1-20-2012 LETTING ITEM 005

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE

AND THE CITY OF CHICAGO

VILLAGES OF ALSIP AND OAK LAWN

# PROPOSED HIGHWAY PLANS

F.A.P. 350: IL ROUTE 50 (CICERO AVE.)

95TH STREET TO 127TH STREET

SECTION: 3068A-RS-1

RESURFACING (3P)

PROJECT: NHF-0350 (036)

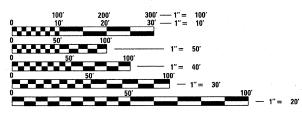
COOK COUNTY

C-91-054-11

# TRAFFIC DATA

 $\bigcirc$ 

2009 ADT = 41,700 - 49,400 SPEED LIMIT = 35 MPH



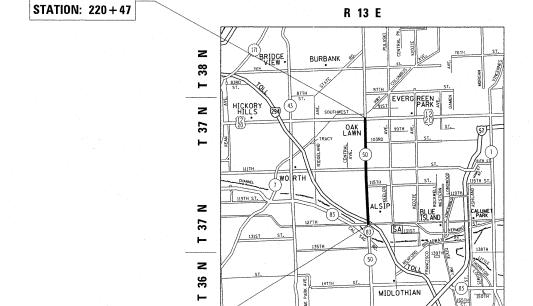
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

C.U.A.N. CHICAGO UTILITY ALERT NETWORK 1-312-744-7000

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. 60L87



PROJECT ENDS

PROJECT BEGINS

**STATION: 29 + 09** 

OMISSION: STA. 69+65 TO STA. 71+61

GROSS LENGTH OF PROJECT = 19138 FEET = 3.63 MILES NET LENGTH OF PROJECT = 18942 FEET = 3.59 MILES

WORTH TOWNSHIP

### D-91-054-11



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED OCTOBER 17 20 11

Die M. O Wash DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Ocember 9 20 11

acting ENGINEER OF DESIGN AND ENVIRONMENT

William R. Freez los Inderim DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS:

SHEET NO.		DESCRIPTION
1	**	COVER SHEET
2	• •	INDEX OF SHEETS, GENERAL NOTES, AND STATE STANDARDS
3		SUMMARY OF QUANTITIES
4-5		EXISTING AND PROPOSED TYPICAL SECTIONS
6-13		ROADWAY AND PAVEMENT MARKING PLAN
14-23		DETECTOR LOOP REPLACEMENT PLAN
24		DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
25		PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
26		CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
27		BUTT JOINT AND HMA TAPER DETAILS (BD-32)
28	× .	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
29		TYPICAL APPLICATIONS - RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)
30		DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
31		TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
32		PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
33		ARTERIAL ROAD INFORMATION SIGN (TC-22)
34		DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS - SHEET 1 (TS-05)
35		DISTRICT 1 - DETECTOR LOOP INSTALLATION - DETAILS FOR ROADWAY RESURFACING (TS-07)

#### STATE STANDARDS:

000001-06	STANDARD SYMBOLS, ABBREVIATION AND PATTERNS
442201 <b>-<i>0</i>3</b>	CLASS C AND D PATCHES
604001 <i>-<b>03</b></i>	FRAME AND LIDS, TYPE 1
701427	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS < 40 MPH
701601- <b>07</b>	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701602 <b>-05</b>	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606 <b>-08</b>	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701- <b>08</b>	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901 <b>-02</b>	TRAFFIC CONTROL DEVICES

#### CITY OF CHICAGO GENERAL NOTES:

780001-03 TYPICAL PAVEMENT MARKINGS

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." (CHICAGO UTILITY ALERT NETWORK) AT (312)744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF CHICAGO.

ALL CATCH BASINS IN THE CITY OF CHICAGO MUST MEET THE DEPARTMENT OF SEWERS' STANDARDS.

PERMITS FROM THE DEPARTMENT OF SEWERS ARE REQUIRED FOR ALL UNDERGROUND STORM, SANITARY OR COMBINED SEWER SYSTEM CONSTRUCTION, AND FOR RESURFACING WORK INVOLVING ADJUSTMENT OF SEWER STRUCTURES. THE DEPARTMENT OF SEWERS' PERMIT MUST BE OBTAINED BY A LICENSED SEWER DRAIN LAYER PRIOR TO START OF CONSTRUCTION.

PERFORATED LIDS SHALL BE PLACED ON ALL MANHOLES AND CATCH BASINS.

ALL BROKEN, CRACKED, WORN OR OTHERWISE DAMAGED OR BICYCLE UNSAFE FRAMES AND LIDS ON SEWER STRUCTURES, SHALL BE REPLACED WITH NEW DEPARTMENT OF SEWERS' STANDARD FRAMES AND LIDS.

OPEN LID DRAINAGE STRUCTURES SHALL NOT BE CLOSED. COVERED OR OTHERWISE OBSTRUCTED DURING CONSTRUCTION OF THIS ROADWAY WITHOUT THE WRITTEN PERMISSION FROM THE CITY OF CHICAGO.

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

# GENERAL NOTES:

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE VILLAGE OF ALSIP, THE VILLAGE OF OAK LAWN, AND THE CITY OF CHICAGO.

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

ANY PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS OBLITERATED BY MILLING AND RESURFACING OPERATIONS ON SIDE STREETS AND ENTRANCES SHALL BE REPLACED AND PAID FOR IN KIND.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

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

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLA**CEMENT** WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

DRAINAGE ADJUSTMENT OR RECONSTRUCTION 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.

FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.

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 ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD ENGINEER, AT (708) 597-9800 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED

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

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.

PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE, TYPE III AND ITS REMOVAL SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKING.

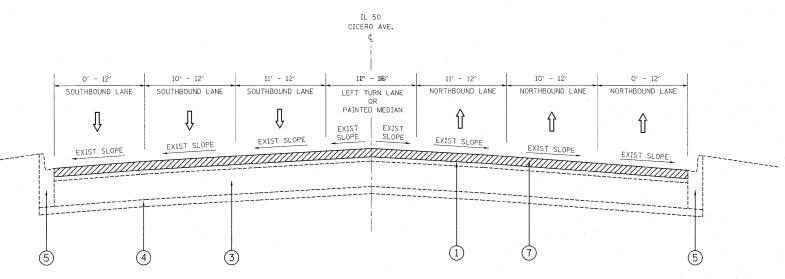
WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 mm) WHERE THE SPEED LIMIT IS 40 MPH (80 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (80 km/h). WITH WRITTEN APPROVAL OF THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 mm) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).

	ILE NAME = USER NAME = beckertom		DESIGNED -	REVISED -
	c:\pw_work\pwidot\beckertcm\d0246251\D10	5411-sht-plan.dgn	DRAWN -	REVISED -
1 10	10-20-2011	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -
		PLOT DATE = 10/18/2011	DATE -	REVISED -

;	STA	TE	0F	ILLINOIS		
EPARTI	ΛEN	Т О	FT	RANSPOR	TATION	

IL 50 (CICERO AVENUE.) (95TH ST. TO 127TH ST.)	F.A.P. RTE.	SECTION	COUNTY	SHEETS	SHEET NO.
INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	350	3068A-RS-1	соок	35	2
INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES			CONTRACT	NO.	60L87
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FFD. RO	AD DIST. NO. 1 ILLINOIS FED. 4	ID PROJECT		

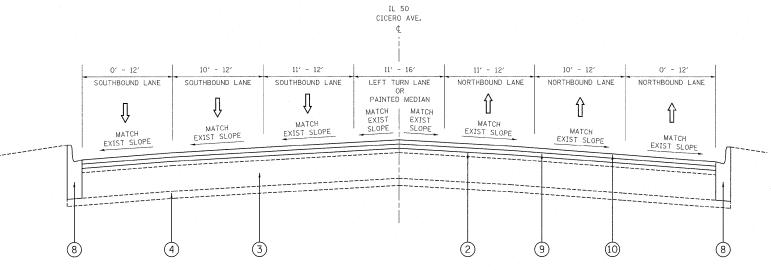
	SUMMARY OF QUANTITIES					ONSTRUCT:	ION TYPE	CODE			SLIMMA	RY OF QUANTITIES			:		CONSTRUCT	ION TYPE	CODE	
	SUMMANT OF GRANTITIES	<u> </u>	URBAN TOTAL	80   FED. 201/STATE							SUMINA	NI OF GUANTITIES	T	URBAN TOTAL	801.FED. 201.STATE					
CODE NO	ITEM	UNIT	QUANTITIES							CODE NO		ITEM	UNIT	QUANTITIES						
			1	0005		12									0005					
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	65	65		·				70300250	TEMPORARY PA	VEMENT MARKING	FOOT	275	275					
25200110	SODDING, SALT TOLERANT	SO YD	65	65														1 1 1 1 1		
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	130	130						70300260	- LINE 12"	VEMENT MARKING	FOOT	1025	1025					
40600300	AGGREGATE (PRIME COAT)	TON	650	650						70300280	TEMPORARY PA - LINE 24"	VEMENT MARKING	FOOT	2200	2200					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	245	245						70301000		VEMENT MARKING REMOVAL	SO FT	5780	5780					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2						<b>*</b> 78000100		C PAVEMENT MARKING	SO FT	2730	2730					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	1240	1240						* 78000200	- LETTERS AN	C PAVEMENT MARKING	FOOT	65450	65450					
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	330	330						* 78000400	- LINE 4"	C PAVEMENT MARKING	FOOT	12575	12575					
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE	TON	15950	15950							- LINE 6"									
42001300	COURSE, MIX "F", N90  PROTECTIVE COAT	SO YD	385	385						* 78000500	THERMOPLASTI - LINE 8"	C PAVEMENT MARKING	FOOT	275	275					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	1150	1150			1.			* 78000600	THERMOPLASTI - LINE 12"	C PAVEMENT MARKING	FOOT	1025	1025					
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SO YD	162675	162675						* 78000650	THERMOPLASTI - LINE 24"	C PAVEMENT MARKING	FOOT	2200	2200					
	C105******	50.57								* 78100100	RAISED REFLE	CTIVE PAVEMENT MARKER	EACH	2495	2495					
44000600	SIDEWALK REMOVAL  HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SO FT	1150	1150						78300200	RAISED REFLE	CTIVE PAVEMENT MARKER	EACH	3380	3380					
										* 88600600		P REPLACEMENT	FOOT	5001	5001					
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SO YD	1825	1825						40600827	POLYMERIZED	LEVELING BINDER (MACHINE	TON	6835	6835					
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SO YD	245	245							METHOD). IL-	4.75, N50								
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SO YD	300	300	-					Δ X5537800	STORM SEWERS	TO BE CLEANED 12"	FOOT	7700	7700			1.		Table 1
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	5	5						X6030310	FRAMES AND L (SPECIAL)	IDS TO BE ADJUSTED	EACH	. 77	77					
60404950	FRAMES AND GRATES, TYPE 24	EACH	5	5						Z0004562		CONCRETE CURB AND GUTTER	БООТ	1150	1150					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6						20004562	REMOVAL AND		FOOT	1150	1150					
67100100	MOBILIZATION	L SUM	1	1	·					Z0018400	DRAINAGE STR	UCTURES TO BE ADJUSTED	EACH	25	25					
70102625	TRAFFIC CONTROL AND PROTECTION. STANDARD 701606	L SUM	1	1						Δ Z0018500	DRAINAGE STR	UCTURES TO BE CLEANED	EACH	220	220					
70102630	TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1						Z0030850		FORMATION SIGNING	SO FT	51.4	51.4					
70102632	STANDARD 701601 TRAFFIC CONTROL AND PROTECTION,	L SUM	1	1						Z0048665	RAILROAD PRO	TECTIVE LIABILITY INSURANCE	L SUM	1	1					
	STANDARD 701602 TRAFFIC CONTROL AND PROTECTION.	L SUM:	1																	
70102635	STANDARD 701701	L SUM	1	1	-															
70300100	SHORT TERM PAVEMENT MARKING	FOOT	52025	52025																
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	2730	2730											1					
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	65450	65450																
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	12575	12575														PECIALTY		00100-
22	LINE D		*														∆ N0	M-LAKII(	CIPATING//	I SIATE
FILE NAME =		IGNED ~		REVISED			L	_1	OTA:	<u>ν</u>		IL 50 (CICERO AVEN	UE) (95TH S	T. TO 127TH	ST.)	F.A.P RTE.	· SEC	TION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\pwidof\becke	DRA     PLOT SCALE = .50,0000 // In.   CHE	CKED -		REVISED REVISED		· .			STATE OF MENT OF 1	ILLINOIS RANSPORTA	TION		RY OF QUANT		•	350		A-RS-1	СООК	<b>3</b> 5 3
	PLOT DATE = 10/17/2011 DAT			REVISED					VI I			SCALE: SHEET NO. OF	SHEETS ST	A. T	O STA.	FED.	ROAD DIST. NO. 1	ILLINOIS FED.		NO. 60L87



EXISTING TYPICAL SECTION
IL 50 (CICERO AVE.)
STA. 29+09 TO STA. 61+00
STA. 88+00 TO STA. 220+47

#### NOTES:

- \* TWO (2) TOTAL SOUTHBOUND LANES FROM: STA. 41+82 TO STA. 61+00 STA. 88+00 TO STA. 109+76
- \* TWO (2) TOTAL NORTHBOUND LANES FROM: STA. 50+91 TO STA. 61+00 STA. 88+00 TO STA. 109+76
- \* ONE (1) SOUTHBOUND RIGHT TURN LANE FROM: STA. 58+00 TO STA. 60+65



PROPOSED TYPICAL SECTION
IL 50 (CICERO AVE.)
STA. 29+09 TO STA. 61+00
STA. 88+00 TO STA. 220+47

#### NOTES:

- \* TWO (2) TOTAL SOUTHBOUND LANES FROM: STA. 41+82 TO STA. 61+00 STA. 88+00 TO STA. 109+76
- \* TWO (2) TOTAL NORTHBOUND LANES FROM: STA. 50+91 TO STA. 61+00 STA. 88+00 TO STA. 109+76
- \* ONE (1) SOUTHBOUND RIGHT TURN LANE FROM: STA. 58+00 TO STA. 60+65

# LEGEND:

- 1) EXISTING HMA SURFACE (VARIES FROM 3" TO 5")
- 2 EXISTING HMA SURFACE AFTER MILLING (VARIES FROM 1/2" TO 2-1/2")
- 3 EXISTING P.C.C. BASE COURSE ( ± 9")
- 4 EXISTING SUB-BASE GRANULAR MATERIAL
- 5 EXISTING COMB. CONC. CURB & GUTTER, TYPE B-6.18 OR TYPE B-6.24
- 6 EXISTING CONCRETE MEDIAN SURFACE, 4"
- (7) PROPOSED HMA SURFACE REMOVAL, 2-1/2"
- 8 PROPOSED COMB. CONC. C&G REMOVAL AND REPLACEMENT
- 9 PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (10) PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX "F", N90, 1-3/4"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS										
OPERATION	MIXTURE TYPE	AIR VOIDS @ Ndes								
PAVEMENT RESURFACING	POLYMERIZED HMA SURFACE COURSE, MIX "F", N90 (IL-9.5 MM)	4% Ø 90 GYR.								
PAVEMENT RESURFACING	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	4% @ 50 GYR.								
PATCHING	CLASS D PATCHES (HMA BINDER IL-19 MM)	4% @ 70 GYR.								
PATCHING	HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 MM)	4% @ 70 GYR.								

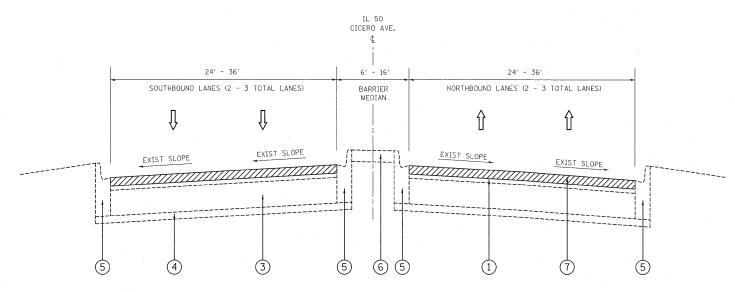
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.

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

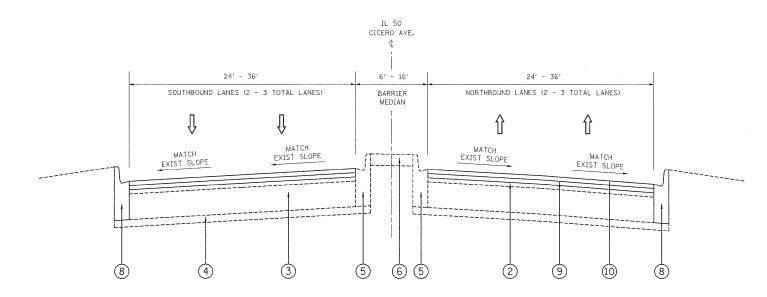
# THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING

FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED -	
c:\pw_work\pwidot\beckertcm\d0246251\D10	05411-sht-plan.dgn	DRAWN -	REVISED ~	STATE OF ILLINOIS
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION
	PLOT DATE = 10/17/2011	DATE -	REVISED -	

	IL 5	O (CICERO	AVENUE)	(95TH	ST. TO 127TH	ST.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	F)	CISTING AN	n PROPO	SED T	YPICAL SECTIO	NS	350	3068A-RS-1	COOK	35	4
ļ	L/	NOTHING AN	1 1101 0			CONTRACT	NO.	60L87			
	SCALE:	SHEET NO.	OF SH	EETS :	STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		



EXISTING TYPICAL SECTION
IL 50 (CICERO AVE.)
STA. 61+00 TO STA. 88+00



PROPOSED TYPICAL SECTION
IL 50 (CICERO AVE.)
STA. 61+00 TO STA. 88+00

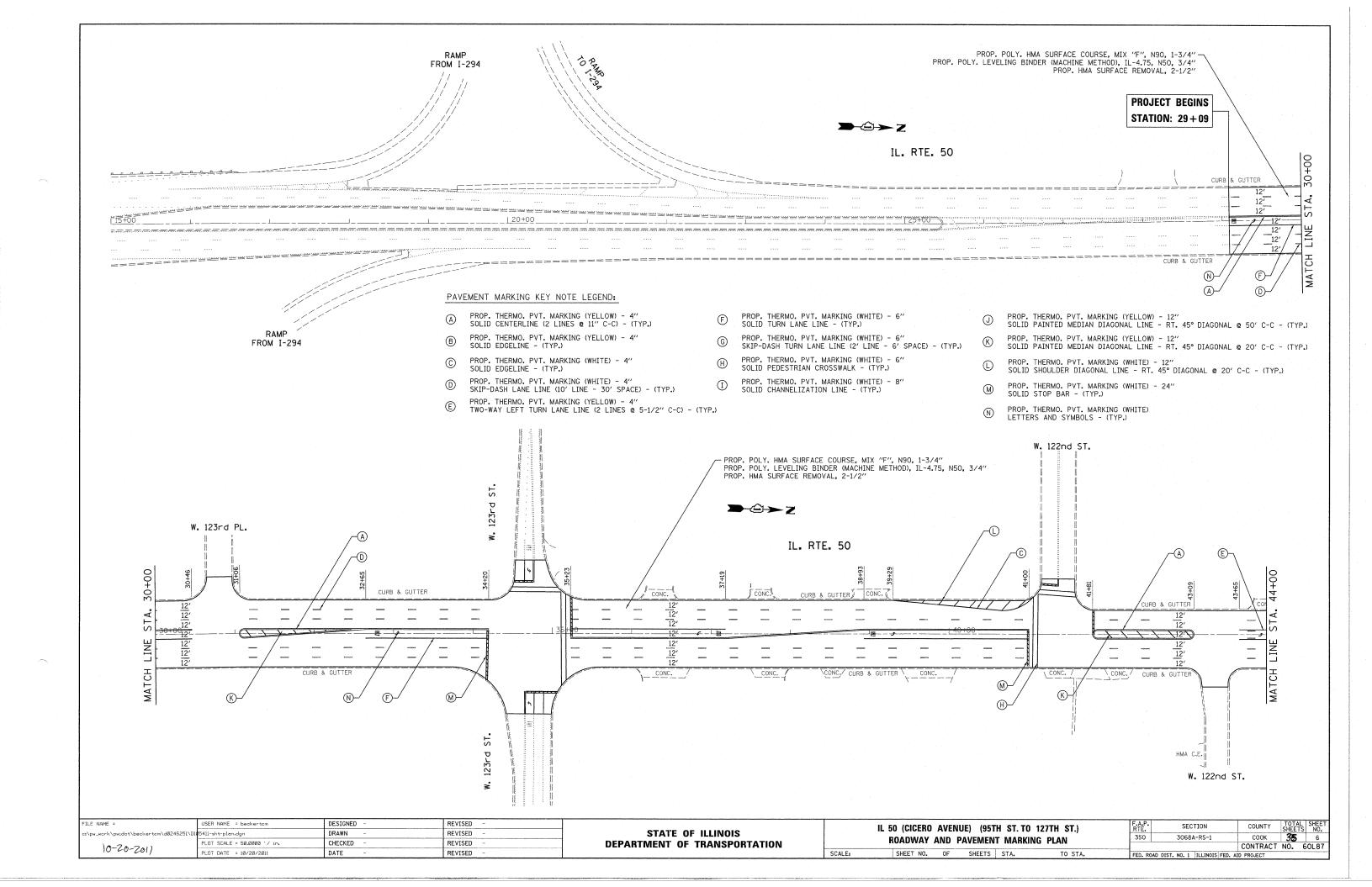
# LEGEND:

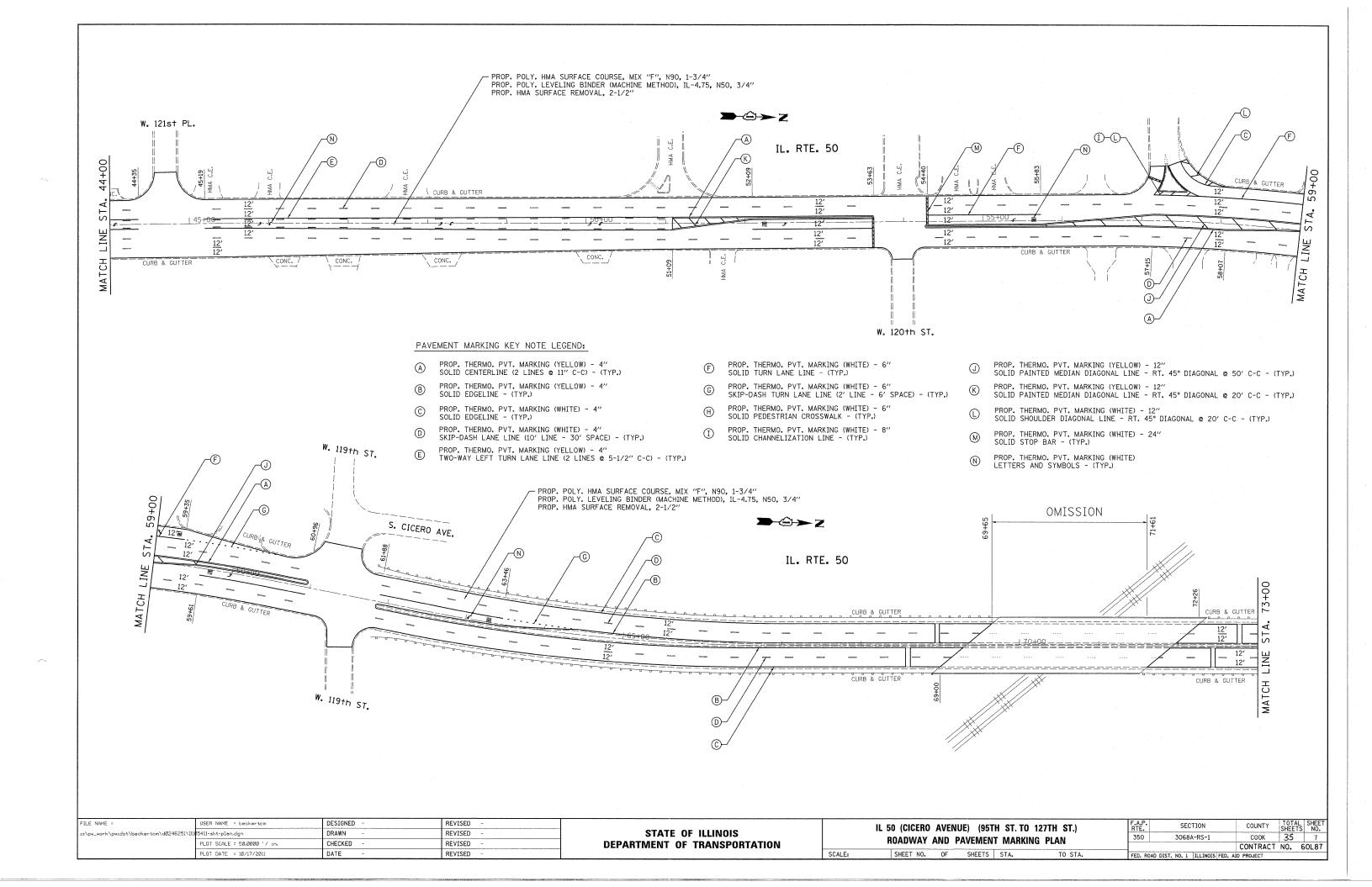
- 1) EXISTING HMA SURFACE (VARIES FROM 3" TO 5")
- 2 EXISTING HMA SURFACE AFTER MILLING (VARIES FROM 1/2" TO 2-1/2")
- $\bigcirc$  EXISTING P.C.C. BASE COURSE (  $\pm$  9")
- 4 EXISTING SUB-BASE GRANULAR MATERIAL
- (5) EXISTING COMB. CONC. CURB & GUTTER, TYPE B-6.18 OR TYPE B-6.24
- 6) EXISTING CONCRETE MEDIAN SURFACE, 4"
- 7 PROPOSED HMA SURFACE REMOVAL, 2-1/2"
- 8 PROPOSED COMB. CONC. C&G REMOVAL AND REPLACEMENT
- (9) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (10) PROPOSED POLYMERIZED HMA SURFACE COURSE, MIX "F", N90, 1-3/4"

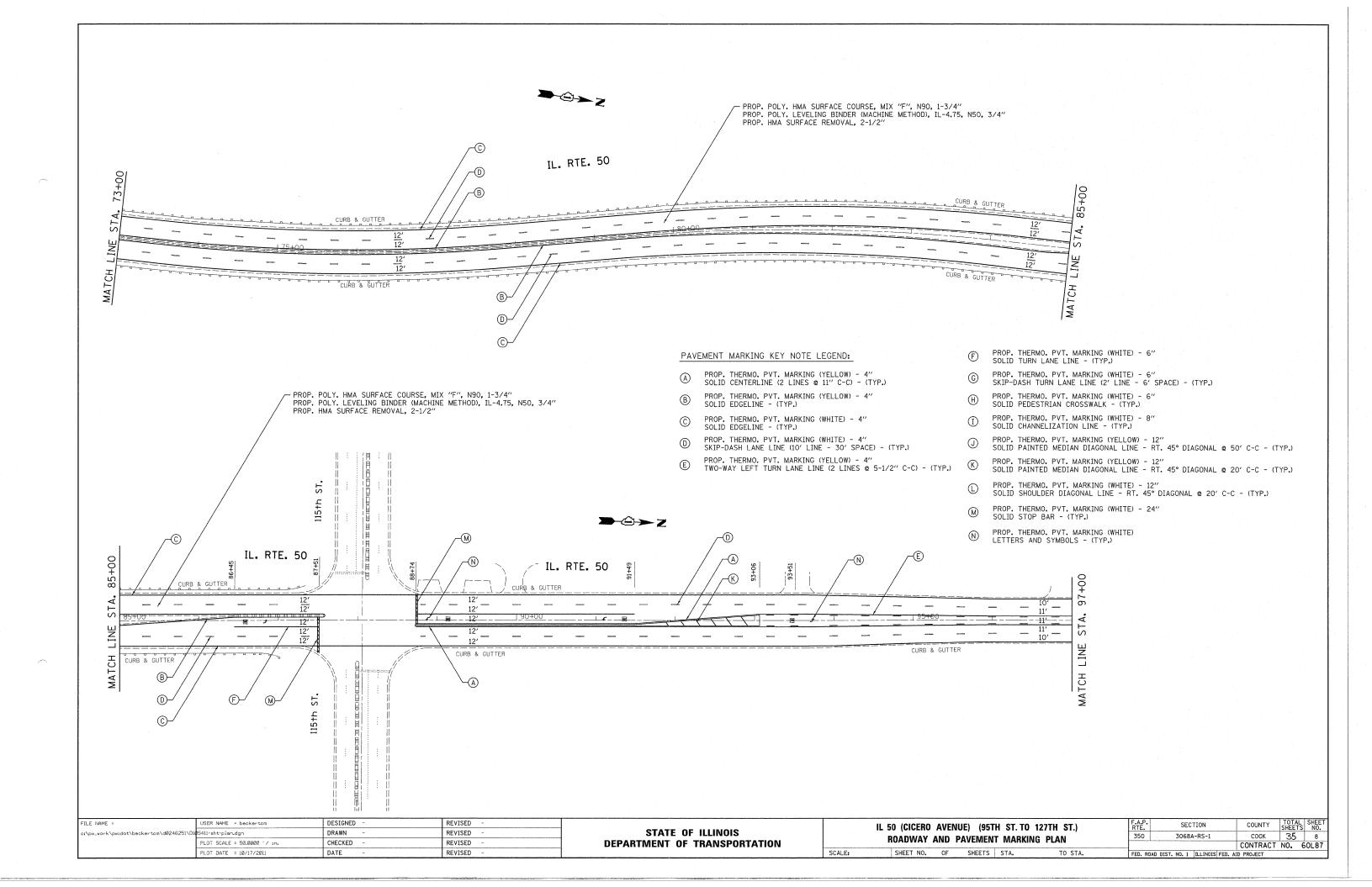
· · · · · · · · · · · · · · · · · · ·				
FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED -	Ī
c:\pw_work\pwidot\beckertcm\d0246251\D10	15411-sht-plan.dgn	DRAWN -	REVISED	
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED	l
·	PLOT DATE = 10/17/2011	DATE -	REVISED -	1

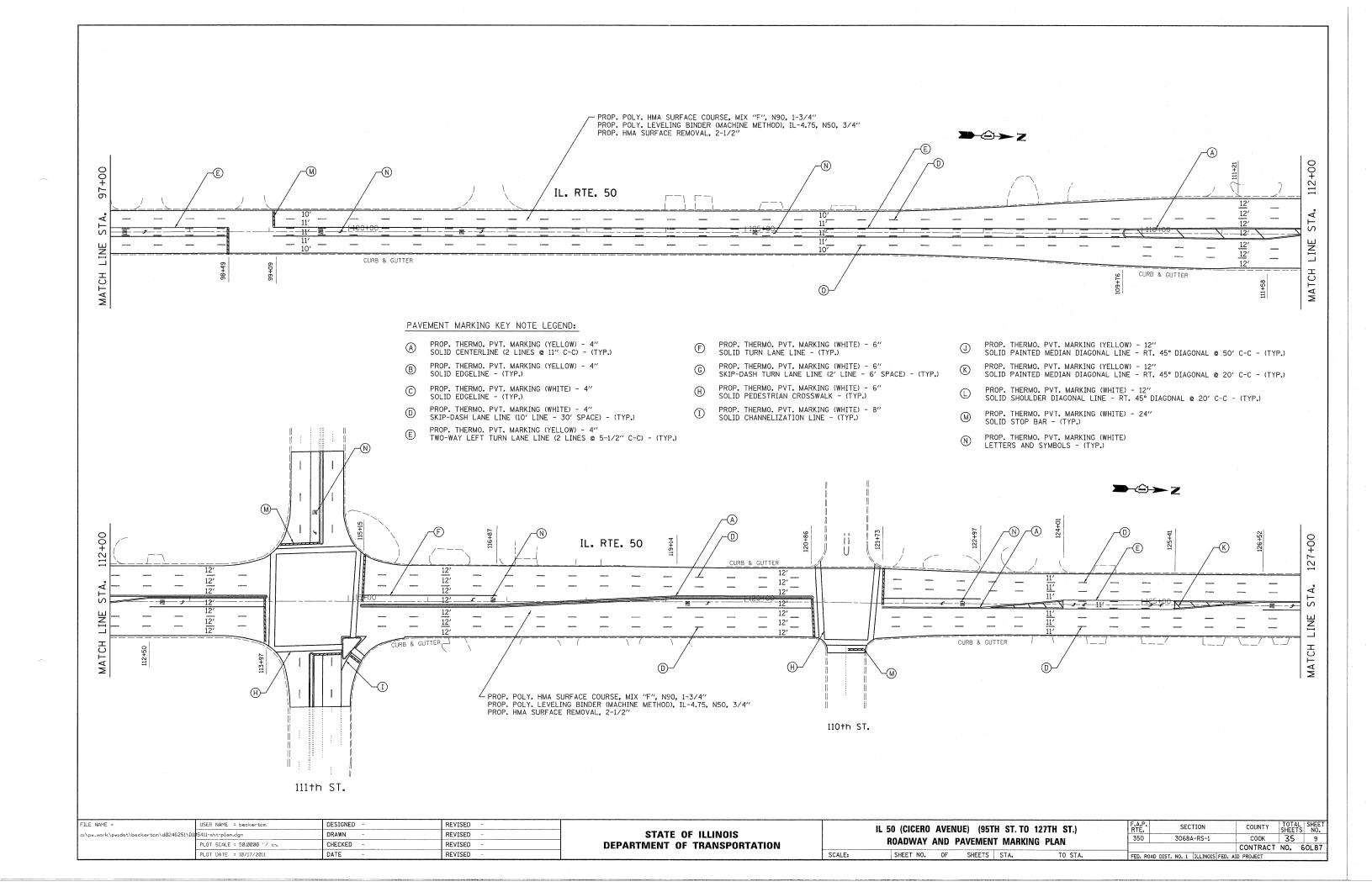
STATE	OF	ILLINOIS	
DEPARTMENT	OF 1	<b>TRANSPORTATION</b>	

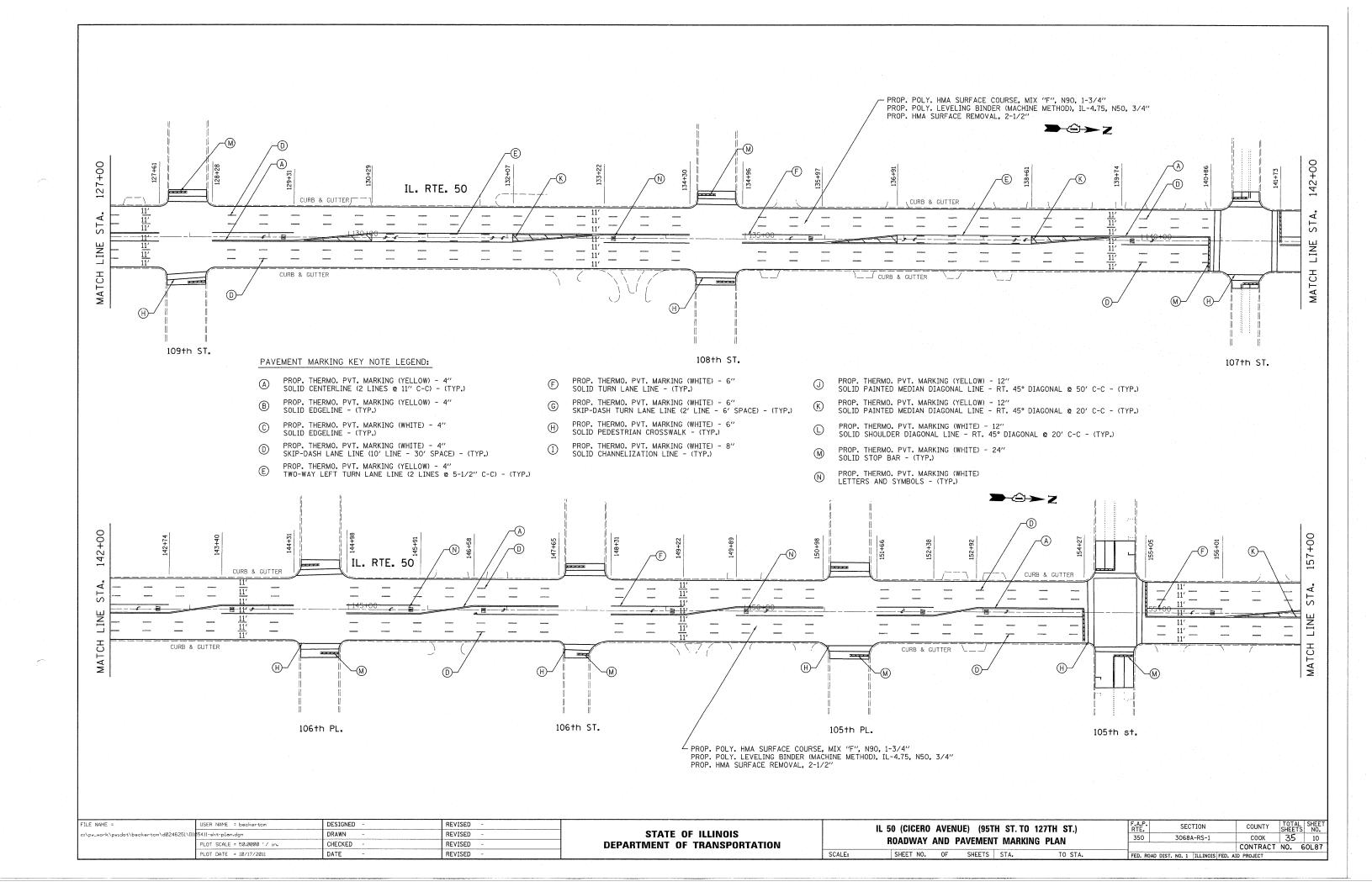
IL S	50 (CICERO AVEN	UE) (95T	H ST. TO	127TH ST.)	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEE NO.
F	XISTING AND PI	350	3068A-RS-1	COOK	35	5			
					CONTRACT	NO. 6	60L8		
SCALE:	SHEET NO. OF	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		

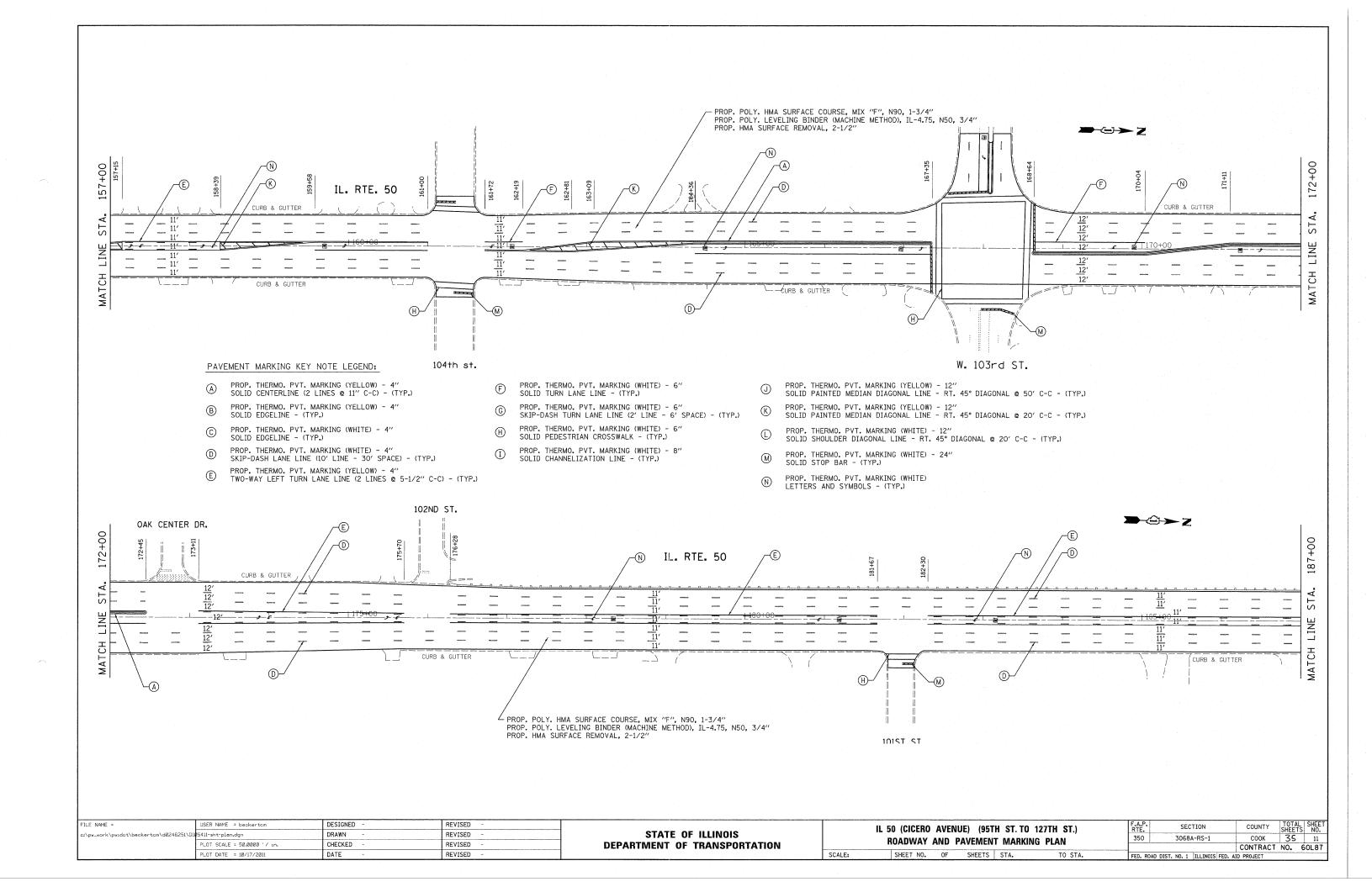


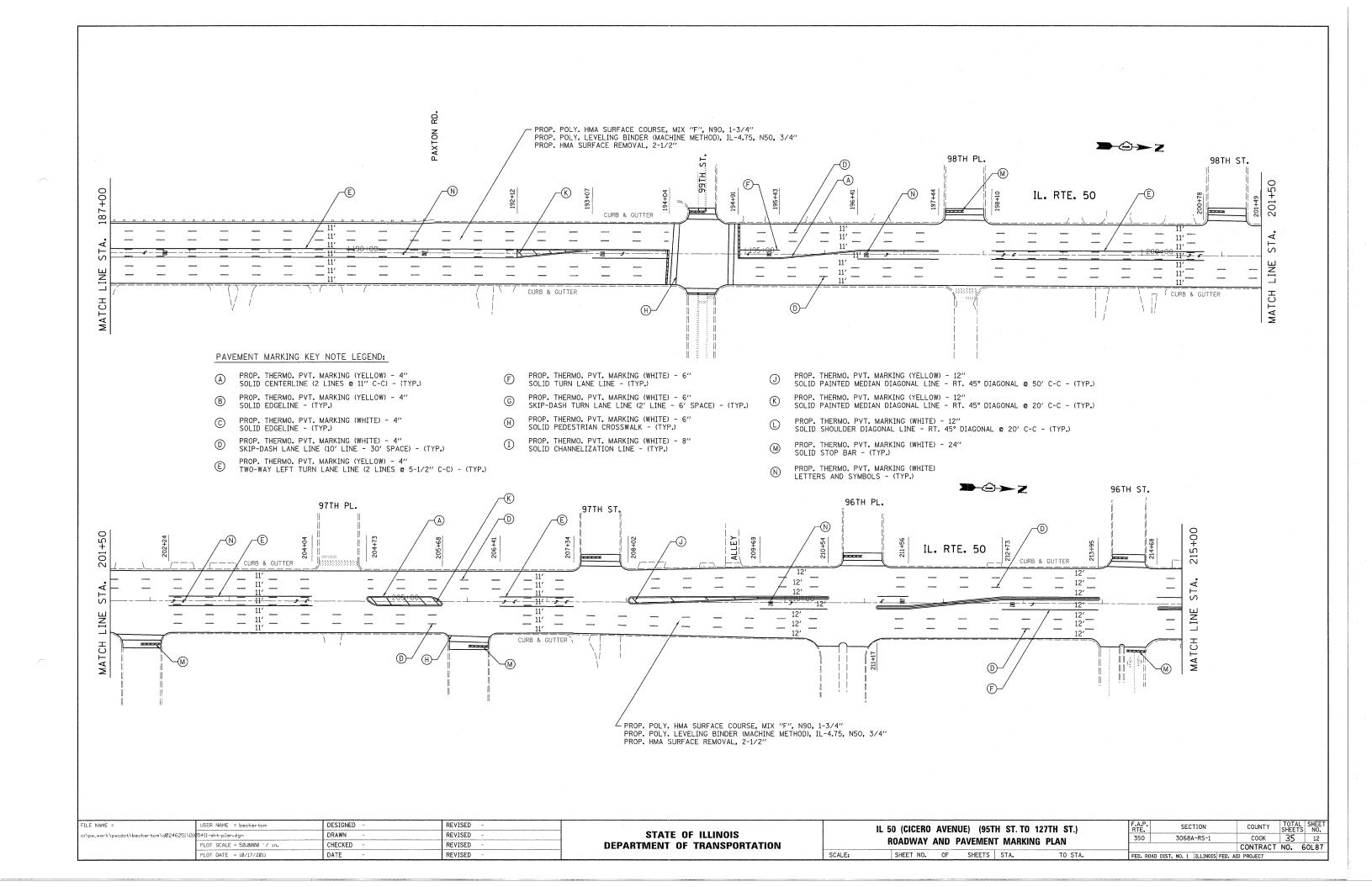


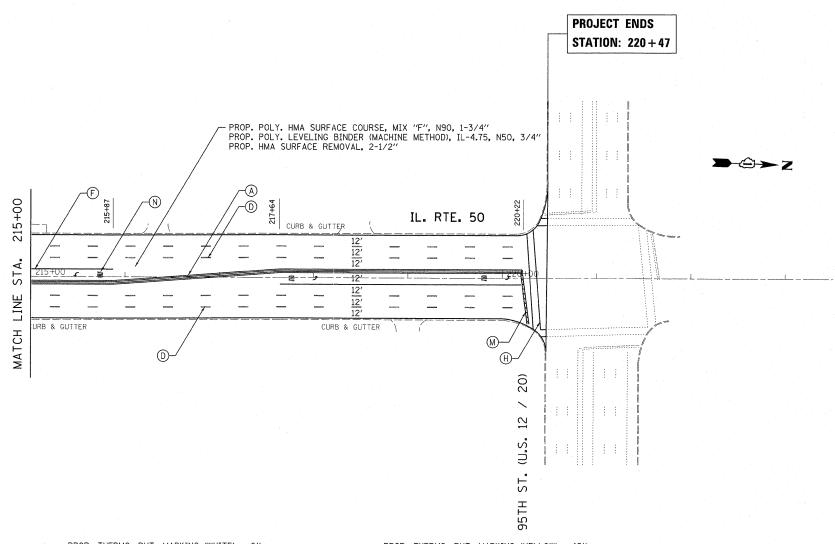








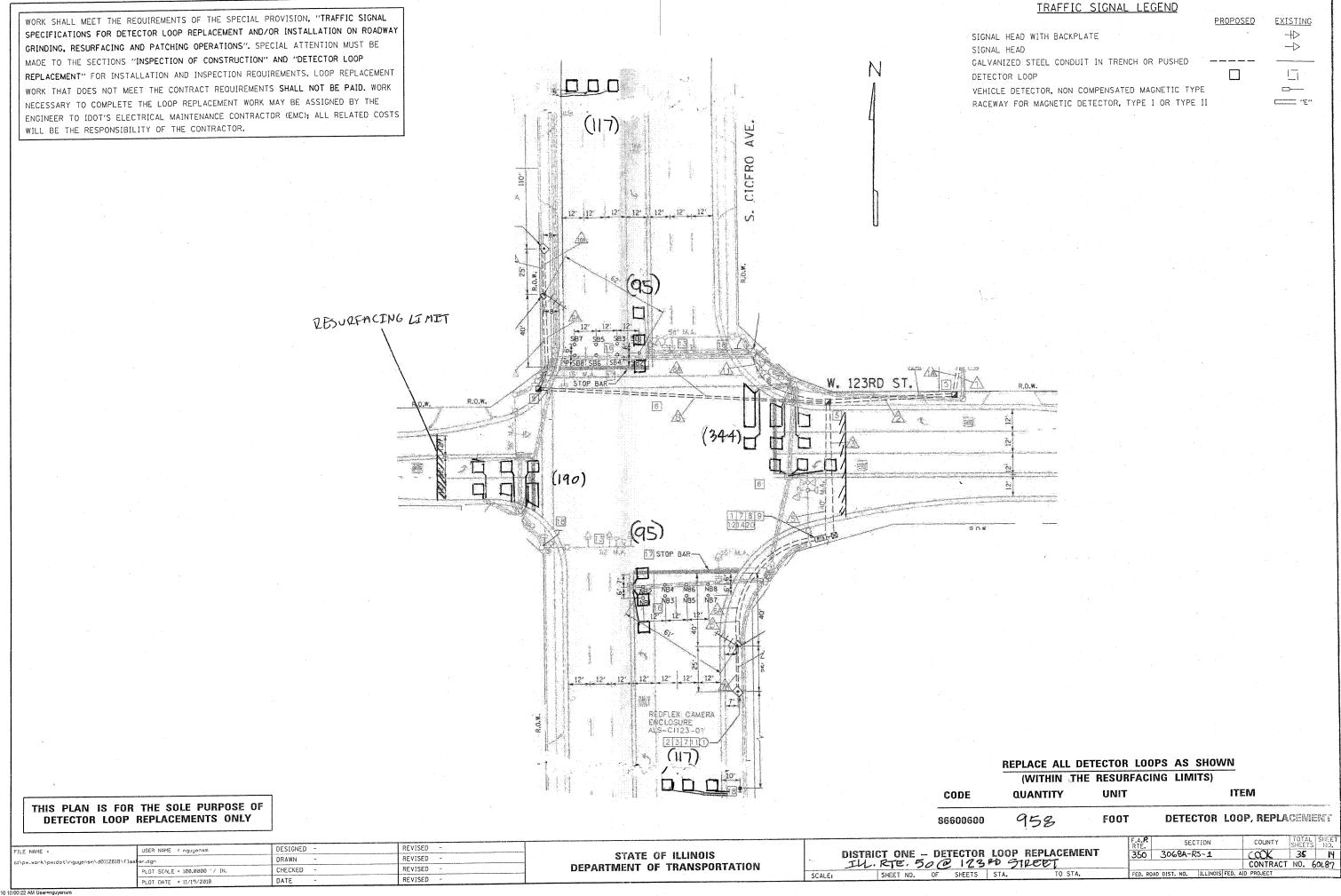




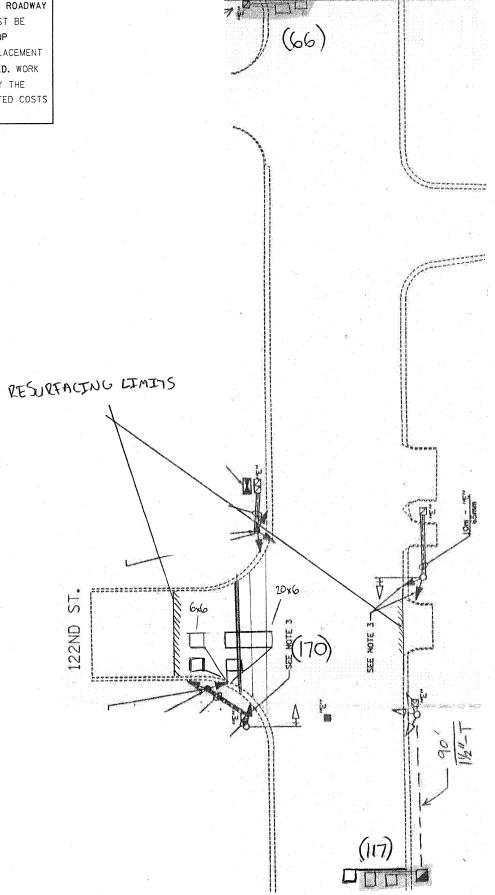
# PAVEMENT MARKING KEY NOTE LEGEND:

- (A) PROP. THERMO. PVT. MARKING (YELLOW) 4" SOLID CENTERLINE (2 LINES @ 11" C-C) (TYP.)
- B PROP. THERMO. PVT. MARKING (YELLOW) 4"
  SOLID EDGELINE (TYP.)
- © PROP. THERMO. PVT. MARKING (WHITE) 4" SOLID EDGELINE (TYP.)
- PROP. THERMO. PVT. MARKING (WHITE) 4" SKIP-DASH LANE LINE (10' LINE - 30' SPACE) - (TYP.)
- © PROP. THERMO. PVT. MARKING (YELLOW) 4"
  TWO-WAY LEFT TURN LANE LINE (2 LINES @ 5-1/2" C-C) (TYP.)
- PROP. THERMO. PVT. MARKING (WHITE) 6"
  SOLID TURN LANE LINE (TYP.)
- © PROP. THERMO. PVT. MARKING (WHITE) 6" SKIP-DASH TURN LANE LINE (2" LINE - 6" SPACE) - (TYP.)
- (H) PROP. THERMO. PVT. MARKING (WHITE) 6" SOLID PEDESTRIAN CROSSWALK (TYP.)
- ① PROP. THERMO. PVT. MARKING (WHITE) 8"
  SOLID CHANNELIZATION LINE (TYP.)
- PROP. THERMO. PVT. MARKING (YELLOW) 12"
  SOLID PAINTED MEDIAN DIAGONAL LINE RT. 45° DIAGONAL @ 50' C-C (TYP.)
- (K) PROP. THERMO. PVT. MARKING (YELLOW) 12" SOLID PAINTED MEDIAN DIAGONAL LINE RT. 45° DIAGONAL @ 20' C-C (TYP.)
- PROP. THERMO. PVT. MARKING (WHITE) 12"
  SOLID SHOULDER DIAGONAL LINE RT. 45° DIAGONAL @ 20' C-C (TYP.)
- M PROP. THERMO. PVT. MARKING (WHITE) 24" SOLID STOP BAR (TYP.)
- N PROP. THERMO. PVT. MARKING (WHITE)
  LETTERS AND SYMBOLS (TYP.)

FILE NAME =	USER NAME = beckertcm	DESIGNED -	REVISED -		IL 50 (CICERO AVENUE) (95TH ST. TO 127TH ST.)	F.A.P. SECTION COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertcm\d024625i\D10	15411-sht-plan.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS	, , , , , , , , , , , , , , , , , , , ,	350 3068A-RS-1 COOK 35 13
	PLOT SCALE = 50.0000 '/ im.	CHECKED ~	REVISED -	DEPARTMENT OF TRANSPORTATION	ROADWAY AND PAVEMENT MARKING PLAN	CONTRACT NO. 60L87
	PLOT DATE = 10/17/2011	DATE -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. 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 CRINDING, 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.



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 \_\_\_\_

"E"

TRAFFIC SIGNAL LEGEND

RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II

REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS) CODE QUANTITY

353

86600600

FOOT

**DETECTOR LOOP, REPLACEMENT** 

ITEM

DESIGNED -REVISED FILE NAME = REVISED DRAWN CHECKED REVISED PLOT SCALE = 100,0000 '/ IN. REVISED DATE

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

> STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SHEET NO. OF SHEETS STA. TO STA. 350

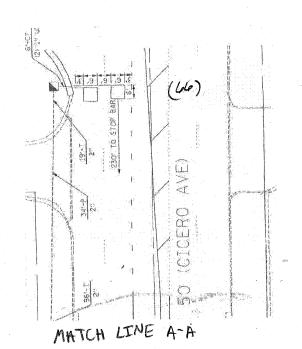
SECTION COUNTY COUNTY SHEETS NO.

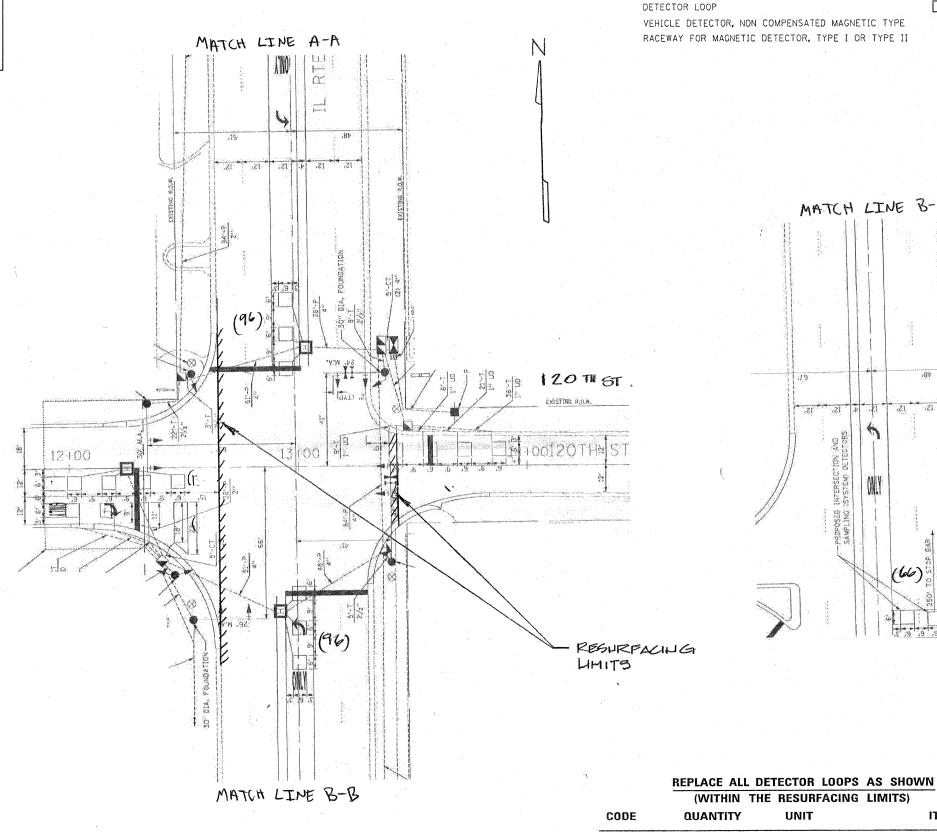
SHEETS NO.

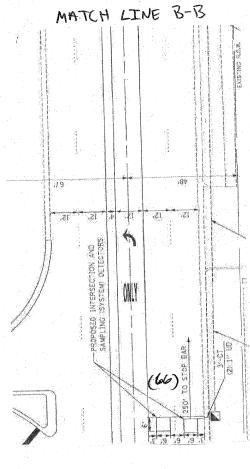
COO STORY

CONTRACT NO. 60687 3068A-RS-1

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.







TRAFFIC SIGNAL LEGEND

GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED

SIGNAL HEAD WITH BACKPLATE

SIGNAL HEAD

PROPOSED

EXISTING

 $\rightarrow \triangleright$ 

 $\rightarrow$ 

\_\_\_

□== "E"

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

DESIGNED -REVISED DRAWN REVISED REVISED CHECKED PLOT SCALE = 100.0000 '/ IN-PLOT DATE = 11/19/2010 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  DISTRICT ONE - DETECTOR LOOP REPLACEMENT

JU. ROHTE 50 @ 120 TH ST.

SHEET NO. OF SHEETS STA. TO STA.

86600600

324

SECTION COUNTY COOK 35 16

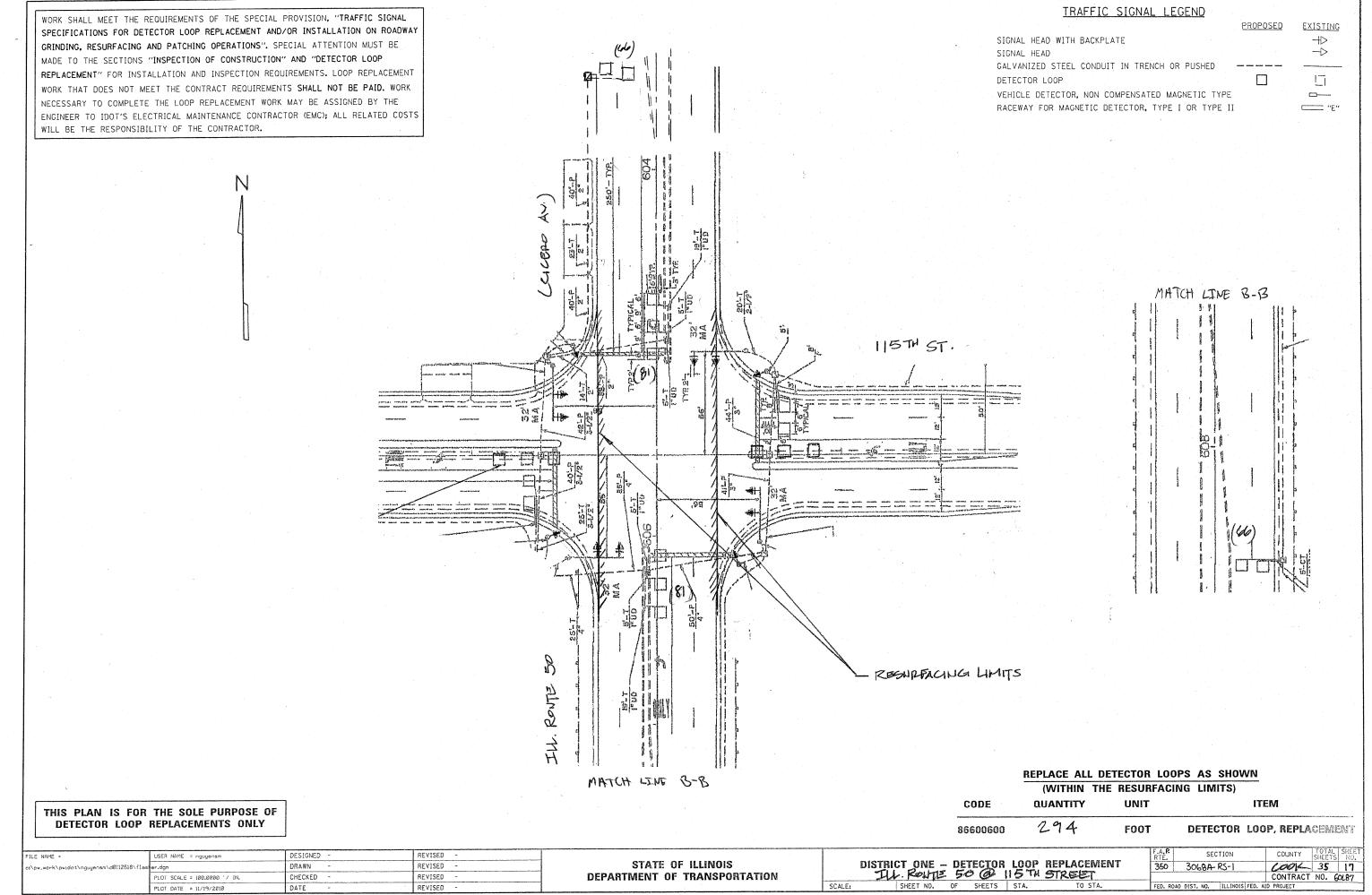
CONTRACT NO. 60L87

ITEM

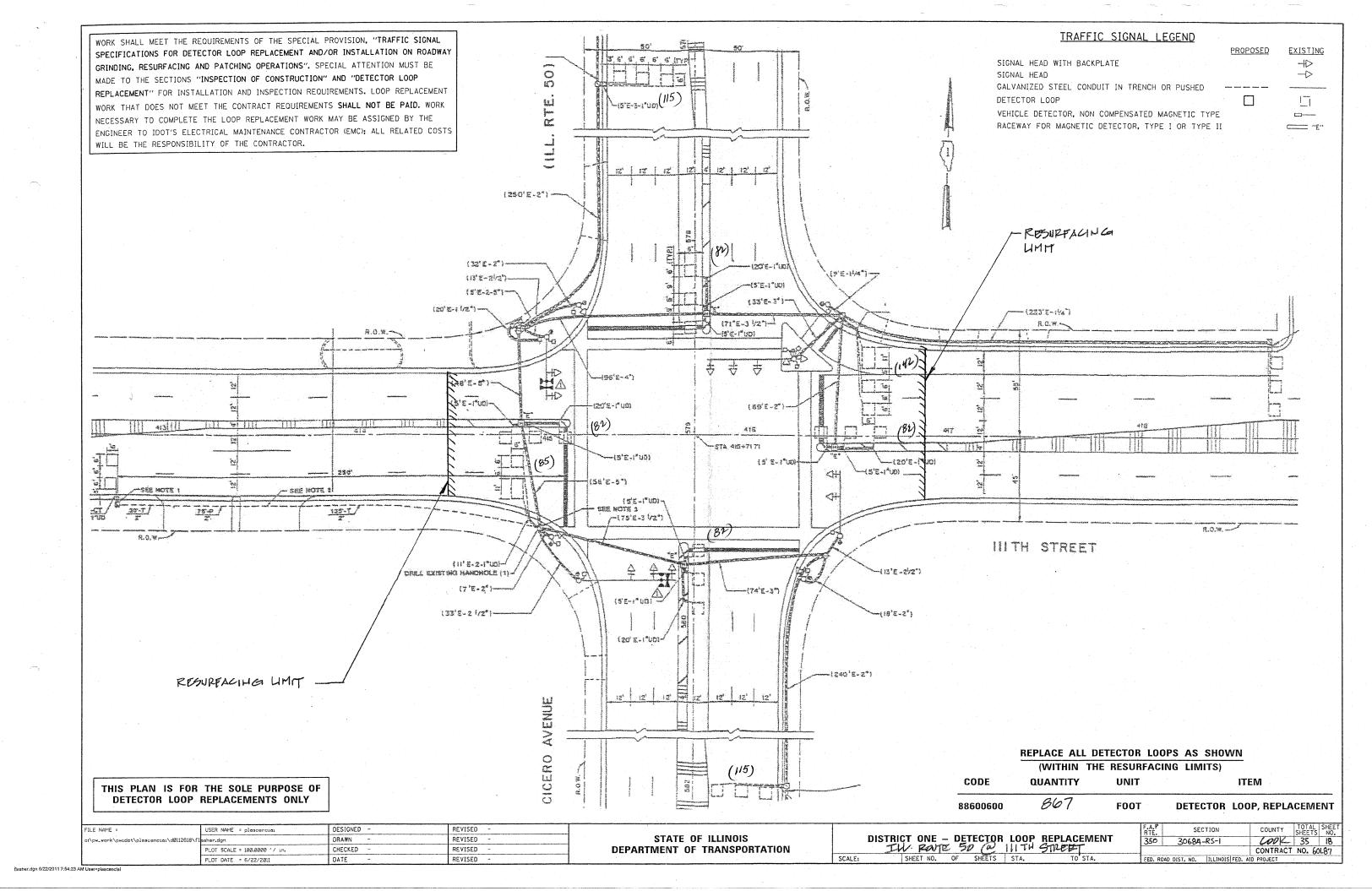
**DETECTOR LOOP, REPLACEMENT** 

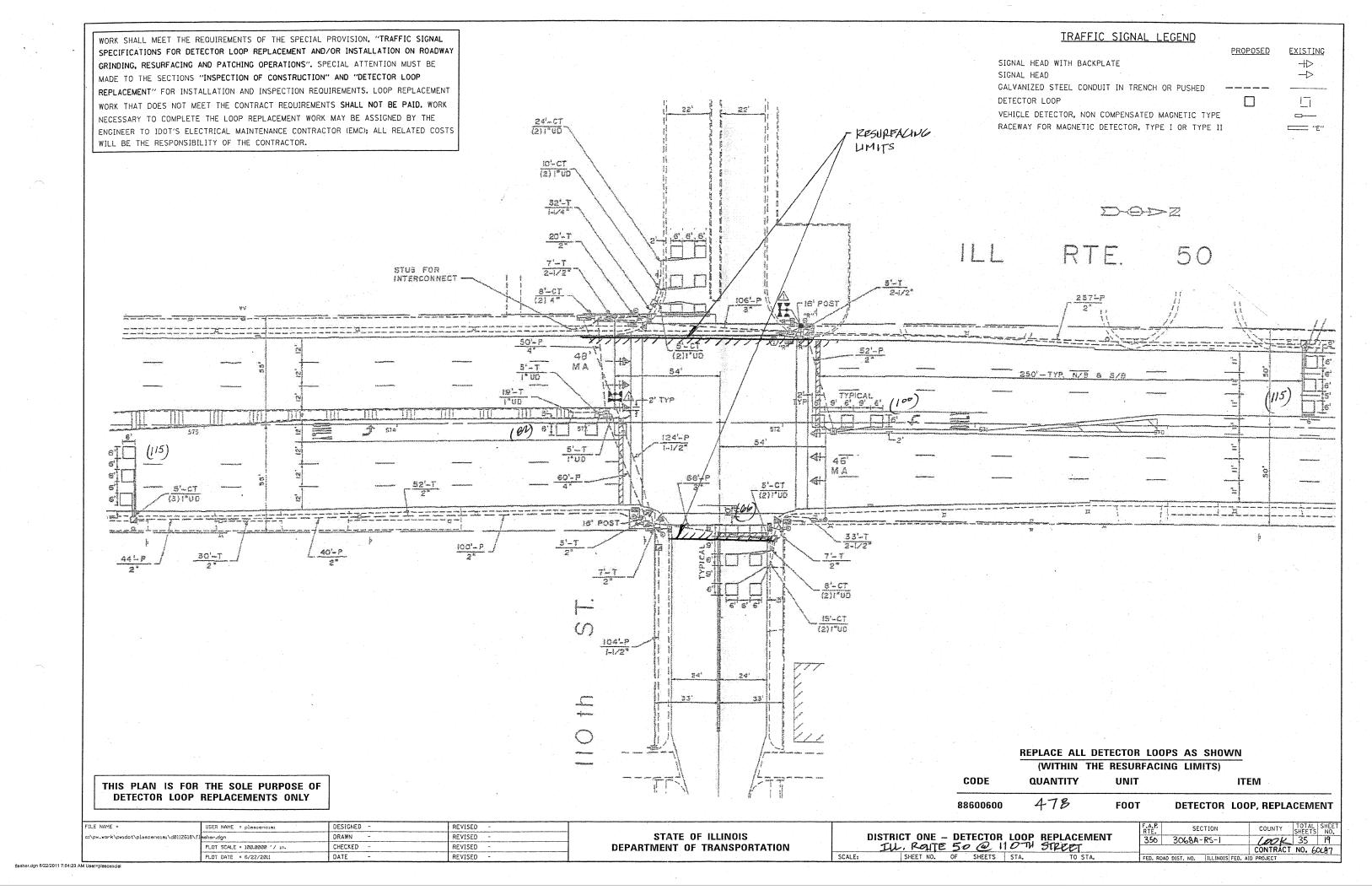
UNIT

FOOT

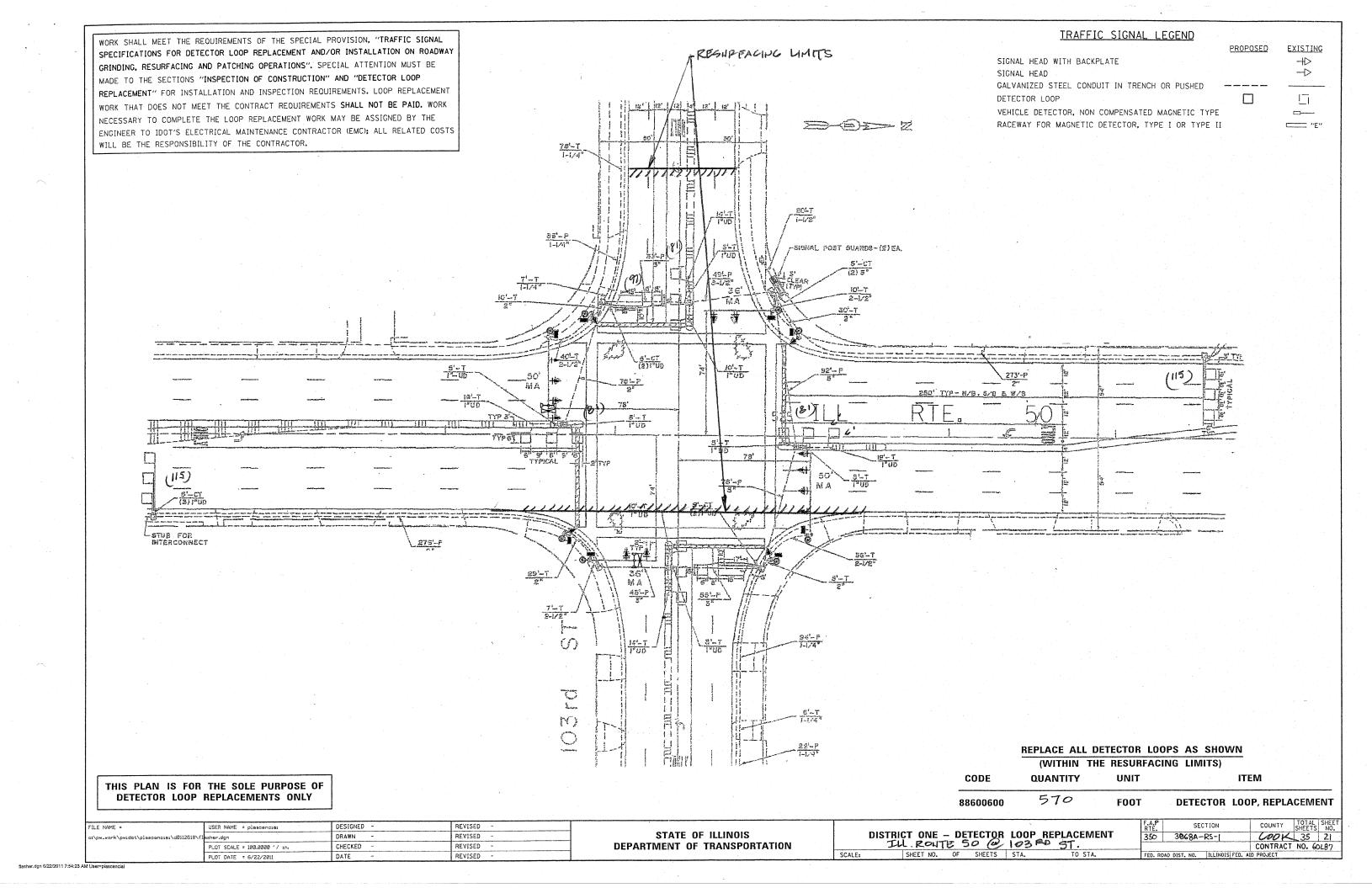


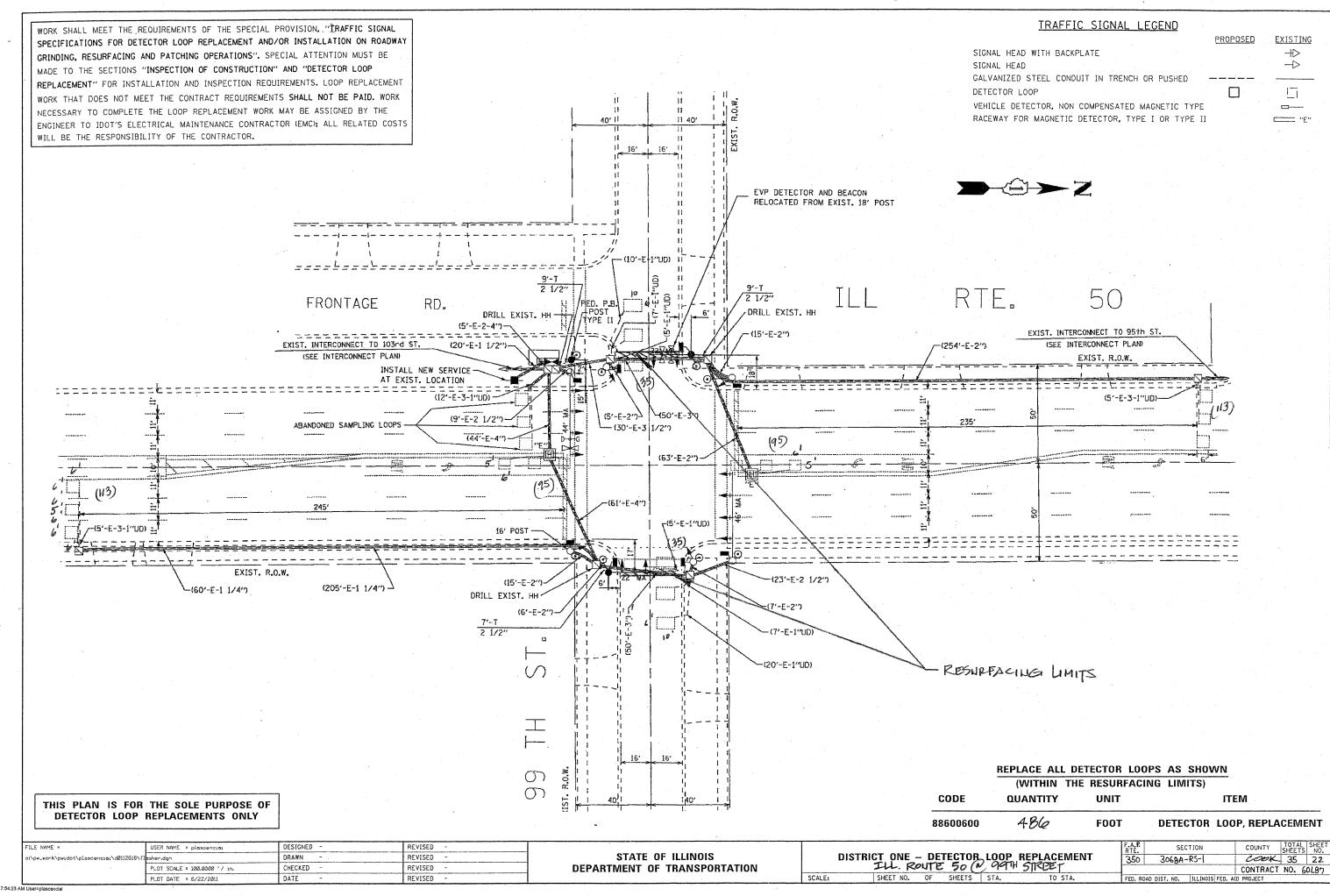
flasher.dgn 11/19/2010 10:00:22 AM User=nguyensm

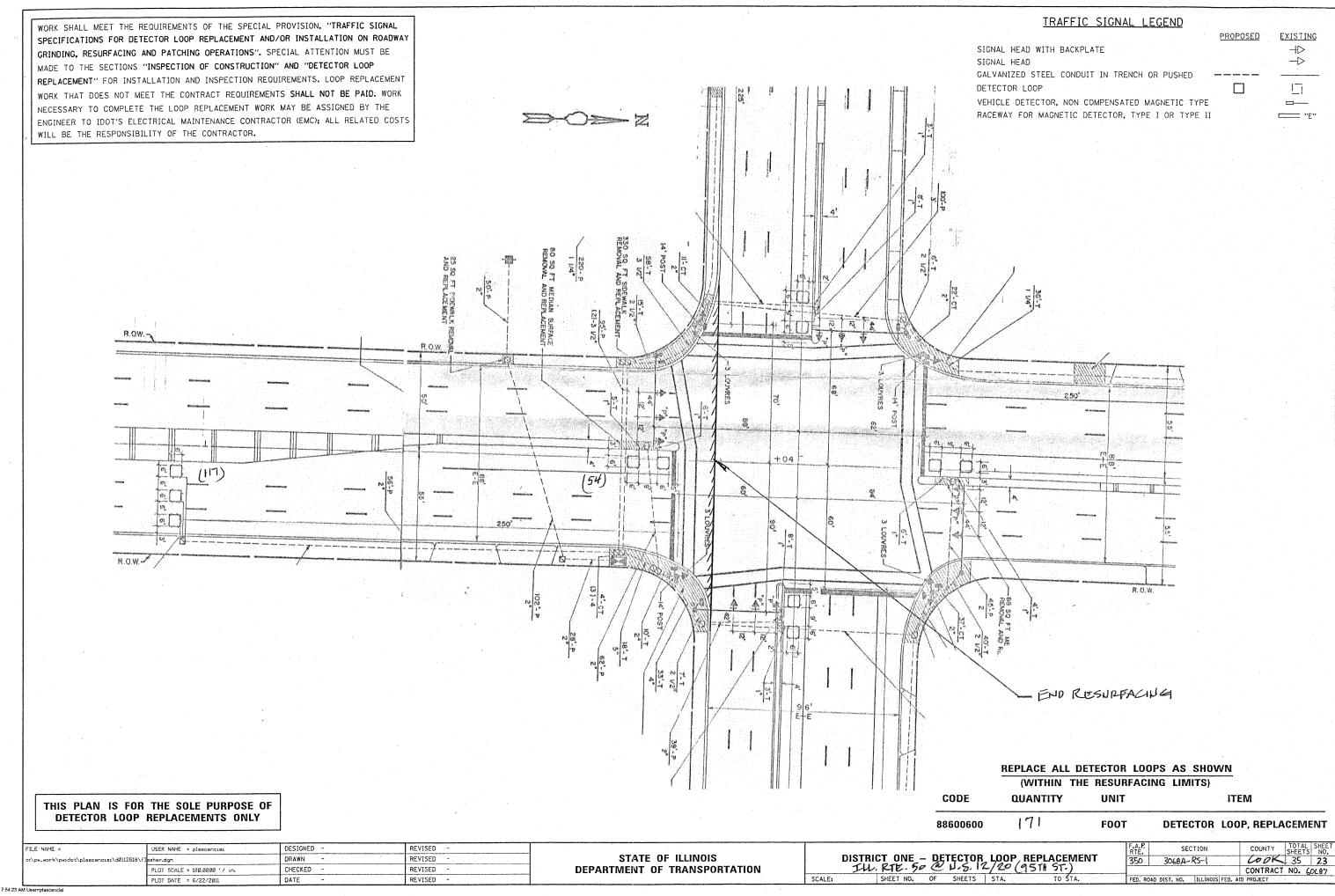


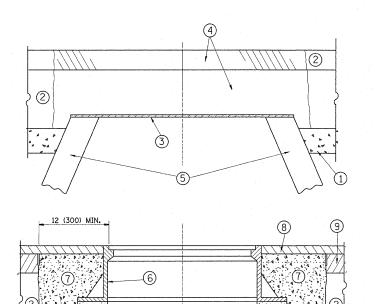


TRAFFIC SIGNAL LEGEND WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL PROPOSED EXISTING SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY SIGNAL HEAD WITH BACKPLATE +GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE -SIGNAL HEAD MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT DETECTOR LOOP WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE \_\_\_\_ NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II "E" ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC); ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. INSTALL NEW SERVICE AT EXIST. LOCATION (65'-E-1 1/2") RESTORATION OF WORK AREA RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAYEMENT ETC. SHALL BE REPLACED (12'-E-1"UD)-리 16.5' 16.5' 106TH (12'-E-1"UD) -IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE 10 UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. EVP DETECTOR AND BEACON (35'-E-1 1/2") RELOCATED FROM EXIST. 18' POST -DRILL EXISTING HANDHOLE EXIST. INTERCONNECT TO 105th ST. (5'-E-2-4" (SEE INTERCONNECT PLAN) 2 1/2" -30 INCH DIA. FOUNDATION (10'-E-2")--(18'-E-2") (14'-E-2")--(263'-E-2") (25'-E-2 1/2") EXIST. R.O.W. -16' POST (5'-E-3-1"UD) 235' TYP, N/B & S/B (43'-E-4") TYP. 2' TYPICAL 16' TYP. (115) 2' TYP. -(53'-E-4") (5'-E-3-1"UD) -(15'-E-4 3 CLEAR - TYP. 16' POST EXIST. R.O.W. -SIGNAL PÒST GUARDS-(2) (EXIST) -(23'-E-2 1/2") (20'-E-2") (265'-E-2") 30 INCH DIA. FOUNDATION DRILL EXIST. HANDHOLE -(8'-E-1"UD) -(20'-E-1"UD) RESURFACING LIMITS REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN THE RESURFACING LIMITS) CODE QUANTITY UNIT ITEM THIS PLAN IS FOR THE SOLE PURPOSE OF **DETECTOR LOOP REPLACEMENTS ONLY** 500 DETECTOR LOOP, REPLACEMENT 88600600 **FOOT** DESIGNED -FILE NAME = REVISED SECTION COUNTY DISTRICT ONE - DETECTOR LOOP REPLACEMENT STATE OF ILLINOIS DRAWN REVISED 350 100K 35 20 3068A-RS-1 sher.dgn CONTRACT NO. 60L87 REVISED **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 100.0000 '/ in. CHECKED SCALE: SHEET NO. OF SHEETS STA. FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT PLOT DATE = 6/22/2011 DATE REVISED









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.

PROPOSED

BRICK, MORTAR, OR CONC. ADJUSTING RINGS

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
- 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.

#### LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 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: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL" NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

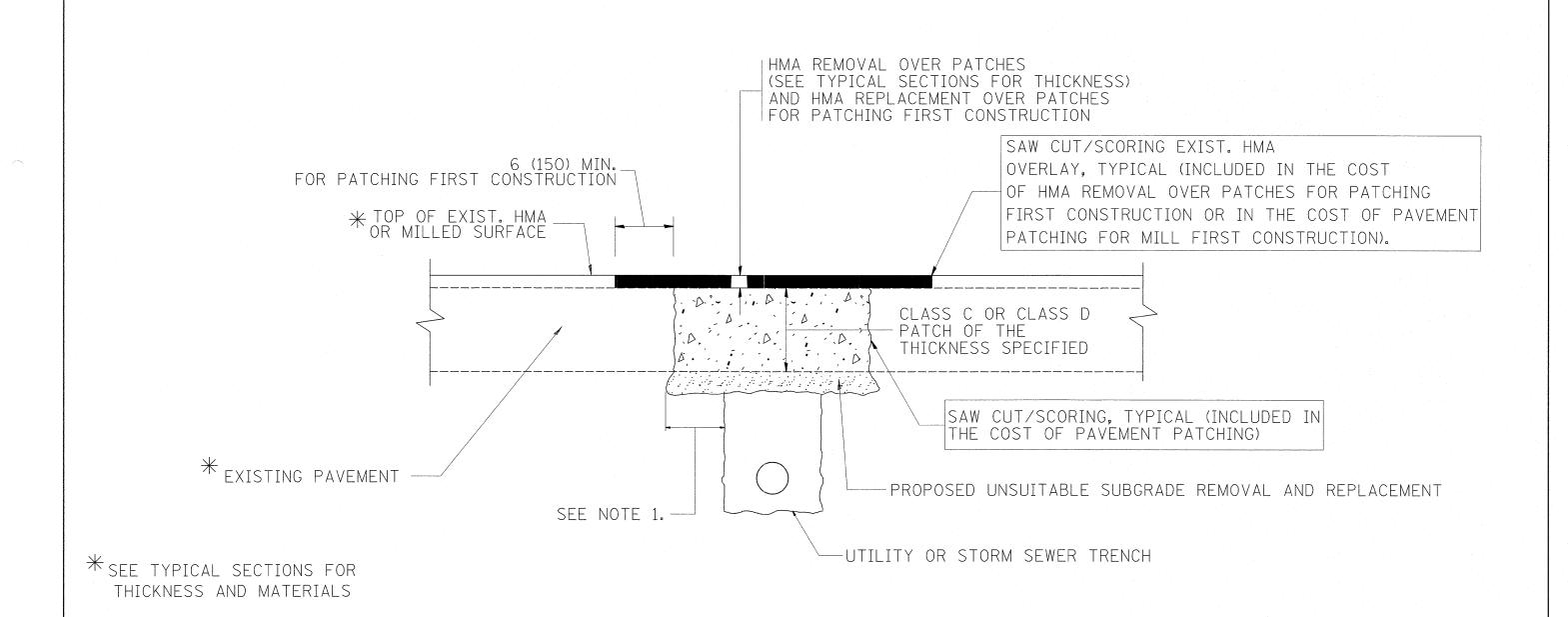
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

1			
FILE NAME =	USER NAME = beckertcm	DESIGNED - R. SHAH	REVISED - A. ABBAS 03-21-97
c:\pw_work\pwidot\beckertcm\d0246251\Dis	tStd.dgn	DRAWN -	REVISED - R. WIEDEMAN 05-14-04
	PLOT SCALE = 50,0000 '/ im.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 10/17/2011	DATE - 10-25-94	REVISED - R. BORO 03-09-11

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

		D	ETAILS FO	)R	-	
	FRAMES AN	D LIDS	ADJUSTN	IENT WITH	MILLING	
SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO	SI

3068A-RS-1 COOK BD600-03 (BD-8) CONTRACT NO. 60L87



# 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)

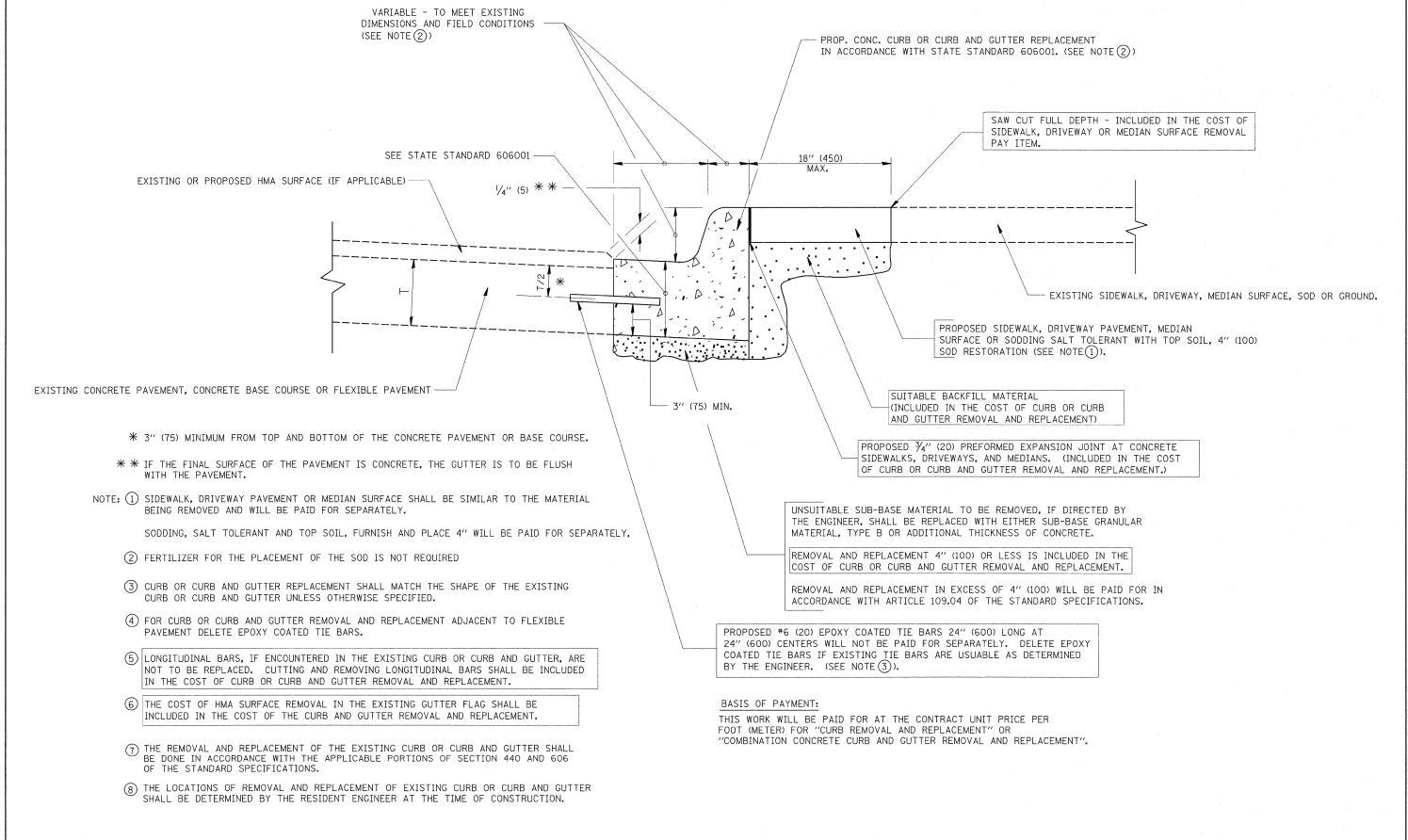
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

# 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.

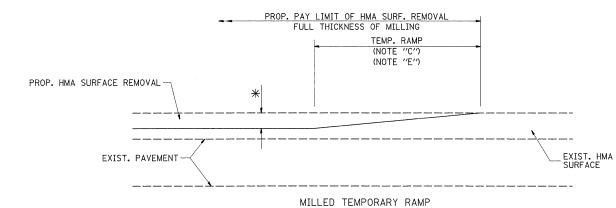
FILE NAME =	USER NAME = beckertom	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR		F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertcm\d03	3246251\D1•tStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS			350 3068A-RS-1	COOK 35 2.5
1	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT		BD400-04 (BD-22)	CONTRACT NO. 60L87
	PLOT DATE = 10/17/2011	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 FE	D. AID PROJECT



# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

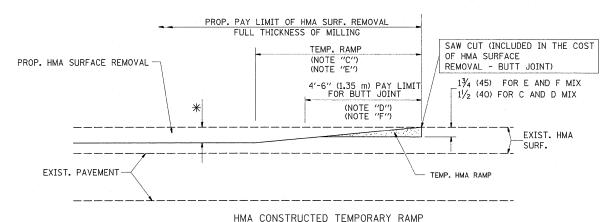
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = beckertom	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	F.A.P. SECTION COUNTY TOTAL SHEET
c:\pw_work\pwidot\beckertcm\dØ246251	\DistStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	· ·	350 3068A-RS-1 COOK 35 76
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD-24) CONTRACT NO. 60L87
	PLOT DATE = 10/18/2011	DATE - 03-11-94	REVISED - R. BORO 12-15-09	·	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

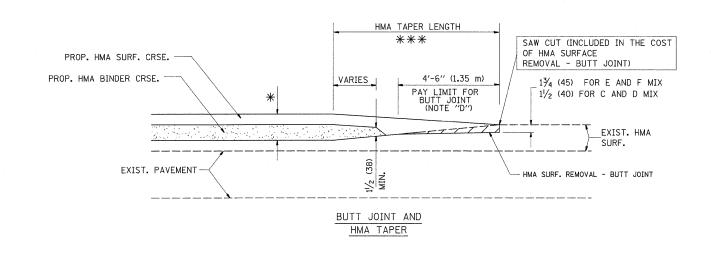
# OPTION 1



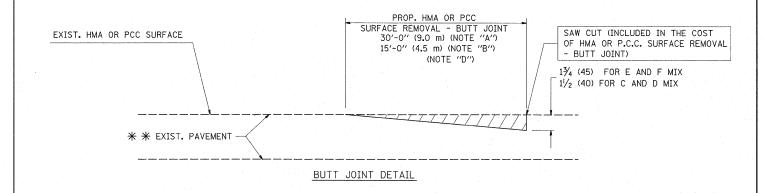
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

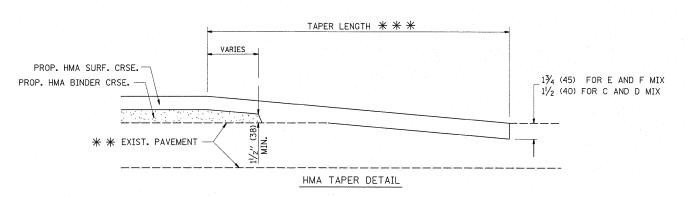
# OPTION 2

# TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

#### NOTES

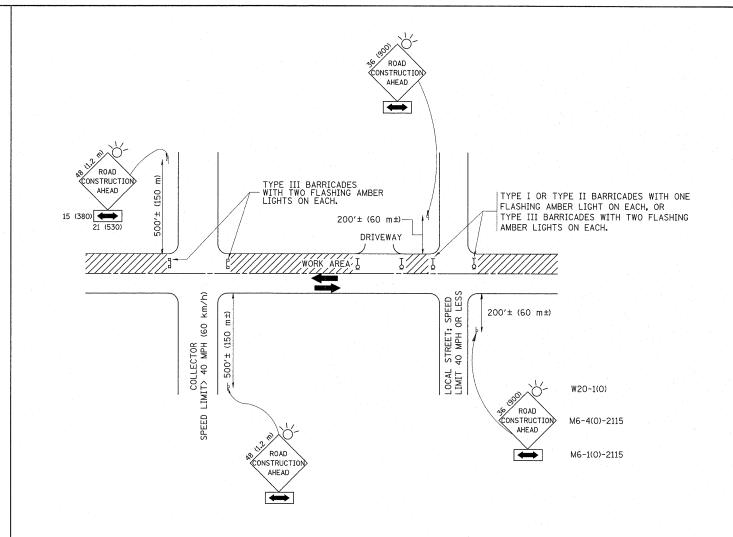
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP, RAMP AT A RATE OF 3'-0" (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".

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

FILE NAME =	USER NAME = beckertcm	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94		BUTT JOINT AND	F.A.P. SECTION	COUNTY TOTAL SHEET
o:\pw_work\pwidot\beckertcm\dØ246251\Dis	tStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		350 3068A-RS-1	COOK 35 27
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED - M. GOMEZ 04-06-01	DEPARTMENT OF TRANSPORTATION	HMA TAPER DETAILS	BD400-05 BD32	CONTRACT NO. 60L87
	PLOT DATE = 10/17/2011	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT



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

# NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- q) 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).

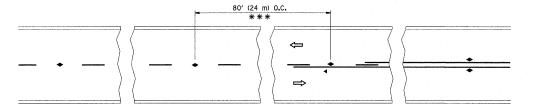
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL 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 = beckertom	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
c:\pw_work\pwidot\beckertcm\d0246251\Dis	tStd.dgn	DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.00000 '/ in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 10/17/2011	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

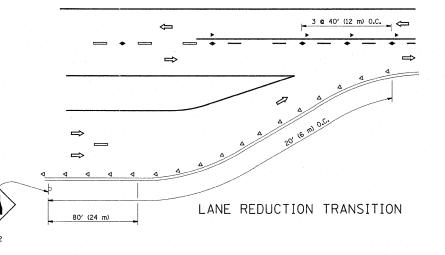
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

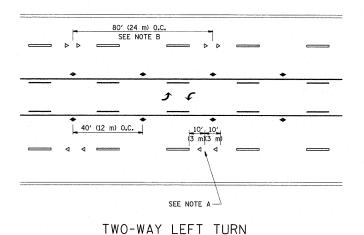
	TRAFFIC CONTROL AND PROT SIDE ROADS, INTERSECTIONS, AN	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS ST	TA. TO STA.



\*\*\* 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





80' (24 m) 0.C.

SEE NOTE B

40' (12 m) 0.C.

40' (12 m) 0.C.

SEE NOTE A

MULTI-LANE/UNDIVIDED

80' (24 m) O.C.

SEE NOTE B

10' 10'

10' 10'

10' 10'

10' 10'

SEE NOTE A

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

LEFT TURN

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

# DESIGN NOTES

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

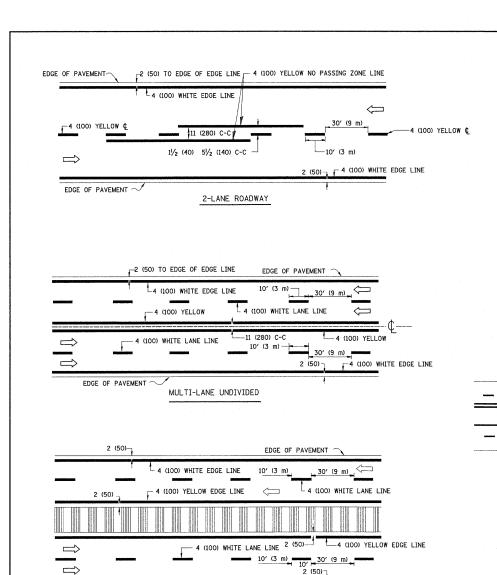
All dimensions are in inches (millimeters) unless otherwise shown.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS

RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

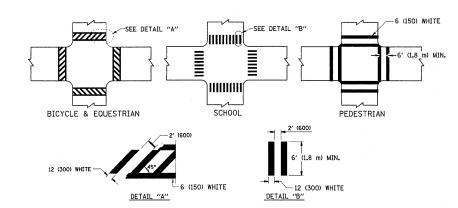
NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.



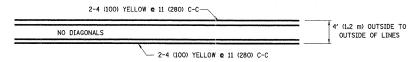
MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

EDGE OF PAVEMENT

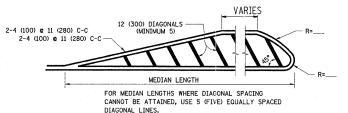
# TYPICAL LANE AND EDGE LINE MARKING



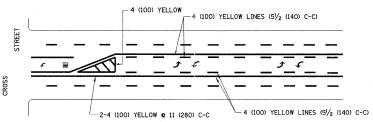
TYPICAL CROSSWALK MARKING



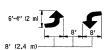
#### 4' (1.2 m) WIDE MEDIANS ONLY



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

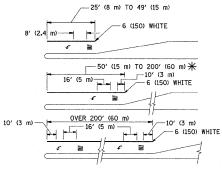


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

# TYPICAL PAINTED MEDIAN MARKING

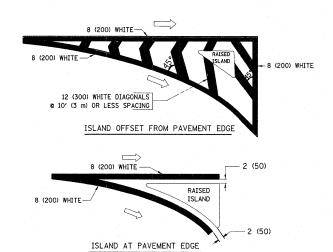


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m² )  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

\*\* 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 UNDIVIDED 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 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 © 6 (150) 12 (300) © 45° 12 (300) © 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 & 4 (100) WITH 12 (300) DIAGONALS & 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "M"-3.6 SQ. FT. (0.33 m²) EACH "X"-54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>@</b> 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

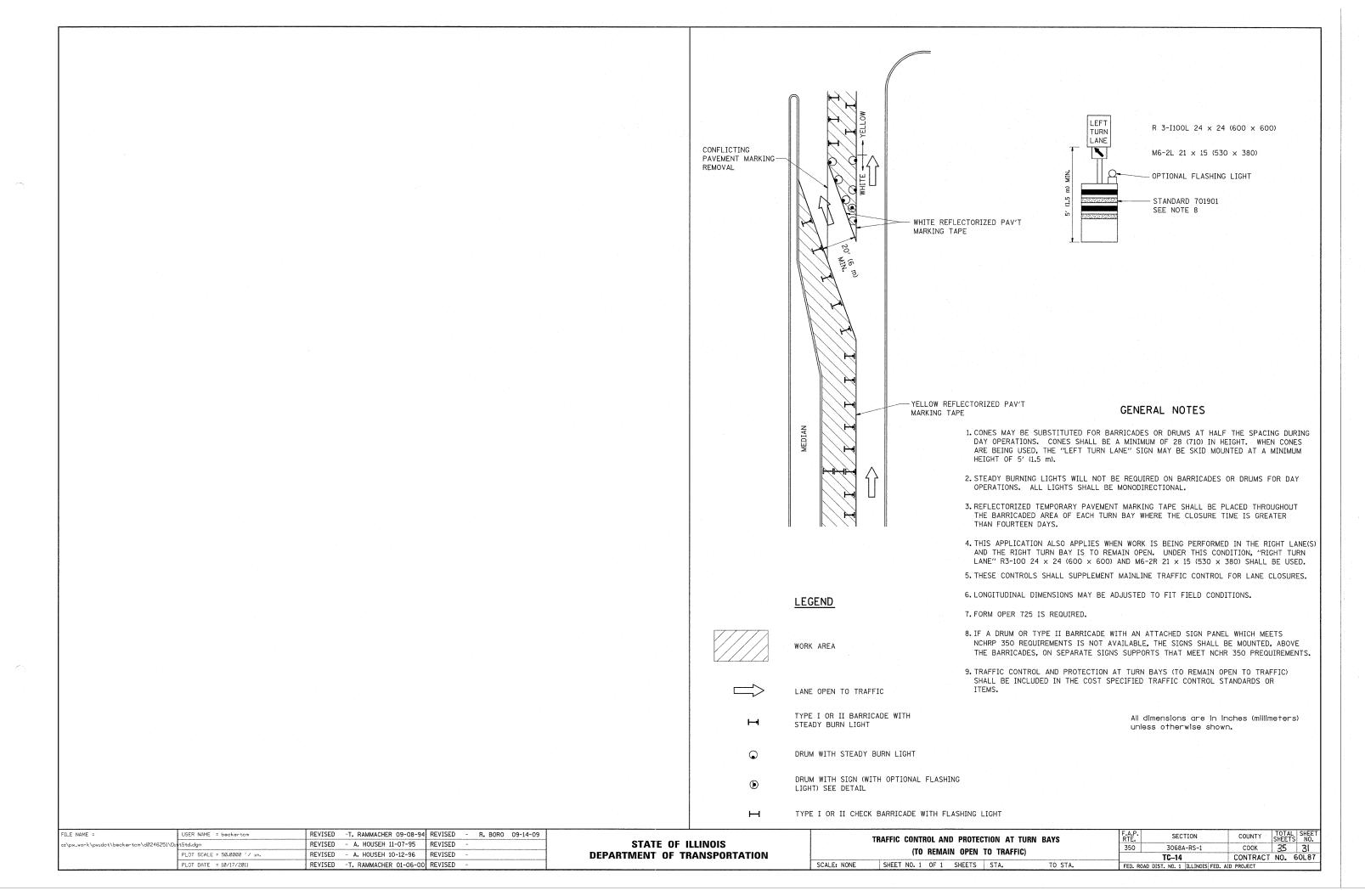
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

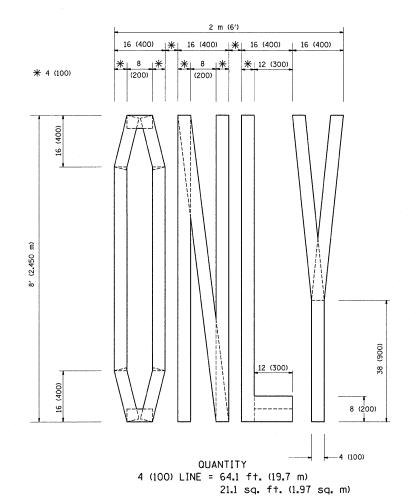
All dimensions are in inches (millimeters) unless otherwise shown.

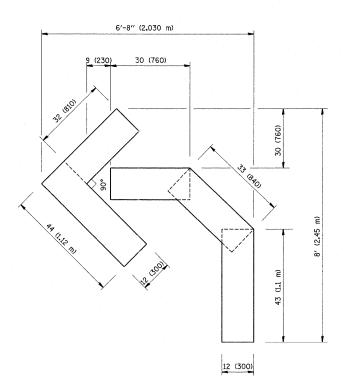
FILE NAME =	USER NAME = beckertcm	DESIGNED	-	EVERS	REVISED	-T. RAMMACHER	10-27-94
c:\pw_work\pwidot\beckertcm\d0246251\Di	tStd.dgn	DRAWN	-		REVISED	-C. JUCIUS	09-09-09
	PLOT SCALE = 50.00000 '/ in.	CHECKED	-		REVISED	***	
	PLOT DATE = 10/17/2011	DATE	~	03-19-90	REVISED	***	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

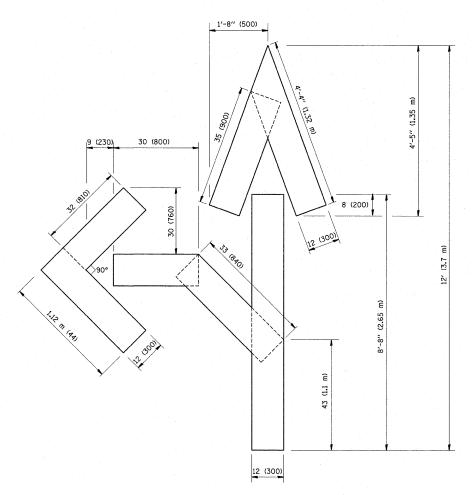
DISTRICT ONE						F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TYPICAL PAVEMENT MARKINGS					350	3068A-RS-1	COOK	35	30	
							TC-13	CONTRACT	NO. E	SOL87
 SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				







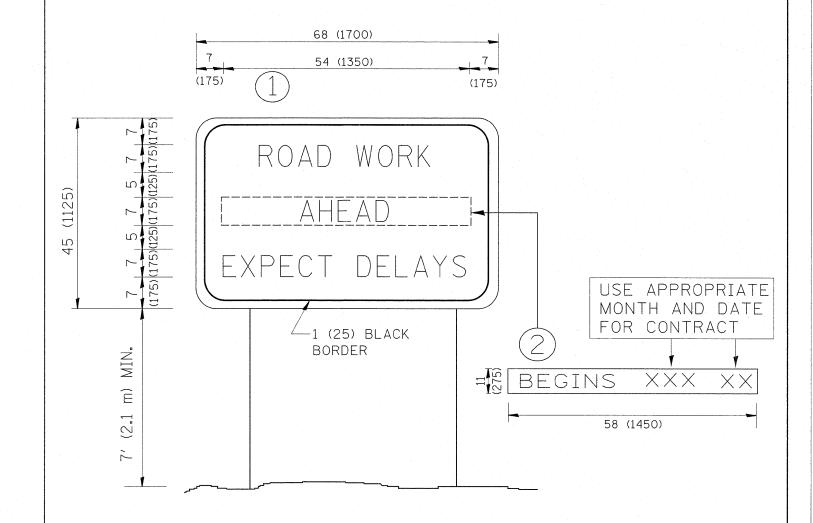
QUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



QUANTITY 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.

CONTRACT  CONTRA	FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS		F.A.P. SECTION	COUNTY TOTAL SHEETS	EET
TC-16 CONTRACT	c:\pw_work\pwidot\beckertcm\d0246251\Di	tStd.dgn			STATE OF ILLINOIS			350 3068A-RS-1		2
	·	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION			TC_16	CONTRACT NO. 60L	.87
PLOT DATE = 10/17/2011 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. AID PROJECT		PLOT DATE = 10/17/2011	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.	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 (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.

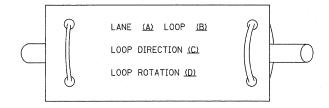
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

1					and the second s					1
FILE NAME =	USER NAME = beckertcm	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD		F.A.P.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
c:\pw_work\pwidot\beckertcm\dØ246251\Dis	tStd.dgn	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS			350	3068A-RS-1	соок	35 33
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN		-	TC-22		NO. 60L87
	PLOT DATE = 10/17/2011	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.		

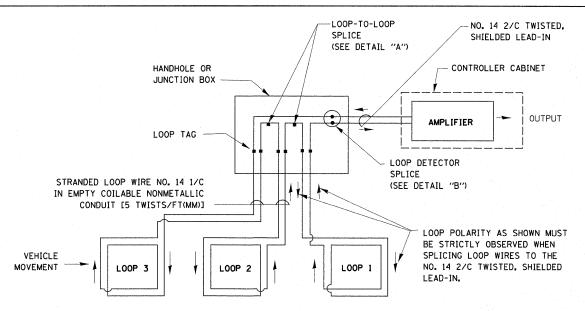
# LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

#### LOOP LEAD-IN CABLE TAG

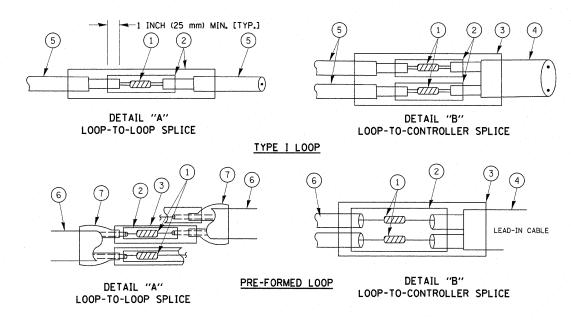


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
   THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



#### LOOP DETECTOR SPLICE

- $\stackrel{\textstyle \bullet}{}$  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.
- (6) PRE-FORMED LOOP
- 7 STATE OF THE STA

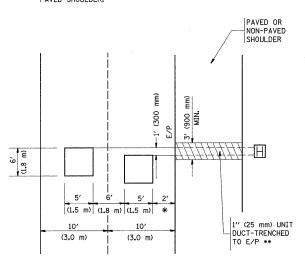
FILE NAME =	USER NAME = beckertom	DESIGNED	-	DAD	REVISED	-
c:\pw_work\pwidot\beckertcm\d0246251\Di	tStd.dgn	DRAWN	-	BCK	REVISED	-
	PLOT SCALE = 50.0000 '/ in.	CHECKED	-	DAD	REVISED	-
	PLOT DATE = 10/17/2011	DATE	-	10-28-09	REVISED	-

S	TATE	OF I	LLINOIS	
DEPARTM	ENT O	F TI	RANSPO	RTATION

			DIS	STRICT ON	ICT ONE			F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET S NO.
	STANDARD TRAFFIC SIGNAL DESIGN DETAILS						350	3068A-RS-1	COOK	35	34	
								TS-05	CONTRACT	NO.	60L87	
	SCALE: NONE	SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.					FED. RO	AD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT			

# LOOPS NEXT TO SHOULDERS

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAYED SHOULDER,



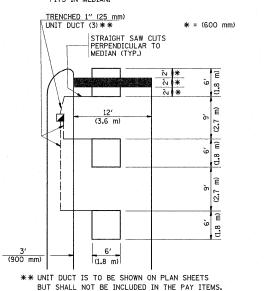
\* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

\* = (600 mm)

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

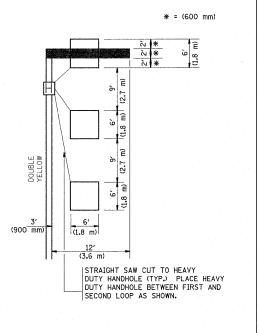
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE ETIS IN MEDIAN



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

(PROTECTED / PERMITTED LEFT TURN PHASING)



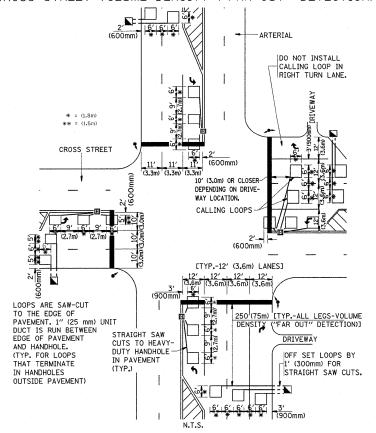
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

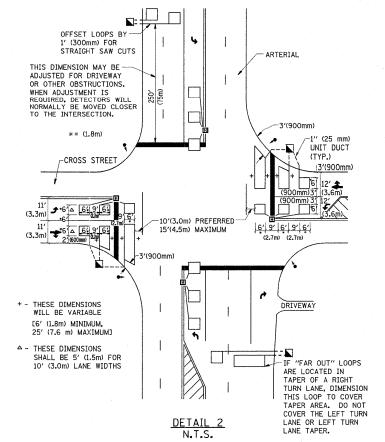
SCALE: NONE

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 (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. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> 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.

#### 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.

DETAIL 1 N.T.S.							
FILE NAME =	USER NAME = beckertom	DESIGNED -	REVISED -				
c:\pw_work\pwidot\beckertcm\d0246251\Dis	tStd.dgn	DRAWN ~	REVISED ~				
·	PLOT SCALE = 50.0000 '/ in.	CHECKED - R.K.F.	REVISED -				
	PLOT DATE = 10/17/2011	DATE -	REVISED -				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION	F.A.P. RTE.		
DETAILS FOR ROADWAY RESURFACING	350	30	
DETAILS FOR RUADIVAT RESURFACING		TS	
SHEET NO. 1 OF 1 SHEETS STA. TO	STA. FED. ROA	D DIST. NO	