FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED WITHIN

THE VILLAGE OF THORNTON

 $\circ$ 

 $\circ$ 

0

0

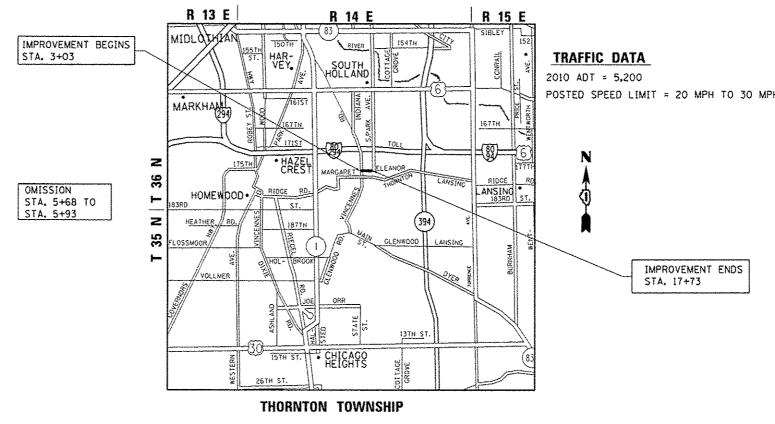
### STATE OF ILLINOIS

### DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

# **PROPOSED** HIGHWAY PLANS

FAU 2921: ELEANOR ST. WATER ST. TO WILLIAMS ST. **SECTION: 2010-092-RS** RESURFACING **COOK COUNTY** C-91-056-11



GROSS LENGTH OF PROJECT = 1,470 LINEAL FEET = 0.28 MILE NET LENGTH OF PROJECT = 1,445 LINEAL FEET = 0.27 MILE

D -91-056-11

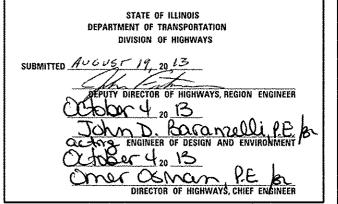
COOK 18 1

CONTRACT NO. 60L89

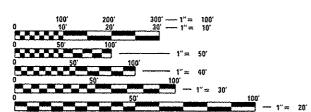
2010-092-RS

2921





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



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

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

PROJECT ENGINEER JENPAI CHANG (847) 705-4432 PROJECT MANAGER KEN ENG (847) 705-4247

CONTRACT NO. 60L89

#### INDEX OF SHEETS

#### LIST OF STATE STANDARDS

DESCRIPTION

CLASS C AND D PATCHES

FRAME AND LIDS, TYPE 1

TRAFFIC CONTROL DEVICES

DETECTOR LOOP INSTALLATION

TYPICAL LAYOUT FOR DETECTOR LOOPS

SPEEDS <= 45 MPH

STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS

OFF-ROAD OPERATIONS. MULTILANE, 15' TO 2' FROM PAVEMENT EDGE

URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR

COMBINATION CONCRETE CURB AND GUTTER

URBAN LANE CLOSURE, MULTILANE INTERSECTION

SHEET NO.	<u>DESCRIPTION</u> <u>S</u>	TANDARD NO.
		000001-06
1	COVER SHEET	442201 <i>-03</i>
2	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES	604001 <i>-03</i>
3-4	SUMMARY OF QUANTITIES	606001 <b>-<i>05</i></b>
5	EXISTING & PROPOSED TYPICAL SECTIONS	701101 <b>- 03</b>
6	ROADWAY & PAVEMENT MARKINGS PLANS	701427 <b>-01</b>
7	DETECTOR LOOP REPLACEMENT PLANS	<b></b>
8	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)	701606 <i>-08</i>
9	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	701701 <i>-08</i>
10	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701901- <b>0Z</b>
11	BUTT JOINT AND HMA TAPER DETAILS (BD-32)	886001 <i>-01</i>
12	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10	886006 <i>-01</i>
13	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-	11)
14	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	
15	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)	
16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)	
17	ARTERIAL ROAD INFORMATION SIGN (TC-22)	
18	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)	

#### 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 IS REDUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF THORNTON,

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 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (45 KM/H) OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (45 KM/H), WITH WRITTEN APPROVAL FROM THE ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

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

THE RESIDENT ENGINEER SHALL CONTACT PATRICE HARRIS AREA TRAFFIC FIELD ENGINEER AT (847) 715-8422 A MINIMUM OF 2 WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.

THE RESIDENT ENGINEER SHALL VERIFY ALL EXISTING PAVEMENT MARKINGS BEFORE MILLING.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS

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

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

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE 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.

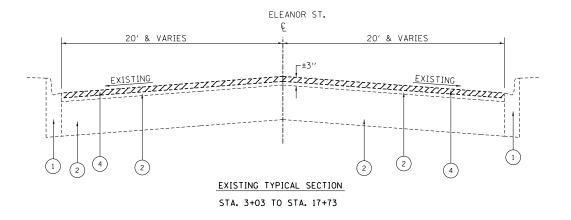
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
	FILE NAME .	USER NAME > qureshiya	DESIGNED -	REVISED -	
ĺ	c:\px.work\pwidos\qureshiya\d0285719\0[8	iiil-sht-plan,dgn	DRAWN -	REVISEO ·	ĺ
		PLOT SCALE . 100,0000 1/ 10.	CHECKED -	REVISED -	ĺ
		PLOT DATE + 0/14/2013	DATE -	REVISED .	į

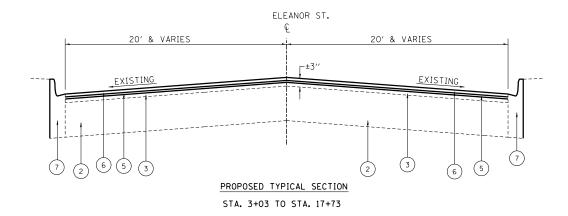
STATE	OF	ILLINOIS
DEPARTMENT O	)F 1	RANSPORTATION

INDEX OF S	HEETS, LIST OF	STATE STA	NDARDS &	GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		ELEANOR S			2921	2010-092-R\$	COOK	18	2
SCALE	SHEET NO. 1 OF		STA,	TO STA.	FED. ROJ	NO DIST. NO. ILLINOIS FED. A	CONTRACT	NO. E	OL89

	SUMMARY OF QUANTITIES	P-910-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	URBAN 100%	<u>/</u>	CONSTRUC	TION TYPE	CODE						URBAN	<del>'</del>	· ·	MSTDUCT	ON TYPE CO	ί <del>ε · · · · ·</del>	
	Johnson C. GOACTITES		STATE TOTAL	ROADWAY						SUMM	ARY OF QUANTITIES		STATE	ROADWAY		Mairocit	ON TIPE CO	/E	
CODE NO	ITEM	UNIT	QUANTITIES	0005	THE PROPERTY OF THE PROPERTY O				CODE NO		ITEM	UNIT	TOTAL						
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	4	4				4	44002212	HOT-MIX ASP	HALT REMOVAL OVER PATCHES, 3"	SO YO	530	530					
40600300	ACCORDATE ( SPANE COLT.)																		
10600300	AGGREGATE (PRIME COAT)	TON	16	16					44201753	C) 155 0 017	CUES TARE II O DOGU								:
40600400	MIXTURE FOR CRACKS, JOINTS, AND	TON	3	3		<u> </u>				CLASS U PAI	CHES, TYPE II, 9 INCH	SO YO	240	240					
	FLANGEWAYS							4	44201757	CLASS D PAT	CHES. TYPE III. 9 INCH	SO YD	150	150					
40600827	POLYMERIZED LEVELING BINDER (MACHINE	+411																	
	METHOD), 11-4.75, NSO	TON	320	320					44201759	CLASS D PAT	CHES. TYPE IV. 9 INCH	SO YD	90	90					
									60250200	CATCH BASIN	S TO BE ADJUSTED	EACH	4	4			-		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT	SO YD	213	213															Manhadamhanagadavenar
	JOINT			THE PARTY OF THE P				6	50252800	CATCH BASIN	S TO BE RECONSTRUCTED	EACH	ı	1					
40601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	90	90				66	0255410	CATCH BASIN	5 TO BE CLEANED	EACH	5	5					
	PATCHES											The state of the s		THE STATE OF THE S					Markeshiller, mar manuraris, discur
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX	704						60	60406000	FRAMES AND L	IDS. TYPE I. OPEN LID	EACH	ı	1					
	"D", N50	TON	632	632	THE PERSON NAMED IN COLUMN NAM			6:	3500310	REMOVE AND F	REINSTALL DELINEATORS	EACH	20	20	·				
42001300	PROTECTIVE COAT	SO YD	300	300			The state of the s	61	7000400	ENCINEER'S F	TELD OFFICE, TYPE A	CAL MO	3	3					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	1750	1750				61	7100100	MOBILIZATION	[	L SUM	1	1					
																			-
42400800	DETECTABLE WARNINGS	SO FT	250	250	77			770	0102625		ROL AND PROTECTION,	L SUM	1	ı					
		30 / 1	£39	- 50	***************************************					STANDARD 701	605		- Anna In		-				The state of the s
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YO	7517	7517				70	0102635	TRAFFIC CONT	ROL AND PROTECTION.	L SUM	1	1					\$455 <del>4</del> 544444444444444444444444444444444
44000600	SIDEWALK REMOVAL									STANDARD 701	701								
	AINCOURT DESCRIPT	SO FT	1750	1750				70	0300100	SHORT TERM D	AVEMENT MARKING	FOOT	1604	1604	ANTE PARTY OF THE				
<b>*</b>										- Section F	THE PARTY MANAGEMENT	7001	1009	1004			• SPECIA	LITY IT	'EMS
THE NAME +		ESIGNEO -		REVISED -			L			1	······································				F.A.U. RTE.	SECTIO			
	PLOT SCALE + 100.0000 1/ In C	rawn - Æcked - Ate -		REVISEO - REVISEO - REVISEO -		Đ		ATE OF ILLIN NT OF TRANS				ANOR ST.  OF QUANTIT		STA	2921	2010-09	2-RS C	OOK TRACT N	OTAL SHEET HEETS NO. 18 3 WO. 60L89

	SUMMARY OF QUANTITIES		100%			ONSTRUCTI	ION TYPE	CODE			SUMMARY OF QUANTITIES		100%		C	ONSTRUCT	ION TYPE C	ODE	
CODE NO	ITEM	UNIT	STATE TOTAL QUANTITIES							CODE NO	ITEM	UNIT	STATE TOTAL QUANTITIES	ROADWAY					
1 1 1		una e constante de la constant		0005										0005					
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND	SQ FT	648	648						78300200	RAISED REFLECTIVE PAVEMENT MARKER	EACH	76	76					
7 . 3	SYMBOLS		ļ	<b></b>							REMOVAL								
70300220	TEMPORARY PAVEMENT WARKING - LINE 4"	FOOT	3675	3675						¥ 88600600	DETECTOR LOOP REPLACEMENT	FOOT	158	158					1
70300240	TEMPOODRY DAVEMENT MADVING	5000																**************************************	+
10300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	80	80				-		×5538000	STORM SEWERS TO BE CLEANED 18"	FOOT	110	110				<del></del>	1
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	175	175						x6030310	FRAMES AND LIDS TO BE ADJUSTED	EACH	6	6					-
											(SPECIAL)				***************************************				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	234	234															
										Z0004562	COMBINATION CONCRETE CURB AND GUTTER	F00T	310	310					-
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	50 FT	535	535							REMOVAL AND REPLACEMENT								1
										***************************************			***************************************			· · · · · · · · · · · · · · · · · · ·			Ţ
8000100	THERMOPLASTIC PAVEMENT MARKING -	\$0 FT	648	648						Z0018500	ORAINAGE STRUCTURES TO BE CLEANED	EACH	5	5				and the second of the second o	4
	LETTERS AND SYMBOLS							-	-										-
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	F007	7678	***						Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4					1
	The Table 1 and 1	FOOT	3675	3675						20048665	RAILROAD PROTECTIVE LIABILITY INSURANCE								
										20040603	DAILHOAD FROM STILL STILL COUNTY	L SUM	1	1					***************************************
78000400	THERMOPLASTIC PAYEMENT MARKING - LINE 6"	FOOT	80	80						35501287	HOT-MIX ASPHALT BASE COURSE, 2 1/4"	SO YD	80	80					
																			***************************************
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	175	175						44000200	DRIVEWAY PAVEMENT REMOVAL	\$0 Y0	80	80					-
				,,,		- Annual Control of the Control of t													
8000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	234	234												··· <del>··························</del> ········			
																			-
8100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	126	126															
8300100	PAVEMENT MARKING REMOVAL	SQ FT	100	100															-
E HAHE •		IGNED -		REVISED	<u> </u>					\circ							• SPEC		l
	4701-002867 9-00056# s/4 pron 591 ORAI			REVISED				S.	TATE OF I	LLINOIS	ELE	ANOR ST.			F.A.U. RTE. 2921	SEC1 2010-0			SH





#### LEGEND

- 1. EXISTING COMBINATION CONCRETE CURB AND GUTTER
- 2. EXISTING HMA SURFACE COURSE
- 3. EXISTING P.C.C. BASE COURSE, 9"
- 4. PROPOSED HMA SURFACE REMOVAL, 2 1/4"
- 5. PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- 6. PROPOSED HMA SURFACE COURSE.
- MIX "D", N50, 1 1/2"
- 7. PROPOSED COMBINATION CONCRETE CURB AND GUTTER (DIRECT BY ENGINEER WHERE NECESSARY)

HOT MAY ACRUM T MAYTURE REQUI	DELIENTS
HOT-MIX ASPHALT MIXTURE REQUI	REMENTS
MIXTURE TYPE	AIR VOIDS(%) @ Ndes
PAVEMENT RESURFACING	
HMA SURFACE COURSE, MIX "D", N50 (IL 9.5 mm)	4% @ 50 GYR.
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50	3.5% @ 50 GYR.
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR.
DRIVEWAYS	
HMA SURFACE BASE COURSE, 2 1/4"	4% <b>©</b> 50 GYR.
HMA SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 2"	4% @ 50 GYR.

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTATIES IS 112 LBS/SQ YD/IN.

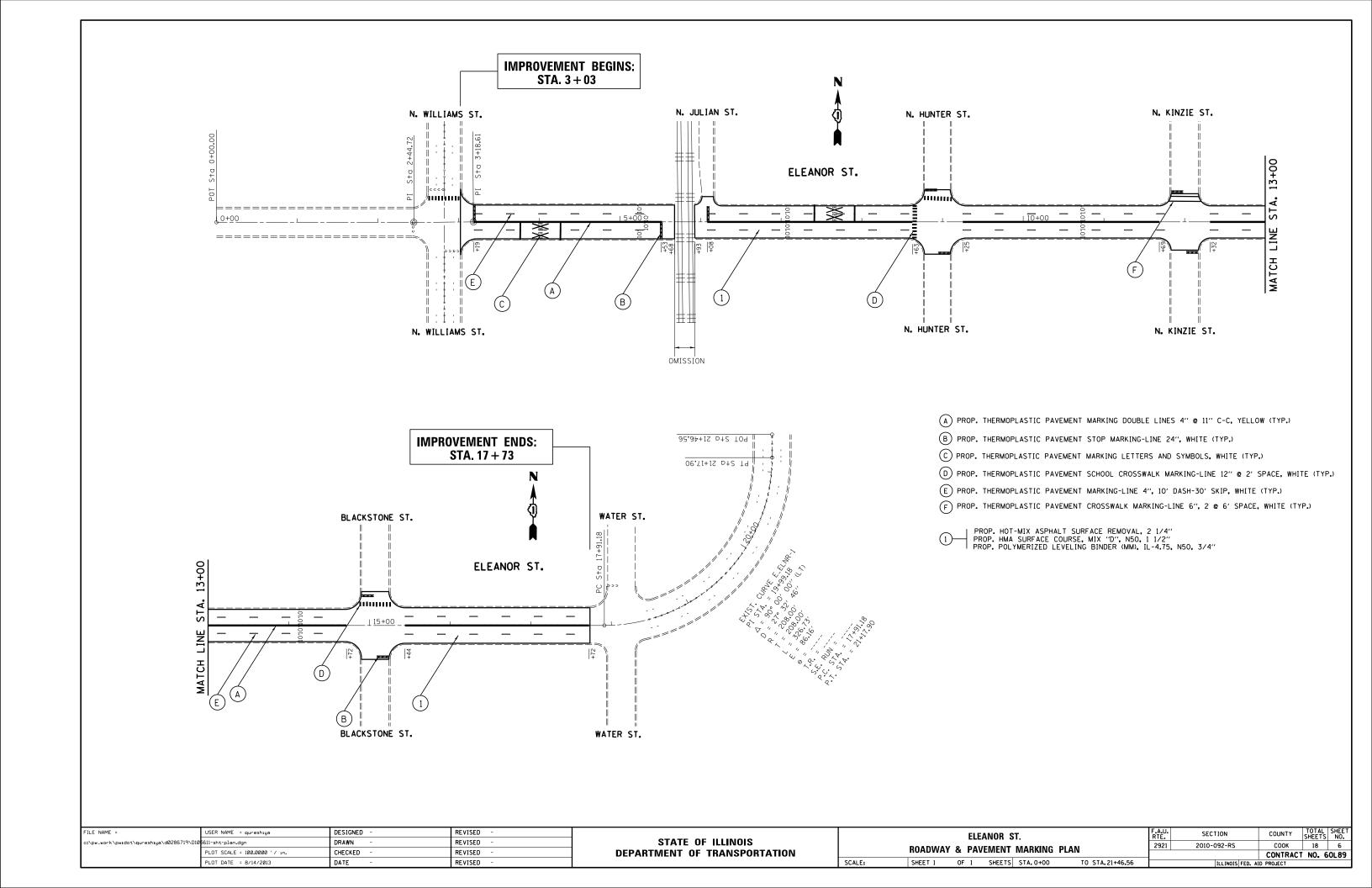
NOTE 2: THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

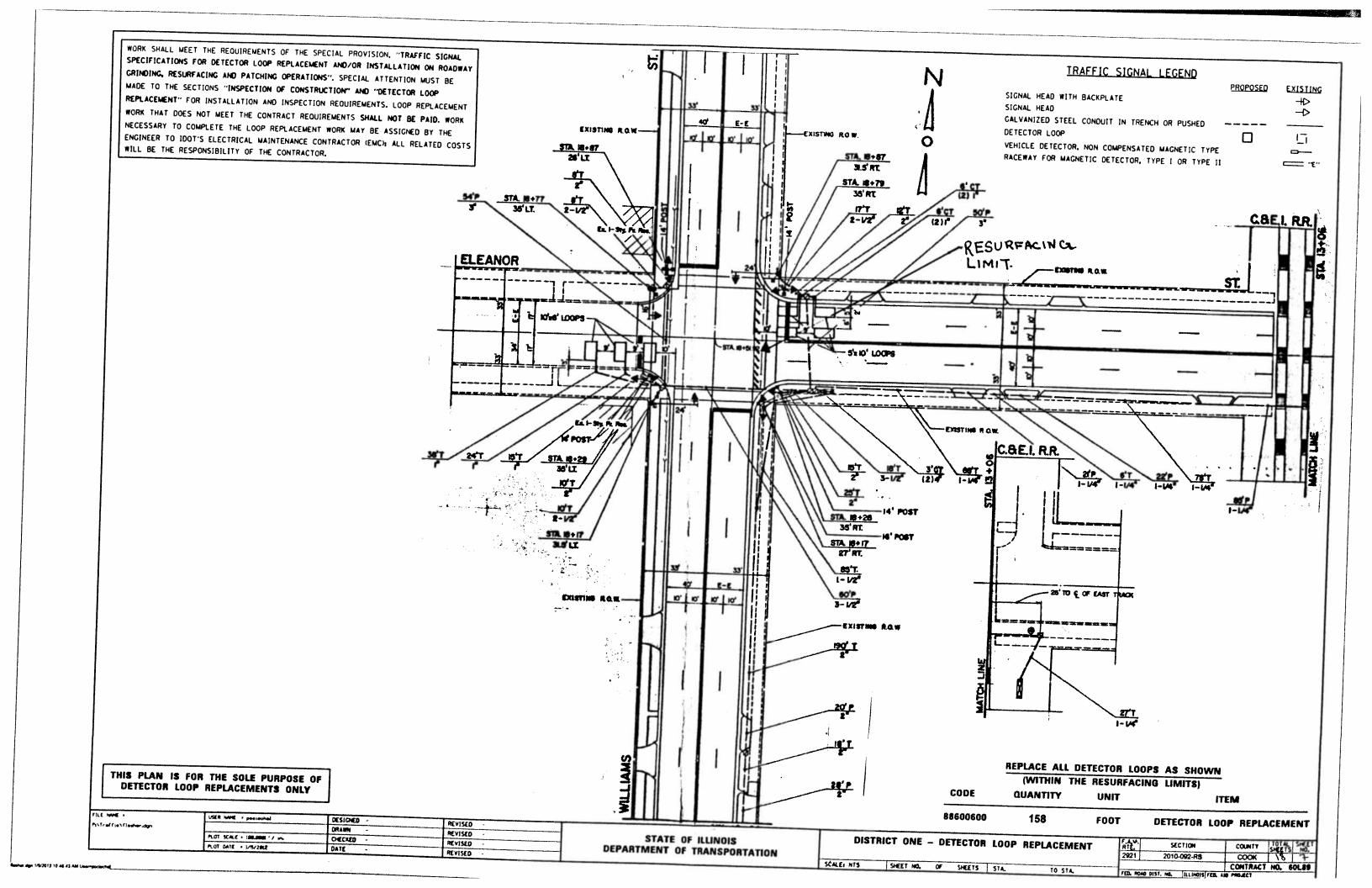
FOR USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

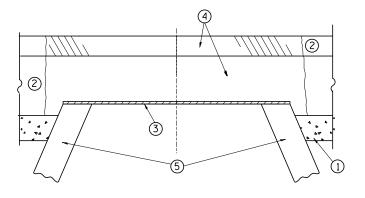
#### <u>NOTE</u>

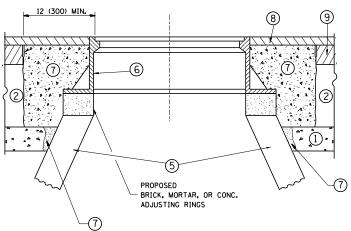
THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

FILE NAME =	USER NAME = qureshiya	DESIGNED -	REVISED -			ELEANOR S	et		F.A.U.	SECTION	COUNTY	TOTAL SHEET
c:\pw_work\pwidot\qureshiya\d0286719\D10	5611-sht-plan.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS				TIONIO	2921	2010-092-RS	соок	18 5
	PLOT SCALE = 100.0002 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		EXISTING & PROPOSED	TYPICAL SECT	IONS		2010 002 110		T NO. 60L89
	PLOT DATE = 8/23/2013	DATE -	REVISED -		SCALE:	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. AID		









#### NOTES:

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.

#### 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 PP-1\*
  CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING
  BASE COURSE OR THE BINDER COURSE.
- \* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LITT OF SURFACE UNLESS APPROVED BY THE FNGINFFR."

#### LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT

(5) EXISTING STRUCTURE

- (7) CLASS PP-1\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 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.

#### BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

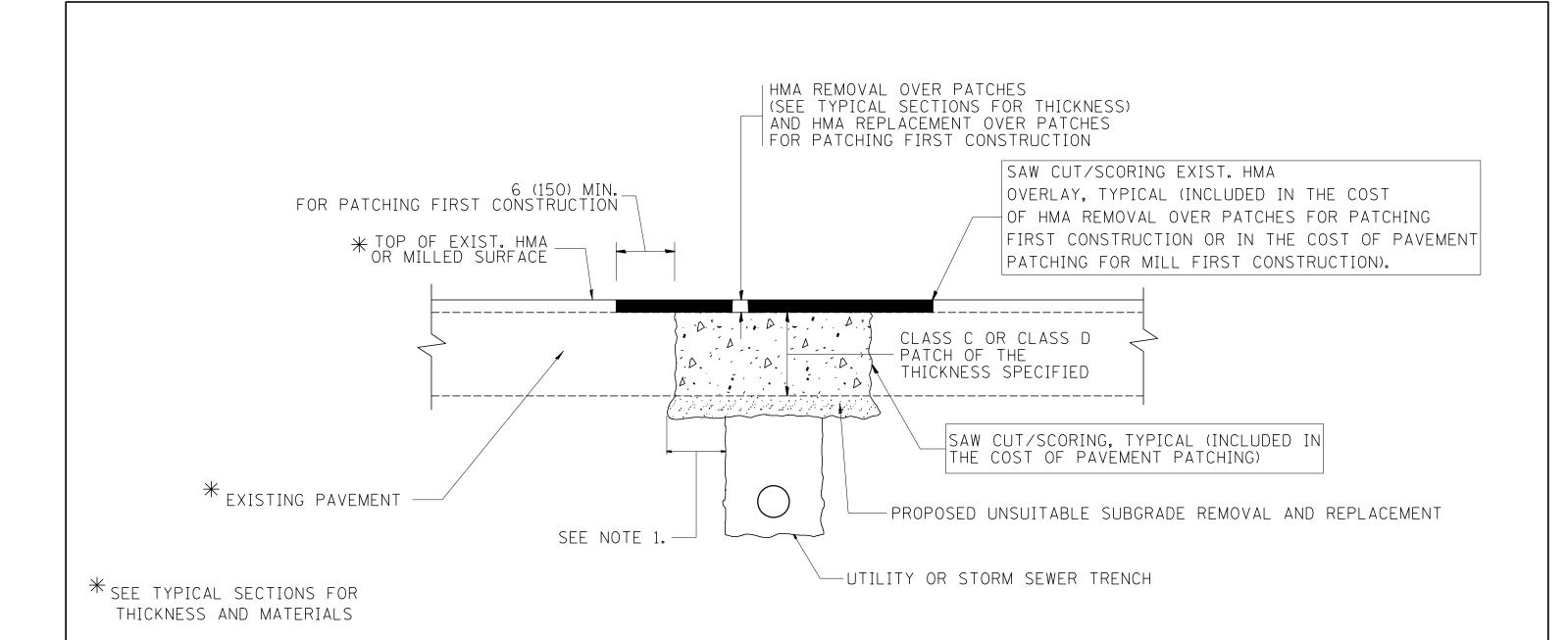
## DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.



#### 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".

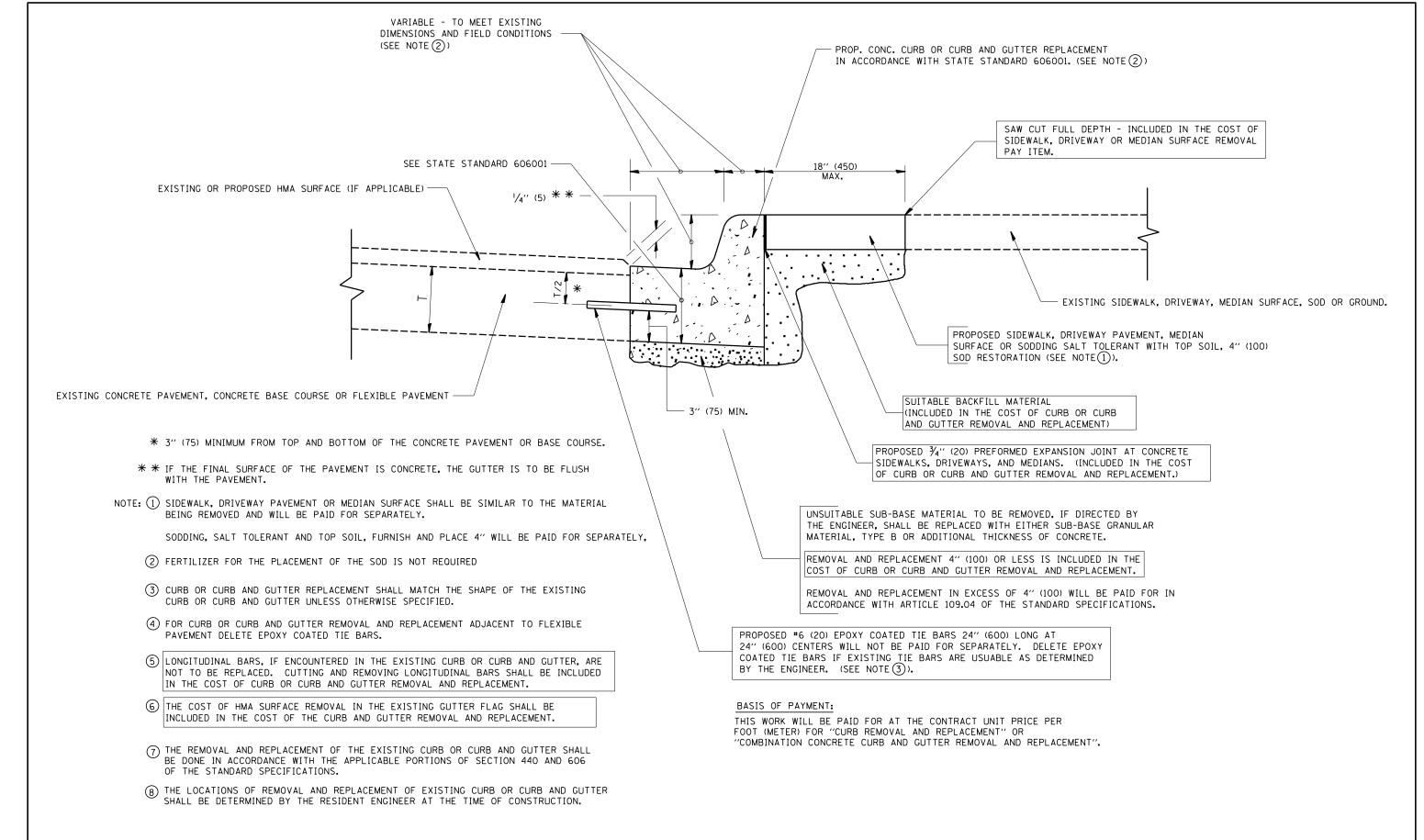
#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 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)

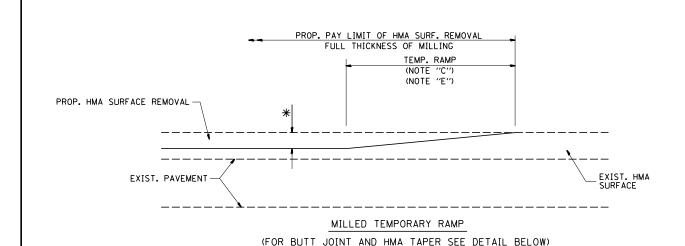
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

Γ	FILE NAME =	USER NAME = qureshiya	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.U. SECTION	COUNTY TOTAL SHEET
- 1	c:\pw_work\pwidot\qureshiya\d0286719\Dis	:Std.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		2921 2010-092-RS	COOK 18 9
		PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60L89
		PLOT DATE = 8/14/2013	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	

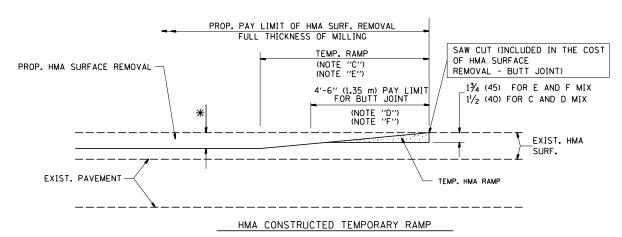


### CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

FILE NAME =	USER NAME = qureshiya	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER		RTF.	SECTION	COUNTY	SHEETS	SHEET NO.
c:\pw_work\pwidot\qureshiya\d0286719\Dis	Std.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS				2921	2010-092-RS	соок	18	10
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		REMOVAL AND REPLACEMENT			D600-06 (BD-24)	CONTRACT	T NO.	60L89
	PLOT DATE = 8/14/2013	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.			. AID PROJECT		

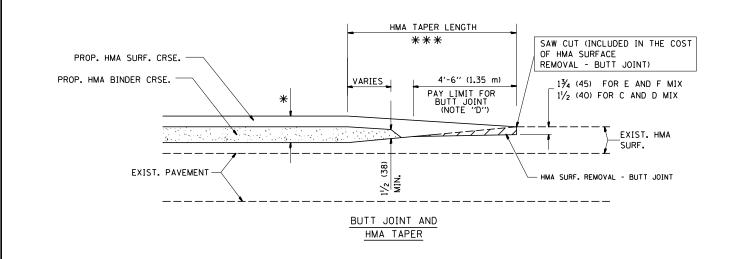


#### OPTION 1



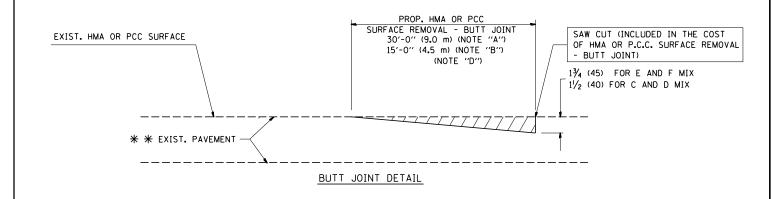
# (FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW) OPTION 2

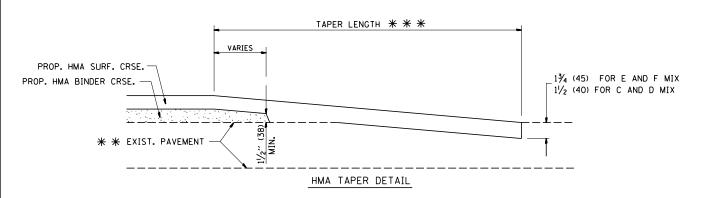
#### TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

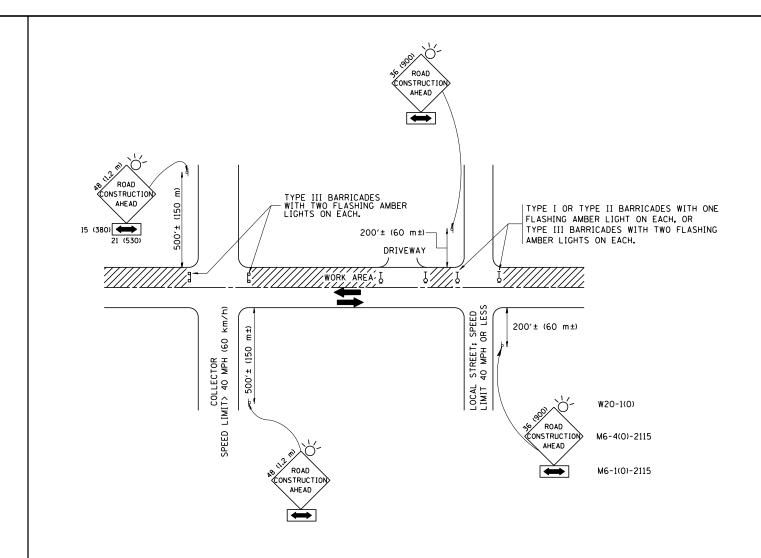
\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- : 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.
- \*\*  $\times$  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
- 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.
- 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).

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.

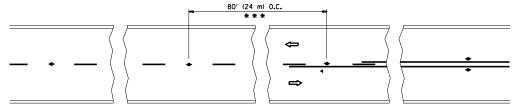
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

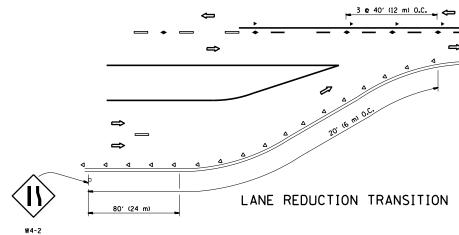
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

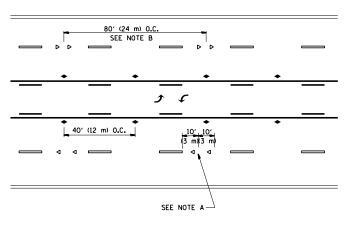
SHEET NO. 1 OF 1 SHEETS STA.



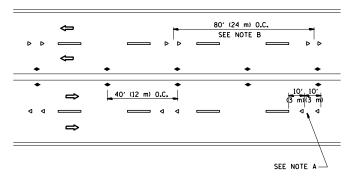
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

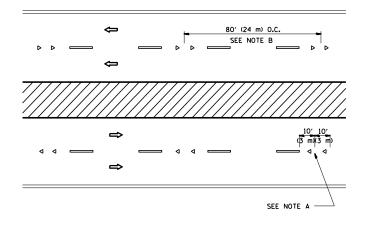




TWO-WAY LEFT TURN



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

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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

#### SYMBOLS

---- YELLOW STRIPE

WHITE STRIPE

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

#### DESIGN NOTES

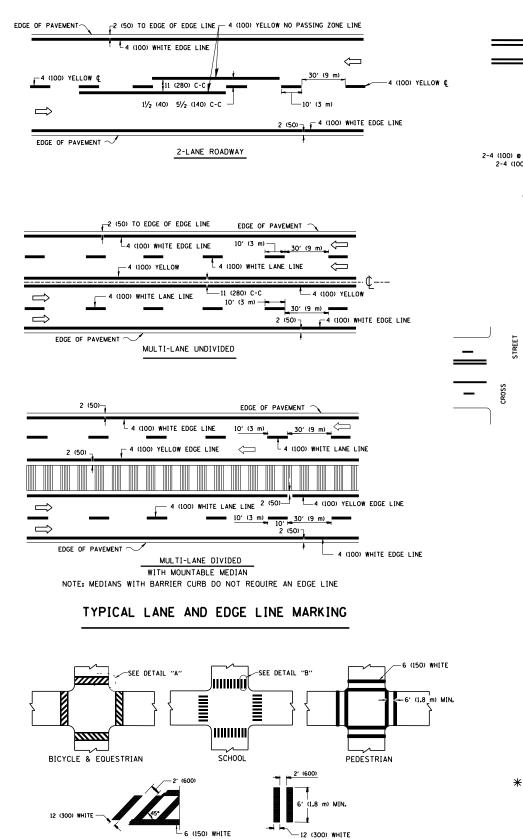
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT
  RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
- 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 = qureshiya	DESIGNED -	REVISED - T. RAMMACHER 09-19-94			TYPICAL APPLICATIONS	RTE. SECTION	COUNTY SHEETS NO.
c:\pw_work\pwidot\qureshiya\d0	286719\DistStd.dgn	DRAWN -	REVISED -T. RAMMACHER 03-12-99	STATE OF ILLINOIS			2921 2010-092-RS	COOK 18 13
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED I	REFLECTIVE PAVEMENT MARKERS (SNOW–PLOW RESISTANT)	TC-11	CONTRACT NO. 60L89
	PLOT DATE = 8/14/2013	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED.	



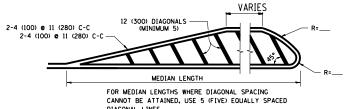
DETAIL "B"

TYPICAL CROSSWALK MARKING

DETAIL "A"

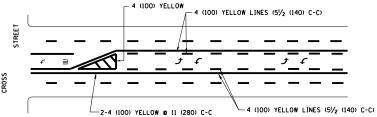
# 2-4 (100) YELLOW • 11 (280) C-C NO DIAGONALS 4' (1.2 m) OUTSIDE TO OUTSIDE OF LINES 2-4 (100) YELLOW • 11 (280) C-C

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

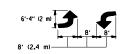


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

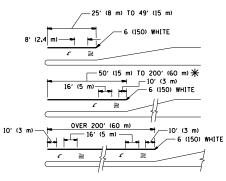


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

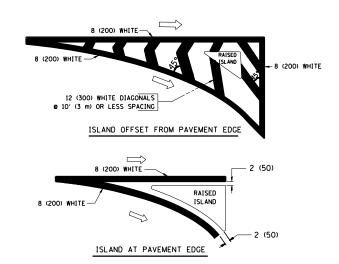


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m² ) OMLY AREA = 20.8 SO. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

#### TYPICAL TURN LANE MARKING



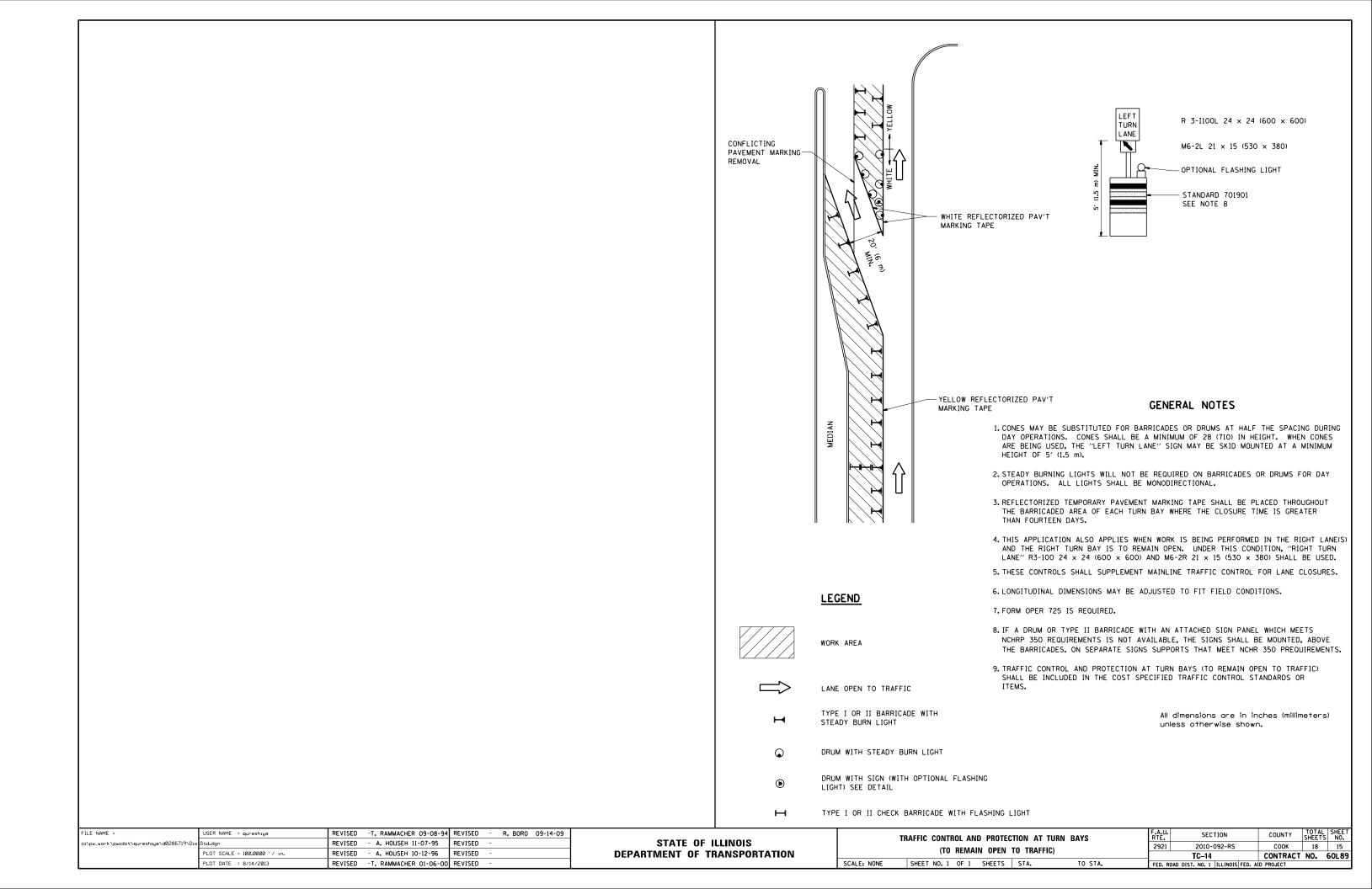
#### TYPICAL ISLAND MARKING

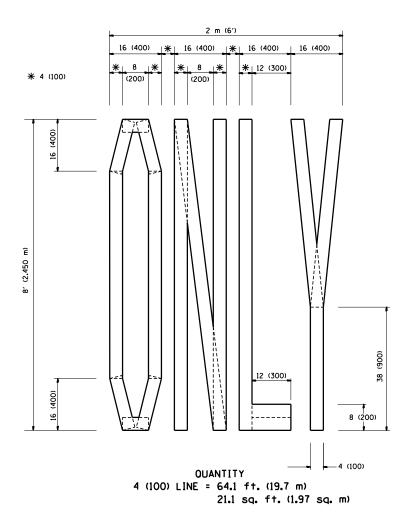
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>0</b> 4 (100)	SOL ID SOL ID	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 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH: 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 <b>e</b> 6 (150) 12 (300) <b>e</b> 45° 12 (300) <b>e</b> 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (500) 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. OTHERNISE, 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.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIACONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (0VER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) <b>e</b> 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) T0 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

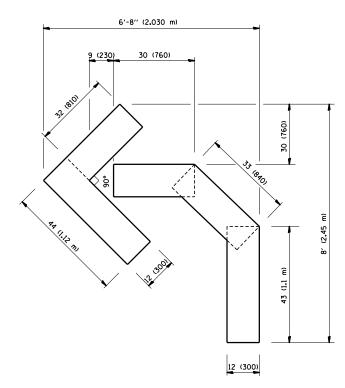
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

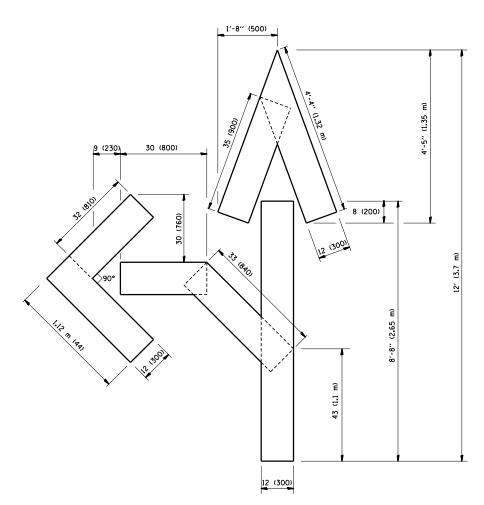
FILE NAME =	USER NAME = qureshiya	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE  TYPICAL PAVEMENT MARKINGS  SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		F.A.U.	SECTION	COUNTY	TOTAL SHEET
c:\pw_work\pwidot\qureshiya\d0286719\Dis	:Std.dgn	DRAWN -	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS			2921	2010-092-RS	соок	18 14
	PLOT SCALE = 100.00000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				TC-13	CONTRACT	T NO. 60L89
	PLOT DATE = 8/14/2013	DATE - 03-19-90	REVISED -				FED. ROAD	FED. ROAD DIST. NO. 1 ILLINOIS FED. A		







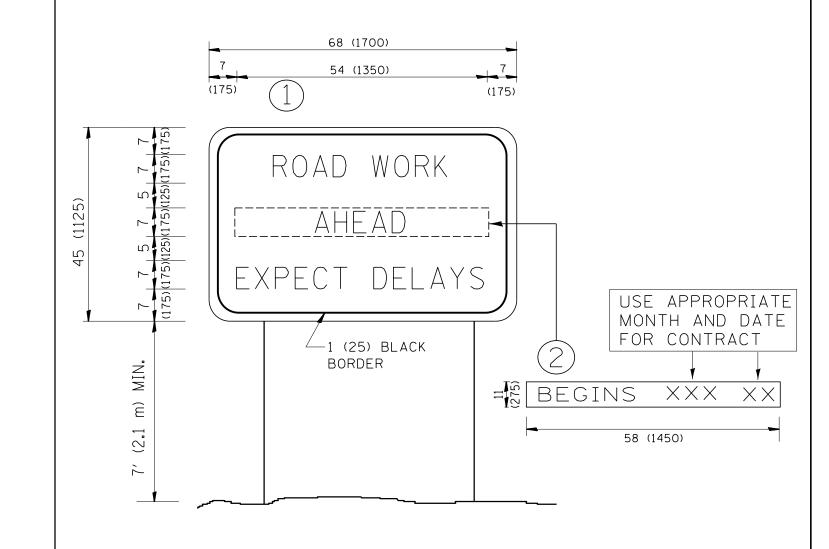
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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

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

FILE NAME =	USER NAME = qureshiya	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING  SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		U. SECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\qureshiya\d0286719\Dis	:Std.dgn	DRAWN -	REVISED -T. RAMMACHER 11-04-97				21 2010-092-RS	соок	18 16
	PLOT SCALE = 100.00000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION			TC-16	CONTRACT	NO. 60L89
	PLOT DATE = 8/14/2013	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00				ROAD DIST. NO. 1 ILLINOIS FED.	. AID 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 () 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.

ſ	FILE NAME =	USER NAME = qureshiya	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROAD	F.A.U.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	c:\pw_work\pwidot\qureshiya\d0286719\Dis	:Std.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			2921	2010-092-RS	соок	18 17
		PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN			TC-22	CONTRACT	NO. 60L89
		PLOT DATE = 8/14/2013	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD		ID PROJECT	

### 

\* = (1.8m)

\*\* = (1.5m)

LOOPS ARE SAW-CUT

EDGE OF PAVEMENT

AND HANDHOLE.

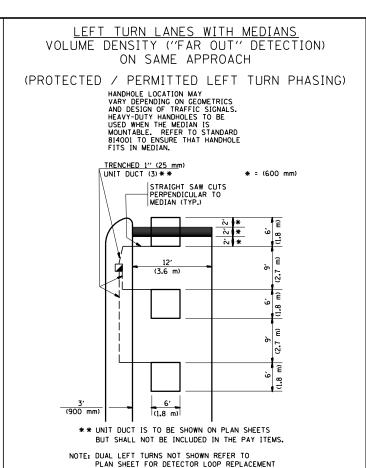
IN HANDHOLES OUTSIDE PAVEMENT)

(TYP. FOR LOOPS

PAVEMENT, 1" (25 mm) UNIT

DUCT IS RUN BETWEEN

CROSS STREET



VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

\* = (600 mm)

\* = (600 mm)

\* = (600 mm)

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

- IF "FAR OUT" LOOPS

ARE LOCATED IN
TAPER OF A RIGHT
TURN LANE, DIMENSION
THIS LOOP TO COVER
TAPER AREA. DO NOT
COVER THE LEFT TURN

LANE OR LEFT TURN LANE TAPER.

SCALE: NONE

OFFSET LOOPS BY-STRAIGHT SAW CUTS - ARTERIAL THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION. 3'(900mm) UNIT DUCT CROSS STREET J3'(900mr 6: 9: 6: -10'(3.0m) PREFERRED -6, 3, 6, 3, 6, (2.7m) (2.7m) + - THESE DIMENSIONS DRIVEWAY WILL BE VARIABLE [6' (1.8m) MINIMUM.

DETAIL 2

N.T.S.

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, SHIFLDED.
- \* 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, <u>MORE</u>
  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.

#### IOTF•

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.

L				
ſ	FILE NAME =	USER NAME = qureshiya	DESIGNED -	REVISED -
1	c:\pw_work\pwidot\qureshiya\d0286719\Dis	.Std.dgn	DRAWN -	REVISED -
1		PLOT SCALE = 100.0000 ' / in.	CHECKED - R.K.F.	REVISED -
l		PLOT DATE = 8/14/2013	DATE -	REVISED -

STRAIGHT SAW

CUTS TO HEAVY

DUTY HANDHOLE -

IN PAVEMENT

(TYP.)

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

6' 2' 11' (600mm)

> DEPENDING ON DRIVE-WAY LOCATION.

[TYP.-12' (3.6m) LANES]

CALLING LOOPS

DO NOT INSTALL

CALLING LOOP IN

RIGHT TURN LANE

TYP.-ALL LEGS-VOLUME

IOFF SET LOOPS BY

STRAIGHT SAW CUTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

25' (7.6 m) MAXIMUM]

10' (3.0m) LANE WIDTHS

△ - THESE DIMENSIONS

DISTRICT 1 - DETECTOR LOOP INSTALLATION			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
	DETAILS FOR ROADWAY RESURFACING					2010-092-RS	соок	18	18
						TS-07	CONTRACT	NO. 60L89	
	SHEET NO. 1 OF 1 SH	HEETS	STA.	TO STA.	FED. RO				