

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

**PROPOSED  
 HIGHWAY PLANS**

FAU ROUTE 1600: ILL 7 (143rd STREET)  
 WOLF RD. TO SOUTHWEST HWY.  
 SECTION 80 R-RS-1  
 PROJECT: M-1600(002)  
 RESURFACING (3P)  
 COOK COUNTY  
 C-91-630-10

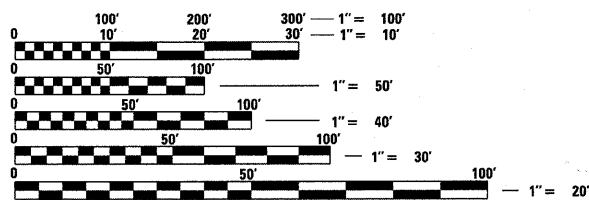
FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE PROJECT IS LOCATED IN THE  
 VILLAGE OF ORLAND PARK.

**TRAFFIC DATA:**

2009 ADT = 15200

POSTED SPEED LIMIT = 30 - 40 MPH



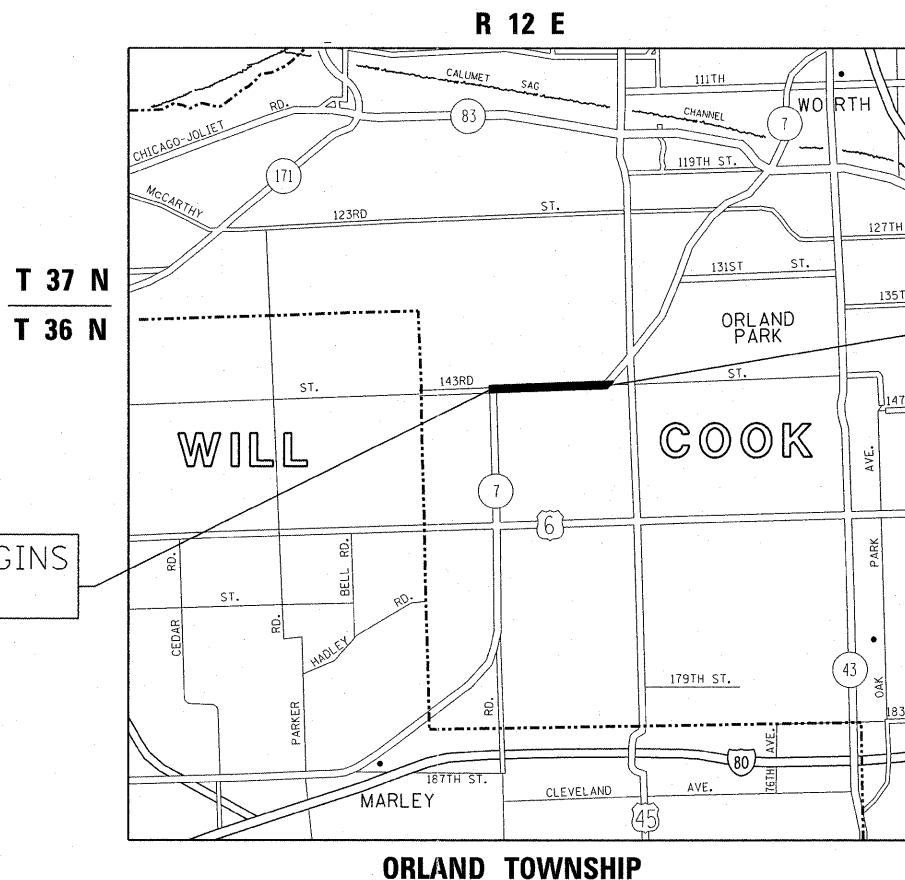
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
 ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT  
 CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS  
 ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
 1-800-892-0123  
 OR 811

PROJECT ENGINEER JENPAI CHANG 847-705-4432  
 PROJECT MANAGER KEN ENG

CONTRACT NO. 60L02

GROSS LENGTH = 8,678.00 FT. = 1.640 MILE  
 NET LENGTH = 8,678.00 FT. = 1.640 MILE

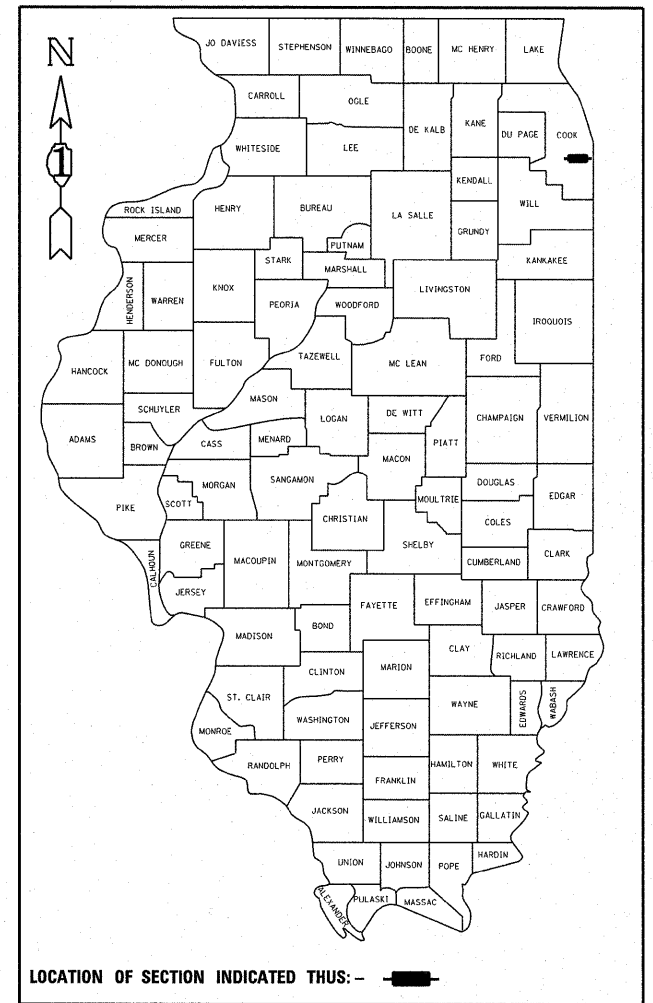


PROJECT BEGINS  
 63+44

PROJECT ENDS  
 150+22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	1
		ILLINOIS	CONTRACT NO. 60L02	

D-91-630-10



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED May 12, 20 11

Diane M. O'Keefe  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

July 1 20 11  
Scott E. Stitt  
 acting ENGINEER OF DESIGN AND ENVIRONMENT

July 1 20 11  
Christine M. Rodler  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS

## INDEX OF SHEETS

SHEET	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-5	TYPICAL SECTIONS
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14	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING, BD600-03 (BD-8)
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17	BUTT JOINT AND HMA TAPER, BD400-05 (BD-32)
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20	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
21	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
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23	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHEET NO. 1)
24	DISTRICT 1- DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

## STATE STANDARDS

STANDARD	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
420001-07	PAVEMENT JOINTS
442201-03	CLASS C AND D PATCHES
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS- DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-07	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-01	TRAFFIC CONTROL DEVICES

## 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, AND THE VILLAGE OF ORLAND PARK.

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 REPLACEMENT (OR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANS)), 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.

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 MS. 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 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.

WHEN THE MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 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).

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

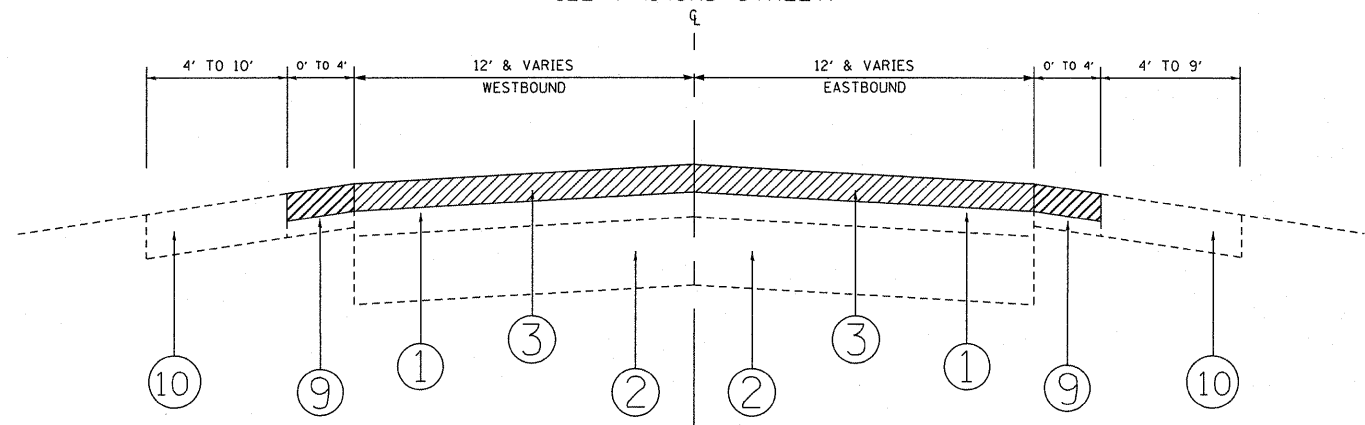
ANY CURB AND GUTTER REMOVAL AND REPLACEMENT OPERATIONS PERFORMED ON THE SOUTHSIDE OF IL 7 (143RD STREET) BETWEEN WEST AVENUE AND UNION STREET SHALL BE PERFORMED WITH CARE SO AS NOT TO DAMAGE THE EXISTING BRICK PAVING BEHIND THE BACK OF CURB. ALL DAMAGE TO BRICK PAVING SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

FILE NAME =	USER NAME = becker.tcm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL 7 (143RD STREET) INDEX OF SHEETS, STATE STANDARDS &amp; GENERAL NOTES</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw_work\pwidot\becker.tcm\d246227\0153010-sht-plan.dgn		DRAWN -	REVISED -		1600	80 R-RS-1	COOK	24	2			
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		CONTRACT NO. 60L02							
PLOT DATE = 5/12/2011		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.			

SUMMARY OF QUANTITIES			URBAN 80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES			URBAN 80% FED. 20% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT		0005						CODE NO	ITEM		UNIT	0005				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	50	50					* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	425	425					
25200110	SODDING, SALT TOLERANT	SO YD	50	50					* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	23913	23913					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	26	26					* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1376	1376					
40600300	AGGREGATE (PRIME COAT)	TON	129	129					* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	47	47					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	49	49					* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	424	424					
40600895	CONSTRUCTING TEST STRIP	EACH	1	1					* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	356	356					
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	475	475					* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	392	392					
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2615	2615					78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	314	314					
42001300	PROTECTIVE COAT	SO YD	100	100					* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1268	1268					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	30595	30595					X2020110	GRADING AND SHAPING SHOULDERS	UNIT	44	44					
44201803	CLASS D PATCHES, TYPE II, 13 INCH	SO YD	237	237					X4060826	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1305	1305					
44201807	CLASS D PATCHES, TYPE III, 13 INCH	SO YD	82	82					# X5539700	STORM SEWERS TO BE CLEANED	FOOT	903	903					
44201809	CLASS D PATCHES, TYPE IV, 13 INCH	SO YD	231	231					X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	2	2					
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	177	177					Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	300	300					
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	6	6					# Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	20	20					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	51.4	51.4					
67100100	MOBILIZATION	L SUM	1	1														
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1														
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1														
70300100	SHORT TERM PAVEMENT MARKING	FOOT	5994	5994														
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	425	425														
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	23913	23913														
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1376	1376														
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	47	47														
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	424	424														
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	356	356														
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SO FT	666	666														

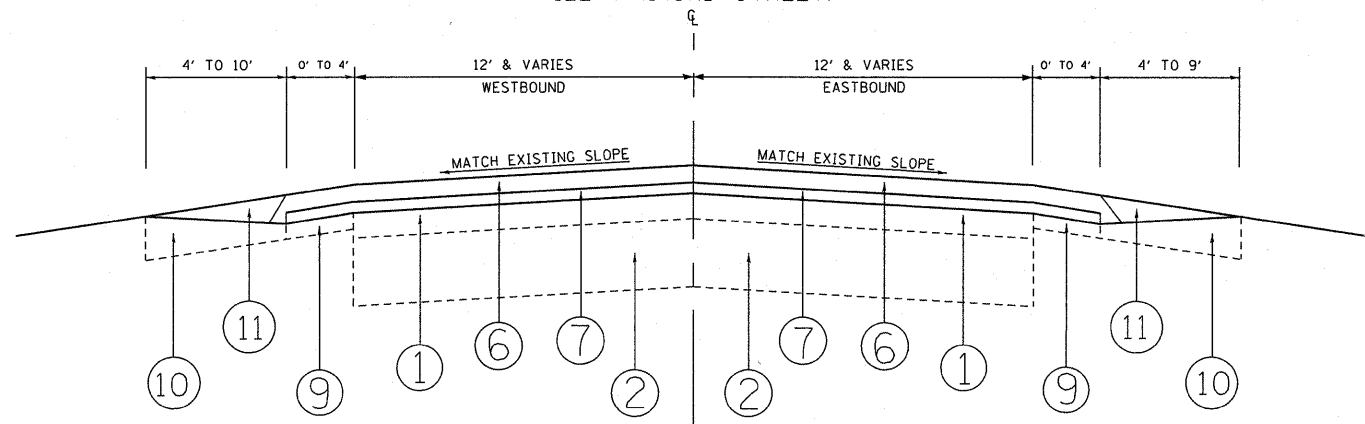
\* SPECIALTY ITEMS  
# NON PARTICIPATING ITEMS (100% STATE)

ILL 7 (143RD STREET)



EXISTING TYPICAL SECTION  
STA 61+50 TO STA 88+79

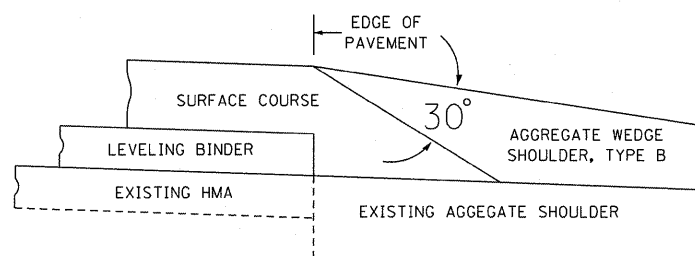
ILL 7 (143RD STREET)



PROPOSED TYPICAL SECTION  
STA 61+50 TO STA 88+79

**SAFETY EDGE DETAIL**

(DETAIL ONLY APPLIES WHERE HMA SHOULDER IS LESS THAN 1')



**LEGEND**

- ① EXISTING HOT-MIX ASPHALT SURFACE AFTER MILLING, 5 1/4" & VARIES
- ② EXISTING PCC BASE COURSE, 8" & VARIES
- ③ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ④ EXISTING PCC BASE COURSE WIDENING, 9"
- ⑤ EXISTING B-6.24 CONCRETE CURB AND GUTTER
- ⑥ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑦ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑧ PROPOSED COMBINATION CONCRETE CURB & GUTTER REMOVAL & REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE ENGINEER)
- ⑨ EXISTING ASPHALT SHOULDER
- ⑩ EXISTING AGGREGATE SHOULDER, TYPE B
- ⑪ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B GRADING AND SHAPING SHOULDERS

**HMA MIXTURE REQUIREMENT**

OPERATION	MIXTURE TYPE	AIR VOIDS @ Ndes
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2" (IL 9.5 mm)	4 % @ 70 GYR.
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	4 % @ 50 GYR.
PATCHES	CLASS D PATCHES, (HMA BINDER IL-19 mm) 13"	4 % @ 70 GYR.

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

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" 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 DISTRICT ONE SPECIAL PROVISIONS.

**NOTES:**

THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.

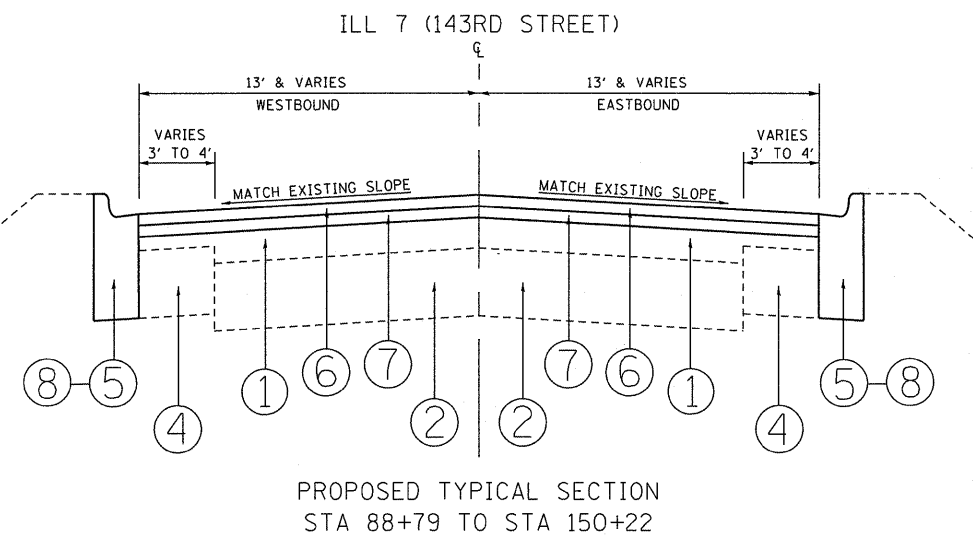
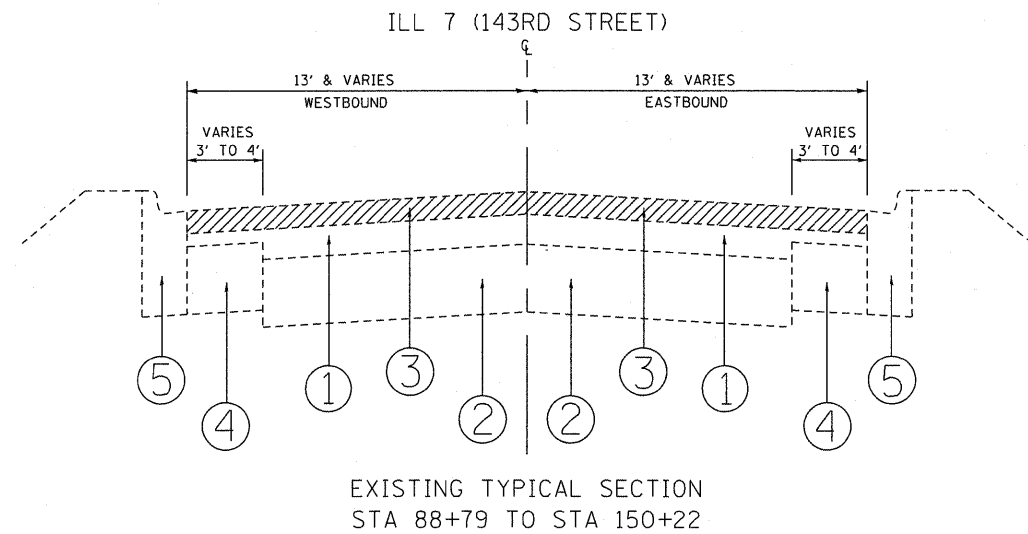
FILE NAME =	USER NAME = becker tom	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL 7 (143RD STREET) EXISTING AND PROPOSED TYPICAL SECTIONS</b>			F.A.U. RTE. 1600	SECTION 80 R-RS-1	COUNTY COOK	TOTAL SHEETS 24	SHEET NO. 4
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	PLOT SCALE = 50.0000 "/ IN.	CHECKED -	REVISED -								ILLINOIS FED. AID PROJECT	
	PLOT DATE = 5/12/2011	DATE -	REVISED -									

## LEGEND

- ① EXISTING HOT-MIX ASPHALT SURFACE AFTER MILLING, 5 1/4" & VARIES
- ② EXISTING PCC BASE COURSE, 8" & VARIES
- ③ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ④ EXISTING PCC BASE COURSE WIDENING, 9"
- ⑤ EXISTING B-6.24 CONCRETE CURB AND GUTTER
- ⑥ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑦ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑧ PROPOSED COMBINATION CONCRETE CURB & GUTTER REMOVAL & REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE ENGINEER)
- ⑨ EXISTING ASPHALT SHOULDER
- ⑩ EXISTING AGGREGATE SHOULDER, TYPE B
- ⑪ PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B

**NOTE:**

THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.

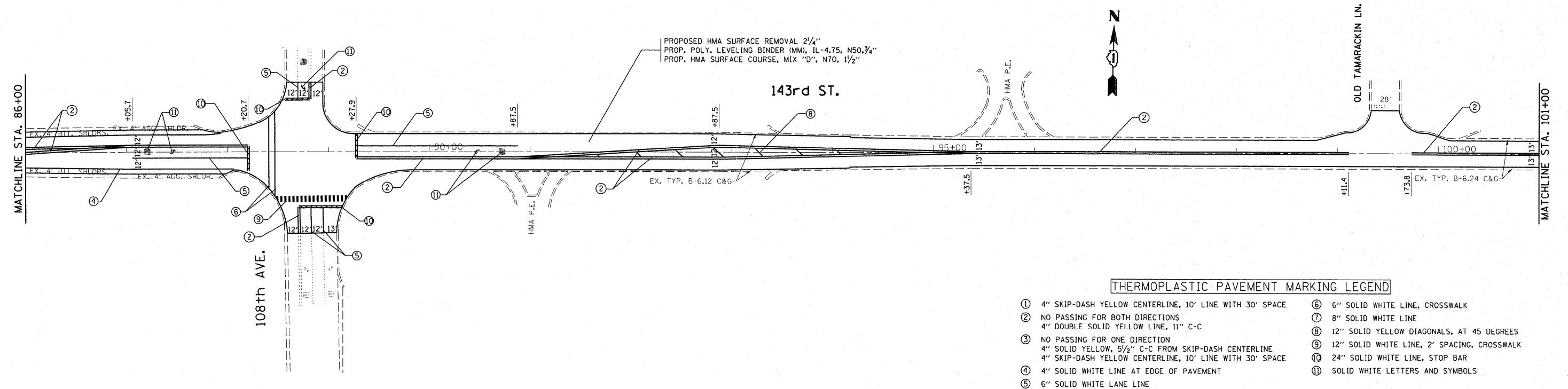


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PLOT DATE = 5/12/2011		DATE -	REVISED -		SHEET NO. OF SHEETS	STA. TO STA.				



NOTE:  
-FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) AND DISTRICT TYPICAL PAVEMENT MARKERS.

NOTES FOR SIDE STREETS:  
-RESURFACING LIMITS ARE TO RADIUS RETURNS WITH 4.5' BUTT JOINTS, UNLESS OTHERWISE NOTED.  
-PROPOSED HMA SURFACE REMOVAL, 2 1/4"  
-PROP. POLY LEVELING BINDER (MM), IL-4.75, N50, 3/4"  
-PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"

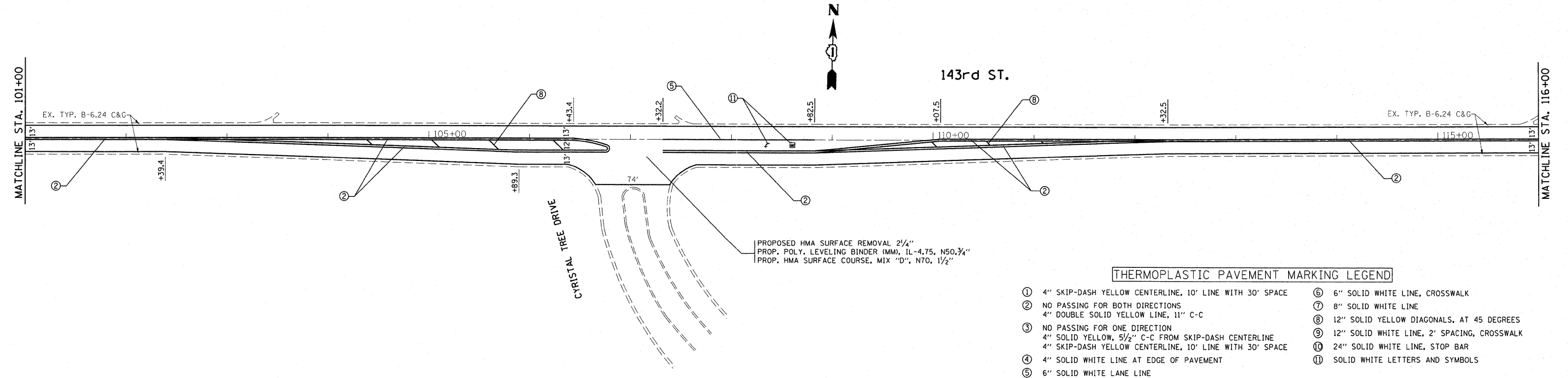


**THERMOPLASTIC PAVEMENT MARKING LEGEND**

- ① 4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE
- ② NO PASSING FOR BOTH DIRECTIONS  
4" DOUBLE SOLID YELLOW LINE, 11" C-C
- ③ NO PASSING FOR ONE DIRECTION  
4" SOLID YELLOW, 5 1/2" C-C FROM SKIP-DASH CENTERLINE  
4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE
- ④ 4" SOLID WHITE LINE AT EDGE OF PAVEMENT
- ⑤ 6" SOLID WHITE LANE LINE
- ⑥ 6" SOLID WHITE LINE, CROSSWALK
- ⑦ 8" SOLID WHITE LINE
- ⑧ 12" SOLID YELLOW DIAGONALS, AT 45 DEGREES
- ⑨ 12" SOLID WHITE LINE, 2' SPACING, CROSSWALK
- ⑩ 24" SOLID WHITE LINE, STOP BAR
- ⑪ SOLID WHITE LETTERS AND SYMBOLS

NOTE:  
-FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) AND DISTRICT TYPICAL PAVEMENT MARKERS.

NOTES FOR SIDE STREETS:  
-RESURFACING LIMITS ARE TO RADIUS RETURNS WITH 4.5' BUTT JOINTS, UNLESS OTHERWISE NOTED.  
-PROPOSED HMA SURFACE REMOVAL, 2 1/4"  
-PROP. POLY LEVELING BINDER (MM), IL-4.75, N50, 3/4"  
-PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



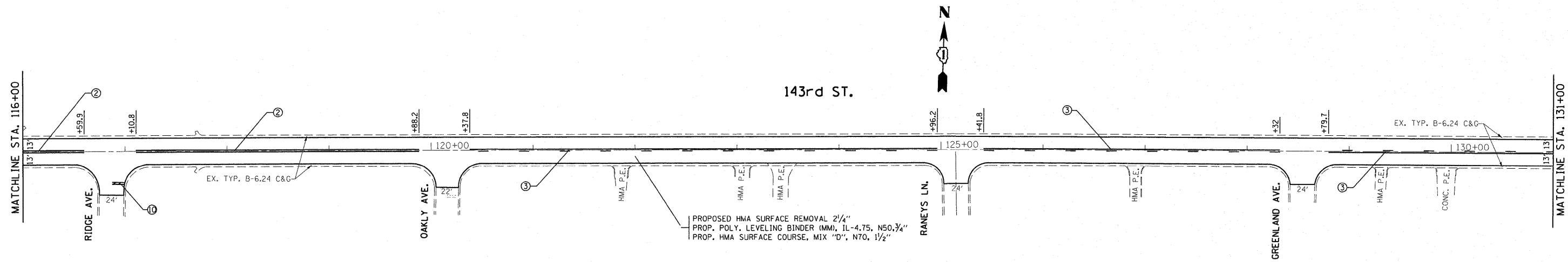
**THERMOPLASTIC PAVEMENT MARKING LEGEND**

- ① 4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE
- ② NO PASSING FOR BOTH DIRECTIONS  
4" DOUBLE SOLID YELLOW LINE, 11" C-C
- ③ NO PASSING FOR ONE DIRECTION  
4" SOLID YELLOW, 5 1/2" C-C FROM SKIP-DASH CENTERLINE  
4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE
- ④ 4" SOLID WHITE LINE AT EDGE OF PAVEMENT
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- ⑨ 12" SOLID WHITE LINE, 2' SPACING, CROSSWALK
- ⑩ 24" SOLID WHITE LINE, STOP BAR
- ⑪ SOLID WHITE LETTERS AND SYMBOLS

FILE NAME =	USER NAME = becker.tom	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ROADWAY PLAN IL RTE. 7 WOLF RD. TO SOUTHWEST HWY.</b>			F.A.U. RTE. 1600	SECTION 80R-RS-1	COUNTY COOK	TOTAL SHEETS 24	SHEET NO. 7
ct:\pw\work\pwwidot\becker.tom\d0246227\DI53010-sht-plan.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -		SCALE: 1"=50'    SHEET NO. 2 OF 4 SHEETS    STA. 86+00    TO STA. 116+00			CONTRACT NO. 60L02				
	PLOT DATE = 5/12/2011	CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT							
		DATE -	REVISED -									

NOTE:  
 -FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) AND DISTRICT TYPICAL PAVEMENT MARKERS.

NOTES FOR SIDE STREETS:  
 -RESURFACING LIMITS ARE TO RADIUS RETURNS WITH 4.5' BUTT JOINTS, UNLESS OTHERWISE NOTED.  
 -PROPOSED HMA SURFACE REMOVAL, 2 1/4"  
 -PROP. POLY LEVELING BINDER (MM), IL-4.75, N50, 3/4"  
 -PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"

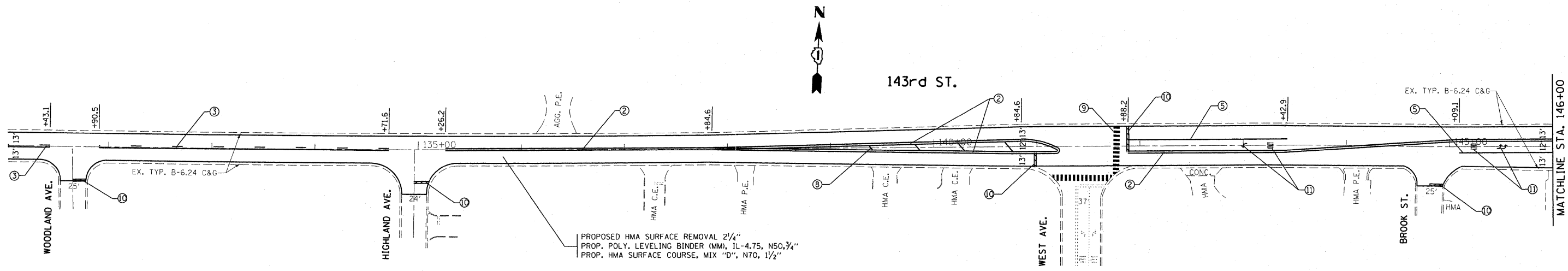


**THERMOPLASTIC PAVEMENT MARKING LEGEND**

- |   |   |
|---|---|
| ① 4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE | ⑥ 6" SOLID WHITE LINE, CROSSWALK              |
| ② NO PASSING FOR BOTH DIRECTIONS                          | ⑦ 8" SOLID WHITE LINE                         |
| 4" DOUBLE SOLID YELLOW LINE, 11" C-C                      | ⑧ 12" SOLID YELLOW DIAGONALS, AT 45 DEGREES   |
| ③ NO PASSING FOR ONE DIRECTION                            | ⑨ 12" SOLID WHITE LINE, 2' SPACING, CROSSWALK |
| 4" SOLID YELLOW, 5 1/2" C-C FROM SKIP-DASH CENTERLINE     | ⑩ 24" SOLID WHITE LINE, STOP BAR              |
| 4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE   | ⑪ SOLID WHITE LETTERS AND SYMBOLS             |
| ④ 4" SOLID WHITE LINE AT EDGE OF PAVEMENT                 |   |
| ⑤ 6" SOLID WHITE LANE LINE                                |   |

NOTE:  
 -FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) AND DISTRICT TYPICAL PAVEMENT MARKERS.

NOTES FOR SIDE STREETS:  
 -RESURFACING LIMITS ARE TO RADIUS RETURNS WITH 4.5' BUTT JOINTS, UNLESS OTHERWISE NOTED.  
 -PROPOSED HMA SURFACE REMOVAL, 2 1/4"  
 -PROP. POLY LEVELING BINDER (MM), IL-4.75, N50, 3/4"  
 -PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"



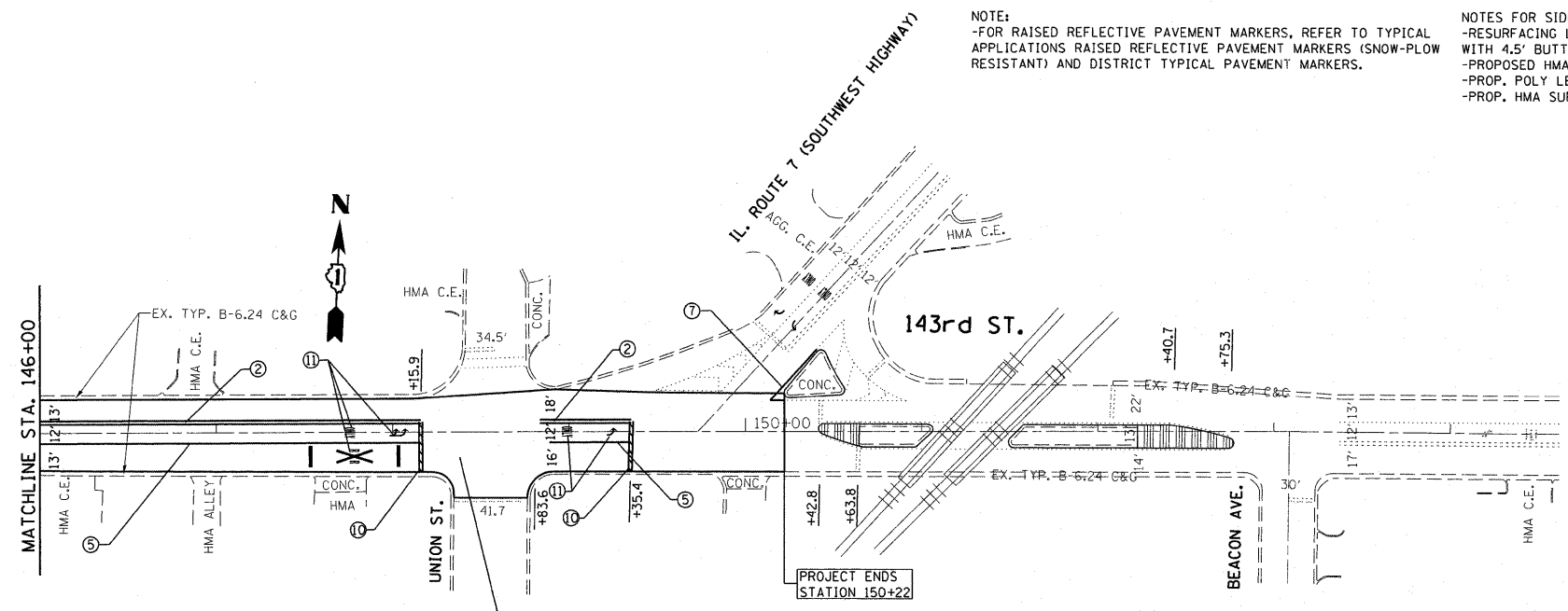
**THERMOPLASTIC PAVEMENT MARKING LEGEND**

- |   |   |
|---|---|
| ① 4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE | ⑥ 6" SOLID WHITE LINE, CROSSWALK              |
| ② NO PASSING FOR BOTH DIRECTIONS                          | ⑦ 8" SOLID WHITE LINE                         |
| 4" DOUBLE SOLID YELLOW LINE, 11" C-C                      | ⑧ 12" SOLID YELLOW DIAGONALS, AT 45 DEGREES   |
| ③ NO PASSING FOR ONE DIRECTION                            | ⑨ 12" SOLID WHITE LINE, 2' SPACING, CROSSWALK |
| 4" SOLID YELLOW, 5 1/2" C-C FROM SKIP-DASH CENTERLINE     | ⑩ 24" SOLID WHITE LINE, STOP BAR              |
| 4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE   | ⑪ SOLID WHITE LETTERS AND SYMBOLS             |
| ④ 4" SOLID WHITE LINE AT EDGE OF PAVEMENT                 |   |
| ⑤ 6" SOLID WHITE LANE LINE                                |   |

FILE NAME =	USER NAME = becker.tom	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ROADWAY PLAN IL. RTE. 7 WOLF RD. TO SOUTHWEST HWY.</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\becker.tom\d0246227\053010-sh-t-plan.dgn	PLDT SCALE = 50.0000' / IN.	DRAWN -	REVISED -			1600	80R-RS-1	COOK	24	8	
	PLDT DATE = 5/12/2011	CHECKED -	REVISED -			CONTRACT NO. 60L02					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

SCALE: 1"=50'    SHEET NO. 3 OF 4 SHEETS    STA. 116+00 TO STA. 146+00





NOTE:  
 -FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) AND DISTRICT TYPICAL PAVEMENT MARKERS.

NOTES FOR SIDE STREETS:  
 -RESURFACING LIMITS ARE TO RADIUS RETURNS WITH 4.5' BUTT JOINTS, UNLESS OTHERWISE NOTED.  
 -PROPOSED HMA SURFACE REMOVAL, 2 1/4"  
 -PROP. POLY LEVELING BINDER (MM), IL-4.75, N50, 3/4"  
 -PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"

PROPOSED HMA SURFACE REMOVAL 2 1/4"  
 PROP. POLY. LEVELING BINDER (MM), IL-4.75, N50, 3/4"  
 PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"

**THERMOPLASTIC PAVEMENT MARKING LEGEND**

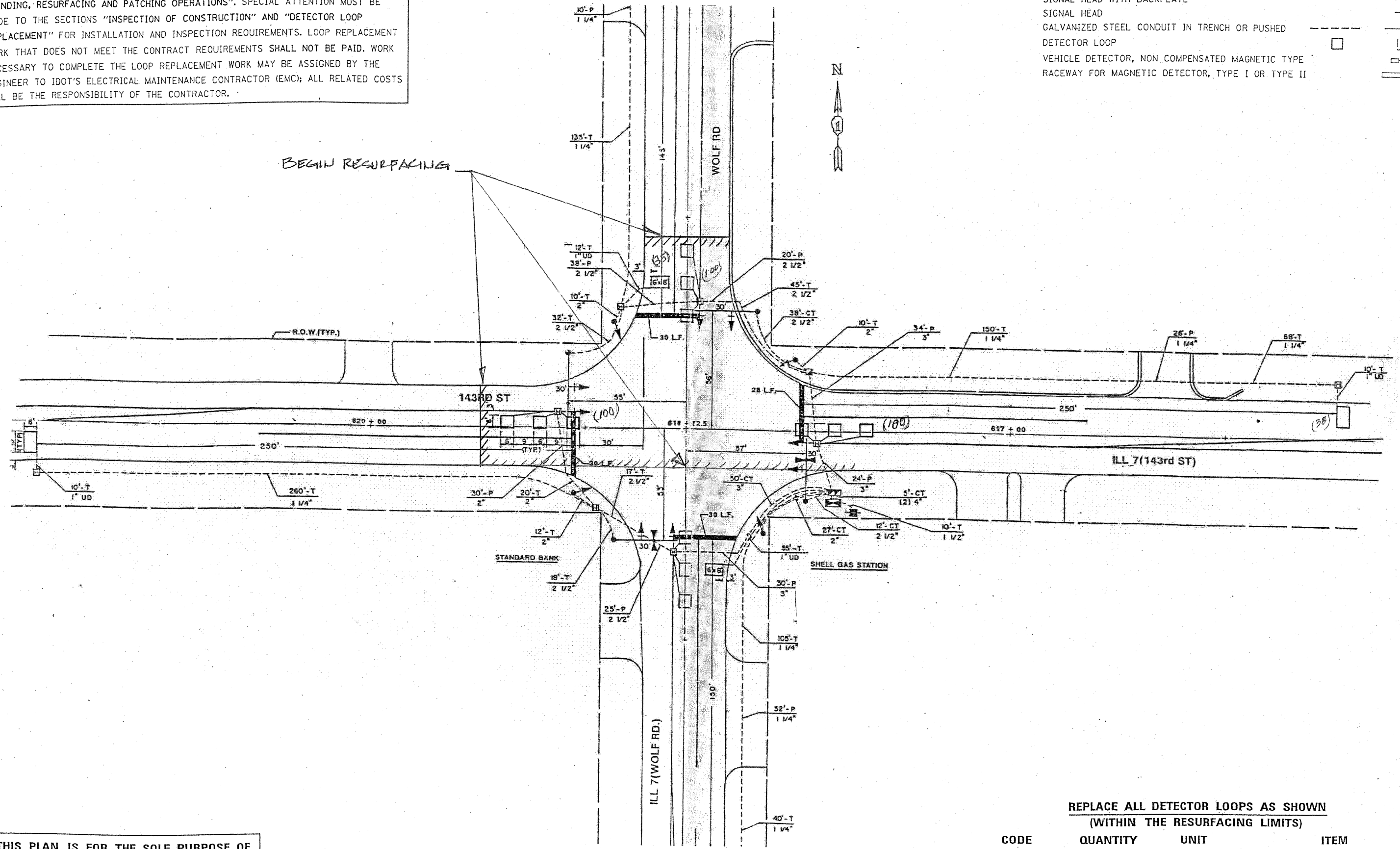
- |  |   |
|--|---|
| ① 4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE  | ⑥ 6" SOLID WHITE LINE, CROSSWALK              |
| ② NO PASSING FOR BOTH DIRECTIONS<br>4" DOUBLE SOLID YELLOW LINE, 11" C-C   | ⑦ 8" SOLID WHITE LINE                         |
| ③ NO PASSING FOR ONE DIRECTION<br>4" SOLID YELLOW, 5 1/2" C-C FROM SKIP-DASH CENTERLINE<br>4" SKIP-DASH YELLOW CENTERLINE, 10' LINE WITH 30' SPACE | ⑧ 12" SOLID YELLOW DIAGONALS, AT 45 DEGREES   |
| ④ 4" SOLID WHITE LINE AT EDGE OF PAVEMENT  | ⑨ 12" SOLID WHITE LINE, 2' SPACING, CROSSWALK |
| ⑤ 6" SOLID WHITE LANE LINE   | ⑩ 24" SOLID WHITE LINE, STOP BAR              |
|  | ⑪ SOLID WHITE LETTERS AND SYMBOLS             |

FILE NAME =	USER NAME = becker.tcm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ROADWAY PLAN IL. RTE. 7 WOLF RD. TO SOUTHWEST HWY.</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw_work\pwidot\becker.tcm\d0246227\DI\3010-sh-t-plan.dgn		DRAWN -	REVISED -		SCALE: 1"=50'	SHEET NO. 4 OF 4 SHEETS	STA. 146+00 TO STA. 153+36.6	1600	80R-RS-1	COOK	24	9
		CHECKED -	REVISED -		CONTRACT NO. 60L02							
		DATE -	REVISED -		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.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
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		



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

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

CODE	QUANTITY	UNIT	ITEM
88600600	35	FOOT	DETECTOR LOOP, REPLACEMENT

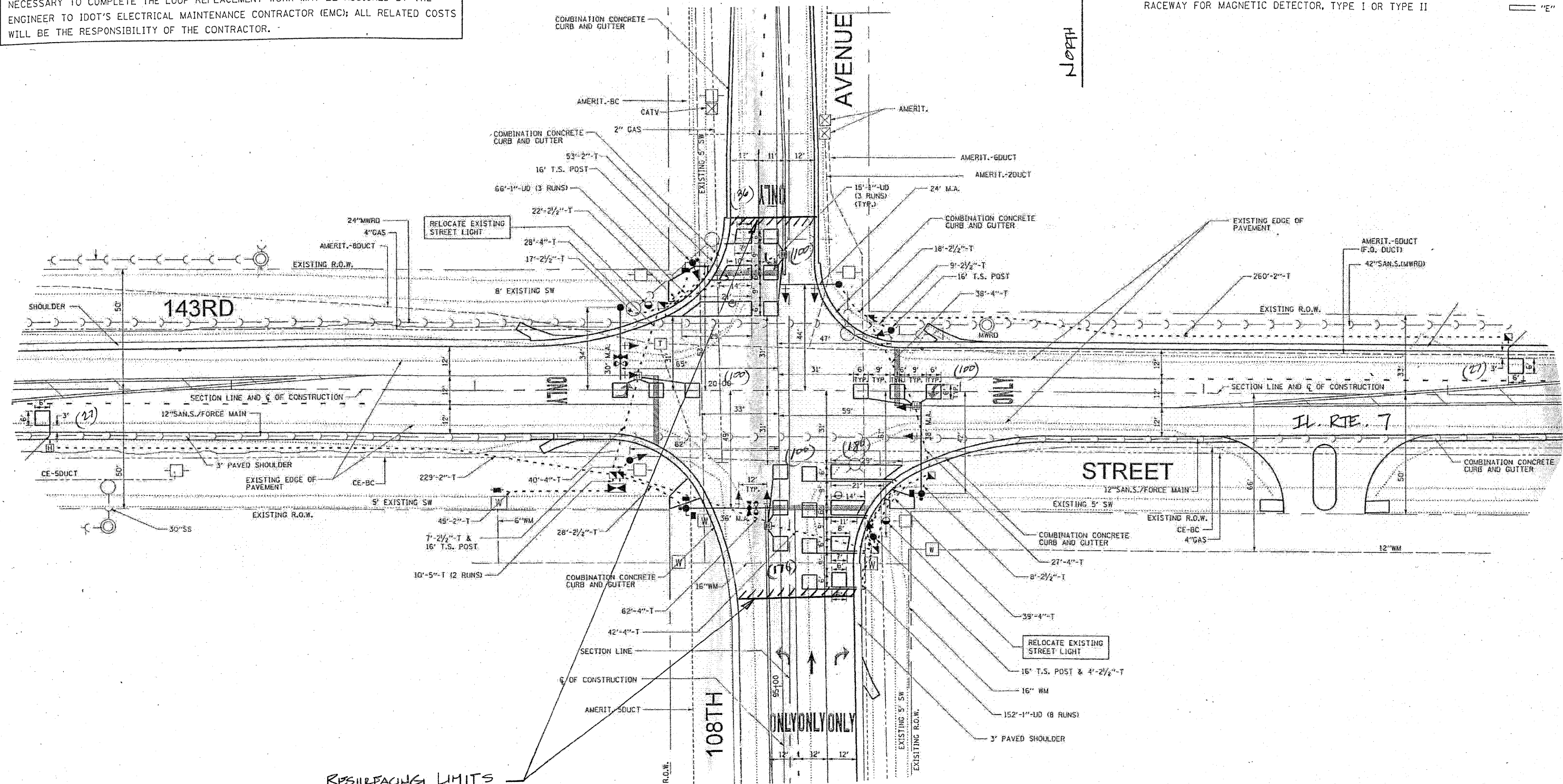
FILE NAME =	USER NAME = nguyensm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT ILL. RTE. 7 (WOLF RD.) @ ILL. RTE. 7 (143RD ST)	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwwork\pwwid\nguyensm\d0112618\1101101.dgn	DRAWN -	REVISED -	1600			80R-RS-1	COOK	24	10	
PLOT SCALE = 100.0000 "/td> <td>CHECKED -</td> <td>REVISED -</td> <td colspan="3">CONTRACT NO. 60L02</td>	CHECKED -	REVISED -	CONTRACT NO. 60L02							
PLOT DATE = 12/1/2010	DATE -	REVISED -	FED. ROAD DIST. NO. 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.

**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING
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	—	—

NORTH



RESURFACING LIMITS

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

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

CODE	QUANTITY	UNIT	ITEM
88600600	946	FOOT	DETECTOR LOOP, REPLACEMENT

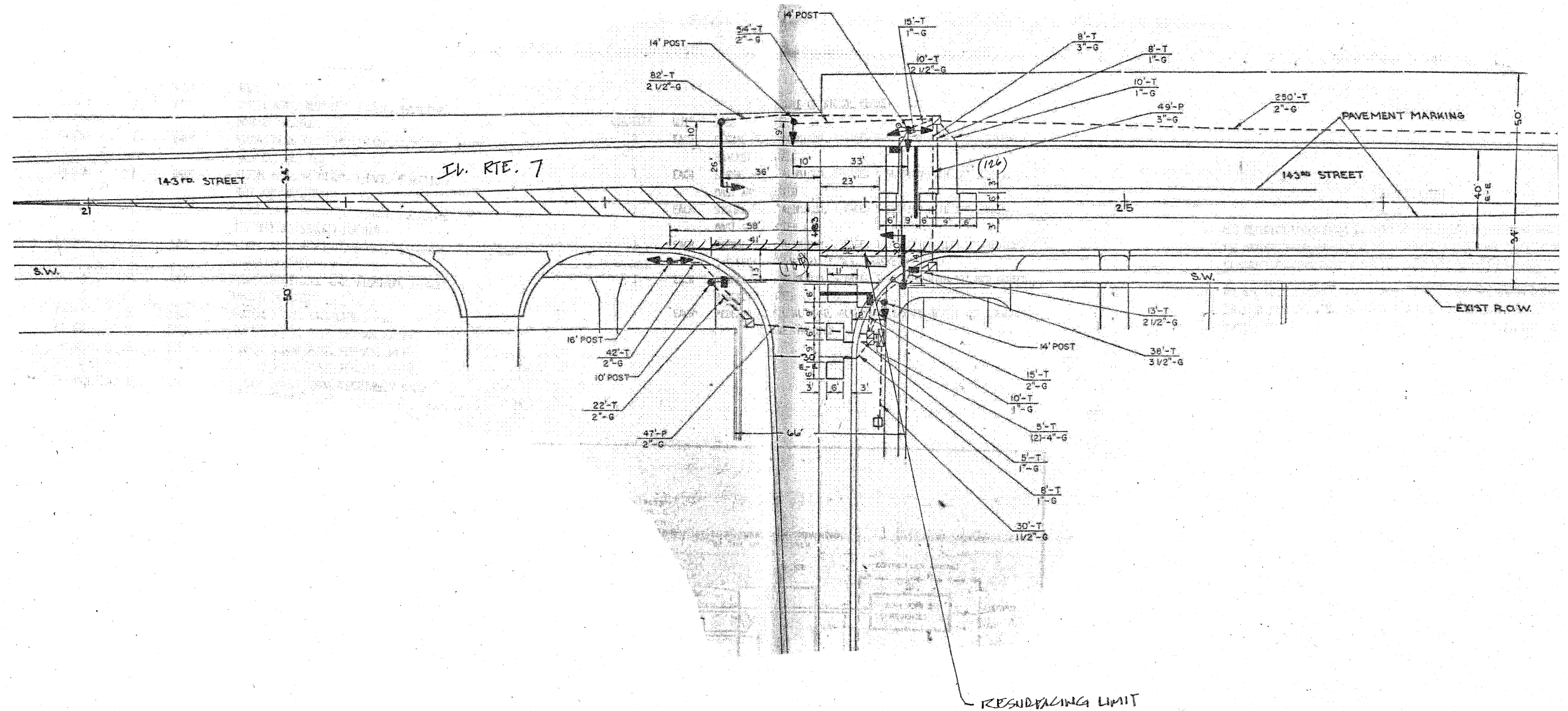
FILE NAME *	USER NAME = nguyensm	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL. RTE. 7 (143RD ST.) @ 108TH AVENUE	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
01\p\work\p\dot\nguyensm\d0112618\F10a	er.dgn	DRAWN -	REVISED -			1600	80 R-RS-1	COOK	24	11	
		CHECKED -	REVISED -			CONTRACT NO. 60L02					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
PLOT SCALE = 100.0000' / IN.		PLOT DATE = 12/1/2010		SCALE:		SHEET NO. OF SHEETS		STA. TO STA.			

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**

	PROPOSED	EXISTING
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		

NORTH



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

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

CODE	QUANTITY	UNIT	ITEM
88600600	126	FOOT	DETECTOR LOOP, REPLACEMENT

FILE NAME =	USER NAME = nguyensm	DESIGNED -	REVISED -
c:\pwwork\pwwid\nguyensm\d0112618\1\1.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - DETECTOR LOOP REPLACEMENT  
IL. RTE. 7 (143RD ST) @ WEST. AV.

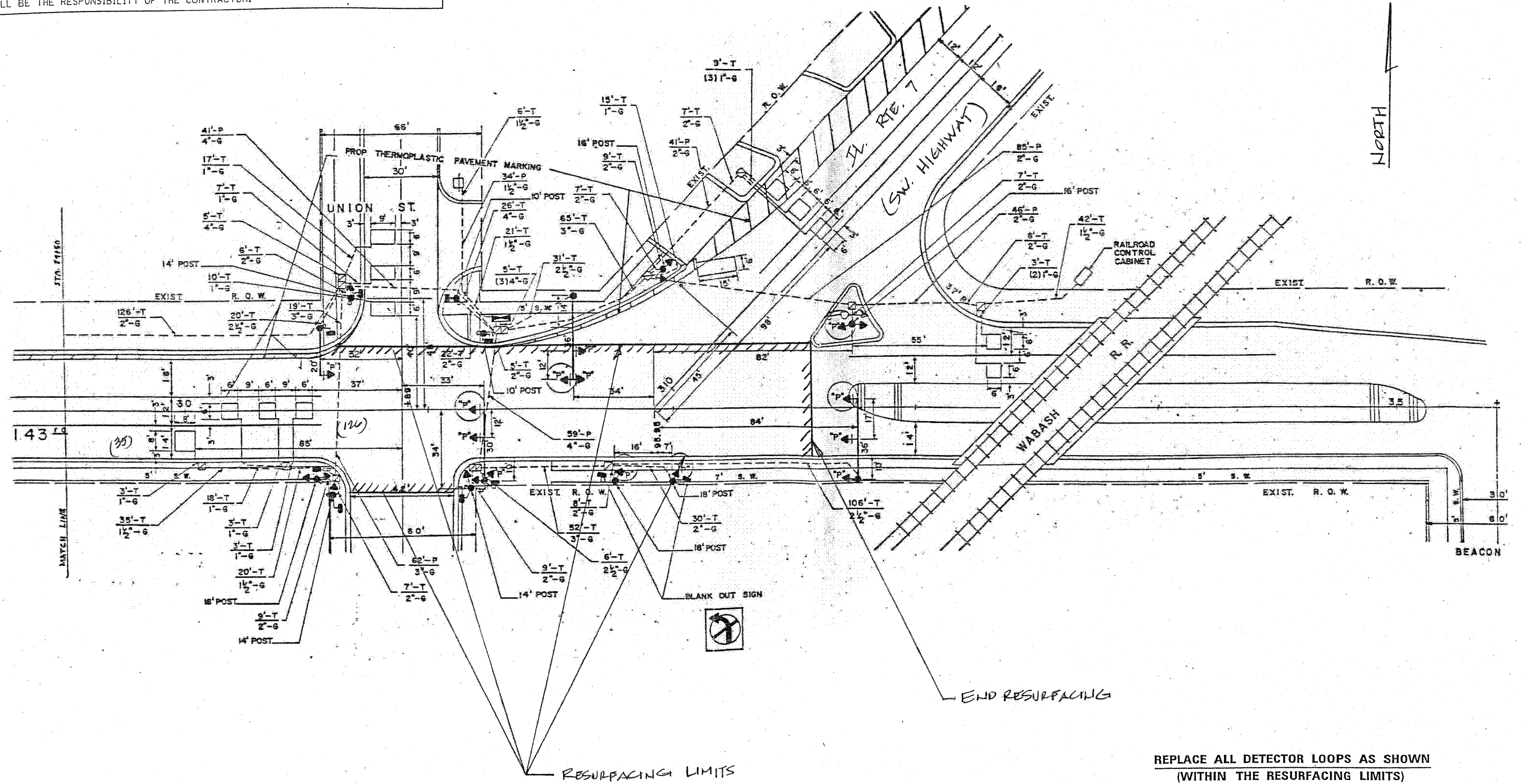
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	12
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60L02	

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

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

PROPOSED	EXISTING
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	— "E" —



NORTH

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

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

CODE	QUANTITY	UNIT	ITEM
88600600	161	FOOT	DETECTOR LOOP, REPLACEMENT

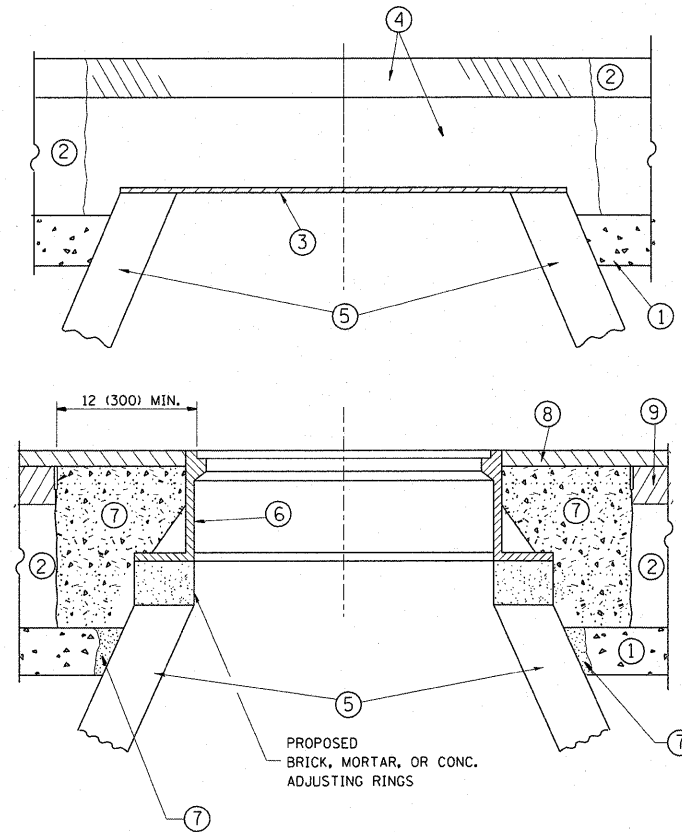
FILE NAME *	USER NAME = nguyensm	DESIGNED -	REVISED -
USER NAME = nguyensm		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - DETECTOR LOOP REPLACEMENT  
IL. RTE. 7 (I-55 RD ST.) @ IL. RTE. 7 (SW. HWY.)

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	13
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60602		



**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.

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) DIAMETER METAL PLATE
- ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ CLASS PP-1\* CONCRETE
- ⑧ PROPOSED HMA SURFACE COURSE
- 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.

**NOTES:**

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

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

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

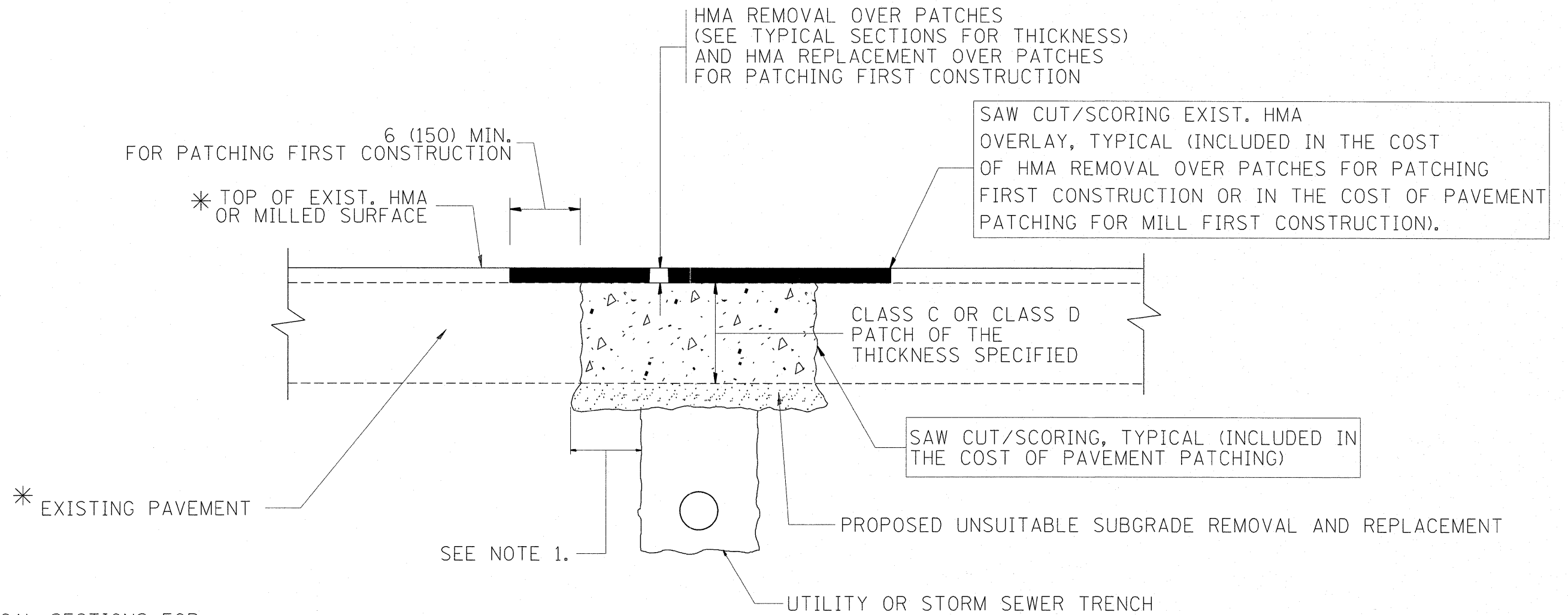
THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = becker.tom	DESIGNED - R. SHAH	REVISED - A. ABBAS 03-21-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\becker.tom\d0246227\01.t5td.dgn		DRAWN -	REVISED - R. WIEDEMAN 05-14-04		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	1600	80 R-RS-1	COOK	24	14
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED - R. BORO 01-01-07		<b>BD600-03 (BD-8) CONTRACT NO. 60L02</b>								
PLOT DATE = 5/12/2011		DATE - 10-25-94	REVISED - R. BORO 03-09-11		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**NOTES:**

1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

**SEQUENCE OF CONSTRUCTION (PATCHING FIRST)**

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

**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

1. MILL HMA FIRST IF THERE IS AT LEAST 4 1/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = becker.tcm	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw_work\pwsdot\becker.tcm\d0246227.D	PlotStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	1600	80 R-RS-1	COOK	24	15
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	REVISED - K. ENG 10-27-08		BD400-04 (BD-22)			CONTRACT NO. 60L02					
PLOT DATE = 5/12/2011	DATE - 10-25-94				FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT								

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001  
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) \*\*

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**BASIS OF PAYMENT:**

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

3" (75) MIN.

\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

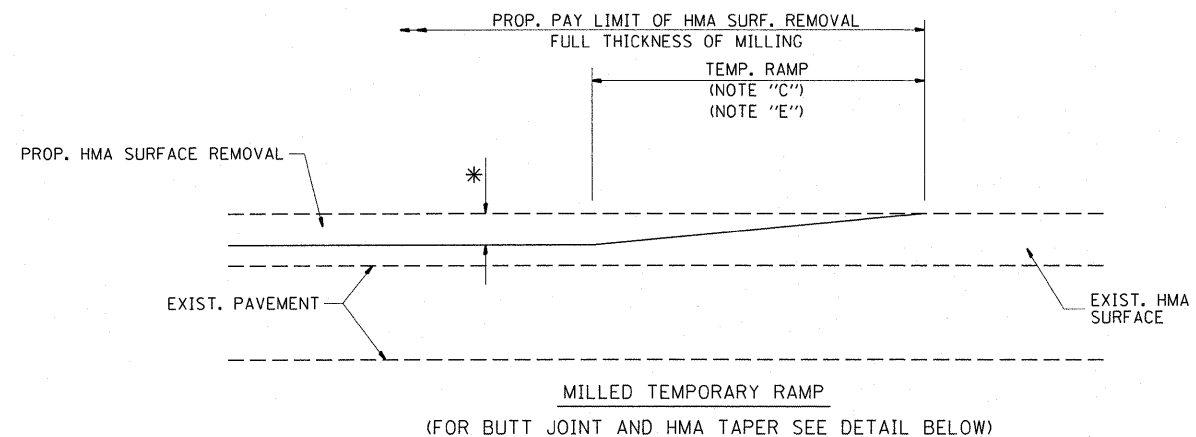
⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

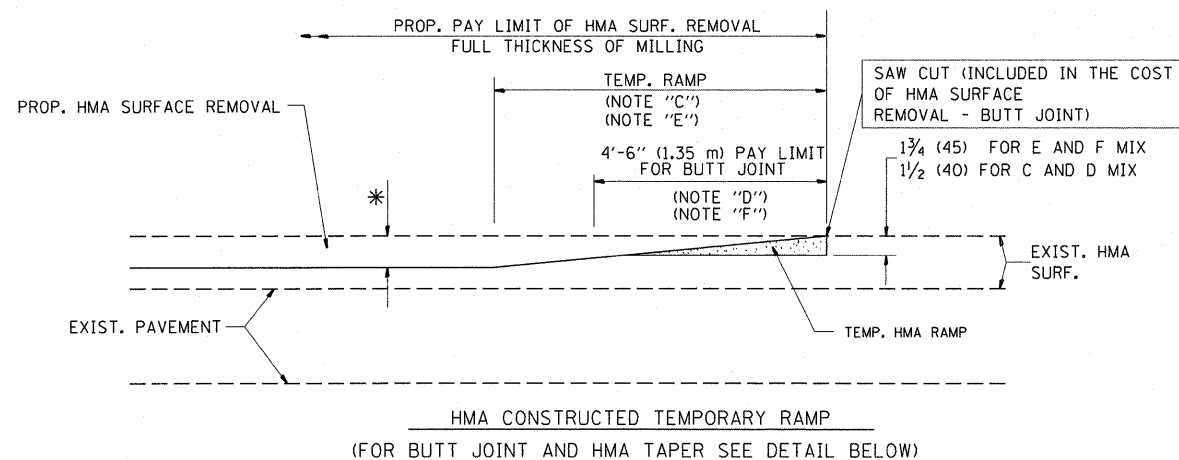
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = becker tom	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pwork\pwork\becker tom\d0246227\d0246227.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97		1600	80 R-RS-1	COOK	24	16			
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED - M. GOMEZ 01-22-01		BD600-06 (BD-24)			CONTRACT NO. 60L02				
PLOT DATE = 5/12/2011		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				

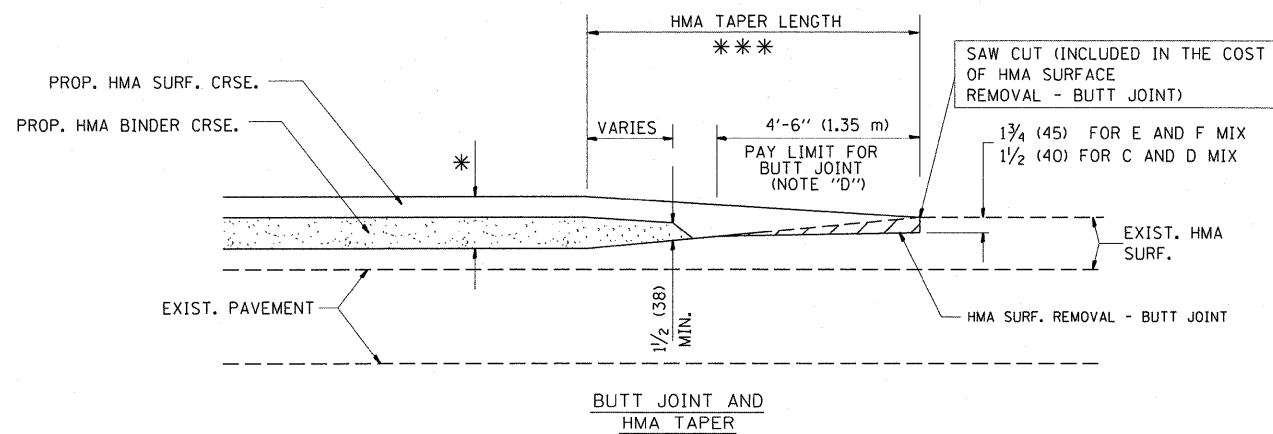




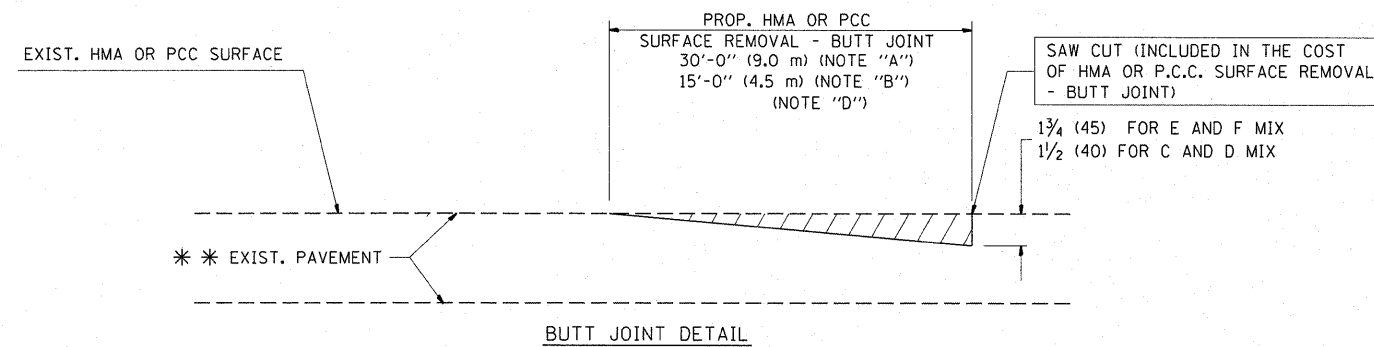
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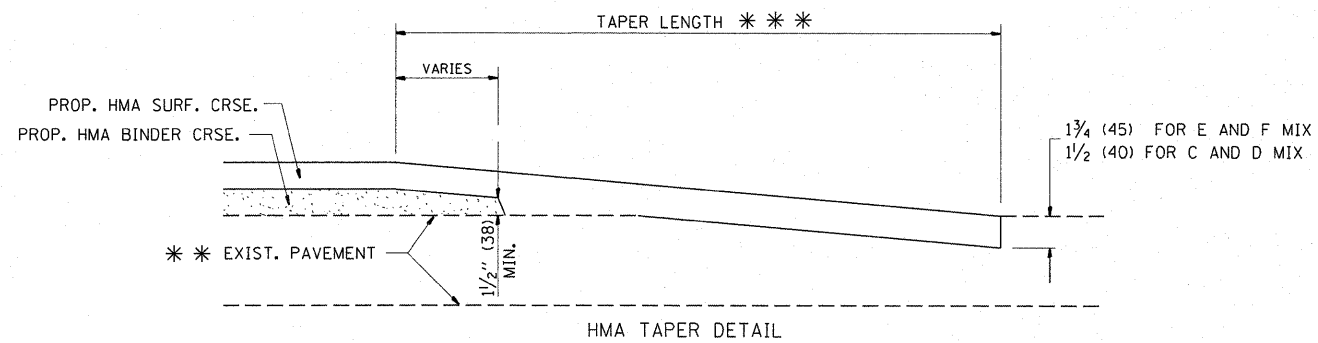
**OPTION 2**  
**TYPICAL TEMPORARY RAMP**



**TYPICAL BUTT JOINT AND HMA TAPER**  
**FOR MILLING AND RESURFACING**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**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.

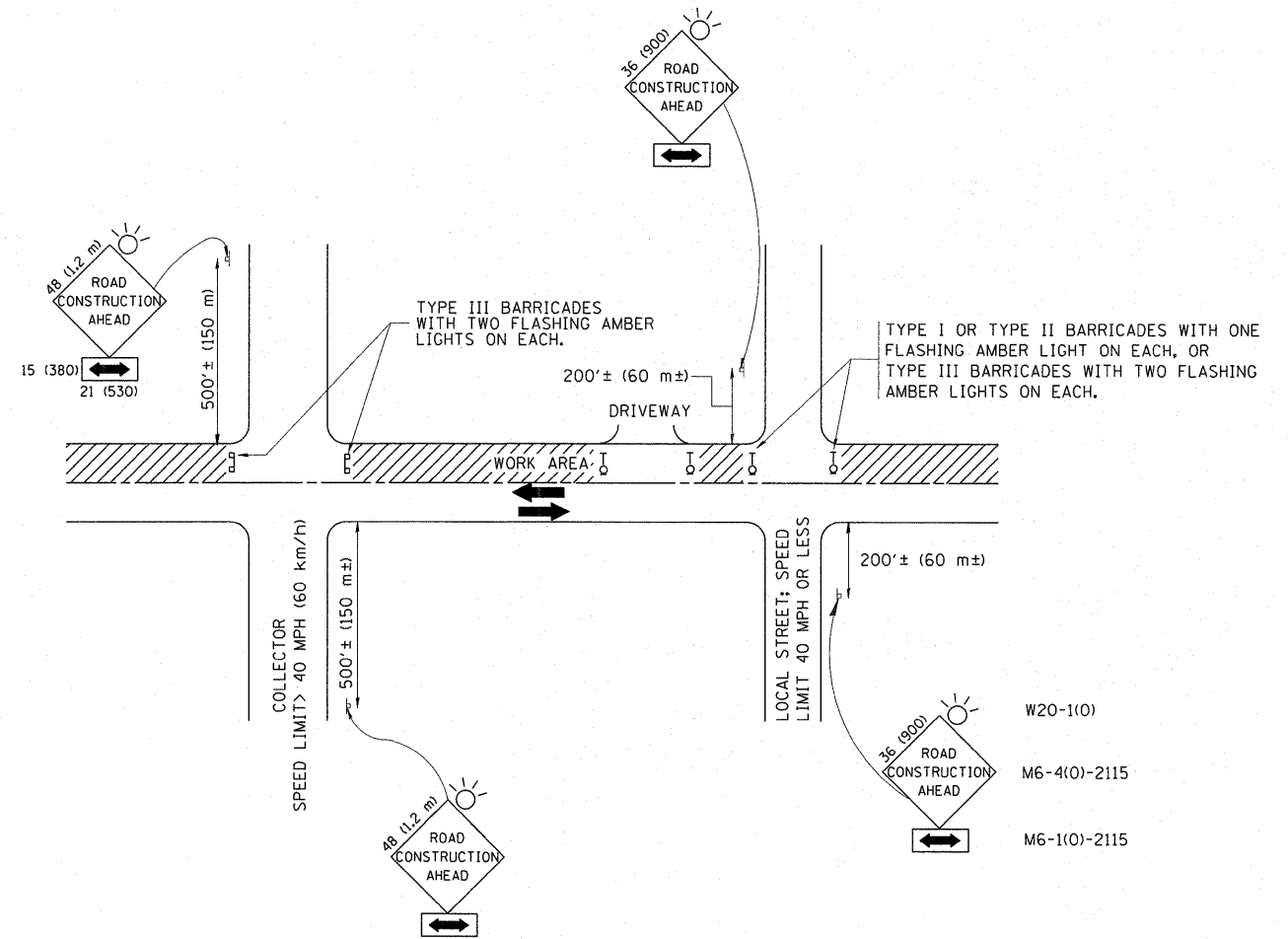
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PLT SCALE = 50.0000' / IN.		CHECKED -	REVISED - M. GOMEZ 04-06-01
PLT DATE = 5/12/2011		DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND**  
**HMA TAPER DETAILS**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	17
BD400-05 BD32			CONTRACT NO. 60L02	
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
- 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:
    - 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.
    - 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.
  - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
    - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.

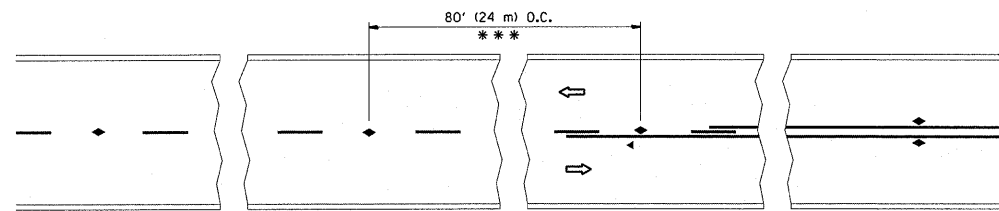
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		CHECKED -	REVISED - A. HOUSEH 10-15-96
		DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

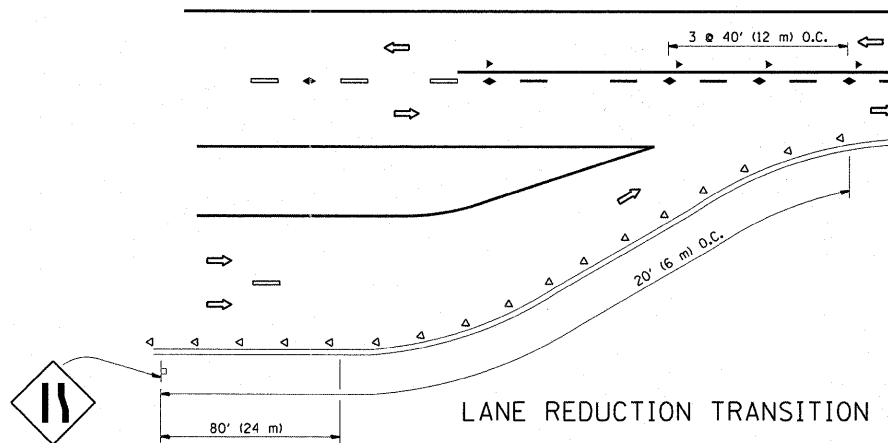
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 60L02	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

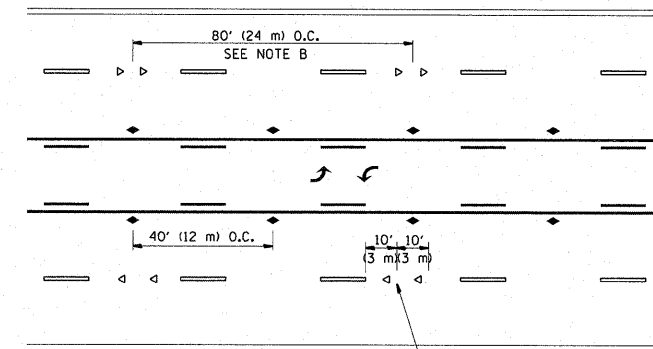


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

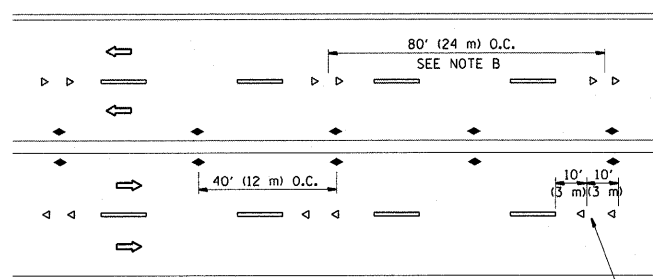
TWO-LANE/TWO-WAY



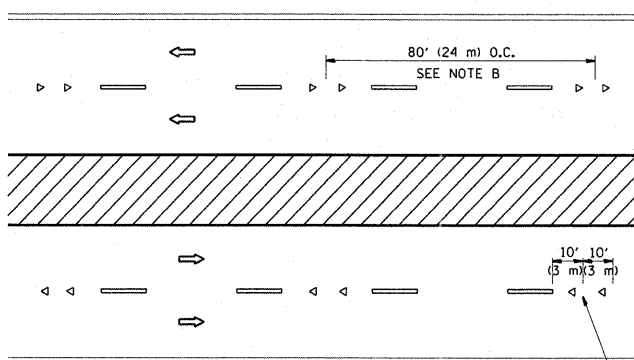
LANE REDUCTION TRANSITION



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.

SYMBOLS

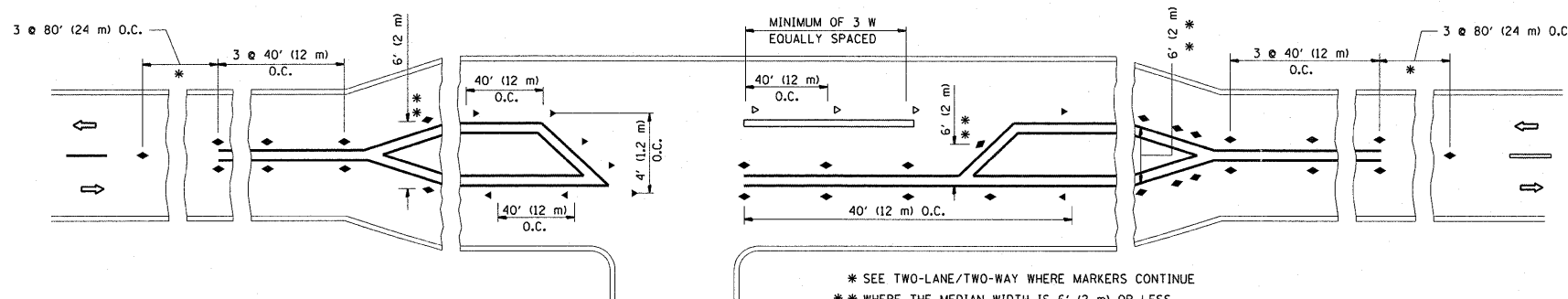
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

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' (1.2 m) OR LESS USE TWO-WAY MARKERS.

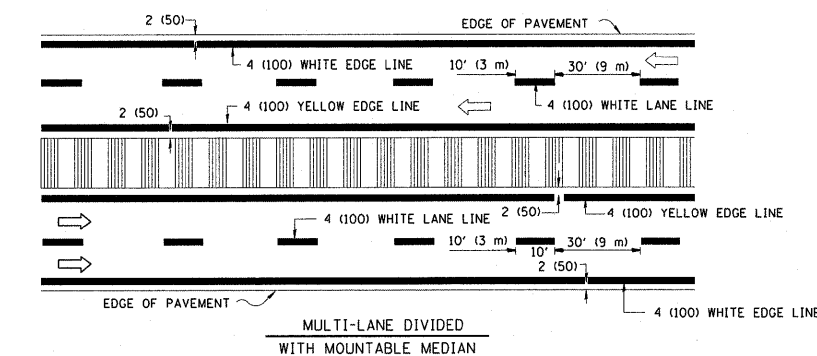
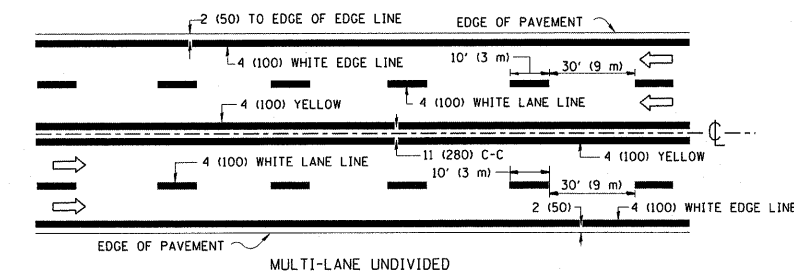
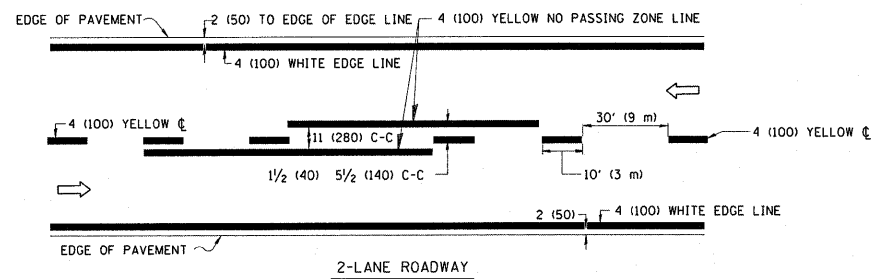
LEFT TURN

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

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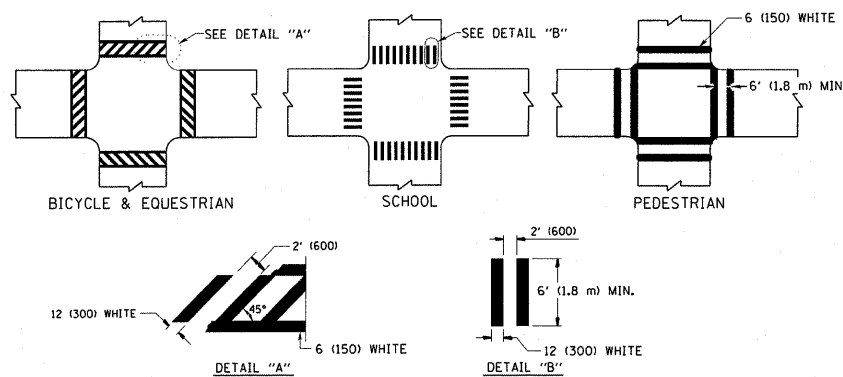
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)				1600	80 R-RS-1	COOK	24	19
SCALE: NONE				TC-11		CONTRACT NO. 60L02		
SHEET NO. 1 OF 1 SHEETS				FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

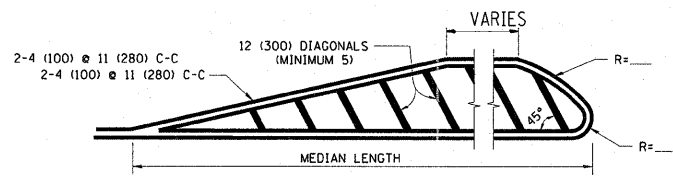
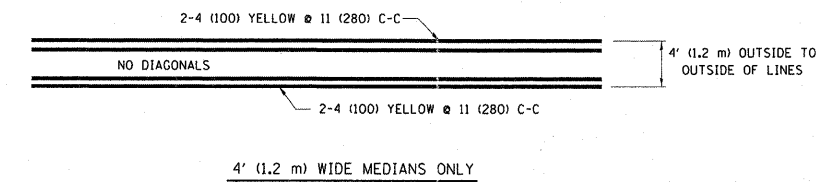


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

**TYPICAL LANE AND EDGE LINE MARKING**

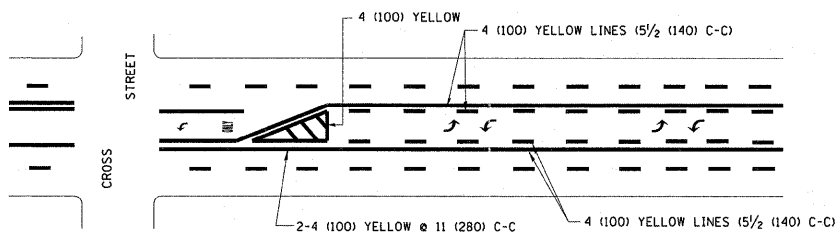


**TYPICAL CROSSWALK MARKING**

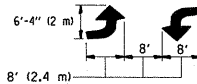


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.  
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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

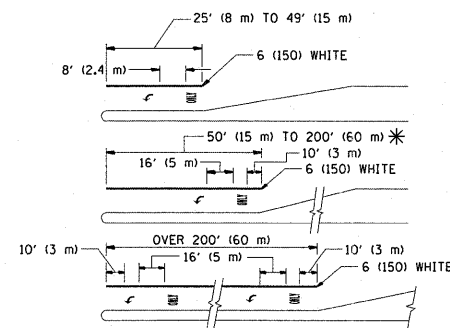


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



**MEDIAN WITH TWO-WAY LEFT TURN LANE**

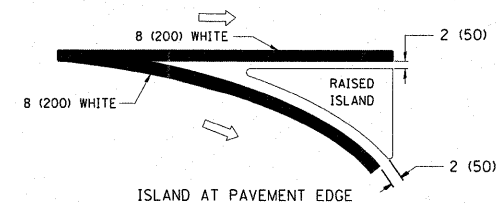
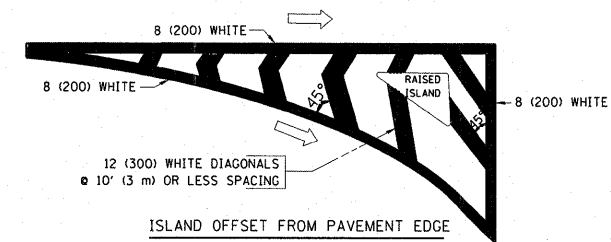
**TYPICAL PAINTED MEDIAN MARKING**



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 \* AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* 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	5/2 (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; 5/2 (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: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) @ 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.

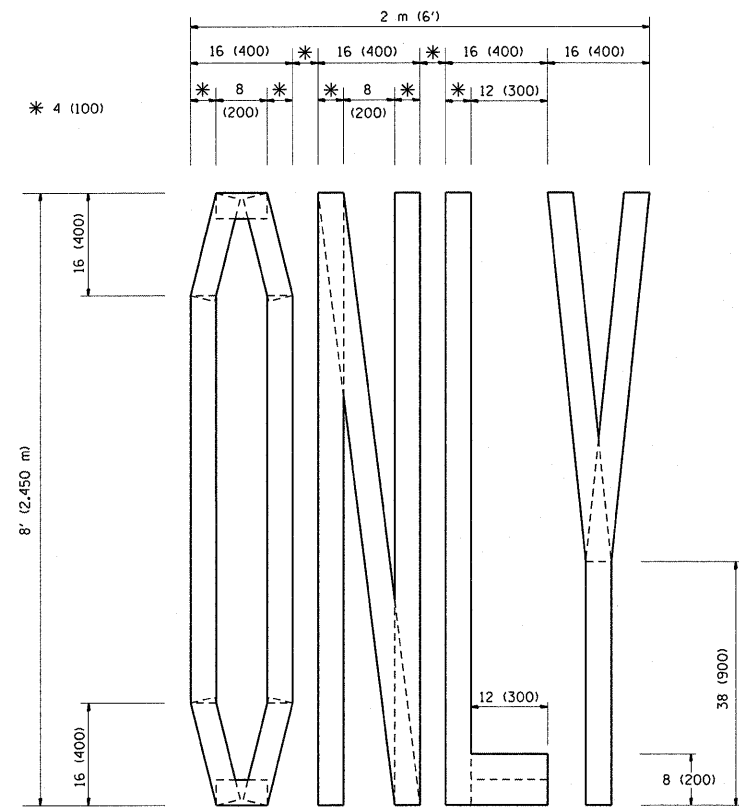
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

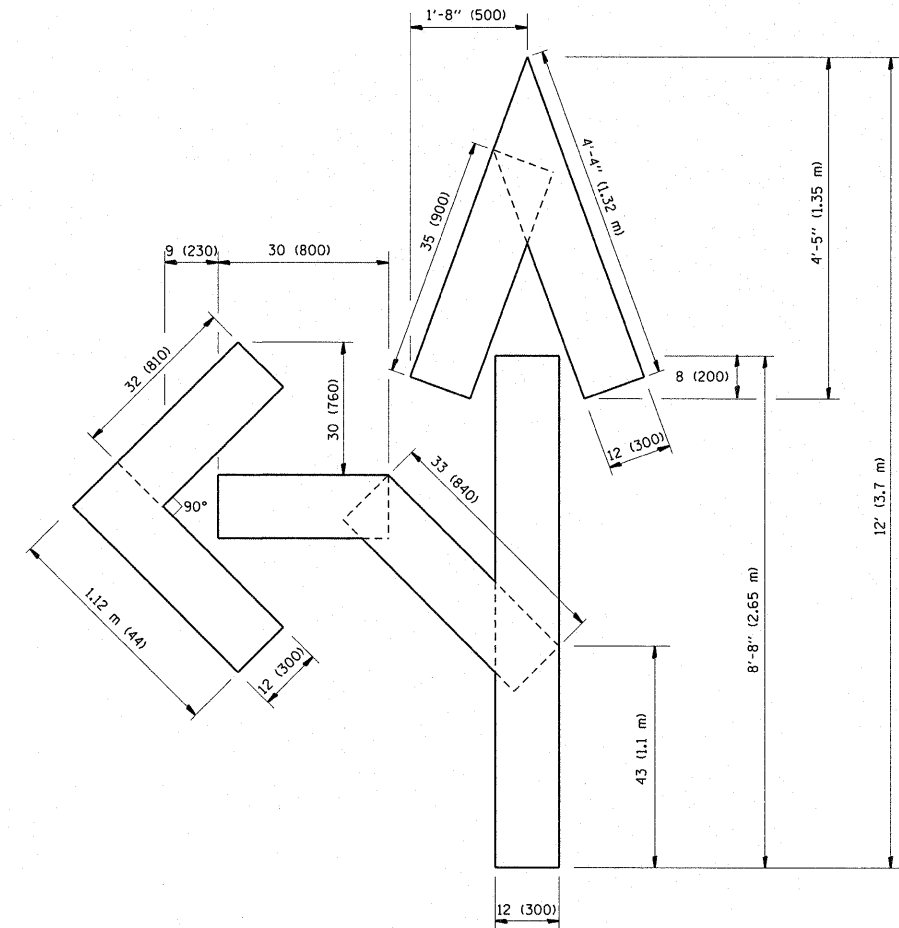
**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**

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

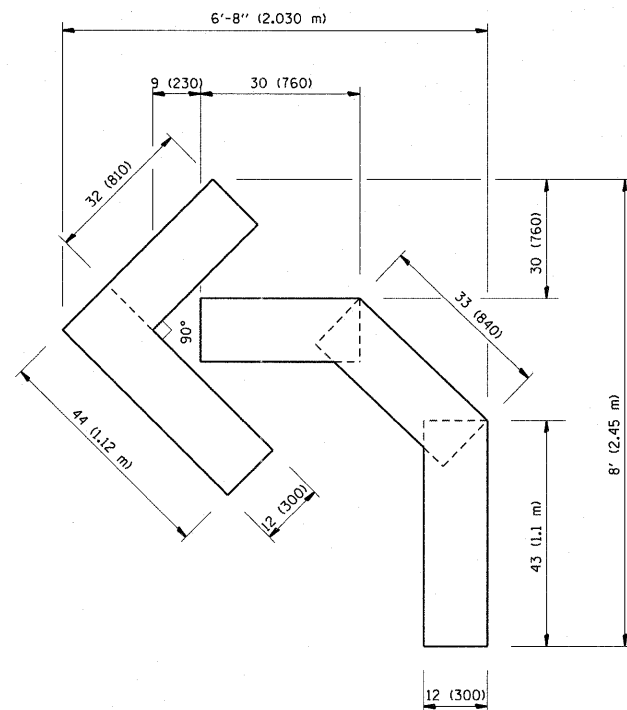
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	20
<b>TC-13</b>		<b>CONTRACT NO. 60L02</b>		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



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



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

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

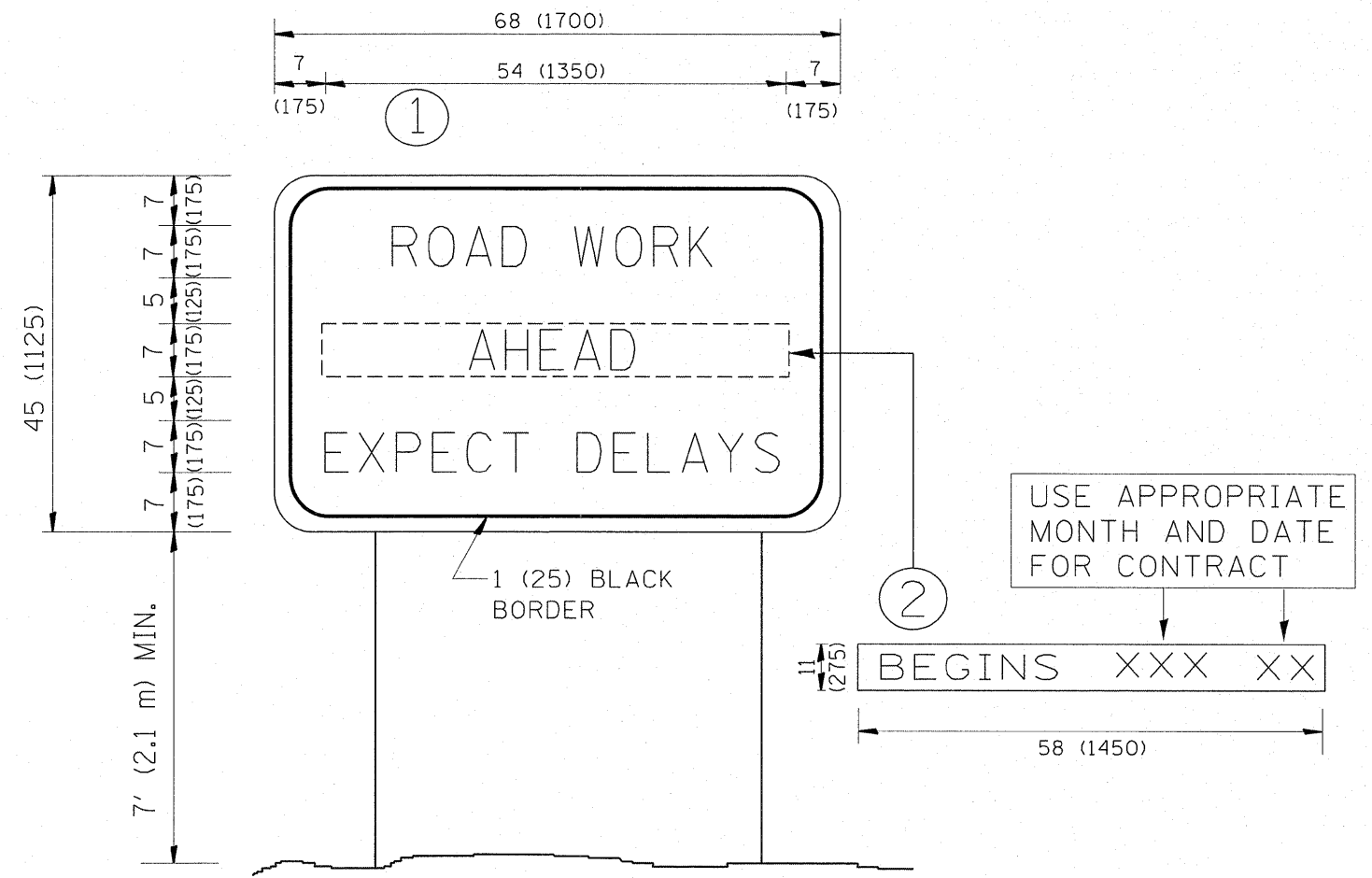
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PLOT SCALE = 50.0000 / IN.		CHECKED -	REVISED -T. RAMMACHER 03-02-98
PLOT DATE = 5/12/2011		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	21
TC-16			CONTRACT NO. 60L02	
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.

FILE NAME =	USER NAME = becker.tom	DESIGNED -	REVISED - R. MIRS 09-15-97
c:\px_work\pwidot\becker.tom\d0246227\d0246227.std.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 50.0000 ' / IN.		CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 5/12/2011		DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

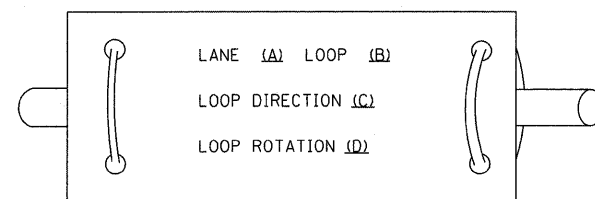
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	22
<b>TC-22</b>			<b>CONTRACT NO. 60L02</b>	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

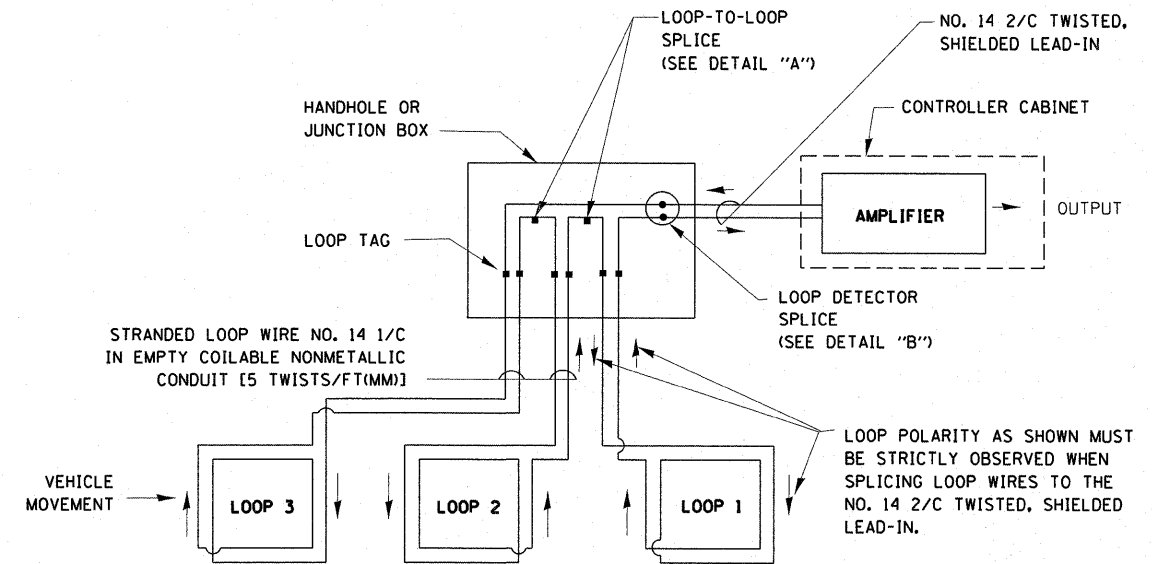
## LOOP DETECTOR NOTES

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 DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

### LOOP LEAD-IN CABLE TAG

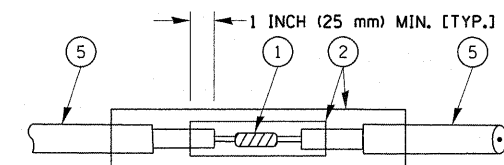


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

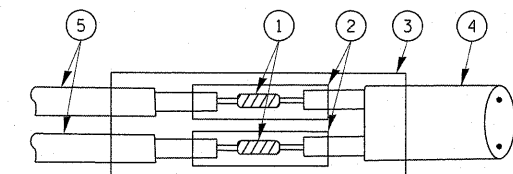


### DETECTOR LOOP WIRING SCHEMATIC

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

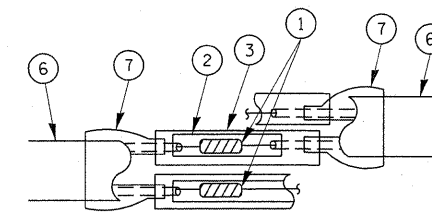


DETAIL "A"  
LOOP-TO-LOOP SPLICE

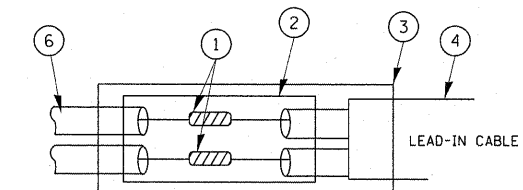


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

### TYPE I LOOP



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

### LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 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 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

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PLOT DATE = 5/12/2011		DATE - 10-28-09	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

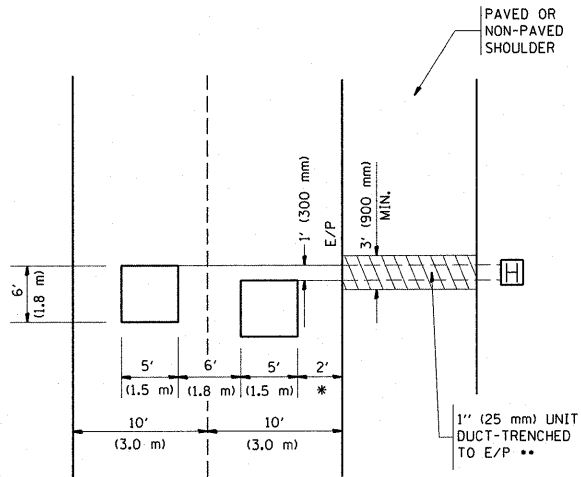
DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 1 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	23
TS-05		CONTRACT NO. 60L02		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**LOOPS NEXT TO SHOULDERS**

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

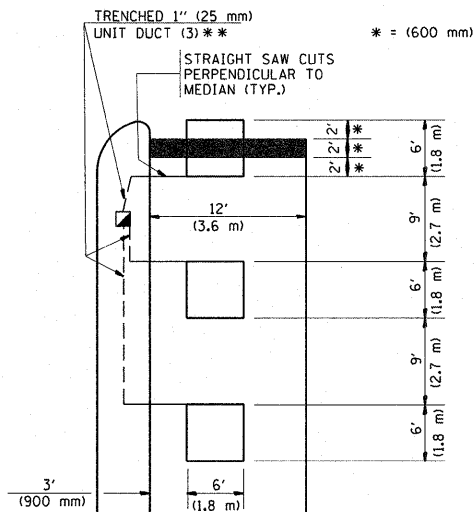


\* = (600 mm)

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

**LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**

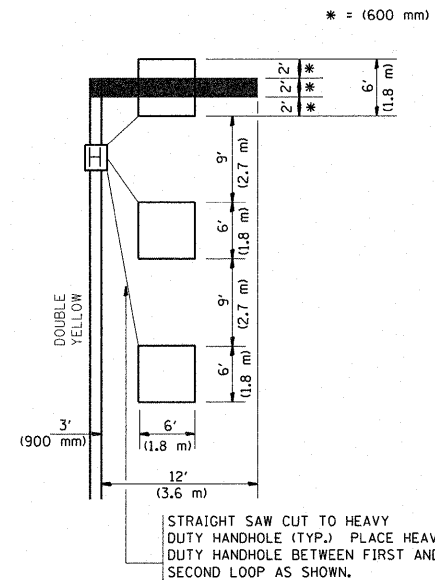
HANDHOLE LOCATION MAY  
VARY DEPENDING ON GEOMETRICS  
AND DESIGN OF TRAFFIC SIGNALS.  
HEAVY-DUTY HANDHOLES TO BE  
USED WHEN THE MEDIAN IS  
MOUNTABLE. REFER TO STANDARD  
814001 TO ENSURE THAT HANDHOLE  
FITS IN MEDIAN.



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

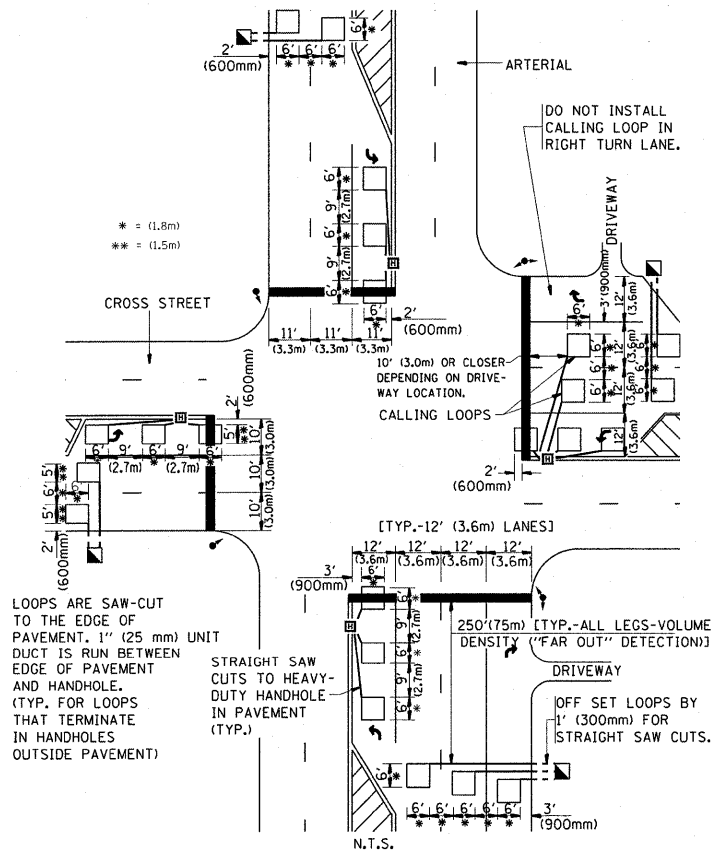
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)**



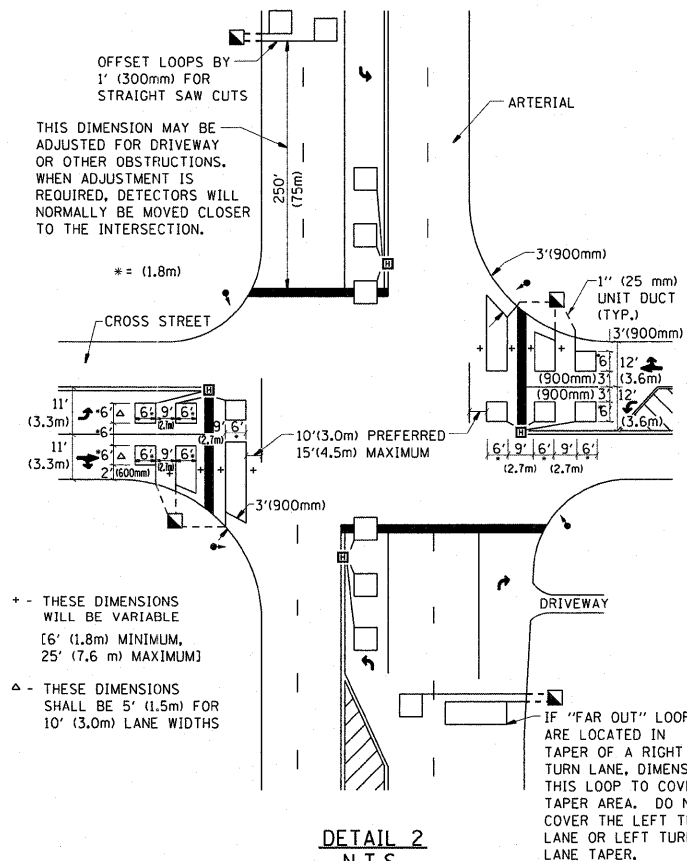
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO  
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



**DETAIL 1**  
N.T.S.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



**DETAIL 2**  
N.T.S.

**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 SEPARATELY. 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 SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**PLACEMENT OF DETECTORS**

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

**NOTE:**

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

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	PLT SCALE = 50.0000' / IN.	CHECKED - R.K.F.	REVISED -
	PLT DATE = 5/12/2011	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING**

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1600	80 R-RS-1	COOK	24	24
TS-07		CONTRACT NO. 60L02		
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				