

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2010-102-RS	COOK	23	1
		ILLINOIS	CONTRACT NO. 60M25	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGE OF MAYWOOD.

**TRAFFIC DATA:**

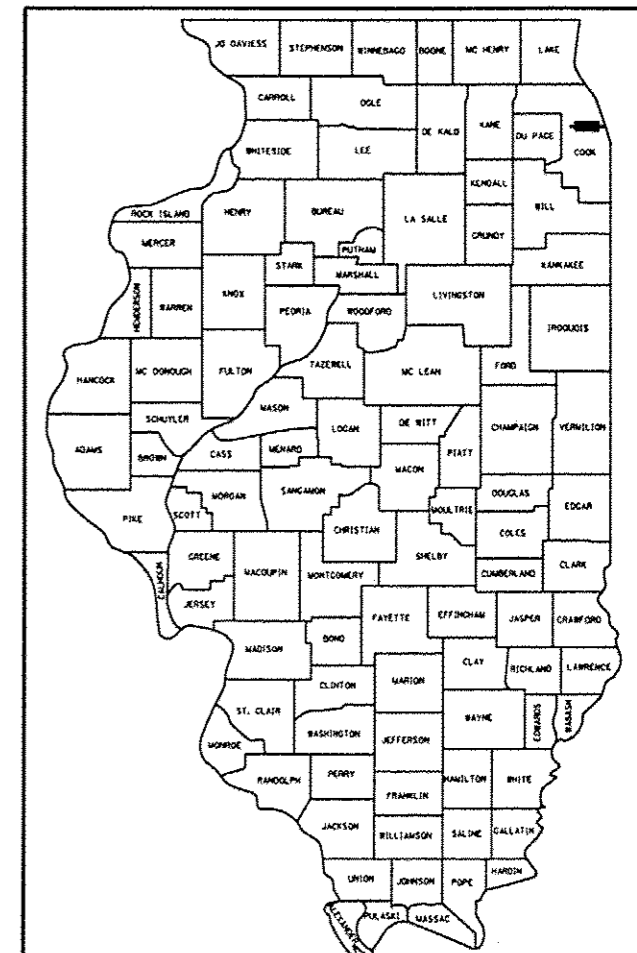
2011 AADT = 3800

POSTED SPEED LIMIT = 30 MPH

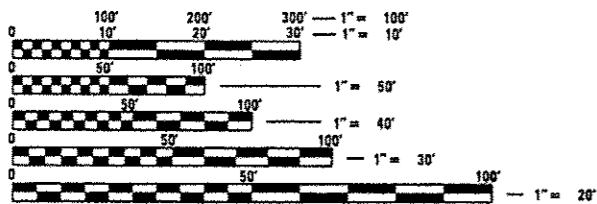
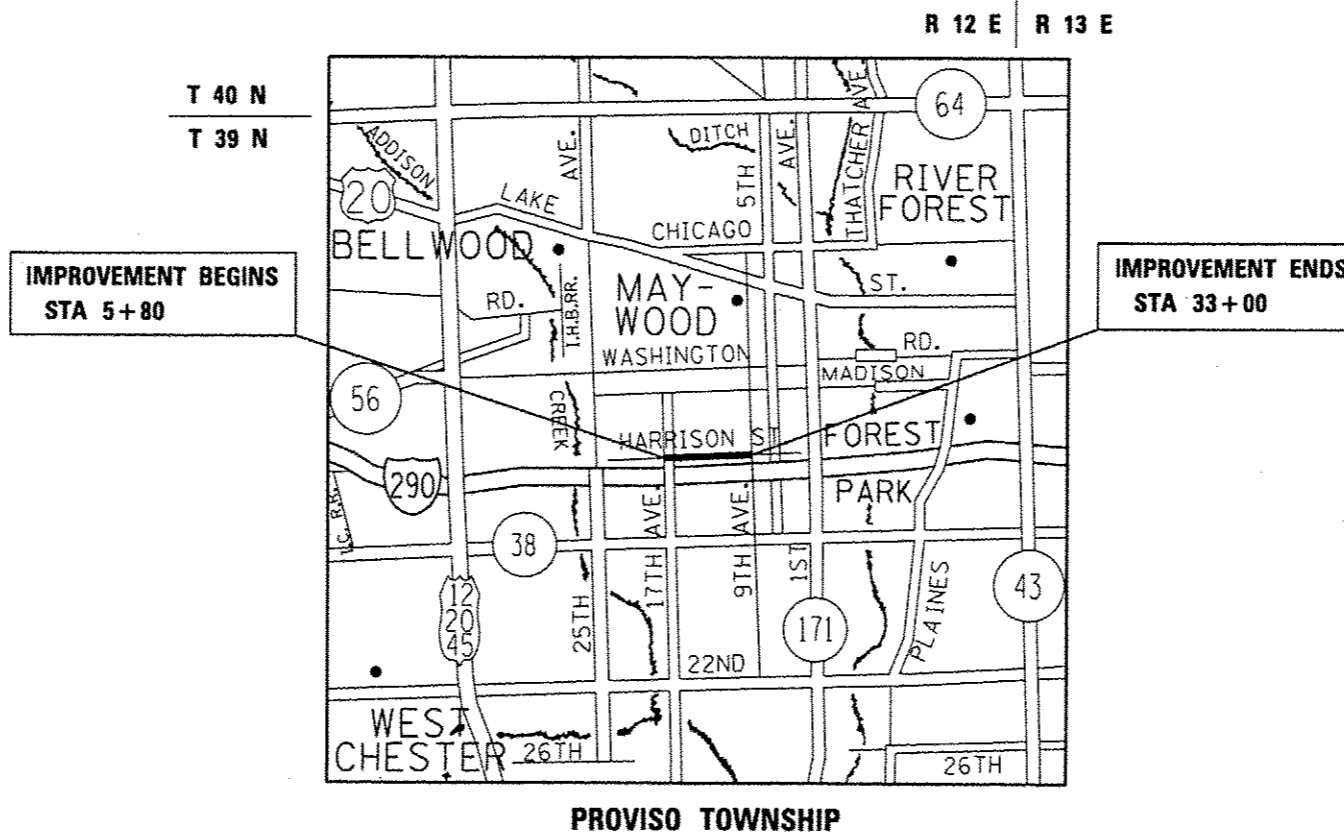
**PROPOSED  
HIGHWAY PLANS**

FAI ROUTE 290: HARRISON ST.  
17TH AVE. TO 9TH AVE.  
SECTION 2010-102-RS  
RESURFACING (3P)  
COOK COUNTY  
C-91-092-11

D-91-092-11



LOCATION OF SECTION INDICATED THIS: - [black rectangle]



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

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

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

CONTRACT NO. 60M25

GROSS LENGTH = 2720 FT. = 0.515 MILE

NET LENGTH = 2720 FT. = 0.515 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED May 27 2014  
*Solra Fintomana*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 27 2014  
*John D. Baranzoli, P.E.*  
acting ENGINEER OF DESIGN AND ENVIRONMENT

June 27 2014  
*Omer Osman, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

# INDEX OF SHEETS

# STATE STANDARDS

# GENERAL NOTES

SHEET	DESCRIPTION	STANDARD	DESCRIPTION
1	TITLE SHEET	000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	442201-03	CLASS C AND D PATCHES
3-4	SUMMARY OF QUANTITIES	701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
5-7	TYPICAL SECTIONS	701701-09	URBAN LANE CLOSURE, MULTILANE INTERSECTION
8-9	ROADWAY AND PAVEMENT MARKING PLAN	701901-03	TRAFFIC CONTROL DEVICES
10	DETECTOR LOOP REPLACEMENT PLAN		
11	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8)		
12	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (DB-22)		
13	CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)		
14	BUTT JOINT AND HMA TAPER (BD-32)		
15	ENTRANCE AND EXIT RAMP CLOSURE DETAILS (TC-08)		
16	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)		
17	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)		
18	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)		
19	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)		
20	TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)		
21	ARTERIAL ROAD INFORMATION SIGN (TC-22)		
22	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHEET 1)		
23	DISTRICT 1- DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)		

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.

TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

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

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, 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 ANDY SCHUETZE 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 THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF PLATED STRUCTURES BY STATION AND OFFSET LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT.

FOR FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING, REUSE EXISTING FRAME AND LID UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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)9\*32SHOWN 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 1/2 INCHES (40 mm) WHERE THE SPEED LIMIT IS 40 MPH (64 km/h) OR LESS AND 1 INCH (25 mm) WHERE THE SPEED LIMIT IS GREATER THAN 40 MPH (64 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 7\*32BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS9\*32SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		HARRISON STREET (17th AVE. TO 9th AVE.) INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES		P.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT SCALE = 100.0000 / in.	CHECKED	REVISED					CONTRACT NO. GOM25				
	PLOT DATE = 5/29/2014	DATE	REVISED					ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.					

URBAN

URBAN

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE						SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE						
CODE NO	ITEM	UNIT	100% STATE TOTAL QUANTITIES	0005						CODE NO	ITEM	UNIT	100% STATE TOTAL QUANTITIES	0005						
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	14	14						44201765	CLASS D PATCHES, TYPE II, 10 INCH	SO YD	152	152						
25200110	SODDING, SALT TOLERANT	SO YD	14	14						44201769	CLASS D PATCHES, TYPE III, 10 INCH	SO YD	152	152						
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	19	19						44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SO YD	76	76						
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4, 75, N50	TON	384	384						60404940	FRAMES AND GRATES, TYPE 23	EACH	3	3						
40600895	CONSTRUCTING TEST STRIP	EACH	1	1						67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6						
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	115	115						67100100	MOBILIZATION	L SUM	1	1						
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	100	100						70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1						
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1322	1322						70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1						
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SO YD	3469	3469						70300100	SHORT TERM PAVEMENT MARKING	FOOT	3741	3741						
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	9141	9141						70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	73	73						
44000600	SIDEWALK REMOVAL	SO FT	8160	8160						70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	5762	5762						
44002216	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 4"	SO YD	437	437						70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	323	323						
										70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	224	224						

FILE NAME	USER NAME	DESIGNED	REVISED
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	PLOT SCALE: 00.0000 1/2 in.	CHECKED	REVISED
	PLOT DATE: 5/21/2014	DATE	REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

HARRISON STREET (17th AVE. TO 9th AVE.)  
SUMMARY OF QUANTITIES

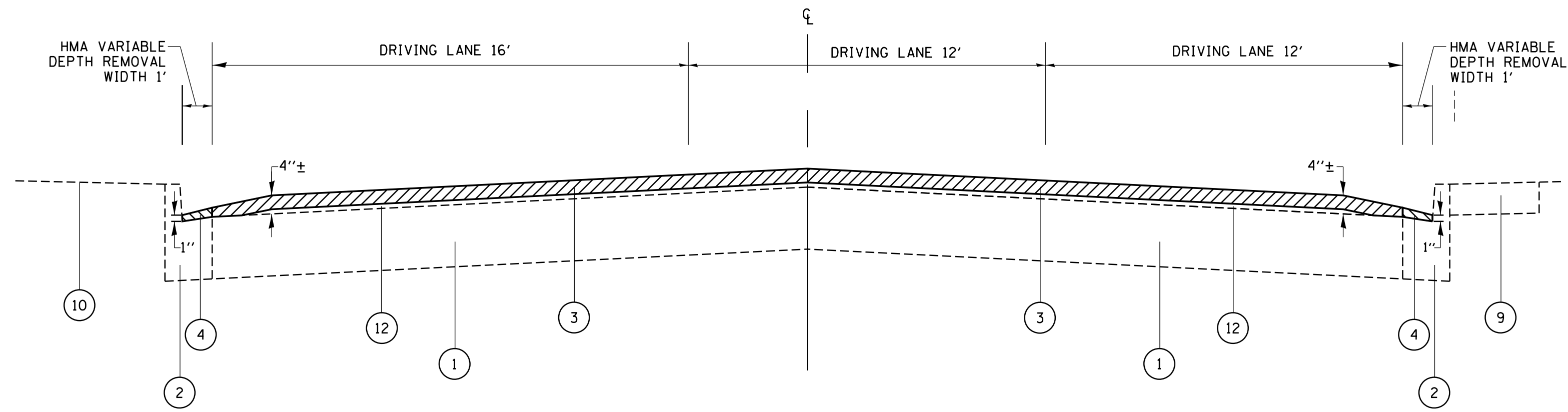
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2010-102-RS	COOK	23	3
CONTRACT NO. 60M25				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	100% STATE TOTAL QUANTITIES	0005					CODE NO	ITEM	UNIT	100% STATE TOTAL QUANTITIES	0005					
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	696	696					X4060110	BITUMINOUS MATERIAL (PRIME COAT)	POUND	4604	4604					
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	51	51					X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	50 YD	590	590					
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	50 FT	3356	3356					X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	160	160					
*78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	50 FT	73	73					X6030310	FRAMES AND LID TO BE ADJUSTED (SPECIAL)	EACH	30	30					
*78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	5762	5762					X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1					
*78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	323	323					Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	164	164					
*78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	224	224					Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	8	8					
*78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1636	1636					Z0030850	TEMPORARY INFORMATION SIGNING	50 FT	52	52					
*78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	51	51														
*78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	45	45														
*88600600	DETECTOR LOOP REPLACEMENT  • SPECIALTY ITEMS	FOOT	172	172														

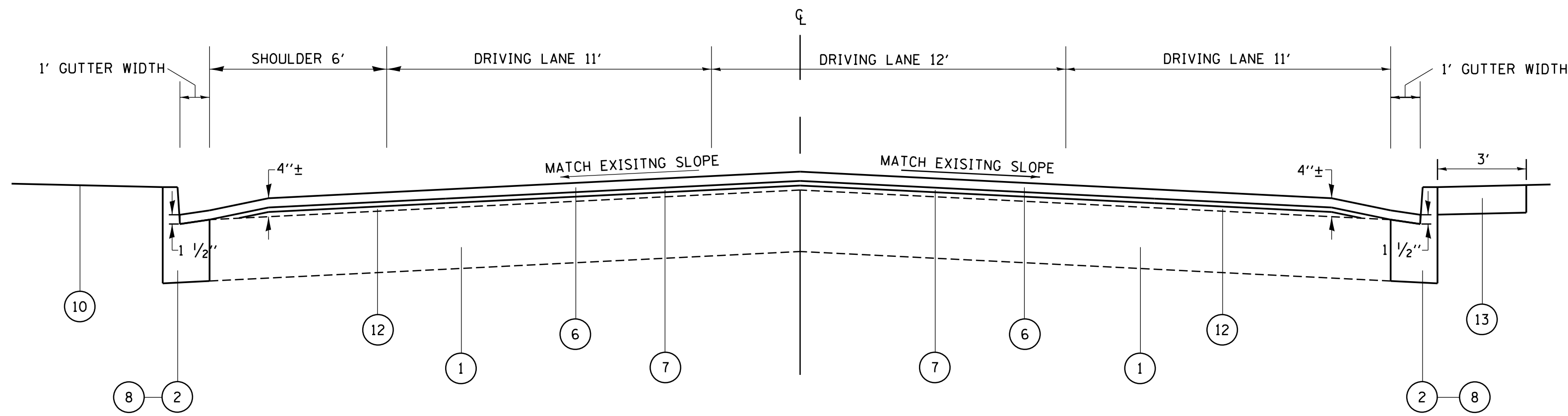
**LEGEND**

- ① EXISTING 10" P.C.C. PAVEMENT.
- ② EXISTING B-6.12 COMBINATION CONCRETE CURB AND GUTTER.
- ③ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ④ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH
- ⑤ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"
- ⑥ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 1/2"
- ⑦ PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- ⑧ PROPOSED COMINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LOCATIONS TO BE DETERMINED BY THE ENGINEER)
- ⑨ EXISTING HOT-MIX ASPHALT SIDEWALK, 4"
- ⑩ EXISTING TOPSOIL AND SOD
- ⑪ EXISTING HOT-MIX ASPHALT AFTER MILLING, 2 1/2"±
- ⑫ EXISTING HOT-MIX ASPHALT AFTER MILLING, 1 3/4"±
- ⑬ PROPOSED HMA SURFACE COURSE, MIX "D", N50, 4" (SIDEWALK ATTACHED TO CURB & GUTTER)



**HARRISON STREET EXISTING TYPICAL SECTION**

STATION 5+80 TO STATION 9+00



**HARRISON STREET PROPOSED TYPICAL SECTION**

STATION 5+80 TO STATION 9+00

**HMA MIXTURE REQUIREMENT**

OPERATION	MIXTURE TYPE	AIR VOIDS	Ndes	QMP
ROADWAY	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm)	4% @ 50 Gyr.		OCP
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 Gyr.		QC/QA
PATCHES	CLASS D PATCHES, (HMA BINDER IL-19)	4% @ 70 Gyr.		QC/QA
	HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19mm)	4% @ 70 Gyr.		QC/QA
SHOULDERS	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm)	4% @ 50 Gyr.		OCP
	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 Gyr.		QC/QA
P. LANES	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm)	4% @ 50 Gyr.		OCP
SIDEWALK	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm)	4% @ 50 Gyr.		OCP

QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA), QUALITY CONTROL FOR PERFORMANCE (OCP)

**NOTES:**

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

**AC TYPE NOTE:**

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 64-28" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS, SEE DISTRICT ONE SPECIAL PROVISIONS.

**QMP NOTE:**

"QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE"

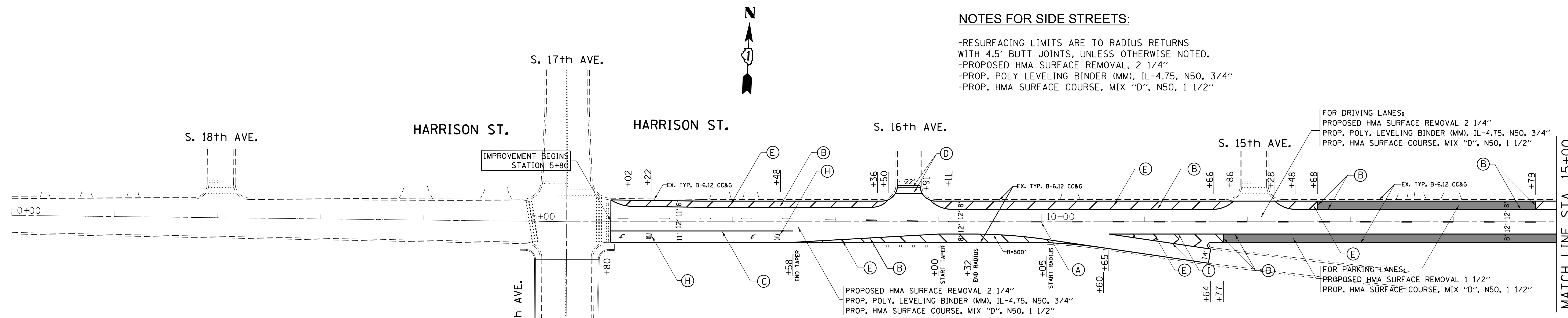
**NOTE:**

THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

FILE NAME =	USER NAME = bauerdl	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>HARRISON STREET (17th AVE. TO 9th AVE.) EXISTING AND PROPOSED TYPICAL SECTIONS</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw_work\pwwork\baueardl\d0274245\0109211-sh-t-plan.dgn		DRAWN -	REVISED -			290	2010-102-RS	COOK	23	5
PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED -			CONTRACT NO. 60M25				
PLOT DATE = 5/28/2014		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. 1 OF 3 SHEETS	STA. 5+80 TO STA. 9+00				







**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", N50, 1 1/2"

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

FOR PARKING LANES:  
 PROPOSED HMA SURFACE REMOVAL 1 1/2"  
 PROP. HMA SURFACE COURSE, MIX "D", N50, 1 1/2"

**THERMOPLASTIC PAVEMENT MARKING LEGEND**

- (A) 4" SKIP-DASH WHITE CENTERLINE, 10' LINE WITH 30' SPACE
- (B) 4" SOLID WHITE EDGE LINE
- (C) 6" SOLID WHITE LANE LINE
- (D) 6" SOLID WHITE LINE, CROSSWALK
- (E) 12" SOLID WHITE DIAGONALS, AT 45 DEGREES, 20' SPACING
- (F) 12" SOLID WHITE LINE, 2' SPACING, CROSSWALK
- (G) 24" SOLID WHITE LINE, STOP BAR
- (H) SOLID WHITE LETTERS AND SYMBOLS
- (I) 8" SOLID WHITE LINE

**NOTES FOR SIDE STREETS:**

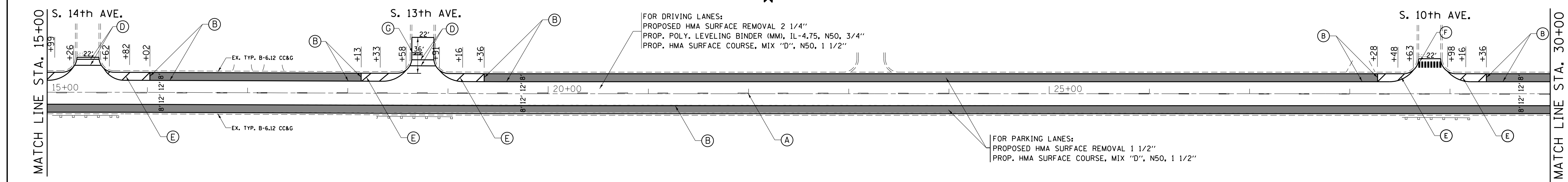
- RESURFACING LIMITS ARE TO RADIUS RETURNS WITH 4.5' BUTT JOINTS, UNLESS OTHERWISE NOTED.
- PROPOSED HMA SURFACE REMOVAL, 2 1/4"
- PROP. POLY LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- PROP. HMA SURFACE COURSE, MIX "D", N50, 1 1/2"

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

FOR PARKING LANES:  
 PROPOSED HMA SURFACE REMOVAL 1 1/2"  
 PROP. HMA SURFACE COURSE, MIX "D", N50, 1 1/2"

**THERMOPLASTIC PAVEMENT MARKING LEGEND**

- (A) 4" SKIP-DASH WHITE CENTERLINE, 10' LINE WITH 30' SPACE
- (B) 4" SOLID WHITE EDGE LINE
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- (E) 12" SOLID WHITE DIAGONALS, AT 45 DEGREES, 20' SPACING
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- (H) SOLID WHITE LETTERS AND SYMBOLS
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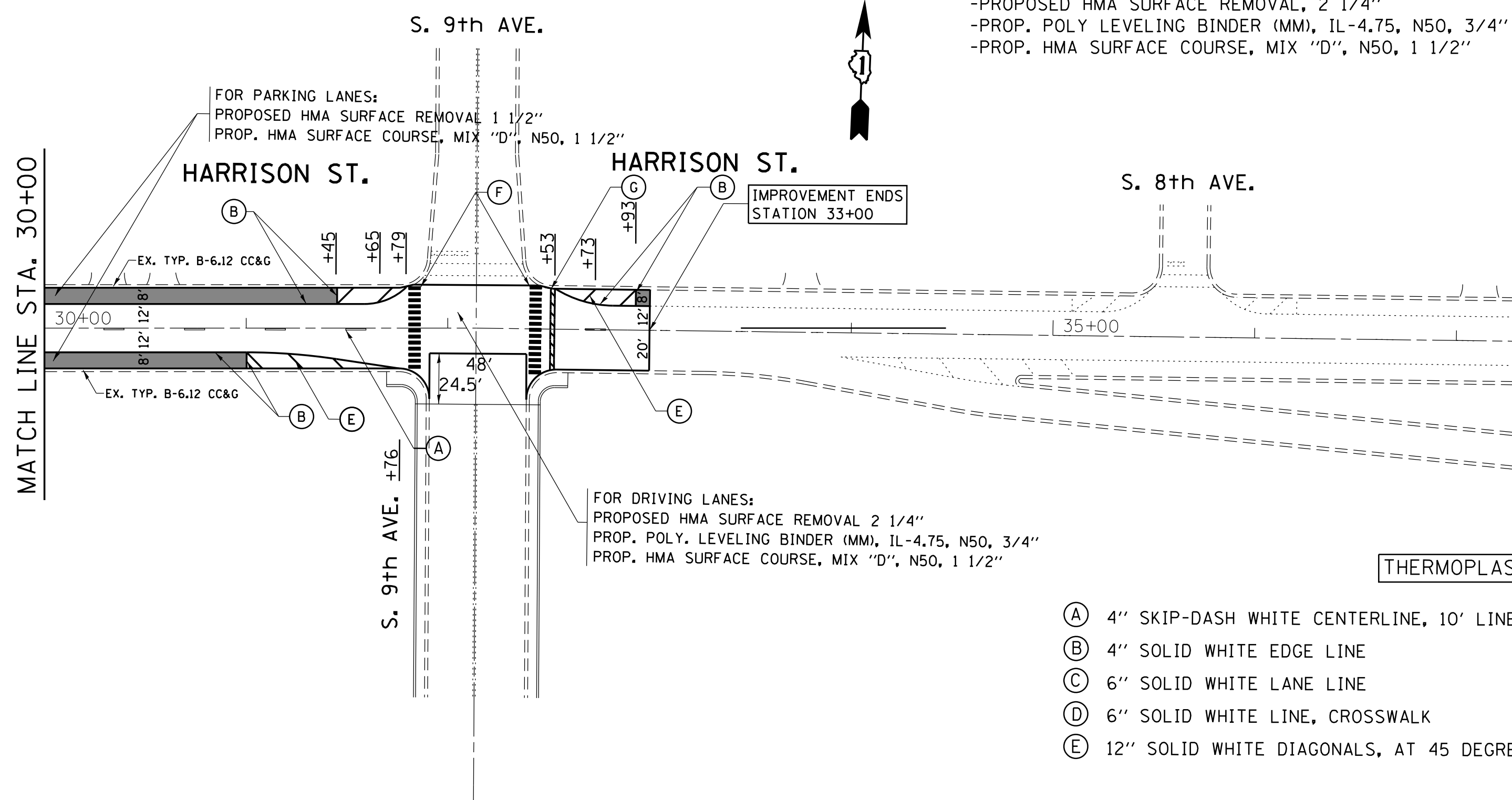


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	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -		SCALE:	SHEET NO. 1 OF 2 SHEETS	STA. 0+00 TO STA. 30+00	CONTRACT NO. 60M25				
PLOT DATE = 5/28/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT							



**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", N50, 1 1/2"

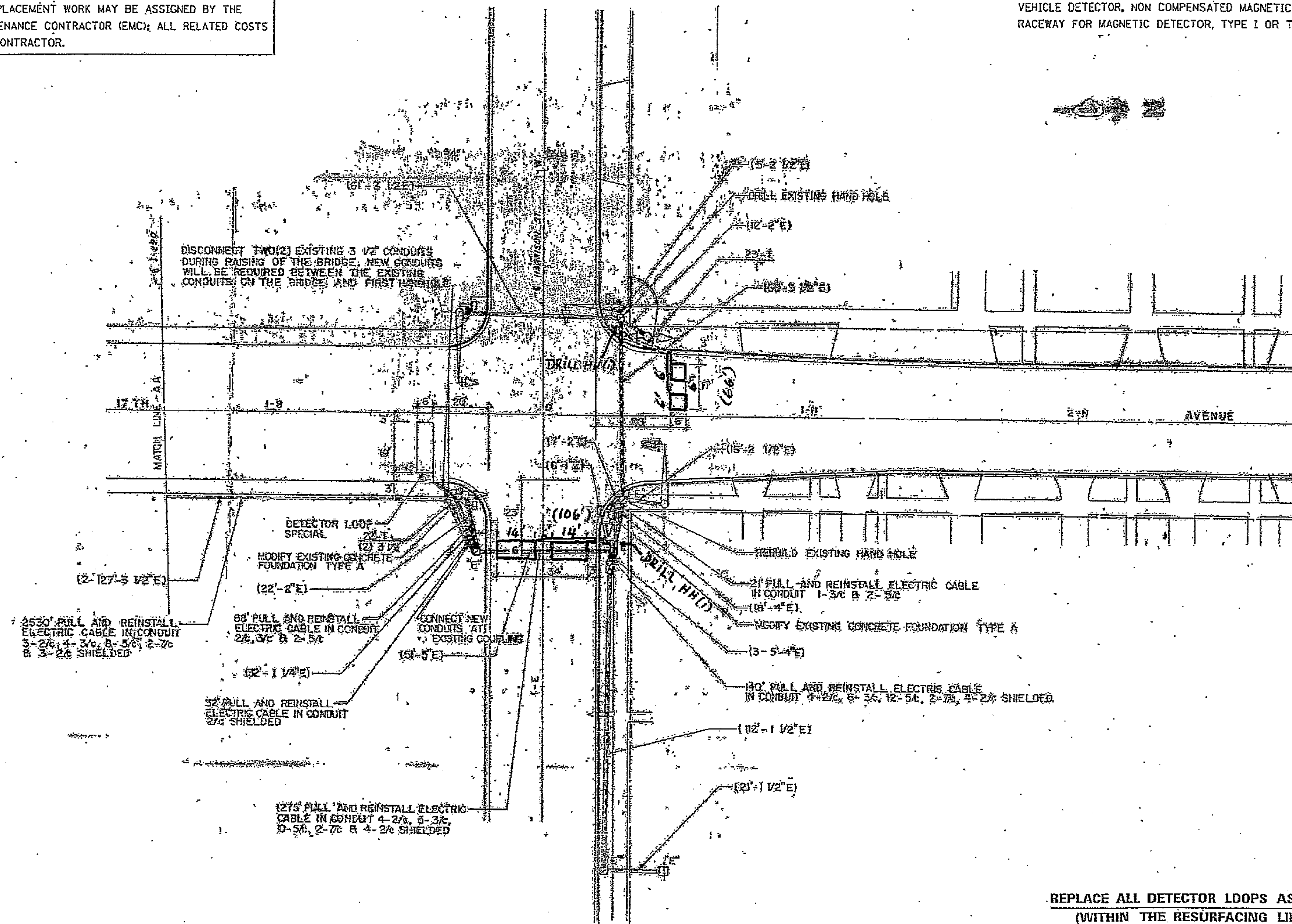


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	PLOT SCALE = 50.0000' / 1" IN.	CHECKED -	REVISED -				290	2010-102-RS	COOK	23	9	
PLOT DATE = 5/28/2014	DATE -	REVISED -	SCALE:		SHEET NO. 2 OF 2 SHEETS	STA. 30+00 TO STA. 37+00	CONTRACT NO. 60M25					
							ILLINOIS FED. AID PROJECT					

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**

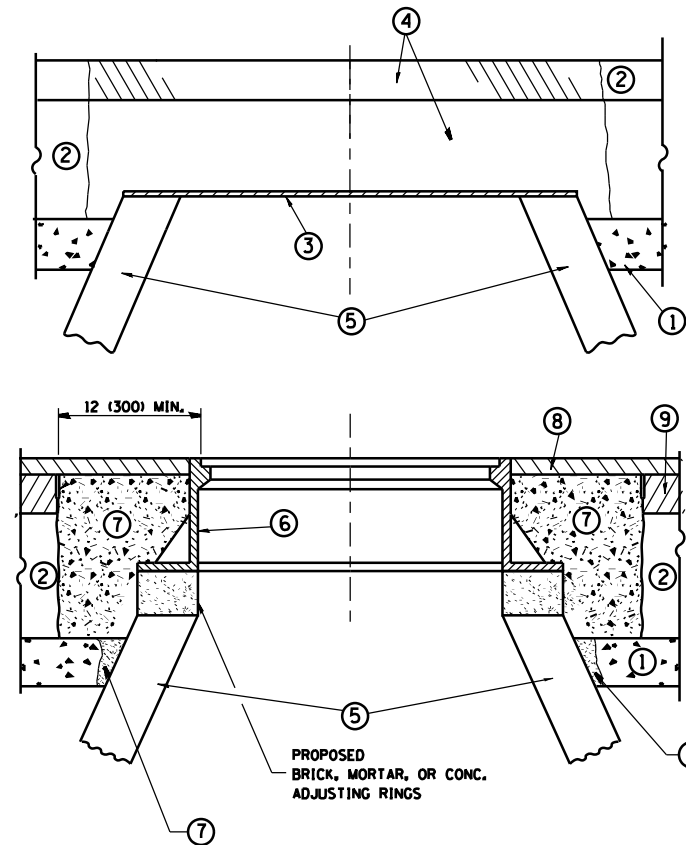
	PROPOSED	EXISTING
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD		
GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		



**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	172	FOOT	DETECTOR LOOP, REPLACEMENT



**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 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
  - B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
  - C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1# CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- \* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

**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:**

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

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

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

**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**

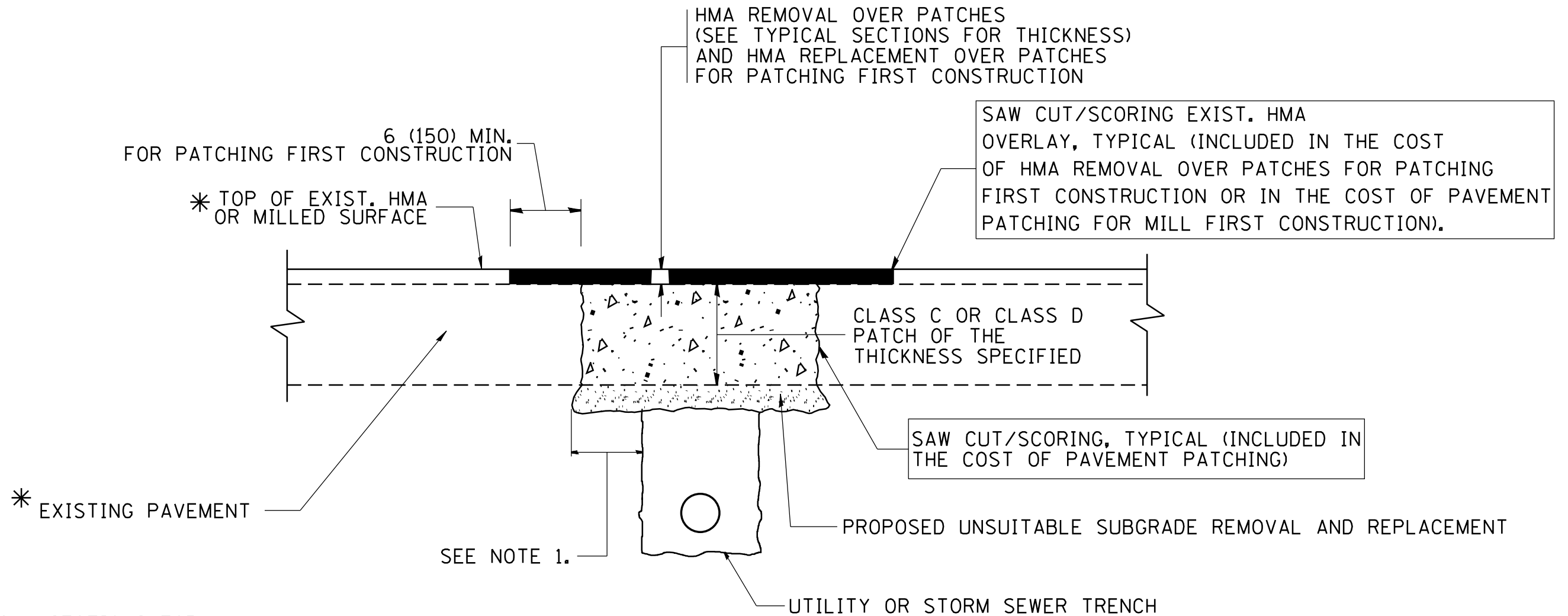
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
et:\pwork\pwork\baueard\0274245\DistStd.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 5/28/2014	DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2010-102-R5	COOK	23	11
BD600-03 (BD-8)		CONTRACT NO. 60M25		
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 = bauerdl	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.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pwork\pwork\baerd\0274245\Dist\td.dgn	DRAWN -	REVISED - R. BORO 01-01-07	REVISED - R. BORO 09-04-07					290	2010-102-R5	COOK	23	12
PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED - R. BORO 09-04-07	REVISED - K. ENG 10-27-08		BD400-04 (BD-22)		CONTRACT NO. 60M25					
PLOT DATE = 5/28/2014	DATE - 10-25-94				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	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).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

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.)

\* 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.

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.

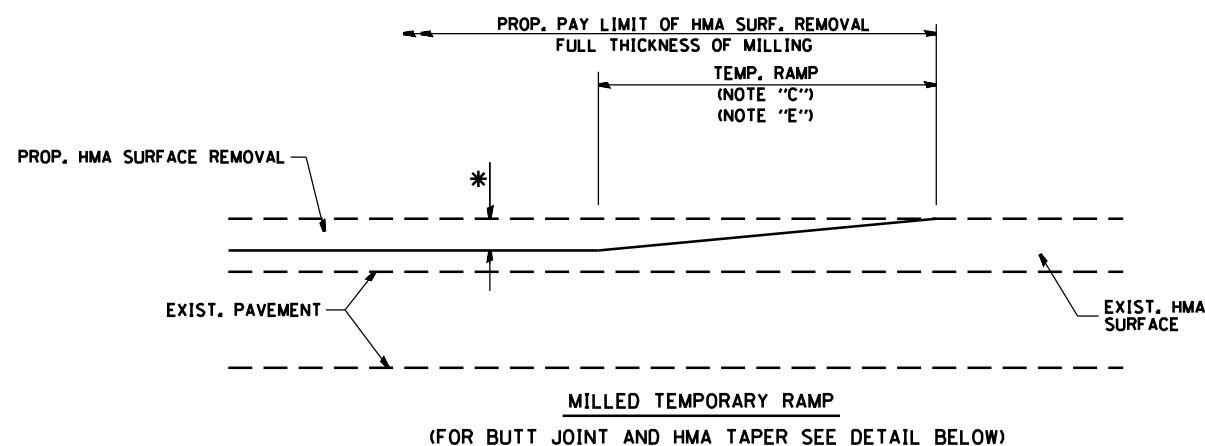
PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

**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".

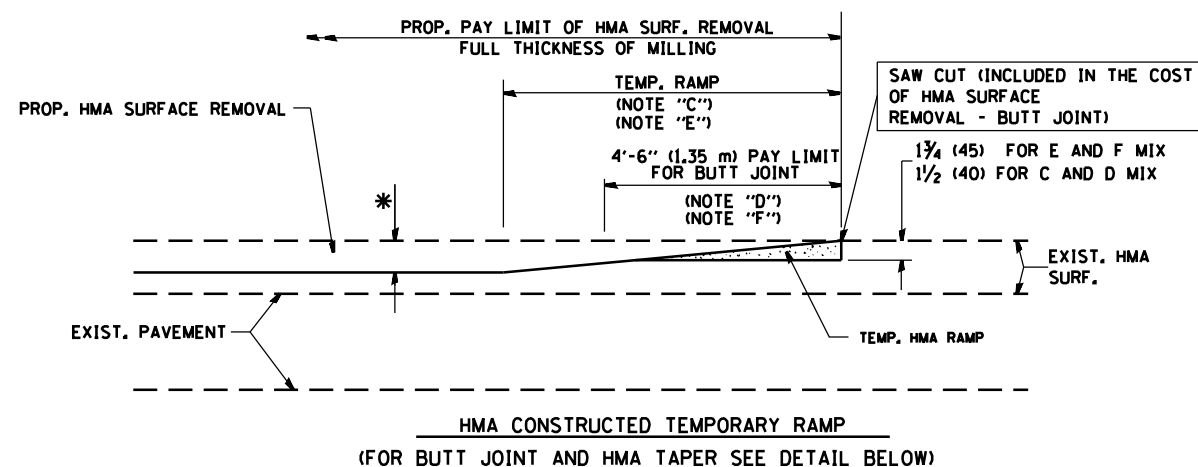
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = bauerdl	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.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\idot\bauerdl\d0274245\DistStd.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97					290	2010-102-R5	COOK	23	13
PLOT SCALE = 100.0000' / in.		CHECKED -	REVISED - M. GOMEZ 01-22-01		BD600-06 (BD-24)			CONTRACT NO. 60M25				
PLOT DATE = 5/28/2014		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				

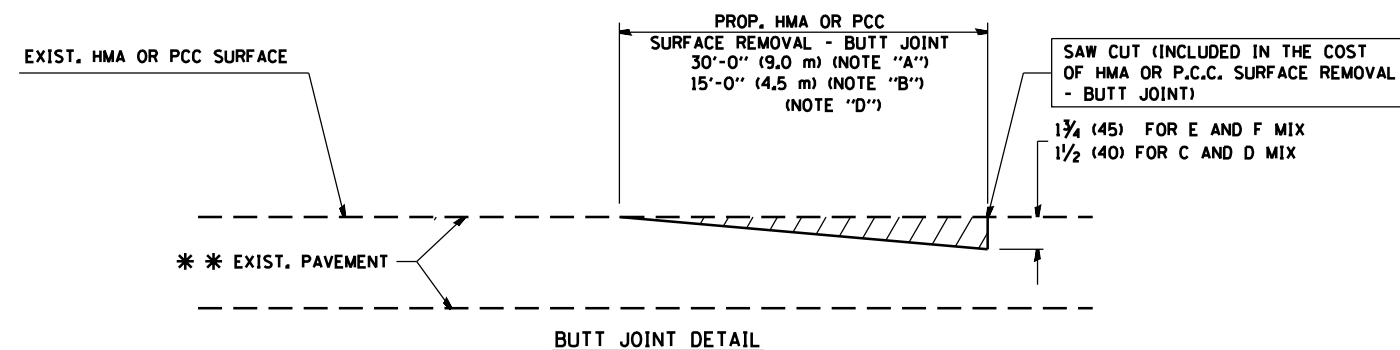


**OPTION 1**

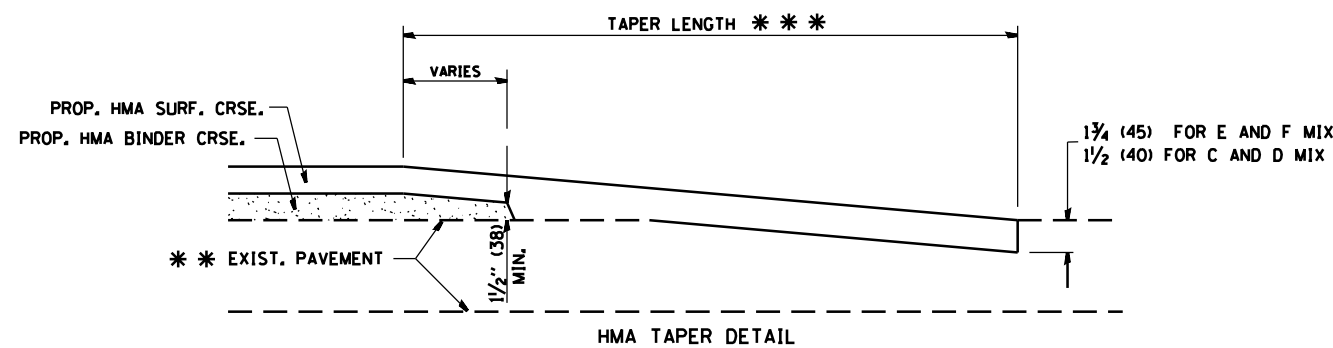


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

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

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

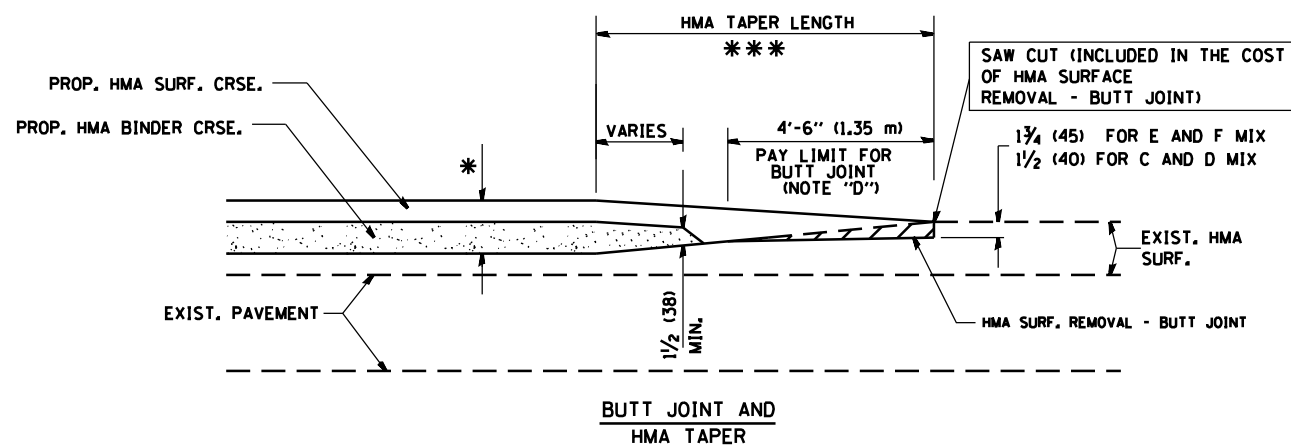
**NOTES**

- A<sub>2</sub> MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
  - B<sub>2</sub> MINOR SIDE ROADS.
  - C<sub>2</sub> THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
  - D<sub>2</sub> THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
  - E<sub>2</sub> TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - F<sub>2</sub> INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
  - G<sub>2</sub> 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.



**BUTT JOINT AND HMA TAPER**

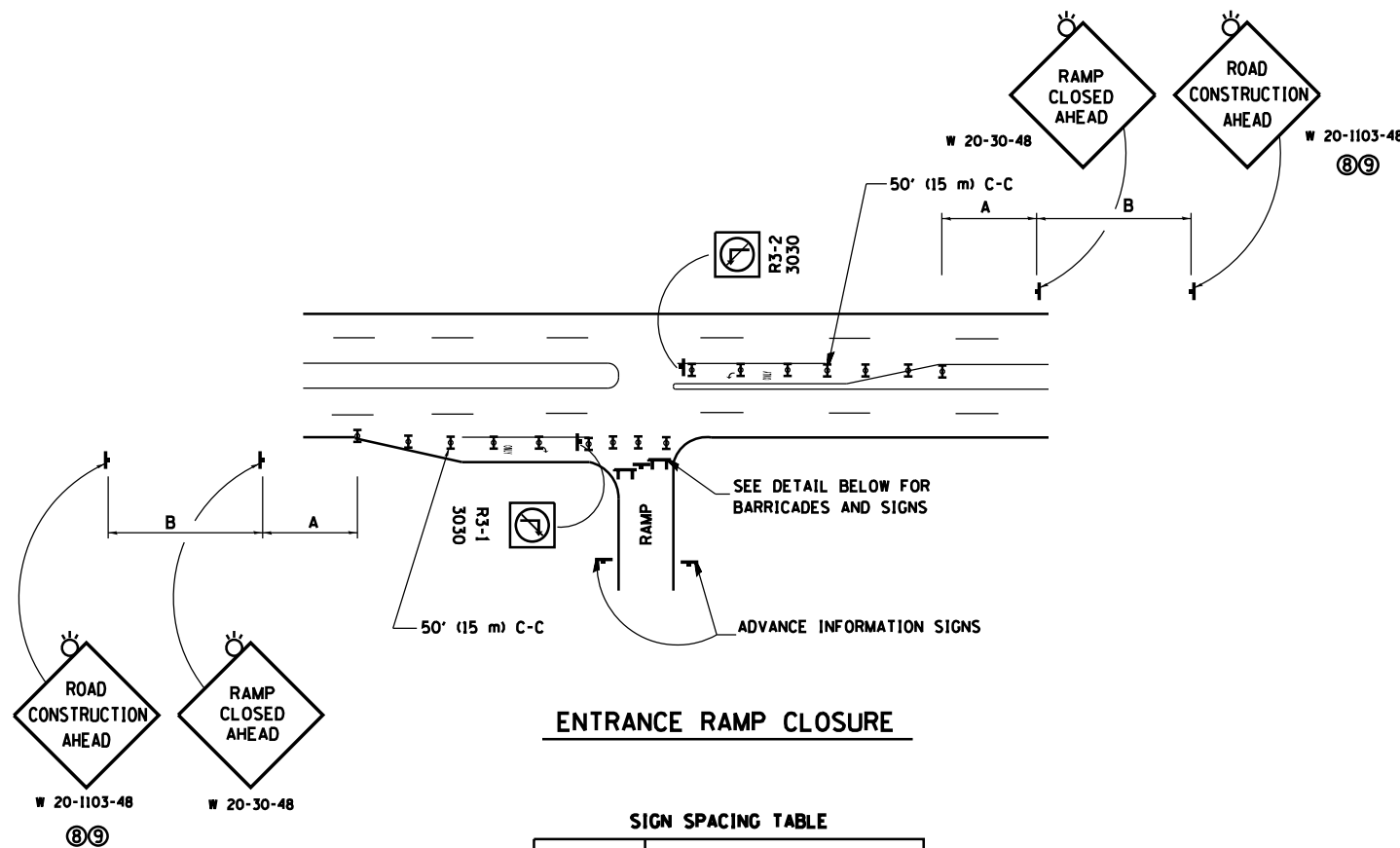
**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

FILE NAME =	USER NAME = bauerdl	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
ca:\pwwork\pwwork\baueardl\d0274245\DistStd.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 5/28/2014	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.
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2010-102-R5	COOK	23	14
BD400-05 BD32		CONTRACT NO. 60M25		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

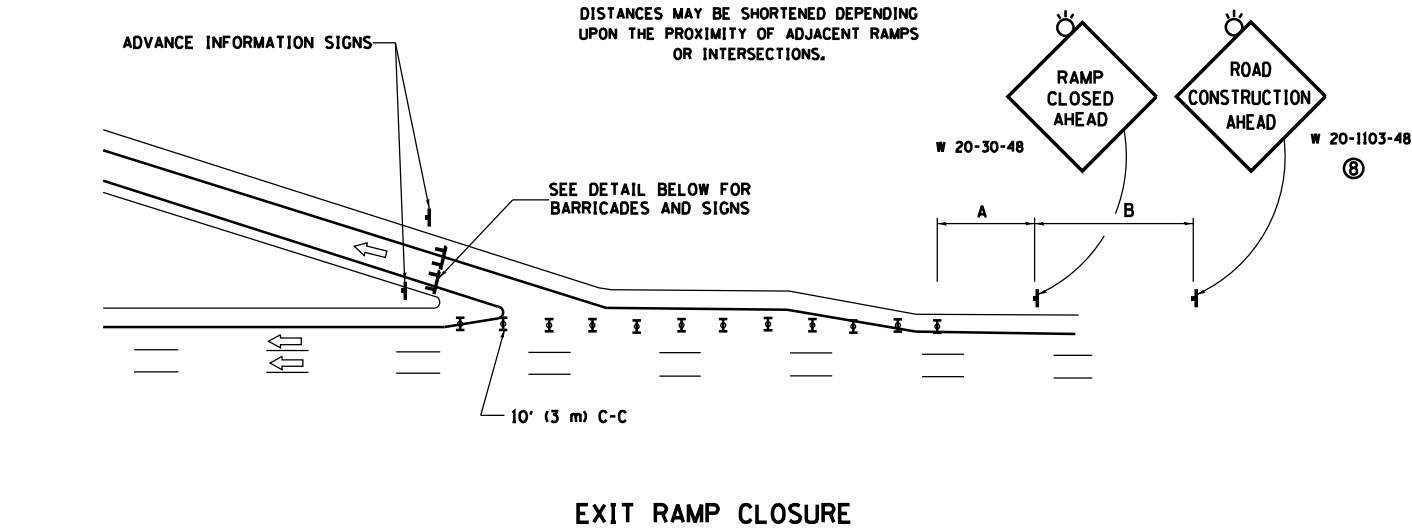


**ENTRANCE RAMP CLOSURE**

**SIGN SPACING TABLE**

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY <24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

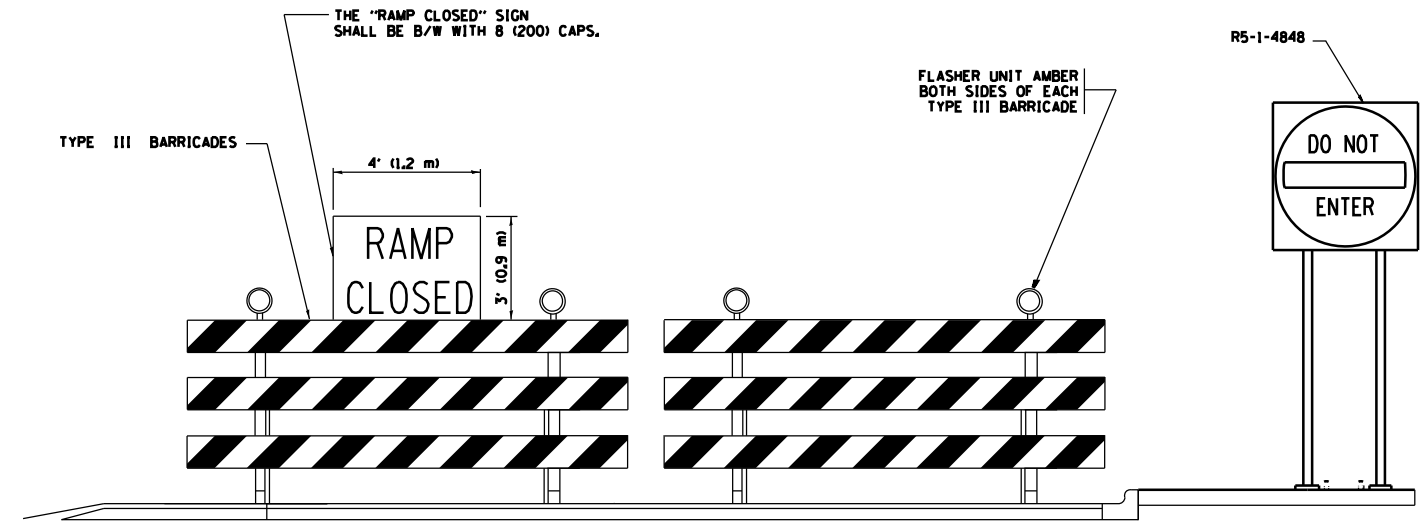
DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.



**EXIT RAMP CLOSURE**

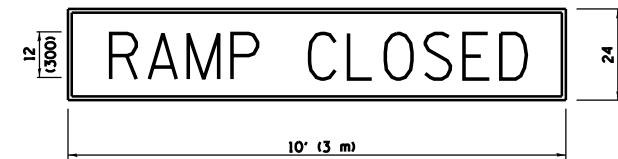
**SYMBOLS**

- ▬ TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- ▬ TYPE III BARRICADE WITH 2 FLASHING LIGHTS



**DETAIL FOR REQUIRED BARRICADES & SIGNS**

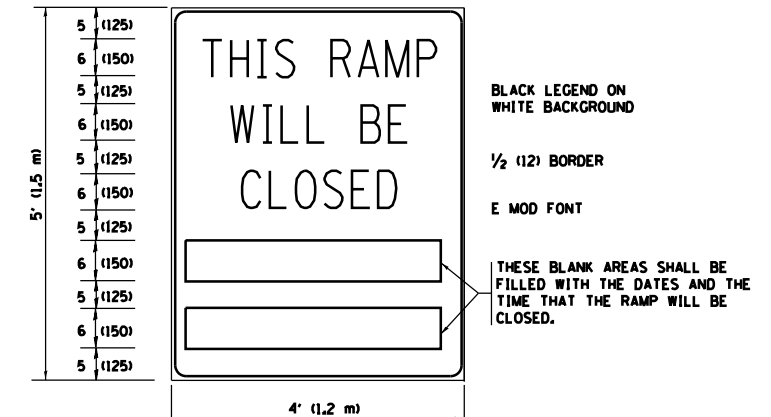
**RAMP CLOSURE ADVANCE WARNING SIGN**



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY  
E MOD FONT  
1/2 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

**RAMP CLOSURE ADVANCE INFORMATION SIGN**



BLACK LEGEND ON WHITE BACKGROUND

1/2 (12) BORDER

E MOD FONT

THESE BLANK AREAS SHALL BE FILLED WITH THE DATES AND THE TIME THAT THE RAMP WILL BE CLOSED.

THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

**GENERAL NOTES:**

- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
- ② STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- ③ A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEDED BY A W20-7 FLAGGER WARNING SIGN.
- ④ ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- ⑤ THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
- ⑥ AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- ⑦ THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH.
- ⑧ ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ⑨ ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

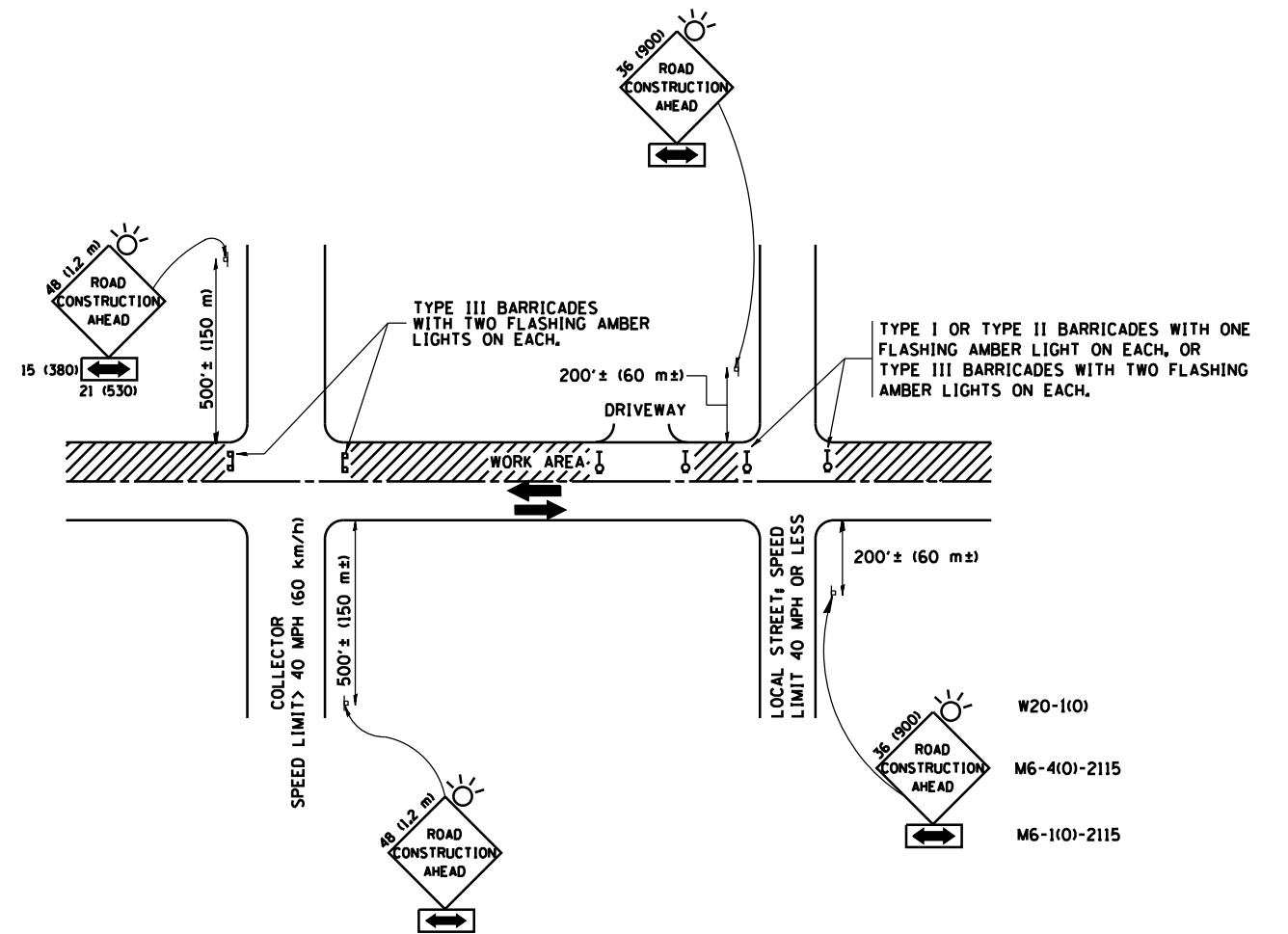
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = bauerdl	DESIGNED - DWS	REVISED - JAF 02-06
ca:\pwork\pwork\baerd\0274245\Dist\td.dgn		DRAWN -	REVISED - SPB 01-07
PLOT SCALE = 100.0000' / 1"		CHECKED -	REVISED - SPB 12-09
PLOT DATE = 5/28/2014		DATE - 02-83	REVISED - MD 06-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ENTRANCE AND EXIT RAMP CLOSURE DETAILS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2010-102-R5	COOK	23	15
TC-08		CONTRACT NO. 60M25		
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:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

**B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = bauerdl	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
et:\pwork\pwork\baue\baue\274245\Dist\td.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 5/28/2014	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

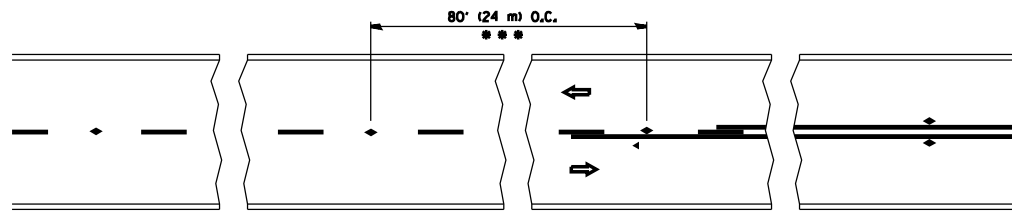
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

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

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

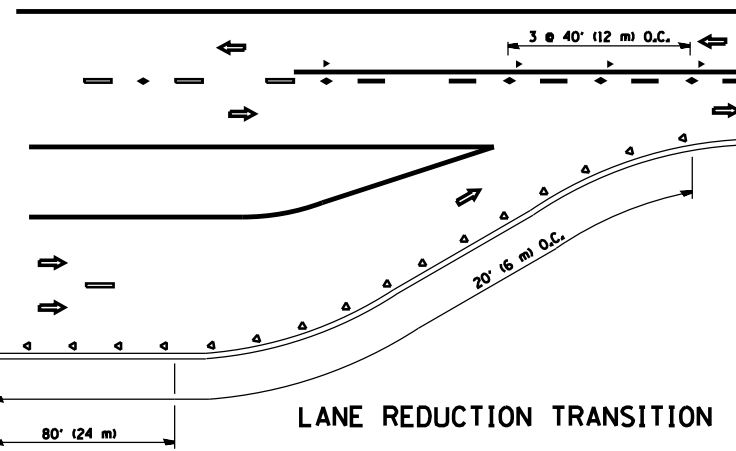
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2010-102-R5	COOK	23	16
TC-10			CONTRACT NO. 60M25	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



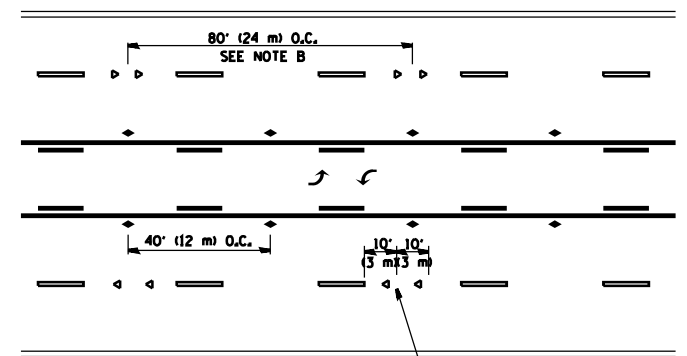


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

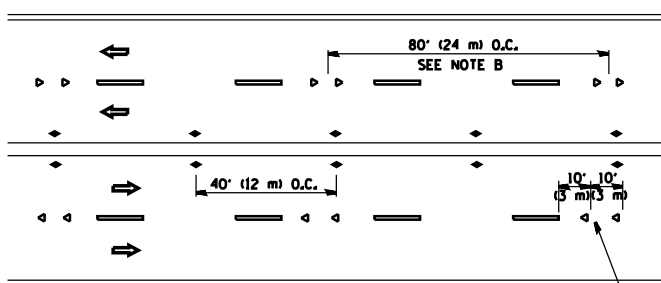
TWO-LANE/TWO-WAY



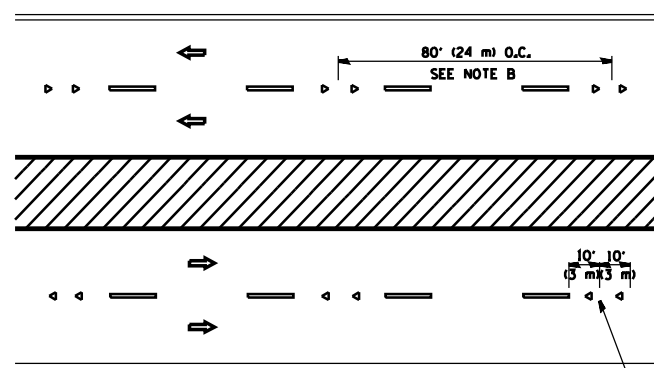
LANE REDUCTION TRANSITION



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

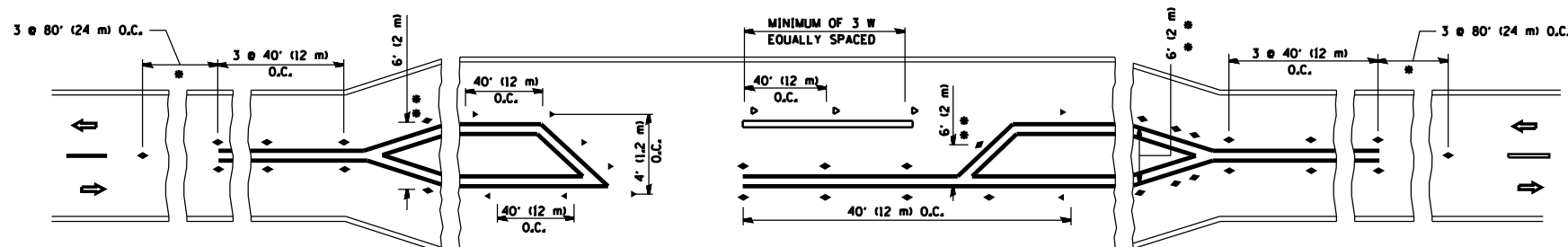
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.

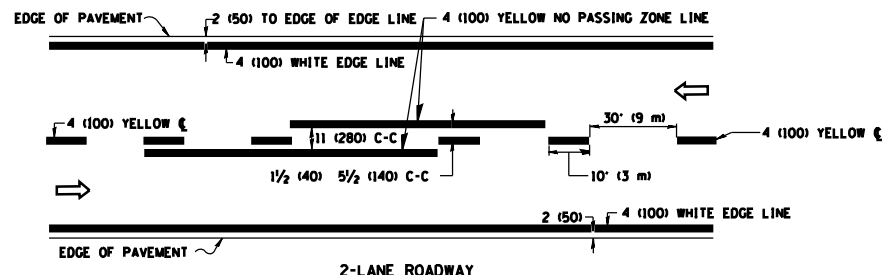


• SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 • WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

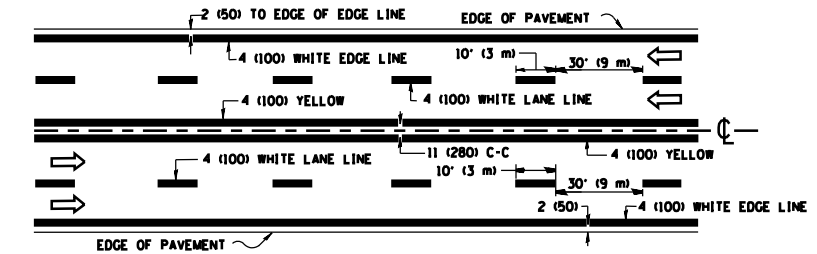
LEFT TURN

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

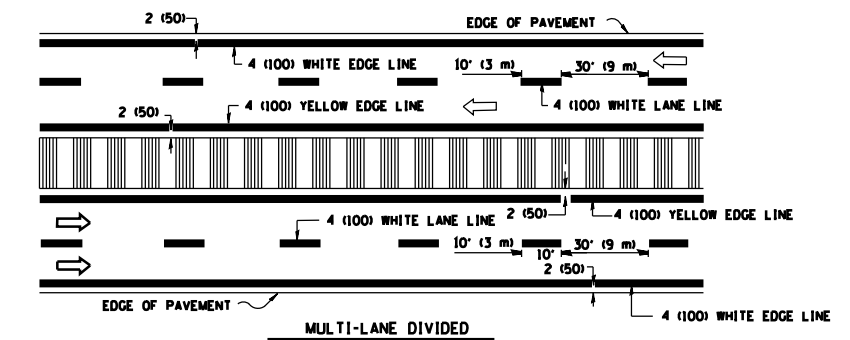
FILE NAME =	USER NAME = bauerdl	DESIGNED -	REVISED - T, RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\pwork\pwork\baueardl\d0274245\DistStd.dgn		DRAWN -	REVISED - T, RAMMACHER 03-12-99				290	2010-102-R5	COOK	23	17
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T, RAMMACHER 01-06-00		RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)		TC-11		CONTRACT NO. 60M25		
	PLOT DATE = 5/28/2014	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



2-LANE ROADWAY



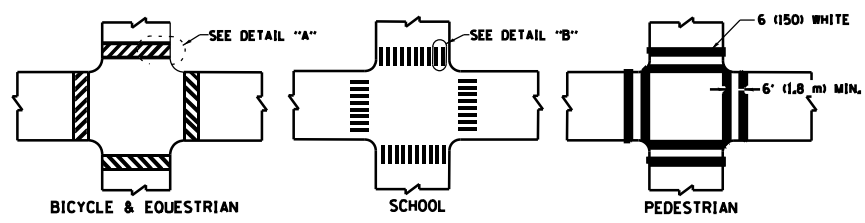
MULTI-LANE UNDIVIDED



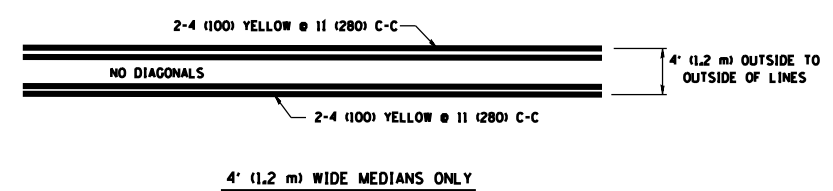
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

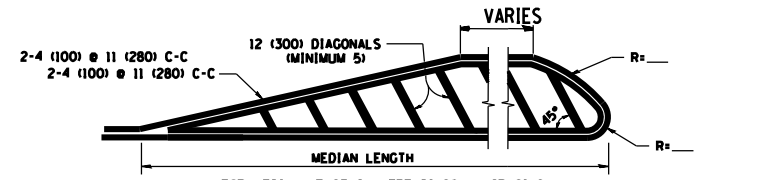
**TYPICAL LANE AND EDGE LINE MARKING**



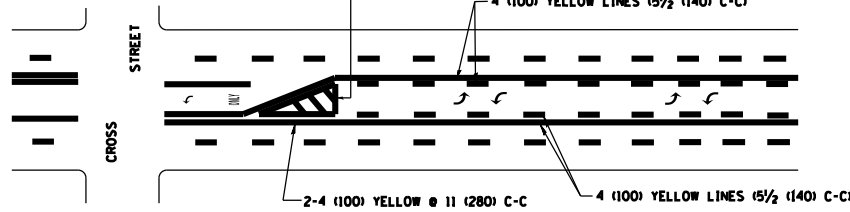
**TYPICAL CROSSWALK MARKING**



4' (1.2 m) WIDE MEDIANS ONLY

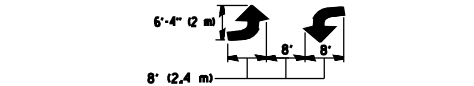


MEDIANS OVER 4' (1.2 m) WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

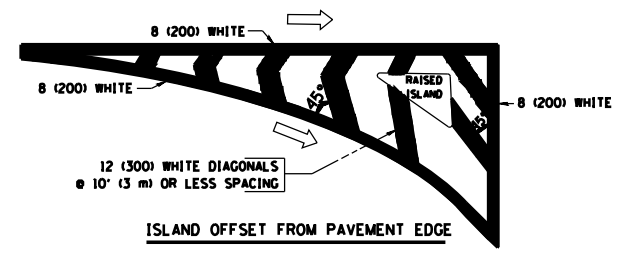
**TYPICAL PAINTED MEDIAN MARKING**



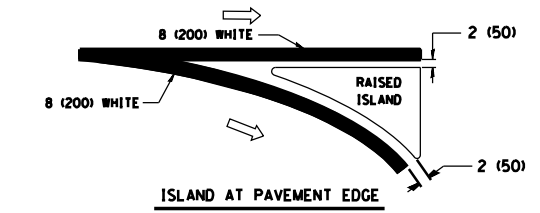
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

**TYPICAL TURN LANE MARKING**



ISLAND OFFSET FROM PAVEMENT EDGE



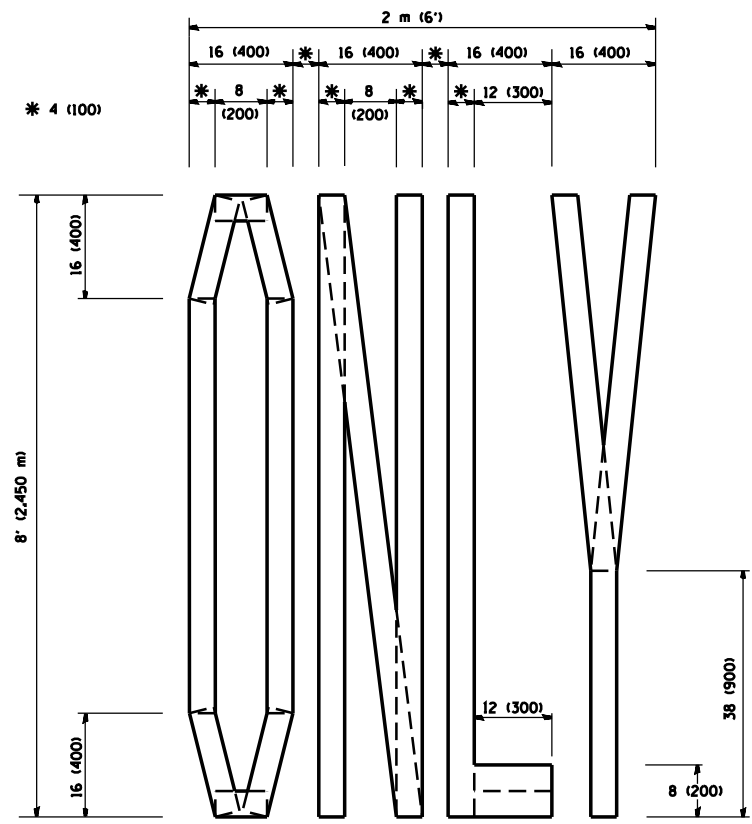
ISLAND AT PAVEMENT EDGE

**TYPICAL ISLAND MARKING**

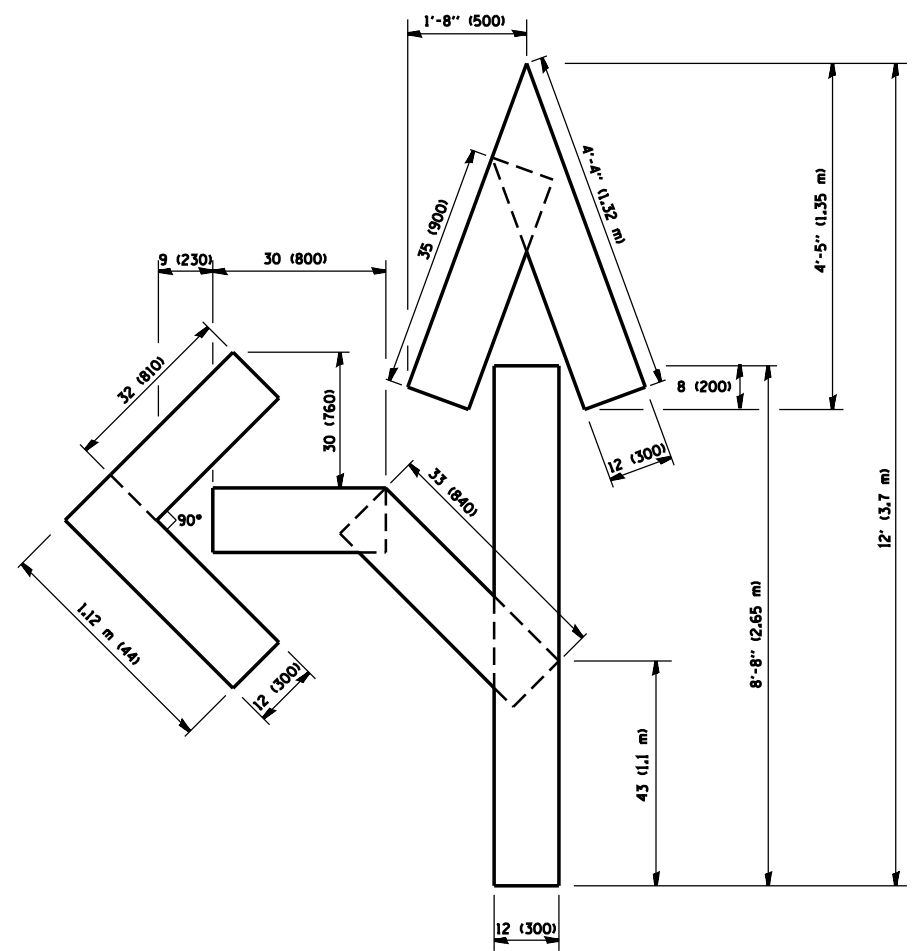
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 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" 15' (4.5 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.

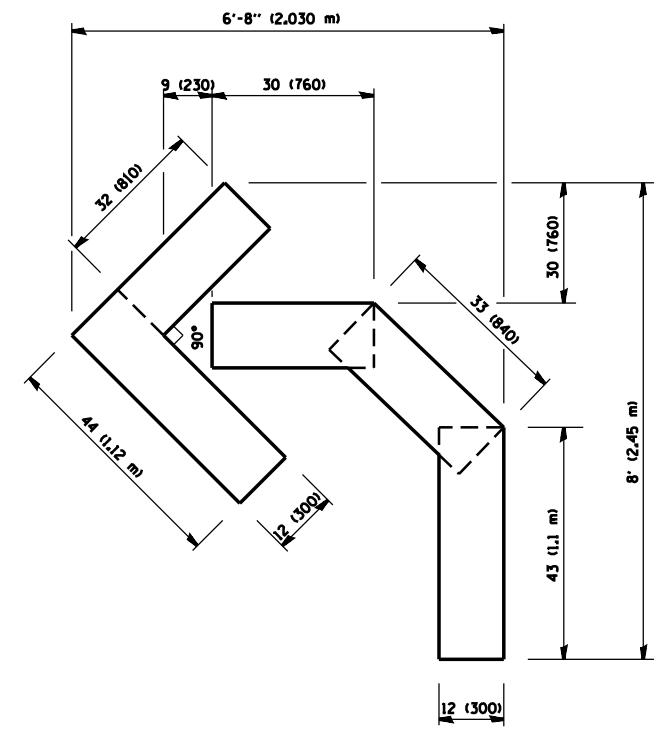
All dimensions are in inches (millimeters) unless otherwise shown.



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.

FILE NAME =	USER NAME = bauerdl	DESIGNED -	REVISED -T, RAMMACHER 06-05-96
et:\pw\work\p\dot\bauerdl\d0274245\Dist\td.dgn		DRAWN -	REVISED -T, RAMMACHER 11-04-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -T, RAMMACHER 03-02-98
	PLOT DATE = 5/28/2014	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

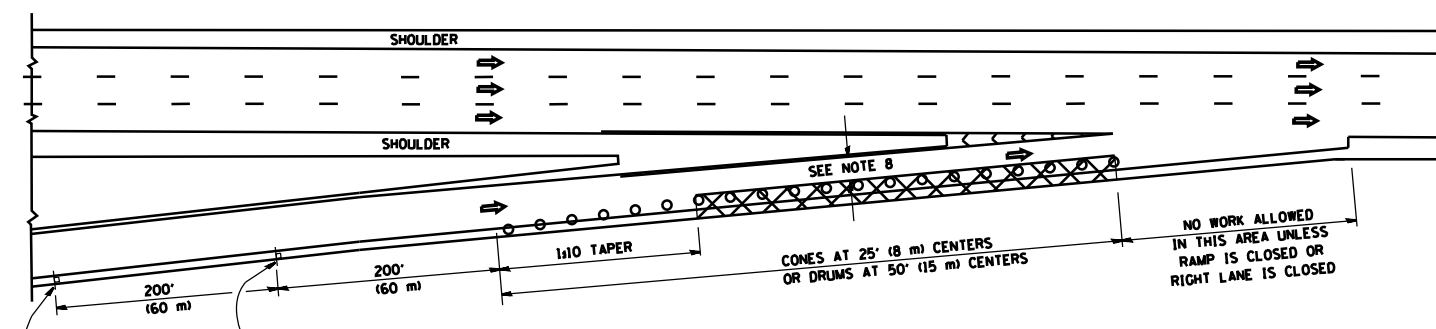
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

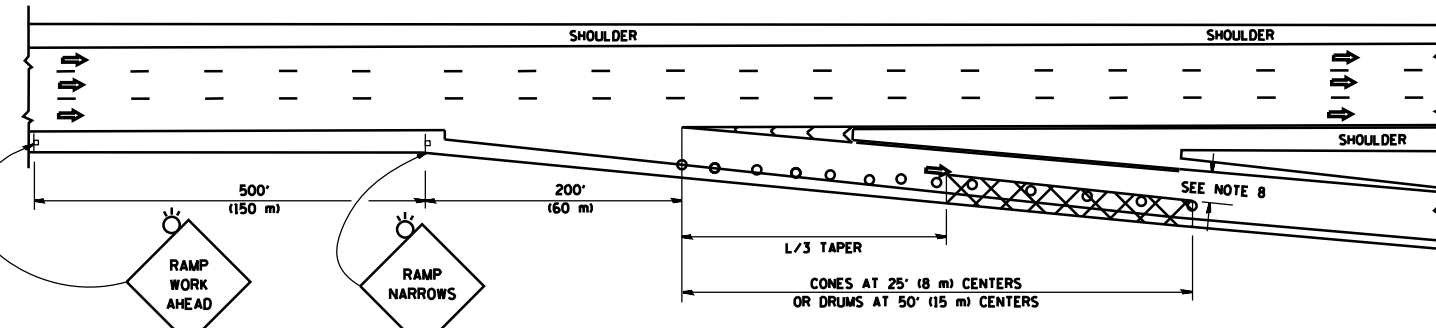
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	2010-102-R5	COOK	23	19
TC-16			CONTRACT NO. 60M25	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

**PARTIAL RAMP CLOSURE DETAILS**

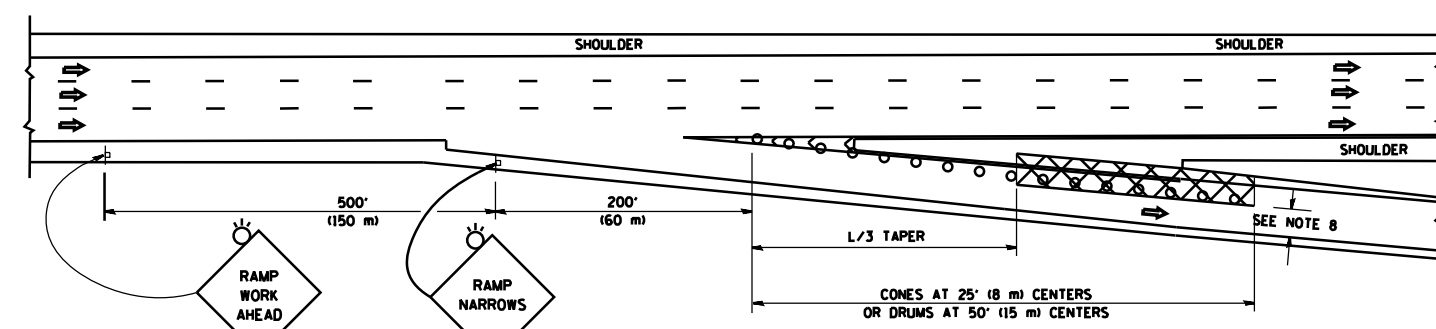
**SHOULDER CLOSURE DETAILS**



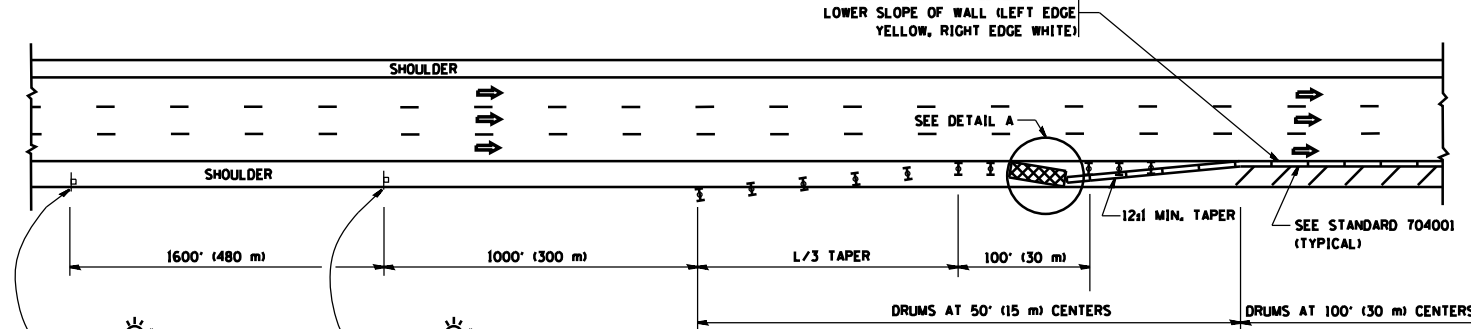
**TYPICAL ENTRANCE RAMP**



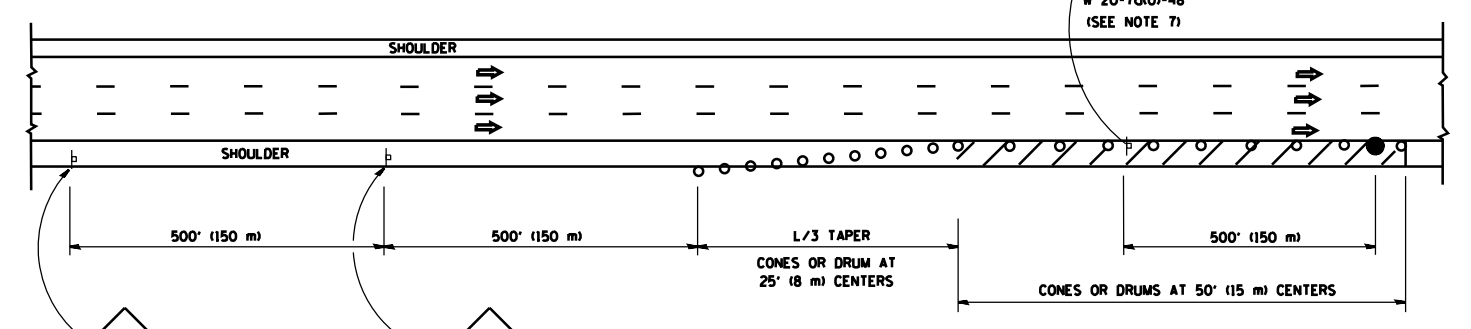
**TYPICAL EXIT RAMP**



**TYPICAL EXIT RAMP**



**PERMANENT SHOULDER CLOSURE**



**DAYTIME SHOULDER CLOSURE**

**SYMBOLS**

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

**GENERAL NOTES**

1. THE "L" DISTANCE EQUALS:
 

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC    ENGLISH
	$L = 0.65(WNS)$ $L = (WNS)$

W = WIDTH OF OFFSET IN FEET (METERS)  
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

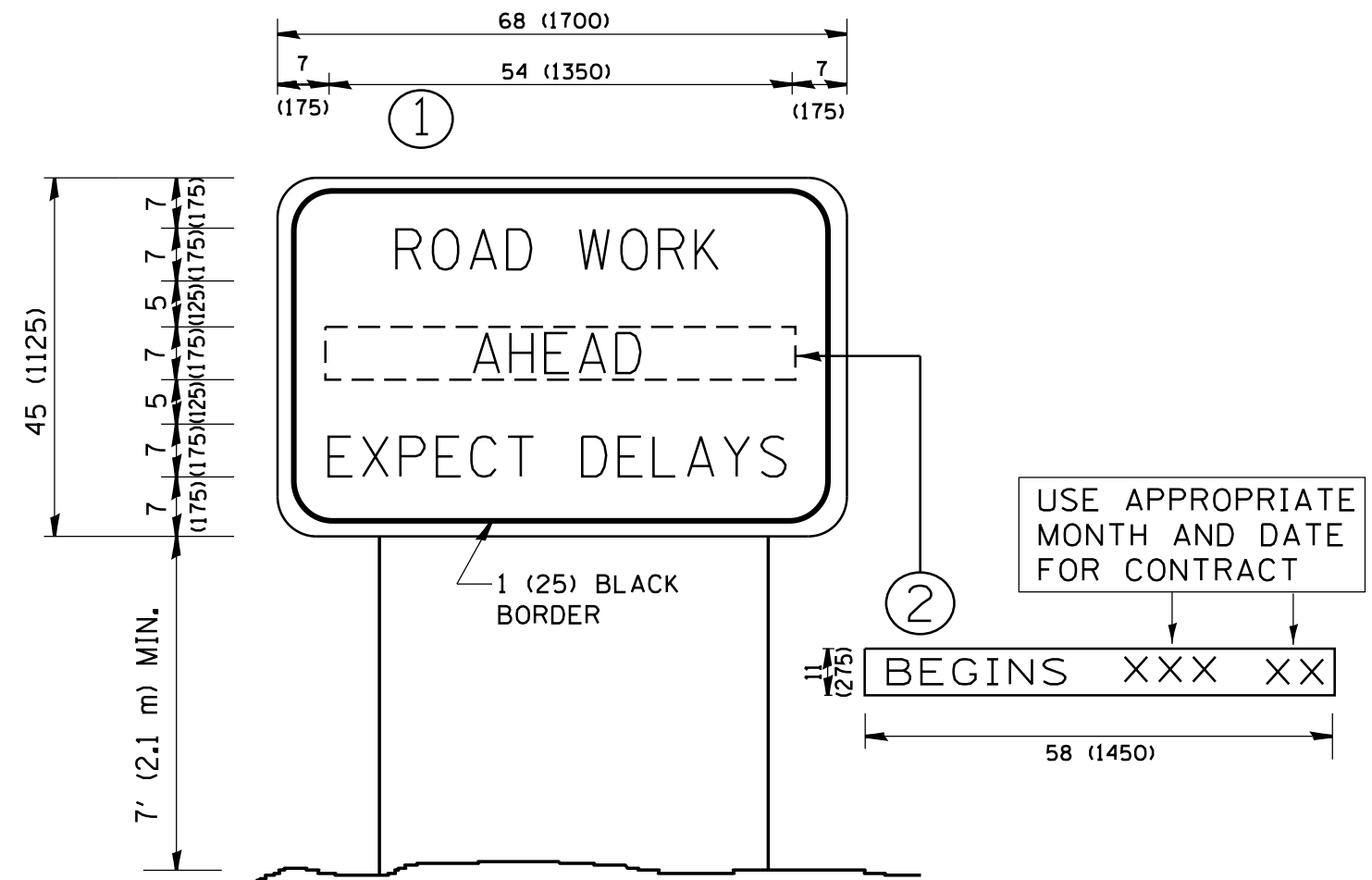
5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
  - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
  - b. THE WORK ACTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION  
16' MIN. WIDTH CURVE SECTION.

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350/MASH COMPLIANT.

**DETAIL "A"**  
IMPACT ATTENUATOR, TEMPORARY  
(SEE NOTE 5)

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

FILE NAME =	USER NAME = bauerdl	DESIGNED -	REVISED - J.A.F. 12-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw_work\p\dot\bauerdl\d0274245\DistStd.dgn		DRAWN - D.W.S.	REVISED - S.P.B. 01-07		290	2010-102-R5	COOK	23	20			
PLOT SCALE = 100.0000' / 1in.		CHECKED -	REVISED - S.P.B. 12-09		TC-17			CONTRACT NO. 60M25				
PLOT DATE = 5/28/2014		DATE - 11-96	REVISED - M.D. 06-13		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.

FILE NAME =	USER NAME = bauerdl	DESIGNED -	REVISED - R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>		F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p1dot\bauerdl\d0274245\Dist\td.dgn		DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	290	2010-102-R5	COOK	23 21
		CHECKED -	REVISED - T. RAMMACHER 02-02-99						TC-22			CONTRACT NO. 60M25
		DATE -	REVISED - C. JUCIUS 01-31-07						FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			

# TRAFFIC SIGNAL LEGEND

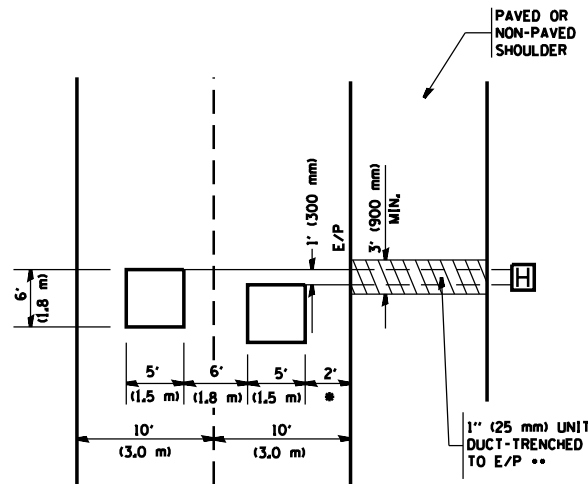
ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM				STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM				ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM				STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM				SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM				INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PERFORMED QUEUE DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PERFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PERFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT							
DETECTOR LOOP, TYPE I				RADIO REPEATER							
PERFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

## RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

**LOOPS NEXT TO SHOULDERS**

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

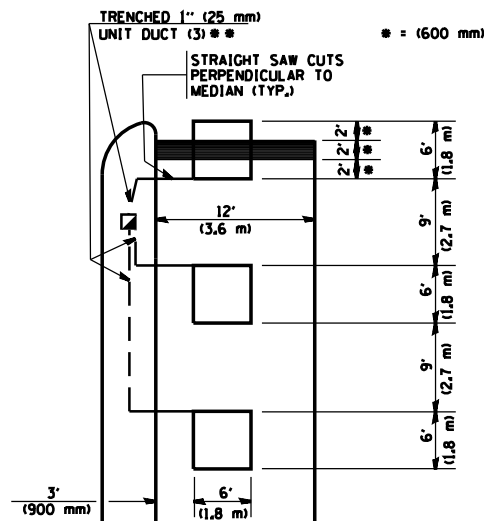


\* = (600 mm)

\*\* 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)**

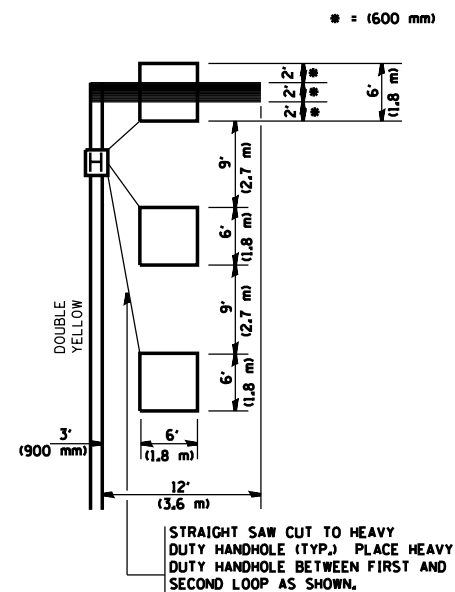
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



\*\* 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)**



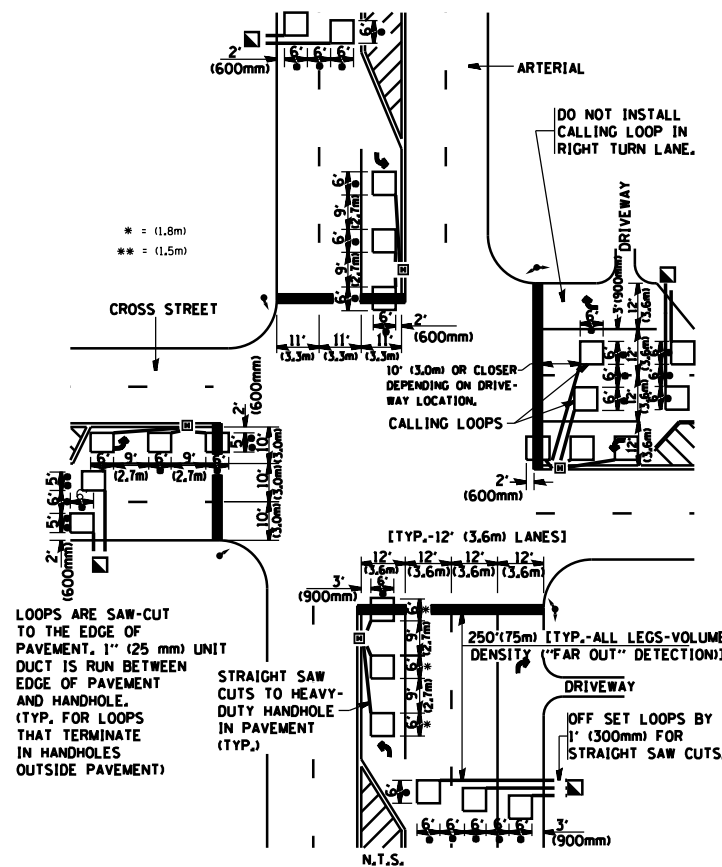
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**NOTES:**

**VEHICLES LOOP DETECTORS**

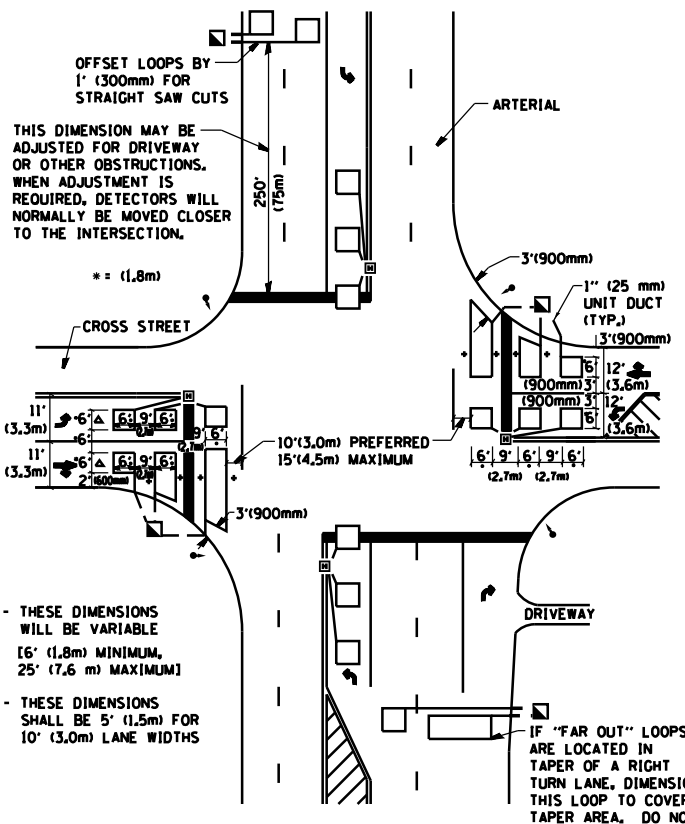
- ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE 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.

**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.**

**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.

FILE NAME =	USER NAME = bauerdl	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING</b>		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw_work\p\dot\bauerdl\d0274245\Dist1.dgn	PLOT SCALE = 100.0000' / 1"	DRAWN -	REVISED -				290	2010-102-R5	COOK	23	23
	PLOT DATE = 5/28/2014	CHECKED - R.K.F.	REVISED -				TS-07	<b>CONTRACT NO. 60M25</b>			
		DATE -	REVISED -				FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
				SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.					