

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

FAP ROUTE 71 (IL. RTE. 54)  
SECTION (3R)J-1  
PROJECT: F-0071(113)  
SANGAMON COUNTY

C-96-517-05

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3R)J-1	SANGAMON	10	1

CONTRACT NO. 72966

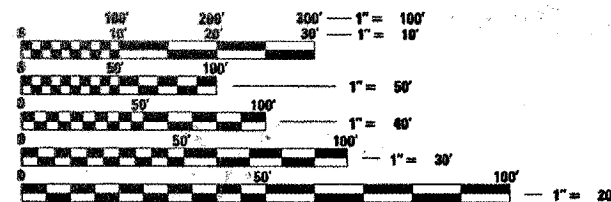
FOR INDEX OF SHEETS AND  
HIGHWAY STANDARDS, SEE SHEET NO. 2

**PROJECT LOCATION/DESCRIPTION:**

**GUARDRAIL IMPROVEMENTS,  
VARIOUS LOCATIONS**

DISTRICT 6 NO. (815) 434-6131

PROJECT ENGINEER: JOHN BARANZELLI  
SQUAD LEADER: MARCUS BRUCE  
TOWNSHIP: CLEAR LAKE



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

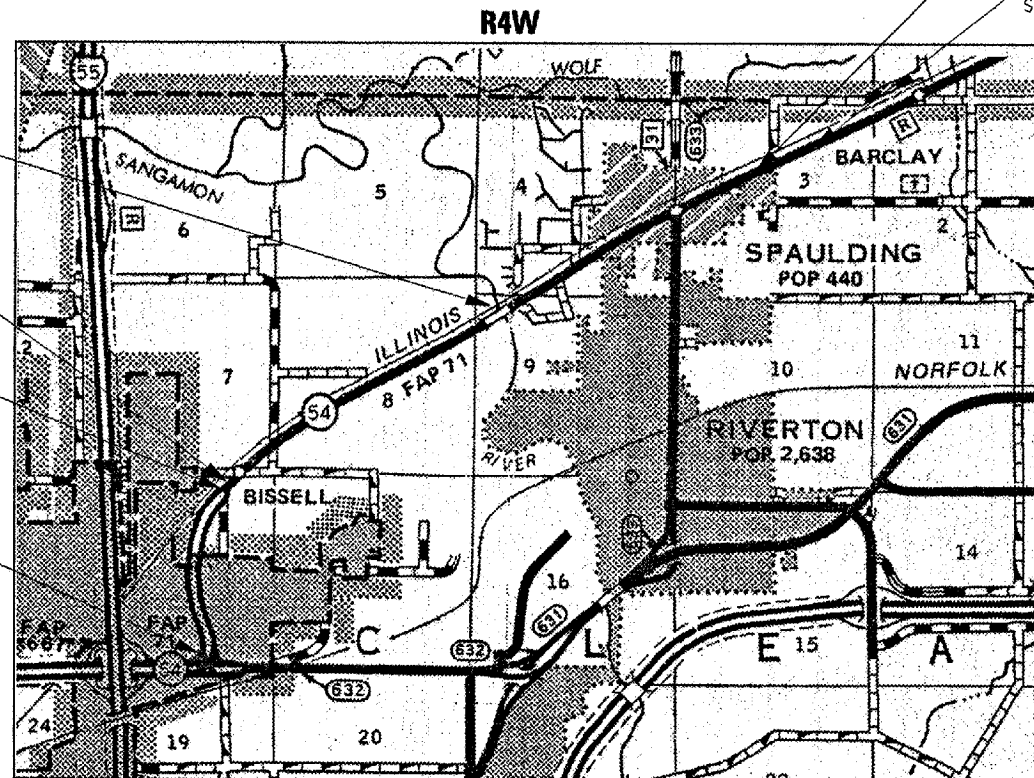
CONTRACT NO. 72966

BRIDGE OMISSION  
STA. 179+97.59 TO  
STA. 189+09.27

STATION EQUATION  
STA. 118+28.70 (S.B.) BK. =  
STA. 98+15.41 AHD.

STATION EQUATION  
STA. 117+07.42 (N.B. ENDS) =  
STA. 117+68.70 (S.B.)

PROJECT BEGINS  
STA. 64+69.41 (N.B.)  
STA. 66+90.50 (S.B.)



STATION EQUATION  
STA. 265+05.65 BK. =  
STA. 40+88.70 AHD.

PROJECT ENDS  
STATION 55+00.00



TOTAL LENGTH OF SECTION (3R)RS-5 = 23,239.74 FEET = 4.40 MILES  
OMISSION LENGTH = 911.68 FEET = 0.17 MILES  
NET LENGTH OF PROJECT = 22,328.06 FEET = 4.23 MILES



WEST OF BISSELL ROAD/OTHER PRINCIPAL ARTERIAL  
EAST OF BISSELL ROAD/MINOR ARTERIAL  
F.A.P. RTE 71 (IL 54) ADT 2003 = 8200  
PV = 92% SU = 5% MU = 3%  
DESIGN SPEED = 55/45 MPH.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED: [Signature] 2005 [Signature]  
DISTRICT ENGINEER

March 25, 2005  
Mike Nene [Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT

March 25, 2005  
Victor Modera [Signature]  
DIRECTOR, DIVISION OF HIGHWAYS

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OF THE STATE OF ILLINOIS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3RJ-1)	SANGAMON	10	2
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 72966

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-6 TYPICAL SECTIONS
- 6 SCHEDULE OF QUANTITIES
- 7-9 ALIGNMENT LAYOUT
- 10 DETAIL SHEETS (SHORT RADIUS GUARDRAIL)

HIGHWAY STANDARDS

- 630001-05 STEEL PLATE BEAM GUARDRAIL
- 631011-02 TRAFFIC BARRIER TERMINAL TYPE 2
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS
- 701201-02 LANE CLOSURE, 2L, 2W, DAY ONLY FOR SPEEDS >= 45 MPH
- 701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 702001-05 TRAFFIC CONTROL DEVICES

GENERAL NOTES

THE STANDARDS AND REVISION NUMBER LISTED SHALL APPLY TO THIS PROJECT

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARK AND MONUMENTS UNTIL THE OWNER AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR ACTION.

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U. S. G. S. MEAN SEA LEVEL DATUM.

<b>DISTRICT SIX</b>		
EXAMINED	<i>February 3</i>	20 <u>05</u>
<i>Benjamin Thomas</i>		
OPERATIONS ENGINEER		
EXAMINED	<i>FEB 3</i>	20 <u>05</u>
<i>W.R. Foley</i>		
PROGRAM IMPLEMENTATION ENGINEER		
EXAMINED	<i>FEBRUARY 7</i>	20 <u>05</u>
<i>William E. Minton</i>		
PROGRAM DEVELOPMENT ENGINEER		

REVISIONS	
NAME	DATE
GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
INDEX, STANDARDS LIST,  
COMMITMENTS, GENERAL NOTES,  
DISTRICT SIGNATURE BLOCK  
FAP 71 (IL 54)  
SECTION (3RJ-1)  
SANGAMON COUNTY

SCALE: VERT.      DRAWN BY TMJ  
HORIZ.              CHECKED BY MEB  
DATE 02-07-05

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2/7/2005  
\*REF01

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	3R1J-1	SANGAMON	10	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 72966				

SFTY-3J  
80% FED.  
20% STATE  
URBAN

CODE NO.	ITEM	UNIT	SAFETY 3J TOTAL QUANTITY
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	8212.5
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	EACH	8
63200310	GUARDRAIL REMOVAL	FOOT	182
63301210	REMOVE AND RE-ERECT STEEL PLATE GUARD RAIL, TYPE A	FOOT	3450
67100100	MOBILIZATION	L SUM	1
78200410	GUARDRAIL MARKERS, TYPE A	EACH	112
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	8
X0322472	RADIUS GUARDRAIL	EACH	4
X6330103	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)	EACH	8

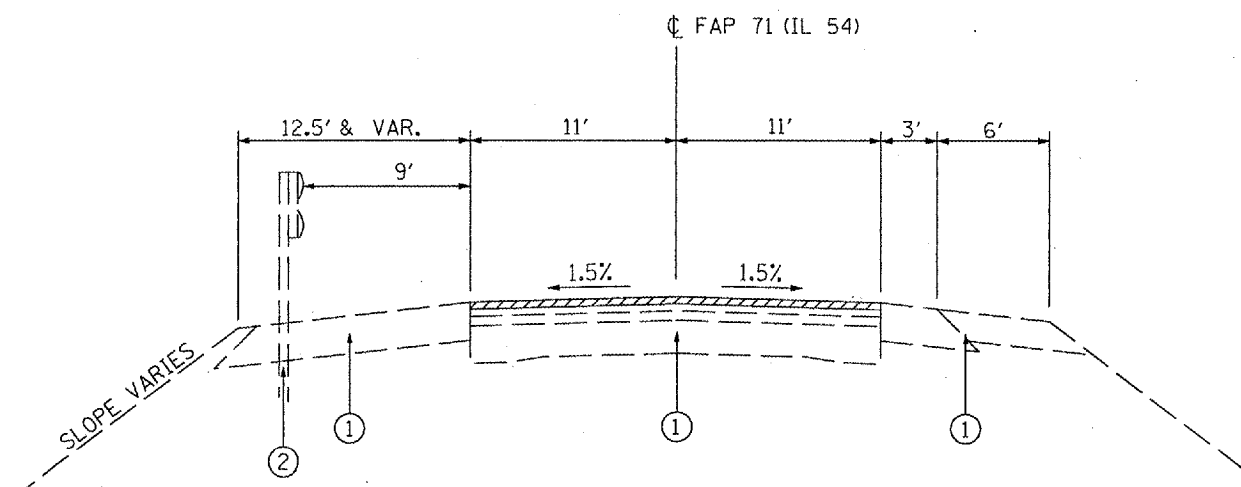
REVISIONS	
NAME	DATE
GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SUMMARY OF QUANTITIES  
FAP 71 (IL 54)  
SECTION 3R1J-1  
SANGAMON COUNTY  
SCALE: VERT.  
HORIZ.  
DATE 02-07-05  
DRAWN BY TMJ  
CHECKED BY MEB

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2/14/2005  
\*REF01

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3RJ-1)	SANGAMON	10	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

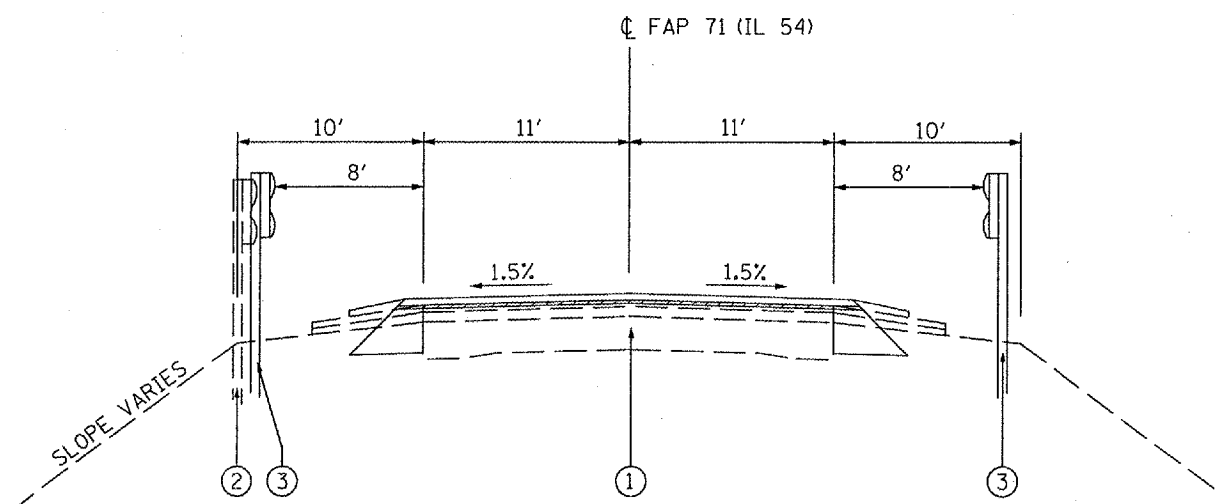
CONTRACT NO. 72966



LT. STA. 173+71.15 TO STA. 179+97.59      RT. STA. 174+03.95 TO STA. 178+06.84  
 RT. STA. 178+06.84 TO STA. 179+97.59

BRIDGE OMISSION  
 STA. 179+97.59 TO STA. 189+09.27

LT. STA. 189+09.27 TO STA. 190+84.07      LT. STA. 190+84.07 TO STA. 194+54.48  
 RT. STA. 189+09.27 TO STA. 190+33.22      RT. STA. 190+33.22 TO STA. 194+54.48



STA. 103+05.94 TO STA. 120+76.74  
 STA. 132+82.60 TO STA. 166+98.70  
 STA. 194+54.48 TO STA. 217+62.38  
 STA. 227+45.79 TO STA. 265+05.65  
 EQUATION STA. 265+05.65 BK. TO STA. 40+88.70 AHD.  
 STA. 40+88.70 TO STA. 55+00

- 1. EXISTING PAVEMENT/SHOULDERS
- 2. EXISTING GUARDRAIL
- 3. PROPOSED GUARDRAIL

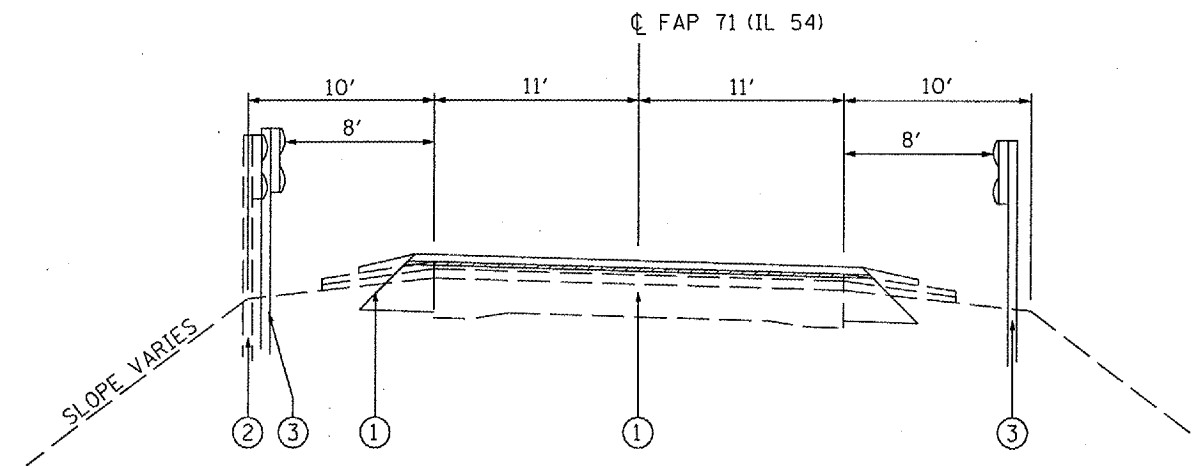
REVISIONS	
NAME	DATE
GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.P. RTE. 71 (IL 54)  
 TYPICAL SECTIONS  
 FAP 71 (IL 54)  
 SECTION (3RJ-1)  
 SANGAMON COUNTY  
 DRAWN BY TMJ  
 CHECKED BY MEB  
 DATE 02-07-05

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 2/7/2005  
 \*REF01

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3R)J-1	SANGAMON	10	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 72966



STA. 117+68.70 TO STA. 118+28.70  
 EQUATION STA. 118+28.70 BK. = STA. 98+15.41 AHD.  
 STA. 98+15.41 TO STA. 103+05.94  
 STA. 120+76.74 TO STA. 132+82.60  
 STA. 166+98.70 TO STA. 173+71.15 LT./STA. 174+03.95 RT.  
 STA. 217+62.38 TO STA. 227+45.79

1. EXISTING PAVEMENT/SHOULDERS
2. EXISTING GUARDRAIL
3. PROPOSED GUARDRAIL

REVISIONS	
NAME	DATE
GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.P. RTE. 71 (IL 54)  
 TYPICAL SECTIONS  
 FAP 71 (IL 54)  
 SECTION (3R)J-1  
 SANGAMON COUNTY  
 DRAWN BY TMJ  
 CHECKED BY MEB  
 DATE 02-07-05

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 2/7/2005  
 \*REF01

SCHEDULE OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3RJ-1)	SANGAMON	10	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

**CONTRACT NO. 72966**

ITEM 63000000: STEEL PLATE BEAM GUARDRAIL, TYPE A	
LOCATION	FOOT
LT. STA. 109+92 TO LT. STA. 113+67	375
RT. STA. 109+04 TO RT. STA. 111+92	287.5
LT. STA. 116+90 TO LT. STA. 122+67	575
RT. STA. 124+22 TO RT. STA. 128+87	487.5
RT. STA. 140+12 TO RT. STA. 146+00	587.5
RT. STA. 151+62 TO RT. STA. 177+00	2587.5
LT. STA. 153+01 TO LT. STA. 174+26	2125
LT. STA. 245+00 TO LT. STA. 252+87.5	787.5
RT. STA. 248+00 TO RT. STA. 252+00	400
<b>TOTAL =</b>	<b>8212.5</b>

ITEM 63100045: TRAFFIC BARRIER TERMINAL, TYPE 2	
LOCATION	EACH
RT. STA. 124+00	1
RT. STA. 129+10	1
<b>TOTAL =</b>	<b>2</b>

ITEM 63100045: TRAFFIC BARRIER TERMINAL, TYPE 2	
LOCATION	EACH
RT. STA. 108+54.5 TO RT. STA. 109+04.5	1
RT. STA. 111+92 TO RT. STA. 112+42	1
RT. STA. 139+62.5 TO RT. STA. 140+12.5	1
RT. STA. 146+00 TO RT. STA. 146+50	1
RT. STA. 151+12.5 TO RT. STA. 151+62.5	1
LT. STA. 244+50 TO LT. STA. 245+00	1
RT. STA. 247+50 TO RT. STA. 248+00	1
RT. STA. 252+00 TO RT. STA. 252+50	1
<b>TOTAL =</b>	<b>8</b>

ITEM 6320031: GUARDRAIL REMOVAL	
LOCATION	FOOT
LT. STA. 112+63 TO LT. STA. 114+09 @ BRICKLER RD.	154
LT. STA. 114+51 TO LT. STA. 114+60	28
<b>TOTAL =</b>	<b>182</b>

ITEM 78200410: GUARDRAIL MARKERS, TYPE A	
LOCATION	MONO-DIRECT SILVER EACH
(FOR ALL NEW GUARDRAIL)	
LT. STA. 109+92 TO LT. STA. 113+67	6
RT. STA. 109+04 TO RT. STA. 111+92	5
LT. STA. 116+90 TO LT. STA. 122+67	8
RT. STA. 124+22 TO RT. STA. 128+87	7
RT. STA. 140+12 TO RT. STA. 146+00	8
RT. STA. 151+62 TO RT. STA. 177+00	33
LT. STA. 153+01 TO LT. STA. 174+26	28
LT. STA. 245+00 TO LT. STA. 252+87.5	11
RT. STA. 248+00 TO RT. STA. 252+00	6
<b>TOTAL =</b>	<b>112</b>

ITEM 63301210: REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, TYPE A		
LOCATION		FOOT
FROM	TO	
LT. STA. 114+60 TO LT. STA. 116+85	LT. STA. 114+65 TO LT. STA. 116+90	225
LT. STA. 122+67 TO LT. STA. 153+01	LT. STA. 122+67 TO LT. STA. 153+01	3037.5
LT. STA. 174+26 TO LT. STA. 176+13.5	LT. STA. 174+26 TO LT. STA. 176+13.5	187.5
<b>TOTAL =</b>		<b>3450</b>

ITEM X6330103: REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)		
LOCATION		EACH
FROM	TO	
LT. STA. 112+13 TO LT. STA. 112+63	LT. STA. 109+42 TO LT. STA. 109+92	1
LT. STA. 116+85 TO LT. STA. 117+35	RT. STA. 122+55 TO RT. STA. 123+05	1
LT. STA. 122+17 TO LT. STA. 122+67	RT. STA. 123+05 TO RT. STA. 123+55	1
LT. STA. 153+01 TO LT. STA. 153+51	LT. STA. 252+87.5 TO LT. STA. 253+37.5	1
LT. STA. 173+76 TO LT. STA. 174+26	RT. STA. 177+50 TO RT. STA. 178+00	1
LT. STA. 176+13.5 TO LT. STA. 176+63.5	LT. STA. 176+13.5 TO LT. STA. 176+63.5	1
LT BRICKLER RD. (LOCATION TO BE DETERMINED BY ENGINEER-SEE RADIUS GUARDRAIL DETAIL)		1
RT BRICKLER RD. (LOCATION TO BE DETERMINED BY ENGINEER-SEE RADIUS GUARDRAIL DETAIL)		1
<b>TOTAL =</b>		<b>8</b>

ITEM 78201000: TERMINAL MARKER-DIRECT APPLIED	
LOCATION	EACH
RT. STA. 108+54.5	1
RT. STA. 112+42	1
RT. STA. 139+62.5	1
RT. STA. 146+50	1
RT. STA. 151+12.5	1
LT. STA. 244+50	1
RT. STA. 247+50	1
RT. STA. 252+50	1
<b>TOTAL =</b>	<b>8</b>

ITEM X0322472: RADIUS GUARDRAIL		
LOCATION		EACH
LT. STA. 113+67 TO LT. STA. 114+06	L1	1
LT. STA. 114+51 TO LT. STA. 114+65	L2	1
RT. STA. 124+05 TO RT. STA. 124+22	L3	1
RT. STA. 128+87 TO RT. STA. 129+08	L4	1
<b>TOTAL =</b>		<b>4</b>

REVISIONS	
NAME	DATE
GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SCHEDULE OF QUANTITIES**  
 FAP 71 (IL 54)  
 SECTION (3RJ-1)  
 SANGAMON COUNTY

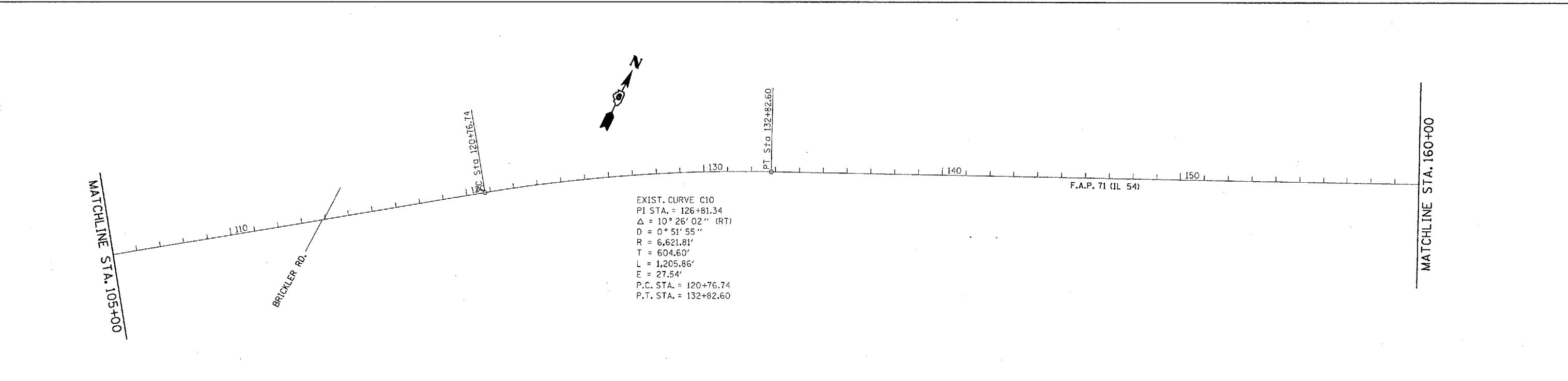
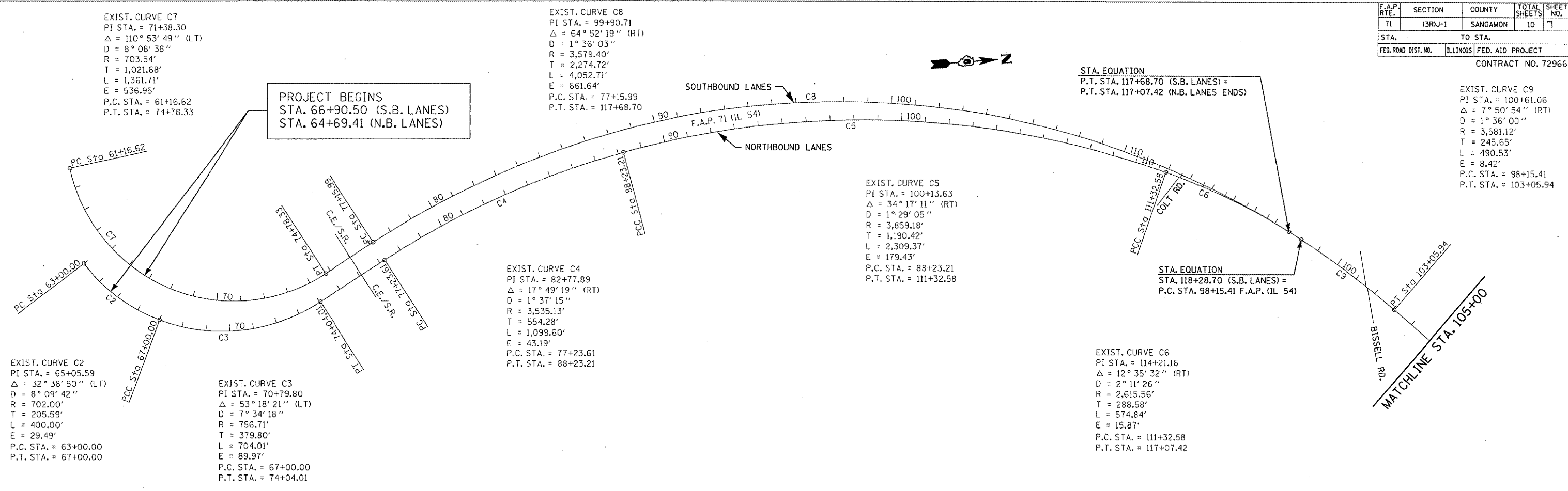
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3R)J-1	SANGAMON	10	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 72966				



REVISIONS	
NAME	DATE
GUARDRAIL/TMJ	02-07-05

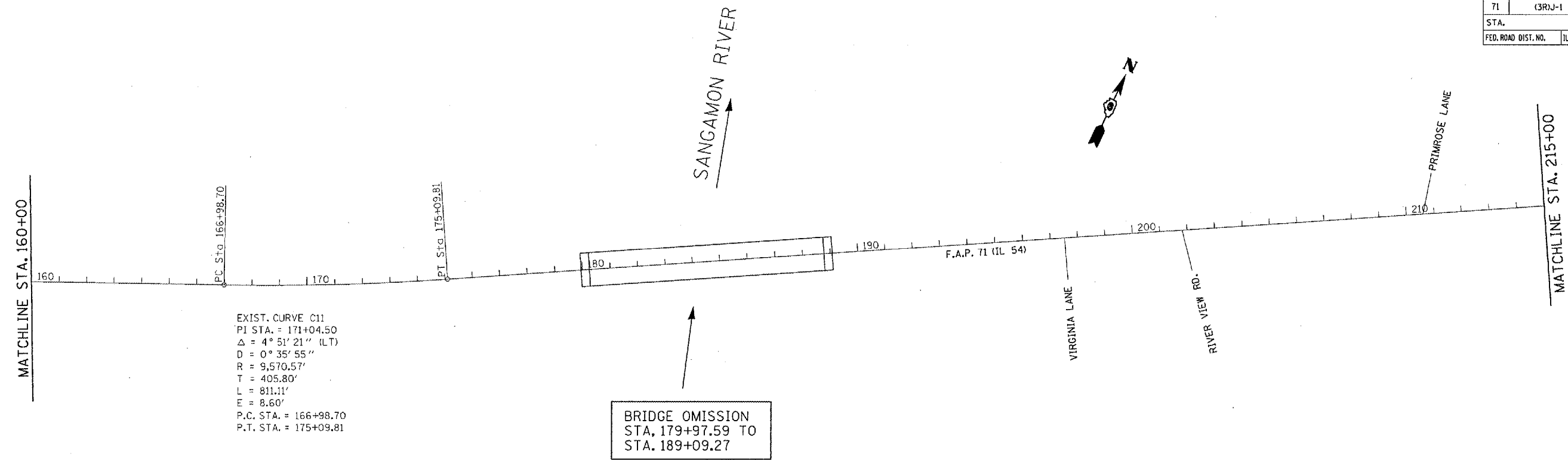
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**ALIGNMENT LAYOUT**  
 FAP 71 (IL 54)  
 SECTION (3R)J-1  
 SANGAMON COUNTY

SCALE: VERT. \_\_\_\_\_  
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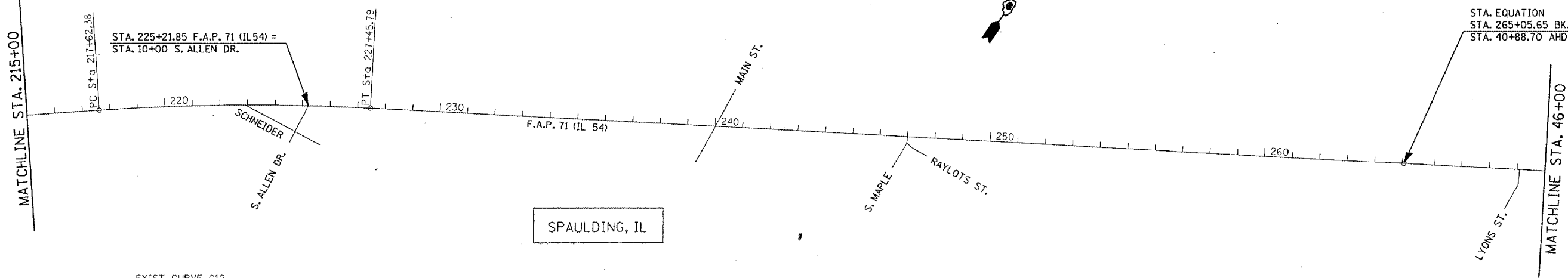
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3R)J-1	SANGAMON	10	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 72966				



EXIST. CURVE C11  
 PI STA. = 171+04.50  
 $\Delta = 4^\circ 51' 21''$  (LT)  
 $D = 0^\circ 35' 55''$   
 $R = 9,570.57'$   
 $T = 405.80'$   
 $L = 811.11'$   
 $E = 8.60'$   
 P.C. STA. = 166+98.70  
 P.T. STA. = 175+09.81

BRIDGE OMISSION  
 STA. 179+97.59 TO  
 STA. 189+09.27



EXIST. CURVE C12  
 PI STA. = 222+54.68  
 $\Delta = 6^\circ 52' 46''$  (RT)  
 $D = 0^\circ 41' 58''$   
 $R = 8,190.59'$   
 $T = 492.30'$   
 $L = 983.42'$   
 $E = 14.78'$   
 P.C. STA. = 217+62.38  
 P.T. STA. = 227+45.79

STA. EQUATION  
 STA. 265+05.65 BK. =  
 STA. 40+88.70 AHD.

SPAULDING, IL

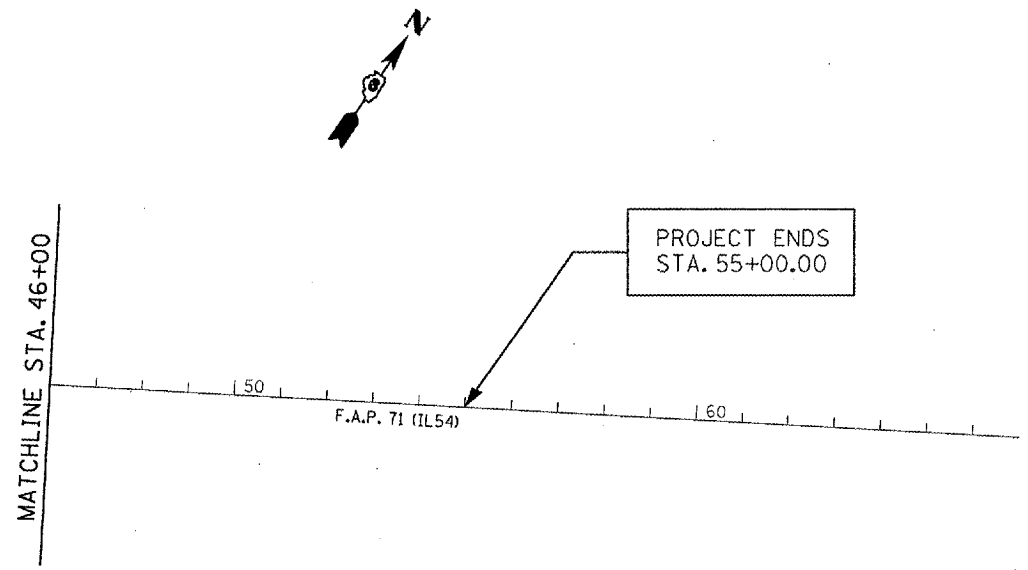
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GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
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 SANGAMON COUNTY  
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(3RJ-1	SANGAMON	10	9
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 72966				



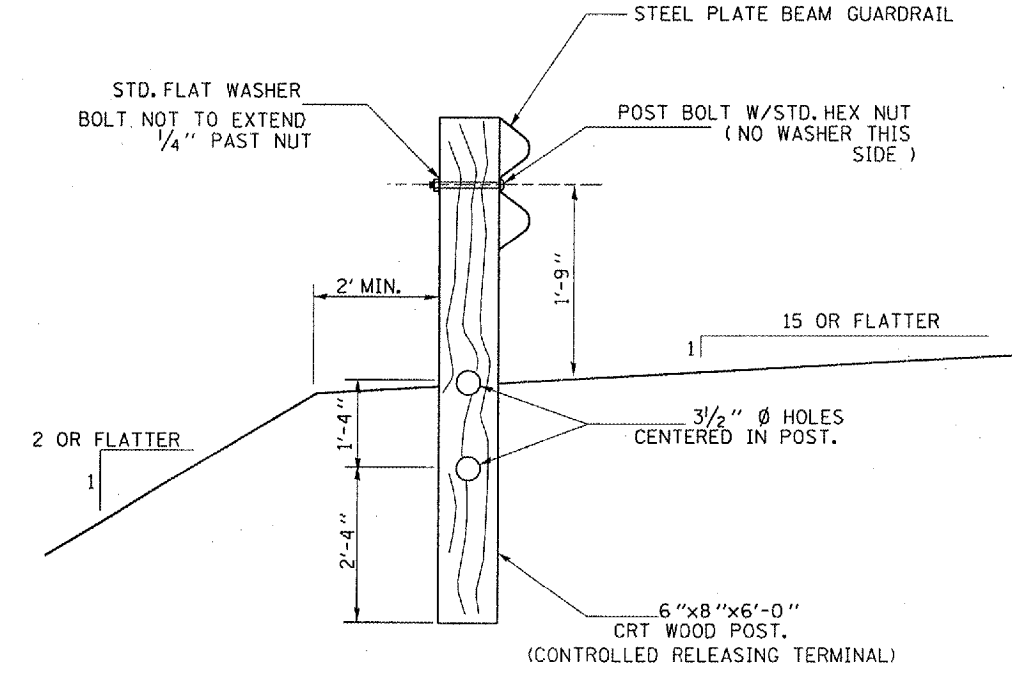
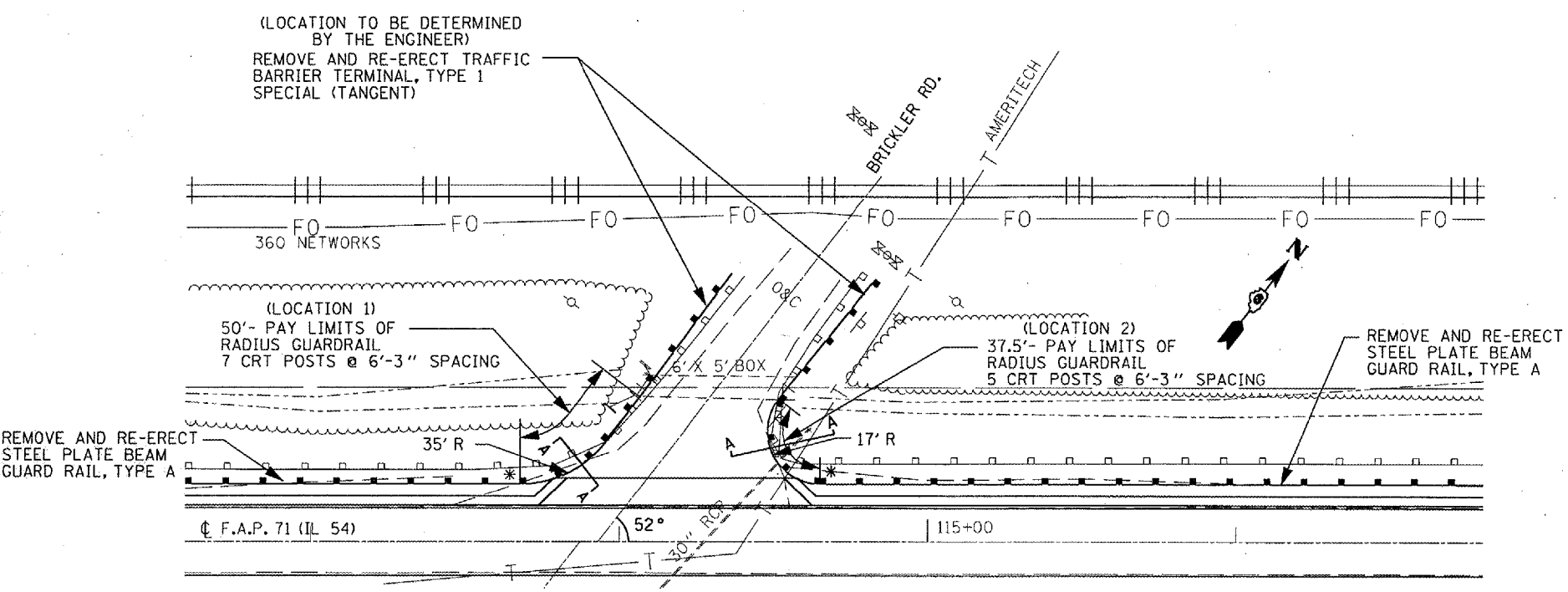
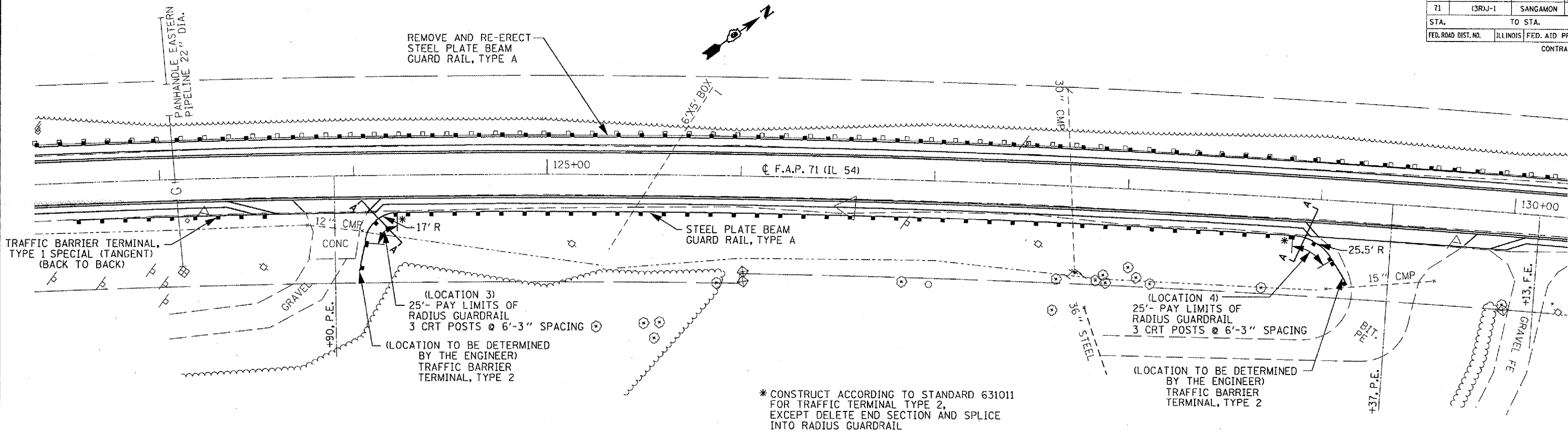
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NAME	DATE
GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**ALIGNMENT LAYOUT**  
 FAP 71 (IL 54)  
 SECTION (3RJ-1)  
 SANGAMON COUNTY

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71	(3RJ-1)	SANGAMON	10	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 72966				



FOR INTERSECTION ANGLES OTHER THAN 85-95 DEGREES, REQUIRE THE USE OF FULL LENGTH GUARDRAIL PANELS (12-6"), SHOP BENT TO THE DESIGN RADIUS IN 5 FOOT INCREMENTS.

### SHORT RADIUS GUARDRAIL DETAIL

REVISIONS	
NAME	DATE
GUARDRAIL/TMJ	02-07-05

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**SHORT RADIUS GUARDRAIL DETAIL**  
 FAP 71 (IL 54)  
 SECTION (3RJ-1)  
 SANGAMON COUNTY

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_  
 DATE 02-07-05

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