STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.U. ROUTE 1398 (CHICAGO AVE.)
LAKE ST. TO THATCHER AVE.
SECTION: 0405 RS-7
RESURFACING (MAINTENANCE)
PROJECT: ESP-1398 (003)
COOK COUNTY

C-91-243-07

ROADWAY OMISSION: STA. 53+83 TO STA. 58+68 R 12 E ROADWAY OMISSION: STA. 53+83 TO STA. 58+68 ROADWAY OMISSION: STA. 58+68

STATION 0+20

TRAFFIC DATA

2006 ADT = 8,800 SPEED LIMIT = 25-35 MPH

IMPROVEMENT ENDS: STATION 78+97

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN THE VILLAGES OF MELROSE PARK AND MAYWOOD

100' 200' 300'—1"= 100'
10' 20' 30'—1"= 10'

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

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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 (847)705–4247

CONTRACT NO. 60C57

0

GROSS LENGTH OF IMPROVEMENT = 7,877 FT. = 1.49 MILES
NET LENGTH OF IMPROVEMENT = 7,392 FT. = 1.40 MILES

PROVISO AND RIVER FOREST TOWNSHIP

D-91-243-07



DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED

JANUARY 12, 20 04

Divident M. O'Heefe gr

DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

STATE OF ILLINOIS

March 13, 2009 Charles O. Dogwood BO ENGINEER OF DESIGN AND ENVIRONMENT March 13, 2009

tine M. Reed TO DIRECTOR OF HIGHWAYS, CHIEF ENGINEE

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

SHE	ET NO.	DESCRIPTION
	1	TITLE SHEET
	2 , , ,	INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES.
	3-4	SUMMARY OF QUANTITIES
4/	5-6	EXISTING AND PROPOSED TYPICAL SECTIONS
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	20	ARTERIAL INFORMATION SIGNING
	21	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN
	22	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

STANDARD NO.

000001-05 TYPICAL SYMBOLS, ABBREVIATIONS AND PATTERNS

DESCRIPTION

442201-03 CLASS C AND D PATCHES

604086-02 FRAME AND LIDS, TYPE 1

606001-04 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER

701201-03 LANE CLOSURE, 2L, 2W, DAY ONLY, SPEEDS > 45 MPH

701501-05 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

701701-06 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 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGES OF MAYWOOD AND MELROSE PARK.

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 HOT-MIX ASPHALT TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT (708) 597-9800 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

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

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 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)

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.

F.A.U. RTE. 1398 COUNTY TOTAL SHEET NO.

COOK 22 3 SECTION 0405 RS-7 FED. ROAD DIST. NO. 1 | ILLINOIS | HIGHWAY PROJECT

										•				CONTE	ACT NO. 60			AY PROJEC
			URBAN	100% FE	D	CONSTRUCT	ION TYPE	CODE		CUMMARY OF CHANTITIES		URBAN	100 % FE1	>		ION TYPE O	ODE	
	SUMMARY OF QUANTITIES		and the state					T		SUMMARY OF QUANTITIES	· ·							
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY IOOO					CODE NO	ITEM	UNIT	TOTAL QUANTITIES	ROADWAY IOOO	1	,			
201006	GRADING AND SHAPING SHOULDERS	UNIT	35	35					67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6				-	
600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	29	29			-		67100100	MOBILIZATION	L SUM	1	1	,e				
600300	AGGREGATE (PRIME COAT)	TON	145	145					70100450	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	19	19		:			70102620	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1					
600895	CONSTRUCTING TEST STRIP	EACH	2	2						STANDARD 701501					-			
600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	605	605					70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1					
601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	45	45					70300100	SHORT-TERM PAVEMENT MARKING	FOOT	5270	5270					ĺ
601003	PATCHES	10							70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	110	110					
603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NSO	TON	3045	3045					70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	12390	12390					
001300	PROTECTIVE COAT	SO YD	170	170					70300240	TEMPORARY PAVEMENT MARKING	FOOT	1410	1410					
100200	PORTLAND CEMENT CONCRETE SIDEWALK 5	SQ FT	1060	1060			- AND THE STREET		 70300240	- LINE 6"					awar Mega		and the second	
00155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	3550	3550					70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	165	165					
000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2	SO YD	32685	32685					70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	830	830		•			
000600	1/4" SIDEWALK REMOVAL	SO FT	1060	1060					70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	F00T	555	555					-
001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	220	220					70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	8755	8755					
1002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES,	SO YD	265	265					* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	110	110			4		
1201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	50	50					¥ 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	F00T	12390	12390		:		4	Constitution of the Consti
1201757	CLASS D PATCHES, TYPE III, 9 INCH	SO YD	75	75					78000400	THERMOPLASTIC PAVEMENT MARKING	FOOT	1410	1410					
201759	CLASS D PATCHES, TYPE IV, 9 INCH	SO YD	100	100					78000500	THERMOPLASTIC PAVEMENT MARKING	FOOT	165	165					
102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	70	70					* 18000300	- LINE 8"	1001	103	103					
039700	STORM SEWERS TO BE CLEANED	FOOT	300	300		-			× 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	.830	830					
250200	CATCH BASINS TO BE ADJUSTED	EACH	4	4	,			1.	¥ 78000650	THERMOPLASTIC PAVEMENT MARKING	FOOT	555	555					
252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1						- LINE 24"					-			
260100	INLETS TO BE ADJUSTED	EACH	1	1					× 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	360	360	,				
300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	45	45					78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	300	300					
406000	FRAMES AND LIDS, TYPE 1. OPEN LID	EACH	10	10					× 88600600	DETECTOR LOOP REPLACEMENT	FOOT	418	418					
0406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	10	10					X0322256	TEMPORARY INFORMATION SIGNING	SO FT	51. 4	51. 4					

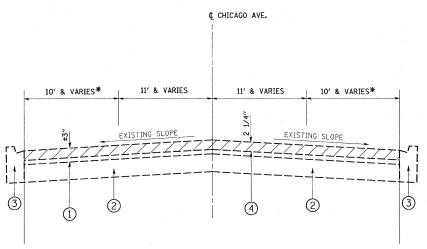
ILLINOIS DEPARTMENT OF TRANSPORTATION SUMMARY OF QUANTITIES REVISIONS

PLOT DATE: 1/12/2009

COUNTY TOTAL SHEET NO.

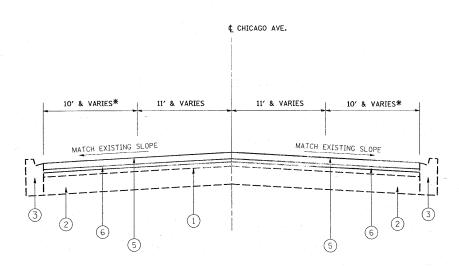
COOK 22 4 SECTION 0405 RS-7 FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT CONTRACT NO. 60C57 URBAN CONSTRUCTION TYPE CODE CONSTRUCTION TYPE CODE SUMMARY OF QUANTITIES SUMMARY OF QUANTITIES TOTAL TOTAL TOTAL ROADWAY
QUANTITIES 1000-2A TOTAL ROADWAY 1000 CODE NO ITEM UNIT CODE NO ITEM UNIT POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 1265 1265 Z0018500 DRAINAGE STRUCTURES TO BE CLEANED EACH 15 15 NON-PARTICIPATING (100% STATE) ILLINOIS DEPARTMENT OF TRANSPORTATION REVISIONS SUMMARY OF QUANTITIES

PLOT DATE: 1/12/2009



EXISTING TYPICAL SECTION CHICAGO AVENUE

STATION 0+20 TO 53+83



PROPOSED TYPICAL SECTION CHICAGO AVENUE

STATION 0+20 TO 53+83

LEGEND

- 1) EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"(±)
- 2 EXISTING PCC BASE COURSE, 9"(±)
- 3 EXISTING COMBINATION CONC. CURB & GUTTER TYPE B-6.12
- (4) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4 "
- (5) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2 "
- 6 PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "

NOTES

* PARKING LANES SHOWN ON ROADWAY PLANS

PARKING LANE RESURFACING SHALL CONSIST OF:
PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL - 1 1/2"
PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2"

PAVEMENT PATCHING SHALL BE DONE PRIOR TO MILLIN OF ROADWAY (SEE BD-22).

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	MIXTURE USE	AC TYPE	AIR VOIDS (%)
ROADWAY	POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50	SBS/SBR 76-28	4% © 50 GYR
KOADWAT	HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50 (IL-9.5mm)	PG 64-22	4% © 50 GYR
DATCHEC	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES, (HMA BINDER IL-19.0 MM)	PG 64-22*	4% @ 70 GYR
PATCHES	CLASS D PATCHES, 9" (HMA BINDER IL-19.0 MM)	PG 64-22*	4% e 70 GYR

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

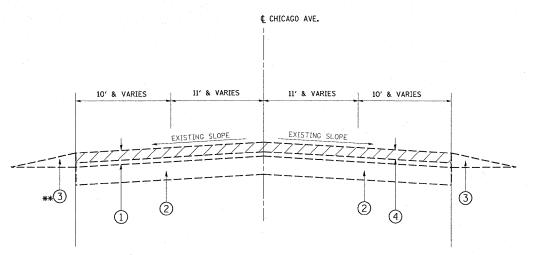
*WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

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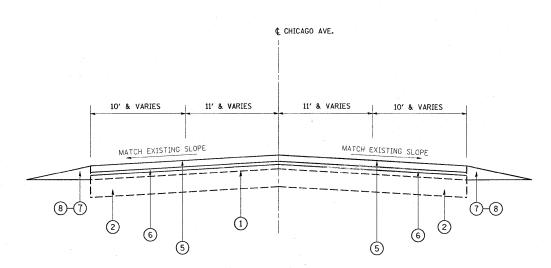
SCALE:

F.A.U. RTE.	SEC	TION	COUNTY	TOTAL	SHEET NO.
1398	0405	RS-7	COOK	22	5
			CONTRAC	T NO. 6	OC57
FED. RO	DAD DIST. NO.	ILLINOIS FED.	AID PROJECT		



EXISTING TYPICAL SECTION CHICAGO AVENUE

STATION 58+68 TO 78+97



PROPOSED TYPICAL SECTION CHICAGO AVENUE

STATION 58+68 TO 78+97

LEGEND

- 1 EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"(±)
- 2 EXISTING PCC BASE COURSE, 9"(±)
- 3 EXISTING AGGREGATE SHOULDER
- (4) PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL 2 1/4 "
- (5) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2 "
- (6) PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4 "
- 7 PROPOSED AGGREGAE WEDGE SHOULDER, TYPE B
- (8) PROPOSED GRADING AND SHAPING SHOULDER

NOTES

** PROPOSED HMA SHOULDER RESURFACING FROM STA. 74+79 TO STA. 78+13 SHOWN ON ROADWAY PLANS

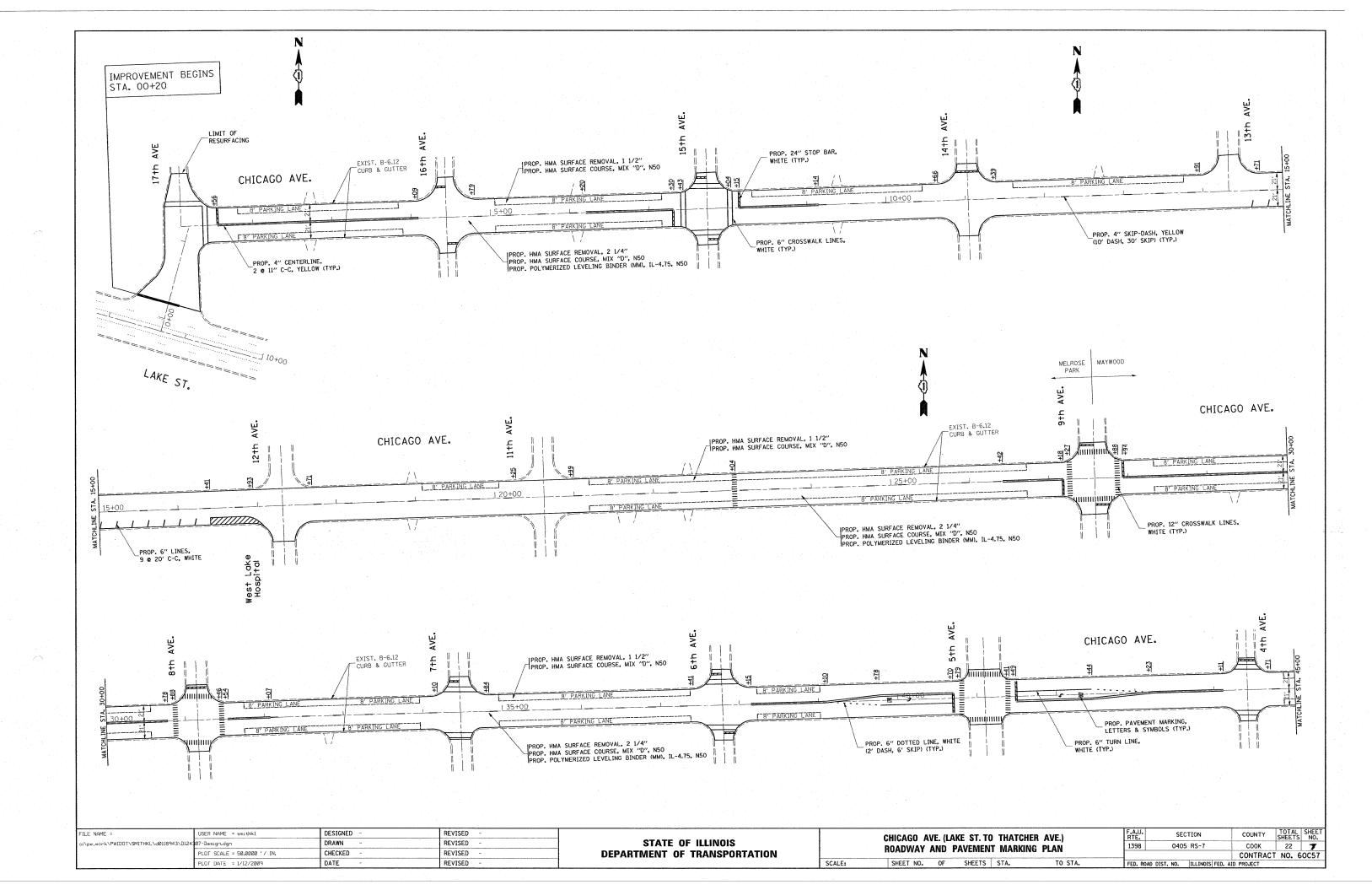
PAVEMENT PATCHING SHALL BE DONE PRIOR TO MILLING OF ROADWAY (SEE BD-22).

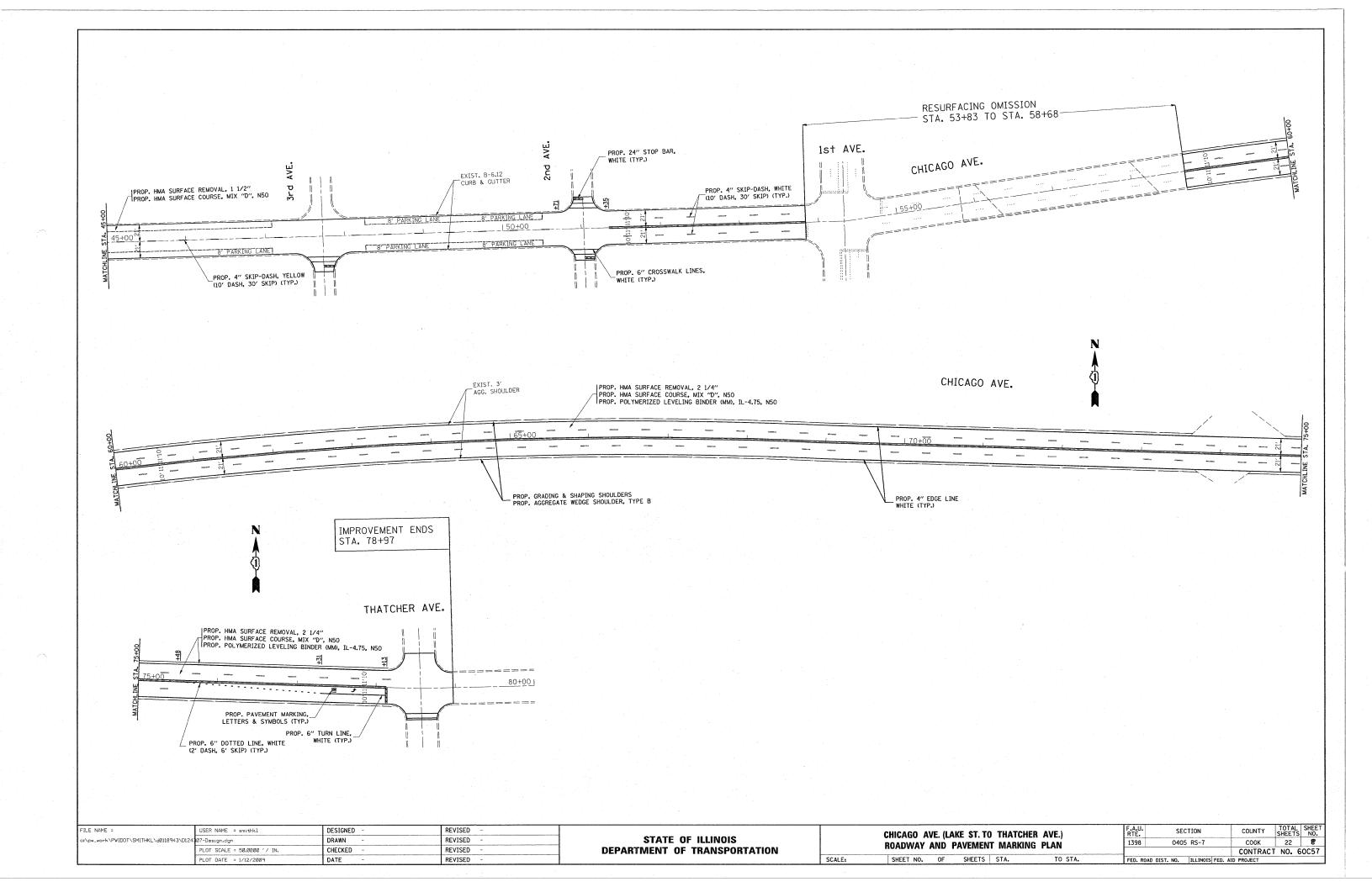
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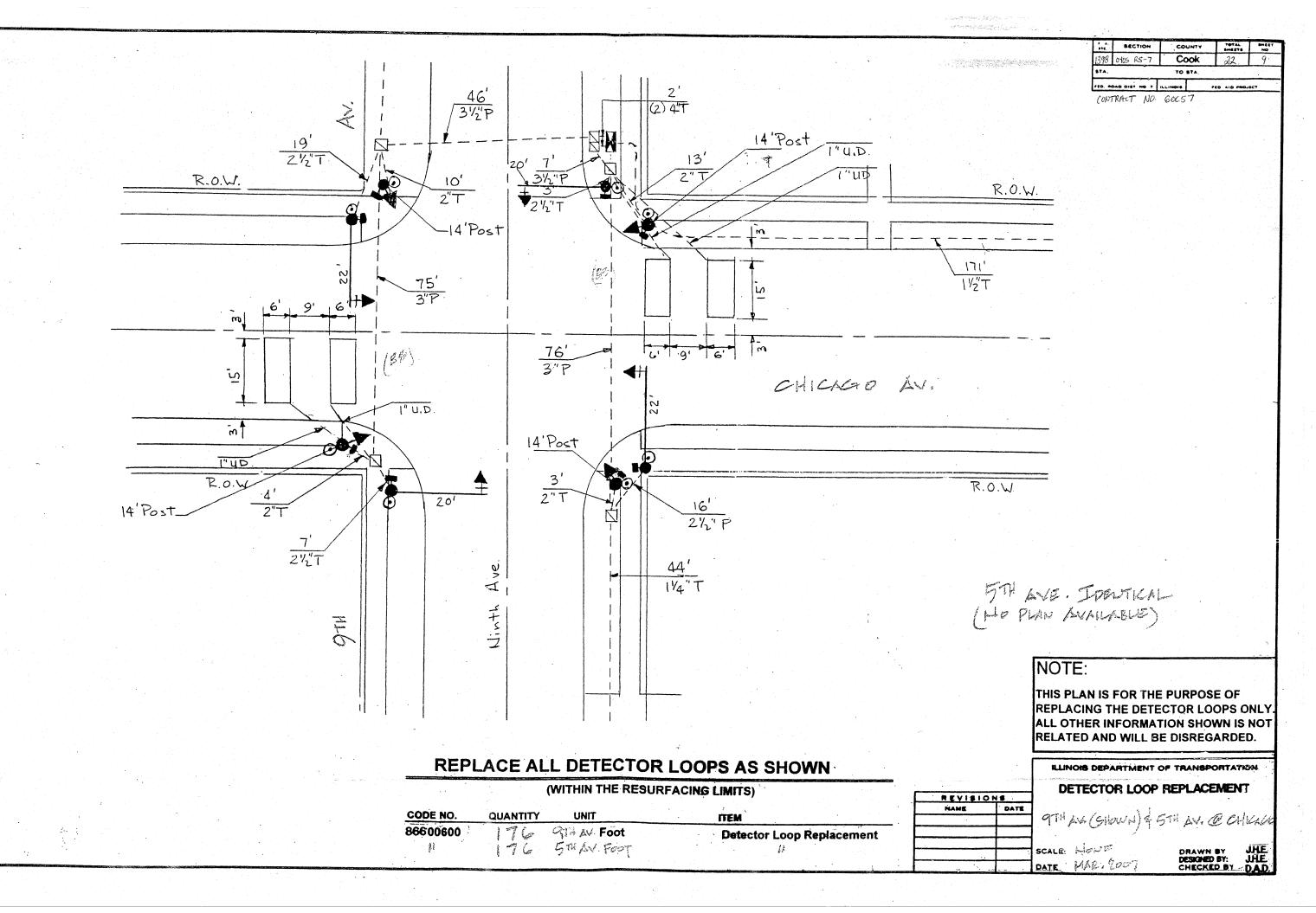
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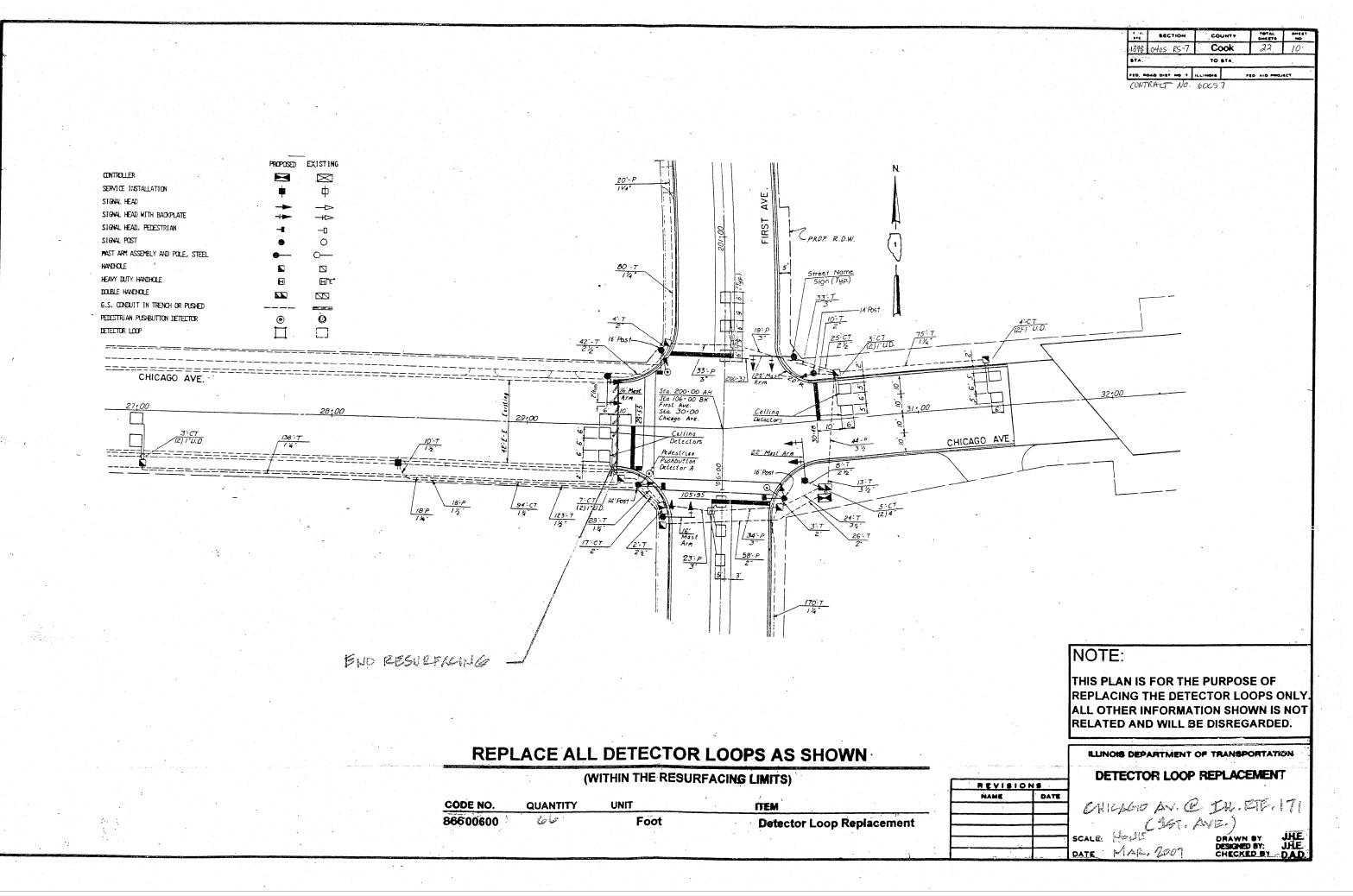
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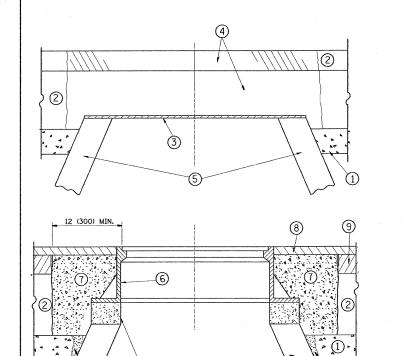
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1398		0405	RS-7			COOK	22	6
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FED. F	ROAD DIST.	NO.	ILLINOIS	FED.	AID	PROJECT		











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.

LEGEND

CONSTRUCTION PROCEDURES

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.

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 LEUVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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

STAGE 1 (BEFORE PAVEMENT MILLING)

STAGE 2 (AFTER PAVEMENT MILLING)

1 SUB-BASE GRANULAR MATERIAL

PROPOSED SAND FILL

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

LOCATION OF STRUCTURES:

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = DESIGNED R. SHAH REVISED - R. SHAH 03-10-95 REVISED - A. ABBAS 03-21-97 PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED - R. WIEDEMAN 05-14-04 DATE 10-25-94 REVISED - R. BORO 01-01-07

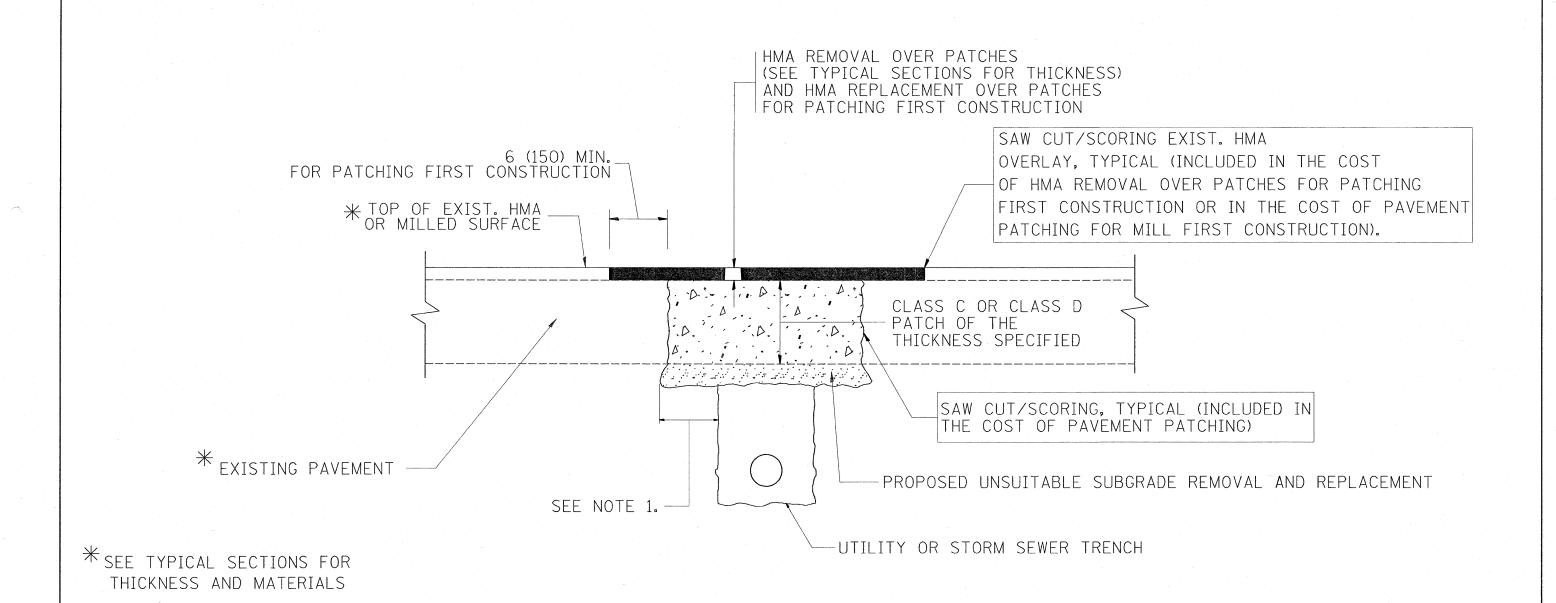
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING SHEET NO. 1 OF 1 SHEETS STA. SCALE: NONE

COUNTY Cook CONTRACT NO. 60C57 BD600-03 (BD-8)

PROPOSED CRUSHED STONE AND HMA SURFACE MIX

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



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)

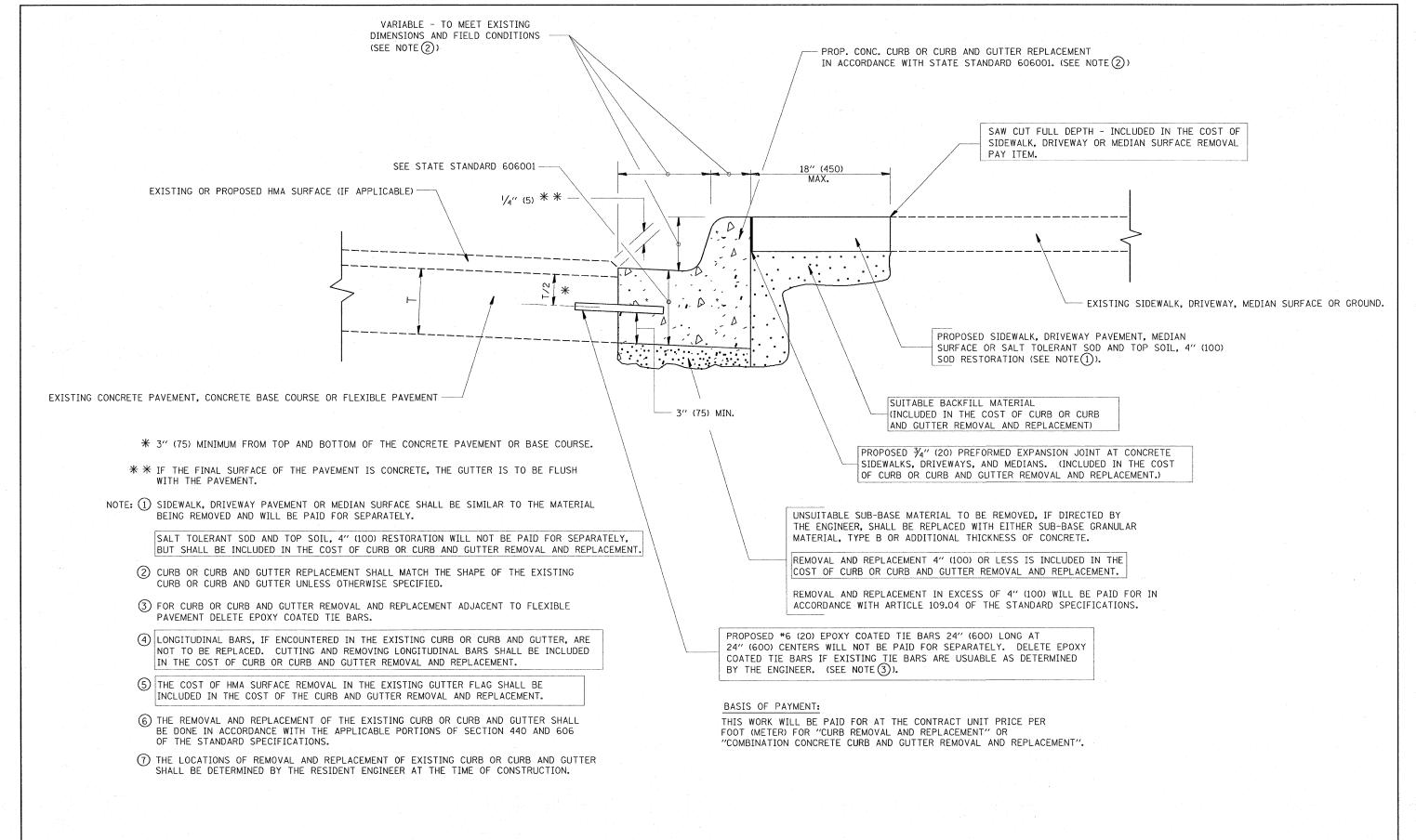
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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.

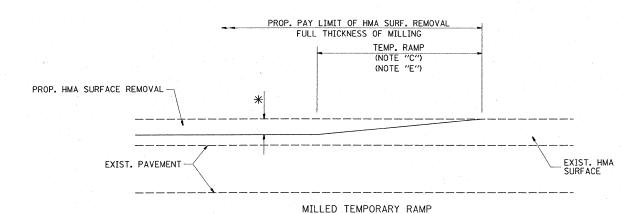
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	PLOT DATE = 1/12/2009	DATE - 10-25-94	REVISED - K. ENG	IG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

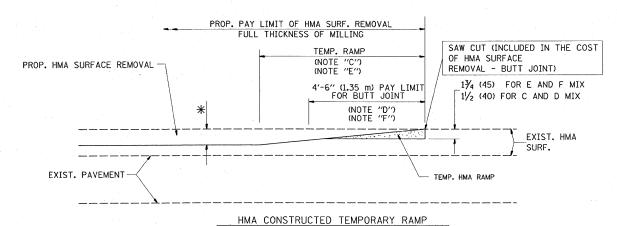
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

CURB OR CURB AND GUTTER C1\pm.work\PWIDOT\SMITHKL\d0i08892\D1=\$\frac{\text{totalgn}}{39.8} \ 0405 \ \frac{\text{K} - 7}{39.8} \ 0405 \ \frac{\text{K} - 7}{	People 23 12
	COOK XX 13
PLOT SCALE = 50,0000 '/ IN. CHECKED - M. GOMEZ 01-22-01 DEPARTMENT OF TRANSPORTATION REMOVAL AND REPLACEMENT BD600-06 (BD-24)	CONTRACT NO. 60C57
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. ROAD DIST. NO. 1 ILLINOIS FED. A)	PROJECT



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

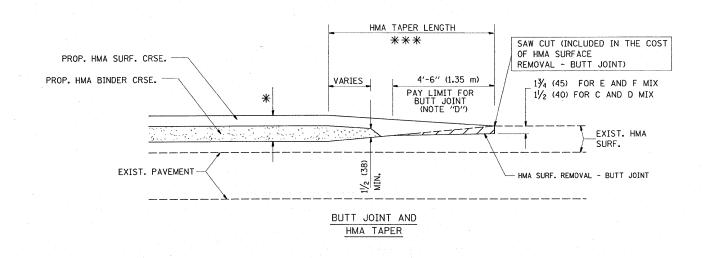
OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



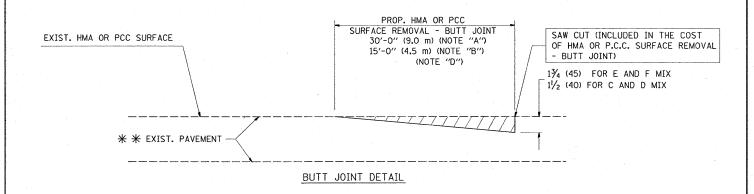
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

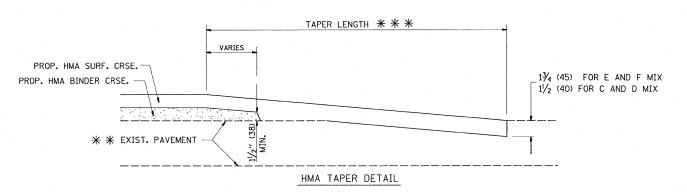
FILE NAME = USER NAME = smithkl DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94
ci\pm\work\PMIDDT\SMITHKL\ddig8892\Dist\text{tddgn} - DRAWN - REVISED - A. ABBAS 03-21-97
PLOT SCALE = 50.0000 '/ IN. CHECKED - REVISED - M. GOMEZ 04-06-01
PLOT DATE = 1/12/2009 DATE - 06-13-90 REVISED - R. BOR0 01-01-07

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

OTHERWISE SHOWN.





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

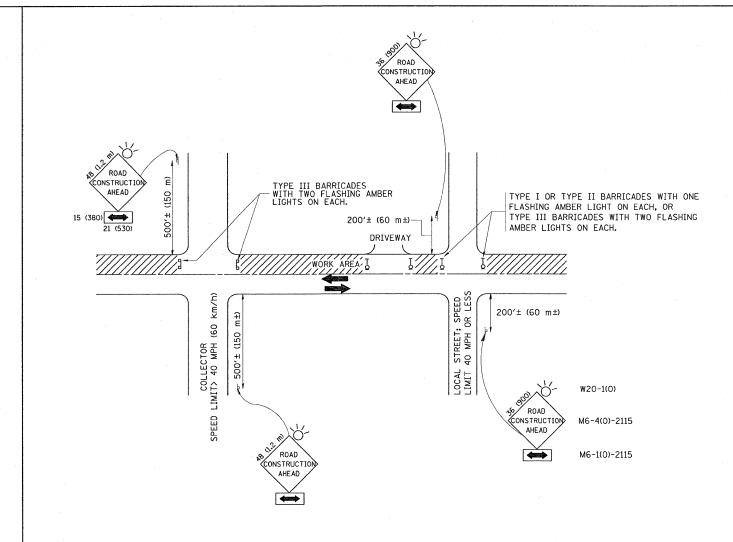
* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

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:
- 0) 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:
- d) 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.

SCALE: NONE

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).

- 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.

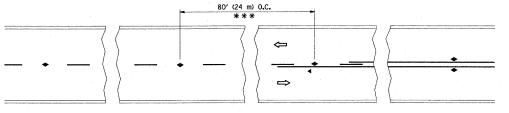
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = smithkI	DESIGNED	-	LHA	REVISED	-	J. OBERLE 10-18-95
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

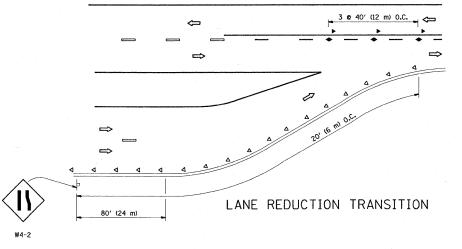
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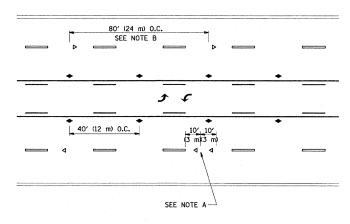
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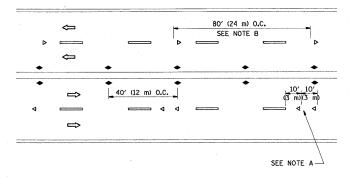
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

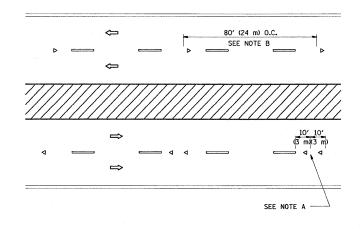




TWO-WAY LEFT TURN



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

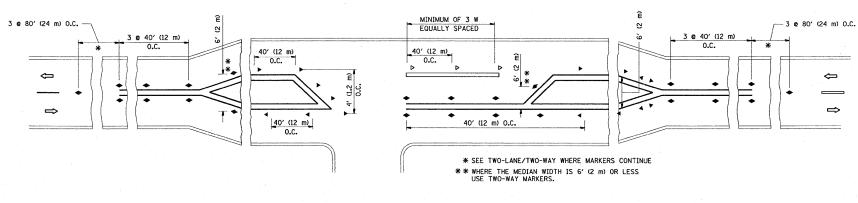
---- YELLOW STRIPE

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



LEFT TURN

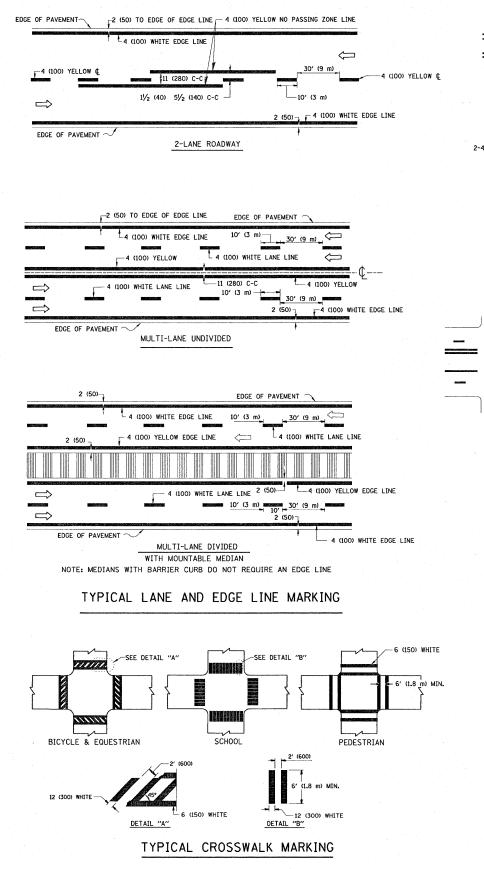
All dimensions are in inches (millimeters) unless otherwise shown.

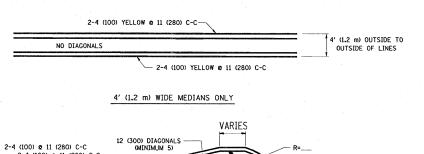
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

	FILE NAME =	USER NAME = smithkl	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	
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		PLOT DATE = 1/12/2009	DATE	REVISED ~	

	TYPICA	L APPLICA	ATIONS	
RAISED	REFLECTIVE PAVEMEN	T MARKE	RS (SNOW-PLOW	RESISTANT)
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.

SECTION Cook 22 0405 RS-7 Cook 22 16 CONTRACT NO. 60CS7





4 (100) © 11 (280) C-C
2-4 (100) © 11 (280) C-C

MEDIAN LENGTH

FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

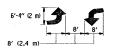
MEDIANS OVER 4' (1.2 m) WIDE

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))

4 (100) YELLOW LINES (51/2 (140) C-C)

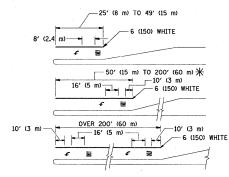
4 (100) YELLOW LINES (5½ (140) C-C)

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

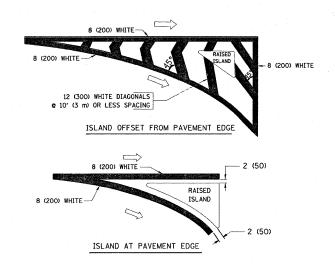


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SQ. FT. (1.5 m²) ML_I^V AREA = 20.8 SQ. FT. (1.9 m²)

* 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 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' (500) 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 0F: "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); 1150' (45 m) C-C (0VER 45MPH (70 km/h))

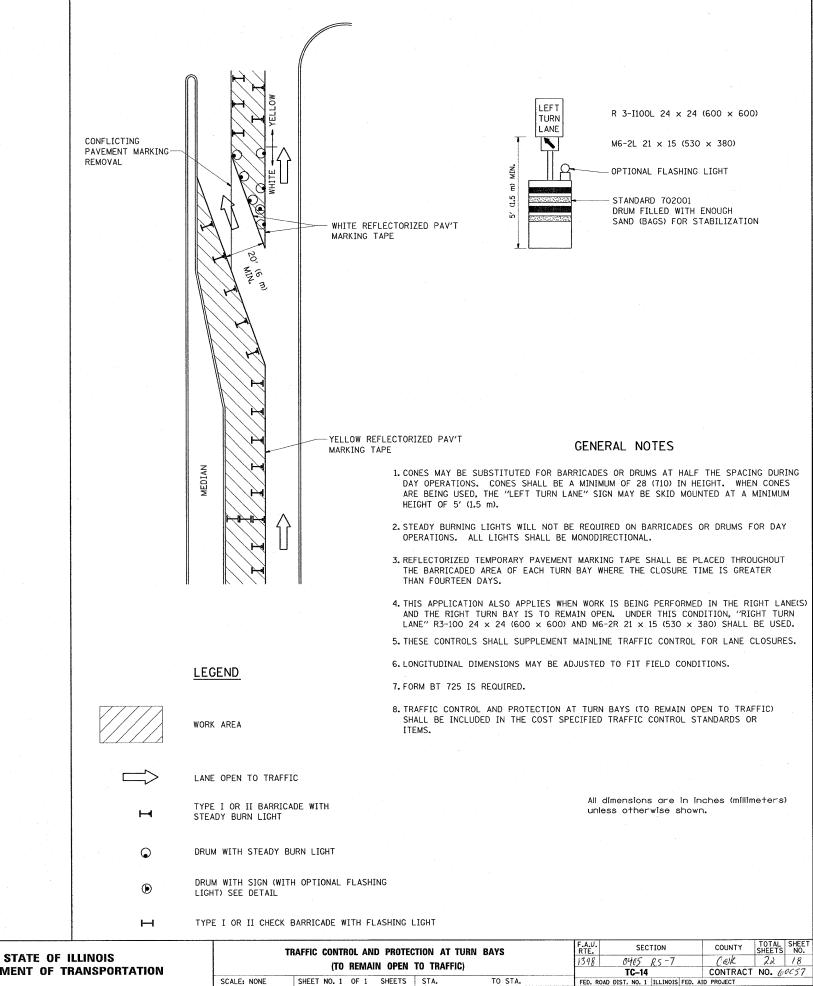
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

FILE NAME =	USER NAME = smithkl	DESIGNED -	EVERS	REVISED	-T. RAMMACHER 10-27-94
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·	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

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

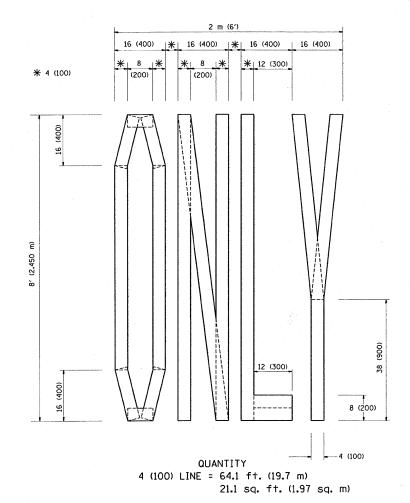
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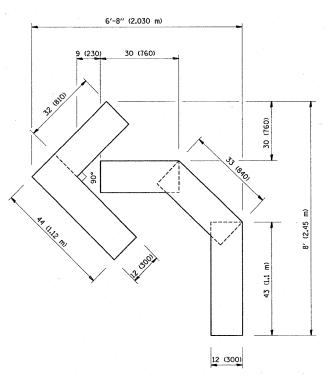


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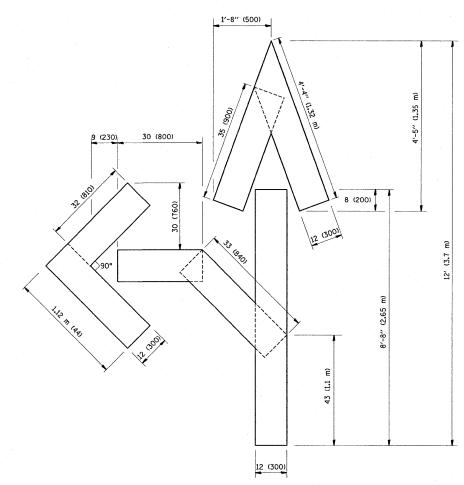
DEPARTMENT OF TRANSPORTATION

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





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



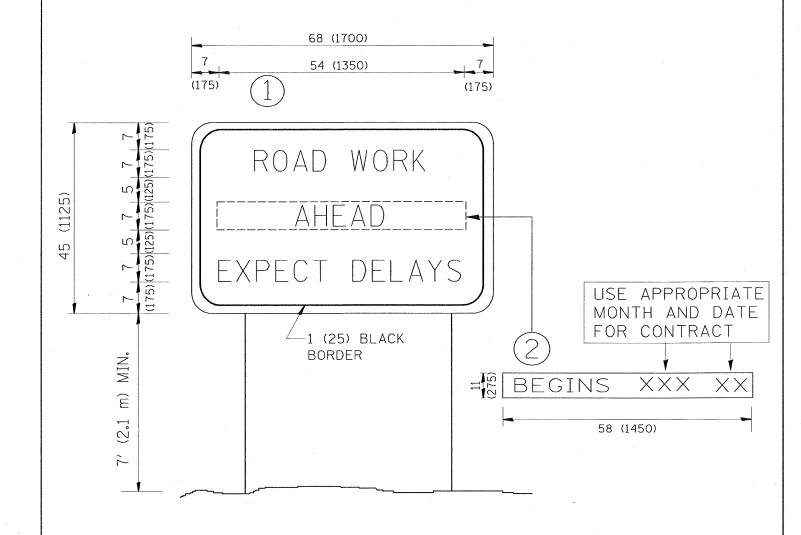
OUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)

TO STA.

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

| FED. ROAD DIST. NO. 1 | ILLINOIS| FED. AID PROJECT | FED. ROAD DIST. NO. 1 | ILLINOIS| FED. AID PROJECT | TOTAL SHEETS | NO. 1 | ILLINOIS| FED. AID PROJECT | NO. 60057

FILE NAME =	USER NAME = smithkl	DESIGNED -	REVISED -T. RAMMACHER 06-05-96			PAVEMENT MARKING LETTE	DE AMB EVIADALE	
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	i	FOR TRAFFIC ST	AGING	
	PLOT DATE = 1/12/2009	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO



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.

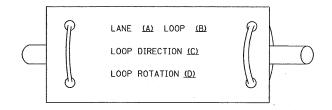
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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c:\pw_work\PWIDGT\SMITHKL\dØ108092\Dist	\$td₁dgn	DRAWN ~	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			133	98 0405 RS-7	look 22 20
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN		TC-22	CONTRACT NO. 60057
	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

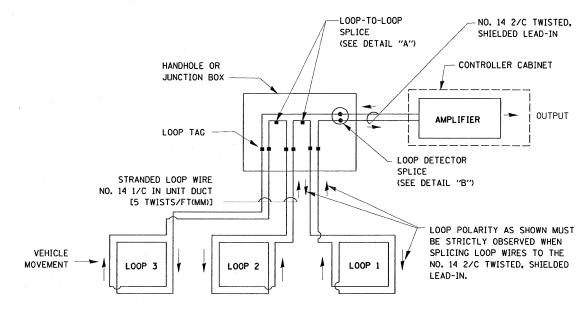
LOOP DETECTOR NOTES

- 1. 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

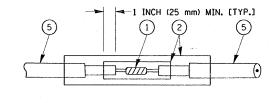


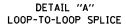
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP *1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

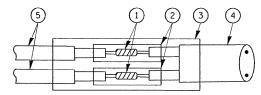


DETECTOR LOOP WIRING SCHEMATIC

- 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.







DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

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.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

ME = smithkI	DESIGNED	-	D.A.D.	REVISED	~ 11-12-01
	DRAWN	. –	R.W.P.	REVISED	- BUR. TRAFFIC 01-01-02
ALE = 50.0000 '/ IN.	CHECKED	-	D.A.Z.	REVISED	-
TE = 1/12/2009	DATE		05-30-00	REVISED	.m. ,
	ME = smithkl CALE = 50.0008 ' / IN. NTE = 1/12/2009	DRAWN CALE = 50.0000 '/ IN. CHECKED	DRAWN - CALE = 50.0000 '/ IN. CHECKED -	DRAWN - R.W.P. CALE = 50.0000 '/ IN. CHECKED - D.A.Z.	DRAWN - R.W.P. REVISED CALE = 50.0000 '/ IN. CHECKED - D.A.Z. REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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	STANDARD		TRICT ON Signal		DETAILS	
SCALE: NONE	SHEET NO. 1	OF 4	SHEETS	STA.	TO S	STA.

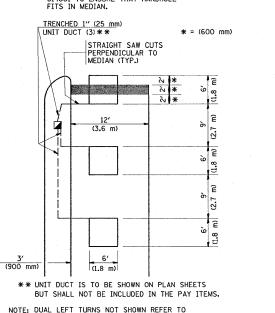
	F.A.U. RTE.			SEC	TION	ı			COUNTY	TOTAL SHEETS	SHEET NO.
	1398		040	15	RS	-7		T	Cook	22	21
			T	S-0	5				CONTRAC	T NO.	0057
- I	FED. R	OAD	DIST.	NO. 1	ILLI	NOIS	FED.	AID	PROJECT		

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER * = (600 mm) * * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL - VOLUME DENSITY ("FAR OU

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

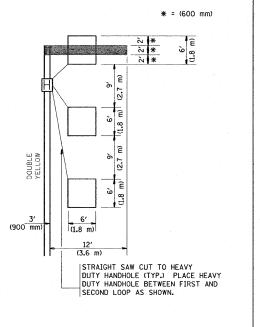
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

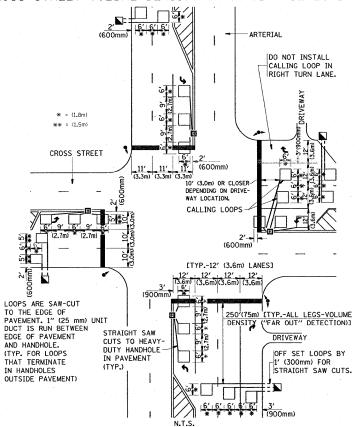


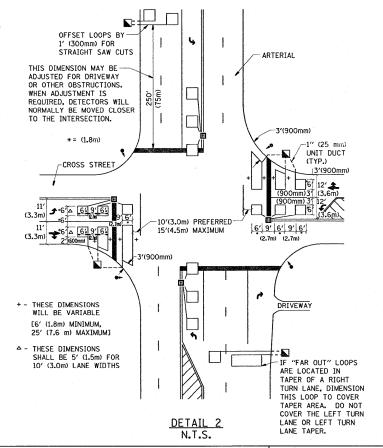
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 (1.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 $\underline{\text{ALL}}$ 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 = smithkl	DESIGNED -	REVISED -
c:\pw_work\PWIDOT\SMITHKL\dØ108092\Dist	td.dgn	DRAWN -	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 1/12/2009	DATE -	REVISED -

DETAIL 1

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.

F.A.U. SECTION COUNTY TOTAL SHEET NO. 1388 0405 RS-7 Cook 22

TS-07 CONTRACT NO. 60C57

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