**HIGHWAY PLANS** 

**F.A.U. 0379: ILLINOIS ROUTE 126 COUNTY LINE ROAD TO WALLIN DRIVE** 

**SECTION: 119 RS-14** 

PROJECT: - -

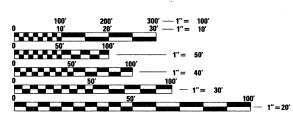
**RESURFACING (3P) WILL COUNTY** 

C-91-317-10

IMPROVEMENT LOCATED WITHIN THE VILLAGE OF PLAINFIELD

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA **ILLINOIS ROUTE 126** 2007 ADT = 17,100 SPEED LIMIT = 40-55 MPH



BEGINS

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

R 8 E R 9 E Z 37 -2 135TH ST PLAINFIELD W 143RD ST E LOCKPORT RD LAKE RENWICK CO FOREST PRESERVE **IMPROVEMENT** STA. 558 + 64.41 CO HWY 5 CO HWY 23

SCALE: NTS

### **PLAINFIELD TOWNSHIP**

GROSS LENGTH OF PROJECT = 10.322.96 FT = 1.96 MILES **NET LENGTH OF PROJECT = 10,322.96 FT = 1.96 MILES** 

CONTRACT NO. 60J95

MILLENNIA PROFESSIONAL SERVICES THOMAS V. NGO. P.E. 062-058379

SIGNATURE AND SEAL APPLIES TO DRWG.

**IMPROVEMENT** 

STA. 661 + 87.37

**ENDS** 

SECTION 119 RS-14 WILL 0379 ILLINOIS CONTRACT NO. 60J95 FED. ROAD DIST. NO. 1

D-91-317-10



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** DIVISION OF HIGHWAYS SUBMITTED FEBRUARY 16, 20 10 Director of Highways, region Engineer march 19 2010 SCOTT E. STITL P.E./OL



200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax www.mps-il.com

Christine M. Reed &
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

MILLENNIA PROFESSIONAL SERVICES

March 19 20 10

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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- TYPICAL SECTIONS
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### LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-05 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS

442201-03 CLASS C AND D PATCHES

HMA SHLD, STRIPS/SHLDS, WITH RESURFACING OR WIDENING AND RESURFACING 482011-03

701301-03 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, 701306-02

FOR SPEEDS > OR = 45 MPH

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

701336-05 LANE CLOSURE, 2L. 2W. WORK AREAS IN SERIES, FOR SPEEDS > OR = 45 MPH

701901-01 TRAFFIC CONTROL DEVICES

### COMMITMENTS

NO COMMITMENTS FOR THIS PROJECT

### GENERAL NOTES

- 1. 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 IS REQUIRED.
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES, VILLAGE OF PLAINFIFLD.
- 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 4. ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.
- ALL DAMAGE TO EXISTING PAVEMENT MARKING OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. NO ADDITIONAL COST TO THE DEPARTMENT.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.
- 7. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 8. LOCATIONS OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 9. DRAINAGE ADJUSTMENTS OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE BY THE ENGINEER.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
- 11. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 12. THE ENGINEER SHALL CONTACT CORA MATHIS, THE TRAFFIC FIELD TECHNICIAN AT (847) 715-8428 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 13. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 14. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 15. DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN ON THE PLANS.
- 16. 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 THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 17. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
- PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND IT'S REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.
- 19. THE CONTRACTOR SHALL PLACE PROPOSED PAVEMENT MARKINGS IN ACCORDANCE WITH DISTRICT 1 TYPICAL PAVEMENT MARKINGS DETAIL (TC-13).

286 22NB Street, Suite 216, Lombard, IL 68148 MILLENNIA PROFESSIONAL SERVICES DATE

DESIGNED - CJD REVISED DRAWN CJD REVISED CHECKED RPD REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**ILLINOIS ROUTE 126** COUNTY LINE ROAD TO WALLIN DRIVE

SHEET NO. OF

SHEETS STA.

INDEX OF SHEETS, LIST OF IDOT HIGHWAY STANDARD, GENERAL NOTES, 0379 AND COMMITMENTS

SECTION WILL 119 RS-14 CONTRACT NO. 60J95

TOTAL SHEET SHEETS NO.

			TOTAL QUANTITY	CONSTRL TYPE	
	SUMMARY OF QUANTITIES		100%	1000	
ODE NO.	ITEM DESCRIPTION	UNIT	STATE	QUANTITY	
201006	GRADING AND SHAPING SHOULDERS	UNIT	207	207	
0600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	18	18	
0600300	AGGREGATE (PRIME COAT)	TON	87	87	
0600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	65	65	
0600826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1824	1824	
0600895	CONSTRUCTING TEST STRIP	EACH	2	2	
0600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	365	365	
0601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	938	938	
0603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	4290	4290	
4000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	43780	43780	
4002224	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 6"	SQ YD	2791	2791	
4201761	CLASS D PATCHES, TYPE I. 10 INCH	SQ YD	64	64	
4201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	1243	1243	
4201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	285	285	
4201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	949	949	
8102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	826	826	
0300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	5	5	
7000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
7100100	MOBILIZATION	L SUM	1	1	
0100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1 .	1	
0100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1	1	
0300100	SHORT-TERM PAVEMENT MARKING	FOOT	5146	5146	
0300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	18	18	
0300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	76620	76620	
0300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2915	2915	
0300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	870	870	
0300280	TEMPORARY PAVEMENT MARKING - LINE 24"				
		FOOT	310	310	
0301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	858	858	
3000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	9	9	ļ

	SUMMARY OF QUANTITIES		TOTAL QUANTITY	CONSTRL TYPE	
	OUNIMALL OF COARTILES		100%		
CODE NO.	ITEM DESCRIPTION	UNIT	STATE	IOOO QUANTITY	
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	38310	38310	
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1460	1460	
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	435	435	
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	155	155	
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	456	456	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	456	456	
38600600	DETECTOR LOOP REPLACEMENT	FOOT	418	418	
(0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	5	5	
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CJD 200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax www.mps-il.com DRAWN CJD CHECKED - RPD MILLENNIA PROFESSIONAL SERVICES DATE

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

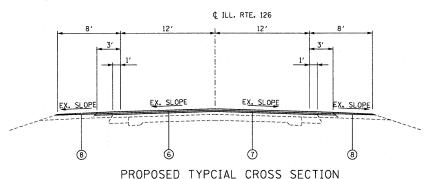
\* SPECIALTY ITEM

**ILLINOIS ROUTE 126** COUNTY LINE ROAD TO WALLIN DRIVE SCALE: NTS SHEET NO. OF SHEETS STA.

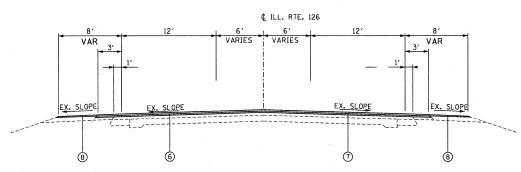
SUMMARY OF QUANTITIES

URBAN

### EXISTING TYPICAL CROSS SECTION ILLINOIS ROUTE 126 STA. 558+64.41 TO STA. 661+87.37



## ILLINOIS ROUTE 126 STA. 558+64 TO STA. 596+51 STA. 616+52 TO STA. 625+76 STA. 641+58 TO STA. 651+50



### PROPOSED TYPCIAL CROSS SECTION

ILLINOIS ROUTE 126 STA. 596+51 TO STA. 616+52 STA. 625+76 TO STA. 641+58 STA. 651+50 TO STA. 661+87

### LEGEND

- 1) EXISTING P.C.C. PAVEMENT 9" (6 1/2"-9")
- ② EXISTING BITUMINOUS SURFACE +/-6"
- 3 EXISTING BITUMINOUS SHOULDER +/-8"
- 4 EXISTING +/- 8" AGGREGATE SHOULDER, TYPE B
- 5) HMA SURFACE REMOVAL 2 1/2" (SEE NOTE 1)
- 6 HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5 MM)-1 3/4"
- (7) POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50-3/4"
- (8) GRADING AND SHAPING SHOULDERS & AGGREGATE WEDGE SHOULDER, TYPE B

### NOTES

1. THE CONTRACTOR SHALL PERFORM THE PAVEMENT PATCHING OPERATIONS PRIOR TO THE HMA SURFACE REMOVAL OPERATION. SEE IDOT DISTRICT 1 DETAIL PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT BD-400-04 (BD-22) FOR ADDITIONAL INFORMATION.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% @ 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	4% @ 50 GYR.
CLASS D PATCHES (HMA BINDER IL-19 MM)	4% @ 70 GYR.
HMA 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 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax

MILLENNIA PROFESSIONAL SERVICES DATE

DESIGNED CJD REVISED CJD REVISED REVISED CHECKED RPD REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

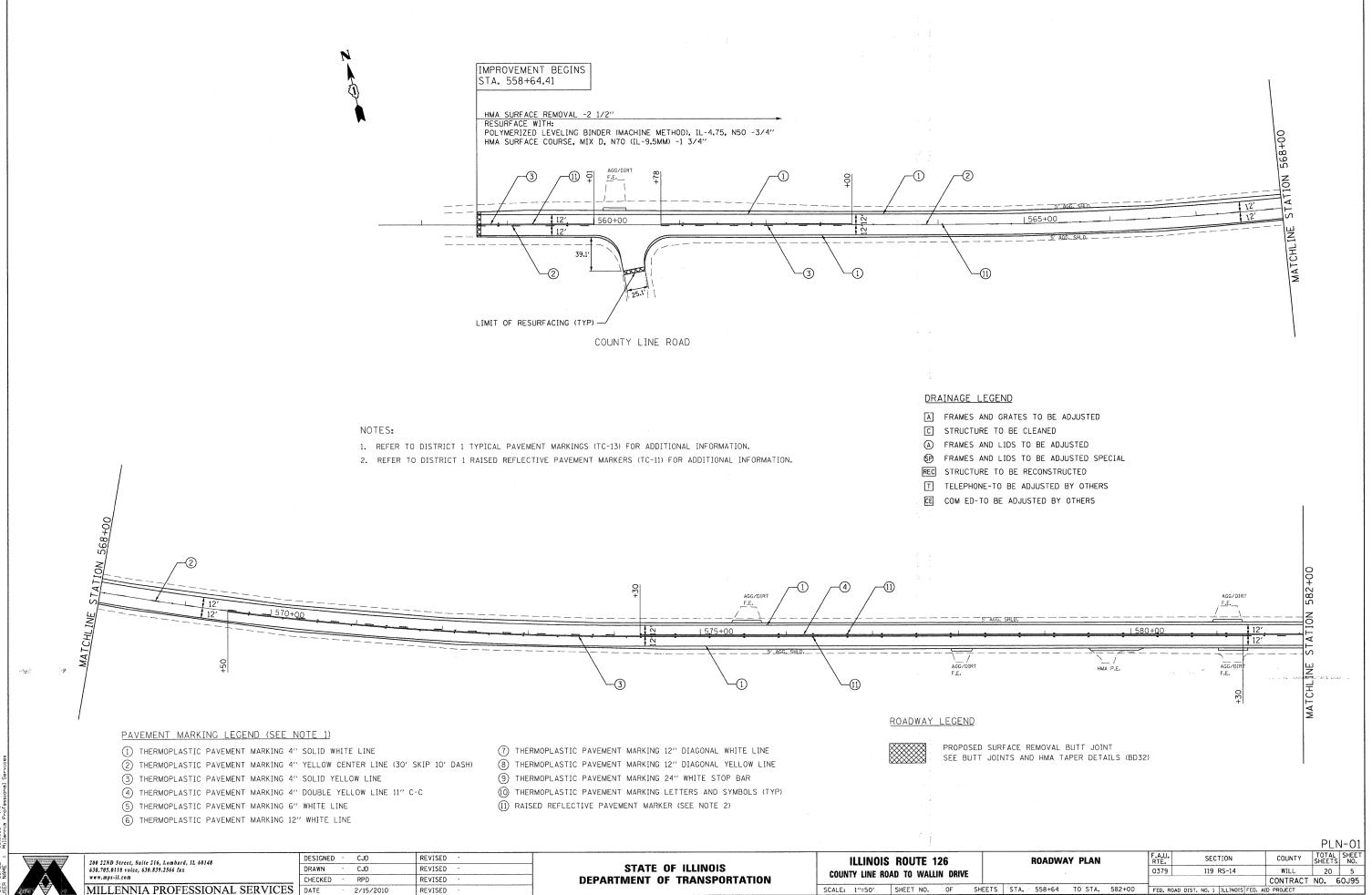
**ILLINOIS ROUTE 126** COUNTY LINE ROAD TO WALLIN DRIVE MAINLINE TYPICAL SECTIONS

TO STA.

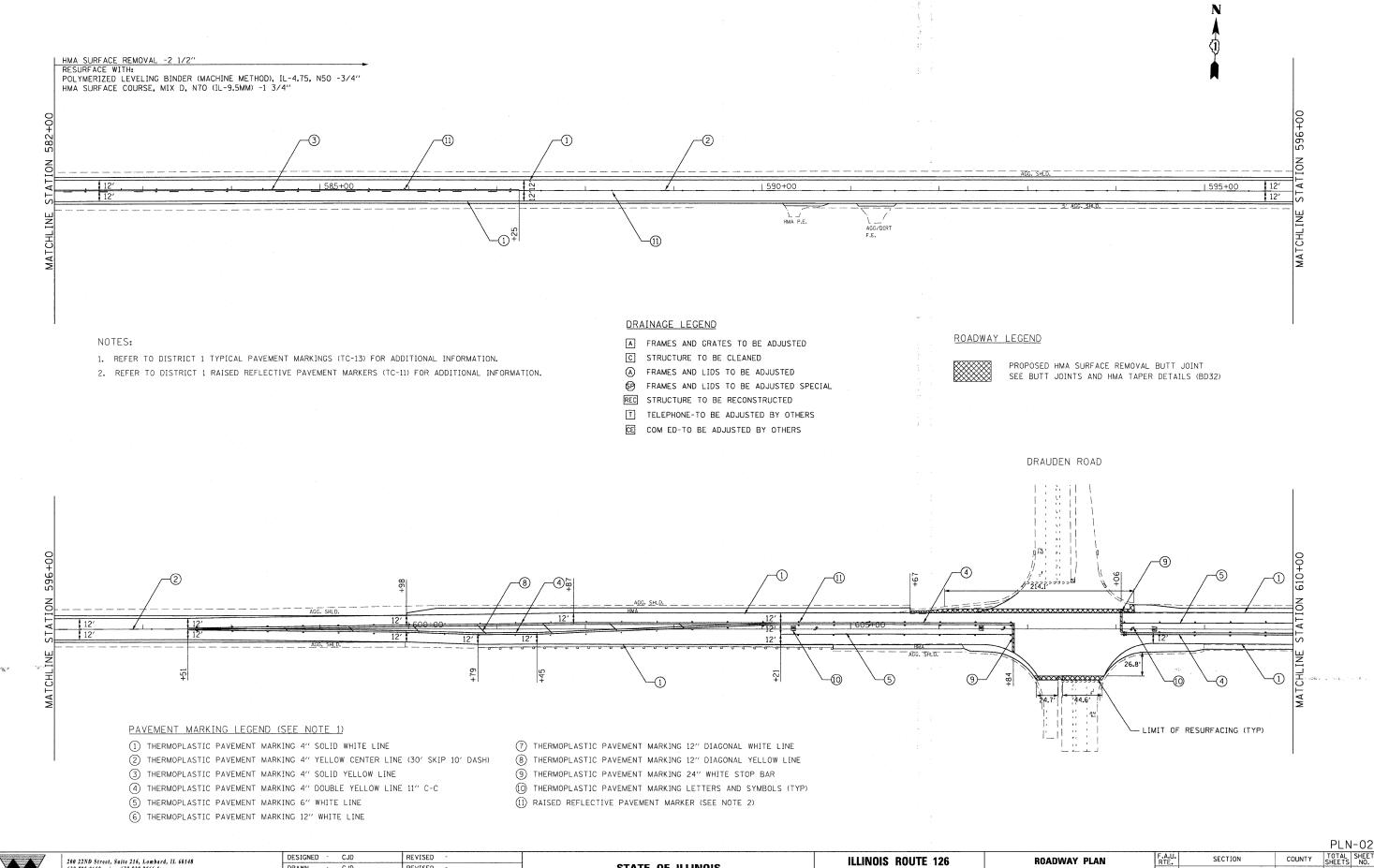
SECTION COUNTY 0379 119 RS-14 WILL 20 4 CONTRACT NO. 60J95 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

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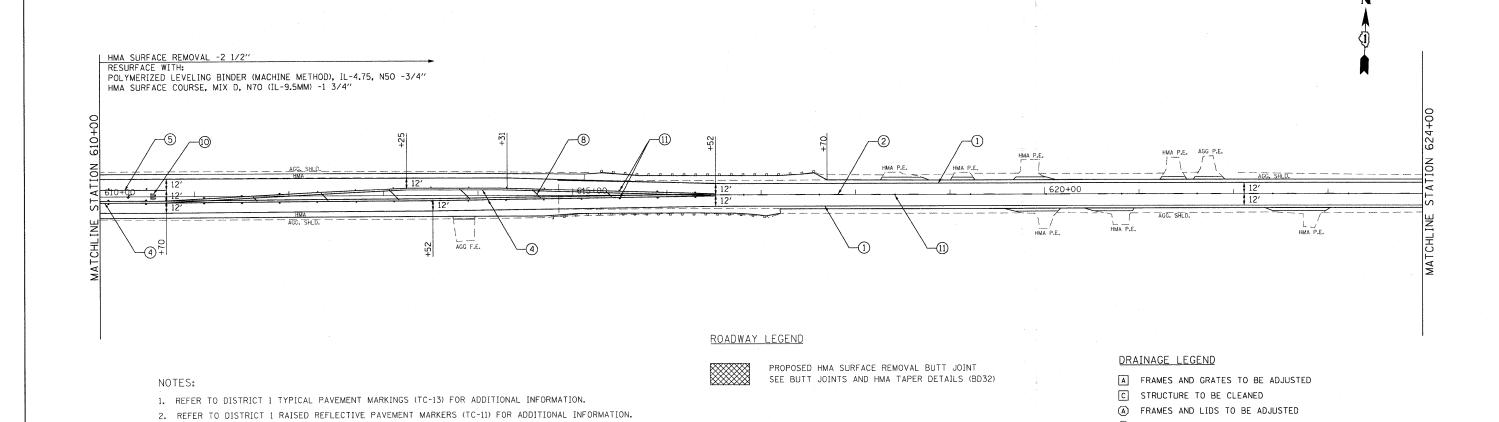
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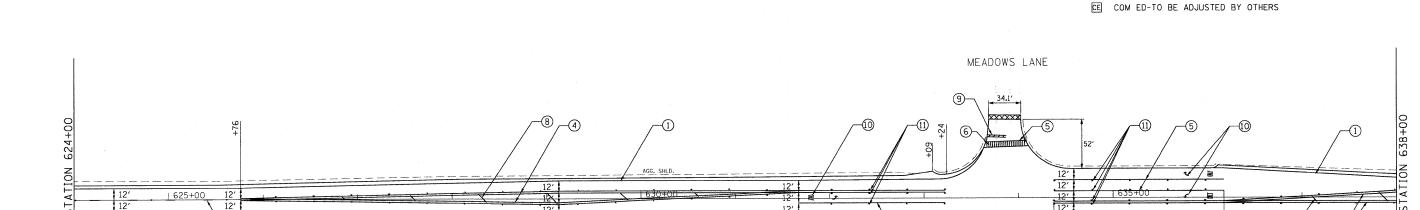
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  COUNTY LINE ROAD TO WALLIN DRIVE

WILL 20 6
CONTRACT NO. 60J95 SCALE: 1"=50' SHEET NO. OF SHEETS STA. 582+00 TO STA. 610+00 FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT
P1/2009\MEG9906S.VarVar Phil\CADD\W09.1L126\Shtest\

MILLENNIA PROFESSIONAL SERVICES DATE





PAVEMENT MARKING LEGEND (SEE NOTE 1)

- 1 THERMOPLASTIC PAVEMENT MARKING 4" SOLID WHITE LINE
- 2 THERMOPLASTIC PAVEMENT MARKING 4" YELLOW CENTER LINE (30' SKIP 10' DASH)
- 3 THERMOPLASTIC PAVEMENT MARKING 4" SOLID YELLOW LINE
- 4) THERMOPLASTIC PAVEMENT MARKING 4" DOUBLE YELLOW LINE 11" C-C
- 5 THERMOPLASTIC PAVEMENT MARKING 6" WHITE LINE
- 6 THERMOPLASTIC PAVEMENT MARKING 12" WHITE LINE

- 7 THERMOPLASTIC PAVEMENT MARKING 12" DIAGONAL WHITE LINE
- (8) THERMOPLASTIC PAVEMENT MARKING 12" DIAGONAL YELLOW LINE
- 9 THERMOPLASTIC PAVEMENT MARKING 24" WHITE STOP BAR
- 10 THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (TYP)

(1) RAISED REFLECTIVE PAVEMENT MARKER (SEE NOTE 2)

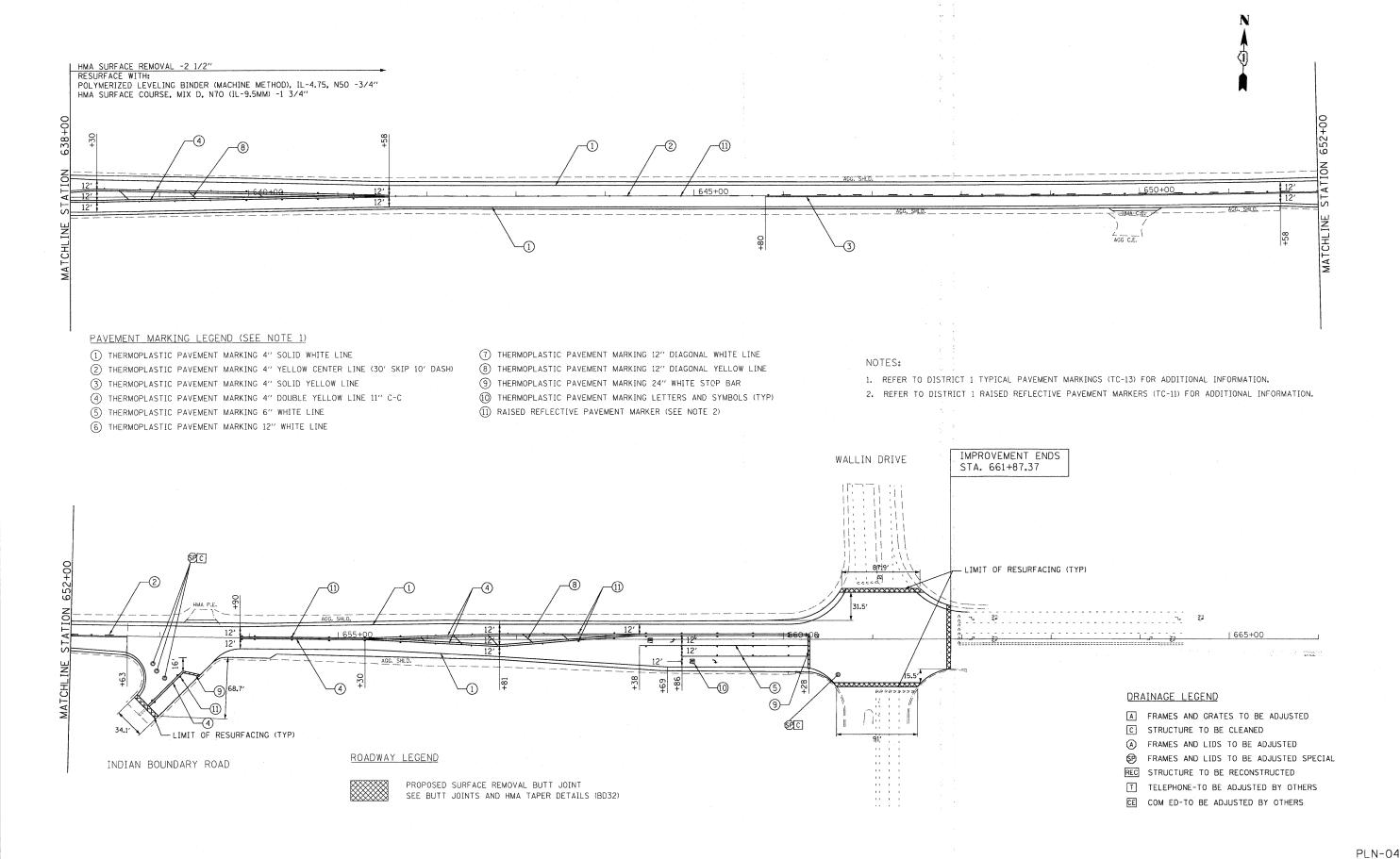
PLN-03 COUNTY TOTAL SHEETS NO.
WILL 20 7 **ILLINOIS ROUTE 126** ROADWAY PLAN 0379 119 RS-14 COUNTY LINE ROAD TO WALLIN DRIVE CONTRACT NO. 60J95

-LIMIT OF RESURFACING (TYP)

FRAMES AND LIDS TO BE ADJUSTED SPECIAL

REC STRUCTURE TO BE RECONSTRUCTED T TELEPHONE-TO BE ADJUSTED BY OTHERS

DESIGNED CJD REVISED 200 22ND Street, Suite 216, Lombard, IL 60148 630.705.0110 voice, 630.839.2566 fax REVISED STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** CHECKED REVISED SCALE: 1"=50' SHEET NO. OF SHEETS STA. 610+00 TO STA. 638+00 FED. ROAD DIST. NO. 1 |ILLINOIS|FED. AID PROJECT
P1\2009\ME99086.VerVer Phil\CADD\WO9\_IL126\Shts\D168J95-sht-plan-03.dg MILLENNIA PROFESSIONAL SERVICES DATE



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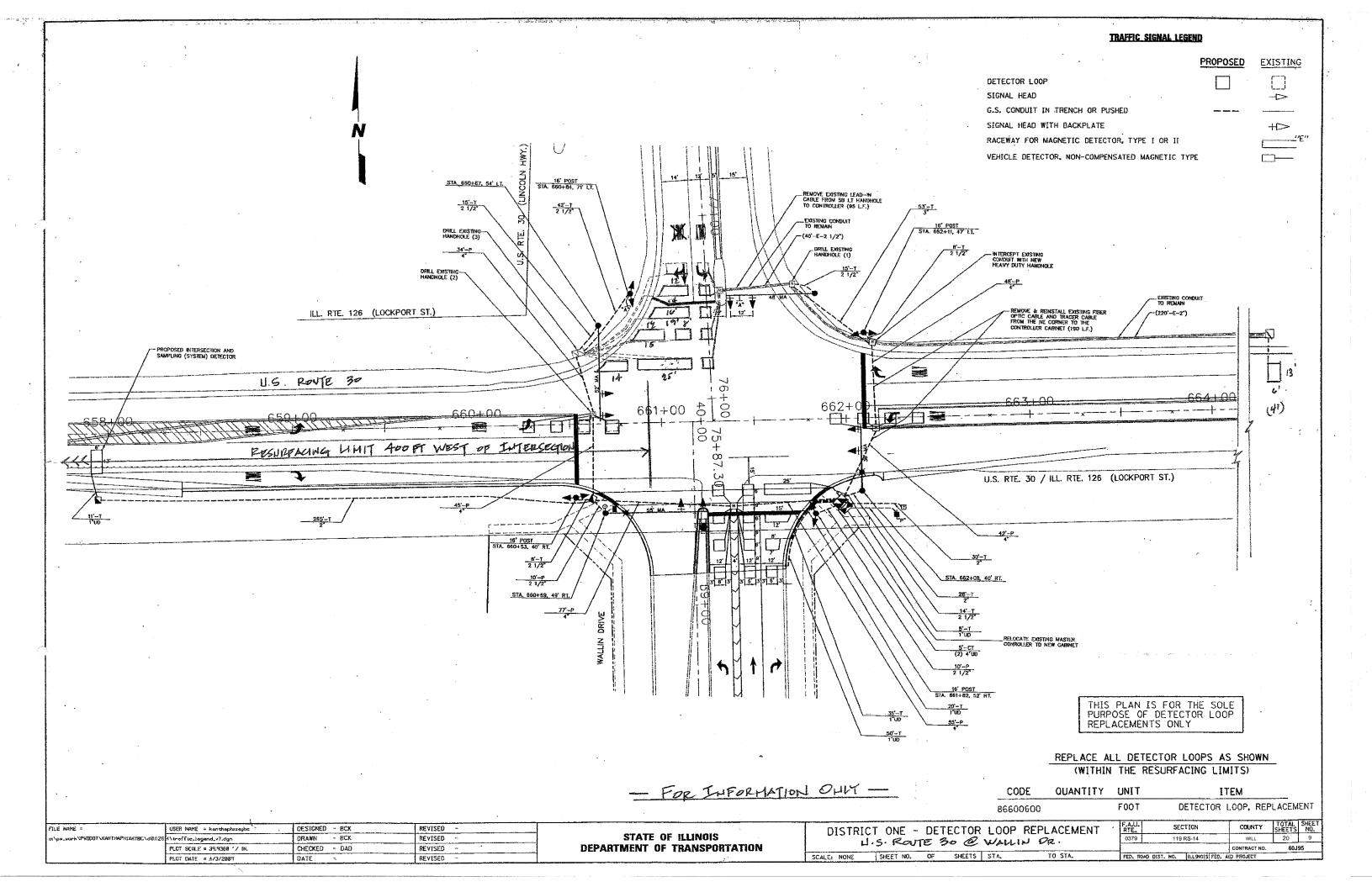
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

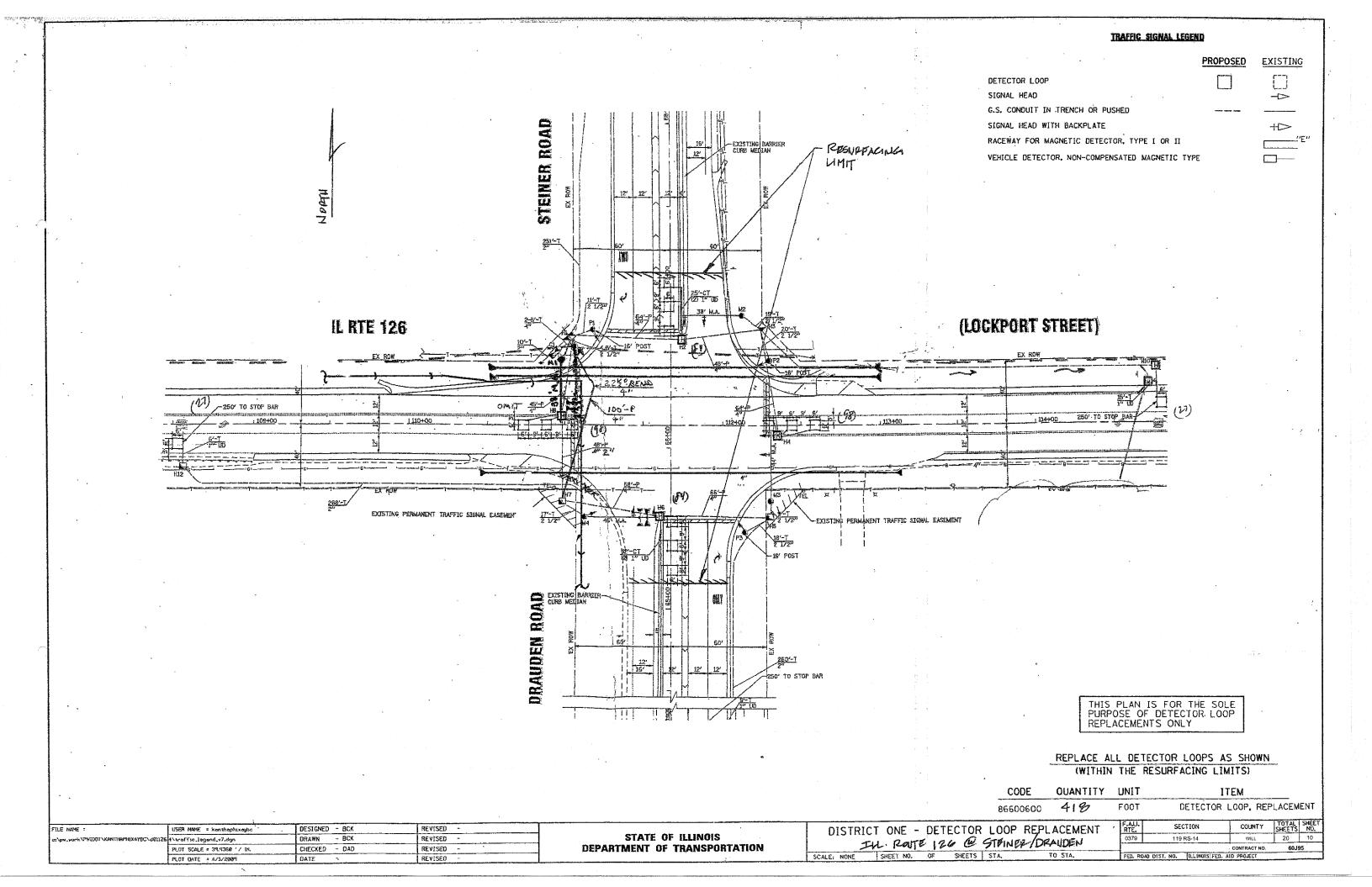
**ILLINOIS ROUTE 126** COUNTY LINE ROAD TO WALLIN DRIVE **ROADWAY PLAN** 

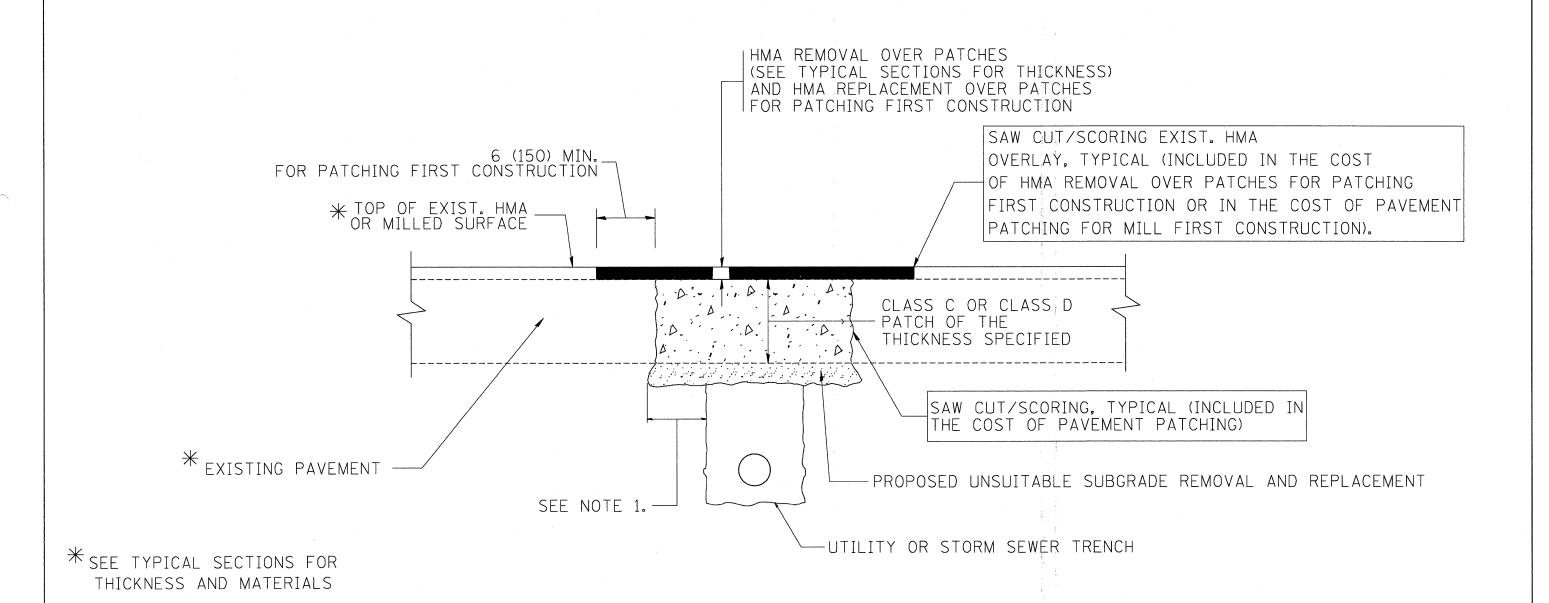
COUNTY TOTAL SHEET NO. SECTION CONTRACT NO. 60J95

SCALE: 1"=50" SHEET NO. OF SHEETS STA. 638+00 TO STA. 665+00 FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

MILLENNIA PROFESSIONAL SERVICES DATE







### 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)

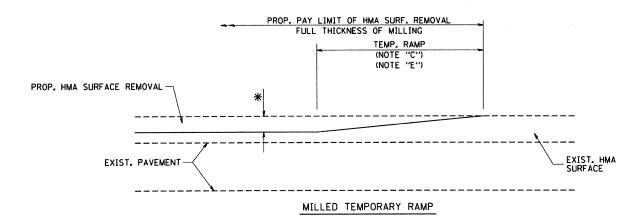
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 4/2 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.

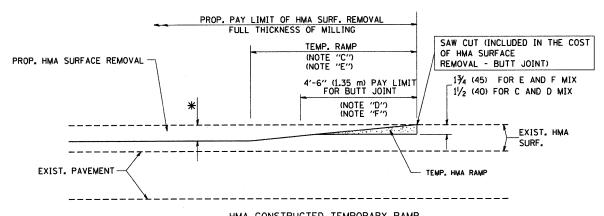
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60J95
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		0379 119 RS-14	WILL 20 11
FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED ~ A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY TOTAL SHEET NO.



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

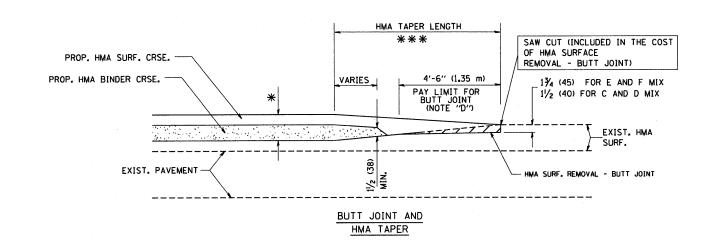
### OPTION 1



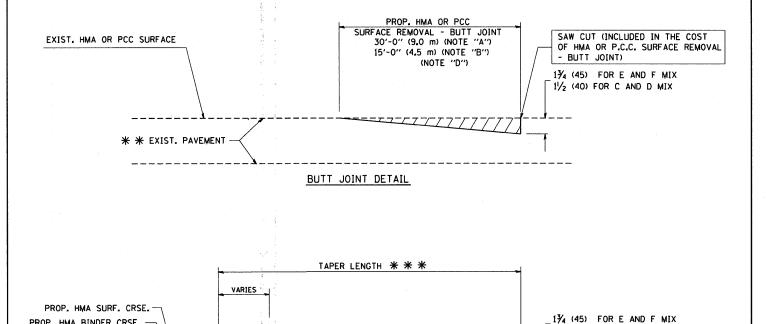
HMA CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

### OPTION 2

### TYPICAL TEMPORARY RAMP



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



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

HMA TAPER DETAIL

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

\* \* EXIST. PAVEMENT

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.

PROP. HMA BINDER CRSE.

- 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 SQUARE YARD (SQUARE METER)
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

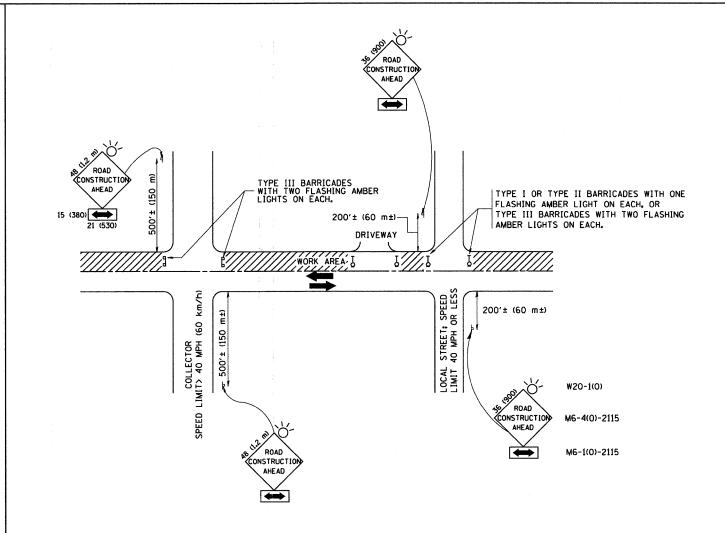
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

400.00

11/2 (40) FOR C AND D MIX

FILE NAME = W:\d:ststd\22x34\bd32.dgn	USER NAME = gaglianobt  PLOT SCALE = 50.00000 '/ IN.	DESIGNED - M. DE YONG DRAWN - CHECKED -	REVISED - R. SHAH 10-25-94   REVISED - A. ABBAS 03-21-97   REVISED - M. GOMEZ 04-06-01	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		BU' HMA
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07	DEFARIMENT OF TRANSFORTATION	SCALE: NONE	SHEET NO. 1 OF 1

	BU	TT JOINT A	ND		F.A.P. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		TAPER DE			0379	119 RS-14	WILL	20	12
	DINIA	IAFEN DE	IAILS			BD400-05 BD32	CONTRACT	NO. 6	0J95
ONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		



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:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) 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:
- o) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 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 SINCLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

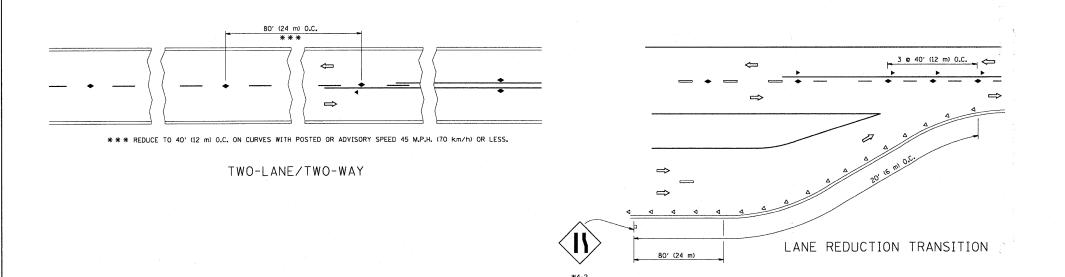
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL 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.

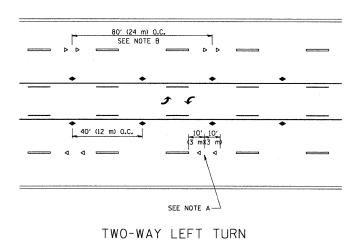
All dimensions are in millimeters (inches) unless otherwise shown.

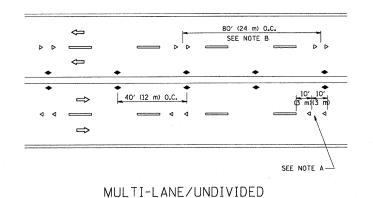
FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\diststd\22x34\tc10.dgn	-	DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

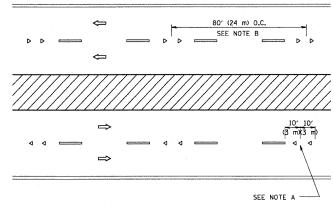
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

,	TRAFFIC	CONTR	OL AND P	ROTECTION	FOR
	SIDE ROAD	S, INTEI	RSECTIONS	, AND DRI	VEWAYS
SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.









MULTI-LANE/DIVIDED

### GENERAL NOTES

- 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.
- 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.

SCALE:

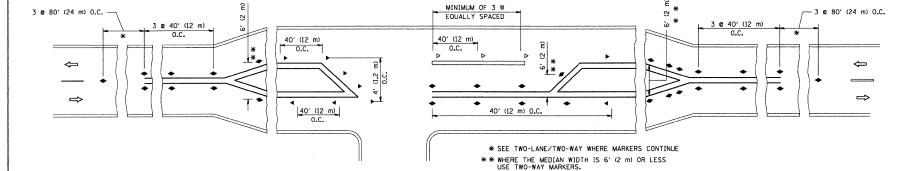
B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

### SYMBOLS

---- YELLOW STRIPE

WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER



LEFT TURN

### DESIGN NOTES

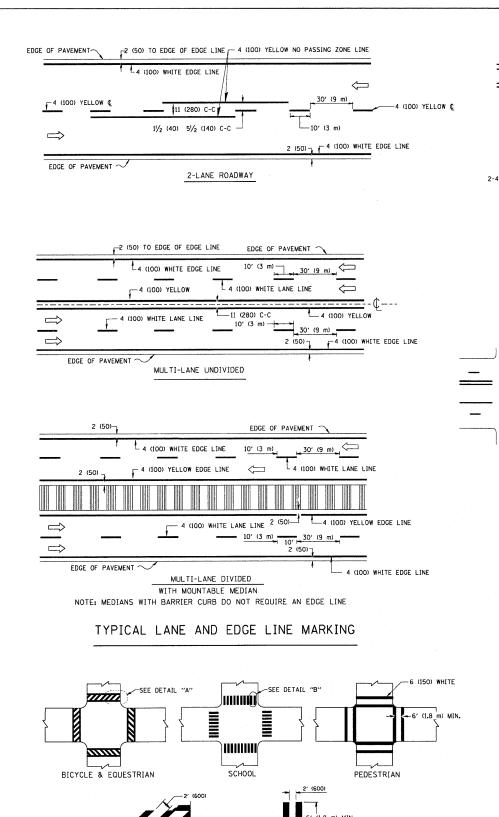
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RICHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED	-T. RAMMACHER 09-19-94
c:\pw_work\pwidot\drivakosgn\dØ108315\tc	11.dgn	DRAWN -	REVISED	T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED	T. RAMMACHER 01-06-00
	PLOT DATE = 9/9/2009	DATE -	REVISED	- C. JUCIUS 09-09-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		TYPICAL	APPLICAT	TIONS	
RAISED	REFLECTIVE	PAVEMENT	MARKER	S (SNOW-PLOW	RESISTANT)
NONE	SHEET NO	). 1 OF 1	SHEETS	STA.	TO STA.



6 (150) WHITE

TYPICAL CROSSWALK MARKING

DETAIL "A"

USER NAME = drivakosgn

PLOT SCALE = 50.000 '/ IN.

PLOT DATE = 9/9/2009

FILE NAME =

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12 (300) WHITE

DESIGNED - EVERS

03-19-90

DETAIL "B"

DRAWN

DATE

CHECKED

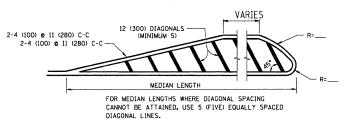
2-4 (100) YELLOW @ 11 (280) C-C

NO DIAGONALS

4' (1,2 m) OUTSIDE TO OUTSIDE OF LINES

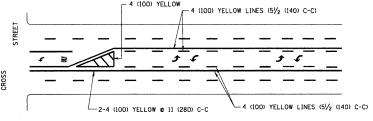
2-4 (100) YELLOW @ 11 (280) C-C

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

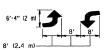


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) T0 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

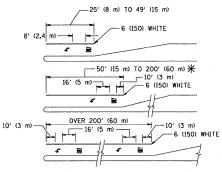


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

### TYPICAL PAINTED MEDIAN MARKING

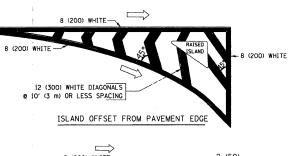


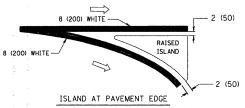
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m²)  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

\*\* 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 ARROW - "ONLY".

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 <b>c</b> 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; 5½ (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 WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERNISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 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 THIORE TANKED INEDIAN HAMANO.
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 (0VER 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 OF: "R""3-3.6 SO. FT. (0.33 m <sup>2</sup> ) EACH "X""54.0 SO. FT. (5.0 m <sup>2</sup> )
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.

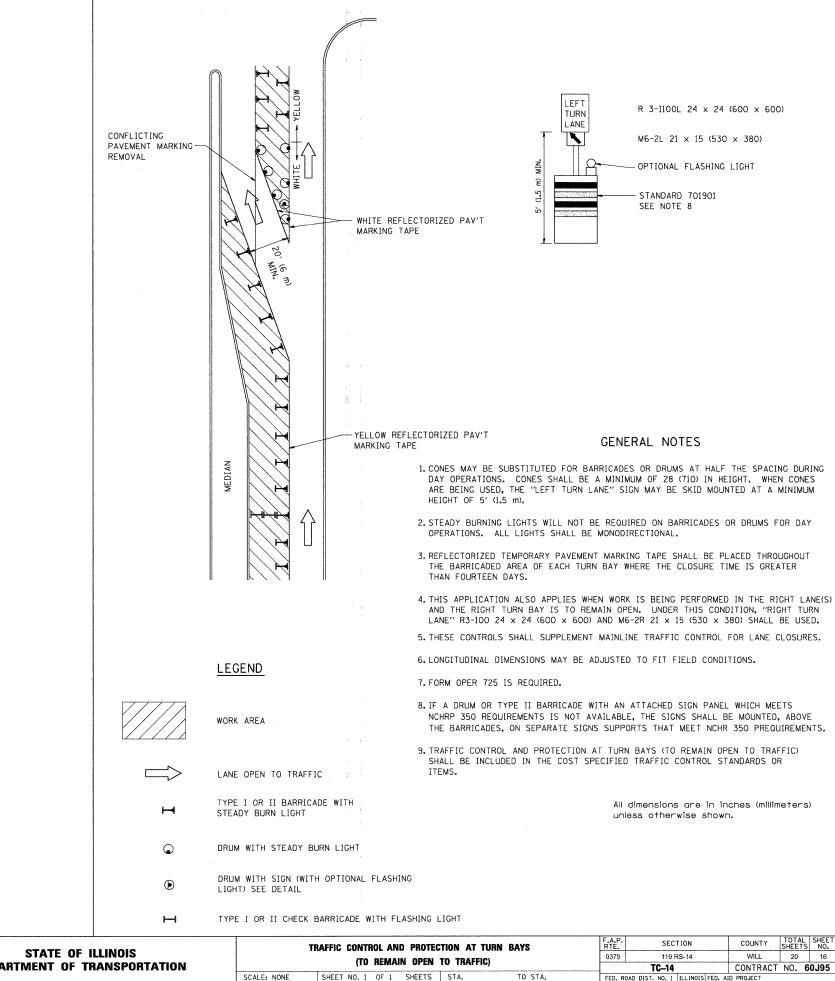
REVISED	-T. RAMMACHER 10-27-94
REVISED	-C. JUCIUS 09-09-09

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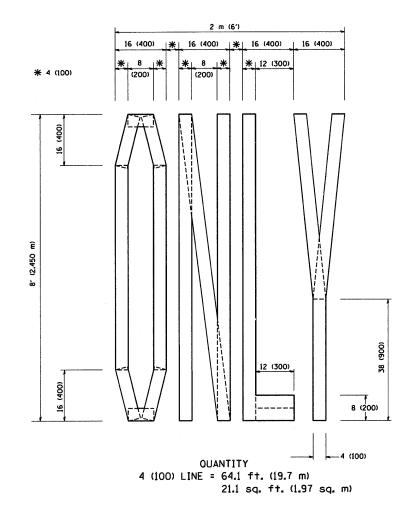
	STATE	OF	ILLINOIS	
DEPARTN	IENT	OF	<b>TRANSPO</b>	RTATION

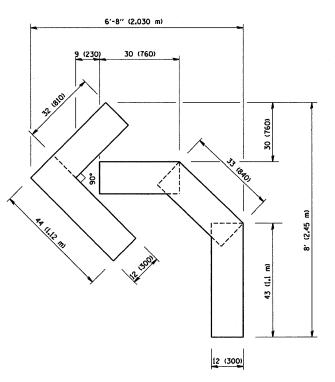
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	TYPICAL PAVEMENT MARKINGS					0379	119 RS-14	WILL	20	15
							TC-13	CONTRACT	NO. 6	0J95
	SCALE: NONE	SHEET NO. 1 OF	1 SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		



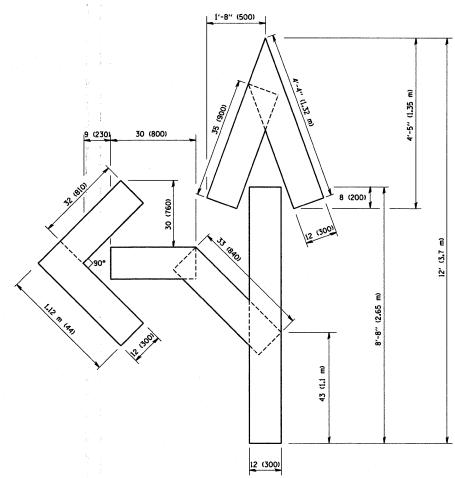
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**DEPARTMENT OF TRANSPORTATION** 





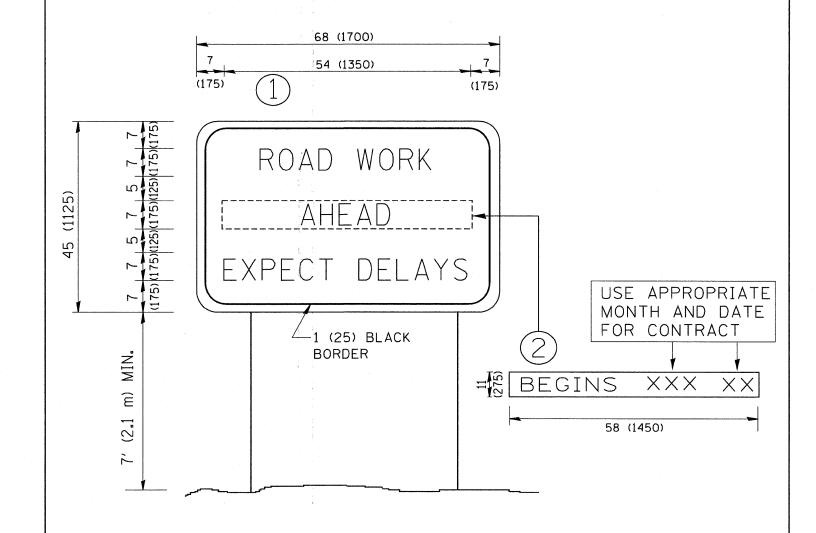
OUANTITY 4 (100) LINE = 45.5 ft.(13.9 m) 15.2 sq. ft.(1.39 sq. m)



QUANTITY 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.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING		F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
Ws\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97				0379	119 RS-14	WILL	20	17
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION				TC-16	CONTRAC	T NO. F	0J95
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD I	DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



# 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.

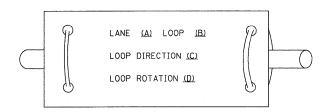
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

L		PLOT DATE = 1/4/2008	DATE -	REVISED -	C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO.	1 OF	1 SHEE	ETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		
		PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -1	T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION				VLUKINA	IIUN	21GM			TC-22	CONTRACT	T NO. 60	0J95
- 1	W:\diststd\22x34\tc22.dgn		DRAWN ~	REVISED -	R. MIRS 12-11-97	STATE OF ILLINOIS				VFORMA:				0379	119 RS-14	WILL	20	18
[i	FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -	R. MIRS 09-15-97					ARTERIA	I ROA	\n		F.A.P.	SECTION	COUNTY	SHEETS	SHEET I

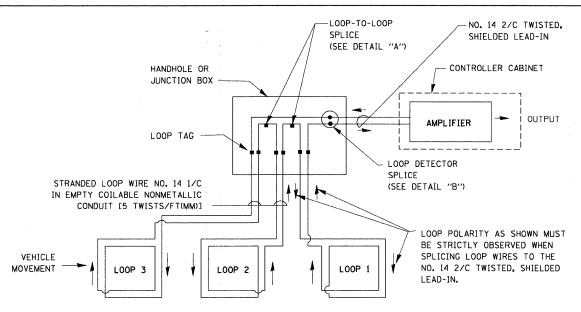
### LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

### LOOP LEAD-IN CABLE TAG

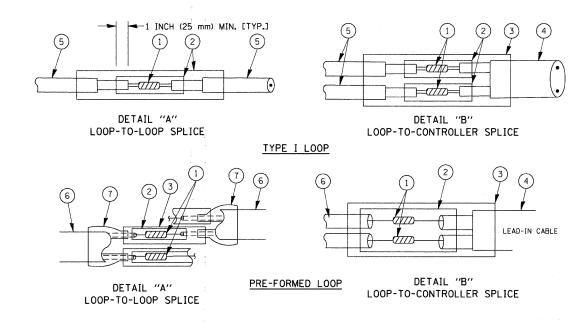


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
   THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



### LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR

(7)	BREAKOUT	SEALS.	TYCO	CBR-2	OR	APPROVED	EQUAL

FILE NAME =	USER NAME = bauerdl	DESIGNED -	DAD	REVISED ~
c:\pw_work\PWIDOT\BAUERDL\d01083!5\ts05	dgn	DRAWN -	BCK	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	DAD	REVISED -
	PLOT DATE = 11/4/2009	DATE -	10-28-09	REVISED -

	STATI	E OF	ILLINOIS	
DEPART	MENT	OF	TRANSPO	RTATION

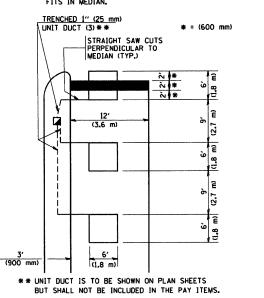
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١	STANDARD TRAFFIC SIGNAL DESIGN DETAILS				0379	119 RS-14	WILL	20	19
1		SIANDAND INAFFIC SIGNA		T\$-05	CONTRACT	NO. 6	60J95		
	SCALE: NONE	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		

# 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 \*\* = (600 mm) \*\* \*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

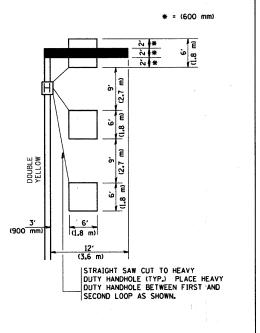
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD BIADOL TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



NOTE: DUAL LEFT TURNS NOT SHOWN REFER 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)

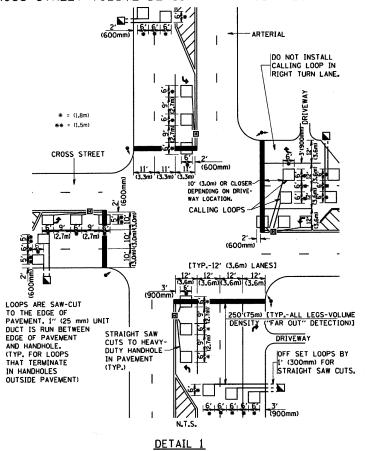


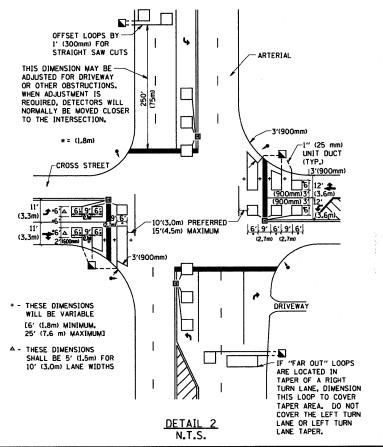
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE NONE

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.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION

DETAILS FOR ROADWAY RESURFACING

SHEET NO. 1 OF 1 SHEETS STA. TO STA.