

U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45		MASSAC	13	1

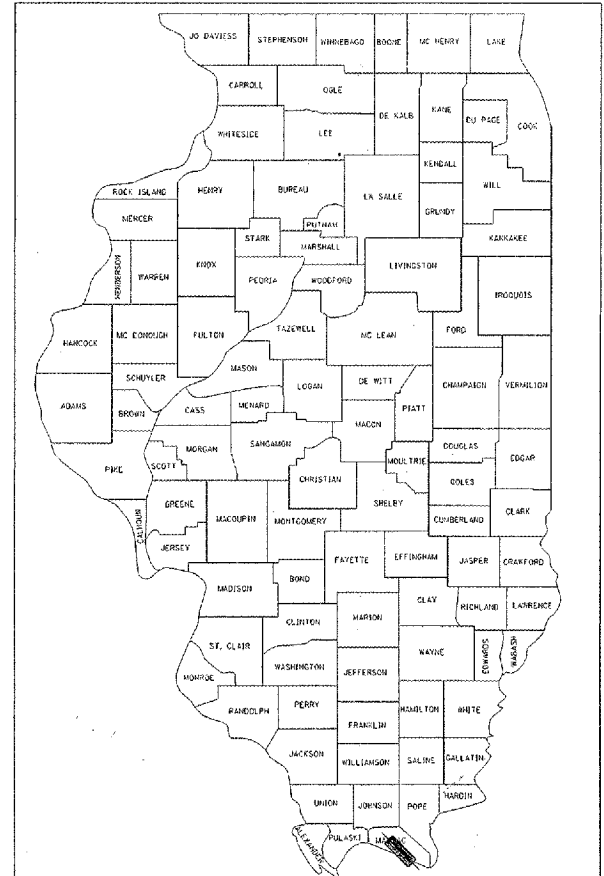
D-9 SMART FY 06-3

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

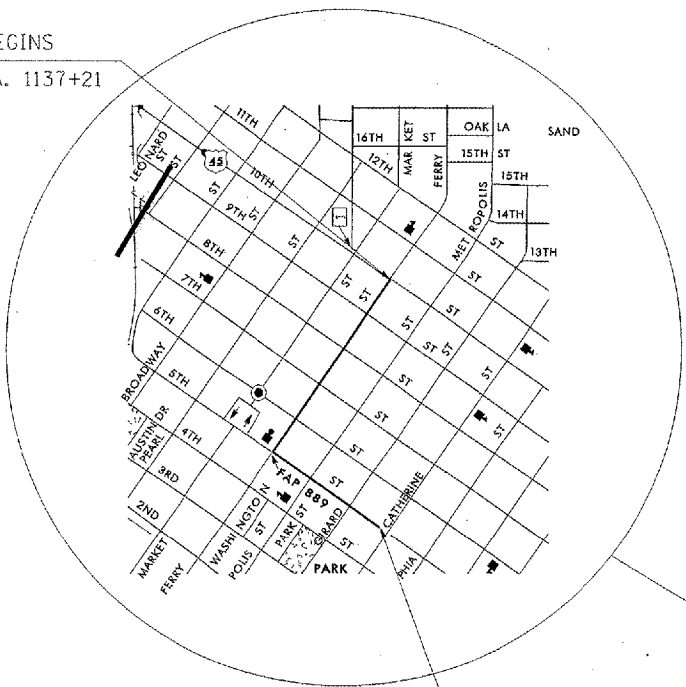
F.A.U. 9771 (US 45)  
SECTION D-9 SMART FY 06-3  
PROJECT  
MASSAC COUNTY  
C-99-031-06

D-99-024-06

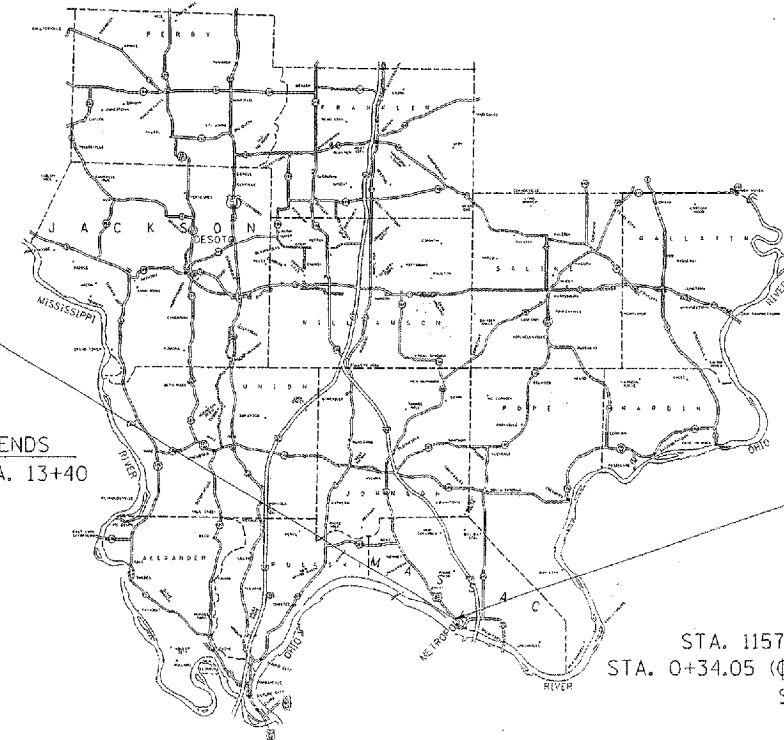


LOCATION OF SECTION INDICATED THUS: -

PROPOSED IMPROVEMENT BEGINS  
US 45/10TH STREET - STA. 1137+21



PROPOSED IMPROVEMENT ENDS  
US 45/5TH STREET - STA. 13+40



LOCATION #1 - US 45  
STA. 1137+21 TO STA. 13+40

**EQUATION STATIONS**

STA. 1157+14.4 BK = STA. 0+00 AH (US 45)  
STA. 0+34.05 (C US 45) = STA. 200+00 (C 5TH ST.) =  
STA. 100+00 (C FERRY ST.)

US 45  
TRAFFIC DATA

	(2005)	(2026)
PC=	6,375	8,720
SU=	300	410
MU=	125	170
ADT=	6,800	9,300

TOWNSHIPS: METROPOLIS

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

NET LENGTH OF PROJECT: 3,333.4 FEET (0.63 MILES)  
GROSS LENGTH OF PROJECT: 3,333.4 FEET (0.63 MILES)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED \_\_\_\_\_ 20 \_\_\_\_\_

*Man C. James*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
March 24, 2006

*Mike Hone*  
ENGINEER OF DESIGN AND ENVIRONMENT  
March 24, 2006

*Milton P. Seco, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

PROJECT ENGINEER: CHARLES STEIN  
DESIGNER: MELISSA COLE

CONTRACT NO. 98967

U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45	*	MASSAC	13	2

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### GENERAL NOTES

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

FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL BITUMINOUS CONCRETE	2.016 TON/CU YD
ALL AGGREGATE	2.05 TON/CU YD
BITUMINOUS MATERIALS:	
ON PAVEMENT	0.09 GAL/SQ YD
ON AGGREGATE	0.32 GAL/SQ YD
AGGREGATE (PRIME COAT)	0.0015 TON/SQ YD

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, BITUMINOUS RESURFACING SHALL BE PLACED IN A SEQUENCE THAT WILL MINIMIZE THE TIME THE CENTERLINE EDGE IS EXPOSED TO TRAFFIC. WHEN AT THE END OF A DAY'S OPERATION THE EXPOSED CENTERLINE EDGE IS GREATER THAN 2,000 FT., THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE ADJACENT LANE ON THE FOLLOWING WORK DAY. PRIOR TO WINTER SHUT DOWN, RESURFACING ON ADJACENT LANES IS TO BE BROUGHT UP TO THE SAME ELEVATION.

THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION EACH FOR THE BITUMINOUS SURFACE REMOVAL AND BITUMINOUS SURFACE COURSE.

THE CONTRACTOR SHALL STAMP STATIONING IN THE BITUMINOUS SURFACE AT 300 FT. INTERVALS ALTERNATING SIDES ON THE OUTSIDE EDGE OF PAVEMENT AND AS DIRECTED BY THE ENGINEER. THE STATION SYMBOL STAMPS USED SHALL BE FURNISHED BY THE CONTRACTOR. THEY SHALL BE 5 1/2 IN. TALL OF A DESIGN APPROVED BY THE ENGINEER, AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

THE LOCATION OF THE DETECTOR LOOPS, AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER OF TRAFFIC OPERATIONS.

DETECTOR LOOP WIRE SHALL BE PLACED IN THE EXISTING CONDUIT FROM THE LOOP SAWCUT TO THE SPLICE POINT AT THE EXISTING HANDHOLE.

DETECTOR LOOPS SHALL BE MEASURED FOR PAYMENT ALONG THE SAWED SLOT IN THE PAVEMENT. DETECTOR LOOP WIRE PLACED IN THE CONDUIT SHALL BE INCLUDED IN THIS COST AND SHALL NOT BE MEASURED.

DETECTOR LOOPS SHALL BE SAWED INTO THE PAVEMENT AFTER BITUMINOUS SURFACE REMOVAL AND PRIOR TO BITUMINOUS SURFACE COURSE.

QUANTITIES SHOWN IN THE PLANS FOR PATCHING ARE ESTIMATES. THE ACTUAL AMOUNT OF PATCHING REQUIRED SHALL BE DETERMINED BY THE ENGINEER.

PRIOR TO PLACEMENT OF THE FINAL PAVEMENT MARKINGS THE RESIDENT ENGINEER SHOULD CONTACT THE BUREAU OF OPERATIONS AND ARRANGE AN INSPECTION AND APPROVAL OF THE PAVEMENT MARKING LAYOUT.

THERE ARE NO COMMITMENTS.

### INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, LIST OF APPLICABLE HIGHWAY STANDARDS, INDEX OF SHEETS, AND SIGNATURE SHEET
3	MIX DESIGN AND SUMMARY OF QUANTITIES
4	RESURFACING AND PAVEMENT MARKING SCHEDULES
5	PAVEMENT PATCHING SCHEDULE
6	TYPICAL SECTIONS
7-10	STRIPING DETAILS
11	DETECTOR LOOP DETAIL
12	SIDEROAD AND BUTT JOINT DETAILS
13	"ROUGH GROOVED SURFACE" SIGN, TEMPORARY BITUMINOUS CONCRETE TRANSITIONS, "UNEVEN PAVEMENT" SIGN, AND DETECTOR LOOP STANDARD DETAILS

### STANDARDS

000001-04	701701-04
442101-05	702001-06
442201-01	780001-01
701602-02	886001
	886006

Prepared By: *Joe Zolankiewicz*  
DISTRICT STUDIES & PLANS ENGINEER

Examined By: *James Lewis Emery*  
DISTRICT LAND ACQUISITION ENGINEER

Examined By: *Carrie Nelson*  
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: *Jim Smith*  
DISTRICT OPERATIONS ENGINEER

Examined By: *Joseph Linn*  
DISTRICT CONSTRUCTION ENGINEER

Examined By: *Burt Scoble*  
DISTRICT MATERIALS ENGINEER

Examined By: *Danny Clayton*  
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: *Danny Clayton*  
ASSISTANT REGIONAL ENGINEER

Approved By: *May Kline*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

DATE: Feb 8 20 06

PLOT DATE : 02/08/06  
 FILE NAME : 98967.DWG  
 PLOT SCALE : AS SHOWN  
 USER NAME : RUSBY

U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45	*	MASSAC	13	3

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### MIX DESIGN

Location(s):	Bituminous Surface Course
Mixture Use(s):	Polymerized Bituminous Concrete Surface Course, Superpave, Mix D, N105
AC/PG	SBS PG76-22
RAP% (Max):	0
Design Air Voids:	4.0%, 105 Gyration Superpave Design
Mixture Composition: (Gradation Mixture)	IL-9.5 mm or IL 12.5 mm
Friction Aggregate:	D Surface

Location(s):	Pavement Patching
Mixture Use(s):	Bituminous Concrete Binder Course, Superpave, N90, IL-19.0
AC/PG	PG64-22
RAP% (Max):	10
Design Air Voids:	4.0%, 90 Gyration Superpave Design
Mixture Composition: (Gradation Mixture)	IL-19.0 mm
Friction Aggregate:	None

Location(s):	Bituminous Materials Prime Coat
Mixture Use(s):	Polymer Modified Emulsified Asphalt
Requirements:	SS-1HP or CSS-1HP

### SUMMARY OF QUANTITIES

CODE NUMBER	ITEM DESCRIPTION CONSTRUCTION TYPE CODE	UNIT	TOTAL QUANTITY	MASSAC CC.	MASSAC CO.
				URBAN 100% STATE	URBAN 100% CITY
40600105	BITUMINOUS MATERIALS PRIME COAT (SPECIAL)	GAL	1,971	1,708	263
40600300	AGGREGATE PRIME COAT	TON	33	28	5
40600990	TEMPORARY RAMP	SQ YD	129	129	
44000006	BITUMINOUS SURFACE REMOVAL 1 1/2"	SQ YD	21,893	18,973	2,920
44200966	CLASS B PATCHES, TYPE I, 10 INCH	SQ YD	5	5	
44200970	CLASS B PATCHES, TYPE II, 10 INCH	SQ YD	47	47	
44200164	PAVEMENT PATCHING, TYPE I, 14 INCH	SQ YD	232	232	
44200168	PAVEMENT PATCHING, TYPE II, 14 INCH	SQ YD	75	75	
44200174	PAVEMENT PATCHING, TYPE IV, 14 INCH	SQ YD	24	24	
44213200	SAW CUTS	FOOT	238	238	
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	2,260	2,260	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3	
67100100	MOBILIZATION	L SUM	1	1	
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	1	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2,283	2,283	
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	565	565	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	9,743	9,743	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	518	518	
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	34	34	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	106	106	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	5,079	5,079	
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	565	565	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	9,743	9,743	
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	518	518	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	34	34	
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	106	106	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	229	229	
88600100	DETECTOR LOOP, TYPE I	FOOT	959	959	
X4066530	POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N105	TON	1,839	1,594	245
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	1	1	
Z0017100	DOWEL BARS	EACH	136	136	
Z0075300	TIE BARS	EACH	4	4	

\* [bracketed list of items 78000600 through 78000650]

\*SPECIALTY ITEMS

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## THERMOPLASTIC PAVEMENT MARKING SCHEDULE

STATION	LETTERS AND SYMBOLS						PAVEMENT MARKING - LINE												
	WHITE						4 INCH			6 INCH			12 INCH		24 INCH				
	ARROW SQ FT						ONLY SQ FT			LINE - YELLOW FOOT			LINE - WHITE FOOT			LINE - WHITE FOOT		LINE - YELLOW FOOT	
	RT	THROUGH	LT	CTL	RT	THROUGH	LT	LEFT SOLID	CENTER DASH	RIGHT SOLID	LEFT SOLID	CENTER DASH	RIGHT SOLID						
LOCATION #1																			
US 45/FERRY STREET																			
STA. 1138+15																			
STA. 1138+17																			
STA. 1138+17 TO STA. 1141+00																			
STA. 1138+17 TO STA. 1140+67																			
STA. 1139+29																			
STA. 1139+57																			
STA. 1140+67 TO STA. 1141+00																			
STA. 1138+17 TO STA. 1139+67																			
STA. 1140+83																			
STA. 1141+00 TO STA. 1152+30																			
STA. 1141+06																			
STA. 1142+22																			
STA. 1142+45																			
STA. 1145+02																			
STA. 1144+79																			
STA. 1146+18																			
STA. 1146+41																			
STA. 1148+75																			
STA. 1148+98																			
STA. 1150+14																			
STA. 1150+37																			
STA. 1152+30 TO STA. 1157+00																			
STA. 1152+30 TO STA. 1154+90																			
STA. 1152+72																			
STA. 1152+95																			
STA. 1154+10																			
STA. 1154+33																			
STA. 1154+90 TO STA. 1156+90																			
STA. 1155+90 TO STA. 1157+00																			
STA. 1156+00																			
STA. 1156+28																			
STA. 1156+90																			
STA. 1157+00																			
STA. 1157+13.5 TO STA. 0+05.1																			
US 45/5TH STREET																			
STA. 0+67.5 TO STA. 0+73.5																			
STA. 0+83																			
STA. 0+86																			
STA. 0+85 TO STA. 1+86																			
STA. 0+86.05 TO STA. 1+86																			
STA. 0+86 TO STA. 3+86																			
STA. 1+40																			
STA. 1+68																			
STA. 1+86 TO STA. 3+86																			
STA. 3+86 TO STA. 13+40																			
FERRY STREET																			
STA. 99+61.5 TO STA. 99+67.5																			
5TH STREET																			
STA. 199+62 TO STA. 199+68																			
SUBTOTAL																			
TOTAL																			

## RESURFACING SCHEDULE

STATION TO STATION	LENGTH	WIDTH	BIT SURF REMOVAL	AVG DEPTH	POLY BIT CONC SURF CRSE MIX "D"	STRIP REFLECTIVE CRACK CONTROL	BIT PRIME COAT (SPECIAL)	AGG PRIME COAT
	FOOT	FOOT	SQ YD	INCH	TON	FOOT	GAL	TON
LOCATION #1								
US 45 (FERRY STREET)								
STA. 1138+15 TO STA. 1157+14.4								
PARKING LANES								
STA. 1138+15 TO STA. 1157+14.4								
US 45 (5TH STREET/FERRY STREET INTERSECTION)								
US 45 (5TH STREET)								
STA. 0+83 TO STA. 13+40								
PARKING LANES								
STA. 0+83 TO STA. 13+40 RT								
STA. 0+83 TO STA. 7+80 LT								
TOTAL								

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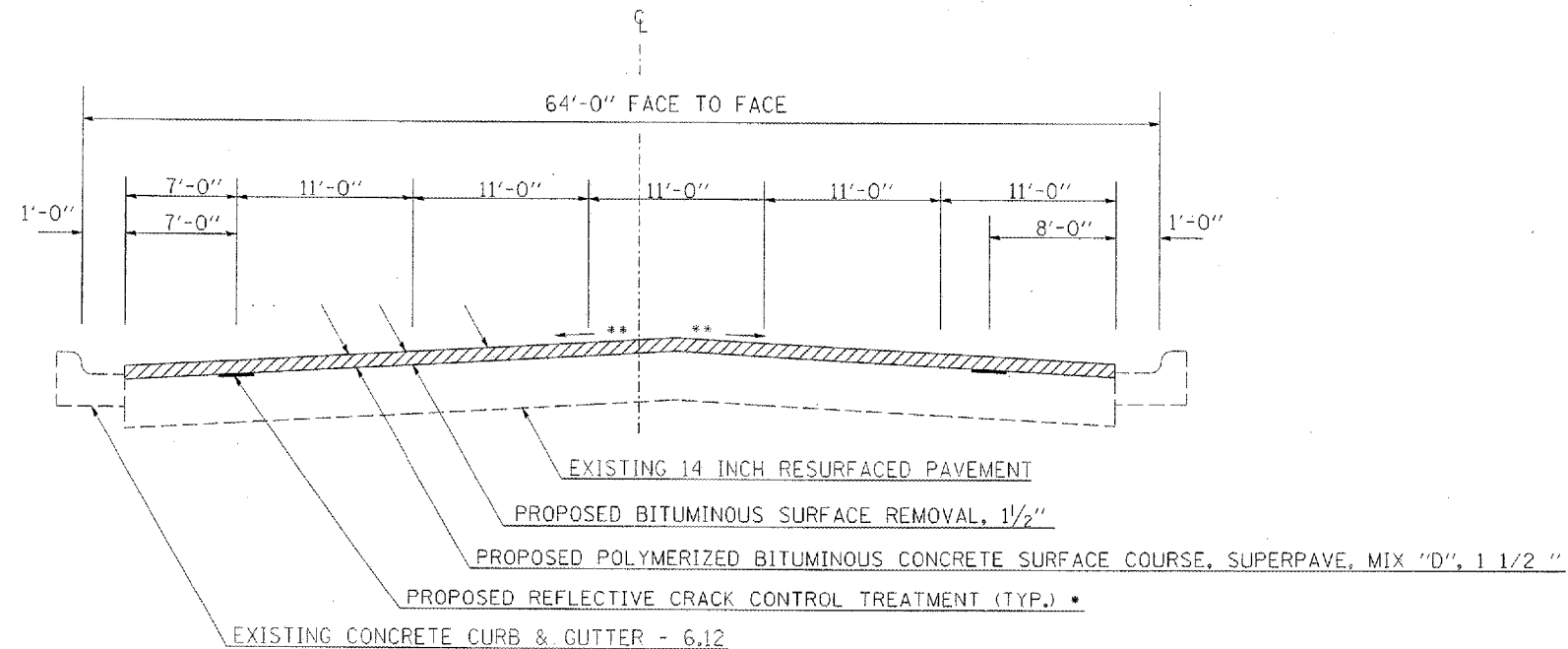


U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45	.	MASSAC	12	6

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### TYPICAL SECTION

US 45  
NOT TO SCALE

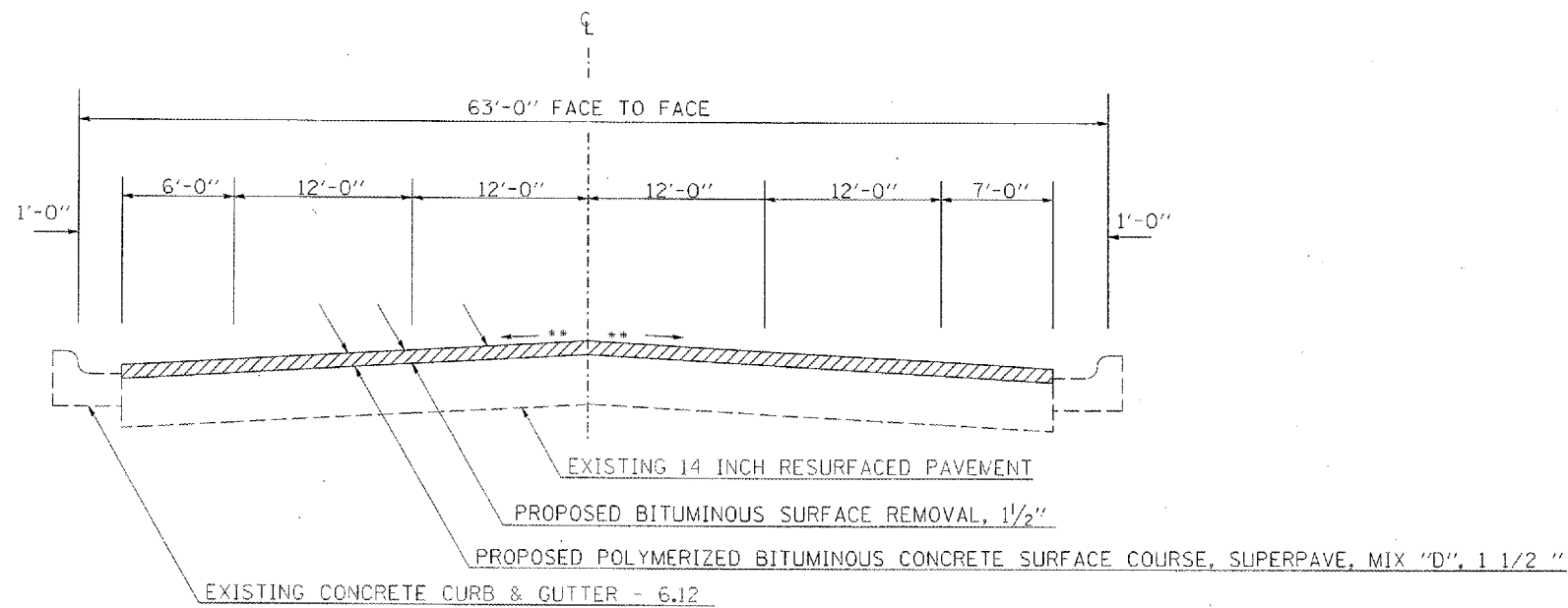


\* STRIP REFLECTIVE CRACK CONTROL TREATMENT IS TO BE USED STA. 1138+15 TO STA. 1149+45  
\*\* MATCH EXISTING

TO BE USED:  
STA. 1138+15 TO STA. 1157+14.4 BK =  
STA. 0+00 AH TO STA. 0+83

### TYPICAL SECTION

US 45  
NOT TO SCALE



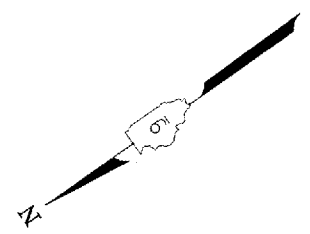
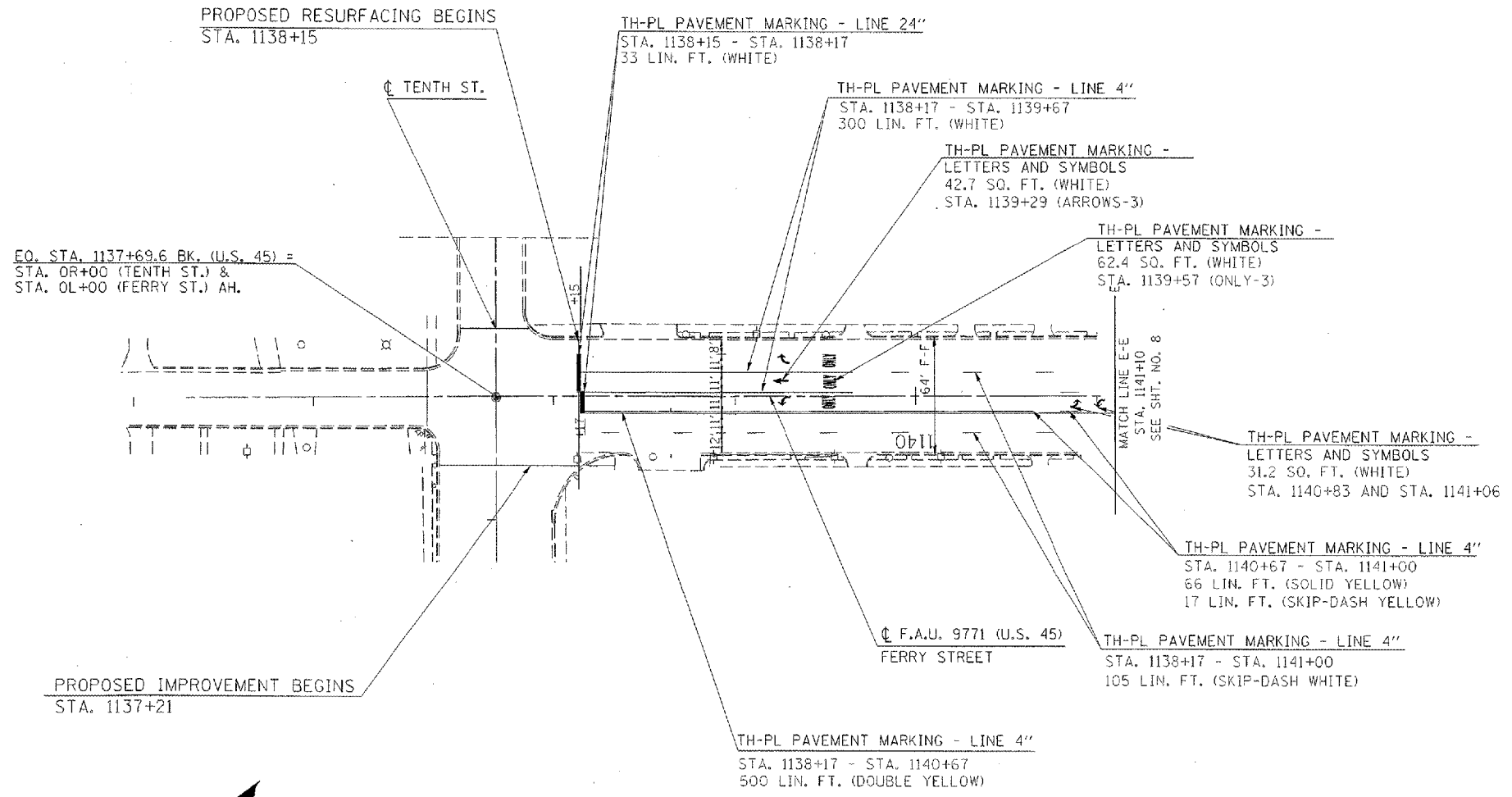
\*\* MATCH EXISTING

TO BE USED:  
STA. 0+83 TO STA. 13+40

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U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45	*	MASSAC	13	7

STA. 1137+21 TO STA. 1141+10  
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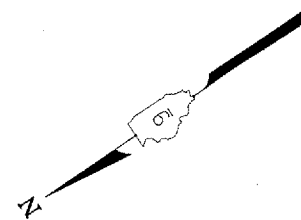
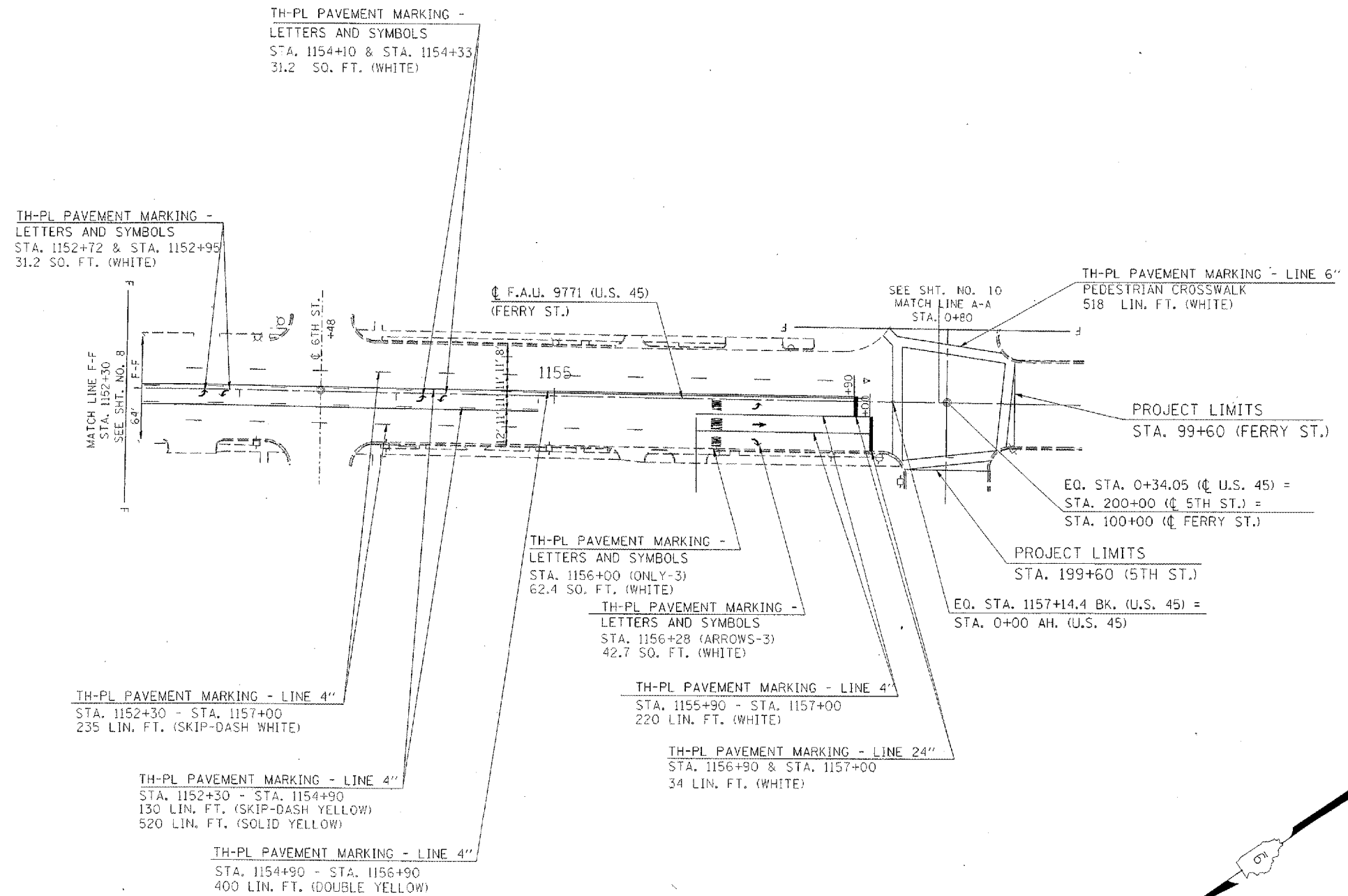




U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45		MASSAC	13	9

STA. 1152+30 TO STA. 0+80

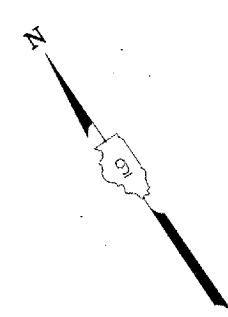
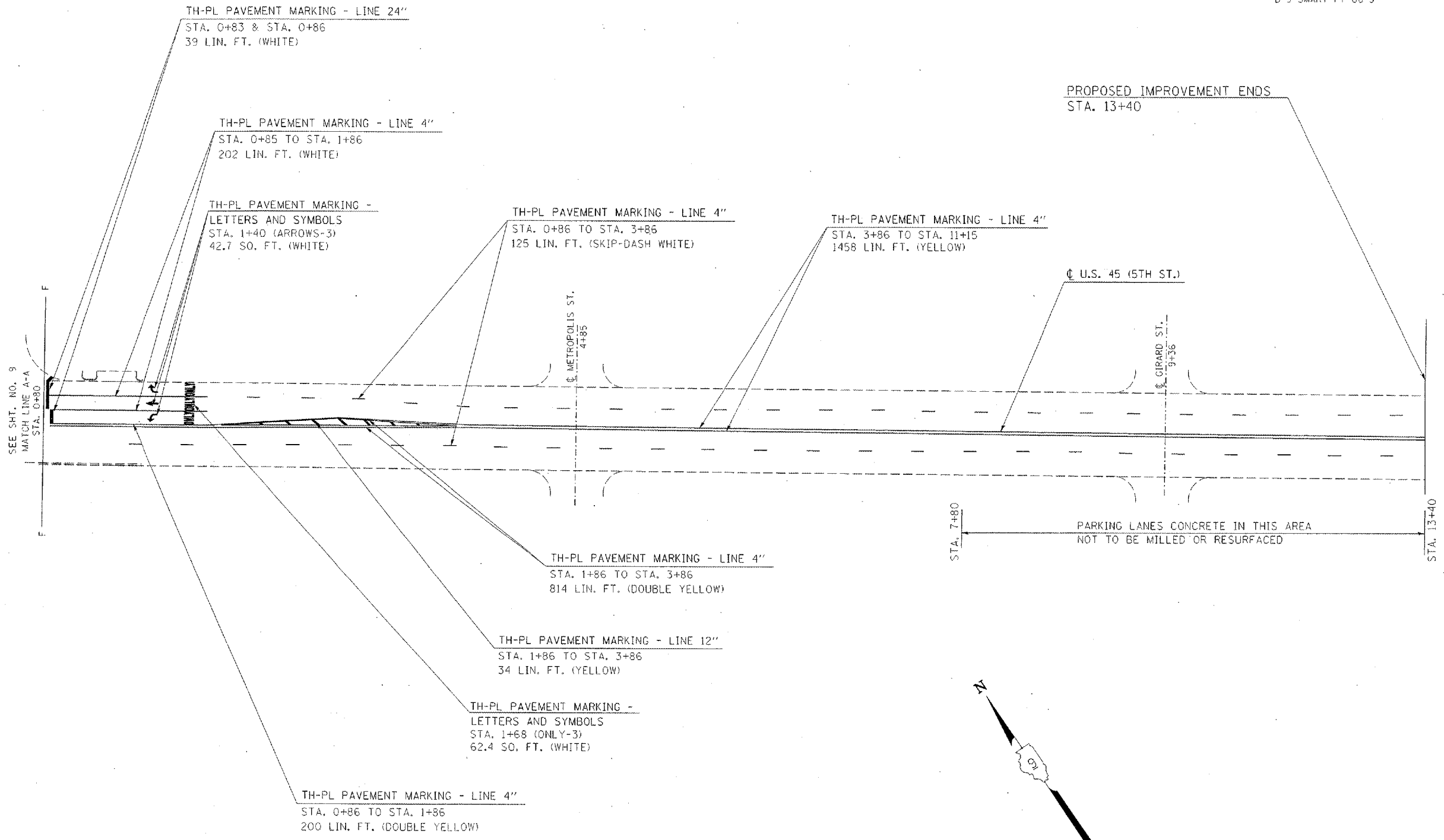
\*D-9 SMART FY 06-3



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US 45		MASSAC	13	10

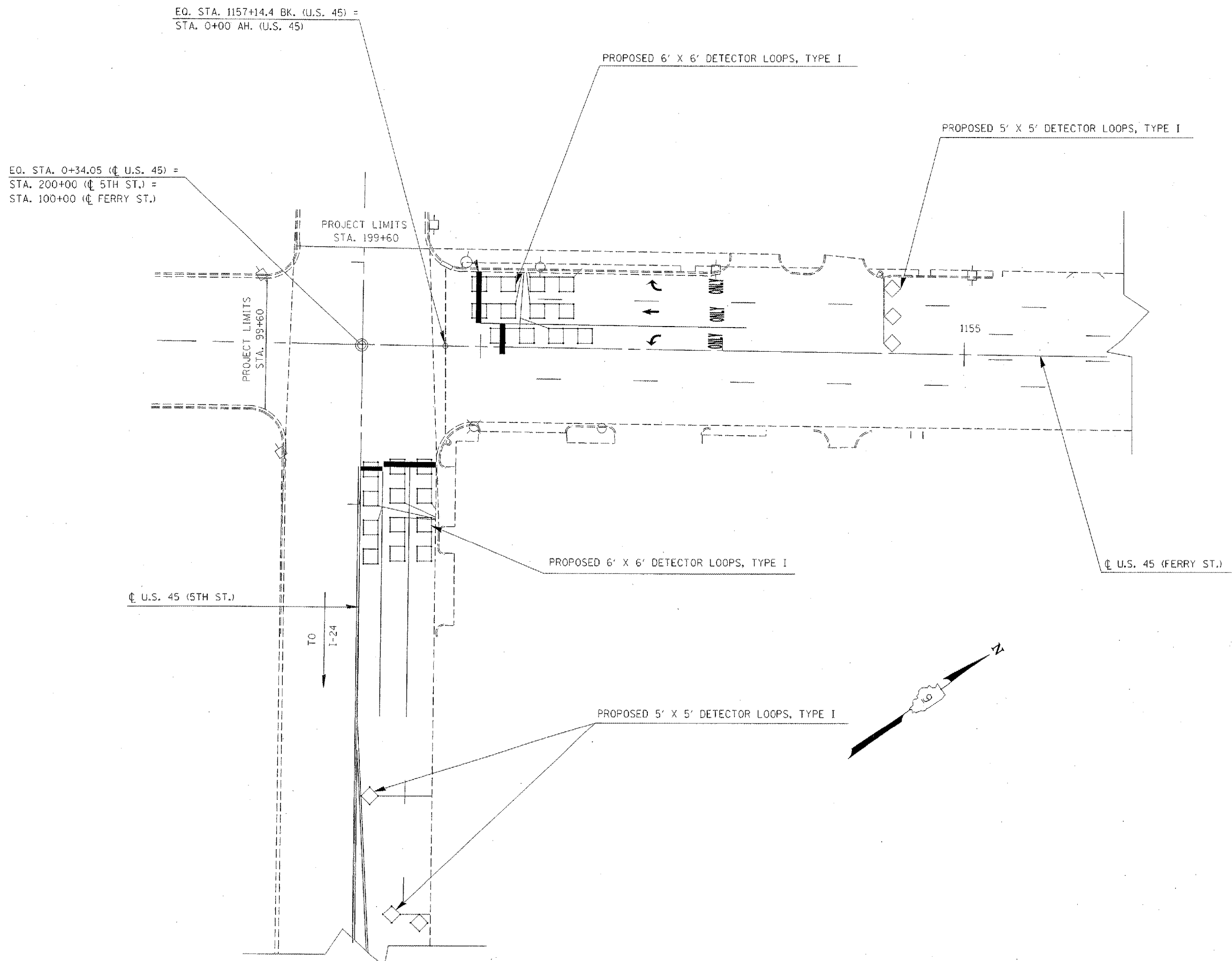
STA. 0+80 TO STA. 11+15  
 •D-9 SMART FY 06-3



PLOT DATE : 4/26/06  
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U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45	-	MASSAC	12	11

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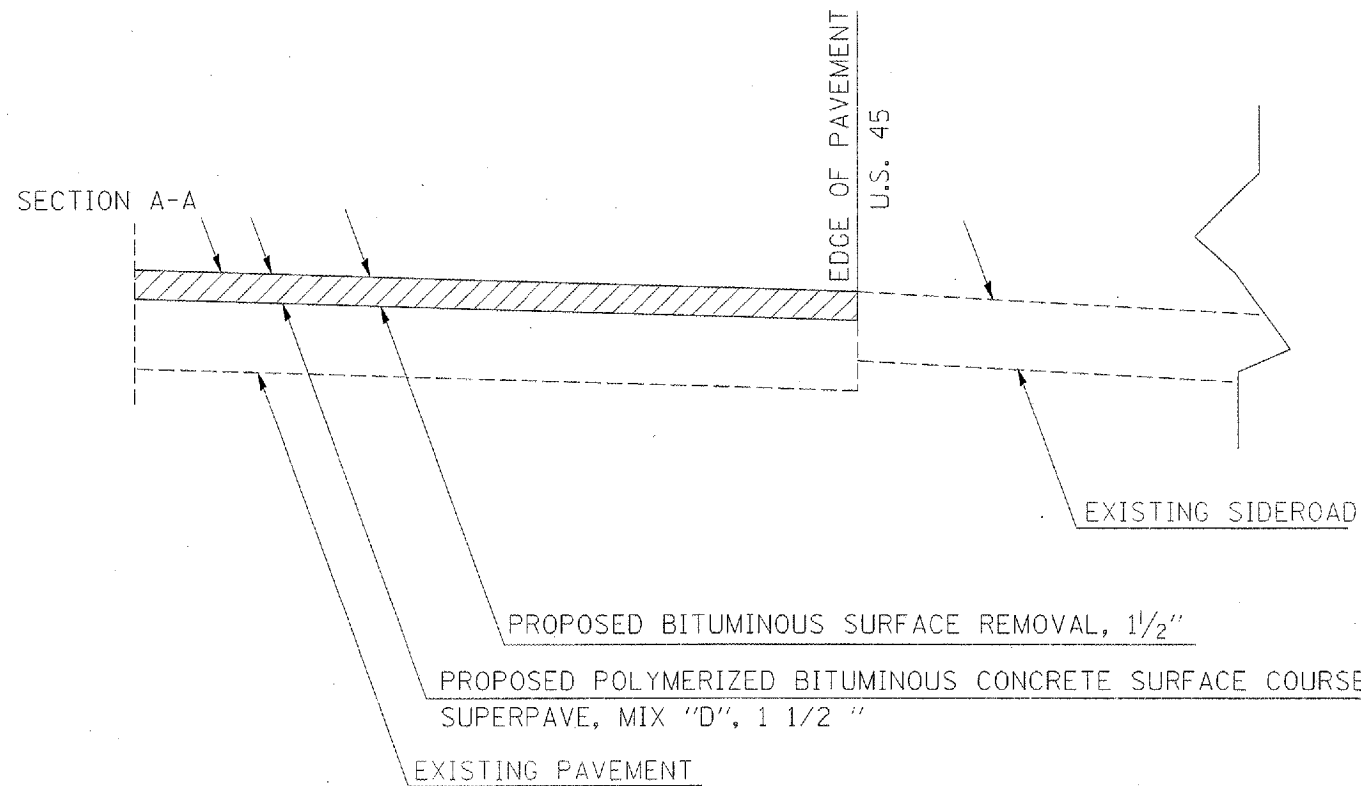
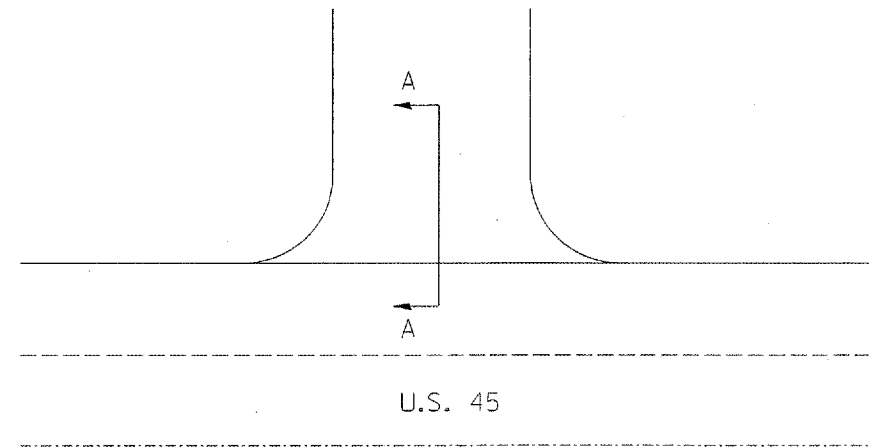
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U.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US 45	*	MASSAC	13	12

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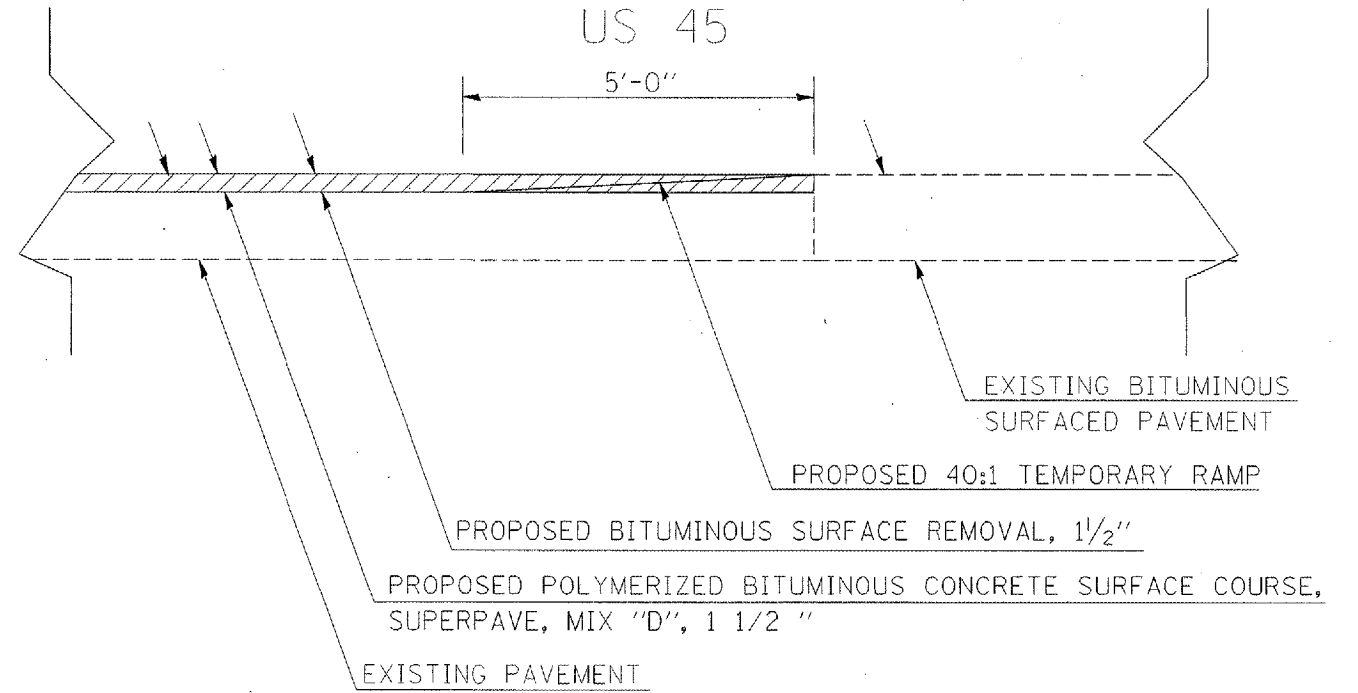
# SIDEROAD DETAIL

## US 45

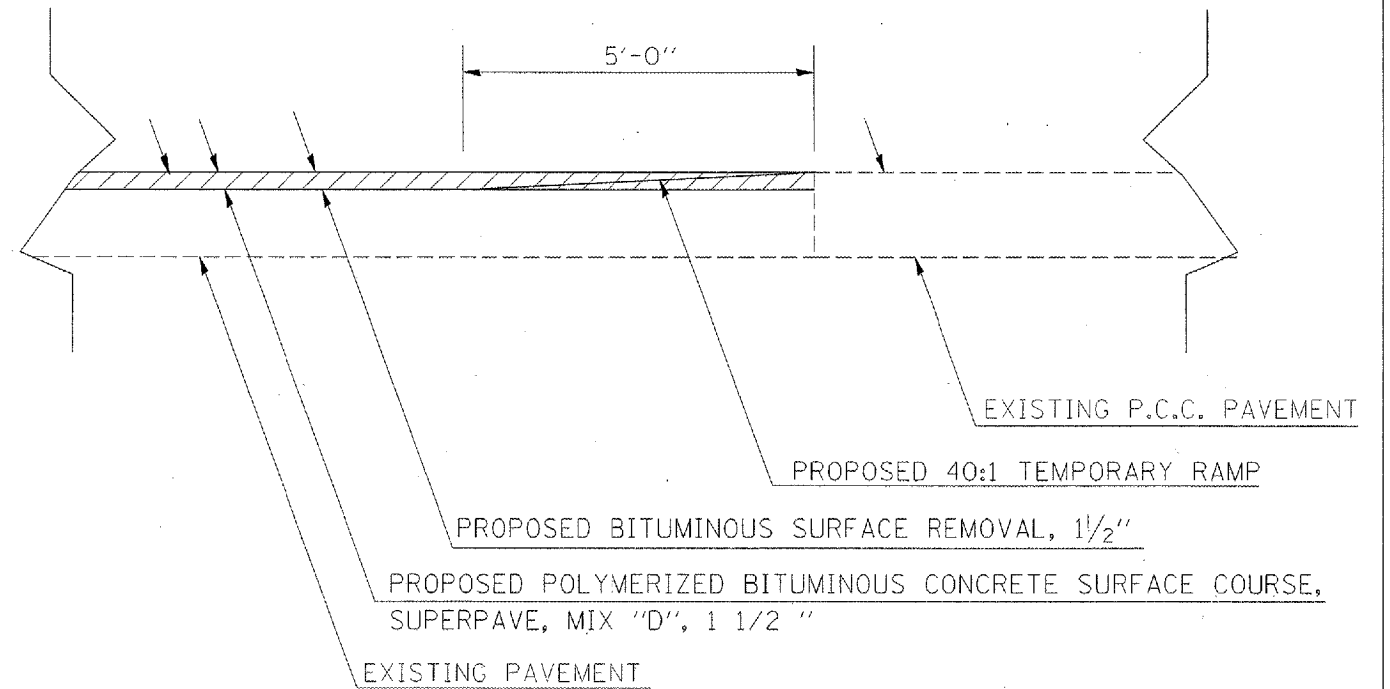


# BUTT JOINT DETAIL

## US 45



TO BE USED:  
 STA. 13+40 STA. 99+60  
 STA. 199+60



TO BE USED:  
 STA. 1138+15

