STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGES OF SKOKIE AND WILMETTE.

PROPOSED HIGHWAY PLANS

FAP 350: US 41 (SKOKIE RD.)

OLD ORCHARD RD. TO CENTRAL AVE.

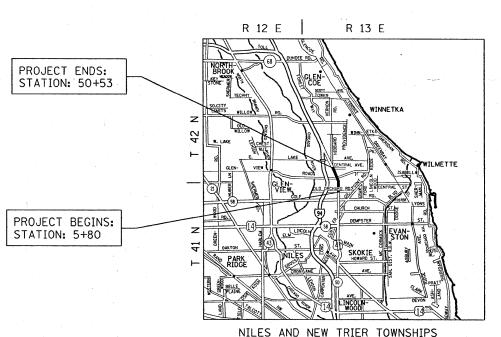
SECTION: 103 RS-2

RESURFACING (MAINTENANCE)

PROJECT: ESP - 0350 (031)

COOK COUNTY

C-91-558-08



TRAFFIC DATA

2007 ADT = 19,800

SPEED LIMIT = 35 MPH

0 50' 100' 1"= 50'
0 50' 100' 1"= 40'
0 50' 100' - 1"= 30'
0 50' 100' - 1"= 30'
0 50' 100' - 1"= 30'
0 50' 100' - 1"= 20

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT 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 1-800-892-0123 OR 811

PROJECT ENGINEER: JENPAI CHANG (847) 705–4432
PROJECT MANAGER: KEN ENG

CONTRACT NO. 60F00

GROSS AND NET LENGTH OF IMPROVEMENT = 4,473 FEET = 0.85 MILE

D-91-558-08



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED

JANUARY 12, 20 09

Dim M. C'Keck

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 13, 20 09

Charle Q. Loquesol / BO

ENGINEER OF DESIGN AND ENVIRONMENT

March 13, 20 09

Ch. A. T. M. LOQUESON

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

TITLE SHEET

SUMMARY OF QUANTITIES

DESCRIPTION

EXISTING AND PROPOSED TYPICAL SECTIONS

ROADWAY AND PAVEMENT MARKING PLANS

DETECTOR LOOP REPLACEMENT PLANS

BUTT JOINT AND HMA TAPER

INTERSECTIONS AND DRIVEWAYS

MARKERS (SNOW-PLOW RESISTANT)

(TO REMAIN OPEN TO TRAFFIC)

ARTERIAL INFORMATION SIGNING

ROADWAY RESURFACING

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

TRAFFIC CONTROL AND PROTECTION OF TURN BAYS

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN

DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR

INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES

DETAILS FOR FRAME AND LIDS ADJUSTMENT WITH MILLING

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,

TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT

SHEET NO.

3

5-6

7-10

11

12

13

14

15

16

18

19

20

21

22

DESCRIPTION AND PATTERNS 442201-03 CLASS C AND D PATCHES 604001-03 FRAME AND LIDS, TYPE 1 606001-04 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER 701201-03 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH 701426-03 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS 701606-04 URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN

701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION

701901-01 TRAFFIC CONTROL DEVICES

886001-01 DETECTOR LOOP INSTALLATION

886006-0 TYPICAL LAYOUT FOR DETECTION LOOPS

STATE STANDARDS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)

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

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT) IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.

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

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISABILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, 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 PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

DOUBLE LANE MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SNOWN IN THE PLANS.

THE RESIDENT ENGINEER SHALL CONTACT MR. WALLY CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF SKOKIE AND WILMETTE.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 41 (LINCOLN AVE./SKOKIE BLVD.)

INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES

SHEET NO. OF SHEETS STA. TO STA.

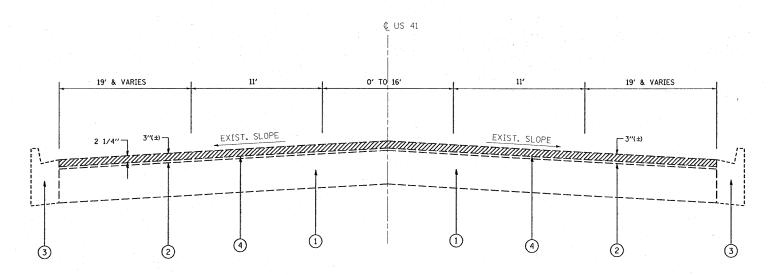
														**************************************	F.A.P. RTE. 350	SECTION 103RS-2		COOK 2	OTAL SHEE NO.
			LIDDAN	INAW CER									HODAN	11009 ET 8		CONTRA-C			AY PROJECT
	SUMMARY OF QUANTITIES		URBAN	100% FED		CONSTRUCT	TION TYPE	CODE			SUMMARY OF QUANTITIES		URBAN	100% FED		CONSTRUCT			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY 1000-24						CODE NO	ITEM	UNIT	TOTAL QUANTITIES	I O D O					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	27	27						70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	`	i i			
40600300	AGGREGATE (PRIME COAT)	TON	134	134						70102625	TRAFFIC CONTROL AND PROTECTION,	L SUM							
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	17	17							STANDARD 701606	L SUM							
40600895	CONSTRUCTING TEST STRIP	EACH	1	1						70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM							
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT	SO YD	295	295						70300100	SHORT-TERM PAVEMENT MARKING	FOOT	7320	7320					
40601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	105	105		-				70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	330	330	i e				
40603340	HOT-MIX ASPHALT SURFACE COURSE,	TON	2810	2810	-					70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	15800	15800					
42001300	PROTECTIVE COAT	SO YD	300	300						70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2390	2390					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5	SQ FT	2150	2150	ı					70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1120	1120					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SQ YD	33395	33395						70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	545	545					
44000600	SIDEWALK REMOVAL	SQ FT	2150	2150			·			70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	1830	1830	,				
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	260	260						* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	330	330					
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES,	SO YD	602	602	•	-	,		·	* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	15800	15800		The state of the s	in and		
44201749	CLASS D PATCHES, TYPE I. 9 INCH	SO YD	10	10						米 78000400	THERMOPLASTIC PAVEMENT MARKING	FOOT	2390	2390			44		
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SO YD	136	136							- LINE 6"								
44201757	CLASS D PATCHES, TYPE III. 9 INCH	SO YD	235	235						* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1120	1120					
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	27	27		-				* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	545	545					
55039700	STORM SEWERS TO BE CLEANED	FOOT	800	800					4.	* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	414	414					
60252800	CATCH BASINS TO BE RECONSTRUCTED MANHOLES TO BE RECONSTRUCTED	EACH	3	3						78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	408	408					
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	52	52						88600600	DETECTOR LOOP REPLACEMENT	FOOT	2772	2772					
				17		1				x0322256	TEMPORARY INFORMATION SIGNING	SO FT	51. 4	51.4					
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	17							x0656100	DRIVEWAY PAVEMENT REMOVAL AND	SQ YD	70	70			·		
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	6	6							REPLACEMENT	*				٠.	1 1		
67000400	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	3	3		,				X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1320	1320					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6						Z0018400	DRAINAGE STRUCTURES TO BE ADJUSTED	EACH	8	8					
67100100	MOBILIZATION	L SUM	1	1						Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	52	52					

△ NON-PARTICIPATING (100% STATE)

* SPECIALTY ITEM

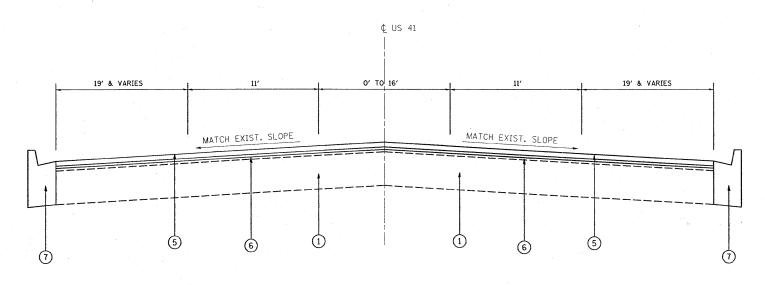
REVISIONS NAME

ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES



EXISTING TYPICAL SECTION US 41 (SKOKIE BLVD.).

STATION: 5+80 TO 50+53



PROPOSED TYPICAL SECTION US 41 (SKOKIE BLVD.).

STATION: 5+80 TO 50+53

LEGEND

- (1) EXIST. PCC BASE COURSE, 9"(±)
- (2) EXIST. HOT-MIX ASPHALT SURFACE COURSE (BEFORE MILLING), 3"(±)
- (3) EXIST. CONCRETE CURB AND GUTTER, TYPE B-6.12
- (4) PROP. HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4"
- ⑤ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- (6) PROP. POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- 7 PROP. CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE RESIDENT ENGINEER)

NOTES:

- 1. SEE ROADWAY AND PAVEMENT MARKING PLAN SHEETS FOR LOCATIONS OF LEFT TURN LANES, BARRIER MEDIANS AND CORRUGATED MEDIANS.
- 2. PAVEMENT PATCHING SHALL BE DONE PRIOR TO MILLING OF ROADWAY (SEE BD-22).

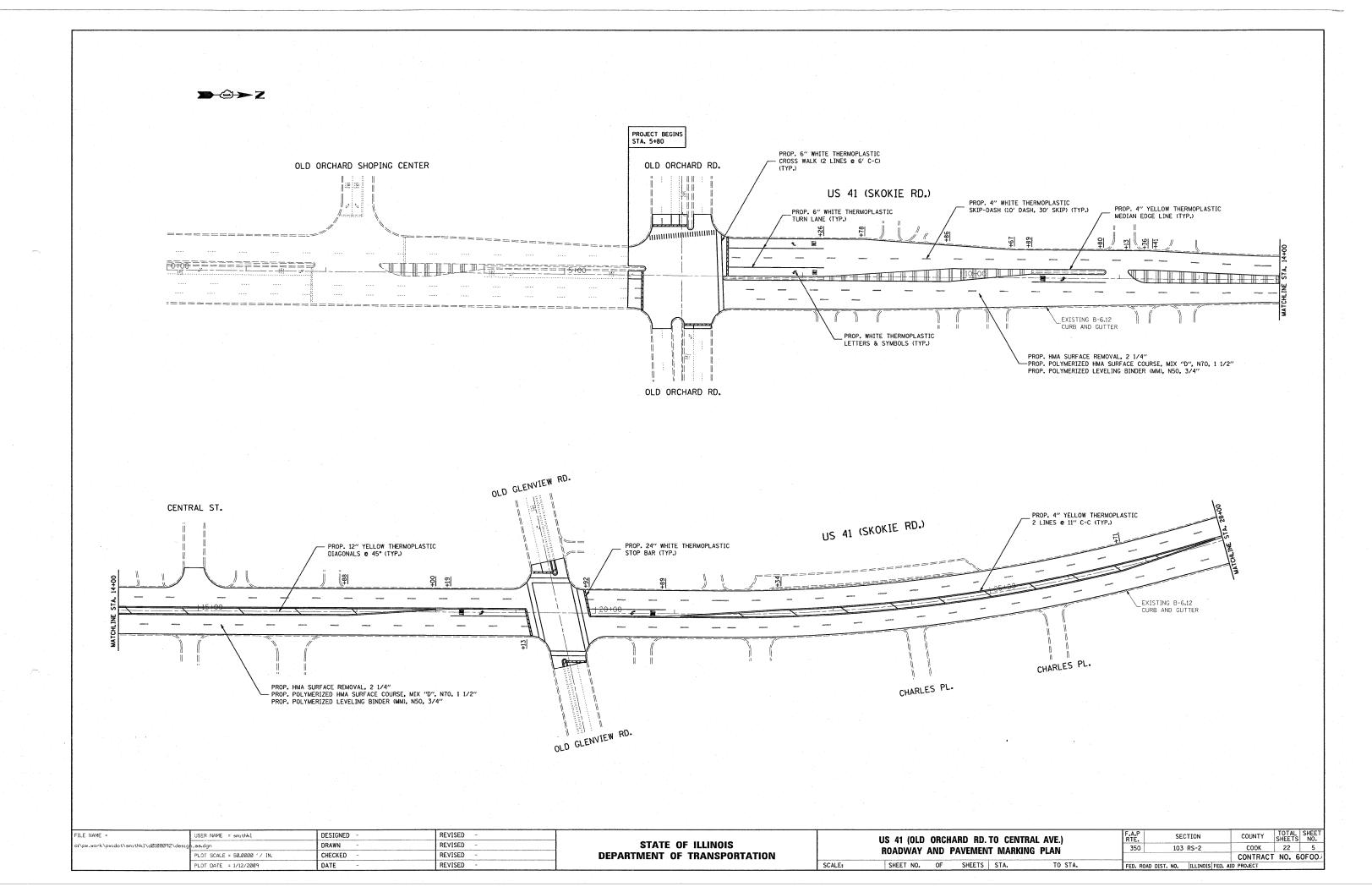
HOT-MIX ASPHALT MIXTURE REQUIREMENTS

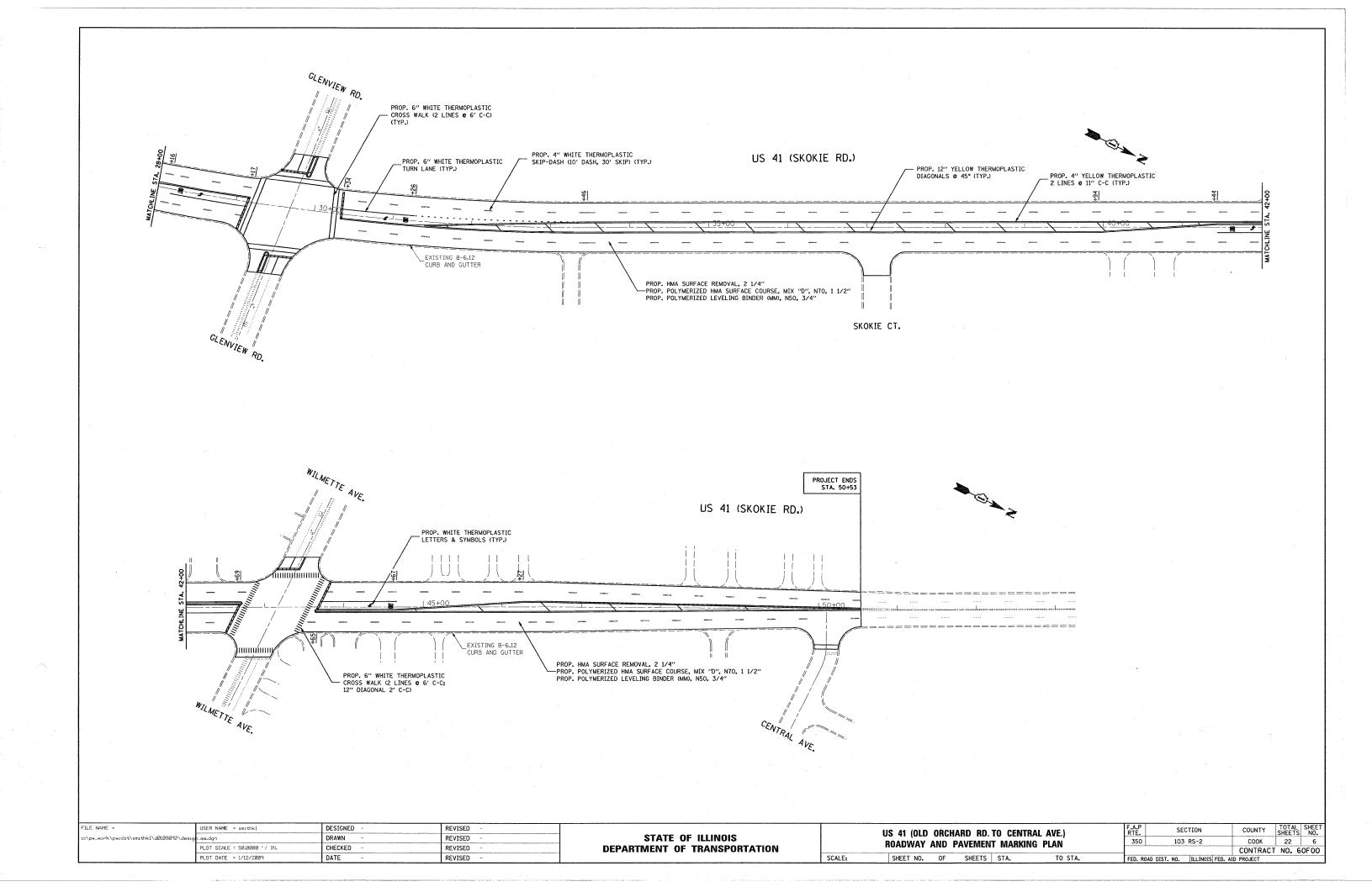
	MIXTURE TYPE	AC TYPE	AIR VOIDS (%)
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2 "	PG 64-22	4% @ 90 GYR
NOADWAT	POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"	SBS/SBR PG 76-28/-22	4% @ 50 GYR
PATCHES	CLASS D PATCHES, (BINDER IL-19.0 MM), 9"	PG 64-22*	4% @ 70 GYR
TATCHES	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES, (BINDER IL-19.0 MM)	PG 64-22*	4% @ 70 GYR

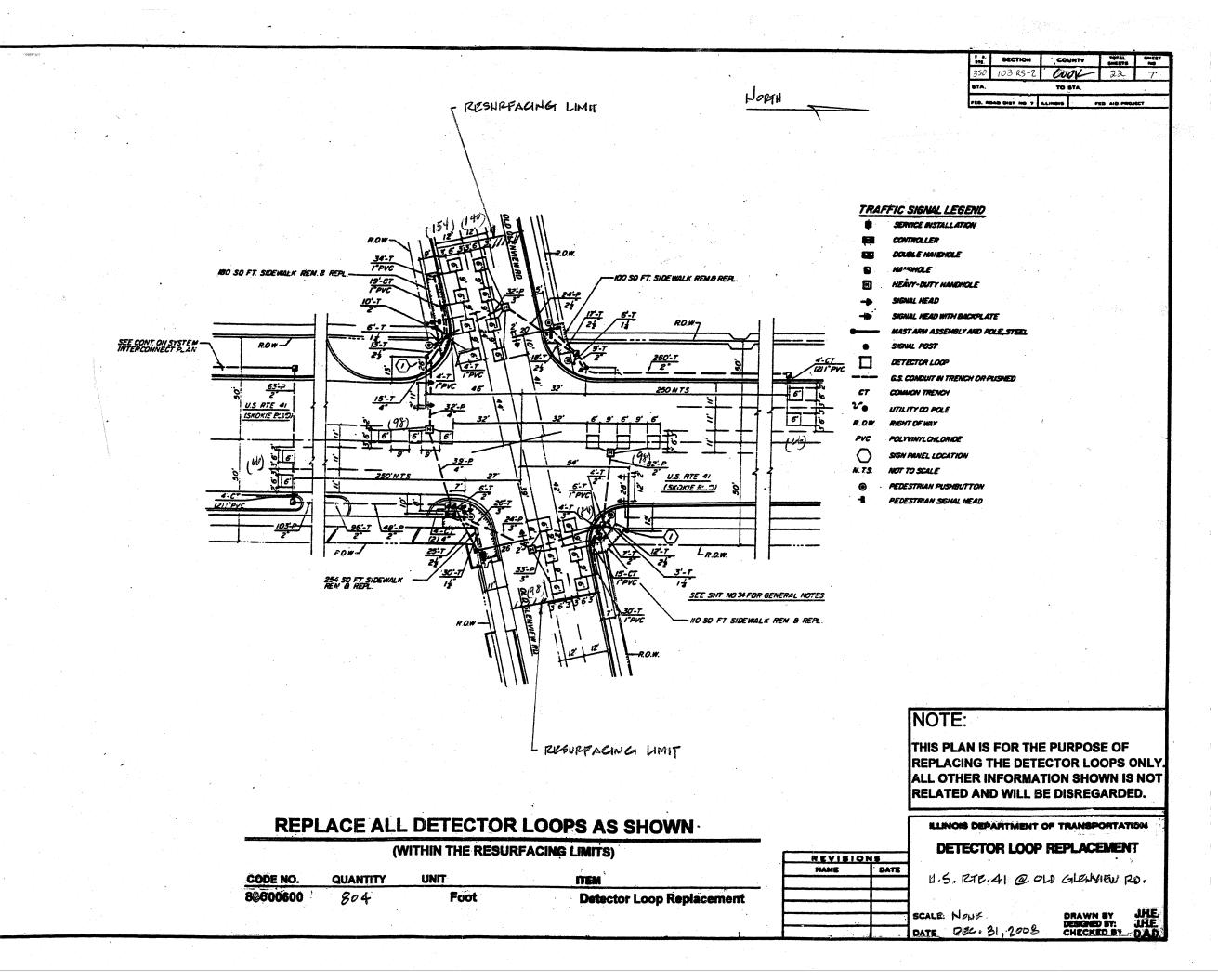
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN

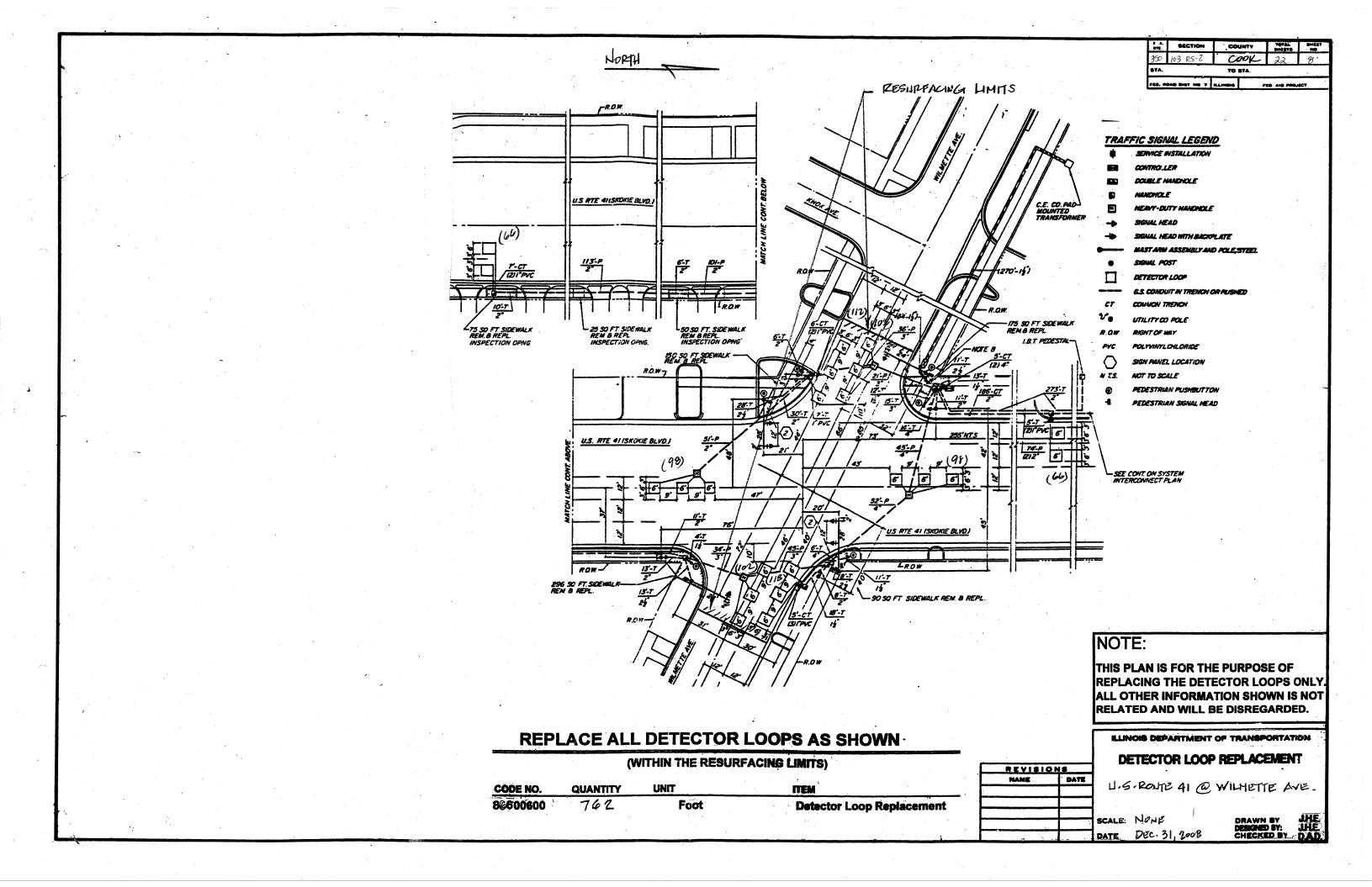
* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

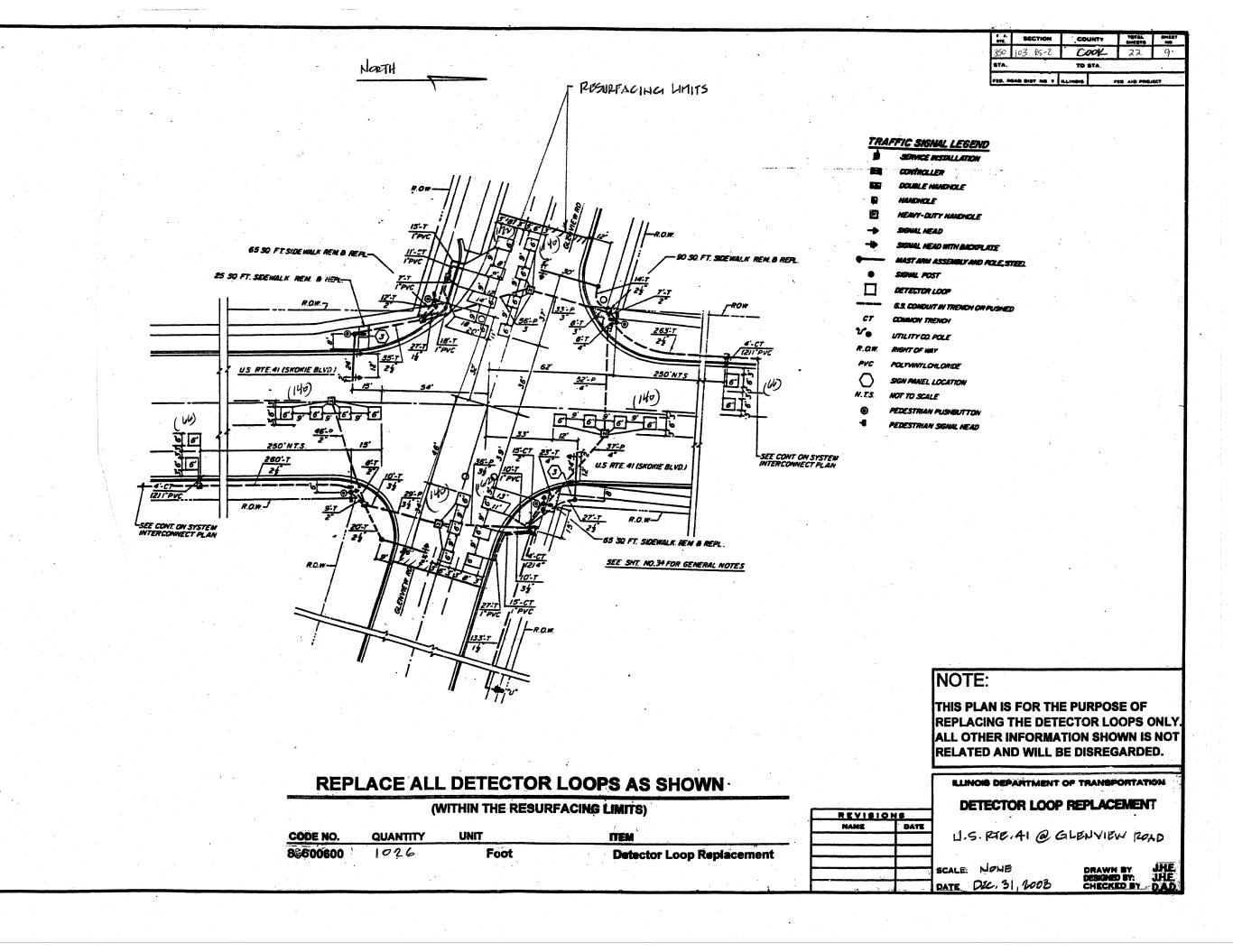
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L		PLOT DATE = 1/13/2009	DATE -	REVISED -		SCALE:	SHE	EET NO.	OF S	SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO. 1	ILLINOIS FED. AI	PROJECT	

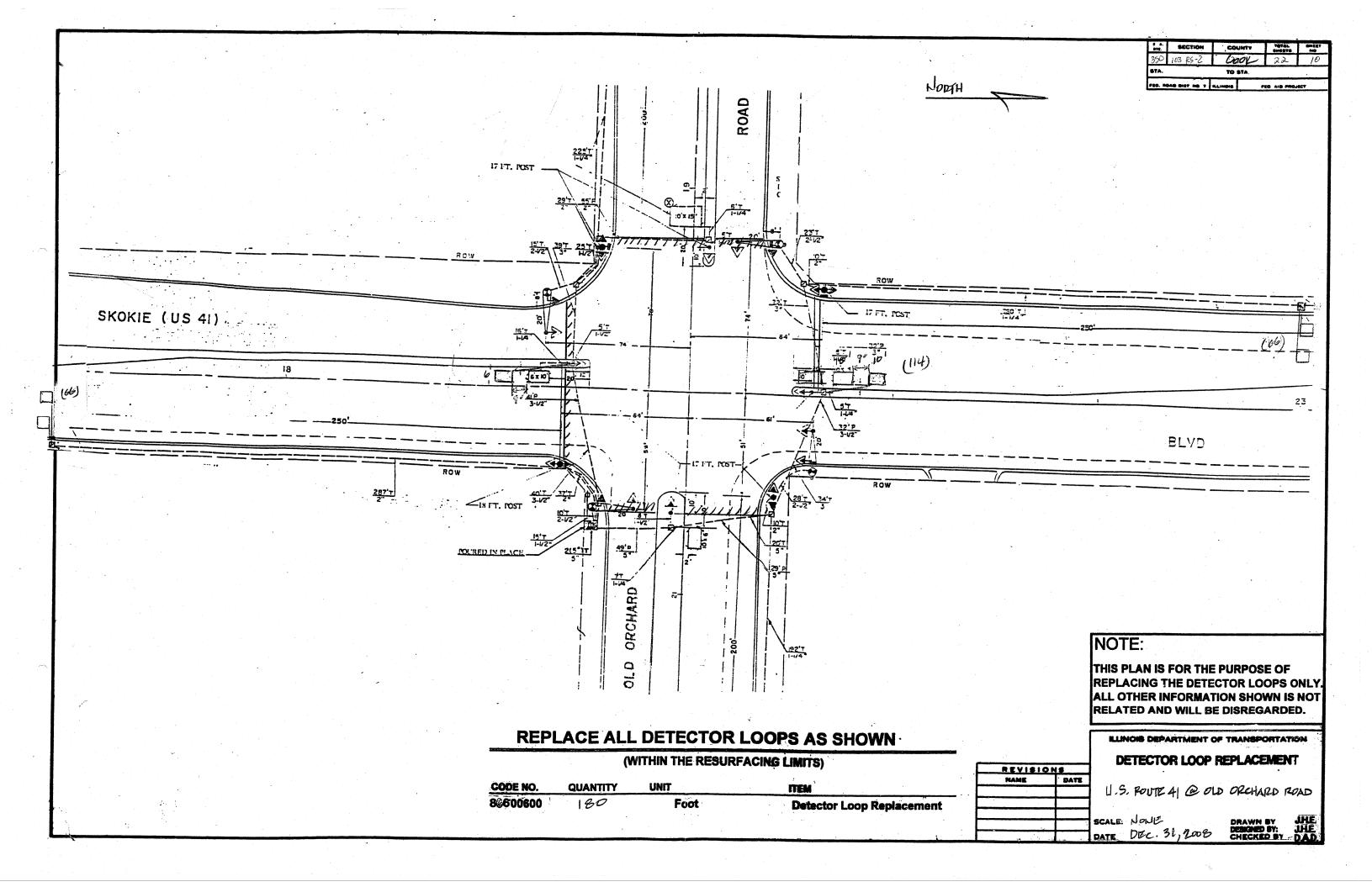


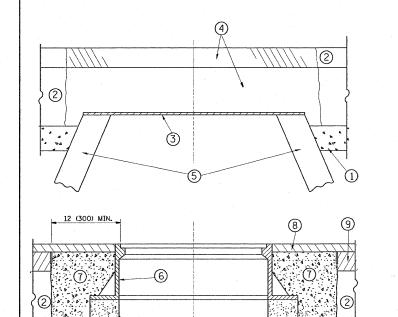












PROPOSED

PROPOSED

SAND FILL

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER, REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

BRICK, MORTAR, OR CONC. ADJUSTING RINGS

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

LEGEND

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

1 SUB-BASE GRANULAR MATERIAL

PROPOSED SAND FILL

- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE 8 PROPOSED HMA SURFACE COURSE
- (5) EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

DESIGNED - R. SHAH REVISED - R. SHAH 03-10-95 USER NAME = smithkl REVISED - A. ABBAS 03-21-97 c:\pw_work\PWIDOT\SMITHKL\dØ108092\Dis DRAWN PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED - R. WIEDEMAN 05-14-04 PLOT DATE = 1/12/2009 DATE 10-25-94 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

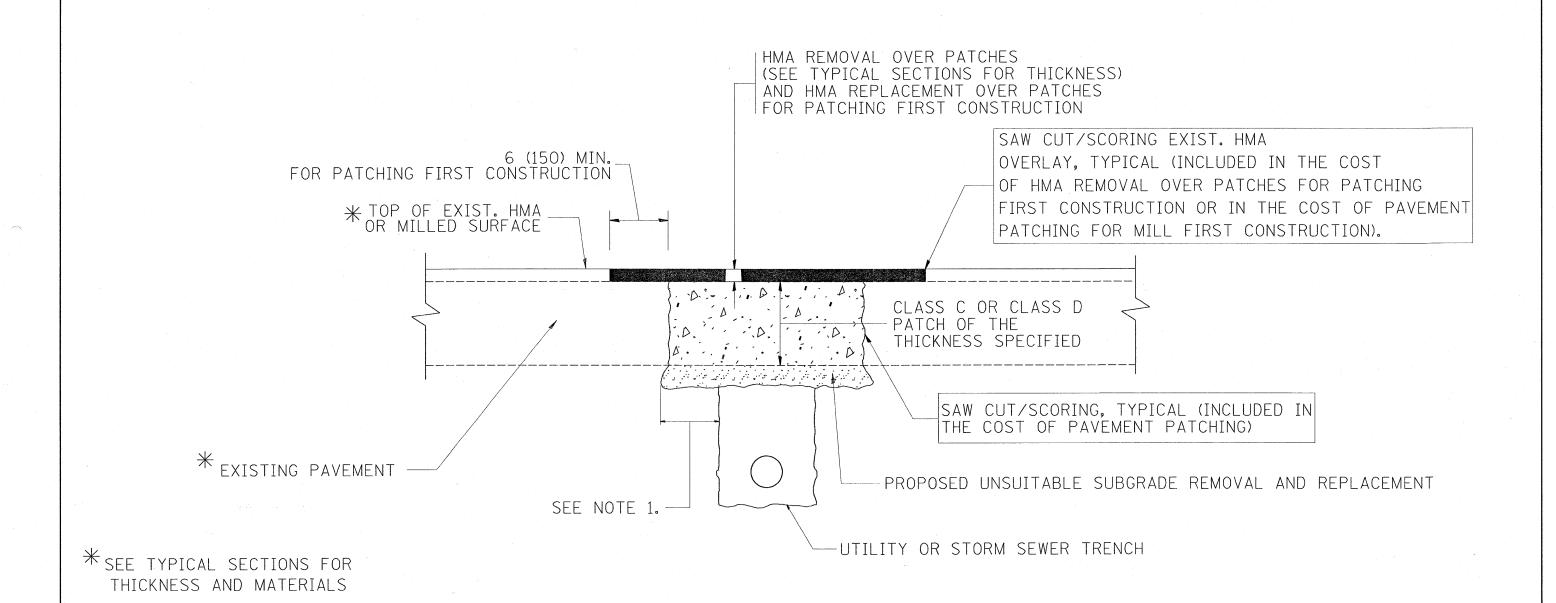
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING SHEET NO. 1 OF 1 SHEETS STA.

(Î. j.)

COUNTY TOTAL SHEETS NO. SECTION BD600-03 (BD-8)
FED. ROAD DIST. NO. 1 ILLINOIS FED CONTRACT NO. 60FOO

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.



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)

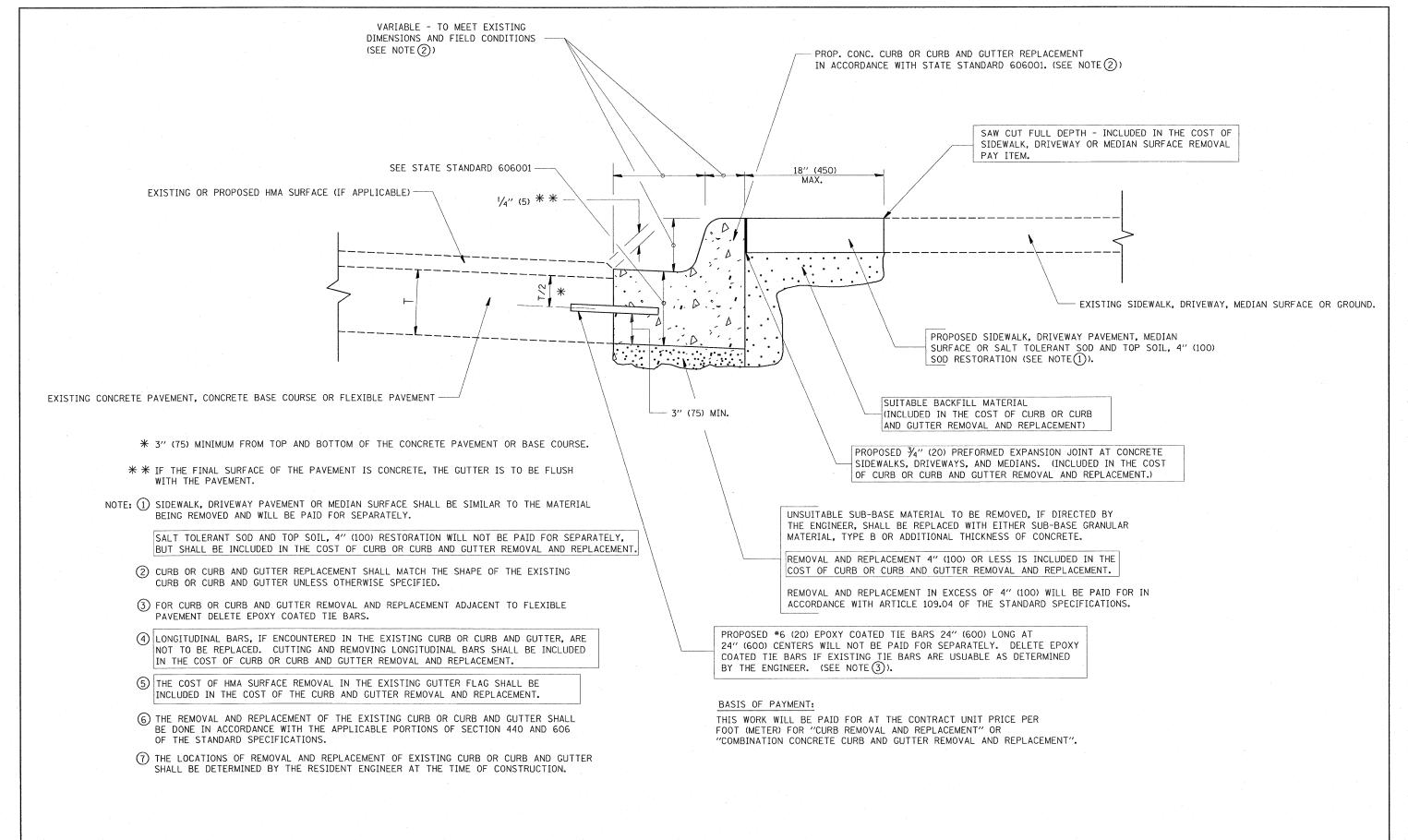
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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.

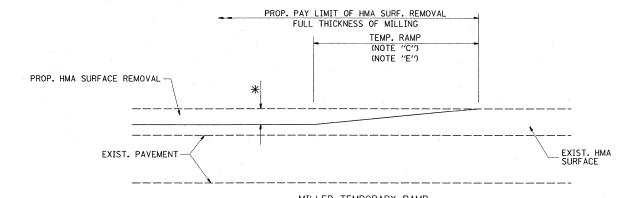
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		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT			BD400-04 (BD-22)	CONTRACT NO. 60FOO
	· ·	PLOT DATE = 1/12/2009	DATE - 10-25-94	REVISED -	K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RO		. AID PROJECT



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

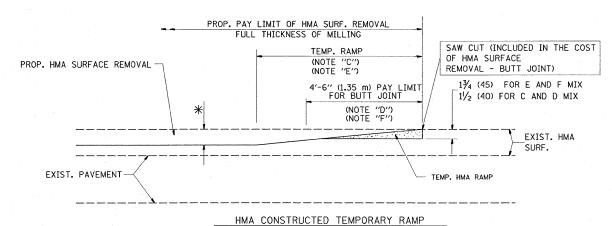
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c	c:\pw_work\PWIDOT\SMITHKL\dØ108092\Dist\$	td.dgn	DRAWN -	REVISED	A. ABBAS 03-21-97	STATE OF ILLINOIS		REMOVAL AND REPLACEMENT		350	103 RS-Z	Cook	22 13
		PLOT SCALE = 50.00000 '/ IN.	CHECKED -	REVISED -	M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION					BD600-06 (BD-24)	CONTRACT	T NO. 60F00
		PLOT DATE = 1/12/2009	DATE - 03-11-94	REVISED -	R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RC	OAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT	



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

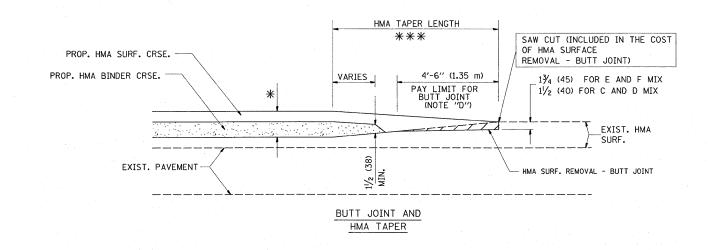
OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP

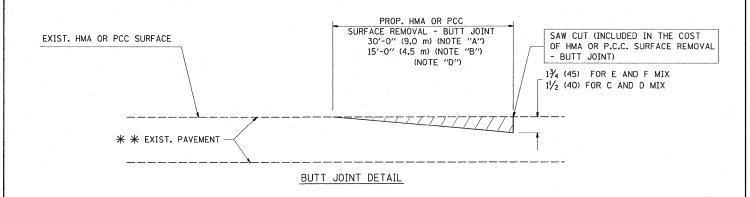


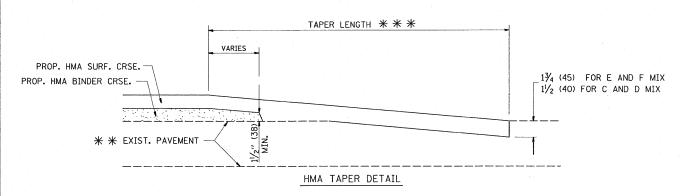
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

OTHERWISE SHOWN.





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

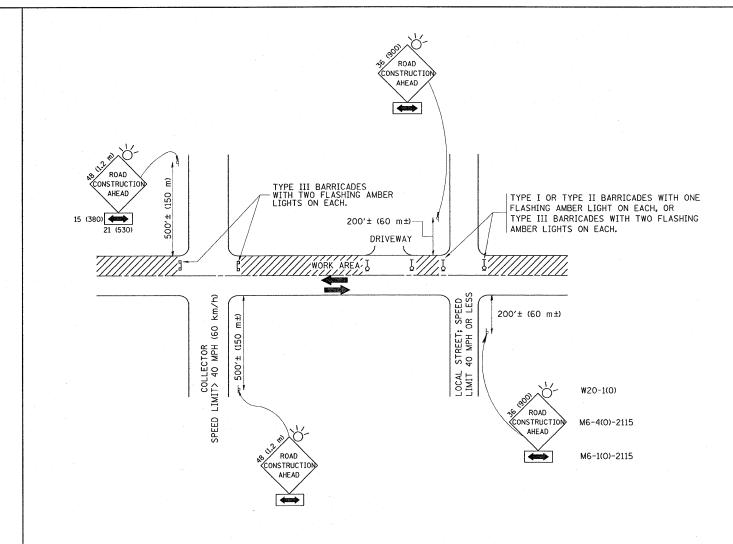
PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

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:
- 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 \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 (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: NONE

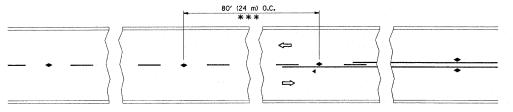
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

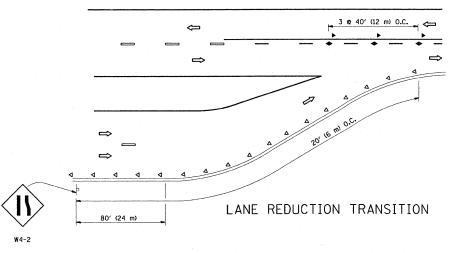
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

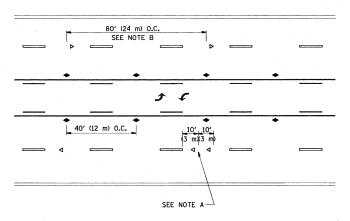
SHEET NO. 1 OF 1 SHEETS STA.



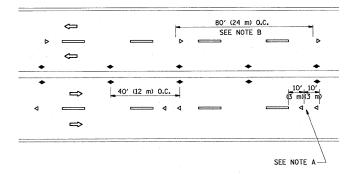
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

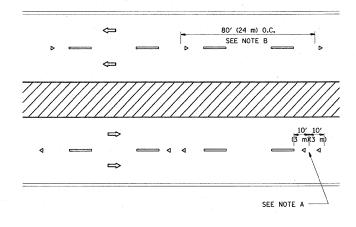




TWO-WAY LEFT TURN



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

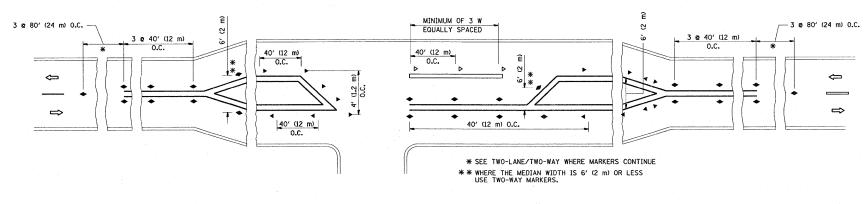
---- YELLOW STRIPE

WHITE STRIPE

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

DESIGN NOTES

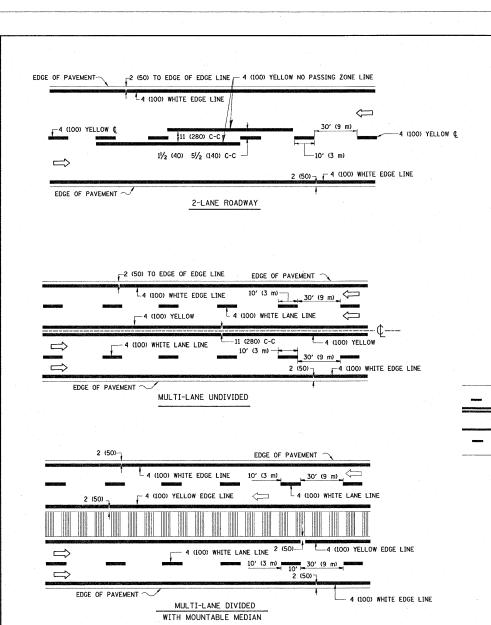
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS SHOULD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



LEFT TURN

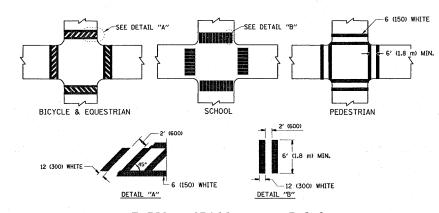
All dimensions are in inches (millimeters) unless otherwise shown.

	FILE NAME =	USER NAME = smithkl	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.P. SECTION	COUNTY TOTAL SHEET NO.
	c:\pw_work\PWIDOT\SMITHKL\dØ108092\Dist	td.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	350 103 RS-Z	Cirk 22 16
		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION		TC-11	CONTRACT NO. 60FOD
- 1		PLOT DATE = 1/12/2009	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FE	ED. AID PROJECT

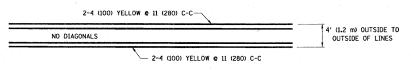


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

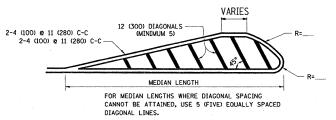
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

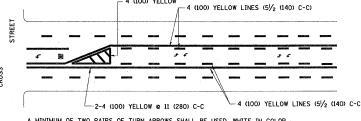


4' (1.2 m) WIDE MEDIANS ONLY



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

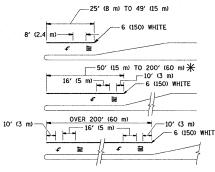


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

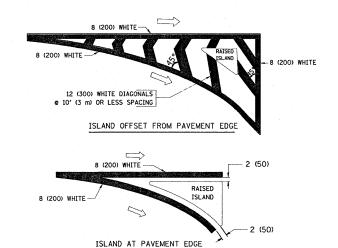
TYPICAL PAINTED MEDIAN MARKING



** 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 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
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 SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, 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 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
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))

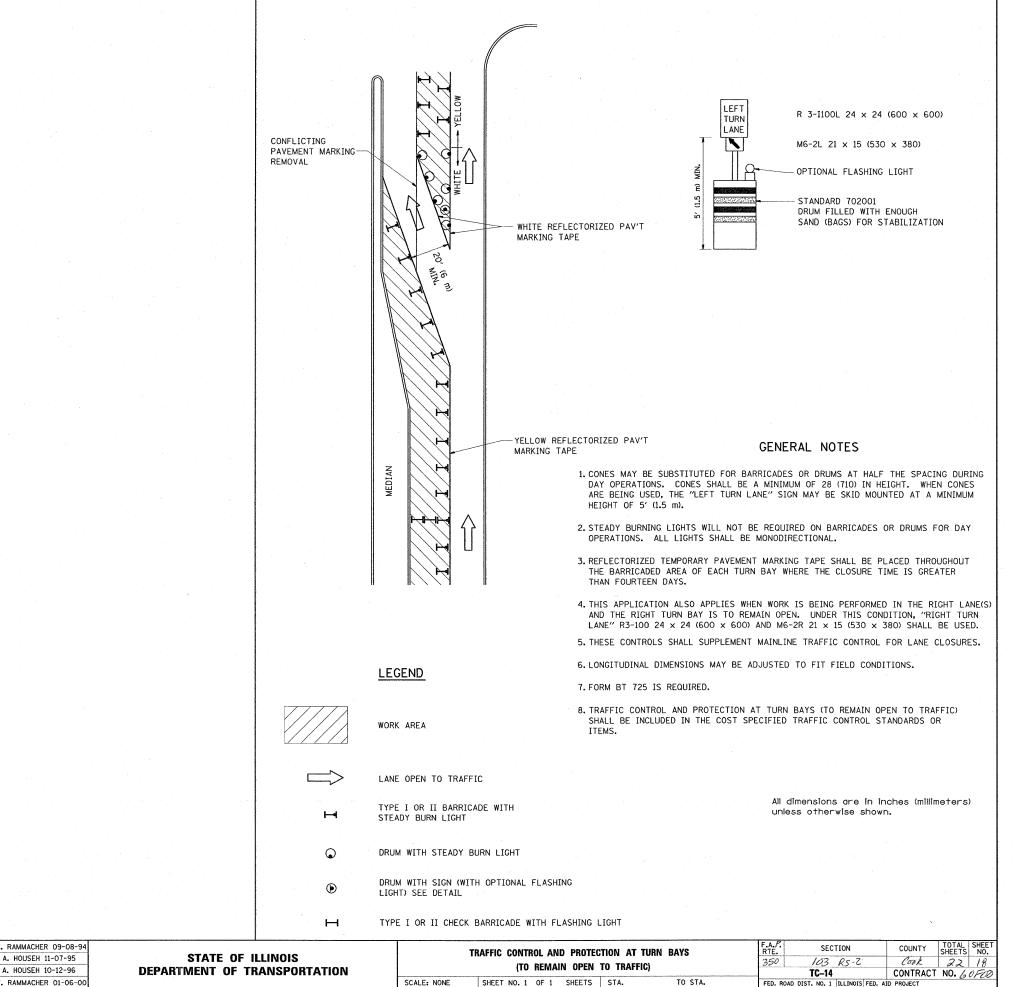
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = smithkl	DESIGNED	-	EVERS	REVISED	-Т.	RAMMACHER 10-27-94
c:\pw_work\PWIDOT\SMITHKL_\d0108092\Dist	td.dgn	DRAWN	-		REVISED	-A.	HOUSEH 10-09-96
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-		REVISED	- A.	HOUSEH 10-17-96
	PLOT DATE = 1/12/2009	DATE	-	03-19-90	REVISED	- T.	RAMMACHER 01-06-00

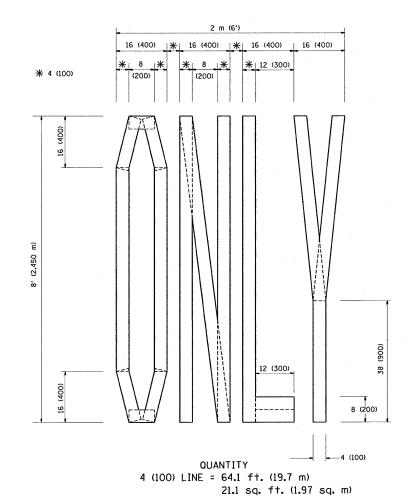
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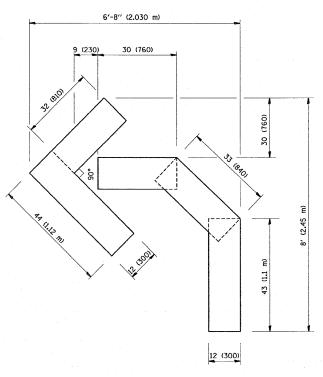
	DIST	RICT ON	JE		F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	TYPICAL PAV				350	103 RS-2"	Cook	24	17
	ITFIGAL FAV	CIASCIAI	MANNINGS			TC-13	CONTRACT	NO. 60	OFCO)
SCALE: NONE	SHEET NO. 1 OF 1 S	SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



FILE NAME = DESIGNED -USER NAME = smithkl REVISED -T. RAMMACHER 09-08-94 :\pw_work\PWIDOT\SMITHKL\d0108092\D: DRAWN REVISED - A. HOUSEH 11-07-95 PLOT SCALE = 50.0000 '/ IN. REVISED - A. HOUSEH 10-12-96 PLOT DATE = 1/12/2009 DATE REVISED -T. RAMMACHER 01-06-00

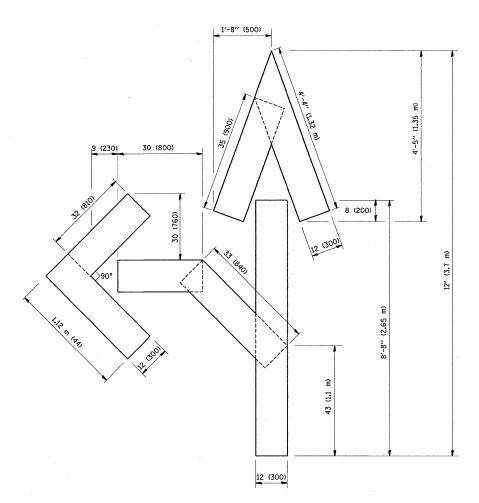
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT





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

SCALE: NONE



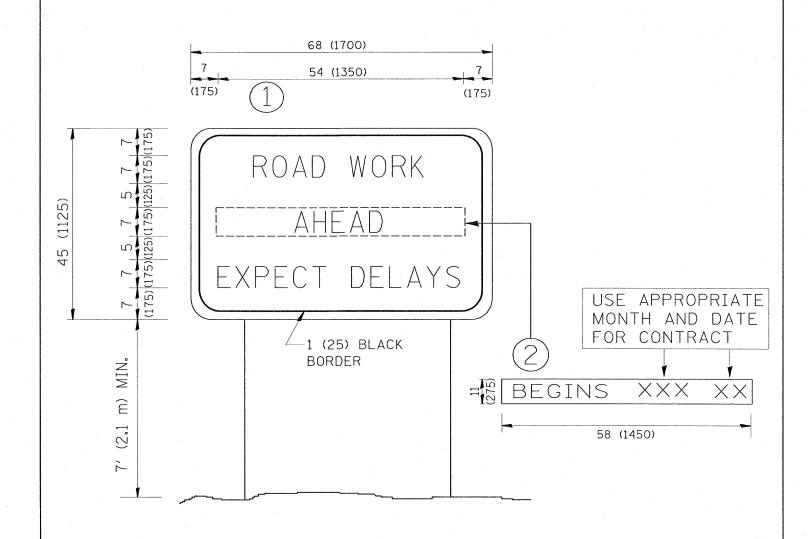
OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

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

FILE NAME =	USER NAME = smithkl	DESIGNED -	REVISED	-T. RAMMACHER 06-05-96	
c:\pw_work\PWIDOT\SMITHKL\d0108092\Dist	td.dgn	DRAWN -	REVISED	-T. RAMMACHER 11-04-97	STATE OF ILLINOIS
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED	-T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION
	PLOT DATE .= 1/12/2009	DATE - 09-18-94	REVISED	-E. GOMEZ 08-28-00	·

STATI	E OI	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	PAVEMENT MARKING LETTERS AND SYMBOLS				F.A.P. RTE.	SECTION	COUNTY TOTAL SHEET SHEETS NO.			
	FOR TRAFFIC STAGING			350	103 RS-Z	Cook	22	19		
					TC-16	CONTRACT	NO. 60	FOO		
- 1	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. AI	D 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.

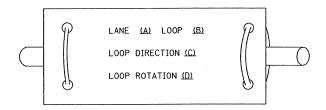
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

Γ	FILE NAME =	USER NAME = smithkl	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROAD		F.A.P.	SECTION	COUNTY	TOTAL SHEET
	c:\pw_work\PWIDOT\SMITHKL\dØ108092\Dist	td.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS		INFORMATION SIGN		350	103 RS-2	Cook	22 20
		PLOT SCALE = 50.00000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INTONIVATION SIGN			TC-22	CONTRACT	NO. 60F00
		PLOT DATE = 1/12/2009	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. AI	D PROJECT	

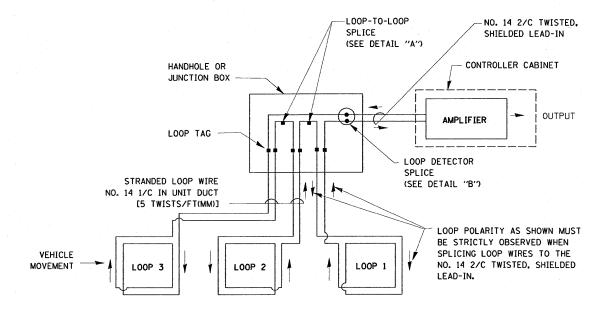
LOOP DETECTOR NOTES

- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT 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

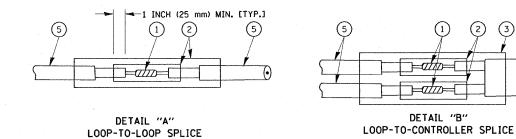


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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

- (1) 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.

SCALE: NO

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

FILE NAME =	USER NAME = smithkl	DESIGNED	-	D.A.D.	REVISED	- 11-12-01
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	PLOT SCALE = 50.00000 '/ IN.	CHECKED	-	D.A.Z.	REVISED	
	PLOT DATE = 1/12/2009	DATE	-	05-30-00	REVISED	44

STATE	: 01	ILLINOIS	
DEPARTMENT	OF	TRANSPORTATION	

		DISTRICT OF	NE		
	STANDARD	TRAFFIC SIGNA	L DESIGN	DETAILS	
NE	SHEET NO. 1	OF 4 SHEETS	STA.	TO STA.	,,,

RTE.	SECTION	COUNTY	SHEETS	NO.
350	103 RS-Z	Cook	22	21
	TS-05	CONTRACT	NO. 60	FW
 FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		

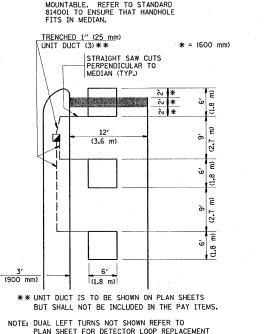
PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER ** = (600 mm) ** ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS

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

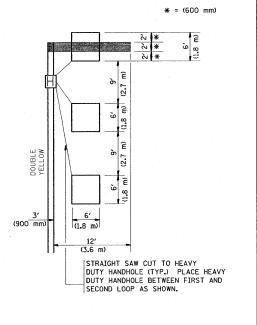
(PROTECTED / PERMITTED LEFT TURN PHASING)

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
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)

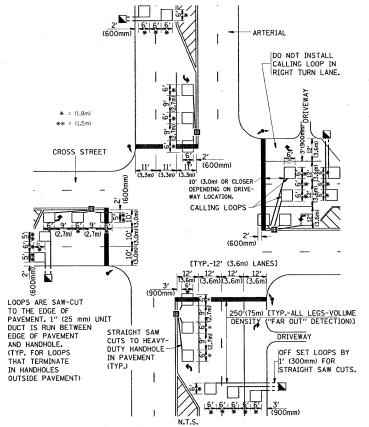


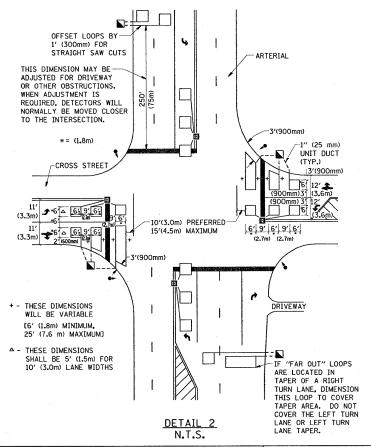
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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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DETAIL 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

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