — 2:1 — 553.59 — 553.26

CUT=0.00 SQ.FT.
FILL=568.00 SQ.FT.

CUT=0.00 SQ.FT.
FILL=625.00 SQ.FT.

CUT=0.00 SQ.FT.
FILL=696.00 SQ.FT.

19,76,553.84 — 38,75,544.39 — 19,76,553.04 — 41,66,542.03 — 19,76,552.71 — 37,76,542.46 — 19,76,551.47 — 36,39,543.16

PROP. R.O.W. — PROP. R.O.W. — PROP. R.O.W. — PROP. R.O.W. — PROP. R.O.W.

FIELD ENTRANCE EARTH — 44.14' — 5.00% — 22,00,553.59 — 16,00,554.00 — 87,09,543.99

465+00.00

464+76.00

464+00.00

2-PRECAST REINFORCED CONC. FLARED END SECTION, 36"

2-PRECAST REINFORCED CONC. FLARED END SECTION, 36"

68.00'

2-PIPE CULVERTS, RCCP, 36"

U.S.F.L. ELEV. = 541.12

U.S.F.L. ELEV. = 541.18

U.S.F.L. ELEV. = 542.12

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JRM	02/04/08

FILE NAME = I:\01jobs\01a2221B\CADD\Road\Sheet\C-301.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 6 OF 16 SHEETS | STA. 464+00.00 TO STA. 465+76.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	72
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

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

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

West Approach Pavement
Section on Skew

468+21.00

27,94,554.60
1.4%
555.00
CUT=0.00 SQ.FT.
FILL=1256.00 SQ.FT.
2.85%
66,84,540.85
PROP. R.O.W.

468+00.00

27,62,554.61
2.85%
65,88,540.07
PROP. R.O.W.

467+50.00

19,76,554.45
4.00%
555.00
2.00%
CUT=0.00 SQ.FT.
FILL=887.00 SQ.FT.
2%
PROP. R.O.W.
46,56,540.05
PROP. R.O.W.

467+00.00

19,76,554.44
4.00%
554.99
2.00%
CUT=0.00 SQ.FT.
FILL=864.00 SQ.FT.
2%
PROP. R.O.W.
45,89,540.37
PROP. R.O.W.

466+00.00

19,76,554.03
4.00%
554.58
2.00%
CUT=0.00 SQ.FT.
FILL=930.00 SQ.FT.
2%
38,65,544.58
PROP. R.O.W.
20,00,554.02
4.00%
2.00%
2%
41,58,543.23
PROP. R.O.W.

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	12/04/08

FILE NAME = I:\01jobs\01s2021B\CADD\Road\Sheets\C-301.dgn

USER NAME = Pop00275

PLOT SCALE = 9.4444 ' / IN.

PLOT DATE = 04\04\2008. 10:58 AM

DESIGNED	MNM/DJP	REVISED -
DRAWN	DJP	REVISED -
CHECKED	MNM	REVISED -
DATE	10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 7 OF 16 SHEETS | STA. 466+00.00 TO STA. 468+21.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	73
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

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

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

474+50.00
East Approach Pavement
Section on Skew

473+29.00
East Abutment Section
Section on Skew

BRIDGE OMISSION
STA. 468+21.00 TO STA. 473+29.00

472+99.71
West Abutment Section
Section on Skew

468+50.29

LAYOUT	DJP	ANM	10/10/07
DRAWN	DJP		10/10/07
RETIEMED	JNM		02/04/08

FILE NAME = I:\01jobs\01s20218\CADD\Road\Sheet\C-301.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 8 OF 16 SHEETS | STA. 468+50.29 TO STA. 474+50.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	74
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552

HANSON
Hanson Professional Services Inc.

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

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

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	MNM	02/04/08

BRIDGE OMISSION
STA. 476+65.50 TO STA. 478+54.50

476+69.50
West Abutment Section
Section on Skew

476+00.00

475+00.00

FIELD ENTRANCE
EARTH

FILE NAME = I:\01jobs\01s20218\CADD\Road\Sheet\C-301.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 9 OF 16 SHEETS | STA. 475+00.00 TO STA. 476+69.50

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	75
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

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

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

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	MNM	02/04/08

479 + 50.00

9,776,559.66
4.00%
2.00%
560.21
50 FT
0 50 FT
CUT=35.00 SQ FT
FILL=867.00 SQ FT
12
542.46
62.00,543.24
PROP. R.O.W.
4.00%
542.08
63.23,543.58
PROP. R.O.W.

479 + 00.00

9,776,557.96
2.27%
2.00%
558.46
50 FT
0 50 FT
CUT=4.00 SQ FT
FILL=1082.00 SQ FT
22
541.84
56.42,542.64
PROP. R.O.W.
2.27%
541.84
55.35,542.29
PROP. R.O.W.

478 + 54.50

22,827,556.47
2.95%
0.45%
557.18
50 FT
0 50 FT
CUT=6.00 SQ FT
FILL=1155.00 SQ FT
24
55.81,542.16
PROP. R.O.W.
22,827,556.9
56.81,542.19
PROP. R.O.W.

BRIDGE OMISSION
STA. 476 + 65.50 TO STA. 478 + 54.50

East Abutment Section
Section on Skew

FILE NAME =	USER NAME = Prpp80275	DESIGNED - MNM/DJP	REVISED -
I:\01_jobs\01s2021B\CADD\Road\Sheet\C-301.dgn		DRAWN - DJP	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07	REVISED -

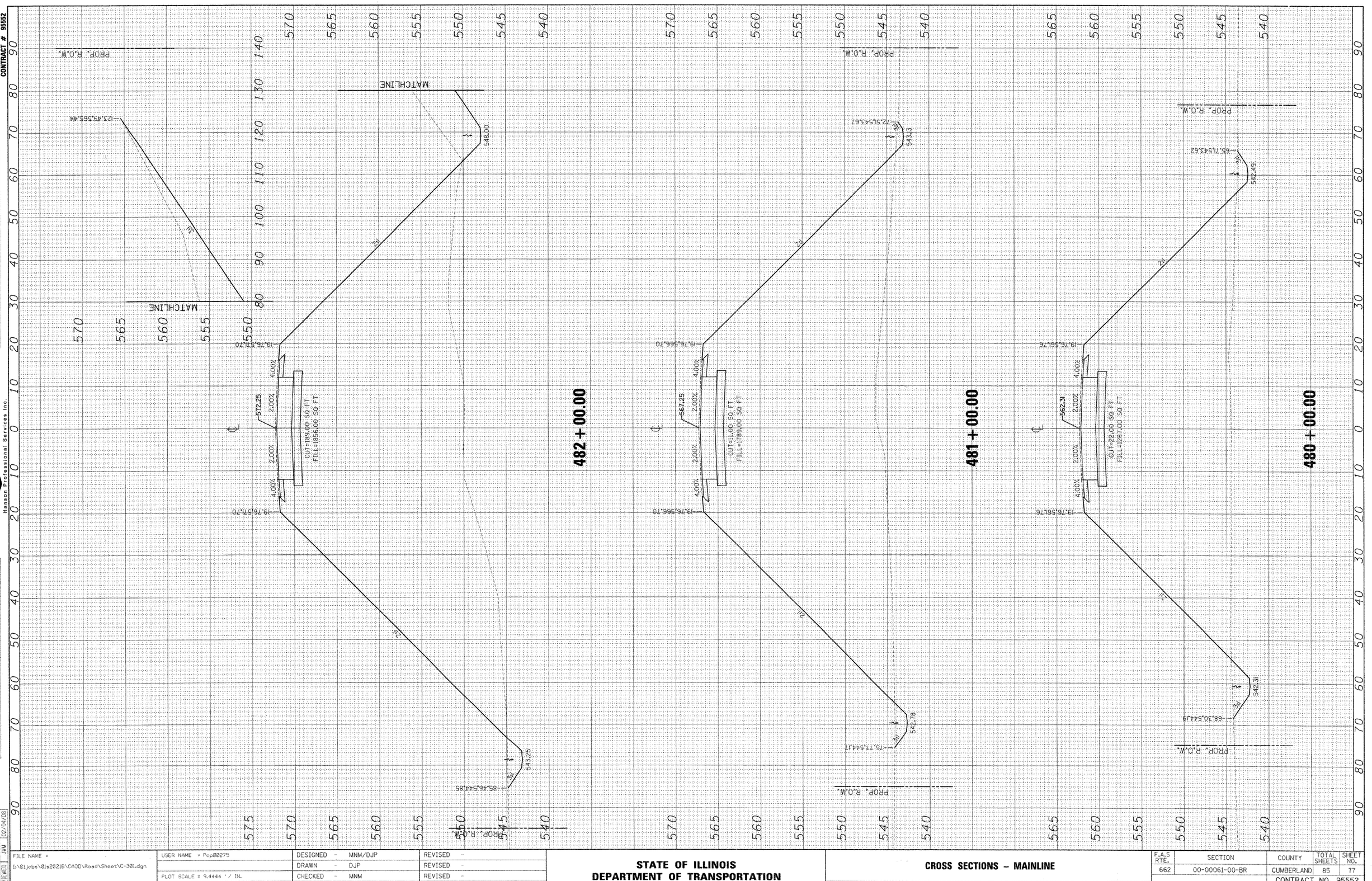
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 10 OF 16 SHEETS | STA. 478+54.50 | TO STA. 479+50.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	76
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552



FINAL SURVEY	SURVEYED:	BY	DATE
NOTE BOOK	DESIGNED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED:	BY	DATE
NOTE BOOK	DESIGNED		
NO.	TEMPLATE		
	AREAS		
	AREAS CHECKED		

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

HANSON
Professional Services Inc.

FILE NAME = I:\01jobs\01s2021B\CADD\Road\Sheet\C-301.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008. 10:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 11 OF 16 SHEETS | STA. 480+00.00 TO STA. 482+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	77
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

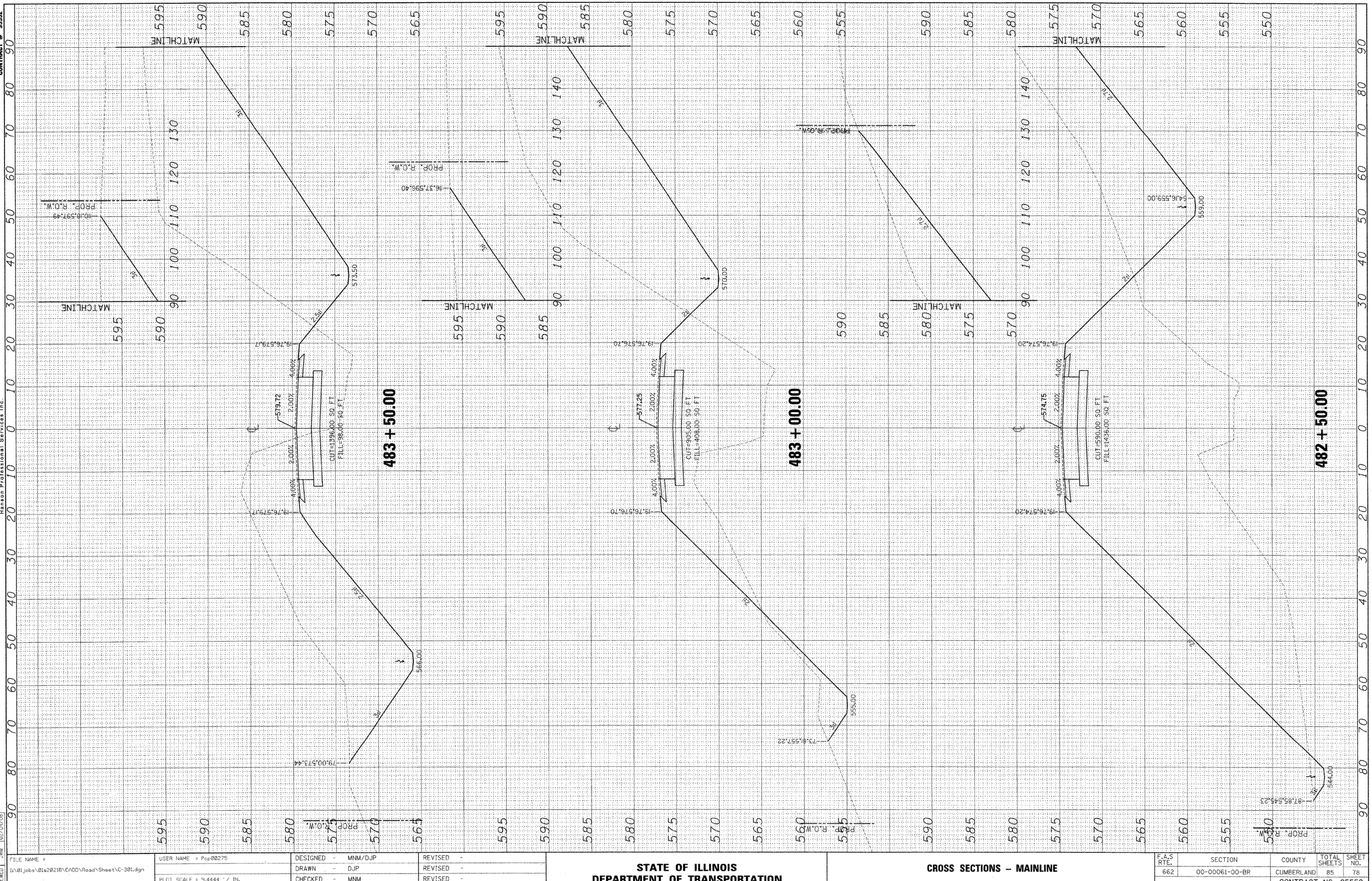
HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

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

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

	BY	DATE
LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JNM	02/04/08



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	PLOT SCALE = 4.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 12 OF 16 SHEETS | STA. 482+50.00 TO STA. 483+50.00

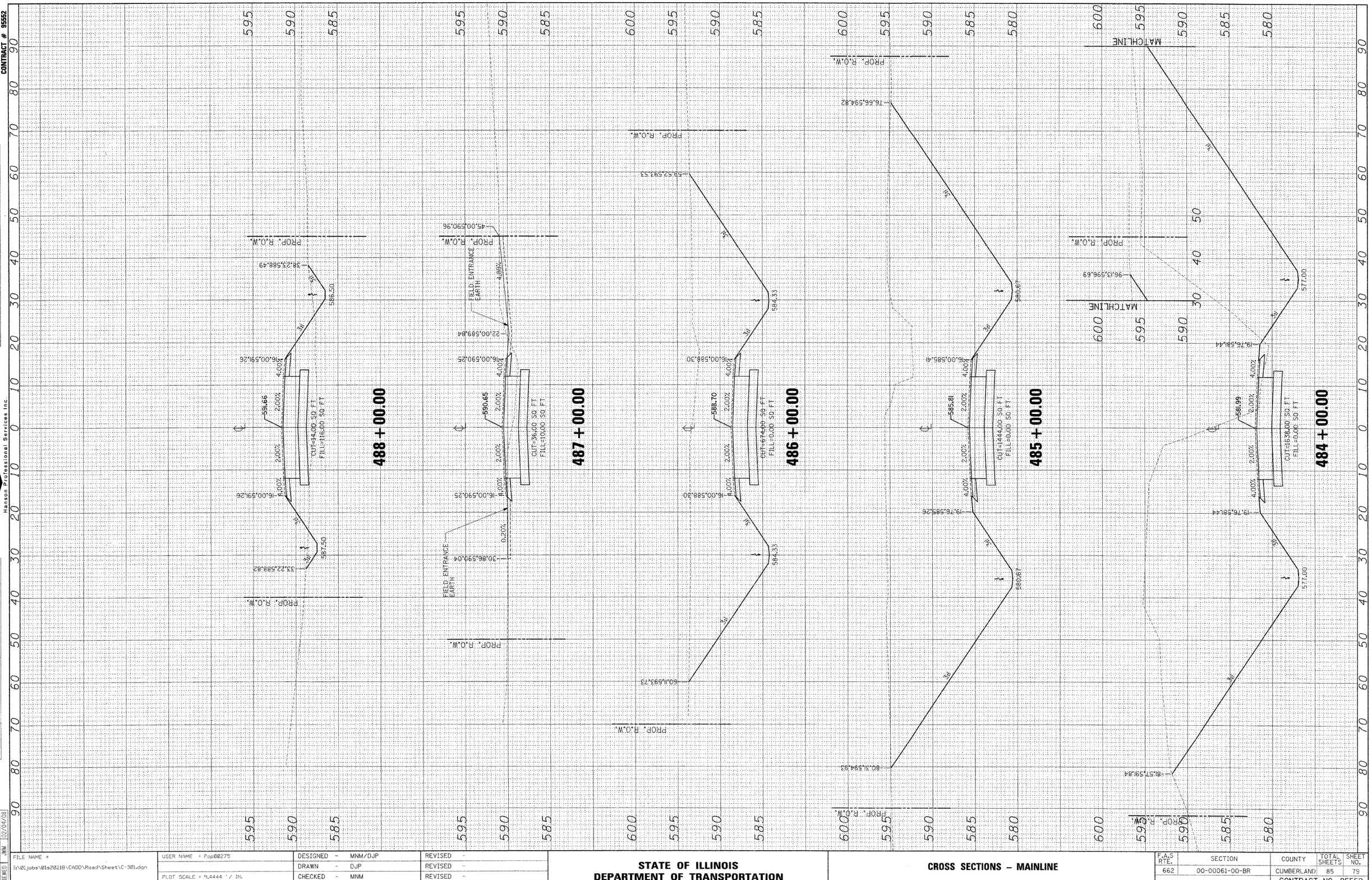
F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	78
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

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

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



LAYOUT	DJP	MNM	10/10/07
DRAWN	DJP		10/10/07
REVIEWED	MNM		12/04/08

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		DRAWN - DJP
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM
	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07

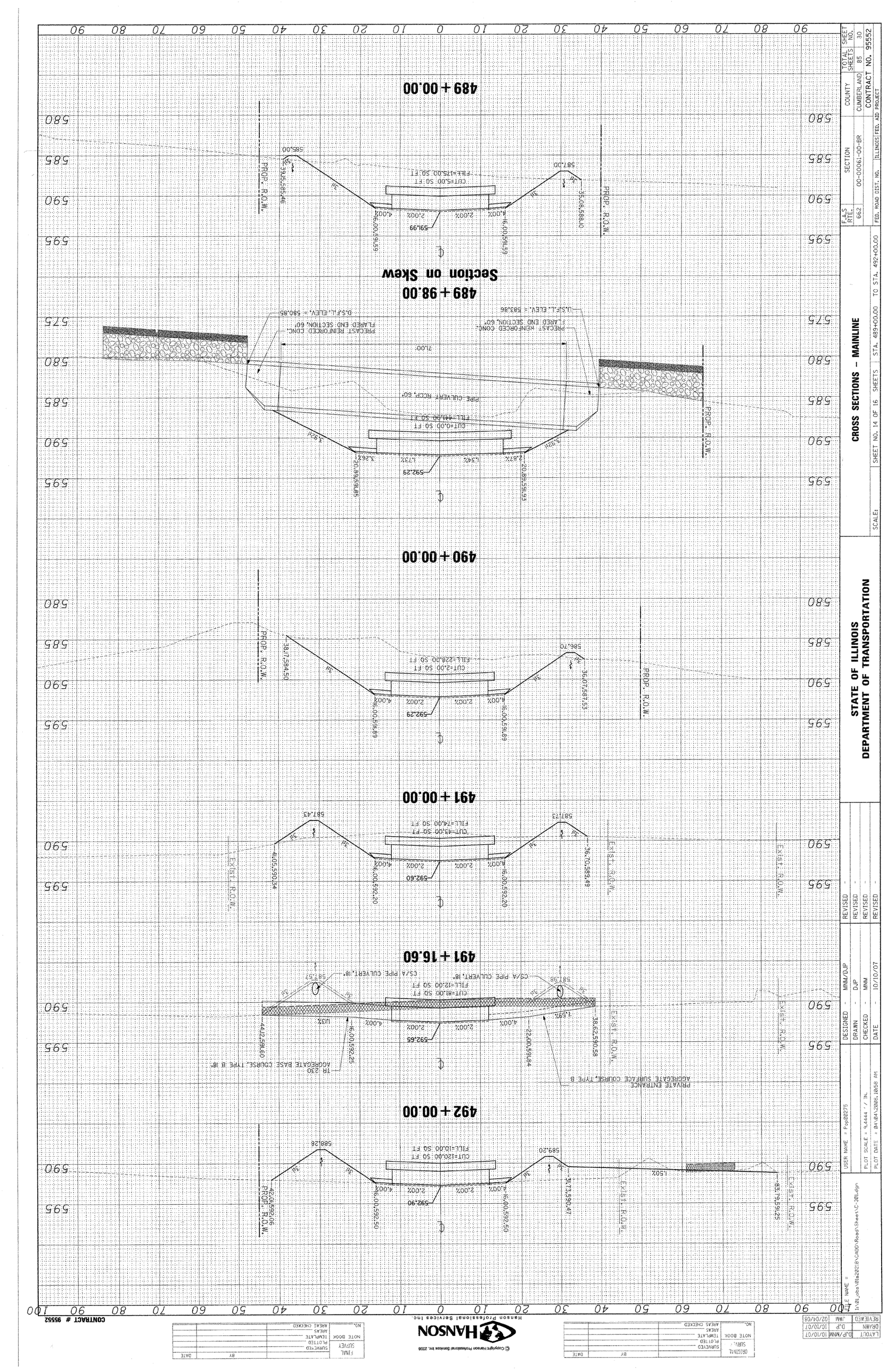
REVISED -	
REVISED -	
REVISED -	
REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 13 OF 16 SHEETS | STA. 484+00.00 TO STA. 488+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	79
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TOTAL SHEETS	SHEET NO.
85	30

F.A.S RTE.	SECTION	COUNTY
662	00-00061-00-BR	CUMBERLAND

CONTRACT NO. 95552

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

CROSS SECTIONS – MAINLINE

SHEET NO. 14 OF 16 SHEETS | STA. 489+00.00 | TO STA. 492+00.00

SCALE:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	DESIGNED	-	MNM/DJP
	DRAWN	-	DJP
	CHECKED	-	MNM
	DATE	-	10/10/07

REVISED	-
REVISED	-
REVISED	-
REVISED	-

USER NAME = Pop80275
PLOT SCALE = 9.4444 ' / IN.
PLOT DATE = 8/4/2008 10:58 AM
FILE NAME = I:\ATI_Jobs\10ta2021\ENGR\D\Road\Sheet\C-301.dgn

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

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMM	02/04/08

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

HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

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

HANSON
Hanson Professional Services Inc.

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

CONTRACT # 95552

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JWM	02/04/08

FILE NAME = I:\Projects\82822\DGN\CAD\Roads\Sheets\C-SRI.dgn

USER NAME = Prog82275

PLOT SCALE = 4.4444 ' / IN.

PLOT DATE = 04/04/2008 10:58 AM

DESIGNED	-	MNM/DJP
DRAWN	-	DJP
CHECKED	-	MNM
DATE	-	10/10/07

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE:

SHEET NO. 15 OF 16 SHEETS STA. 493+00.00 TO STA. 499+00.00

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	81

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

CONTRACT NO. 95552

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

MATCHLINE

EXIST. R.O.W.

PROP. R.O.W.

SEE INTERSECTION DETAIL SHEET FOR GRADING

499+00.00

SEE INTERSECTION DETAIL
STA. 498+23.44 TO END

498+23.44

CUT=156.00 SQ FT
FILL=11.00 SQ FT

497+00.00

CUT=171.00 SQ FT
FILL=11.00 SQ FT

496+00.00

CUT=175.00 SQ FT
FILL=7.00 SQ FT

495+00.00

CUT=165.00 SQ FT
FILL=9.00 SQ FT

494+00.00

CUT=151.00 SQ FT
FILL=11.00 SQ FT

493+00.00

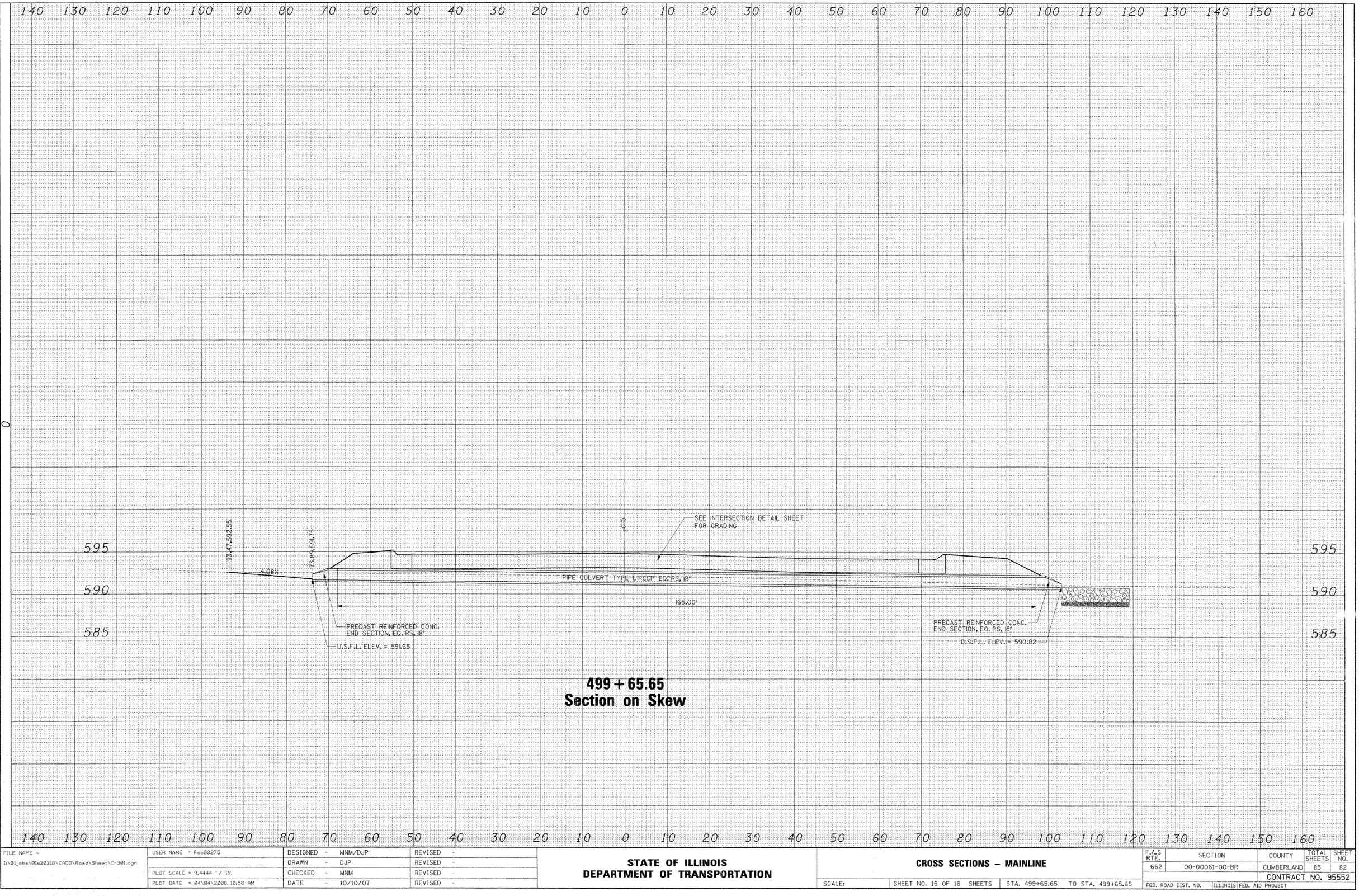
CUT=122.00 SQ FT
FILL=15.00 SQ FT

CONTRACT # 95552

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

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

HANSON
Hanson Professional Services Inc.



499+65.65
Section on Skew

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JNM	02/04/08

FILE NAME =	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
I:\01jobs\01s2021B\CADD\Road\Sheet\C-301.dgn		DRAWN - DJP	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 12:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – MAINLINE

SCALE: | SHEET NO. 16 OF 16 SHEETS | STA. 499+65.65 | TO STA. 499+65.65

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	82
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT # 95552

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

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

HANSON
Hanson Professional Services Inc.

LAYOUT	D.P.	10/10/07
DRAWN	D.P.	10/10/07
REVIEWED	J.W.M.	02/04/08

PROP. R.O.W.
EXIST. R.O.W.

12+00.00
13+00.00
14+00.00
15+00.00
16+00.00
17+00.00

CUT=6.00 SQ FT
FILL=60.00 SQ FT

CUT=69.00 SQ FT
FILL=60.00 SQ FT

CUT=94.00 SQ FT
FILL=60.00 SQ FT

CUT=87.00 SQ FT
FILL=60.00 SQ FT

CUT=62.00 SQ FT
FILL=60.00 SQ FT

CUT=62.00 SQ FT
FILL=60.00 SQ FT

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		DRAWN -	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 04\04\2008, 10:58 AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – NORTH GRADING

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. 12+00.00 TO STA. 17+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	83
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

CONTRACT # 95552

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

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

	BY	DATE
LAYOUT	DJP/ANM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	JMK	02/04/08

FILE NAME =	USER NAME = Pop00275	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 04\04\2008 10:58 AM	DATE -	REVISED -

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – NORTH GRADING

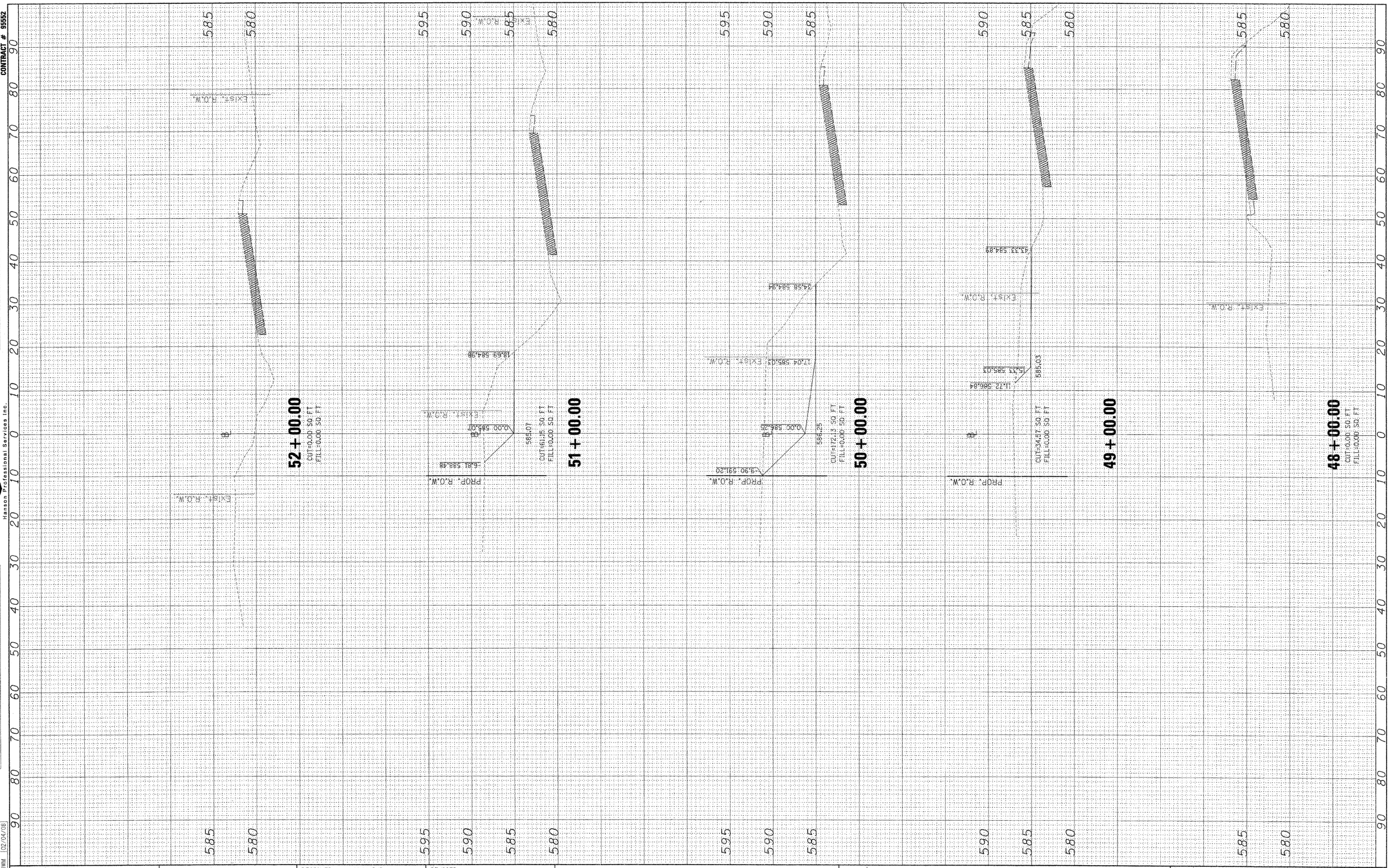
SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. 18+00.00 TO STA. 21+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	84
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

HANSON
Hanson Professional Services Inc.

FINAL SURVEY	SURVEYED	BY	DATE
	RECORDED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

CONTRACT # 95552



ORIGINAL SURVEY	SURVEYED	BY	DATE
	RECORDED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

LAYOUT	DJP/MNM	10/10/07
DRAWN	DJP	10/10/07
REVIEWED	MNM	02/04/08

FILE NAME = I:\Øljobs\Øls2021B\CADD\Road\Model\C-303right.dgn	USER NAME = Pop00275	DESIGNED - MNM/DJP	REVISED -
		DRAWN - DJP	REVISED -
	PLOT SCALE = 9.4444 ' / IN.	CHECKED - MNM	REVISED -
	PLOT DATE = 04\04\2008, 10:58 AM	DATE - 10/10/07	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – SOUTH GRADING

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. 48+00.00 TO STA. 52+00.00

F.A.S RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	00-00061-00-BR	CUMBERLAND	85	85
		CONTRACT NO. 95552		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		