

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	1

D-93-013-04  
P-93-030-02

**INDEX OF SHEETS**

- 1 COVER SHEETS
- 2 GENERAL NOTES
- 3-4 SUMMARY OF QUANTITIES
- 5 TYPICAL SECTIONS
- 6-7 SCHEDULE OF QUANTITIES
- 8-12 F.A.S. 1317 (IL 113) AND TR 77 PLAN AND PROFILE
- 13 TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR
- 14 RIGHT OF WAY SHEETS
- 15-17 MISCELLANEOUS DETAILS
- 18-31 STRUCTURE PLANS
- 32-39 EXISTING STRUCTURE PLANS
- 40-58 CROSS SECTIONS

**STANDARDS**

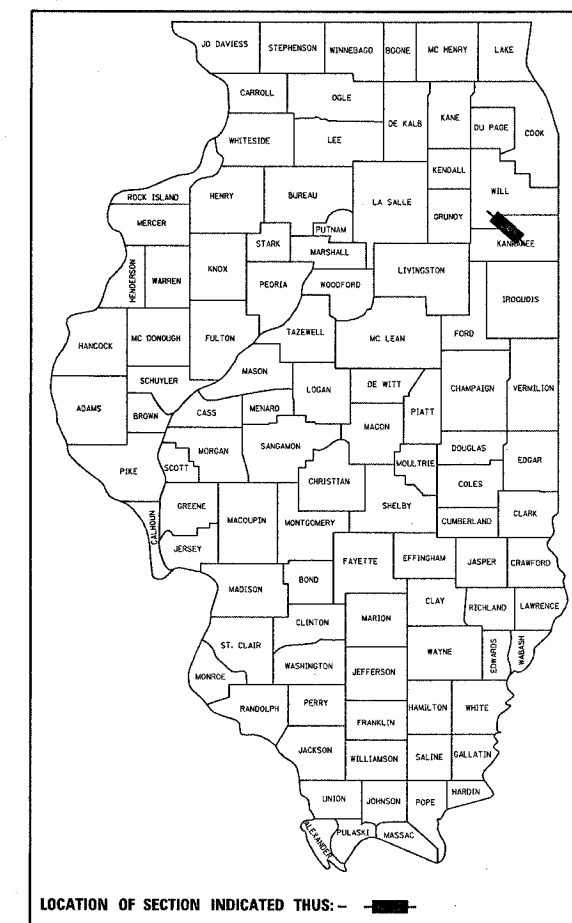
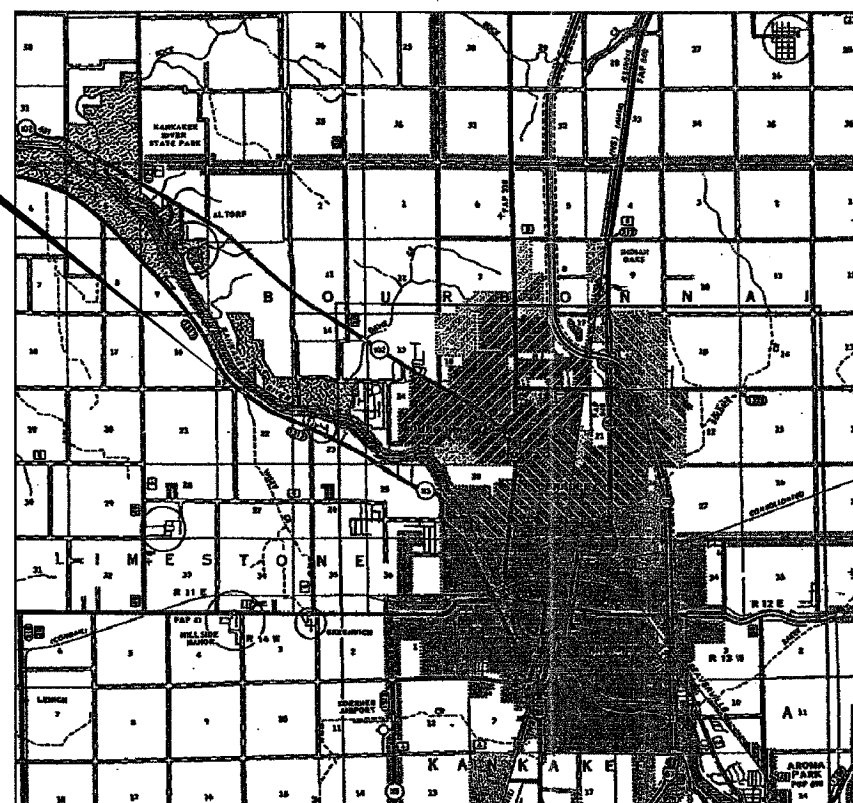
- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-02 TEMPORARY EROSION CONTROL SYSTEMS
- 285001-01 FABRIC FORMED CONCRETE REVEMENT MATS
- 420401-05 BRIDGE APPROACH PAVEMENT
- 515001-02 NAME PLATE FOR BRIDGES
- 609006-02 BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
- 630001-05 STEEL PLATE BEAM GUARDRAIL
- 630201-03 PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 631031-05 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 666001 RIGHT-OF-WAY MARKERS
- 701001-01 OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5 m (15') AWAY
- 701006-02 OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
- 701011-01 OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
- 701201-02 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS P 45 MPH
- 701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-01 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS P 45 MPH
- 701311-02 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
- 702001-05 TRAFFIC CONTROL DEVICES
- 720001 SIGN PANEL MOUNTING DETAILS
- 720006 SIGN PANEL ERECTION DETAILS
- 720011 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
- 780001-01 TYPICAL PAVEMENT MARKINGS
- 781001-02 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PROPOSED**  
**HIGHWAY PLANS**

**F.A.S. 1317 (IL ROUTE 113)**  
**SECTION 109 BR,N**  
**PROJECT ACRS-ACBRS-1317(103)**  
**KANKAKEE COUNTY**  
**BR REPL & INTERSECTION IMPR**  
**C - 93 - 008 - 04**

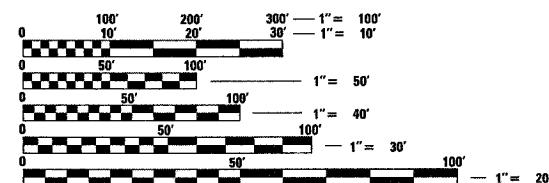
R 14 W                      R 13 W

**PROJECT LOCATION**  
EXIST SN 046-0074  
PROP SN 046-0137



LOCATION OF SECTION INDICATED THUS: - ■ -

**FUNCTION CLASSIFICATION**  
**MINOR ARTERIAL RURAL**  
2003 ADT = 3300  
P.V. = 93.2% S.U. = 3.0% M.U. = 3.8%



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

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: DAN DRAPER  
UNIT CHIEF: PAT BRABOY

CONTRACT NO. 66410

GROSS LENGTH = 800 FT = 0.15 MI  
NET LENGTH = 800 FT = 0.15 MI

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED 8/23 20 05  
Gregory Mount  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 14, 20 05  
Mike Line RD  
ENGINEER OF DESIGN AND ENVIRONMENT

October 14, 20 05  
Eric E. Draper RD  
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

P. A. S. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BR,N	KANKAKEE	58	2
STA.		TO STA.		
FED. ROAD DIST. NO.		BLINDS	FED. AID PROJECT	

**GENERAL NOTES**

THE THICKNESS OF BITUMINOUS MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

THE BITUMINOUS SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE BITUMINOUS SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE BITUMINOUS SURFACE

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

AGGREGATE (PRIME COAT): FA 20 MAY BE USED IN ADDITION TO THE GRADATIONS LISTED IN THE 3RD PARAGRAPH OF ARTICLE 1003.03(G) OF THE STANDARD SPECIFICATIONS.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08	GAL / SQ YD OR
	0.375	GAL / SQ YD
AGGREGATE PRIME COAT	0.002	TONS / SQ YD
BITUMINOUS RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT /100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
TEMPORARY DITCH CHECKS	9	BALES OR
	5	TONS AGGREGATE

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:  
COMMONWEALTH EDISON  
SBC  
COMCAST CABLE

**GENERAL NOTES**

THE OLD ROADBED OF TR 77 WILL BE REMOVED AS SHOWN ON THE CROSS SECTIONS. IF THERE IS ANY EXISTING ROCK FROM THE OLD ROADBED THAT IS AT THE FINISHED GRADE, THIS ROCK SHALL BE CORED DOWN AN ADDITIONAL 4" AND EMBANKMENT SHALL BE PLACED IN THIS AREA.

REMOVAL OF THE WOVEN WIRE FENCE IN THE LOCATION OF THE TREE REMOVAL AREA WHERE TR77 WILL BE REALIGNED WILL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE COST OF TREE REMOVAL

**COMMITMENTS:**

1. ENVIRONMENTAL COORDINATION
2. STRUCTURAL STATUS SHEET
3. 404 PERMIT
4. RESIDENT ENGINEER TO COORDINATE WITH PUBLIC AGENCIES PRIOR TO ROAD CLOSURE
5. VIDEOTAPE WARNER BRIDGE ROAD WITH KANKAKEE COUNTY PRIOR TO USING THIS ROAD AS A DETOUR ROUTE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

PREPARED BY: Steven B. Andrews  
ACTING DISTRICT STUDIES & PLANS ENGINEER

DATE: AUGUST 18, 2005

EXAMINED BY: Hubert K. [Signature]  
DISTRICT CONSTRUCTION ENGINEER

Kenneth [Signature]  
DISTRICT MATERIALS ENGINEER

James A. [Signature]  
DISTRICT OPERATIONS ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL NOTES**

**CONTRACT NO. 66410**

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
131T	109 BRN	KANKAKEE	58	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	80% FED. 20% STATE TOTAL QUANTITY	CONSTRUCTION	TYPE CODE
				ACRS ROADWAY 1000-1A	ACBRS BRIDGE X071-2A
20100500	TREE REMOVAL, ACRES	ACRE	0.26	0.26	
20200100	EARTH EXCAVATION	CU YD	816	816	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	125		125
25000300	SEEDING, CLASS 3	ACRE	0.74	0.74	
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	68	68	
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	68	68	
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	68	68	
25100115	MULCH, METHOD 2	ACRE	0.74	0.74	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	244	244	
28000300	TEMPORARY DITCH CHECKS	FACH	6	6	
28000400	PERIMETER EROSION BARRIER	FOOT	1142	1142	
28000500	INLET AND PIPE PROTECTION	EACH	1	1	
28100107	STONE RIPRAP, CLASS A4	SQ YD	960		960
35100300	AGGREGATE BASE COURSE, TYPE A 4"	SQ YD	1585	1585	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	1	1	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	639	639	
40600300	AGGREGATE (PRIME COAT)	TON	5	5	
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	200	200	
40600990	TEMPORARY RAMP	SQ YD	42	42	
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	214	214	
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	42	42	
44000100	PAVEMENT REMOVAL	SQ YD	216	216	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	161	161	
48202400	BITUMINOUS SHOULDERS SUPERPAVE 6"	SQ YD	166	166	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50105200	REMOVE EXISTING CULVERTS	EACH	1	1	
50200100	STRUCTURE EXCAVATION	CU YD	210		210
50300100	FLOOR DRAINS	EACH	12		12
50300225	CONCRETE STRUCTURES	CU YD	54		54
50300255	CONCRETE SUPERSTRUCTURE	CU YD	129		129
50300260	BRIDGE DECK GROOVING	SQ YD	319		319
50300300	PROTECTIVE COAT	SQ YD	402		402
50300310	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	6		6
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1
50500505	STUD SHEAR CONNECTORS	EACH	1206		1206
50800105	REINFORCEMENT BARS	POUND	2161		2161
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	34490		34490
51500100	NAME PLATES	EACH	1		1
54215550	METAL END SECTIONS 15"	EACH	2	2	
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	97	97	

• SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**SUMMARY OF QUANTITIES**

SCALE: VERT. \_\_\_\_\_ HORIZ. \_\_\_\_\_  
 DATE \_\_\_\_\_ DRAWN BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BRN	KANKAKEE	58	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	80% FED. 20% STATE TOTAL QUANTITY	CONSTRUCTION ACRS		TYPE CODE ACBRS
				ROADWAY I000-1A	BRIDGE X071-2A	
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	338	338		
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)	EACH	4	4		
63200310	GUARDRAIL REMOVAL	FOOT	568	568		
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	5	5		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6		
67100100	MOBILIZATION	L SUM	1	1		
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1		
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	420	420		
* 70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2750	2750		
* 70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	343	343		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	47	47		
* 72000100	SIGN PANEL - TYPE 1	SQ FT	27	27		
73000100	WOOD SIGN SUPPORT	FOOT	37.5	37.5		
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2750	2750		
* 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	343	343		
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	10	10		
* 78200405	GUARDRAIL MARKERS	EACH	9	9		
78200500	BARRIER WALL MARKERS	EACH	4	4		
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10	10		
X3550600	BITUMINOUS BASE COURSE SUPERPAVE 9"	SQ YD	1468	1468		
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	219	219		
X4066740	LEVELING BINDER (HAND METHOD), SUPERPAVE N70	TON	2	2		
X4066765	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N50	TON	247	247		
X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	LSUM	1	1		
* Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	22		22	
<del>Z0002000</del>	FILTER FABRIC	SQ YD	1055		1055	
Z0002600	BAR SPLICERS	EACH	66		66	
* Z0008242	DRILLED SHAFT IN SOIL 42"	FOOT	45		45	
* Z0008336	DRILLED SHAFT IN ROCK 36"	FOOT	28		28	

\* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

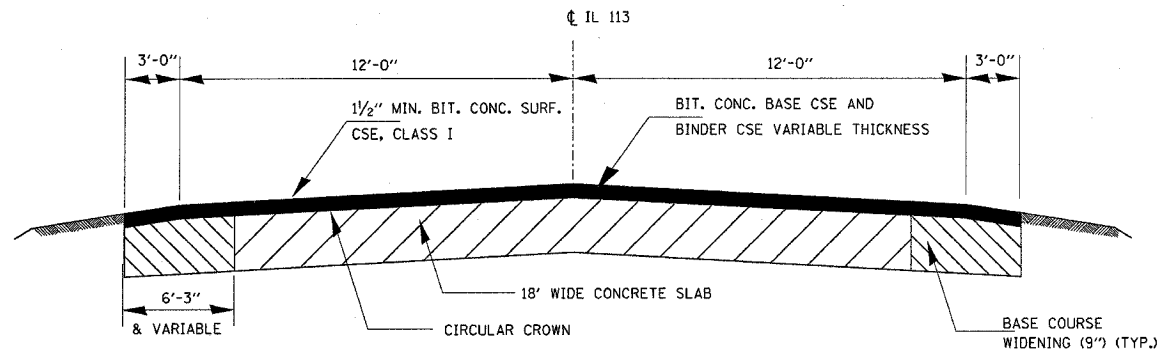
SUMMARY OF QUANTITIES

SCALE: VERT.  
HORIZ.  
DATE

DRAWN BY  
CHECKED BY

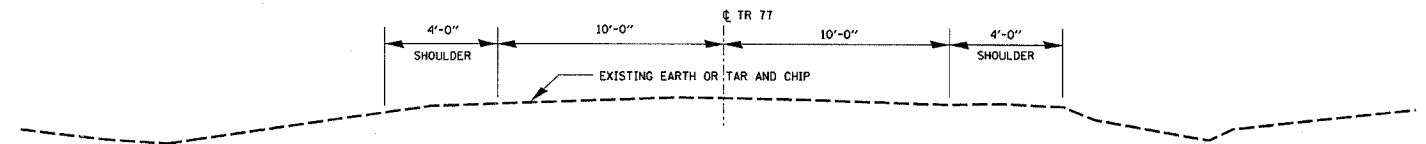


F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BR,N	KANKAKEE	58	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



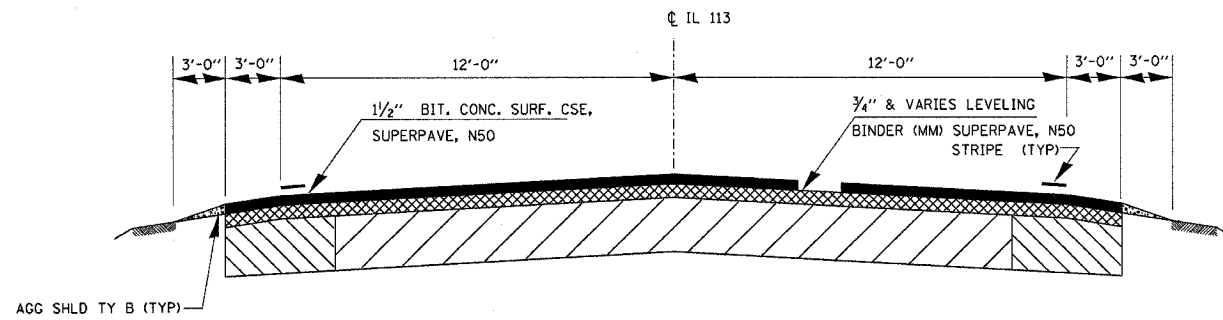
EXISTING ROADWAY TYP. SECTION

STA 257+00 TO 265+00



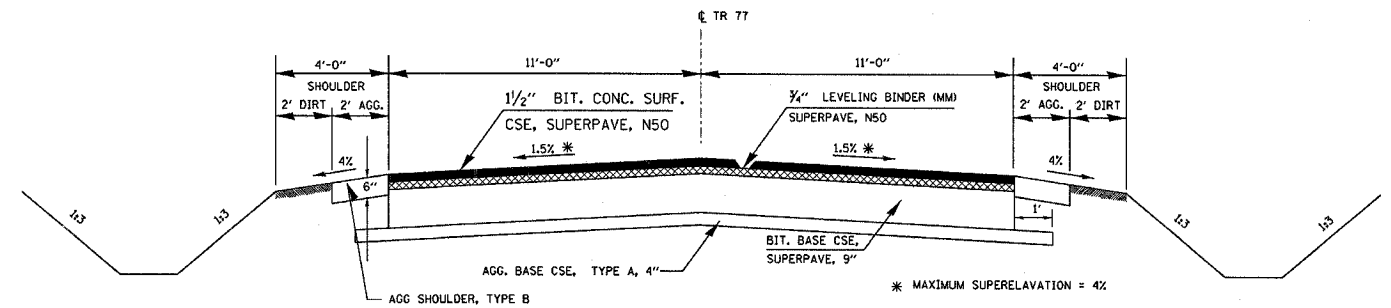
EXISTING ROADWAY TYP. SECTION

STA 105+25-110+00



PROPOSED ROADWAY TYP. SECTION

STA 257+00 TO 265+00



PROPOSED ROADWAY TYP. SECTION

STA 105+25-110+00

	SUPERPAVE LEVEL BINDER	SUPERPAVE SURFACE	SUPERPAVE SHOULDERS	SUPERPAVE BASE COURSE
PG GRADE	PG 64-22	PG 64-22	PG 58-22	PG 64-22
MAX % RAP ALLOWABLE**	25%	15%	30%	15%
DESIGN AIR VOIDS	4% @ N50	4% @ N50	2% @ N30	4% @ N70
MIXTURE COMPOSITION	IL 9.5	IL 12.5 OR IL 9.5	BAM	IL 19.0
FRICION AGGREGATE		MIXTURE C		
PLANT CONTROL LIMITS	CLASS I	CLASS I	NON-CLASS I	CLASS I
DENSITY CONTROL LIMITS	Satisfaction of the Engineer	Correlation	.	CORES

\*\* IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

\* MATERIAL SHALL BE COMPACTED TO 90 PERCENT ON FIRST LIFT AND 92 PERCENT ON SUBSEQUENT LIFTS OF THE MAXIMUM THEORETICAL DENSITY. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

ILL 113 & TR 77

SCALE: VERT. HORIZ. DATE

DRAWN BY CHECKED BY

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BRN	KANKAKEE	58	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

MAINLINE											
LOCATION	AREA	BIT CONC. BIND. CSE. SUPERPAVE, 9"	AGG BSE. CSE, TYPE A, 4"	LEVELING BINDER (MM) SUPERPAVE	LEVELING BINDER (HM) SUPERPAVE	MIX CRACKS, JTS & FLANGEWAYS	AGG (PR. CT.)	TEMPORARY RAMP	BIT MATLS. (PR. CT.)	BIT CONC. SURF. CSE. SUPERPAVE	AGG. SHLD. TY. B
STATION	SQ. YD.	TON	SQ YD	TON	TON	TON	TON	SQ YD	GAL	TON	TON
ILL 113											
257+00 TO 259+48	441			90.0	0.2	0.1	0.9	11.0	36.0	37.0	20.0
260+81 TO 265+00	567			90.0	0.3	0.2	1.1	11.0	46.0	48.0	20.0
TR 77											
104+25 TO 105+25	111			5.0	0.1	0.0	0.2	20.0	9.0	10.0	8.0
105+25 TO 110+00	1356	1356.0	1465.0	57.0	0.7	0.4	2.7		506.0	114.0	108.0
TR 100N											
19+40 TO 19+88	112	112.0	120.0	5.0	0.1	0.0	0.2		42.0	10.0	5.0
<b>TOTALS</b>		<b>1468.0</b>	<b>1585.0</b>	<b>247.0</b>	<b>1.3</b>	<b>0.8</b>	<b>5.2</b>	<b>42.0</b>	<b>639.0</b>	<b>219.0</b>	<b>161.0</b>

GUARDRAIL							
LOCATION	SPBGR, T A FOOT	TBT, T6 EACH	TBT, T1 SPEC. (FLARED) EACH	TERM MK, DIRECT APPLIED EACH	GUARDRAIL MARKERS EACH	BARRIER WALL MARKERS EACH	REMOVE EXISTING GUARDRAIL FOOT
SE QUADRANT	174	1	1	1	3		158
SW QUADRANT	77	1	1	1	2		110
NE QUADRANT	77	1	1	1	2		150
NW QUADRANT	174	1	1	1	2		150
SN 046-0137 (LT & RT)						4	
<b>TOTALS</b>	<b>502</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>9</b>	<b>9</b>	<b>568.0</b>

BRIDGE APPROACH PAVMENT			
STATION	FT	BRIDGE APPR. PVT. SQ YD	BRIDGE APPR. PVT. CONNECTOR SQ YD
259+18-259+24	6		21
259+24.25-259+54.25	30	107	
260+45.75-260+75.75	30	107	
260+76-260+82	6		21
<b>TOTALS</b>		<b>214.0</b>	<b>42.0</b>

EARTH EXCAVATION SCHEDULE				
(1) LOCATION	EARTH EXCAVATION CU YD	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CU YD	(4) EMBANKMENT CU YD	(5) EARTHWORK BALANCE (+) WASTE (+) OR SHORTAGE (-) CU YD
STA. TO STA.	CU YD	CU YD	CU YD	CU YD
ILL 113				
257+00 TO 259+90	23	14.95	28	-13.05
PR SN 046-0137				
259+90 TO 260+55				
260+55 TO 265+00	23	14.95	28	-13.05
3000 N RELOCATED TR 77				
105+25 TO 110+00	770	500.5	232	268.5
<b>TOTALS</b>	<b>816</b>	<b>530.4</b>	<b>288</b>	<b>242.4</b>

REMOVAL ITEMS			
LOCATION	LENGTH	BIT SURF REMOVAL, BUTT JOINT SQ YD	PAVEMENT REMOVAL SQ. YD.
STATION	FT	SQ YD	SQ. YD.
257+00 TO 257+70	70	117	
259+18 TO 259+79	61		108
260+20 TO 260+81	61		108
264+50 TO 265+00	50	83	
<b>TOTALS</b>		<b>200</b>	<b>216</b>

COLUMNS 1,2, AND 4-LOCATION AND QUANTITIES FROM CROSS SECTIONS  
 COLUMN 3- QUANTITY OF EARTH EXCAVATION (CUT) ADJUSTED FOR A SHRINKAGE FACTOR OF 35% (1- SHRINKAGE FACTOR)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**SCHEDULES OF QUANTITIES**

SCALE: VERT. DATE:      HORIZ. DATE:      DRAWN BY:      CHECKED BY:

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BR.N	KANKAKEE	58	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

PAVEMENT MARKINGS								
LOCATION	TEMPORARY PAVEMENT MARKING 4"	TEMPORARY PAVEMENT MARKING 6"	PAINT PAVEMENT MARKING 4"	PAINT PAVEMENT MARKING 6"	RAISED REF PVT MARKERS*	RAISED REF PVT MK REMOVAL	SH TERM PVT MK	WK ZONE PVT MK REMOVAL
	WHITE	YELLOW	WHITE	YELLOW				
STA	FOOT	FOOT	FOOT	FOOT	EACH	EACH	FOOT	SQ FT
ILL 113								
257+00-265+00	1600	200	1600	200	10	10	250	27
TR 77								
104+25-110+00	1150	143	1150	143			170	20
<b>TOTALS</b>	<b>2750</b>	<b>343</b>	<b>2750</b>	<b>343</b>	<b>10</b>	<b>10</b>	<b>420</b>	<b>47</b>

\*ADJUST LOCATION OF RAISED REFLECTIVE PAVEMENT MARKERS SO THERE ARE NONE ON THE BRIDGE

TREE REMOVAL	
LOCATION	TREE REMOVAL, ACRES
NW CORNER OF TR 77 AND IL 113 INTERSECTION	0.26

REMOVE ALL TREES WITHIN NEW ROW FOR NEW ROAD REALIGNMENT

SEEDING SCHEDULE									
LOCATION	SEEDING CLASS III	NITROGEN FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	PHOSPHOROS FERTILIZER NUTRIENT	MULCH METHOD 2	TEMPORARY EROSION CONTROL SEEDING	INLET AND PIPE PROTECTION	PERIMETER EROSION BARRIER	TEMP DITCH CHECKS
STA. TO STA.	ACRE	POUND	POUND	POUND	ACRE	POUND		FOOT	EACH
TR 77									
107+50 TO 110+00 (RT)	0.44	40	40	40	0.44	145			2
107+50 TO 110+00 (LT)	0.16	15	15	15	0.16	53			2
105+25 TO 109+12								392	
ILL 113									
257+00 TO 265+00 (LT & RT)	0.14	13	13	13	0.14	46	1	750	2
<b>TOTAL</b>	<b>0.74</b>	<b>68</b>	<b>68</b>	<b>68</b>	<b>0.74</b>	<b>244</b>	<b>1</b>	<b>1142</b>	<b>6</b>

STANDARD SIGN SCHEDULE						
LOCATION	SIGN STANDARD NUMBER	LEGEND	SIZE	QUANTITY	SIGN PANEL TYPE 1	WOOD SIGN SUPPORT
			IN.X IN.		SQ FT	FEET
STOP SIGN ON TR 77	R1-1	STOP	36 X 36	1	9	12.5
STOP AHEAD SIGN 500' IN ADVANCE OF STOP SIGN ON TR 77	W3-1A	STOP AHEAD	36 X 36	1	9	12.5
CURVE AHEAD SYMBOL SIGN 500' WEST OF BEGINNING OF CURVE ON TR 77	W1-2(L)		36 X 36	1	9	12.5
<b>TOTALS</b>					<b>27</b>	<b>37.5</b>

BITUMINOUS SHOULDERS, SUPERPAVE, 6"	
LOCATION	BIT SHLD, SUPERPAVE, 6" SQ YD.
FOR BIT. STABILIZATION	
SE QUADRANT	45.0
SW QUADRANT	38.0
NE QUADRANT	38.0
NW QUADRANT	45.0
<b>TOTALS</b>	<b>166.0</b>

NO SHOULDERS NEEDED BEHIND APPROACH PAVEMENT

PIPE CULVERT			
LOCATION	PIPE CULVERT, CLASS D, TYPE 1, 15"	METAL END SECTION, 15"	REMOVE EXISTING CULVERTS
	FOOT	EACH	EACH
261+50 TO 262+45			1*
263+33 TO 264+30	97	2	1

\* PIPE CULVERT IS 95' LONG

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**SCHEDULES OF QUANTITIES**

SCALE: VERT. \_\_\_\_\_ HORIZ. \_\_\_\_\_ DATE \_\_\_\_\_

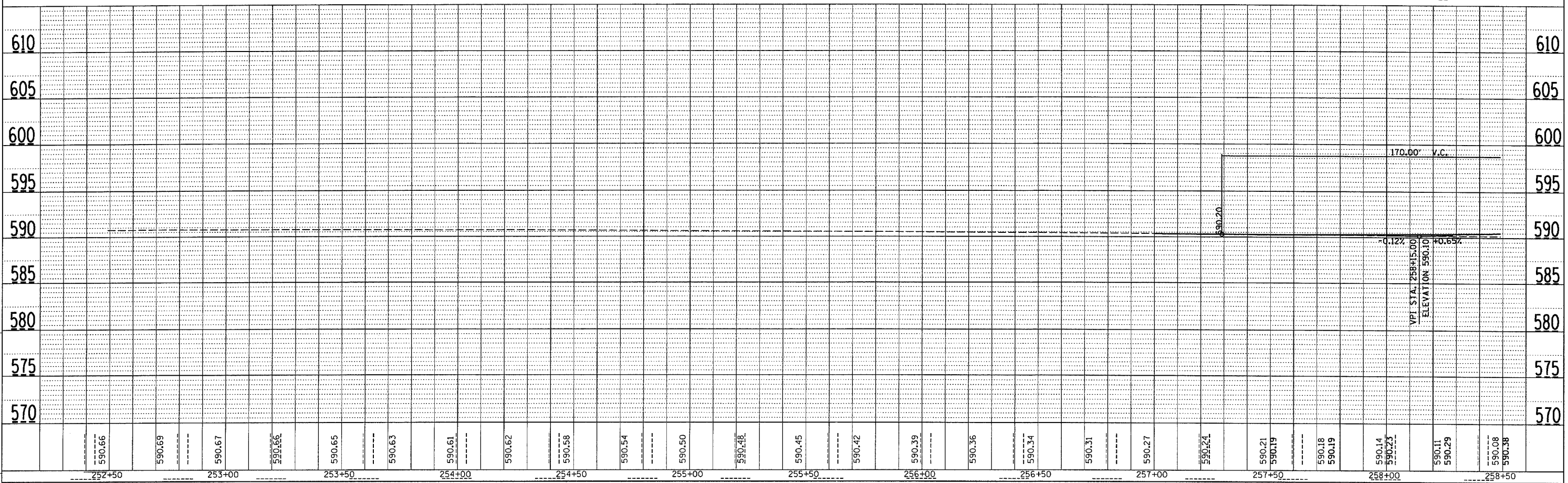
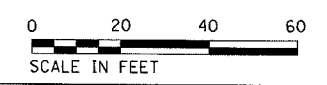
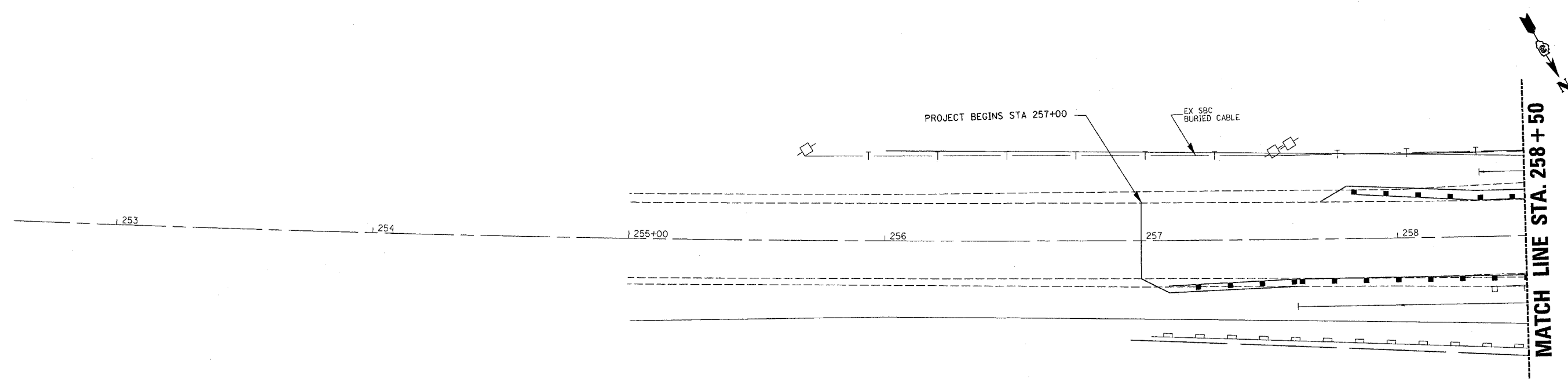
DRAWN BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	8
STA. 255+50		TO STA. 258+50		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	PROJECT NO.		
RT. OF WAY CHECKED	ADJUSTMENT CHECKED		
ROAD FILE NAME			

PROFILE	SURVEYED	BY	DATE
NOTE BOOK NO.	PROJECT NO.		
STRUCTURE NOTATIONS			

Dec. 02, 2003  
 1603002.DWG.DGN



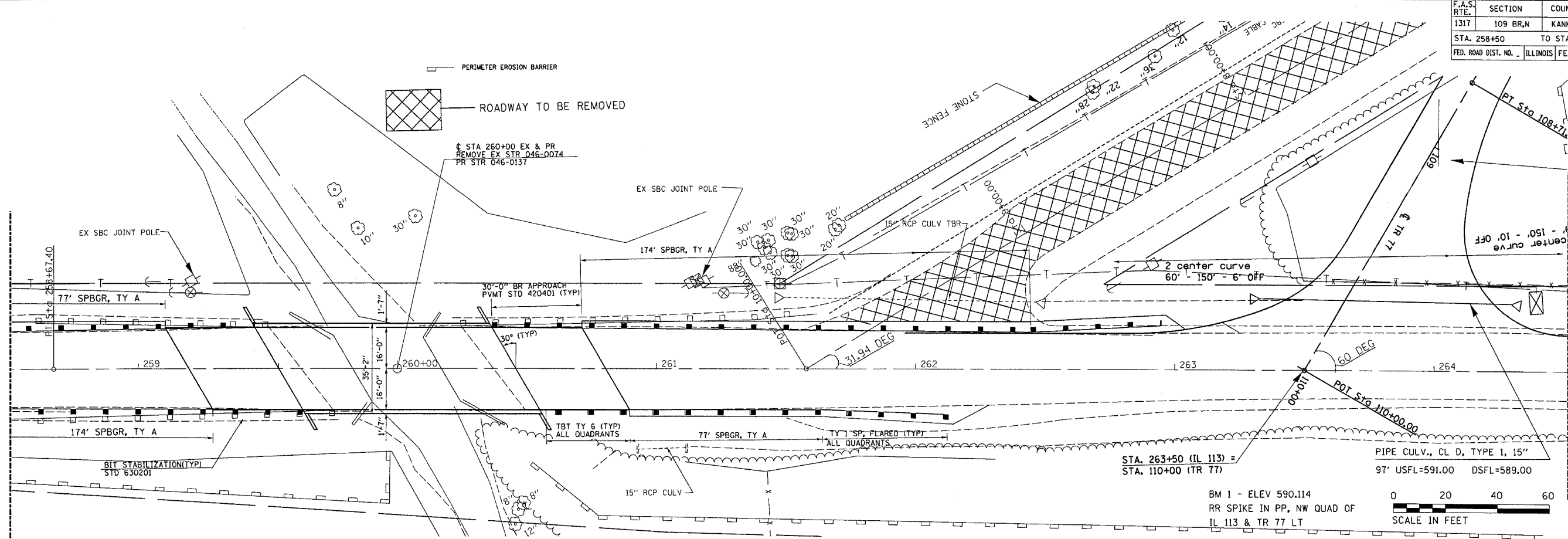
**STA. 255 + 00 TO STA. 258 + 50**  
**IL 113 PLAN & PROFILE**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR.N	KANKAKEE	58	9
STA. 258+50		TO STA. 264+50		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLAN	DATE
BY	
NOTED	
CHECKED	
NO. OF WAY CHECKED	
DATE	
NO.	

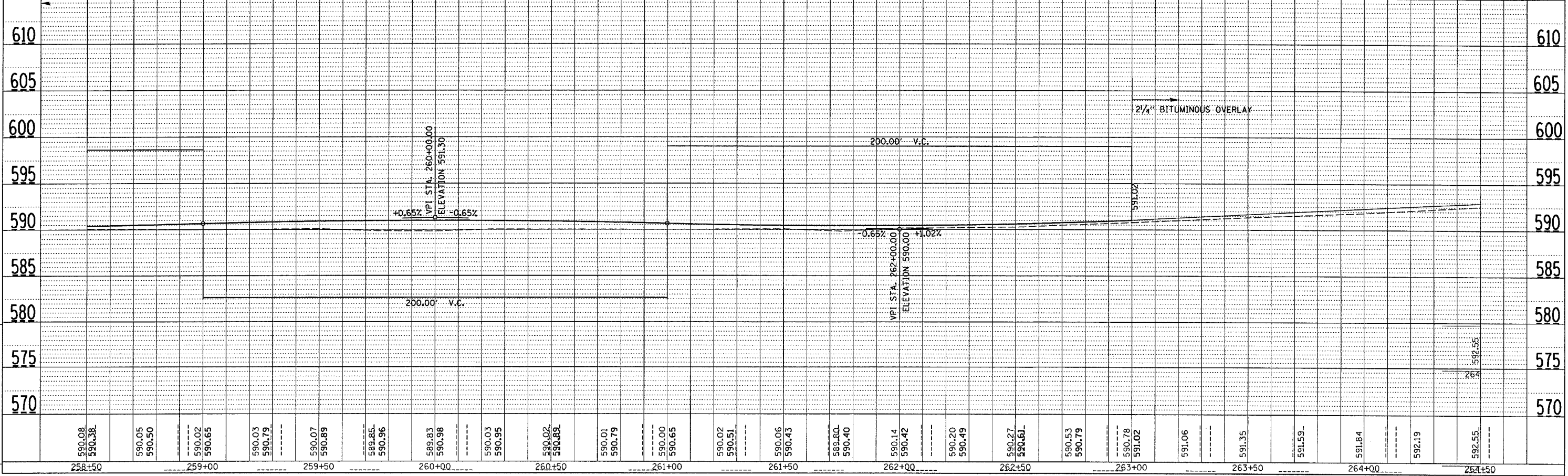
MATCH LINE STA. 258 + 50

MATCH LINE STA. 264 + 50



PROFILE	DATE
BY	
NOTED	
CHECKED	
NO. OF WAY CHECKED	
DATE	
NO.	

Dec. 02, 2003  
V0203002.DWG/PLS.DGN



**STA. 258 + 50 TO STA. 264 + 50**  
**IL 113 PLAN & PROFILE**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	10
STA. 264+50		TO STA. 267+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

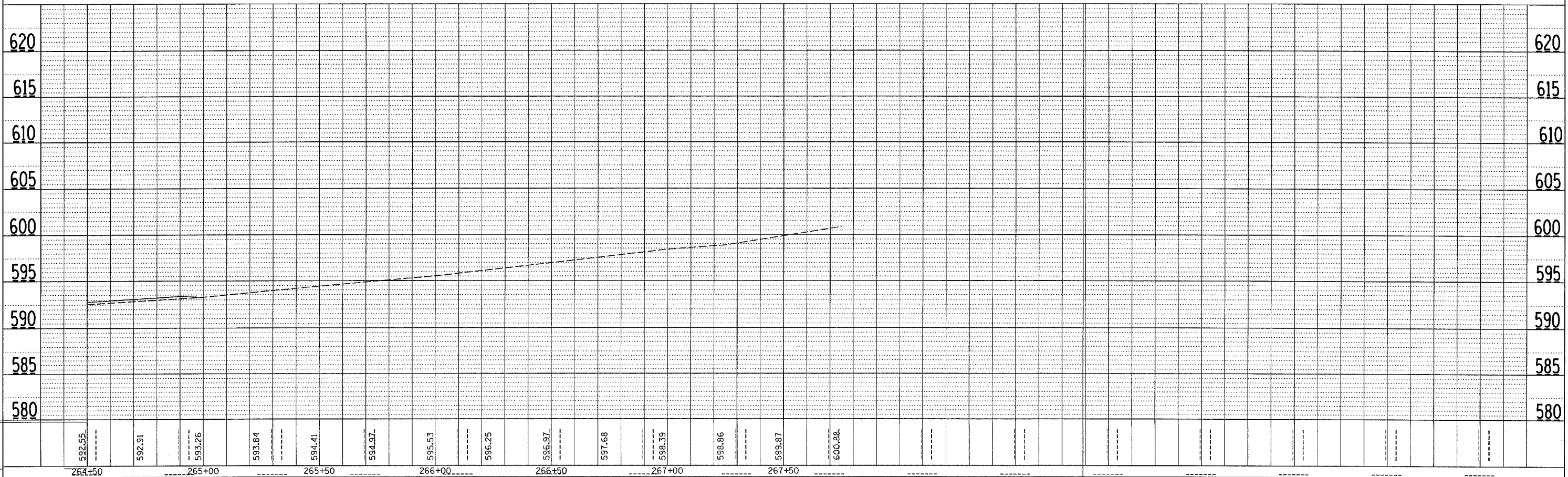
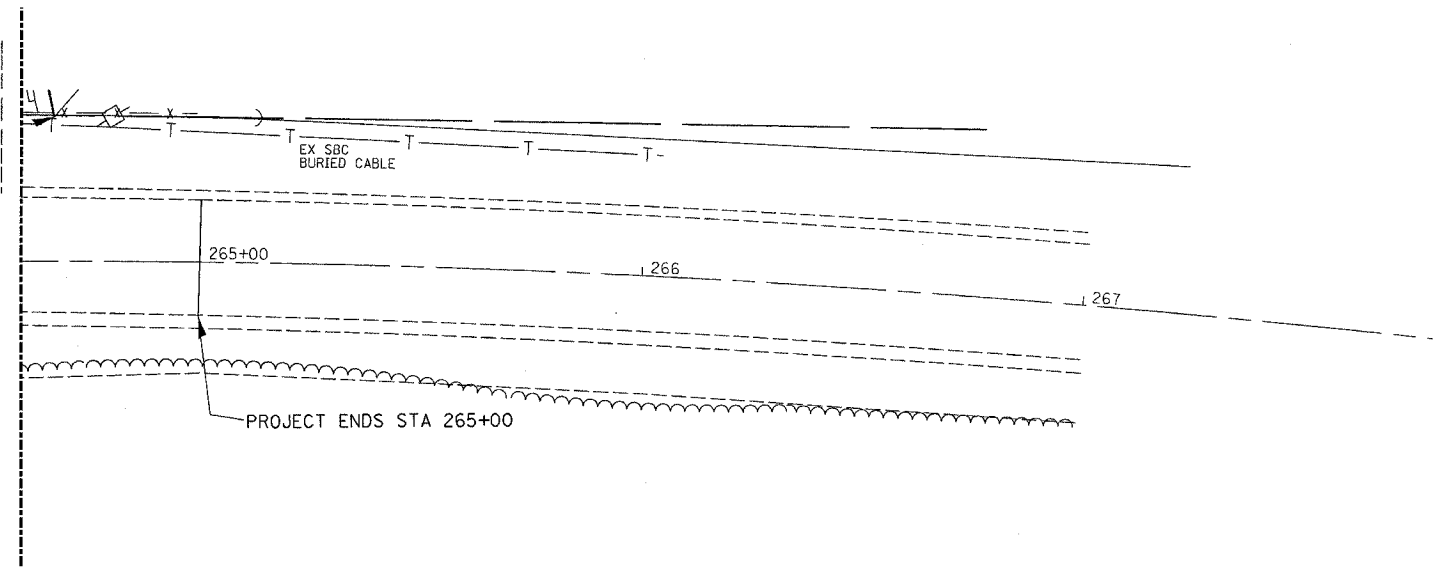


PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	REVISIONS		
	NO. OF REVISIONS		
	DATE		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK NO.	REVISIONS		
	NO. OF REVISIONS		
	DATE		

Dec. 02, 2003  
 \ed0302.dwg

**MATCH LINE STA. 264 + 50**



**STA. 264 + 50 TO STA. 267 + 00**  
**IL 113 PLAN & PROFILE**

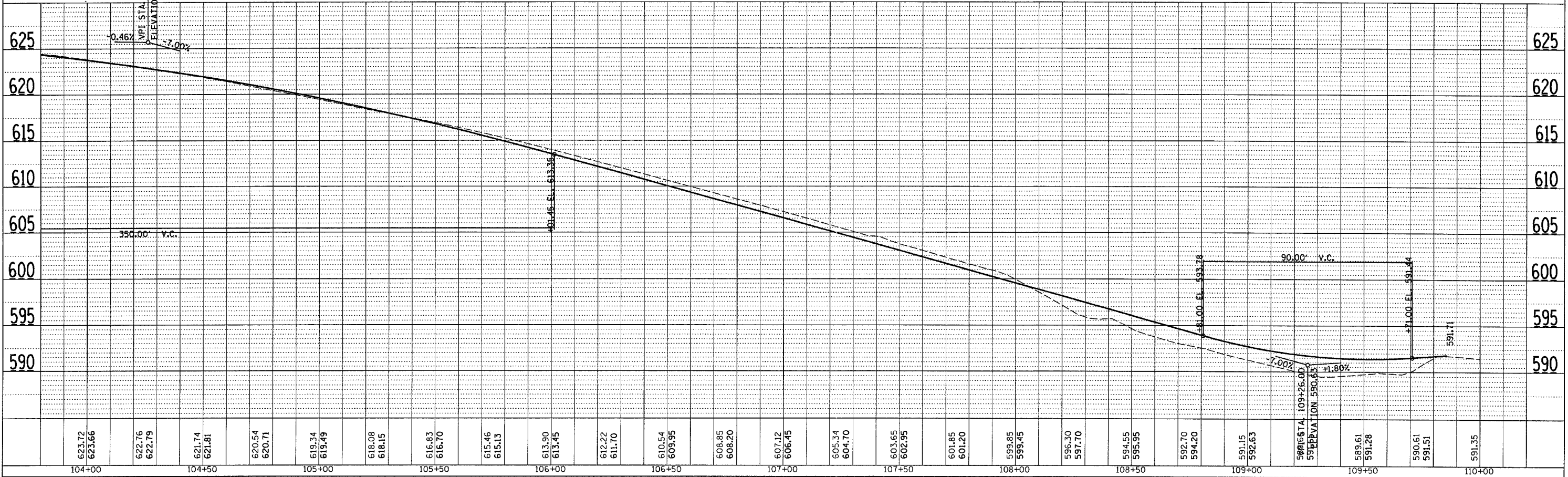
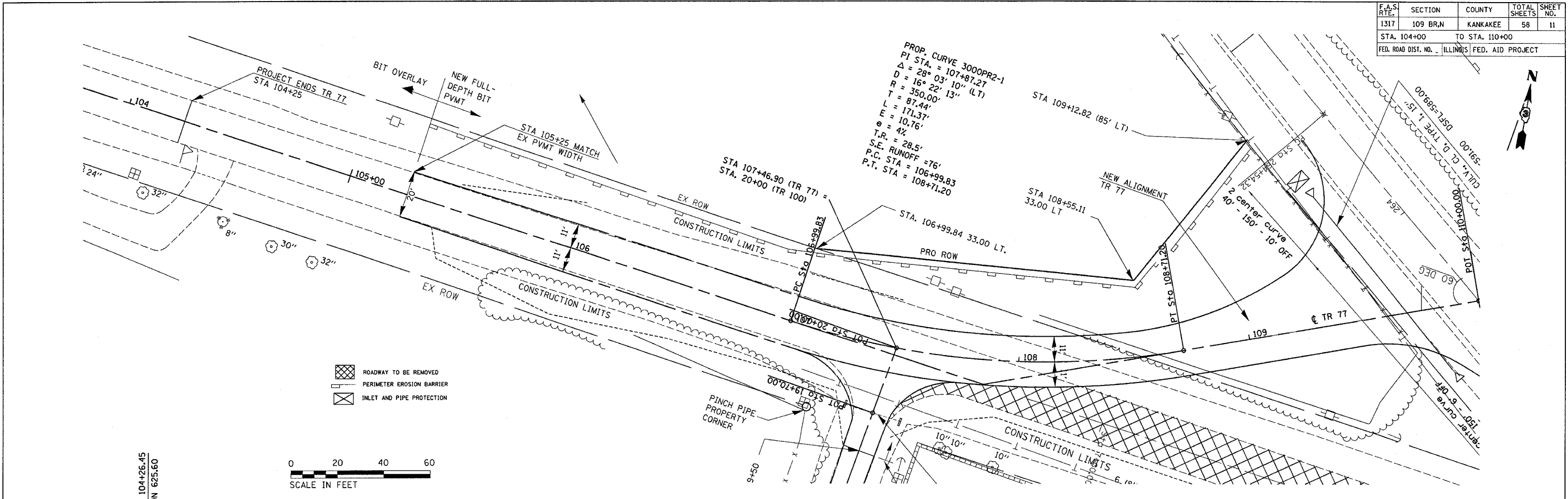


F.A.S. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	11
STA. 104+00		TO STA. 110+00		
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

PLAN	DATE	BY
DATE		
BY		
DATE		
BY		
DATE		
BY		

PROFILE	DATE	BY
DATE		
BY		
DATE		
BY		
DATE		
BY		

JAN. 05, 2004  
 PLOT DATE = 9/24/2005  
 FILE NAME = 109BRN\109BRN\109BRN.DGN  
 PLOT SCALE = 1/8" = 1' 0"  
 REFERENCE = BREF



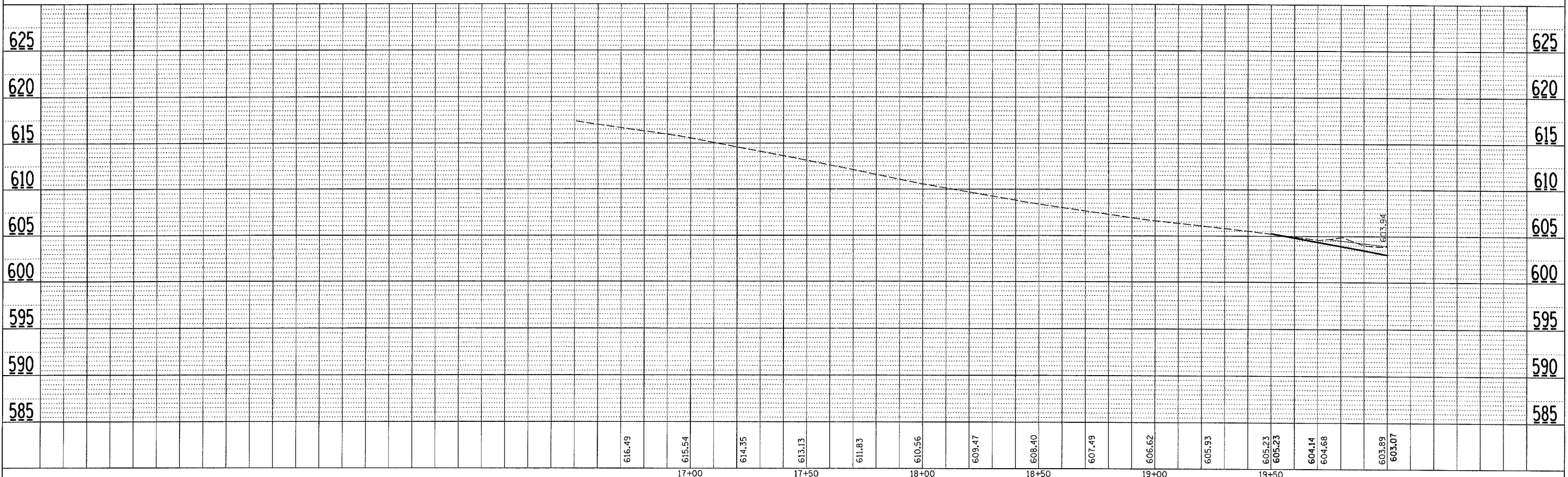
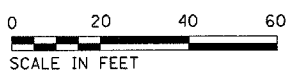
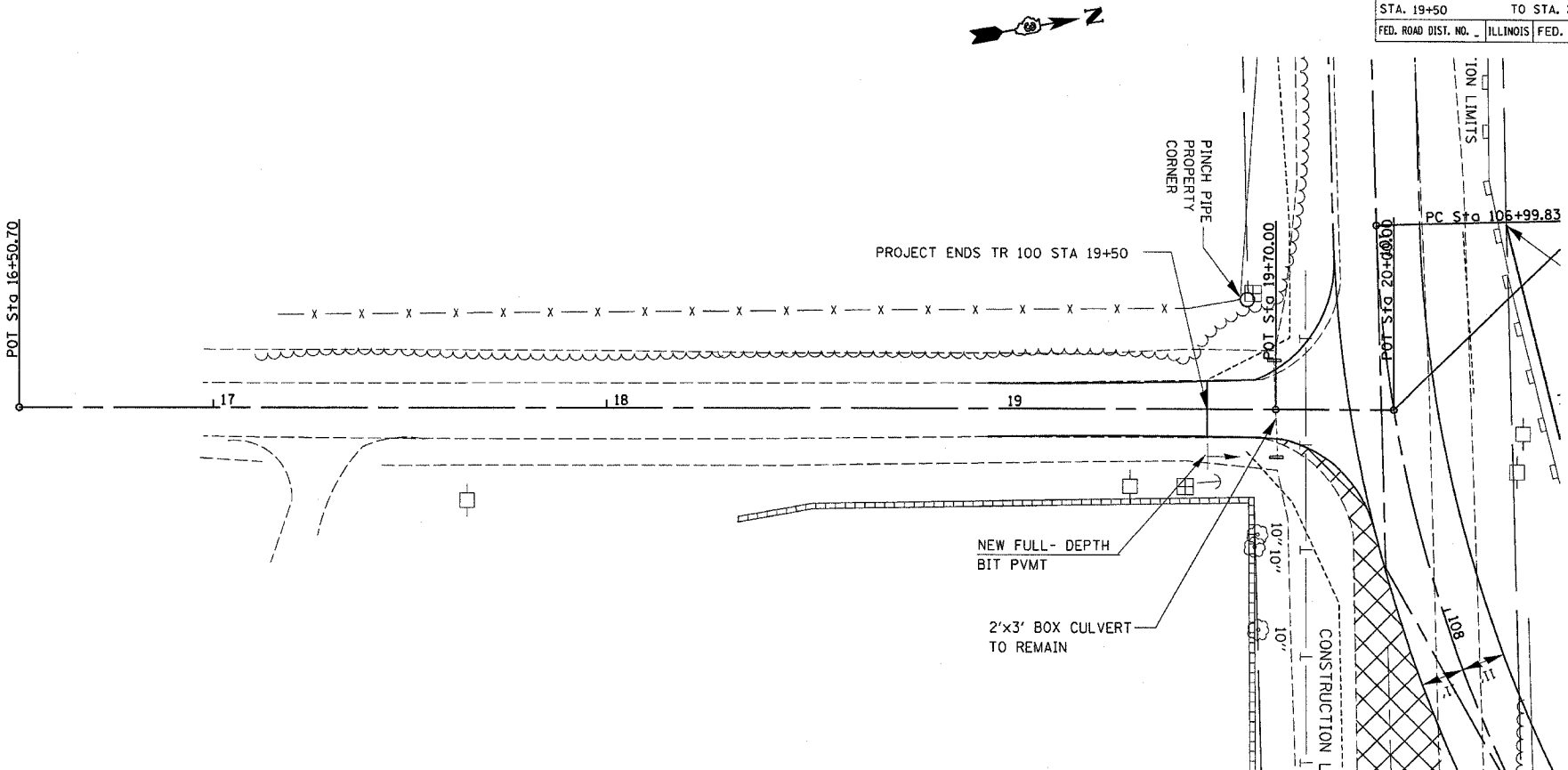
STA. 104+00 TO STA. 110+00  
 TR 77 PLAN & PROFILE

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	12
STA. 19+50		TO STA. 20+00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PLAN	SURVEYED	DATE
NO.	BY	
	CHECKED	
	PI. OF WAY CHECKED	
	ADD FILE NAME	

PROFILE	SURVEYED	DATE
NO.	BY	
	CHECKED	
	PI. OF WAY CHECKED	
	STRUCTURE NOTATIONS OK'D	

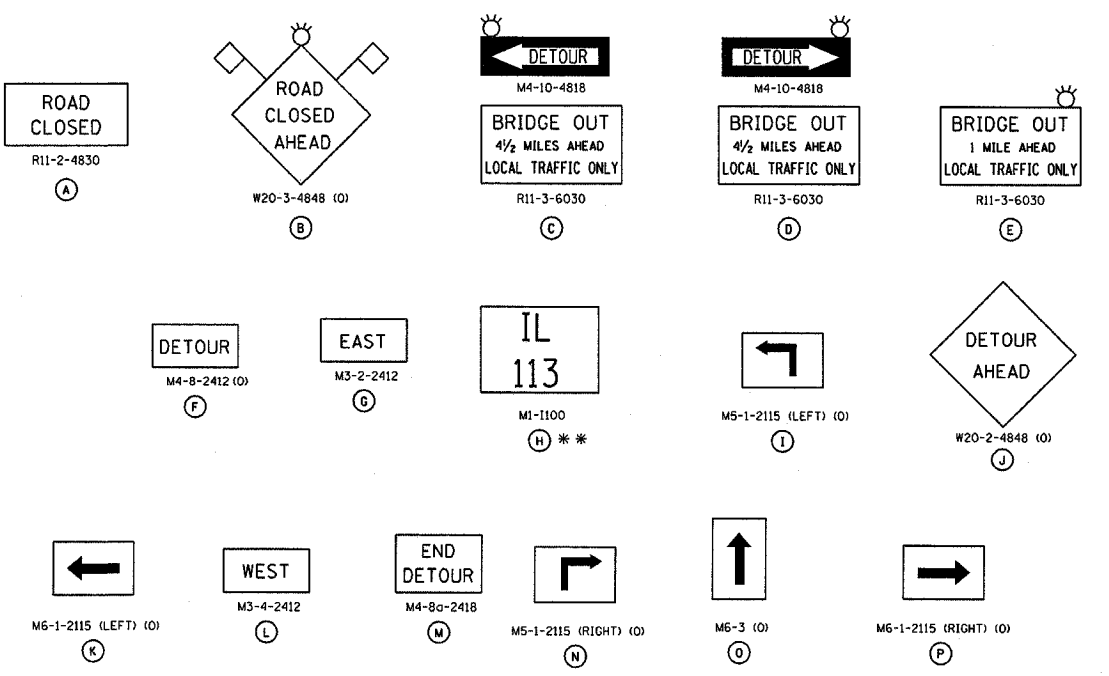
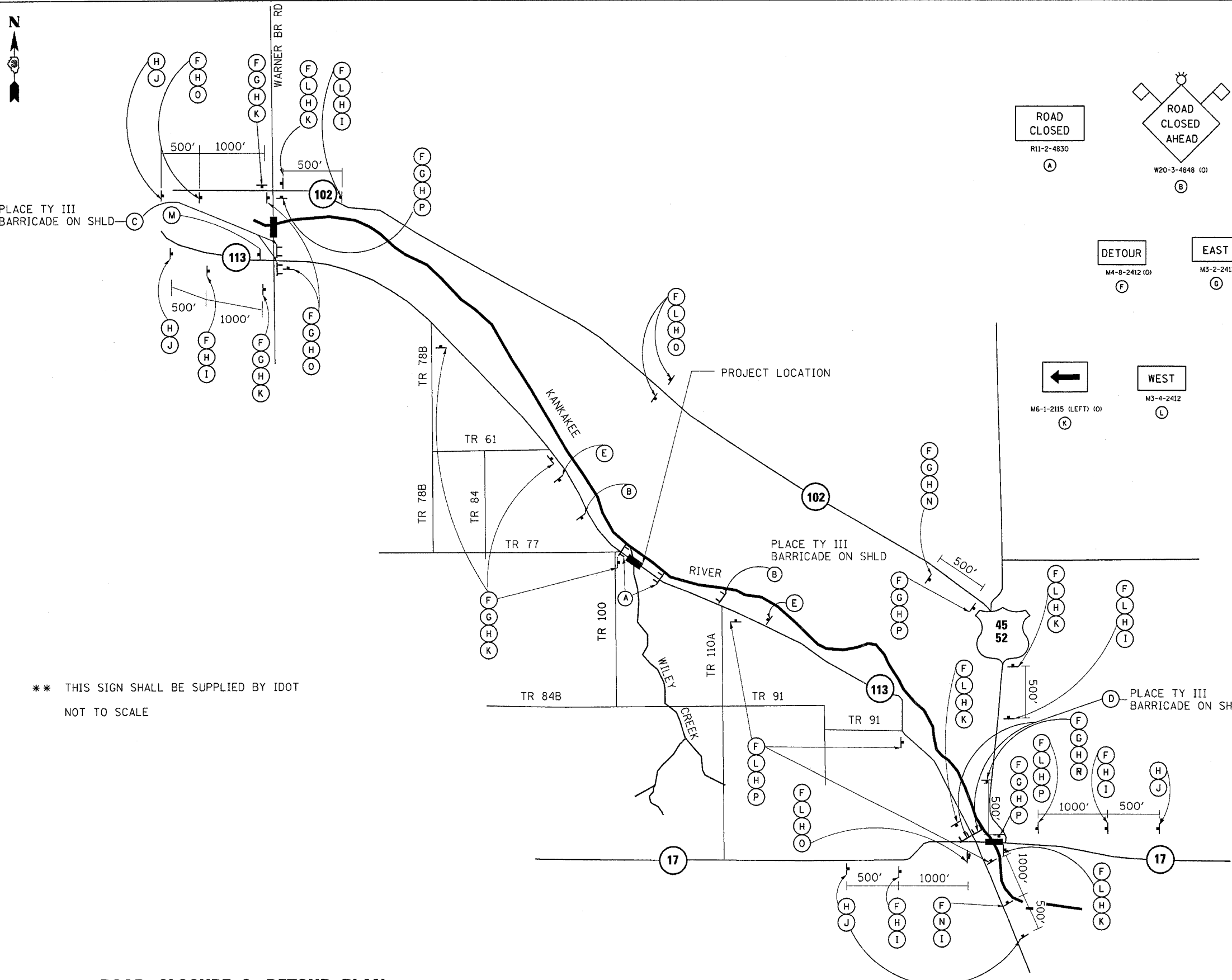
DATE: 08/22/2014  
 FILE NAME: 1317109 BR,N TR 100 STA 19+50 TO STA 20+00.DGN  
 PLOT SCALE: 1"=40' (PLAN) 1"=10' (PROFILE)  
 REFERENCE: SHEET 12



**STA. 19+50 TO STA. 20+00**  
**TR 100 PLAN & PROFILE**



F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BRN	KANKAKEE	58	13
STA.		TO STA.		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		



- LEGEND**
- TT TYPE III BARRICADES CONFORMING TO STD. 702001 "ROAD CLOSED TO ALL TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE
  - SIGNS ON PERMANENT SUPPORTS
  - ⚡ FLASHING LIGHT ABOVE SIGN
  - ◇ 18"x18" ORANGE FLAG

- GENERAL NOTES**
1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
  2. ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED, UNLESS NOTED OTHERWISE.
  3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
  4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR OTHER ITEMS REQUIRED BY THE ENGINEER AND NOT SHOWN ON THIS DRAWING SHALL BE INCLUDED IN THE PAY ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
  5. THE ILLINOIS DEPARTMENT OF TRANSPORTATION WILL SUPPLY ALL IL 113 SIGNS FOR THIS DETOUR. THE CONTRACTOR SHALL NOTIFY DISTRICT 3 BUREAU OF OPERATIONS 14 CALENDAR DAYS PRIOR TO PLACING THE DETOUR.

\*\* THIS SIGN SHALL BE SUPPLIED BY IDOT  
NOT TO SCALE

**ROAD CLOSURE & DETOUR PLAN**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL & PROTECTION FOR TEMPORARY DETOUR**

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_

DATE \_\_\_\_\_ DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BRN	KANKAKEE	58	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

**S.W. 1/4 OF SECTION 15, TOWNSHIP 31 NORTH, RANGE 11 EAST. OF THE 3RD PRINCIPAL MERIDIAN**

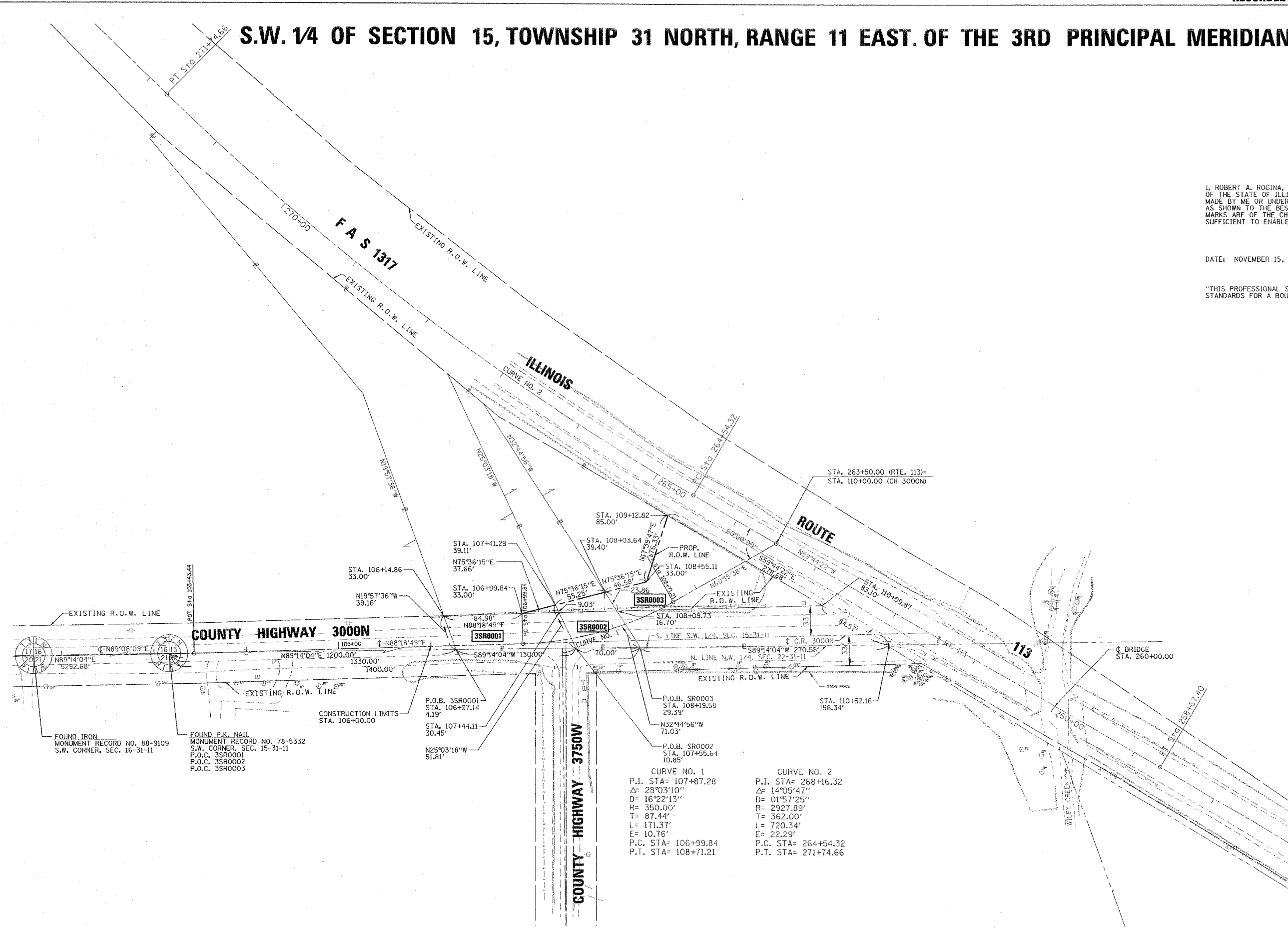


I, ROBERT A. ROGINA, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF PROPOSED ILLINOIS RTE 113 WAS MADE BY ME OR UNDER MY DIRECTION AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

DATE: NOVEMBER 15, 2004

*Robert A. Rogina*  
 ROBERT A. ROGINA, I.P.L.S. 2017  
 LICENSE EXPIRES: 11/30/04

"THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY."



**PARCEL 3SR0001**

A. EVERETT PATTON  
 TOTAL HOLDING: 1.168 AC±  
 TOTAL R.O.W. REQUIRED: 0.116 AC± (5046 SQ. FT.)  
 AREA IN EXIST. R.O.W.: 0.112 AC± (4879 SQ. FT.)  
 NET R.O.W.: 0.004 AC± (167 SQ. FT.)  
 REMAINDER: 1.052 AC±

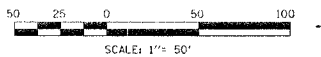
**PARCEL 3SR0002**

AUGUST E. & PEARLE PETERSON, ET AL  
 TOTAL HOLDING: 0.297 AC±  
 TOTAL R.O.W. REQUIRED: 0.081 AC± (3515 SQ. FT.)  
 AREA IN EXIST. R.O.W.: 0.060 AC± (2630 SQ. FT.)  
 NET R.O.W.: 0.021 AC± (885 SQ. FT.)  
 REMAINDER: 0.216 AC±

**PARCEL 3SR0003**

A. EVERETT PATTON  
 TOTAL HOLDING: 0.810 AC±  
 TOTAL R.O.W. REQUIRED: 0.496 AC± (21606 SQ. FT.)  
 AREA IN EXIST. R.O.W.: 0.239 AC± (10411 SQ. FT.)  
 NET R.O.W.: 0.257 AC± (11195 SQ. FT.)  
 REMAINDER: 0.314 AC±

BEARINGS BASED ON ILLINOIS STATE PLANE COORDINATES EAST ZONE (NAD 83)



**RIGHT OF WAY PLANS**

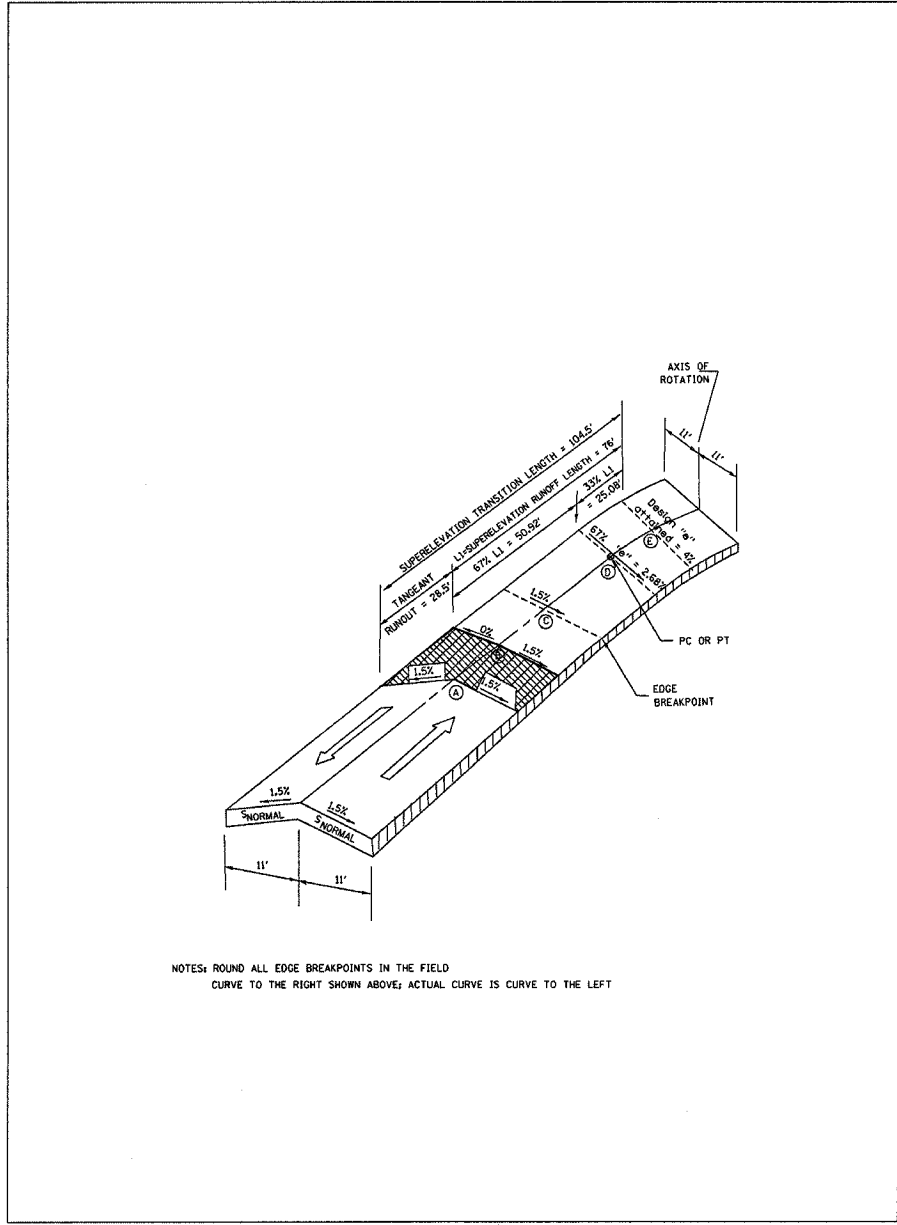
ROUTE	FAS 1317 (IL 113)
SECTION	109BR.N.
PROJECT	
COUNTY	KANKAKEE
JOB NUMBER	R-93-004-04
STATION	106+00.00 TO 110+00.00
SHEET	1 OF 1 SCALE 1" = 50'

**N.W. 1/4 OF SECTION 22, TOWNSHIP 31 NORTH, RANGE 11 EAST. OF THE 3RD PRINCIPAL MERIDIAN**

NO.	DATE	DESCRIPTION	BY
1	11/15/04	PER 1001 REVIEW	MCS/JAK
2	10/23/04	PER 1001 REVIEW	MCS/JAK
3	09/21/04	PER 1001 REVIEW	MCS/JAK
4	09/21/04	PER 1001 REVIEW	MCS/JAK
5	03/08/04	ORIGINAL ISSUE	RPH/JAK

Y:\DGM\1001\23-1001\23-2014.dgn

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BRN	KANKAKEE	58	15
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



STATION	REFERENCE POINT*	DESCRIPTION	11' LT ELEV	11' RT ELEV	CL ELEV
106+00			613.29	613.29	613.45
106+20.41	A	NORMAL CROWN	611.86	611.86	612.02
106+48.91	B	END OF TANGENT RUNOUT	609.86	610.03	610.03
106+77.41	C	BREAKPOINT	608.53	608.85	608.69
106+99.83	D	END OF 67% OF SE RUNOFF (PC)	606.27	606.75	606.46
107+24.91	E	END OF 33% SE RUNOFF (FULL SE=4%)	604.27	605.15	604.71

STATION	REFERENCE POINT*	DESCRIPTION	11' LT ELEV	11' RT ELEV	CL ELEV
109+50.62	A	NORMAL CROWN	591.21**	590.82	590.98
109+22.12	B	END OF TANG. RUNOUT	589.85**	589.88	589.88
108+93.62	C	BREAKPOINT	588.72	589.04	588.88
108+71.20	D	END OF 67% OF SE RUNOFF (PT)	594.17	597.76	594.47
108+46.12	E	END OF 33% SE RUNOFF (FULL SE=4%)	595.78	596.66	596.22

\*SEE DRAWING TO THE LEFT  
 \*\*THESE TWO SHOTS VARY FROM WHAT IS SHOWN IN THE DIAGRAM IN ORDER TO MEET ILL 113-VARY CROSS SLOPE ON LEFT FROM +2.08% @ STA 109+50.62 (POINT "A") TO -1.5% @ 108+93.62 (POINT "C") (POSITIVE CROSS SLOPE IMPLIES LEFT EOP ELEV IS HIGHER THAN CENTERLINE ELEV)

REVISIONS	
NAME	DATE

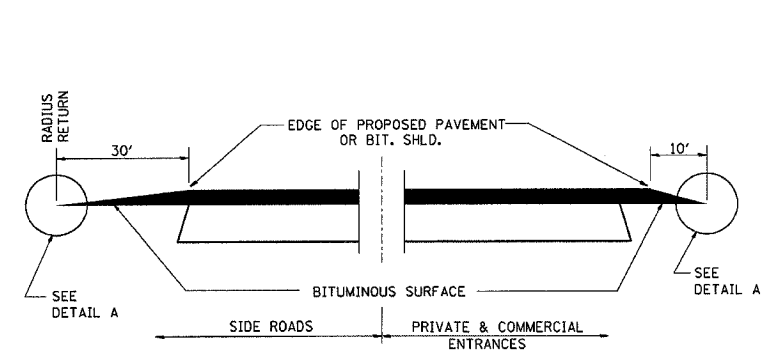
ILLINOIS DEPARTMENT OF TRANSPORTATION

**S.E. TRANSITION**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_

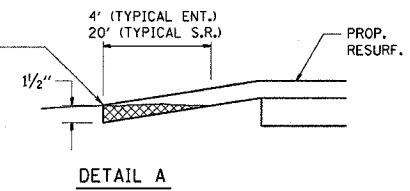
DATE \_\_\_\_\_ DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BRN	KANKAKEE	98	16
STA.		TO STA.		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		

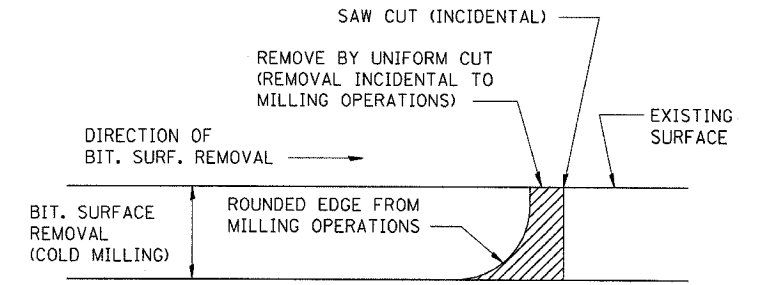
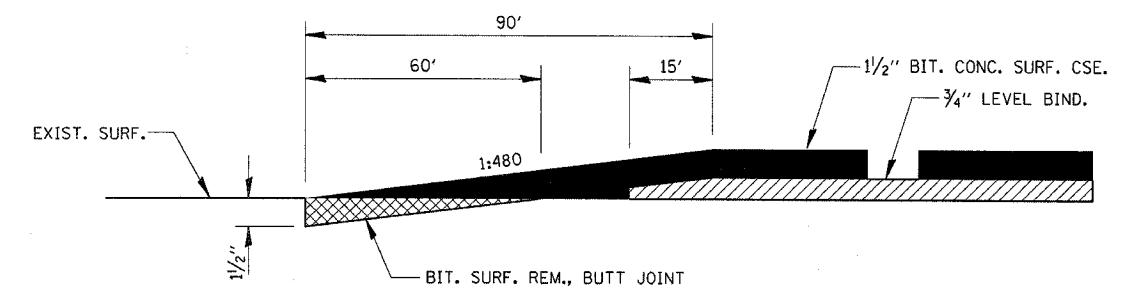


**SECTION A-A**  
**DETAILS AT ENTRANCES & SIDE ROADS**

THE COST OF REMOVAL AT EXISTING BIT. OR P.C.C. LOCATIONS SHALL BE PAID FOR PER SQ. YD. BY THE APPROPRIATE PAY ITEM. REMOVAL AT EXISTING AGG. LOCATIONS SHALL BE INCIDENTAL TO THE BITUMINOUS. A-3 LOCATIONS SHALL BE FEATHER TAPERED.

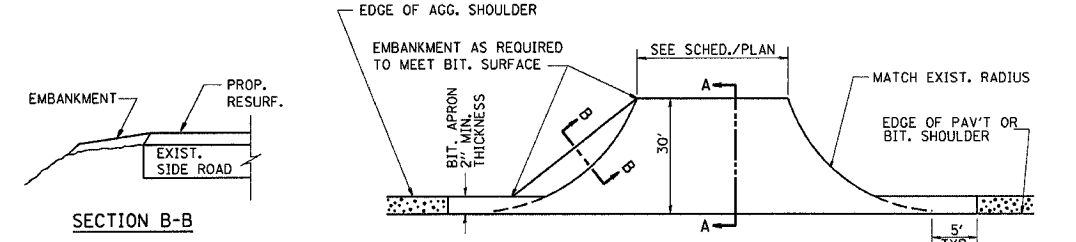


**DETAIL A**

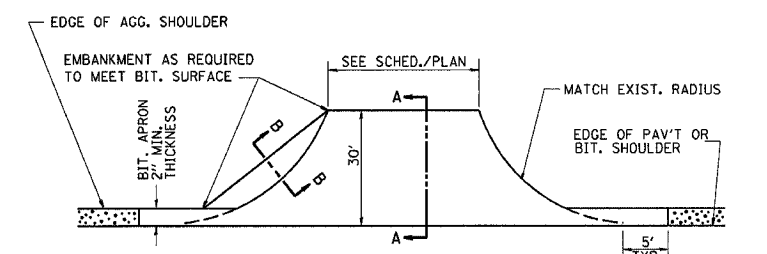


NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.

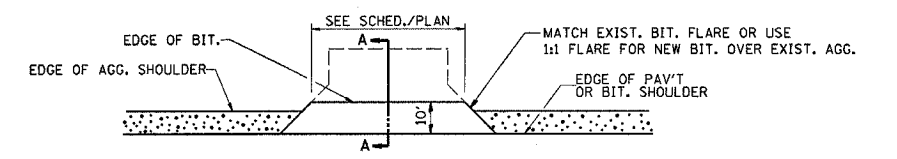
**BITUMINOUS DETAIL AT BUTT JOINTS**



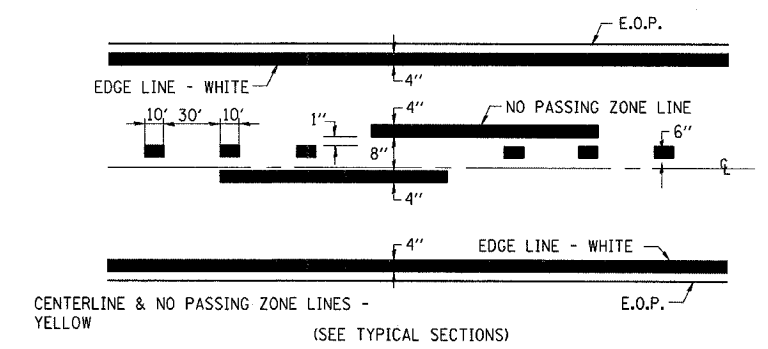
**SECTION B-B**



**PLAN AT SIDE ROADS**



**PLAN AT PRIVATE & COMMERCIAL ENTRANCES**  
(DO NOT RESURFACE FIELD ENTRANCES)



**PAVEMENT MARKING**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

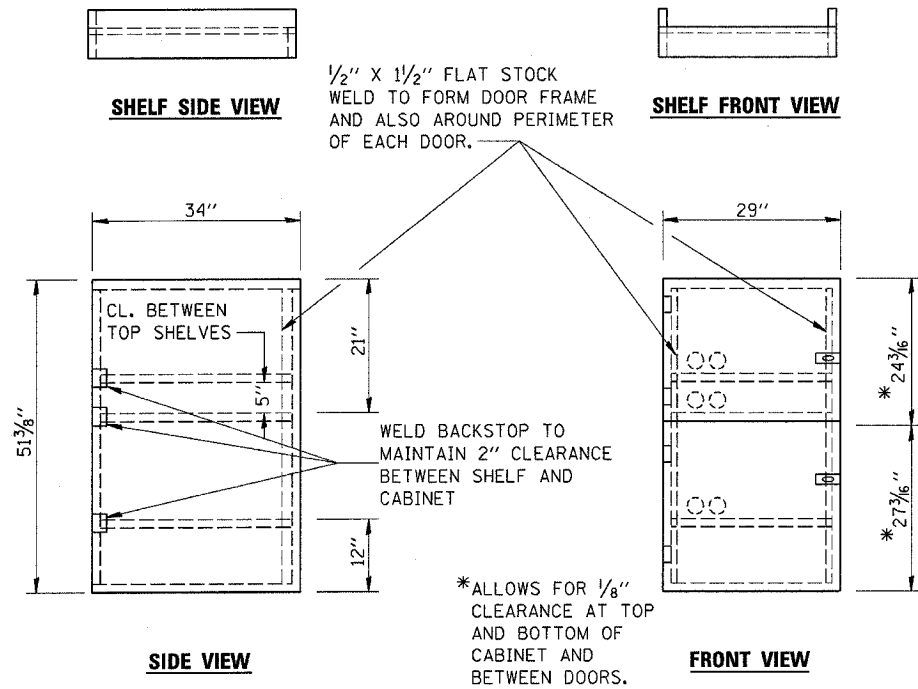
**DETAILS**

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_

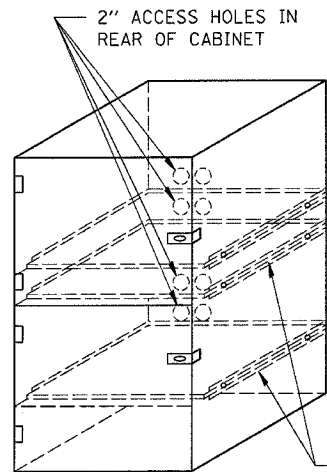
DATE \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BR.N	KANKAKEE	58	17
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

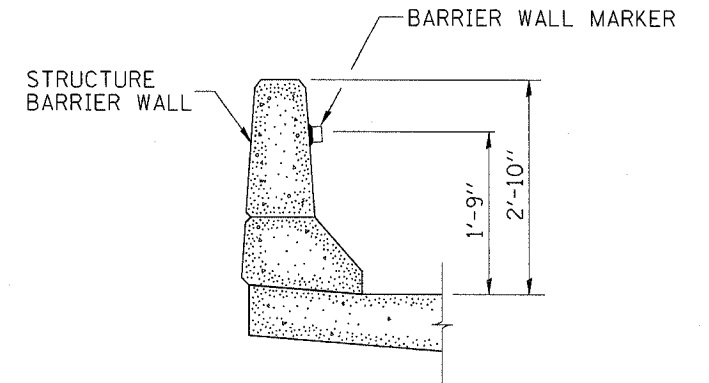


- NOTES:
1. USE 16 GAUGE STEEL FOR CABINET.
  2. THE TOP SHELF SHALL SLIDE IN OR OUT WITH THE TOP DOOR OPEN.
  3. ALL HINGES AND HASPS WILL BE WELDED TO THE CABINET.
  4. ALL EDGES SHALL BE GROUND SMOOTH.
  5. TWO (2" DIA.) ACCESS HOLES WILL BE REQUIRED FOR EACH SHELF.
  6. CABINET SHALL BE PAINTED WITH TWO COATS OF FLAT PAINT.
  7. 2 EACH MATCHING KEY PADLOCKS, WITH 3 KEYS PROVIDED, MASTER MODEL 3 T OR EQUIVALENT.
  8. 4 EACH PLAIN STEEL, NON-REMOVABLE PIN, NO HOLE 4"X4" SQUARE CORNER HINGES TO BE WELDED ON.
  9. 2 EACH EXTRA HEAVY, PLAIN STEEL, FIXED STAPLE, NO HOLE, 7 1/4 " HASPS TO BE WELDED ON.



FLAT STOCK DIMENSIONS VARY DEPENDING ON TYPE OF ROLLER ASSEMBLY.

**LOCKABLE COMPUTER CABINET**



**BARRIER WALL MARKER**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**DETAILS**

SCALE: VERT. HORIZ. DATE

DRAWN BY CHECKED BY

Bench Mark: Spike, Sta. 257+03.01 21.071' Rt, Elev. 589.69.

Existing Structure: S.N. 046-0074, One-span PPC deck beam with closed type abutments on spread footings founded on rock. Built in 1927 as single span reinforced concrete T beam bridge under IL Route 113, section 109B, at Sta. 260+00. Superstructure and upper abutments were replaced and widened using PPC Deck Beams in 1974, resulting in 33'-0" bridge width (Out to Out), 41'-6" bridge length (Bk. to Bk. abutments). 3'-9" wide Precast Concrete Bridge Slabs were added at sides of approach slabs. Existing structure to be removed and replaced. Traffic to be detoured during construction.

No salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
IL 113	109BR, N	KANKAKEE COUNTY	58	18
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

CONTRACT # 66410

**LOADING HS20-44**  
Allow 50#/sq. ft. for future wearing surface.  
**DESIGN SPECIFICATIONS**  
2002 AASHTO, 17th Edition

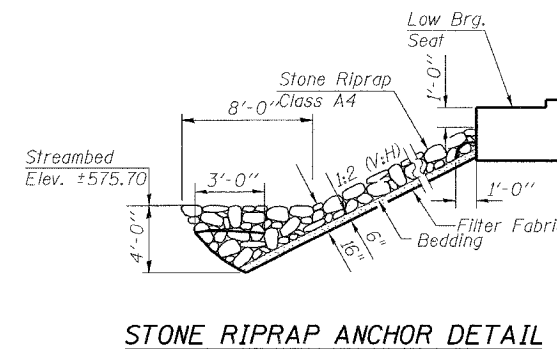
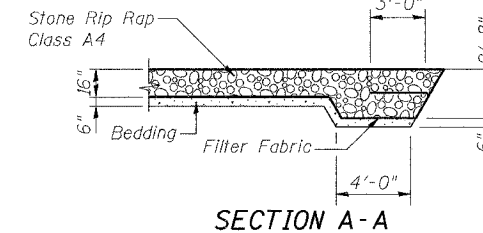
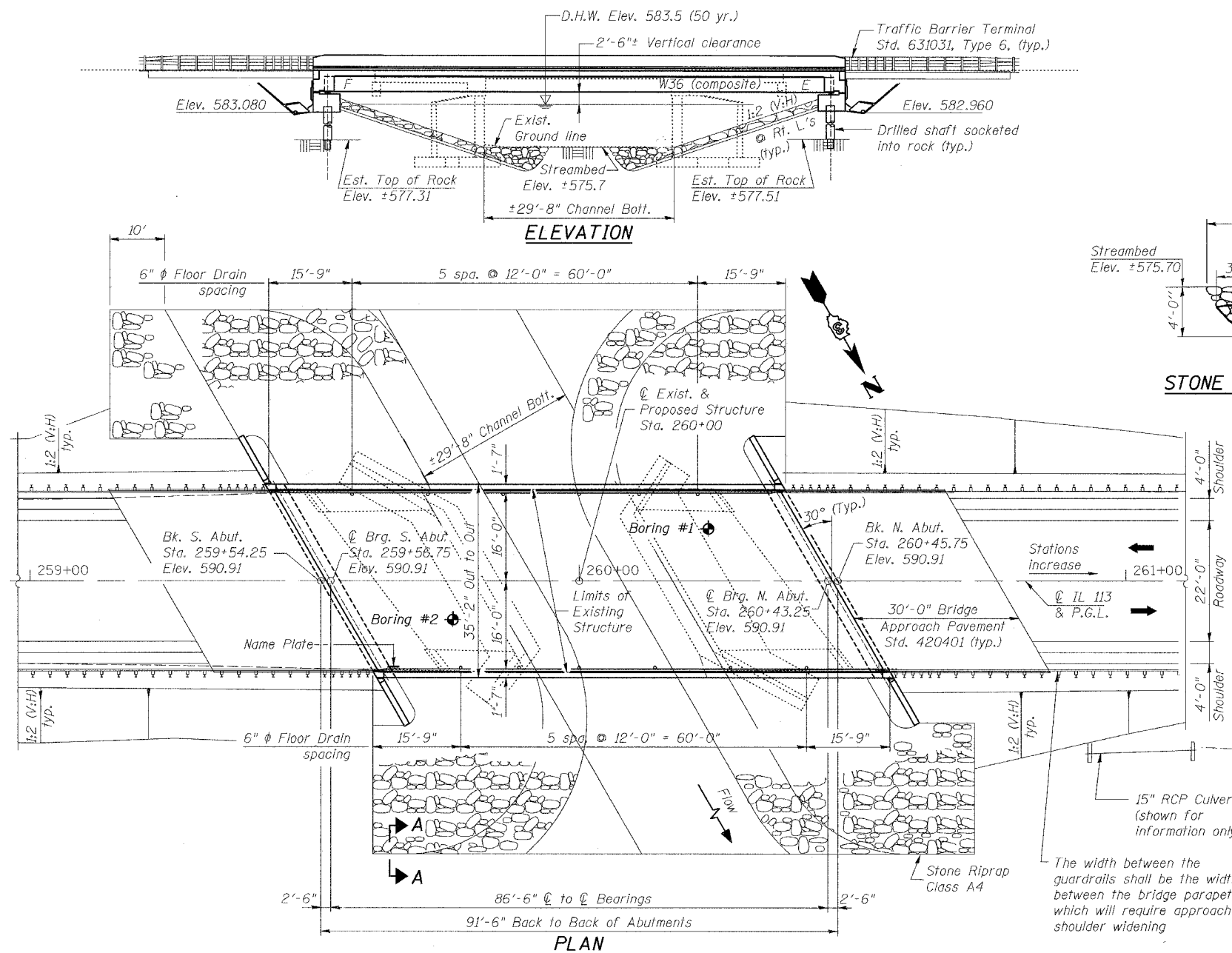
**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)  
 $f_y = 50,000$  psi (structural steel)  
AASHTO M270 Grade 50W

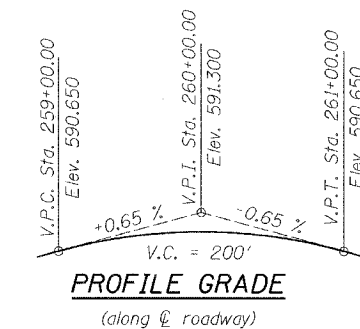
**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.04g  
Site Coefficient (S) = 1.0



STATION 260+00  
BUILT 2006 BY  
STATE OF ILLINOIS  
F.A.S. 1317 (IL 113)  
SECT 109 BR, N  
LOADING HS20  
STR. NO. 046-0137

**NAME PLATE**  
See Std. 515001

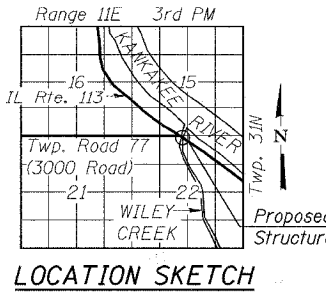


**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

*Ralph E. Anderson (TSP)*  
ENGINEER OF BRIDGES AND STRUCTURES



*Hakim H. Tayebi*  
HAKIM H. TAIYEBI  
ILLINOIS LICENSED  
STRUCTURAL ENGINEER  
NO. 081-003266  
LICENSE EXP. 11-30-06



LOCATION SKETCH

**GENERAL PLAN AND ELEVATION**  
IL 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

**WATERWAY INFORMATION**

Drainage Area = 10.98 mi<sup>2</sup> Low Grade Elev. 590.0 ft. @ Sta. 261+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	836	218	306	583.0	0.2	0.1	583.2	583.1	
Overtopping	50	1224	234	336	583.5	0.4	0.3	583.9	583.8	
Base	100	1380	241	351	583.8	0.4	0.3	584.2	584.1	
Max. Calc.	500	1741	260	388	584.9	0.5	0.4	585.4	585.3	

Nat. H.W.E. derived from Kankakee River Q10 Event, river Q50 = 584.4

DESIGNED	N.U.S./J.M./R.A.
CHECKED	M.R.
DRAWN	J.B.
CHECKED	H.T.

SCALE: NONE DATE: AUGUST, 2005  
Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
IL 113	109BR, N	KANKAKEE COUNTY	58	19
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		14 SHEETS
CONTRACT # 66410				

**GENERAL NOTES**

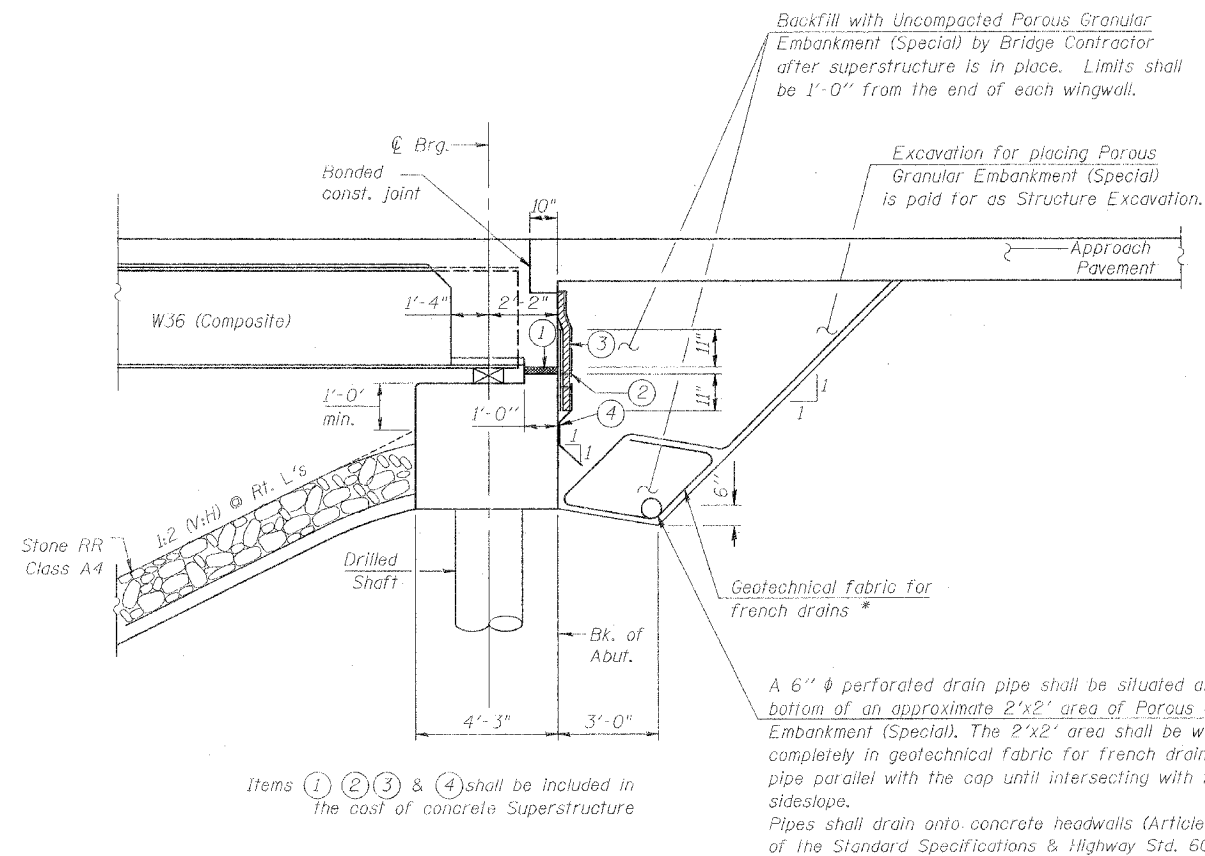
- Fasteners shall be high strength bolts (AASHTO M 164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas). Bolts 7/8"  $\phi$ , open holes 15/16"  $\phi$ , unless otherwise noted.
- Calculated weight of Structural Steel = 98,000 lb. (AASHTO M 270 Grade 50W)
- Field welding of construction accessories will not be permitted to beams.
- The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
- Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.
- All construction joints shall be bonded.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- 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 wide flange beams.
- The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number 0304620 which was issued for the permanent construction.
- 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 I. 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.

**INDEX OF SHEETS**

- General Plan and Elevation
- General Notes, Index of Sheets, Total Bill of Material & Details
- Top of Slab Elevations
- Superstructure
- Superstructure Details
- Diaphragm Details
- Structural Steel
- Bearing Details
- Anchor Bolt Details for Bearings
- Abutment Plan & Elevation
- Abutment Details
- Bar Splicer Details
- Soil Boring Logs (1 of 2)
- Soil Boring Logs (2 of 2)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.	-	125	125
Stone Riprap, Class A4	Sq. Yd.	-	960	960
Filter Fabric	Sq. Yd.	-	1055	1055
Removal of Existing Structures	Each	-	1	1
Structure Excavation	Cu. Yd.	-	210	210
Floor Drains	Each	12	-	12
Concrete Structures	Cu. Yd.	-	53.9	54
Concrete Superstructure	Cu. Yd.	128.7	-	129
Bridge Deck Grooving	Sq. Yd.	319	-	319
Protective Coat	Sq. Yd.	402	-	402
Elastomeric Bearing Assembly, Type I	Each	6	-	6
Furnishing and Erecting Structural Steel	L.S.	1	-	1
Stud Shear Connectors	Each	1206	-	1206
Reinforcement Bars	Pound	-	2161	2161
Reinforcement Bars, Epoxy Coated	Pound	23890	10600	34490
Name Plates	Each	1	-	1
Bar Splicers	Each	66	-	66
Drilled Shaft in Rock, 36"	Foot	-	28	28
Drilled Shaft in Soil, 42"	Foot	-	45	45
Asbestos Bearing Pad Removal	Each	22	-	22



- 2" Preformed Joint Filler (Section 1051 of the standard Specifications) bonded to abutment cap with approved adhesive (full width of cap)
- Fabric Reinforced Elastomeric Mat (See Special Provisions). Fabric mat shall be 24" wide and attached full width to the abutment cap with a 3/8" x 5" steel plate and 1/2"  $\phi$  studs with nuts and washers at 12" cts.
- 2" Preformed Joint Filler (Section 1051 of the standard Specifications) bonded to superstructure (full width of cap)
- Geocomposite wall drain (Section 591 of the Standard Specifications - full width of cap)

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

**SECTION THRU SEMI-INTEGRAL ABUTMENT**

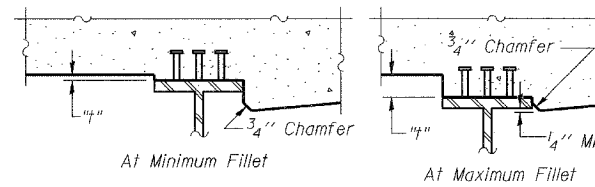
(Horiz. dim. @ Rt. L's)

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

GENERAL NOTES, INDEX OF SHEETS,  
TOTAL BILL OF MATERIAL & DETAILS  
IL 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005  
Soodan Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

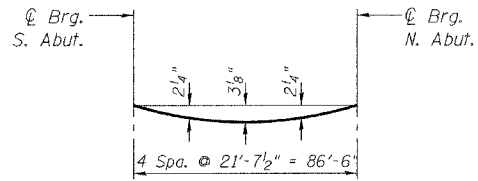
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 113	KANKAKEE COUNTY	58	20
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	

CONTRACT # 66410

SHEET NO. 3  
14 SHEETS



**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 below.

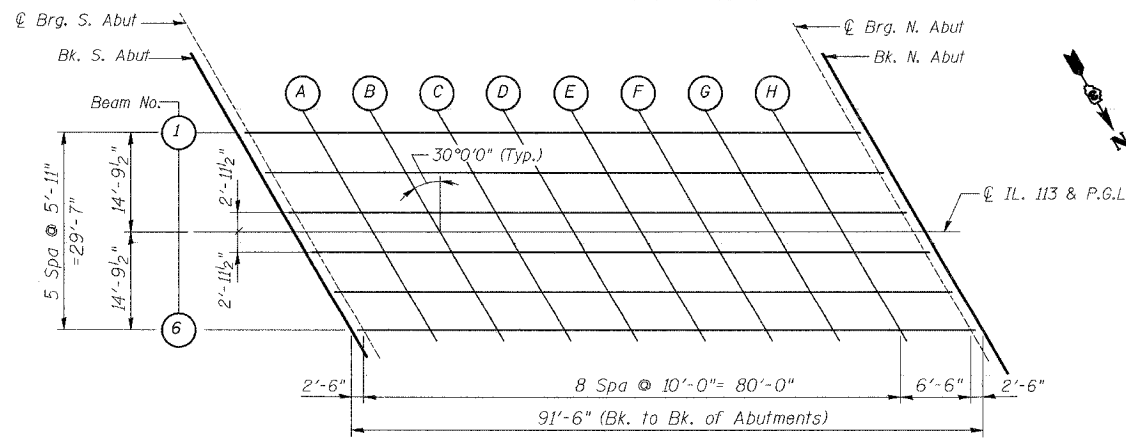
To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflection" shown below, minus slab thickness, equals the fillet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

**FILLET HEIGHTS**

BEAM 1					BEAM 2					BEAM 3					P.G.L.				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	259+45.71	-14.79	590.634	590.634	Bk. of S. Abut.	259+49.12	-8.88	590.752	590.752	Bk. of S. Abut.	259+52.54	-2.96	590.856	590.856	Bk. of S. Abut.	259+54.25	0.00	590.907	590.907
☉ Brg. S. Abut.	259+48.21	-14.79	590.642	590.642	☉ Brg. S. Abut.	259+51.62	-8.88	590.760	590.760	☉ Brg. S. Abut.	259+55.04	-2.96	590.863	590.863	☉ Brg. S. Abut.	259+56.75	0.00	590.914	590.914
A	259+58.21	-14.79	590.673	590.765	A	259+61.62	-8.88	590.788	590.880	A	259+65.04	-2.96	590.889	590.981	A	259+66.75	0.00	590.939	591.031
B	259+68.21	-14.79	590.697	590.867	B	259+71.62	-8.88	590.810	590.981	B	259+75.04	-2.96	590.909	591.079	B	259+76.75	0.00	590.957	591.128
C	259+78.21	-14.79	590.714	590.941	C	259+81.62	-8.88	590.825	591.052	C	259+85.04	-2.96	590.921	591.148	C	259+86.75	0.00	590.969	591.196
D	259+88.21	-14.79	590.725	590.978	D	259+91.62	-8.88	590.834	591.087	D	259+95.04	-2.96	590.928	591.181	D	259+96.75	0.00	590.975	591.228
E	259+98.21	-14.79	590.729	590.977	E	260+01.62	-8.88	590.836	591.084	E	260+05.04	-2.96	590.928	591.176	E	260+06.75	0.00	590.974	591.221
F	260+08.21	-14.79	590.727	590.938	F	260+11.62	-8.88	590.832	591.042	F	260+15.04	-2.96	590.921	591.132	F	260+16.75	0.00	590.966	591.176
G	260+18.21	-14.79	590.719	590.864	G	260+21.62	-8.88	590.821	590.967	G	260+25.04	-2.96	590.908	591.054	G	260+26.75	0.00	590.952	591.097
H	260+28.21	-14.79	590.704	590.764	H	260+31.62	-8.88	590.804	590.864	H	260+35.04	-2.96	590.889	590.95	H	260+36.75	0.00	590.931	590.992
☉ Brg. N. Abut.	260+34.71	-14.79	590.690	590.690	☉ Brg. N. Abut.	260+38.12	-8.88	590.789	590.789	☉ Brg. N. Abut.	260+41.54	-2.96	590.873	590.873	☉ Brg. N. Abut.	260+43.25	0.00	590.914	590.914
Bk. of N. Abut.	260+37.21	-14.79	590.684	590.684	Bk. of N. Abut.	260+40.62	-8.88	590.783	590.783	Bk. of N. Abut.	260+44.04	-2.96	590.866	590.866	Bk. of N. Abut.	260+45.75	0.00	590.907	590.907

BEAM 4					BEAM 5					BEAM 6				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of S. Abut.	259+55.96	2.96	590.866	590.866	Bk. of S. Abut.	259+59.38	8.88	590.783	590.783	Bk. of S. Abut.	259+62.79	14.79	590.684	590.684
☉ Brg. S. Abut.	259+58.46	2.96	590.873	590.873	☉ Brg. S. Abut.	259+61.88	8.88	590.789	590.789	☉ Brg. S. Abut.	259+65.29	14.79	590.690	590.690
A	259+68.46	2.96	590.896	590.988	A	259+71.88	8.88	590.811	590.903	A	259+75.29	14.79	590.710	590.802
B	259+78.46	2.96	590.914	591.085	B	259+81.88	8.88	590.826	590.996	B	259+85.29	14.79	590.722	590.893
C	259+88.46	2.96	590.924	591.151	C	259+91.88	8.88	590.834	591.061	C	259+95.29	14.79	590.729	590.955
D	259+98.46	2.96	590.929	591.182	D	260+01.88	8.88	590.836	591.089	D	260+05.29	14.79	590.728	590.982
E	260+08.46	2.96	590.926	591.174	E	260+11.88	8.88	590.832	591.079	E	260+15.29	14.79	590.722	590.969
F	260+18.46	2.96	590.918	591.128	F	260+21.88	8.88	590.821	591.031	F	260+25.29	14.79	590.709	590.919
G	260+28.46	2.96	590.902	591.048	G	260+31.88	8.88	590.803	590.949	G	260+35.29	14.79	590.689	590.834
H	260+38.46	2.96	590.881	590.941	H	260+41.88	8.88	590.779	590.840	H	260+45.29	14.79	590.663	590.723
☉ Brg. N. Abut.	260+44.96	2.96	590.863	590.863	☉ Brg. N. Abut.	260+48.38	8.88	590.760	590.760	☉ Brg. N. Abut.	260+51.79	14.79	590.642	590.642
Bk. of N. Abut.	260+47.46	2.96	590.856	590.856	Bk. of N. Abut.	260+50.88	8.88	590.752	590.752	Bk. of N. Abut.	260+54.29	14.79	590.634	590.634



PLAN

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

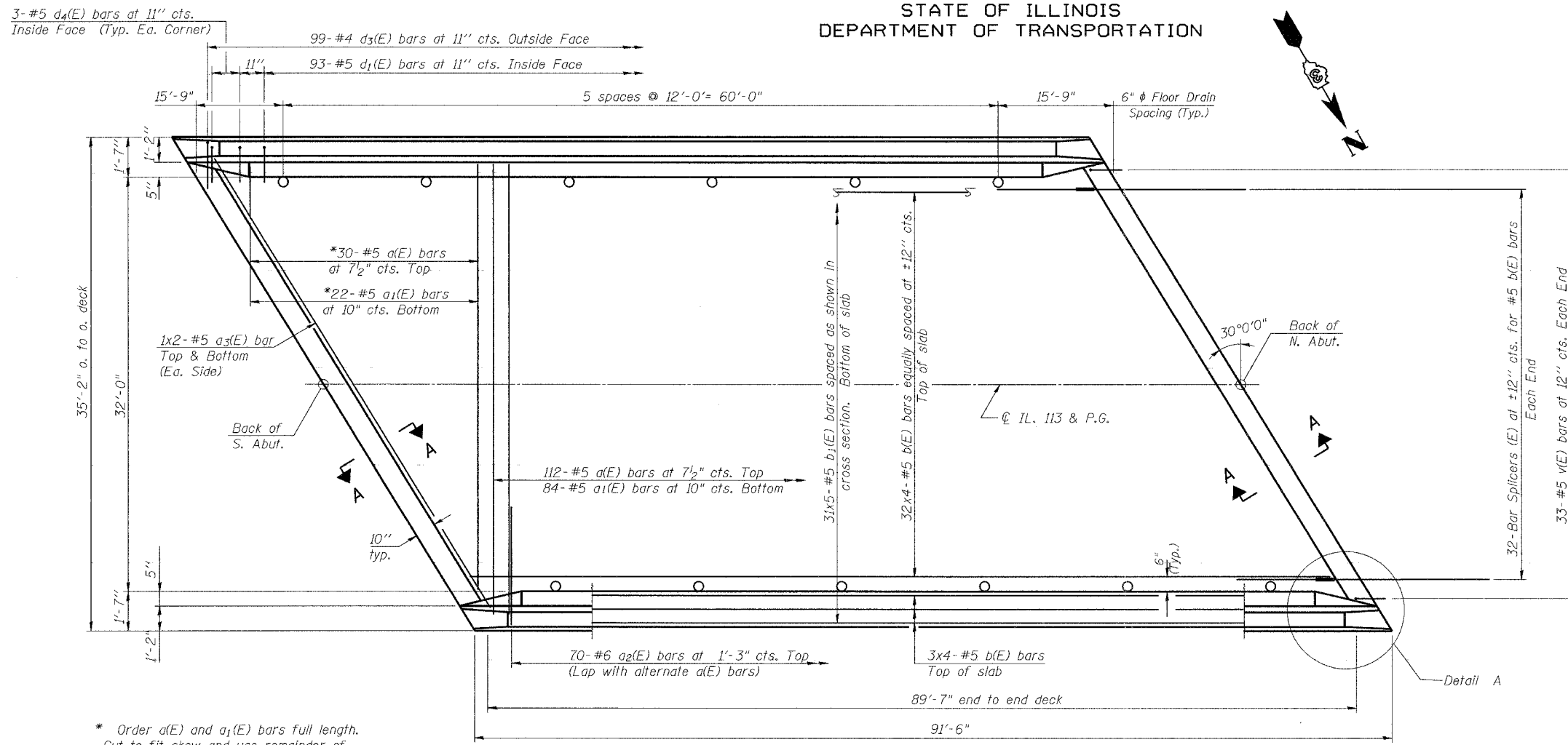
**TOP OF SLAB ELEVATIONS**  
 IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
 FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
 KANKAKEE COUNTY  
 STATION 260+00.00  
 STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005  
 Soodan & Associates, Inc.  
 100 North LaSalle Street, Suite 1800  
 Chicago, Illinois 60602



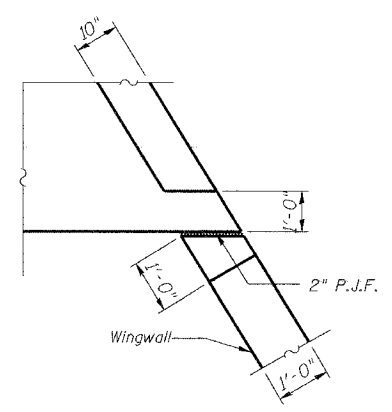
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
IL 113	109BR, N KANKAKEE COUNTY	58	21	14 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT-		
CONTRACT # 66410				



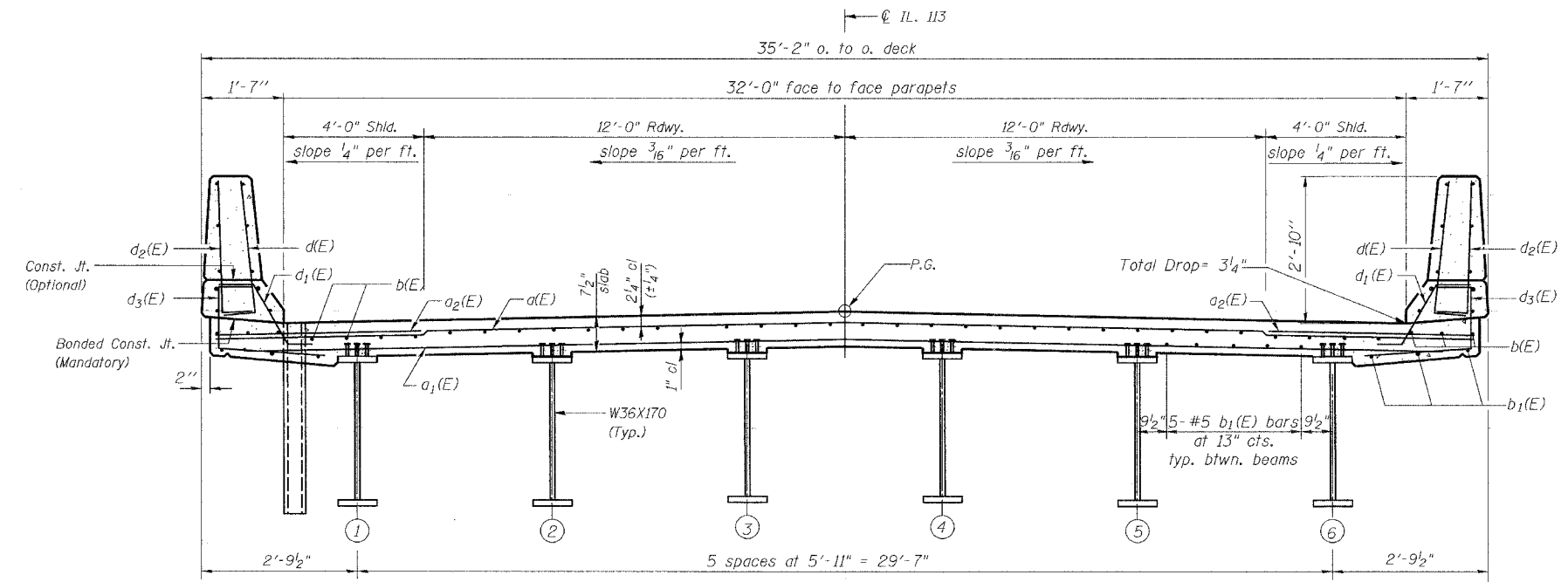
\* Order a(E) and a<sub>1</sub>(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PLAN



DETAIL A  
(Parapet and approach not shown)  
(Similar at all four corners)

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



CROSS SECTION  
(Looking East)

- Notes:
- See Sheet 5 of 14 for superstructure details and Bill of Material.
  - Reinforcement bars designated (E) shall be epoxy coated.
  - Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
  - See Sheet 5 of 14 for parapet reinforcement.
  - See Sheet 6 of 14 for Section A-A.

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

**SUPERSTRUCTURE**

IL 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

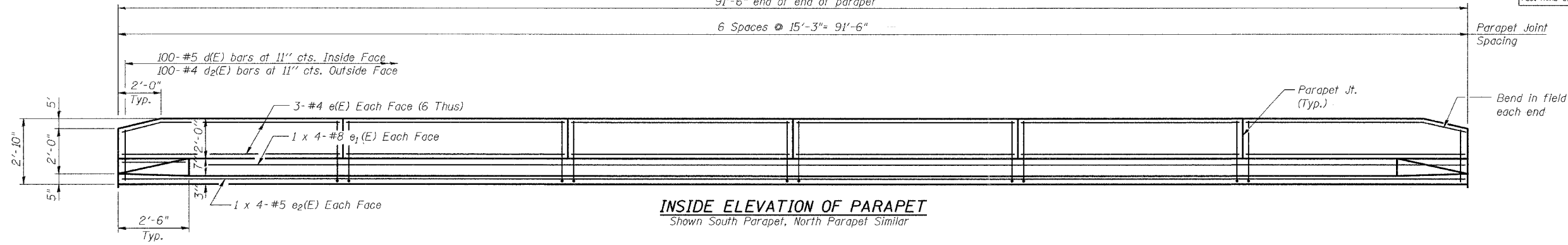
SCALE: NONE DATE: AUGUST, 2005

Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
IL 113	109BR, N	KANKAKEE COUNTY	58	22
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	14 SHEETS

CONTRACT # 56410



**INSIDE ELEVATION OF PARAPET**  
Shown South Parapet, North Parapet Similar

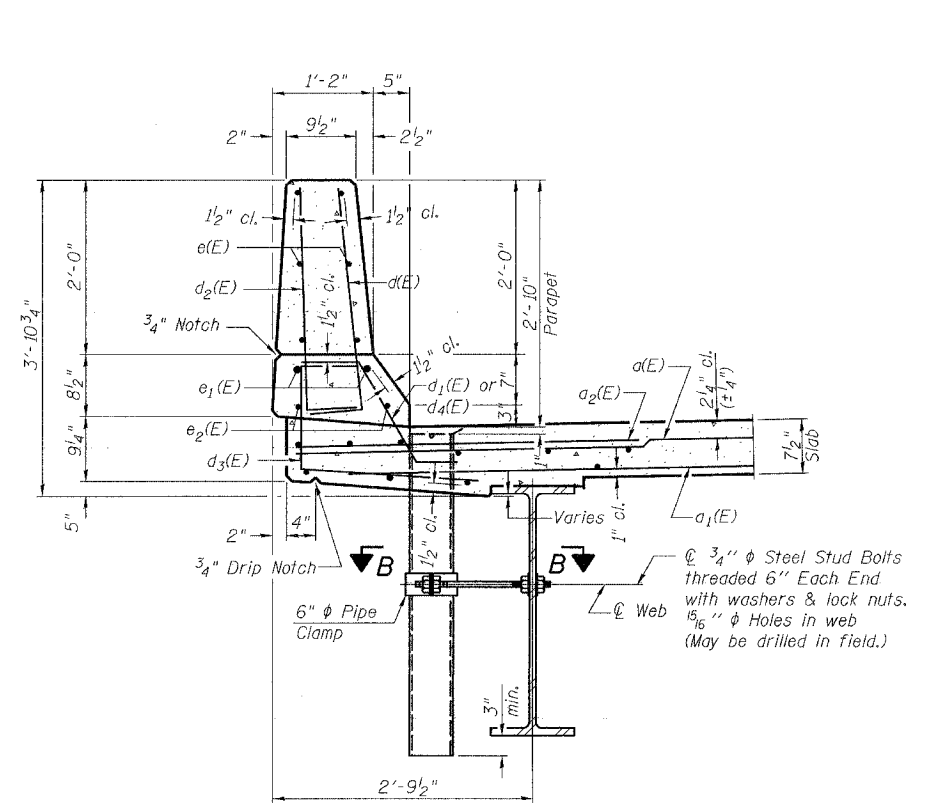
**SUPERSTRUCTURE  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d(E)	142	#5	34'- 8"	—
a1(E)	106	#5	33'- 0"	—
a2(E)	140	#6	4'- 6"	—
a3(E)	8	#5	21'- 0"	—
b(E)	152	#5	23'- 6"	—
b1(E)	155	#5	19'- 3"	—
d(E)	200	#5	3'- 0"	—
d1(E)	186	#4	2'- 5"	—
d2(E)	200	#4	3'- 0"	—
d3(E)	198	#4	3'- 7"	—
d4(E)	12	#4	2'- 2"	—
e(E)	72	#4	15'- 0"	—
e1(E)	16	#8	26'- 3"	—
e2(E)	16	#5	24'- 6"	—
m(E)	32	#6	21'- 5"	—
m1(E)	20	#6	6'- 6"	—
m2(E)	8	#6	2'- 9"	—
m3(E)	24	#6	9'- 7"	—
s(E)	72	#4	8'- 4"	—
s1(E)	62	#5	9'- 6"	—
u(E)	82	#4	3'- 9"	—
v(E)	66	#5	3'- 8"	—
Reinforcement Bars, Epoxy Coated			Pound	23,890
Concrete Superstructure			Cu. Yds.	129

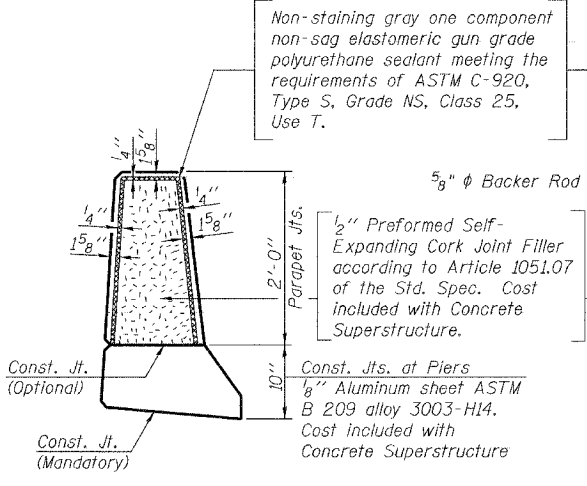
Reinforcement bars designated (E) shall be epoxy coated.  
Bars indicated thus 1 x2 -#5 etc. indicates 1 line of bars with 2 lengths per line.

**PARAPET MIN. BAR LAPS**

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

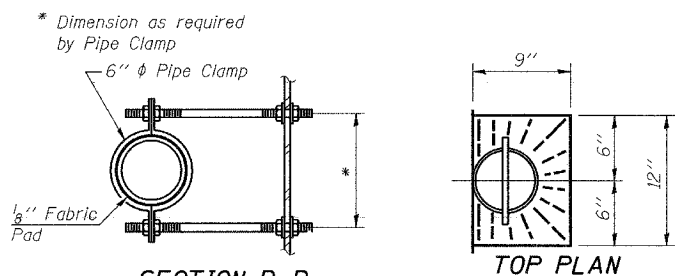
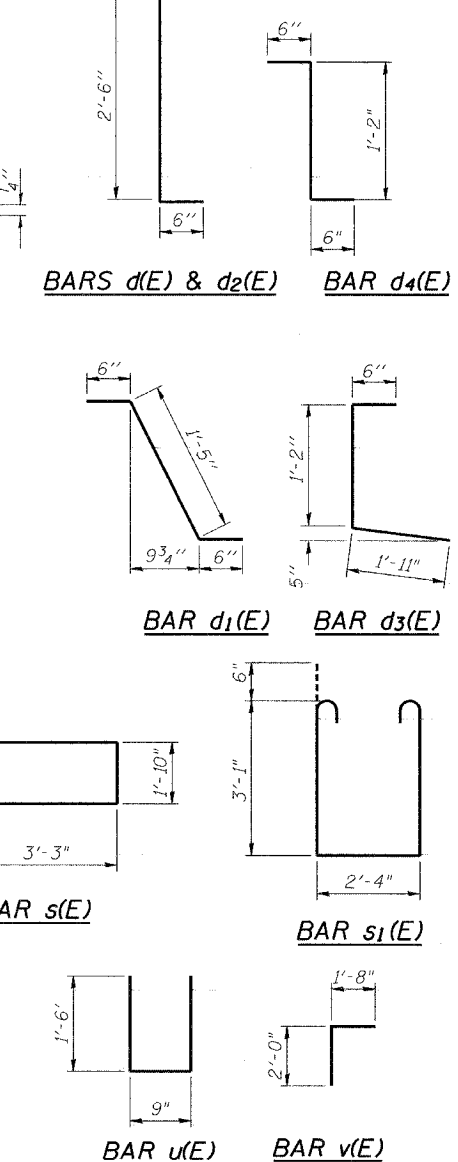


**SECTION THRU PARAPET**



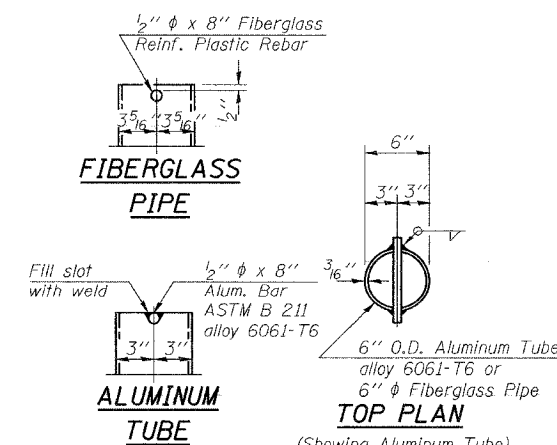
**PARAPET JOINT DETAILS**

Notes:  
Floor drains need not be painted.  
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.



**SECTION B-B**

**TOP PLAN**



**FIBERGLASS PIPE**

**ALUMINUM TUBE**

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

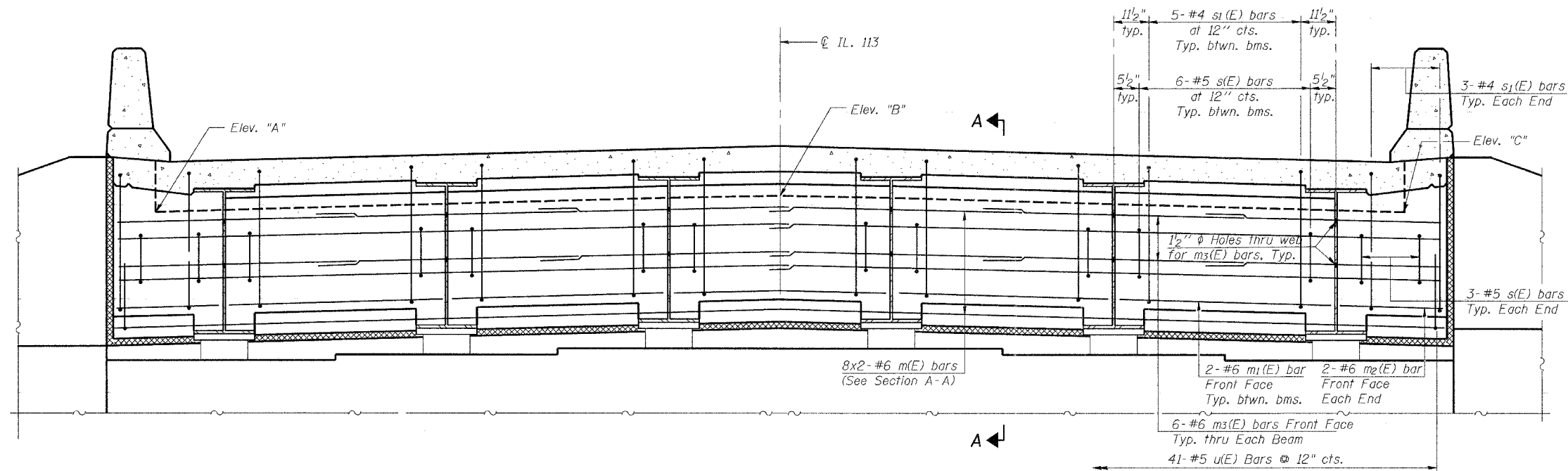
**SUPERSTRUCTURE DETAILS**

IL 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

Soodan

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

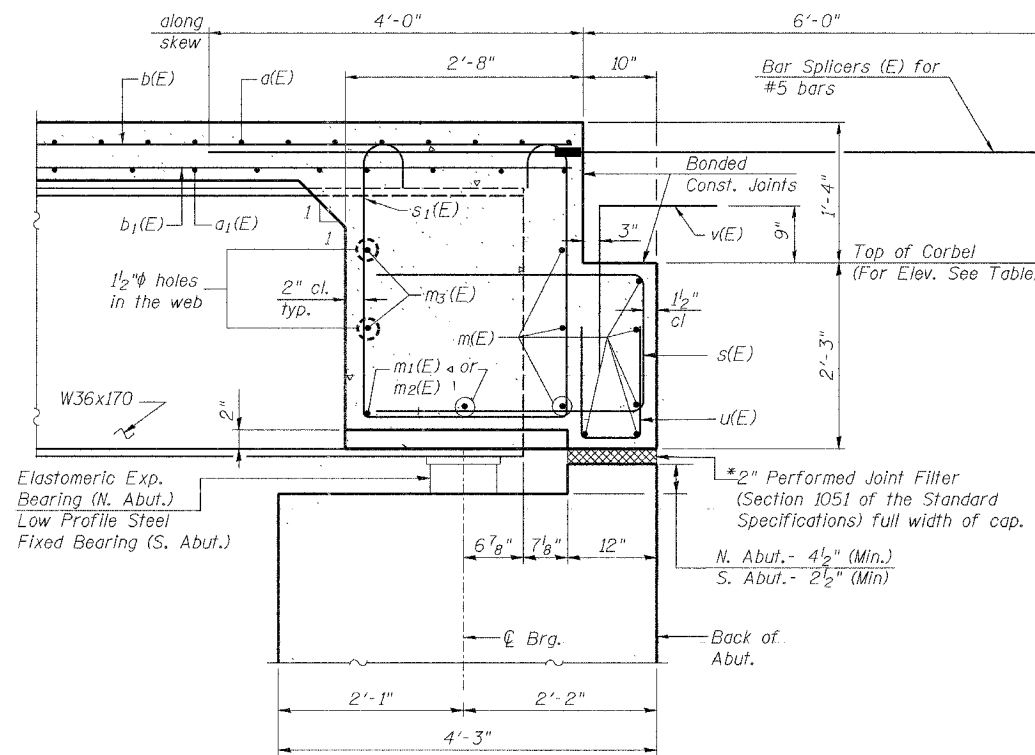
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
IL 113	109BR, N	KANKAKEE COUNTY	58	23
14 SHEETS				
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT-				
CONTRACT # 66410				



**DIAPHRAGM ELEVATION AT ABUTMENT**  
(Shown North Abutment, South Abutment Similar)

Notes:  
Reinforcement bars in diaphragm are billed with superstructure on sheet 5 of 14.  
Concrete in diaphragm is included with Concrete Superstructure on sheet 5 of 14.  
For details of bars s(E) & s<sub>1</sub>(E) see sheet 5 of 14.  
The s(E) and s<sub>1</sub>(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.  
For anchor bolt details see sheet 9 of 14.

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



**SECTION A-A**

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

**TOP OF CORBEL ELEVATION TABLE**

Location	North Abutment	South Abutment
"A"	589.33	589.28
"B"	589.57	589.57
"C"	589.28	589.33

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

**DIAPHRAGM DETAILS**

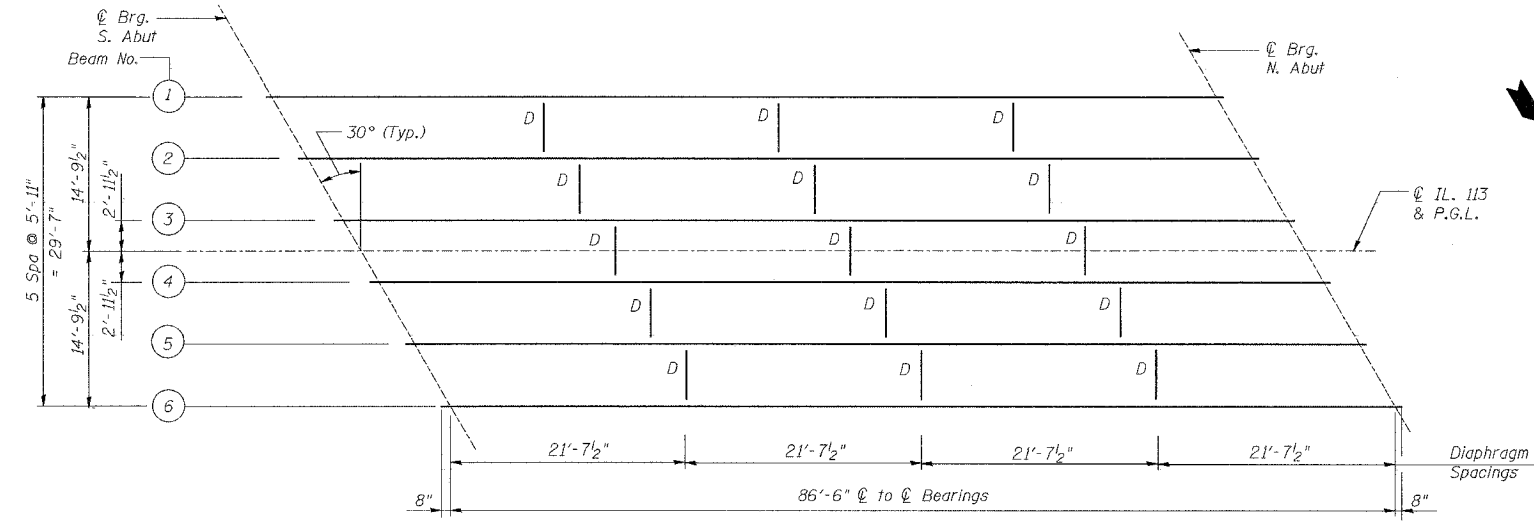
IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005  
Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

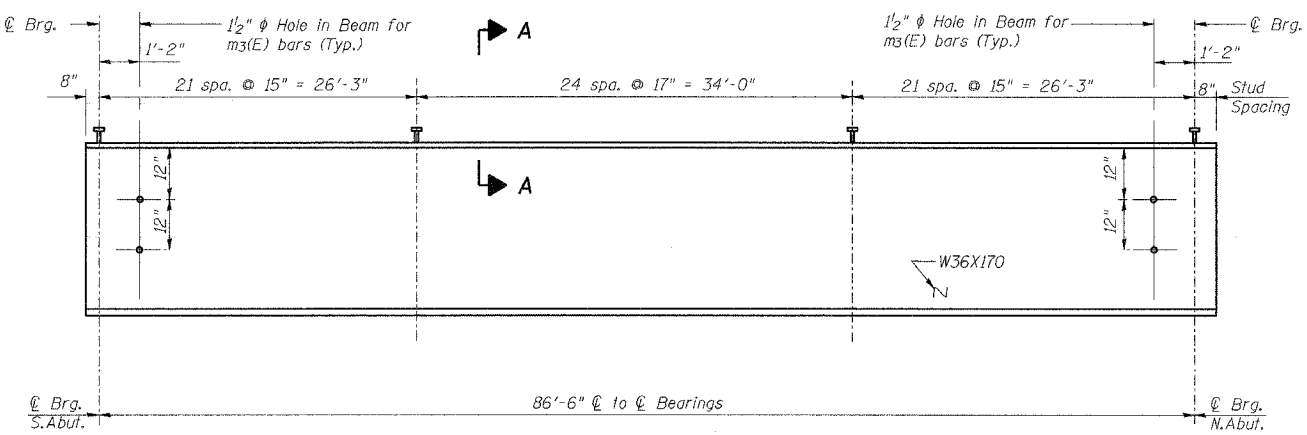
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
IL 113	109BR, N	KANKAKEE COUNTY	58	24
14 SHEETS				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT # 66410

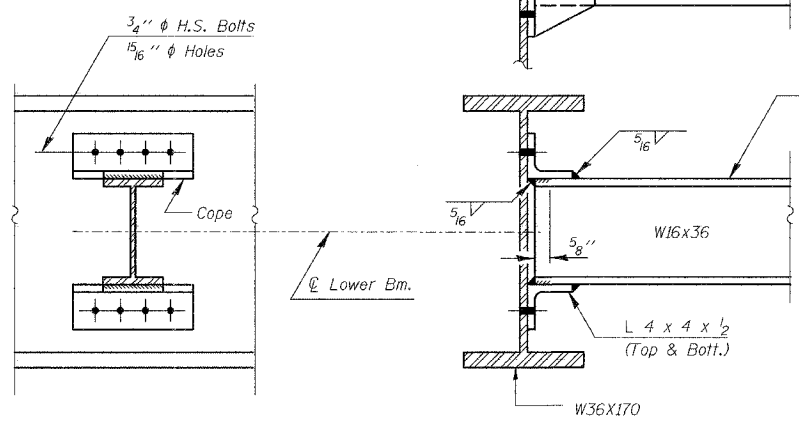


FRAMING PLAN



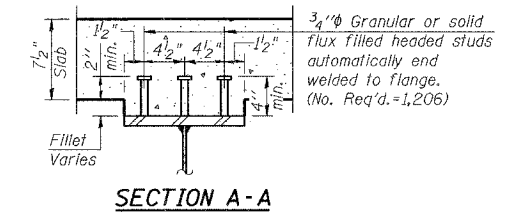
BEAM ELEVATION

"NTR" denotes to which notch toughness requirements are applicable.



DIAPHRAGM D

(15 Required)



SECTION A-A

Sp. 1		
Is	(in <sup>4</sup> )	10500
Ic (n)	(in <sup>4</sup> )	2470.3
Ic (3n)	(in <sup>4</sup> )	17811
Ss	(in <sup>3</sup> )	580
Sc (n)	(in <sup>3</sup> )	809.6
Sc (3n)	(K/ft.)	724.5
Z	(K)	-
D	(K/')	0.74
M <sub>D</sub>	(K)	692.1
s <sub>D</sub>	(K)	0.42
M <sub>sD</sub>	(K)	392.9
M <sub>t</sub>	(K)	689.7
M (Imp)	(K)	163.1
M <sub>3</sub> (M <sub>t</sub> +I)	(K)	1421.3
M <sub>a</sub>	(K)	3258.2
M <sub>u</sub>	(K)	4331.2
f <sub>s</sub> non-comp(ksi)		14.3
f <sub>s</sub> (comp)	(ksi)	6.5
f <sub>s</sub> 5/8(M <sub>t</sub> +I)	(ksi)	21.1
f <sub>s</sub> (Overload)	(ksi)	41.5
f <sub>s</sub> (Total)	(ksi)	-
VR	(K)	42.8

N.Abut. & S.Abut.	
R <sub>D</sub>	(K) * 76.4
R <sub>t</sub>	(K) 38.4
Imp.	(K) 9.1
R (Total)	(K) 123.9

\* Dead Load Reaction includes the weight of Abutment Diaphragm & Bridge Approach Pavement.

Is and Ss are the moment of Inertia and section modulus of the steel section used in computing fs (Total & Overload).  
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs (Total & Overload).  
VR is the maximum Live Load + Impact shear range in span.  
Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.  
Ma (Applied Moment)=1.3[M<sub>D</sub> + M<sub>sD</sub> + 5/8(M<sub>t</sub> + I)].  
Mu is the Full Plastic Moment Capacity for Compact, Braced section.  
fs (Overload) is the sum of the stresses due to M<sub>D</sub> + M<sub>sD</sub> + 5/8(M<sub>t</sub> + I).  
fs (Total) (Non-comp section) is the sum of the stresses due to 1.3[M<sub>D</sub> + M<sub>sD</sub> + 5/8(M<sub>t</sub> + I)].

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
N. Abutment	590.02	590.12	590.21	590.20	590.09	589.98
S. Abutment	589.98	590.09	590.20	590.21	590.12	590.02

\* For Fabrication only

Notes:

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

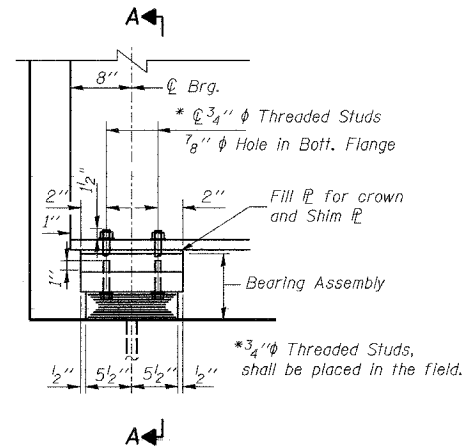
STRUCTURAL STEEL  
IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005  
Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

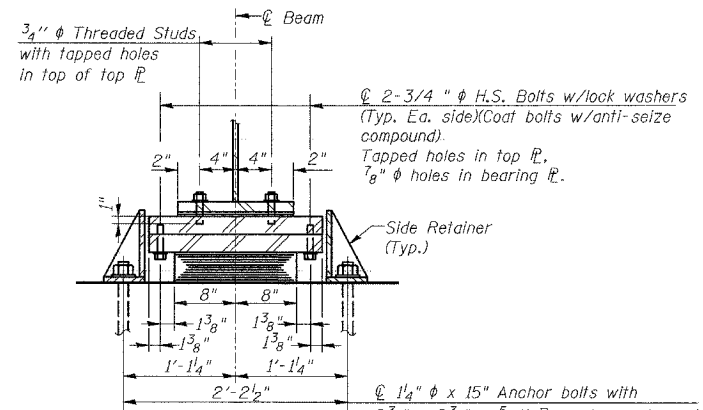
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8
IL 113	109BR, N	KANKAKEE COUNTY	58	25
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT-		

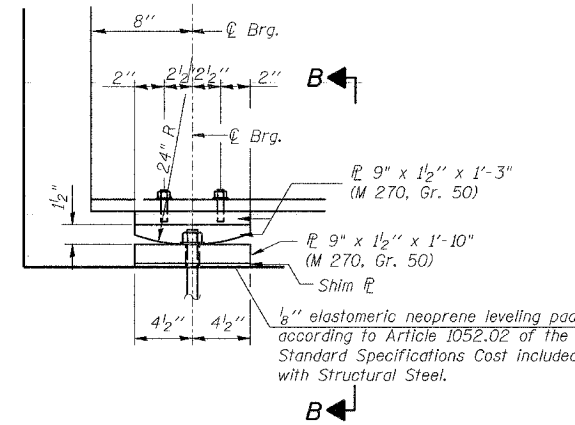
CONTRACT # 66410



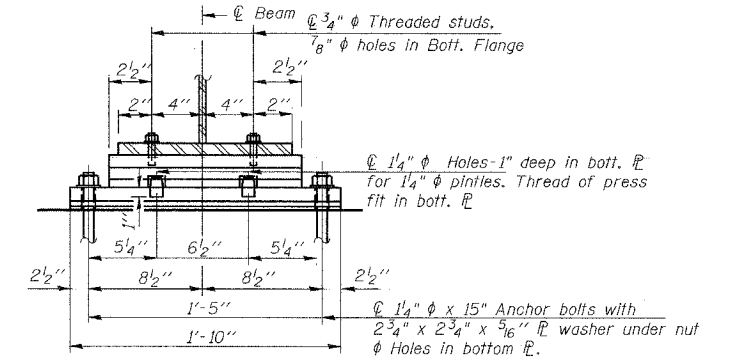
ELEVATION AT N. ABUT.



SECTION A-A



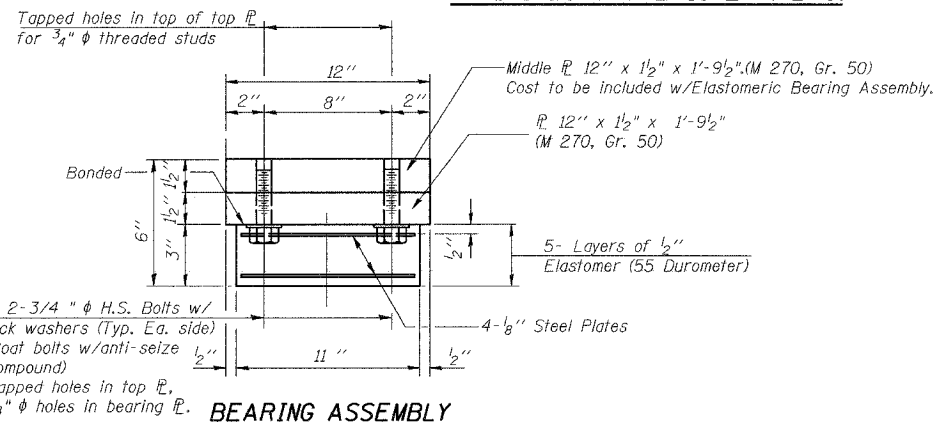
ELEVATION AT S. ABUT.



SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.

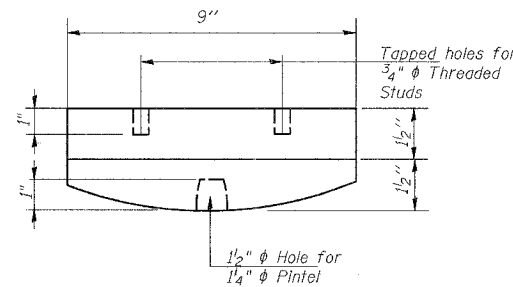
Notes:  
Anchor bolts at fixed bearings may be built into the masonry.  
See sheet 9 for Anchor Bolt installation.



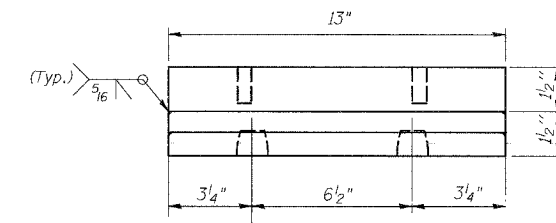
BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.

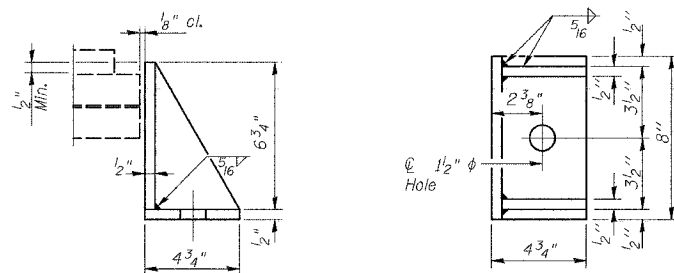
FIXED BEARING



ELEVATION OF STEEL EXTENSION

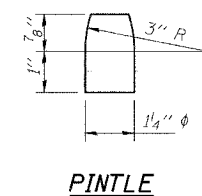


END VIEW STEEL EXTENSION



SIDE RETAINER AT ABUTMENT

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.  
Weight included with Structural Steel.



PINTLE

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	6

BEARING DETAILS

IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005

Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

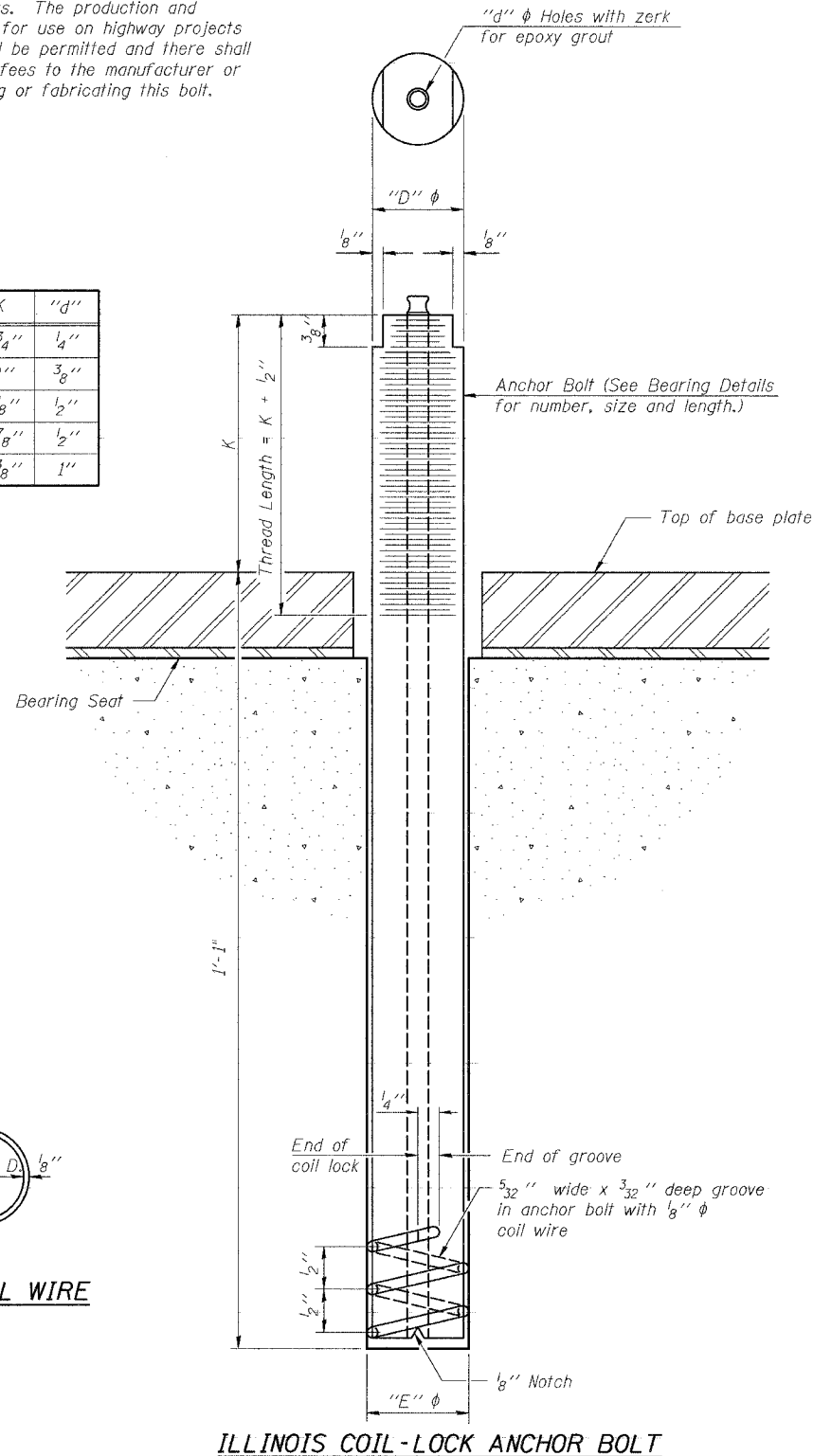
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9
IL 113	109BR, N	KANKAKEE COUNTY	58	26
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		14 SHEETS

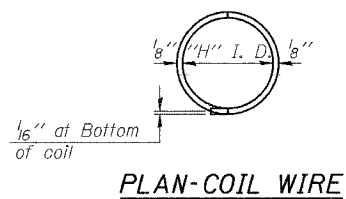
CONTRACT # 66410

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



PLAN-COIL WIRE

**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.	12 Each- 1 1/4" $\phi$ x 1'-3" Long, A-307
S. Abut.	12 Each- 1 1/4" $\phi$ x 1'-3" Long, A-307

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 and 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.

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

ABB-1 10-22-04

ANCHOR BOLTS DETAILS  
FOR BEARINGS  
IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

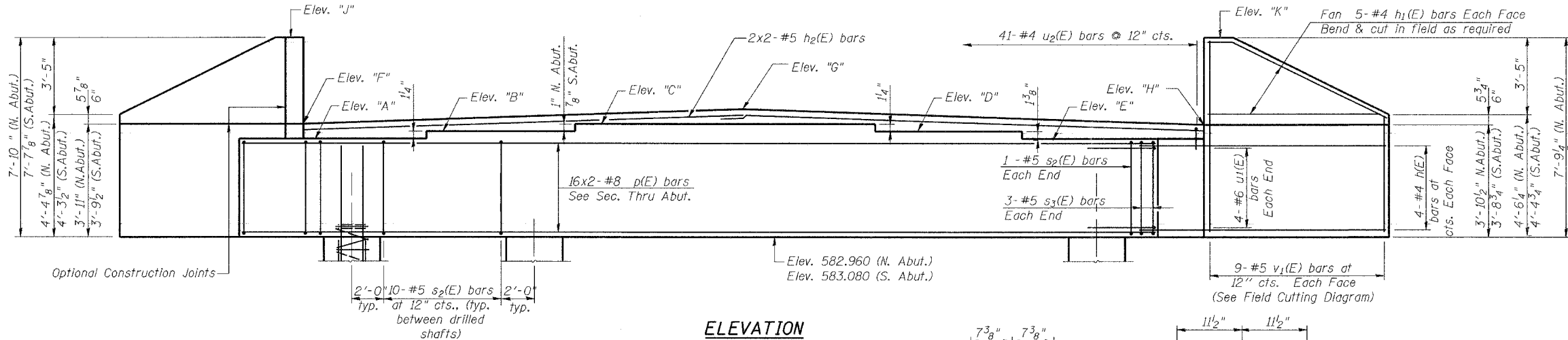
SCALE: NONE DATE: AUGUST, 2005

Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

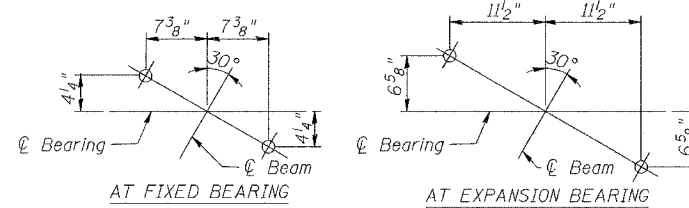
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 10
IL 113	109BR, N	KANKAKEE COUNTY	58	27
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	14 SHEETS

- Notes:
1. Pour steps monolithically with cap.
  2. Reinforcement bars designated (E) shall be epoxy coated.
  3. Space cap reinforcement to miss anchor bolts. Minimum lap for spirals = 1 1/2 turns
  4. All exposed edges shall have 3/4" chamfer, except as noted.



**ELEVATION**  
(Looking North, North Abut.)  
(Looking South, South Abut.)



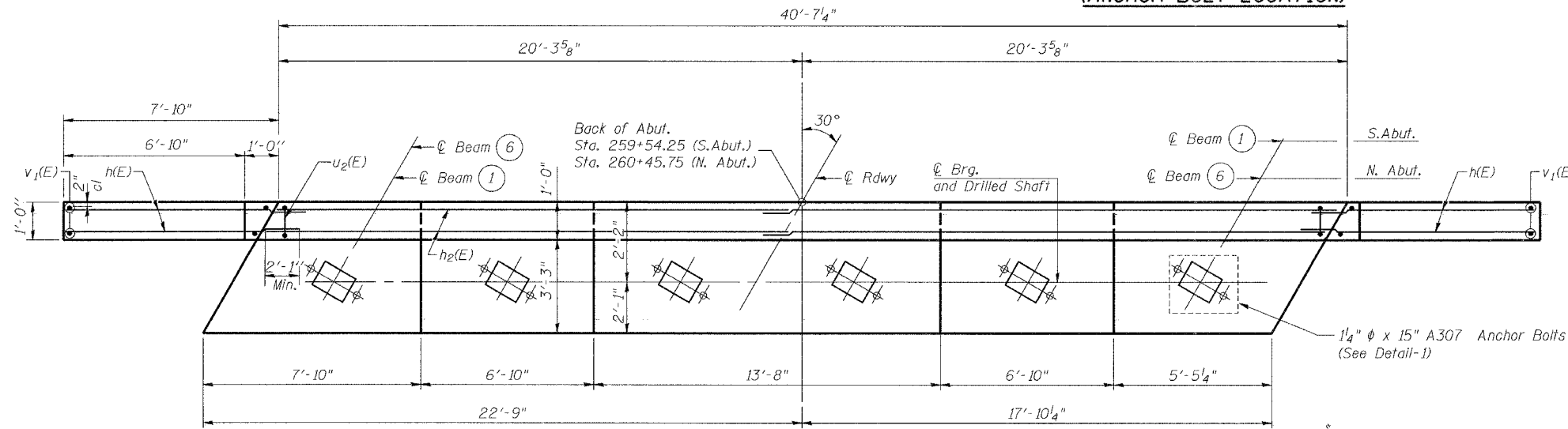
**DETAIL-1**  
(ANCHOR BOLT LOCATION)

**ELEVATION TABLE**

Location	North Abutment	South Abutment
"A"	586.503	586.638
"B"	586.602	586.737
"C"	586.681	586.811
"D"	586.573	586.708
"E"	586.455	586.590
"F"	586.878	586.878
"G"	587.157	587.157
"H"	586.823	586.823
"J"	590.786	590.786
"K"	590.731	590.731

**BILL OF MATERIAL**  
(North & South Abutment)

Bar	No.	Size	Length	Shape
h(E)	32	#4	9'-10"	
h1(E)	40	#4	8'-3"	
h2(E)	8	#5	21'-4"	
p(E)	64	#8	23'-2"	
s2(E)	64	#5	15'-1"	
s3(E)	24	#5	10'-0"	
u1(E)	16	#6	9'-11"	
u2(E)	82	#4	4'-11"	
v1(E)	36	#9	7'-7"	
v2	56	#9	9'-0"	
n(E)	112	#9	8'-9"	
sp	8	#4	84'-6"	
Concrete Structures	Cu. Yd.		53.9	
Reinforcement Bars, Epoxy Coated	Pound		10,592	
Structure Excavation	Cu. Yd.		210.0	
Drilled Shaft in Soil, 36" Dia.	Foot		28	
Drilled Shaft in Soil, 42" Dia.	Foot		45	
Reinforcement Bars	Pound		2,161	

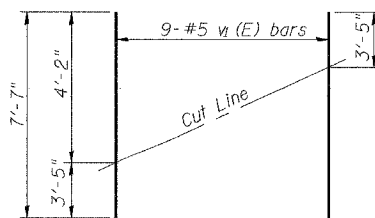


**PLAN**

**MIN. BAR LAPS**

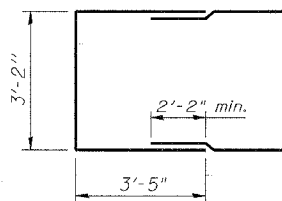
- #4 bars = 1'-8"
- #5 bars = 2'-2"
- #6 bars = 2'-7"
- #7 bars = 4'-10"
- #8 bars = 6'-4"

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

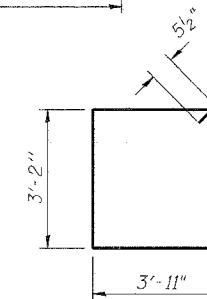


**FIELD CUTTING DIAGRAM**

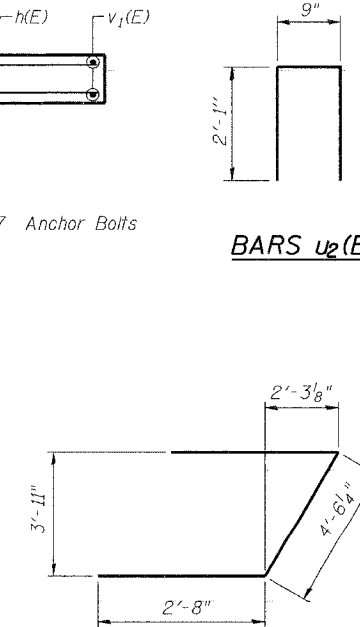
Order v1(E) full length. Cut as shown and use remainder of bars in opposite face.



**BARS s3(E) Pairs**



**BARS s2(E)**



**BAR u1(E)**

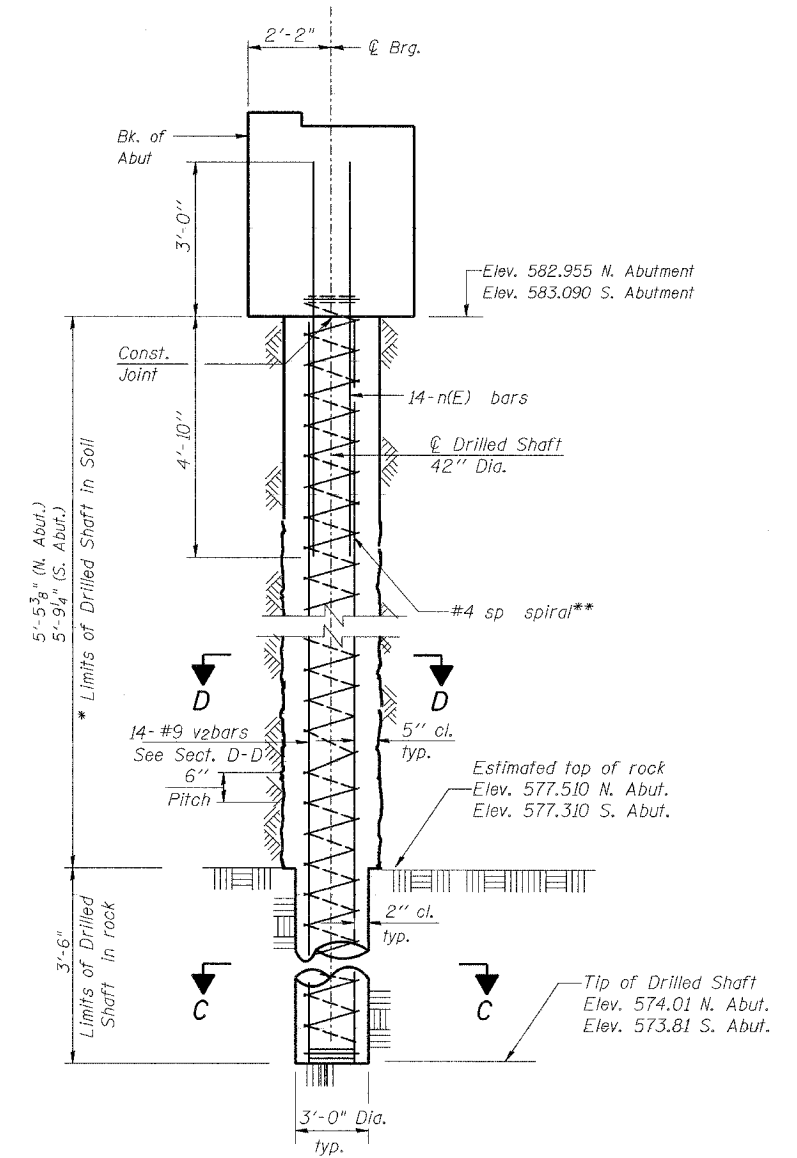
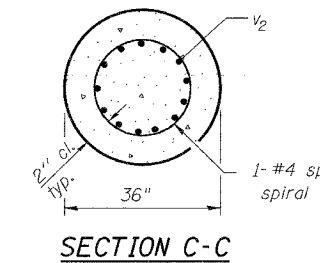
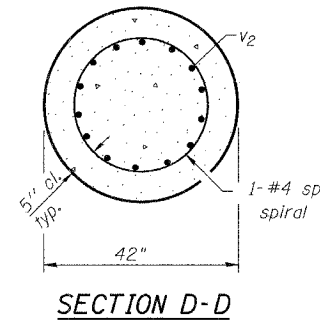
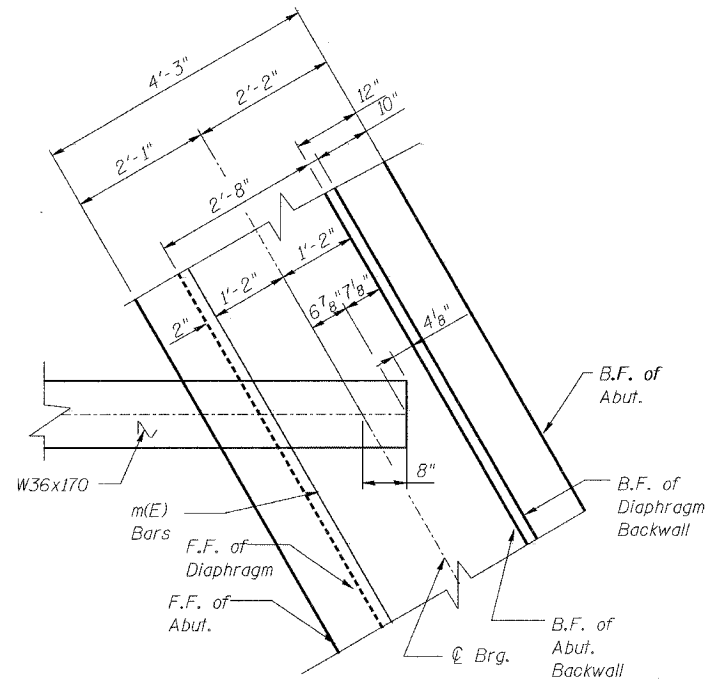
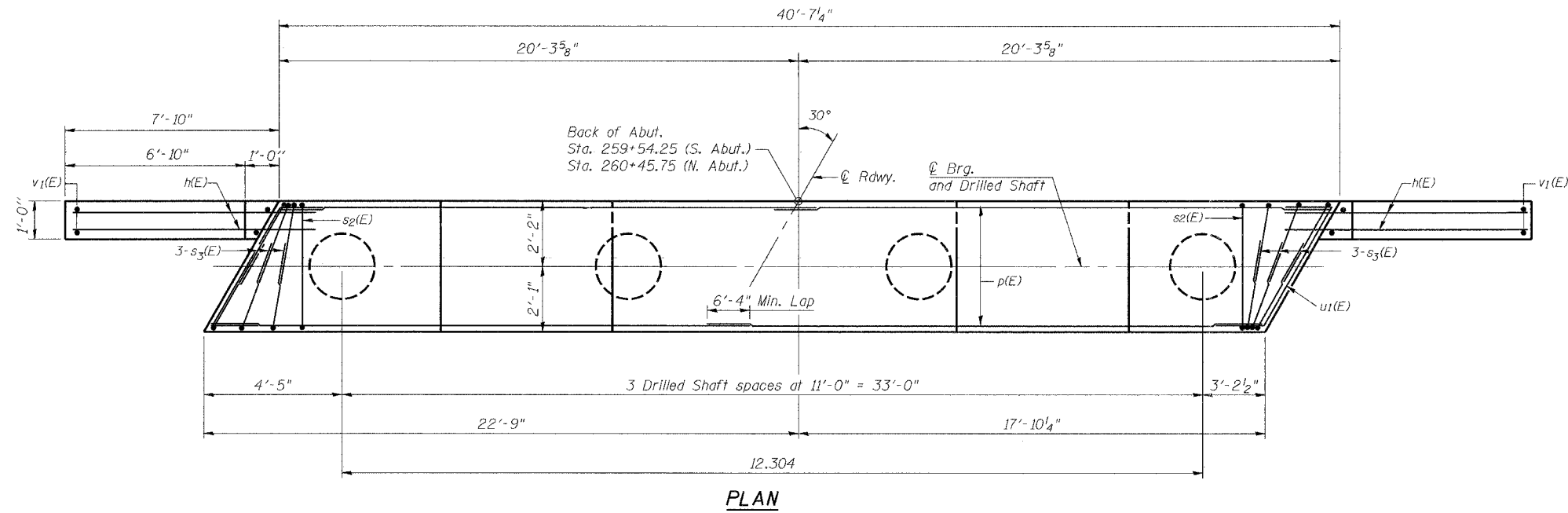
**ABUTMENT PLAN & ELEVATION**  
IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005  
Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

**Soodan**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11 14 SHEETS	
IL 113	109BR, N	KANKAKEE COUNTY	58		28
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	CONTRACT # 66410		



Notes: \* The quantities and detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.  
Reinforcement bars designated (E) shall be epoxy coated. Quantity of concrete in end post included with Concrete Superstructure on sheet 10 of 14.  
\*\* Provide 1/2 extra turns top and bottom of each drilled shaft. Extend spiral 2" into abutment or wingwall cap. Provide min. 4-#4 spacers or equivalent.  
Min. lap for spirals = 1'-4"

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

ABUTMENT DETAILS

IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005

Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 12
IL 113	109BR, N	KANKAKEE COUNTY	58	29
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	14 SHEETS
CONTRACT # 66410				

**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) =  $1.25 \times f_y \times A_l$
- ② Minimum \*Pull-out Strength (Tension in kips) =  $1.25 \times f_{s_{allow}} \times A_l$

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)  
 $A_l$  = Tensile stress area of lapped reinforcement bars.  
\* = 28 day concrete

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."

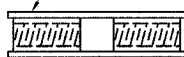
The diameter of this part is the same as the diameter of the bar spliced.

**ROLLED THREAD DOWEL BAR**



**\*\* ONE PIECE**

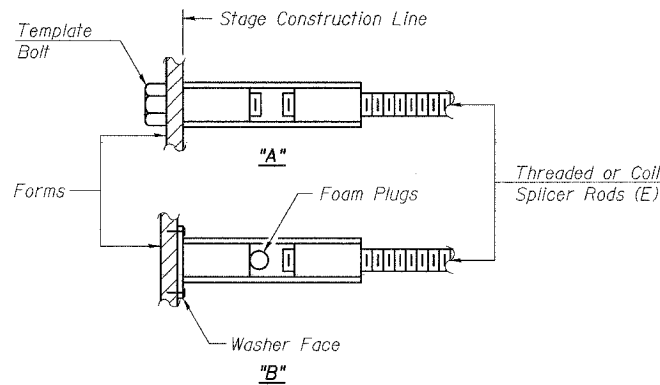
Wire Connector



**WELDED SECTIONS**

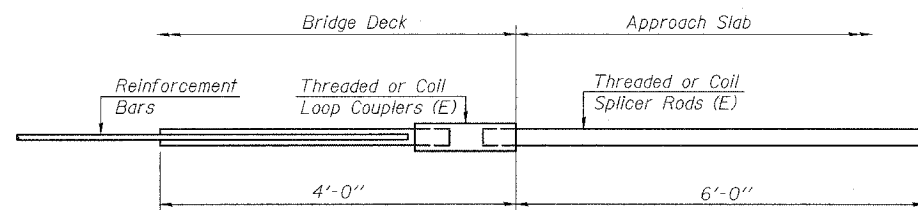
**BAR SPLICER ASSEMBLY ALTERNATIVES**

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



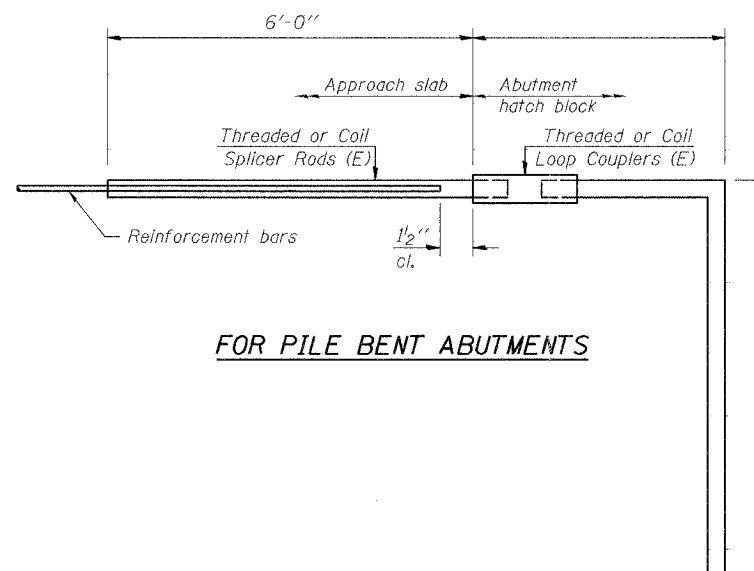
**INSTALLATION AND SETTING METHODS**

"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.



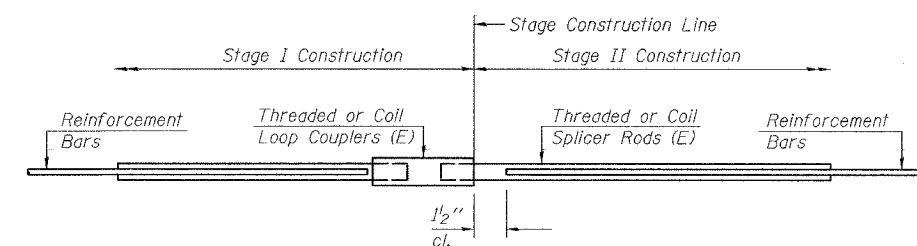
**FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS**

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 9.2 kips - tension	
No. Required = 64	



**FOR PILE BENT ABUTMENTS**

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



**STANDARD**

Bar Size	No. Assemblies Required	Location

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

BSD-1 9-01-03

**BAR SPLICER DETAILS**

IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005  
Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13 14 SHEETS
IL 113	109BR, N KANKAKEE COUNTY	58	30	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

CONTRACT # 66410



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

**SOIL BORING LOG**

Page 1 of 1

Date 4/23/03

ROUTE FAS 1317(IL 113) DESCRIPTION ILLINOIS 113 OVER WILEY CREEK WEST OF BOURBONNIAS LOGGED BY IDOT-KW

SECTION (109)BR LOCATION NW 1/4, SEC. 22, TWP. 31N, RNG. 11E, 3rd PM

COUNTY KANKAKEE DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTOMATIC

STRUCT. NO. 046-0074 EXISTING  
Station 260+00  
BORING NO. 1 NORTH ABUT  
Station 260+23.5  
Offset 9.50ft LT  
Ground Surface Elev. 590.01 ft

Surface Water Elev. 576.11 ft  
Stream Bed Elev. \_\_\_\_\_ ft  
Groundwater Elev.:  
First Encounter \_\_\_\_\_ ft  
Upon Completion \_\_\_\_\_ ft  
After \_\_\_\_\_ Hrs. \_\_\_\_\_ ft

Description	D E P T H (ft)	B L O W S Qu	U C S (tsf)	M O I S T (%)	S T R E N G T H
AUGERED BITUMINOUS CONCRETE & APPROACH CONCRETE	588.76				
AUGERED Black CLAY LOAM	587.51				
Medium Brown & Black CLAY LOAM to SANDY CLAY LOAM with Pieces of Weathered DOLOMITE; Material at 10 to 12 feet is too coarse for Sample Tube Recovery	-5	3	0.7	15.0	
		4	P		
		4	-		
		5	-		
		3			
		5	0.5	15.0	
		4	P		
	-10				
Borehole continued with rock coring.	577.51				
	-15				
	-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrator)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, Form 137 (Rev. 8-99)



**Illinois Department of Transportation**  
Division of Highways  
Illinois Department of Transportation

**ROCK CORE LOG**

Page 1 of 1

Date 4/23/03

ROUTE FAS 1317(IL 113) DESCRIPTION ILLINOIS 113 OVER WILEY CREEK WEST OF BOURBONNIAS LOGGED BY IDOT-KW

SECTION (109)BR LOCATION NW 1/4, SEC. 22, TWP. 31N, RNG. 11E, 3rd PM

COUNTY KANKAKEE CORING METHOD ROTARY

STRUCT. NO. 046-0074 EXISTING  
Station 260+00  
BORING NO. 1 NORTH ABUT  
Station 260+23.5  
Offset 9.50ft LT  
Ground Surface Elev. 590.01 ft

CORING BARREL TYPE & SIZE 5' DOUBLE BARREL  
Core Diameter 2 1/2 in  
Top of Rock Elev. 577.51 ft  
Begin Core Elev. 576.81 ft

Description	D E P T H (ft)	C O R E R E Y (*)	R E C O V E R Y (%)	R O C K Q U A L I T Y (%)	S T R E N G T H (tsf)
DOLOMITE, LIGHT GRAY, DENSE, FINE GRAINED, WITH CLAY FILLED BEDDING PLANES Qu Moisture Content = 2%	576.81	1	97	46	
	-15				927.0
		2	100	42	
	-20				1003.0
End of Boring	566.81				
	-25				
	-30				

Color pictures of the cores \_\_\_\_\_  
Cores will be stored for examination until UNTIL BUILT  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)  
BBS, Form 138 (Rev. 8-99)

DESIGNED	M.R./R.A.
CHECKED	H.T.
DRAWN	J.S.
CHECKED	H.T./M.R.

SOIL BORING LOGS (1 OF 2)  
IL. 113 OVER WILEY CREEK (PUBLIC WATERS)  
FAS ROUTE 1317 (IL 113), SECTION 109BR, N  
KANKAKEE COUNTY  
STATION 260+00.00  
STRUCTURE NO. 046-0137

SCALE: NONE DATE: AUGUST, 2005  
**Soodan**  
Soodan & Associates, Inc.  
100 North LaSalle Street, Suite 1800  
Chicago, Illinois 60602



F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BRN	KANKAKEE	58	32
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**EXISTING HEADWALL STA. 260+77.33 (R.L. EL. 307.10)**  
Existing structure built as S.D.I. Rte. 113, Sec. 107B in 1927  
Concrete girder on closed RC abutts.  
Contractor shall remove the existing structure, (35.0% L.F.E. ± 25.0 and) replace and widen. The existing abutments shall be widened.  
Traffic shall be maintained at all times utilizing stage construction.  
No salvage.

**GENERAL NOTES**

All reinforcement bars shall be lapped 2d diameter unless otherwise shown.  
It shall be the responsibility of the contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.  
Expansion joints shall consist of self-drilling expansion anchors and 4 # 1/2" hooked bars.  
Shoulder transition to wingwall shall be shaped with broken concrete, cast incidental.  
Hooked bars shall extend a minimum of 12" into new concrete except as otherwise shown.  
One coat of basic lead silico chromate shop primer shall be used for painting of structural steel.  
Limits of Waterproofing Membrane System shall be from two feet beyond floor to expansion end of deck beams and out to out of deck.

**ELEVATION**

**STATION 260+00**  
BUILT BY  
STATE OF ILLINOIS  
S.D.I. Rte. 113 SEC. 109 BRN  
LOADING H520

**NAME PLATE**  
Std. 2113

**PLAN**

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course Class 2	TON	17.6		17.6
Concrete Removal	Cu. Yd.	10.8		10.8
Expansion Joints (S.V.)	Each	20		20
Class 1 Concrete	Cu. Yd.	0.9		0.9
Precast Concrete Bridge Slab	Sq. Ft.	269		269
Precast Prestressed Concrete Deck Beams (17')	Sq. Ft.	162		162
Steel Hatching Top S	Lin. Ft.	148		148
Reinforcement Bars	Pound	120	2220	2340
Removal of Existing Superstructure	Each	1		1
Waterproofing Membrane System	Sq. Yd.	14		14
Name Plates	Each	1		1
Perforated Lead Slatting (2x)	Lin. Ft.	36		36
Removable Guard Rail	Lin. Ft.	37		37
Structural Steel	Pound	2340		2340

**DESIGN STRESSES**  
FIELD UNITS  
Ft = 14000 psi.  
Fs = 20000 psi - Reinf.  
Vc = 30 psi  
n = 10

**PRECAST PRESTRESSED UNITS**  
Ft = 5000 psi  
Fs = 4000 psi  
Fb = 270,000 psi - 7/8" strands  
Fbs = 180,000 psi - 7/8" strands

**PRECAST UNITS**  
Ft = 4500 psi  
Fs = 18000 psi  
Fb = 20,000 psi  
n = 8

Allow 25% for R.I.N.S. Design Specifications 7101 AA390 (as applicable)  
**LOADING H52044**

**GENERAL PLAN & ELEVATION**  
S.D.I. Rte. 113 OVER WILEY CREEK  
S.D.I. ROUTE 113  
SECTION 107BR  
KANKAKEE COUNTY  
STATION 260+0000

**LOCATION SKETCH**

DESIGNED: John A. Morris  
CHECKED: J. J. Edwards  
DRAWN: JCS  
CHECKED: JCS

DATE: October 10, 1973

Drainage Area ----- 9.29 Miles  
Character ----- rolling, sand, cultivated  
Present Opening ----- 200 Sq. Ft.  
Required Opening ----- 200 Sq. Ft.  
Proposed Opening ----- 200 Sq. Ft.  
Gravel ----- 1,660 cfs.

SCALE: 1" = 20'

ILLINOIS DEPARTMENT OF TRANSPORTATION

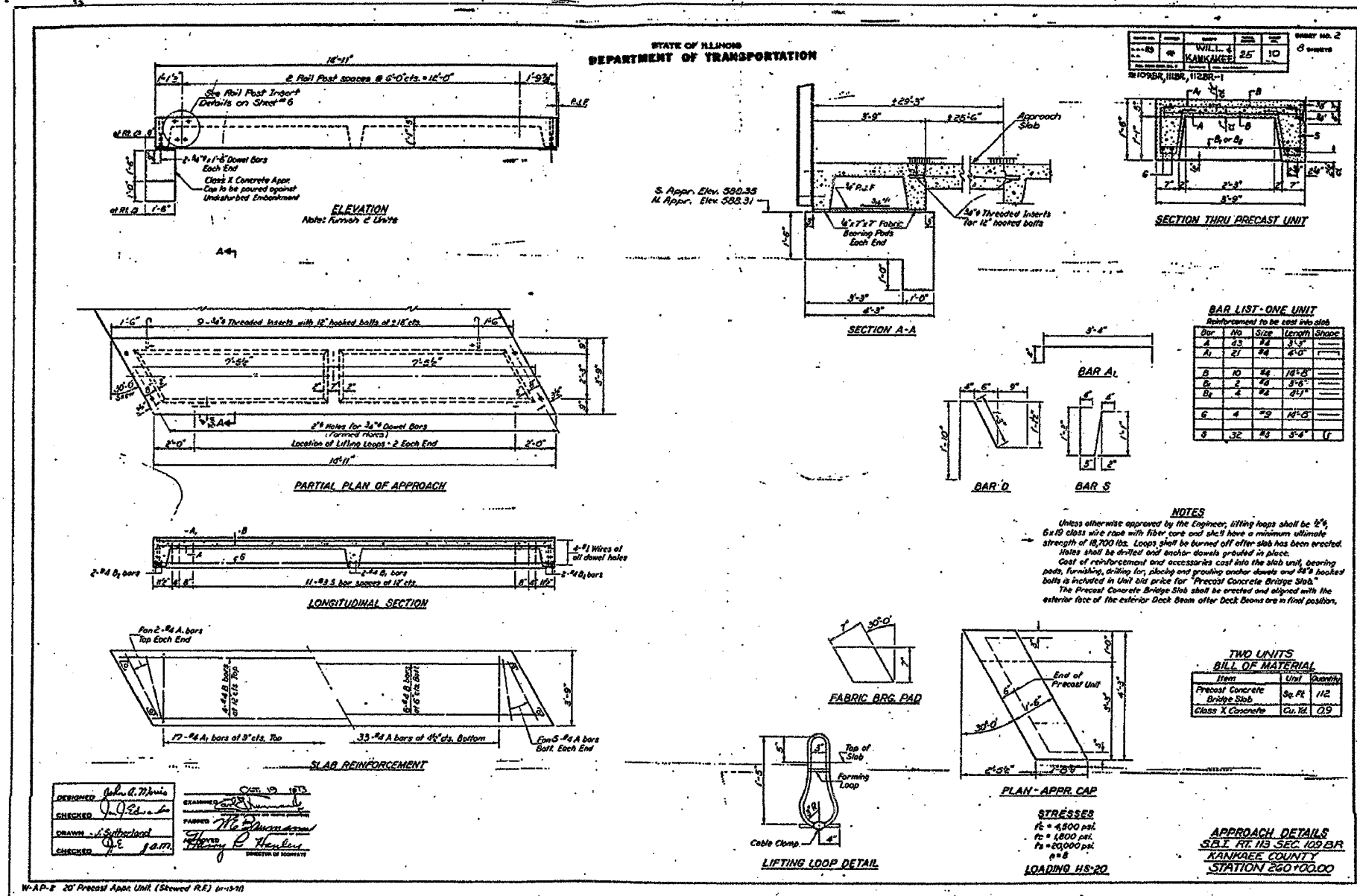
EX BR PLANS FOR  
INFORMATION ONLY

REVISIONS	
NAME	DATE

SCALE: VERT. \_\_\_\_\_  
          HORIZ. \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BR,N	KANKAKEE	58	33
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



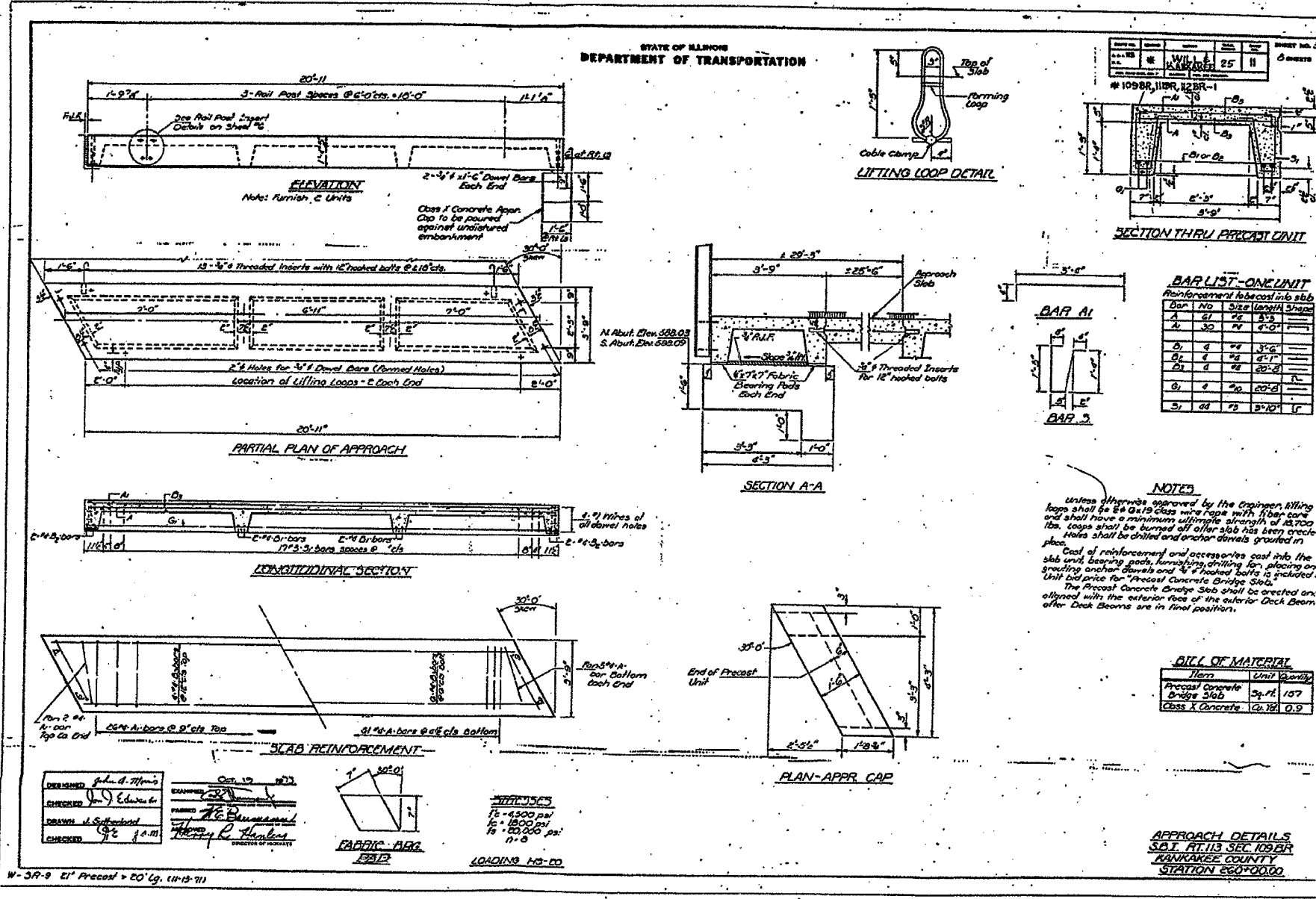
ILLINOIS DEPARTMENT OF TRANSPORTATION

**EX BR PLANS FOR INFORMATION ONLY**

REVISIONS	
NAME	DATE

SCALE: VERT.      DRAWN BY  
 HORIZ.              DATE              CHECKED BY

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BR,N	KANKAKEE	58	34
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



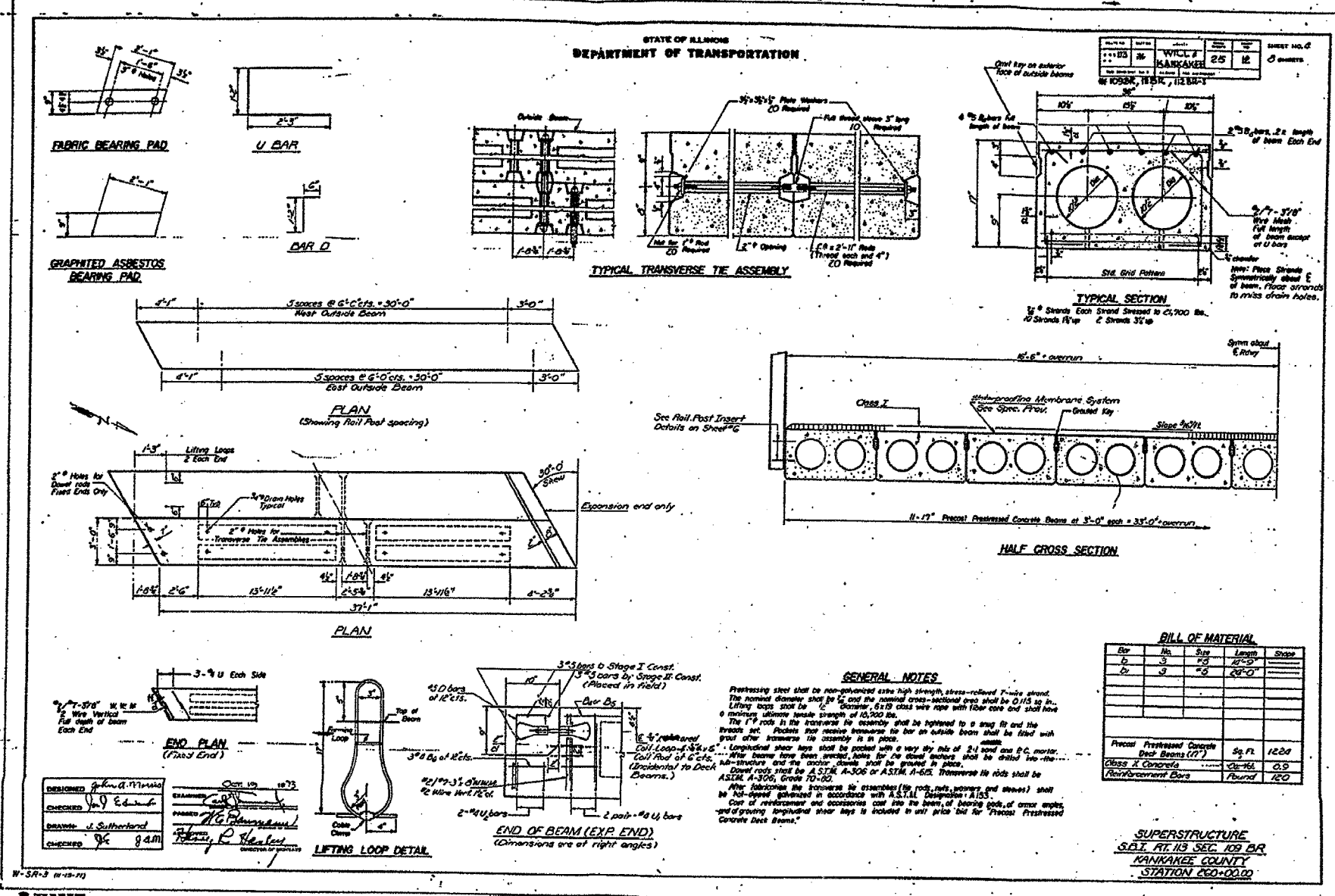
ILLINOIS DEPARTMENT OF TRANSPORTATION

**EX BR PLANS FOR INFORMATION ONLY**

SCALE: VERT. DATE  
 HORIZ. DRAWN BY CHECKED BY

REVISIONS	
NAME	DATE

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR.N	KANKAKEE	58	35
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



DESIGNED: J. Sutherland  
 CHECKED: J.C. gdm  
 DATE: OCT 10 1973

**SUPERSTRUCTURE**  
 S.B.T. AT 113 SEC. 109 BR.  
 KANKAKEE COUNTY  
 STATION 250+00.00

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

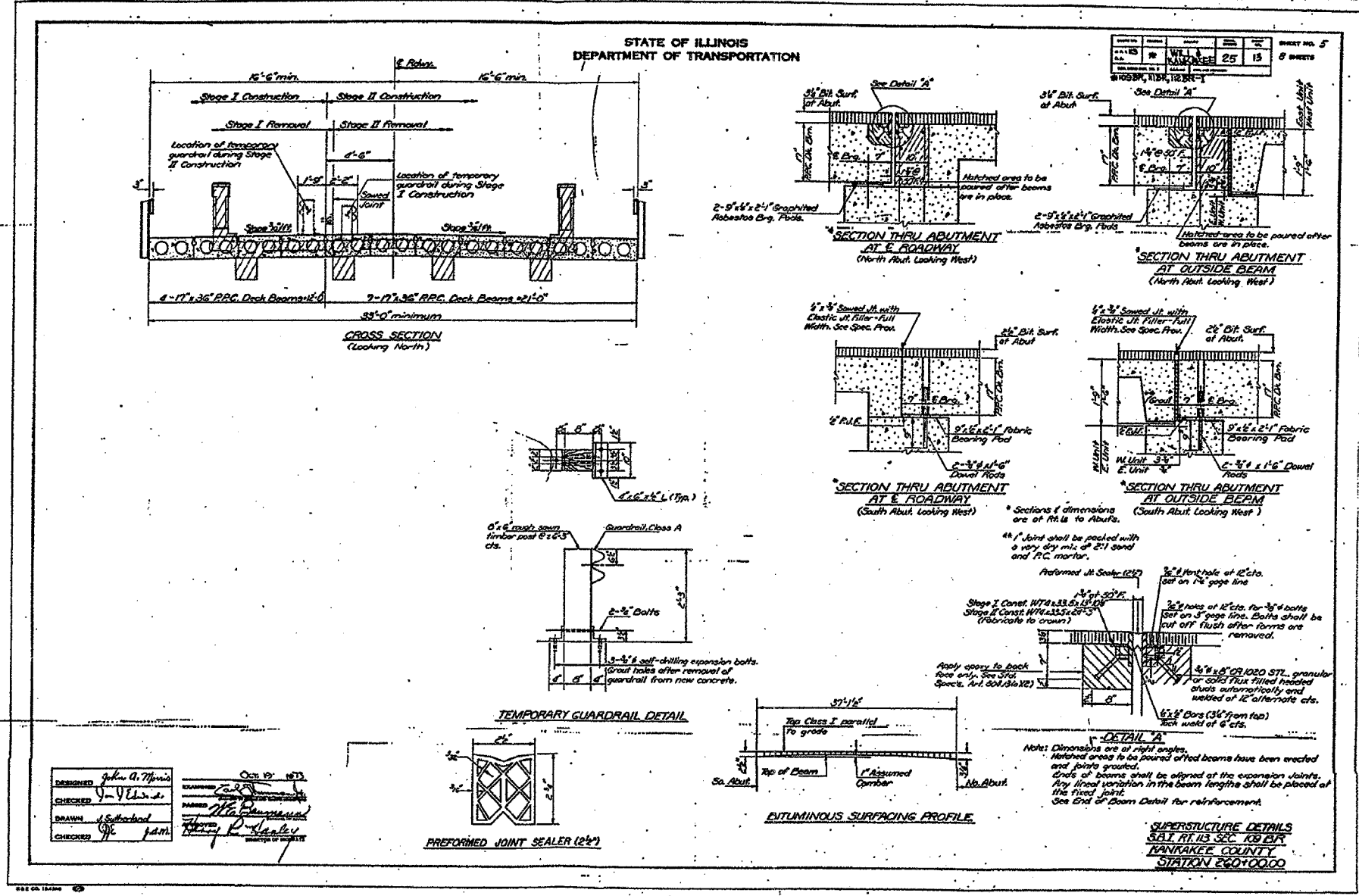
**EX BR PLANS FOR INFORMATION ONLY**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_



F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR.N	KANKAKEE	58	36
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



DESIGNED: John A. Morris  
 CHECKED: J. V. Edwards  
 DRAWN: J. S. Schaefer  
 CHECKED: J. M. ...

OCT 19 1973

ILLINOIS DEPARTMENT OF TRANSPORTATION

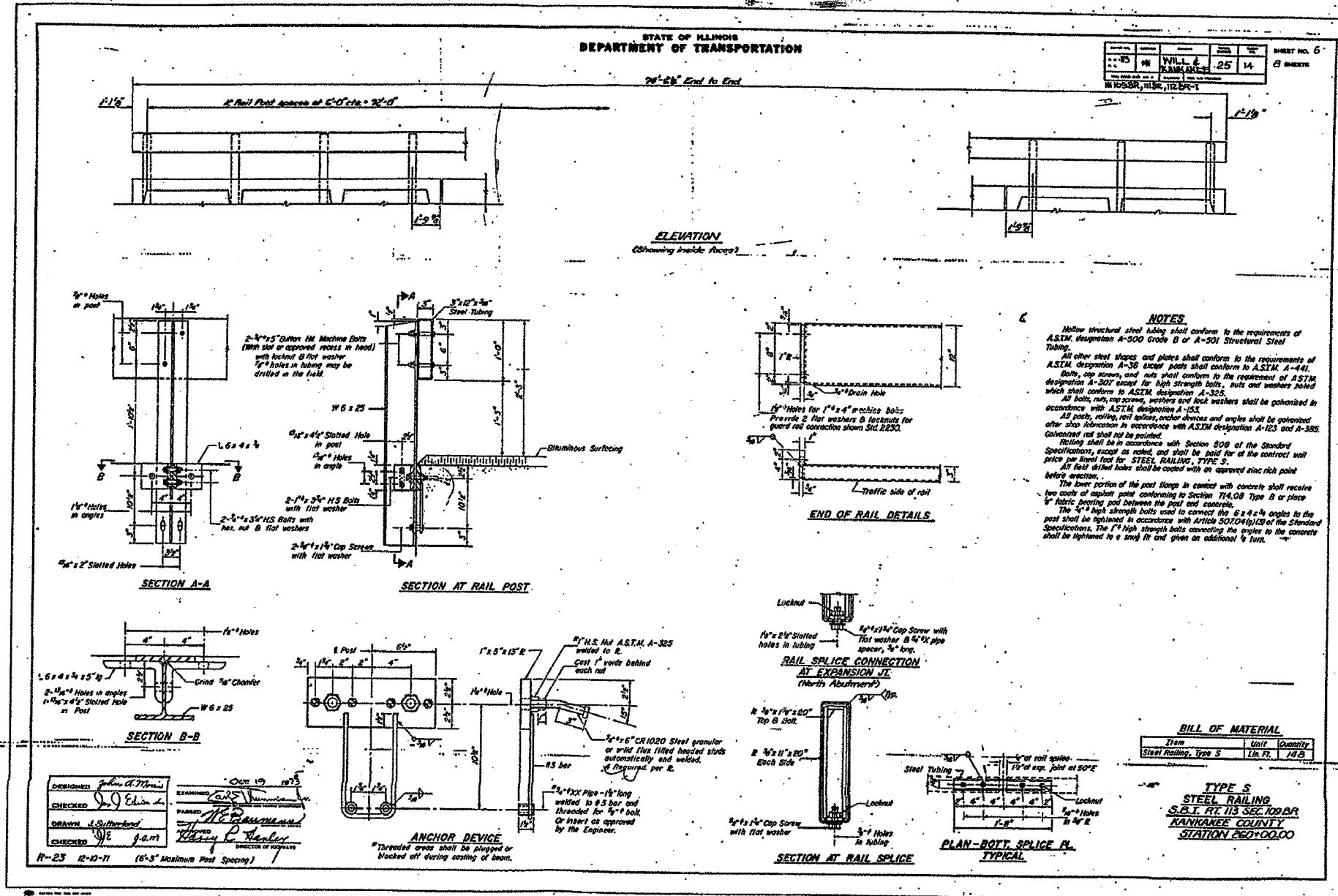
**EX BR PLANS FOR  
INFORMATION ONLY**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_



F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR.N	KANKAKEE	58	37
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



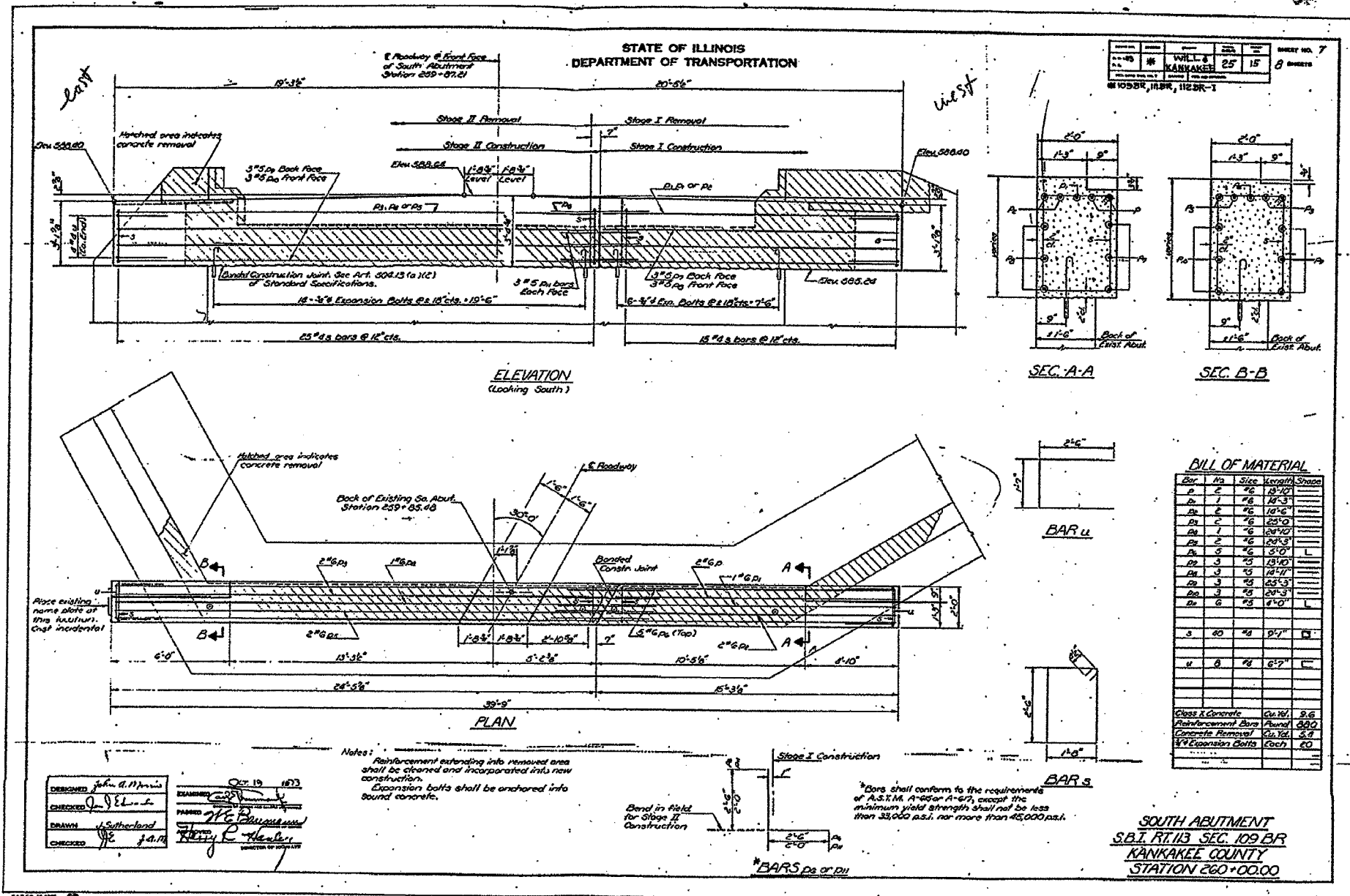
ILLINOIS DEPARTMENT OF TRANSPORTATION

**EX BR PLANS FOR INFORMATION ONLY**

SCALE: VERT. \_\_\_\_\_  
HORIZ. \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BR/M	KANKAKEE	58	38
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



DESIGNED: John A. P. Harris  
CHECKED: J. E. L. ...  
DRAWN: J. Sutherland  
CHECKED: J. A. R. ...

EXAMINED: ...  
APPROVED: H. G. Baumann  
DATE: Oct 19 1973

REVISIONS	
NAME	DATE

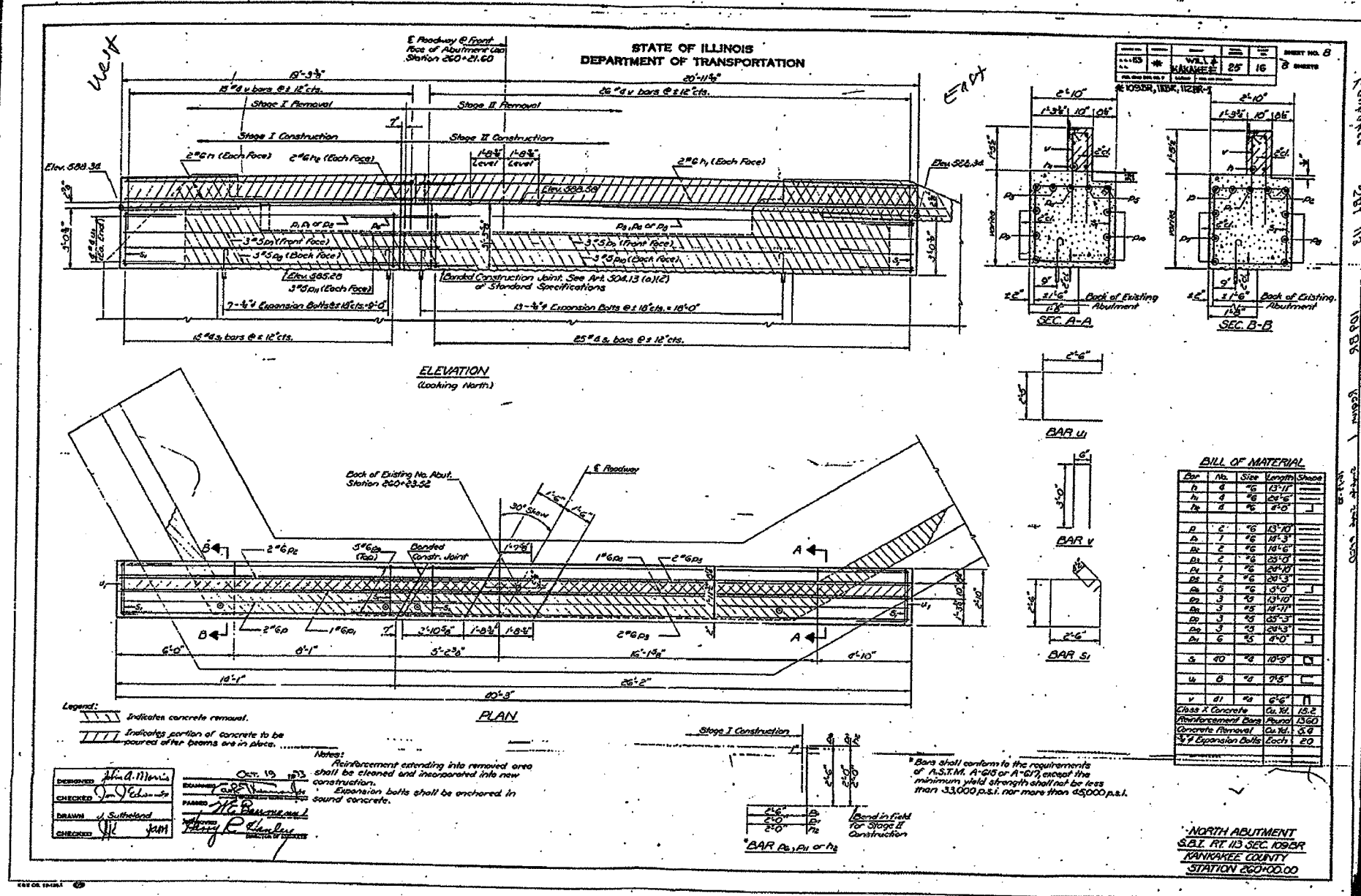
ILLINOIS DEPARTMENT OF TRANSPORTATION

**EX BR PLANS FOR  
INFORMATION ONLY**

SCALE: VERT. \_\_\_\_\_  
          HORIZ. \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_

F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
1317	109 BRN	KANKAKEE	58	39
STA.		TO STA.		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**EX BR PLANS FOR INFORMATION ONLY**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_

DATE \_\_\_\_\_

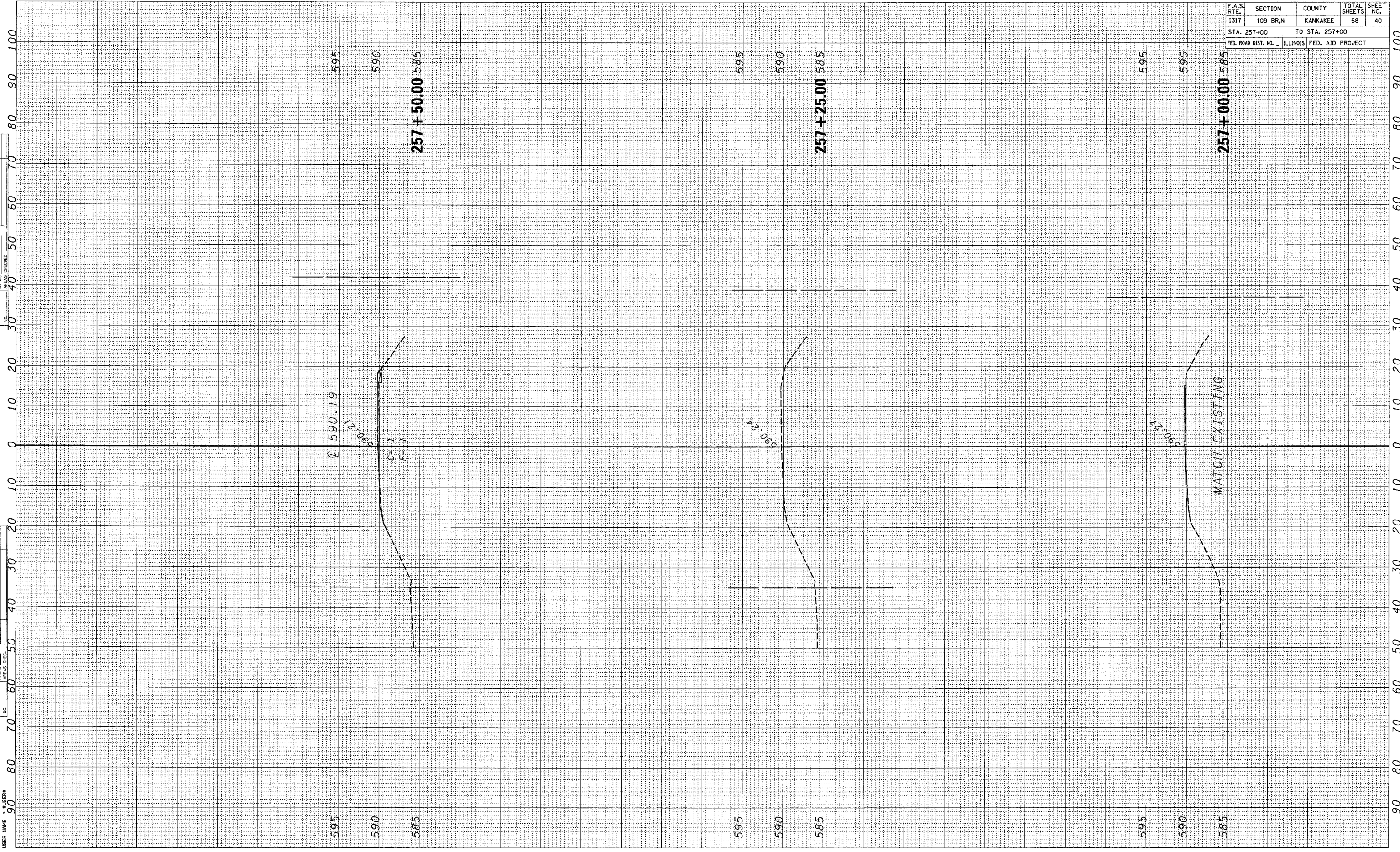
DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_



PLOT DATE = 8/24/2005  
 FILE NAME = #FILE#  
 PLOT SCALE = #SCALE#  
 USER NAME = #USER#

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

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



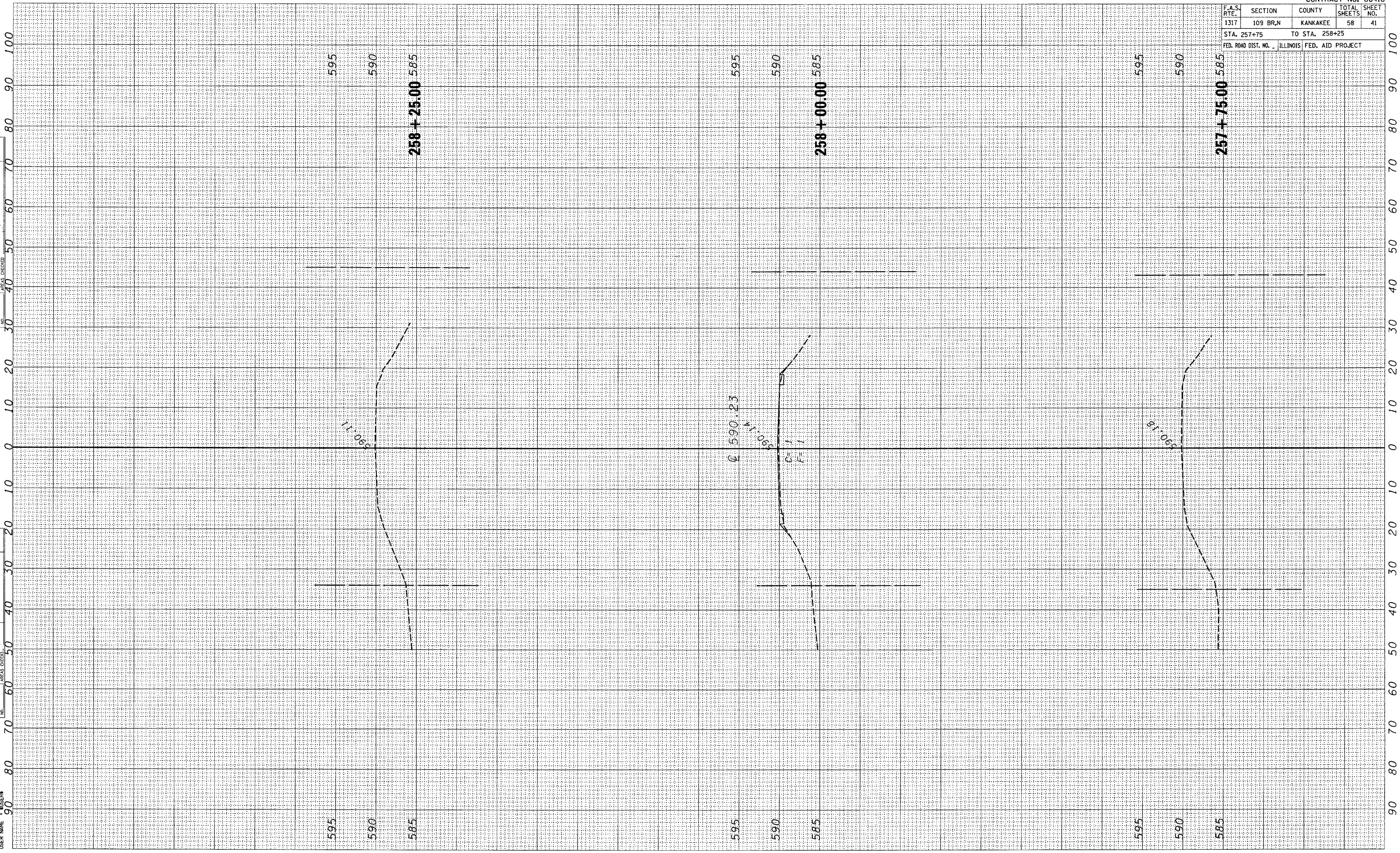
CONTRACT NO. 66410				
F.A.S. DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	40
STA. 257+00 TO STA. 257+00				
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	



PLOT DATE = 8/24/2005  
FILE NAME = #FILEL9  
SCALE = #SCALE  
USER NAME = #USER

ORIGINAL SURVEY PLOTTED AREAS CHECKED  
NOTE BOOK NO. \_\_\_\_\_  
DATE \_\_\_\_\_

FINAL SURVEY PLOTTED AREAS CHECKED  
NOTE BOOK NO. \_\_\_\_\_  
DATE \_\_\_\_\_



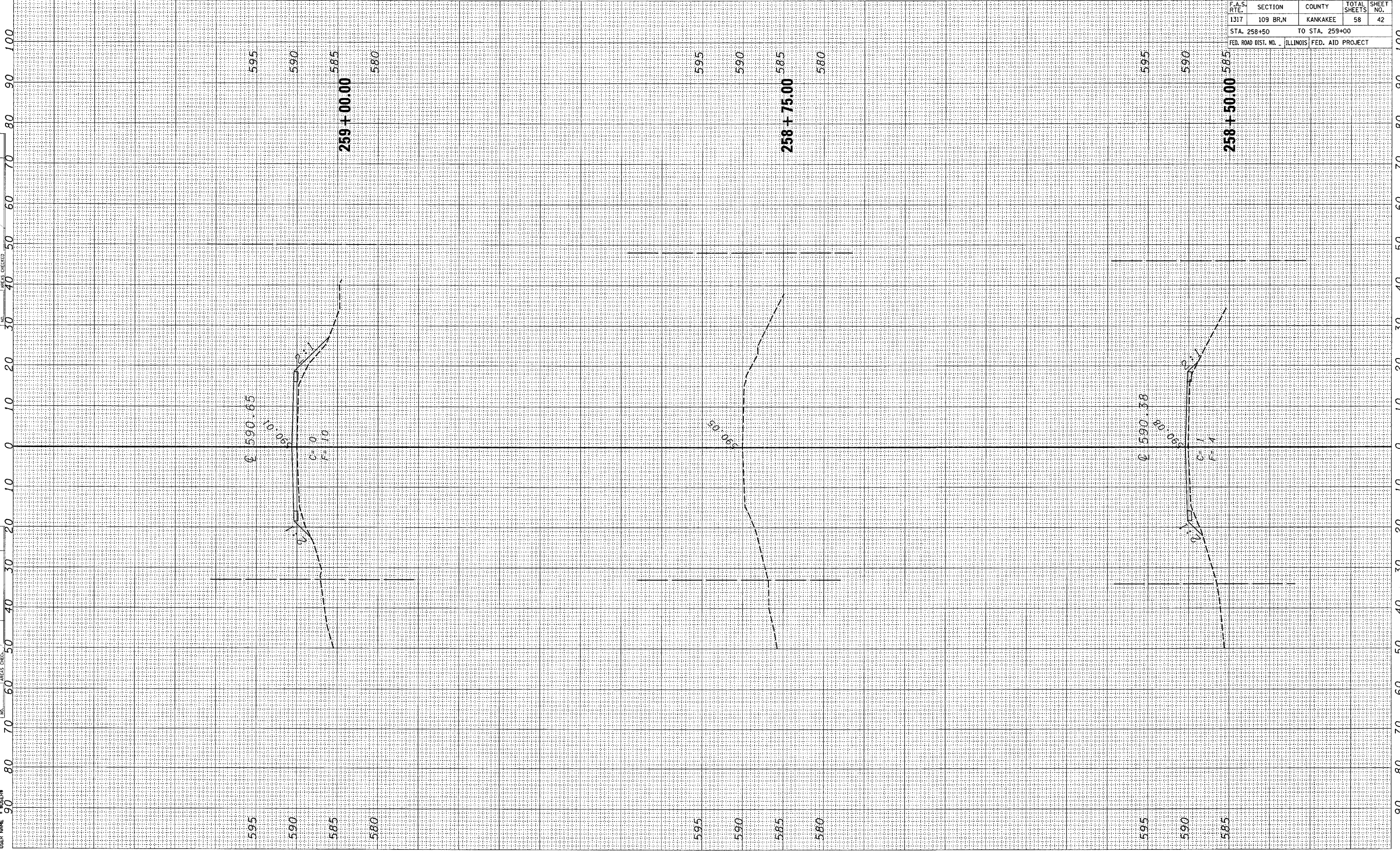
CONTRACT NO. 66410				
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	41
STA. 257+75		TO STA. 258+25		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



PLOT DATE = 8/24/2005  
 FILE NAME = #FILEL5  
 USER NAME = #USERN

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

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



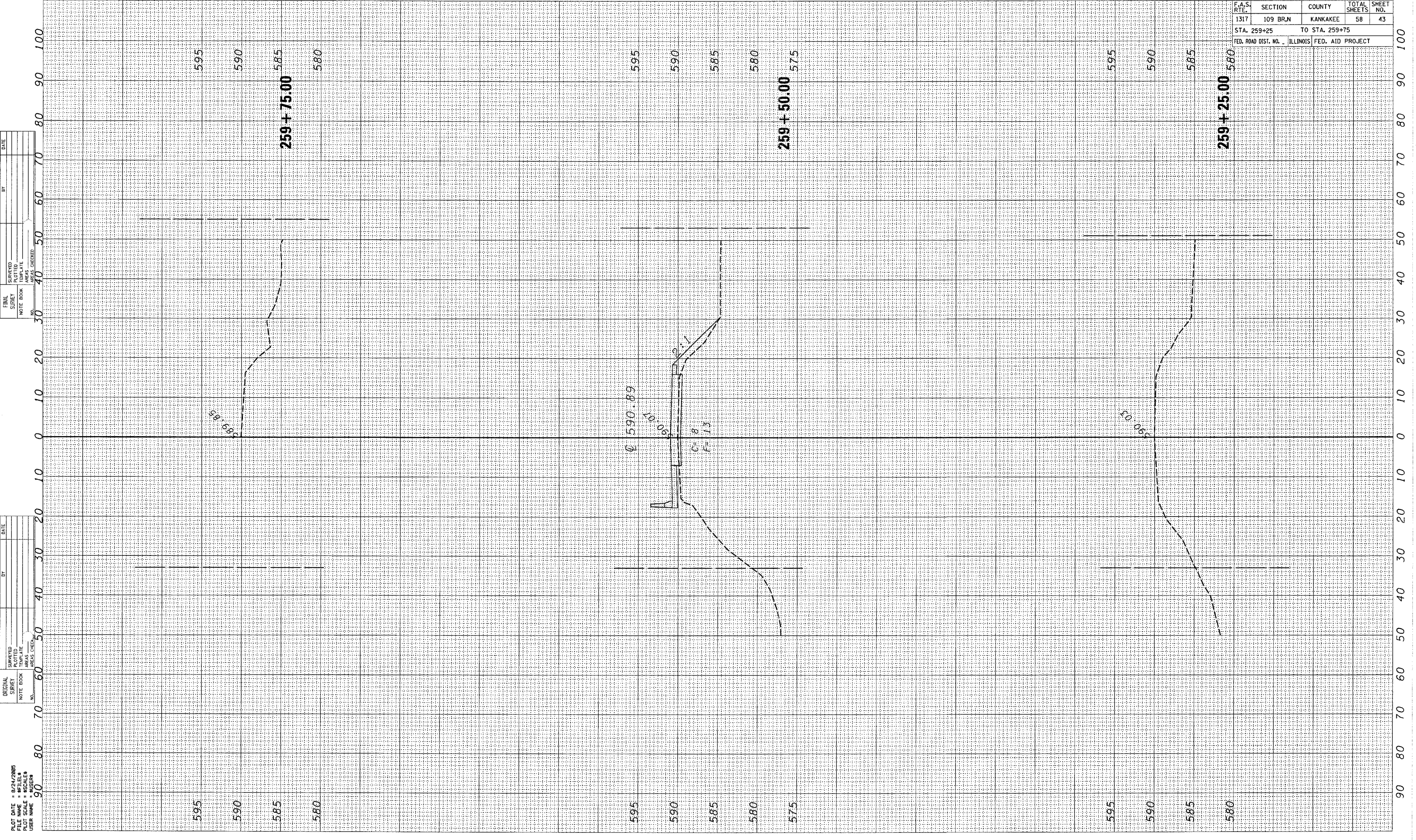
CONTRACT NO. 66410				
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	42
STA. 258+50 TO STA. 259+00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



PLOT DATE = 01/24/2005  
 FILE NAME = 01LE14  
 PLOT SCALE = 80000  
 USER NAME =

ORIGINAL SURVEY  
 CHECKED BY  
 DATE

FINAL SURVEY  
 CHECKED BY  
 DATE



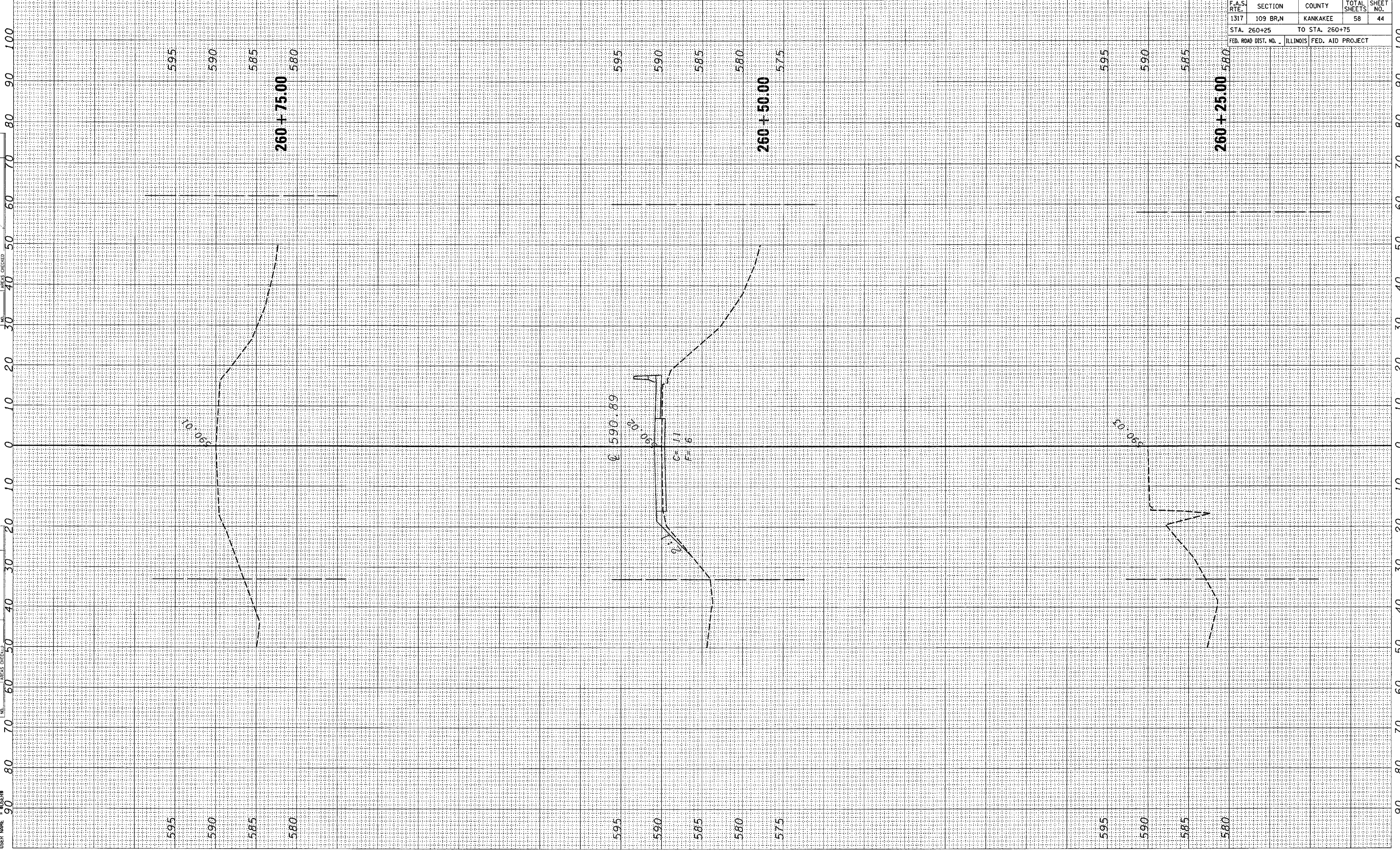
CONTRACT NO. 66410				
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR.N	KANKAKEE	58	43
STA. 259+25 TO STA. 259+75				
FED. ROAD DIST. NO. ILLINOIS			FED. AID PROJECT	



PLOT DATE = 8/24/2005  
 FILE NAME = #FILEL#  
 SCALE = #SCALE#  
 USER NAME = #USER#

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

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



CONTRACT NO. 66410			
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS
1317	109 BR,N	KANKAKEE	58
STA. 260+25		TO STA. 260+75	
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT	

100  
90  
80  
70  
60  
50  
40  
30  
20  
10  
0  
10  
20  
30  
40  
50  
60  
70  
80  
90

595  
590  
585  
580

260+75.00

595  
590  
585  
580  
575

260+50.00

595  
590  
585  
580

260+25.00



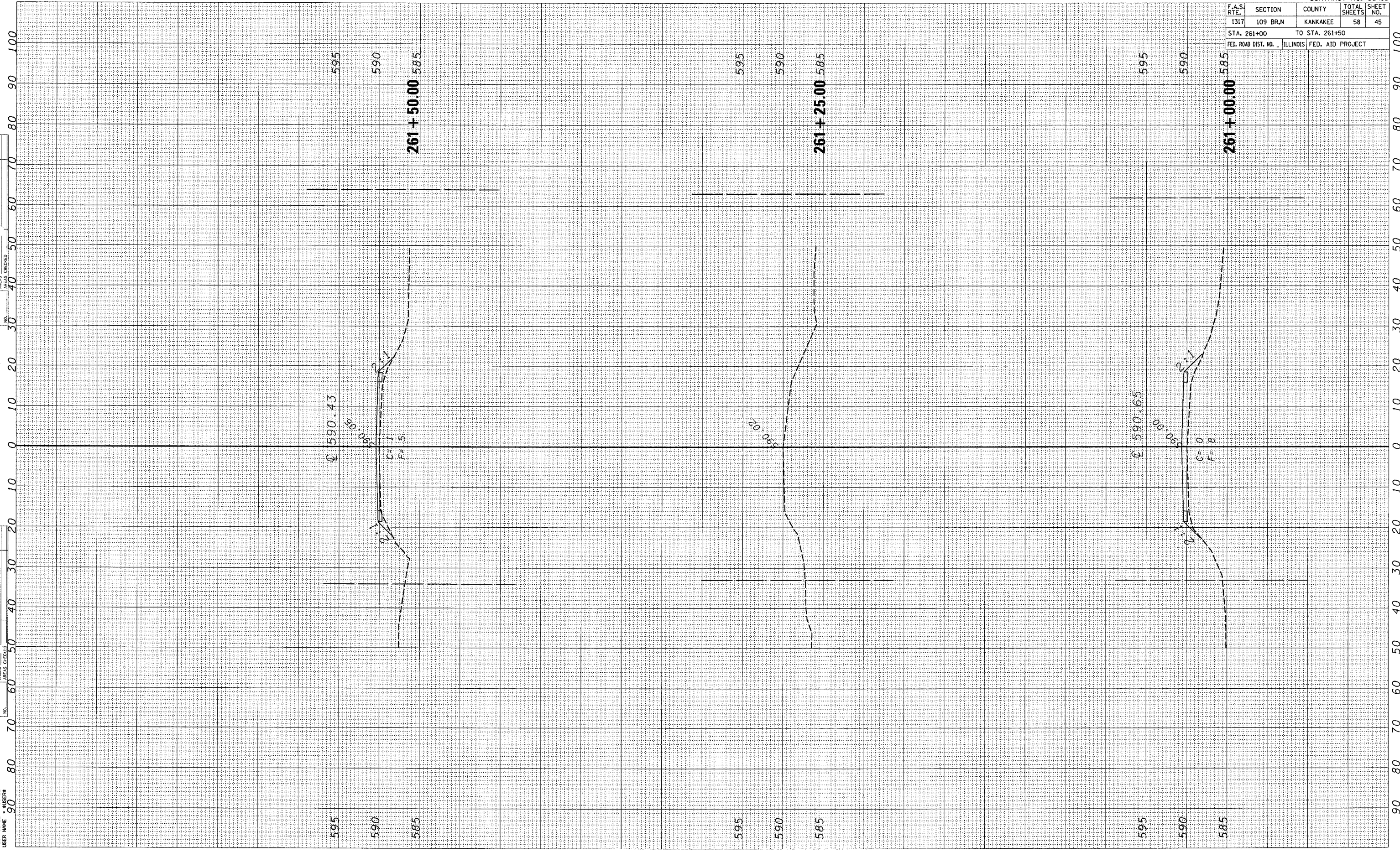
PLOT DATE = 02/24/2005  
 FILE NAME = #FILE#  
 PLOT SCALE = #SCALE#  
 USER NAME = #USER#

ORIGINAL SURVEY  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_

FINAL SURVEY  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_

BY \_\_\_\_\_

DATE \_\_\_\_\_



CONTRACT NO. 66410

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	45
STA. 261+00		TO STA. 261+50		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

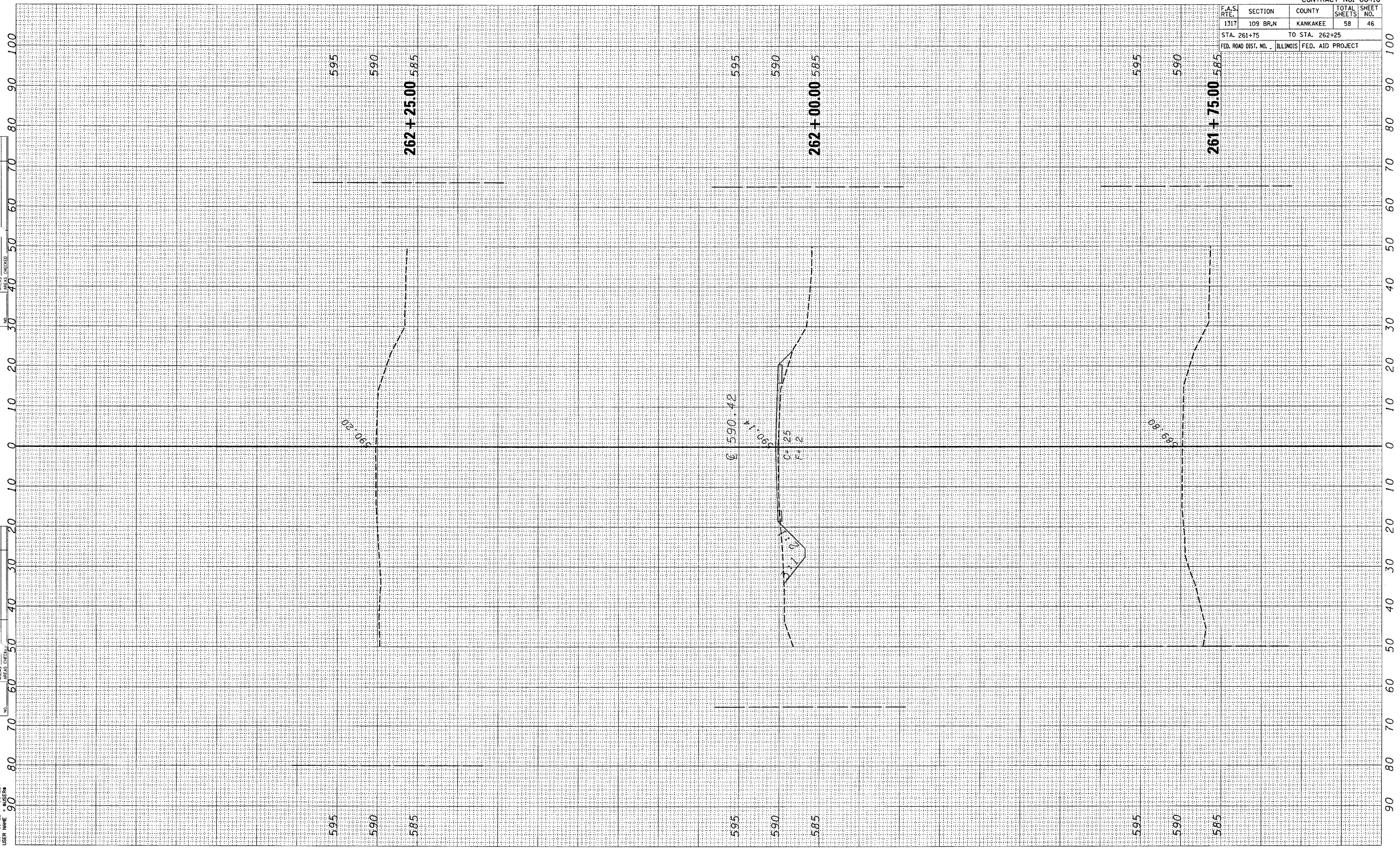


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	46
STA. 261+75 TO STA. 262+25			ILLINOIS FED. AID PROJECT	

FINAL SURVEY  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_  
 DATE \_\_\_\_\_

ORIGINAL SURVEY  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_  
 DATE \_\_\_\_\_

PLOT DATE : 8/24/2005  
 FILE NAME : #FILE#  
 PLOT SCALE : #SCALE#  
 USER NAME : #USER#





PLOT DATE = 8/24/2005  
 FILE NAME = #FILE#  
 PLOT SCALE = #SCALE#  
 USER NAME = #USER#

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

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



CONTRACT NO. 66410

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	47
STA. 262+50		TO STA.263+00		
FED. ROAD DIST. NO. _____		ILLINOIS FED. AID PROJECT		

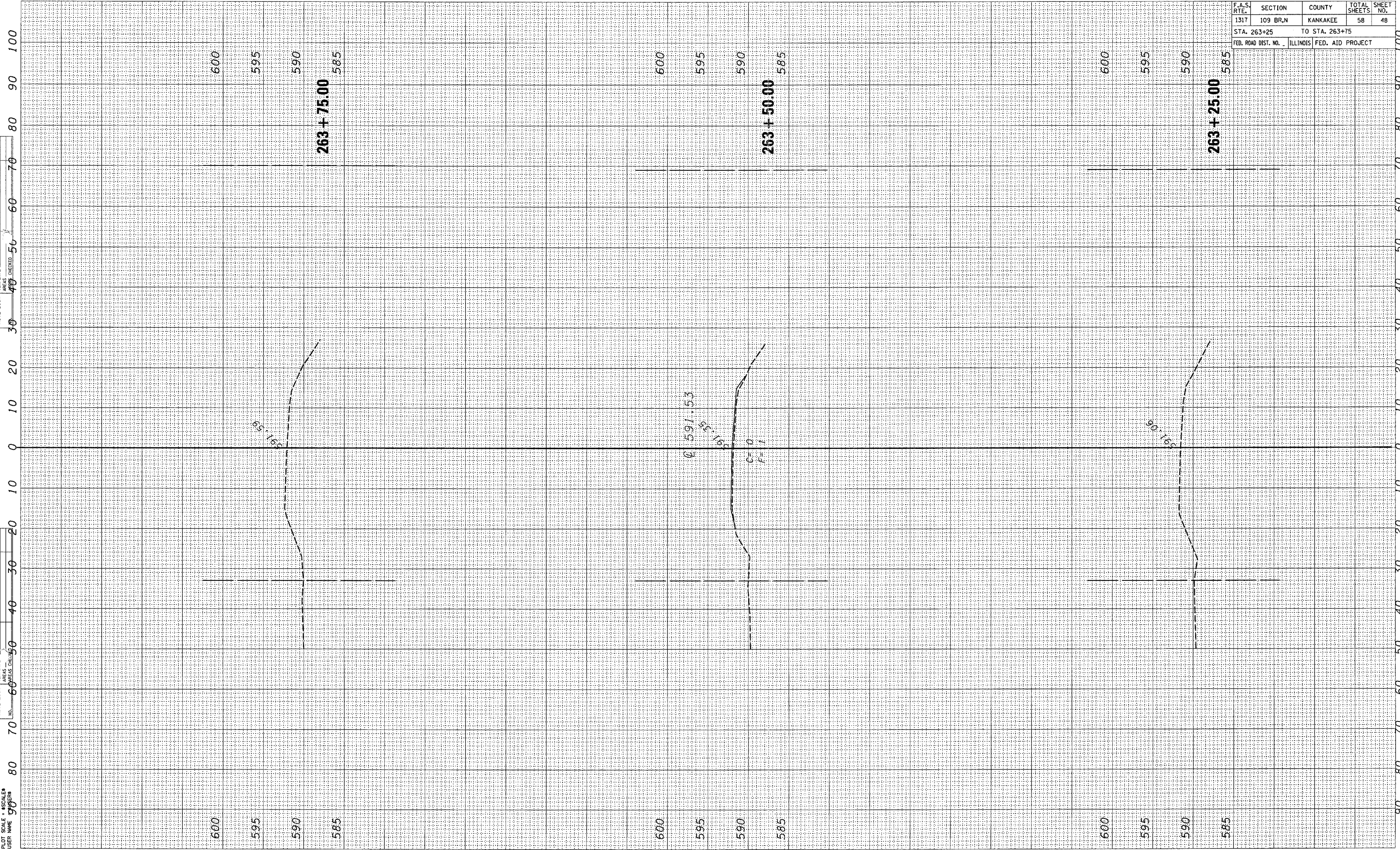


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	48
STA. 263+25		TO STA. 263+75		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		

PLOT DATE = 8/24/2005  
 FILE NAME = #FILE#  
 PLOT SCALE = #SCALE#  
 USER NAME = #USER#

ORIGINAL SURVEY  
 SURVEY NO. \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 PLOTTED BY \_\_\_\_\_  
 DATE \_\_\_\_\_

FINAL SURVEY  
 SURVEY NO. \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 PLOTTED BY \_\_\_\_\_  
 DATE \_\_\_\_\_



600  
595  
590  
585

600  
595  
590  
585

600  
595  
590  
585

600  
595  
590  
585

600  
595  
590  
585

600  
595  
590  
585

263+75.00

263+50.00

263+25.00

90°

591.53

C=0  
F=1

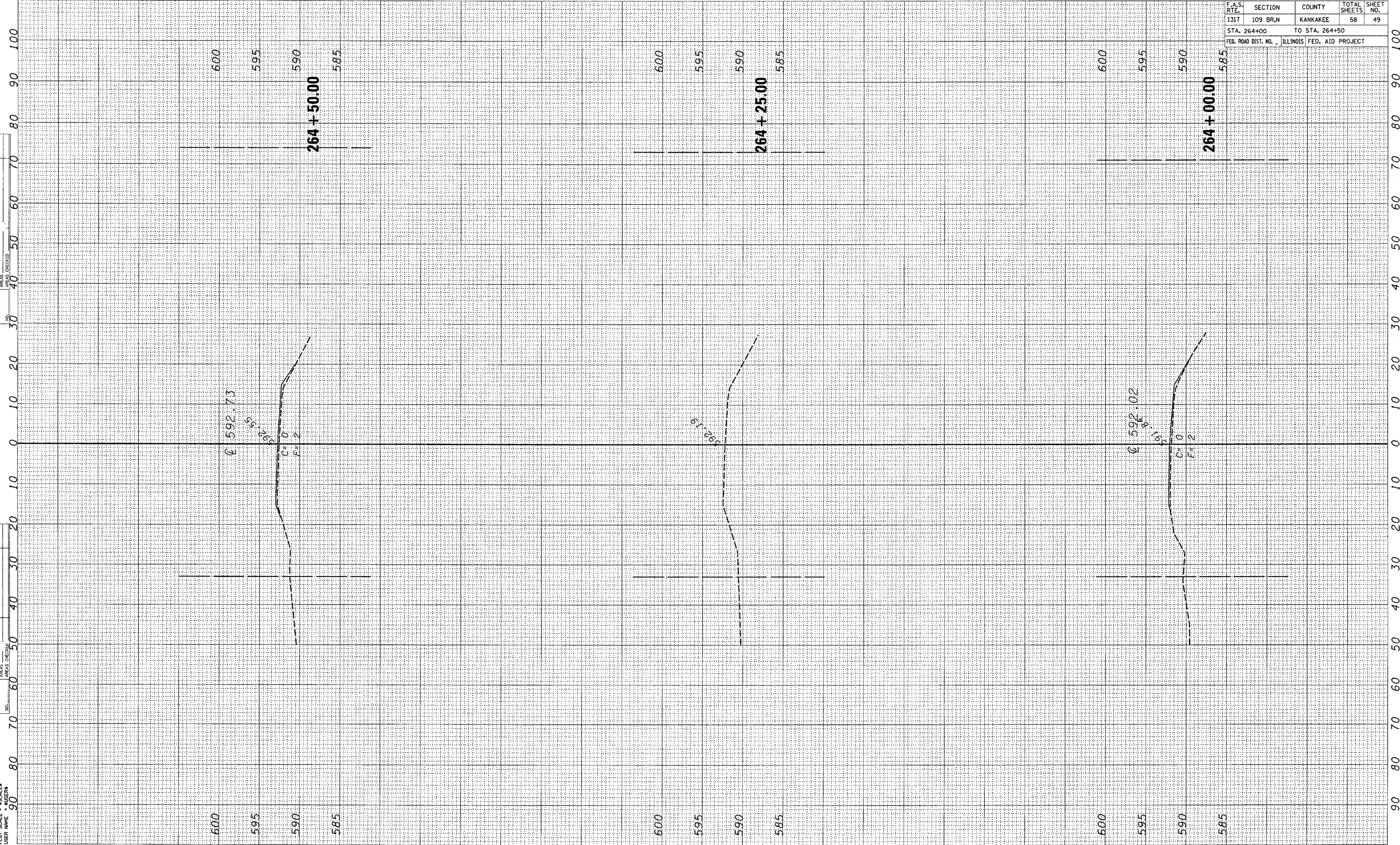
90°



PLOT DATE = 07/24/2005  
 FILE NAME = #FILE#  
 SCALE = #SCALE#  
 USER NAME = #USER#

ORIGINAL SURVEY BY DATE  
 NOTE BOOK  
 TEMPLATE  
 AREAS CHECKED

FINAL SURVEY BY DATE  
 NOTE BOOK  
 TEMPLATE  
 AREAS CHECKED



CONTRACT NO. 66410				
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	49
STA. 264+00 TO STA. 264+50				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

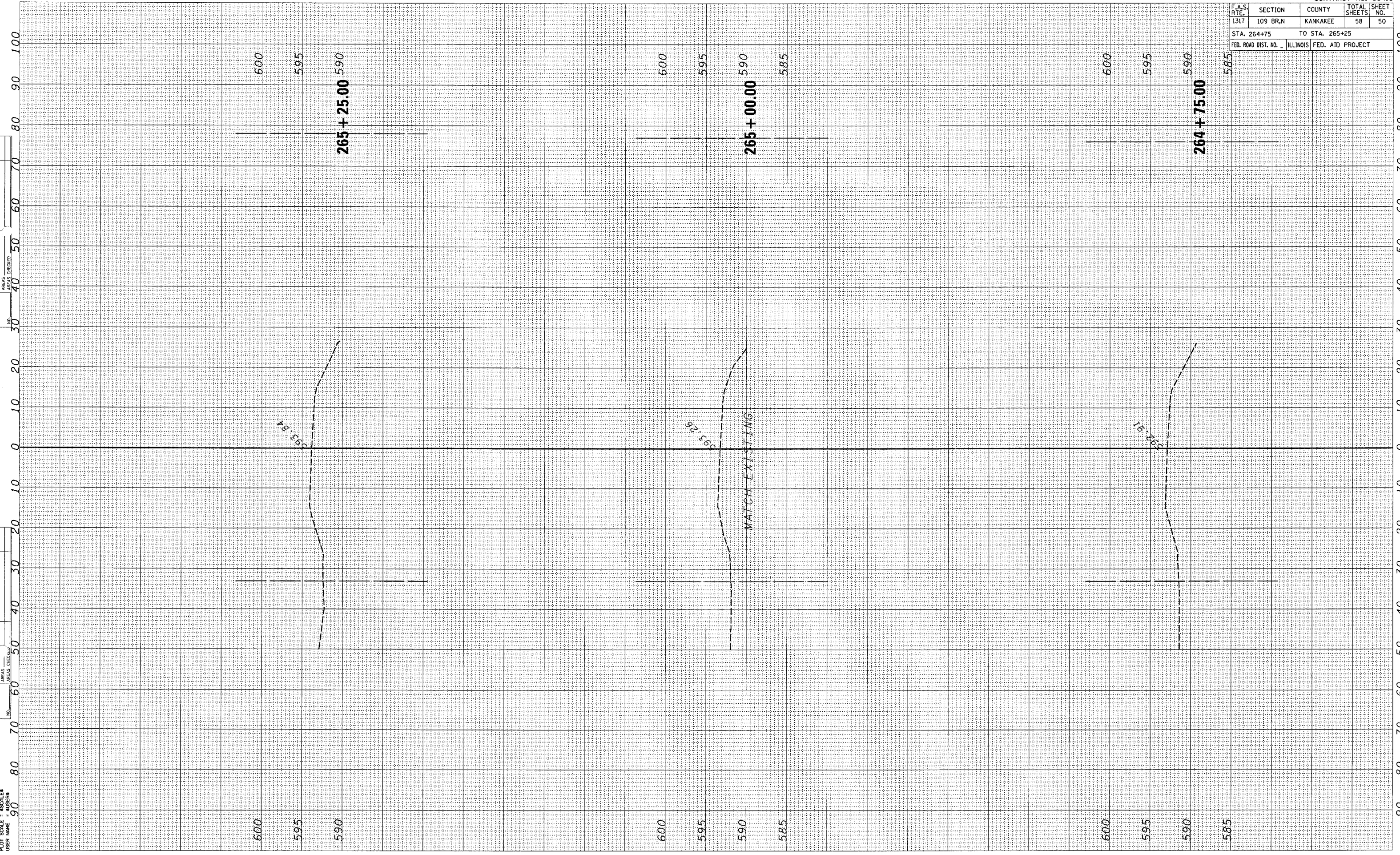


F.A.S. NO. 1317	SECTION 109 BR,N	COUNTY KANKAKEE	TOTAL SHEETS 58	SHEET NO. 50
STA. 264+75		TO STA. 265+25		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINN	CORRECTED	DATE
SURVEY	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS	CHECKED

ORIGINAL	SURVEY	DATE
NOTE BOOK	PLOTTED	
NO.	AREAS	CHECKED

PLOT DATE = 01/24/2005  
 FILE NAME = #FILE#  
 USER NAME = #USER#





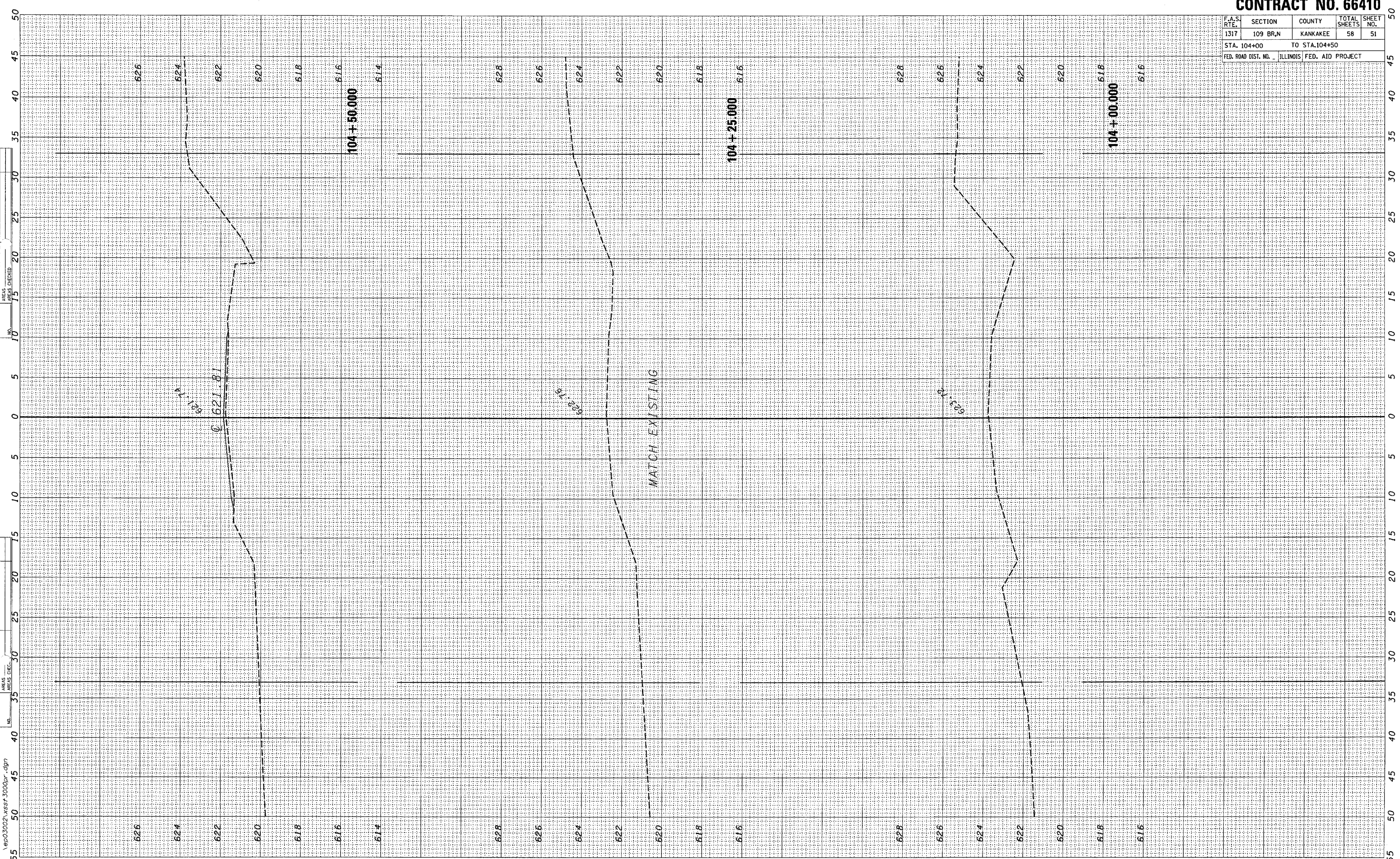
**CONTRACT NO. 66410**

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	51
STA. 104+00 TO STA.104+50				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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

Dec. 23, 2003  
 \ep03002\ssst3000br.dgn



**3000N RELOCATED**



F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	52
STA. 104+75 TO STA.105+25				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY BY DATE

NO. 10 15 20 25 30 35 40 45 50

SURVEYED BY

PLOTTED BY

NOTE BOOK NO.

AREAS CHECKED

ORIGINAL SURVEY BY DATE

NO. 10 15 20 25 30 35 40 45 50

SURVEYED BY

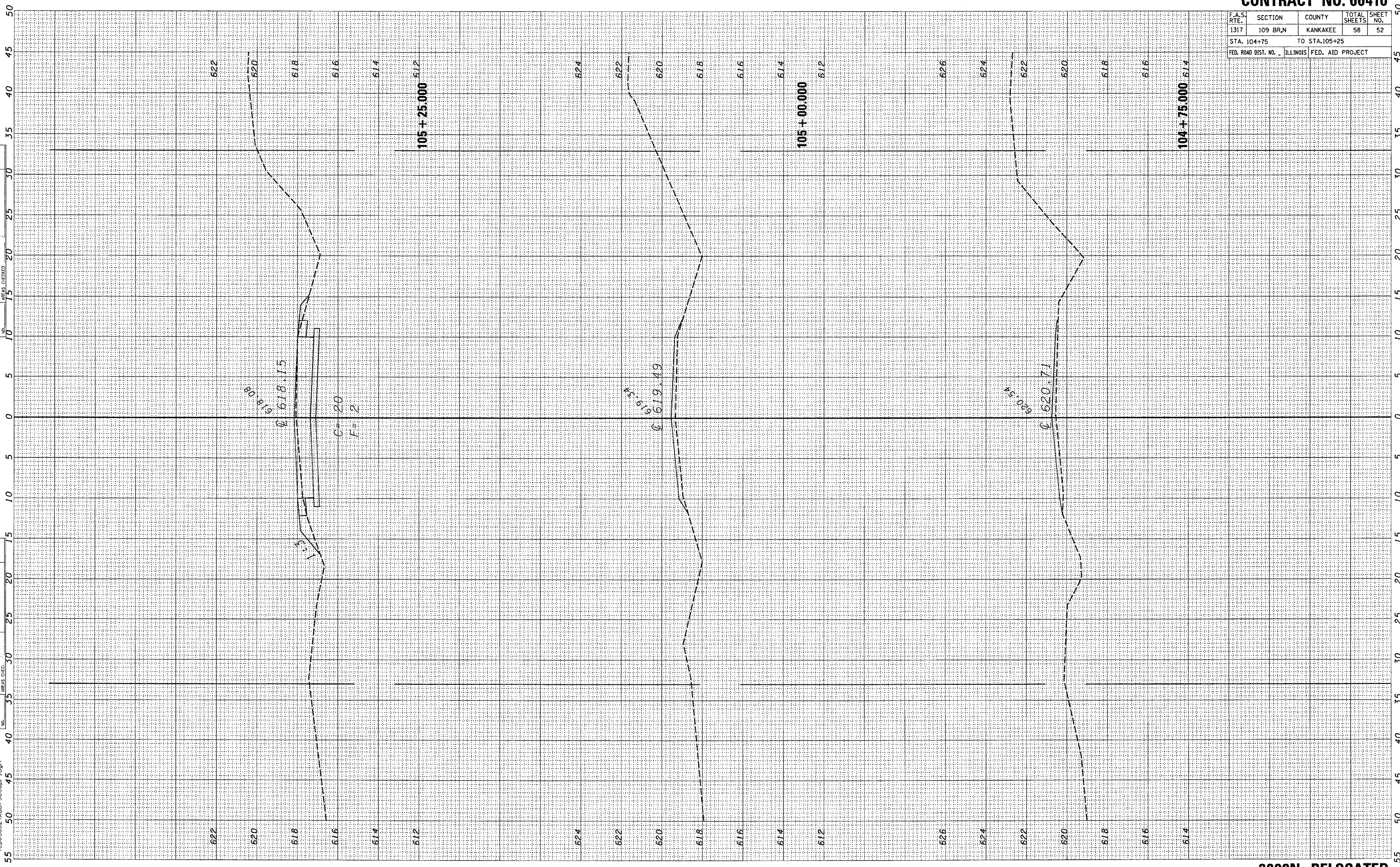
PLOTTED BY

NOTE BOOK NO.

AREAS CHECKED

Dec. 23, 2003

\\epd03002\asr\30000pr.dgn





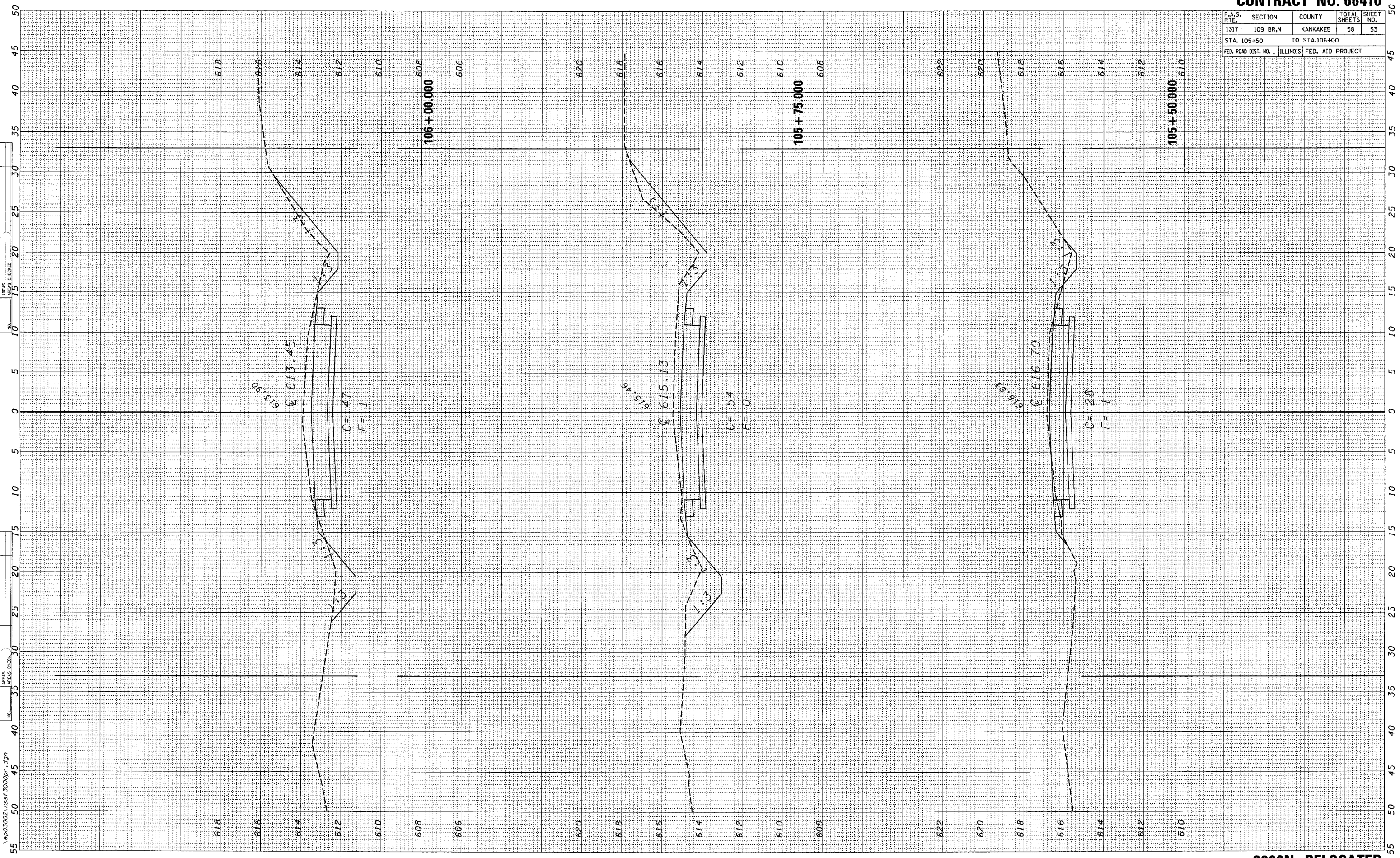
**CONTRACT NO. 66410**

F.A.S. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	53
STA. 105+50		TO STA.106+00		
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		

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

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

Dec. 23, 2003  
 \ap03002\ssst\3000pr.dgn



**3000N RELOCATED**

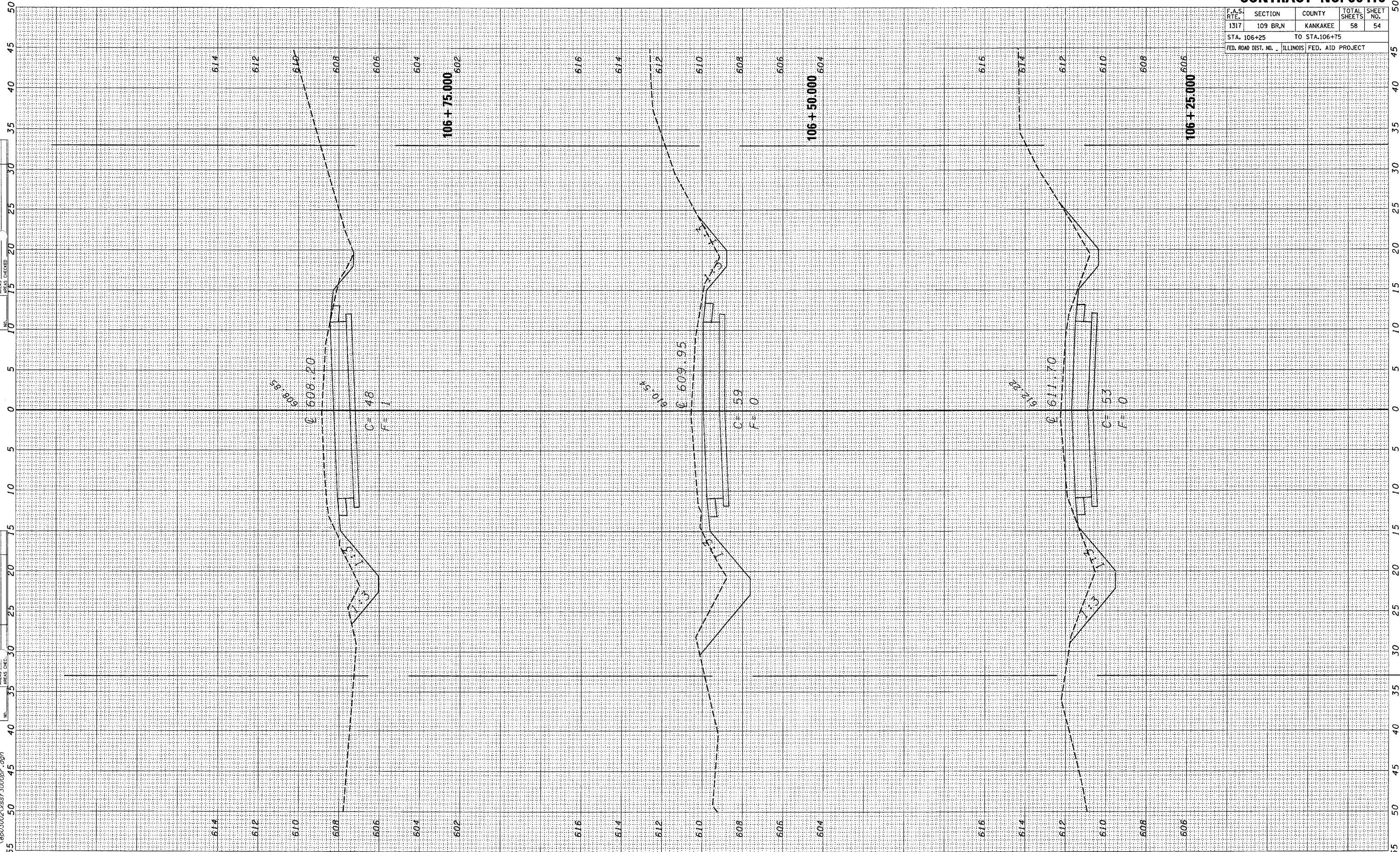


F.A.S. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	54
STA. 106+25		TO STA.106+75		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FINAL SURVEY  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_

ORIGINAL SURVEY  
 SURVEYED \_\_\_\_\_  
 PLOTTED \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 BY \_\_\_\_\_ DATE \_\_\_\_\_

Dec. 23, 2003  
 \ep030021\ssst 3000pr.dgn



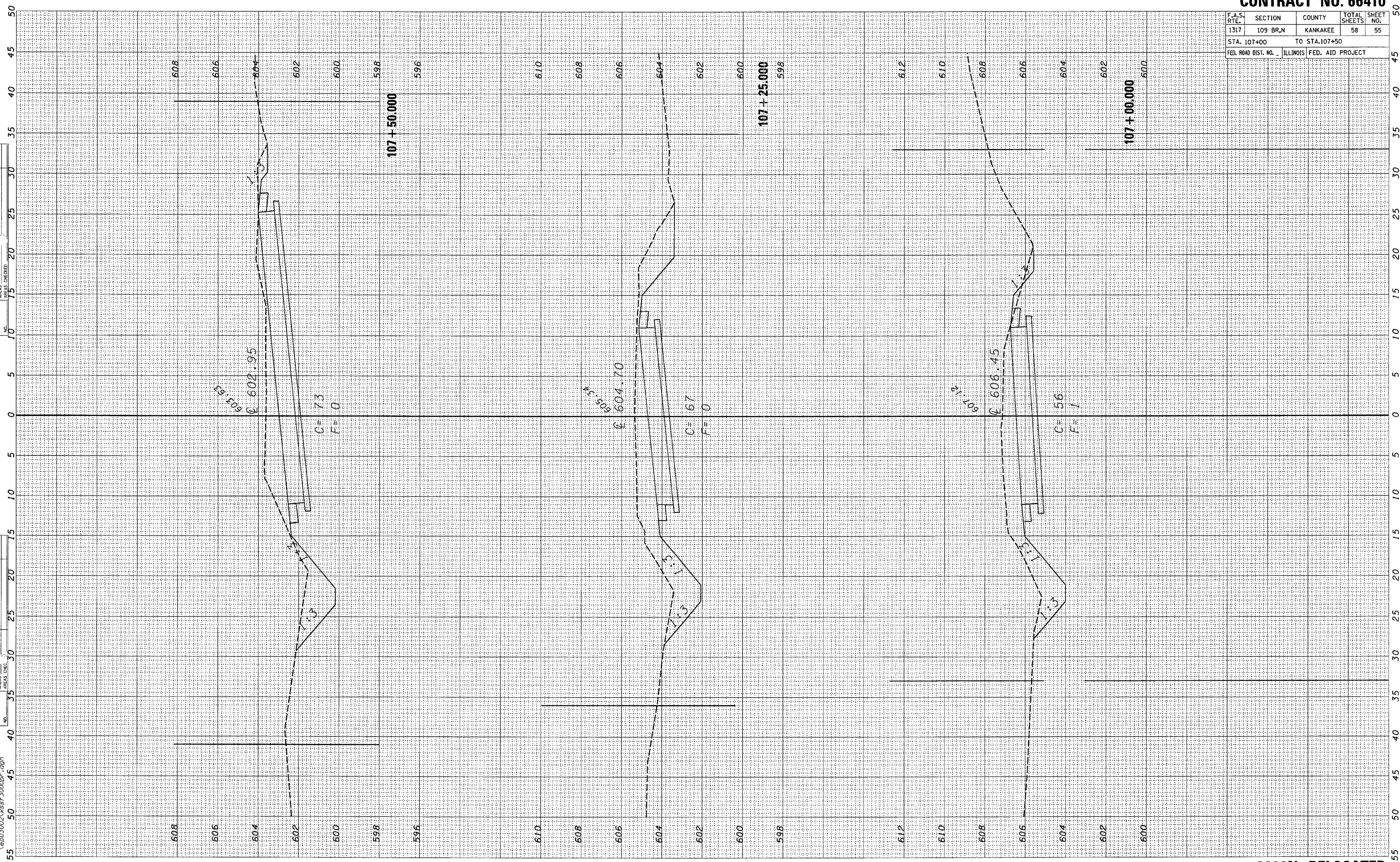


F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	55
STA. 107+00		TO STA.107+50		
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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

Dec. 23, 2003  
 \ep03002\xsst3000pr.dgn





Dec. 23, 2003

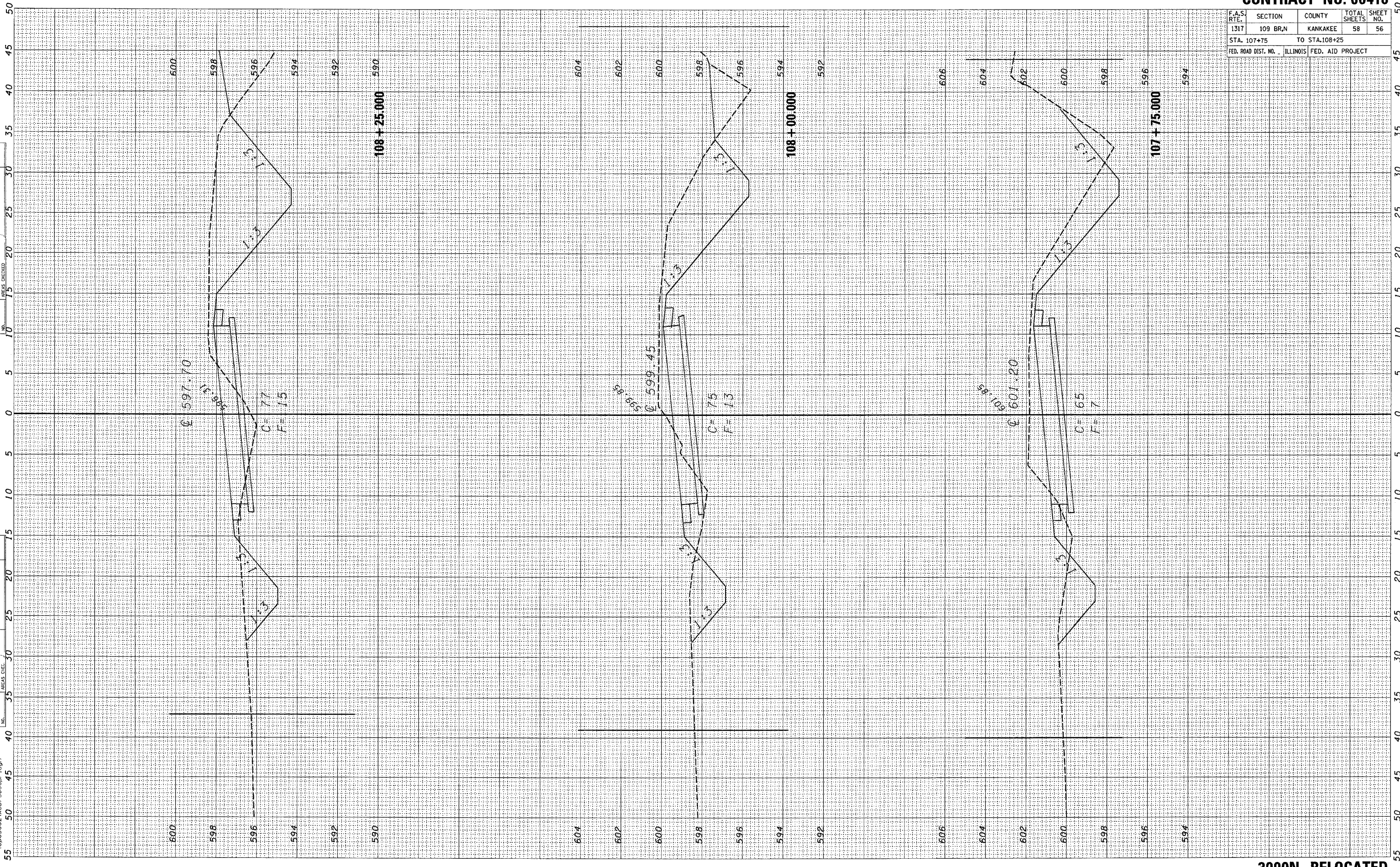
\\ep02002\ssst\3000pr.dgn

FINAL SURVEY	BY	DATE
SURVEYED		
NOTED		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
PLOTTED		
NOTE BOOK		
AREAS CHECKED		

### CONTRACT NO. 66410

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	56
STA. 107+75		TO STA. 108+25		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



3000N RELOCATED



Dec. 23, 2003

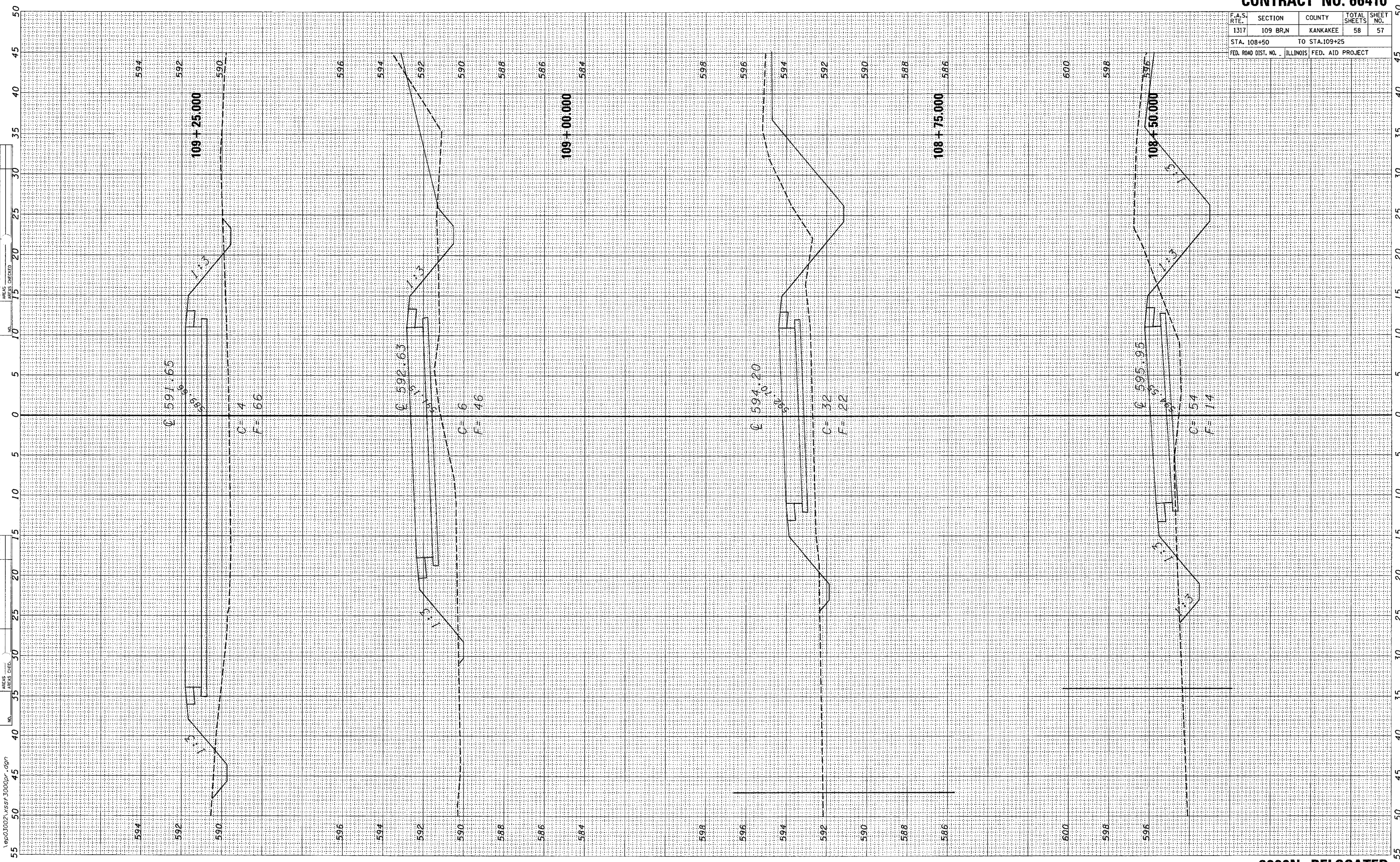
\\p03002\ssr\3000pr.dgn

FINAL SURVEY	CONVERTED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CREATED		

ORIGINAL SURVEY	CONVERTED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS		
	CREATED		

### CONTRACT NO. 66410

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	57
STA. 108+50		TO STA.109+25		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



3000N RELOCATED

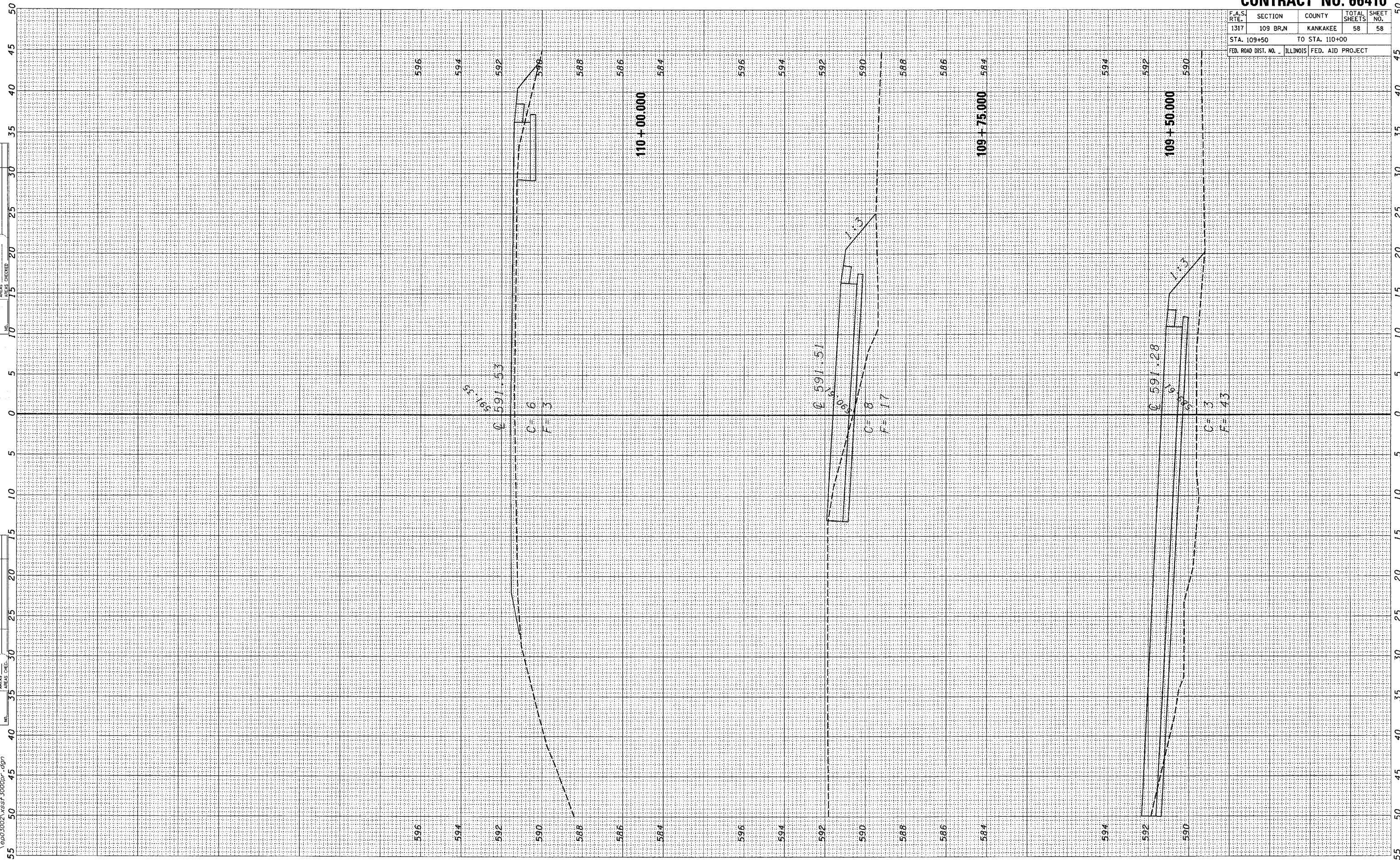


Dec. 23, 2003

\\ep01002\ssst\3000pr.dgn

ORIGINAL SURVEY	DATE
NOTED	
TEMPLATE	
AREAS	
BY	
DATE	

FINAL SURVEY	DATE
NOTED	
TEMPLATE	
AREAS	
BY	
DATE	



# CONTRACT NO. 66410

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1317	109 BR,N	KANKAKEE	58	58
STA. 109+50		TO STA. 110+00		
FED. ROAD DIST. NO. ILLINOIS		FED. AID PROJECT		

3000N RELOCATED