

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	1

37

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 781 (IL 33)

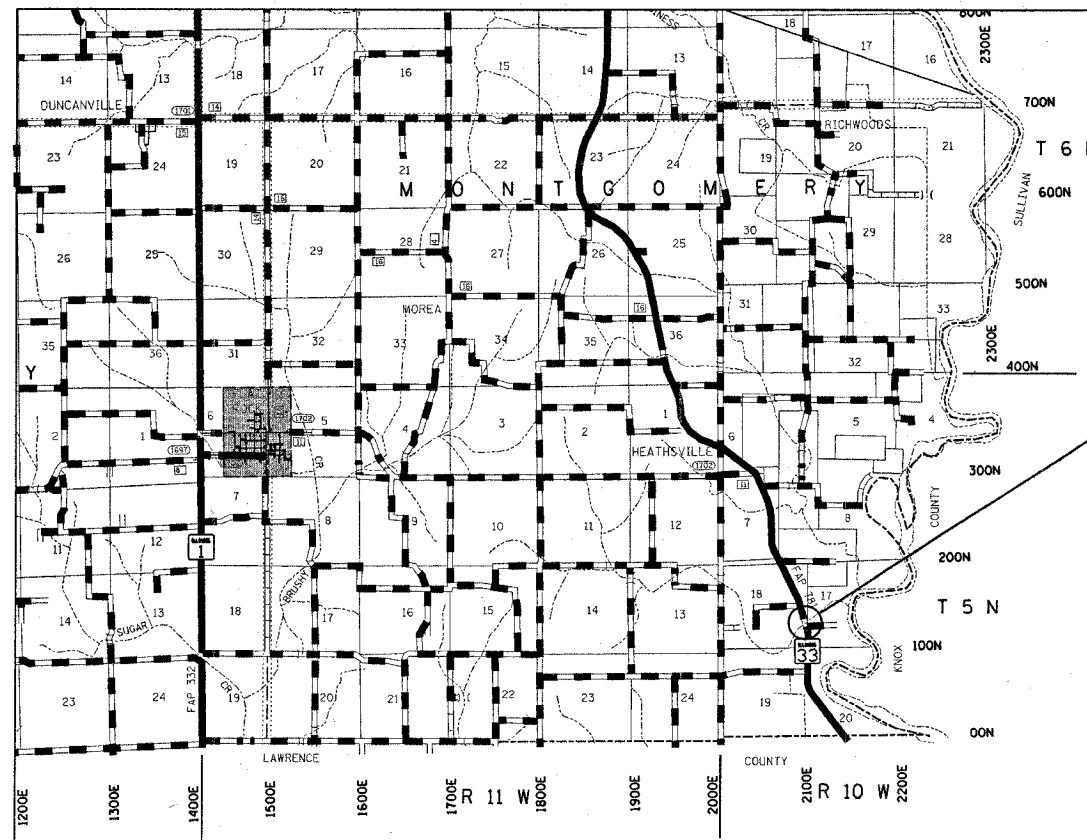
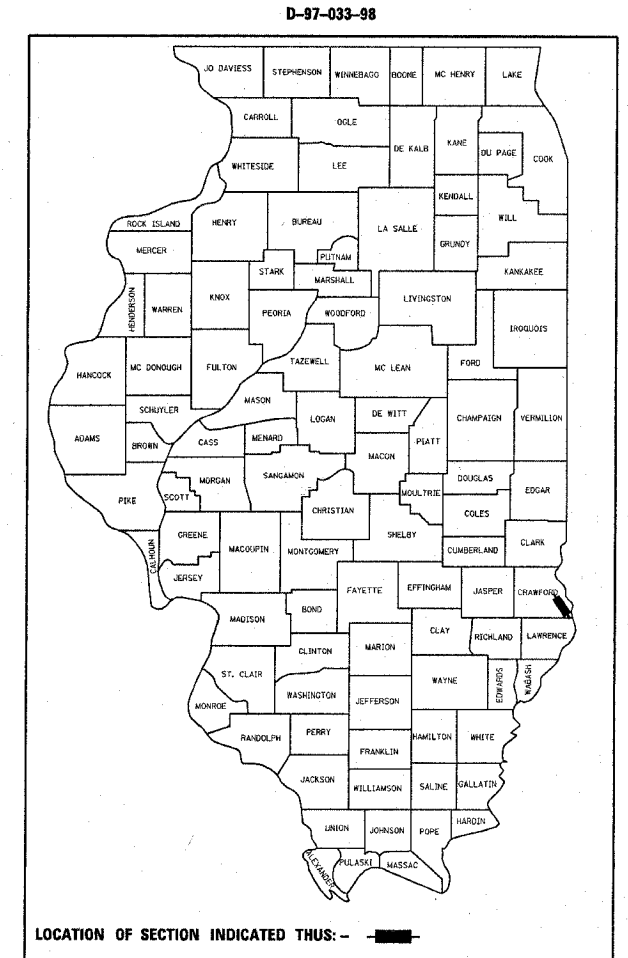
SECTION 108BR-1

PROJECT: F-781(27)

**BRIDGE REPLACEMENT
CRAWFORD COUNTY**

C-97-022-05

FOR INDEX OF SHEETS, SEE SHEET NO. 2



PROPOSED PROJECT
SECTION 108BR-1
CRAWFORD COUNTY
STATION 545+80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

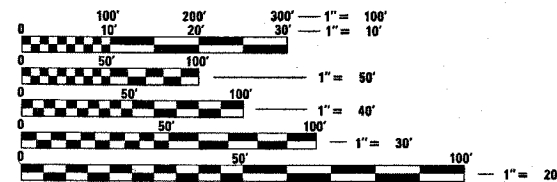
SUBMITTED Oct. 28, 20 05
Christ H. Reed
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 9, 20 05
Mike Hine
ENGINEER OF DESIGN AND ENVIRONMENT

December 9, 20 05
Eris Harnett
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

ADT (2005) = 800



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

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

GROSS LENGTH = 95 FEET = 0.02 MILES
NET LENGTH = 95 FEET = 0.02 MILES

CONTRACT NO. 94656 TOWNSHIP : MONTGOMERY T5N R10W

PROJECT ENGINEER : MARK DAUGHERTY
SQUAD LEADER : JOYCE HEMMEN
DESIGNER : JOYCE HEMMEN
TELEPHONE : 217/342-3951 EX 341

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2002; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" INDICATED ON THE CHECK SHEET, AND "THE SPECIAL PROVISIONS" INCLUDED IN THE PROPOSAL.

THE WORK INCLUDED IN THIS SECTION 108BR-1 CONSISTS OF COMPLETE REMOVAL AND REPLACEMENT OF THE EXISTING STRUCTURE WITH A NEW SINGLE SPAN CLOSED ABUTMENT STRUCTURE, APPROACH PAVEMENTS, GUARDRAIL, AND ANY OTHER INCIDENTAL WORK NECESSARY TO COMPLETE THE SECTION. THIS WORK SHALL BE DONE UTILIZING STAGE CONSTRUCTION AND TRAFFIC SIGNALS.

PAVEMENT MARKING SHALL BE APPLIED IN ACCORDANCE WITH SECTION 780 OF THE STANDARD SPECIFICATIONS; SHORT TERM PAVEMENT MARKING SHALL BE TAPE.

THE MATERIAL USED FOR AGGREGATE SURFACE COURSE, TYPE B SHALL BE CRUSHED STONE.

FOR THE PAY ITEM BITUMINOUS MATERIALS (PRIME COAT), THE CONTRACTOR SHALL USE EITHER RC-70 OR AN EMULSIFIED POLYMER PRIME SS-1HP.

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESS TO THE BITUMINOUS PLANT QUALITY CONTROL LAB SO THAT BITUMINOUS PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL BITUMINOUS ITEMS.

EXCAVATION QUANTITIES FOR WIDENING AND BITUMINOUS SHOULDERS SHALL NOT BE PAID FOR SEPARATELY, BUT HAVE BEEN INCLUDED IN THE QUANTITY FOR EARTH EXCAVATION.

TEMPORARY CONCRETE BARRIERS (STATE OWNED) ARE LOCATED AT THE IDOT MAINTENANCE YARD NORTH OF LAWRENCEVILLE ON IL ROUTE 1. A MINIMUM OF 48 HOURS NOTICE WILL BE REQUIRED TO ARRANGE PICK UP AND RETURN OF THE BARRIERS. STATE MAINTENANCE FORCES WILL NOT LOAD OR UNLOAD THE BARRIERS.

TREES SHALL BE PLANTED AT THE CONCLUSION OF THE PROJECT AT LOCATIONS DESIGNATED BY THE ENGINEER.

THE FOLLOWING BITUMINOUS CONCRETE MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT.

MIXTURE USE(S): BASE COURSE WIDENING
 AC/PG: PG 64-22
 RAP%: (MAX) 25%
 DESIGN AIR VOIDS: 4.0% @ NDESIGN = 50
 MIXTURE COMPOSITION: (GRADATION MIXTURE) IL-19.0
 FRICTION AGGREGATE: NA

MIXTURE USE(S): BRIDGE APPROACH PAVEMENT CONNECTOR
 AC/PG: PG 64-22
 RAP%: (MAX) 25%
 DESIGN AIR VOIDS: 4.0% @ NDESIGN = 70
 MIXTURE COMPOSITION: (GRADATION MIXTURE) IL-19.0
 FRICTION AGGREGATE: NA

MIXTURE USE(S): BITUMINOUS SHOULDERS SUPERPAVE, 6"
 AC/PG: PG 58-22
 RAP%: (MAX) 25%
 DESIGN AIR VOIDS: 20% @ NDESIGN = 30
 MIXTURE COMPOSITION: (GRADATION MIXTURE) NA
 FRICTION AGGREGATE: NA

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES & INDEX
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
5	STEEL PLATE BEAM GUARDRAIL, SHORT RADIUS DETAIL
6	ENTRANCE SCHEDULE
7	PLAN SHEET
8-9	STAGE CONSTRUCTION DETAILS
10-25	BRIDGE PLANS
26	NOT USED
27-38	CROSS-SECTIONS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NUMBER 38

STD. NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS, PATTERNS
001001	AREAS OF REINFORCEMENT REBARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420401-05	BRIDGE APPROACH PAVEMENT
515001-02	NAME PLATE FOR BRIDGES
630001-05	STEEL PLATE BEAM GUARDRAIL
630301-03	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-02	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-05	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701006-02	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-01	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-02	LANE CLOSURE 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-08	LANE CLOSURE 2L, 2W BRIDGE REPAIR WITH BARRIER
702001-05	TRAFFIC CONTROL DEVICES
704001-02	TEMPORARY CONCRETE BARRIER
780001-01	TYPICAL PAVEMENT MARKINGS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES
&
INDEX OF SHEETS**

SCALE: VERT.
DATE: HORIZ.

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	3
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		X071-2A	SFTY-3N	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	283	283		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	66	66		
20200100	EARTH EXCAVATION	CU YD	804	804		
20400800	FURNISHED EXCAVATION	CU YD	39	39		
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	209.1	209.1		
* 25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.6	0.6		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	183	183		
28000300	TEMPORARY DITCH CHECKS	EACH	6	6		
28000400	PERIMETER EROSION BARRIER	FOOT	990	990		
28100107	STONE RIPRAP, CLASS A4	SQ YD	736.7	736.7		
28200200	FILTER FABRIC	SQ YD	736.7	736.7		
35650500	BASE COURSE WIDENING 10"	SQ YD	130	130		
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	51	51		
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	228	228		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	46	46		
44000100	PAVEMENT REMOVAL	SQ YD	277	277		
48202400	BITUMINOUS SHOULDERS SUPERPAVE 6"	SQ YD	647	647		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	1		
50104000	BRIDGE RAIL REMOVAL	FOOT	100	100		
50105220	PIPE CULVERT REMOVAL	FOOT	32	32		
50200100	STRUCTURE EXCAVATION	CU YD	370.8	370.8		
50300100	FLOOR DRAINS	EACH	8	8		
50300225	CONCRETE STRUCTURES	CU YD	40	40		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	131.6	131.6		
50300260	BRIDGE DECK GROOVING	SQ YD	336.6	336.6		
50300300	PROTECTIVE COAT	SQ YD	438.4	438.4		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1		
50500505	STUD SHEAR CONNECTORS	EACH	1155	1155		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	31,020	31,020		
51201600	FURNISHING STEEL PILES HP12X53	FOOT	563	563		
51202700	DRIVING STEEL PILES	FOOT	563	563		
51203600	TEST PILE STEEL HP12X53	EACH	1	1		
51204600	METAL SHOES	EACH	13	13		
51205200	TEMPORARY SHEET PILING	SQ FT	1554	1554		
51500100	NAME PLATES	EACH	1	1		
54215559	METAL END SECTIONS 24"	EACH	2	2		
542D1069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	43	43		
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	425	425		
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1		
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	3	3		

SUMMARY OF QUANTITIES			80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		X071-2A	SFTY-3N	
63200310	GUARDRAIL REMOVAL	FOOT	224	224		
* 63300725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	32	32		
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	6	6		
67100100	MOBILIZATION	L SUM	1	1		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1		
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	SUM	1	1		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	151	151		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2447	2447		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	950	950		
70400500	TEMPORARY CONCRETE BARRIER (STATE OWNED)	FOOT	430	430		
70400600	RELOCATE TEMPORARY CONCRETE BARRIER (STATE OWNED)	FOOT	270	270		
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2447	2447		
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	17	17		
* 78200420	GUARDRAIL MARKERS, TYPE B	EACH	4	4		
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	1458	1458		
* A2001216	TREE, ACER RUBRUM RED SUNSET (RED SUNSET RED MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	6	6		
* A2002316	TREE, BETULA NIGRA (RIVER BIRCH), 2" CALIPER, BALLED AND BURLAPPED	EACH	10	10		
* A2005816	TREE, PLATANUS OCCIDENTALIS (SYCAMORE), 2" CALIPER, BALLED AND BURLAPPED	EACH	10	10		
* A2007616	TREE, TAXODIUM DISTICHUM (COMMON BALD CYPRESS), 2" CALIPER, BALLED AND BURLAPPED	EACH	10	10		
X0323082	DRAINAGE SCUPPERS, DS-33	EACH	1	1		
XX001537	PERMANENT ROAD CLOSURE	EACH	1	1		
Z0002600	BAR SPLICERS	EACH	366	366		
Z0029999	IMPACT ATTENUATOR REMOVAL	EACH				
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2		2	
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2		2	

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*SPECIALTY ITEMS

Rev.

REVISIONS	
NAME	DATE

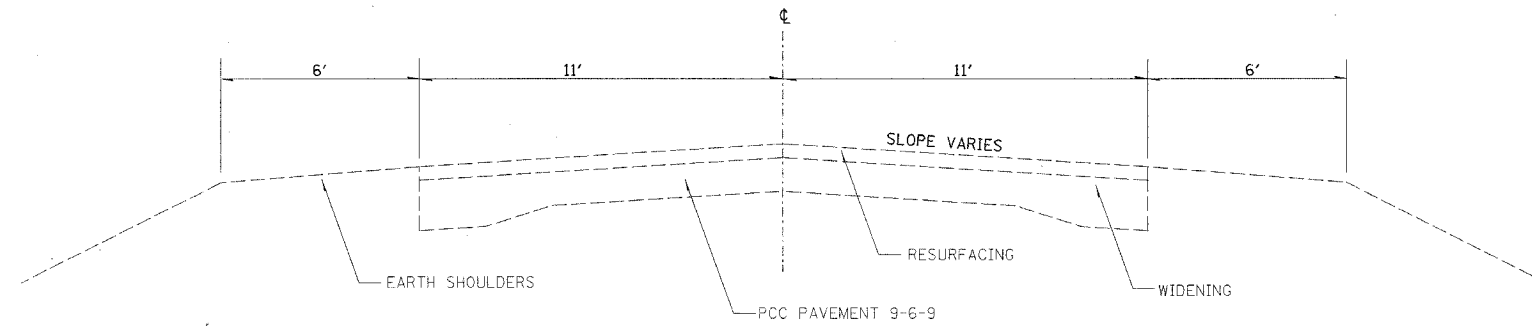
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SUMMARY OF QUANTITIES

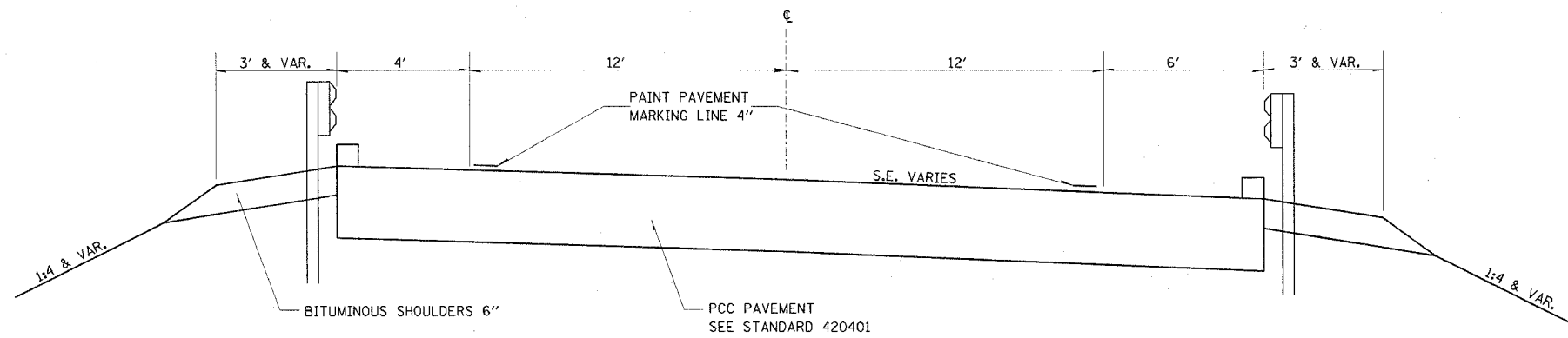
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING ROADWAY PAVEMENT
STA 542+00 TO STA 549+00



PROPOSED APPROACH PAVEMENT TYPICAL SECTION
STA 545+02.50 TO STA 545+32.50
STA 546+27.50 TO STA 546+57.50

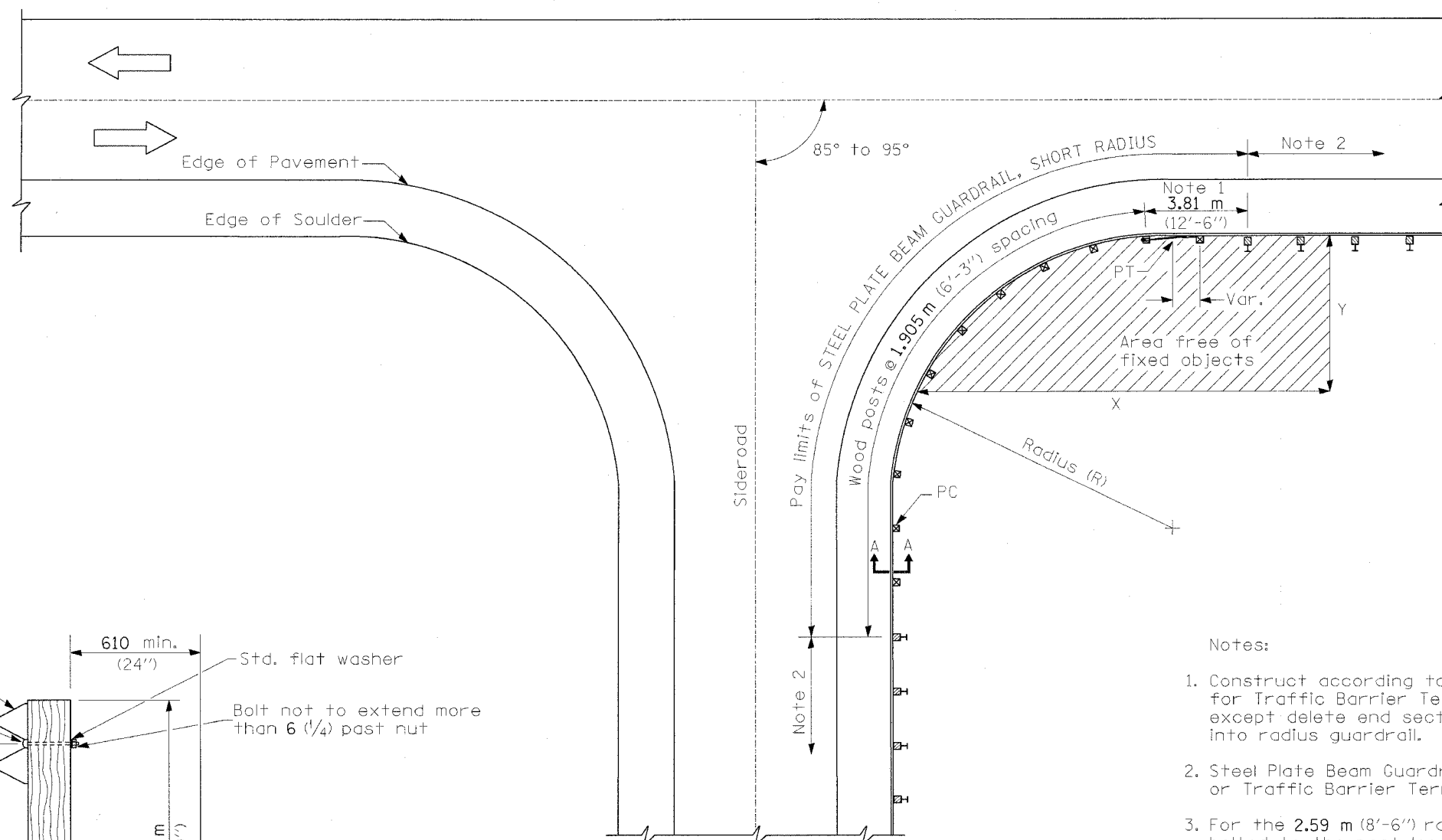
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICALS

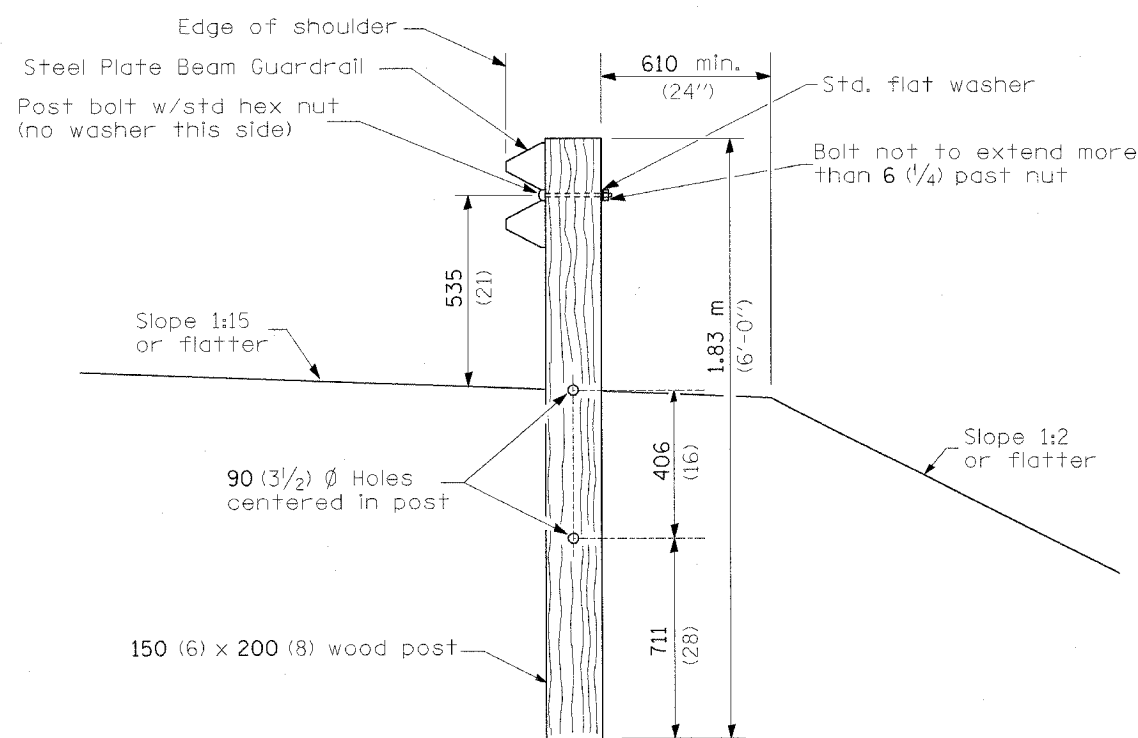
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Notes:

1. Construct according to Standard 631011 for Traffic Barrier Terminal Type 2, except delete end section and splice into radius guardrail.
2. Steel Plate Beam Guardrail Type A, Type B, or Traffic Barrier Terminal as specified.
3. For the 2.59 m (8'-6") radius, the rail is not bolted to the post located at the midpoint of the curve.



SECTION A-A

PLAN

INSTALLATION CHARACTERISTICS PER DESIGN RADIUS (R)			
R	NO. OF WOOD POSTS	X	Y
2.59 (8'-6")	5 (Note 3)	7.6 m (25')	4.6 (15')
5.18 (17'-0")	6	9.1 m (30')	4.6 (15')
7.77 (25'-6")	8	12.2 m (40')	6.1 (20')
10.67 (35'-0")	11	15.2 m (50')	6.1 (20')

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STEEL PLATE BEAM GUARDRAIL, SHORT RADIUS

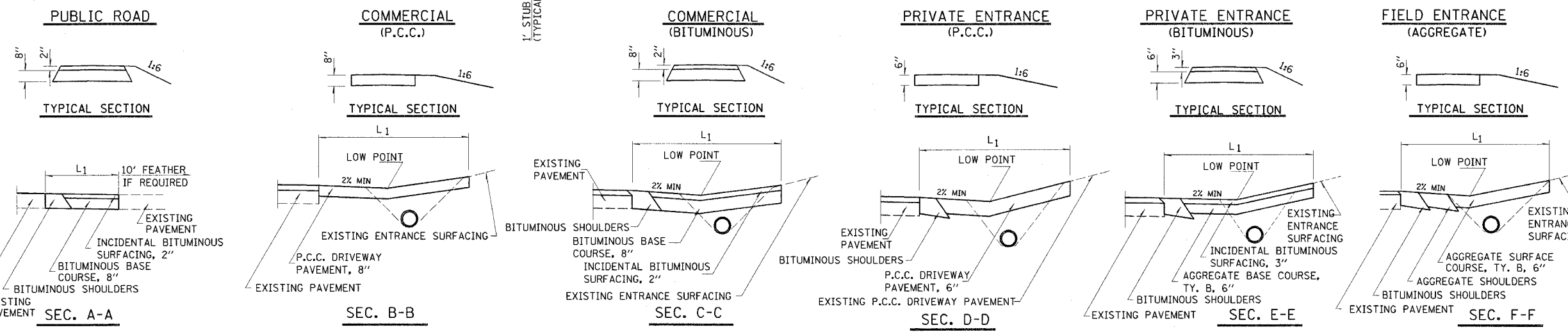
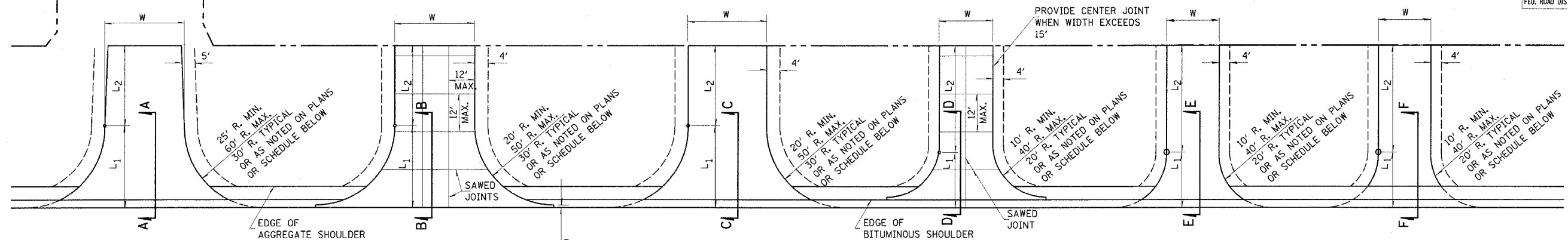
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CONTRACT NO. 94656

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



ENTRANCE SCHEDULE

TYPE	SIDE/STATION	WIDTH	LENGTH		RURAL RADII	AGGREGATE BASE, CSE. TY. B, 6"		AGGREGATE SURF. CSE. TYPE B	INCIDENTAL BITUMINOUS SURFACING	P.C.C. DRIVEWAY PAV'T	BITUMINOUS CONC. SURF. CSE.	PIPE CULVERT
			L1	L2		TON	SQ. YD.					
FE	RT 544+81.5	12	20	50	20			30				

NOTES

L1 = DISTANCE FROM EDGE OF PAVEMENT TO RADIUS POINT OR MAXIMUM DISTANCE OF 30'.
 L2 = DISTANCE FROM RADIUS POINT OR MAXIMUM DISTANCE OF 30' FROM EDGE OF PAVEMENT TO R.O.W. LINE
 MATERIAL USED TO CONSTRUCT L2 LENGTH SHALL BE THE SAME TYPE OF MATERIAL AS THE EXISTING ENTRANCE
 THE THICKNESS OF THE BITUMINOUS SHOULDERS THROUGH COMMERCIAL ENTRANCES (BITUMINOUS) AND PUBLIC ROADS SHALL BE 10". THE COST OF THE EXTRA THICKNESS SHALL BE INCLUDED WITH THE BITUMINOUS SHOULDERS PAY ITEM.
 THE COST OF THE BITUMINOUS MATERIALS AND AGGREGATE (PRIME COAT) FOR ENTRANCES AND PUBLIC ROAD APPROACHES SHALL BE INCLUDED IN THE PAY ITEM INCIDENTAL BITUMINOUS SURFACING.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		ENTRANCE SCHEDULE SCALE: VERT. HORIZ. DATE: DRAWN BY: CHECKED BY:

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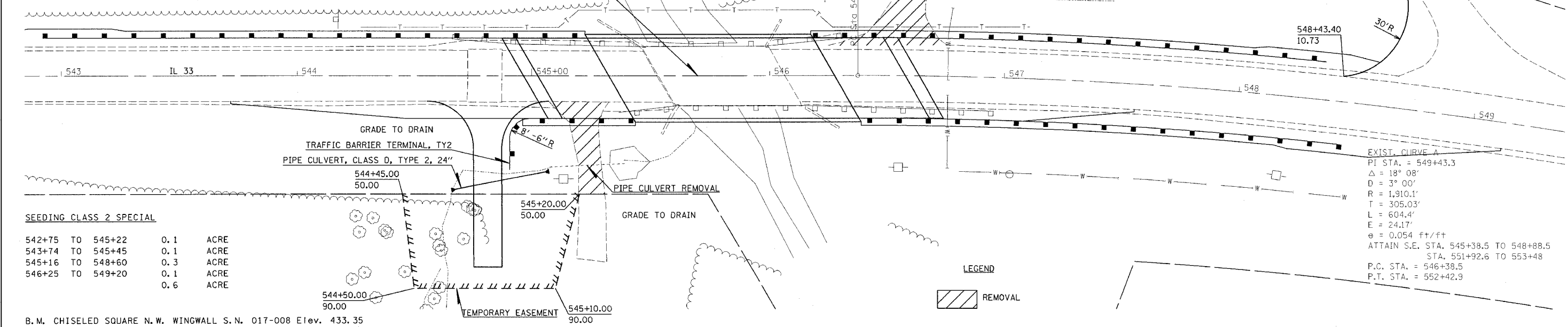
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	EARTH EXCAVATION	EMBANKMENT	EARTHWORK BALANCE
	CU YD	ADJUSTED (0.75)		
STA 542+50 TO 549+00	126	94.5	722	-628 CU YD
FIELD ENTRANCE	1	0.75	198	-197 CU YD
EXC FROM EX BRIDGE	677	507.75	0	508 CU YD
STRUCTURE EXCAVATION	370.8	278.1	0	278 CU YD
TOTAL				-39 CU YD

FAP ROUTE 781
IL 33
SECTION 108BR-1
CRAWFORD CO.
STA 545+80

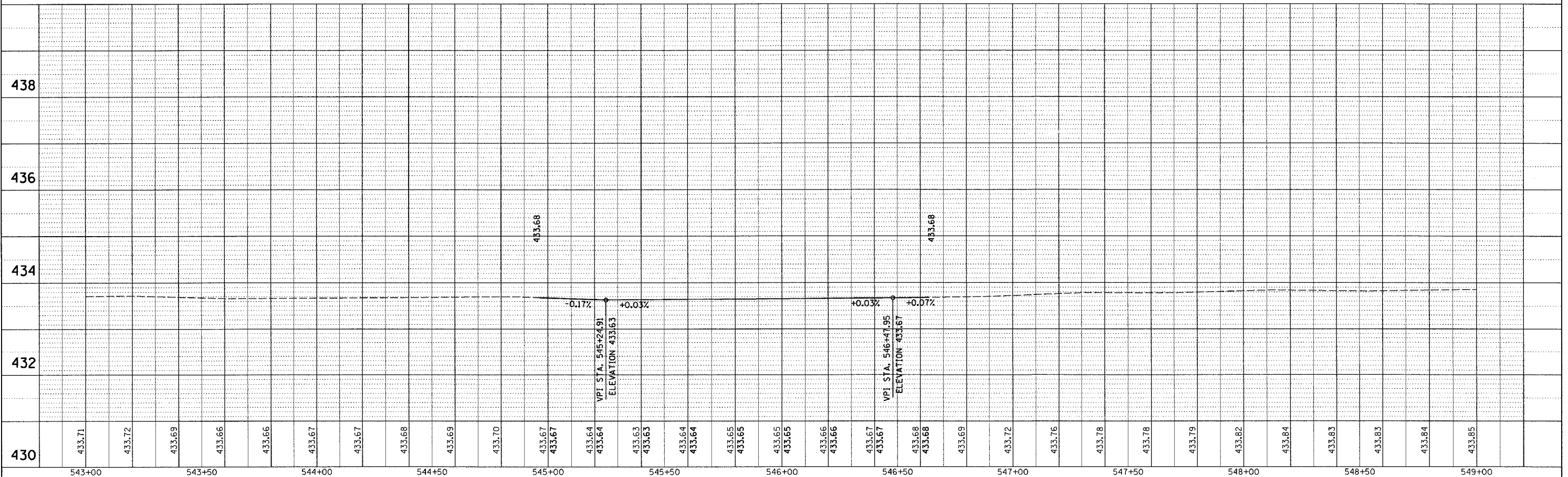
PERMANENT ROAD CLOSURE
LT STA. 546+57 1 EACH
REMOVE TO TR 125



SEEDING CLASS 2 SPECIAL

542+75 TO 545+22	0.1	ACRE
543+74 TO 545+45	0.1	ACRE
545+16 TO 548+60	0.3	ACRE
546+25 TO 549+20	0.1	ACRE
	0.6	ACRE

B. M. CHISELED SQUARE N. W. WINGWALL S. N. 017-008 Elev. 433.35





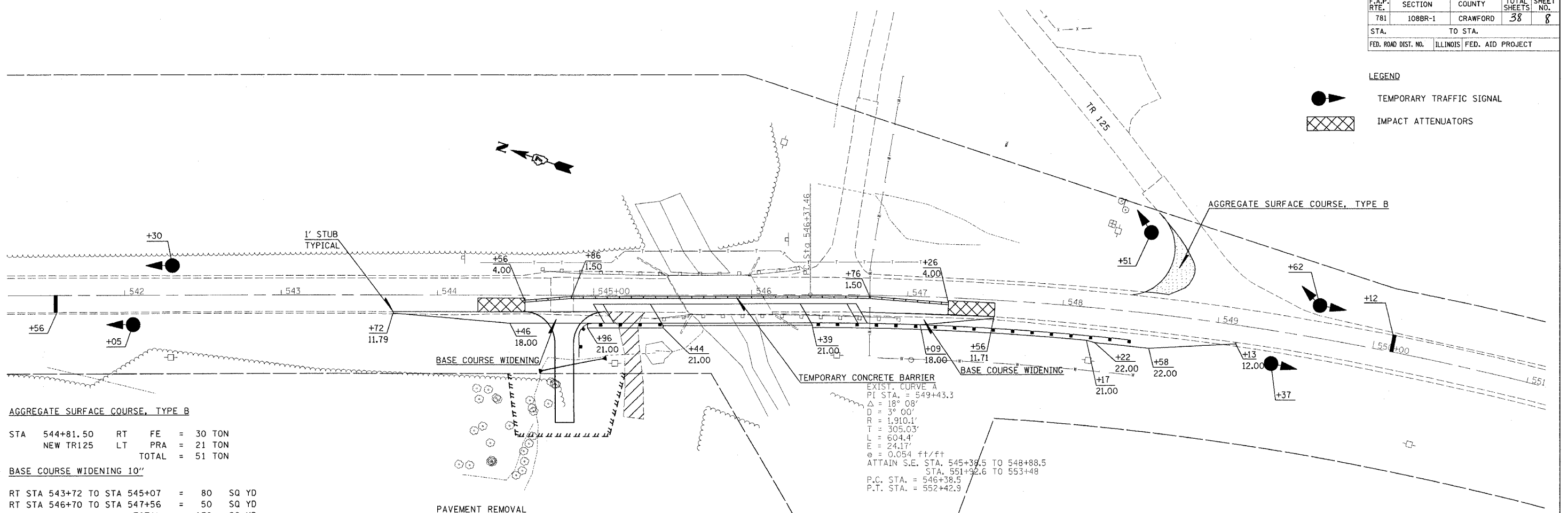
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NOTE BOOK NO. _____

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LEGEND

-  TEMPORARY TRAFFIC SIGNAL
-  IMPACT ATTENUATORS



AGGREGATE SURFACE COURSE, TYPE B

STA 544+81.50	RT	FE	=	30	TON	
	NEW TR125	LT	PRA	=	21	TON
			TOTAL	=	51	TON

BASE COURSE WIDENING 10"

RT STA 543+72 TO STA 545+07	=	80	SQ YD
RT STA 546+70 TO STA 547+56	=	50	SQ YD
TOTAL	=	130	SQ YD

BITUMINOUS SHOULDERS SUPERPAVE 6"

RT STA 544+96 TO 545+44	=	11	SQ YD
RT STA 548+39 TO 549+13	=	168	SQ YD
TOTAL	=	179	SQ YD

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

RT STA 545+00 TO STA 545+06	=	8	SQ YD
RT STA 546+61 TO STA 546+67	=	8	SQ YD
TOTAL	=	16	SQ YD

BRIDGE APPROACH PAVEMENT

RT STA 545+06 TO STA 545+36	=	40.5	SQ YD
RT STA 546+31 TO STA 546+61	=	40.5	SQ YD
TOTAL	=	81	SQ YD

GUARDRAIL REMOVAL

RT STA 54537 TO STA 54563	28	FT
RT STA 54613 TO STA 54696	83	FT
TOTAL	111	FT

IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3

544+55.87	=	1	EACH
547+26.19	=	1	EACH
TOTAL	=	2	EACH

METAL END SECTIONS 24"

544+64.44	50.80	RT	=	1	EACH
545+05.63	40.63	RT	=	1	EACH
TOTAL			=	2	EACH

PAVEMENT REMOVAL

STA 545+06 TO STA 545+36	=	33	SQ YD
STA 546+31 TO STA 546+61	=	34	SQ YD
TOTAL	=	67	SQ YD

PERIMETER EROSION BARRIER

NW SIDE OF FE STA 544+00 TO 544+50	=	85	FT
RT STA 545+00 TO 545+25	=	85	FT
RT STA 546+25 TO 549+00	=	280	FT
TOTAL	=	450	FT

STEEL PLATE BEAM GUARD RAIL, (SHORT RADIUS)

NW SECTION RT STA 544+80	32	FT
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STEEL PLATE BEAM GUARD RAIL, TYPE A

SOUTHWEST QUADRANT	=	137.5	FOOT
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TEMPORARY CONCRETE BARRIER (STATE OWNED)

STA 544+56 TO STA 547+26	=	270	FT
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BRIDGE RAIL REMOVAL

RT STA. 545+63 TO STA. 546+13	50	FT
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GUARDRAIL MARKERS, TYPE A

NW SECTION	2	EACH
SW SECTION	5	EACH
TOTAL	7	EACH

GUARDRAIL MARKERS, TYPE B

W PARAPET WALL	2	EACH
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TEMPORARY CONCRETE BARRIER

EXIST. CURVE A
 PI STA. = 549+43.3
 Δ = 18° 08'
 D = 3° 00'
 R = 1,910.1'
 T = 305.03'
 L = 604.4'
 E = 24.17'
 e = 0.054 ft/ft
 ATTAIN S.E. STA. 545+39.5 TO 548+88.5
 STA. 551+92.6 TO 553+48
 P.C. STA. = 546+38.5
 P.T. STA. = 552+42.9

TEMPORARY EROSION CONTROL SEEDING

RT = 37	POUND
RT = 30	POUND
TOTAL = 67	POUND

TEMPORARY DITCH CHECKS

RT STA 545+50	=	1	EACH
RT STA 546+50	=	1	EACH
TOTAL	=	2	EACH

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

SOUTHWEST QUADRANT	=	1	EACH
--------------------	---	---	------

TRAFFIC BARRIER TERMINAL, TYPE 2

NORTHWEST QUADRANT	=	1	EACH
--------------------	---	---	------

TRAFFIC BARRIER TERMINAL, TYPE 6

NORTHWEST QUADRANT	=	1	EACH
SOUTHWEST QUADRANT	=	1	EACH
TOTAL	=	2	EACH

STAGE I NOTES

PREFORM WORK NECESSARY TO CLOSE TOWNSHIP ROAD ACCORDING THE SPECIAL PROVISIONS CLOSURE OF TOWNSHIP ROAD.

CONSTRUCT THE NEW RADIUS FOR THE TOWNSHIP ROAD THAT IS TO REMAIN OPEN AND RELOCATE THE STOP SIGN AND TOWNSHIP ROAD SIGN FROM THE FORMER TOWNSHIP ROAD TO THE TOWNSHIP ROAD THAT IS TO REMAIN OPEN.

CONSTRUCT BASE COURSE WIDENING ON STAGE I TRAFFIC SIDE USING TRAFFIC CONTROL PLAN.

INSTALL TRAFFIC CONTROL ACCORDING TO TRAFFIC CONTROL STANDARD 701321 (SPECIAL).

REMOVE EXISTING FIELD ENTRANCE AND PIPE CULVERT. INSTALL THE NEW 24" CMP CULVERT AND CONSTRUCT PROPOSED FIELD ENTRANCE. ACCESS SHALL BE MAINTAINED AT ALL TIMES

REMOVE STAGE I PORTION OF EXISTING STRUCTURE AND GUARD RAIL.

CONSTRUCT STAGE I PORTION OF NEW STRUCTURE.

CONSTRUCT EMBANKMENT, BRIDGE APPROACH PAVEMENT AND BRIDGE APPROACH PAVEMENT CONNECTOR, BITUMINOUS SHOULDERS AND GUARD RAIL.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION



STAGE I CONSTRUCTION

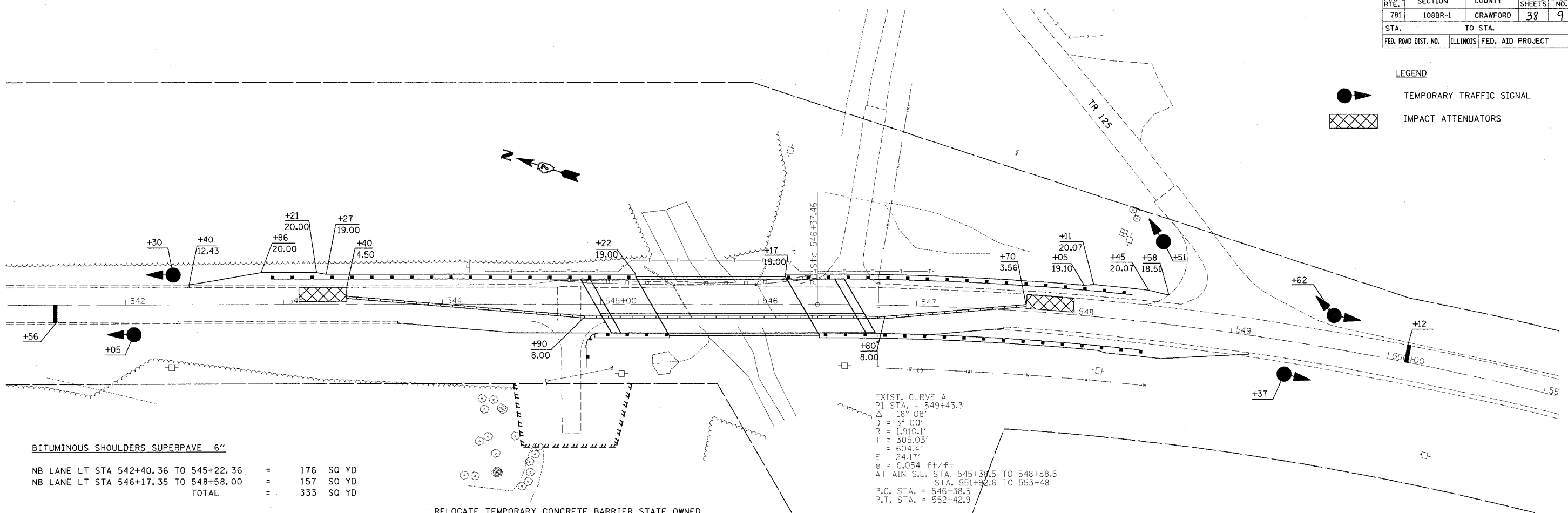
SCALE: VERT.
 HORIZ.
 DATE

DRAWN BY
 CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
781	108BR-1	CRAWFORD	38	9
STA. TO STA.				
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

LEGEND

-  TEMPORARY TRAFFIC SIGNAL
-  IMPACT ATTENUATORS



EXIST. CURVE A
 PI STA. = 549+43.3
 Δ = 18° 08'
 D = 3° 00'
 R = 1,910.1'
 T = 305.03'
 L = 604.4'
 E = 24.17'
 e = 0.054 ft/ft
 ATTAIN S.E. STA. 545+39.5 TO 548+88.5
 STA. 551+92.6 TO 553+48
 P.C. STA. = 546+38.5
 P.T. STA. = 552+42.9

BITUMINOUS SHOULDERS SUPERPAVE 6"

NB LANE LT STA 542+40.36 TO 545+22.36	=	176	SQ YD
NB LANE LT STA 546+17.35 TO 548+58.00	=	157	SQ YD
TOTAL	=	333	SQ YD

BRIDGE APPROACH PAVEMENT

RT STA 545+02.5 TO STA 545+32.5	=	73.5	SQ YD
RT STA 546+28 TO STA 546+58	=	73.5	SQ YD
TOTAL	=	147	SQ YD

BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)

RT STA 544+96.5 TO STA 545+02.5	=	15	SQ YD
RT STA 546+58 TO STA 546+64	=	15	SQ YD
TOTAL	=	30	SQ YD

GUARDRAIL REMOVAL

LT STA 54466 TO STA 54548	83	FT
LT STA 54598 TO STA 54631	33	FT
TOTAL	116	FT

PAVEMENT REMOVAL

STA 545+02.5 TO STA 545+32.5	=	104	SQ YD
STA 546+28 TO STA 546+58	=	106	SQ YD
TOTAL	=	210	SQ YD

PERIMETER EROSION BARRIER

LT STA 542+50 TO 545+50	=	300	FT
LT STA 546+40 TO 548+60	=	240	FT
TOTAL	=	540	FT

IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE) TEST LEVEL 3

543+39.69	=	1	EACH
547+69.21	=	1	EACH
TOTAL	=	2	EACH

RELOCATE TEMPORARY CONCRETE BARRIER STATE OWNED

545+00 to 547+70 = 270 FOOT

STEEL PLATE BEAM GUARD RAIL, TYPE A

NORTHEAST QUADRANT	=	150	FOOT
SOUTHEAST QUADRANT	=	137.5	FOOT
TOTAL	=	288	FOOT

TEMPORARY CONCRETE BARRIER (STATE OWNED)

STA 543+40 TO STA 545+00 = 160 FT

TRAFFIC BARRIER TERMINAL, TYPE 6

NORTHEAST QUADRANT	=	1	EACH
SOUTHWEST QUADRANT	=	1	EACH
TOTAL	=	2	EACH

TEMPORARY DITCH CHECKS

LT STA 545+25=	1	EACH	
LT STA 545+25=	1	EACH	
LT STA 547+19=	1	EACH	
LT STA 547+57=	1	EACH	
TOTAL	=	4	EACH

TEMPORARY EROSION CONTROL SEEDING

RT =	37	POUND	
RT =	30	POUND	
TOTAL	=	67	POUND

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

NORTHEAST QUADRANT	=	1	EACH
SOUTHEAST QUADRANT	=	1	EACH
TOTAL	=	2	EACH

BRIDGE RAIL REMOVAL

LT STA. 545+48 TO STA. 545+98 50 FT

GUARDRAIL MARKERS, TYPE A

NE SECTION	5	EACH
SE SECTION	5	EACH
TOTAL	10	EACH

GUARDRAIL MARKERS, TYPE B

E PARAPET WALL 2 EACH

STAGE II NOTES

- RELOCATE TEMPORARY CONCRETE BARRIER, SIGNS, ETC. ACCORDING TO TRAFFIC CONTROL PLAN.
- REMOVE STAGE II PORTION OF EXISTING STRUCTURE AND CONSTRUCT THE STAGE II PORTION OF THE NEW STRUCTURE.
- CONSTRUCT EMBANKMENT, BRIDGE APPROACH PAVEMENT AND BRIDGE APPROACH PAVEMENT CONNECTOR, BITUMINOUS SHOULDERS AND GUARD RAIL.
- PLACE FINAL PAVEMENT MARKINGS, SEEDING AND PERFORM OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY _____
 CHECKED BY _____

PLOT DATE = 10/27/2005
 PLOT SCALE = AS SHOWN
 USER NAME = district

Bench Mark: Chiseled "□" N.W. wingwall S.N. 017-0008 Elev. 433.35

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

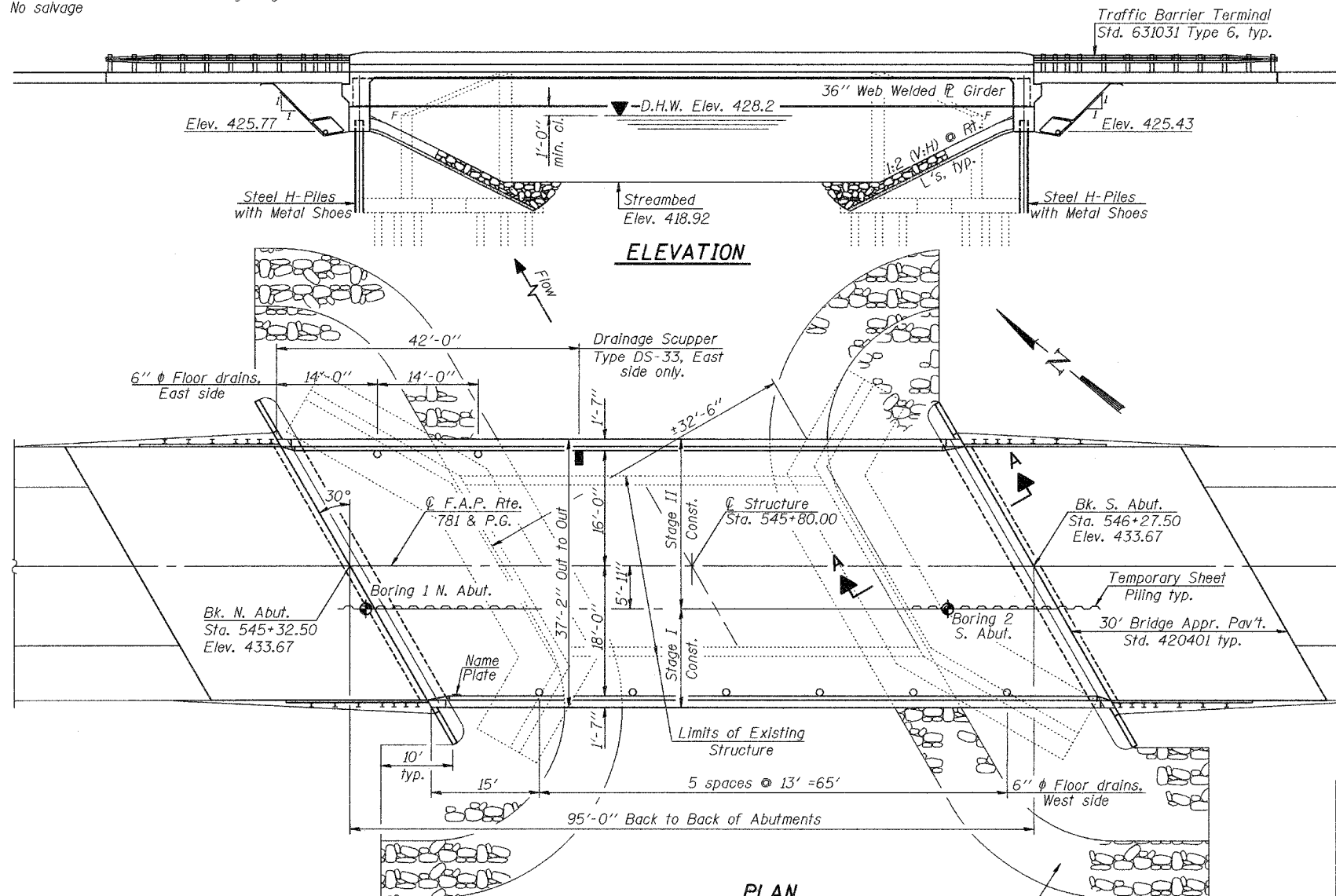
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 781	108B-1	CRAWFORD	38	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1

16 SHEETS

Contract #94656

Existing Structure: S.N. 017-0008 Built 1933 as S.B.I. Route 181, Section 108B, at Sta. 545+80.
Existing structure consists of a single span concrete T-girder superstructure on closed abutments.
53'-5 1/2" Bk.-Bk. abuts. 25'-3" 0.-0. deck. Structure to be removed and replaced.
Traffic to be maintained using stage construction.
No salvage



INDEX OF SHEETS

1. General Plan and Elevation
2. Stage Construction Details
3. Temporary Concrete Barrier
- 4.-5. Top of Slab Elevations
- 6.-7. Superstructure
- 8.-9. Diaphragm Details
10. Drainage Scupper
11. Structural Steel Details
12. Anchor Bolt Details
- 13.-14. Abutments
15. Bar Splicers
16. Boring Data

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
The Contractor shall drive one Steel HP 12x53 test pile in a permanent location at the South Abutment as directed by the Engineer before ordering the remainder of piles.
Fasteners shall be high strength bolts. (AASHTO M164, Type 3). Bolts 3/4" φ, open holes 13/16" φ, unless otherwise noted.
All structural steel shall be AASHTO M270 Grade 50W.
Calculated weight of Structural Steel = 145656 lbs. (AASHTO M270 Grade 50W)
Field welding of construction accessories will not be permitted to girders.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges and webs.
AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M 300, Type 1. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel."
Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before Stage I Removal.
All construction joints shall be bonded.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		370.8	370.8
Concrete Structures	Cu. Yd.		40.0	40.0
Protective Coat	Sq. Yd.	438.4		438.4
Stone Riprap, Class A4	Sq. Yd.		736.7	736.7
Reinforcement Bars, Epoxy Coated	Pound	25210	5810	31020
Furnishing Steel Piles HP12x53	Foot		563	563
Driving Steel Piles	Foot		563	563
Test Pile Steel HP12x53	Each		1	1
Name Plates	Each	1		1
Filter Fabric	Sq. Yd.		736.7	736.7
Bridge Deck Grooving	Sq. Yd.	336.6		336.6
Bar Splicers	Each	348	18	366
Temporary Sheet Piling	Sq. Ft.		1554	1554
Floor Drains	Each	8		8
Drainage Scuppers, DS-33	Each	1		1
Stud Shear Connectors	Each	1155		1155
Furnishing & Erecting Structural Steel	L.S.	1		1
Concrete Superstructure	Cu. Yd.	131.6		131.6
Porous Granular Embankment (Special)	Cu. Yd.		209.1	209.1
Metal Shoes	Each		13	13

STATION 545+80.00
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 781 SEC. 108B-1
LOADING HS-20
STR. NO. 017-0030

NAME PLATE

See Std. 515001

LOADING HS20-44

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

DESIGN SPECIFICATIONS

1996 AASHTO with 1997 thru 2002 Interims

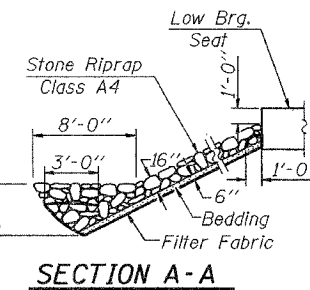
SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 8.4%g
Site Coefficient (S) = 1.0

DESIGN STRESSES

FIELD UNITS

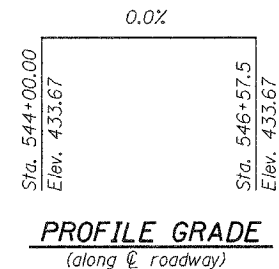
f_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
f_y = 50,000 psi (AASHTO M270 GR. 50W)



WATERWAY INFORMATION

Drainage Area = 7.4 sq. mi. Low Grade Elev. 433.6 ft. @ Sta. 545+25

Flood	Freq. Yr.	Q	C.F.S.	Opening	Nat. H.W.E.	Head - Ft.	Headwater E.I.
Design	50	1940	333	411	428.2	0.1	428.3
Base	100	2230	360	452	428.8	0.1	428.9
Overtopping							
Max. Calc.	500	2900	430	560	430.6	1.1	431.7



CURVE DATA

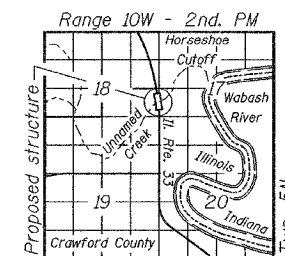
P.I. Sta. = 549+42.49
Δ = 18°-08'-51"
R = 1909.96 ft.
T = 305.03 ft.
L = 604.95 ft.
E = 24.20 ft.
S.E. = 5.4%
P.C. Sta. = 546+37.46
P.T. Sta. = 552+42.42
S.E. attained Sta. 544+93.66 to Sta. 546+86.96

DESIGNED	William A. Beiser
CHECKED	Chel... (signature)
DRAWN	R. Dalsin
CHECKED	CCC/SJB/SMR

December 13 2005
EXAMINED
PASSED
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2006



LOCATION SKETCH

GENERAL PLAN & ELEVATION

ILLINOIS ROUTE 33 OVER
UNNAMED CREEK
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

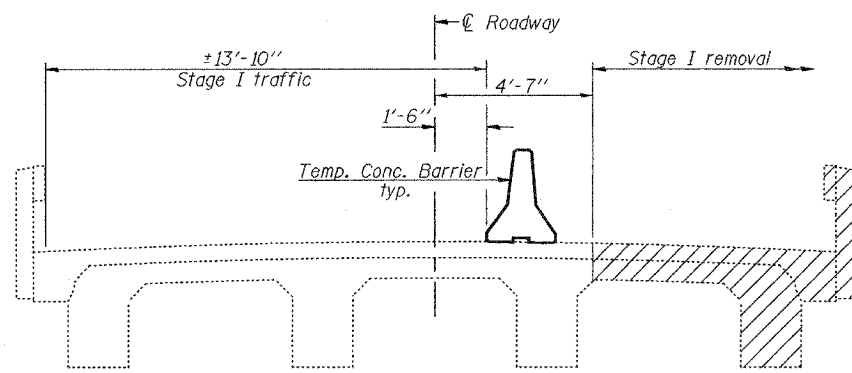
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET
F.A.P. 781	108B-1	CRAWFORD	38	11
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT-	

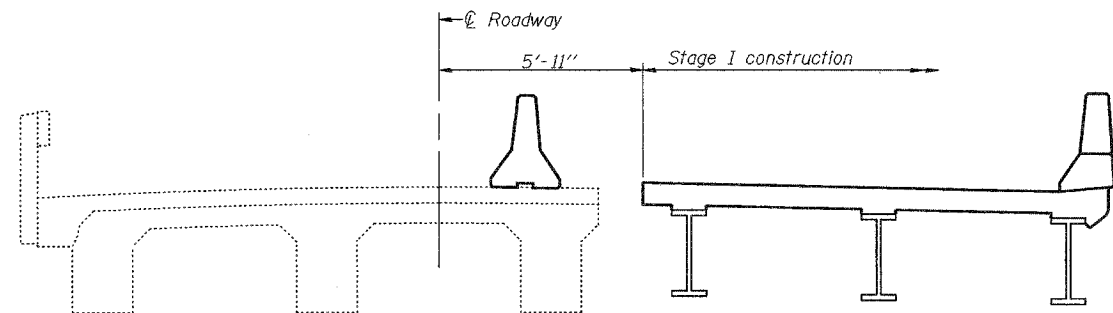
SHEET NO. 2

16 SHEETS

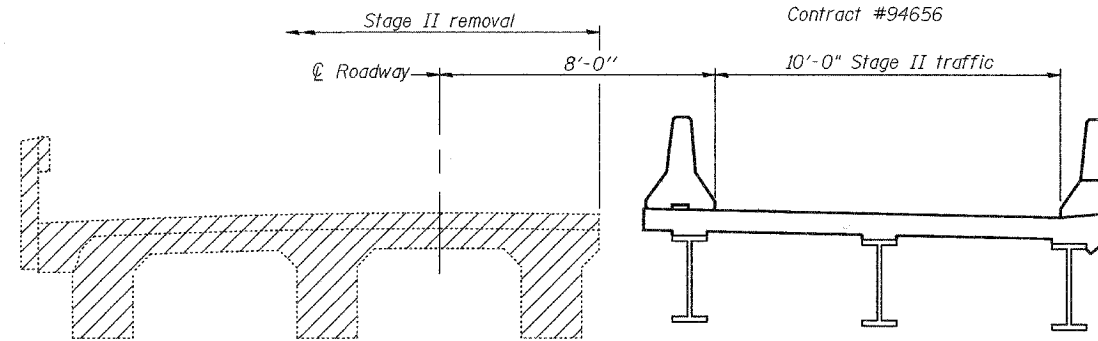
Contract #94656



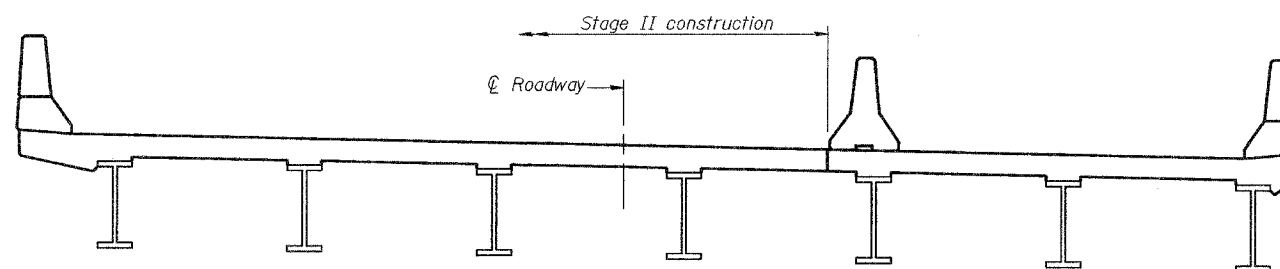
STAGE I REMOVAL



STAGE I CONSTRUCTION

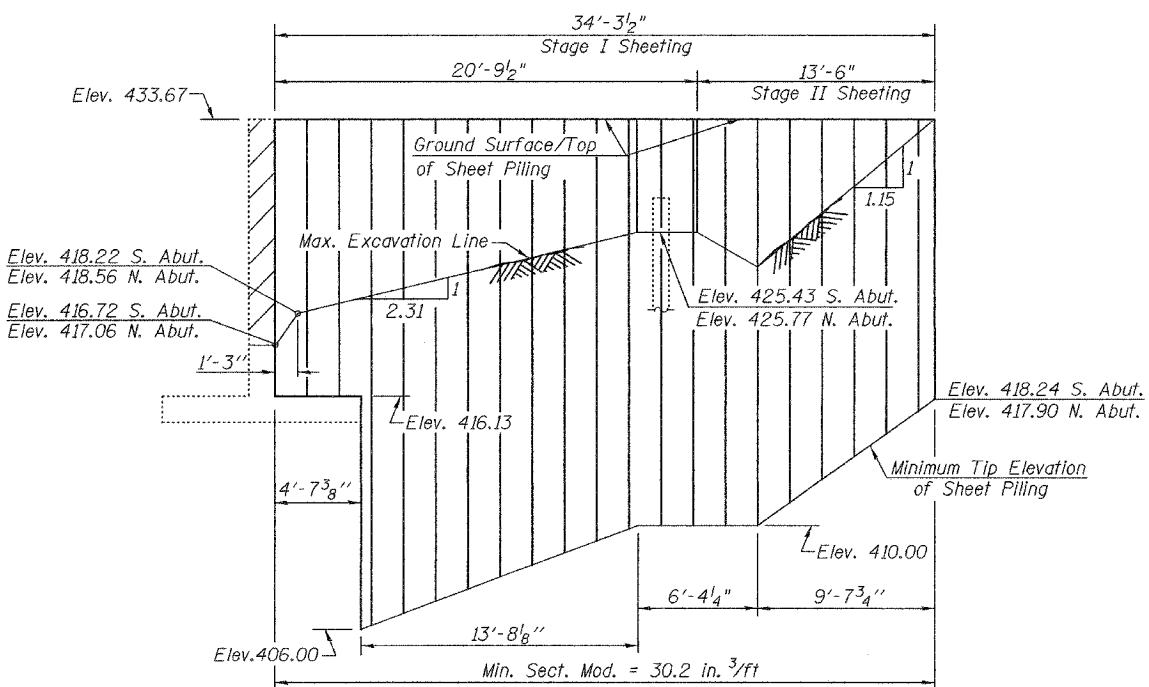


STAGE II REMOVAL



STAGE II CONSTRUCTION

Notes: All staging sections are looking South.
For quantity of Temporary Concrete Barrier, see roadway plans.
Hatched area indicates Removal of Existing Structures.
For details of Temporary Concrete Barrier see sheet 3 of 16.

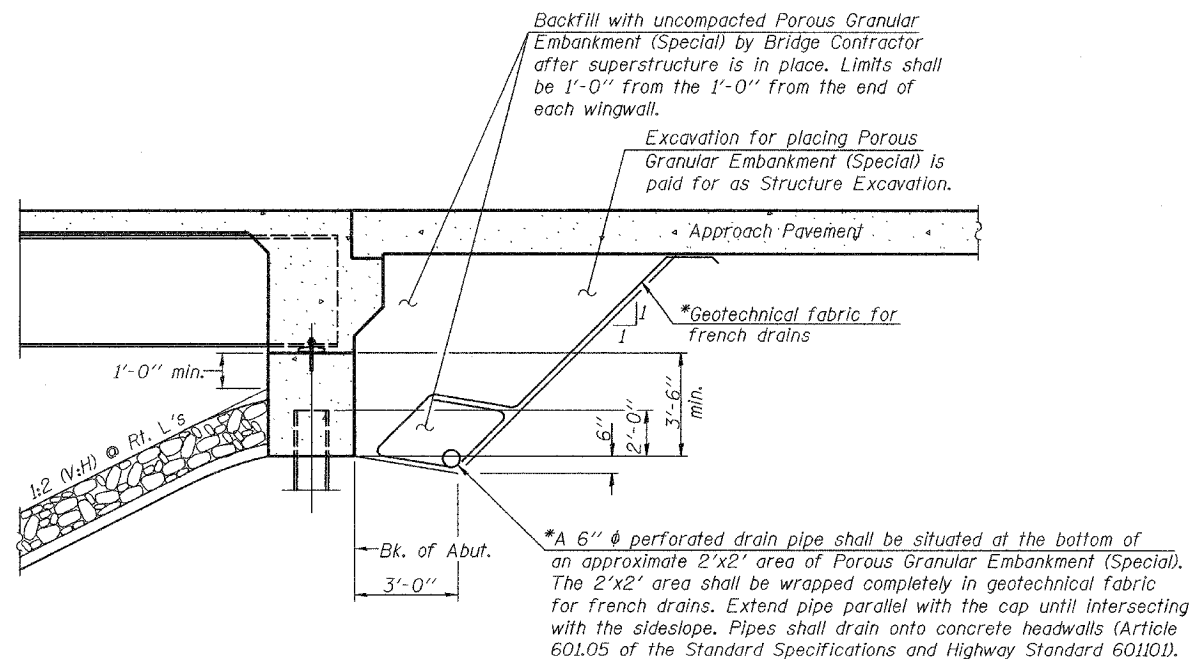


ELEVATION

(S. Abut. shown N. Abut. similar)

TEMPORARY SHEET PILING DETAIL

Notes: If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
Hard driving may be encountered during the sheet piling installation. The Contractor shall provide the appropriate driving equipment for the soil conditions indicated on the boring logs.
To ensure stability of sheets driven to the top of the existing footing, the Contractor shall connect the first sheet to the existing abutment wall. This connection shall be approved by the Engineer and the cost included in the pay item "Temporary Sheet Piling."



*Included in the cost of Porous Granular Embankment (Special).

SECTION THRU INTEGRAL ABUTMENT

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

STAGE CONSTRUCTION DETAILS
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

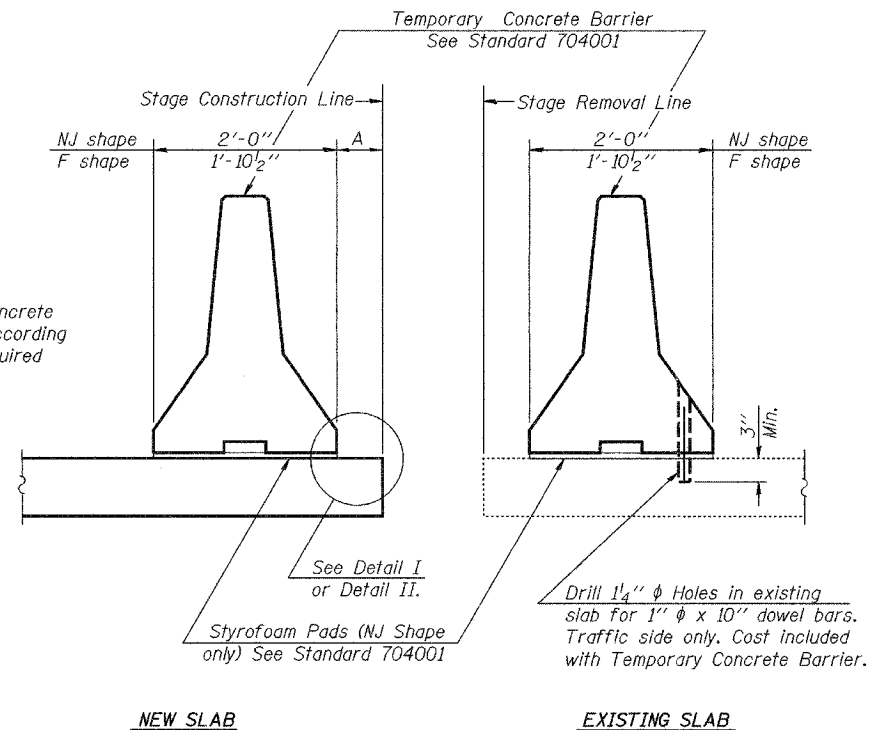
DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

December 13 2005
EXAMINED *Thomas J. Demagallibi*
PRINCIPAL ENGINEER OF BRIDGE DESIGN
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3
F.A.P. 781	108B-1	CRAWFORD	38	12	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

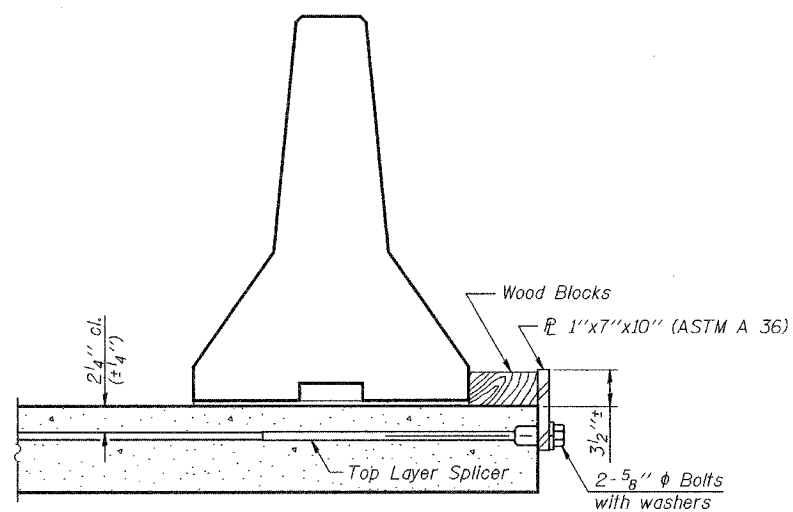
Contract #94656



SECTION THRU SLAB

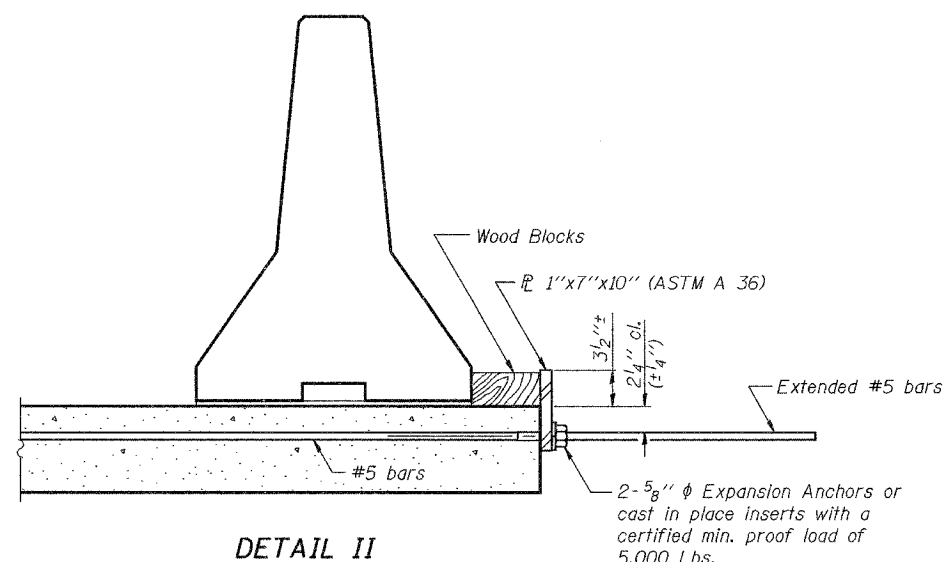
NOTES

- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel PL to the concrete slab with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.



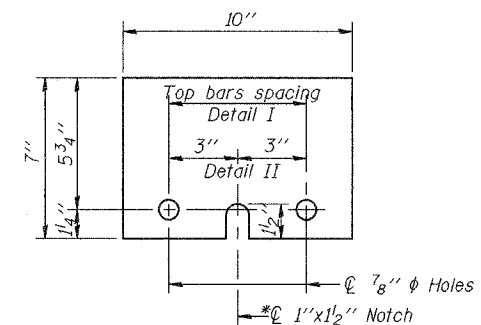
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1"x7"x10"

*Required only with Detail II

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C./S.J.B./S.M.R.

EXAMINED	December 13 2005
PASSED	Thomas J. Demagala ENGINEER OF BRIDGE DESIGN
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

R-27

10-22-04

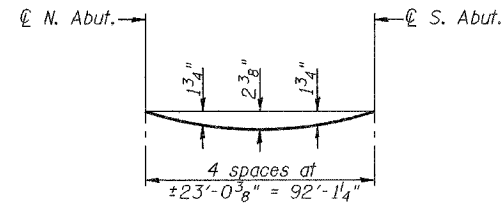
TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 781	108B-1	CRAWFORD	38	13
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT		

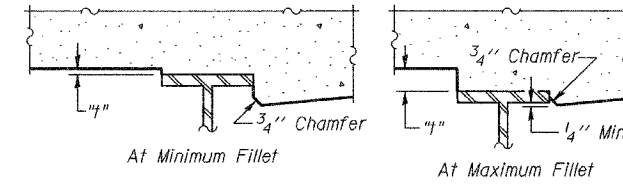
SHEET NO. 4
16 SHEETS

Contract #94656



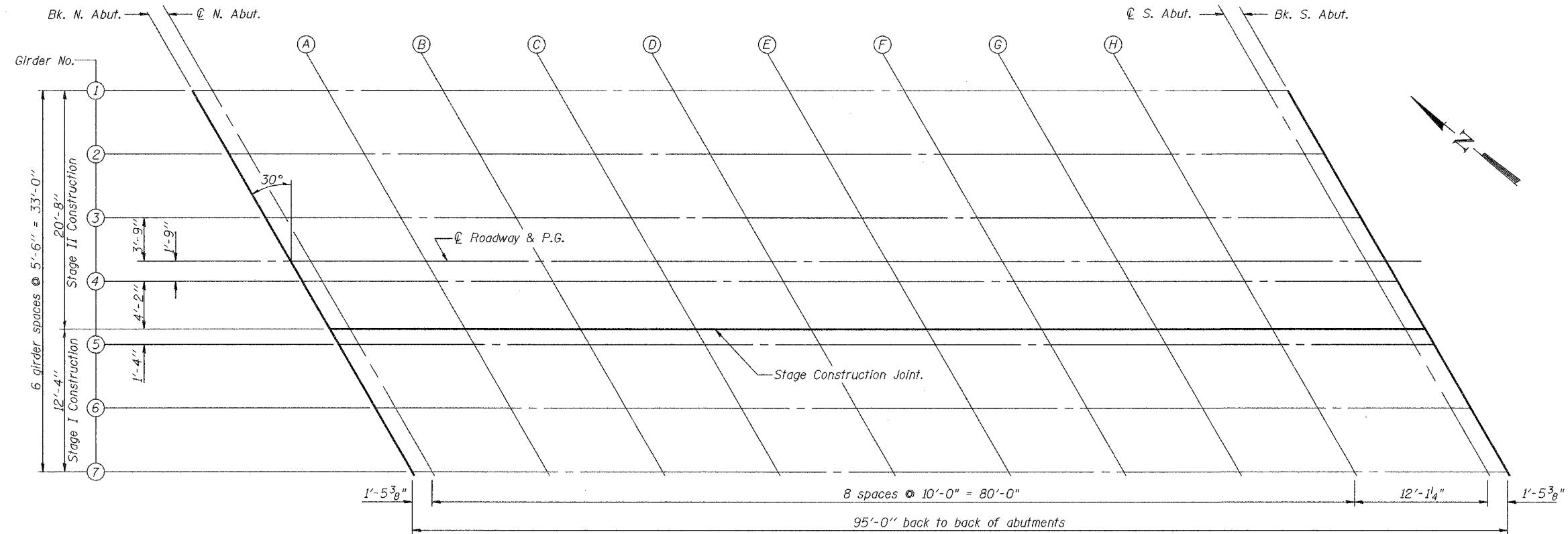
DEAD LOAD DEFLECTION DIAGRAM

(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 5 of 16.



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 5 of 16, minus slab thickness, equals the fillet heights "t" above top flange of girders.

FILLET HEIGHTS



PLAN

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

December 13 2005
EXAMINED *Thomas J. Demagala*
PASSED *Robert E. Anderson*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 16 SHEETS
F.A.P. 781	108B-1	CRAWFORD	38	14	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #94656

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54523.984	-14.750	433.589	433.589
CI N Abut.	54525.427	-14.750	433.596	433.596
A	54535.427	-14.750	433.650	433.711
B	54545.427	-14.750	433.704	433.826
C	54555.427	-14.750	433.758	433.916
D	54565.427	-14.750	433.812	433.995
E	54575.427	-14.750	433.866	434.054
F	54585.427	-14.750	433.920	434.083
G	54595.427	-14.750	433.973	434.109
H	54605.427	-14.750	434.027	434.101
CI S Abut.	54617.541	-14.750	434.093	434.093
Bk S Abut.	54618.984	-14.750	434.100	434.100

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54527.160	-9.250	433.637	433.637
CI N Abut.	54528.603	-9.250	433.642	433.642
A	54538.603	-9.250	433.675	433.736
B	54548.603	-9.250	433.709	433.831
C	54558.603	-9.250	433.742	433.900
D	54568.603	-9.250	433.775	433.958
E	54578.603	-9.250	433.808	433.997
F	54588.603	-9.250	433.842	434.005
G	54598.603	-9.250	433.875	434.010
H	54608.603	-9.250	433.908	433.983
CI S Abut.	54620.717	-9.250	433.949	433.949
Bk S Abut.	54622.160	-9.250	433.954	433.954

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54530.335	-3.750	433.661	433.661
CI N Abut.	54531.778	-3.750	433.663	433.663
A	54541.778	-3.750	433.676	433.738
B	54551.778	-3.750	433.690	433.812
C	54561.778	-3.750	433.703	433.862
D	54571.778	-3.750	433.717	433.900
E	54581.778	-3.750	433.730	433.919
F	54591.778	-3.750	433.744	433.907
G	54601.778	-3.750	433.757	433.893
H	54611.778	-3.750	433.771	433.845
CI S Abut.	54623.892	-3.750	433.787	433.787
Bk S Abut.	54625.335	-3.750	433.789	433.789

RDWY. & P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54532.500	0.000	433.670	433.670
CI N Abut.	54533.943	0.000	433.670	433.670
A	54543.943	0.000	433.670	433.731
B	54553.943	0.000	433.670	433.792
C	54563.943	0.000	433.670	433.828
D	54573.943	0.000	433.670	433.853
E	54583.943	0.000	433.670	433.858
F	54593.943	0.000	433.670	433.834
G	54603.943	0.000	433.670	433.805
H	54613.943	0.000	433.670	433.744
CI S Abut.	54626.057	0.000	433.670	433.670
Bk S Abut.	54627.500	0.000	433.670	433.670

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54533.510	1.750	433.643	433.643
CI N Abut.	54534.953	1.750	433.643	433.643
A	54544.953	1.750	433.643	433.704
B	54554.953	1.750	433.643	433.765
C	54564.953	1.750	433.643	433.801
D	54574.953	1.750	433.643	433.826
E	54584.953	1.750	433.640	433.828
F	54594.953	1.750	433.633	433.797
G	54604.953	1.750	433.627	433.762
H	54614.953	1.750	433.621	433.695
CI S Abut.	54627.067	1.750	433.613	433.613
Bk S Abut.	54628.510	1.750	433.612	433.612

STAGE CONST. JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54535.916	5.917	433.578	433.578
CI N Abut.	54537.359	5.917	433.578	433.578
A	54547.359	5.917	433.578	433.639
B	54557.359	5.917	433.578	433.700
C	54567.359	5.917	433.578	433.736
D	54577.359	5.917	433.578	433.761
E	54587.359	5.917	433.563	433.751
F	54597.359	5.917	433.541	433.705
G	54607.359	5.917	433.520	433.655
H	54617.359	5.917	433.499	433.573
CI S Abut.	54629.473	5.917	433.473	433.473
Bk S Abut.	54630.916	5.917	433.470	433.470

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54536.686	7.250	433.557	433.557
CI N Abut.	54538.129	7.250	433.557	433.557
A	54548.129	7.250	433.557	433.618
B	54558.129	7.250	433.557	433.679
C	54568.129	7.250	433.557	433.715
D	54578.129	7.250	433.557	433.740
E	54588.129	7.250	433.537	433.725
F	54598.129	7.250	433.510	433.674
G	54608.129	7.250	433.484	433.620
H	54618.129	7.250	433.458	433.532
CI S Abut.	54630.243	7.250	433.427	433.427
Bk S Abut.	54631.686	7.250	433.423	433.423

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54539.861	12.750	433.467	433.467
CI N Abut.	54541.304	12.750	433.467	433.467
A	54551.304	12.750	433.467	433.528
B	54561.304	12.750	433.467	433.589
C	54571.304	12.750	433.467	433.625
D	54581.304	12.750	433.463	433.646
E	54591.304	12.750	433.420	433.608
F	54601.304	12.750	433.375	433.538
G	54611.304	12.750	433.329	433.464
H	54621.304	12.750	433.283	433.357
CI S Abut.	54633.418	12.750	433.227	433.227
Bk S Abut.	54634.861	12.750	433.221	433.221

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk N Abut.	54543.037	18.250	433.352	433.352
CI N Abut.	54544.480	18.250	433.352	433.352
A	54554.480	18.250	433.352	433.414
B	54564.480	18.250	433.352	433.475
C	54574.480	18.250	433.352	433.511
D	54584.480	18.250	433.335	433.518
E	54594.480	18.250	433.292	433.480
F	54604.480	18.250	433.227	433.390
G	54614.480	18.250	433.161	433.296
H	54624.480	18.250	433.095	433.169
CI S Abut.	54636.594	18.250	433.016	433.016
Bk S Abut.	54638.037	18.250	433.006	433.006

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

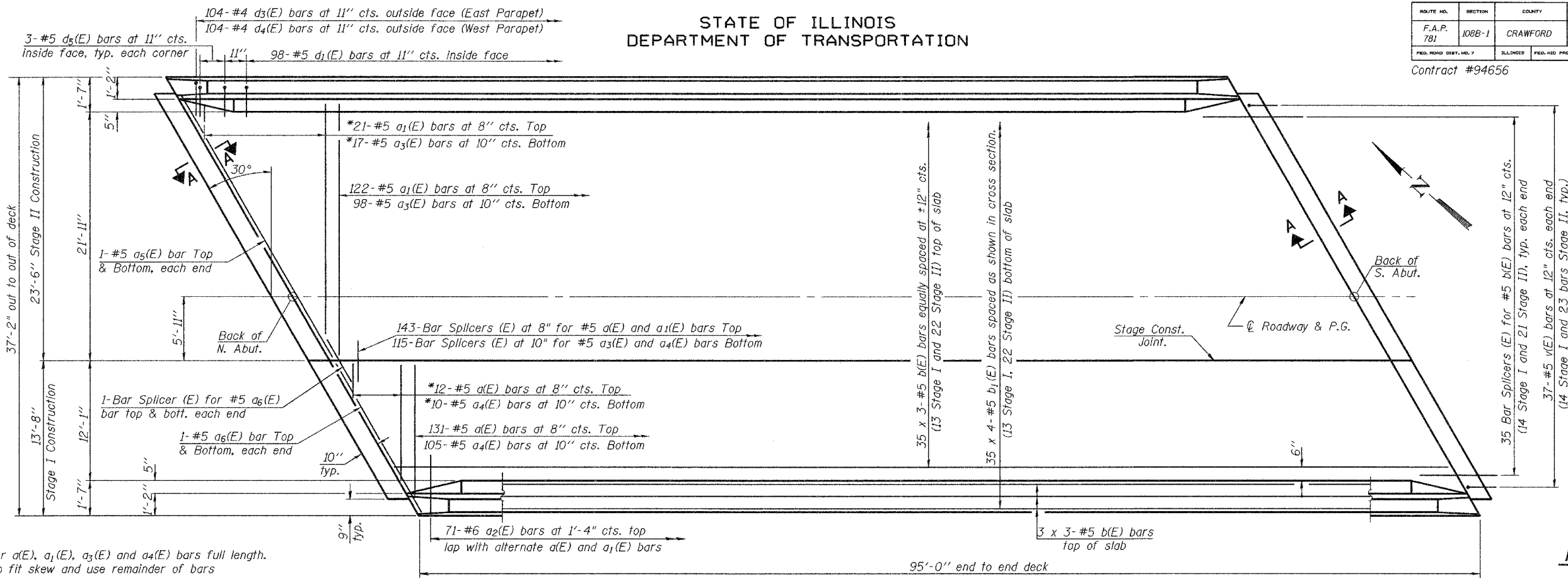
December 13, 2005
 EXAMINED *Thomas J. Donaghy*
 ENGINEER OF BRIDGE DESIGN
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6 16 SHEETS
F.A.P. 781	108B-1	CRAWFORD	38	15	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

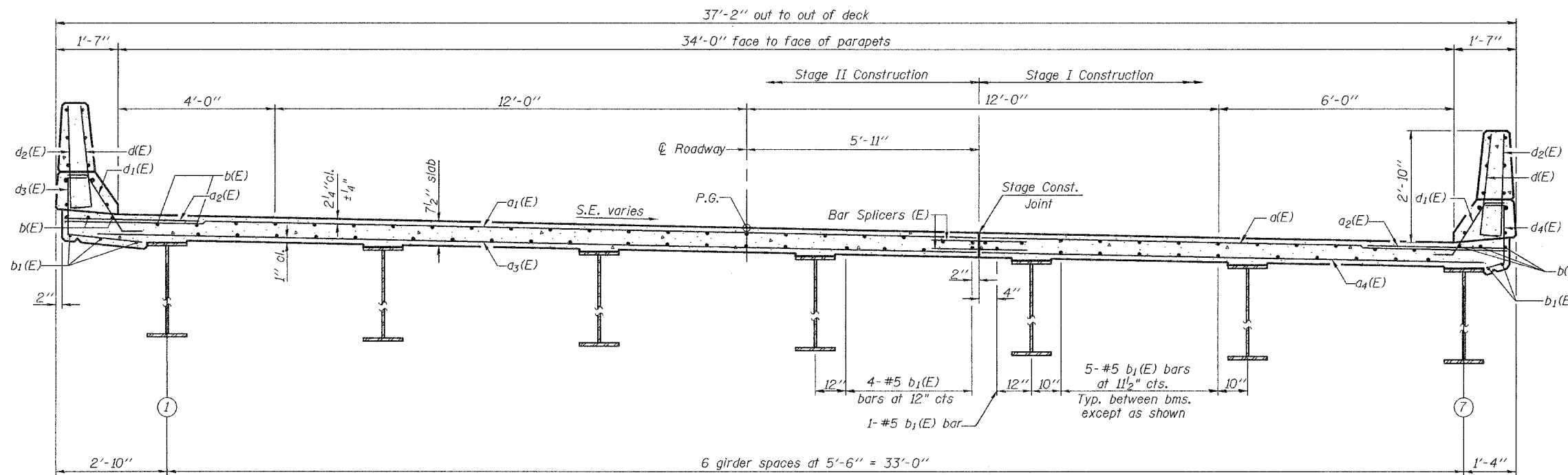
Contract #94656



*Order a(E), a₁(E), a₃(E) and a₄(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

MIN. BAR LAP
#5 bar = 1'-8"

PLAN



Notes: See Sheet 7 of 16 for superstructure details, parapet reinforcement and Bill of Material. For Section A-A see sheet 9 of 16. Reinforcement bars designated (E) shall be epoxy coated. Bars indicated thus 35 x 3-#5 etc. indicates 35 lines of bars with 3 lengths per line. See Sheet 1 of 16 for Floor Drain spacing. See Sheet 15 of 16 for Bar Splicer Details.

CROSS SECTION
(Looking South)

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

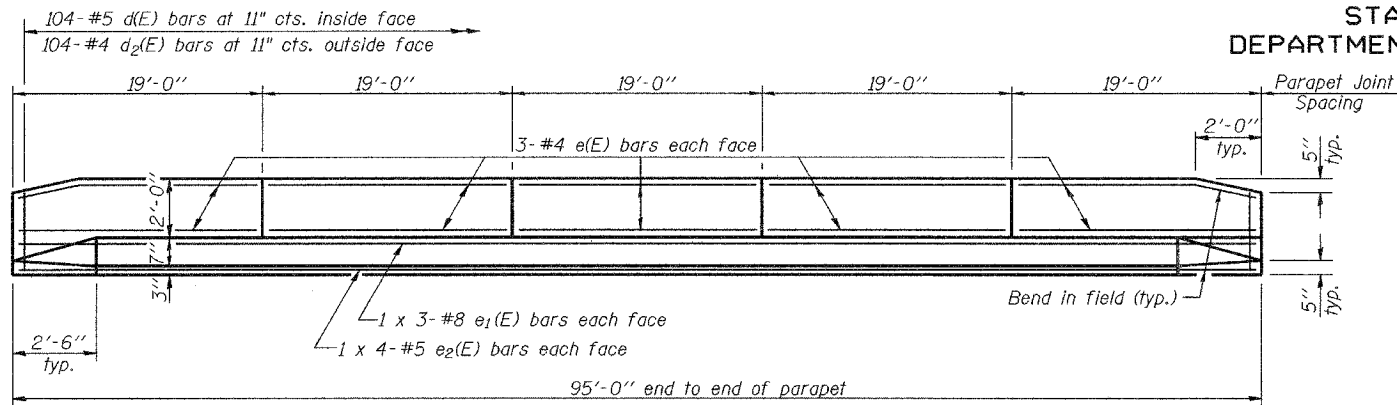
December 13 2005
EXAMINED *Thomas J. Demagala*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES

SUPERSTRUCTURE
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

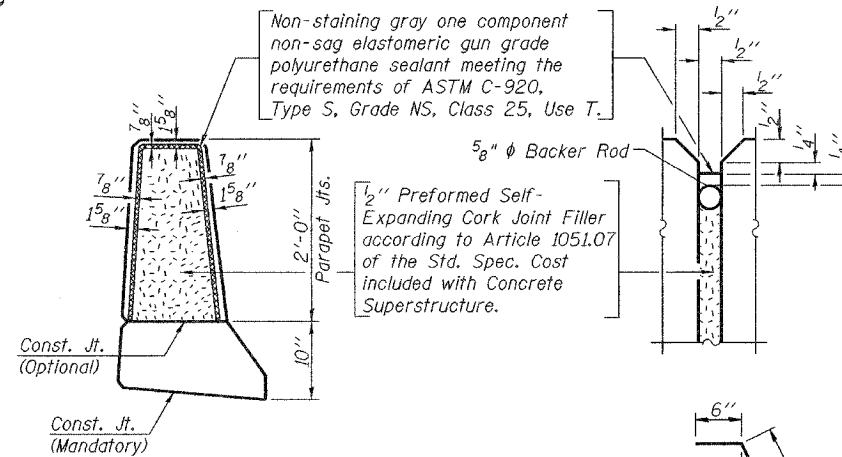
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	JOBS	SHEET	SHEET NO. 7
F.A.P. 781	108B-1	CRAWFORD	38	16	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

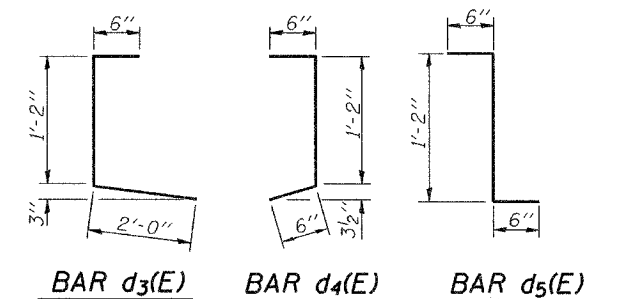
Contract #94656



INSIDE ELEVATION OF PARAPET



PARAPET JOINT DETAILS

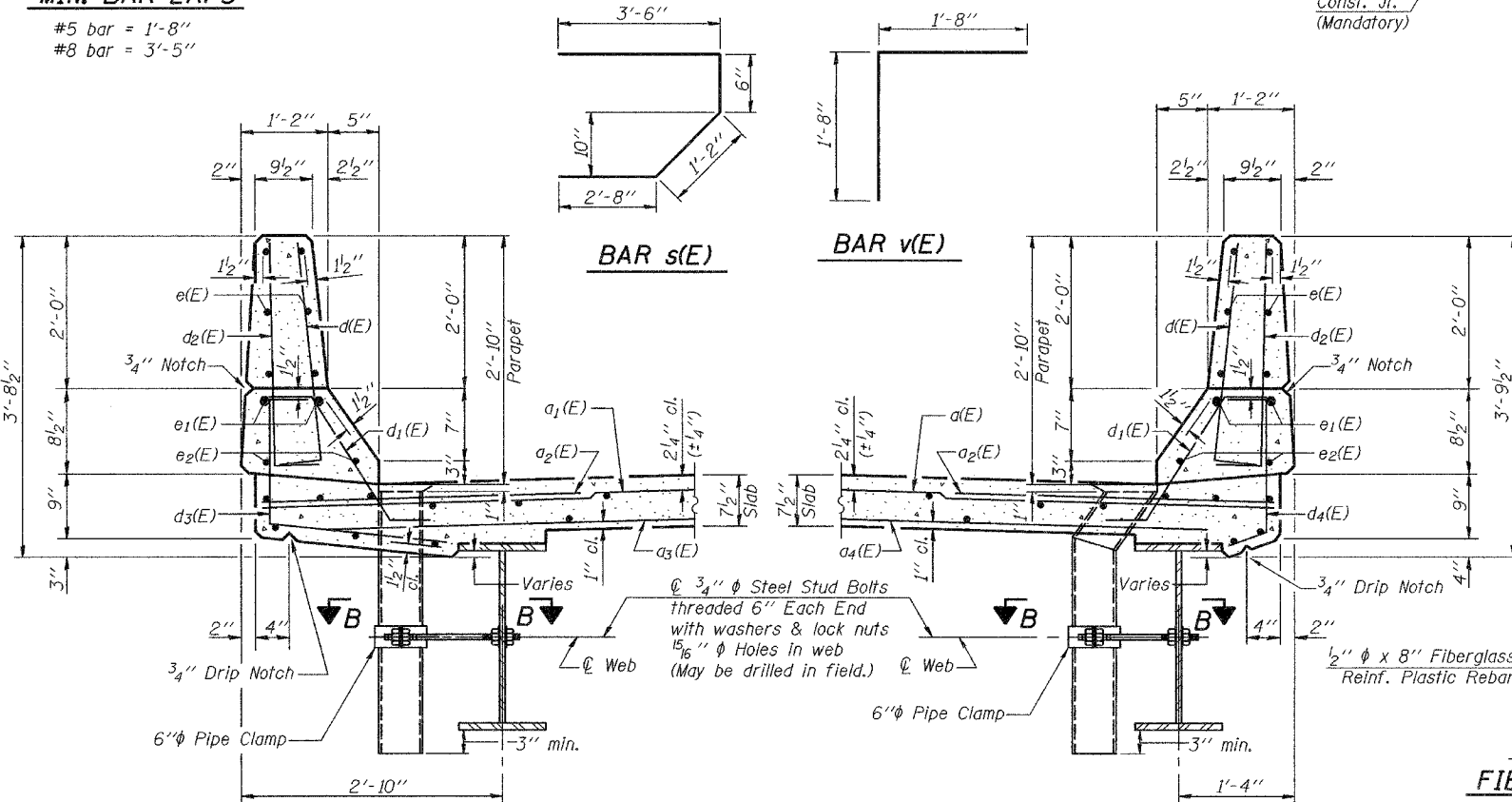


SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	143	#5	13'-4"	
a ₁ (E)	143	#5	23'-2"	
a ₂ (E)	142	#6	4'-6"	
a ₃ (E)	115	#5	22'-2"	
a ₄ (E)	115	#5	12'-4"	
a ₅ (E)	4	#5	26'-5"	
a ₆ (E)	4	#5	15'-0"	
a ₇ (E)	8	#5	2'-0"	
b(E)	123	#5	32'-8"	
b ₁ (E)	140	#5	25'-0"	
d(E)	208	#5	3'-0"	
d ₁ (E)	196	#5	2'-5"	
d ₂ (E)	208	#4	3'-0"	
d ₃ (E)	104	#4	3'-8"	
d ₄ (E)	104	#4	2'-2"	
d ₅ (E)	12	#5	2'-2"	
e(E)	60	#4	18'-9"	
e ₁ (E)	12	#8	33'-11"	
e ₂ (E)	16	#5	25'-0"	
m(E)	4	#6	14'-8"	
m ₁ (E)	4	#6	26'-0"	
m ₂ (E)	6	#6	15'-6"	
m ₃ (E)	6	#6	27'-0"	
m ₄ (E)	12	#6	7'-0"	
m ₅ (E)	16	#6	8'-10"	
m ₆ (E)	10	#6	6'-1"	
m ₇ (E)	4	#6	1'-3"	
m ₈ (E)	2	#6	4'-6"	
m ₉ (E)	2	#6	3'-0"	
s(E)	68	#5	7'-10"	
s ₁ (E)	68	#4	10'-10"	
v(E)	74	#5	3'-4"	
Reinforcement Bars, Epoxy Coated		Pound	25210	
Concrete Superstructure		Cu. Yds.	131.6	

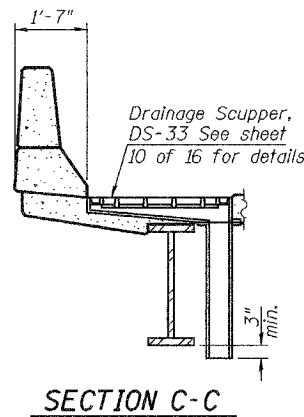
MIN. BAR LAPS

#5 bar = 1'-8"
#8 bar = 3'-5"

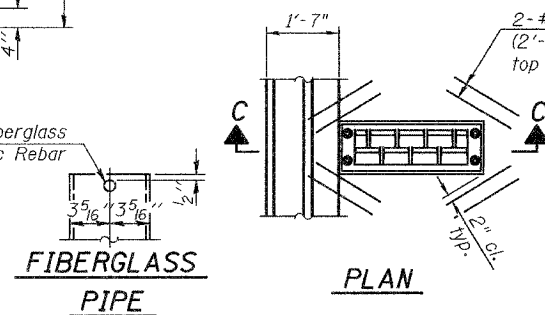


SECTION THRU EAST PARAPET

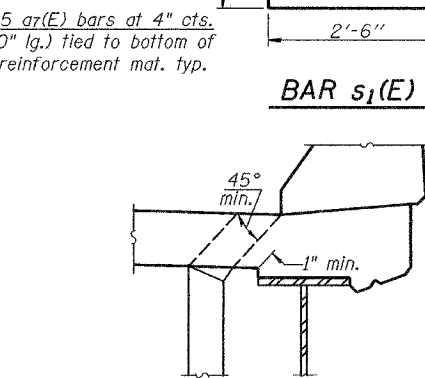
SECTION THRU WEST PARAPET



SECTION C-C

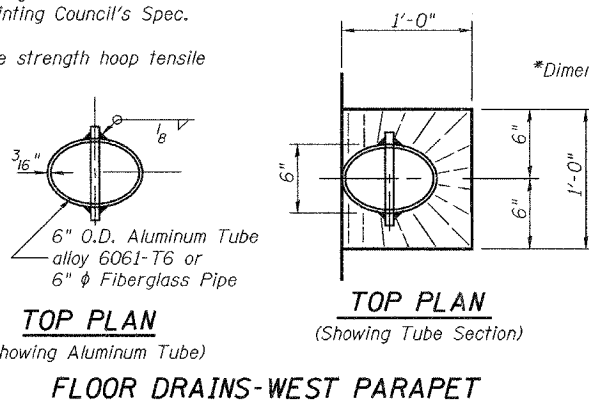


FIBERGLASS PIPE PLAN

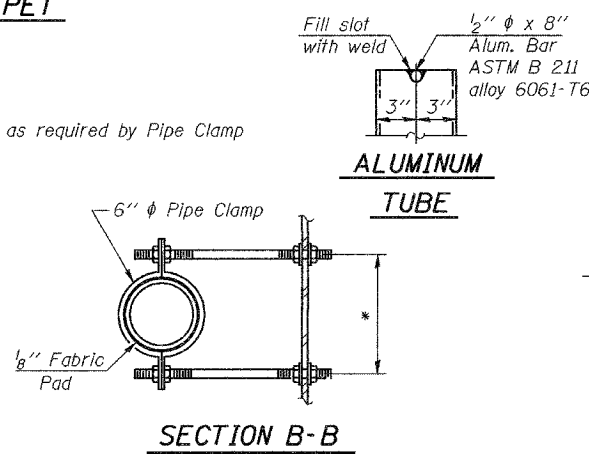


WEST PARAPET TUBE DETAIL

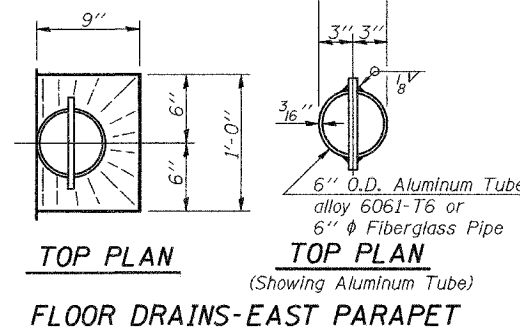
Notes: The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting Requirements for Weathering Steel. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SPI prior to painting.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Cut longitudinal reinforcement to clear drainage scupper.



FLOOR DRAINS-WEST PARAPET



SECTION B-B



FLOOR DRAINS-EAST PARAPET

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

EXAMINED	December 13 2005
PASSED	Thomas J. Demagallibi Ralph E. Anderson

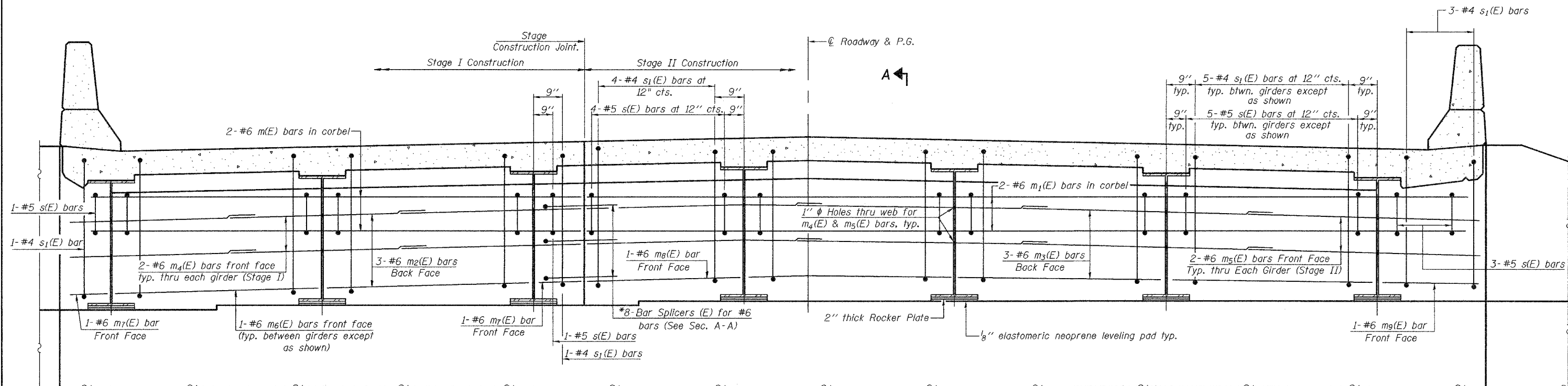
SUPERSTRUCTURE DETAILS
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 16 SHEETS
F.A.P. 781	108B-1	CRAWFORD	38	17	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #94656



MIN. BAR LAP
#6 bar = 2'-9"

DIAPHRAGM ELEVATION AT NORTH ABUTMENT

(Looking North)
(Bearing Stiffeners not shown)

*Use bent bar splicers in Front Face.
Detail on sheet 15 of 16.

Notes: Reinforcement bars in diaphragm are billed with superstructure on sheet 7 of 16.
Concrete in diaphragm is included with Concrete Superstructure on sheet 7 of 16.
For details of bars s(E) & s₁(E) see sheet 7 of 16.
The s(E) and s₁(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
For Section A-A see sheet 9 of 16.
For anchor bolt details see sheet 12 of 16.
For bar splicers details see sheet 15 of 16.

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

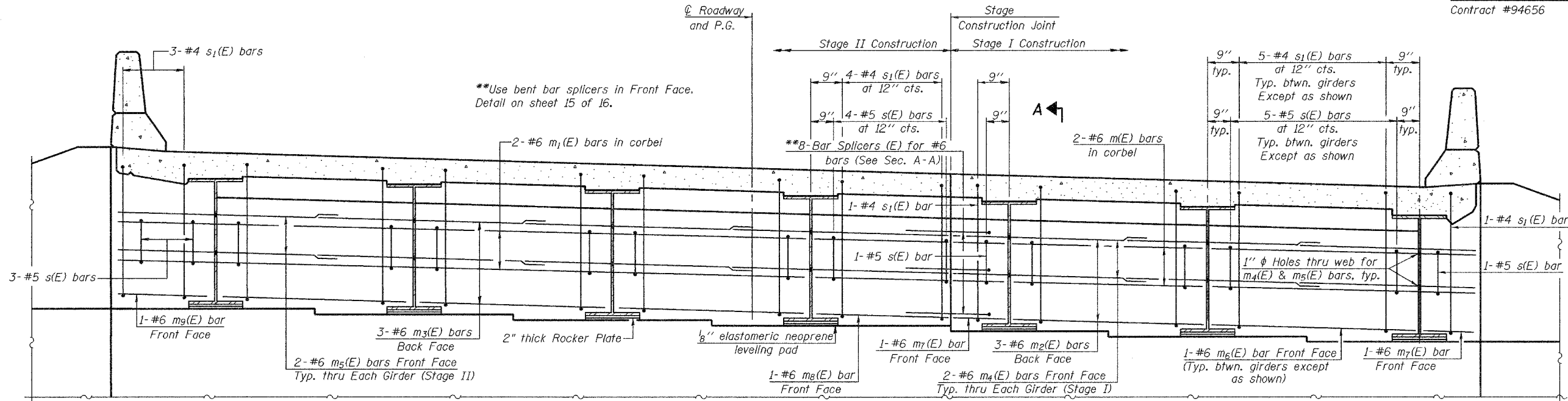
December 13 2005
EXAMINED *Thomas J. Demagala*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

DIAPHRAGM DETAILS
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 781	108B-1	CRAWFORD	38	18
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

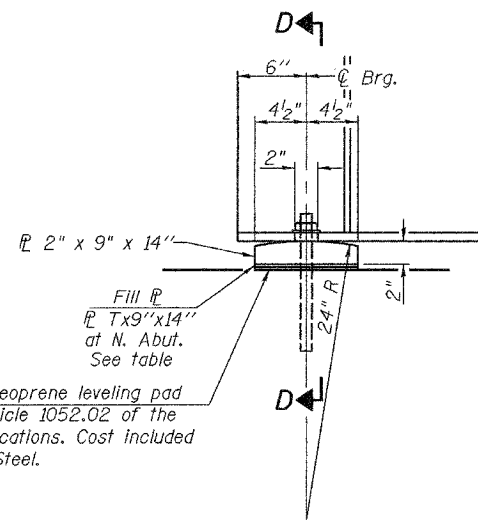
SHEET NO. 9
16 SHEETS
Contract #94656



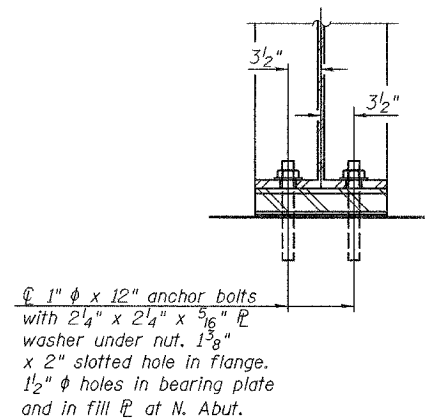
DIAPHRAGM ELEVATION AT SOUTH ABUTMENT A-A

(Looking South)
(Bearing Stiffeners not shown)

MIN. BAR LAP
#6 bar = 2'-9"



ELEVATION AT ABUTMENT



SECTION D-D

FIXED BEARING

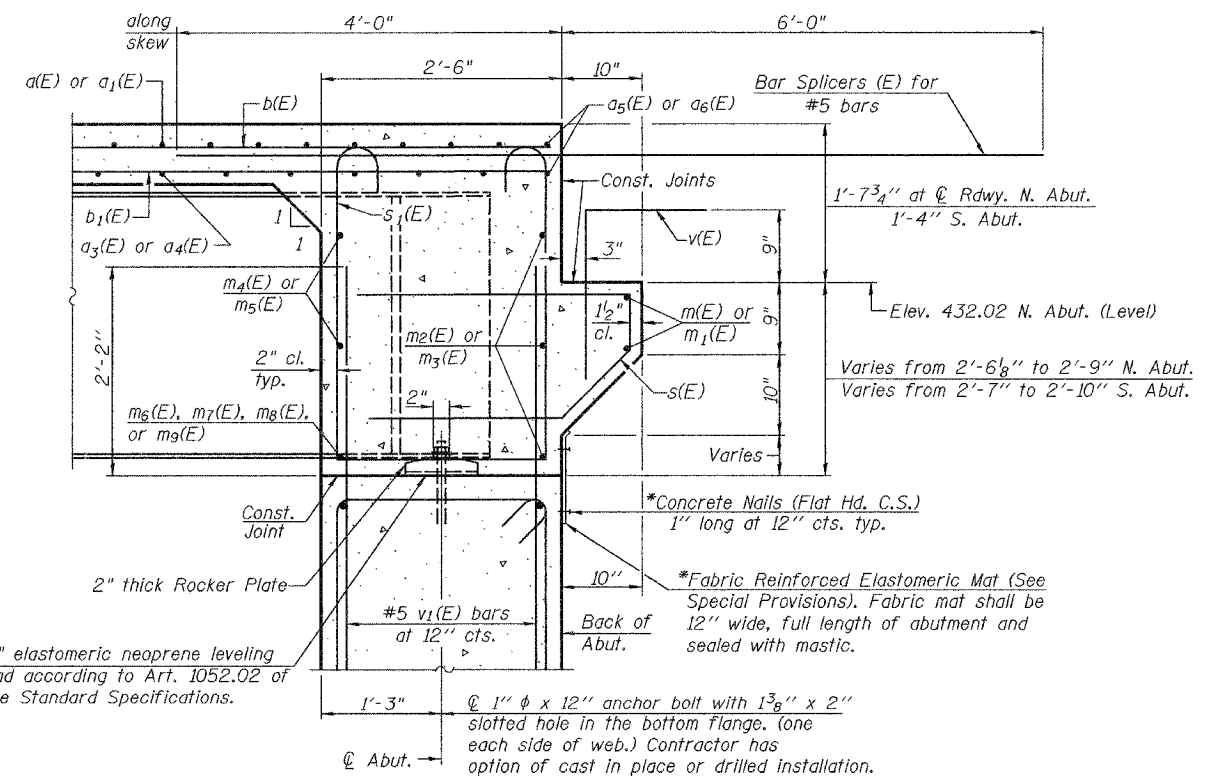
Rocker plates and fill plates shall be AASHTO M270 Gr. 50W.

FILL P TABLE

(N. Abut. only)

Girder	T (in.)
1	0
2	9/16
3	1 1/16
4	9/16
5	1 1/8
6	0
7	0

Notes: Reinforcement bars in diaphragm are billed with superstructure on sheet 7 of 16.
Concrete in diaphragm is included with Concrete Superstructure on sheet 7 of 16.
For details of bars s(E) & s₁(E) see sheet 7 of 16. The s(E) and s₁(E) bars shall be placed parallel to the girders. Spacing for these bars shall be at right angles to the girders.
For anchor bolt details see sheet 12 of 16.
For bar splicers details see sheet 15 of 16.



SECTION A-A

Dimensions at right angles to abutment, except as noted.
*Cost included with Concrete Superstructure.

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

December 13 2005

EXAMINED *Thomas J. Damgalabki*
ENGINEER OF BRIDGE DESIGN

PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

DIAPHRAGM DETAILS
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

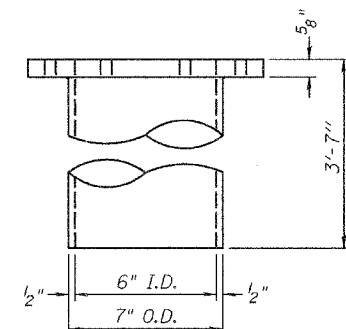
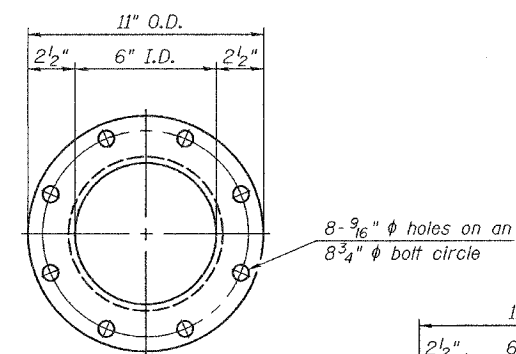
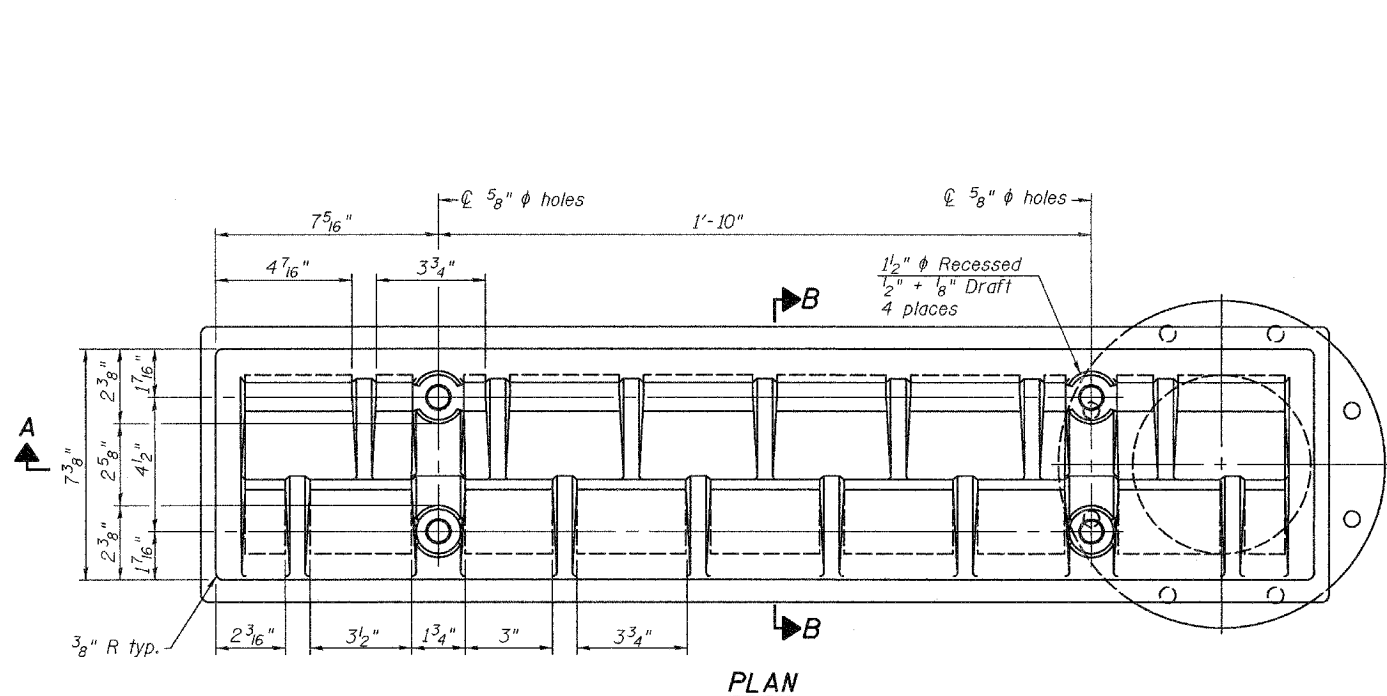
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 781	108B-1	CRAWFORD	38	19
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

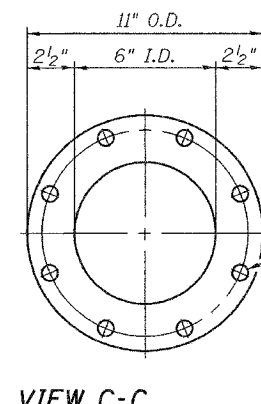
SHEET NO. 10

16 SHEETS

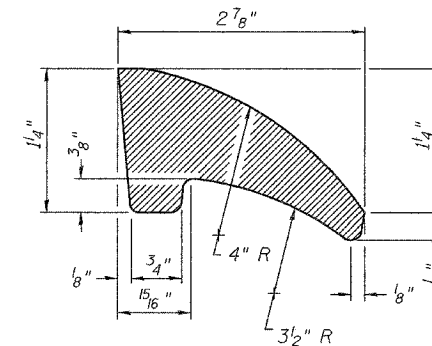
Contract #94656



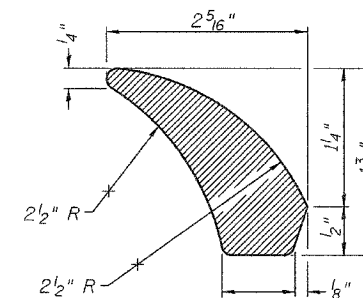
DOWNSPOUT



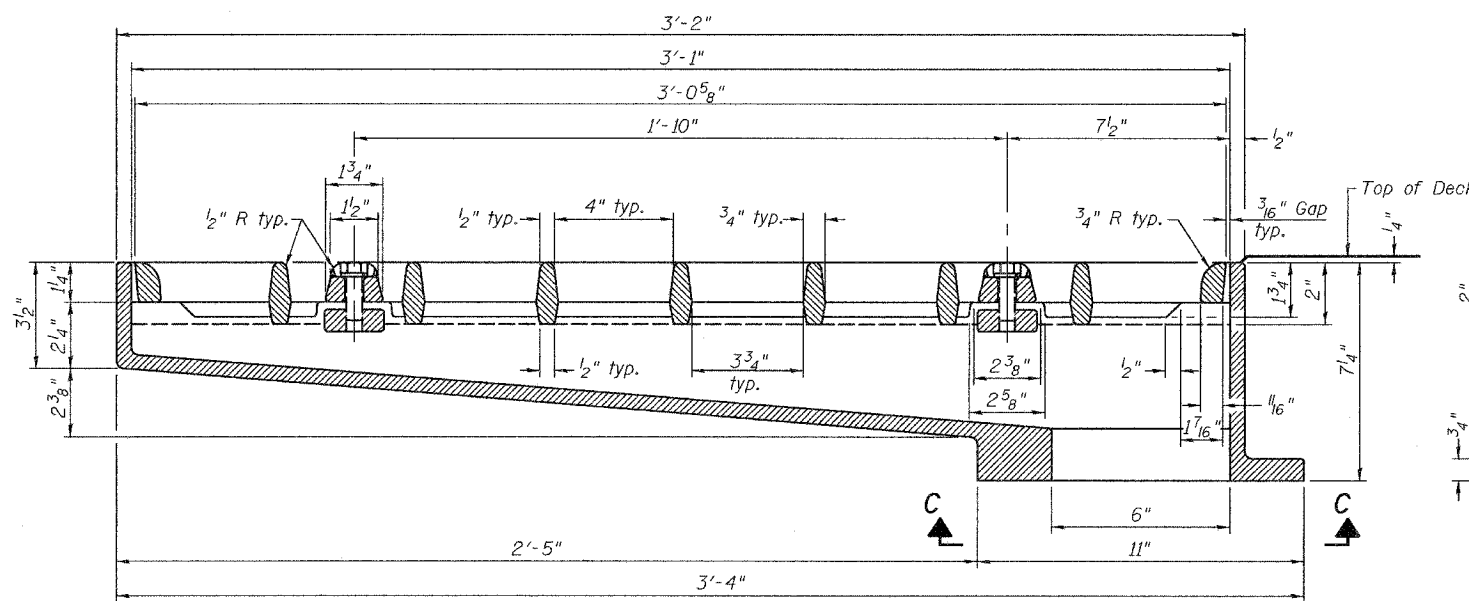
VIEW C-C



FIRST VANE DETAIL

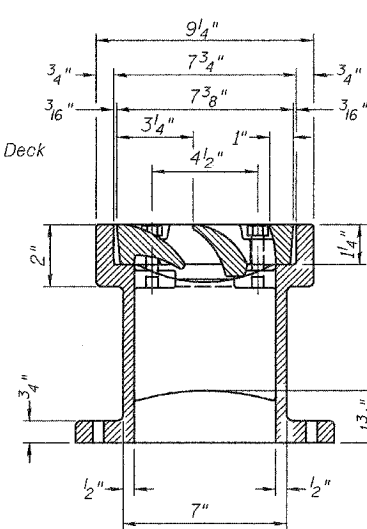


SECOND VANE DETAIL



SECTION A-A

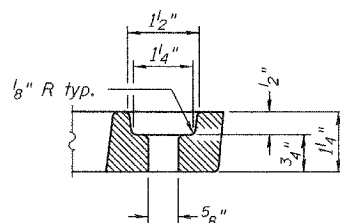
See sheet 7 of 16 for scupper location relative to parapet.



SECTION B-B

Notes:

- All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
- Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
- The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
- As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
- Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.
- The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
- Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-33.



BOLT HOLE DETAIL

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

EXAMINED	December 13 2005
PASSED	Thomas J. Demagala ENGINEER OF BRIDGES DESIGN
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

8/1/2000

BILL OF MATERIAL

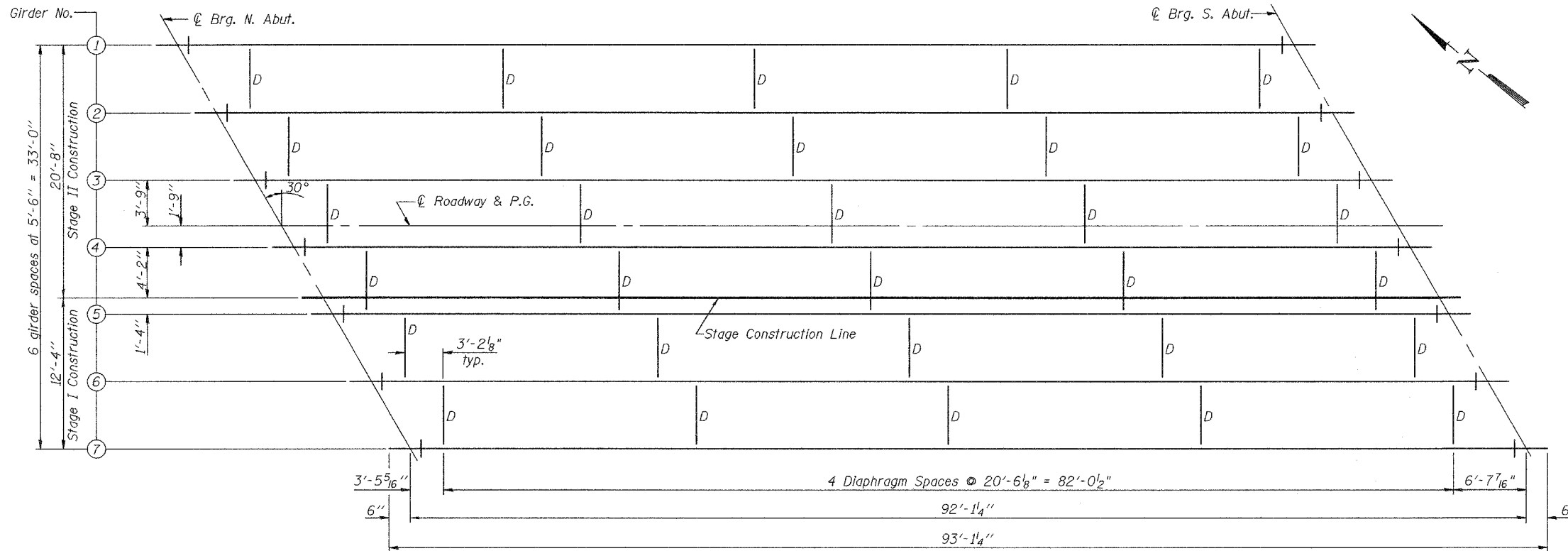
ITEM	UNIT	QUANTITY
Drainage Scupper, DS-33	Each	1

DRAINAGE SCUPPER, DS-33
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

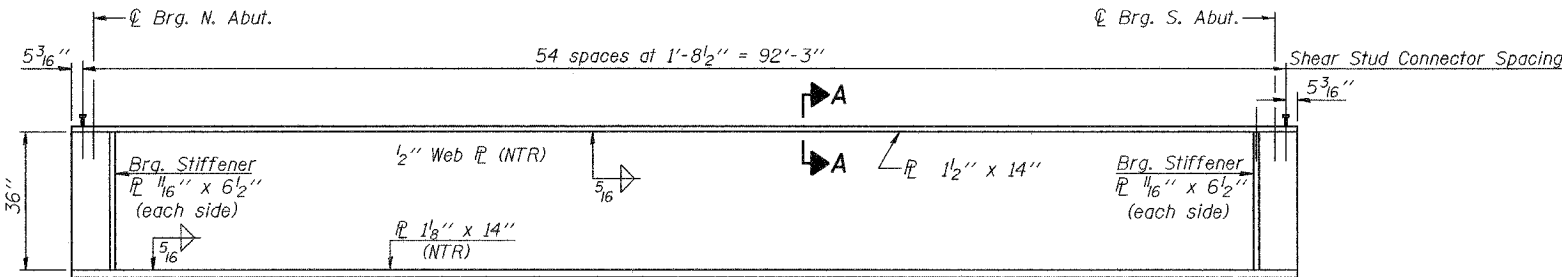
ROUTE NO. F.A.P. 781	SECTION 108B-1	COUNTY CRAWFORD	TOTAL SHEETS 38	SHEET NO. 20	SHEET NO. 11 16 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT	

Contract #94656



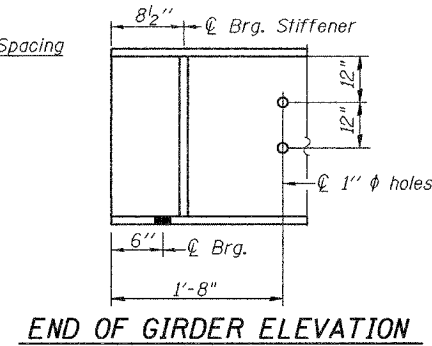
FRAMING PLAN

Note: All plates, diaphragms and angles shall be AASHTO M270 Gr. 50W.

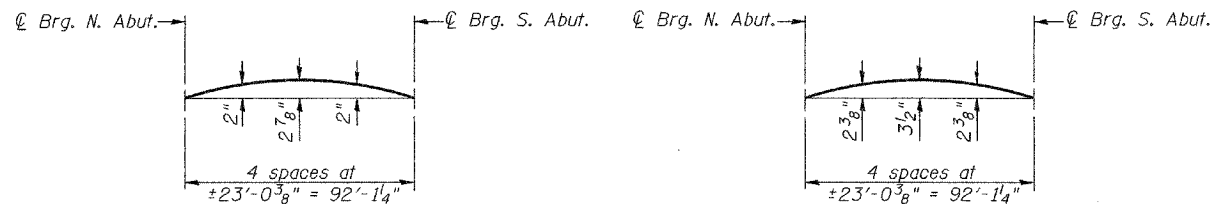


GIRDER ELEVATION

"NTR" denotes plates to which Notch Toughness Requirements are applicable.

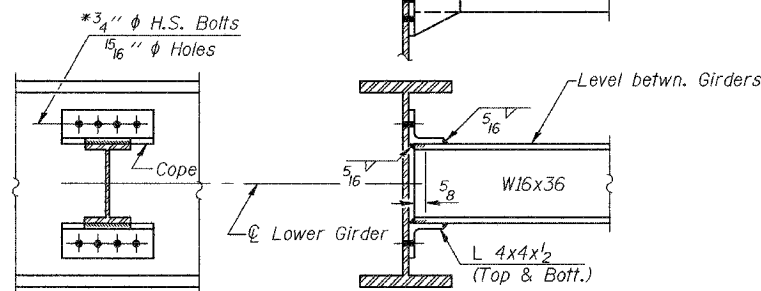


END OF GIRDER ELEVATION



CAMBER DIAGRAM
(Girders 1, 2, 3, & 4)

CAMBER DIAGRAM
(Girders 5, 6 & 7)



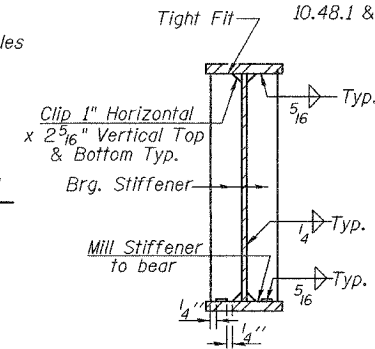
DIAPHRAGM D
(30 Required)

Note: Two hardened washers shall be required over all oversize holes for diaphragms.

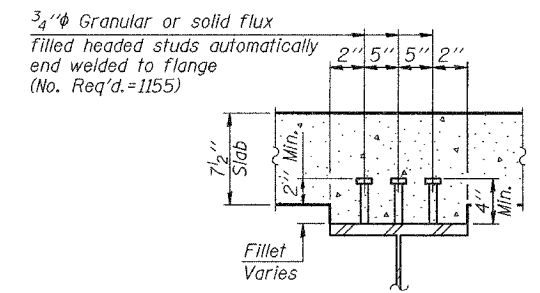
Symbol	Units	Value
I_s	(in ⁴)	14572
I_c (n)	(in ⁴)	28289
I_c (3n)	(in ⁴)	21395
S_s	(in ³)	695
S_c (n)	(in ³)	882
S_c (3n)	(in ³)	806
ϕ	(K/ft.)	0.754
$M\phi$	(K)	797.7
$s\phi$	(K/ft.)	0.372
$Ms\phi$	(K)	393.5
$M\phi$	(K)	691.3
M (Imp)	(K)	159
$S_3[M\phi + M(Imp)]$	(K)	1417
M_a	(K)	3391
M_u	(K)	4202
$fs\phi$ non-comp (k.s.i.)		13.8
$fs\phi$ (comp) (k.s.i.)		5.9
$fs_{S_3}(\phi + Imp)$ (k.s.i.)		19.3
fs (Overload) (k.s.i.)		39
fs (Total) (k.s.i.)		—
VR	(K)	39.8

Symbol	Units	Value
$R\phi$	(K)	51.8
$R\phi$	(K)	32.4
Imp.	(K)	7.5
R (Total)	(K)	91.7

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 $I_c(n)$ and $S_c(n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 $I_c(3n)$ and $S_c(3n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Superimposed Dead Loads. (See AASHTO 10.38).
 VR is the maximum live Load + Impact shear range within the composite portion of the span.
 M_a (Applied Moment) = $1.3[M\phi + Ms\phi + S_3(M\phi + M(Imp))]$.
 fs (Overload) is the sum of the stresses due to $M\phi + Ms\phi + S_3(M\phi + M(Imp))$.
 fs (Total) is the sum of the stresses due to $1.3[M\phi + Ms\phi + S_3(M\phi + M(Imp))]$.
 The Plastic Moment Capacity (M_u) is computed according to AASHTO 10.48.1 & 10.50.1.1.



SECTION AT ABUTMENT



SECTION A-A

**TOP OF WEB ELEVATIONS

Loc.	Gir. #1	Gir. #2	Gir. #3	Gir. #4	Gir. #5	Gir. #6	Gir. #7
⊕ Brg. N. Abut.	432.784	432.830	432.851	432.831	432.745	432.655	432.540
⊕ Brg. S. Abut.	433.281	433.137	432.975	432.801	432.615	432.415	432.204

**For fabrication only.

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

December 13 2005
 EXAMINED *Thomas J. Demagala*
 PASSED *Ralph E. Anderson*
 ENGINEER OF BRIDGES AND STRUCTURES

*Use 1 1/2" vertical x 1 3/16" slotted holes in top and bottom angles at West Side of Beam 4 only. The bolts for the slotted holes in angles at Beam 4 shall only be finger tightened prior to the Stage II deck pouring and then be fully tightened after completion of the pouring for Stage II Construction. Each slotted hole shall have 5/16" plate washer.

STRUCTURAL STEEL DETAILS
 F.A.P. ROUTE 781 - SECTION 108B-1
 CRAWFORD COUNTY
 STATION 545+80.00
 STRUCTURE NO. 017-0030

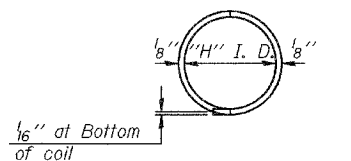
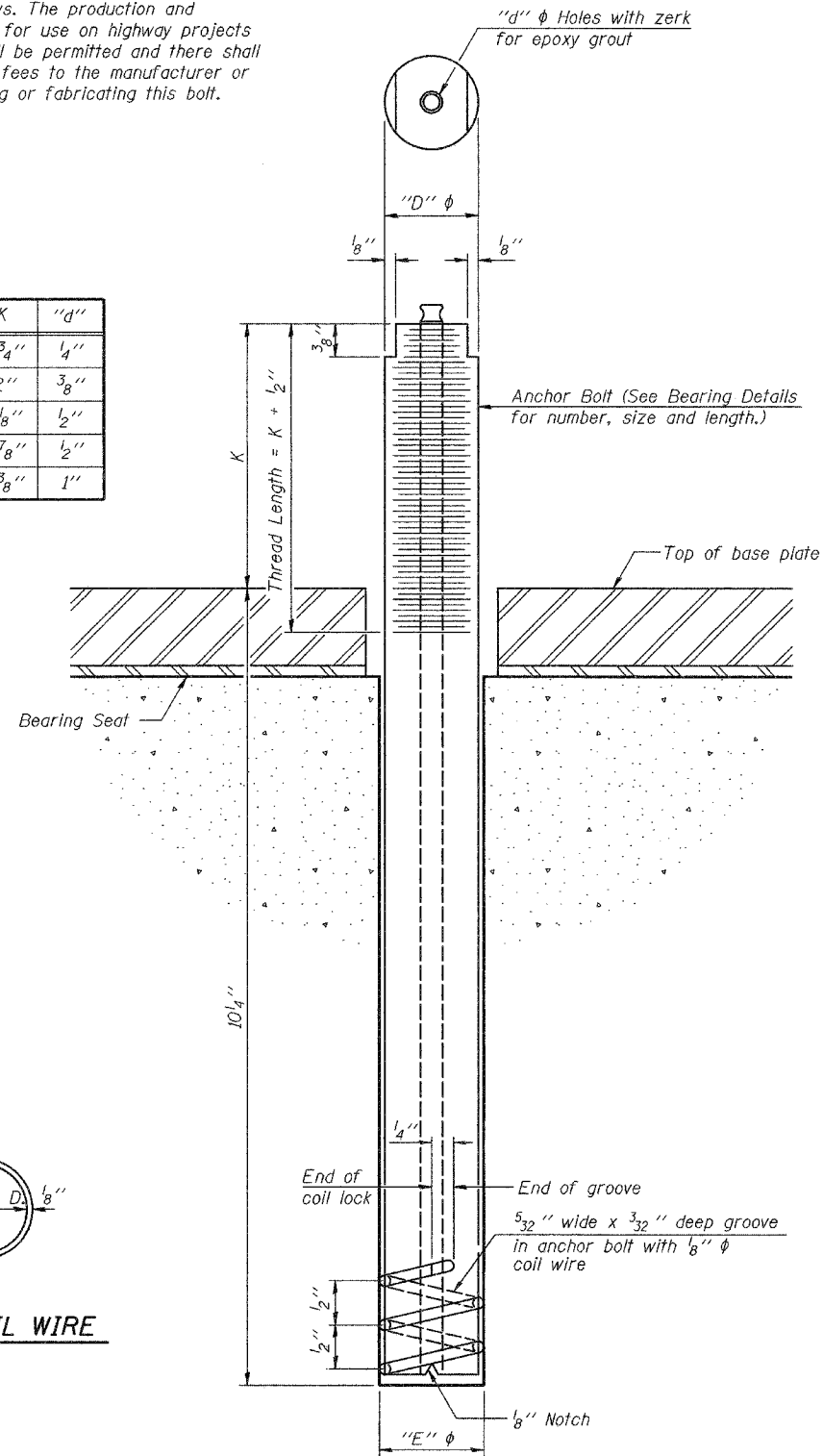
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12 16 SHEETS
F.A.P. 781	108B-1	CRAWFORD	38	21	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #94656

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 3/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



ILLINOIS COIL-LOCK ANCHOR BOLT

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire.

The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.

The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. A threaded rod stud with nut and washer of the type specified.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Type
N. Abut.	A307
S. Abut.	A307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.

Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

The anchor bolts, furnished and installed including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

ANCHOR BOLT DETAILS

FOR BEARINGS

F.A.P. ROUTE 781 - SECTION 108B-1

CRAWFORD COUNTY

STATION 545+80.00

STRUCTURE NO. 017-0030

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

EXAMINED	December 13 2005
PASSED	Thomas J. Domagalicki ENGINEER OF BRIDGE DESIGN
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

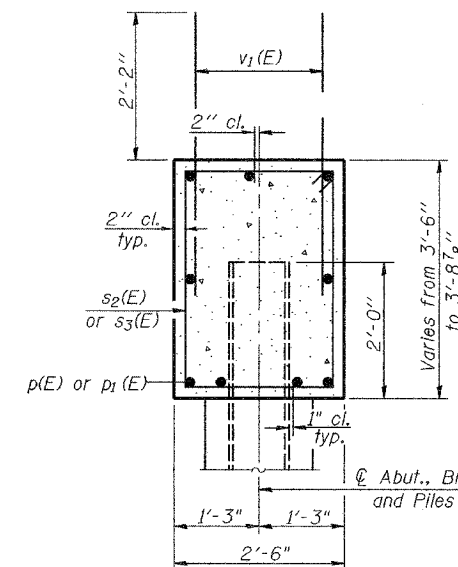
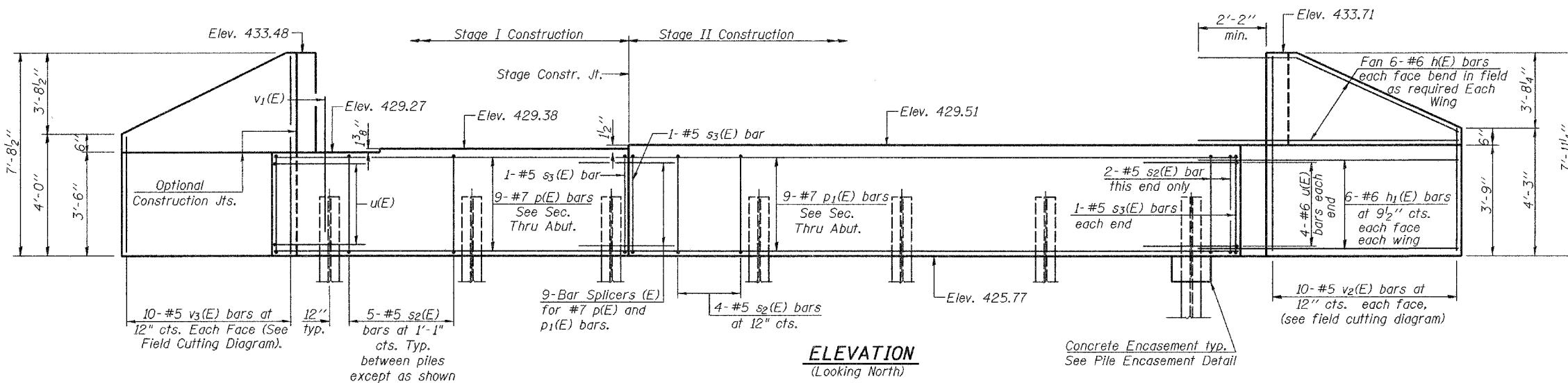
ABB-1 10-22-04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 781	108B-1	CRAWFORD	38	22
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

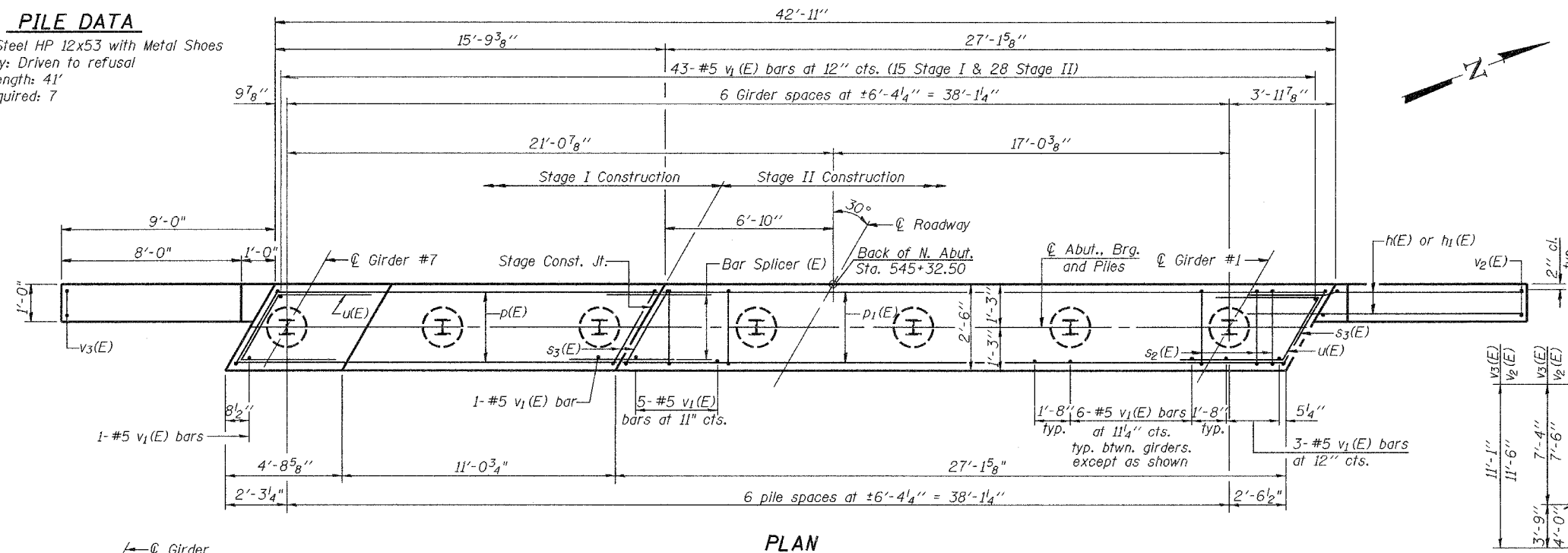
SHEET NO. 13
16 SHEETS
Contract #94656

Notes: Four steps monolithically with cap.
Reinforcement bars designated (E) shall be epoxy coated.
Space reinforcement in cap to miss anchor bolts.
For anchor bolt installation details see sheet 12 of 16.
For bar splicer details see sheet 15 of 16.



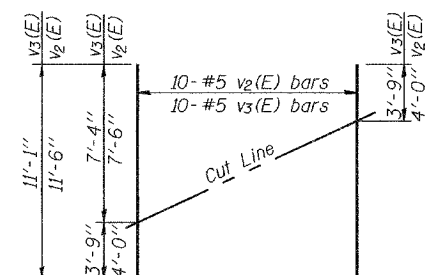
SEC. THRU ABUT.
Dim's. are at Rt. L's.

PILE DATA
Type: Steel HP 12x53 with Metal Shoes
Capacity: Driven to refusal
Est. Length: 41'
No. Required: 7



PLAN

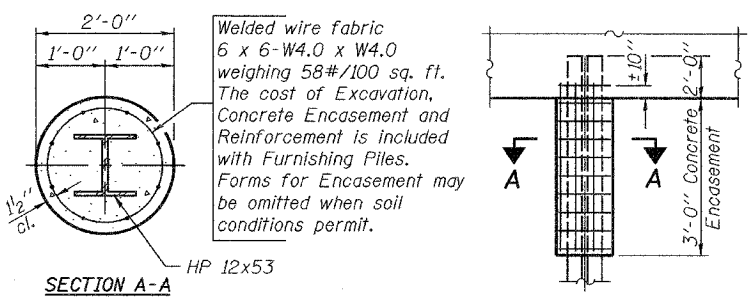
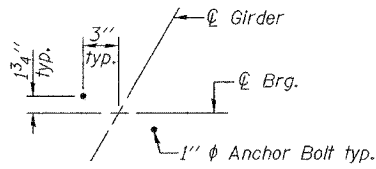
FIELD CUTTING DIAGRAM
Order v2(E) and v3(E) bars full length. Cut as shown and use remainder of bars in opposite face.



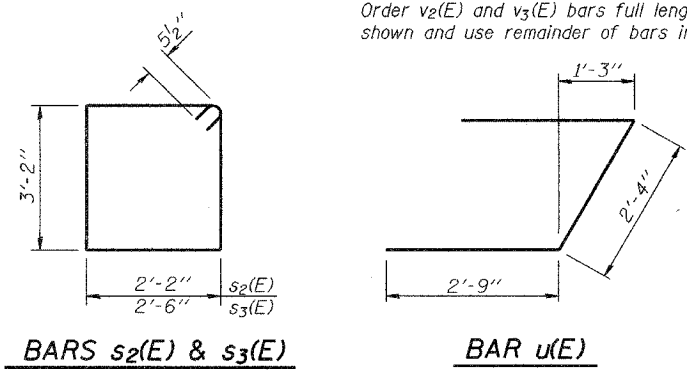
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	24	#6	11'-10"	—
h1(E)	24	#6	11'-2"	—
p(E)	9	#7	15'-6"	—
p1(E)	9	#7	26'-10"	—
s2(E)	31	#5	11'-7"	□
s3(E)	4	#5	12'-3"	□
u(E)	8	#6	7'-10"	┌
v1(E)	83	#5	4'-4"	—
v2(E)	10	#5	11'-6"	—
v3(E)	10	#5	11'-1"	—
Concrete Structures		Cu. Yd.	20.0	
Reinforcement Bars, Epoxy Coated		Pound	2740	
Structure Excavation		Cu. Yd.	185.4	
Furnishing Steel Piles HP12x53		Foot	287	
Driving Steel Piles		Foot	287	
Metal Shoes		Each	7	

ANCHOR BOLT DETAIL



SECTION A-A
PILE ENCASEMENT DETAIL



BARS s2(E) & s3(E)
BAR u(E)

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

December 13 2005
EXAMINED *Thomas J. Demagala*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

NORTH ABUTMENT
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.P. 781	108B-1	CRAWFORD	38	24
FED. ROAD DIST. NO. 7		BLINDS	FED. AID PROJECT	

Contract #94656

The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



**ONE PIECE

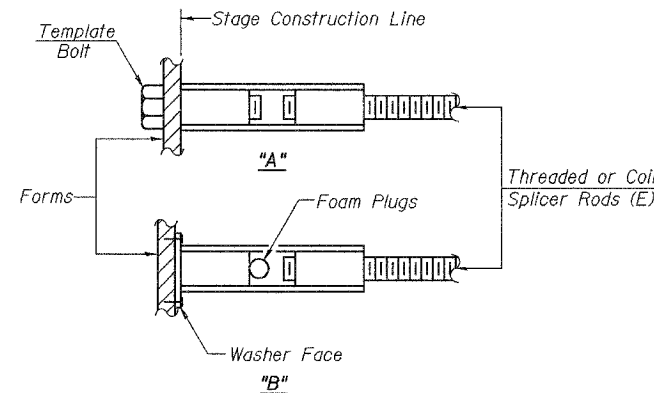
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTRNATIVES

**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

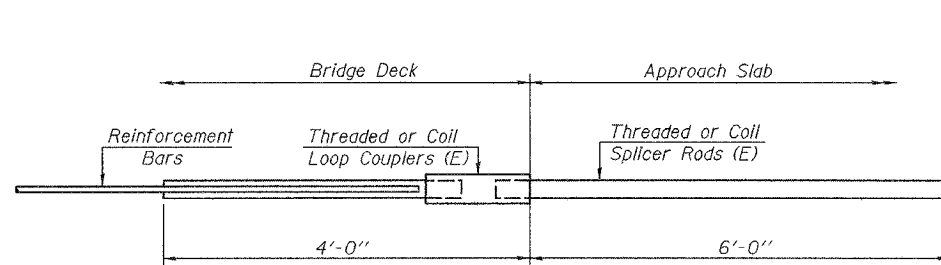
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the 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:

- Minimum Capacity = $1.25 \times f_y \times A_t$
(Tension in kips)
- Minimum *Pull-out Strength = $1.25 \times f_{s,allow} \times A_t$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s,allow}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

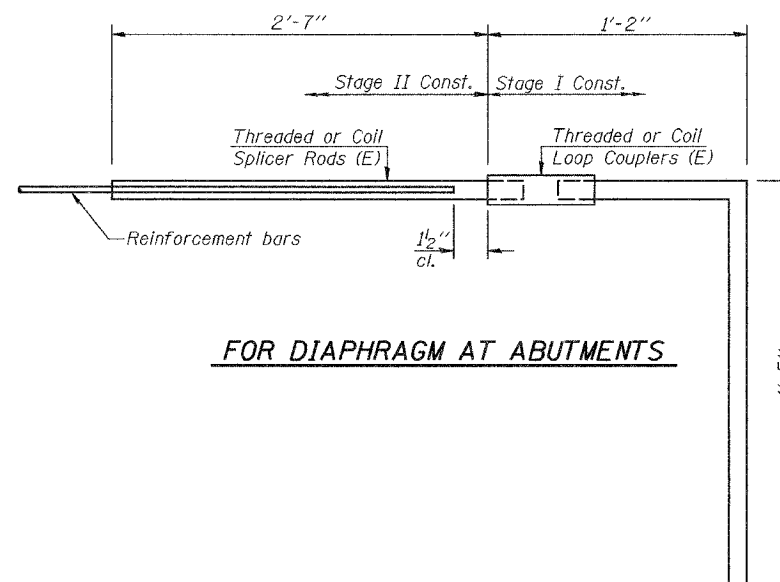
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



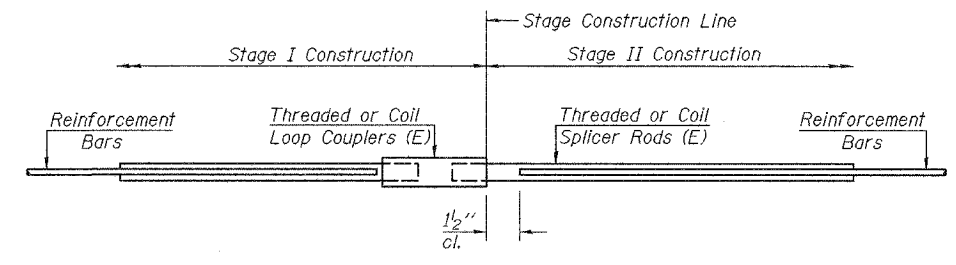
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 70



FOR DIAPHRAGM AT ABUTMENTS

Bar Splicer for #6 bar
Min. Capacity = 33.1 kips - tension
Min. Pull-out Strength = 13.3 kips - tension
No. Required = 6



STANDARD

Bar Size	No. Assemblies Required	Location
#5	262	Slab
#6	10	Diaphragms
#7	18	Abut. Cap

BAR SPLICER ASSEMBLY DETAILS
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

DESIGNED	W. Beisner
CHECKED	Chi-Cheung Chau
DRAWN	R. Dalsin
CHECKED	C.C.C./S.J.B./S.M.R.

EXAMINED	December 13 2005
PASSED	Thomas J. Damgalabici ENGINEER OF BRIDGE DESIGN
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
F.A.P. 781	108B-1	CRAWFORD	3/8	25
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Contract #94656

SHEET NO. 16

16 SHEETS

Illinois Department of Transportation
SOIL BORING LOG

Page 1 of 2

Date 6/6/00

ROUTE FAP 781 DESCRIPTION Trib. to Wabash River LOGGED BY Dale Lux

SECTION 108B-1 LOCATION SE 1/4, SEC. 18, TWP. 5N, RNG. 10W, 2 PM

COUNTY Crawford DRILLING METHOD Auger & Split Spoon HAMMER TYPE Automatic Drop

STRUCT. NO.	Station	DRILLING METHOD	HAMMER TYPE	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	Ground Surface Elev.	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
017-0008	125N 2095E	Auger & Split Spoon	Automatic Drop	419.0	418.8	420.4	421.3	423.4	433.4								
<p>Estimated very stiff, damp, gray marbled, brown, Clay Till (continued)</p> <p>432.30 5 3.0 12</p> <p>Est. medium, damp to very damp, brown marbled, gray & red, Clay</p> <p>409.80 5 4.8 12</p> <p>428.40 5 3.6 13</p> <p>Med. damp to very damp, brown marbled gray Silty Clay to Clay w/ sand lenses & small roots</p> <p>426.40 5 3.7 13</p> <p>Estimated medium, very damp, gray, Silty Clay Loam with organic odor</p> <p>422.40 5 3.2 13</p> <p>V. loose, v. moist, gray, Sandy Loam w/ organic odor, Clay lenses & small roots</p> <p>421.40 5 4.2 13</p> <p>V. loose, water bearing gray with brown streaks, mix of coarse & fine grain Sand, Clay & gravel</p> <p>417.90 5 2.8 14</p>																	

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
SOIL BORING LOG

Page 2 of 2

Date 6/6/00

ROUTE FAP 781 DESCRIPTION Trib. to Wabash River LOGGED BY Dale Lux

SECTION 108B-1 LOCATION SE 1/4, SEC. 18, TWP. 5N, RNG. 10W, 2 PM

COUNTY Crawford DRILLING METHOD Auger & Split Spoon HAMMER TYPE Automatic Drop

STRUCT. NO.	Station	DRILLING METHOD	HAMMER TYPE	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	Ground Surface Elev.	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
017-0008	125N 2095E	Auger & Split Spoon	Automatic Drop	419.0	418.8	420.4	421.3	423.4	433.4								
<p>Very stiff, damp to very damp, gray, Clay Till (continued)</p> <p>392.40 5 18 12</p> <p>Dense, moist, brown mix of Clay, calc. & fine gr. Sand, ss fragments & some gravel</p> <p>391.40 7 14 13</p> <p>Med. moist, brown mix of Clay, calc. & fine gr. Sand, sandstone fragments & gravel</p> <p>389.40 7 13 13</p> <p>Medium moist, gray marbled, brown, very badly weathered, Clay Shale</p> <p>387.90 31 8</p> <p>Very dense, moist, thin layered, very badly weathered, gray Clay Shale with very thin Sand partings</p> <p>382.20 2760 17700</p> <p>Limit of Exploration</p> <p>Benchmark is square chiseled in S.E. Wingwall</p> <p>Elevation = 433.82</p>																	

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
SOIL BORING LOG

Page 1 of 2

Date 6/6/00

ROUTE FAP 781 DESCRIPTION Trib. to Wabash River LOGGED BY Dale Lux

SECTION 108B-1 LOCATION SE 1/4, SEC. 18, TWP. 5N, RNG. 10W, 2 PM

COUNTY Crawford DRILLING METHOD Auger & Split Spoon HAMMER TYPE Automatic Drop

STRUCT. NO.	Station	DRILLING METHOD	HAMMER TYPE	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	Ground Surface Elev.	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
017-0008	125N 2095E	Auger & Split Spoon	Automatic Drop	419.0	418.8	417.8	422.0	433.6	433.6								
<p>Loose, very moist, red, fine grain, Sand with small amount 3/8" - 3/4" gravel, some 1/8" Clay lenses</p> <p>432.40 10 3.7 11</p> <p>Very stiff, damp to very damp, gray, Clay Till (continued)</p> <p>428.10 11 3.9 11</p> <p>Loose, very moist, red, mix of Sandy Clay, Clay, fine grain Sand & small amount 3/8" - 1" gravel</p> <p>424.10 10 4.4 12</p> <p>Soft, wet, gray, Silty Clay with organic odor, small amt. gravel & sm. wood pieces</p> <p>424.10 10 4.4 12</p> <p>Very soft, wet, gray, Clay with some small wood pieces, fine grain Sand lenses & sm. amount gravel, with organic odor</p> <p>420.60 11 3.9 12</p> <p>Soft, wet, gray, marbled brown, Clay w/ organic odor, some gravel, local frags, sm. wood pcs. & fine gr. Sand lenses</p> <p>419.10 15 17 19</p> <p>Very loose, water bearing, gray mix of Clay, coarse & fine grain Sand & 3/8" - 1" gravel with petroleum odor</p> <p>416.10 12 4.5 12</p>																	

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
SOIL BORING LOG

Page 2 of 2

Date 6/6/00

ROUTE FAP 781 DESCRIPTION Trib. to Wabash River LOGGED BY Dale Lux

SECTION 108B-1 LOCATION SE 1/4, SEC. 18, TWP. 5N, RNG. 10W, 2 PM

COUNTY Crawford DRILLING METHOD Auger & Split Spoon HAMMER TYPE Automatic Drop

STRUCT. NO.	Station	DRILLING METHOD	HAMMER TYPE	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.	First Encounter	Upon Completion	Ground Surface Elev.	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
017-0008	125N 2095E	Auger & Split Spoon	Automatic Drop	419.0	418.8	417.8	422.0	433.6	433.6								
<p>Hard, damp, gray, Clay till (continued)</p> <p>391.60 11 4.4 12</p> <p>Very stiff, damp, gray, Clay Till</p> <p>389.60 11 3.5 13</p> <p>No recovery - Est. medium, water bearing fine grain sand</p> <p>388.60 3 8</p> <p>Loose, water bearing, fine grain, gray, Sand with some 3/8" to 5/8" gravel and some 1/8" Clay lenses</p> <p>383.10 1 19</p> <p>Very dense, moist, gray, very badly weathered, very thin layered Clay shale with very thin Sand and sandstone partings</p> <p>380.60 2760 17700</p> <p>Very dense, moist, gray, weathered, sandstone with very thin Clay partings</p> <p>377.80 2760 17700</p> <p>Limit of Exploration</p> <p>Benchmark is square chiseled in S.E. Wingwall</p> <p>Elevation = 433.82</p>																	

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)

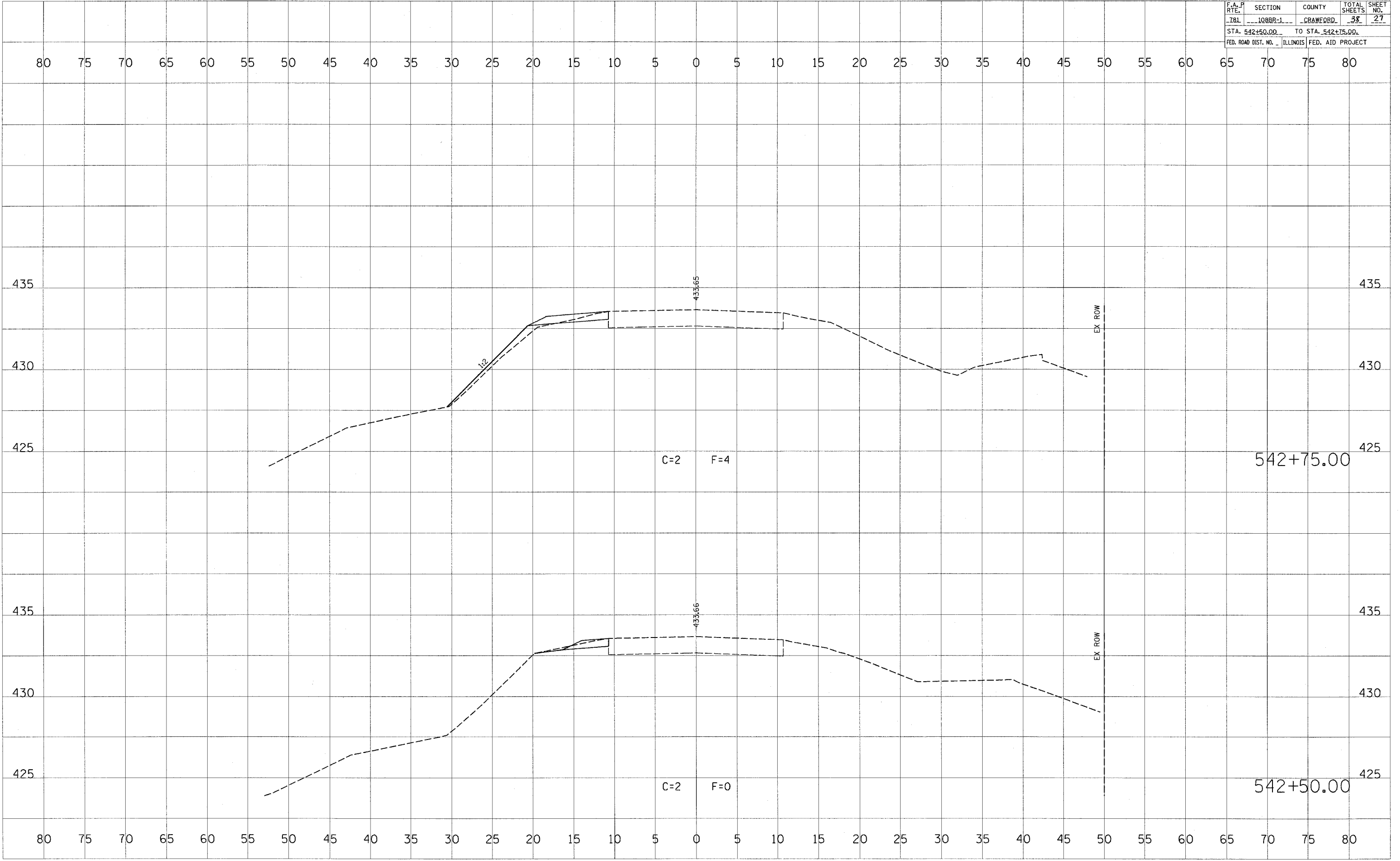
BORING DATA
F.A.P. ROUTE 781 - SECTION 108B-1
CRAWFORD COUNTY
STATION 545+80.00
STRUCTURE NO. 017-0030

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78L	1088R-1	CRAWFORD	38	27
STA. 542+50.00 TO STA. 542+75.00.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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

PLOT DATE = 10/27/2005
PLOT SCALE = 0.0019 / IN.
USER NAME = hammyjp



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
108RR-1	CRAWFORD		38	28
STA. 543+00.00		TO STA. 543+25.00		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE: _____ BY: _____

FINAL SURVEY SURVEYED _____ PLOTTED _____

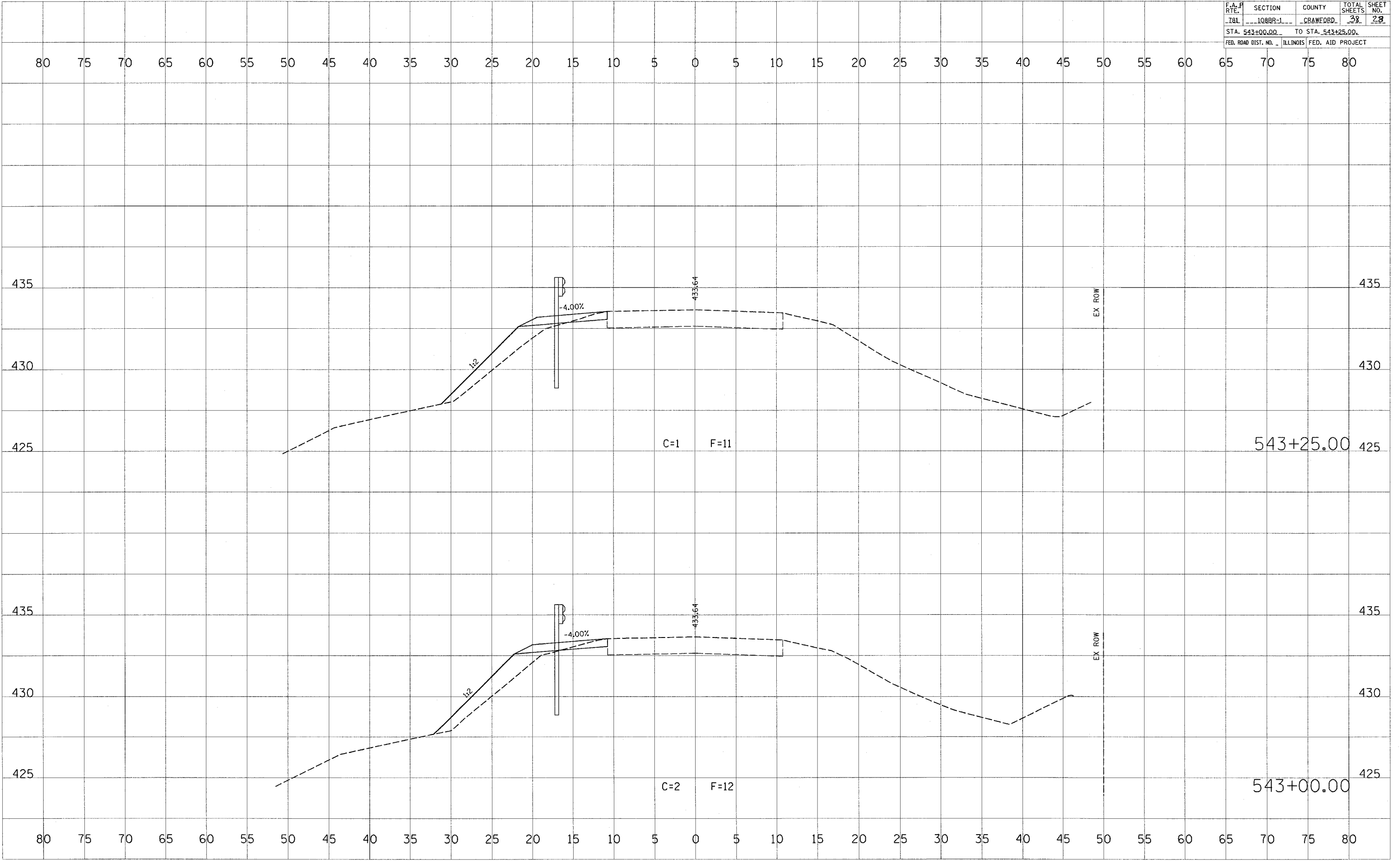
NOTE BOOK NO. _____ AREAS CHECKED _____

DATE: _____ BY: _____

ORIGINAL SURVEY SURVEYED _____ PLOTTED _____

NOTE BOOK NO. _____ AREAS CHECKED _____

PLOT DATE = 10/27/2005
 FILE NAME = 94656a-08398a.dwg
 PLOT SCALE = 0.0131' / 1" IN.
 USER NAME = hemmenj



CONTRACT NO. 94656

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1088R-1	CRAWFORD		38	29
STA. 543+50.00 TO STA. 543+75.00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY	DATE

FINAL SURVEY	PLOTTED	DATE

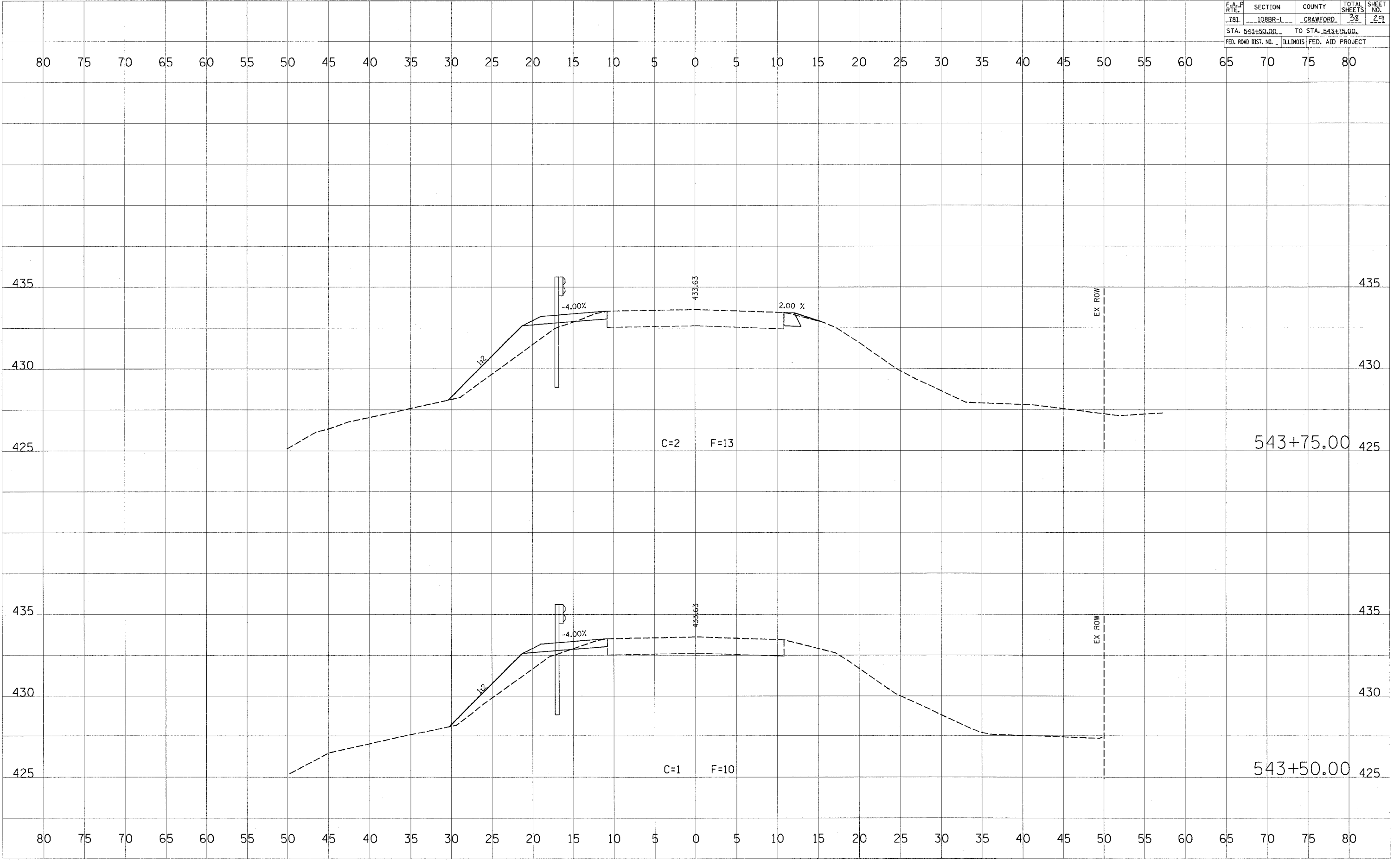
NOTE BOOK NO.	AREAS CHECKED

BY	DATE

ORIGINAL SURVEY	PLOTTED	DATE

NOTE BOOK NO.	AREAS CHECKED

PLOT DATE = 10/27/2005
PLOT USER = 94656\94656a\83398a1.r32
PLOT SCALE = 5/8" = 1' / IN.
USER NAME = hemmerlp

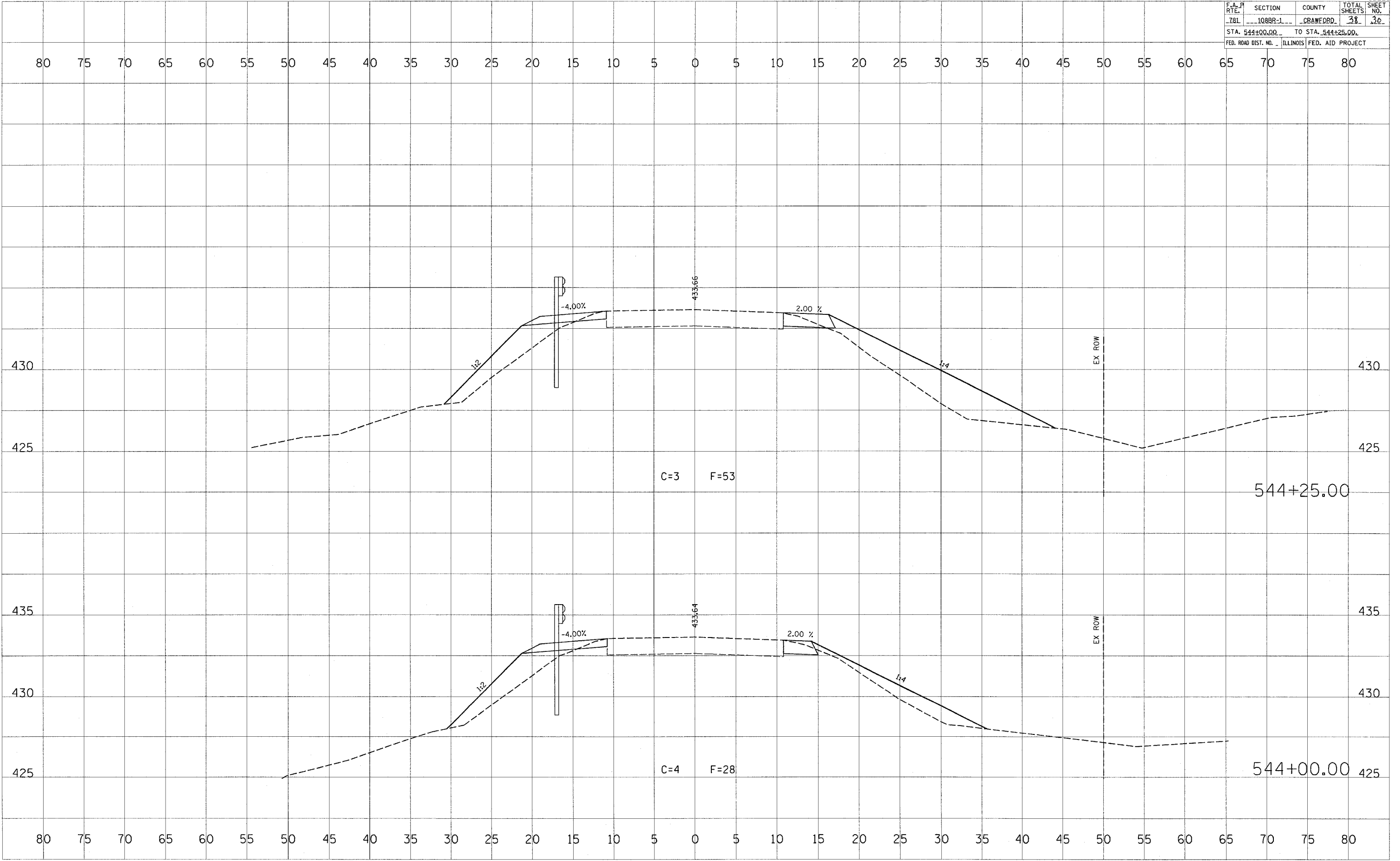


F.A. RTL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1088R-1	CRAWFORD		38	30
STA. 544+00.00 TO STA. 544+25.00.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

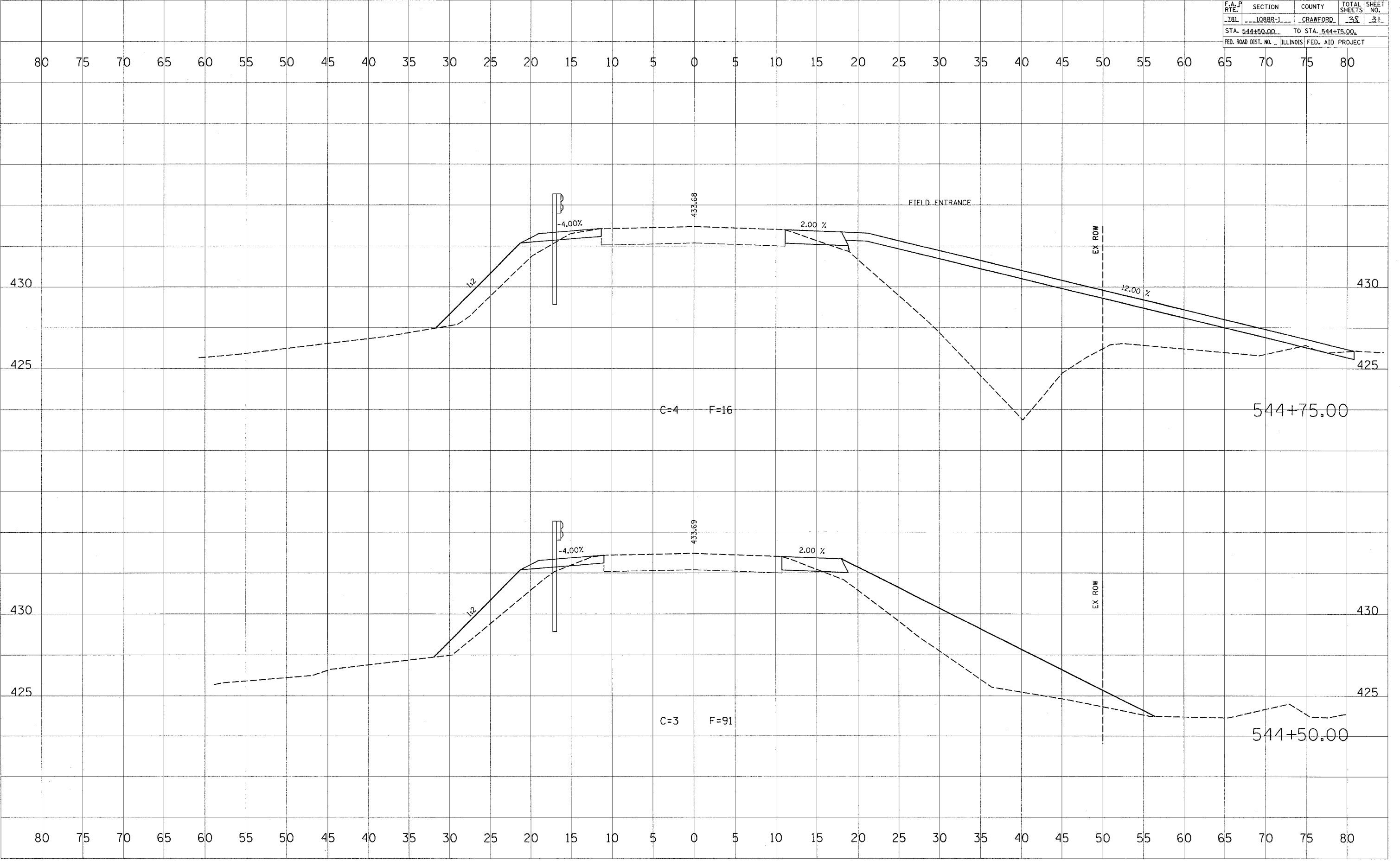
BY	DATE
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

BY	DATE
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

PLOT DATE = 10/27/2005
 FILE NAME = H:\94656\83398.dwg
 PLOT SCALE = 0.0131' / IN.
 USER NAME = hemmanjp



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
181	1088R-1	CRAWFORD	38	31
STA. 544+50.00 TO STA. 544+75.00			ILLINOIS FED. AID PROJECT	

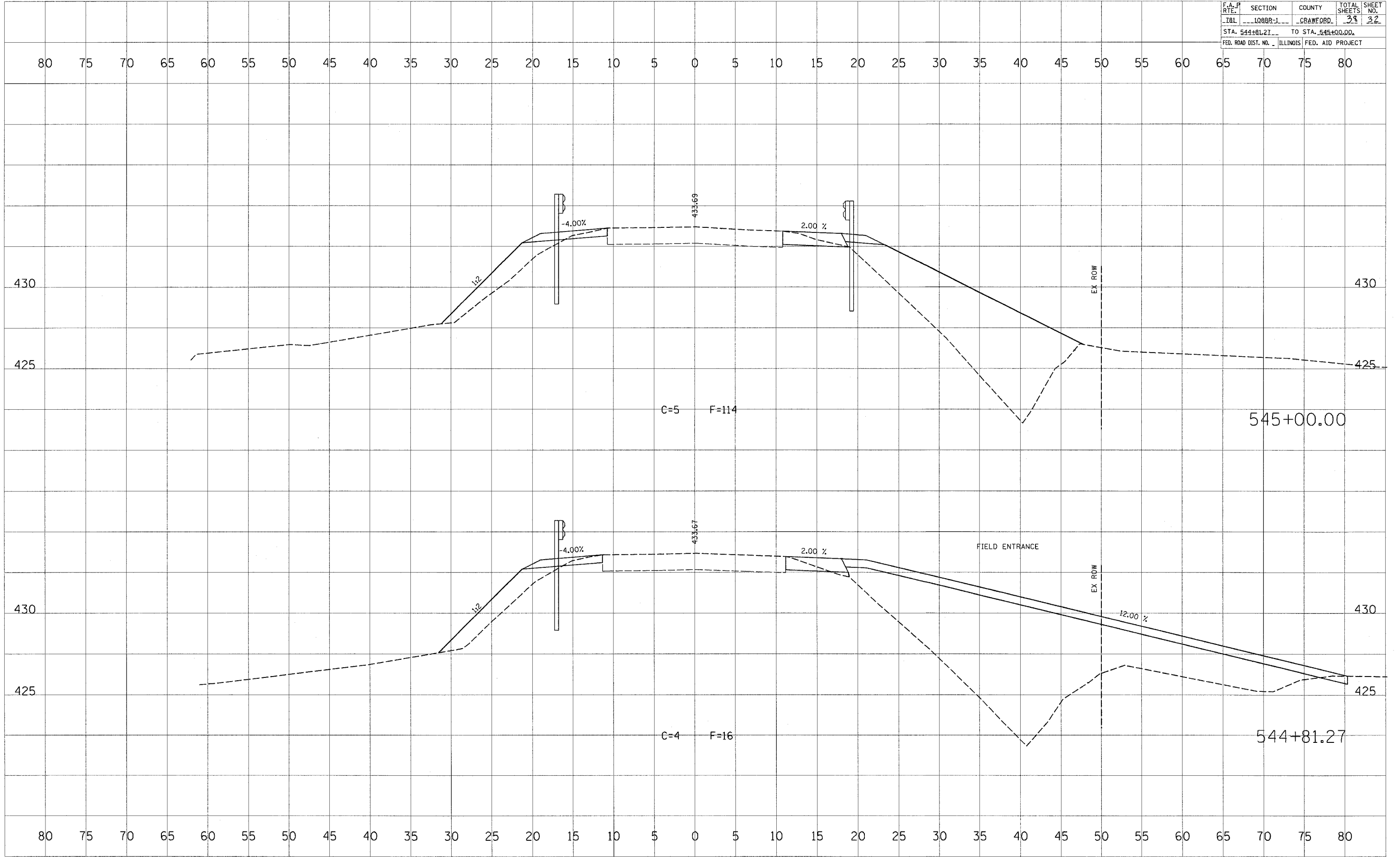


DATE: _____ BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS CHECKED: _____
 NO. _____

DATE: _____ BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS CHECKED: _____
 NO. _____

PLOT DATE = 10/27/2006
 FILE NAME = c:\p\proj\1088r-1\1088r-1.dwg
 PLOT SCALE = 5.0039' / IN.
 USER NAME = hammyrjp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
181	1088R-1	CRAWFORD	32	32
STA. 544+81.27		TO STA. 545+00.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

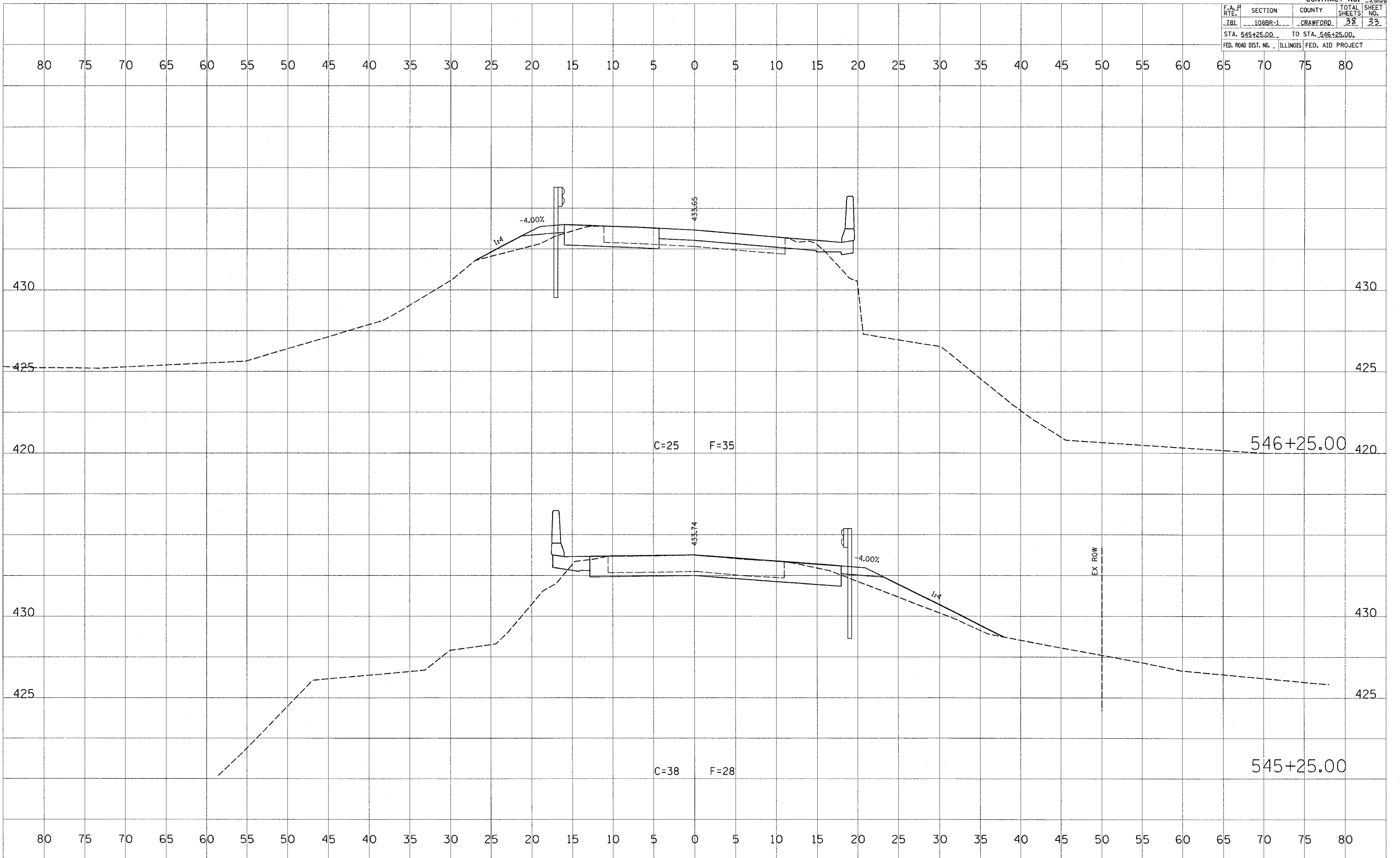


DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

DATE	BY
SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

PLOT DATE = 10/27/2005
 FILE NAME = c:\prowork\46566\46566.dwg
 USER NAME = hmanuq

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
181	1088R-1	CRAWFORD	38	33
STA. 545+25.00		TO STA. 546+25.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

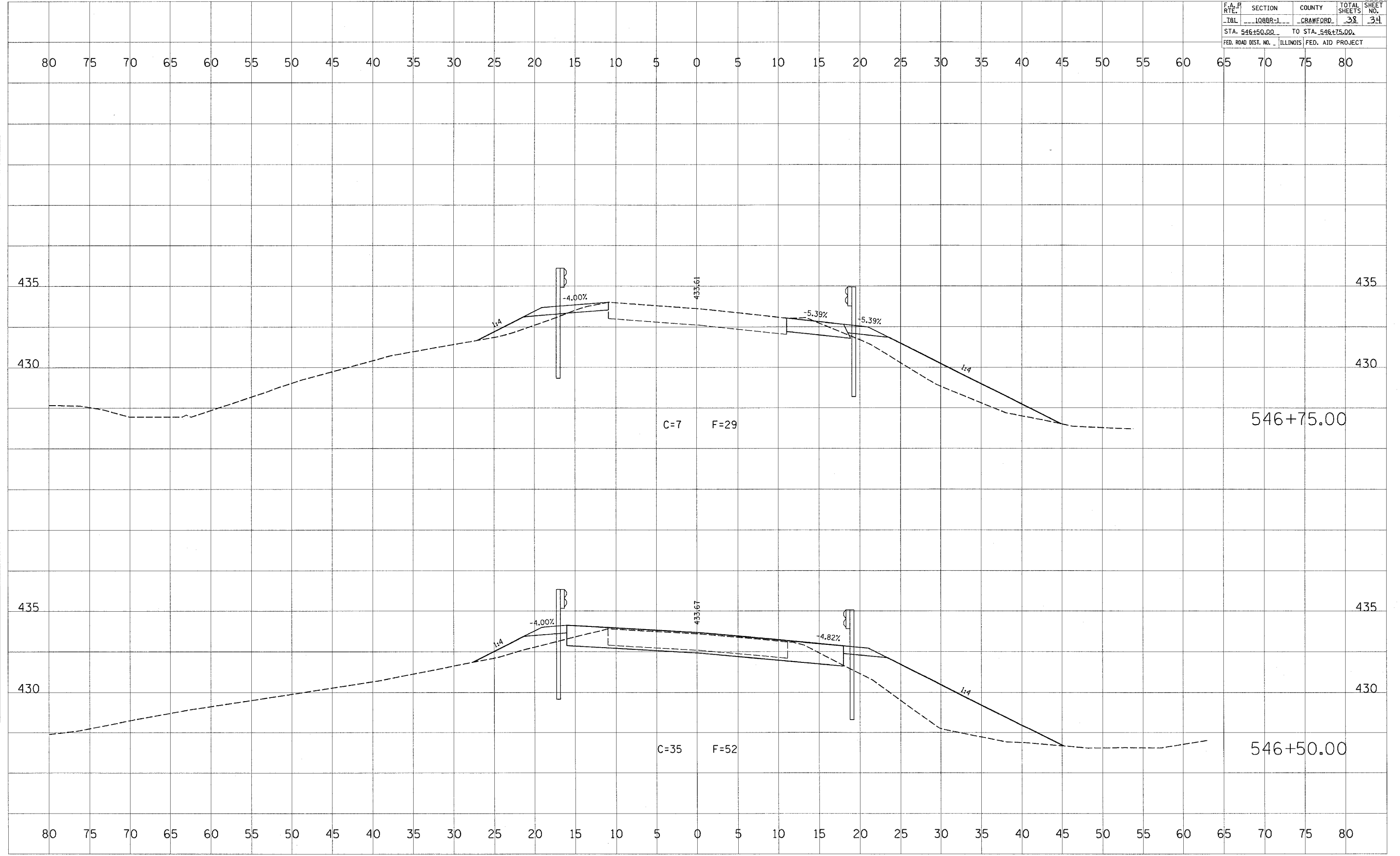


DATE: _____
 BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS: _____
 CHECKED: _____

DATE: _____
 BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS: _____
 CHECKED: _____

PLOT DATE = 10/27/2005
 FILE NAME = c:\projects\104656a\104656a.dwg
 PLOT SCALE = 5.0039' / IN.
 USER NAME = hamnerjp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78L	1088R-1	CRAWFORD	38	34
STA. 546+50.00 TO STA. 546+75.00				
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	

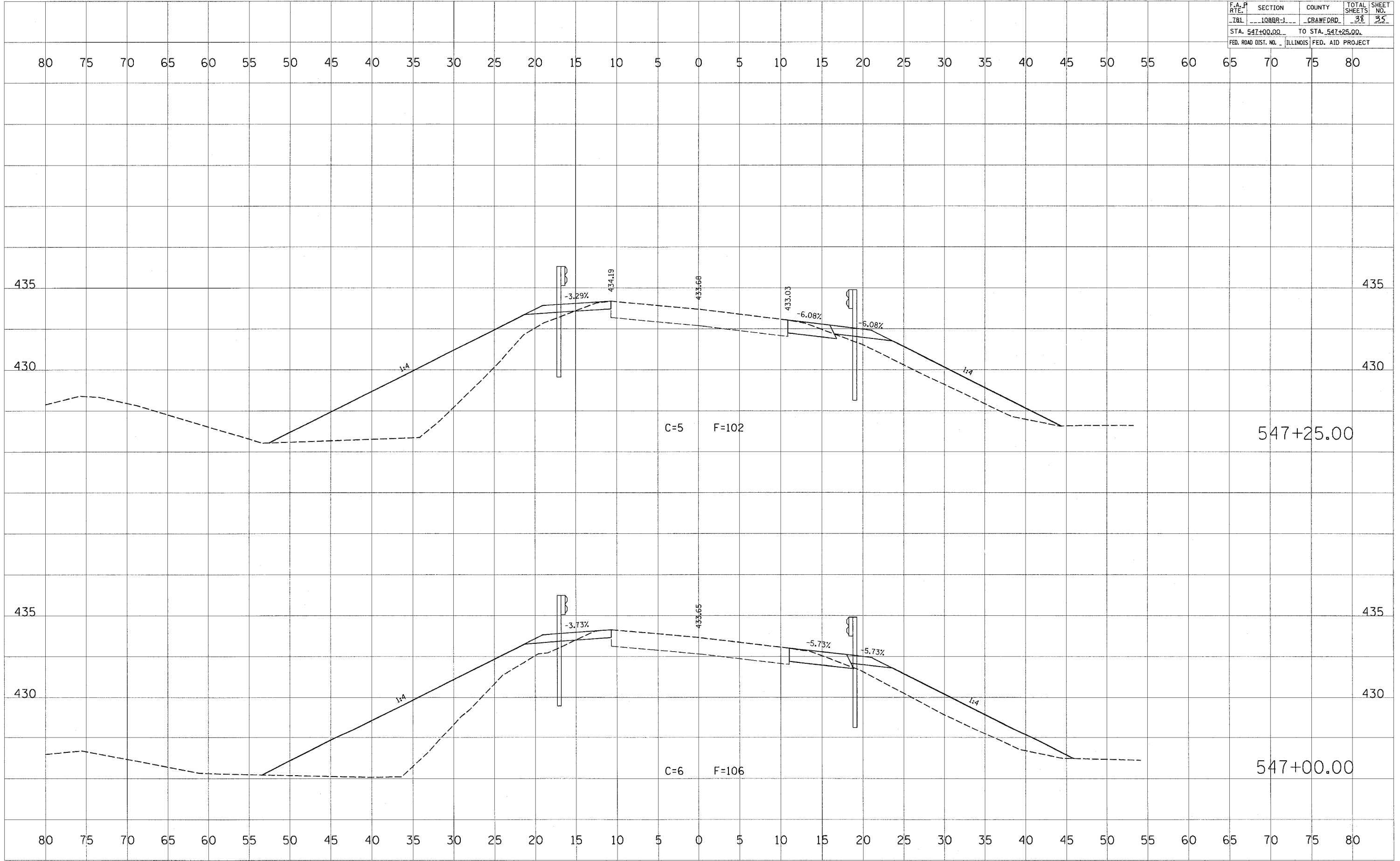


DATE: _____
 BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS: _____
 CHECKED: _____
 NO.:

DATE: _____
 BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS: _____
 CHECKED: _____
 NO.:

PLOT DATE = 10/27/2005
 FILE NAME = c:\pvs\pvs\94656\94656.dwg
 PLOT SCALE = 6.813' / IN.
 USER NAME = henneryj

CONTRACT NO. 34556			
F.A.P. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78L 1088R-1	CRAWFORD	38	35
STA. 547+00.00 TO STA. 547+25.00			
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT	



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

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

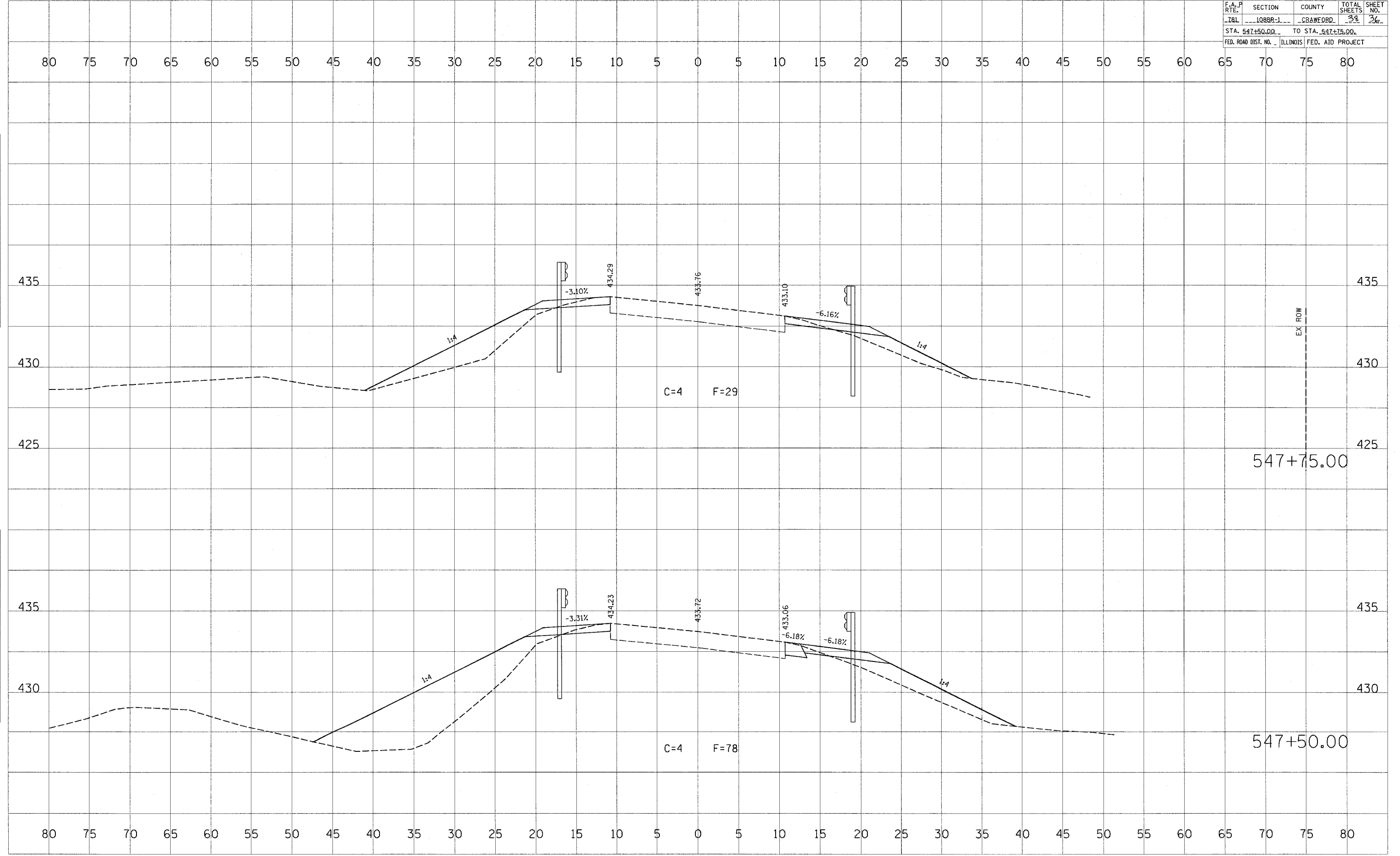
PLOT DATE = 10/27/2005
 FILE NAME = c:\prowork\141666\141666.dwg
 USER NAME = hmanuq

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
181	1088B-1	CRAWFORD	38	36
STA. 547+50.00 TO STA. 547+75.00			ILLINOIS FED. AID PROJECT	

DATE: _____
 BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS CHECKED: _____

DATE: _____
 BY: _____
 SURVEYED: _____
 SURVEY: _____
 NOTE BOOK: _____
 TEMPLATE: _____
 AREAS CHECKED: _____

PLOT DATE = 10/27/2005
 FILE NAME = c:\p\projects\46566\83398.dwg
 PLOT SCALE = 6.0/36" / IN.
 USER NAME = hemmerly

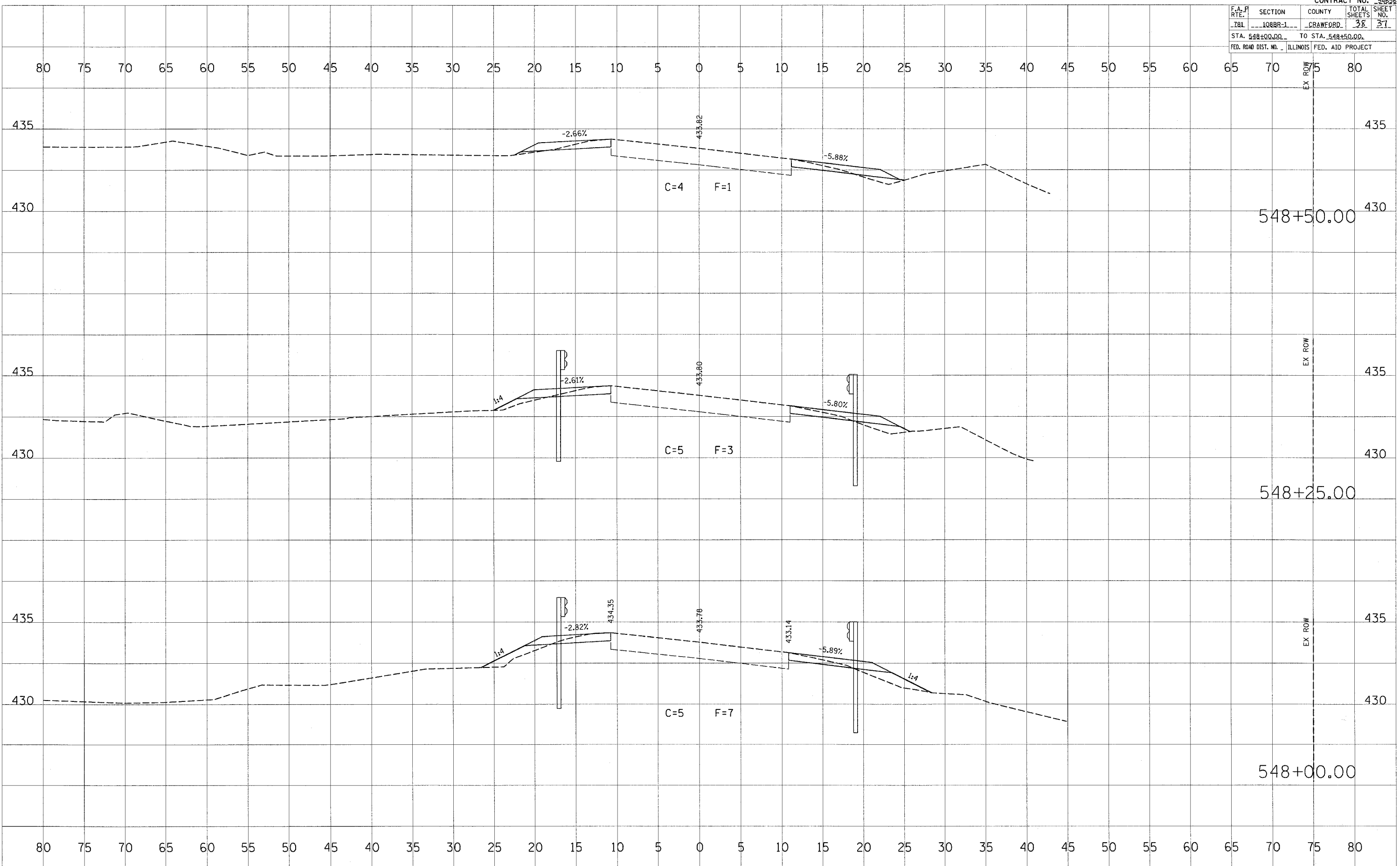


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
108BB-1		CRAWFORD	38	37
STA. 548+00.00		TO STA. 548+50.00		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 AREAS CHECKED _____

BY: _____ DATE: _____
 SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 AREAS CHECKED _____

PLT DATE = 10/27/2006
 FILE NAME = 946560-083961.mxd
 PLOT SCALE = 5/8" = 1' IN.
 USER NAME = hammyj



F.A. PROJECT		CONTRACT NO. 94656	
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1088R-1	CRAWFORD	38	38
STA. 548+75.00 TO STA. 549+00.00			
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT	

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

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

PLOT DATE = 10/27/2005
 PLOT SCALE = 1" = 20'
 USER NAME = hnmam01e

