

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	1

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

F.A.S. 338 (U.S. ROUTE 45)  
SECTION 33 BR-1  
PROJECT BRS-0338(105)  
IROQUOIS COUNTY

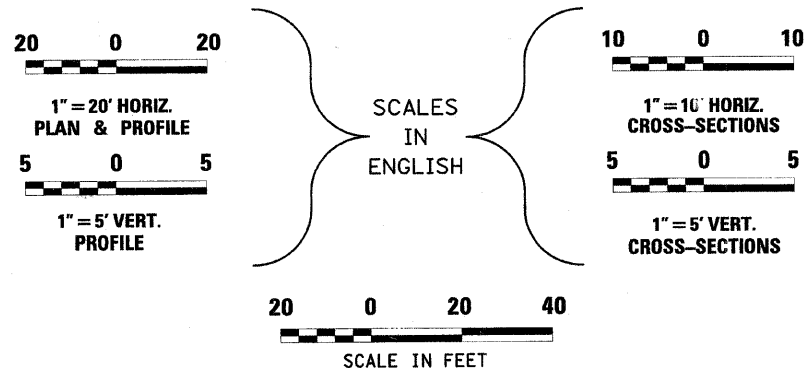
C-93-067-07

CULVERT REPLACEMENT OVER A DITCH,  
SOUTH EDGE OF LODA

INDEX OF SHEETS

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- 2 STATE STANDARDS, GENERAL NOTES & COMMITMENTS
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- 24-27 CROSS SECTIONS

FOR LIST OF STANDARDS, SEE SHEET NO. 2



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.

MICROFILMED \_\_\_\_\_  
REEL NUMBER \_\_\_\_\_  
AWARDED \_\_\_\_\_  
RESIDENT ENGINEER \_\_\_\_\_  
AS BUILT CHANGES WERE MADE ON THE FOLLOWING SHEETS \_\_\_\_\_

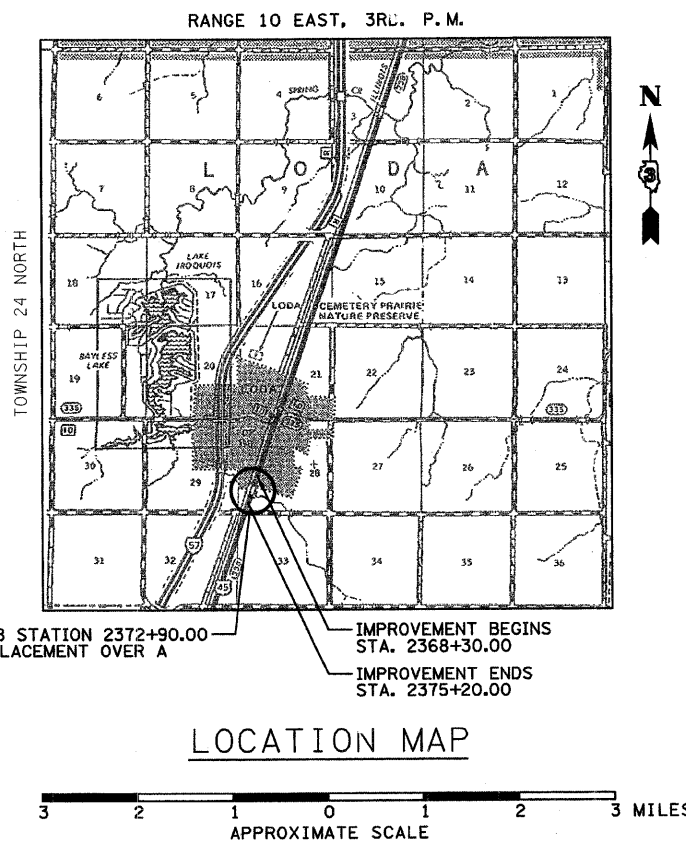
J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: JOSEPH KANNEL  
UNIT CHIEF: MICHELE LINDEMANN

CONTRACT NO. 66717

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

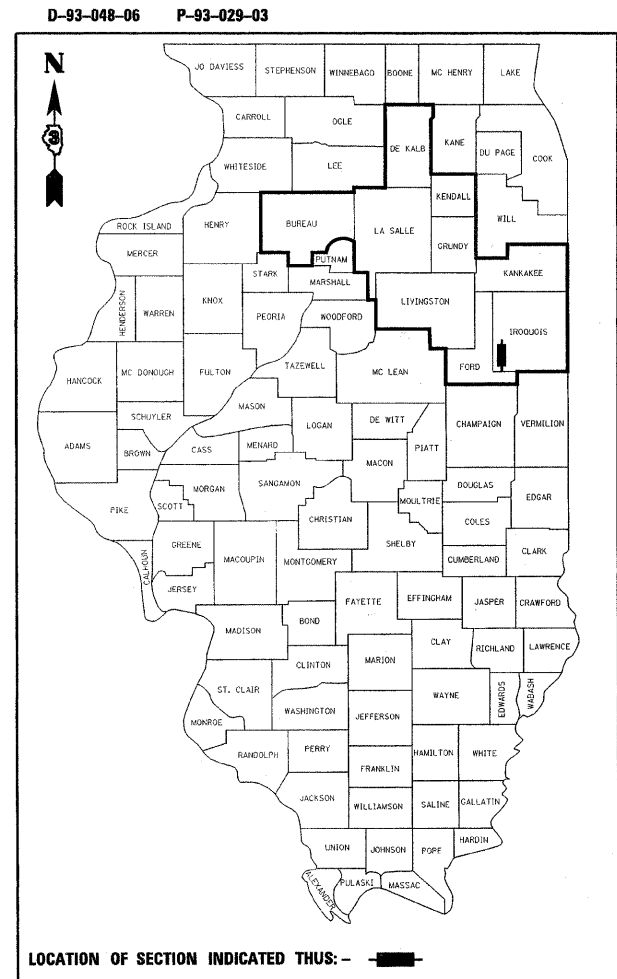


S.N. 038-2018 STATION 2372+90.00  
CULVERT REPLACEMENT OVER A DITCH

IMPROVEMENT BEGINS STA. 2368+30.00

IMPROVEMENT ENDS STA. 2375+20.00

GROSS LENGTH = 690 FT. = 0.131 MI.  
NET LENGTH = 690 FT. = 0.131 MI.



DESIGN DESIGNATION

SPEED LIMIT: 55 MPH  
ADT = 3450 (2007) 4500 (2027)  
PV = 88%  
SU = 8%  
MU = 4%

HIGHWAY CLASSIFICATION

MAJOR COLLECTOR (RURAL)

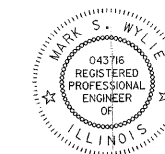
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED 12/13 2007

*George E. Ryan*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
February 1, 2008

*Eric E. Harn*  
ENGINEER OF DESIGN AND ENVIRONMENT  
February 1, 2008

*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



*Mark S. Wylie* Date 12/21/07  
MARK S. WYLIE  
REGISTERED PROFESSIONAL ENGINEER  
NO. 062-043716  
EXPIRATION 11/30/09

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	2
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

**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.

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".

SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (PRIME COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE, SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

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 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:  
FIBER OPTIC - VERIZON

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


**COMMITMENTS**

THIS PROJECT HAS A PRAIRIE REMNANT ON THE WEST SIDE OF THE ROAD, BEGINNING APPROXIMATELY 6.5' FROM THE EDGE OF THE PAVEMENT. IN ORDER TO PROTECT THE PRAIRIE, NO PARKING OF VEHICLES OR STORAGE OF EQUIPMENT OR MATERIALS SHOULD OCCUR IN THIS AREA.


**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 APPLICATIONS OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

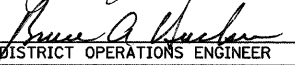
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DISTRICT THREE

REVIEWED BY:   
DISTRICT STUDIES & PLANS ENGINEER

DATE: 12.13.07

EXAMINED BY:   
DISTRICT CONSTRUCTION ENGINEER

  
DISTRICT MATERIALS ENGINEER

  
DISTRICT OPERATIONS ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
STATE STANDARDS, GENERAL NOTES  
& COMMITMENTS  
F.A.P. 338 (US 45)  
OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY

DATE: 12/07/07  
DRAWN BY: DJM  
CHECKED BY: MSW

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CODE NUMBER	ITEM	UNIT	TOTAL	ROADWAY 1000	STRUCTURE NO. 038-2018 X028 24
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	232	232	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	56	56	
20200100	EARTH EXCAVATION	CU YD	1484	1484	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	213		213
20400800	FURNISHED EXCAVATION	CU YD	478	478	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	313	313	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	159		159
21300010	EXPLORATION TRENCH, SPECIAL	FOOT	100	100	
• 25000300	SEEDING, CLASS 3	ACRE	0.4	0.4	
• 25000310	SEEDING, CLASS 4	ACRE	0.2	0.2	
• 25000322	SEEDING, CLASS 5A	ACRE	0.2	0.2	
• 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	54	54	
• 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	54	54	
• 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	54	54	
25000775	SELECTIVE MOWING STAKES	EACH	4	4	
• 25100115	MULCH, METHOD 2	ACRE	0.6	0.6	
• 25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	2908	2908	
• 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	972	972	
28000300	TEMPORARY DITCH CHECKS	EACH	16	16	
28000400	PERIMETER EROSION BARRIER	FOOT	1444	1444	
28100107	STONE RIPRAP, CLASS A4	SQ YD	395		395
28200200	FILTER FABRIC	SQ YD	395		395
31100500	SUB-BASE GRANULAR MATERIAL, TYPE A 6"	SQ YD	83	83	
31100910	SUB-BASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	1161	1161	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1197	1197	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	201	201	
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	165	165	
44000100	PAVEMENT REMOVAL	SQ YD	550	550	
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	292	292	

• SPECIALTY ITEM

CODE NUMBER	ITEM	UNIT	TOTAL	ROADWAY 1000	STRUCTURE NO. 038-2018 X028 24
48203029	HOT-MIX ASPHALT SHOULDER, 8"	SQ YD	1174	1174	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50104400	CONCRETE HEADWALL REMOVAL	EACH	1	1	
50800105	REINFORCEMENT BARS	POUND	9890		9890
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	680		680
51500100	NAME PLATES	EACH	1		1
54003000	CONCRETE BOX CULVERTS	CU YD	81.5		81.5
54021009	PRECAST CONCRLTE BOX CULVERT 10'x9' (M213)	FOOT	80		80
• 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	475	475	
• 63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	50	50	
• 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
66503100	BARBED WIRE FENCE, FOUR STRAND	FOOT	280	280	
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	3	3	
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	2260	2260	
• 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12	12	
* 78200405	GUARDRAIL MARKERS	EACH	10	10	
• 78201000	TERMINAL MARKFR - DIRECT APPLIED	EACH	4	4	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	12	12	
Z0022800	FENCE REMOVAL	FOOT	430	430	
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1	
X0325908	FENCE POST REMOVAL	EACH	5	5	
X0325909	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 1 1/4"	SQ YD	1120	1120	
X0325910	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, VARIABLE DEPTH	SQ YD	397	397	

• SPECIALTY ITEM

REVISIONS	
NAME	DATE

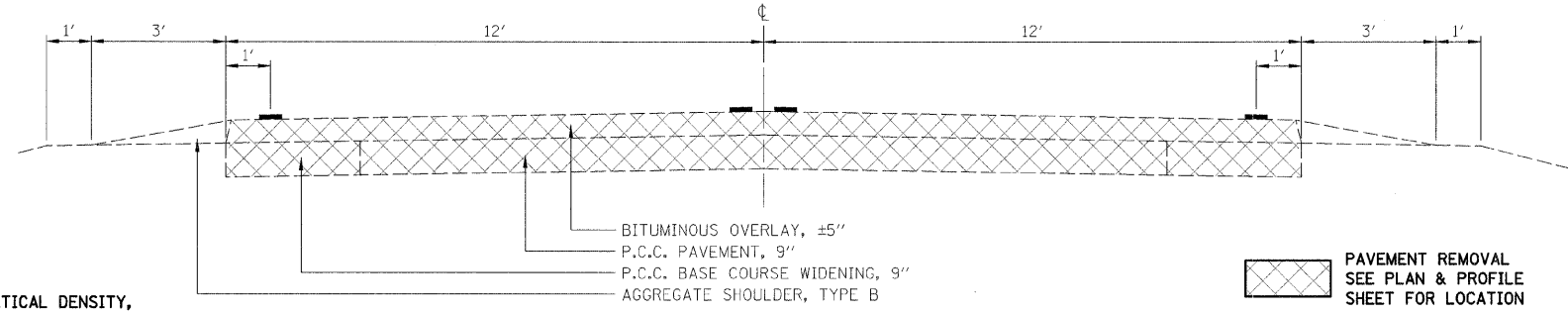
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SUMMARY OF QUANTITIES  
 F.A.P. 338 (US 45)  
 OVER A DITCH  
 SECTION 33 BR-1  
 IROQUOIS COUNTY

DATE: 12/07/07

DRAWN BY: DJM  
 CHECKED BY: MSW

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

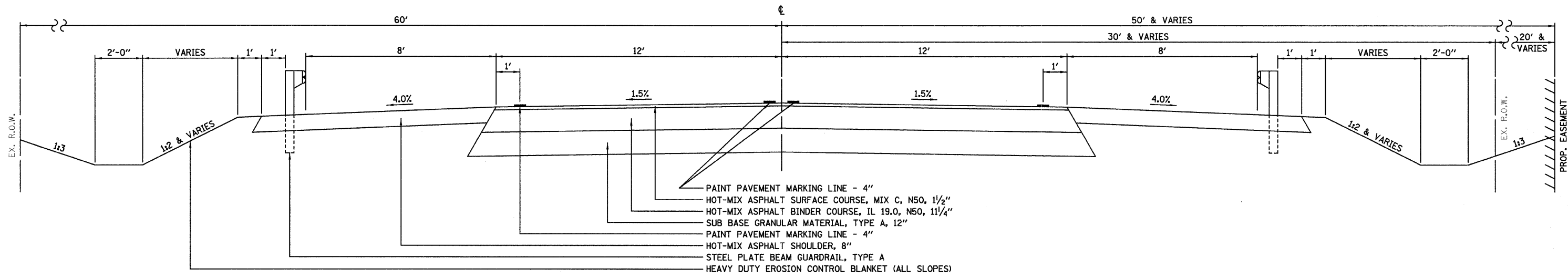
	HMA BINDER	HMA SURFACE	HMA SHOULDERS
PG GRADE	PG58-22	PG64-22	PG58-22
MAX % RAP ALLOWABLE**	25%	15%	50%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	3.0% @ N50
MIXTURE COMPOSITION	IL 19.0	IL 12.5 OR IL 9.5	IL 19.0
FRICTION AGGREGATE	-	MIXTURE C	-
DENSITY CONTROL METHOD	NUCLEAR/ CORES	NUCLEAR/ CORES	*



**EXISTING TYPICAL CROSS SECTION**

F.A.P. 338 (US 45)

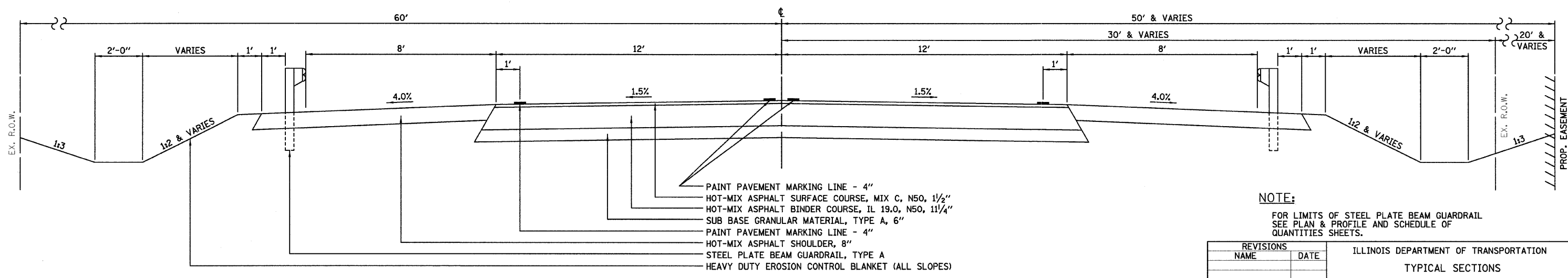
- \* MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE, THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN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



**PROPOSED TYPICAL CROSS SECTION**

F.A.P. 338 (US 45)

STA 2370+95 TO STA 2372+76  
STA 2373+04 TO STA 2373+89



**PROPOSED TYPICAL CROSS SECTION**

F.A.P. 338 (US 45)

STA 2372+76 TO STA 2373+04

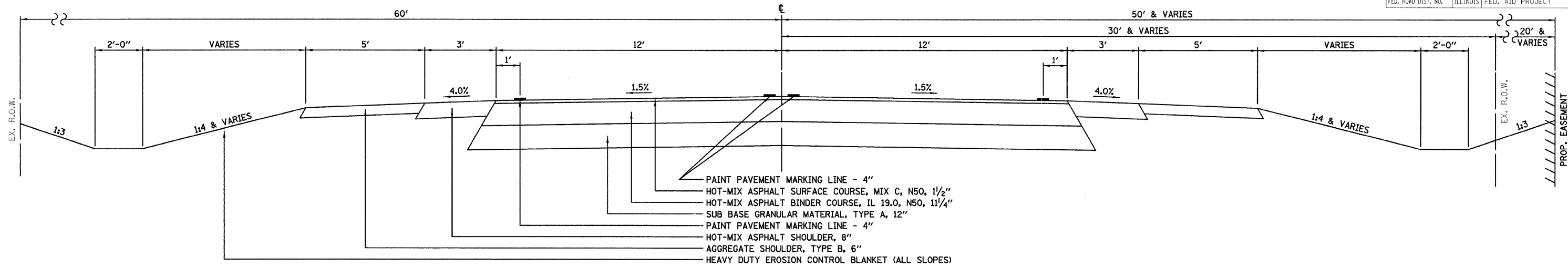
**NOTE:**  
FOR LIMITS OF STEEL PLATE BEAM GUARDRAIL SEE PLAN & PROFILE AND SCHEDULE OF QUANTITIES SHEETS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
TYPICAL SECTIONS  
F.A.P. 338 (US 45)  
OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY  
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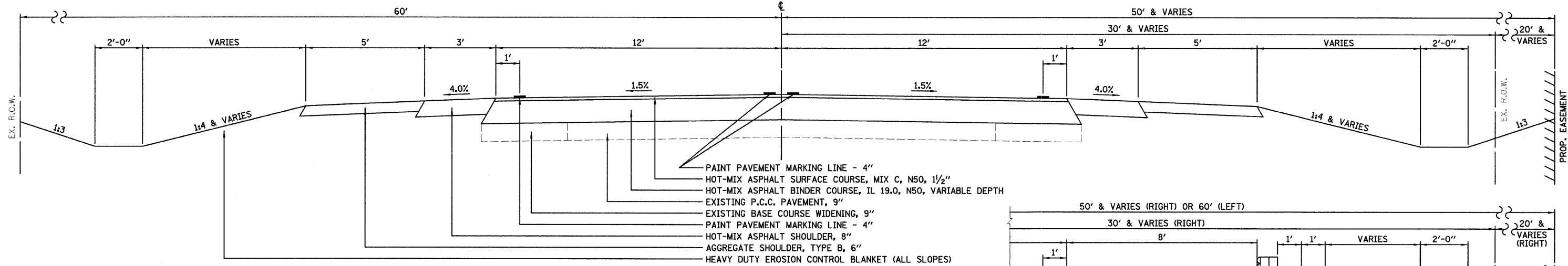
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROUOIS	27	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**PROPOSED TYPICAL CROSS SECTION**

F.A.P. 338 (US 45)

STA 2369+74 TO STA 2370+95

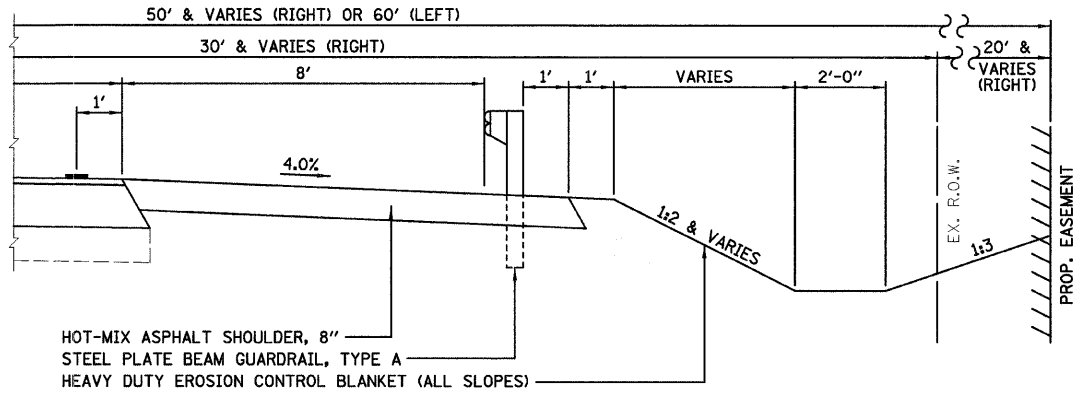


**PROPOSED TYPICAL CROSS SECTION**

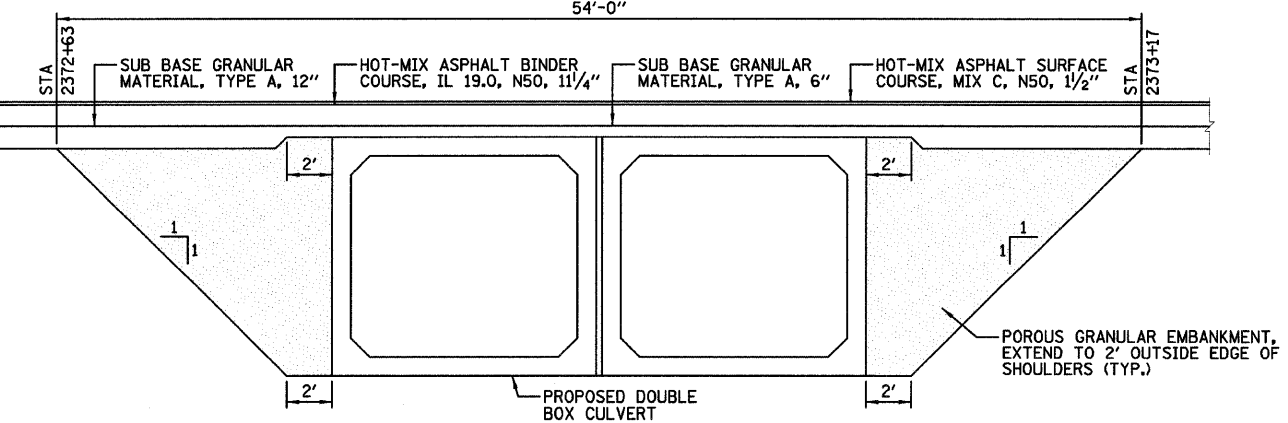
F.A.P. 338 (US 45)

STA 2368+67 TO STA 2369+74

BINDER COURSE TRANSITION STATIONS  
 STA. 2368+92 TO STA. 2369+74  
 STA. 2373+89 TO STA. 2374+54



STA 2373+89 TO STA 2374+58 RT  
 STA 2373+89 TO STA 2374+82 LT



**SECTION THRU CULVERT**

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TYPICAL SECTIONS F.A.P. 338 (US 45) OVER A DITCH SECTION 33 BR-1 IROUOIS COUNTY

DATE: 12/07/07

DRAWN BY: DJM  
 CHECKED BY: MSW

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

**EROSION CONTROL**

LOCATION	TEMPORARY DITCH CHECKS EACH	PERIMETER EROSION BARRIER FOOT
STA 2368+50LT	1	
STA 2369+00LT	1	
STA 2369+50LT	1	
STA 2370+00LT	1	
STA 2370+50LT	1	
STA 2371+00LT	1	
STA 2371+50LT & RT	2	
STA 2372+00LT & RT	2	
STA 2372+50LT & RT	2	
STA 2373+50LT	1	
STA 2374+00LT	1	
STA 2374+50LT	1	
STA 2375+00LT	1	
STA 2368+25, 20' LT TO STA 2368+25, 40' LT		20
STA 2368+25, 40' LT TO STA 2369+50, 40' LT		125
STA 2369+50, 40' LT TO STA 2370+00, 55' LT		52
STA 2370+00, 55' LT TO STA 2372+50, 60' LT		250
STA 2372+50, 60' LT TO STA 2372+55, 50' LT		12
STA 2372+99, 50' LT TO STA 2373+00, 60' LT		10
STA 2373+00, 60' LT TO STA 2374+16, 60' LT		116
STA 2374+16, 60' LT TO STA 2374+50, 58' LT		35
STA 2374+50, 58' LT TO STA 2375+25, 50' LT		76
STA 2375+25, 50' LT TO STA 2375+25, 20' LT		30
STA 2368+25, 20' RT TO STA 2368+25, 25' RT		5
STA 2368+25, 25' RT TO STA 2369+00, 28' RT		76
STA 2369+00, 28' RT TO STA 2370+00, 45' RT		102
STA 2370+00, 45' RT TO STA 2372+50, 50' RT		251
STA 2372+50, 50' RT TO STA 2372+80, 86' RT		47
STA 2373+36, 86' RT TO STA 2373+54, 36' RT		54
STA 2373+54, 36' RT TO STA 2374+50, 39' RT		97
STA 2374+50, 39' RT TO STA 2375+25, 30' RT		76
STA 2375+25, 30' RT TO STA 2375+25, 20' RT		10
<b>TOTAL</b>	<b>16</b>	<b>1444</b>

**TREE REMOVAL (6 TO 15 UNITS DIAMETER)**

STATION	OFFSET	DIA
STA 2372+55	36' LT	12
STA 2372+58	34' LT	10
STA 2372+97	35' LT	8
STA 2372+97	38' LT	8
STA 2373+36	30' LT	8
STA 2374+40	27' LT	15
STA 2374+41	30' LT	15
STA 2374+42	28' LT	15
STA 2372+81	67' RT	10
STA 2372+82	43' RT	6
STA 2372+84	43' RT	6
STA 2372+94	47' RT	6
STA 2372+95	64' RT	12
STA 2372+97	47' RT	6
STA 2372+99	47' RT	10
STA 2373+04	61' RT	10
STA 2373+05	55' RT	10
STA 2373+07	46' RT	10
STA 2373+07	38' RT	10
STA 2373+07	28' RT	10
STA 2373+25	43' RT	8
STA 2373+31	51' RT	6
STA 2373+33	40' RT	15
STA 2373+34	53' RT	6
<b>TOTAL</b>		<b>232</b>

**TREE REMOVAL (OVER 15 UNITS DIAMETER)**

STATION	OFFSET	DIA
STA 2374+34	27' LT	36
STA 2373+24	62' RT	20
<b>TOTAL</b>		<b>56</b>

**POROUS GRANULAR EMBANKMENT**

LOCATION	CU YD
STA 2372+66 TO STA 2373+15	313

**EXPLORATION TRENCH, SPECIAL**

LOCATION	FOOT
THROUGHOUT PROJECT	100
<b>TOTAL</b>	<b>100</b>

**SEEDING TABLE**

LOCATION	SEEDING CLASS 3	SEEDING CLASS 4	SEEDING CLASS 5A	MULCH METHOD 2	TEMPORARY EROSION CONTROL SEEDING	FERTILIZER NITROGEN	FERTILIZER PHOSPHORUS	FERTILIZER POTASSIUM	HEAVY DUTY EROSION CONTROL BLANKET	SELECTIVE MOWING STAKES
	ACRE	ACRE	ACRE	ACRE	POUND	POUND	POUND	POUND	SQ. YD.	EACH
STA 2368+30LT TO STA 2372+70LT	0.25			0.25	405	22	22	22	1209	
STA 2373+25LT TO STA 2375+20LT	0.15			0.15	243	14	14	14	726	
STA 2368+30RT TO STA 2372+70RT		0.16	0.16	0.16	259	15	15	15	778	
STA 2373+25RT TO STA 2375+20RT		0.04	0.04	0.04	65	3	3	3	195	
STA 2368+30LT & RT										2
STA 2375+20LT & RT										2
<b>TOTAL</b>	<b>0.40</b>	<b>0.20</b>	<b>0.20</b>	<b>0.60</b>	<b>972</b>	<b>54</b>	<b>54</b>	<b>54</b>	<b>2908</b>	<b>4</b>

**PAVING MATERIALS**

LOCATION	BIT. MATLS. PRIME COAT	H.M.A. SURFACE REMOVAL - BUTT JOINT	H.M.A. SURF. CSE. MIX C, N50	H.M.A. BINDER CSE., IL-19.0, N50, 11.25"	H.M.A. BINDER CSE., IL-19.0, N50, VAR. DEPTH	H.M.A. SHOULDER, 8"	AGGR. SHOULDERS, TYPE B, 6"	SUB-BASE GRANULAR MATERIAL, TYPE A, 6"	SUB-BASE GRANULAR MATERIAL, TYPE A, 12"
	GAL	SQ. YD.	TON	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.
STA 2368+30 TO STA 2375+20	1197		165						
STA 2368+30 TO STA 2368+67		99							
STA 2374+82 TO STA 2375+20		102							
STA 2370+62.88RT TO STA 2374+90.37RT						147			
STA 2370+88.16LT TO STA 2375+20LT						145			
STA 2369+74 TO STA 2373+89				1120					
STA 2368+92 TO STA 2369+74					221				
STA 2373+89 TO STA 2374+54					176				
STA 2368+30RT TO STA 2375+20RT						441			
STA 2368+30LT TO STA 2375+20LT						441			
STA 2368+30RT TO STA 2370+62.88RT							130		
STA 2368+30LT TO STA 2370+95LT							145		
STA 2374+90.37RT TO STA 2375+20RT							17		
STA 2369+74 TO STA 2370+95									363
STA 2370+95 TO STA 2372+76									543
STA 2372+76 TO STA 2373+04								83	
STA 2373+04 TO STA 2373+89									255
<b>TOTAL</b>	<b>1197</b>	<b>201</b>	<b>165</b>	<b>1120</b>	<b>397</b>	<b>1174</b>	<b>292</b>	<b>83</b>	<b>1161</b>

**PAVEMENT REMOVAL**

LOCATION	SQ YD
STA 2369+74 TO STA 2370+75	270
STA 2372+60 TO STA 2372+78	48
STA 2373+02 TO STA 2373+89	232
<b>TOTAL</b>	<b>550</b>

**CONCRETE HEADWALL REMOVAL**

LOCATION	EACH
STA 2373+05LT	1
<b>TOTAL</b>	<b>1</b>

**GUARDRAIL**

LOCATION	TRAFFIC BARRIER TERMINAL TY 1 SPECIAL (TANGENT)	SPBGR. TY A	SPBGR. ATTACHED TO STRUCTURES	GUARDRAIL MARKERS	TERMINAL MARKER - DIRECT APPLIED
	EACH	FOOT	FOOT	EACH	EACH
STA 2370+95RT TO STA 2371+45RT	1			1	1
STA 2371+45RT TO STA 2372+82.5 RT		137.5		2	
STA 2371+22LT TO STA 2371+72LT	1			1	1
STA 2371+72LT TO STA 2372+72LT		100		1	
STA 2372+72LT TO STA 2372+97LT			25		
STA 2372+82.5RT TO STA 2373+07.5RT			25		
STA 2373+07.5RT TO STA 2374+07.5RT		100		1	
STA 2374+07.5RT TO STA 2374+57.5RT	1			1	1
STA 2372+97LT TO STA 2374+34.5LT		137.5		2	
STA 2374+34.5LT TO STA 2374+84.5LT	1			1	1
<b>TOTAL</b>	<b>4</b>	<b>475</b>	<b>50</b>	<b>10</b>	<b>4</b>

**FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS**

LOCATION	EACH
STA 2374+16 60' LT	1
STA 2376+00 50' LT	1
STA 2377+00 30' LT	1
<b>TOTAL</b>	<b>3</b>

**FENCE STATIONING**

LOCATION	FENCE REMOVAL	FENCE POST REMOVAL	BARBED WIRE FENCE, FOUR STRAND
	FOOT	EACH	FOOT
STA 2372+91, 31' LT TO STA 2376+90, 32' LT	399		
STA 2374+22, 31' LT TO STA 2374+14, 60' LT	31		
STA 2368+04 60' LT		1	
STA 2369+00 60' LT		1	
STA 2370+00 60' LT		1	
STA 2371+00 60' LT		1	
STA 2372+00 60' LT		1	
STA 2374+13, 60' LT TO STA 2376+00, 50' LT			188
STA 2376+00, 50' LT TO STA 2376+90, 32' LT			92
<b>TOTAL</b>	<b>430</b>	<b>5</b>	<b>280</b>

**MOBILIZATION**

LOCATION	L SUM
JOB SITE	1

**ENGINEER'S FIELD OFFICE, TYPE A**

LOCATION	CAL MO
JOB SITE	4

**PAINT PAVEMENT MARKING LINE**

LOCATION	LINE 4"
	FOOT
STA 2368+30RT TO STA 2375+20RT	690
STA 2368+30LT TO STA 2375+20LT	690
STA 2368+30 CL TO STA 2375+20 CL	190
STA 2368+30LT TO STA 2373+45LT (NPZ)	515
STA 2373+45RT TO STA 2375+20RT (NPZ)	175
<b>TOTAL</b>	<b>2260</b>

**RAISED REFLECTIVE PAVEMENT MARKER**

LOCATION	REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER
	EACH	EACH
STA 2367+35 TO STA 2375+70	12	12
<b>TOTAL</b>	<b>12</b>	<b>12</b>

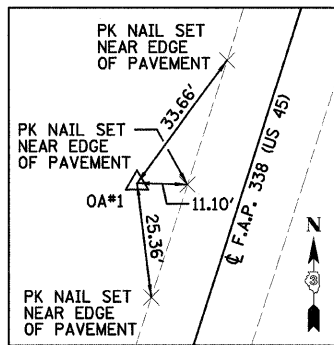
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF QUANTITIES  
 F.A.P. 338 (US 45)  
 OVER A DITCH  
 SECTION 33 BR-1  
 IROQUOIS COUNTY

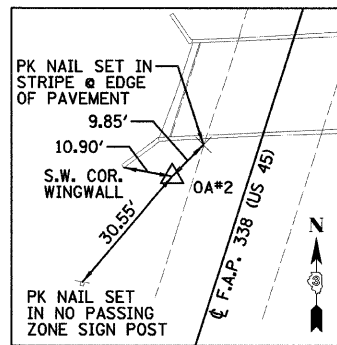
DATE: 12/07/07

DRAWN BY: DJM  
 CHECKED BY: MSW

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

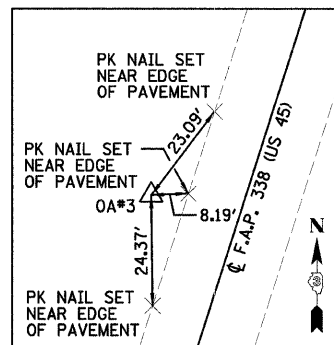


U.S. 45  
 STA 2366+12.65, 22.75' RT  
 NORTHING 1399249.990  
 EASTING 1055887.219



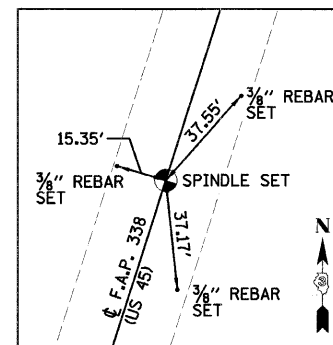
U.S. 45  
 STA 2373+16.36, 16.25' RT  
 NORTHING 1398577.870  
 EASTING 1055678.672

BENCHMARK OA\*1  
 STA 2366+12.65, 22.75' RT  
 ELEV=767.11  
 BAR SET FLUSH, ±11.0'  
 WEST OF WEST EDGE OF  
 PAVEMENT



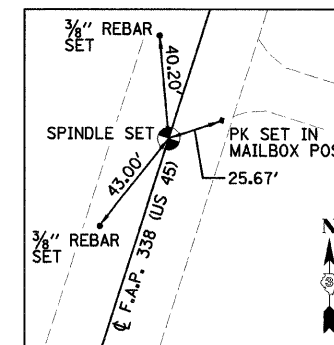
U.S. 45  
 STA 2378+41.85, 19.95' RT  
 NORTHING 1398078.606  
 EASTING 1055514.816

BENCHMARK OA\*2  
 STA 2373+16.36, 16.25' RT  
 ELEV=755.05  
 BAR SET FLUSH, S.W. QUAD.  
 OF BRIDGE ±4.5' WEST OF  
 WEST EDGE OF PAVEMENT



U.S. 45  
 STA 2365+00.00, 0.00' RT/LT  
 NORTHING 1399350.327  
 EASTING 1055943.255

BENCHMARK OA\*3  
 STA 2378+41.85, 19.95' RT  
 ELEV=767.80  
 BAR SET FLUSH, ±7.5'  
 WEST OF WEST EDGE OF  
 PAVEMENT



U.S. 45  
 STA 2380+00.00, 0.00' RT/LT  
 NORTHING 1397921.870  
 EASTING 1055485.534

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SURVEY TIES AND BENCHMARKS  
 F.A.P. 338 (US 45)  
 OVER A DITCH  
 SECTION 33 BR-1  
 IROQUOIS COUNTY

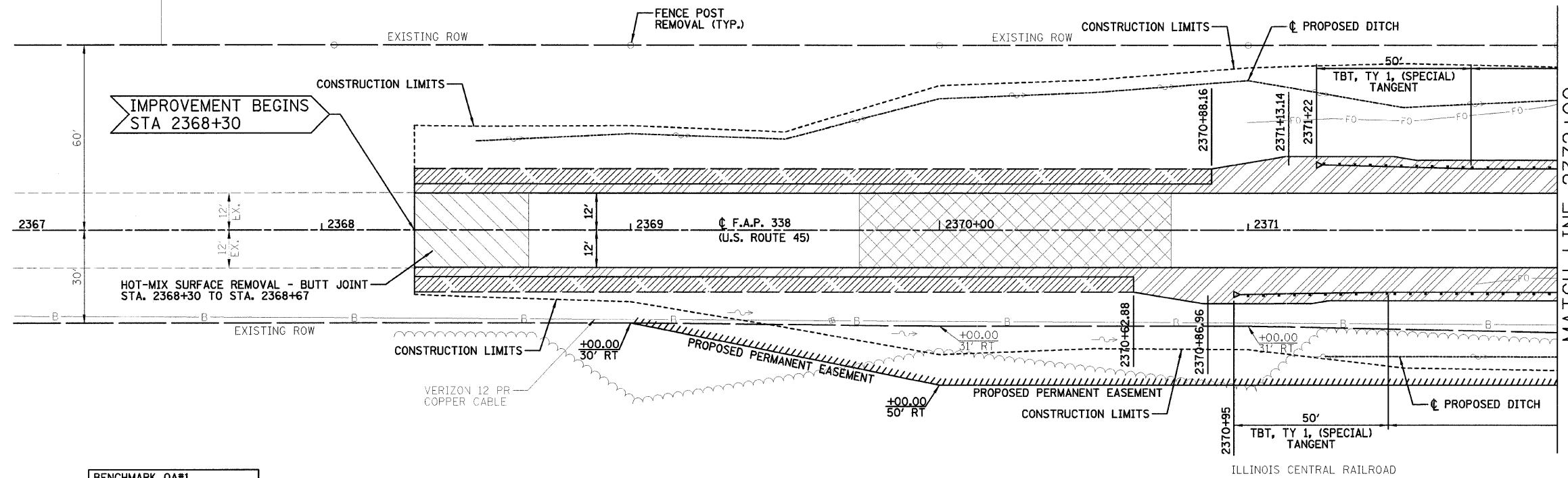
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DRAWN BY: DJM  
 CHECKED BY: MSW

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	8
STA. 2368+30.00		TO STA. 2372+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

PATRICK NOONAN ESTATE

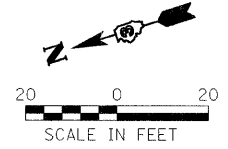
MRS. FRANK BUTZOW



	HOT-MIX SURFACE REMOVAL - BUTT JOINT
	HOT-MIX ASPHALT SHOULDER
	AGGREGATE SHOULDER
	PAVEMENT REMOVAL

BENCHMARK OA#1  
 STA 2366+12.65, 22.75' RT  
 ELEV=767.11  
 BAR SET FLUSH, ±11.0'  
 WEST OF WEST EDGE OF PAVEMENT

PAVEMENT REMOVAL  
 STA 2369+74 TO STA 2370+75

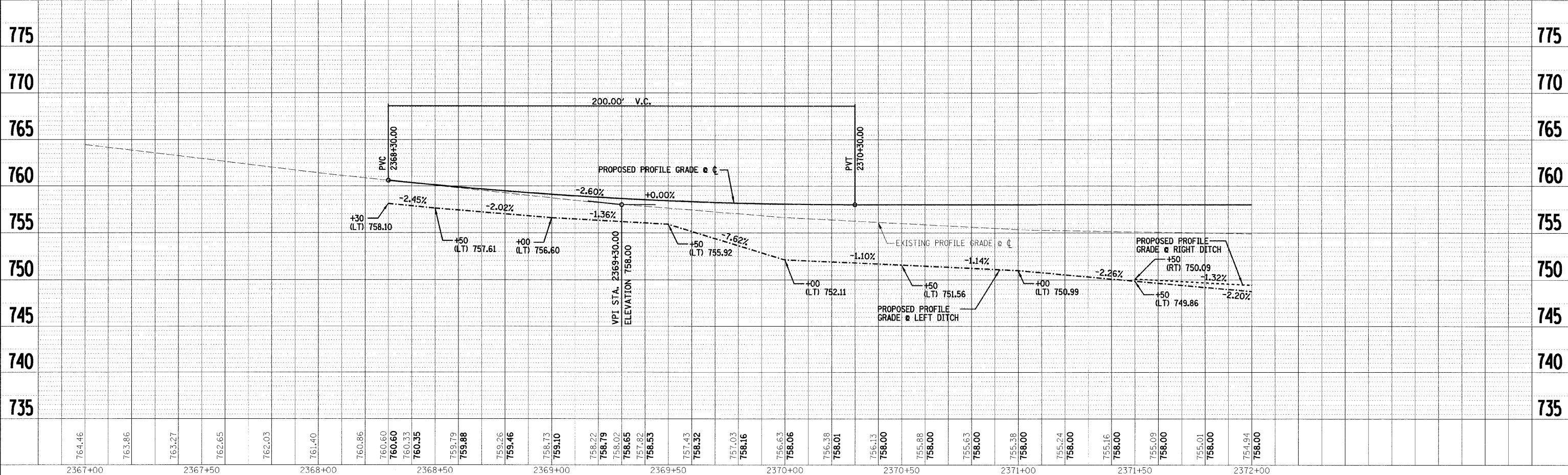


DATE	BY

PLAN  
 PLOTTED BY: [ ]  
 CHECKED BY: [ ]  
 DATE: [ ]

DATE	BY

PROFILE  
 PLOTTED BY: [ ]  
 CHECKED BY: [ ]  
 DATE: [ ]



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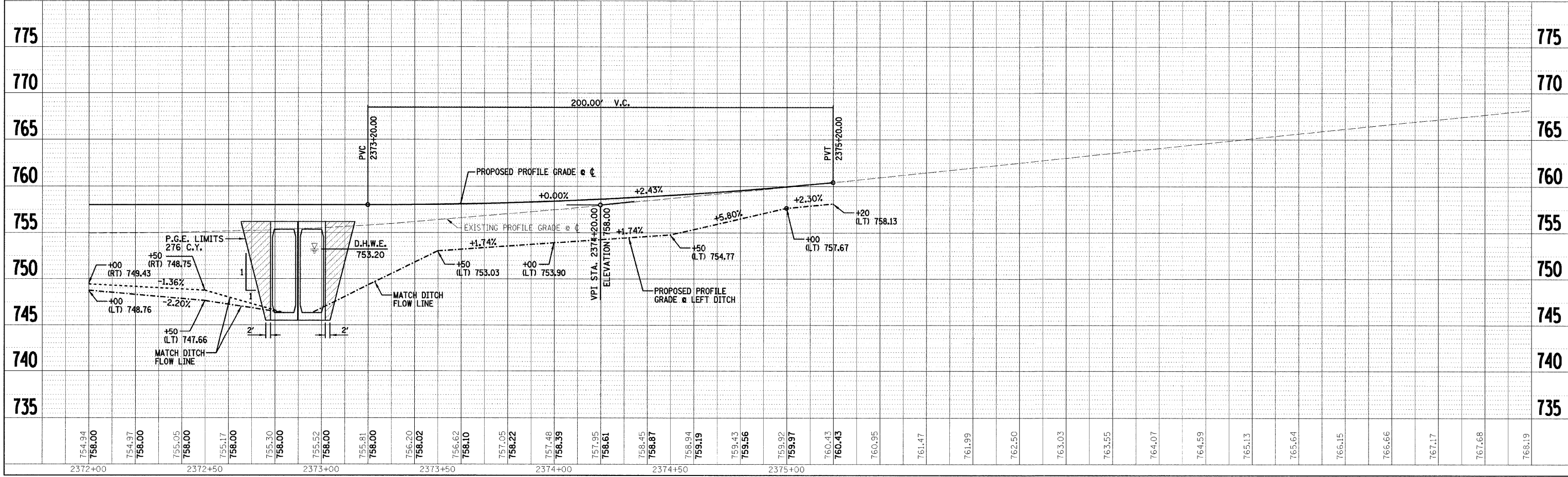
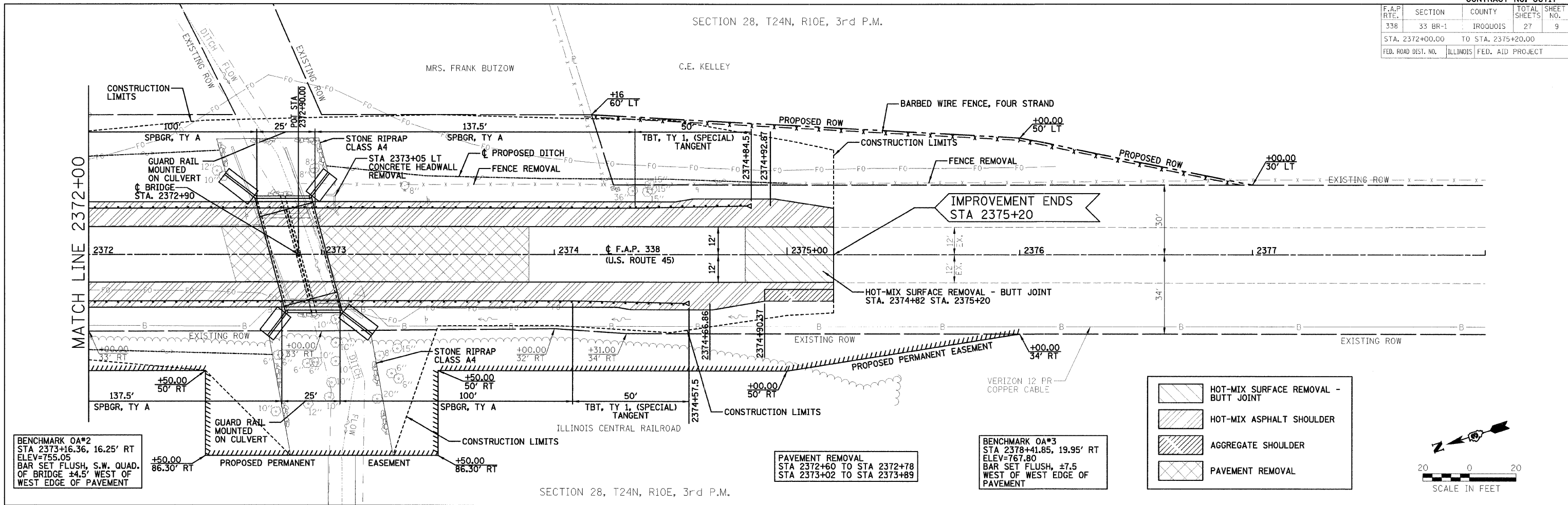
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	9
STA. 2372+00.00 TO STA. 2375+20.00				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SECTION 28, T24N, R10E, 3rd P.M.

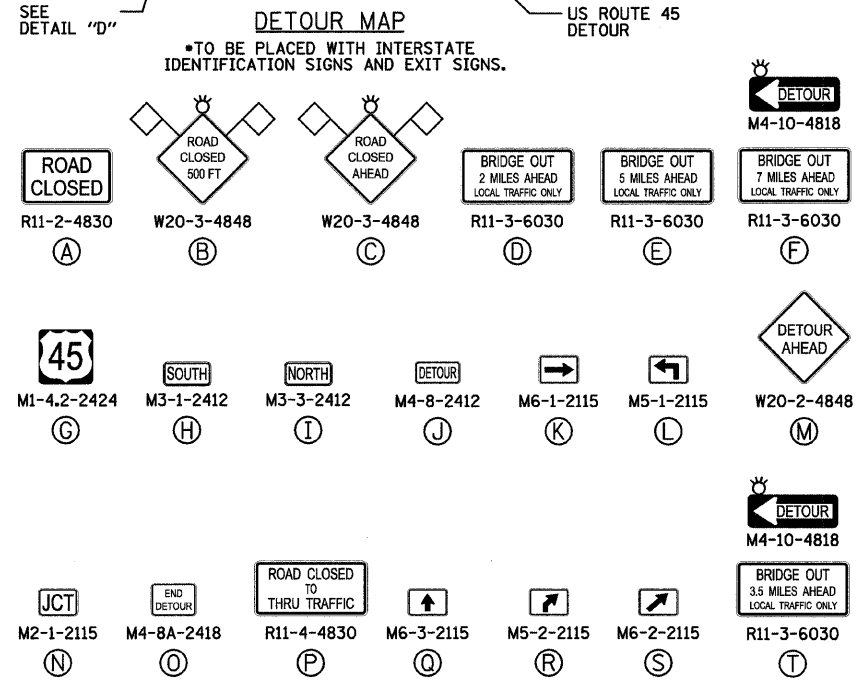
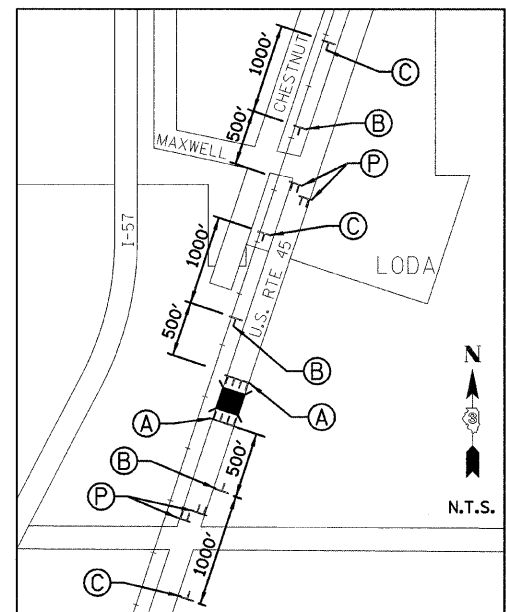
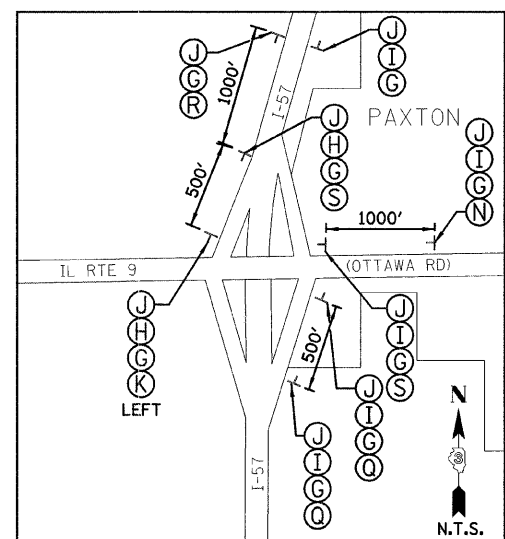
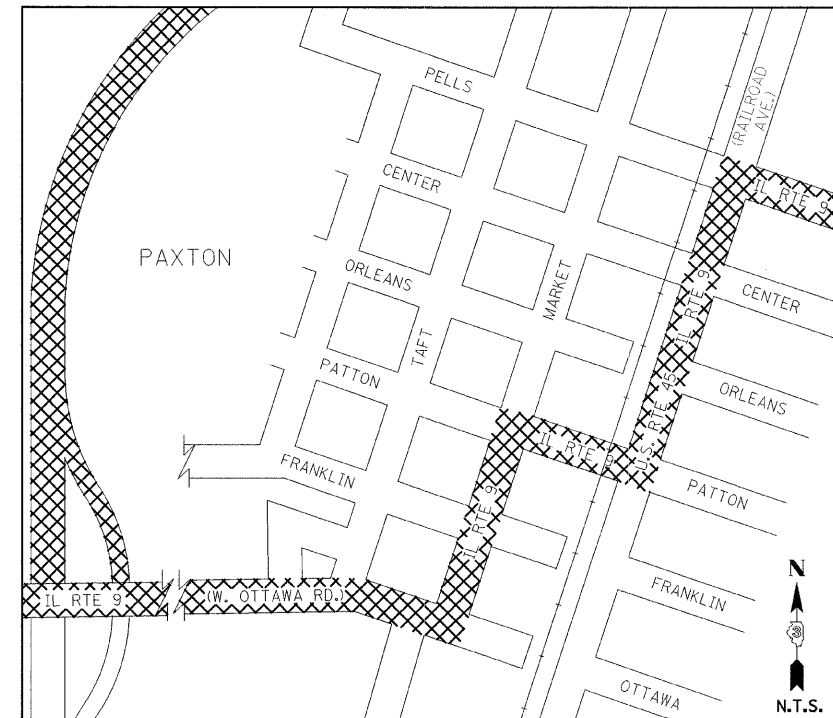
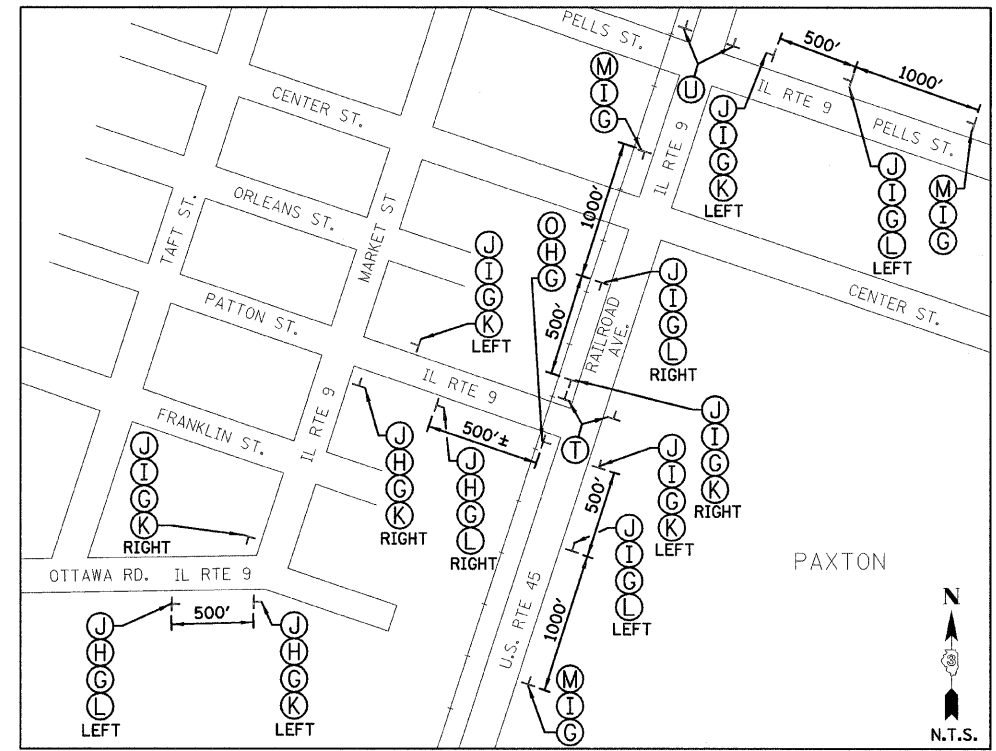
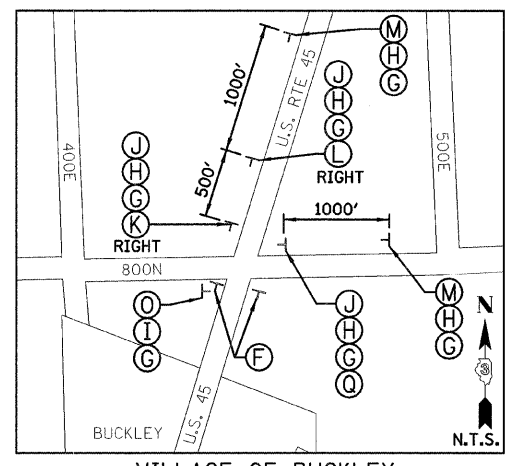
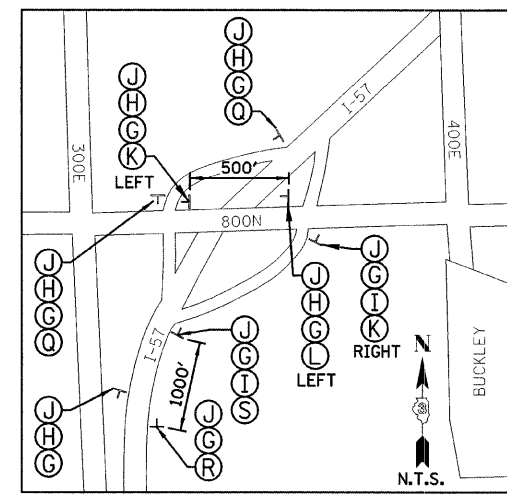
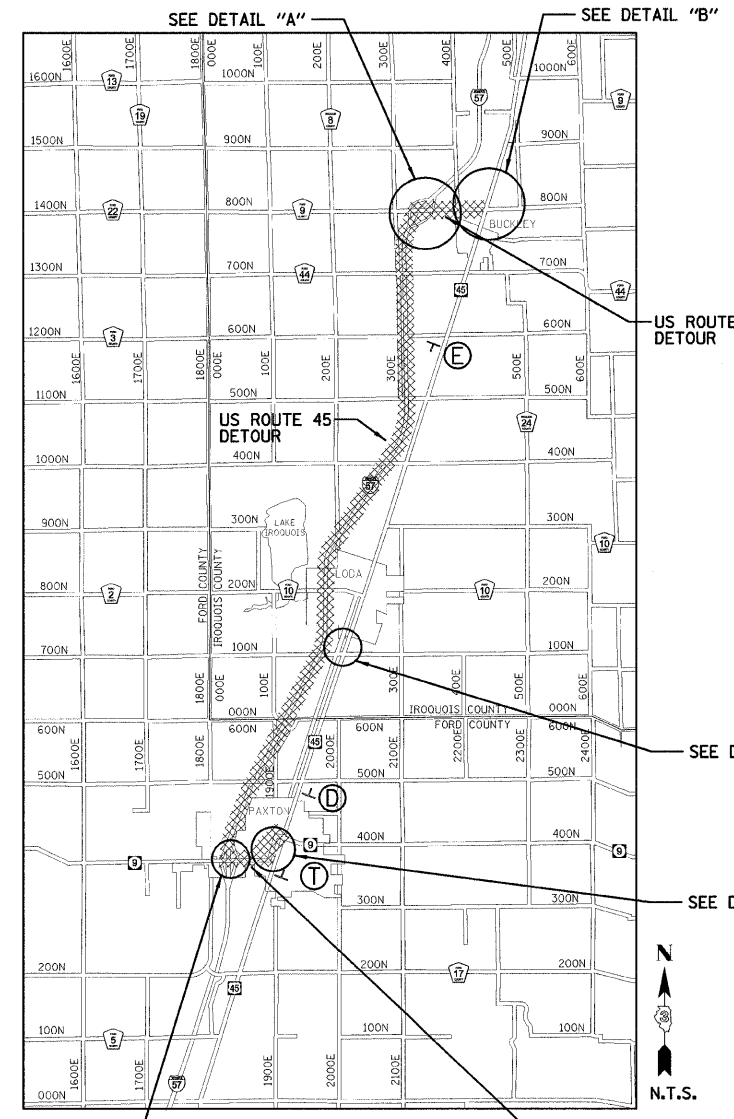
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 PLOT SCALE = 8/SCALE8  
 USER NAME = 8/USER8



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



**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:**

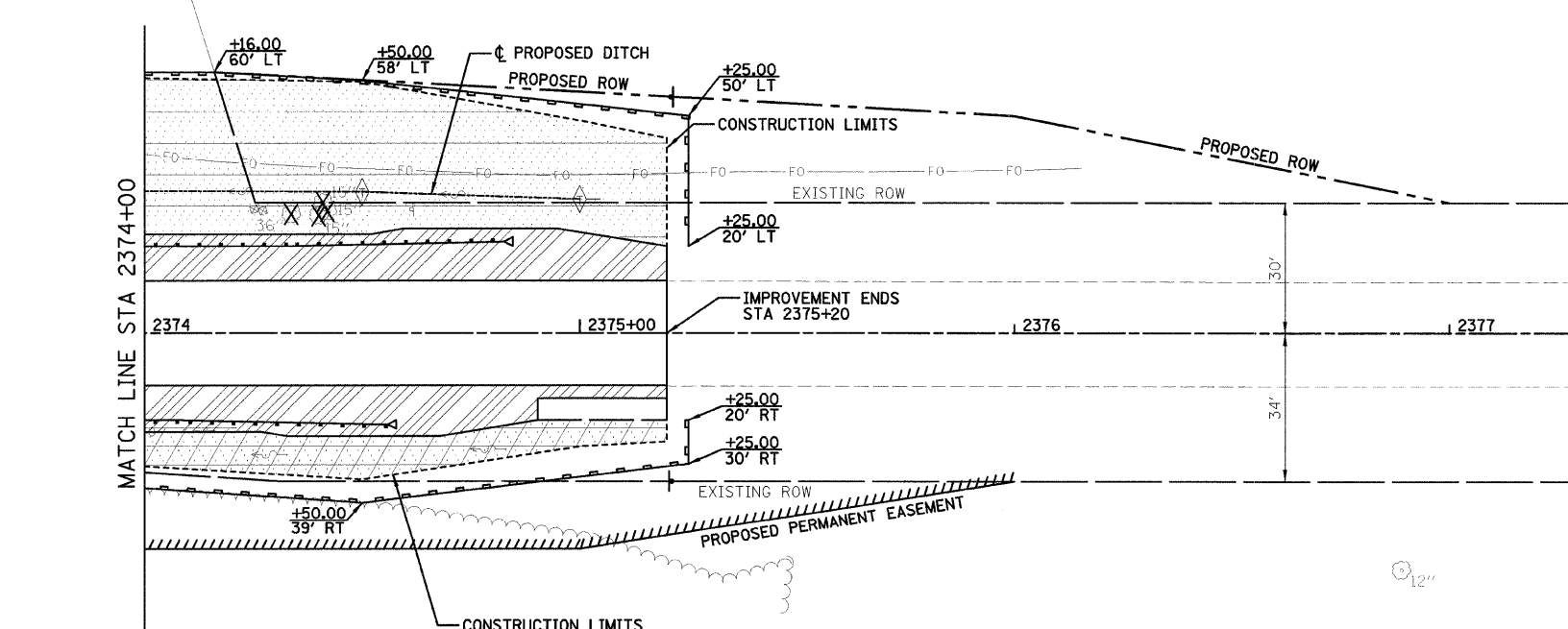
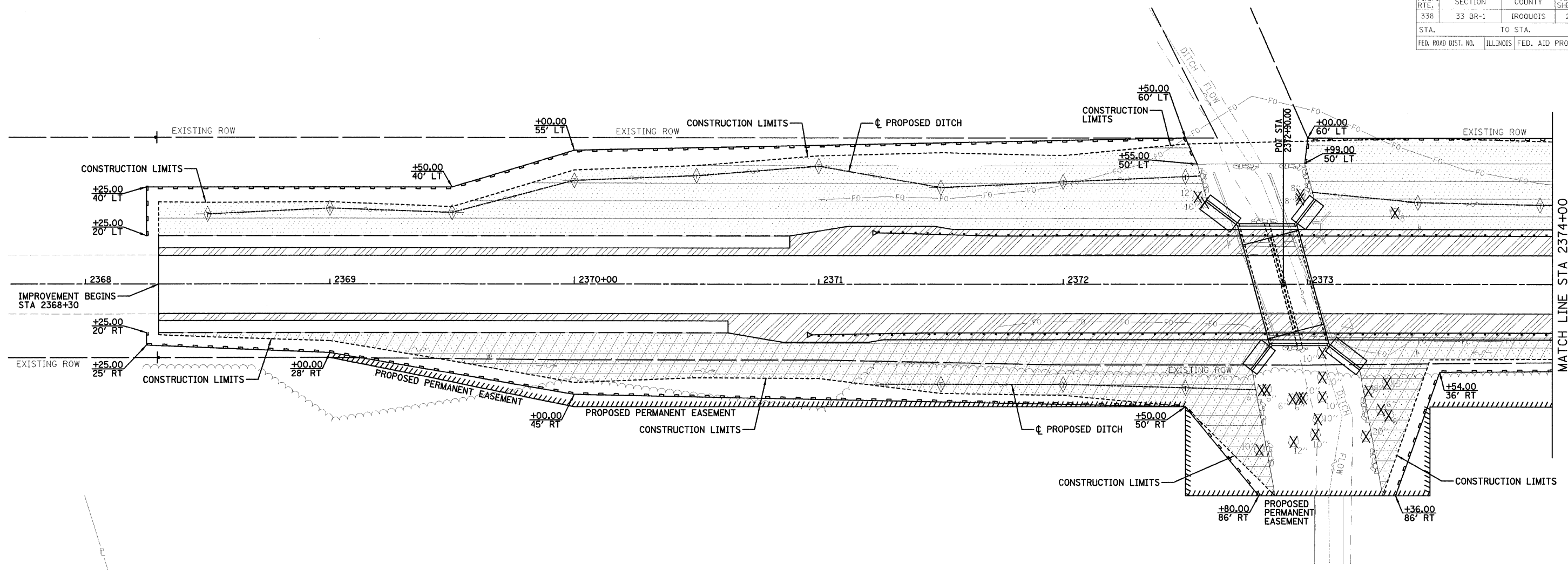
- 1.) ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
- 2.) ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED, UNLESS OTHERWISE NOTED.
- 3.) LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
- 4.) THE ILLINOIS DEPARTMENT OF TRANSPORTATION WILL SUPPLY ALL US 45 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 WITHIN A MILE RADIUS OF THE INTERSECTION BETWEEN US ROUTE 45 AND COUNTY HIGHWAY 9. COVER ANY SIGNS DENOTING NORTH US ROUTE 45 WITHIN A MILE RADIUS OF THE INTERSECTION WITH US ROUTE 45 AND IL ROUTE 9.
- 7.) ON IL ROUTE 9 WESTBOUND, THE GREENBOARD DIRECTIONAL SIGN FOR GILMAN SHALL BE COVERED.

REVISIONS	
NAME	DATE

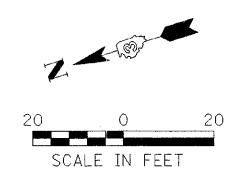
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DETOUR PLANS  
 F.A.P. 338 (US 45)  
 OVER A DITCH  
 SECTION 33 BR-1  
 IROQUOIS COUNTY  
 DRAWN BY: DJM  
 CHECKED BY: MSW  
 DATE: 12/07/07



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LEGEND	
	TEMPORARY DITCH CHECK @ 50' SPACING
	SELECTIVE MOWING STAKE
	PERIMETER EROSION BARRIER
	TEMPORARY EROSION CONTROL SEEDING, HEAVY DUTY EROSION CONTROL BLANKET & SEEDING, CLASS 3
	TEMPORARY EROSION CONTROL SEEDING, HEAVY DUTY EROSION CONTROL BLANKET & SEEDING, CLASS 4 AND 5A
	DECIDUOUS TREE TO BE REMOVED
	EVERGREEN TREE TO BE REMOVED
	STONE RIPRAP, CLASS A4 & FILTER FABRIC

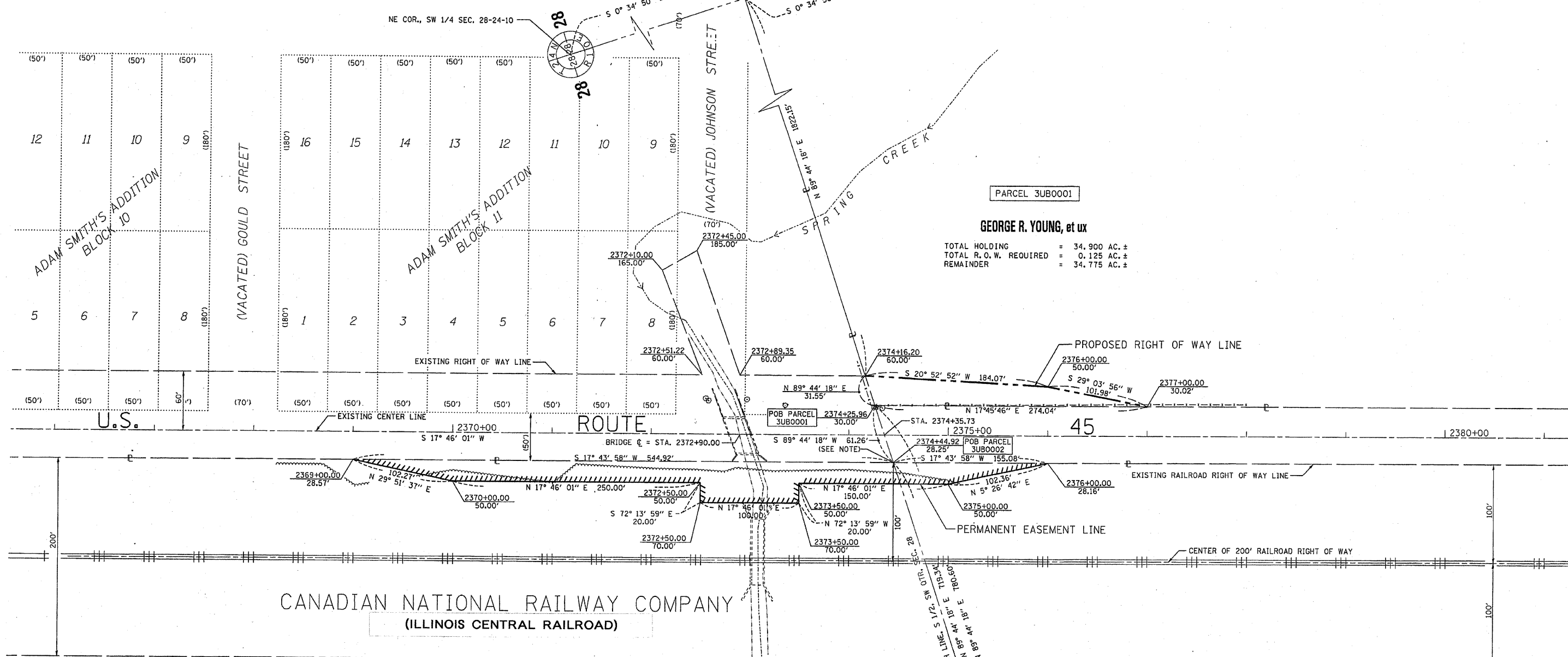


REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION EROSION CONTROL PLAN F.A.P. 338 (US 45) SECTION 33 BR-1 IROQUOIS COUNTY
NAME	DATE	
		DRAWN BY: DJM CHECKED BY: MSW DATE: 12/07/07



# SW 1/4, SEC. 28, T. 24 N., R. 10 E. OF THE 3RD P.M.

SE COR., SW 1/4 SEC. 28-24-10  
FOUND SURVEY NAIL  
MONUMENT RECORD NO. 07R0534



### SURVEYOR'S STATEMENT

I, JOHN R. HUSEMAN, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF F.A.S. 338 (US ROUTE 45) WAS MADE BY WILLETT HOFMANN & ASSOCIATES, INC. UNDER MY DIRECTION, AT THE REQUEST OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3, 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.

DATED 25 APRIL 2007



BY John R. Huseman  
JOHN R. HUSEMAN (ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2452 (EXPIRES NOVEMBER 2008))  
WILLETT, HOFMANN & ASSOCIATES, INC. - DESIGN FIRM NO. 184-000918

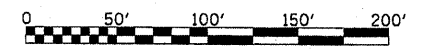
### CANADIAN NATIONAL RAILWAY COMPANY

PERMANENT EASEMENT AREA REQUIRED = 0.344 AC. ±  
PURPOSE: SHAPE AND MAINTAIN BACKSLOPE

NW COR., SW 1/4 SEC. 28-24-10  
FOUND SURVEY NAIL  
MONUMENT RECORD NO. 07R0534

SW COR., SW 1/4 SEC. 28-24-10  
FOUND SURVEY NAIL  
MONUMENT RECORD NO. 07R0534  
P.O.C. PARCEL 3UB0001 & 3UB0002

NOTE: FOR THE PURPOSES OF THIS PLAT, BEARINGS ARE BASED UPON AN ASSUMED NORTH.



### RIGHT OF WAY PLANS

ROUTE: FAS 338 (US ROUTE 45)  
SECTION: 33 BR-1  
PROJECT  
COUNTY: IROQUOIS  
JOB NO.: R-93-005-06  
STA 2364+00 TO STA 2378+00  
SCALE 1" = 50'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WATERWAY INFORMATION

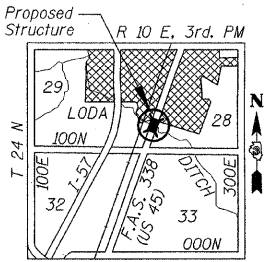
Drainage Area = 6.25 Sq. Mi.		Existing Low Grade Elev. 754.94 @ Sta. 2372+00		Proposed Low Grade Elev. 758.00 @ Sta. 2372+00		
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist. Prop.	Nat. H.W.E.	*Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.
	10	570	91 117	752.60	2.00 1.40	754.60 754.00
Design	50	836	103 129	753.20	3.10 2.50	756.30 755.70
Base	100	943	108 133	753.41	3.40 3.10	756.80 756.50
Overtopping (exist.)	25	700	99	752.92	2.50	755.40
Overtopping (prop.)	300	1135	140	753.76	4.30	758.10
Max. Calc.	300	1135	140	753.76	4.30	758.10

10 year velocity through Existing Structure = 2.45 fps  
10 year velocity through Proposed Structure = 1.91 fps  
\*Gross Area Opening = 180 sq. ft.  
Taken from the section with the highest created head.

STA. TO STA.  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

SHEET NO. B1

OF 10 SHEETS



LOCATION SKETCH

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 2372+90.00  
BUILT 200\_ BY  
STATE OF ILLINOIS  
F.A.P. RTE. 338 SECTION 33 BR-1  
LOADING HS20  
STR. NO. 038-2018

NAME PLATE

See Standard 515001

TOTAL BILL OF MATERIAL-BOX CULVERT

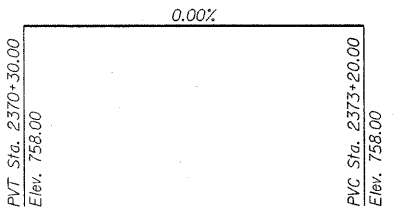
ITEM	UNIT	TOTAL
Removal and Disposal of Unsuitable Material	Cu Yd	213
Porous Granular Embankment, Special	Cu Yd	159
Stone Riprap, Class A4	Sq Yd	395
Filter Fabric	Sq Yd	395
Removal Of Existing Structures	Each	1
Reinforcement Bars	Pound	9890
Reinforcement Bars, Epoxy Coated	Pound	680
Name Plates	Each	1
Concrete Box Culverts	Cu Yd	81.5
Precast Concrete Box Culvert 10' x 9' (M273)	Foot	80

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 3/4".
- 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.
- 11.) All applicable cast-in-place concrete dimensions shall match precast culvert dimensions.
- 12.) The existing plans are provided for informational use only.
- 13.) See Sheet B7 for soil borings.
- 14.) 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, B4 & B5.
- 15.) The pay item "Ren-val and Disposal of Unsuitable Material" shall include the excavation of unsuitable material for a depth of ±3'-2" below the structure for a width of 27'-7" 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 pay item "Porous Granular Embankment, Special" shall include the placement of CA-1 and CA-7 below the structure for a width of 27'-7" within the limits of the toe walls as shown on the plans. The actual amount shall be determined in the field by the Engineer.
- 17.) 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".
- 18.) Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

INDEX TO SHEETS

SHEET NO.	TITLE
B1	GENERAL PLAN AND ELEVATION
B2	DOUBLE BOX CULVERT LONGITUDINAL SECTION, PRECAST CONCRETE CULVERT SECTION AND DETAILS
B3	CAST-IN-PLACE CONCRETE CULVERT SECTION, DETAILS AND BILL OF MATERIAL
B4	CAST-IN-PLACE CONCRETE CULVERT TOP SLAB PLANS AND SECTIONS
B5	CAST-IN-PLACE CONCRETE CULVERT BOTTOM SLAB PLANS AND SECTIONS
B6	CAST-IN-PLACE CONCRETE WINGWALLS
B7	SOIL BORING LOGS
B8-B10	EXISTING PLANS



PROFILE GRADE

(Along & Roadway)

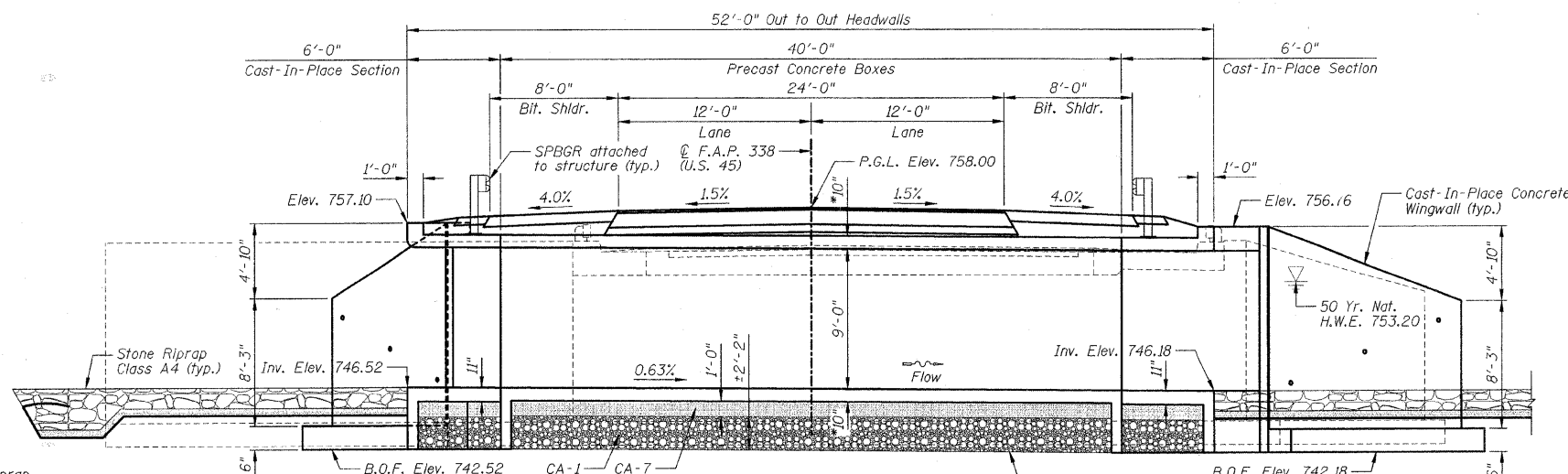
NOTES:

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

Benchmarks: OA#2, Bar set flush, S.W. Quadrant of bridge, ±4.5' West of West edge of pavement, Elevation = 755.05 @ Sta. 2373+16.36/16.25' RT.

Existing Structure: SN 038-0045 was built in the 1920's as a single span reinforced concrete slab bridge with closed abutments supported on spread footings. The original structure was 26'-0" out-to-out of deck. The structure is 23'-8 3/4" back-to-back of abutments with a 20° skew right forward. In 1952, the concrete bridge rails and concrete wingwalls were removed and the bridge was widened to 38'-4" out-to-out of deck. The substructure was widened with abutments and vertical cantilever wingwalls on spread footings. The upstream wingwalls to the East are approximately 30' long and run parallel with the abutments and channel. Traffic to be detoured.

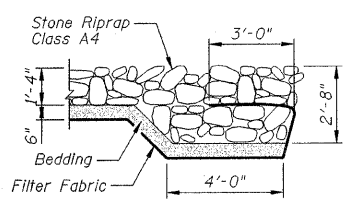
No Salvage.



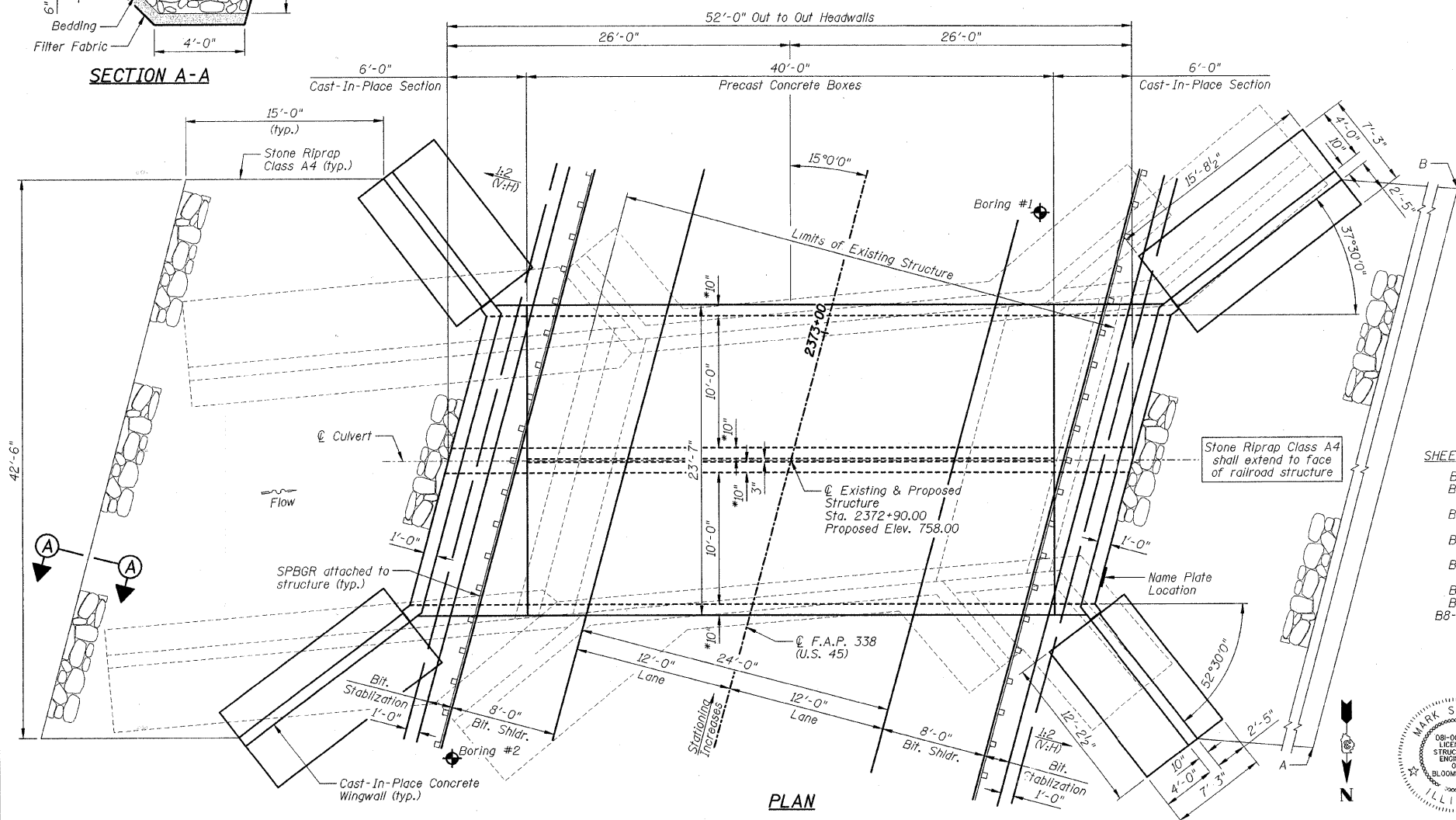
LONGITUDINAL SECTION

(Looking South @ & of Culvert, roadway dimensions @ right angles to roadway)

Remove unsuitable soil and replace with Porous Granular Embankment, Special. Limits shall extend to 2'-0" outside of the culvert barrel walls

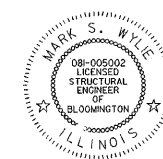


SECTION A-A



PLAN

A = Sta. 2372+87/86' RT.  
B = Sta. 2373+31/86' RT.



Mark S. Wylie Date 12/7/07  
MARK S. WYLIE  
ILLINOIS STRUCTURAL ENGINEER  
NO. 081-005002  
Exp. Date 11/30/08

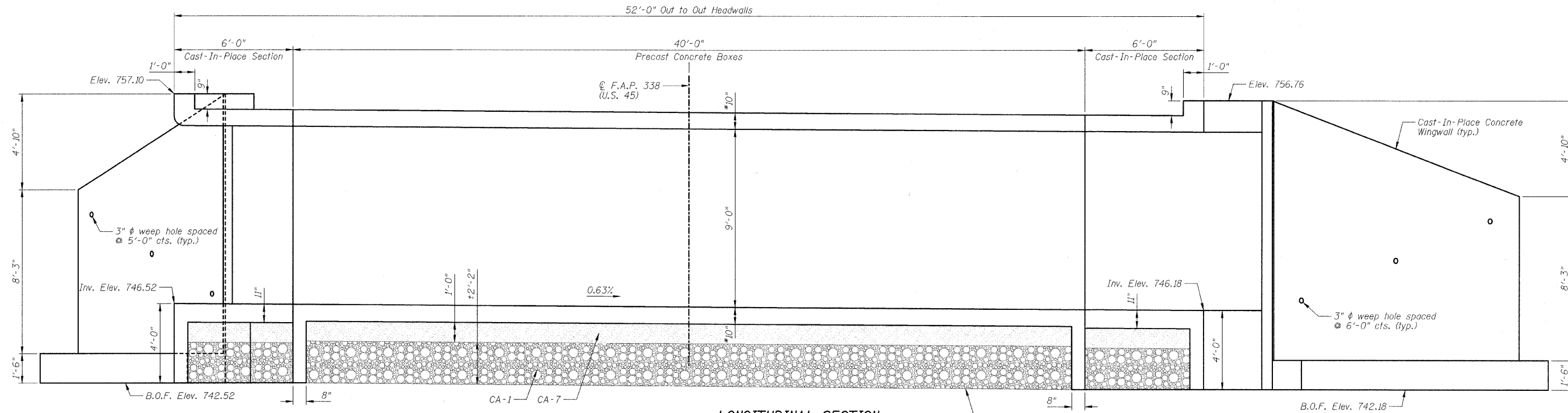
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
GENERAL PLAN AND ELEVATION  
F.A.P. 338 (US 45) OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY  
STATION 2372+90.00  
STRUCTURE NO. 038-2018  
DESIGNED BY: JML  
DATE: 12/07/07  
DRAWN BY: DJM  
CHECKED BY: MSW

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

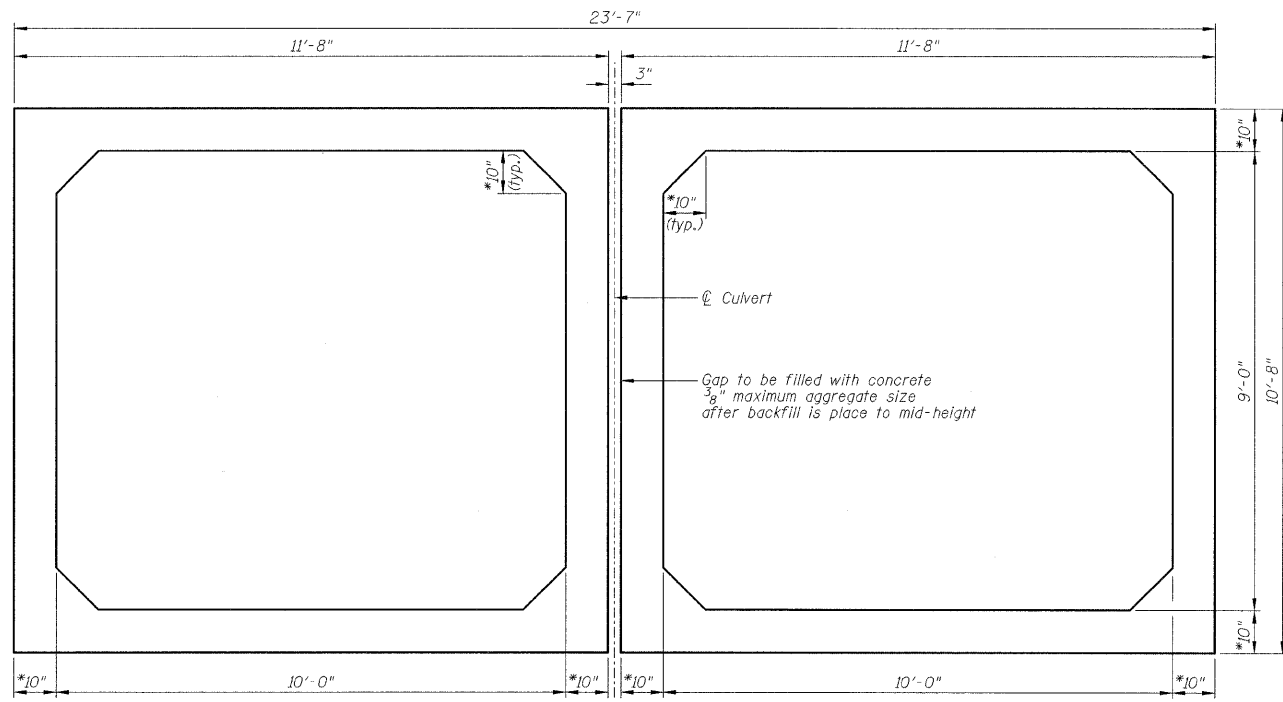
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	14
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET NO. B2  
OF 10 SHEETS

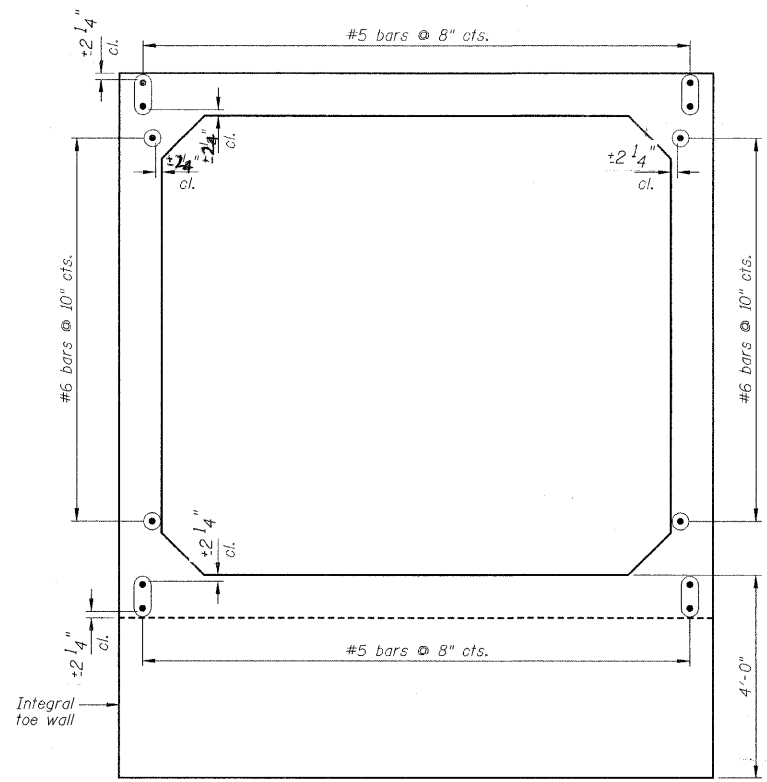


**LONGITUDINAL SECTION**  
(Looking South @ C of Culvert,  
roadway dimensions @ right angles to roadway)

Remove unsuitable soil and replace with Porous Granular Embankment, Special. Limits shall extend to 2'-0" outside of the culvert barrel walls



**SECTION THRU PRECAST CONCRETE BARREL**



**PRECAST CONCRETE CULVERT END ELEVATION**

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

**BILL OF MATERIAL**

Item	Unit	Quantity
Removal and Disposal of Unsuitable Material	Cu Yd	213
Porous Granular Embankment, Special	Cu Yd	159
Precast Concrete Box Culvert 10'x9'	Foot	80

**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.

REVISIONS	
NAME	DATE

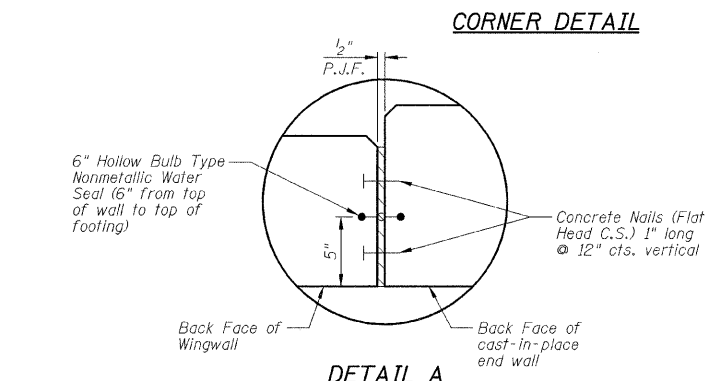
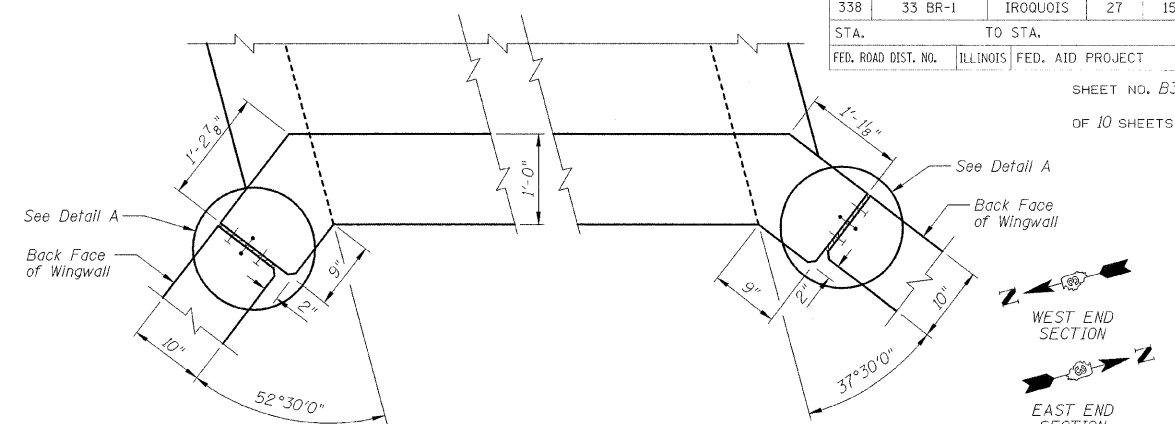
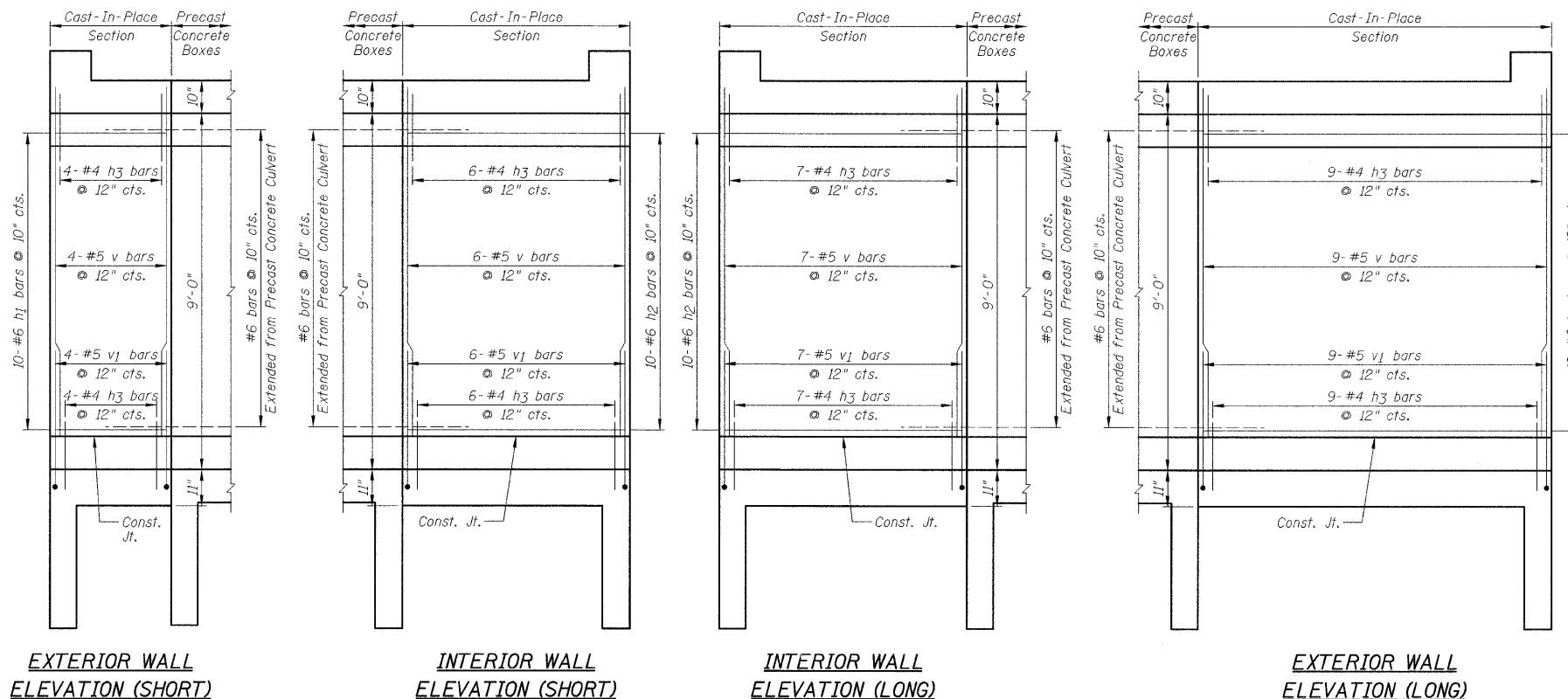
ILLINOIS DEPARTMENT OF TRANSPORTATION  
DOUBLE BOX CULVERT LONGITUDINAL SECTION, PRECAST CONCRETE CULVERT SECTION AND DETAILS  
F.A.P. 338 (US 45) OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY  
STATION 2372+90.00  
STRUCTURE NO. 038-2018

DESIGNED BY: JML  
DATE: 12/07/07  
DRAWN BY: DJM  
CHECKED BY: MSW

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

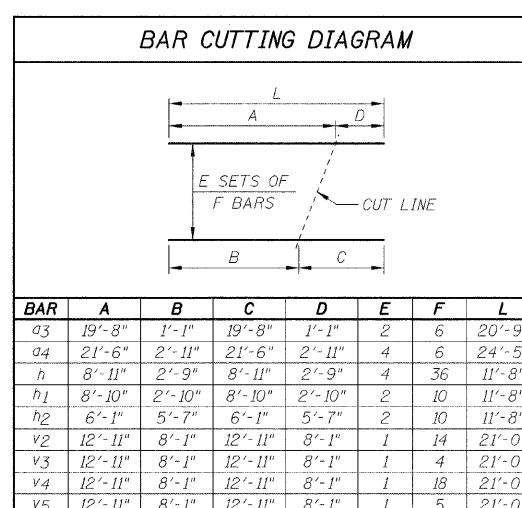
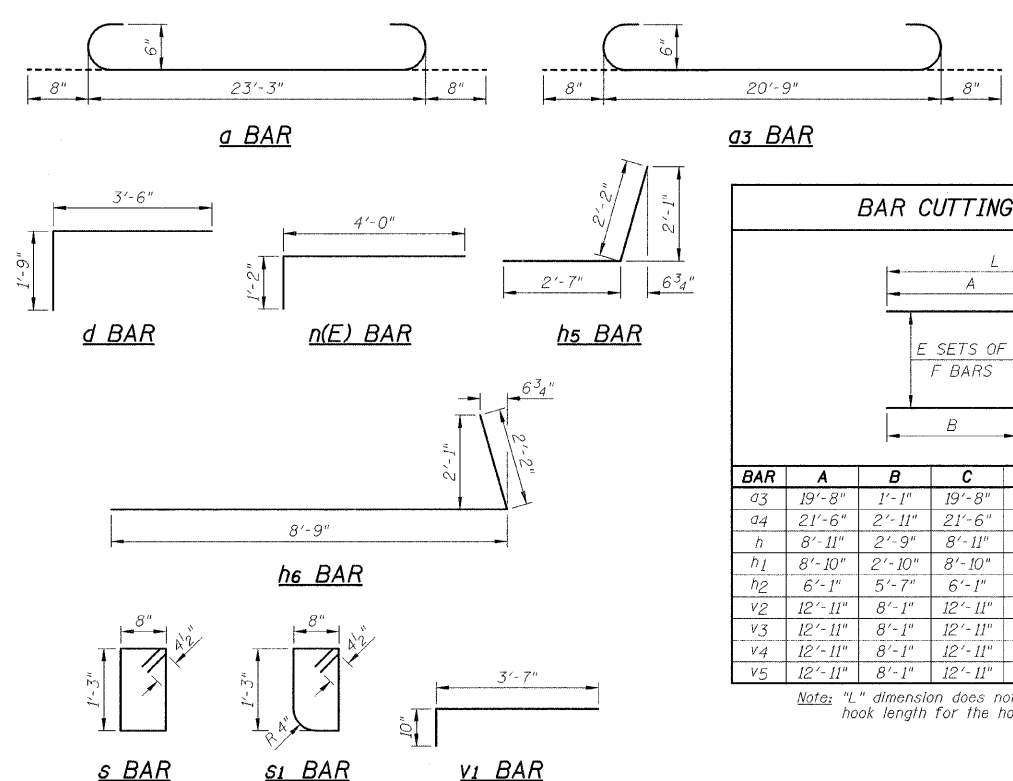
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. B3  
OF 10 SHEETS

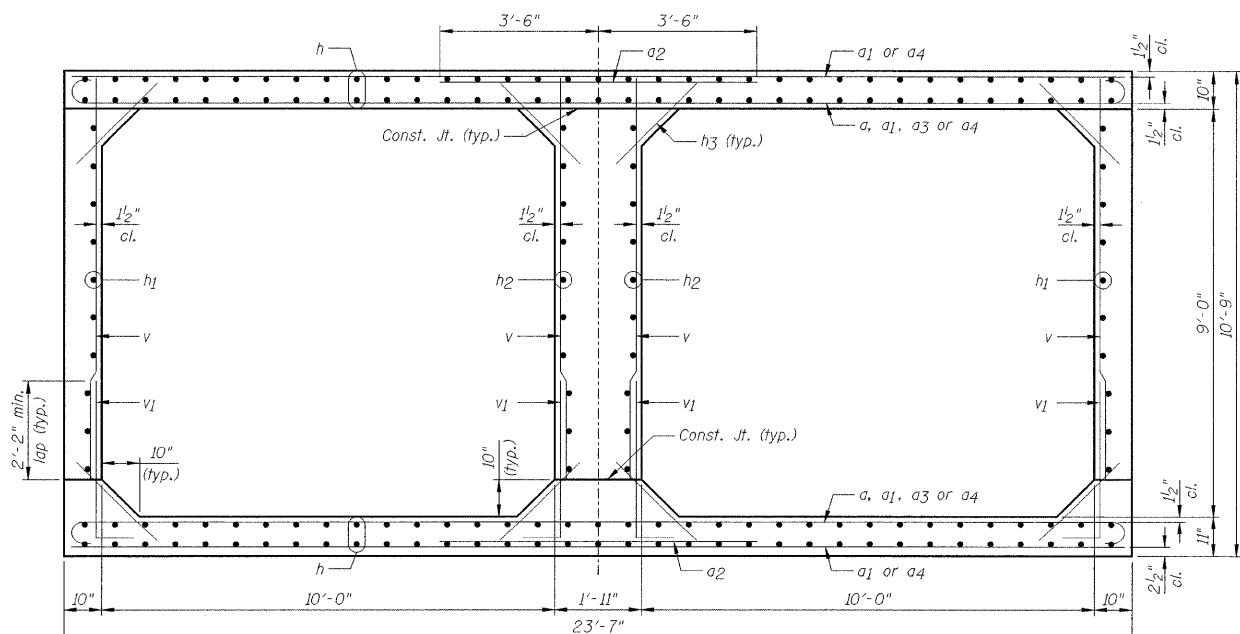


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	12	#6	24'-7"	U
a1	24	#6	23'-3"	—
a2	20	#6	7'-0"	—
a3	12	#6	22'-1"	U
a4	24	#6	24'-5"	—
d	74	#4	5'-3"	L
h	144	#5	11'-8"	—
h1	20	#6	11'-8"	—
h2	20	#6	11'-8"	—
h3	104	#4	2'-6"	—
h4	6	#5	24'-1"	—
h5	6	#5	4'-9"	—
h6	6	#5	10'-11"	7
h7	8	#5	23'-2"	—
h8	40	#4	11'-10"	—
h9	40	#4	15'-4"	—
n(E)	64	#7	5'-2"	L
s	24	#4	4'-7"	U
s1	24	#4	4'-5"	U
t	172	#4	6'-11"	—
v	52	#5	8'-10"	—
v1	52	#5	4'-5"	L
v2	14	#5	21'-0"	—
v3	4	#4	21'-0"	—
v4	18	#5	21'-0"	—
v5	5	#4	21'-0"	—
w	32	#4	11'-10"	—
w1	32	#4	15'-4"	—
Item	Unit	Quantity		
Reinforcement Bars	Pound	9890		
Reinforcement Bars, Epoxy Coated	Pound	680		
Name Plates	Each	1		
Concrete Box Culverts	Cu Yd	81.5		



BAR	A	B	C	D	E	F	L
a3	19'-8"	1'-1"	19'-8"	1'-1"	2	6	20'-9"
a4	21'-6"	2'-11"	21'-6"	2'-11"	4	6	24'-5"
h	8'-11"	2'-9"	8'-11"	2'-9"	4	36	11'-8"
h1	8'-10"	2'-10"	8'-10"	2'-10"	2	10	11'-8"
h2	6'-1"	5'-7"	6'-1"	5'-7"	2	10	11'-8"
v2	12'-11"	8'-1"	12'-11"	8'-1"	1	14	21'-0"
v3	12'-11"	8'-1"	12'-11"	8'-1"	1	4	21'-0"
v4	12'-11"	8'-1"	12'-11"	8'-1"	1	18	21'-0"
v5	12'-11"	8'-1"	12'-11"	8'-1"	1	5	21'-0"



SECTION THRU CAST-IN-PLACE CONCRETE BARREL

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.

REVISIONS	
NAME	DATE

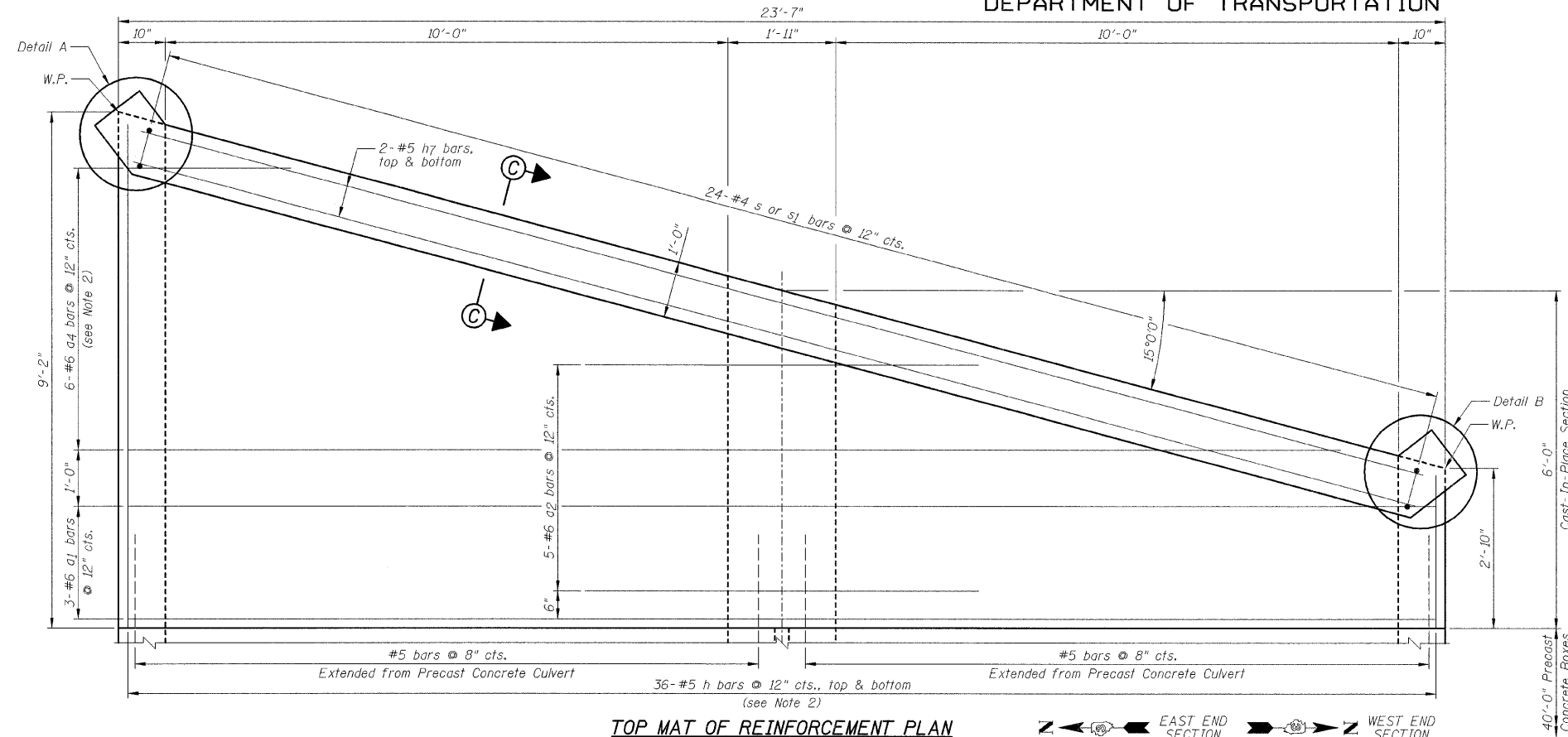
ILLINOIS DEPARTMENT OF TRANSPORTATION  
CAST-IN-PLACE CONCRETE CULVERT  
SECTION, DETAILS AND BILL OF MATERIAL  
F.A.P. 338 (US 45) OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY  
STATION 2372+90.00  
STRUCTURE NO. 038-2018  
DESIGNED BY: JML  
DRAWN BY: DJM  
DATE: 12/07/07  
CHECKED BY: MSW

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

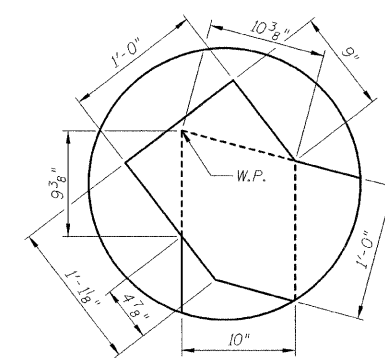
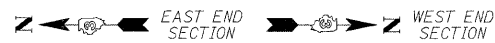
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	16
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. B4

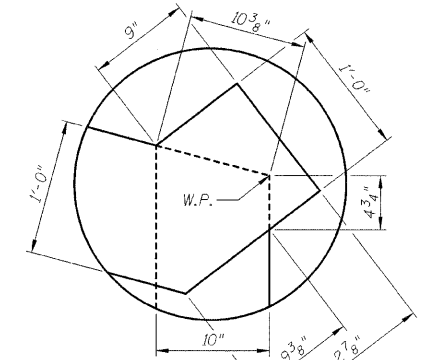
OF 10 SHEETS



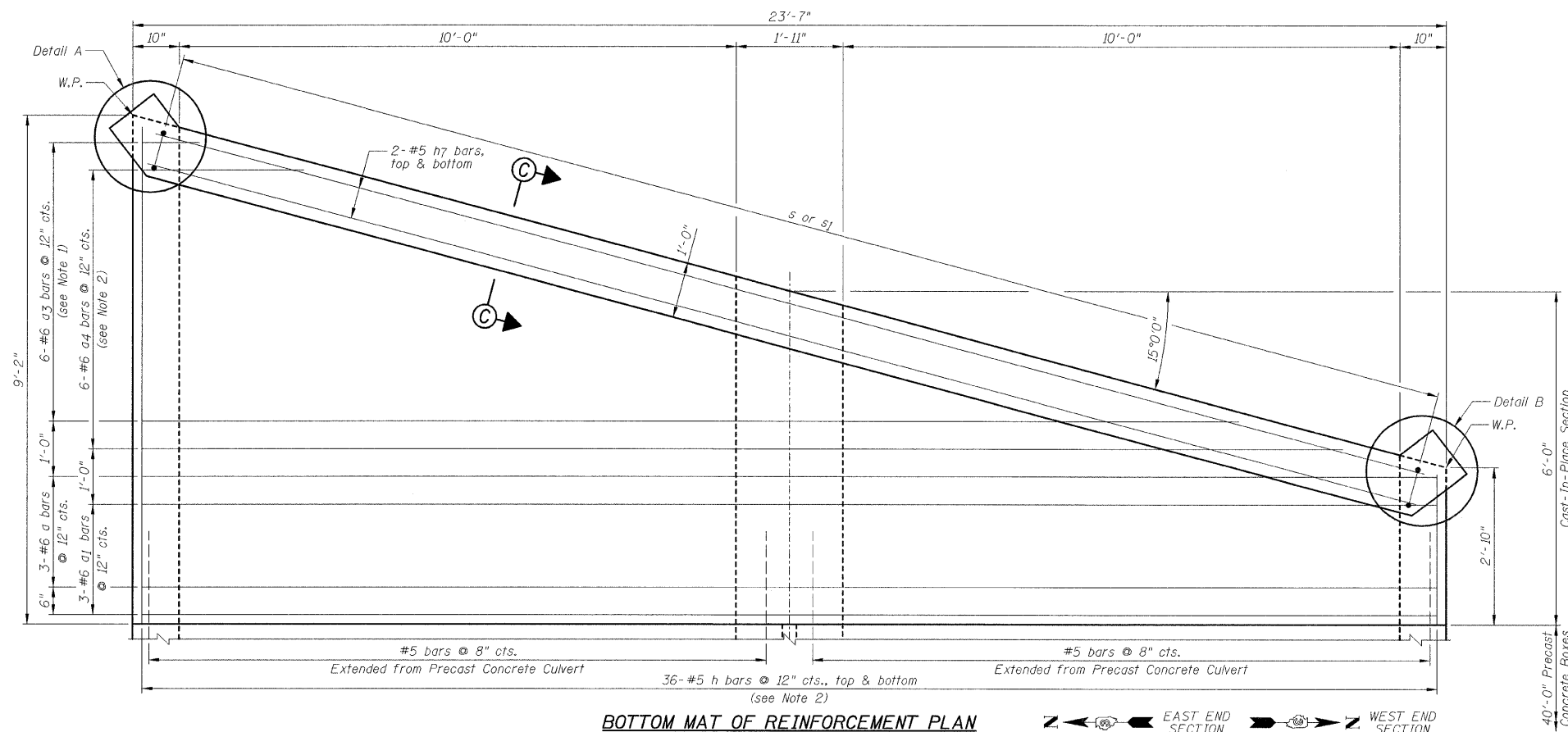
TOP MAT OF REINFORCEMENT PLAN



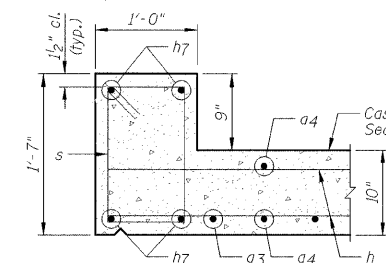
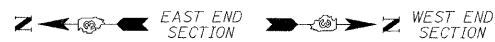
DETAIL A



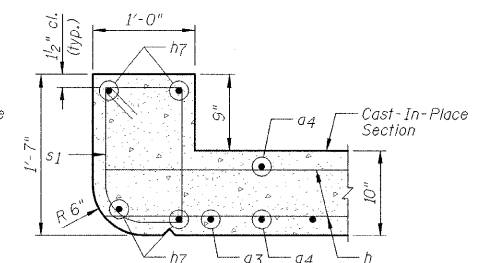
DETAIL B



BOTTOM MAT OF REINFORCEMENT PLAN



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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
CAST-IN-PLACE CONCRETE CULVERT  
TOP SLAB PLANS AND SECTIONS  
F.A.P. 338 (US 45) OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY  
STATION 2372+90.00  
STRUCTURE NO. 038-2018

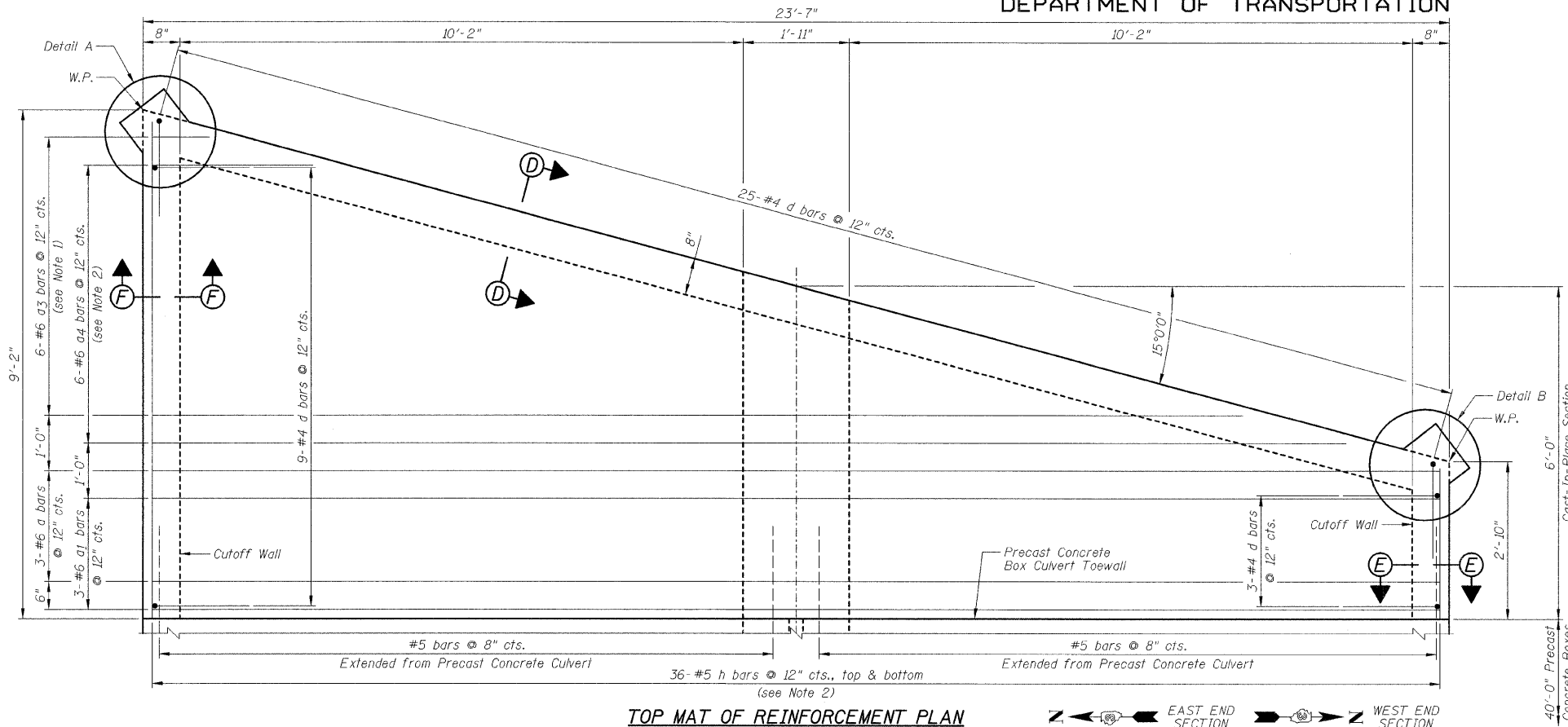
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DATE: 12/07/07  
DRAWN BY: DJM  
CHECKED BY: MSW

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	17
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

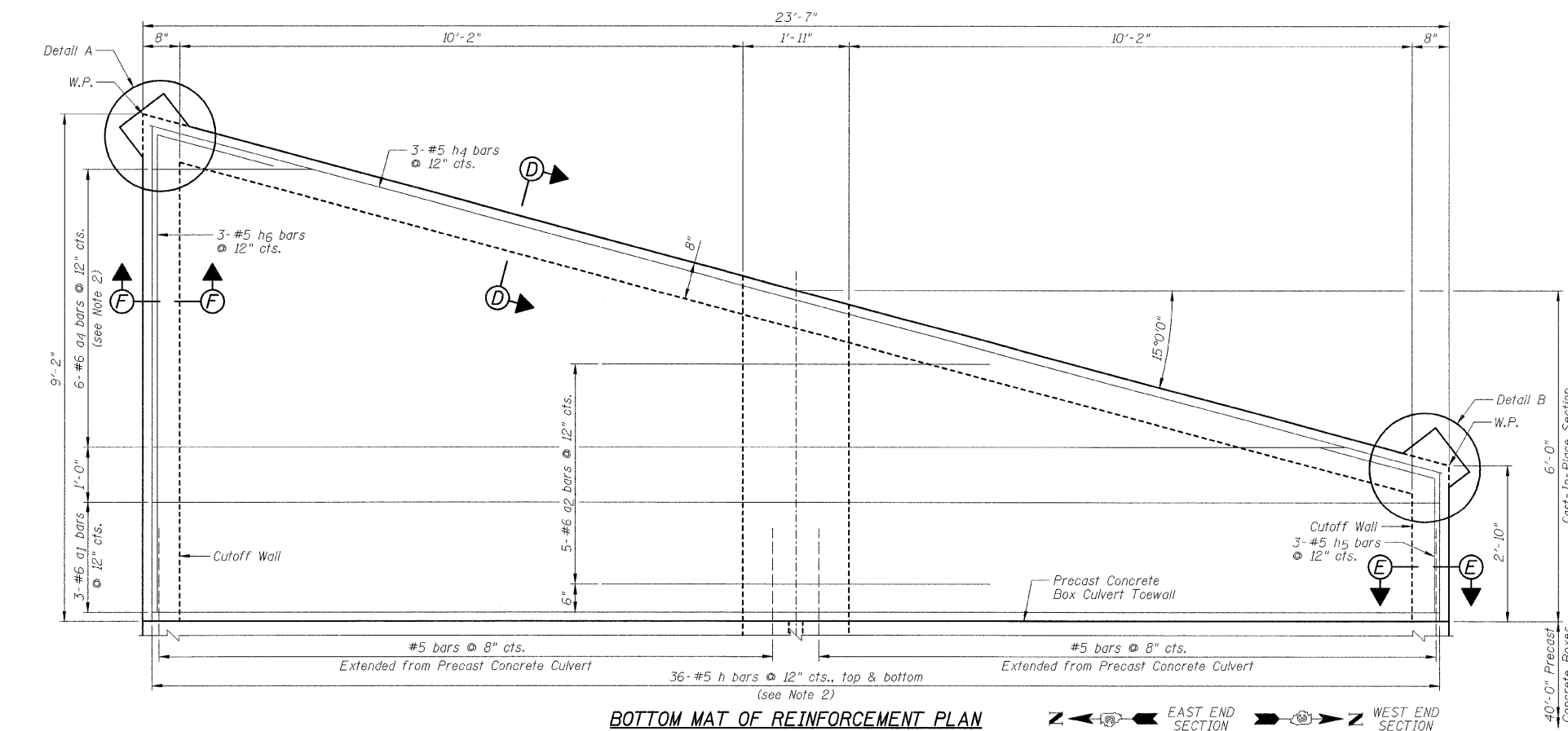
SHEET NO. B5

OF 10 SHEETS



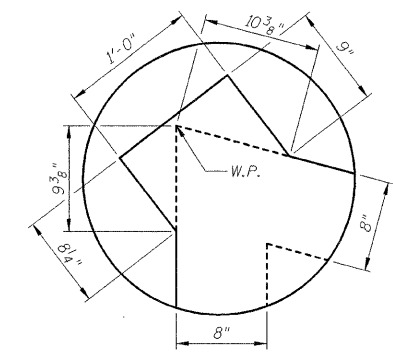
TOP MAT OF REINFORCEMENT PLAN

← EAST END SECTION → WEST END SECTION

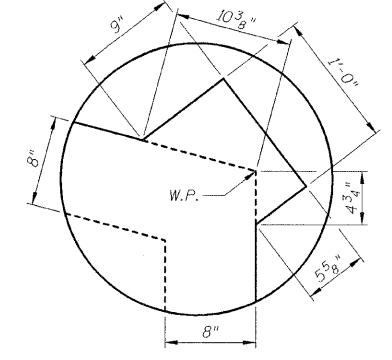


BOTTOM MAT OF REINFORCEMENT PLAN

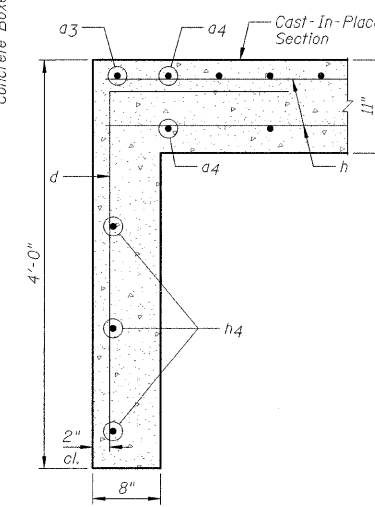
← EAST END SECTION → WEST END SECTION



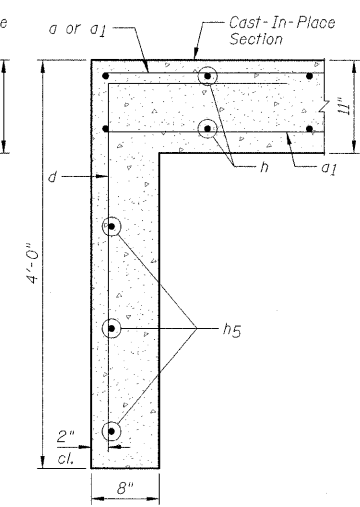
DETAIL A



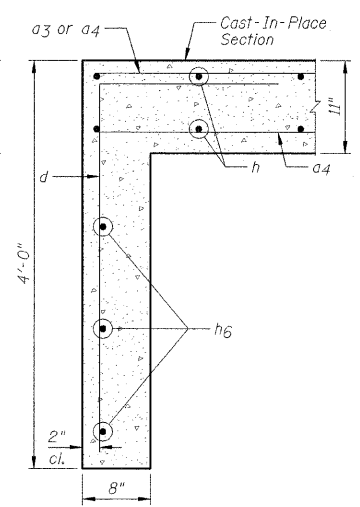
DETAIL B



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.

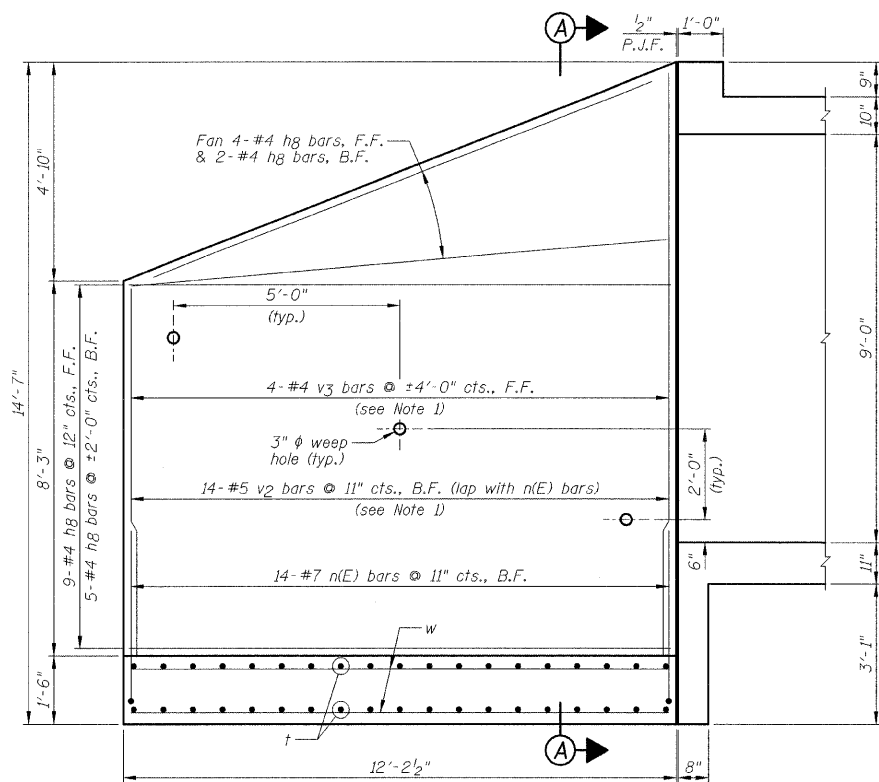
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
CAST-IN-PLACE CONCRETE CULVERT  
BOTTOM SLAB PLANS AND SECTIONS  
F.A.P. 338 (US 45) OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY  
STATION 2372+90.00  
STRUCTURE NO. 038-2018  
DESIGNED BY: JML  
DATE: 12/07/07  
DRAWN BY: DJM  
CHECKED BY: MSW

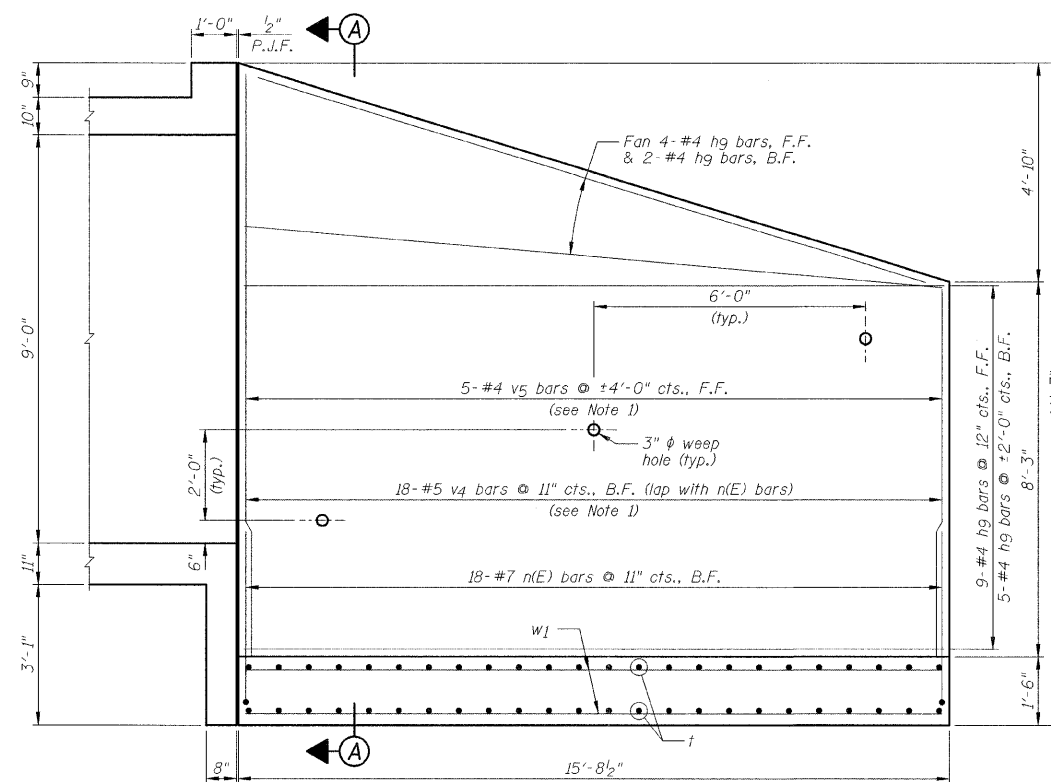
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET NO. B6  
OF 10 SHEETS

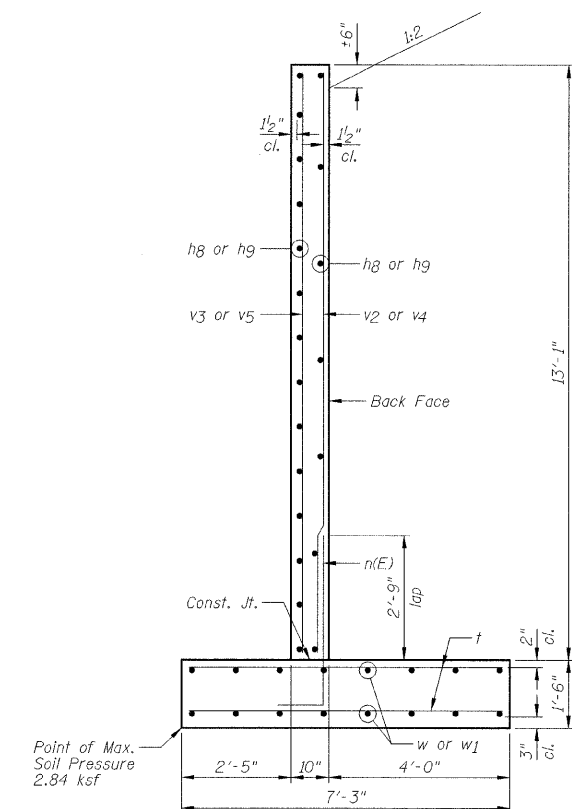
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



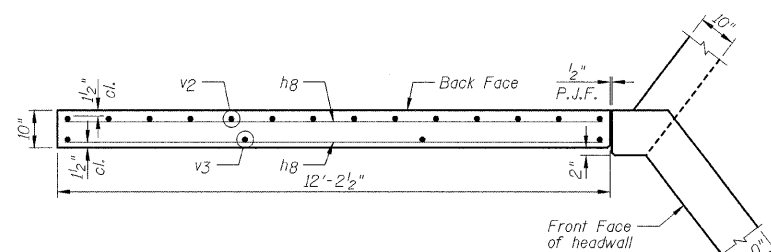
NORTHWEST & SOUTHEAST WINGWALL ELEVATION



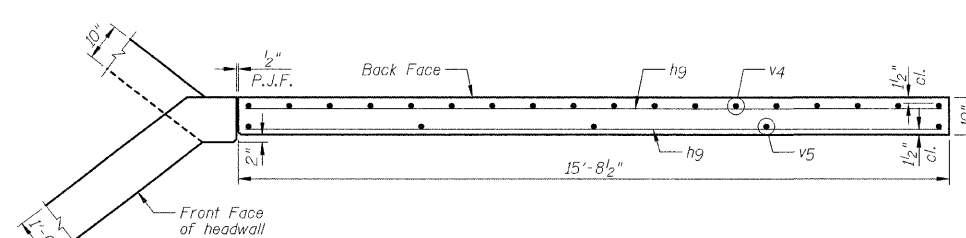
NORTHEAST & SOUTHWEST WINGWALL ELEVATION



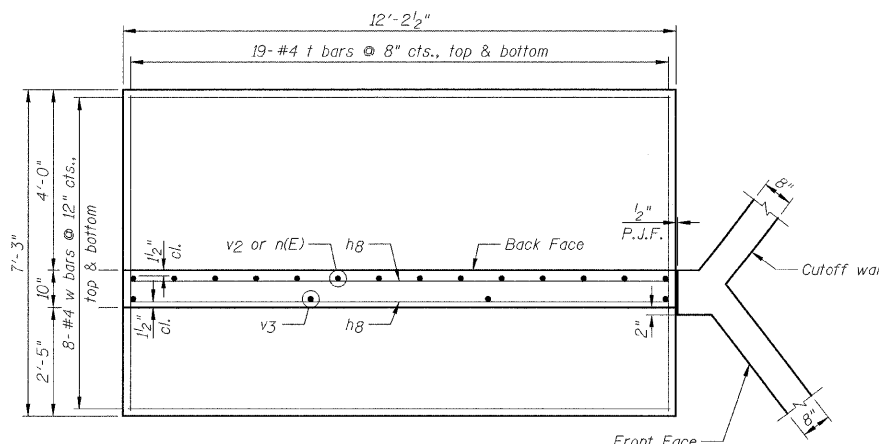
SECTION A-A



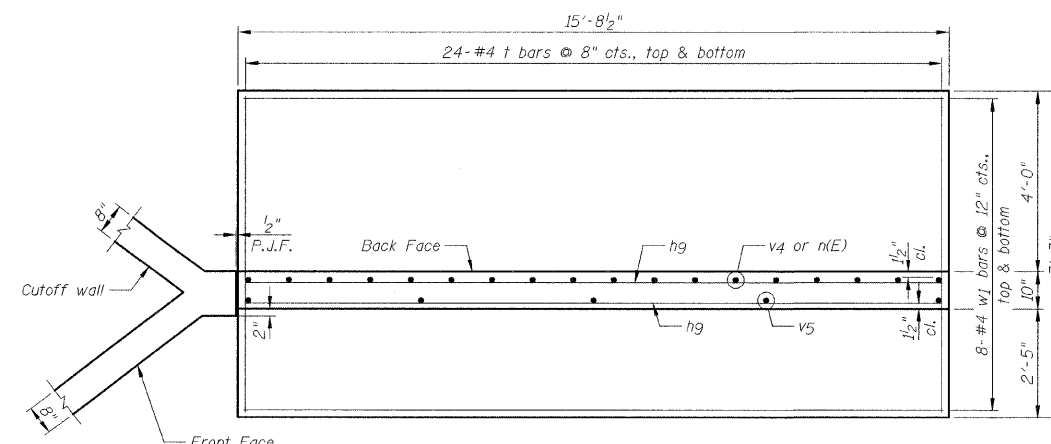
UPPER WINGWALL PLAN



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 = 2.84 ksf.
  - 3.) For Bill Of Material, see Sheet B3.
  - 4.) F.F. denotes Front Face. B.F. denotes Back Face.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
CAST-IN-PLACE CONCRETE WINGWALLS  
F.A.P. 338 (US 45) OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY  
STATION 2372+90.00  
STRUCTURE NO. 038-2018  
DESIGNED BY: JML  
DRAWN BY: DJM  
DATE: 12/07/07  
CHECKED BY: MSW

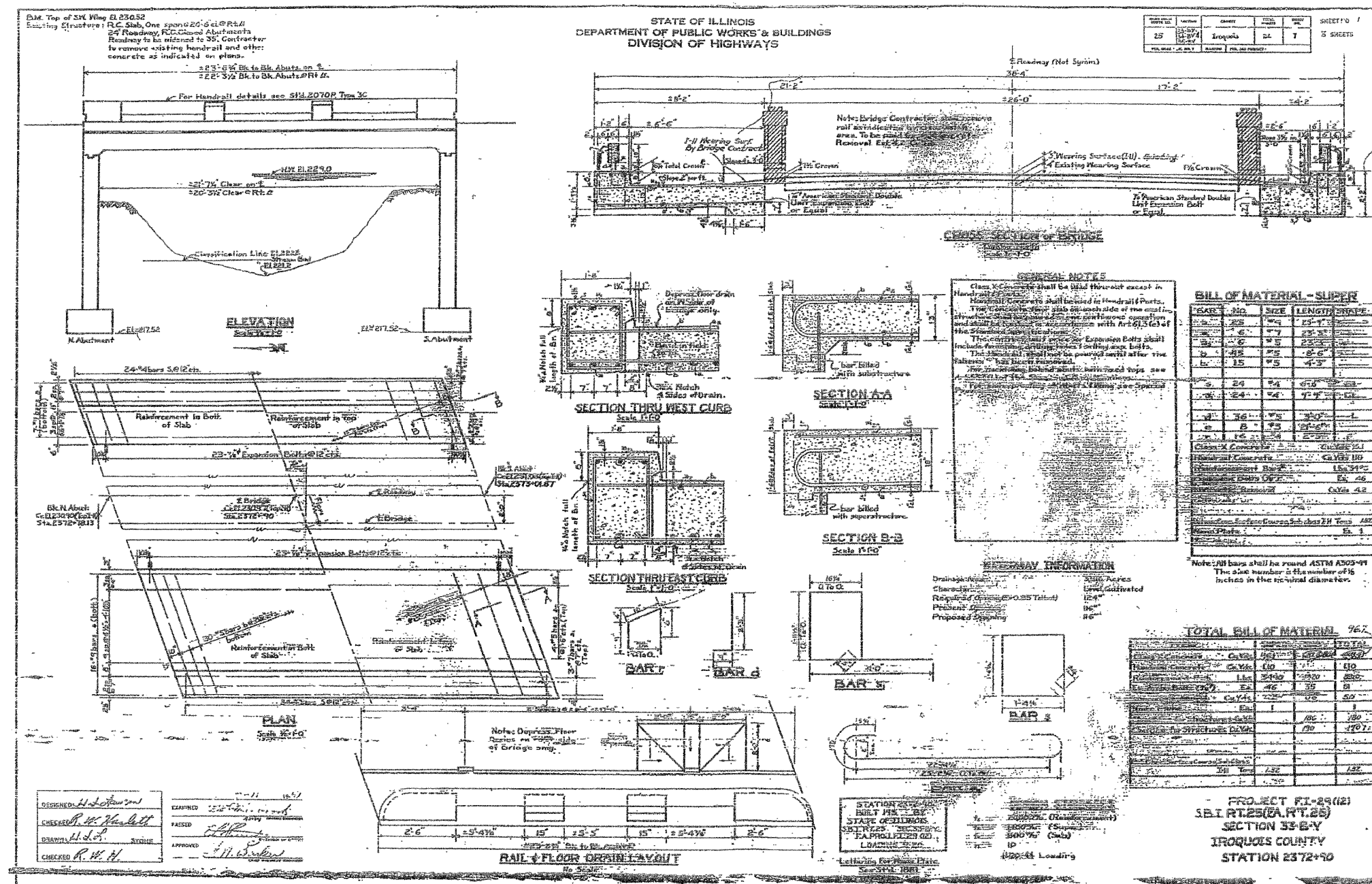




STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SHEET NO. 88  
OF 10 SHEETS



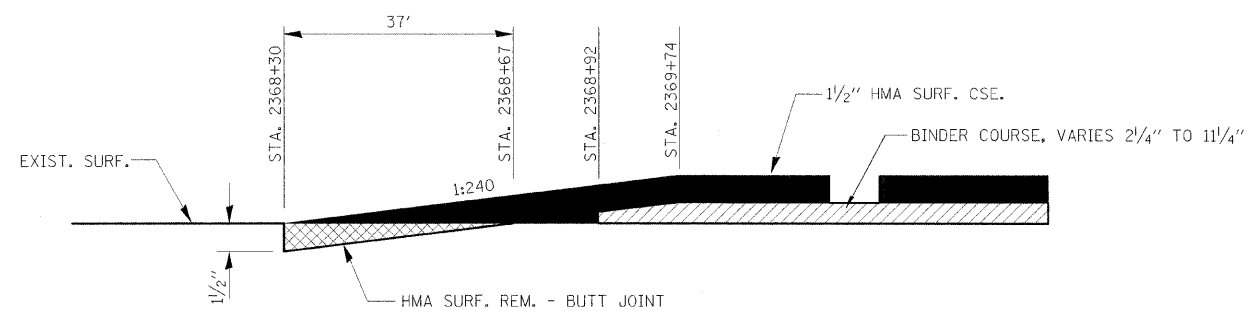
FOR INFORMATIONAL  
USE ONLY

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION EXISTING PLANS F.A.P. 338 (US 45) OVER A DITCH SECTION 33 BR-1 IROQUOIS COUNTY STATION 2372+90.00 STRUCTURE NO. 038-2018
NAME	DATE	
		DESIGNED BY: JML DATE: 12/07/07
		DRAWN BY: DJM CHECKED BY: MSW



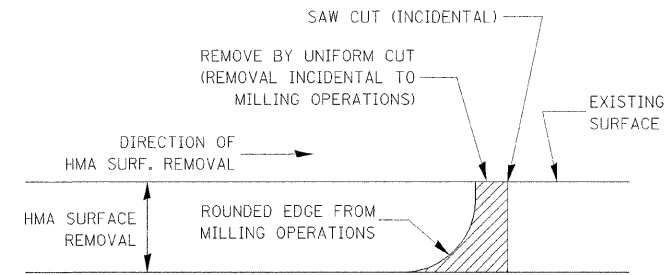


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	23
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



**BEGINNING OF IMPROVEMENTS**

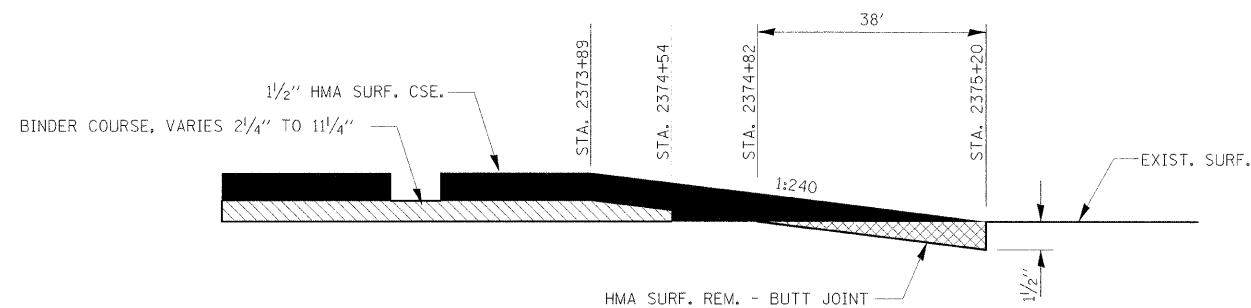
STA. 2368+30



**NOTE:**

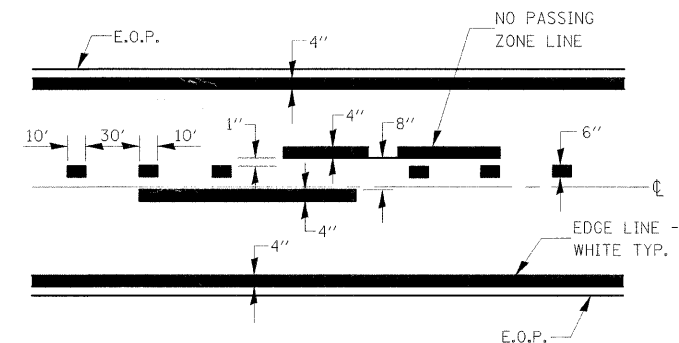
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.

**HMA DETAIL AT BUTT JOINTS**



**END OF IMPROVEMENTS**

STA. 2375+20



**PAVEMENT MARKING**

NO PASSING ZONE STATIONS:  
STA. 2373+45 RT TO STA. 2375+20 RT  
STA. 2368+30 LT TO STA. 2373+45 LT

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
MISCELLANEOUS DETAILS  
F.A.P. 338 (US 45)  
OVER A DITCH  
SECTION 33 BR-1  
IROQUOIS COUNTY

DATE: 12/07/07  
DRAWN BY: DJM  
CHECKED BY: MSW

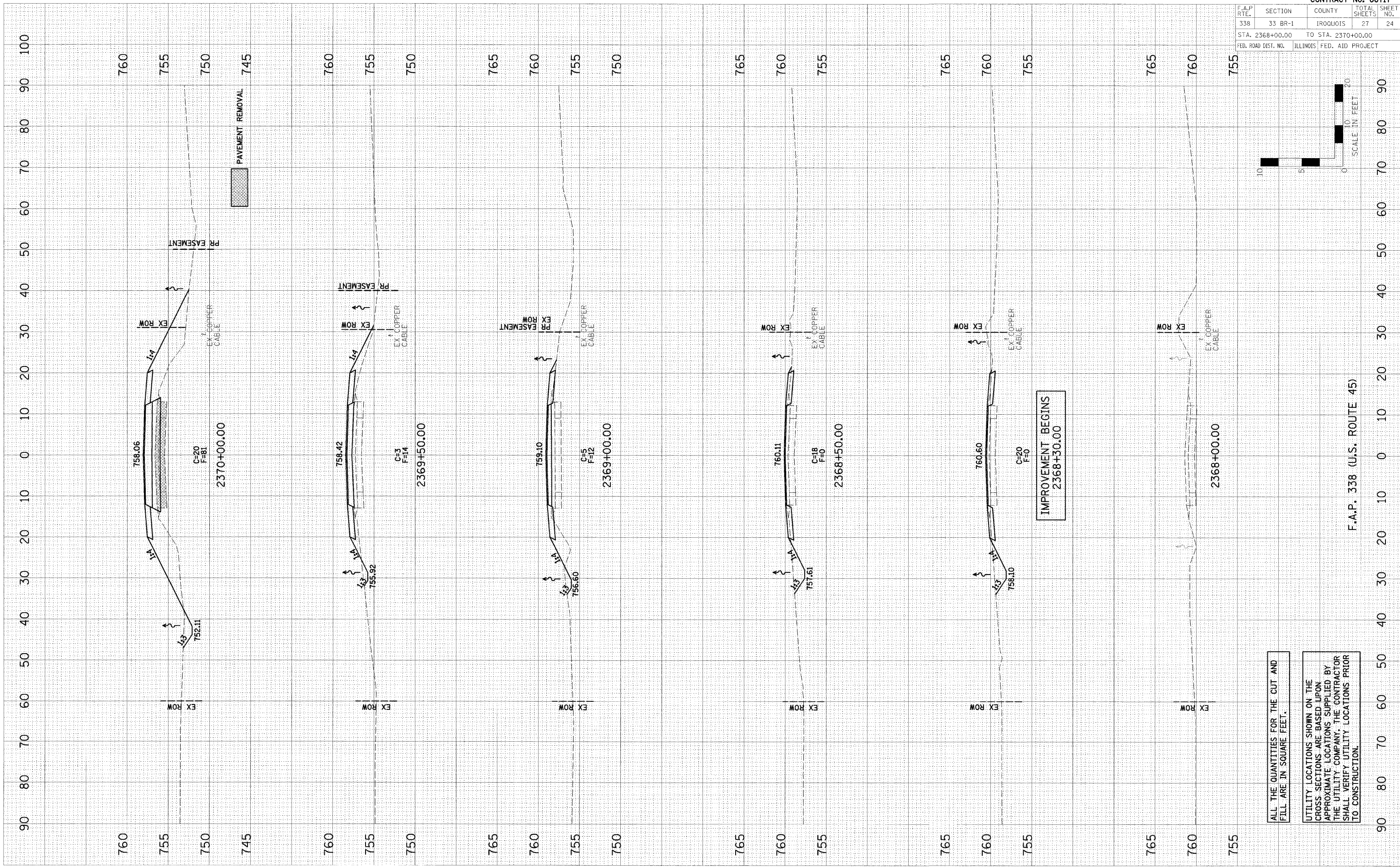


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	24
STA. 2368+00.00		TO STA. 2370+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

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

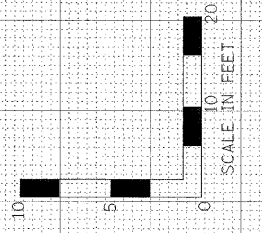
ORIGINAL SURVEY  
 SURVEYED  
 PLOTTED  
 TEMPLATE  
 NOTE BOOK  
 NO. \_\_\_\_\_  
 BY \_\_\_\_\_  
 DATE \_\_\_\_\_

PLOT DATE: #DATE#  
 PLOT SCALE: #SCALE#  
 USER NAME: #USER#



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.



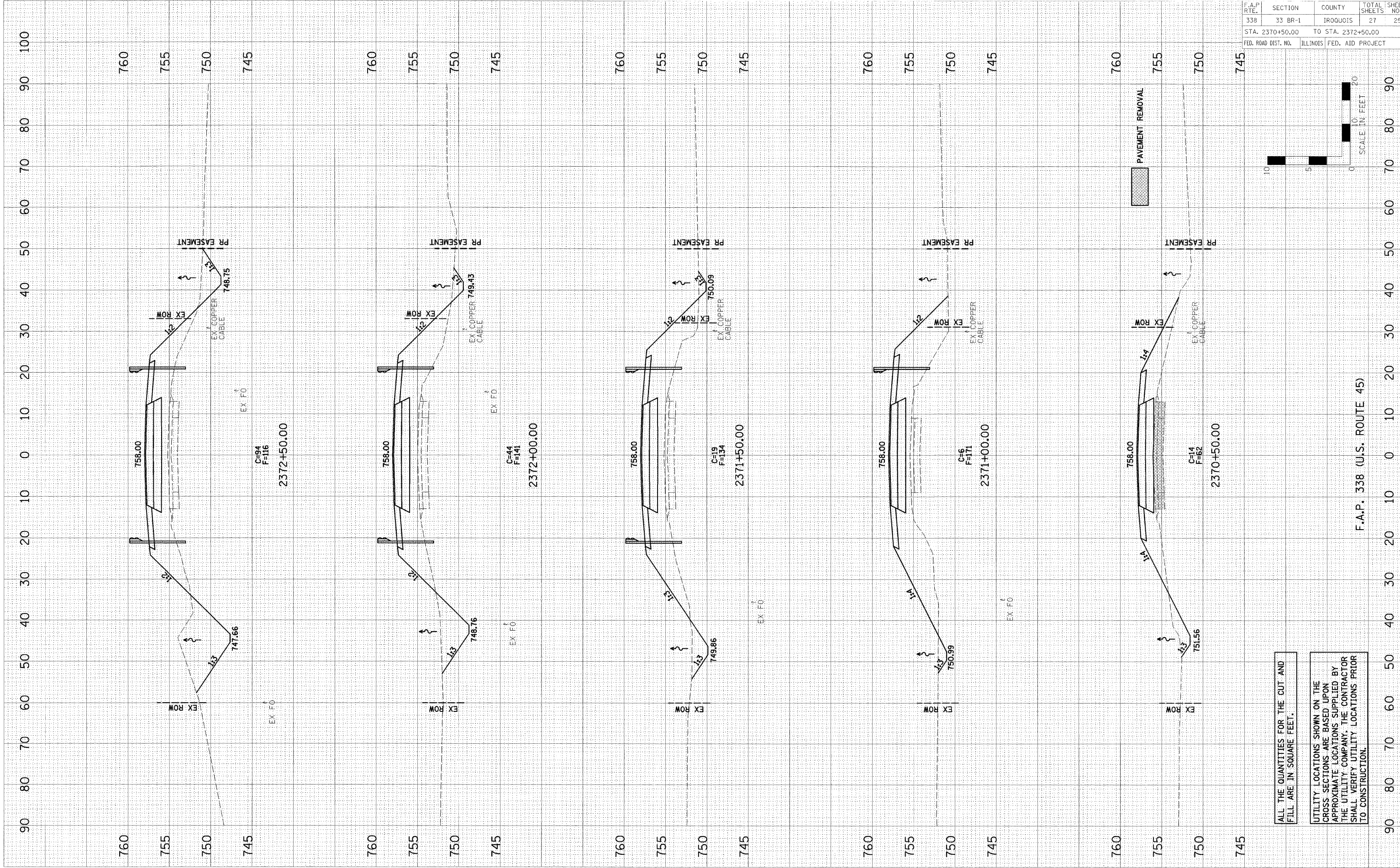
F.A.P. 338 (U.S. ROUTE 45)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	25
STA. 2370+50.00		TO STA. 2372+50.00		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

FINAL SURVEYED	BY	DATE
SHEET PLOTTED		
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEYED	BY	DATE
SHEET PLOTTED		
NOTE BOOK		
AREAS CHECKED		

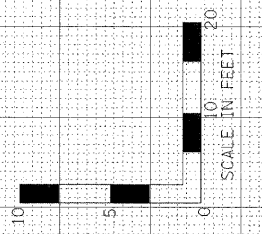
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 PLOT SCALE = #SCALE#  
 PLOT NAME = #NAME#  
 USER NAME = #USER#



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. 338 (U.S. ROUTE 45)



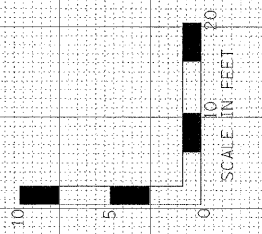
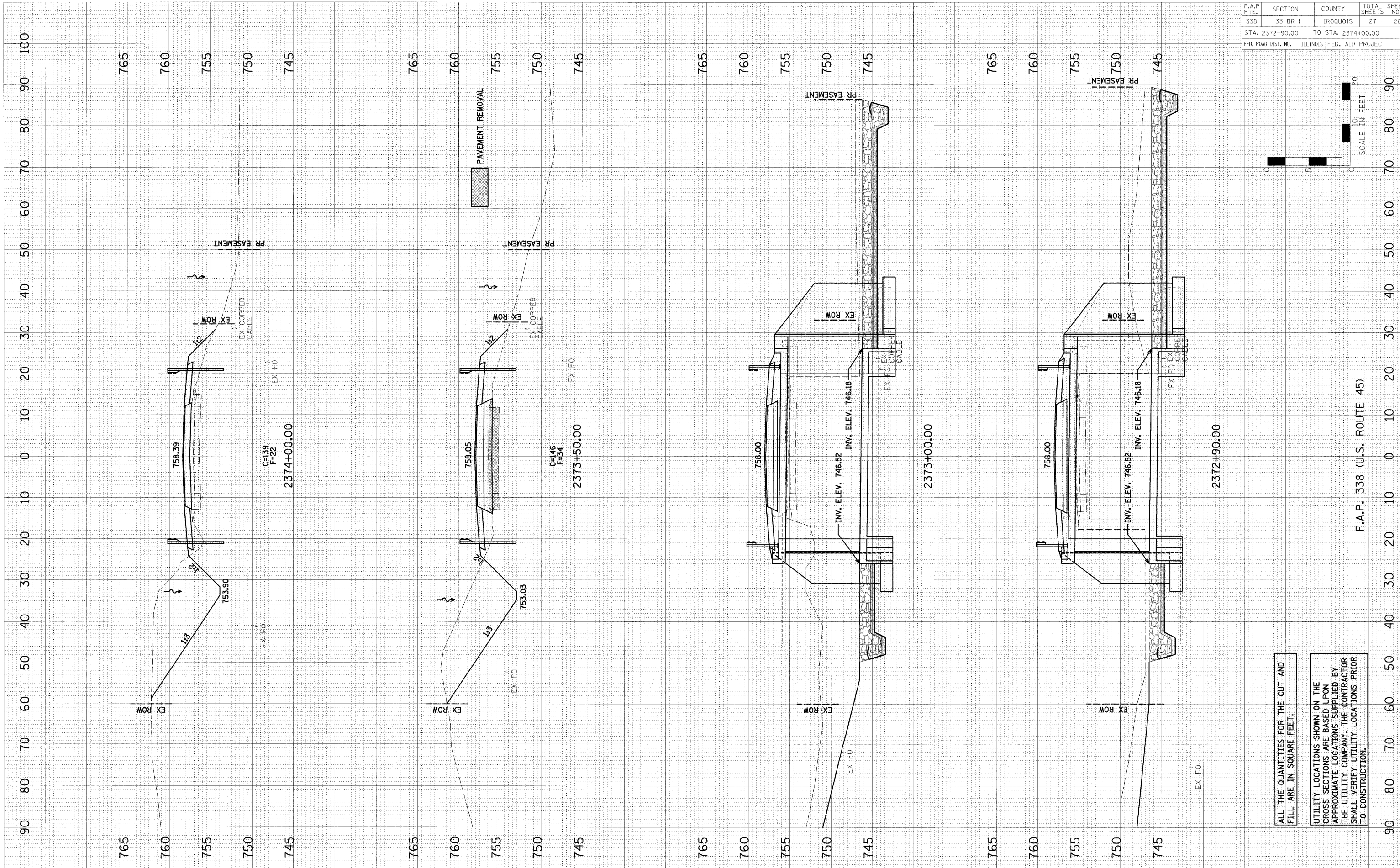


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IROQUOIS	27	26
STA. 2372+90.00		TO STA. 2374+00.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLE		
NOTE BOOK		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLE		
NOTE BOOK		
AREAS CHECKED		

PLOT DATE \* DATE \*  
 PLOT SCALE \* FEET \*  
 PLOT NAME \* USER \*  
 USER NAME \* USER \*  
 USER NAME \* USER \*



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.

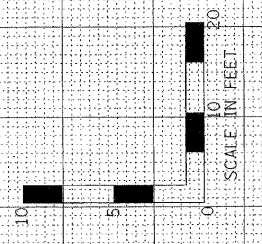
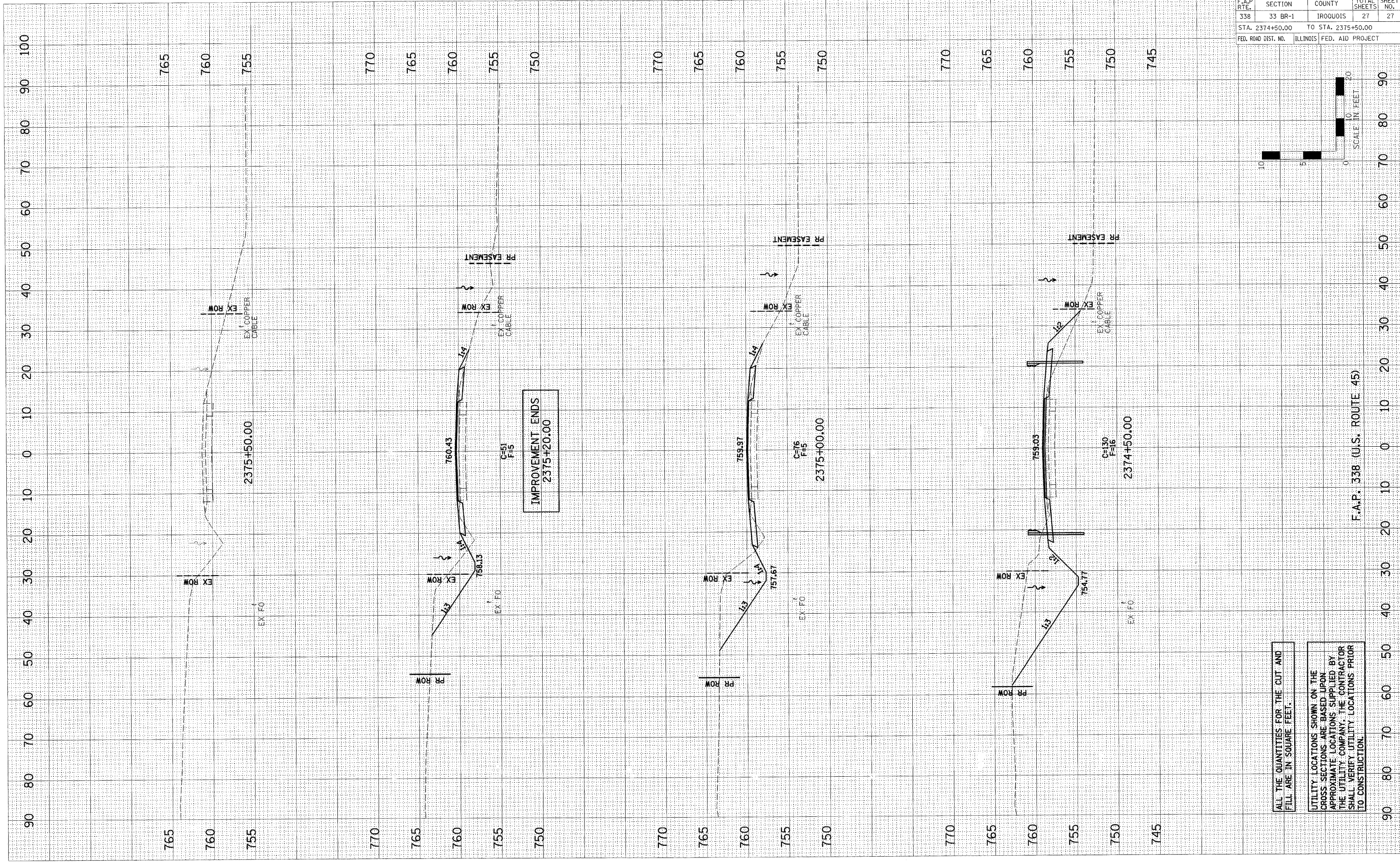
F.A.P. 338 (U.S. ROUTE 45)

F.A.P. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	33 BR-1	IRROUOIS	27	27
STA. 2374+50.00		TO STA. 2375+50.00		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		

PLOT DATE = \$DATE\$  
 FILE NAME = \$FILEL\$  
 PLOT SCALE = \$SCALE\$  
 USER NAME = \$USER\$



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. 338 (U.S. ROUTE 45)