04-26-13 LETTTING ITEM 010

STATE OF ILLINOIS

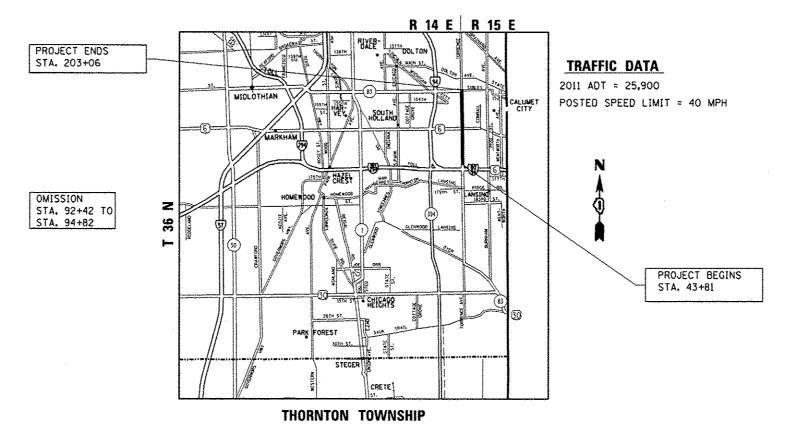
**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

PROPOSED HIGHWAY PLANS

FAP 358: US 6/LL 83 (TORRENCE AVE.)
ILL 83 (SIBLEY BLVD.) TO I-80
SECTION: 2010-109-RS
BESURFACING

COOK COUNTY C-91-103-11



GROSS LENGTH OF PROJECT = 15,925 LINEAL FEET = 3.02 MILE

NET LENGTH OF PROJECT = 15,685 LINEAL FEET = 2.97 MILE

THE PROJECT IS LOCATED IN THE CITY OF CALUMET AND THE VILLAGE OF LANSING

FOR INDEX OF SHEETS, SEE SHEET NO. 2

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0 100' 200' 300' 1" = 100'
0 10' 26' 30' 1" = 10'
0 50' 100' 1" = 50'
0 50' 100' 1" = 40'
0 50' 100' 1" = 30'

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

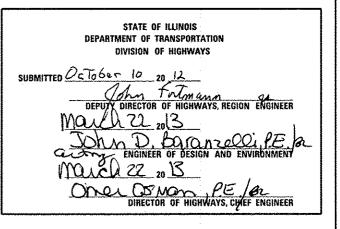
CONTRACT NO. 60M36

FED. ROAD DIST. NO. | ILLINOIS CONTRACT NO. 60M36

D -91-103-11

X 32+1=33





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS

#### LIST OF STATE STANDARDS

SHEET	NO.	DESCRIPTION	STANDARD NO.	DESCRIPTION
	1	COVER SHEET	000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
	2	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES	442201-03	CLASS C AND D PATCHES
•	3-3A	SUMMARY OF QUANTITIES	604001-03	FRAME AND LIDS. TYPE 1
•	4	EXISTING & PROPOSED TYPICAL SECTIONS	606001-04	COMBINATION CONCRETE CURB AND GUTTER
	,5-10	ROADWAY & PAVEMENT MARKINGS PLANS	701427-01	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR
:	11-21	DETECTOR LOOP REPLACEMENT PLANS		SPEEDS <= 40 MPH
	22	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)	701601- <i>08</i>	URBAN LANE CLOSURE, MULTILANE, IW OR 2W WITH NONTRAVERSABLE MEDIAN
	23	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)	701602 <b>-00</b>	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
	24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)	701606 <b>-<i>08</i></b>	LANE CLOSURE, MULTILANE, 2-W, WITH MOUNTABLE MEDIAN
	25	BUTT JOINT AND HMA TAPER DETAILS (BD-32)	701701- <i>08</i>	URBAN LANE CLOSURE, MULTILANE INTERSECTION
	26	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-1)	701901- <i>02</i>	TRAFFIC CONTROL DEVICES
	27	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TO	886001-04	DETECTOR LOOP INSTALLATION
	28	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)	886006-01	TYPICAL LAYOUT FOR DETECTOR LOOPS
	29	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)		
	30	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)		
	31	ARTERIAL ROAD INFORMATION SIGN (TC-22)		
	32	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 REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CALUMET AND THE VILLAGE OF LANSING.

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 MS. PATRICE HARRIS AREA TRAFFIC FIELD ENGINEER AT (708) 597-9800 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.

COUNTY TOTAL SHEET NO.
COOK 32 Z

CONTRACT NO. 60M36

COUNTY

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L		PLOT DATE + 12/28/2012	DATE -	REVISEO -	ĺ

STATE	OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

INDEX OF SHEETS, LIST	OF	STATE STANDARDS &	GENERAL NOTES	F.A.P. RTE.	SECTION
•		(TORRENCE AVENUE)		358	2010-109-RS
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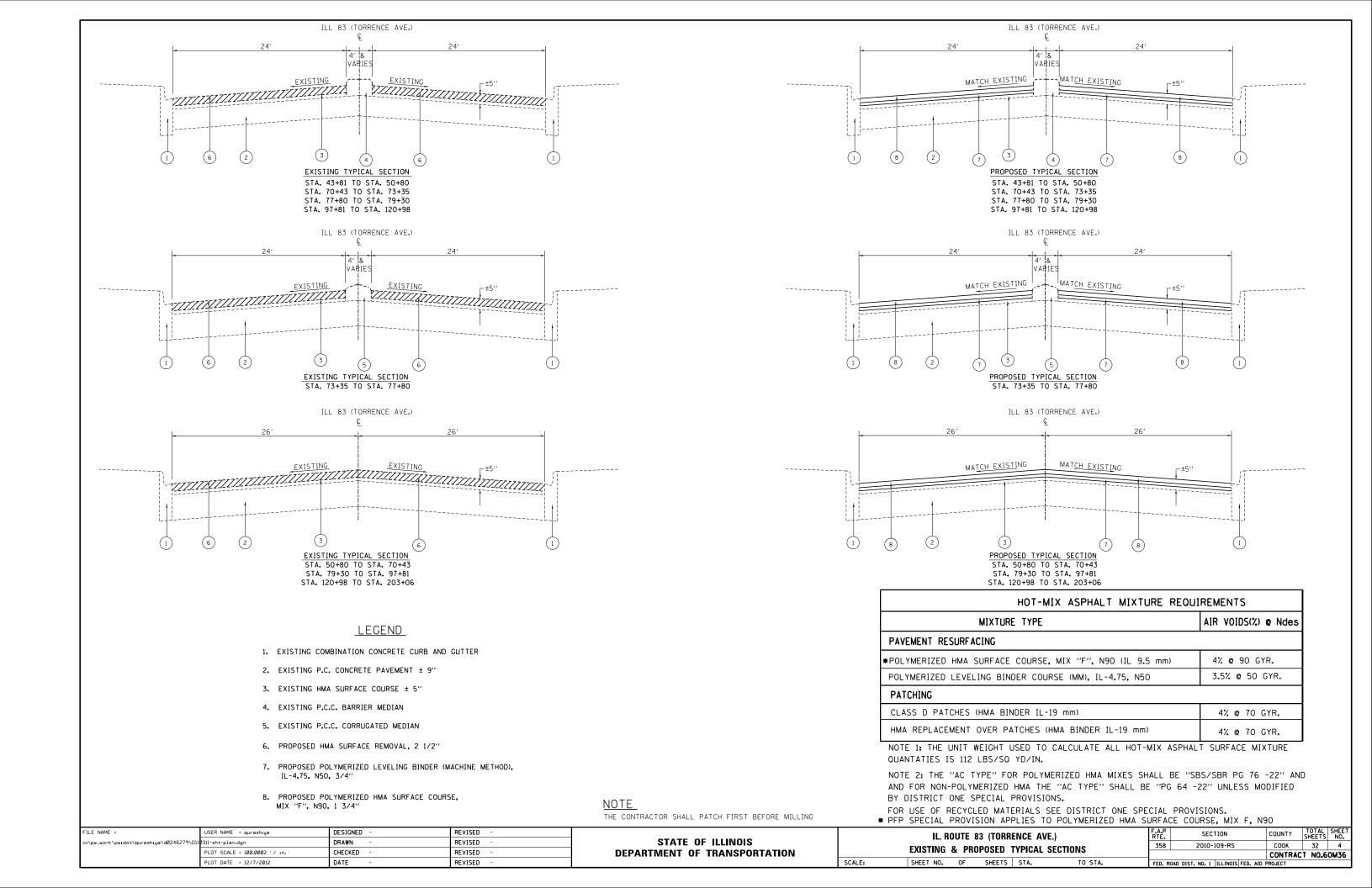
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40600300	AGGREGATE (PRIME COAT)	TON	230	230						44201759	CLASS D PATO	HES. TYPE IV. 9 INCH	SO YD	81	81					
40600400	MIXTURE FOR CRACKS, JOINTS,	TON	35	35						60406100	FRAMES AND I	TOS. TYPE 1. CLOSED LID	EACH	40	40	***************************************				
	AND FLANGEWAYS							<u> </u>	1										***************************************	
						-				67000400	ENGINEER'S	IELD OFFICE, TYPE A	CAL MO	6	6					
40600827	POLYMERIZED LEVELING BINDER (MACHINE	TON	4875	4875																
	METHOD), [L-4.75, N50									67100100	MOBILIZATION		L SUM	1	1					
40600895	CONSTRUCTING TEST STRIP	54611												_						<del> </del>
40000033	CONSTRUCTING 1251 SIRTY	EACH	2	2	·.				,	70102625	STANDARD 701	ROL AND PROTECTION.	L SUM	1	<b>1</b>					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT	SO YO	691	691						THE STATE OF THE S	3,410410	. :								
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40601005	HOT-MIX ASPHALT REPLACEMENT OVER	TON	283	283							-									
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44002220	HOT-MIX ASPHALT REMOVAL OVER PATCHES.	SO YD	1010	1010	to the was the same of the sam		**************************************			70300220	TEMPORADY DA	/EWENT WARKING	FOOT	56630	56630					
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44201753	CLASS D PATCHES, TYPE II. 9 INCH	SO YD	659	659										-						
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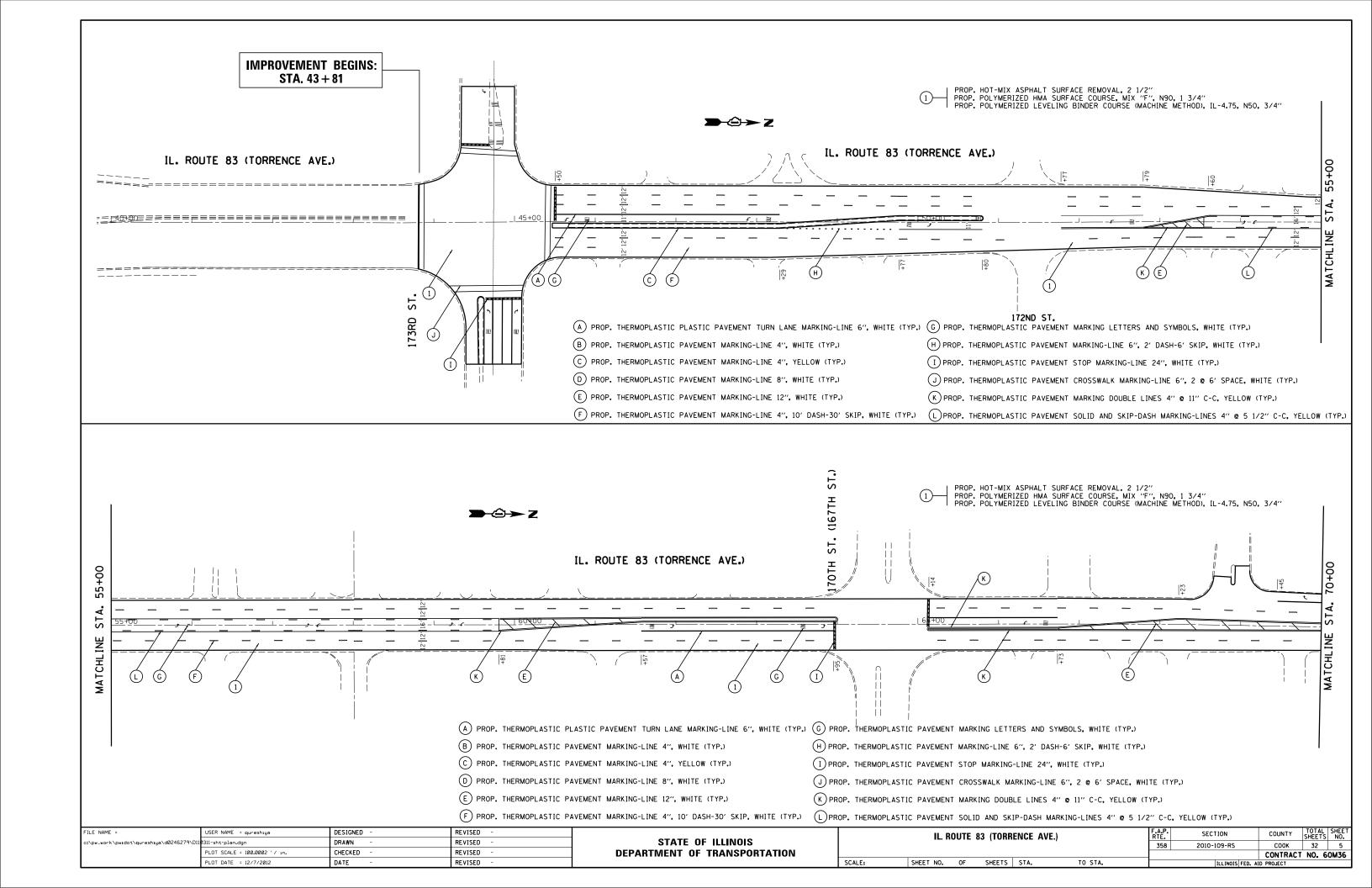
URBAN CONSTRUCTION TYPE CODE 100% SUMMARY OF QUANTITIES 1001. STATE CONSTRUCTION TYPE CODE SUMMARY OF QUANTITIES STATE ROADWAY ROADWAY TOTAL TOTAL CODE NO ITEM UNIT OUANTITIES CODE NO ITEM TINU OUANTITIES 0005 TEMPORARY PAVEMENT MARKING FOOT 8400 8400 \*78100100 RAISED REFLECTIVE PAVEMENT MARKER EACH 2711 2711 - LINE 6" 78300200 RAISED REFLECTIVE PAVEMENT MARKER EACH 1627 1627 TEMPORARY PAVEMENT MARKING 70300250 FOOT 550 550 REMOVAL " LINE 8" 88600600 DETECTOR LOOP REPLACEMENT FOOT 5045 5045 70300260 TEMPORARY PAVEMENT MARKING FOOT 450 450 - LINE 12" X6030310 FRAMES AND LIDS TO BE ADJUSTED EACH . 50 50 (SPECIAL) 70300280 TEMPORARY PAYEMENT MARKING 1350 1350 - LINE 24" 20004562 COMBINATION CONCRETE CURB AND GUTTER 900 900 REMOVAL AND REPLACEMENT 70301000 WORK ZONE PAVEMENT MARKING REMOVAL SO FT 14313 14313 Z0030850 TEMPORARY INFORMATION SIGNING SO FT 51.4 51.4 **₱78000100** THERMOPLASTIC PAVEMENT MARKING SO FT 1841 1841 - LETTERS AND SYMBOLS **\***78000200 THERMOPLASTIC PAVEMENT MARKING FOOT 56630 56630 - LINE 4" **\***78000400 THERMOPLASTIC PAVEMENT MARKING FOOT 8400 8400 - LINE 6" **\***78000500 THERMOPLASTIC PAVEMENT MARKING FOOT 550 550 - LINE 8" **\***78000600 THERMOPLASTIC PAVEMENT MARKING FOOT 450 450 - LINE 12" . SPECIALITY ITEMS **\***78000650 THERMOPLASTIC PAVEMENT MARKING FOOT 1350 1350 - LINE 24" FILE NAME . DESIGNED -REVISEO F.A.P. RTE. 358 SECTION COUNTY DRAWN REVISED STATE OF ILLINOIS PLOT SCALE + 100,0000 1/ /A CHECKED -2010-109-RS REVISED SUMMARY OF QUANTITIES **DEPARTMENT OF TRANSPORTATION** PLOS DATE + 12/10/2012 DATE -REVISED

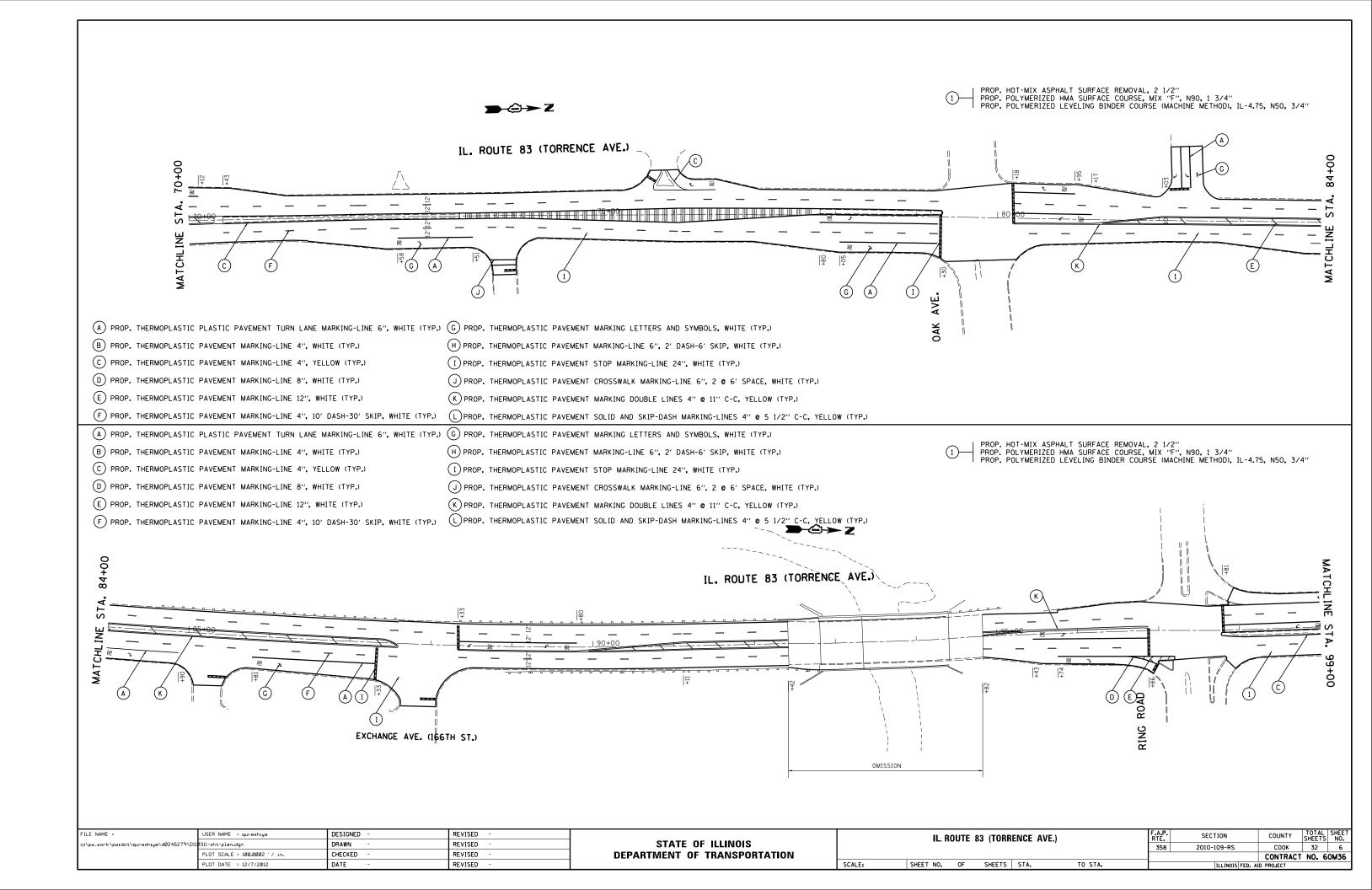
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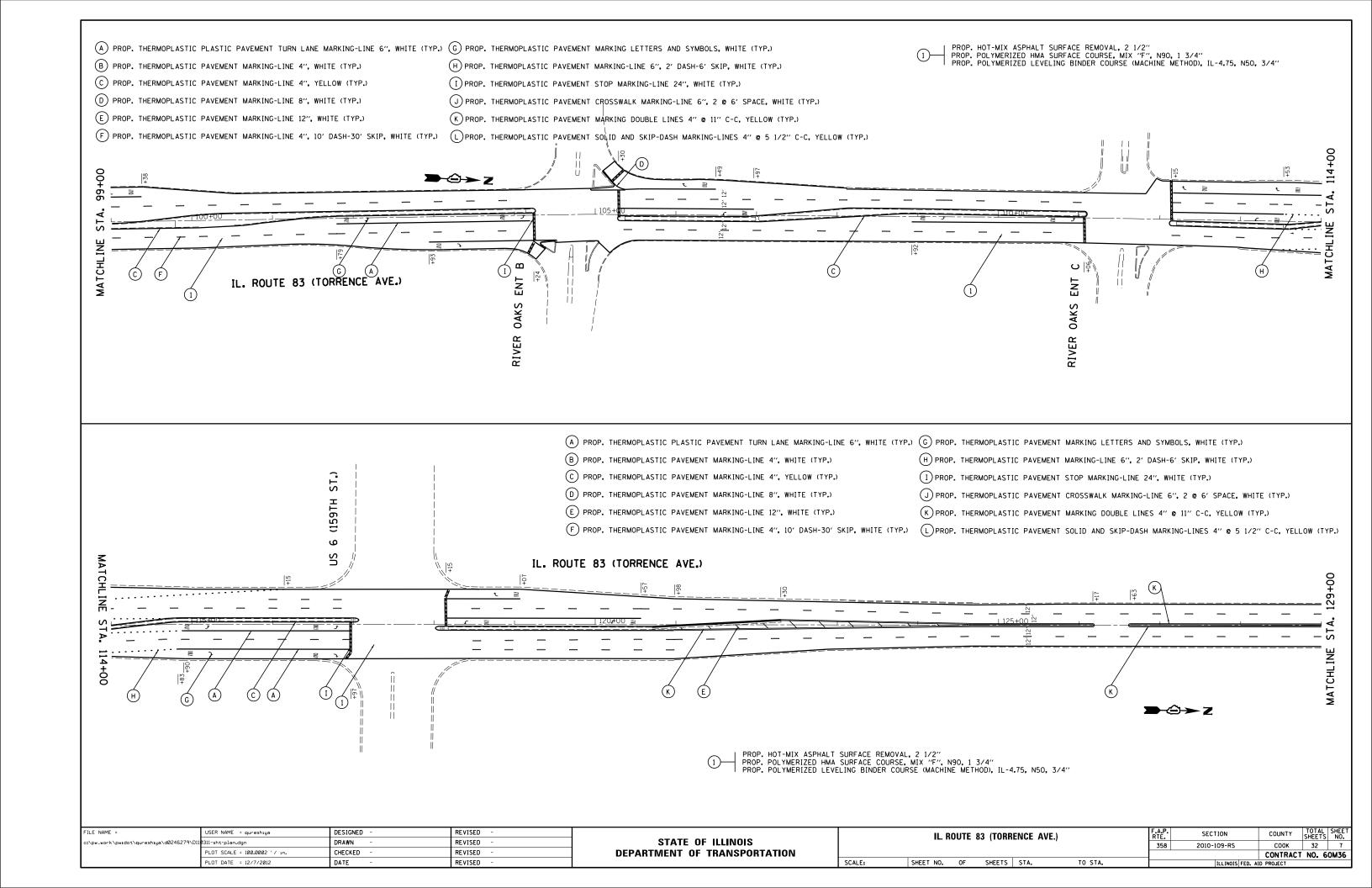
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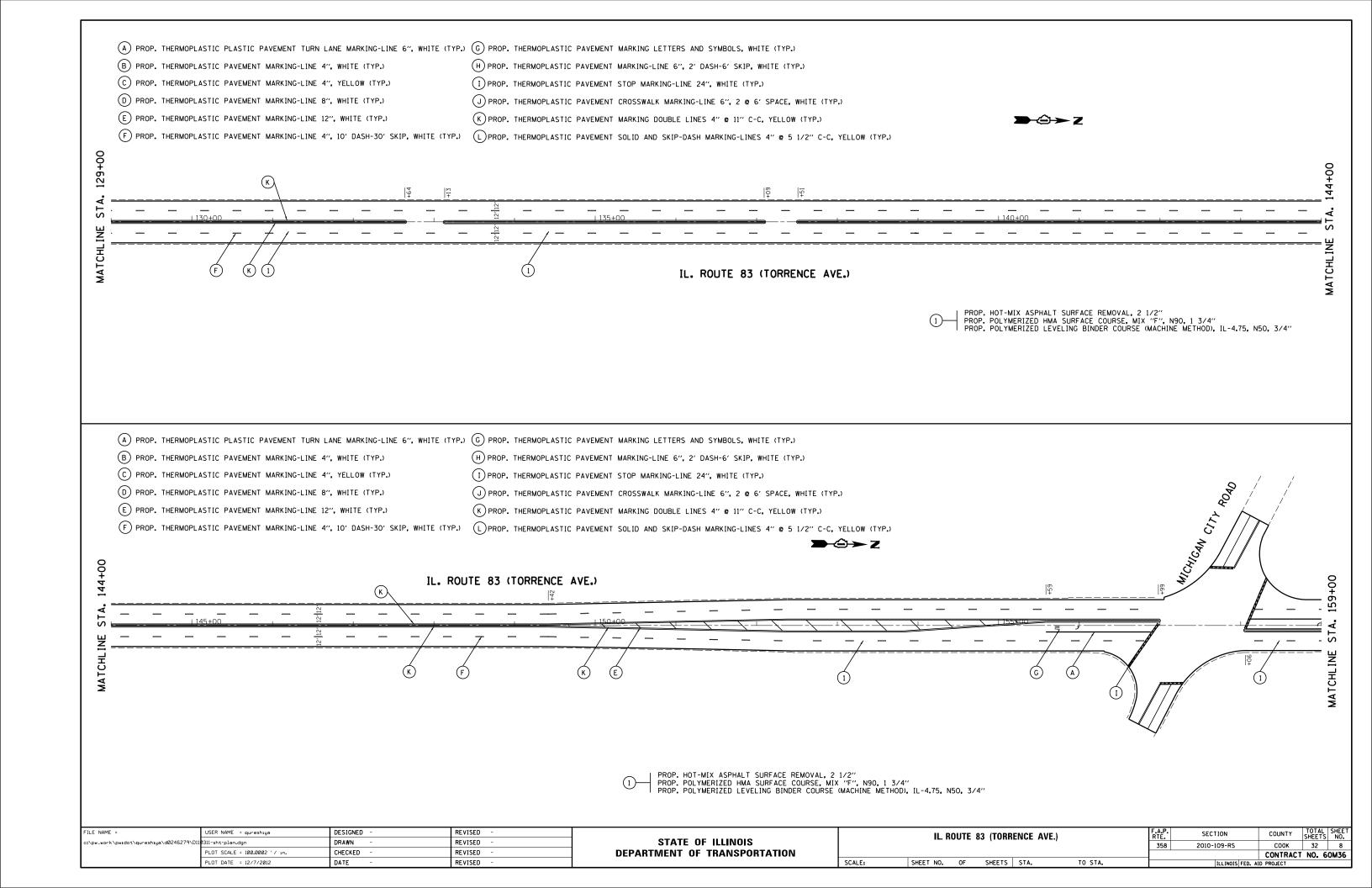
COOK 32 3A CONTRACT NO. 60M36 FEO. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

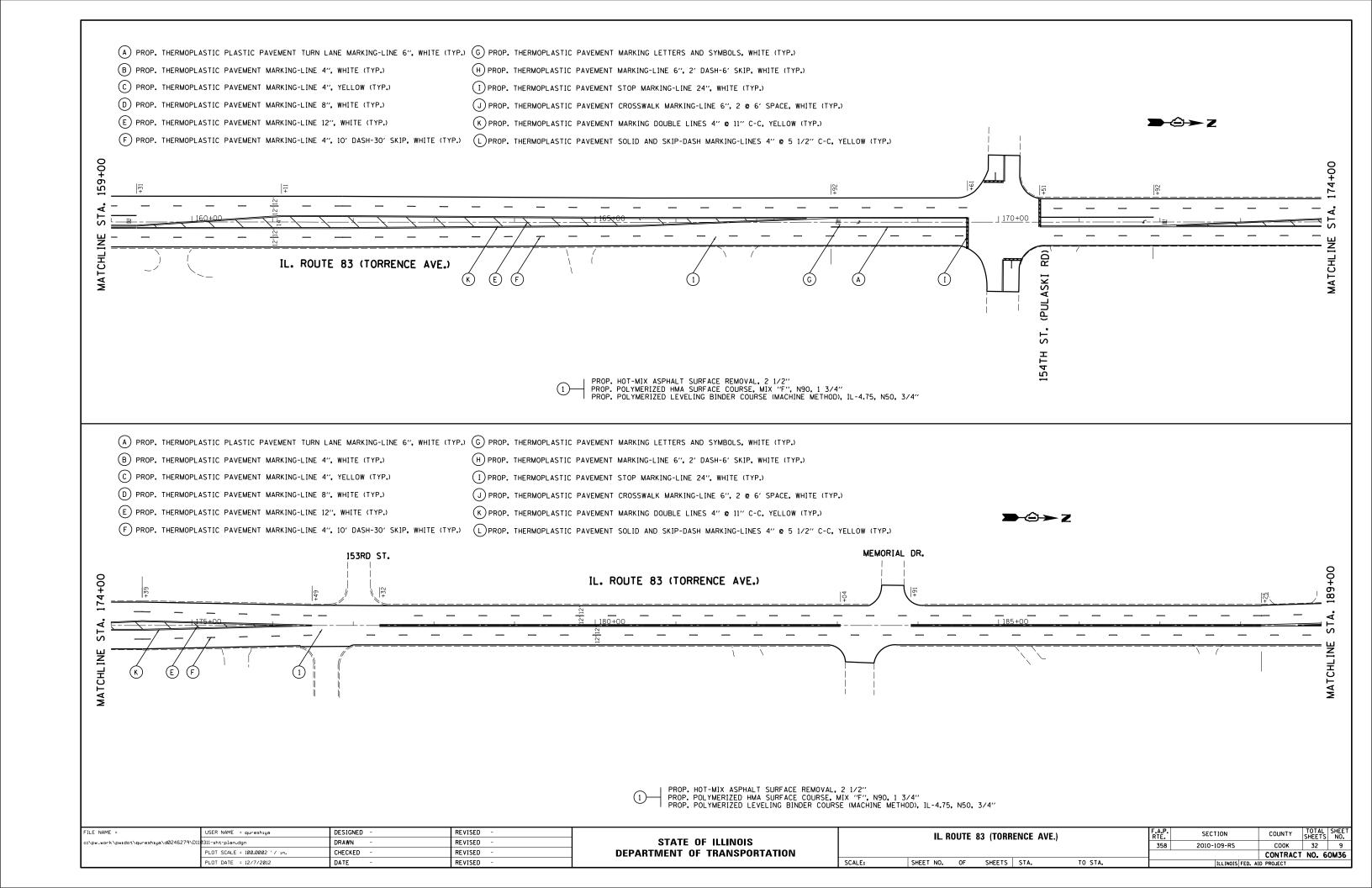


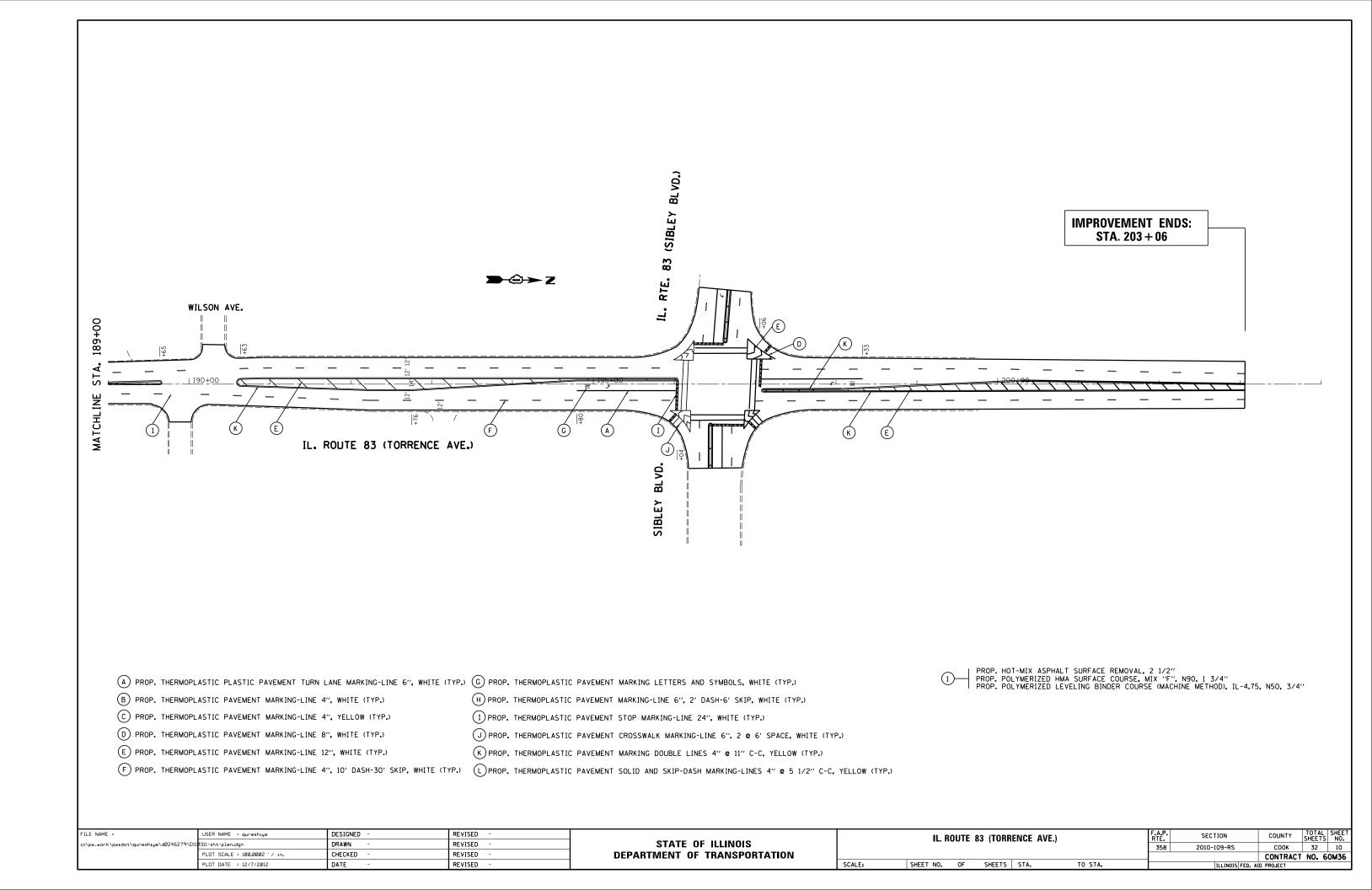


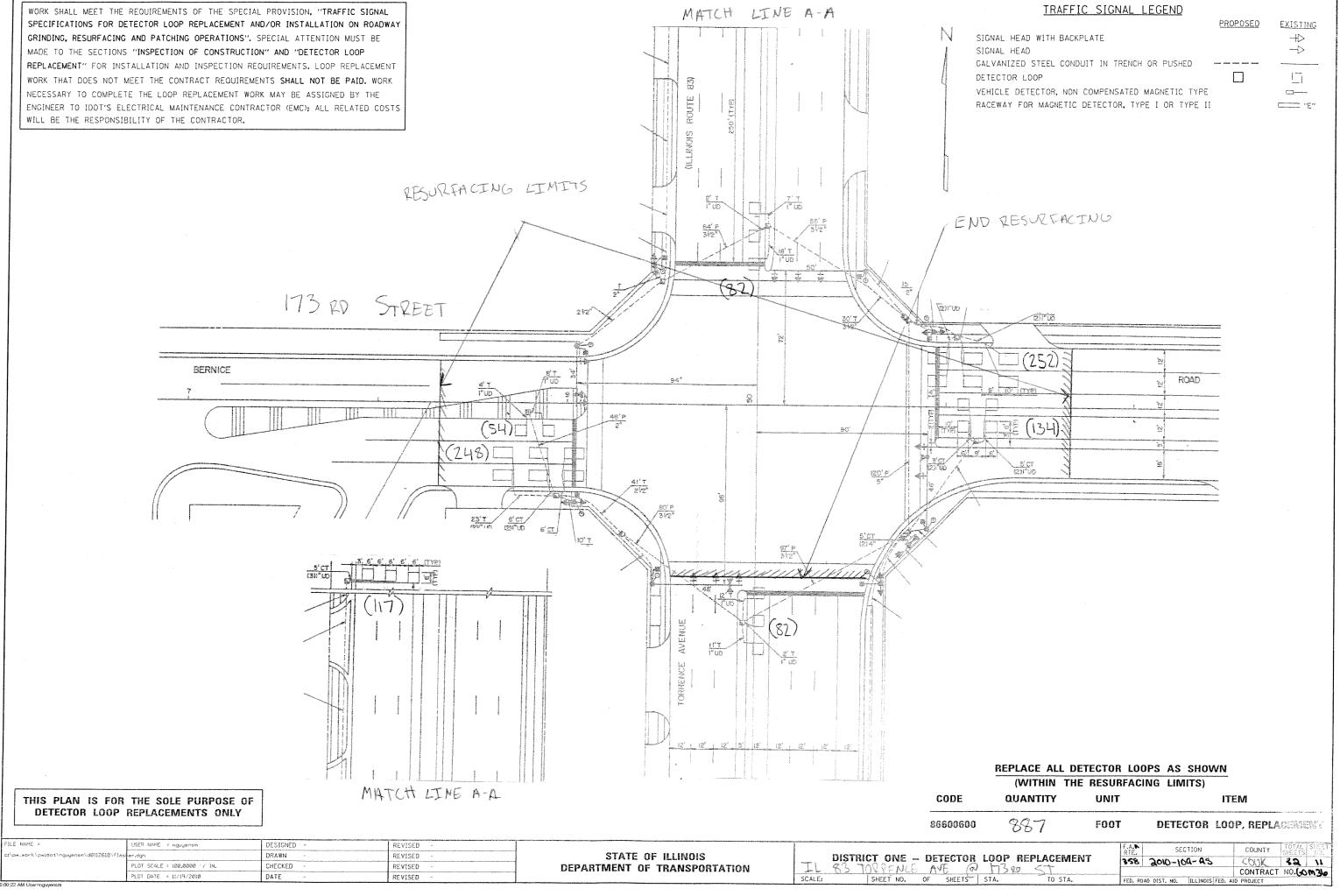


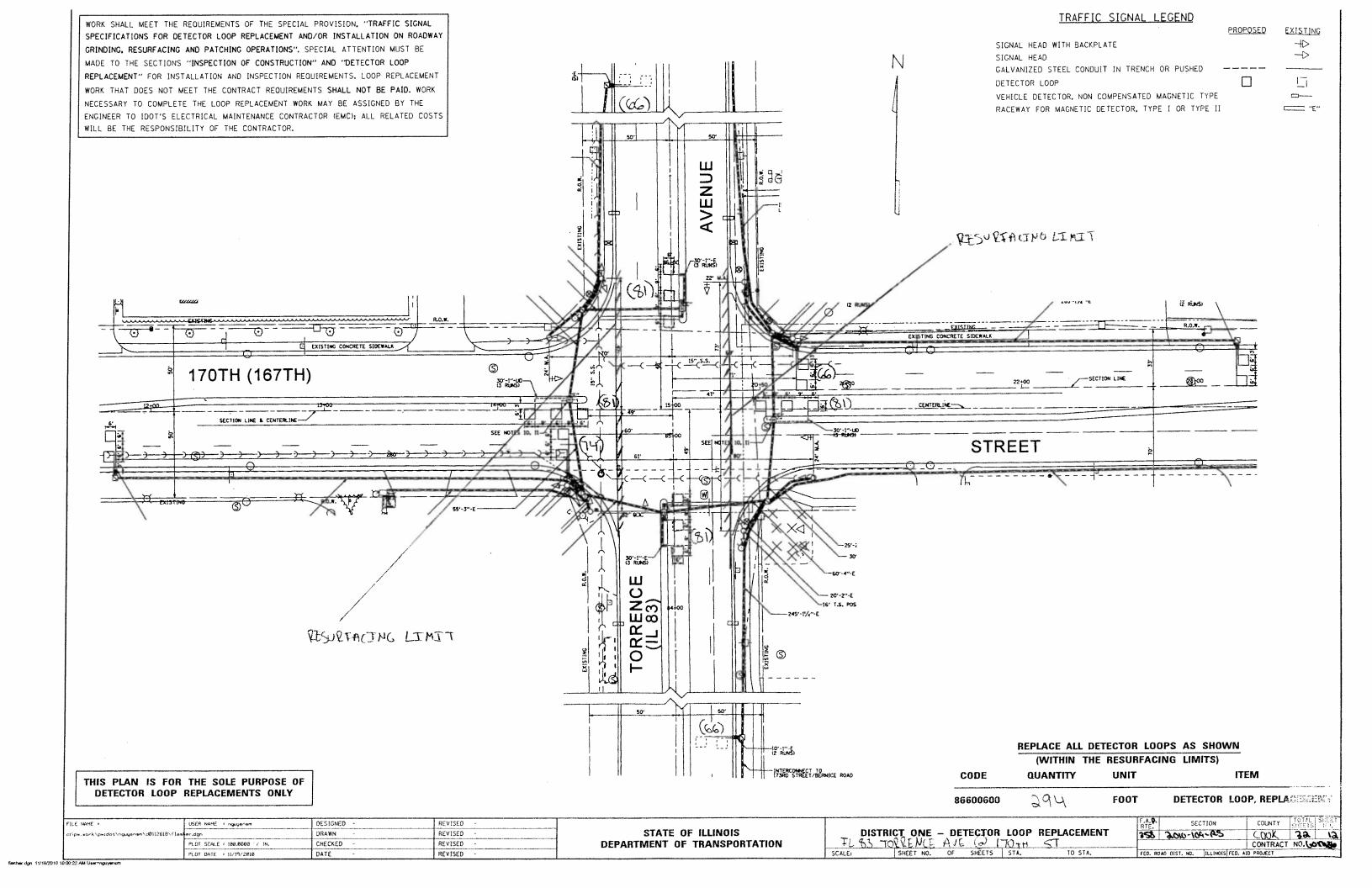


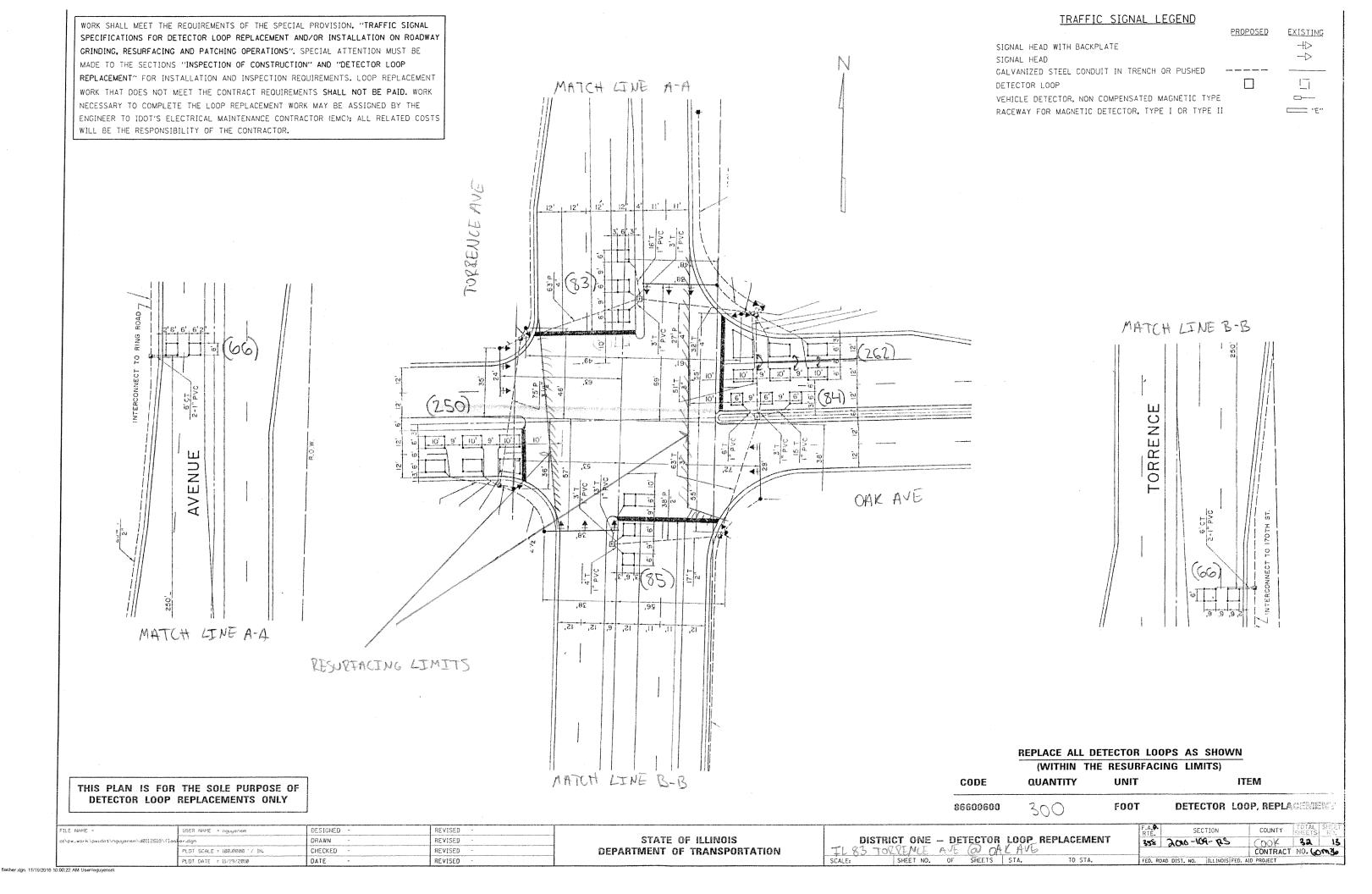




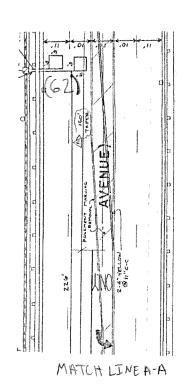








WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.



## THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

FILE NAME :	USER NAME = nguyenam	DESIGNED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - DETECTOR LOOP REPLACEMENT

TL 83 TORIENCE AVE O 165TH ST

SCALE: SHEET NO. OF SHEETS STA. TO STA.

86600600

483

FOOT

RTE. SECTION COUNTY SHEETS NO.

358 200-109-25 COK 32 N

CONTRACT NO. (CONTRACT NO. (C

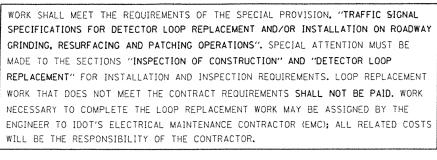
DETECTOR LOOP, REPLACEMENTS

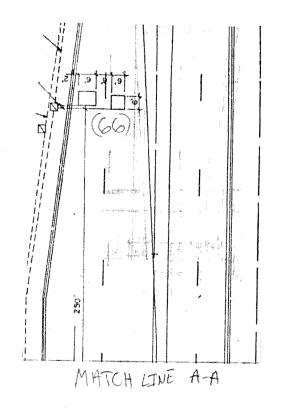
TRAFFIC SIGNAL LEGEND

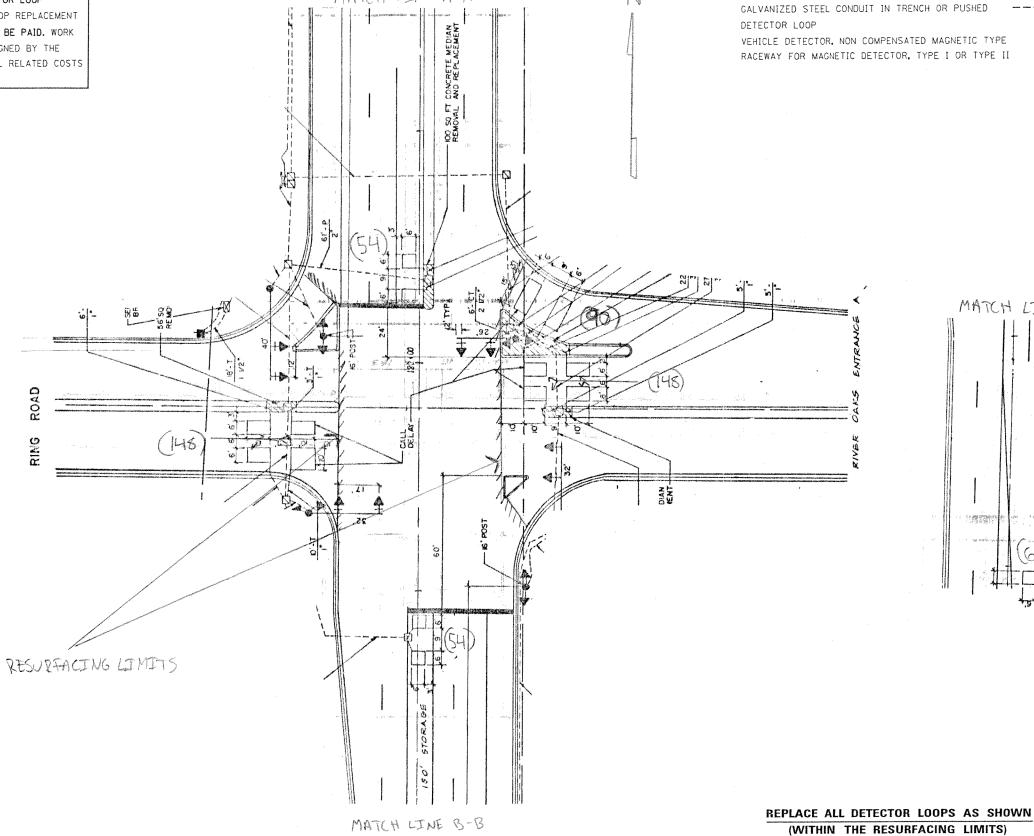
PROPOSED

EXISTING

## $\dashv \triangleright$ SIGNAL HEAD WITH BACKPLATE $\rightarrow$ SIGNAL HEAD GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED DETECTOR LOOP VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE MATCH LINE A-A RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II MATCH LIVE B-B THEFT SE CE (TORREN -Resultaning Limit 83 0 US. REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS) QUANTITY UNIT ITEM CODE MATCH LINE B-B







MATCH LIVE A-A

MATCH LINE B-B

EXISTING

 $\rightarrow \triangleright$ 

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TRAFFIC SIGNAL LEGEND

SIGNAL HEAD WITH BACKPLATE

SIGNAL HEAD

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

DESIGNED REVISED DRAWN REVISED PLOT SCALE = 100.0000 1/ IN. CHECKED REVISED REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL 83 TORRENCE AVE @ RIVER OAKS ENTRHAKE A/RING R SCALE: SHEET NO. OF SHEETS STA. TO STA.

CODE

86600600

QUANTITY

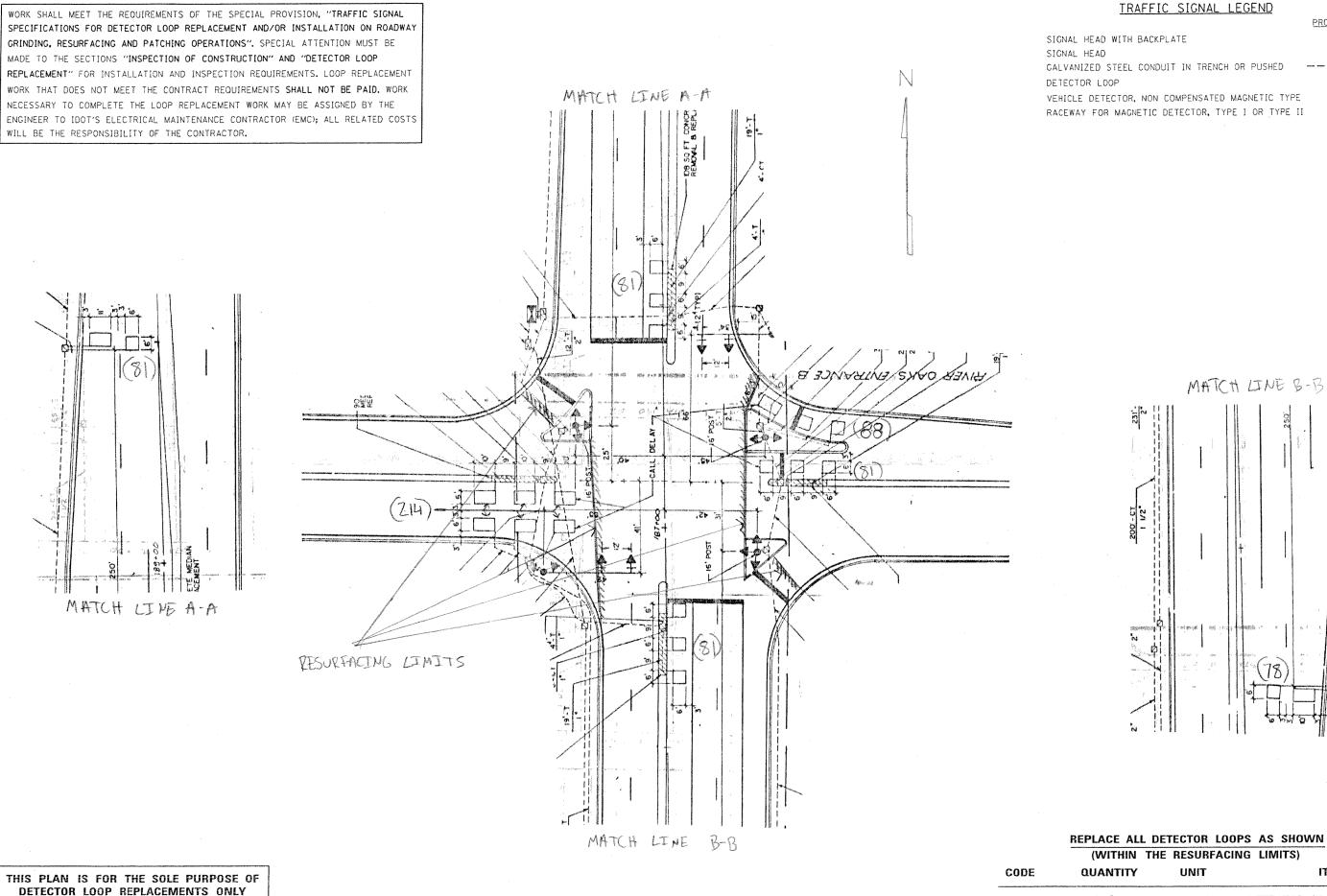
239

UNIT

**FOOT** 

DETECTOR LOOP, REPLACEMENT SECTION 32 15 358 2010-109-08 CONTRACT NO. 60m36

ITEM



DETECTOR LOOP, REPLACEMENT 321 FOOT 86600600

DESIGNED FILE NAME : REVISED DRAWN REVISED CHECKED PLDT SCALE = 100.0000 1/ IN. REVISED PLOT DATE = 11/19/2010 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISTRICT ONE - DETECTOR LOOP REPLACEMENT TL 83 TORRENCE AVE @ RIVER DAKS EMPLANCE B SHEET NO. OF SHEETS STA.

358 2010-109-63 CONTRACT NO. Lom36

ITEM

PROPOSED

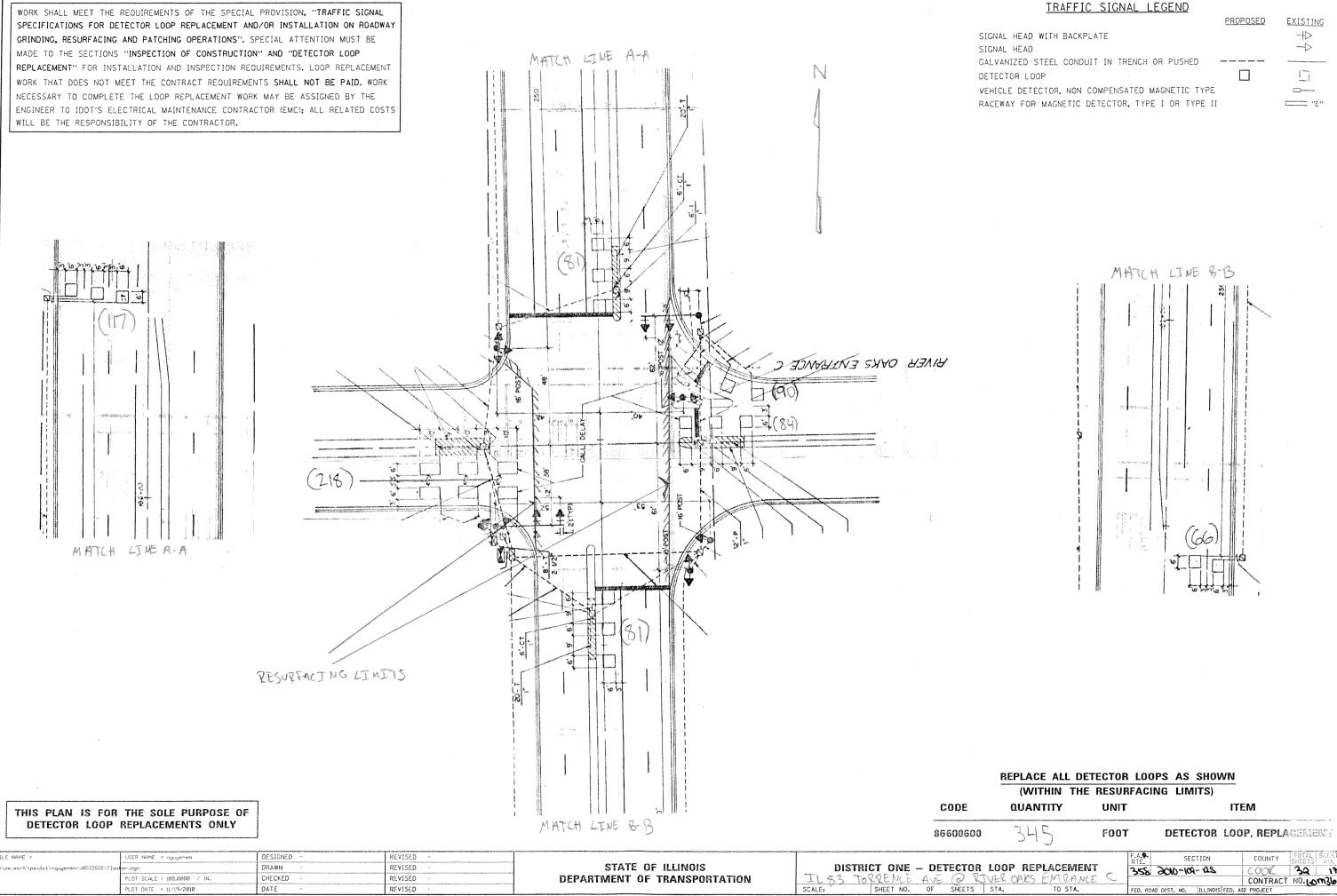
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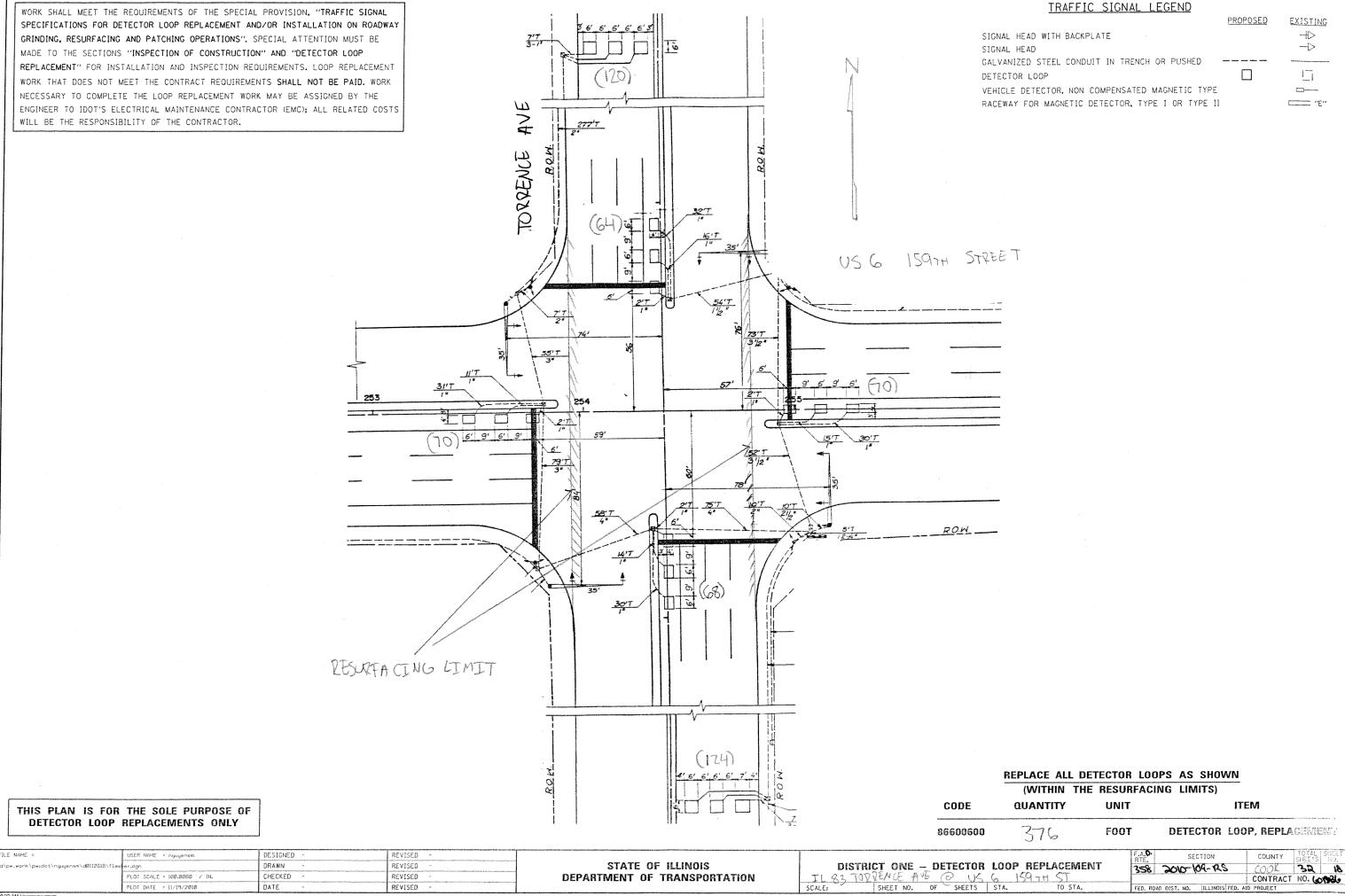
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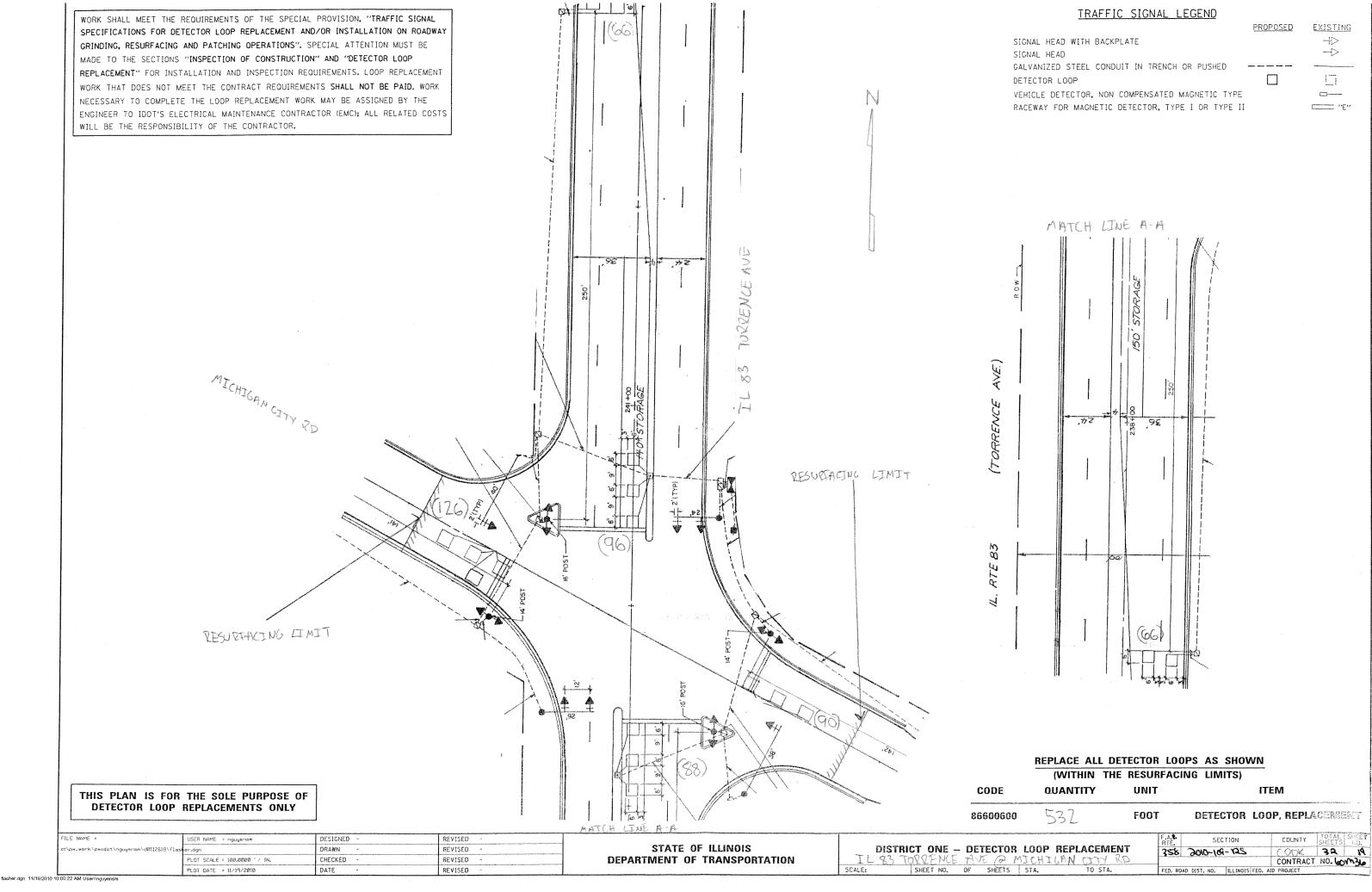
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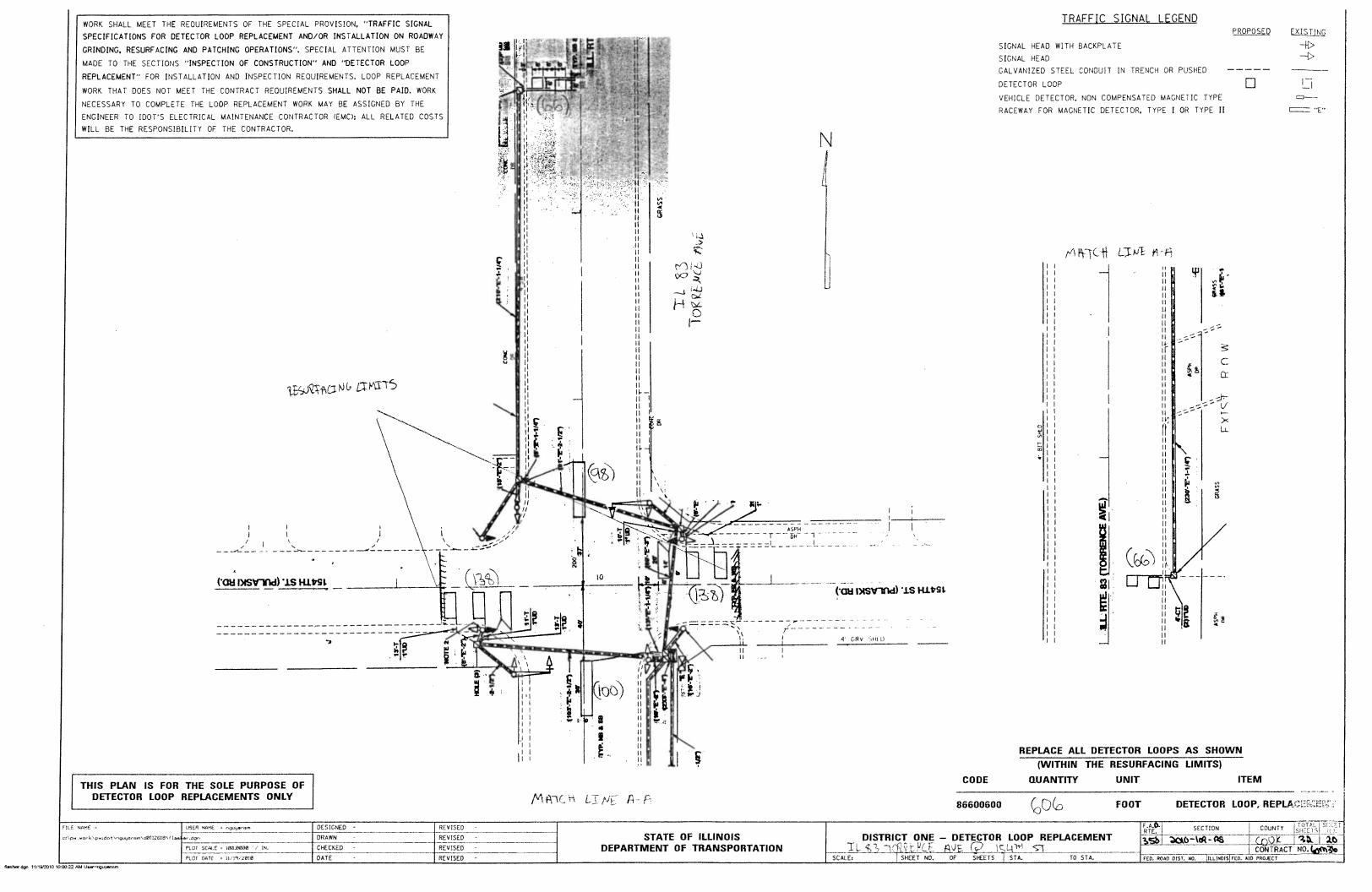
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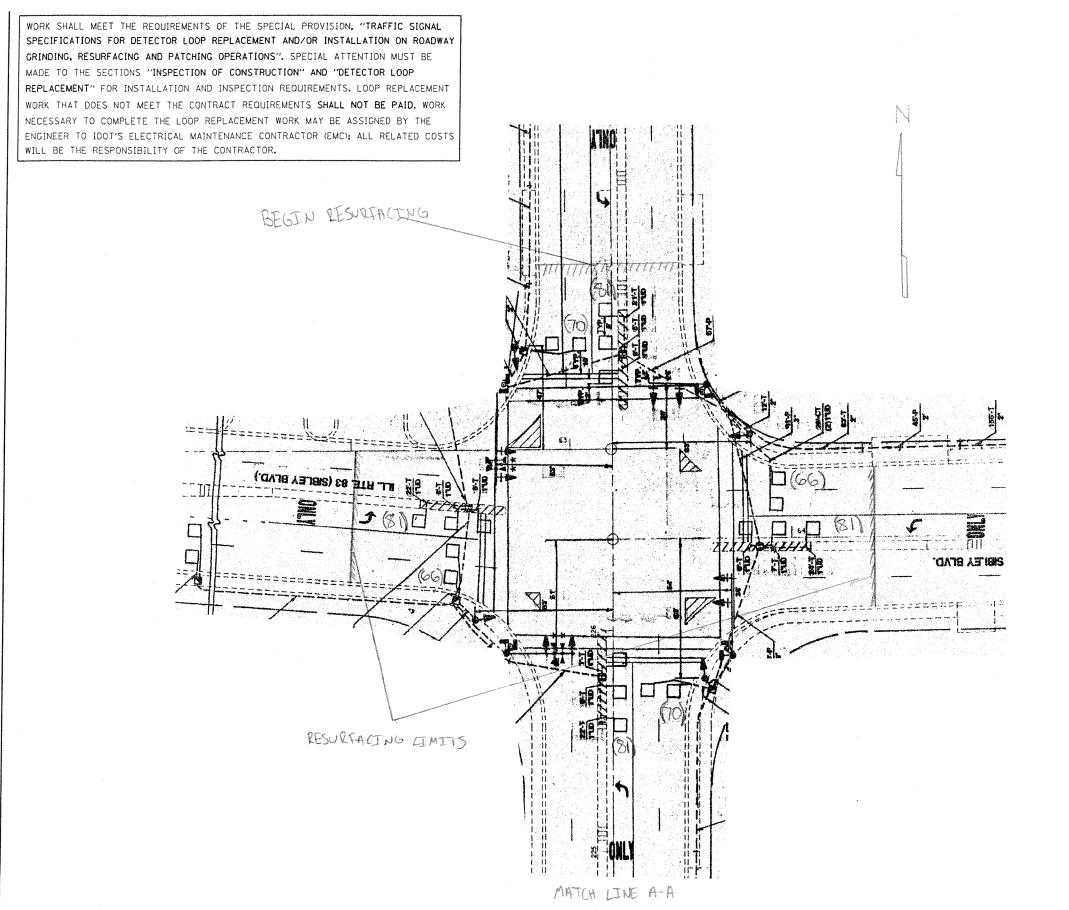
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TRAFFIC SIGNAL LEGEND

SIGNAL HEAD WITH BACKPLATE

SIGNAL HEAD

GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED

DETECTOR LOOP

VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE

RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II

EXISTING

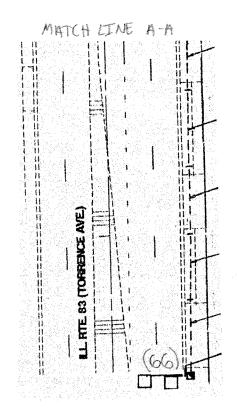
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## REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS)

	(**************************************	il negom Ac	ind Limits)
CODE	QUANTITY	UNIT	ITEM
86600600	662	FOOT	DETECTOR LOOP, REPLACEMENT

THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

FILE NAME :	USER NAME = nguyensm	DESIGNED	*	REVISED	-	Γ
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	PLOT DATE = 11/19/2010	DATE	*	REVISED		1

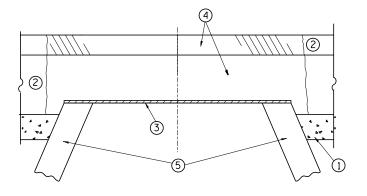
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

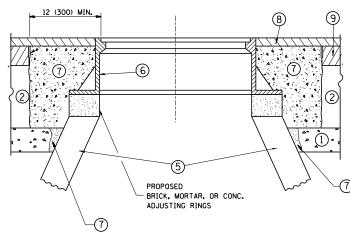
DISTRICT ONE - DETECTOR LOOP REPLACEMENT

I 83 TORRENCE AVE OF THE 83 STRIFY RIVE

SCALE: SHEET NO. OF SHEETS STA. TO STA.

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





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  $1^{1}\!\!/_{2}$  (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 LIFT OF SURFACE UNLESS APPROVED BY THE

#### LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS PP-1\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 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.

#### 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

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

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

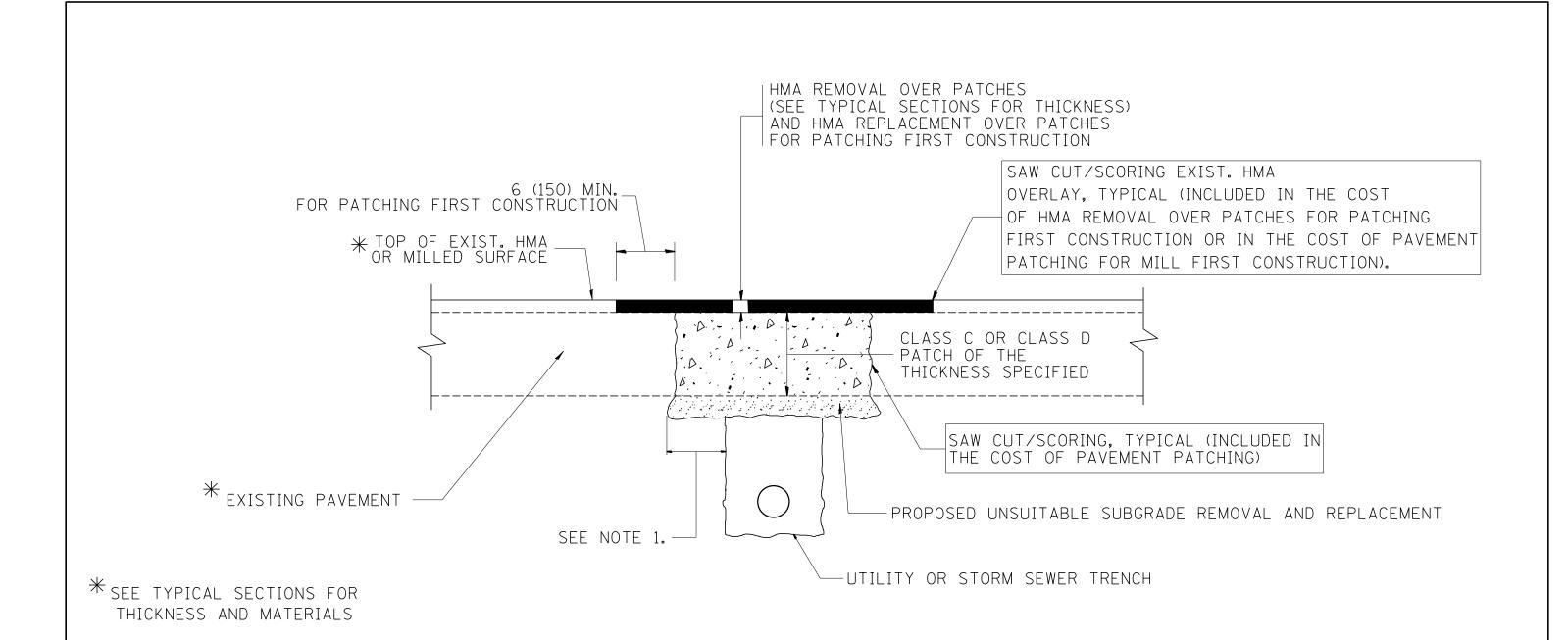
## DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = qureshiya	DESIGNED	-	R. SHAH	REVISED	- R. WIEDEMAN 05-14-04	
c:\pw_work\pwidot\qureshiya\d0246279\Dis	tStd.dgn	DRAWN	-		REVISED	- R. BORO 01-01-07	
	PLOT SCALE = 100.0000 '/ in.	CHECKED	-		REVISED	- R. BORO 03-09-11	
	PLOT DATE = 12/7/2012	DATE	-	10-25-94	REVISED	- R. BORO 12-06-11	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	DETAILS FO	R		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FRAMES AND LIDS ADJUSTM	ENT WITH	MILLING	358	2010-109-RS	соок	32	22
	THANKS AND LIDS ADJUSTIN	WILLING		BD600-03 (BD-8)	CONTRACT	NO. 60	M36	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	FED. RO	DAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT				



#### 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)

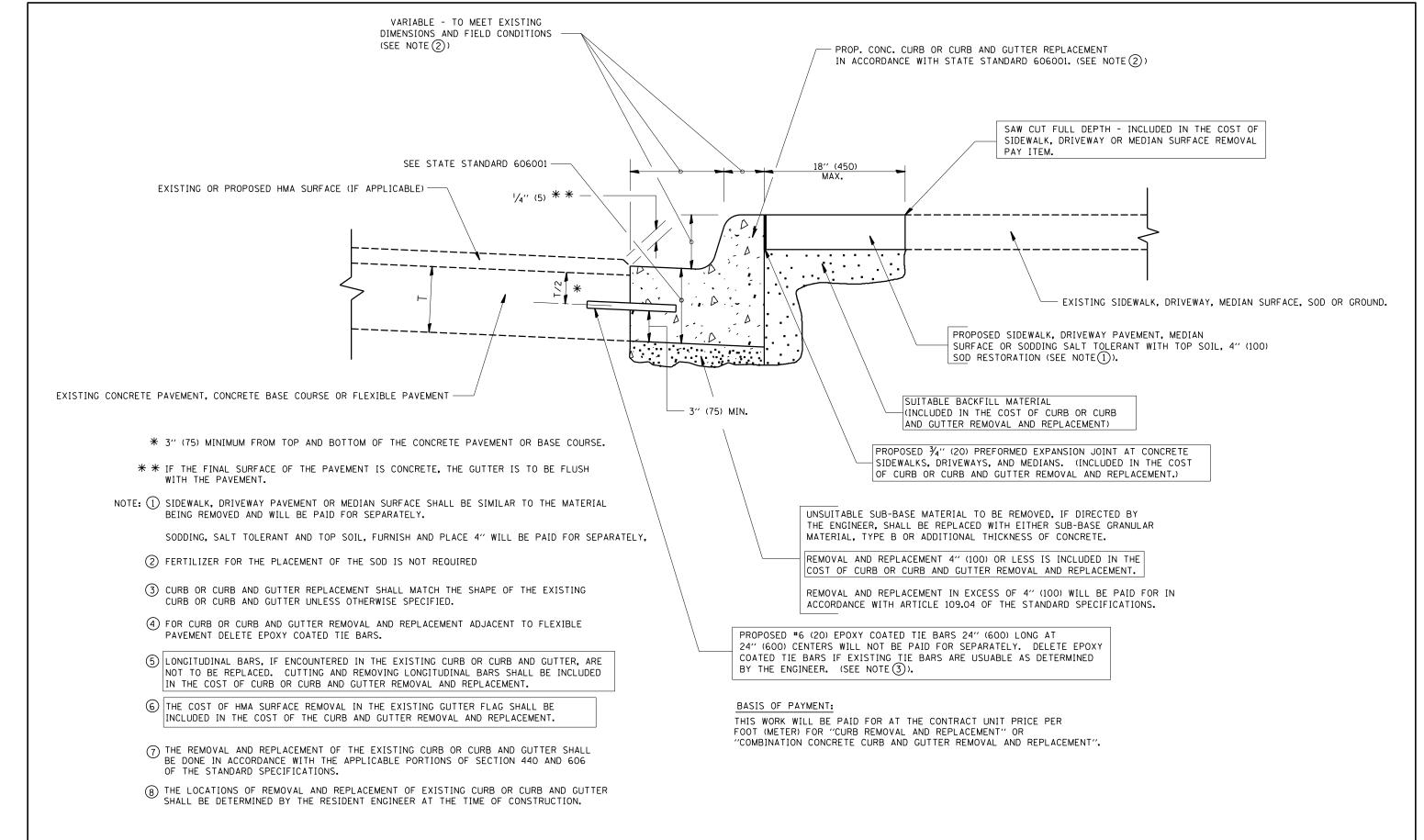
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### 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.

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

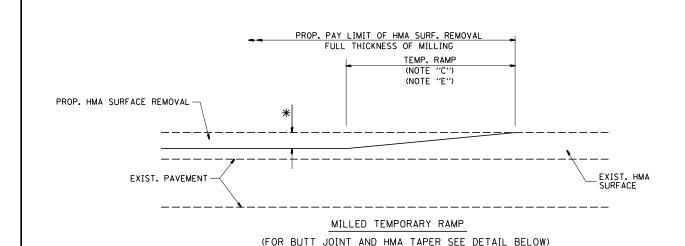
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c:\pw_work\pwidot\qure	eshiya\d0246279\DistStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		358 2010-109-RS	COOK 32 23
	PLOT SCALE = 100.0000 ' / 10.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60M36
	PLOT DATE = 12/7/2012	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	



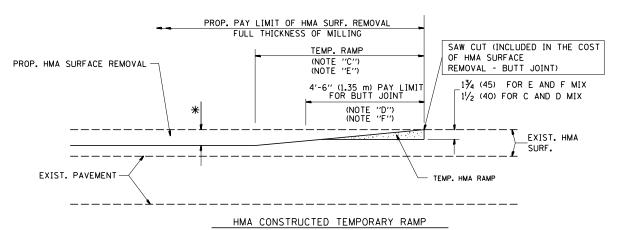
## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = qureshiya	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER		F.A.P.	SECTION	COUNTY	SHEETS NO.
c:\pw_work\pwidot\qureshiya\d0246279\Dis	tStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	REMOVAL AND REPLACEMENT			358	2010-109-RS	соок	32 24
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		REMOVAL AND REPLACEMENT			3D600-06 (BD-24)		T NO. 60M36
	PLOT DATE = 12/7/2012	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.		AD DIST. NO. 1 ILLINOIS FED.		

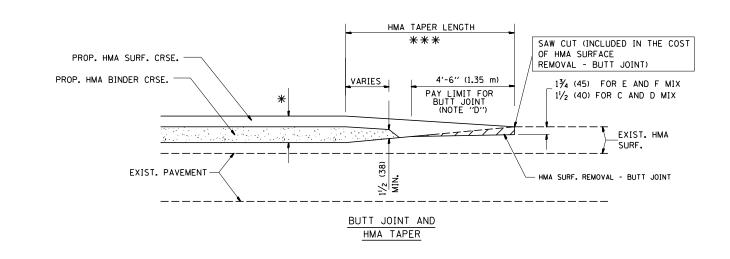


#### OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

# OPTION 2 TYPICAL TEMPORARY RAMP

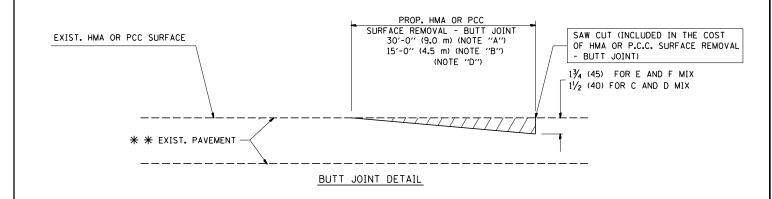


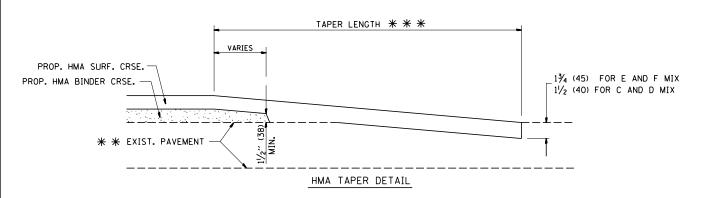
# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

OTHERWISE SHOWN.





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

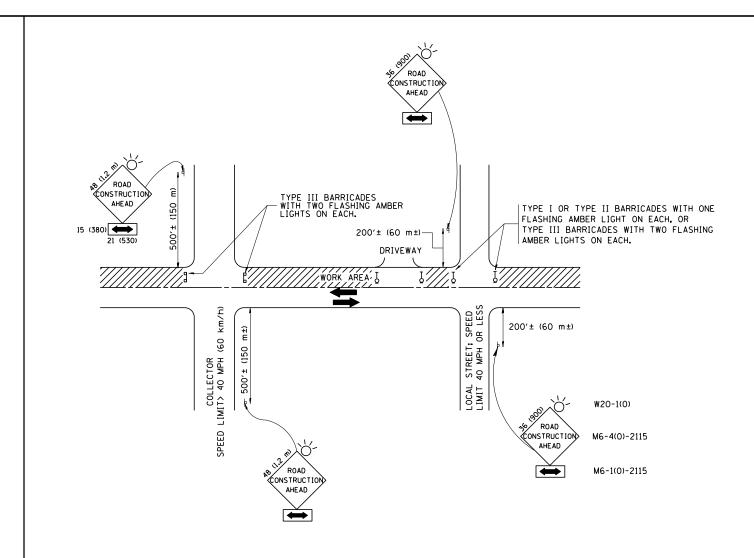
\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

#### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- : 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:
- a) 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 (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.

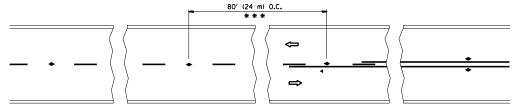
COUNTY

COOK 32 26 CONTRACT NO. 60M36

FILE NAME =	ILE NAME = USER NAME = qureshiya		-	LHA	REVISED	-	J. OBERLE 10	0-18-95
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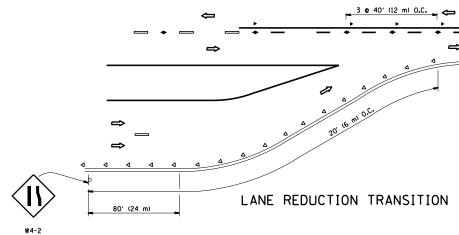
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DEPARTMENT	OF	TRANSPORTATION

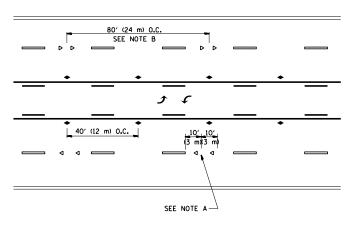
	TRAFFIC CONTROL AND PROTECTION FOR						SEC		COUNTY		
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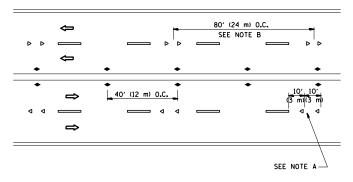
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

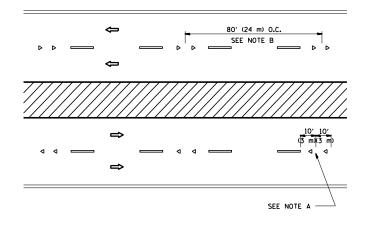




TWO-WAY LEFT TURN



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

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 (₩/O)
- ◆ TWO-WAY AMBER MARKER

#### DESIGN NOTES

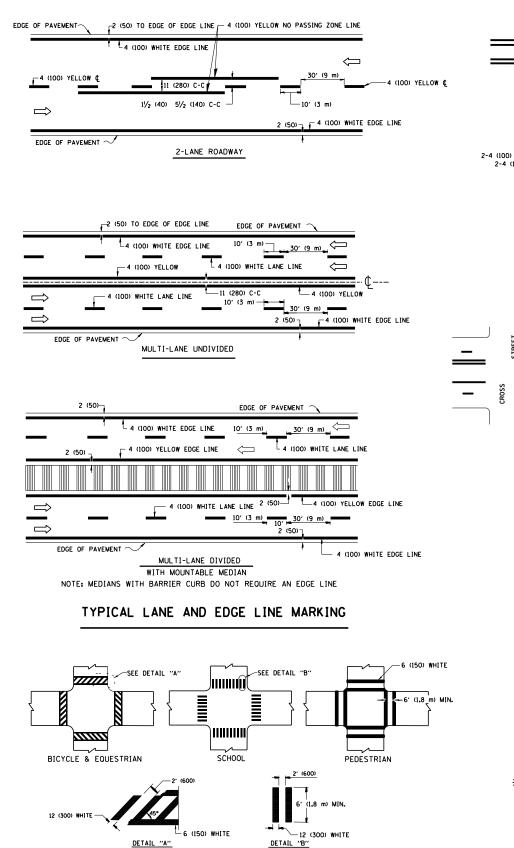
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT
  RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD 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.

# # SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

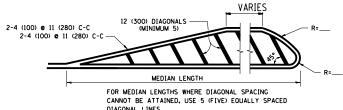
FILE NAME =	USER NAME = qureshiya	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.P.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\qureshiya\d0246279\Dis	tStd.dgn	DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS		358	2010-109-RS	соок	32 27
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)		TC-11		T NO. 60M36
	PLOT DATE = 12/7/2012	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROA	AD DIST. NO. 1 ILLINOIS		



TYPICAL CROSSWALK MARKING

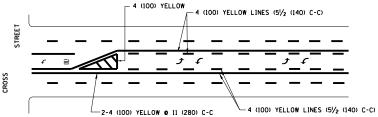
2-4 (100) YELLOW @ 11 (280) C-C-4' (1.2 m) OUTSIDE TO NO DIAGONALS OUTSIDE OF LINES \_\_ 2-4 (100) YELLOW @ 11 (280) C-C

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

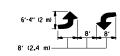


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

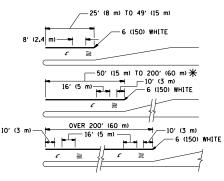


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

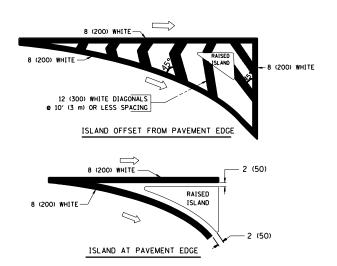
#### TYPICAL PAINTED MEDIAN MARKING



\* 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

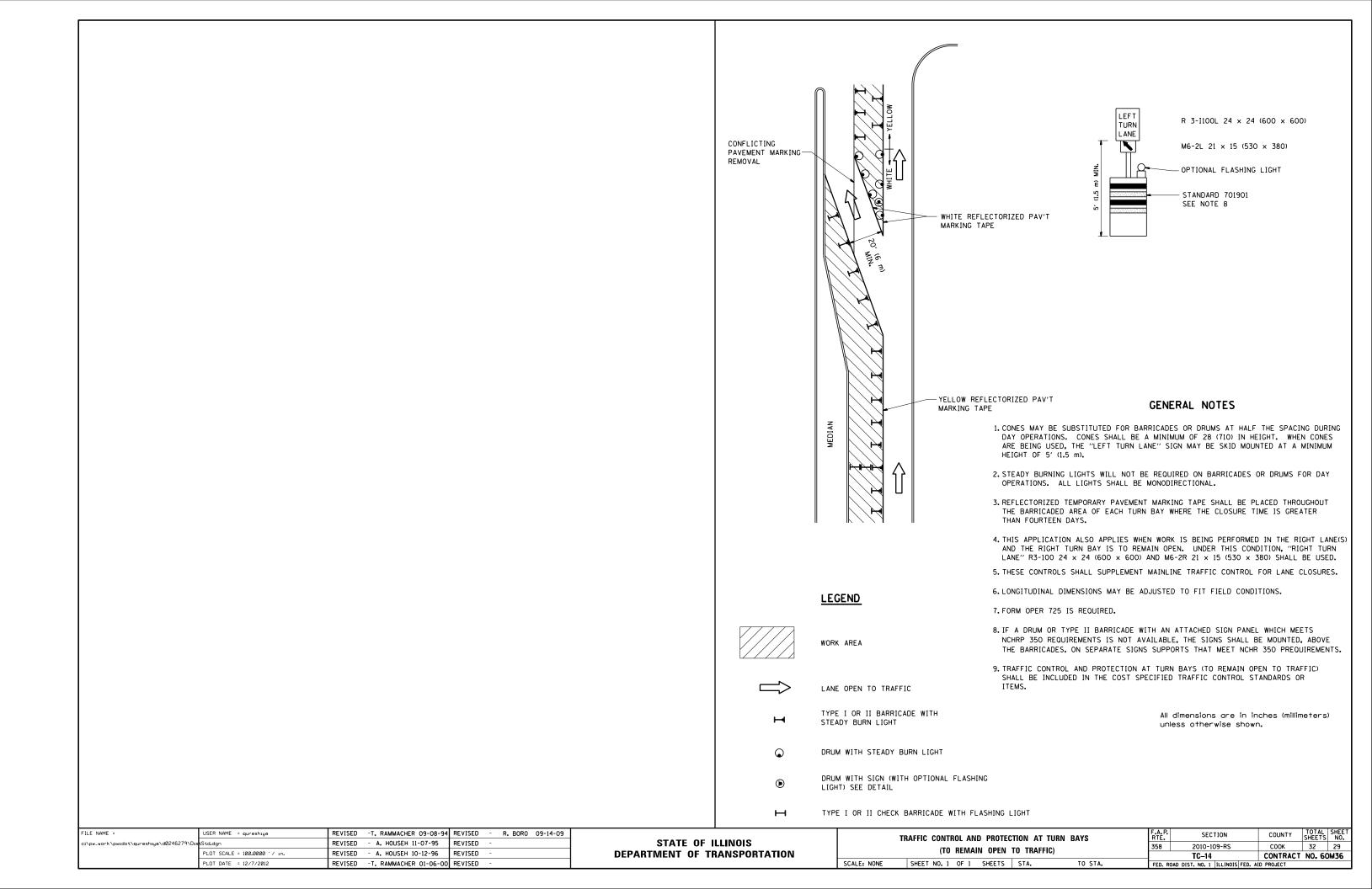
	1			1
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>e</b> 4 (100)	SOL ID SOL ID	YELLOW YELLOW	5/ <sub>2</sub> (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 WHITE	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' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO 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.
CORE 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 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
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) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

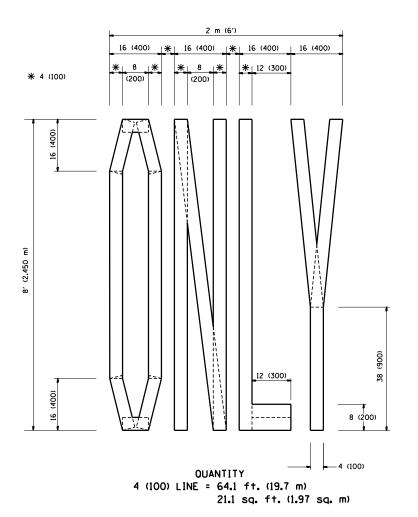
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

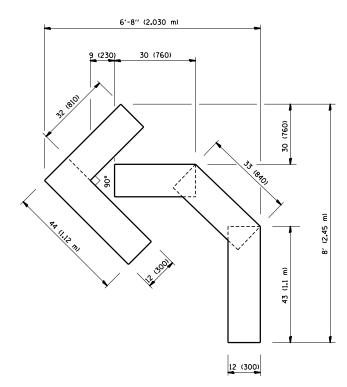
All dimensions are in inches (millimeters) unless otherwise shown.

TYPICAL	IUKN	LANE	MARKING

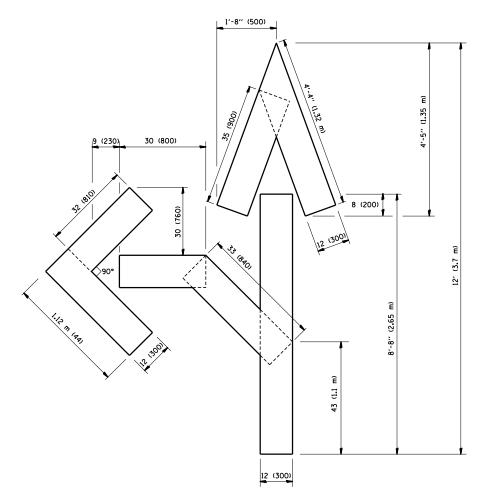
FILE NAME =	USER NAME = qureshiya	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94			DISTRICT ONE		F.A.P.	SECTION	COUNTY	TOTAL S	SHEET
c:\pw_work\pwidot\qureshiya\d0246279\Dis	tStd.dgn	DRAWN -	REVISED -C. JUCIUS 09-09-09	STATE OF ILLINOIS				358	2010-109-RS	COOK	32	28
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		TYPICAL PAVEMENT MARKINGS				CONTRACT	NO. 601	/36
	PLOT DATE = 12/7/2012	DATE - 03-19-90	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROA	D DIST. NO. 1 THE INDIS FED. AT			







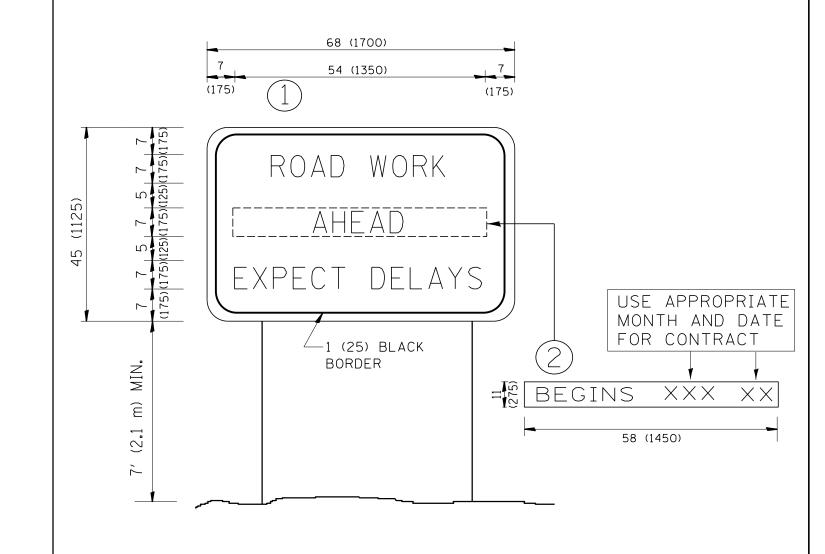
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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	F.A.P.	SECTION	COUNTY CHEE	TAL SHEET
c:\pw_work\pwidot\qureshiya\d0246279\Di	tStd.dgn	DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS				2010-109-RS	COOK 32	
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	FOR TRAFFIC STAGING			TC-16	CONTRACT NO.	. 60M36
	PLOT DATE = 12/7/2012	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		FED. ROAD [	DIST. NO. 1   ILLINOIS   FED. A	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 () 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.

FILE NAME =	USER NAME = qureshiya	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROAD		F.A.P. RTE.	SECTION	COUNTY	TOTAL :	HEET NO.
c:\pw_work\pwidot\qureshiya\d0246279\Di	stStd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS	ON INFORMATION SIGN	358	2010-109-RS	СООК	32	31		
	PLOT SCALE = 100.0000 ' / 10.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFURMATION SIGN			TC-22	CONTRACT	NO. 60	36
	PLOT DATE = 12/7/2012	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.				

## LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER ) Ê (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNI DUCT-TRENCHED TO E/P •• (3.0 m) (3.0 m) \* = (600 mm)\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

\* = (1.8m)

CROSS STREET

\*\* = (1.5m)

I OOPS ARE SAW-CUT TO THE EDGE OF

EDGE OF PAVEMENT

AND HANDHOLE.

IN HANDHOLES OUTSIDE PAVEMENT)

(TYP. FOR LOOPS

PAVEMENT, 1" (25 mm) UNIT

STRAIGHT SAW

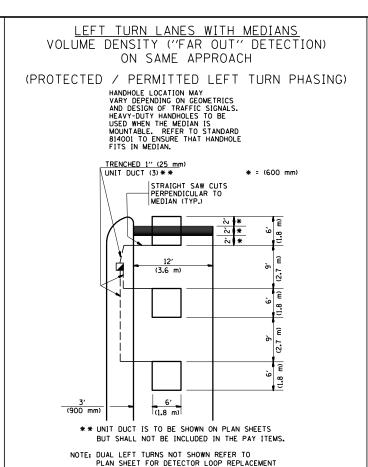
CUTS TO HEAVY

DUTY HANDHOLE -

IN PAVEMENT

(TYP.)

DUCT IS RUN BETWEEN



LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) \* = (600 mm) (900 m (1.8 m) (3.6 m STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN. NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

- 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. UNIT DUCT CROSS STREE 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. 25' (7.6 m) MAXIMUM]

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,
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> 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.

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.

#### N.T.S. DESIGNED REVISED USER NAME = qureshiya ::\pw\_work\pwidot\qureshiua\d0246279\D td.dan DRAWN REVISED PLOT SCALE = 100.0000 '/ in. CHECKED R.K.F. REVISED PLOT DATE = 12/7/2012 DATE REVISED

DETAIL 1

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** 

△ - THESE DIMENSIONS

10' (3.0m) LANE WIDTHS

SECTION COUNTY DISTRICT 1 - DETECTOR LOOP INSTALLATION 358 2010-109-RS COOK 32 32 DETAILS FOR ROADWAY RESURFACING CONTRACT NO. 60M36 TS-07 SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT