~~11-7-08 Letting, Item 055~~

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 66730		

D-93-048-06 P-93-035-04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

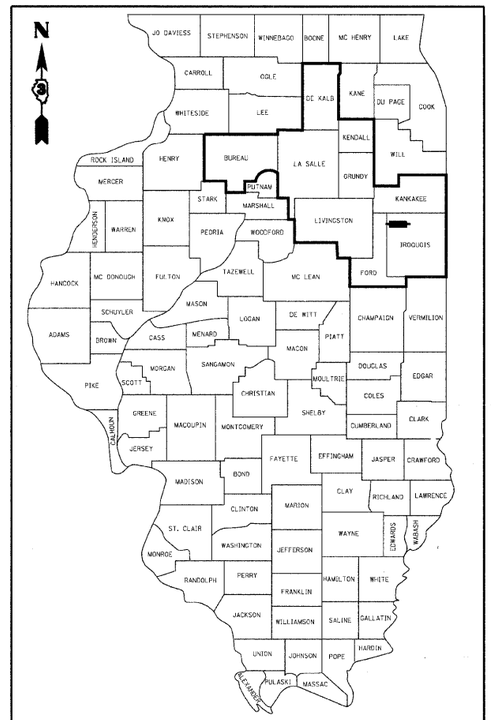
FAP ROUTE 681 (IL 116)
SECTION 116 BR-1
PROJECT ACBRF-0681(035)
IROQUOIS COUNTY

C-93-087-07

CULVERT REPLACEMENT OVER LANGAN CREEK,
6.5 MILES WEST OF I-57

INDEX OF SHEETS

FOR LIST OF STANDARDS, SEE SHEET NO. 2



LOCATION OF SECTION INDICATED THUS: –

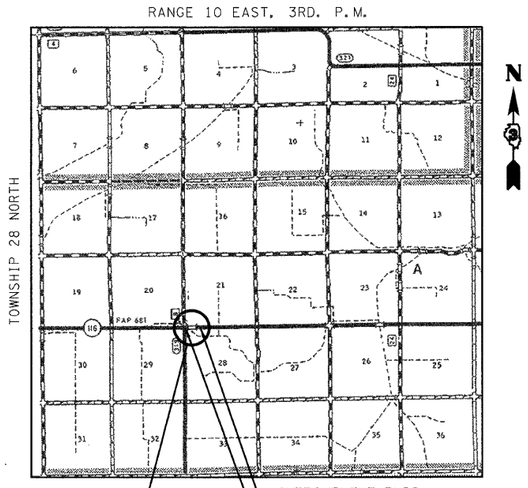
DESIGN DESIGNATION

SPEED LIMIT: 55 MPH
ADT = 950 (2005) 1200 (2024)
PV = 76.8%
SU = 7.4%
MU = 15.8%

HIGHWAY CLASSIFICATION

RURAL MINOR ARTERIAL

RANGE 10 EAST, 3RD. P.M.



LOCATION MAP

3 2 1 0 1 2 3 MILES
APPROXIMATE SCALE

GROSS LENGTH = 374.8 FT. = 0.071 MI.
NET LENGTH = 374.8 FT. = 0.071 MI.

0 100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

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

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

DISTRICT 3 NO. (815) 434-6131
PROJECT ENGINEER: JOSEPH KANNEL
UNIT CHIEF: MICHELE LINDEMANN

CONTRACT NO. 66730

Farnsworth GROUP
2709 McGraw Drive
Bloomington, Illinois 61704
309/663-8435, 309/663-1571 fax

MARK S. WYLIE 043716 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

Mark S Wylie Date 4/14/08
MARK S. WYLIE
ILLINOIS PROFESSIONAL ENGINEER
NO. 062-043716
EXPIRATION 11/30/09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 8-11-08 20 08
Deputy Director of Highways, Region Engineer
October 3, 20 08
Eric E. Harm
Interim ENGINEER OF DESIGN AND ENVIRONMENT
October 3, 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DATE 04/09/08 FILE NO. 24-7917

GENERAL NOTES

THE THICKNESS OF HMA 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 HMA IS PLACED.

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

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

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 REFER 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 SHOWN IN THE LIST OF STANDARDS 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
HMA 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
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
TEMPORARY DITCH CHECKS	5	TONS AGGREGATE

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:
EASTERN ILLINI ELECTRIC, VERIZON AND FRONTIER

NON-MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:
NONE

COMMITMENTS

STANDARD NUMBERS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
515001-02	NAME PLATE FOR BRIDGES
630001-07	STEEL PLATE BEAM GUARDRAIL
630101-07	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701001-01	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 4.5 m (15') AWAY
701006-02	OFF-RD OPERATIONS, 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701011-01	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-01	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701311-02	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
701326-02	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
701901	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS
781001-02	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR 21-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

REVIEWED BY: _____
DISTRICT STUDIES & PLANS ENGINEER

DATE: 8-11-08

EXAMINED BY: _____
DISTRICT CONSTRUCTION ENGINEER

_____
DISTRICT MATERIALS ENGINEER

_____
DISTRICT OPERATIONS ENGINEER

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE STANDARDS, GENERAL NOTES & COMMITMENTS

SCALE: | SHEET NO. 2 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	2
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

	CODE NUMBER	ITEM	UNIT	TOTAL	80% FED. 20% STATE ROADWAY I000	80% FED. 20% STATE STRUCTURE NO. 038-2022 X028-2A
	20200100	EARTH EXCAVATION	CU YD	241	241	
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	160		160
	20700220	POROUS GRANULAR EMBANKMENT	CU YD	420	420	
	20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	160		160
	21300010	EXPLORATION TRENCH, SPECIAL	FOOT	200	200	
•	25000300	SEEDING, CLASS 3	ACRE	0.3	0.3	
•	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	30	30	
•	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	30	30	
•	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	30	30	
•	25100115	MULCH, METHOD 2	ACRE	0.3	0.3	
•	25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1,540	1,540	
•	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	550	550	
	28000300	TEMPORARY DITCH CHECKS	EACH	11	11	
	28000400	PERIMETER EROSION BARRIER	FOOT	825	825	
	28000500	INLET AND PIPE PROTECTION	EACH	2	2	
	28100107	STONE RIPRAP, CLASS A4	SQ YD	185		185
	28200200	FILTER FABRIC	SQ YD	185		185
	31100500	SUB-BASE GRANULAR MATERIAL, TYPE A 6"	SQ YD	105	105	
	31100910	SUB-BASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	130	130	
	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	60	60	
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	90	90	
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	20	20	
	44000100	PAVEMENT REMOVAL	SQ YD	132	132	
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	435	435	

• SPECIALTY ITEM

	CODE NUMBER	ITEM	UNIT	TOTAL	80% FED. 20% STATE ROADWAY I000	80% FED. 20% STATE STRUCTURE NO. 038-2022 X028-2A
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
	50105200	REMOVE EXISTING CULVERTS	EACH	2	2	
	50800105	REINFORCEMENT BARS	POUND	19,040		19,040
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,780		1,780
	51500100	NAME PLATES	EACH	1		1
	54003000	CONCRETE BOX CULVERTS	CU YD	142.2		142.2
	542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	70	70	
	54213453	END SECTIONS 18"	EACH	4	4	
•	63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	313	313	
•	63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	75	75	
•	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3	
	63200310	GUARDRAIL REMOVAL	FOOT	380	380	
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4	
	67100100	MOBILIZATION	L SUM	1	1	
	70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	1	
	70101900	TRAFFIC CONTROL AND PROTECTION (DETOUR 1)	L SUM	1	1	
•	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	700	700	
•	78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	120	120	
•	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	1	1	
•	78200405	GUARDRAIL MARKERS	EACH	9	9	
•	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3	
	X0325909	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 11¼"	SQ YD	220	220	
	X0326205	PRECAST CONCRETE BOX CULVERT 12'x11' (M273)	FOOT	60		60

• SPECIALTY ITEM

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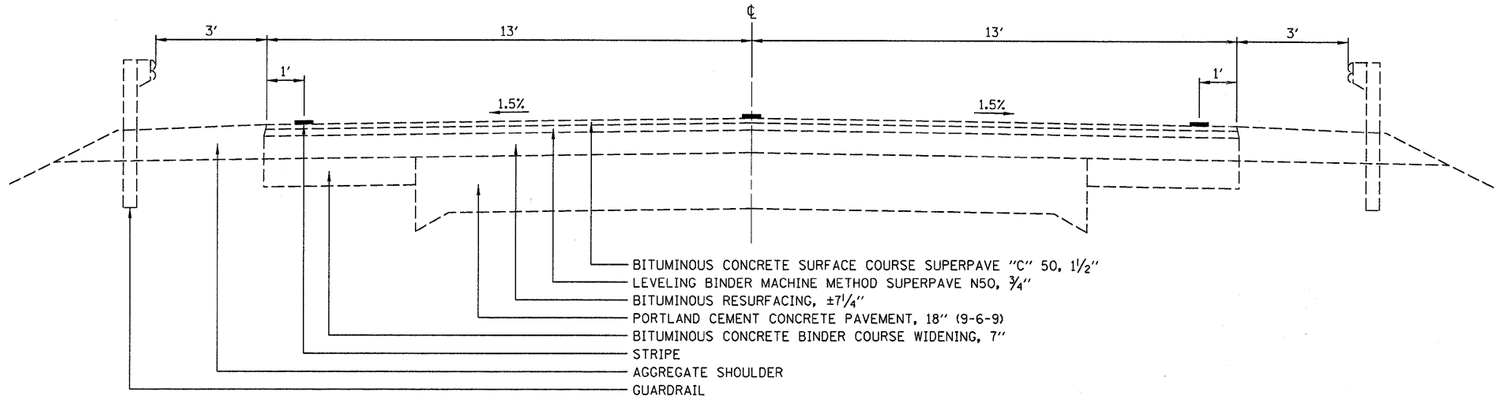
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 3 OF 28 SHEETS | STA. | TO STA.

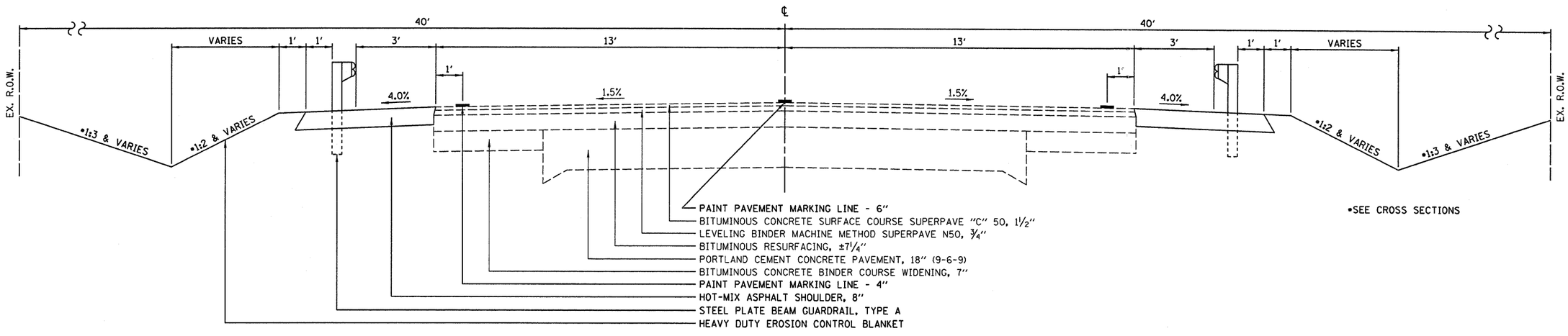
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	3
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX



EXISTING TYPICAL CROSS SECTION

F.A.P. 681 (IL 116)



PROPOSED TYPICAL CROSS SECTION

F.A.P. 681 (IL 116)

STA 316+23.50 RT TO STA 317+20.89 RT
STA 316+65.00 LT TO STA 317+11.32 LT
STA 317+83.27 LT TO STA 319+98.30 LT
STA 317+92.71 RT TO STA 319+30.50 RT

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

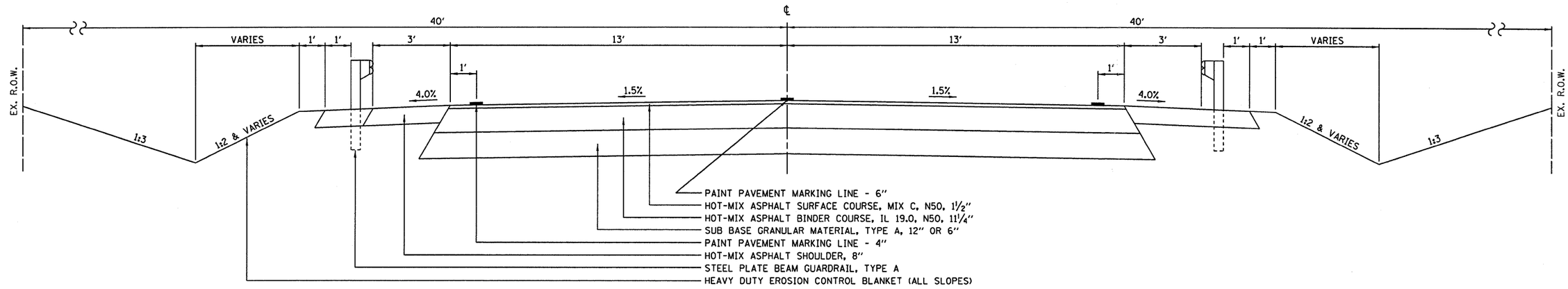
TYPICAL SECTIONS

SCALE: | SHEET NO. 4 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	4
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917



PROPOSED TYPICAL CROSS SECTION

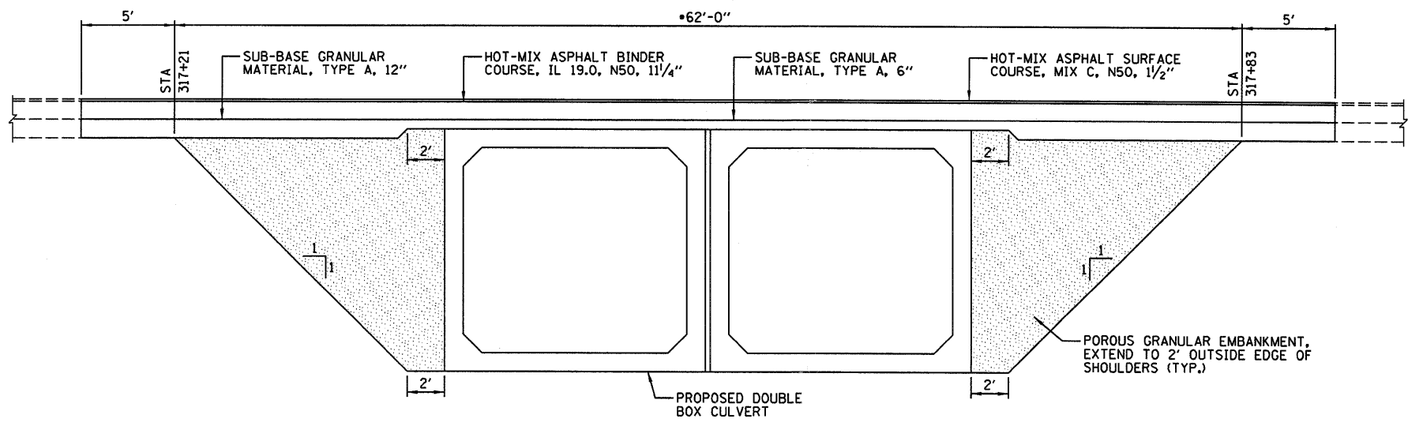
F.A.P. 681 (IL 116)

STA. 317+16 TO STA. 317+88

	HMA BINDER	HMA LEVEL BINDER	HMA SURFACE	HMA BASE COURSE WIDENING	HMA SHOULDERS
PG GRADE	PG58-22	PG58-22	PG64-22	PG58-22	PG58-22
MAX % RAP ALLOWABLE••	25%	25%	15%	25%	50%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50	2.0% @ N50
MIXTURE COMPOSITION	IL 19.0	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE	-	-	MIXTURE C	-	-
DESITY CONTROL METHOD	NUCLEAR/ CORES	SATISFACTION OF THE ENGINEER	NUCLEAR/ CORES	NUCLEAR/ CORES	•

- MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE, THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

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



SECTION THRU CULVERT

NOTES:

1.) •DIMENSION TAKEN ALONG ℄ OF ROAD.
2.) SEE STRUCTURE PLANS FOR BOX CULVERT DIMENSIONS.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET NO. 5 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	5
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917

EARTHWORK				
	EARTH EXCAVATION	TOTAL EXCAV. ADJUSTED FOR 25% SHRINKAGE	EMBANKMENT	BALANCE WASTE (+) SHORTAGE (-)
LOCATION	CU YD	CU YD	CU YD	CU YD
STA 316+23.50 TO STA. 317+36.97	23	17	38	-21
STA 317+67.03 TO STA. 320+49.50	218	164	98	66
EARTH EXCAVATION	241	181	136	45

POROUS GRANULAR EMBANKMENT	
LOCATION	CU YD
CULVERT STA 317+52.00, LT & RT	420
TOTAL	420

INLET AND PIPE PROTECTION	
LOCATION	EACH
STA 319+26.53, RT	1
STA 320+42.58, LT	1
TOTAL	2

EXPLORATION TRENCH, SPECIAL	
LOCATION	FOOT
STA 317+00 TO SSTA 318.00, LT & RT	200
TOTAL	200

SEEDING/FERTILIZING							
	SEEDING, CLASS 3	NITROGEN FERTILIZER NUTRIENT	PHOSPHROUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH, METHOD 2	HEAVY DUTY EROSION CONTROL BLANKET	TEMPORARY EROSION CONTROL SEEDING
LOCATION	ACRE	POUND	POUND	POUND	ACRE	SQ YD	POUND
LT STA 316+65 TO 317+39	0.02	2	2	2	0.02	70	34
LT STA 316+60 TO 320+10.35	0.12	11	11	11	0.12	588	207
LT STA 320+34.35 TO 320+60	0.01	1	1	1	0.01	60	17
RT STA 316+24 TO 317+45	0.06	5	5	5	0.06	278	103
RT STA 317+73 TO 318+89.50	0.04	4	4	4	0.04	192	69
RT STA 319+18.50 TO 320+60	0.07	7	7	7	0.07	352	120
TOTAL	0.32	30	30	30	0.32	1,540	550

TEMPORARY DITCH CHECKS	
LOCATION	EACH
STA 316+43, RT	1
STA 316+93, RT	1
STA 318+00, LT & RT	2
STA 318+50, LT & RT	2
STA 319+00, LT	1
STA 319+50, LT	1
STA 320+00, RT	1
STA 320+60, LT & RT	2
TOTAL	11

ENGINEER'S FIELD OFFICE, TYPE A	
LOCATION	CAL MO
THROUGHOUT PROJECT	4
TOTAL	4

TRAFFIC CONTROL AND PROTECTION, STANDARD BLR-21	
LOCATION	L SUM
THROUGHOUT PROJECT	1
TOTAL	1

MOBILIZATION	
LOCATION	L SUM
THROUGHOUT PROJECT	1
TOTAL	1

TRAFFIC CONTROL AND PROTECTION (DETOUR 1)	
LOCATION	L SUM
THROUGHOUT PROJECT	1
TOTAL	1

PERIMETER EROSION BARRIER	
LOCATION	FOOT
STA 316+60 TO 317+10.35, LT	66
STA 317+64.58 TO 320+65, LT	322
STA 316+20 TO 317+39.41, RT	145
STA 317+93.64 TO 320+65, RT	292
TOTAL	825

SUB-BASE GRANULAR MATERIAL, TYPE A 12"	
LOCATION	SQ YD
STA 314+16 TO 317+35.88, LT & RT	65
STA 317+68.13 TO 317+88, LT & RT	65
TOTAL	130

AGGREGATE SURFACE COURSE, TYPE B	
LOCATION	TON
STA 319+06.50, RT (FIELD ENTRANCE)	35
STA 320+22.50, LT (FIELD ENTRANCE)	25
TOTAL	60

BITUMINOUS MATERIALS (PRIME COAT)	
LOCATION	GALLON
STA 317+16 TO 317+88, LT & RT	90
TOTAL	90

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	
LOCATION	TON
STA 317+16 TO 317+88, LT & RT	20
TOTAL	20

PAVEMENT REMOVAL	
LOCATION	SQ YD
STA 317+16.00 TO 317+36.97, LT & RT	61
STA 317+67.03 TO 317+88.00, LT & RT	61
TOTAL	132

HOT-MIX ASPHALT SHOULDER 8"	
LOCATION	SQ YD
STA 316+23.50 TO 319+28.50, RT	198
STA 316+65.00 TO 319+98.30, LT	222
TOTAL	420

PIPE CULVERTS			
	REMOVE EXISTING CULVERT	PIPE CULVERT CLASS D, TYPE 1, 18"	END SECTIONS 18"
LOCATION	EACH	FOOT	EACH
STA 318+82.00, LT	1		
STA 318+89.00, RT			1
STA 319+06.50, RT	1	35	
STA 319+24.00, RT			1
STA 320+05.00, LT			1
STA 320+22.50, LT		35	
STA 320+40.00, LT			1
TOTAL	2	70	4

SUB-BASE GRANULAR MATERIAL, TYPE A 6"	
LOCATION	SQ YD
STA 317+35.88 TO 317+68.13, LT & RT	105
TOTAL	105

GUARDRAIL				
	GUARDRAIL REMOVAL	STEEL PLATE BEAM GUARDRAIL, TYPE A	STEEL PLATE BEAM GUARD RAIL ATTACHED TO STRUCTURES	TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT
LOCATION	FOOT	FOOT	FOOT	EACH
STA 316+39.69 TO 316+89.69, RT				1
STA 316+44.00 TO 317+45.00, RT	102			
STA 316+65.00 TO 317+27.50, LT		63		
STA 316+65.00 TO 317+33.00, LT	69			
STA 316+89.69 TO 317+39.69, RT		50		
STA 317+27.50 TO 317+65.00, LT			37.5	
STA 317+39.69 TO 317+77.19, RT			37.5	
STA 317+59 TO 318+63, LT	105			
STA 317+65.00 TO 319+15.00, LT		150		
STA 317+71 TO 318+74, RT	104			
STA 317+77.19 TO 318+27.19, RT		50		
STA 318+27.19 TO 318+77.18, RT				1
STA 319+15.00 TO 319+65.00, LT				1
TOTAL	380	313	75	3

PAINTING		
	PAINT PAVEMENT MARKING LINE 4"	PAINT PAVEMENT MARKING LINE 6"
LOCATION	FOOT	FOOT
STA 316+62 TO 320+51, LT	389	
STA 316+21 TO 319+32, RT	311	
STA 316+23.50 TO 320+49.50		120
TOTAL	700	120

REFLECTORS/MARKERS			
	RAISED REFLECTIVE PAVEMENTS MARKERS	GUARDRAIL MARKERS	TERMINAL MARKER DIRECT APPLIED
LOCATION	EACH	EACH	EACH
STA 317+25	1		
STA 316+65.00 TO 319+65.00, LT		5	
STA 316+34.69 TO 318+77.19, RT		4	
STA 316+39.69, RT			1
STA 318+77.19, RT			1
STA 319+65.00, LT			1
TOTAL	1	9	3

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 11¼"	
LOCATION	SQ YD
STA 317+16 TO 317+88	220
TOTAL	220

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 6 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	6
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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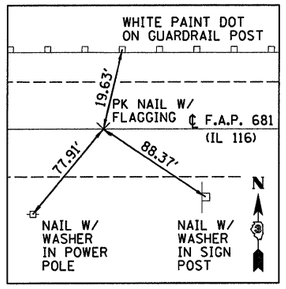
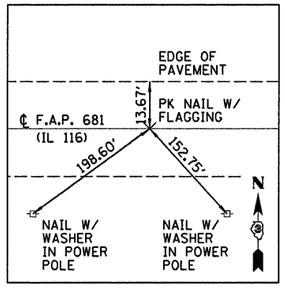
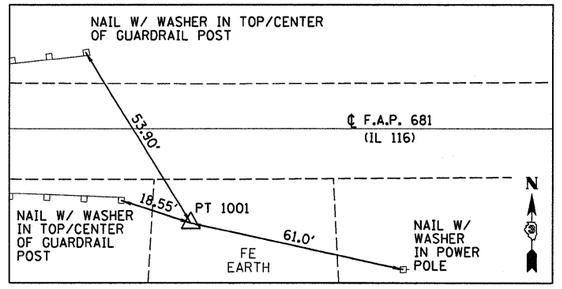


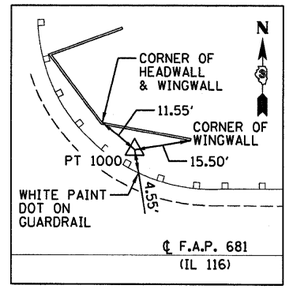
IL 116
STA 311+00, 0.00' RT/LT



IL 116
STA 325+00, 0.00' RT/LT



IL 116
STA 318+89.76, 25.04' RT



IL 116
STA 316+25.88, 28.03' LT

BENCHMARK #100/#1895
STA 316+84.00, 62' RT
ELEV=658.09
STAINLESS STEEL ROD IN SLEEVE

BENCHMARK #101
STA 315+51.51, ±83' RT
ELEV=657.63
RAILROAD SPIKE IN POWER POLE @ S.W. CORNER OF INTERSECTION OF RTE. 116 & C.R. 200 E

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SURVEY TIES AND BENCHMARKS

SCALE: | SHEET NO. 7 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	7
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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24-7917

SECTION 20 T28N, R10E, 3rd P.M.

SECTION 21 T28N, R10E, 3rd P.M.

SECTION 29 T28N, R10E, 3rd P.M.

SECTION 28 T28N, R10E, 3rd P.M.

NOTE: TBT DENOTES TRAFFIC BARRIER TERMINAL.

10' ℄ EXISTING DOUBLE BOX CULVERT
℄ STA. 5+00

LAHOGUE ROAD

EXISTING ROW

PE AGG

BIT

AGG

STONE RIPRAP CLASS A4

LANGAN CREEK FLOW

62.5' SPBGR, TY A

37.5' GUARDRAIL ATTACHED TO STRUCTURES

150' SPBGR, TY A

50' TBT, TY 1, (SPECIAL) TANGENT

316+65.00

317+27.50

317+65.00

319+15.00

319+65.00

CONSTRUCTION LIMITS/EX. ROW

EX 18" CMP

FE STA 318+92.00
RELOCATED TO
STA 320+22.50

FE 320+22.50

STA 320+22.50
PROP. 18"x35' P. CULV.
CL D, TY 1 @ 0.83%
W/END SECTIONS
USFL (32.83' LT) = 654.84
DSFL (33.88' LT) = 654.55

℄ PROPOSED DITCH

PIPE CULVERT TO BE REMOVED
1 EACH

℄ ELEV. 654.16

℄ ELEV. 654.76

℄ STA 315+81.44 F.A.P. 681
℄ STA 5+38.84 LAHOGUE RD

CONSTRUCTION LIMITS

315+00 316 317 318 319 320+00

+16 +88

℄ F.A.P. 681
(IL ROUTE 116)

40'

13' EX

13' EX

IMPROVEMENT BEGINS
STA 316+23.50

℄ EXISTING BOX CULVERT
STA 6+2.89

℄ PROPOSED DITCH

℄ STRUCTURE
STA 317+52.00

℄ ELEV. 654.61

EX 18" CMP

FE STA 319+06.50

℄ ELEV. 655.33

℄ PROPOSED DITCH

316+39.69

316+89.69

317+39.69

317+77.19

318+27.19

318+77.19

50' TBT, TY 1, (SPECIAL) TANGENT

50' SPBGR, TY A

37.5' GUARDRAIL ATTACHED TO STRUCTURE

50' SPBGR, TY A

50' TBT, TY 1, (SPECIAL) TANGENT

CONSTRUCTION LIMITS/EX. ROW

EXISTING ROW

CONSTRUCTION LIMITS

PIPE CULVERT TO BE REMOVED
1 EACH

STA 319+06.50
PROP. 18"x35' P. CULV.
CL D, TY 1 @ 1.00%
W/END SECTIONS
USFL (31.65' RT) = 655.05
DSFL (30.10' RT) = 654.76

IMPROVEMENT ENDS
STA 319+98.30

CONSTRUCTION LIMITS/EX. ROW

C.H. 8

BENCHMARK #101
STA 315+51.51, ±83' RT
ELEV=657.63
RAILROAD SPIKE IN POWER POLE @ S.W. CORNER OF INTERSECTION OF RTE. 116 & C.R. 200 E

BENCHMARK #100/#1895
STA 316+84.00, 62' RT
ELEV=658.09
STAINLESS STEEL ROD IN SLEEVE

PAVEMENT REMOVAL
STA 317+16 TO STA 317+37
STA 317+67 TO STA 317+88

HOT-MIX ASPHALT SHOULDER

PAVEMENT REMOVAL

N

20 0 20
SCALE IN FEET

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
DATE
BY

PROFILE
SURVEYED
PLOTTED
NOTE BOOK
NO.
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTATING CHKD
DATE
BY

680 675 670 665 660 655 650 645 640

EXISTING ROADWAY PROFILE ℄

PROPOSED PROFILE GRADE ℄
(MATCH EXISTING)

EXISTING STRUCTURE

P.G.E. LIMITS

D.H.W.E.
655.10

+50
(RT) 654.00

-0.32%

+00
(RT) 653.84

-4.60%

PROPOSED PROFILE
GRADE AT RIGHT DITCH

+40
(RT) 652.00

MATCH DITCH
FLOW LINE

+65
(LT) 652.00

MATCH DITCH
FLOW LINE

+86
(RT) 651.00

+00
(RT) 652.56

+3.43%

+1.80%

+00
(LT) 653.20

+4.06%

+50
(RT) 654.59

+0.44%

18" P. CULV TY 1

+1.00%

PROPOSED PROFILE
GRADE AT LEFT DITCH

+00
(RT) 654.81

+0.66%

PROPOSED PROFILE
GRADE AT RIGHT DITCH

+50
(RT) 655.31

+0.64%

18" P. CULV TY 1

+0.83%

+00
(LT) 654.51

+60
(RT) 656.01

+60
(LT) 655.01

661.00 661.12 661.18 661.02 660.87 660.77 660.74 660.68 660.52 660.39 660.26 660.10

315+00 315+50 316+00 316+50 317+00 317+50 318+00 318+50 319+00 319+50 320+00 320+50

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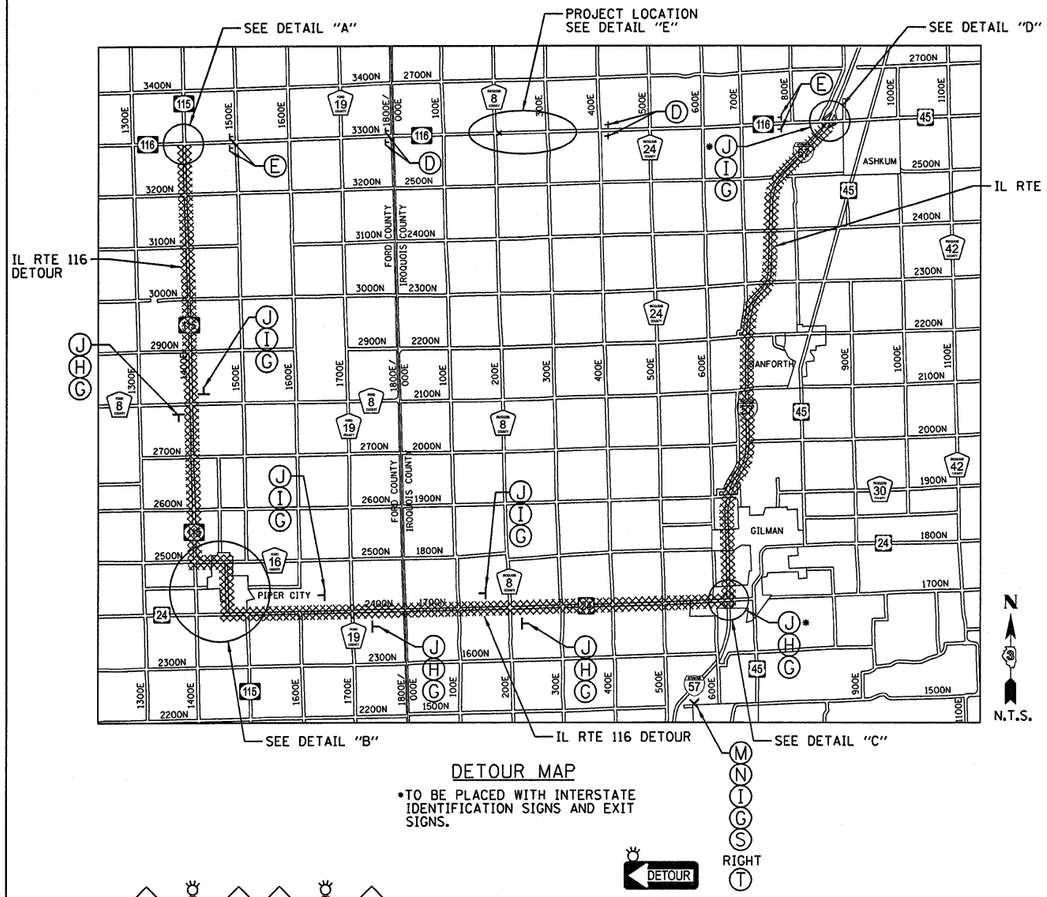
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PLOT

SCALE: | SHEET NO. 8 OF 28 SHEETS | STA. 314+90 | TO STA. 320+50

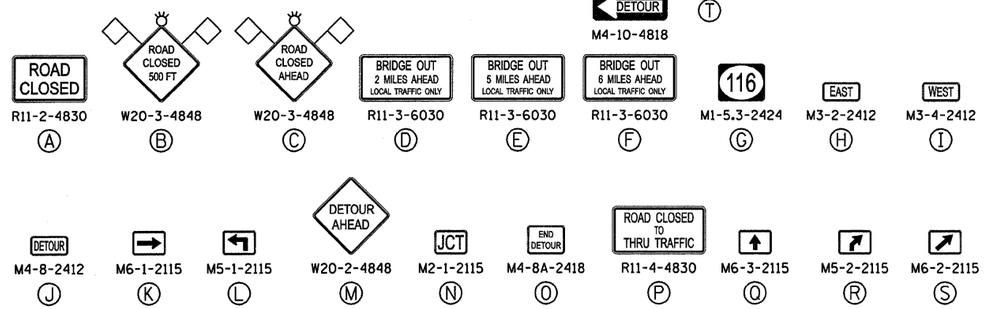
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	8
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

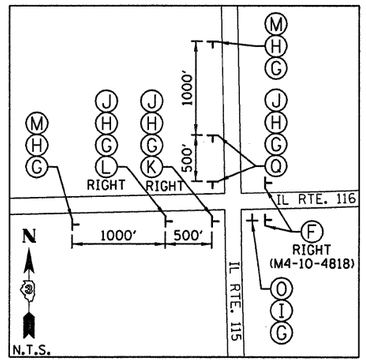
24-7917



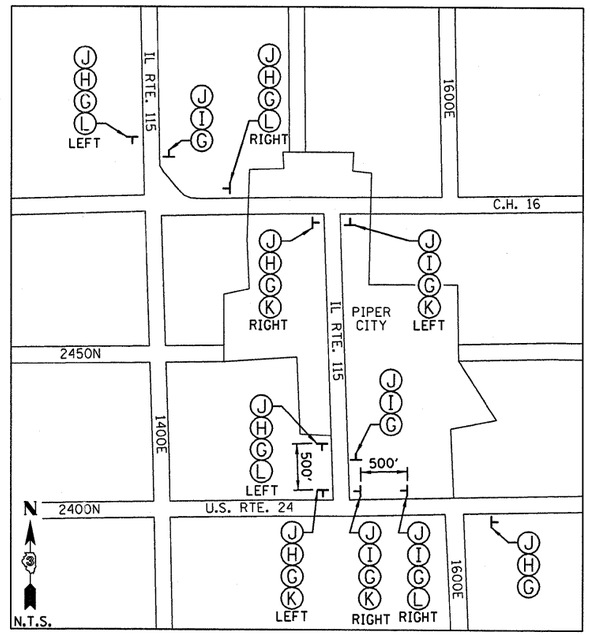
DETOUR MAP

•TO BE PLACED WITH INTERSTATE IDENTIFICATION SIGNS AND EXIT SIGNS.

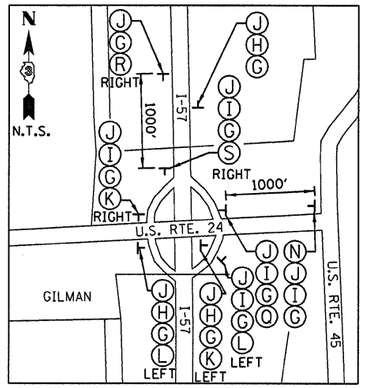




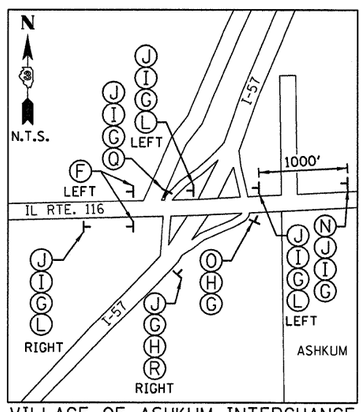
IL RTE. 116 &
IL RTE. 115 INTERSECTION
(DETAIL "A")



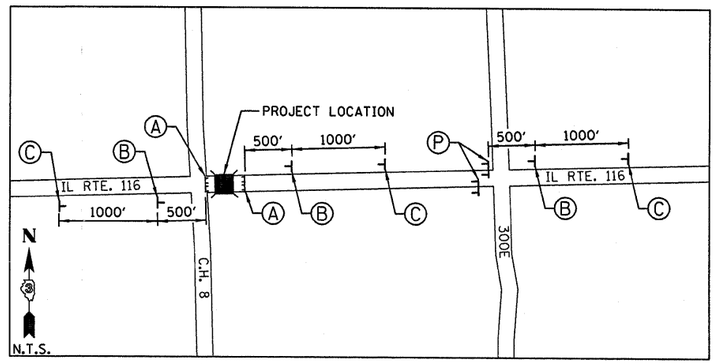
IL RTE. 115 &
U.S. RTE. 24 INTERSECTION
(DETAIL "B")



CITY OF GILMAN INTERCHANGE
(DETAIL "C")



VILLAGE OF ASHKUM INTERCHANGE
(DETAIL "D")



PROJECT LOCATION VICINITY
(DETAIL "E")

LEGEND

- TYPE III BARRICADES CONFORMING TO STD. 702001 "ROAD CLOSED TO ALL TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE
- TYPE III BARRICADES CONFORMING TO STD. 702001 "ROAD CLOSED TO THRU TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE
- SIGNS ON PERMANENT SUPPORTS
- FLASHING LIGHT ABOVE SIGN
- 18"x18" ORANGE FLAG
- DETOUR ROUTE

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 OTHERWISE NOTED.
3.) LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4.) THE ILLINOIS DEPARTMENT OF TRANSPORTATION, BUREAU OF OPERATIONS WILL SUPPLY ALL IL 116 ROUTE SIGNS FOR THIS DETOUR. THE CONTRACTOR SHALL NOTIFY DISTRICT 3 BUREAU OF OPERATIONS 21 CALENDAR DAYS PRIOR TO PLACING THE DETOUR.
5.) WORK SHALL BE DONE IN ACCORDANCE WITH BLR-21.
6.) COVER ANY SIGNS DENOTING EAST IL ROUTE 116 WITHIN A MILE RADIUS OF THE INTERSECTION BETWEEN IL ROUTE 116 AND IL ROUTE 115. COVER ANY SIGNS DENOTING WEST IL ROUTE 116 WITHIN A MILE RADIUS OF THE I-57 INTERCHANGE.
7.) TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MANUAL FOR UNIFORM TRAFFIC CONTROL, HIGHWAY STANDARDS AND SPECIAL PROVISIONS.
8.) COVER "ASHKUM" ON THE GREEN BOARD SIGNS ON I-57 NORTHBOUND AND SOUTHBOUND OF THE ASHKUM EXIT AT IL RTE. 116.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETOUR PLAN

SCALE: | SHEET NO. 9 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	9
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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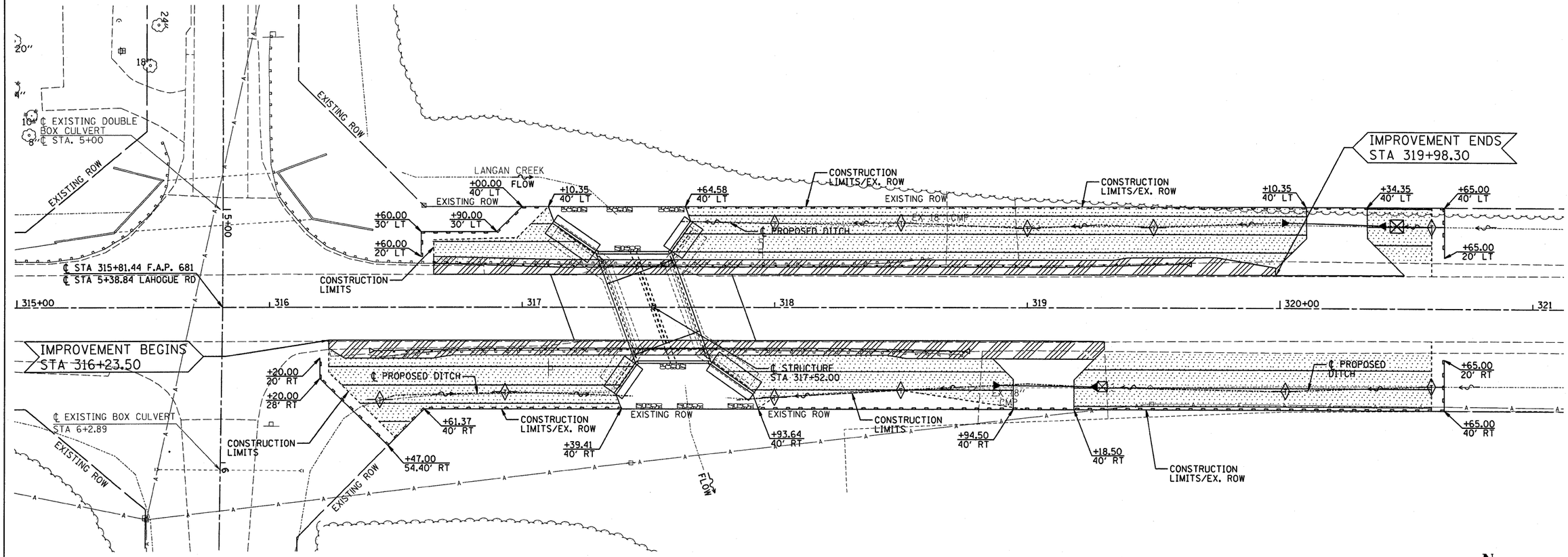
24-7917



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

SCALE: | SHEET NO. 10 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	10
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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24-7917

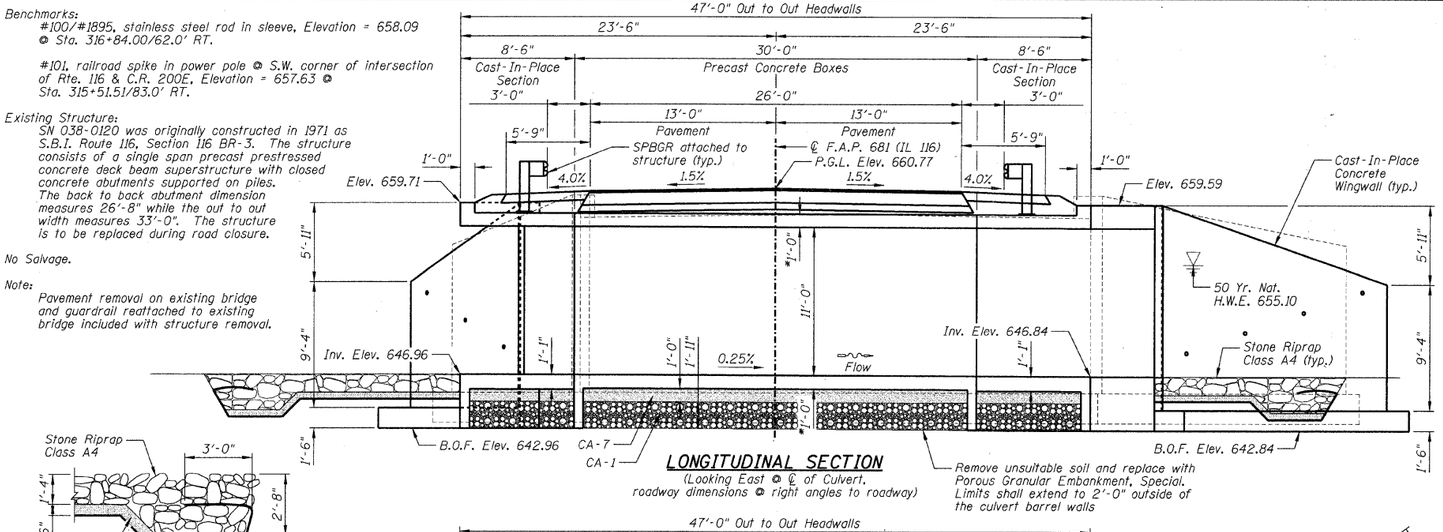
Benchmarks:
#100/#1895, stainless steel rod in sleeve, Elevation = 658.09 @ Sta. 316+84.00/62.0' RT.

#101, railroad spike in power pole @ S.W. corner of intersection of Rte. 116 & C.R. 200E, Elevation = 657.63 @ Sta. 315+51.51/83.0' RT.

Existing Structure:
SN 038-0120 was originally constructed in 1971 as S.B.I. Route 116, Section 116 BR-3. The structure consists of a single span precast prestressed concrete deck beam superstructure with closed concrete abutments supported on piles. The back to back abutment dimension measures 26'-8" while the out to out width measures 33'-0". The structure is to be replaced during road closure.

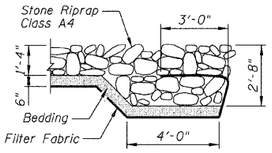
No Salvage.

Note:
Pavement removal on existing bridge and guardrail reattached to existing bridge included with structure removal.

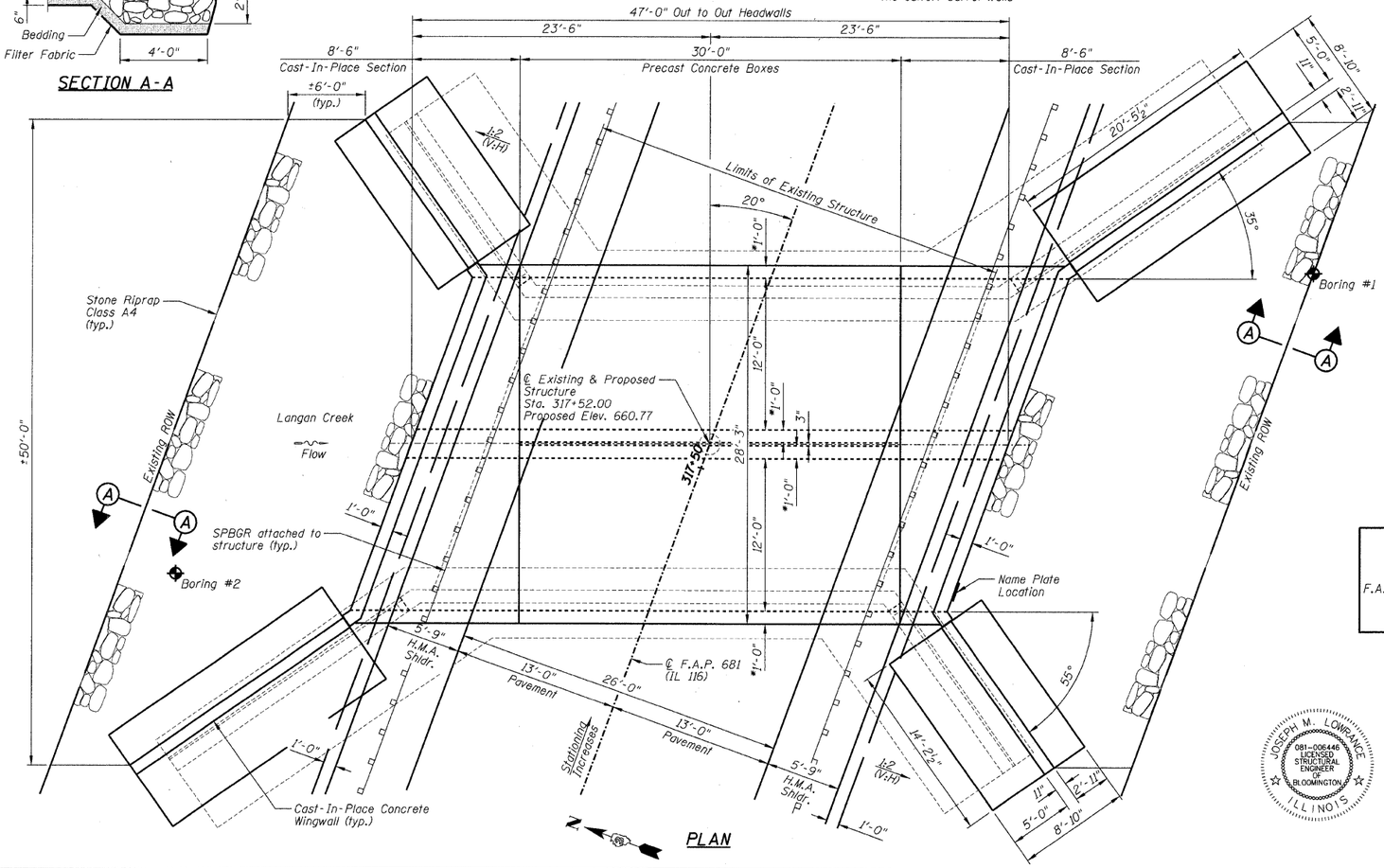


LONGITUDINAL SECTION

(Looking East @ ℄ of Culvert, roadway dimensions @ right angles to roadway)



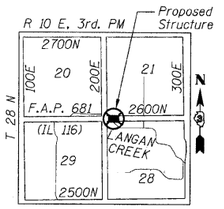
SECTION A-A



PLAN

TOTAL BILL OF MATERIAL - BOX CULVERT

ITEM	UNIT	TOTAL
Removal and Disposal of Unsuitable Material	Cu Yd	160
Porous Granular Embankment, Special	Cu Yd	160
Stone Riprap, Class A4	Sq Yd	185
Filter Fabric	Sq Yd	185
Removal Of Existing Structures	Each	1
Reinforcement Bars	Pound	19,040
Reinforcement Bars, Epoxy Coated	Pound	1,780
Name Plates	Each	1
Concrete Box Culverts	Cu Yd	142.2
Precast Concrete Box Culvert 12' x 11' (M273)	Foot	60



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 3.00 Sq. Mi.
Existing Low Grade Elev. 659.39 @ Sta. 326+00
Proposed Low Grade Elev. 659.39 @ Sta. 326+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	145	151	170	654.20	0.00	0.00	654.20	654.20
Design	50	201	172	191	655.10	0.00	0.00	655.10	655.10
Base	100	223	181	201	655.50	0.00	0.00	655.50	655.50
Overtopping									
Max. Calc.	500	272	195	218	656.20	0.00	0.00	656.20	656.20

10 year velocity through Existing Structure = 1.0 fps
10 year velocity through Proposed Structure = 0.9 fps

DESIGN SPECIFICATIONS

AASHTO 2002

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi (Cast-In-Place)
fy = 60,000 psi (Reinforcement)
PRECAST UNITS
f'c = 5,000 psi (Precast)
fy = 60,000 psi (Reinforcement)
fy = 65,000 psi (Welded Wire Fabric)

LOADING HS20-44

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

STATION 317+52.00
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RTE. 681 SECTION 116 BR-1
LOADING HS20
STR. NO. 038-2022

NAME PLATE

See Standard 515001

JOSEPH M. LOWRANCE
081-006446
LICENSED STRUCTURAL ENGINEER OF BLOOMINGTON
ILLINOIS

Joseph M. Lowrance Date 4/14/08
JOSEPH M. LOWRANCE
ILLINOIS STRUCTURAL ENGINEER
NO. 081-006446
Exp. Date 11/30/08

GENERAL NOTES

1.) Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
2.) Reinforcement bars designated (E) shall be epoxy coated.
3.) Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4.) Cast-In-Place concrete exposed edges shall be beveled ¾".
5.) It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included with the cost of "Concrete Box Culverts".
6.) Structural seal does not include design of precast elements.
7.) The precast concrete culvert sections shall be designed and manufactured in accordance with AASHTO M273 (ASTM C 850).
8.) For backfilling and embankment, see Standard Specifications.
9.) End of precast section shall not have a bell or spigot.
10.) Contractor to confirm all precast culvert dimensions with supplier before starting construction. All applicable cast-in-place concrete dimensions shall match precast culvert dimensions.
11.) The existing plans are provided for informational use only.
12.) See Sheet B7-B9 for soil borings.
13.) The last section of precast culvert shall have an integral toe wall and reinforcing bars extending from the precast culvert as shown on Sheets B2 - B5.
14.) The pay item "Removal and Disposal of Unsuitable Material" shall include the excavation of unsuitable material for a depth of 2'-11" below the structure for a width of 32'-3" within the limits of the toe walls as shown on the plans. The actual amount shall be determined in the field by the Engineer.
15.) The pay item "Porous Granular Embankment, Special" shall include the placement of CA-1 and CA-7 below the structure for a width of 32'-3" within the limits of the toe walls as shown on the plans. The actual amount shall be determined in the field by the Engineer.
16.) The Contractor shall reshape the channel within the Right-Of-Way in order to facilitate drainage and the placement of riprap as directed by the Engineer. The cost of reshaping the channel shall be included in the cost of "Removal of Existing Structures".

INDEX TO SHEETS

NOTES:

1.) *Confirm slab and wall thickness with Precaster.
2.) B.O.F. denotes Bottom Of Footing.
3.) P.G.L. denotes Profile Grade Line.

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		DRAWN - DJM	REVISED -	
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	PLOT DATE = *DATE*	DATE - 04/09/08	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

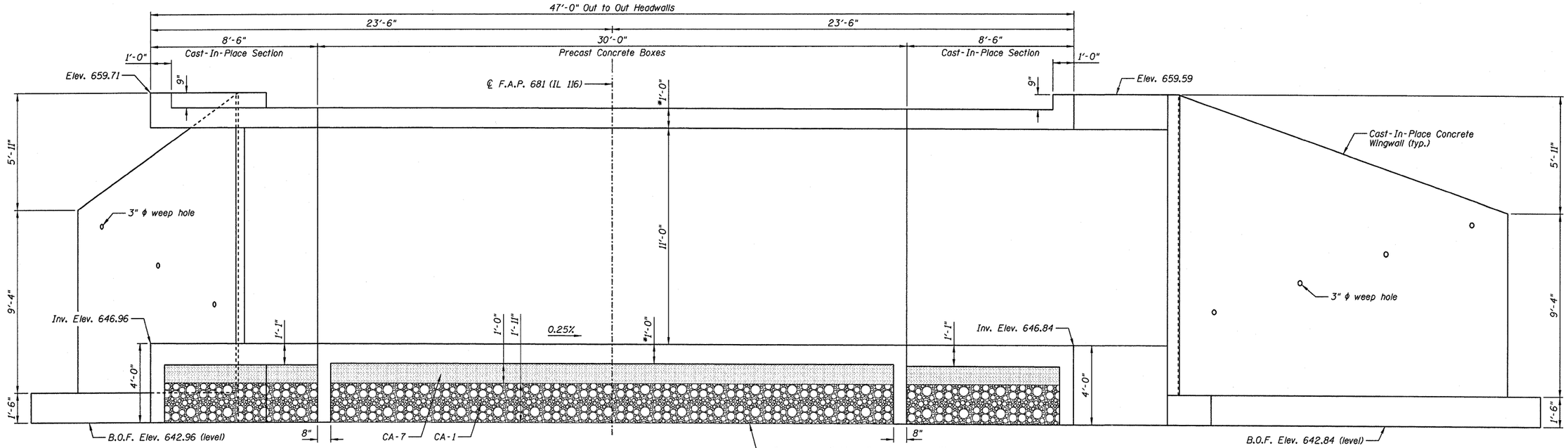
GENERAL PLAN AND ELEVATION

SCALE: | SHEET NO. B1 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	11
			CONTRACT NO. 66730	
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

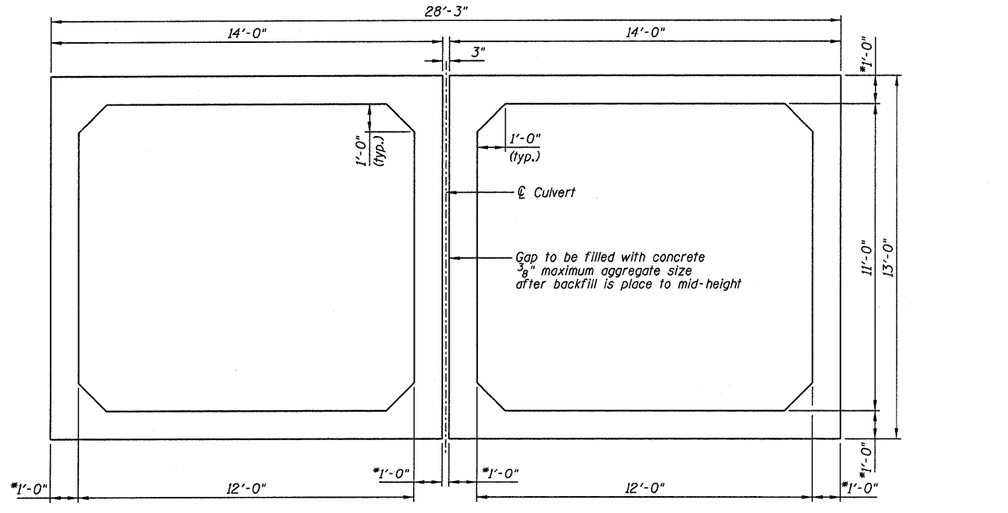
FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917

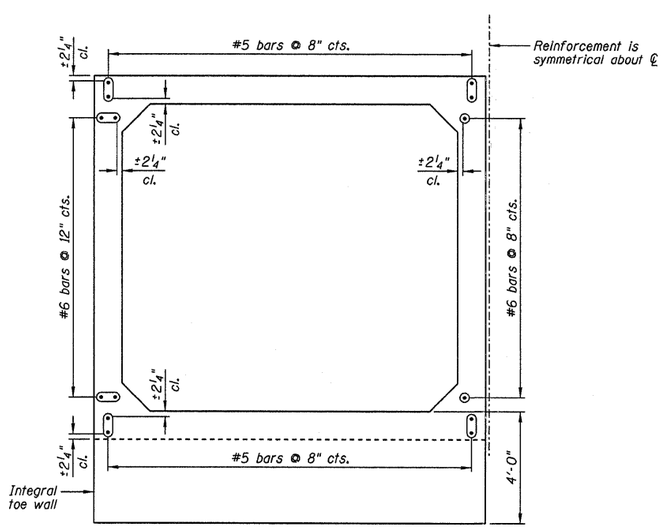


LONGITUDINAL SECTION

(Looking East @ ℄ of Culvert, roadway dimensions @ right angles to roadway)



SECTION THRU PRECAST CONCRETE BARREL



PRECAST CONCRETE CULVERT END ELEVATION

Sections are symmetrical about ℄ culvert.

Bar	Extension
#5	1'-8"
#6	2'-0"

BILL OF MATERIAL

Item	Unit	Quantity
Removal and Disposal of Unsuitable Material	Cu Yd	160
Porous Granular Embankment, Special	Cu Yd	160
Precast Concrete Box Culvert 12'x11' (M273)	Foot	60

NOTES:

1.) *Confirm slab and wall thickness with Precaster.
2.) For Cast-In-Place concrete portions, see Sheet B3-B6.
3.) B.O.F. denotes Bottom Of Footing.
4.) Cost of reinforcing bars extending from precast barrels included with the cost of precast concrete box culverts.

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	PLOT DATE = Aug 07, 2008 - 09:12:19 AM	DATE - 04/09/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DOUBLE BOX CULVERT LONGITUDINAL SECTION, PRECAST CONCRETE CULVERT SECTION AND DETAILS

SCALE: | SHEET NO. B2 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	12
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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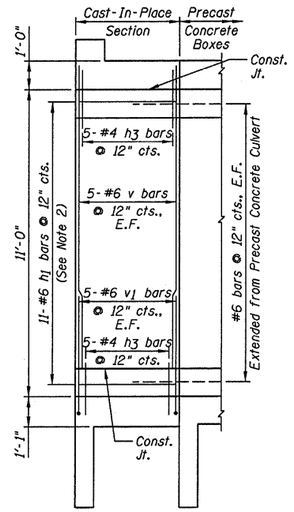
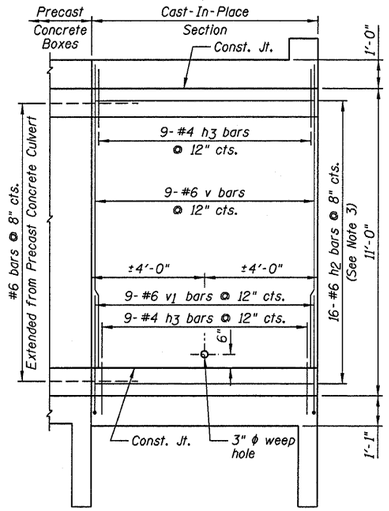
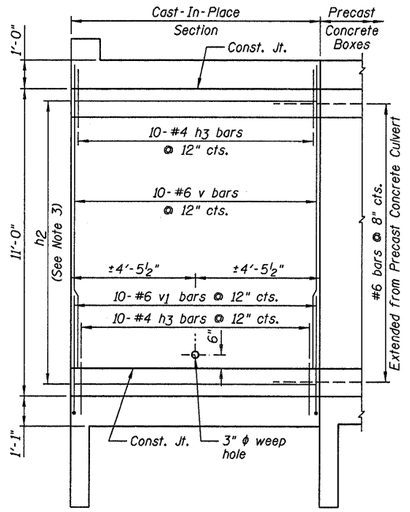
24-7917



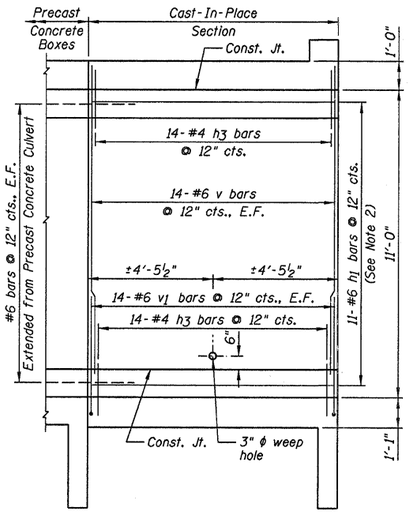
EXTERIOR WALL ELEVATION (SHORT)



INTERIOR WALL ELEVATION (SHORT)



INTERIOR WALL ELEVATION (LONG)

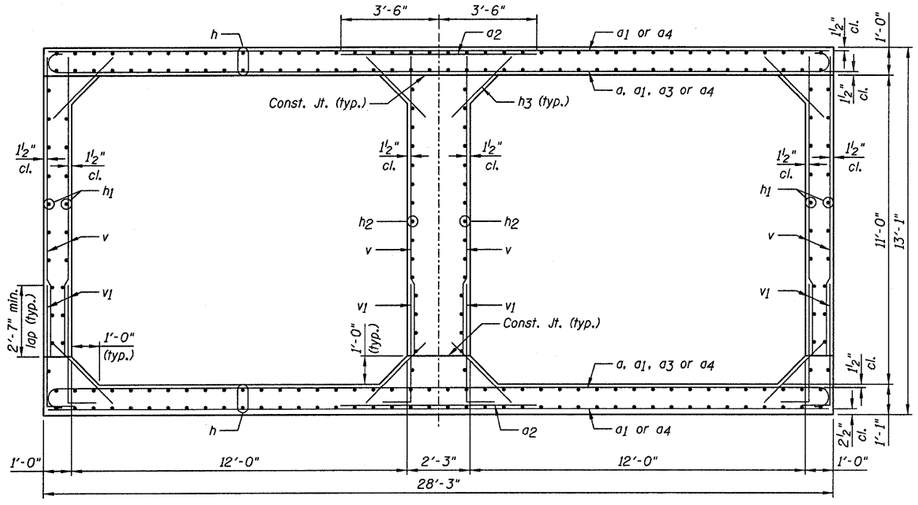


EXTERIOR WALL ELEVATION (LONG)

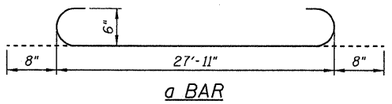
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	12	#6	29'-3"	
a1	32	#6	27'-11"	
a2	28	#6	7'-0"	
a3	20	#6	30'-1"	
a4	36	#6	28'-8"	
d	94	#4	5'-3"	
h	168	#5	16'-7"	
h1	44	#6	16'-7"	
h2	32	#6	16'-6"	
h3	152	#4	3'-0"	
h4	6	#5	29'-8"	
h5	6	#5	5'-2"	
h6	6	#5	15'-0"	
h7	8	#6	28'-6"	
h8	50	#4	13'-11"	
h9	50	#4	20'-2"	
n(E)	94	#8	7'-1"	
s	30	#4	5'-3"	
s1	30	#4	5'-1"	
t	150	#6	8'-6"	
v	114	#6	10'-10"	
v1	114	#6	5'-6"	
v2	19	#5	24'-3"	
v3	5	#4	24'-3"	
v4	28	#5	24'-3"	
v5	6	#4	24'-3"	
w	40	#4	13'-11"	
w1	40	#4	20'-2"	

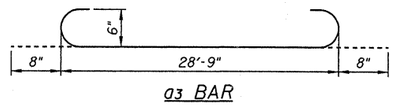
Item	Unit	Quantity
Reinforcement Bars	Pound	19,040
Reinforcement Bars, Epoxy Coated	Pound	1,780
Name Plates	Each	1
Concrete Box Culverts	Cu Yd	142.2



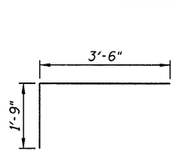
SECTION THRU CAST-IN-PLACE CONCRETE BARREL



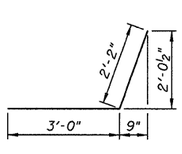
a BAR



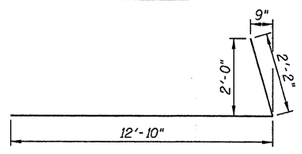
a3 BAR



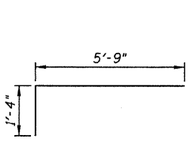
d BAR



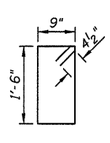
h5 BAR



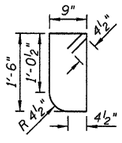
h6 BAR



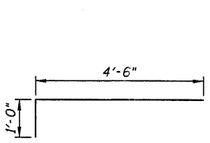
n(E) BAR



s BAR

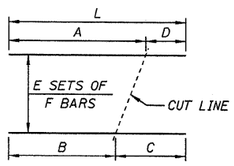


s1 BAR



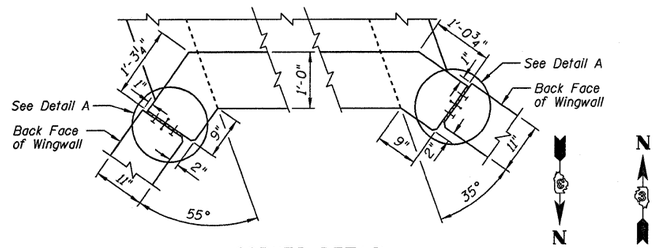
v1 BAR

BAR CUTTING DIAGRAM

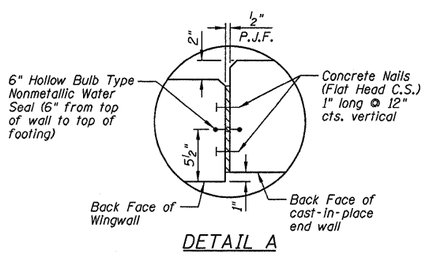


BAR	A	B	C	D	E	F	L
a3	26'-9"	2'-0"	26'-9"	2'-0"	2	10	28'-9"
a4	25'-4"	3'-4"	25'-4"	3'-4"	4	9	28'-8"
h	13'-3"	3'-4"	13'-3"	3'-4"	4	42	16'-7"
h1	13'-3"	3'-4"	13'-3"	3'-4"	4	11	16'-7"
h2	8'-8"	7'-10"	8'-8"	7'-10"	2	16	16'-6"
v2	14'-11"	9'-4"	14'-11"	9'-4"	1	19	24'-3"
v3	14'-11"	9'-4"	14'-11"	9'-4"	1	5	24'-3"
v4	14'-11"	9'-4"	14'-11"	9'-4"	1	28	24'-3"
v5	14'-11"	9'-4"	14'-11"	9'-4"	1	6	24'-3"

Note: "L" dimension does not take into account the hook length for the hooked bar a3.



CORNER DETAIL



DETAIL A

NOTES:

1.) Tilt hook of a bars and a3 bars if necessary to provide the clearance specified.
2.) Order h1 bars full length, cut according to Bar Cutting Diagram. Use remainder of bar in opposite exterior wall.
3.) Order h2 bars full length, cut according to Bar Cutting Diagram. Use remainder of bar in opposite mat of interior wall.
4.) E.F. denotes Each Face.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAST-IN-PLACE CONCRETE CULVERT SECTION, DETAILS AND BILL OF MATERIAL

SCALE: | SHEET NO. B3 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	13
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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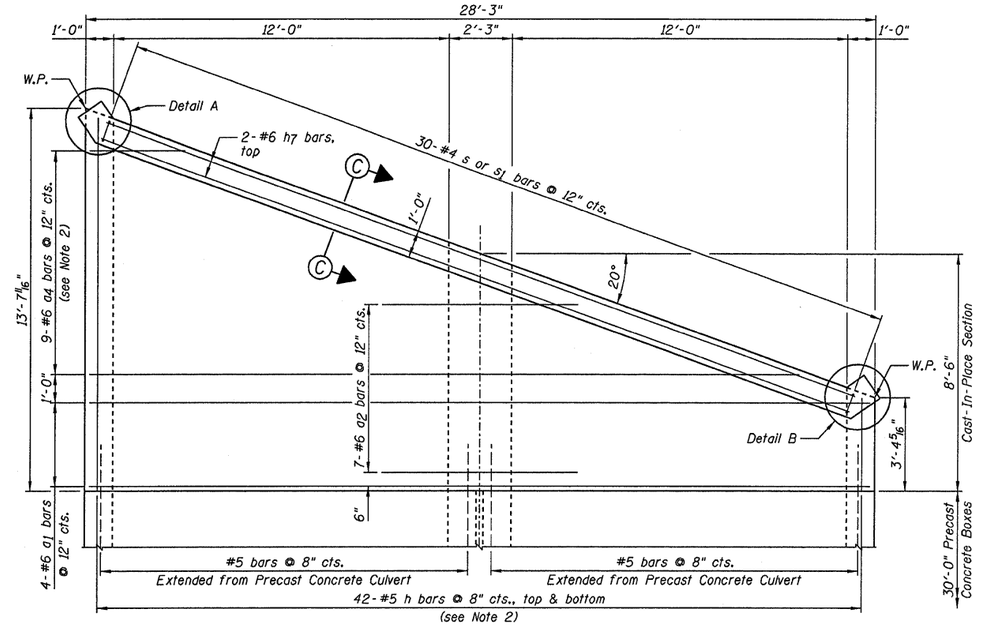
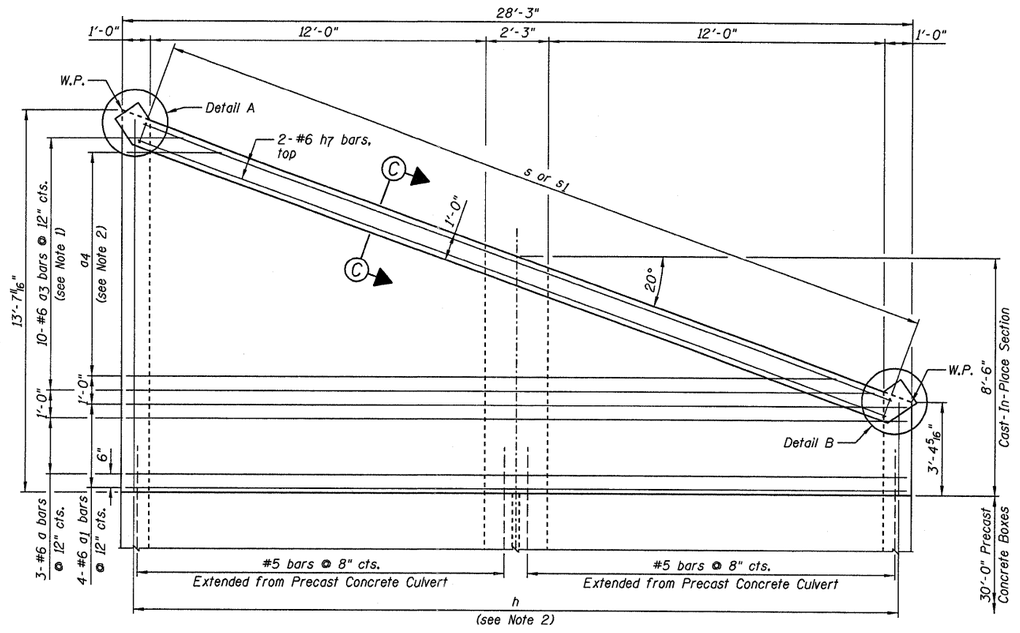
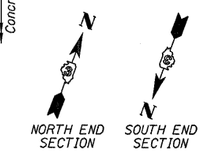
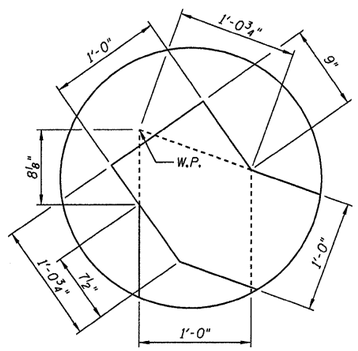


TOP MAT OF REINFORCEMENT PLAN

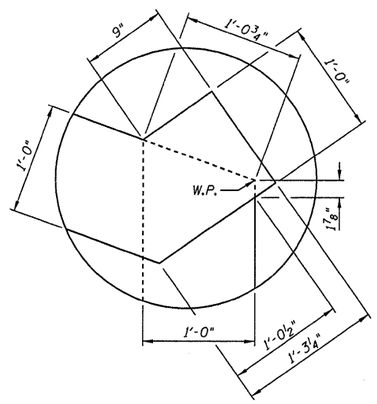


BOTTOM MAT OF REINFORCEMENT PLAN

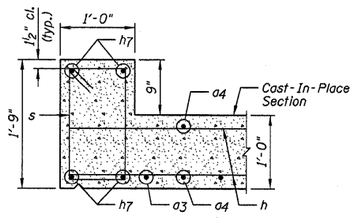




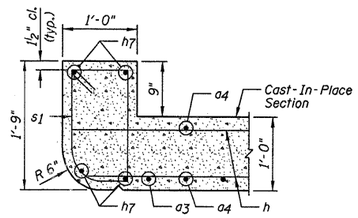
DETAIL A



DETAIL B



DOWNSTREAM HEADWALL



UPSTREAM HEADWALL

SECTION C-C

NOTES:

1.) Order a3 bars full length, cut according to Bar Cutting Diagram on Sheet B3. Use remainder of bars in opposite end.
2.) Order a4 and h bars full length, cut according to Bar Cutting Diagram on Sheet B3. Use remainder of bars in opposite mat.
3.) For Bill of Material, see Sheet B3.
4.) W.P. denotes Working Point.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAST-IN-PLACE CONCRETE CULVERT
TOP SLAB PLANS AND SECTIONS

SCALE: | SHEET NO. B4 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	14
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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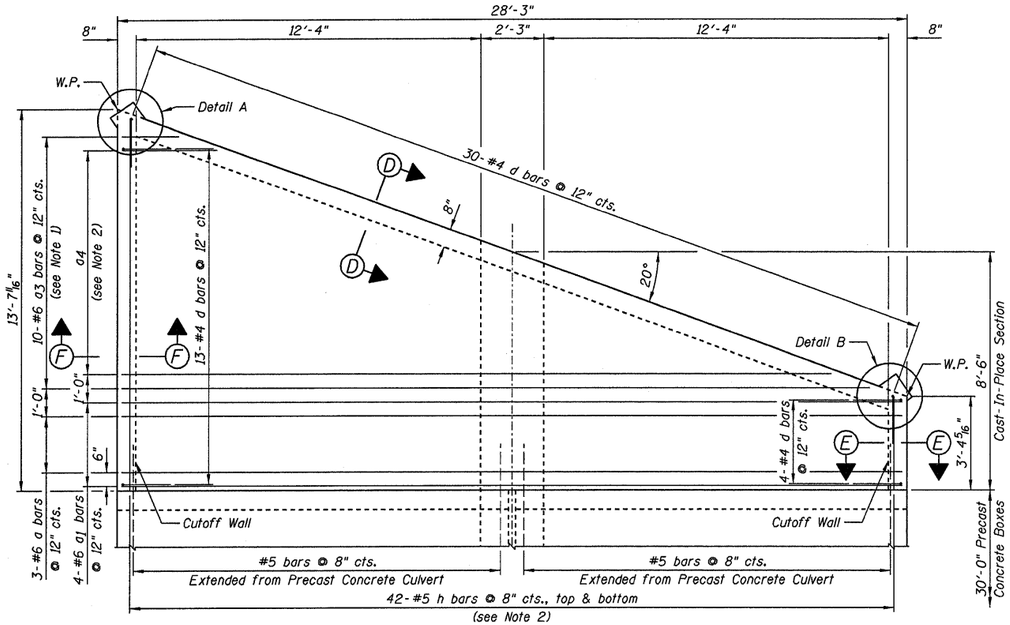
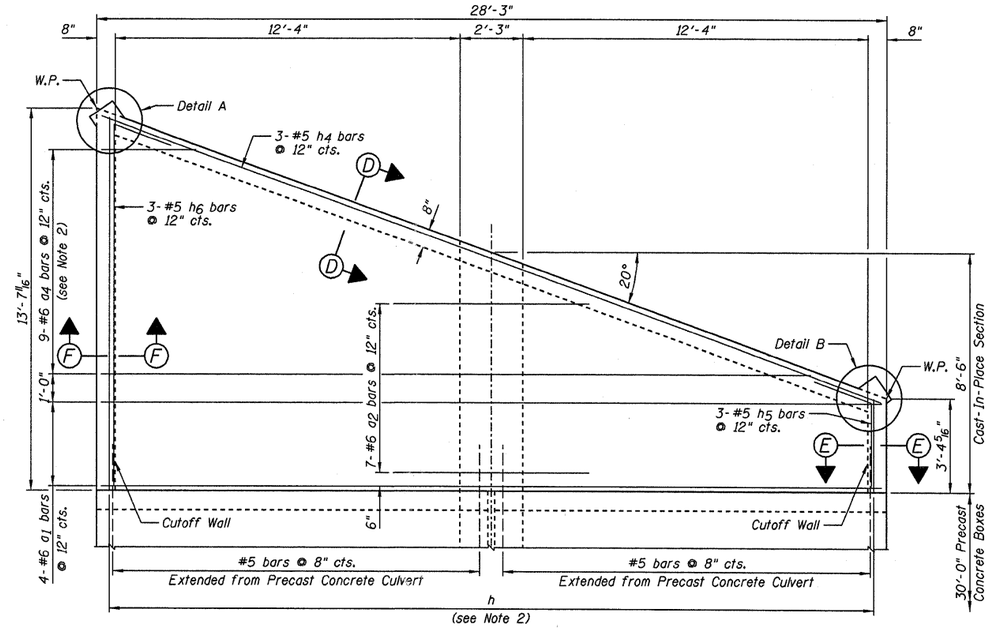
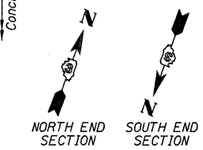
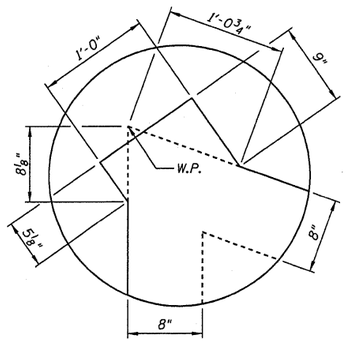


TOP MAT OF REINFORCEMENT PLAN

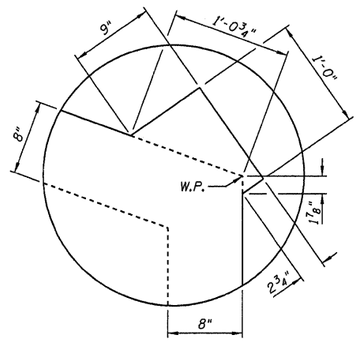


BOTTOM MAT OF REINFORCEMENT PLAN

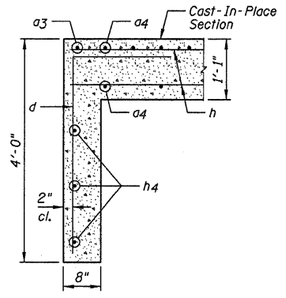




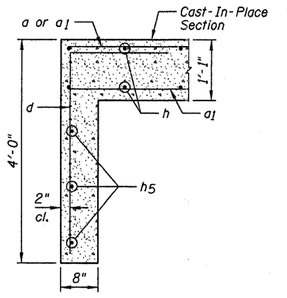
DETAIL A



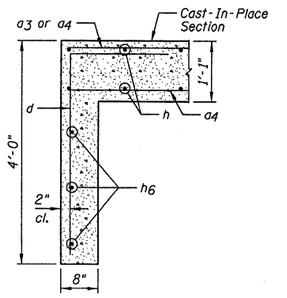
DETAIL B



SECTION D-D



SECTION E-E



SECTION F-F

NOTES:

1.) Order a3 bars full length, cut according to Bar Cutting Diagram on Sheet B3. Use remainder of bars in opposite end.
2.) Order a4 and h bars full length, cut according to Bar Cutting Diagram on Sheet B3. Use remainder of bars in opposite mat.
3.) For Bill of Material, see Sheet B3.
4.) W.P. denotes Working Point.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAST-IN-PLACE CONCRETE CULVERT
BOTTOM SLAB PLANS AND SECTIONS

SCALE: | SHEET NO. B5 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	15
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

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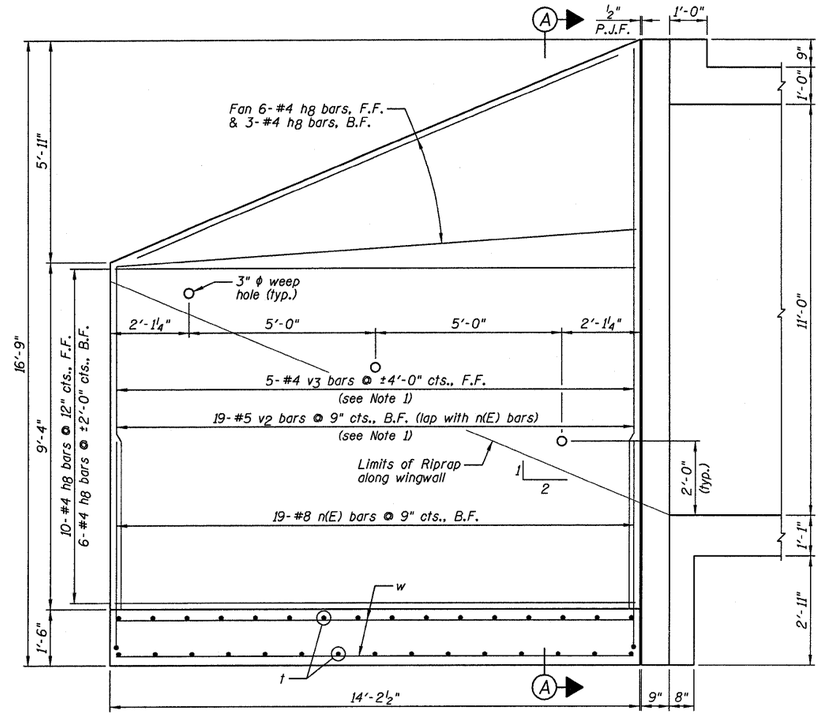
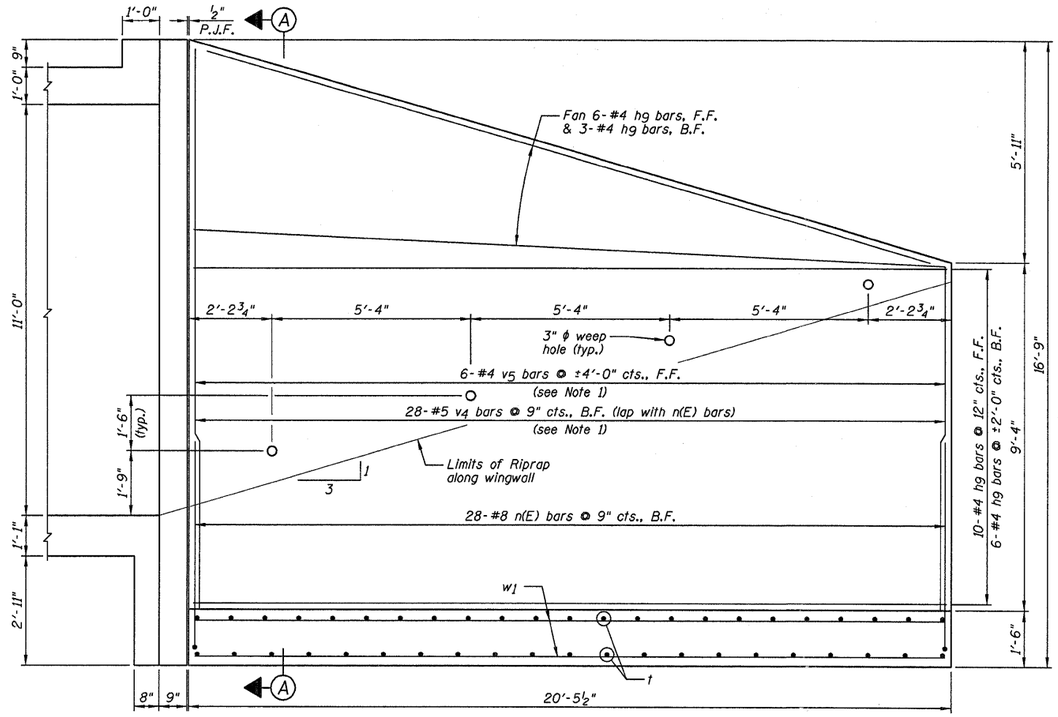
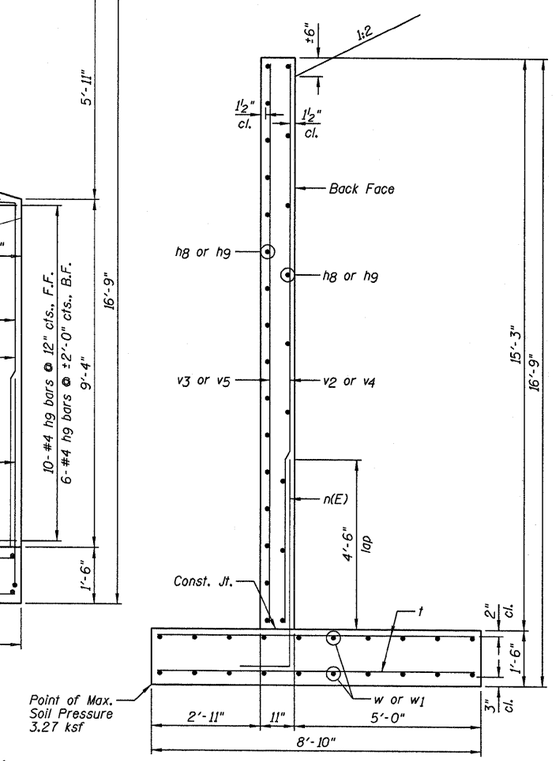


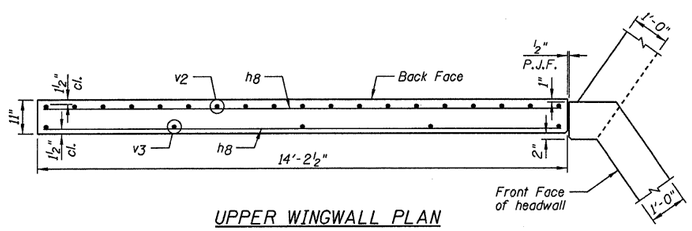
NORTHEAST & SOUTHWEST WINGWALL ELEVATION



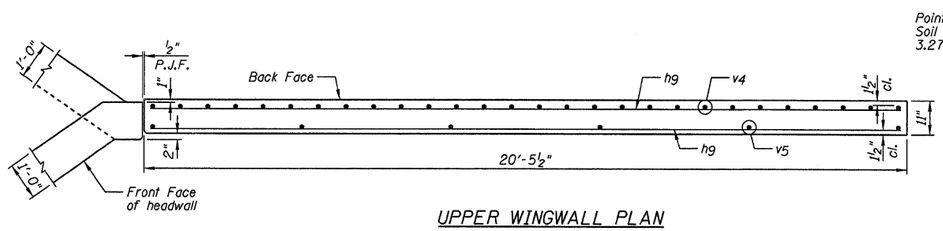
NORTHWEST & SOUTHEAST WINGWALL ELEVATION



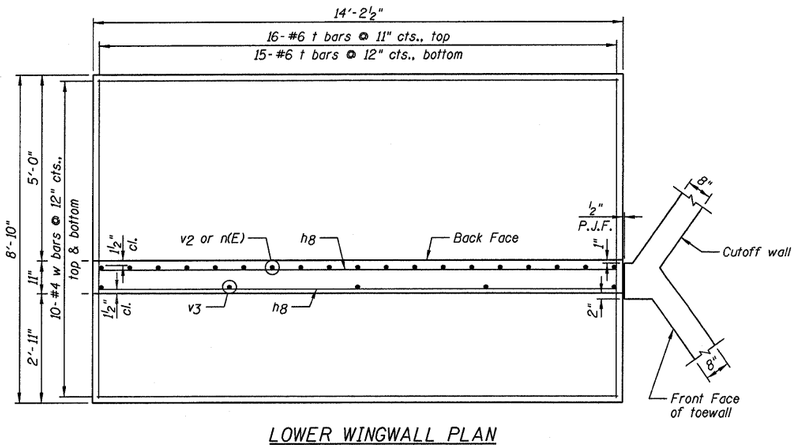
SECTION A-A



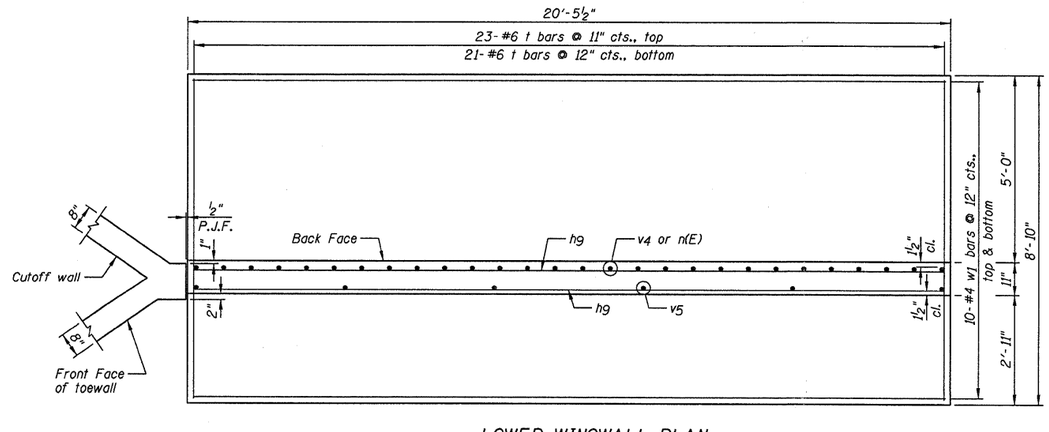
UPPER WINGWALL PLAN



UPPER WINGWALL PLAN



LOWER WINGWALL PLAN



LOWER WINGWALL PLAN

NOTES:

1.) Order v2, v3, v4 and v5 bars full length, cut according to Bar Cutting Diagram on Sheet B3. Use remainder of bars in opposite wingwall.
2.) Calculated minimum bearing pressure = 3.27 ksf.
3.) For Bill Of Material, see Sheet B3.
4.) F.F. denotes Front Face.
B.F. denotes Back Face.
5.) Bottom of Footing Elev. N.E. & N.W. Wingwalls = 642.96.
6.) Bottom of Footing Elev. S.E. & S.W. Wingwalls = 642.84.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAST-IN-PLACE CONCRETE WINGWALLS

SCALE: | SHEET NO. B6 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	16
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917

Illinois Department of Transportation
Division of Highways
District 03, Ottawa

SOIL BORING LOG

Date 12/15/70

ROUTE IL 116 DESCRIPTION IL 116 over Langan Creek LOGGED BY W Pearce

SECTION 116-BR-3 LOCATION SW 1/4, SEC. 21, TWP. 28N, RNG. 10E

COUNTY Iroquois DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. 038-0120
Station 317+52

BORING NO. 1
Station 317+81
Offset 40.00ft Rt
Ground Surface Elev. 96.46 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 86.5 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff, yellow brown, Clay Till			
	4		
	6 7	1.6 B	23.0
	3		
-5	3 5	1.8 B	26.0
(651.46) 80.46 Stiff, yellow brown, Silty Clay			
	5		
	7 8	1.2 S	27.0
	6		
-10	6 6	1.5 B	24.0
	7		
(646.46) 85.46 Hard, dark brown, Silty Clay			
	11 12	6.8 B	20.0
(643.96) 82.96 Stiff very stiff, gray, Clay Till			
	6		
-15	5 7	1.9 B	26.0
	4		
	5 6	2.3 B	27.0
	3		
-20	5	1.5	30.0
Stiff very stiff, gray, Clay Till (continued)			
(636.46) 75.46 Very stiff to hard, gray, Clay Till			
	7		
	9 10	3.1 B	14.0
	9		
-25	6 9	5.4 B	15.0
(631.46) 70.46 Stiff, gray, Clay Till			
	6		
	8 12	1.6 B	16.0
(628.46) 67.46 Very stiff, gray, Clay Till			
	5		
-30	6 17	2.1 B	16.0
	9		
	10 18	3.7 B	14.0
(623.46) 62.46 Hard, gray, Clay Till with Limestone fragments @ 35'			
	53		
-35	63 54	4.8 S	11.0
	20		
	22 28	6.4 S	12.0
(618.96) 57.96 Hard, pale yellow, Clay with Limestone fragments			
	28		
-40	52	3.9	13.0

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District 03, Ottawa

SOIL BORING LOG

Date 12/15/70

ROUTE IL 116 DESCRIPTION IL 116 over Langan Creek LOGGED BY W Pearce

SECTION 116-BR-3 LOCATION SW 1/4, SEC. 21, TWP. 28N, RNG. 10E

COUNTY Iroquois DRILLING METHOD _____ HAMMER TYPE _____

STRUCT. NO. 038-0120
Station 317+52

BORING NO. 1
Station 317+81
Offset 40.00ft Rt
Ground Surface Elev. 96.46 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 86.5 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Hard, pale yellow, Clay with Limestone fragments (continued)			
	53	S	
	58		
	161 100/1"	4.2 S	14.0
(613.46) 52.46 Limestone fragments	100/2"		
-45 (611.96) 50.96 End of Boring			
-50			
-55			
-60			

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

BBS, from 137 (Rev. 8-99)

NOTES:

1.) Ground Surface Elevation 96.46 = ±657.46 (correlation between 1970 Borings and current plans).
2.) Existing Ground Surface Elevation = ±651.50.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: | SHEET NO. B7 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	17
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917

Illinois Department of Transportation
Division of Highways
District 03, Ottawa

SOIL BORING LOG

Date 12/22/70

ROUTE IL 116 DESCRIPTION IL 116 over Langan Creek LOGGED BY W Pearce

SECTION 116-BR-3 LOCATION SW 1/4, SEC. 21, TWP. 28N, RNG. 10E

COUNTY Iroquois DRILLING METHOD HAMMER TYPE

STRUCT. NO. 038-0120
Station 317+52

BORING NO. 2
Station 317+28
Offset 36.00ft Lt
Ground Surface Elev. 97.11 ft

Surface Water Elev. ft
Stream Bed Elev. ft

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

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Stiff, yellowish brown, Clay and Clay Till
	4			
	8	1.8	21.0	
	6	B		
	2			
5	2	1.9	23.0	
	3	B		
				(652.11) 91.11
				Medium, light brown, Silty Clay Till
	2			
	2	0.3	25.0	
	4	B		
				(649.61) 88.61
				Very stiff, brown, Clay Till
	3			
10	5	3.1	17.0	
	8	B		
	6			
	10	2.3	24.0	
	13	B		
	5			
15	6	2.7	24.0	
	8	B		
				(642.11) 81.11
				Stiff, gray brown, Clay Till
	5			
	7	1.3	29.0	
	6	B		
	4			
20	4	1.6	33.0	
	5	B		Stiff, gray brown, Clay Till *(continued)*
	6			
	8	1.5	16.0	
	9	B		
				(634.11) 73.11
	5			Very stiff, gray brown, Clay Till
30	7	2.3	14.0	
	10	B		
	6			
	8	2.1	15.0	
	10	B		
	6			
	7	2.1	15.0	
	8	B		
				(624.61) 63.61
				Hard, greenish gray, Clay Till
	10			
35	14	4.7	16.0	
	25	B		
	20			
40	31	4.6	11.0	

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

BBS, from 137 (Rev. 8-99)

Date 12/22/70

ROUTE IL 116 DESCRIPTION IL 116 over Langan Creek LOGGED BY W Pearce

SECTION 116-BR-3 LOCATION SW 1/4, SEC. 21, TWP. 28N, RNG. 10E

COUNTY Iroquois DRILLING METHOD HAMMER TYPE

STRUCT. NO. 038-0120
Station 317+52

BORING NO. 2
Station 317+28
Offset 36.00ft Lt
Ground Surface Elev. 97.11 ft

Surface Water Elev. ft
Stream Bed Elev. ft

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

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	55	B		Hard, greenish gray, Clay Till *(continued)*
				(614.61) 53.61
	53			Very dense, yellow to green, Silt
45	35		16.0	
	76			(612.61) 51.61
				End of Boring
50				
55				
60				

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

BBS, from 137 (Rev. 8-99)

NOTES:

1.) Ground Surface Elevation 97.11 = ±658.11
(correlation between 1970 Borings and current plans).
2.) Existing Ground Surface Elevation = ±647.75.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: | SHEET NO. 88 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	18
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917

Illinois Department of Transportation
Division of Highways
District 03, Ottawa

SOIL BORING LOG

Date 11/14/05

ROUTE IL 116 DESCRIPTION IL 116 over Langan Creek LOGGED BY Larry Myers

SECTION 116-BR-3 LOCATION SW 1/4, SEC. 21, TWP. 28N, RNG. 10E

COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 038-0120
Station 317+52

BORING NO. 3 SW quad
Station 317+03
Offset 7.50ft Rt
Ground Surface Elev. ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Augered, bituminous, CA06, brown, Sand and Gravel fill
	8			
	9		5.9	Medium, brown, Sand to fine, Gravel fill
	8			
-5	2			Loose, brown, Sand to fine, Gravel fill
	2		6.3	
	3			
	8			Stiff, brown, Silty Clay Loam with layers of concrete rubble (fill)
	28	1.5	22.8	
	9	P		Concrete obstruction at 12' Moved Rig west 10' and continued
▽				
-10	3			
	4	1.0	23.7	
	3	P		
	2			Medium, brown, interbedded, Silt and Clay
	3	0.9	24.8	
	4	S		
-15	5			Very stiff, brown, Silty Clay
	6	3.7	19.4	
	9	S		
	2			Very stiff, gray, Silty Clay to Clay
	5	3.0	21.0	
	6	S		
-20	3			
	4	1.6	25.0	Stiff, gray, Clay with minor pockets of Silty Clay to Silt 3" varved, Clay at 26' *(continued)*
	5	S		
	1			
	3	1.4	27.0	
	4	S		
-25	1			
	3	1.2	32.6	
	6	S		
	2			Stiff, gray, Sandy Clay Till
	5	2.6	14.2	
	7	B		
-30	2			
	4	1.8	14.7	
	8	B		
	3			
	5	1.5	15.1	
	8	B		
-35	3			Very stiff, gray, Silty Clay Till with layers of gray, Silt
	5	2.2	12.9	
	7	S		
	6			
	8	2.3	15.7	
	12	S		
-40	13			Hard, gray, Silty Clay Loam Till with large, Limestone pieces at 45'

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

SBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District 03, Ottawa

SOIL BORING LOG

Date 11/14/05

ROUTE IL 116 DESCRIPTION IL 116 over Langan Creek LOGGED BY Larry Myers

SECTION 116-BR-3 LOCATION SW 1/4, SEC. 21, TWP. 28N, RNG. 10E

COUNTY Iroquois DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 038-0120
Station 317+52

BORING NO. 3 SW quad
Station 317+03
Offset 7.50ft Rt
Ground Surface Elev. ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	20	4.5	10.2	Hard, gray, Silty Clay Loam Till with large, Limestone pieces at 45' *(continued)*
	23	S		
	18			
	20	4.0	11.0	
	27	S		
-45	33			
	100/5	>4.5	6.8	
		P		Brown and white, fractured, Limestone- weathered at surface
	23			
	85	>4.5	16.2	
	100/1"	P		End of Boring
-50				
-55				
-60				
-65				
-70				
-75				
-80				

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

SBS, from 137 (Rev. 8-99)

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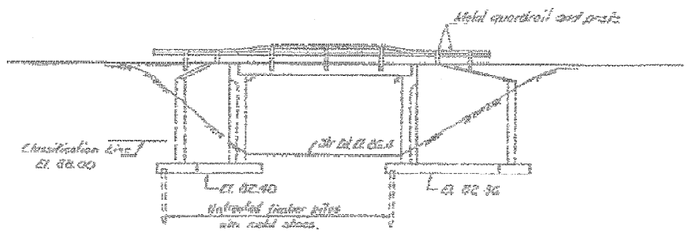
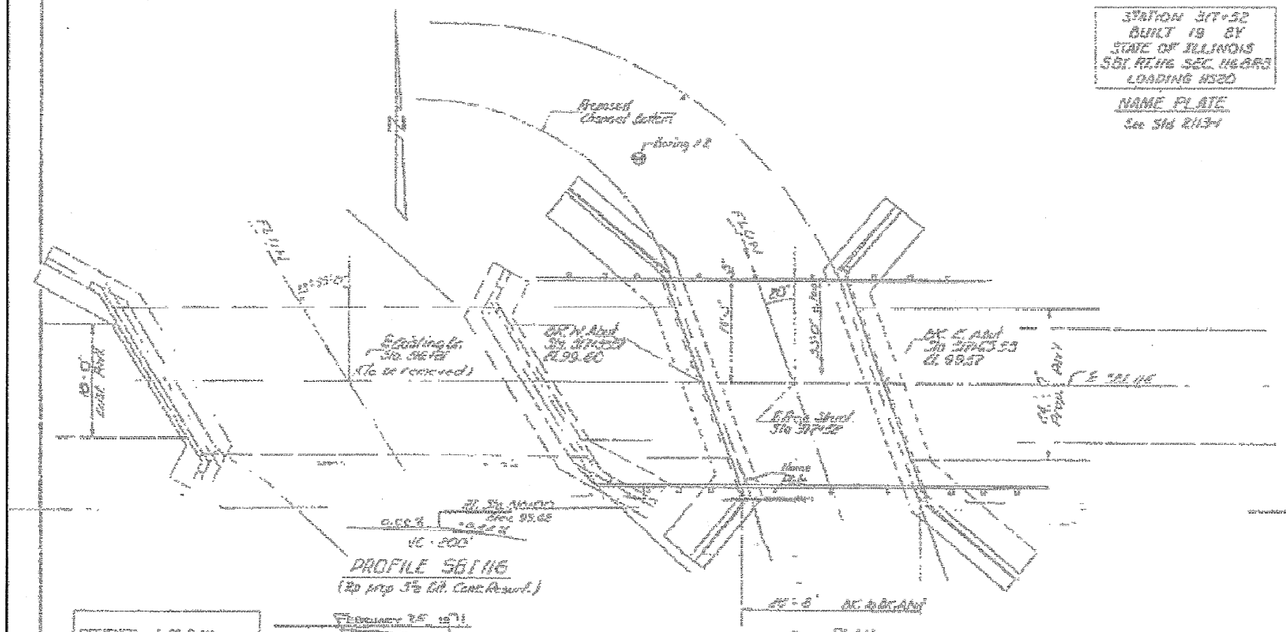
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

SCALE: | SHEET NO. B9 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	19
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		





B.M. #2A "□" on top of S.E. Wingwall of Bridge 11' Rt. Sta. 317+20
Elev. 93.36
Existing Structure: Steel Pony Truss 1 span @ 60' Built in 1938 as
SBI Rt. 116, Sec. 116 C (Superstructure), 116 B (Substructure)
@ Sta. 316+81. To be removed by Bridge Contractor
No Salvage
Run-around on North side

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Backfill shall be placed behind the abutment after the deck beams have been placed and dowel holes grouted. See Article 502.11 of the Standard Specifications.

An alternate strand pattern using Extra High Strength Prestressing strand (270 KSI) is permitted.

The back surfaces of the abutments and wings shall be waterproofed above the tops of the footings.

The Contractor shall drive one timber test pile in a permanent position at the West abut. as directed by the Engineer before ordering the remainder of piles.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Class A Excavation for Structures	Cu. Yds.			432
Class B Excavation for Structures	Cu. Yds.			390
Bituminous Concrete Surface Course Class I	Tons	13		13
Channel Excavation	Cu. Yds.			2783
Class X Concrete	Cu. Yds.		116.3	116.3
Reinforcement Bars	Lbs.		15320	15320
Precast Prestressed Concrete Deck Beams (17")	Sq. Ft.	892		892
Coal Tar Interliner Protective Coat	Sq. Yds.	103		103
Name Plate	Each		1	1
Untreated Piles up to 30 Feet	Lin. Ft.		1731	1731
Test Pile Timber	Each		1	1
Metal Shoes	Each		72	72
Removal of Existing Structure	Each			1
Steel Railing, Type N	Lin. Ft.	36		36

ELEVATION

STATION 317+52
BUILT 19 BY
STATE OF ILLINOIS
SBI RT. 116 SEC. 116 BR-1
LOADING HS20

NAME PLATE
See Std. 2113-4

PROFILE SBI 116

(To prop. 3½ Bit. Conc. Resurf.)

PLAN

TYPICAL CHANNEL SECTION

PROPOSED CHANNEL CHANGE

LOCATION SKETCH

SBI RT. 116 OVER DRAINAGE DITCH
SBI RT. 116 SECTION 116 BR-1
IROQUOIS COUNTY
STATION 317+52

DESIGNED	J. M. Dill
CHECKED	
DRAWN	Daryl W. Williams Jr.
CHECKED	

February 25, 1971

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 248,000 psi (½" Strands)
f'si = 173,600 psi (½" Strands)

FIELD UNITS

f'c = 1400 Super
fc = 1,000 Sub
Vc = 75 Footing
fs = 20,000 psi Reinf.
n = 10

Design Specifications, AASHO, 1969 as applicable
Allow 25#/sq.ft. for Future W.S.
LOADING HS 20-44

FOR INFORMATIONAL USE ONLY

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS

SCALE: | SHEET NO. B10 OF 14 SHEETS | STA. | TO STA.

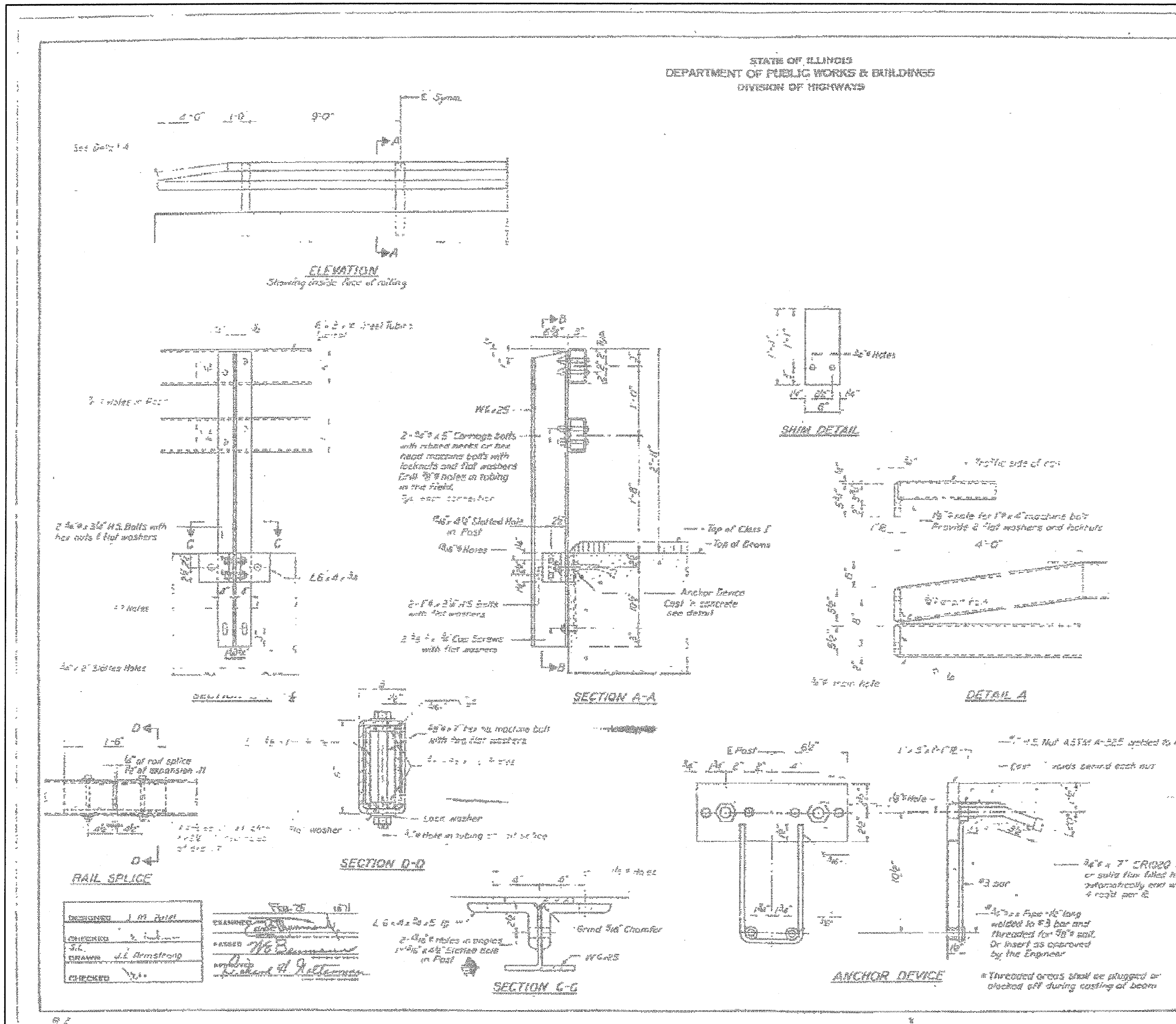
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	20

CONTRACT NO. 66730

FED. ROAD DIST. NO. 3 | ILLINOIS | FED. AID PROJECT

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917



NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-501 "Hot Formed Welded and Seamless Carbon Steel Structural Tubing."

All other steel shapes and plates shall conform to the requirements of ASTM designation A-36 except bolts shall conform to ASTM A-[illegible]

Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A-307 except for high strength bolts, nuts and washers noted which shall conform to ASTM designation A-325.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with ASTM designation A-153.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with ASTM designation A-123 and A-385. [illegible] shall not be [illegible].

Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for STEEL RAILING, TYPE K.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

The lower portion of the post flange in contact with concrete shall receive two coats of asphalt paint conforming to Section 714.08 Type B or place ⅛" fabric bearing pad between the post and concrete.

The ¾" high strength bolts used to connect the 6x4x⅜ angles to the post shall be tightened in accordance with Article 716.11 of the Standard Specifications. The 1" high strength bolts connecting the angles to the concrete beam shall be tightened to a snug fit and given an additional ½ turn.

FOR INFORMATIONAL USE ONLY

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS

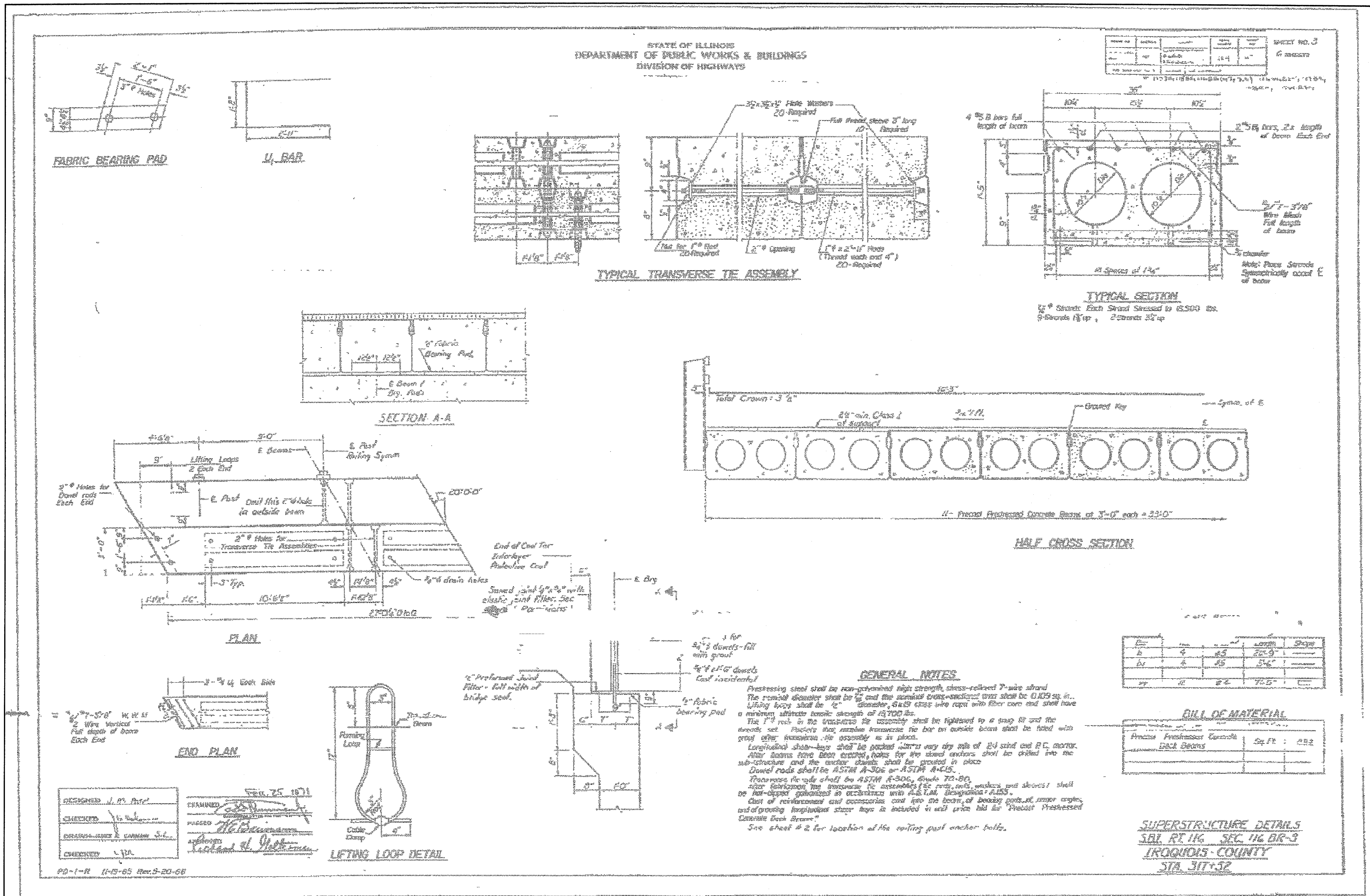
SCALE: | SHEET NO. B11 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	21
		CONTRACT NO. 66730		

FED. ROAD DIST. NO. 3 ILLINOIS FED. AID PROJECT

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917



FOR INFORMATIONAL USE ONLY

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

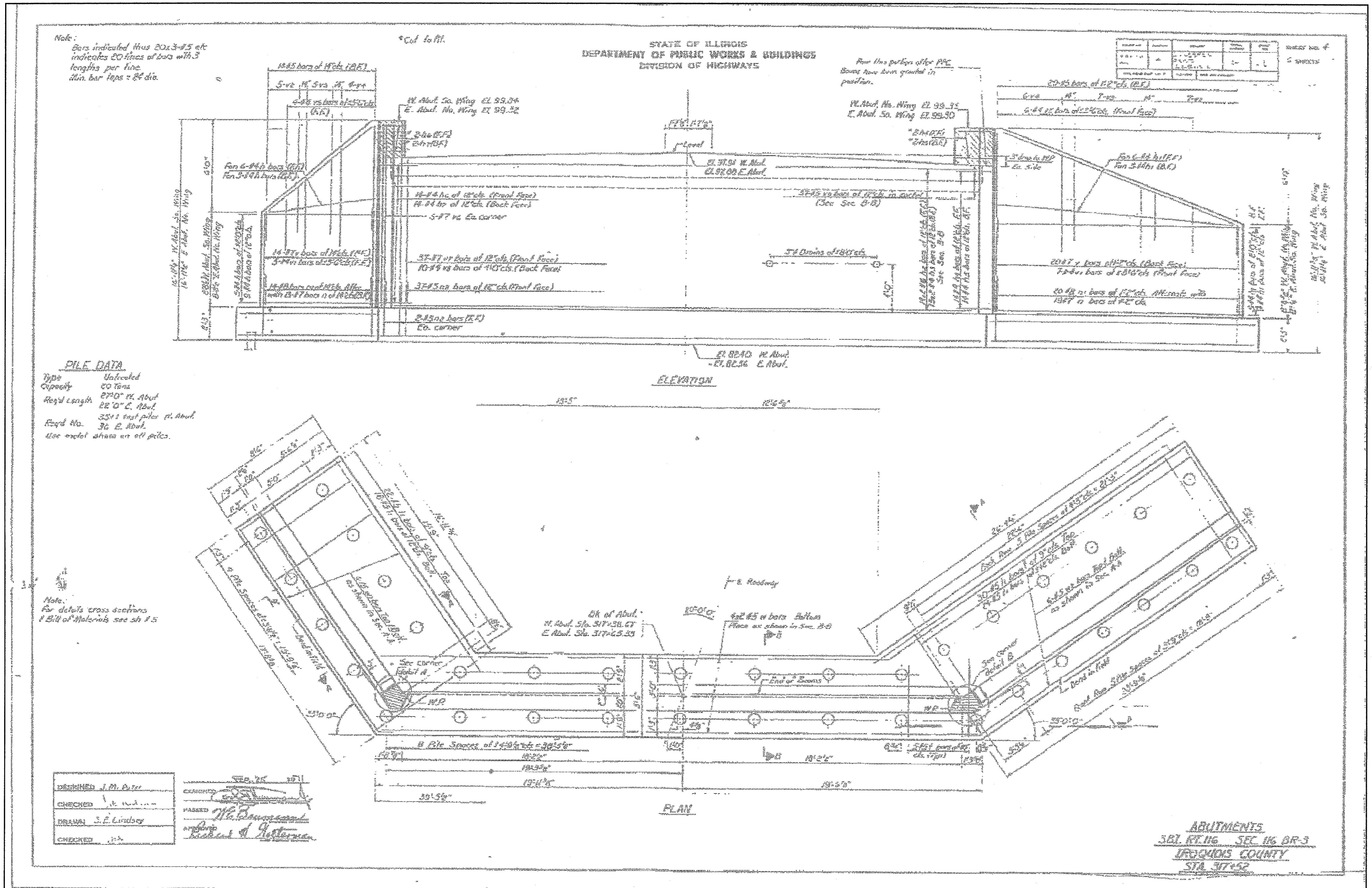
EXISTING PLANS

SCALE: | SHEET NO. B12 OF 14 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	22
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCCRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917



FOR INFORMATIONAL USE ONLY

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS

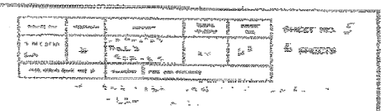
SCALE: | SHEET NO. B13 OF 14 SHEETS | STA. | TO STA.

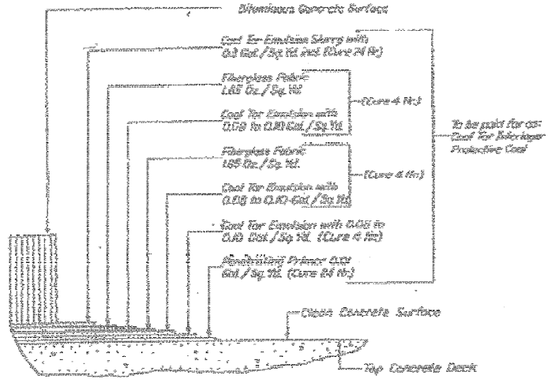
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	23
		CONTRACT NO. 66730		

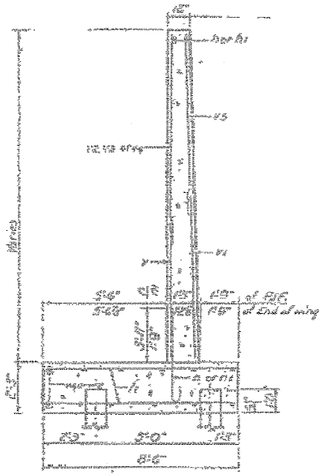
FED. ROAD DIST. NO. 3 | ILLINOIS | FED. AID PROJECT

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCCRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917







FOR INFORMATIONAL USE ONLY

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DESIGNED - JML
DRAWN - DJM
CHECKED - MSW
DATE - 04/09/08

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS

SCALE:
SHEET NO. B14 OF 14 SHEETS
STA.
TO STA.

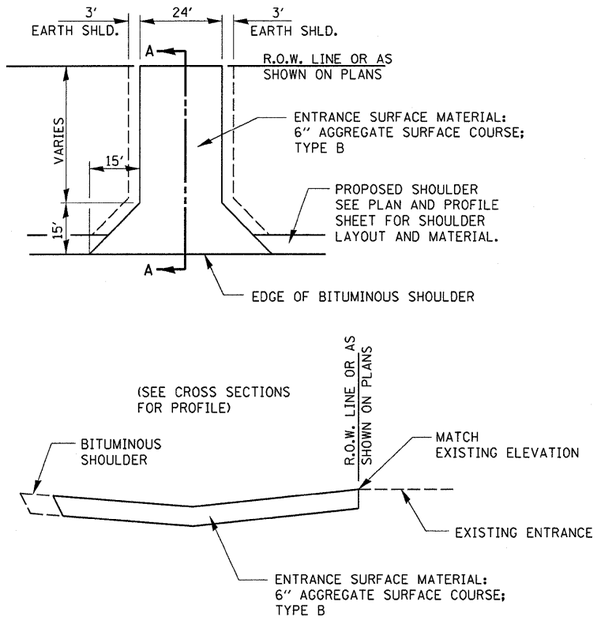
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	24

CONTRACT NO. 66730

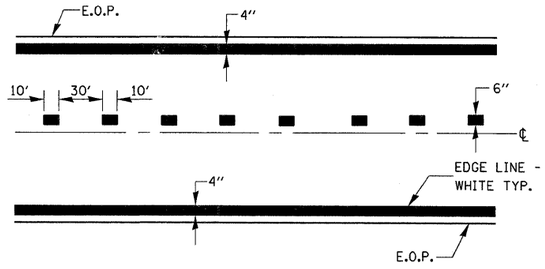
FED. ROAD DIST. NO. 3 ILLINOIS FED. AID PROJECT

FARNSWORTH GROUP, INC.
CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917



FIELD ENTRANCE DETAIL



CENTERLINE - YELLOW (SEE TYPICAL SECTIONS)

PAVEMENT MARKING

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

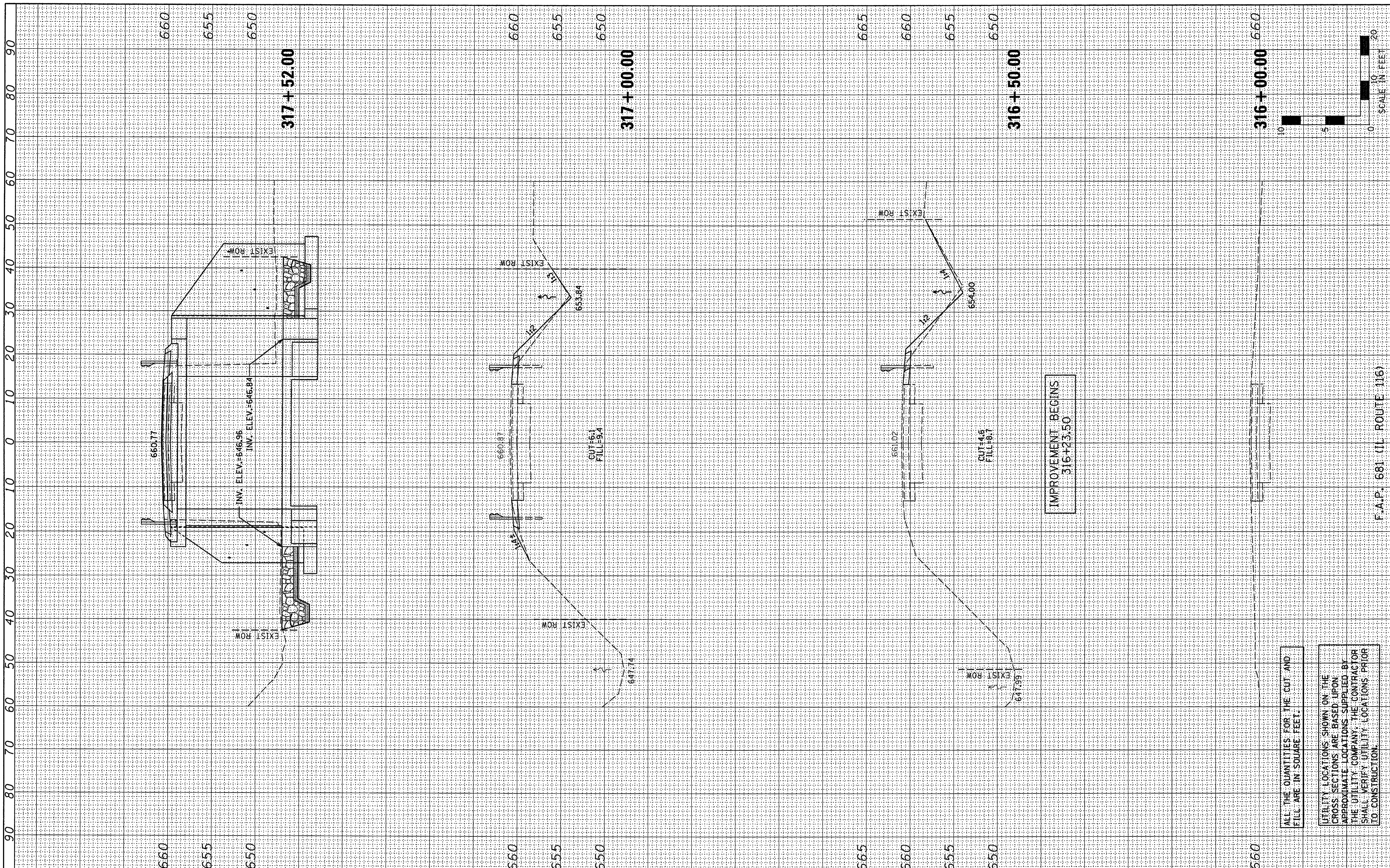
MISCELLANEOUS DETAILS

SCALE: | SHEET NO. 25 OF 28 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	25
		CONTRACT NO. 66730		
FED. ROAD DIST. NO. 3	ILLINOIS	FED. AID PROJECT		

FARNSWORTH GROUP, INC. CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX

24-7917



317+52.00
317+00.00
316+50.00
316+00.00
SCALE IN FEET
EXIST ROW
INV. ELEV.=646.96
INV. ELEV.=646.84
660.77
660.87
661.02
653.84
654.00
647.74
647.99
CUT=6.1
FILL=9.4
CUT=4.6
FILL=8.7
IMPROVEMENT BEGINS
316+23.50
F.A.P. 681 (IL ROUTE 116)
ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.
UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

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		DATE - 04/09/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

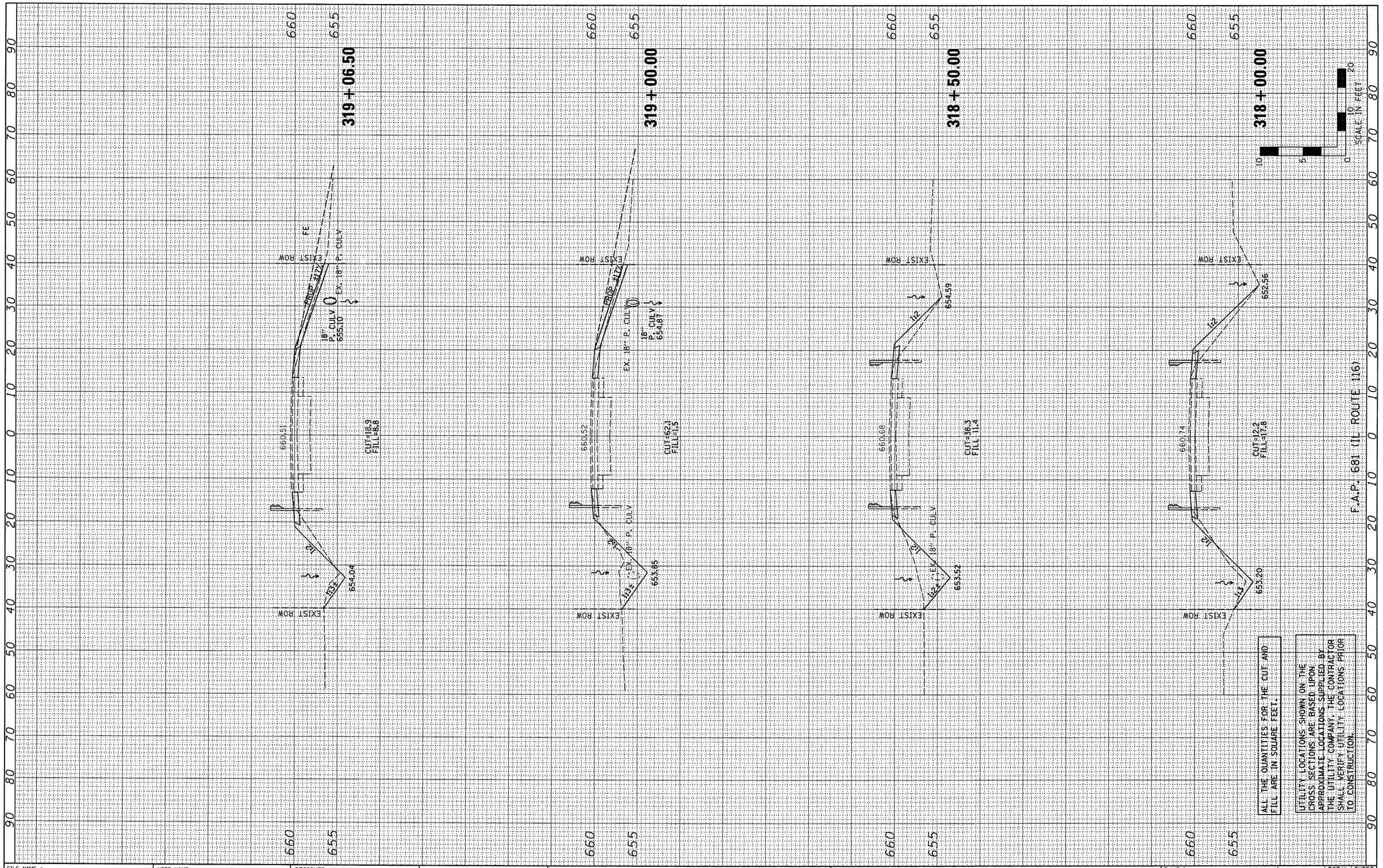
SCALE: | SHEET NO. 26 OF 28 SHEETS | STA. 316+00.00 TO STA. 317+52.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	26
		CONTRACT NO. 66730		

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

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

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



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

F.A.P. 681 (IL ROUTE 116)

FILE NAME =	USER NAME = carpenterdj	DESIGNED - JML	REVISED -
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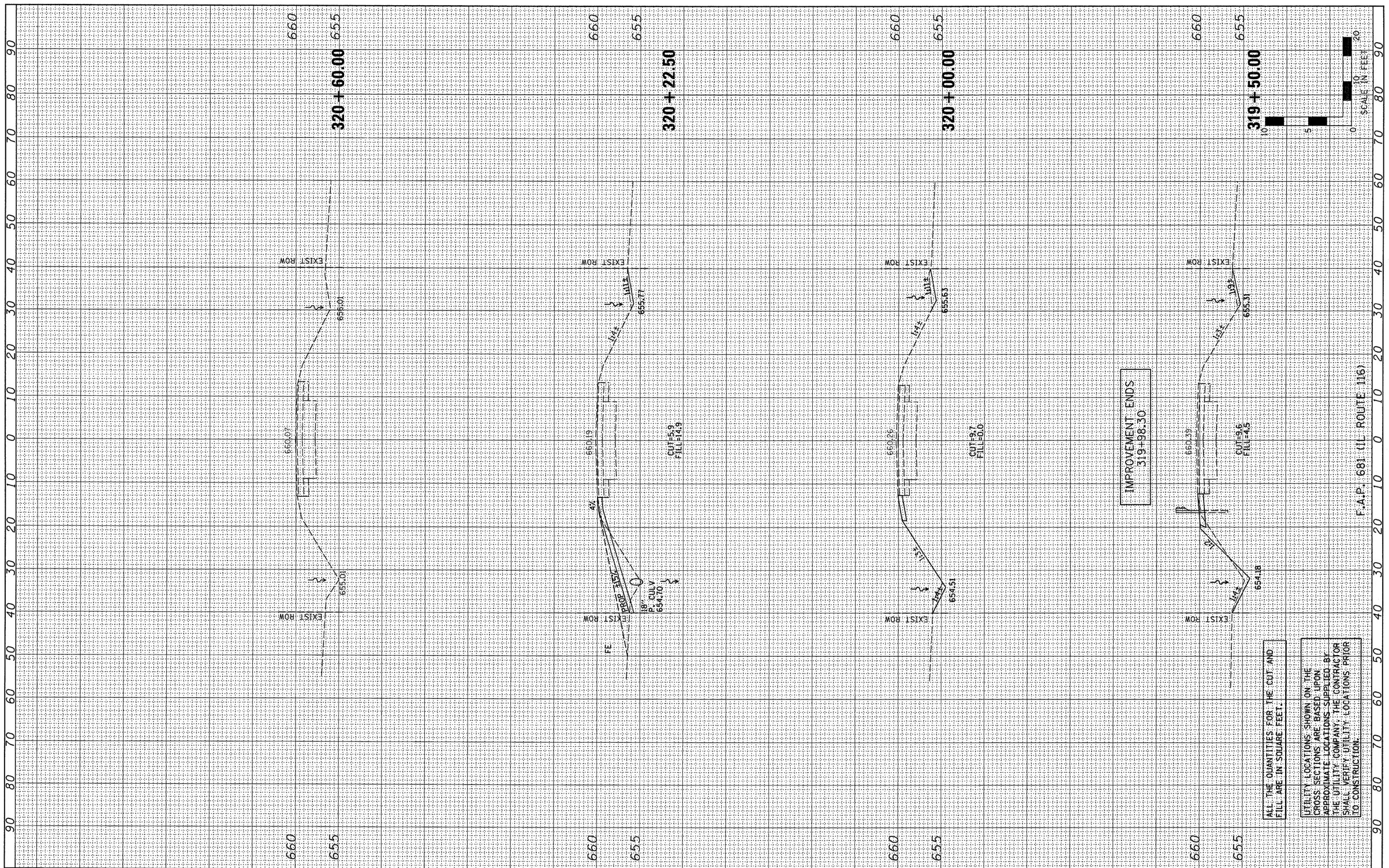
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET NO. 27 OF 28 SHEETS | STA. 318+00.00 | TO STA. 319+06.50

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	27
		CONTRACT NO. 66730		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ALL THE QUANTITIES FOR THE CUT AND FILL ARE IN SQUARE FEET.

UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED UPON APPROXIMATE LOCATIONS SUPPLIED BY THE UTILITY COMPANY; THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

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

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CH. — BY — DATE
NOTE BOOK — NO. — JD

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	PLOT DATE = Aug 07, 2008 - 09:03:27 AM	DATE - 04/09/08	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET NO. 28 OF 28 SHEETS | STA. 319+50.00 | TO STA. 320+60.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	116 BR-1	IROQUOIS	28	28
		CONTRACT NO. 66730		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		