### STATE OF ILLINOIS

### DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

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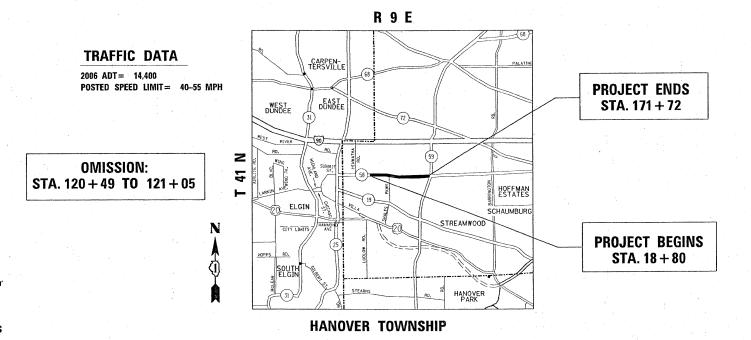
 $\circ$ 

PROJECT LOCATED IN THE CITY OF ELGIN AND VILLAGE OF HOFFMAN ESTATES

# PROPOSED HIGHWAY PLANS

FAU ROUTE 1320 /ILL 58 (GOLF RD.)
SECTION: 581 RS-1
SHADY OAKS DR. TO ILL 59 (SUTTON RD.)
RESURFACING (3P)

COOK COUNTY C-91-066-09



GROSS LENGTH OF PROJECT = 15.292 LIN. FT. = 2.90 MILES

NET LENGTH OF PROJECT = 15,236 LIN. FT. = 2.89 MILES

CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT

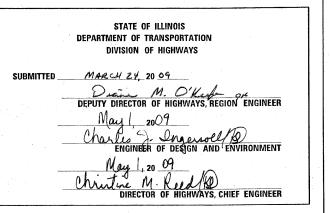
PROJECT ENGINEER: DANIEL WILGREEN /(847) 705-4240
PROJECT MANAGER: KEN ENG /(847) 705-4247

**CONTRACT NO. 60F35** 

1-800-892-0123

#### D-91-066-09





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

### INDEX OF SHEETS

SHE	ET NO.	DESCRIPTION
	1	COVER SHEET
	2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
	3	SUMMARY OF QUANTITIES
	4-5	TYPICAL SECTIONS
	6-11	ROADWAY AND PAVEMENT MARKING PLANS
	12	DETECTOR LOOP REPLACEMENT PLANS
	13	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
	14	BUTT JOINT AND HMA TAPER DETAILS
	15	TRAFFIC CONTROL AND PROTECTION FOR SIDEROADS, INTERSECTIONS, AND DRIVEWAYS
	16	TYPICAL APPLICATION FOR RAISED REFLECTIVE PAVEMENT MARKERS
	17	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
	18	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
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	20	ARTERIAL ROAD INFORMATION SIGN
	21	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING

### STATE STANDARDS

000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

442201-03 CLASS C AND D PATCHES

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

701306-02 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATION DAY ONLY FOR SPEEDS  $\geq$  45 MPH

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

701606-00 URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN

701701-04 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701901-01 TRAFFIC CONTROL DEVICES

### GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION REQUIRED).

10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTERS AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF ELGIN AND VILLAGE OF HOFFMAN ESTATES.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1½ INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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 SPECIFIED.

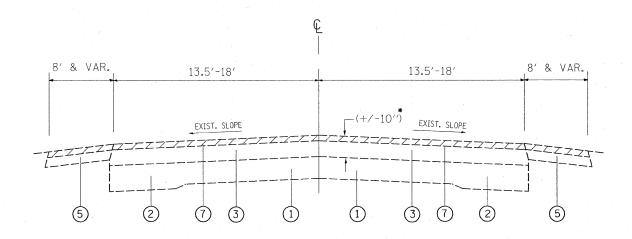
THE RESIDENT ENGINEER SHALL CONTACT MR. WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT (847) 715-8419 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MININMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF TEMPORARY TRAFFIC CONTROL DEVICES.

THE RESIDENT ENGINEER SHALL DETERMINE THE LOCATIONS OF CLASS "D" PATCHES.

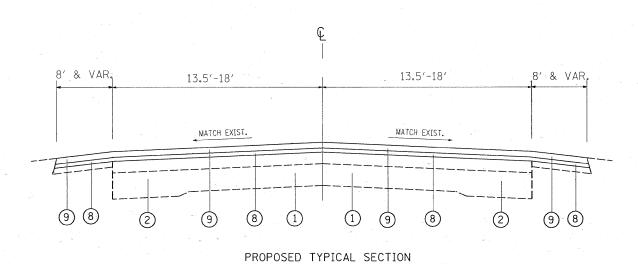
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	SUMMARY OF QUANTITIES		100%.STATE			CONSTRUCT	ION TYPE	CODE	T		SUMMAR	Y OF QUANTITIES		100 % STATE	-	С	ONSTRUCTI	ON TYPE C	ODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN IOOO	×					CODE NO		ITEM	UNIT	TOTAL	URBAN IOOO					
20201006	GRADING AND SHAPING SHOULDERS	UNIT	301	301						¥ 78000500	THERMOPLASTIC	PAVEMENT MARKING	FOOT	105	105					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	23	23	· ·			, ,		¥ 78000600		PAVEMENT MARKING	FOOT	270	270		÷			-
40600300	AGGREGATE (PRIME COAT)	TON	113	113						7000000	- LINE 12"	TATEMENT MARKING	1001	210						
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	17	17	. 1				·	<b>⊀</b> 78000650	THERMOPLASTIC	PAVEMENT MARKING	FOOT	260	260					
40600895	CONSTRUCTING TEST STRIP	EACH	1	1			-			<del>X</del> 78100100	RAISED REFLEC	CTIVE PAVEMENT MARKER	EACH	460	460					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	314	314			-			78300200	RAISED REFLEC	TIVE PAVEMENT MARKER	EACH	460	460			,		
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	4893	4893		· · · · ·				* 88600600	DETECTOR LOOF	REPLACEMENT	FOOT	404	404					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 /4"	SQ YD	56547	56547						X0322256		ORMATION SIGNING EVELING BINDER (MACHINE	SQ FT TON	51. 4 2294	51. 4					
44201839	CLASS D PATCHES, TYPE II, 16 INCH	SQ YD	5224	5224							METHOD), IL-	4.75, N50								
44201843	CLASS D PATCHES, TYPE III, 16 INCH	SQ YD	128	128						Z0048665	RAILROAD PROT	ECTIVE LIABILITY INSURANCE	L SUM	1	1			-		
44201845	CLASS D PATCHES, TYPE IV, 16 INCH	SQ YD	354	354															,	
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	1205	1205											-					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	,															
67100100	MOBILIZATION	L SUM	1	1		1	,													
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1																
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1	,															
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	·										, tra					
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	7065	7065																
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	500	500										·						
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	53090	53090												- 1		e akke saka		
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1950	1950			. 4											-		
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	105	105											-					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	270	270										, ,	-		*			-
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	260	260															· · · · · · · · · · · · · · · · · · ·	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	800	800	1						· .									
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	500	500			1 82			:										
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	53090	53090																
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1950	1950		-									-					-
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### EXISTING TYPICAL SECTION

IL ROUTE 58 (GOLF ROAD) STA. 18+80 TO STA. 26+85



IL ROUTE 58 (GOLF ROAD) STA. 18+80 TO STA. 26+85

### LEGEND

- (1) EXISTING P.C.C. PAVEMENT, 8" (+/-)
- 2 EXISTING P.C.C. WIDENING
- (3) EXISTING HMA SURFACE COURSE, 10" (+/-)
- 4 EXISTING AGGREGATE SHOULDER
- 5 EXISTING HMA SHOULDER
- 6 EXISTING CONCRETE MEDIAN (CORRUGAED)
- (7) PROPOSED HMA SURFACE REMOVAL, 2 1/4 "
- 8 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- 9 PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2 "
- 10 PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- \* CONTRACTOR SHALL MILL FIRST BEFORE PATCHING

HOT-MIX ASPHALT MIX	TURE REQUIR	EMENTS
MIXTURE USES	AC TYPE	DESIGN AIR VOIDS
HMA SURFACE COURSE, MIX "D", N7O (IL-9.5 mm)	PG 64-22	4% AT 70 GYR.
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% AT 50 GYR.
CLASS D PATCHES, (HMA BINDER IL-19.0 mm)	* PG 64-22	4% AT 70 GYR.

### NOTES:

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE COURSE MIXTURES IS

112 LBS/SY/IN

THE NEW ACRUAL PRINCE IN THE NEW ACRUAL PRINCE IN THE NEW CHARLES IN THE NEW ACRUAL PRINCE IN THE NEW ACRUAL PR

\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

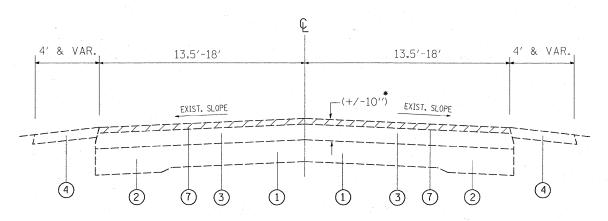
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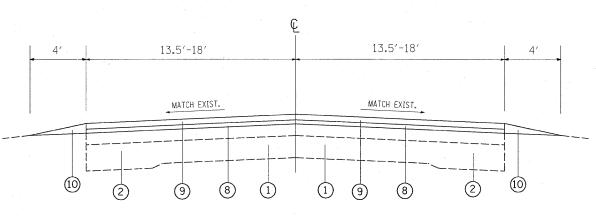
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E.		SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
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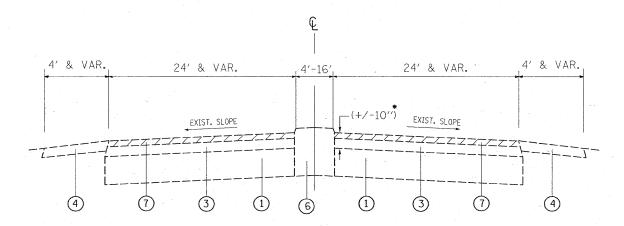
### EXISTING TYPICAL SECTION

IL ROUTE 58 (GOLF ROAD) STA. 26+85 TO STA. 120+49 STA. 121+05 TO STA. 170+00



### PROPOSED TYPICAL SECTION

IL ROUTE 58 (GOLF ROAD) STA. 26+85 TO STA. 120+49 STA. 121+05 TO STA. 170+00

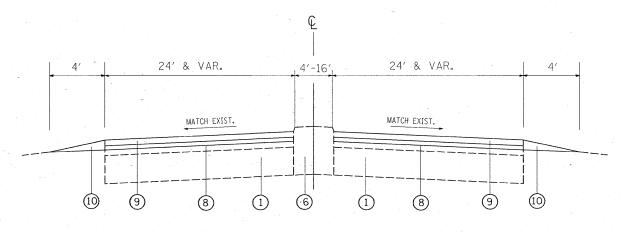


### EXISTING TYPICAL SECTION

IL ROUTE 58 (GOLF ROAD) STA. 170+00 TO STA. 171+72

### LEGEND

- 1 EXISTING P.C.C. PAVEMENT, 8" (+/-)
- (2) EXISTING P.C.C. WIDENING
- 3 EXISTING HMA SURFACE COURSE, 10" (+/-)
- 4 EXISTING AGGREGATE SHOULDER
- 5 EXISTING HMA SHOULDER
- 6 EXISTING CONCRETE MEDIAN (CORRUGAED)
- 7 PROPOSED HMA SURFACE REMOVAL, 2 1/4 "
- (8) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4 "
- 9 PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2 "
- (10) PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- \* CONTRACTOR SHALL MILL FIRST BEFORE PATCHING



### PROPOSED TYPICAL SECTION

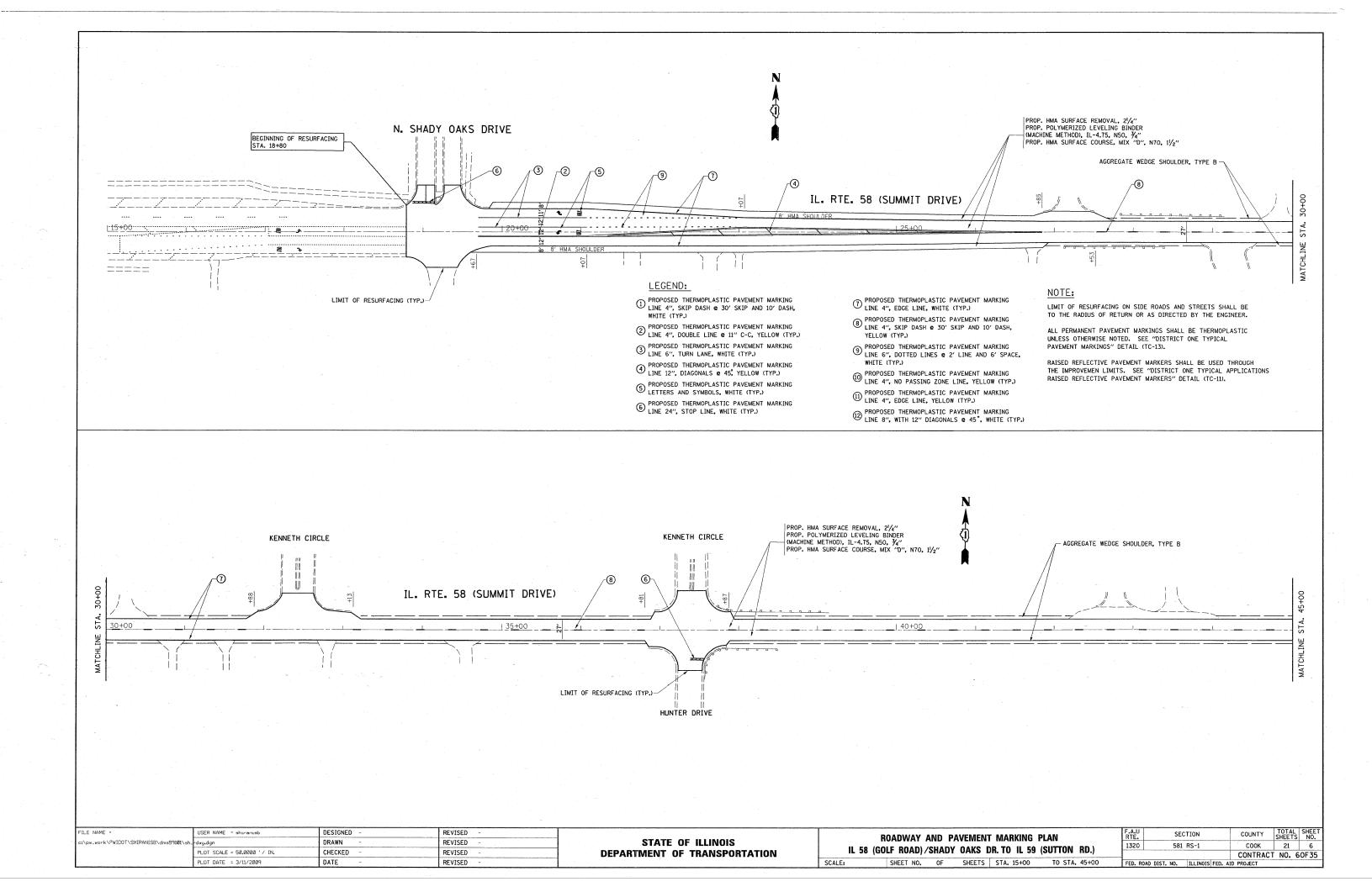
IL ROUTE 58 (GOLF ROAD) STA. 170+00 TO STA. 171+72

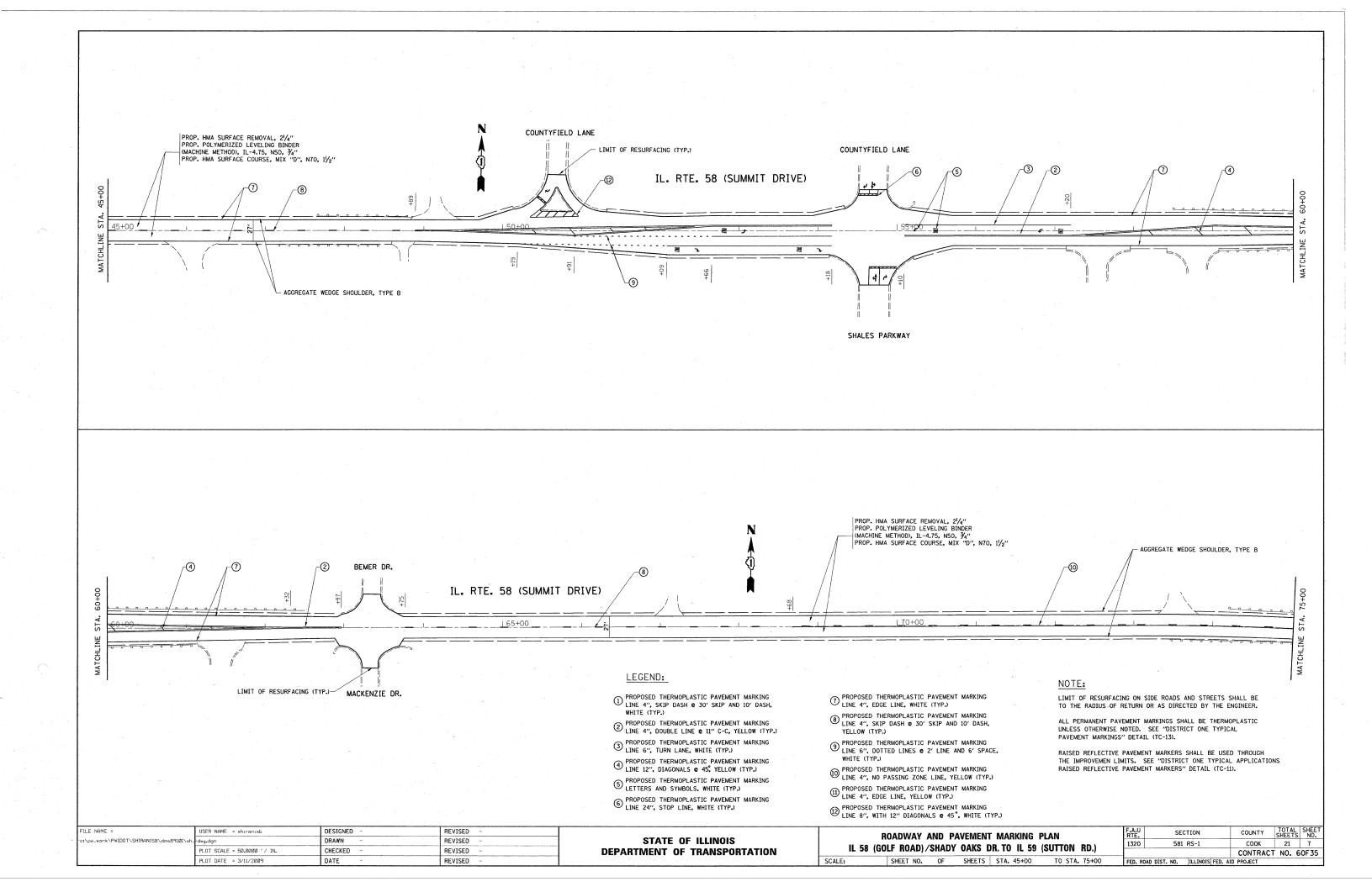
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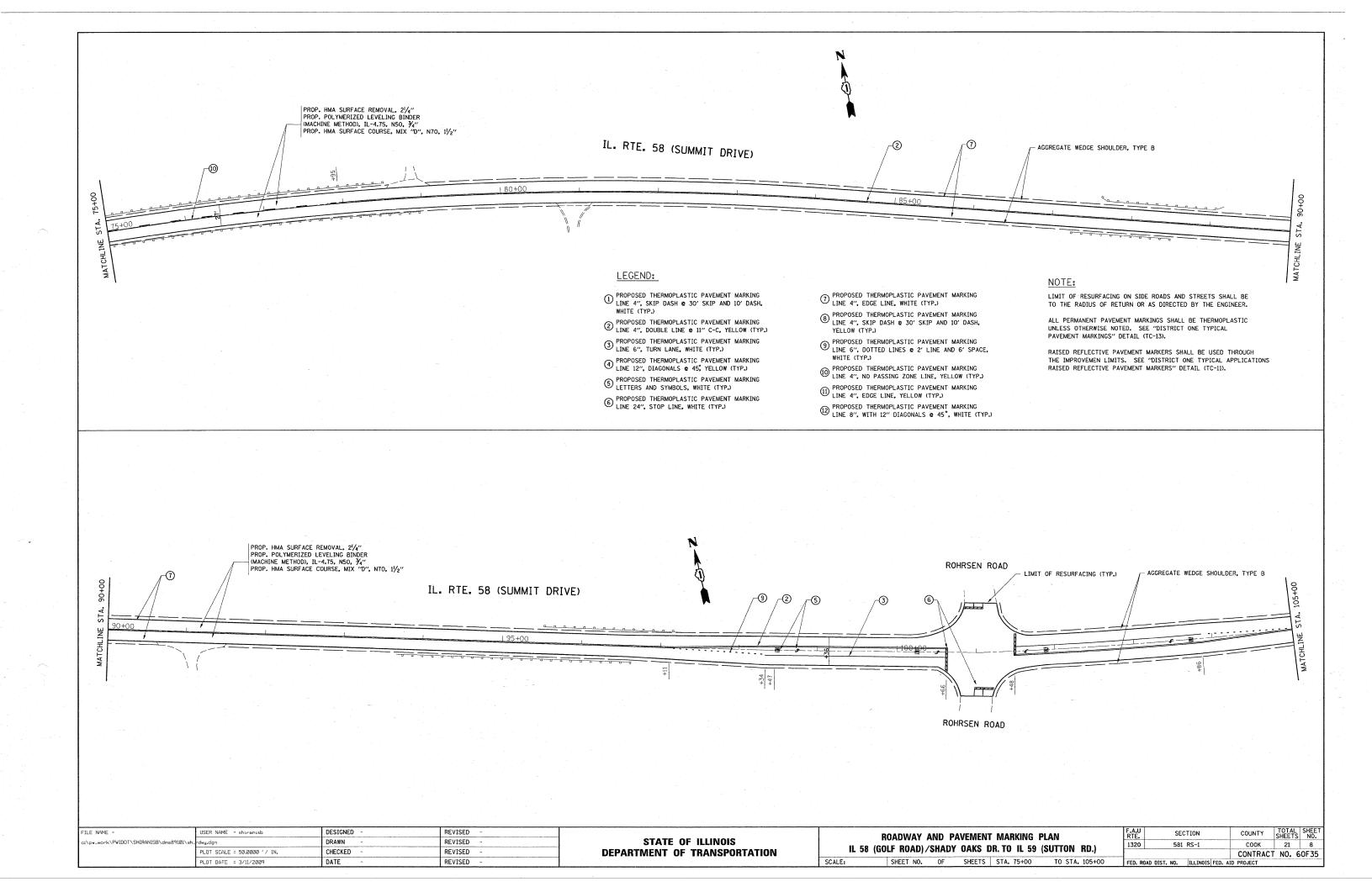
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DEPARTMENT OF TRANSPORTATION

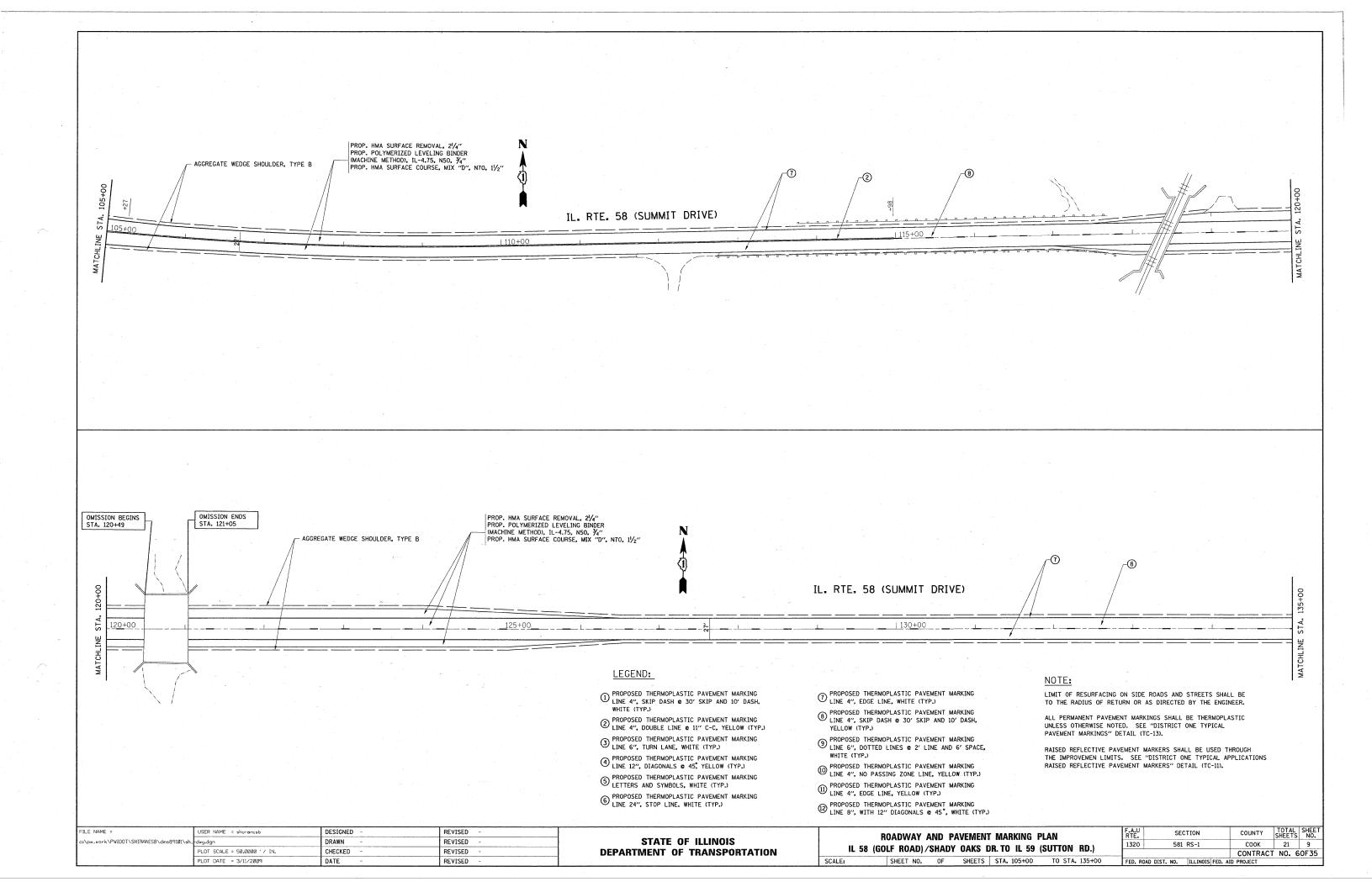
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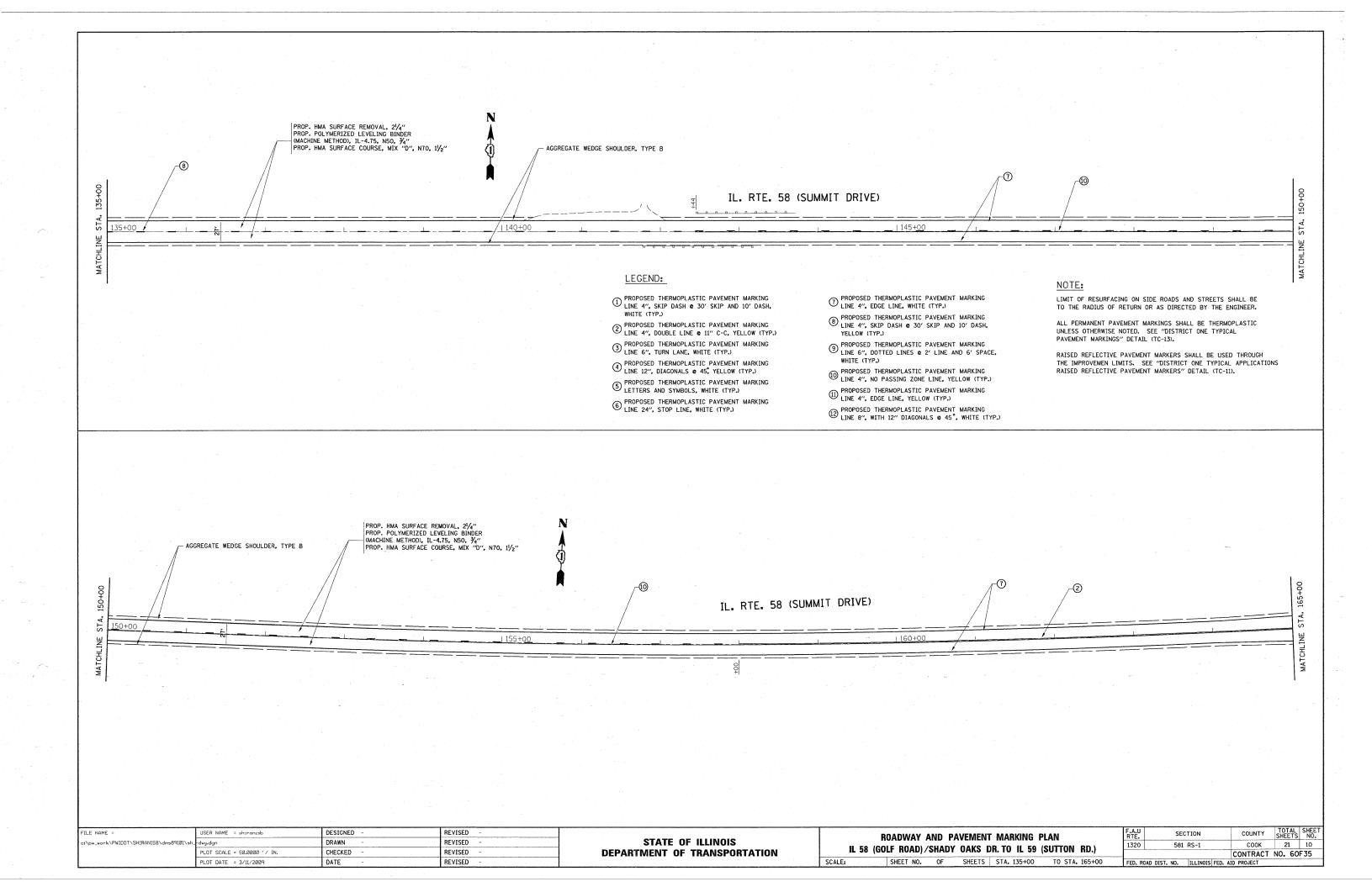
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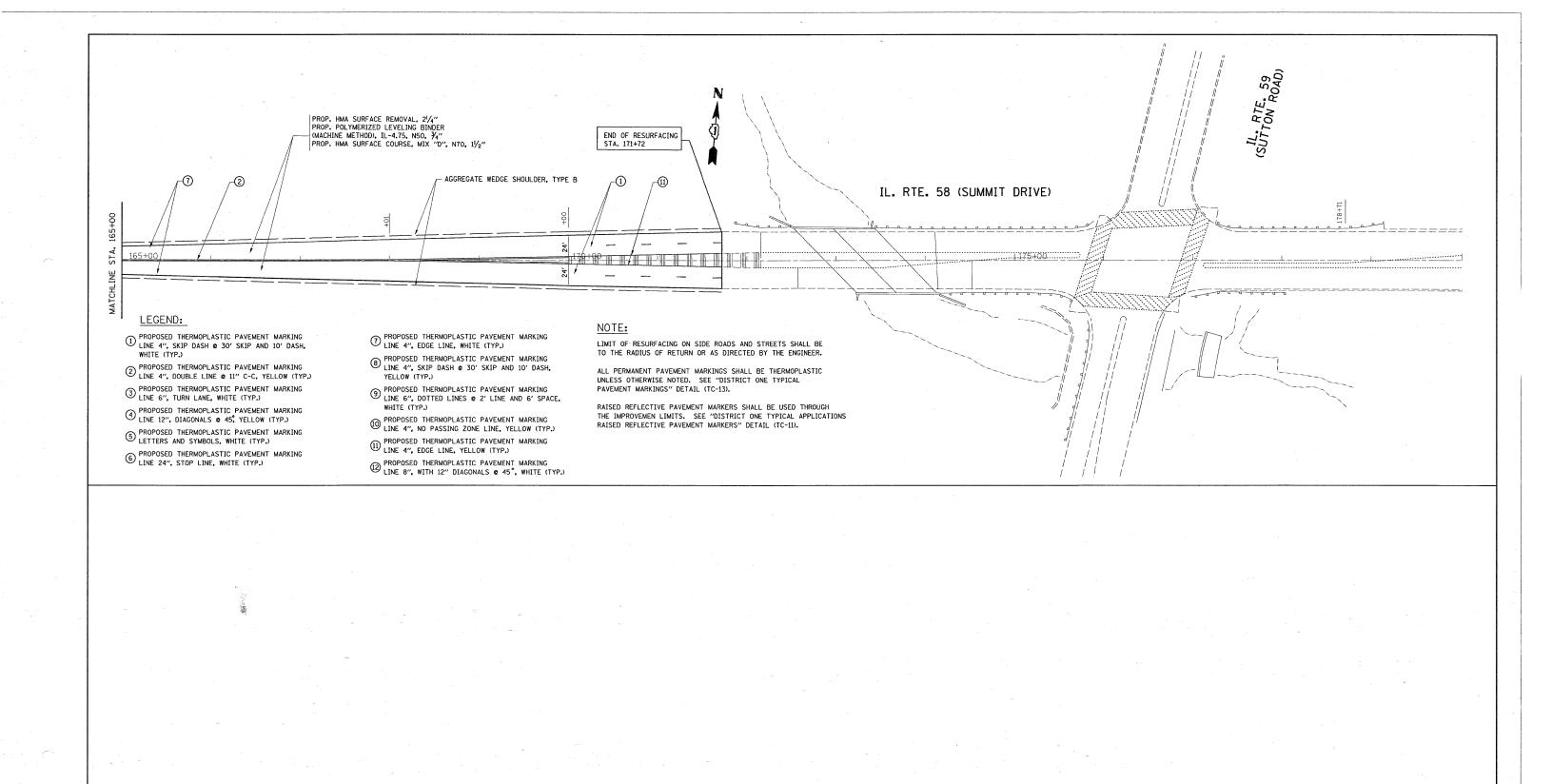








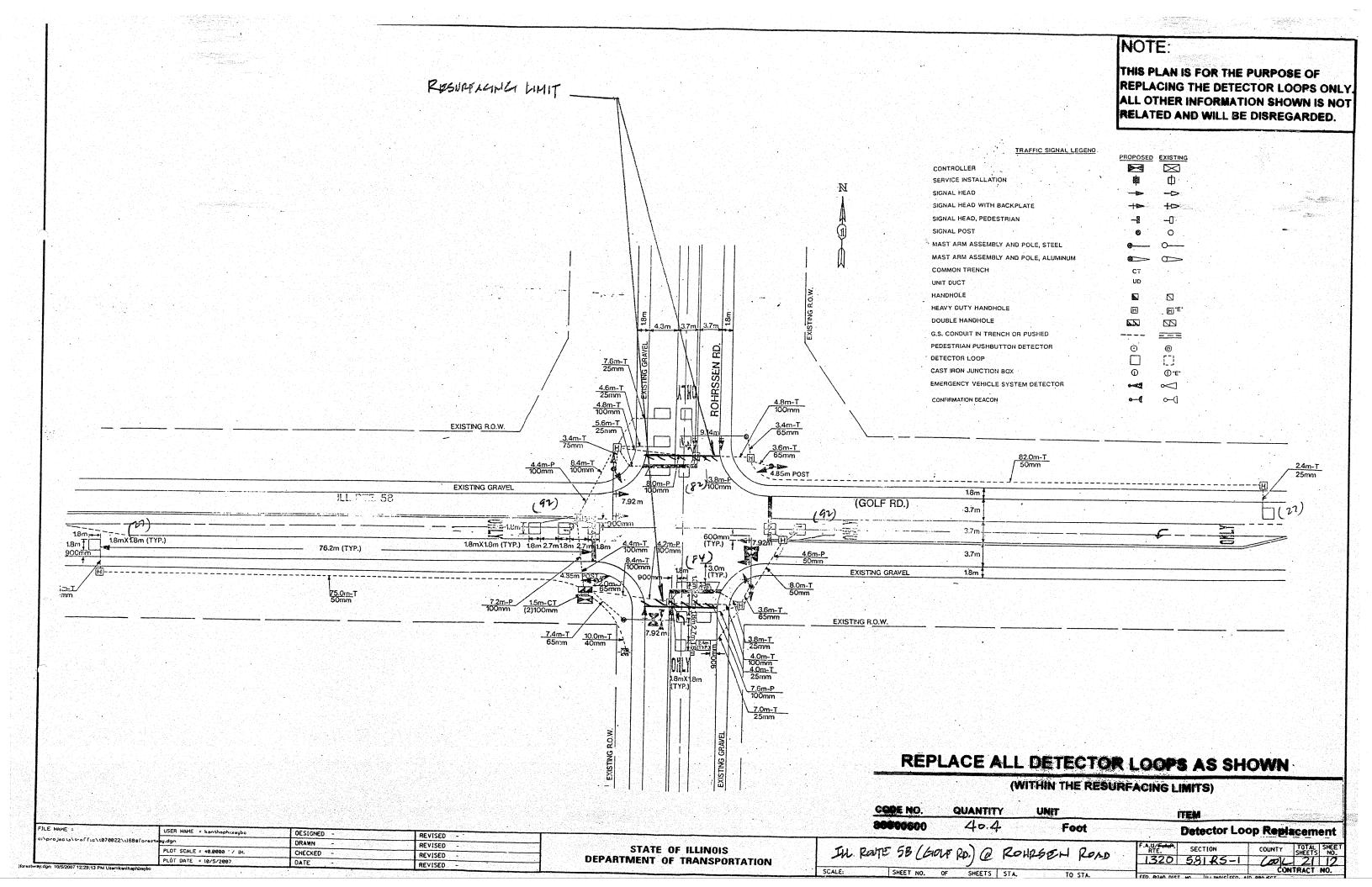


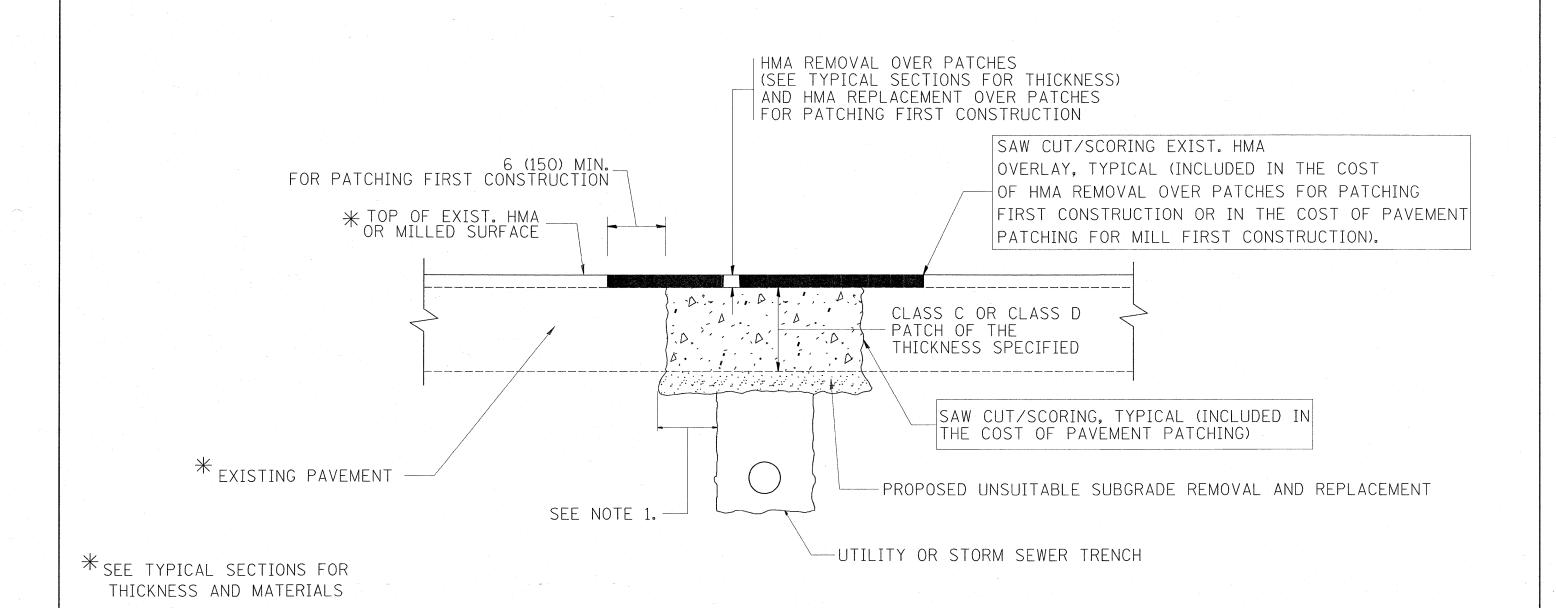


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R	ROADWAY AND PAVEMENT MARKING PLAN										
IL 58 (GO	LF ROAD)	/SHADY	OAKS I	OR. TO IL 59	(SUTTON	RD.)					
-	SHEET NO.	OF	SHEETS	STA. 165+00	TO STA.	180+00					

-		DAD DIST. NO.		~~~	CONTRACT ID PROJECT	NO. 60	F35
	1320	- 58	81 RS-1		COOK	21	11
	F.A.U RTE.	S	ECTION		COUNTY	TOTAL SHEETS	SHEET NO.





### 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)

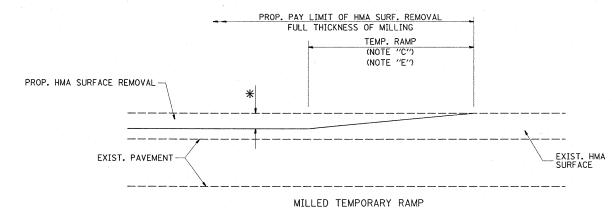
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### 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.

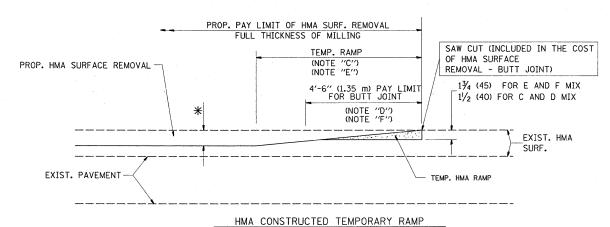
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

ı	FILE NAME =	USER NAME = sharanasb	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.U.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
- 1	P:\Detail-IL581\bd22.dgm		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		1320	581 RS-1	COOK	21 13
- 1		PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT		BD400-04 (BD-22)	CONTRACT	T NO. 60F35
		PLOT DATE = 3/7/2009	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS F	ED. AID PROJECT	



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

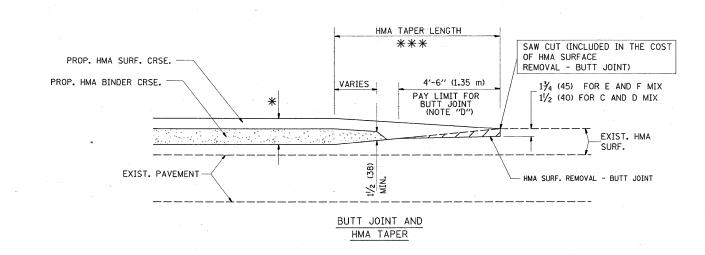
### OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

### OPTION 2

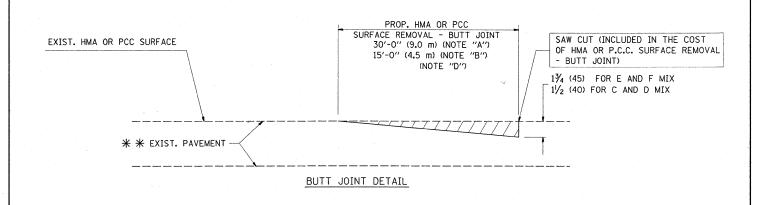
### TYPICAL TEMPORARY RAMP

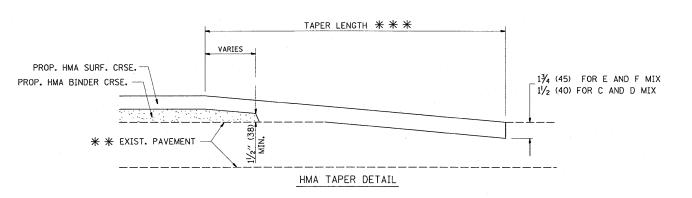


### TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = DESIGNED - M. DE YONG R. SHAH 10-25-94 JSER NAME = shiranisb ?:\Detail-IL581\bd32.dgn DRAWN REVISED A. ABBAS 03-21-97 PLOT SCALE = 49.9999 '/ IN CHECKED REVISED M. GOMEZ 04-06-01 DATE 06-13-90 REVISED R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





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

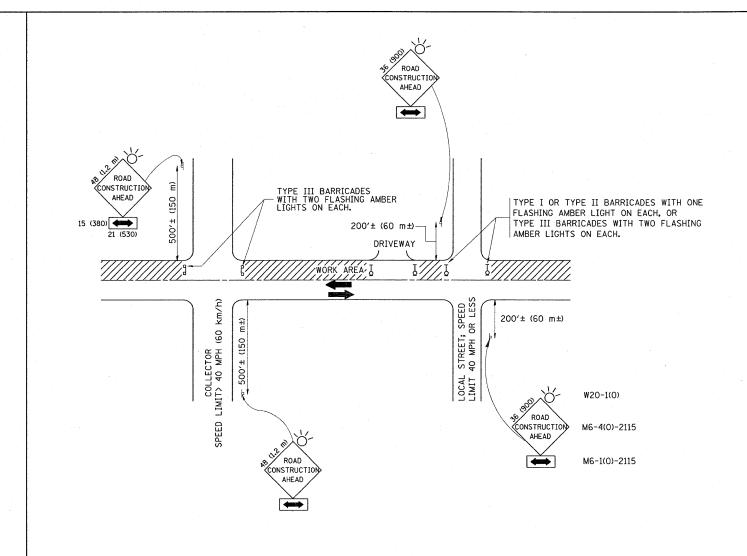
\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

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



### 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:
- Q) 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:
- 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.

SCALE: NONE

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).

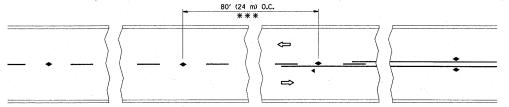
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL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

FILE NAME =	USER NAME = shiranisb	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
P:\Detail-[L58 \tol0.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
*	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
*	PLOT DATE = 3/7/2009	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

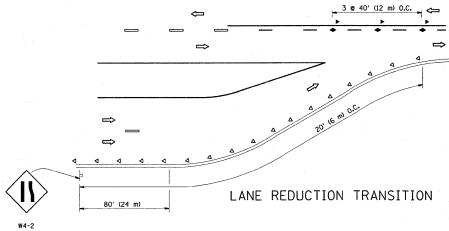
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

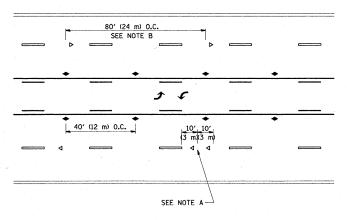
TR.	AFFI	C	CON	TR	OL AND	PF	ROTEC	TION	FOR	
SIDE	ROA	D	S, IN	TE	RSECTIO	NS,	AND	DRIV	EWAYS	\$
 SHEET	NO.	1	OF	1	SHEETS	<b>3</b> T	STA.			TO



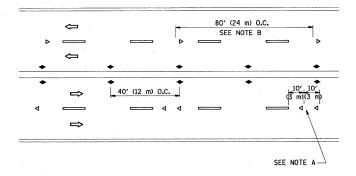
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

### TWO-LANE/TWO-WAY

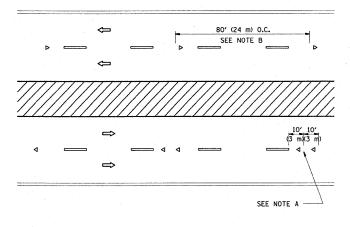




TWO-WAY LEFT TURN



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

- 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.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

### SYMBOLS

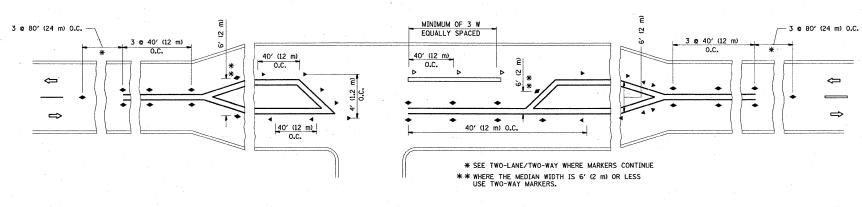
---- YELLOW STRIPE

WHITE STRIPE

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

### DESIGN NOTES

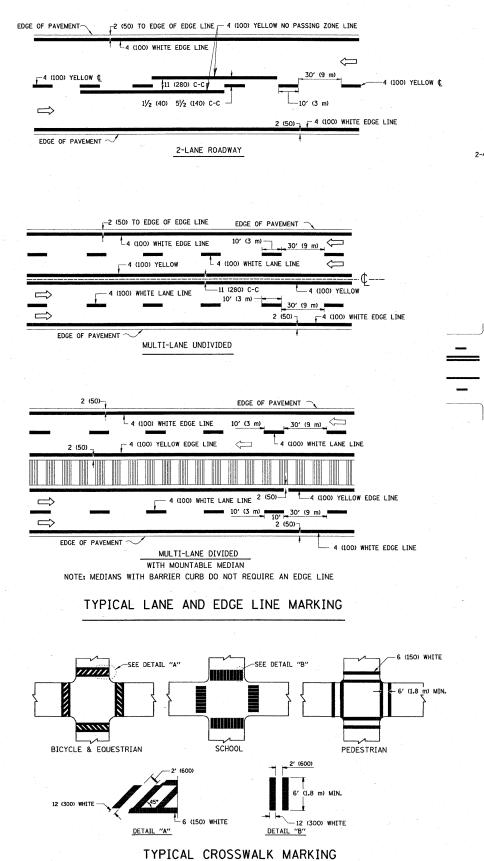
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY
  EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
  LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS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

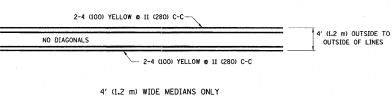


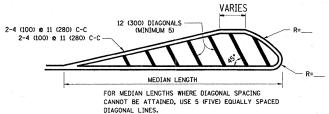
LEFT TURN

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

FILE NAME =	USER NAME = shiranish	DESIGNED -	REVISED	- T. RAMMACHER 09-19-94			TYPI	CAL APPLIC	ATIONS		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	HEET NO.
P:\Detail-IL581\tcl1.dgn		DRAWN -	REVISED -	-T. RAMMACHER 03-12-99	STATE OF ILLINOIS	DAIGED				DECICE ANT	1320	581 RS-1	COOK	21	16
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED	-T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	KAISEU	REFLECTIVE PAVEMI	NI WAKE	H2 (2MOAA-LFOAA	RESISTANT)		TC-11	CONTRACT	NO. 60	F35
	PLOT DATE = 3/7/2009	DATE -	REVISED	-		SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO. 1   ILLINOIS FED	. AID PROJECT		

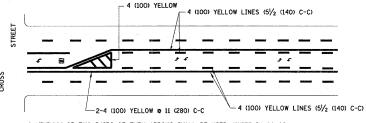




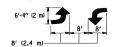


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

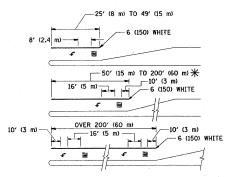


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR.



MEDIAN WITH TWO-WAY LEFT TURN LANE

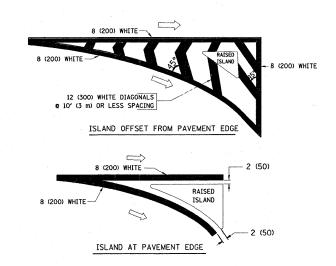
### TYPICAL PAINTED MEDIAN MARKING



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)

SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE



### 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 UNDIVEDED 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
ANE 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 SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
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 OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>©</b> 45°	SOLID	WHITE - RIGHT	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.

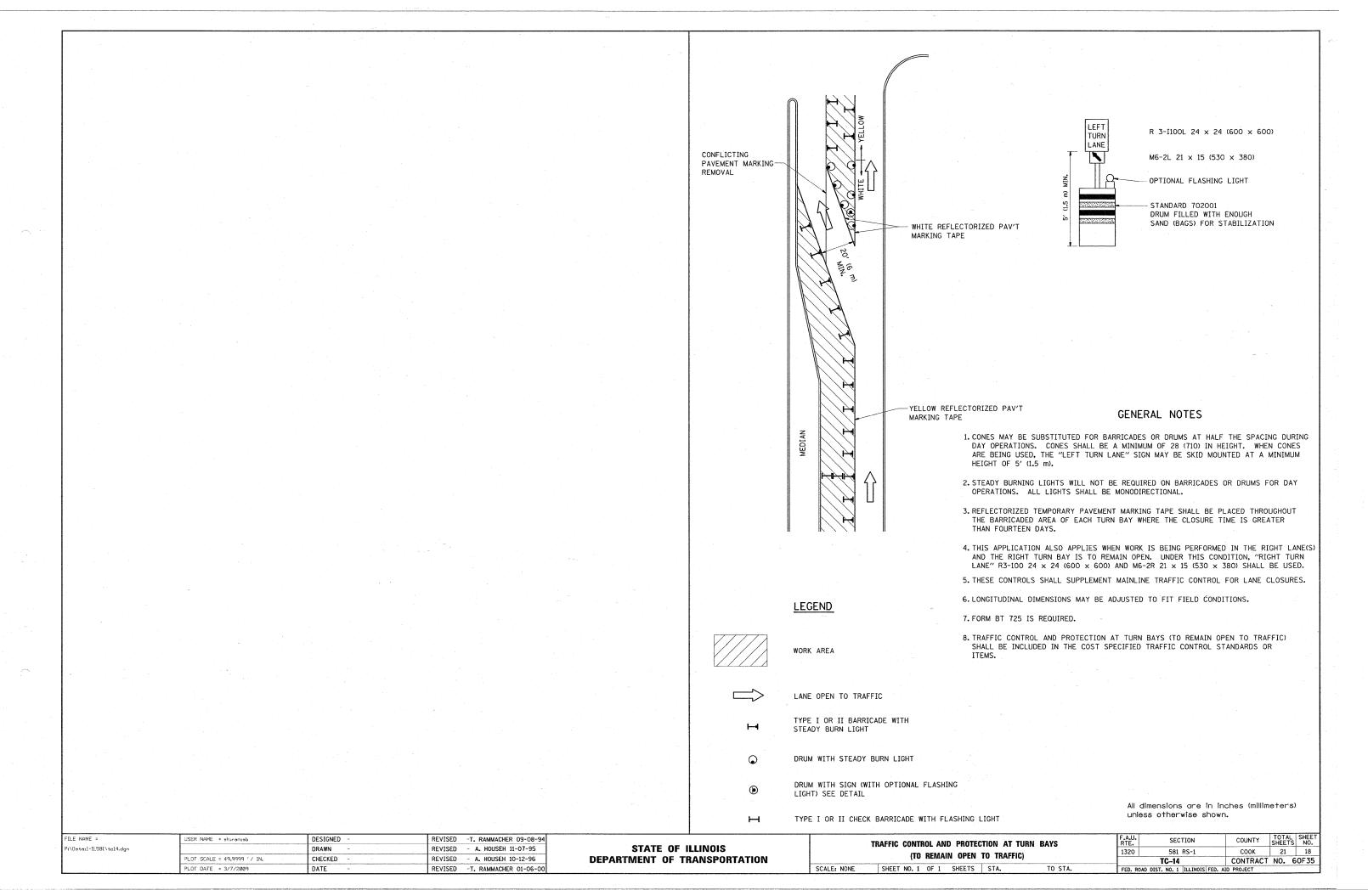
All dimensions are in inches (millimeters) unless otherwise shown.

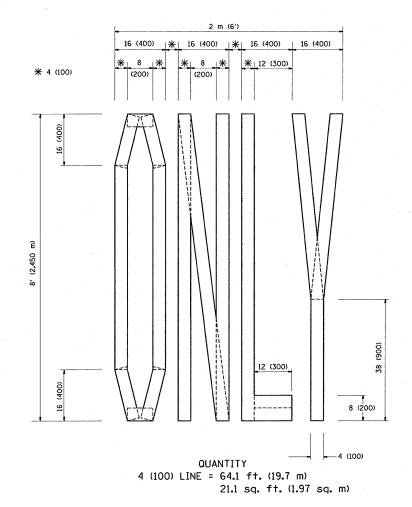
TYPICAL TURN LANE MARKING

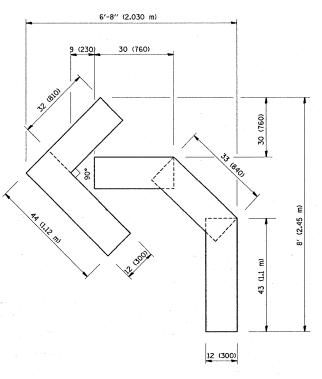
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P:\Detail-IL581\tc13.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96	ST.
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96	DEPARTME
	PLOT DATE = 3/7/2009	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00	

STATE OF ILLINOIS IENT OF TRANSPORTATION

		DI	STRICT ON	4E		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	TVDI	AL D	VERMENT	MARKINGS		1320	581 RS-1	COOK	21	17
	ITFI	ML F					TC-13	CONTRACT	NO. 6	60F35
SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. ROA	AD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		

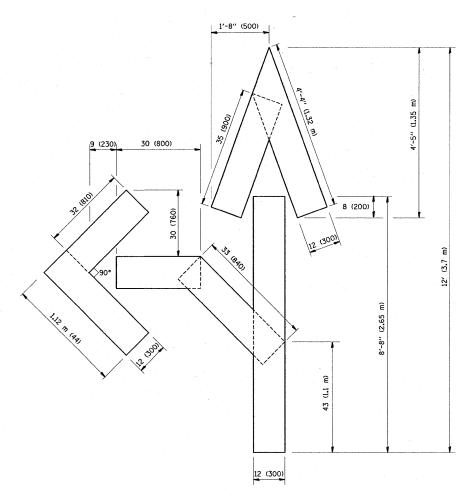






QUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)

SCALE: NONE



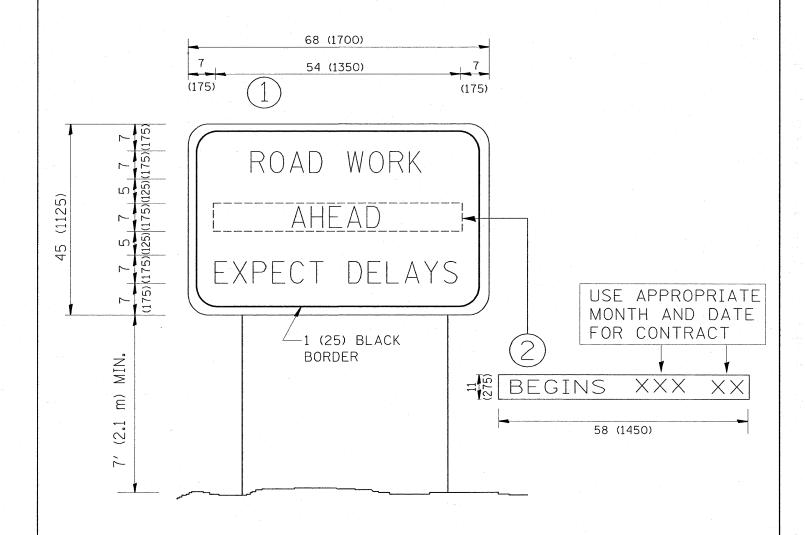
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
FOR TRAFFIC STAGING

SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIS'



### 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.

	PLOT DATE = 3/7/2009	DATE -	REVISED	- C. J	JUCIUS 01-31-07	7	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FE	D. AID PROJECT	
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED	-T. RAMN	MACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN			TC-22	CONTRACT	T NO. 60F35
P:\Detail-IL581\tc22.dgn		DRAWN -	REVISED	- R. M	MIRS 12-11-97	STATE OF ILLINOIS				1320	581 RS-1	COOK	21 20
FILE NAME =	USER NAME = shiranisb	DESIGNED -	REVISED		MIRS 09-15-97			ARTERIAL ROAD		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.

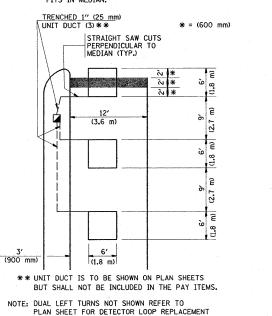
## LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER 900 NTM 5′ (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNII DUCT-TRENCHED TO E/P \*\*

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



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

(PROTECTED / PERMITTED LEFT TURN PHASING)

\* = (600 mm) (900 m (1.8 m) (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

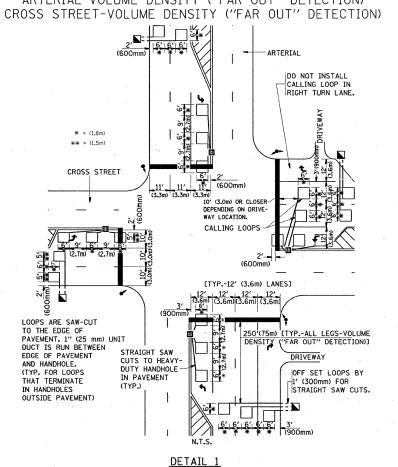
SCALE: NONE

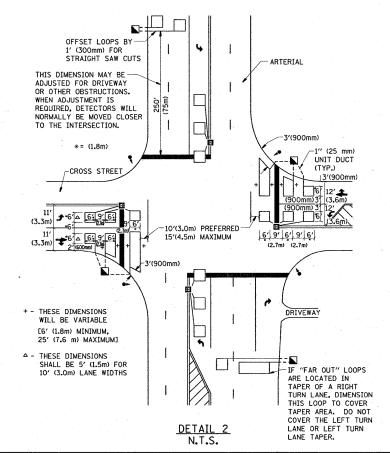
ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

\* = (600 mm)

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 ALL 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.

FILE NAME =	USER NAME = shiranisb	DESIGNED -	REVISED -
P:\Detail-IL581\ta07.dgn		DRAWN -	REVISED -
	PLOT SCALE = 49.9999 '/ IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 3/7/2009	DATE -	REVISED -

N.T.S.

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT 1 - DETECTOR LOOP INSTALLATION **DETAILS FOR ROADWAY RESURFACING** SHEET NO. 1 OF 1 SHEETS STA. TO STA.

TOTAL SHEE NO. SECTION COUNTY 1320 581 RS-1 COOK 21 21 TS-07 CONTRACT NO. 60F35