# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

0-91-298-11 CONTRACT NO. 60N28

+25+1=26

### FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED WITHIN
THE CITY OF HARVARD AND
UNINCORPORATED McHENRY COUNTY

# PROPOSED HIGHWAY PLANS

F.A.P 305 (US ROUTE 14)
SECTION 29R-RS-4
IL ROUTE 23 TO BUNKER HILL ROAD

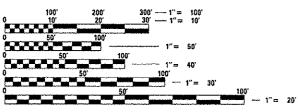
RESURFACING (3P)

PROJECT: HD-0305 (050)

MCHENRY COUNTY

C-91-298-11

TRAFFIC DATA
US ROUTE 14
2009 ADT = 7,400
SPEED LIMIT = 55 MPH



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.

Call Before You Dig

CHYRCH & 202, BY BAXTER & WOODWAY, MC.
LIATE OF RINOS - PROTESSORM, DESIGN FRM.
CHYRE, MA. - 88-60121 - EXPERTS ANDAPOUT
SACRES - ANDAPOUT

CONTACT JULIE AT 811 OR 800-892-0123
WITH THE FOLLOWING:

CITY-TWNSHP. = DUNHAM & HARTLAND

SEC. & 1/4 SEC. NO. = 11, 12, 13, 18, 19, 20

ONE-CALL SYSTEM

48 HOURS (2 working days) BEFORE YOU DIG

R 5 E R 6 E

MCOURE ROAD

STREIT ROAD

LEMBCKE ROAD

BLANKER HILL ROAD

DUSHAM ROAD

DUNHAM & HARTLAND TOWNSHIPS

GROSS LENGTH OF IMPROVEMENT = 22,193 LF OR 4.203 MILES

NET LENGTH OF IMPROVEMENT = 22,193 LF OR 4.203 MILES

SCALE: NTS

DISTRICT ONE -

PROJECT MANAGER: KEN ENG (847) 705-4247 (IDOT)

PROJECT ENGINEER: ROBERT LENZINI (815) 459-1260 (BAXTER & WOODMAN)

**PROJECT BEGINS** 

STA 5+76

**CONTRACT NO. 60N28** 



WHITESIDE

LEE

OF EALS

WHITESIDE

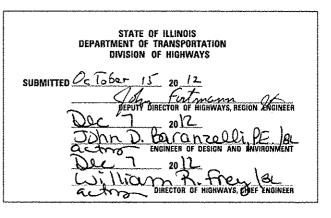
LEE

OF EALS

OF ACOUNT

WHITESIDE

OF EALS



**PROJECT ENDS** 

LICENSED

PROJECT ENGINEER
"LICENSE EXPIRES 11-30-2

STA 227+69

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

B&W PROJECT NO.: 100153

### INDEX OF SHEETS DESCRIPTION

### SHEET NO.

18

20

21

25

TITLE SHEET

INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES

SHAMARY OF CHANTITIES

EXISTING AND PROPOSED TYPICAL SECTIONS

ROADWAY AND PAVEMENT MARKING PLANS

DISTRICT ONE - DETECTOR LOOP REPLACEMENT 15

SHOULDER RUMBLE STRIPE FOR NON-FREEWAY

RUMBLE STRIPES FOR CENTERLINE, NON-FREEWAY 17

(BD-22) PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

(BD-32) BUTT JOINT AND HMA TAPER DETAILS 19

(TC-10) TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

(TC-11) TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

(TC-13) TYPICAL PAVEMENT MARKINGS 22

(TC-16) PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC 23

(TC-22) ARTERIAL ROAD INFORMATION SIGNING 24

(TS-O7) DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

### HIGHWAY STANDARDS

DESCRIPTION STANDARD NO.

000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS

442201 - 03 CLASS C AND D PATCHES

701006-04 OFF-RD OPERATIONS, 2L. 2W, 15' (4,5m) TO 24" (600 mm) FROM PAVEMENT EDGE

701011 - 03 OFF-RD MOVING OPERATIONS, 2L, 2W. DAY ONLY

701301-04 LANE CLOSURE, 2L. 2W. SHORT TIME OPERATIONS

701306 - 03 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY FOR SPEEDS > 45 MPH

701311 - 03 LANE CLOSURE, 2L. 2W MOVING OPERATIONS - DAY ONLY

701336 - 06 LANE CLOSURE, 2L, 2W. WORK AREAS IN SERIES. FOR SPEEDS

701701-08 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701901 - 03 TRAFFIC CONTROL DEVICES

886001-01 DETECTOR LOOP INSTALLATIONS

886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS

### **GENERAL NOTES**

- 1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERED TO AS THE "STANDARD SPECIFICATIONS"). THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND THE "MANUAL OF TEST PROCEDURES FOR
- 2. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. 48 HOUR NOTIFICATION REQUIRED.
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT,
- 4. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF HARVARD.
- 5. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE
- 6. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF MILLING IS SLOPED AT A MINIMUM OF 1:3 (V:H).
- 7. THE ENGINEER SHALL CONTACT DEBBIE HANLON, THE AREA TRAFFIC FIELD ENGINEER. AT (847) 438-2300 A MINIMUM OF TWO (2) WEEKS PRIOR TO INSTALLATION OF PERMANENT PAVEMENT MARKINGS. THE RESIDENT ENGINEER IS RESPONSIBLE FOR RECORDING EXISTING PAVEMENT MARKINGS PRIOR TO HMA SURFACE REMOVAL.
- 8. THE CONTRACTOR SHALL CONTACT THE IDOT TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE 9. ENGINEER.
- DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL 10. "TYPICAL APPLICATIONS - RAISED REFLECTIVE MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN THE PLANS.
- BEFORE BEGINNING WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE 11. REFERENCE, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN GROER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND 12. CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT 13. ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- WHEN CONSTRUCTION OPERATIONS ON TWO-LANE ROADS OPEN TO TRAFFIC RESULT IN 14. THE REMOVAL OR COVERING OF ANY PAVEMENT MARKING INDICATING PASSING RESTRICTIONS, "NO PASSING ZONES STRIPED NEXT .... MILES" SIGNS SHALL BE USED. THE CONTRACTOR SHALL PLACE THE SIGNS AT THE BEGINNING OF THE UNSTRIPED AREA, JUST BEYOND EACH MAJOR INTERSECTION WITHIN THE UNSTRIPED AREA, AND AT SUCH LOCATIONS AS THE ENGINEER MAY DIRECT TO ENSURE A MINIMUM SPACING OF FIVE MILES.

### COMMITMENTS

THERE ARE NO COMMITMENTS FOR THIS PROJECT.

_	DESIGNED	 OSH	REVISED - 6-6-11 IDOT REVIEW
	DRAWN	 KAR	REVISED - 8-17-12 IDOT REVIEW
	CHECKED	 LDH	REVISED -
	DATE	 12-13-10	FILE - 100153-W018-CEN-NOTE.sht

SHEETS NO. MCHENRY 25 CONTRACT NO. 60N28 FEO. ROAD DIST. NO. 1 | ILLINOIS | FED ATO PROJECT

					TION TYPE
	SUMMARY OF QUANTITIES		URBAN	CO	DE
<b></b>			TOTAL	0005	
CODE NO.	ITEM DESCRIPTION	UNIT	QUANTITY	QUANTITY	
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	. 62	62	
40600300	AGGREGATE (PRIME COAT)	TON	. 487	487	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	18	18	
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL 4,75, N50	TON	4,147	4,147	
40600895	CONSTRUCTING TEST STRIP	EACH	2	2	
·····			~~~~		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	300	300	
40601005	HOT-MIX APSHALT REPLACEMENT OVER PATCHES	TON	141	141	
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	9,093	9,093	
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	8,913	8,913	
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	\$Q YD	72,112	72,112	
	·		<del></del>		
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	720	720	
<del></del>			· · · · · · · · · · · · · · · · · · ·		
44002224	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 6"	SQ YD	46	46	
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	536	536	
<u></u>					
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	48	48	·
4.00 - 77 -					
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	54	54	
	INDICATES SPECIALTY ITEM				<u></u>

				CONSTRUC	TION TYPE
				00	
	SUMMARY OF QUANTITIES		URBAN		
0005 NO	TTH DESCRIPTION	11547	TOTAL	0005	
COUE NO.	ITEM DESCRIPTION	UNIT	QUANTITY	QUANTITY	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	2,507	2,507	
	OLIOUS DEED DURING COMPANY A MACH		<del>,</del>		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
64200108	SHOULDER RUMBLE STRIPS, 8 INCH	FOOT	34,199	34,199	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	5	5	
6/100100	MOBILIZATION	LSUM	1	1	
70100460	TRAFFIC CONTROL AND PROTECTION STANDARD 701306	LSUM	1	1	
			<del></del>		
70100600	TRAFFIC CONTROL AND PROTECTION STANDARD 701336	LSUM	1	1 1	<del></del>
70102635	TRAFFIC CONTROL AND PROTECTION STANDARD 701701	LSUM	1	1	
-					
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	16,645	16,645	· · · · · · · · · · · · · · · · · · ·
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	364	364	· · · · · · · · · · · · · · · · · · ·
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	17,860	17,860	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1,896	1,896	······································
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1,010	1,010	
700505	THEODADY DAVISACIAN AND AND AND AND AND AND AND AND AND A	5007	244	0.44	
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	644	644	
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	F00T	296	296	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,850	1,850	
	INDICATES SPECIALTY ITEM				

SCALE: NONE

\* INDICATES SPECIALTY ITEM

WOODMAN Counting Enfoque

DESIGNED		DSH	REVISED - 7-20-11 IDOT REVIEW
DRAWN		KAR	REVISED - 8-17-12 IDOT REVIEW
CHECKED	-	LOH	REVISED -
CATE		12-13-10	CD E 100163-W018-500 ch+

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		US I	ROUTE	14			
IL	ROUTE	23 TO	BUNI	KER	HILL	ROAD	
	SU	MMARY	/ OF (	QUA	NTITI	ES	

STA,

TO STA.

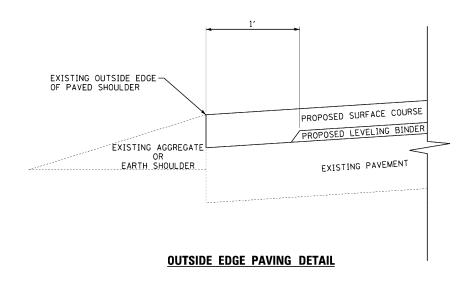
menine					Į.	CTION TYPE	
***************************************		SUMMARY OF QUANTITIES		URBAN	i co	DE	-
Ì			l	TOTAL	0005		1
	CODE NO.	ITEM DESCRIPTION	UNIT	QUANTITY	QUANTITY		1
							1
,	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	182	182	THE PROPERTY OF THE PROPERTY O	
	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	8,930	8,930		-
***************************************							
***************************************	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	948	948		
	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	505	505		
	· · · · · · · · · · · · · · · · · · ·						કાર્ટ્સ એ કે. કાર્ય
	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	322	322	anda, Alija	ingis,
							in.
	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	148	148		
***************************************							
***************************************	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	631	631		
							1. 144 j. j. 75 j. j.
		RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	631	631		
-			1,21 (1)			pa ningal yi	fil de
	88600600	DETECTOR LOOP REPLACEMENT	FOOT	568	568		
-			·				244 .
-	20030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52		
							<u> </u>
	X0326898	CENTER LINE - RUMBLE STRIP - 16"	FOOT	20,854	20,854		
-	X2020110	GRADING AND SHAPING SHOULDERS	UNIT	410	410		
***************************************				* ***	W. 1	to the second of the second of the	
-	X7800815	HOT SPRAY THERMOPLASTIC PAVEMENT MARKING LINE - 4 INCH	FOOT	66,014	66,014		
				-			
	*	INDICATES SDECIALTY ITEM					į.

<sup>\*</sup> INDICATES SPECIALTY ITEM

 *	Ä	×	Ŧ	•	13	
		•	-		•	
н			1	=		
7				ч		
4			۰	. `	٧,	
	ō	0	-	-	٠.	

DESIGNED	-	DSH	REVISED -
DRAWN	-	KAR	REVISED ~
CHECKED	-	LDH	REVISED -
2475		12-17-10	CILC 1001E7-W010-C00 +b+

TO STA.



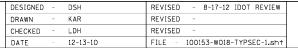
### <u>LEGEND</u>

SHOULDER RUMBLE STRIPS, 8 INCH

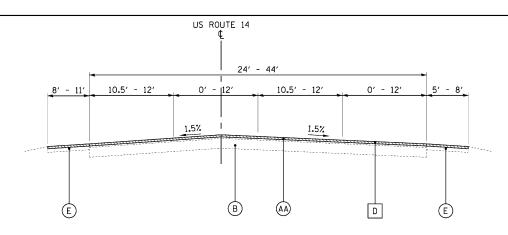
EXISTING HMA SURFACE, 3"± EXISTING HMA SURFACE, 6"± EXISTING PCC BASE, 10"± EXISTING AGGREGATE SHOULDER, 6"± HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4" EXISTING PAVED SHOULDERS

\*\*2

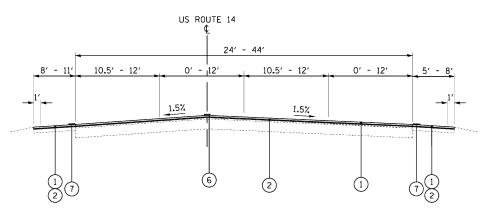
HOT-MIX ASPHALT SURFACE REMOVAL, 3" ITEM TO BE REMOVED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm) - 1 1/2" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 3/4" GRADING AND SHAPING SHOULDERS AND AGGREGATE WEDGE SHOULDER, TYPE B HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm) - 2" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 1" CENTER LINE - RUMBLE STRIP - 16"



### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



### **EXISTING TYPICAL SECTION** US ROUTE 14 STA 5+76 TO STA 19+16



### **PROPOSED TYPICAL SECTION** US ROUTE 14 STA 5+76 TO STA 19+16

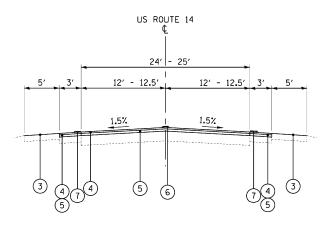
- 1. THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.
- \*\* 2. POLYMERIZED LEVELING BINDER WILL BE STOPPED 1 FOOT SHORT OF THE OUTSIDE EDGE OF SHOULDER (SEE DETAIL).

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS Ndes
RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5mm)	4% <b>©</b> 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL 4.75, N50	3.5% @ 50 GYR.
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.
HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (HMA BINDER IL-19mm)	4% @ 70 GYR.

- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ. YD./IN.
- 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
- \* PAY FOR PERFORMANCE APPLIES TO THIS SURFACE MIX ONLY (HMA SURFACE COURSE, MIX D, N70)

US ROUTE 14 IL ROUTE 23 TO BUNKER HILL ROAD				SECTION	COUNTY	TOTAL SHEETS	SHE NO
			305	29R-RS-4	McHENRY	25	4
TYPICAL SECTIONS				298-11	CONTRACT	NO. 60	N28
SCALE: NONE	STA.	TO STA.	FED. RO	DAD DIST. NO. 1   ILLINOIS   FED .	AID PROJECT		

### **EXISTING TYPICAL SECTION** US ROUTE 14 STA 19+16 TO STA 219+86



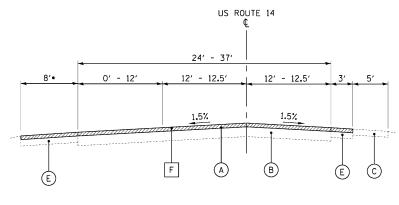
### PROPOSED TYPICAL SECTION **US ROUTE 14** STA 19+16 TO STA 219+86

### <u>LEGEND</u>

EXISTING HMA SURFACE, 3"± EXISTING HMA SURFACE, 6"± EXISTING PCC BASE, 10"± EXISTING AGGREGATE SHOULDER, 6"± HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4" EXISTING PAVED SHOULDERS HOT-MIX ASPHALT SURFACE REMOVAL, 3" \*\*2 \*\*5 6

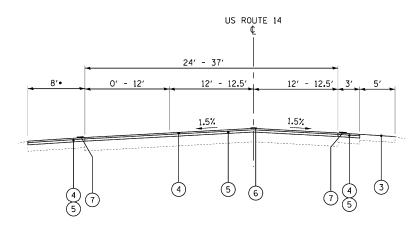
SHOULDER RUMBLE STRIPS, 8 INCH

ITEM TO BE REMOVED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm) - 1 1/2" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 3/4" GRADING AND SHAPING SHOULDERS AND AGGREGATE WEDGE SHOULDER, TYPE B HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm) - 2" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 1" CENTER LINE - RUMBLE STRIP - 16"



• 5' PAVED SHOULDER AND 5' AGGREGATE SHOULDER STA 220+90 TO STA 223+54

### **EXISTING TYPICAL SECTION** US ROUTE 14 STA 219+86 TO STA 227+69



• 5' PAVED SHOULDER AND 5' AGGREGATE SHOULDER STA 220+90 TO STA 223+54

### PROPOSED TYPICAL SECTION US ROUTE 14 STA 219+86 TO STA 227+69

\*\* POLYMERIZED LEVELING BINDER WILL BE STOPPED 1 FOOT SHORT OF THE OUTSIDE EDGE OF SHOULDER (SEE DETAIL).

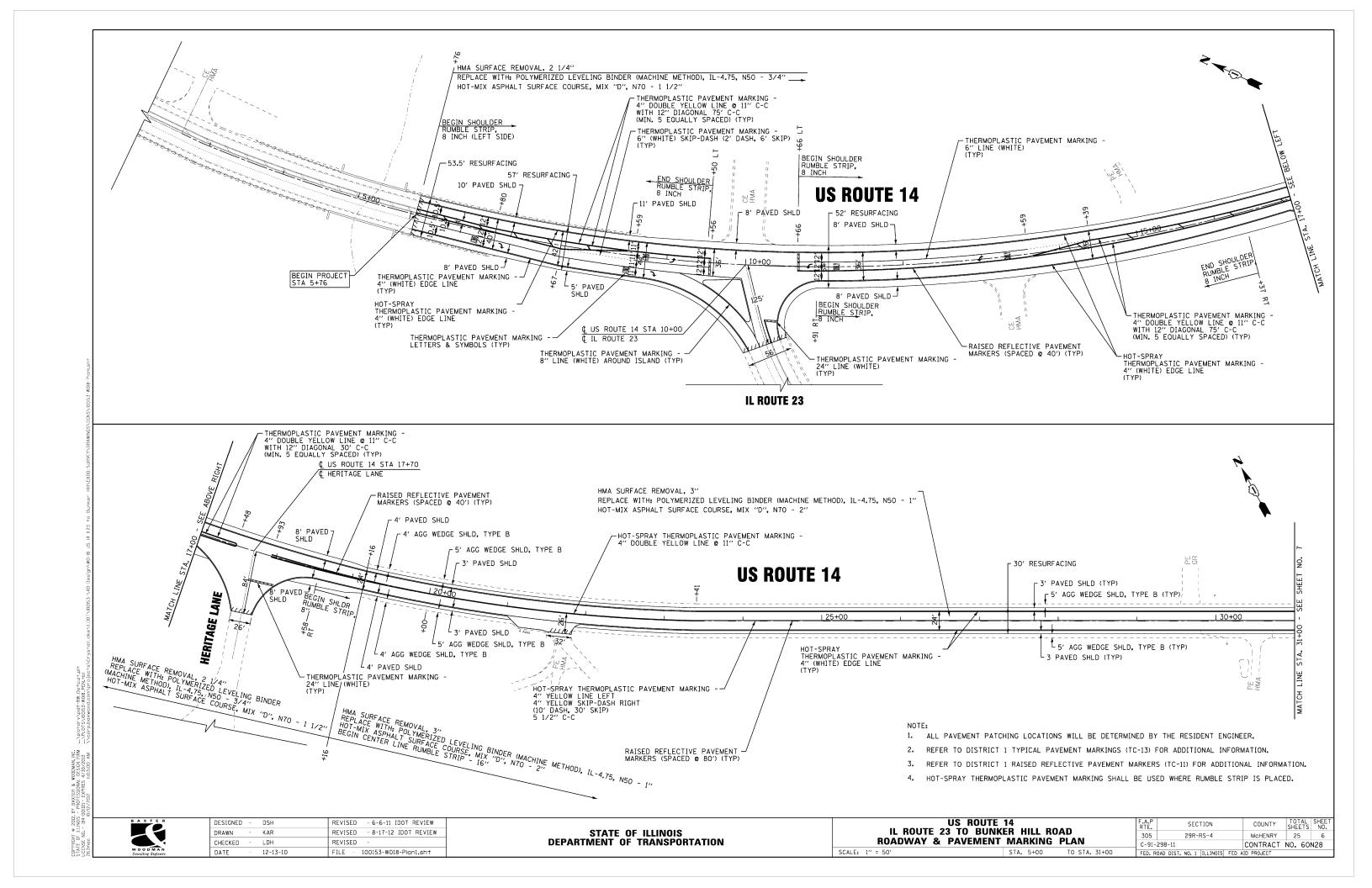
DESIGNED DSH REVISED - 6-6-11 IDOT REVIEW KAR REVISED - 8-17-12 IDOT REVIEW DRAWN CHECKED -LDH REVISED 12-13-10 FILE - 100153-W018-TYPSEC-1.sht

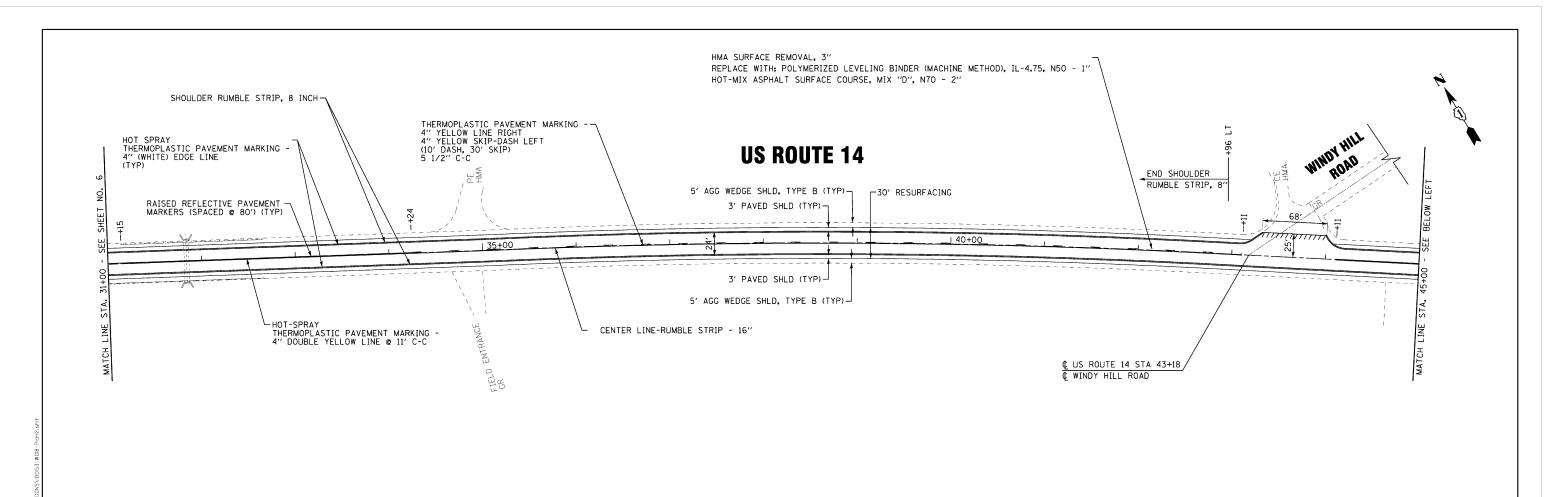
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

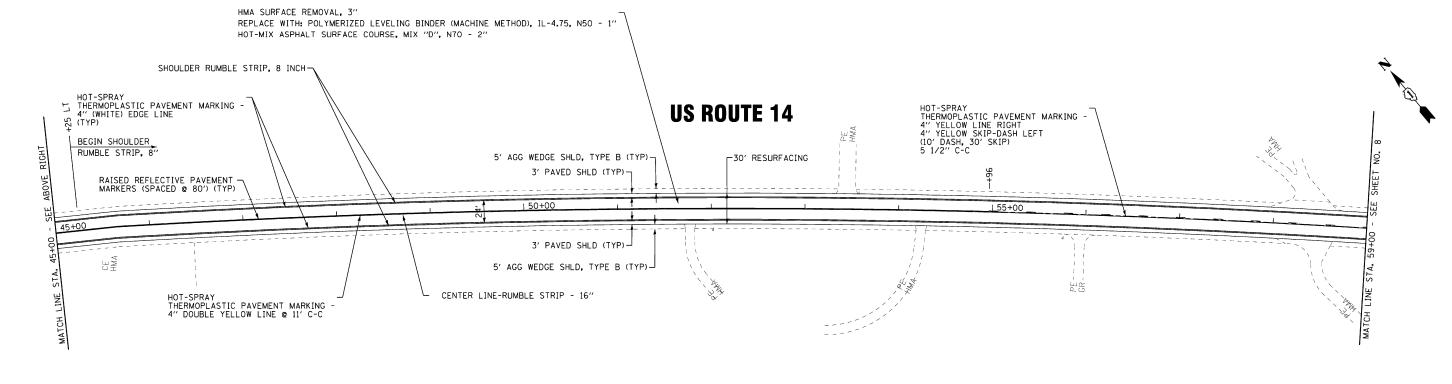
US ROUTE 14 IL ROUTE 23 TO BUNKER HILL ROAD TYPICAL SECTIONS

SCALE: NONE

TOTAL SHEE NO. SECTION COUNTY 305 McHENRY 29R-RS-4 C-91-298-11 CONTRACT NO. 60N28 FED. ROAD DIST. NO. 1 | ILLINOIS | FED AID PROJECT







NOTE

- 1. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED BY THE RESIDENT ENGINEER.
- 2. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.
- 3. REFER TO DISTRICT 1 RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) FOR ADDITIONAL INFORMATION.
- HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING SHALL BE USED WHERE RUMBLE STRIP IS PLACED.

WOOD MAN

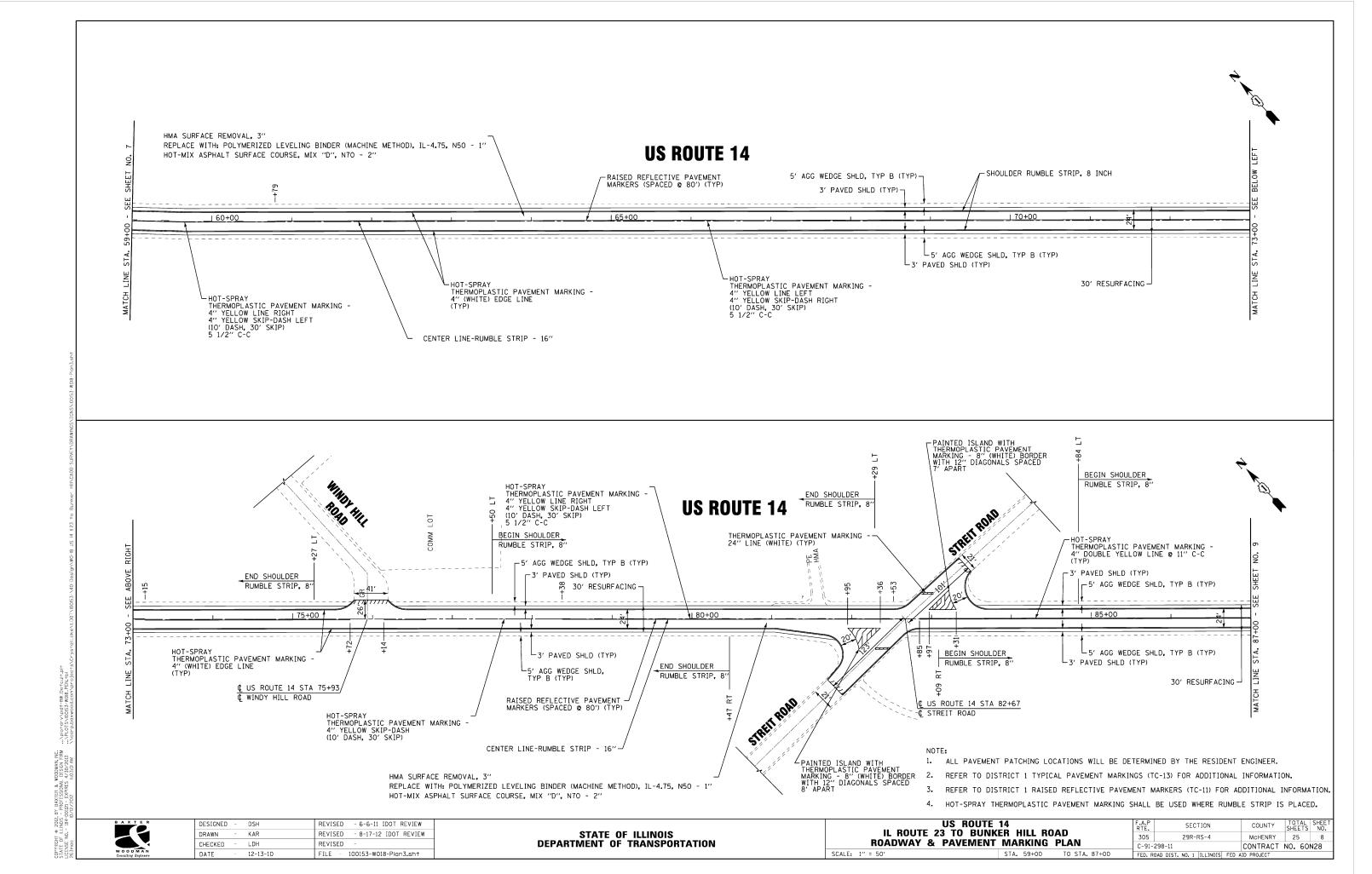
DESIGNED	-	DSH	REVISED - 6-6-11 IDOT REVIEW
DRAWN	-	KAR	REVISED - 8-17-12 IDOT REVIEW
CHECKED	-	LDH	REVISED -
DATE	-	12-13-10	FILE - 100153-W018-Plan2.sht

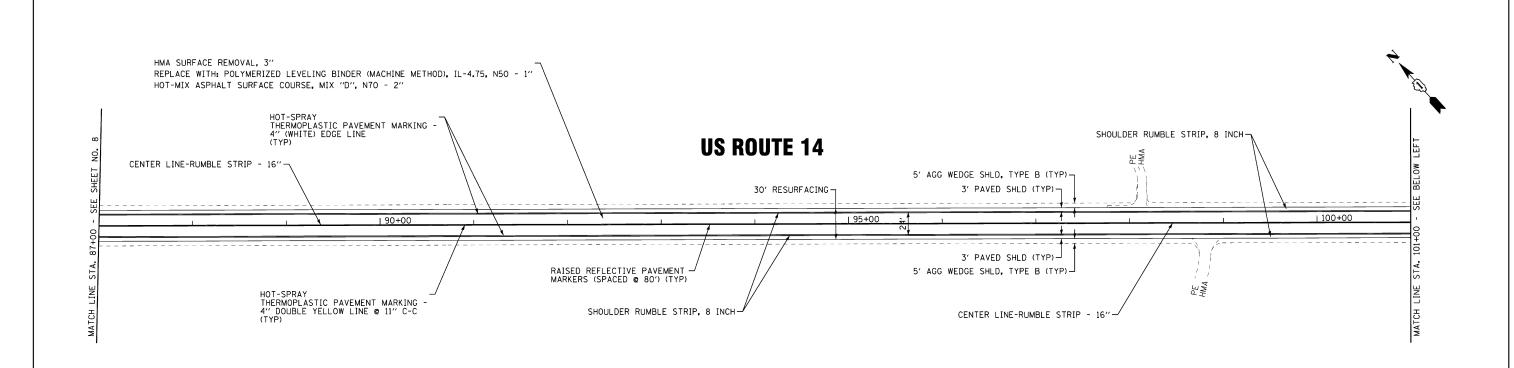
STATE	: OF	ILLINOIS	
DEPARTMENT	0F 1	RANSPORTATION	

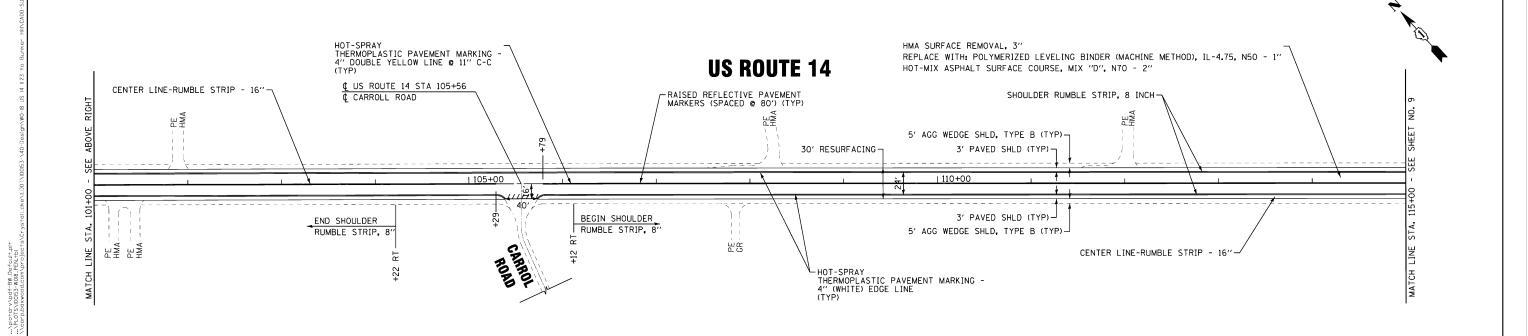
l	IL ROUTE 23 TO BUNKI	ER HILL RO	DAD
L	ROADWAY & PAVEMENT	MARKING	PLAN
	SCALE: 1" = 50'	STA. 31+00	TO STA. 59+00

US ROUTE 14

RTE.		3EC	IION		CODINT	SHEETS	NO.
305		29R-F	RS-4		McHENRY	25	7
C-91-298-11					CONTRACT	NO. 60	N28
FED. R	OAD DIST.	NO. 1	ILLINOIS	FED A	ID PROJECT		







D

US ROUTE 14

IL ROUTE 23 TO BUNKER HILL ROAD

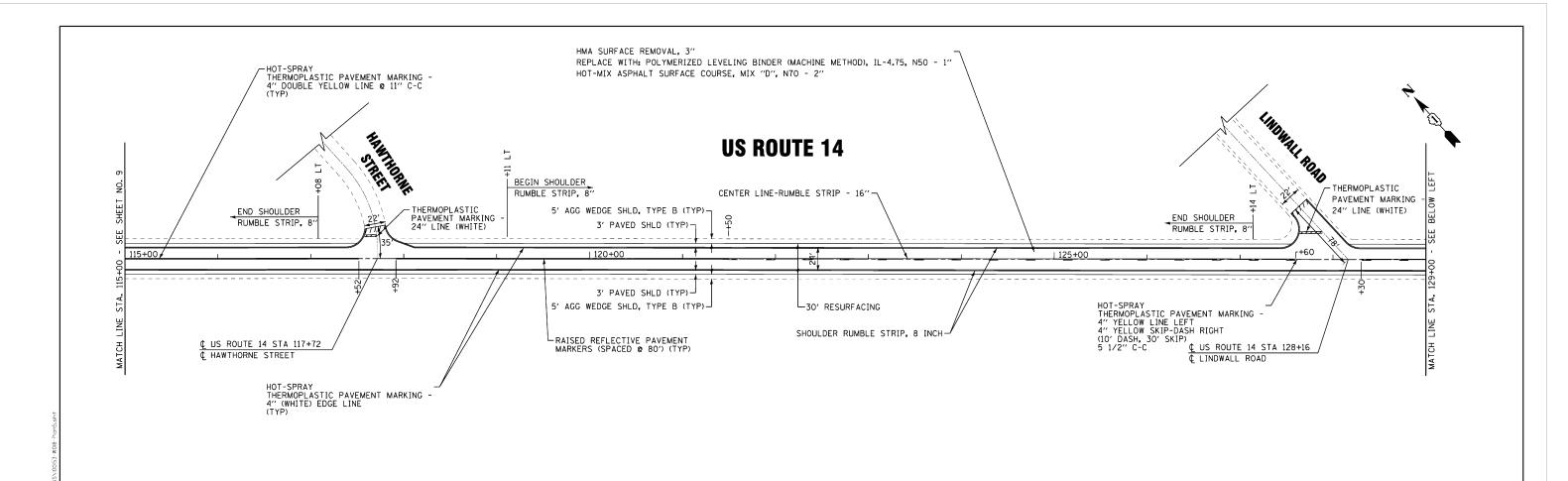
ROADWAY & PAVEMENT MARKING PLAN

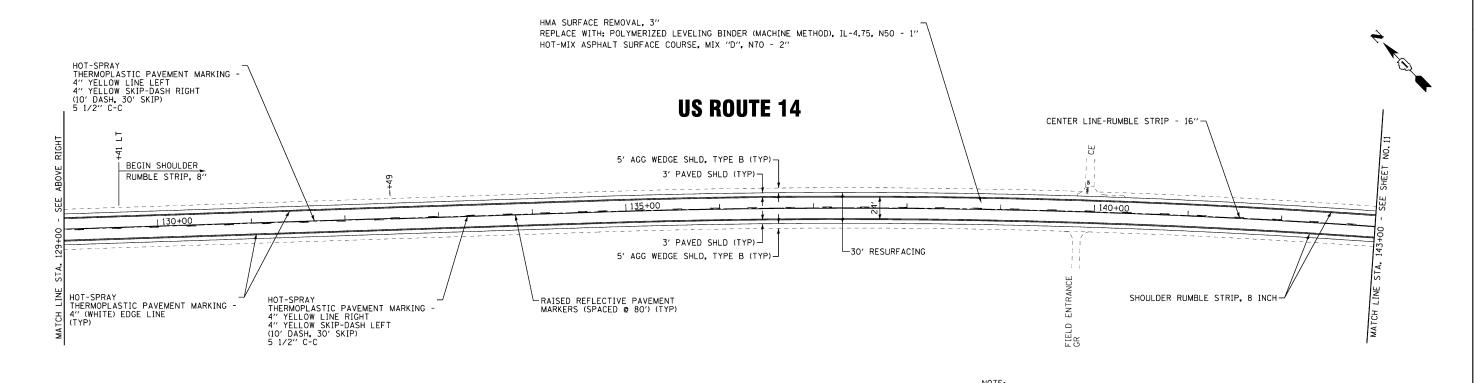
SCALE: 1" = 50' STA. 87+00 TO STA. 115+00

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED BY THE RESIDENT ENGINEER.
 REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.

REFER TO DISTRICT 1 RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) FOR ADDITIONAL INFORMATION.
 HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING SHALL BE USED WHERE RUMBLE STRIP IS PLACED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





DESIGNED DSH REVISED - 6-6-11 IDOT REVIEW KAR REVISED - 8-17-12 IDOT REVIEW DRAWN CHECKED LDH REVISED DATE 12-13-10 FILE - 100153-W018-Plan5.sht

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

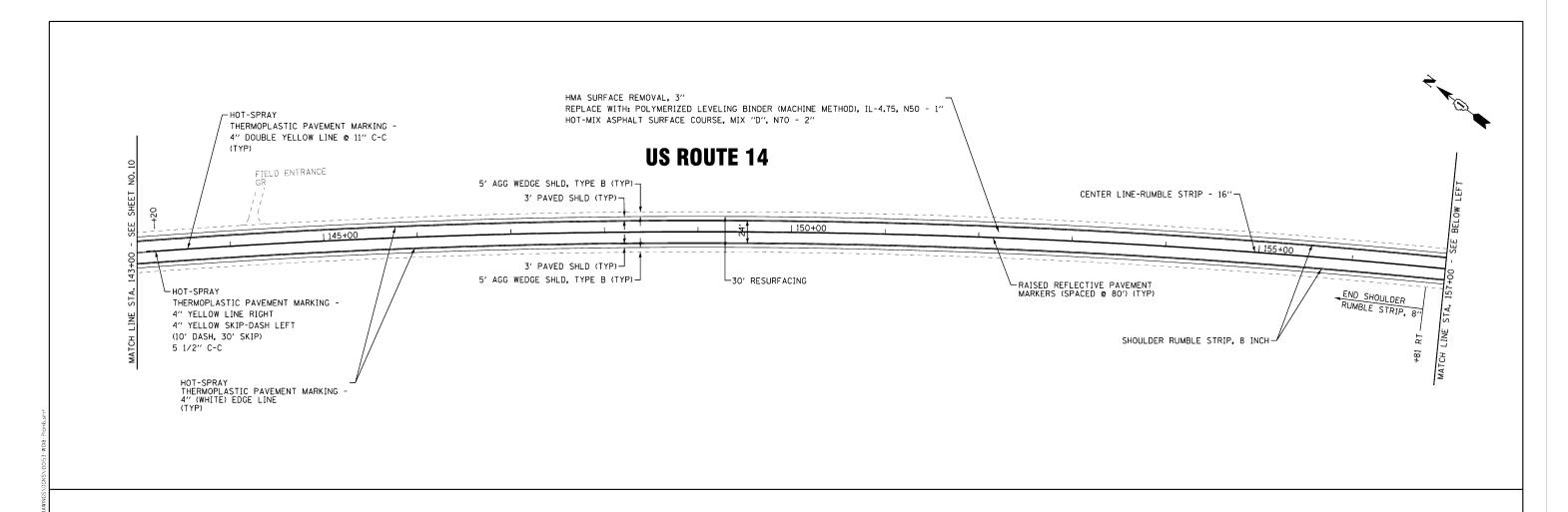
IL ROUTE 23 TO BUNKER HILL ROAD **ROADWAY & PAVEMENT MARKING PLAN** SCALE: 1" = 50'

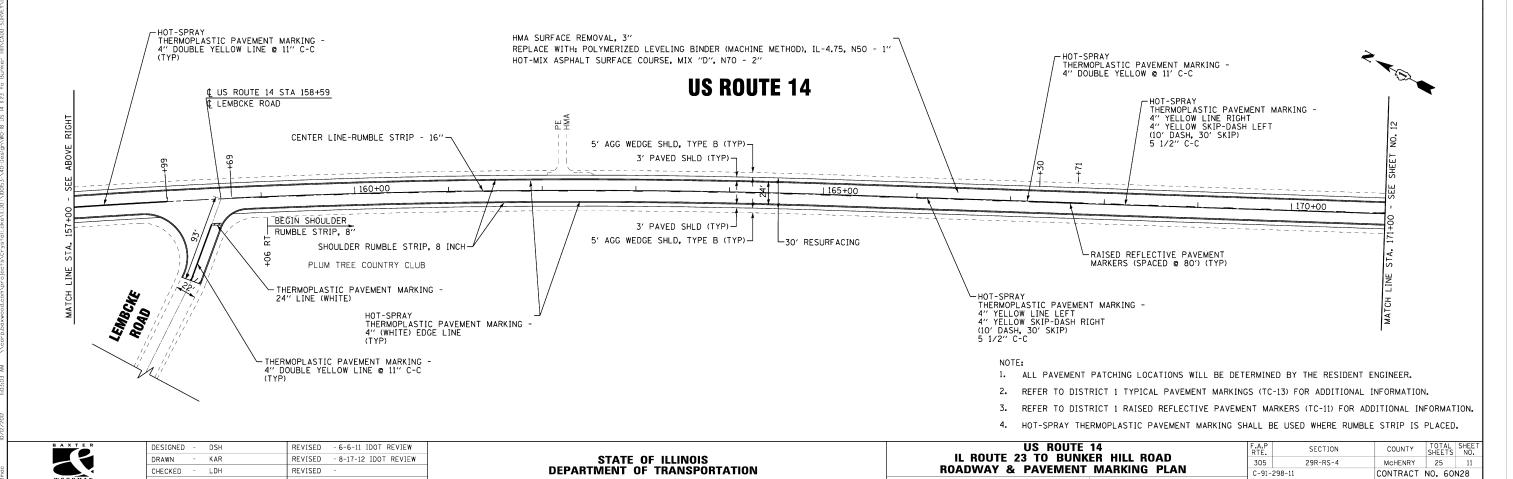
SHEETS NO. SECTION COUNTY RTE. McHENRY 305 29R-RS-4 25 C-91-298-11 CONTRACT NO. 60N28 FED. ROAD DIST. NO. 1 | ILLINOIS | FED AID PROJECT

STA. 115+00 TO STA. 143+00

1. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED BY THE RESIDENT ENGINEER. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.

REFER TO DISTRICT 1 RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) FOR ADDITIONAL INFORMATION. HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING SHALL BE USED WHERE RUMBLE STRIP IS PLACED.





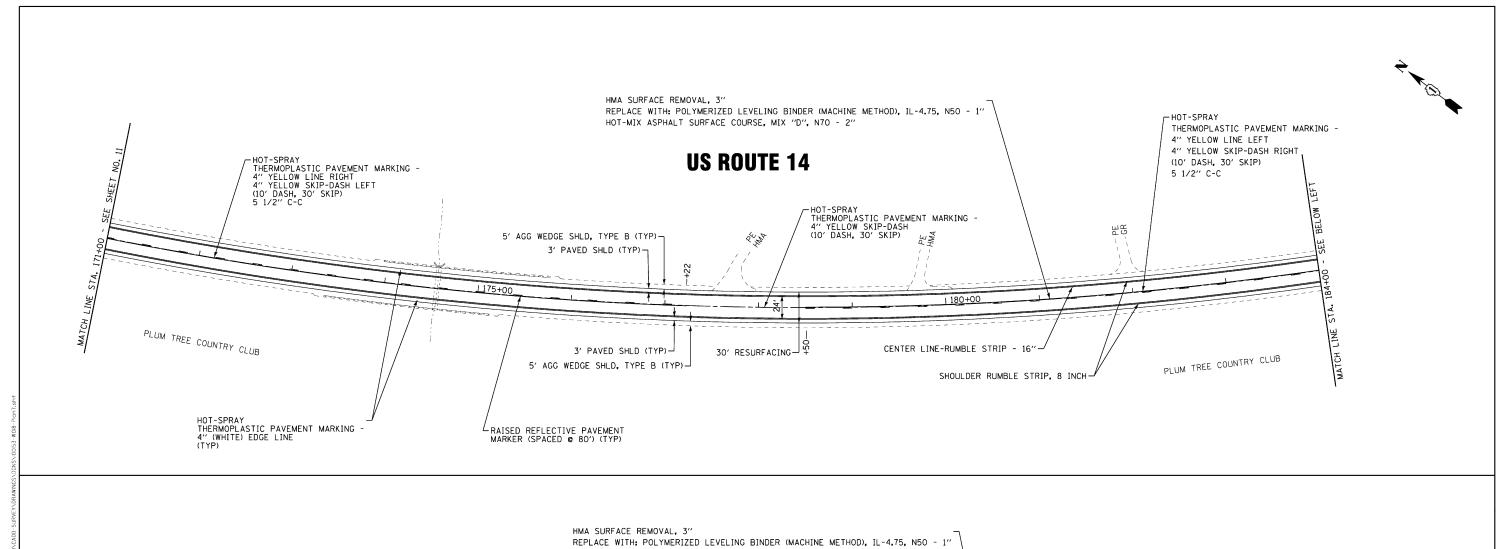
12-13-10

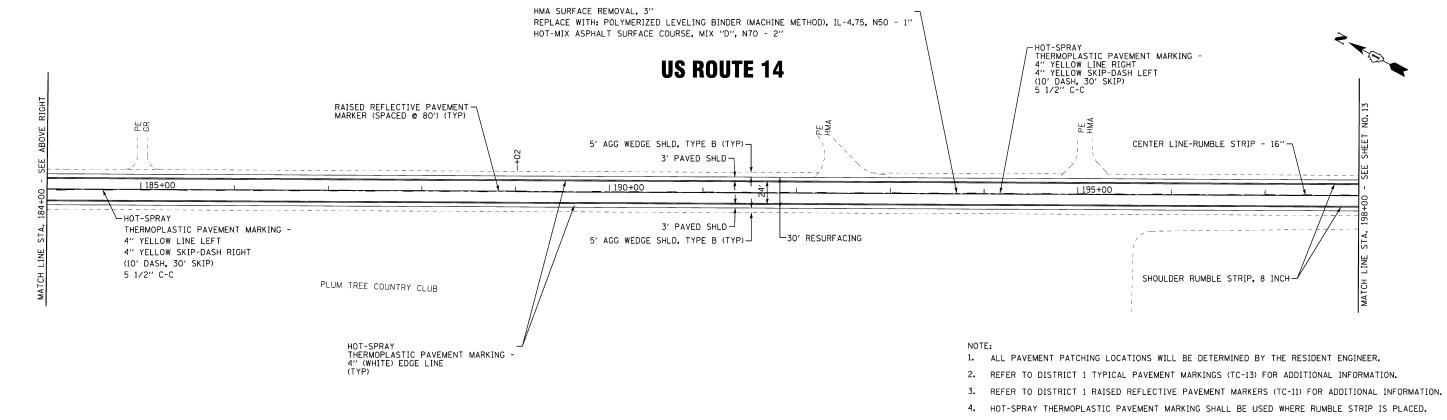
FILE - 100153-W018-Plan6.sht

SCALE: 1" = 50"

STA. 143+00 TO STA. 171+00

FED. ROAD DIST. NO. 1 | ILLINOIS | FED AID PROJECT



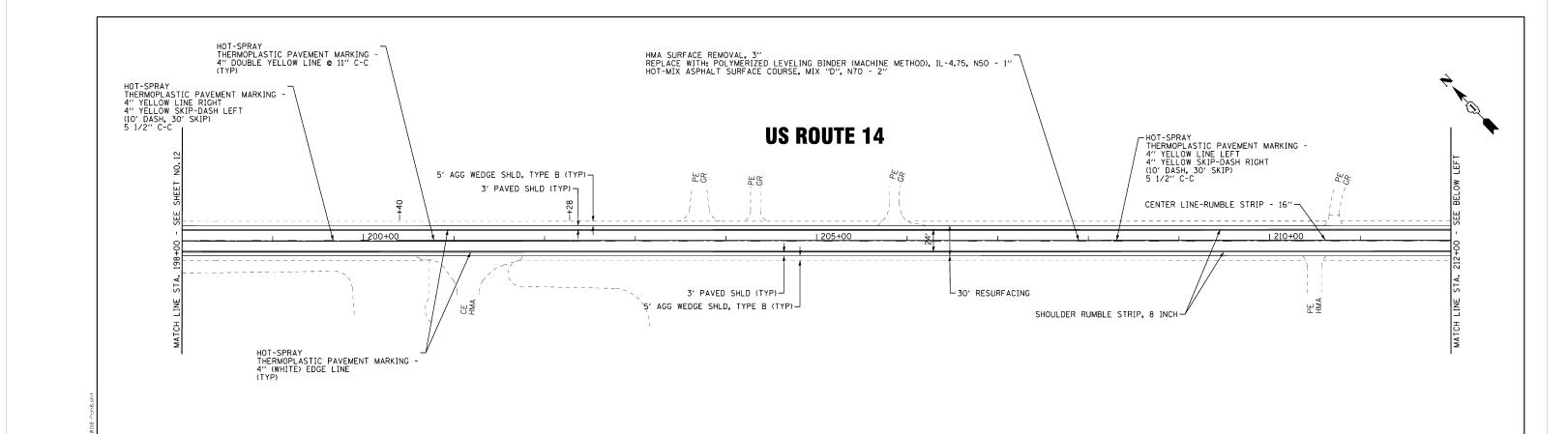


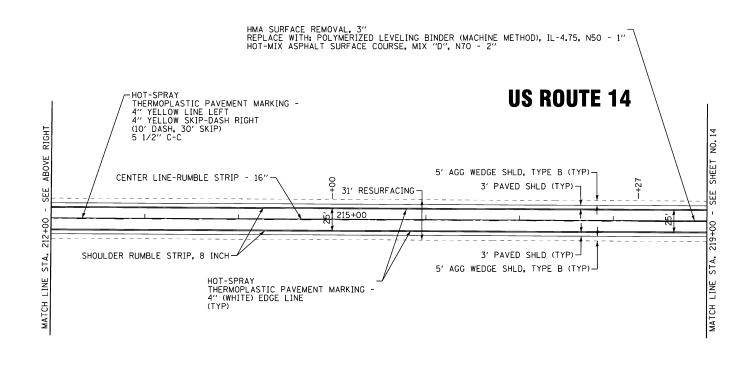
BAXTER
WOODMAN
Consulting Engineers

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 23 TO BUNKER HILL ROAD
ROADWAY & PAVEMENT MARKING PLAN

SCALE: 1" = 50' STA. 171+00 TO STA. 198+00







### NOTE:

- 1. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED BY THE RESIDENT ENGINEER.
- 2. REFER TO DISTRICT 1 TYPICAL PAVEMENT MARKINGS (TC-13) FOR ADDITIONAL INFORMATION.
- 3. REFER TO DISTRICT 1 RAISED REFLECTIVE PAVEMENT MARKERS (TC-11) FOR ADDITIONAL INFORMATION.
- 4. HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING SHALL BE USED WHERE RUMBLE STRIP IS PLACED.

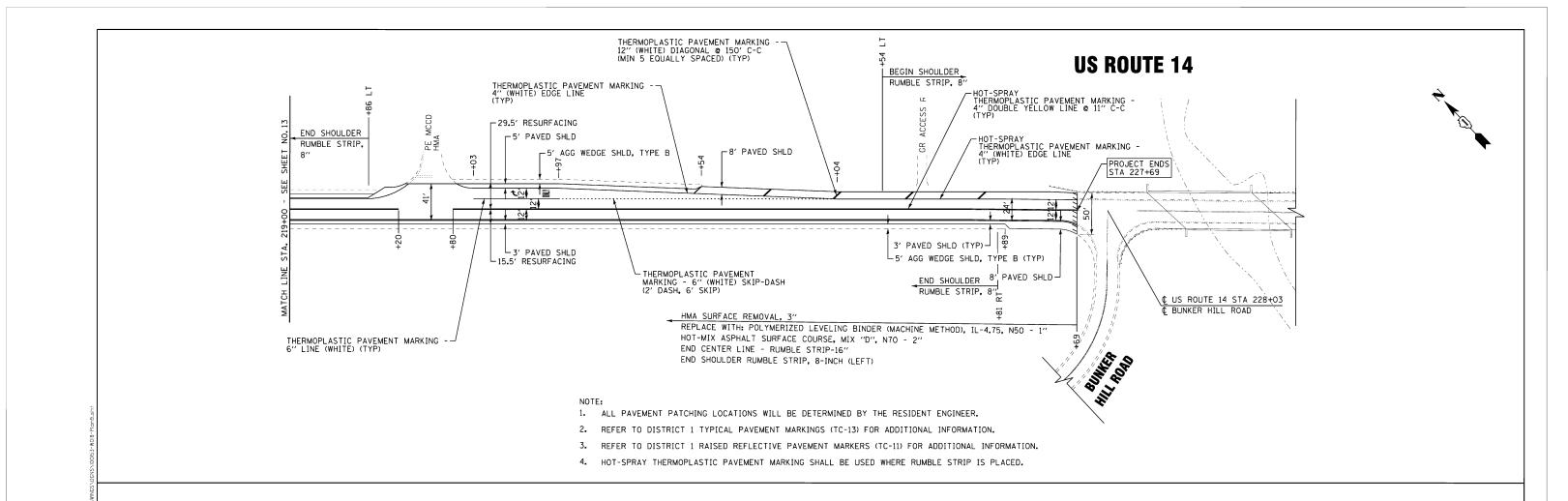


DESIGNED	-	DSH	REVISED - 8-17-12 IDOT REVIEW
DRAWN	-	KAR	REVISED -
CHECKED	-	LDH	REVISED -
DATE	-	12-13-10	FILE - 100153-W018-Plan8 sh+

STATE	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

U DOUTE 22 TO DUNIE		RTE.	SECTION
IL ROUTE 23 TO BUNK		305	29R-RS-4
ROADWAY & PAVEMENT	MARKING PLAN	C-91	-298-11
SCALE: 1" = 50"	STA. 198+00 TO STA. 219+00	FED. F	ROAD DIST. NO. 1   ILLINOIS   FED A

A.P. SECTION COUNTY TOTAL SHEET NO. 05 29R-RS-4 MGHENRY 25 13 -91-298-11 CONTRACT NO. 60N28



YRGHT & 2012, BY BAXTER & WOODMAN, INC.
TE DF ILLINOIS - PROFESSIONAL DESIGN FIRM
INSE NO. - 184-001121 - EXPIRES A 730/2013
INCLOSE NO. - 1003404 AM

DESIGNED DSH REVISED -7-20-11 IDOT REVIEW KAR REVISED - 8-17-12 IDOT REVIEW DRAWN CHECKED LDH REVISED DATE 12-13-10 FILE - 100153-W018-Plan9.sht

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 14 IL ROUTE 23 TO BUNKER HILL ROAD **ROADWAY & PAVEMENT MARKING PLAN** SCALE: 1" = 50"

COUNTY TOTAL SHEET NO.

MCHENRY 25 14 SECTION F.A.P RTE. 305 29R-RS-4 CONTRACT NO. 60N28 C-91-298-11 FED. ROAD DIST. NO. 1 | ILLINOIS | FED AID PROJECT

STA. 219+00 TO STA. 230+10

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION. "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRAFFIC SIGNAL LEGEND

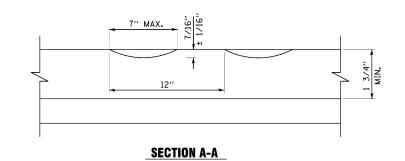
RESURFACTNO LIMET RESURFACTING LIMIT REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS) ITEM CODE QUANTITY UNIT THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY 568 DETECTOR LOOP, REPLACEMENT FOOT 88600600

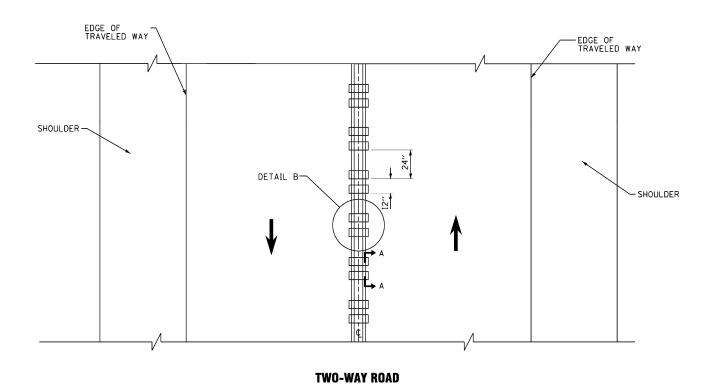
BAXTER

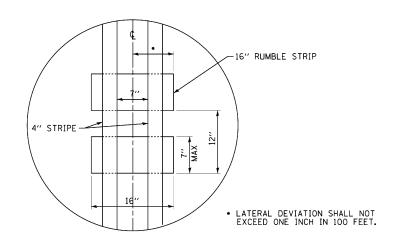
DESIGNED	-	DSH	REVISED -	
DRAWN	-	KAR	REVISED -	
CHECKED	-	LDH	REVISED -	
DATE	-	12-13-10	FILE - 100153-W018-det loops-1.s	h+

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - DETECTOR	IOOP R	EDI ACEMENT	F.A.P RTE.	SEC <sup>-</sup>	TION	
	IL ROUT		305	29R-F	RS-4	
0.0. 110012 11			C-91-	298-11		
SCALE: NONE	STA.	TO STA.	FED. R	OAD DIST. NO. 1	ILLINOIS	FEC







DETAIL B

GENERAL NOTES

SEE STANDARD 780001 FOR OTHER STRIPING LAYOUTS.

RUMBLE STRIPS SHALL NOT BE PLACED ON BRIDGES.

ALL RUMBLE STRIPS SHALL BE MILLED.

CENTERLINE RUMBLE STRIPS SHALL BE CONTINUOUS THROUGH CONNECTIONS OF SIDEROADS WITH NO LEFT

DISCONTINUE CENTERLINE RUMBLE STRIPS THROUGH THE LIMITS OF ALL LEFT TURN LANES, INCLUDING ANY LANE TAPER SECTIONS.

WHERE USED, ADJUST SPACING OF RAISED REFLECTIVE PAVEMENT MARKERS TO FALL IN WIDER GAP BETWEEN RUMBLE STRIPS.

HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING WILL BE USED OVER THE RUMBLE STRIPES.

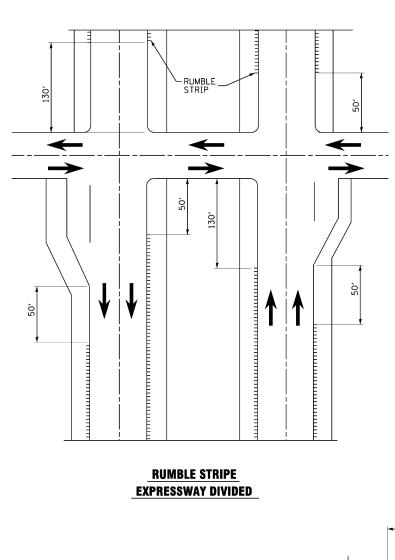
DESIGNED DSH REVISED KAR REVISED DRAWN CHECKED -LDH REVISED 12-13-10 FILE - 100153-W018-MISC-DETS.dg

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

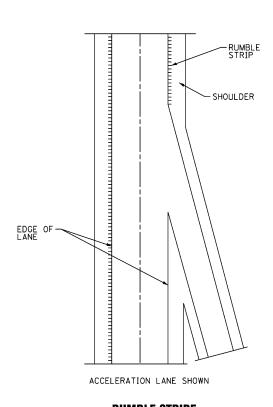
US ROUTE 14 IL ROUTE 23 TO BUNKER HILL ROAD RUMBLE STRIPES FOR CENTERLINE, NON-FREEWAY

COUNTY TOTAL SHEETS NO.
MCHENRY 25 16 SECTION 305 29R-RS-4 McHENRY CONTRACT NO. 60N28 C-91-298-11 FED. ROAD DIST. NO. 1 | ILLINOIS | FED AID PROJECT

T ● 2012, BY BAXT - ILLINOIS - PROFE: NO. - 184-001121 - E

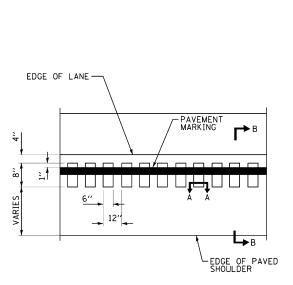


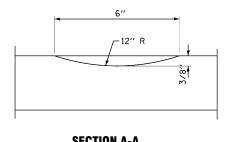
RESIDENTIAL, OR COMMERCIAL ENTRANCE OR PUBLIC ROAD ONE-WAY OR
TWO-WAY ROAD



**RUMBLE STRIPE** INTERSECTIONS

RUMBLE STRIPE ACCELERATION OR DECELERATION LANE





**SECTION A-A** 

VARIES EDGE OF PAVED -SHOULDER EDGE OF -PAVEMENT MARKING

**SECTION B-B** 

GENERAL NOTES

OMIT SHOULDER RUMBLE STRIP ACROSS STRUCTURES.

SHOULDER RUMBLE STRIPES TO BE PAID FOR AS SHOULDER RUMBLE STRIP AND HOT-SPRAY THERMOPLASTIC PAVEMENT MARKING - LINE 4"

PLAN FOR RUMBLE STRIPE

DESIGNED	-	DSH	REVISED -	Г
DRAWN	-	KAR	REVISED -	
CHECKED	-	LDH	REVISED -	
DATE	-	12-13-10	FILE - 100153-W018-MISC-DETS.dgr	

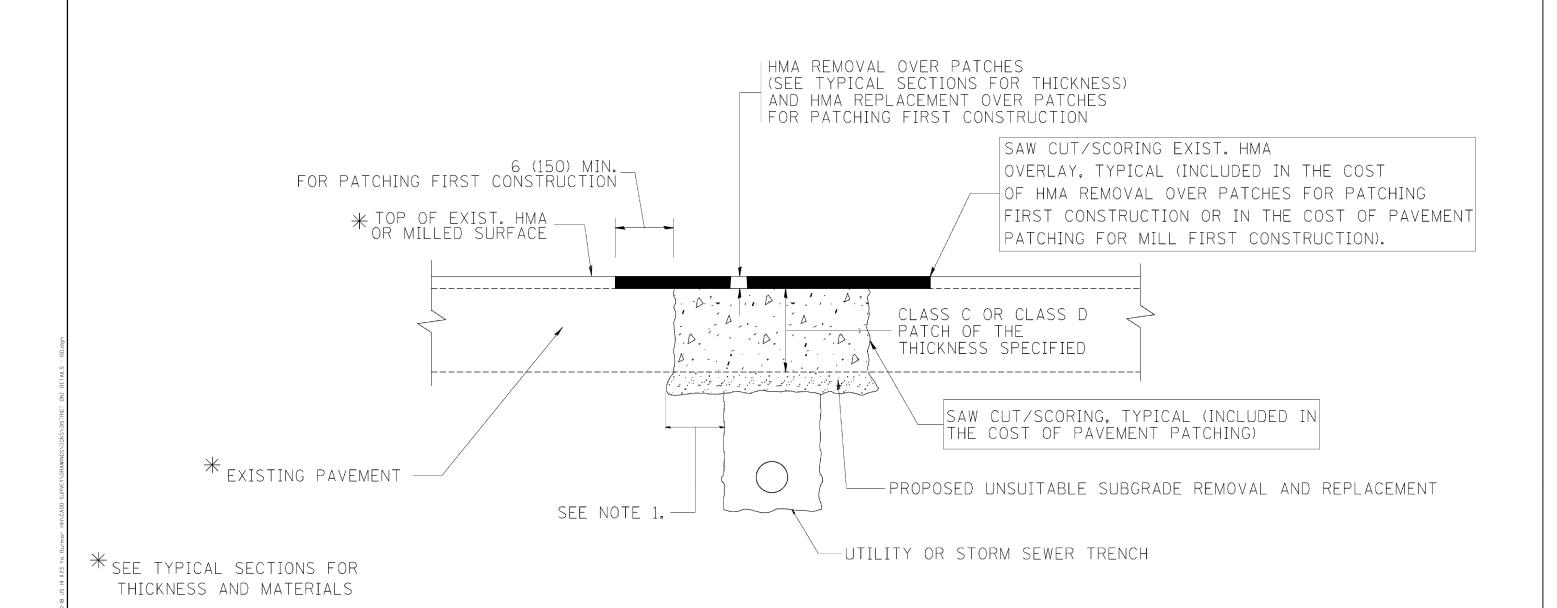
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL ROUTE 23 TO	OUTE 14 BUNKER HILL ROAD STRIPE FOR NON-FREEWAY	
SCALE: NONE	STA. TO STA.	

COUNTY TOTAL SHEET NO.

McHENRY 25 17 F.A.P RTE. 305 SECTION McHENRY 29R-RS-4 C-91-298-11 CONTRACT NO. 60N28 FED. ROAD DIST. NO. 1 | ILLINOIS | FED AID PROJECT

T © 2012, BY BAXTER & WOODMAN, INC.
F. ILLINOIS - PROFESSIONAL DESIGN FIRM
NO. - 184-00121 - EXPIRES 4709/2013



### NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

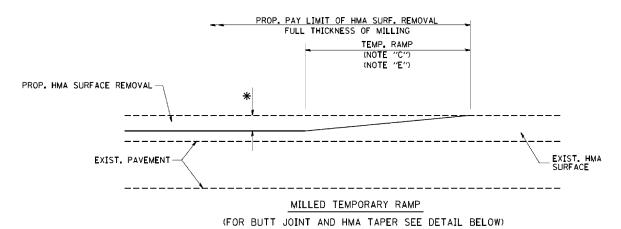
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

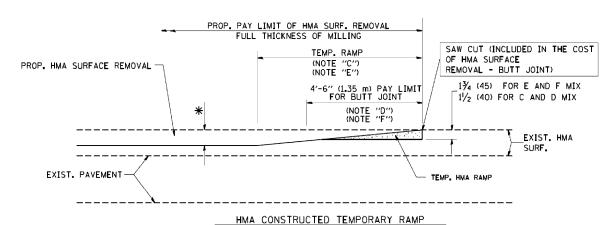
- 1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

REVISED - A. ABBAS 04-27-98 COUNTY TOTAL SHEE **PAVEMENT PATCHING FOR** STATE OF ILLINOIS projects\diststd22x34\bd22.don DRAWN REVISED - R. BORO 01-01-07 McHENRY 25 18 29R-RS-4 HMA SURFACED PAVEMENT LOT SCALE = 50.000 '/ IN. CHECKED REVISED - R. BORO 09-04-07 **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60N28 BD400-04 (BD-22) K. ENG 10-27-08 SHEET NO. 1 OF 1 SHEETS STA.



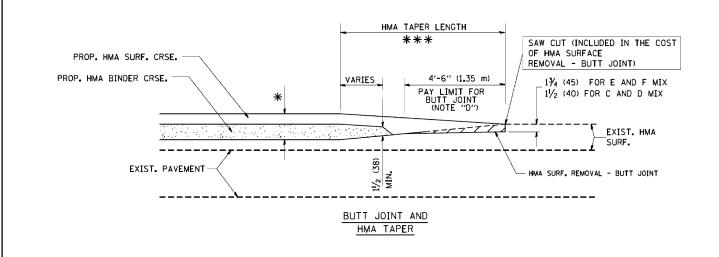
### OPTION 1



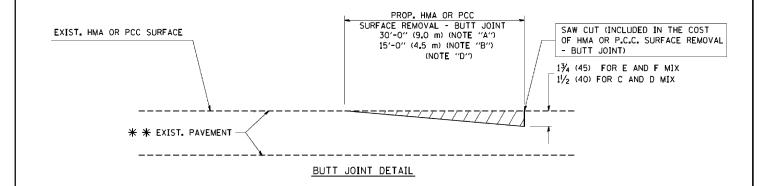
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

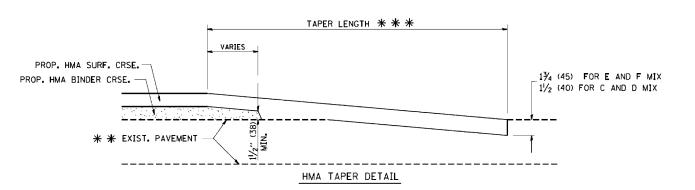
OPTION 2

### TYPICAL TEMPORARY RAMP



### TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





### TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\* \* \* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

### BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

SCALE:

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

	FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED	- R. SHAH 10-25-94
	W:\diststd\22x34\bd32.dgn		DRAWN -	REVISED	- A. ABBAS 03-21-97
3		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED	- M. GOMEZ 04-06-01
3		PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED	- R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	BUTT	JOINT A	ND		F.A RTE.	SECTIO	ON	COUNTY	TOTAL SHEETS	
HMA TAPER DETAILS					305	29R-RS	-4	McHENRY	25	19
			IMILO			BD400-05 BI	D32	CONTRACT	NO. 6	50N28
NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FEO. RO	DAD DIST. NO. 1 IL	LINOIS FED. AI	D PROJECT		

ROAD ONSTRUCTION AHEAD ROAD CONSTRUCTION AHEAD TYPE III BARRICADES WITH TWO FLASHING AMBER LIGHTS ON EACH. TYPE I OR TYPE II BARRICADES WITH ONE FLASHING AMBER LIGHT ON EACH, OR 15 (380) TYPE III BARRICADES WITH TWO FLASHING 200'± (60 m±)-AMBER LIGHTS ON EACH. DRIVEWAY WORK AREA J 200'± (60 m±) 09) COLLECTOR LIMIT> 40 MPH ( 75 4 LOCAL W20-1(0) ROAD SPEED CONSTRUCTION M6-4(0)-2115 AHEAD ROAD M6-1(0)-2115 CONSTRUCTION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900×900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 48  $\times$  48 (1.2 m  $\times$  1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

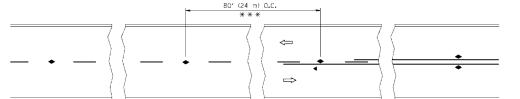
DESIGNED -LHA REVISED - J. OBERLE 10-18-95 ISER NAME = gaglianobt :\diststd\22×34\tc10.dan DRAWN REVISED - A. HOUSEH 03-06-96 PLOT SCALE = 50.000 '/ IN. CHECKED REVISED - A. HOUSEH 10-15-96 DATE 06-89 REVISED -T. RAMMACHER 01-06-0

STATE OF ILLINOIS

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHEET NO. 1 OF 1 SHEETS STA.

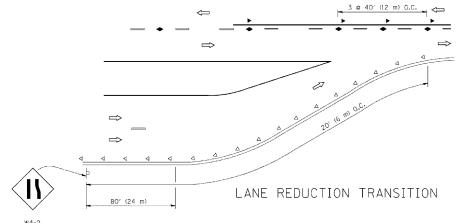
COUNTY TOTAL SHEE NO. SECTION 29R-RS-4 McHENRY 25 20 CONTRACT NO. 60N28 TC-10 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

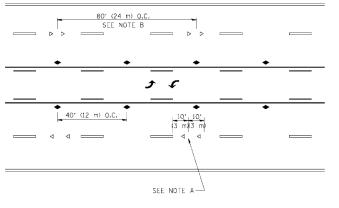
**DEPARTMENT OF TRANSPORTATION** 



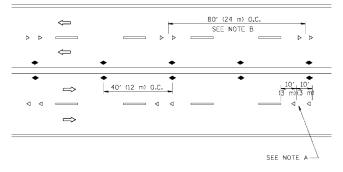
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

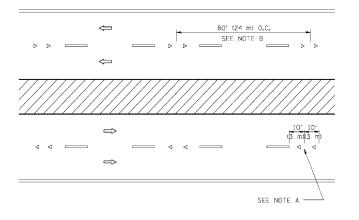




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

### GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

### LANE MARKER NOTES

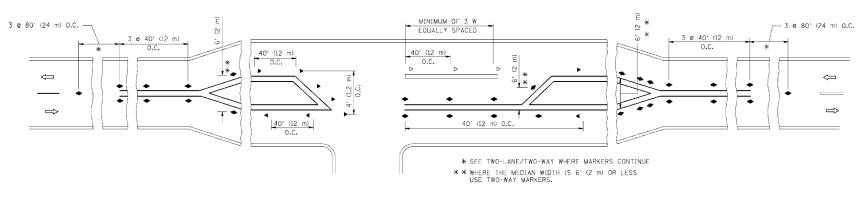
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- 8. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

### SYMBOLS

- YELLOW STRIPE
- ----- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- ◆ TWO-WAY AMBER MARKER

### DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY INVOLVED.



LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

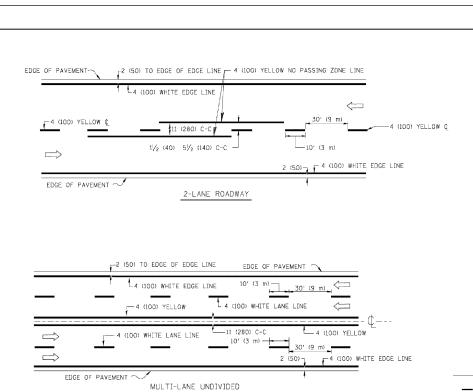
USER NAME = drivakosgn DESIGNED REVISED -T. RAMMACHER 09-19-94 REVISED -T. RAMMACHER 03-12-99 DRAWN :\pw\_work\pwidot\drivakoson\d0108315\toll.dan PLOT SCALE = 50.000 1/ IN. CHECKED -REVISED -T. RAMMACHER 01-06-00 REVISED - C. JUCIUS 09-09-0

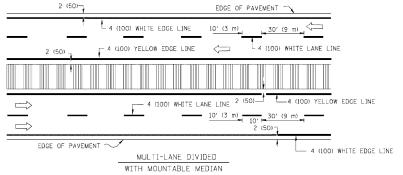
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) SHEET NO. 1 OF 1 SHEETS STA.

COUNTY TOTAL SHEE SHEETS NO. SECTION McHENRY 25 21 305 29R-RS-4 CONTRACT NO. 60N28 TC-11

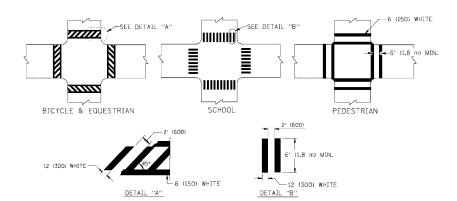
FED. ROAD DIST. NO. 1 ILLINOIS FED. AND PROJECT



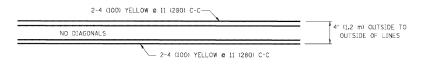


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

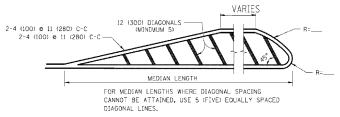
### TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

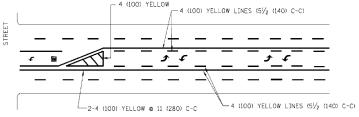


### 4' (1.2 m) WIDE MEDIANS ONLY

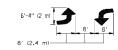


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

### MEDIANS OVER 4' (1.2 m) WIDE

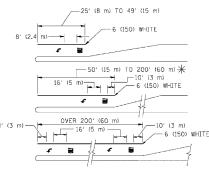


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

### TYPICAL PAINTED MEDIAN MARKING

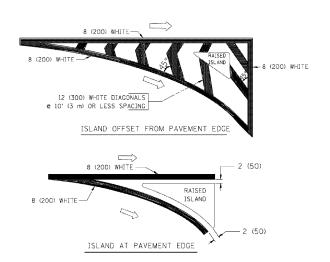


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m² )  $\P$  AREA = 20.8 SO. FT. (1.9 m²)

\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF

TYPICAL LEFT (OR RIGHT) TURN LANE

### TYPICAL TURN LANE MARKING



### TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE LE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF FRESANT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS p 45°	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	SEE TITICAL PAINTED WEDIAN WANNING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA 0F: "X"-3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)] 150' (45 m) C-C (0VER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

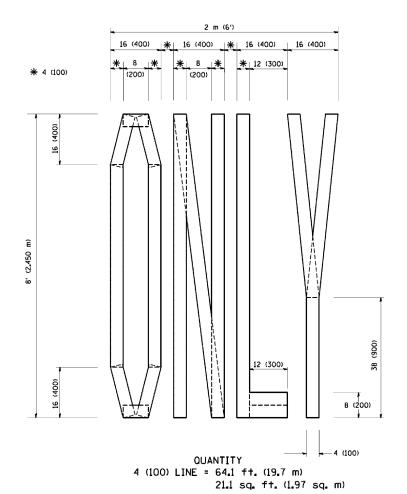
FILE NAME =	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
o:\p*_work\pwidot\drivakosgn\d0108315\to	3.dgn	DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

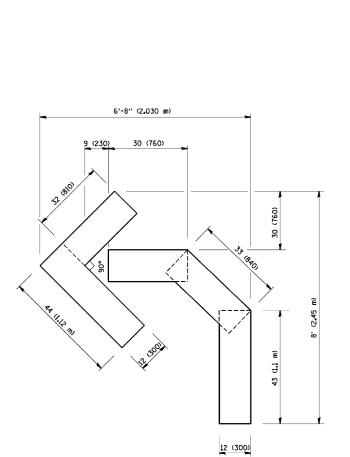
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE				F.A RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
TYPICAL PAVEMENT MARKINGS			305	29R-RS-4	McHENRY	25	22	
ITTIGAL PAVENTENI MARRINGS					TC-13	CONTRACT NO. 60N28		50N28
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		

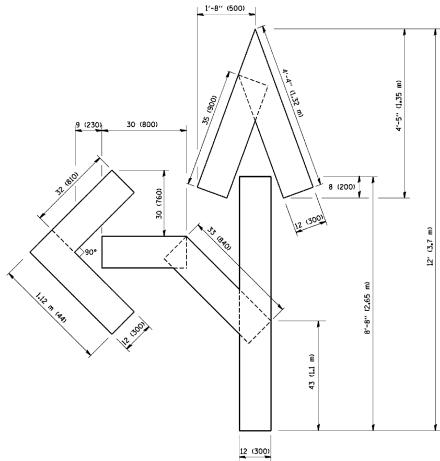
GHT ● 2012, BY BAXTER & WGODMAN, INC.
OF ILLINOS: PROFESSIONAL DESIGN FIRM...\DIOTICIL\NOSA-WOIR PEIF
F ND. - 184-001121 - FXPIRFS 4-30/2013

SE NO. - 184-001121 - OC 1072/20





OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

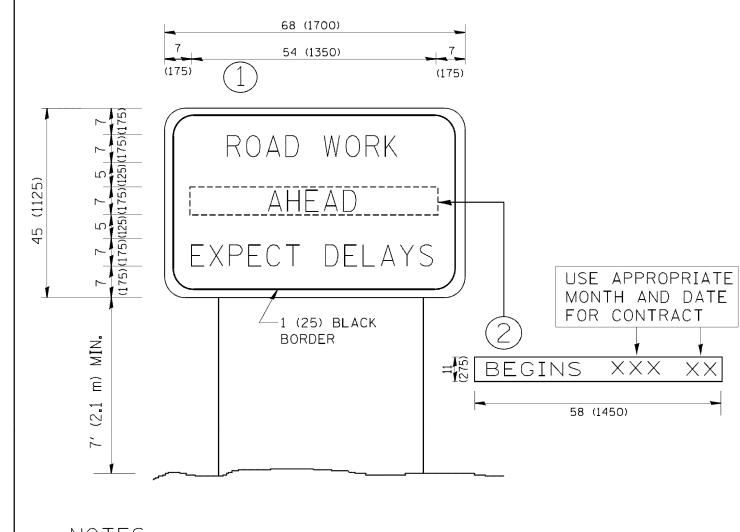
All dimensions are in inches (millimeters) unless otherwise shown.

COPYRIGHT © 2012, BY BAXTER & WODDMAN, I STATE OF ILLINOIS - PROFESSIONAL DESIGN F LICENSE NO. - 184-00121 - EXPIRES 4/30/2012 - 25/37-27 II.O/20/2012

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-9
#:\d1ststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-9
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-9
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00

STATI	E OF	: ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

	PAVEMENT MARKING LETTERS AND SYMBOLS		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
	FOR TRAFFIC STAGING				305	29R-RS-4	McHENRY	25	23	
						TC-16	CONTRACT	NO. 6	ON28	
	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
						C-91	1-298-11			



### NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

ISER NAME = gaglianobt DESIGNED REVISED - R. MIRS 09-15-97 :\diststd\22×34\to22.dqn DRAWN - R. MIRS 12-11-97 REVISED PLOT SCALE = 50.000 '/ IN. CHECKED REVISED -T. RAMMACHER 02-02-9 DATE C. JUCIUS 01-31-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

ARTERIAL ROAD INFORMATION SIGN SHEET NO. 1 OF 1 SHEETS STA.

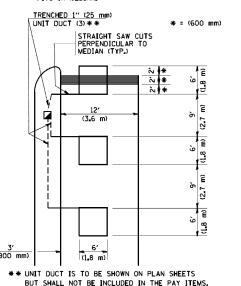
COUNTY TOTAL SHEETS NO. SECTION McHENRY 25 24 29R-RS-4 CONTRACT NO. 60N28 TC-22 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

# PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 10' 10' (3,0 m) 10' (3,0 m) 10' \*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

## <u>LEFT TURN LANES WITH MEDIANS</u> VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-OUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



NOTE: DUAL LEFT TURNS NOT SHOWN REFFR TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

\* = (600 mm)

\* = (000 mm)

\* = (1.8 m)

12'

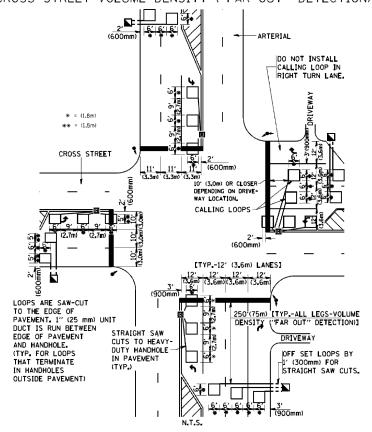
(3.6 m)

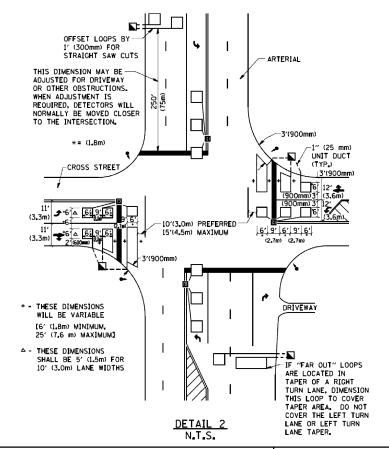
STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)





### NOTES:

### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX, EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

### NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1
TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

HT © 2012, BY BAXTER & WOOL DF ILLINOIS - PROFESSIONAL DE? NO. - 184-001121 - EXPIRES 473

DETAIL 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION

DETAILS FOR ROADWAY RESURFACING

E1 NONE SHEET NO. 1 OF 1 SHEETS STA. TO ST.

C-91-298-11