### STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

PROPOSED

HIGHWAY PLANS

PROJECT LOCATED IN THE VILLAGE OF SUMMIT

**DESIGN DESIGNATION:** 

2007 ADT = 42,700

 $\circ$ 

0

 $\circ$ 

 $\circ$ 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

SPEED LIMIT: 30 M.P.H. TO 50 M.P.H.

F.A.P. RTE. 373 IL. RTE. 171 (FIRST AVENUE & ARCHER AVENUE)
SECTION: 2009–053 RS
I–55 (STEVENSON EXPRESSWAY) TO IL. RTE. 43 (HARLEM AVENUE)
RESURFACING (3P)

COOK COUNTY C-91-611-09

LYONS TOWNSHIP

PROJECT BEGINS
STA. 12 + 44

PAVING OMISSION
STA. 16 + 91 TO
STA. 20 + 41

PAVING OMISSION STA. 24 + 46 TO STA. 32 + 65

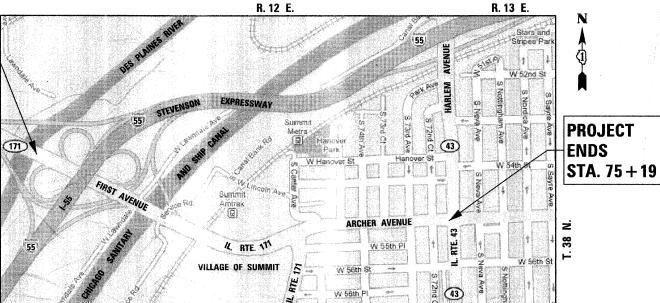
PAVING OMISSION STA. 36 + 20 TO STA. 38 + 68

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 LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123

DISTRICT ONE - PLAN PREP ENGINEER: KEN ENG (847) 705-4247

**CONTRACT NO. 60H41** 



GROSS LENGTH OF PROJECT = 6,275 FEET = 1.188 MILES

NET LENGTH OF PROJECT = 4,858 FEET = 0.920 MILES

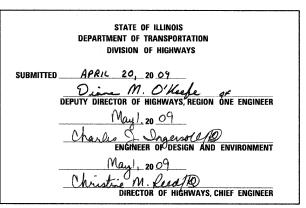
D-91-611-09

2009-053 RS

СООК

FED. ROAD DIST. NO. 1 ILLINOIS CONTRACT NO. 60H41







Birinder S. Sachdera BIRINDER S. SACHDEVA, P.E.

April 20,2009



CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS - PLANNERS - SURVEYORS
211 W. WACKER DRIVE CHICAGO, IL. 60606
TELEPHONE: 312-372-2023

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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### LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201-03	CLASS C AND D PATCHES
604001-03	FRAME AND LIDS, TYPE 1
606001- <i>04</i>	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701456	PARTIAL EXIT RAMP CLOSURE FREEWAY/ EXPRESSWAY
701601-00	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901 - <i>01</i>	TRAFFIC CONTROL DEVICES
780001- OZ	TYPICAL PAVEMENT MARKINGS

### GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF SUMMIT.
- 4. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS
  IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- 7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40mm) WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 10. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- 11. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS ON ALL FINAL SURFACES. THE COST OF THE PAVEMENT MARKING TAPE TYPE III SHALL BE INCLUDED IN THE COST OF SHORT TERM PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS.
- 12. THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES. AT LEAST 72 HOURS PRIOR TO PLACING ANY TRAFFIC CONTROL ON THE RAMPS THE CONTRACTOR SHALL CALL 847-705-4151
- 13. THE CONTRACTOR SHALL CONTACT MR. WALTER CZARNY, THE AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 14. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS.
- 16. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 17. PAY ITEM 55039700 STORM SEWERS TO BE CLEANED SHALL ONLY BE UTILIZED TO CLEAN STORM SEWER LATERAL PIPES BETWEEN INLETS OR CATCH BASINS AND THE MAIN SEWER.

FILE NAME = D160H41-sht-gennote.dgn

CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: 1312372-2023 FAX( 3712372-527

IC.	DESIGNED	-	G.F.L.	REVISED	ws.
5	DRAWN	-	A.C.S.	REVISED	-
	CHECKED	-	M.P.	REVISED	-
274	DATE	-	APRIL 20, 2009	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL. RTE. 171 (I-55 TO IL. RTE. 43)	373	2009-053 RS	соок	20	2
			CONTRACT	NO. 6	OH41
CALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 12+44 TO STA. 75+19	FED. R	DAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT		

CODE NO  40600200  40600300  40600400  40600895  40600982	•			
40600300 40600400 40600895	ITEM	UNIT	TOTAL QUANTITIES	IOOO URBAN
40600400 40600895	BITUMINOUS MATERIALS (PRIME COAT)	TON	33	33
40600895	AGGREGATE (PRIME COAT)	TON	151	151
	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	20	20
40600982	CONSTRUCTING TEST STRIP	EACH	2	2
	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	685	685
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	399	399
40603595	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90	TON	3,710	3,710
42001300	PROTECTIVE COAT	SQ YD	723	723
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	500	500
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	37,854	37,854
44000600	SIDEWALK REMOVAL	SQ FT	500	500
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2,000	2,000
44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	130	130
44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	830	830
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	830	830
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	276	276
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	2,376	2,376
55039700	STORM SEWERS TO BE CLEANED	FOOT	1,222	1,222
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	1
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	1	1
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	24	24
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	1	1
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	1	1
60404300	FRAMES AND LIDS, TYPE 3	EACH	1	1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6

	SUMMARY OF QUANTITIES		URBAN 1004.STATE	CONSTRUCTION TYPE CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	IOOO URBAN
67100100	MOBILIZATION .	L SUM	1	1
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	11,920	11,920
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	504	504
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	19,500	19,500
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	2,108	2,108
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1,138	1,138
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	329	329
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	110	110
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	504	504
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	19,500	19,500
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,108	2,108
78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	2,938	2,938
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1,138	1,138
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	329	329
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	380	380
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	380	380
88600600	DETECTOR LOOP REPLACEMENT	FOOT	2,005	2,005
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52
X0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	sa yà	200	200
X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1,590	1,590
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	47	47
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE ,	L SUM	1	1

\* SPECIALTY ITEM

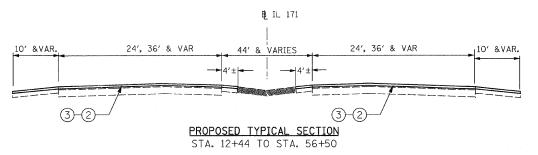
FILE NAME = D160H41-sht-S00.dgn PLOT DATE = 4/21/2009 CHRISTIAN-ROGE & ASSOCIATES, INC.
ENGINEERS-PLANNERS-SURVEYORS
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60666
PHONE: (312)372-2023 FAX: (312)372-5274

S, INC.	DESIGNED	-	G.F.L.	REVISED -
YORS	DRAWN	-	A.C.S.	REVISED -
•	CHECKED	-	M.P.	REVISED -
72-5274	DATE	-	APRIL 20, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

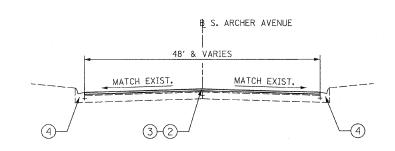
	SUMMARY OF QUANTITIES IL. RTE. 171 (I–55 TO IL. RTE. 43)	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. 12+44	TO STA. 75+19

# # IL 171 10' &VAR. 24', 36' & VAR 44' & VARIES 24', 36' & VAR 10' &VAR. 10' &VAR. 10'



# B. S. ARCHER AVENUE 48' & VARIES C. E. B. E. C.

EXISTING TYPICAL SECTION STA. 56+50 TO STA. 75+19



PROPOSED TYPICAL SECTION STA. 56+50 TO STA. 75+19

### EXISTING CONDITIONS:

- A HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3"± & VARIES
- B P.C.C. BASE COURSE, 9"± & VARIES
- C COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- D GRASS MEDIAN
- E TIE-BARS
- F HMA SHOULDERS

### PROPOSED IMPROVEMENTS:

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"
- 2 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 13/4"
- $\bigcirc$  POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50,  $\cancel{3}\!\!4''$
- (AS DETERMINED BY THE ENGINEER)

:

THE CONTRACTOR SHALL MILL FIRST BEFORE PATCHING.

	HOT-MIX ASPHALT MIXTURE REQUIREMENTS										
ROADWAY NAME	MIXTURE TYPE	AC TYPE	AIR VOIDS								
	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 (IL 9.5 mm)	SBS/SBR PG 70-22	4% ⊚ 90 GYR.								
IL RTE. 171	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% @ 50 GYR.								
IL KIE. III	CLASS D PATCHES (HMA BINDER IL-19 mm)	₩ PG 64-22	4% @ 70 GYR.								
	HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	* PG 64-22	4% @ 70 GYR.								
	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N5O HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm)	* PG 64-22 PG 64-22/58-22	4% @ 50 GYR. 4% @ 50 GYR.								

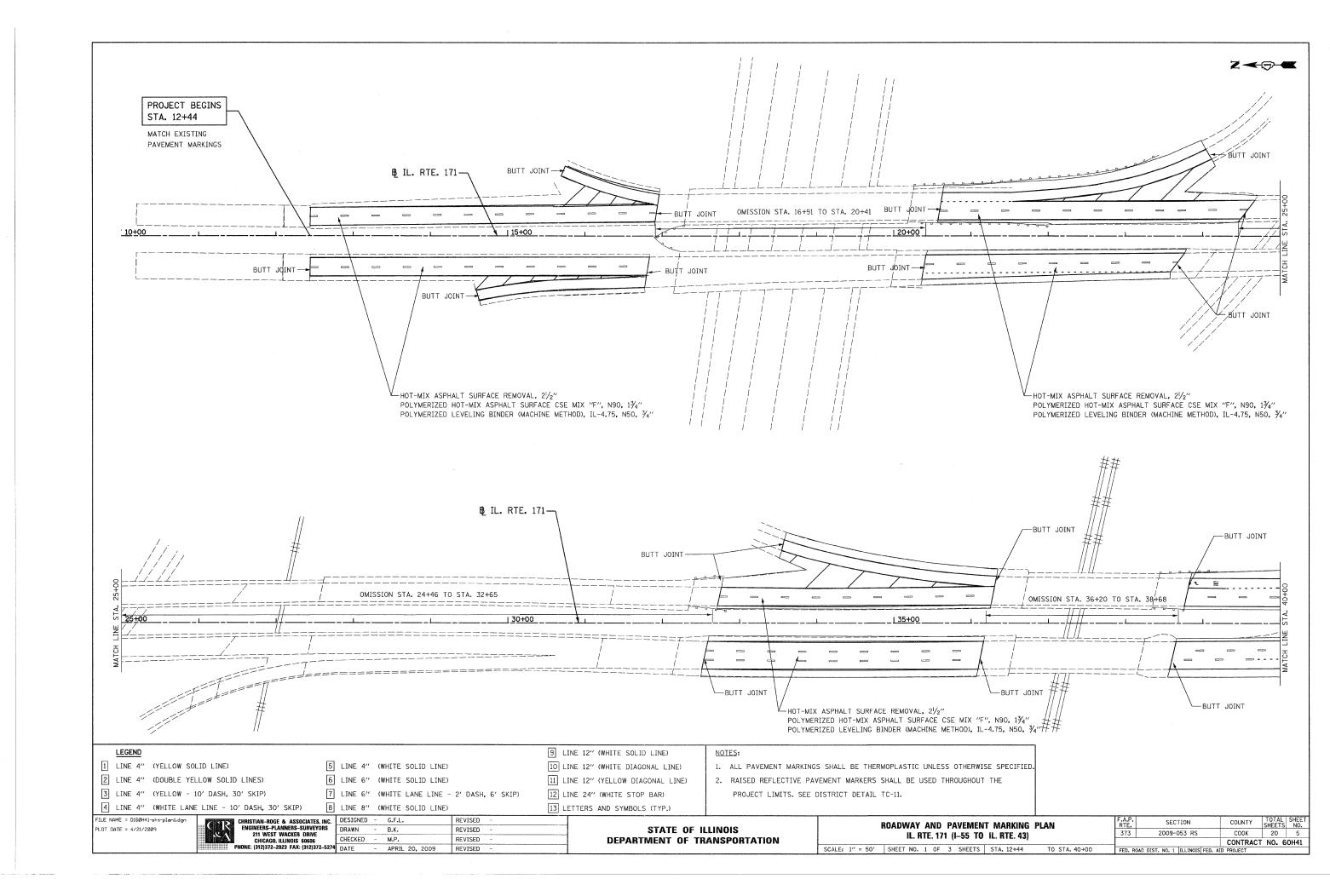
THE UNIT WEIGHT USED TO CALCULATE ALL HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN. # WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

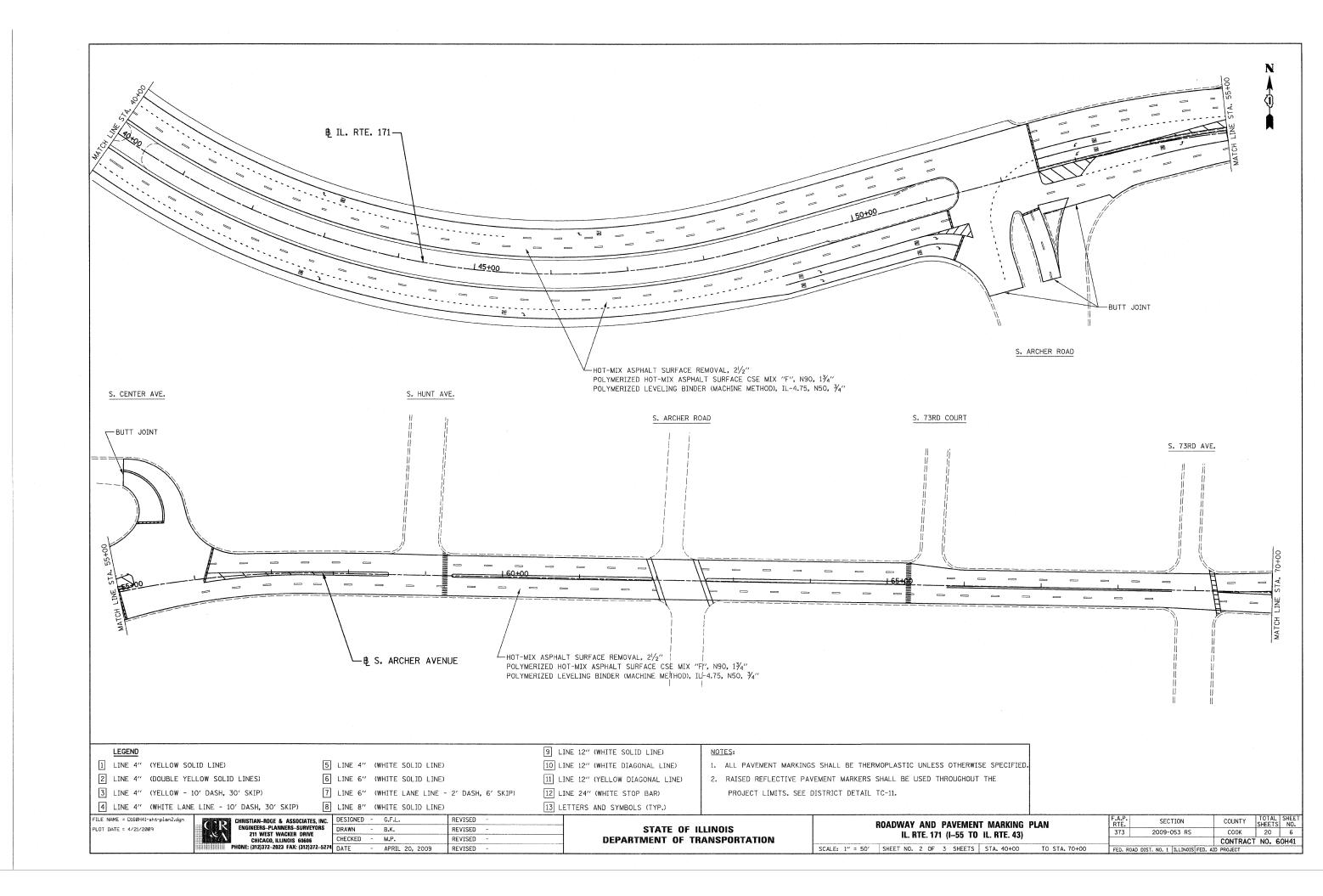
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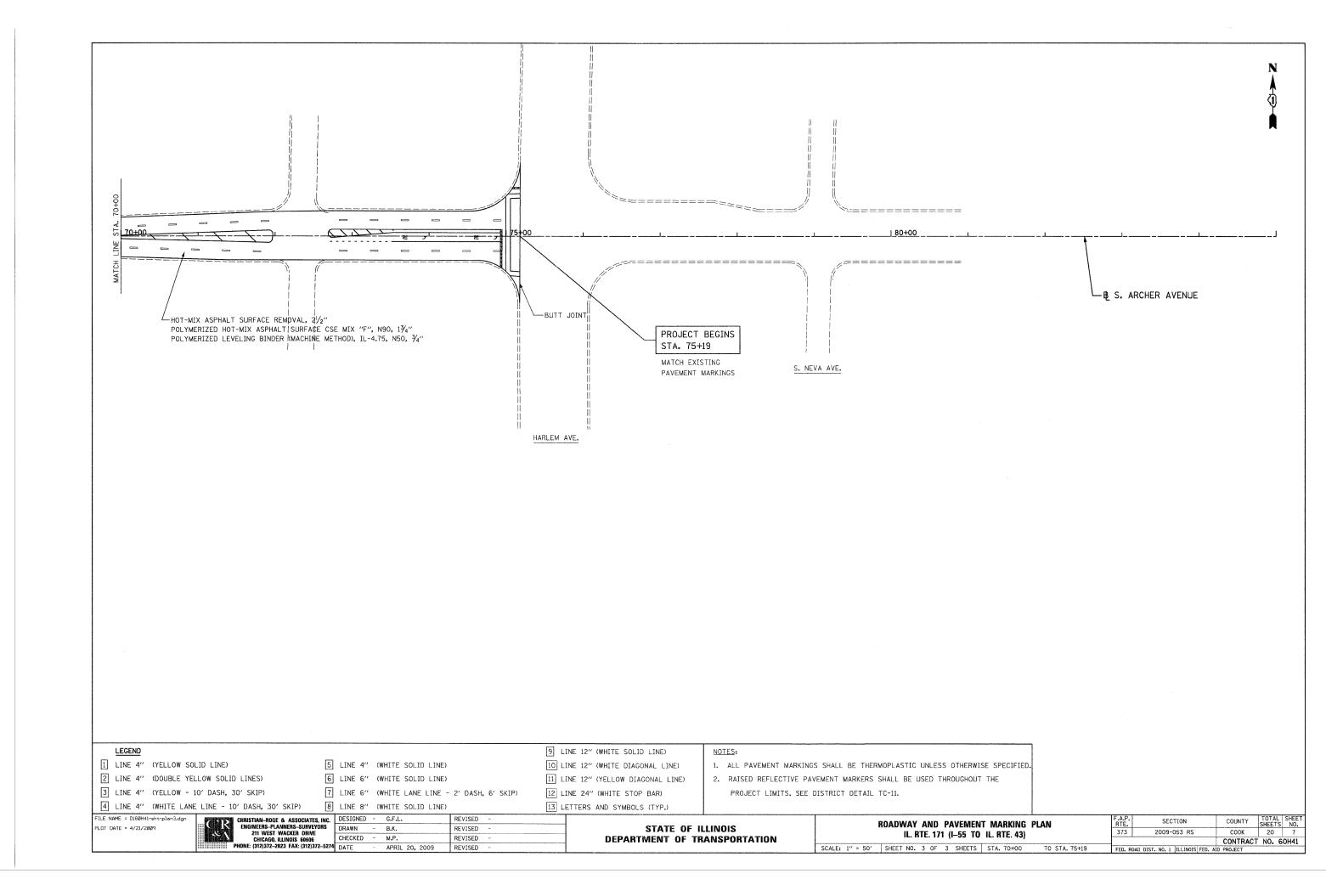
CHRISTIAN-ROGE & ASSOCIATES, INC.	DESIGNED	-	G.F.L.	REVISED	=
ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE	DRAWN	-	B.K.	REVISED	-
CHICAGO, ILLINOIS 60606	CHECKED	-	M.P.	REVISED	-
PHONE: (312)372–2023 FAX: (312)372–5274	DATE	-	APRIL 20, 2009	REVISED	-

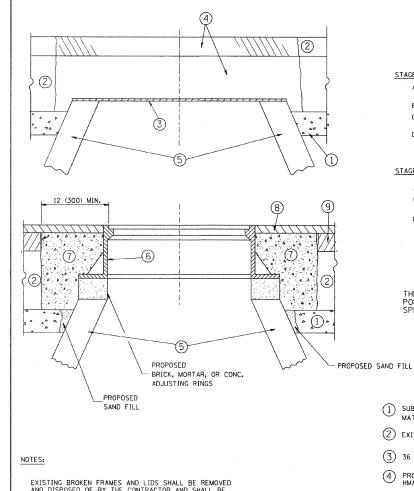
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS	F.A.P. RTE.	SECTION	COUNTY TOTAL SHEETS		SHEET NO.
IL. RTE. 171 (I-55 TO IL. RTE. 43)	373	2009-053 RS	COOK	20	4
			CONTRACT	NO. 6	OH41
SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. 12+44 TO STA. 75+19	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		









EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109,04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

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

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

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

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

### CONSTRUCTION PROCEDURES

### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40)
  THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

### STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE LEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

### LEGEN

- 1 SUB-BASE GRANULAR MATERIAL
- 2 EXISTING PAVEMENT
- (3) 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 5 EXISTING STRUCTURE
- 6 FRAME AND LID (SEE NOTES)
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 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"

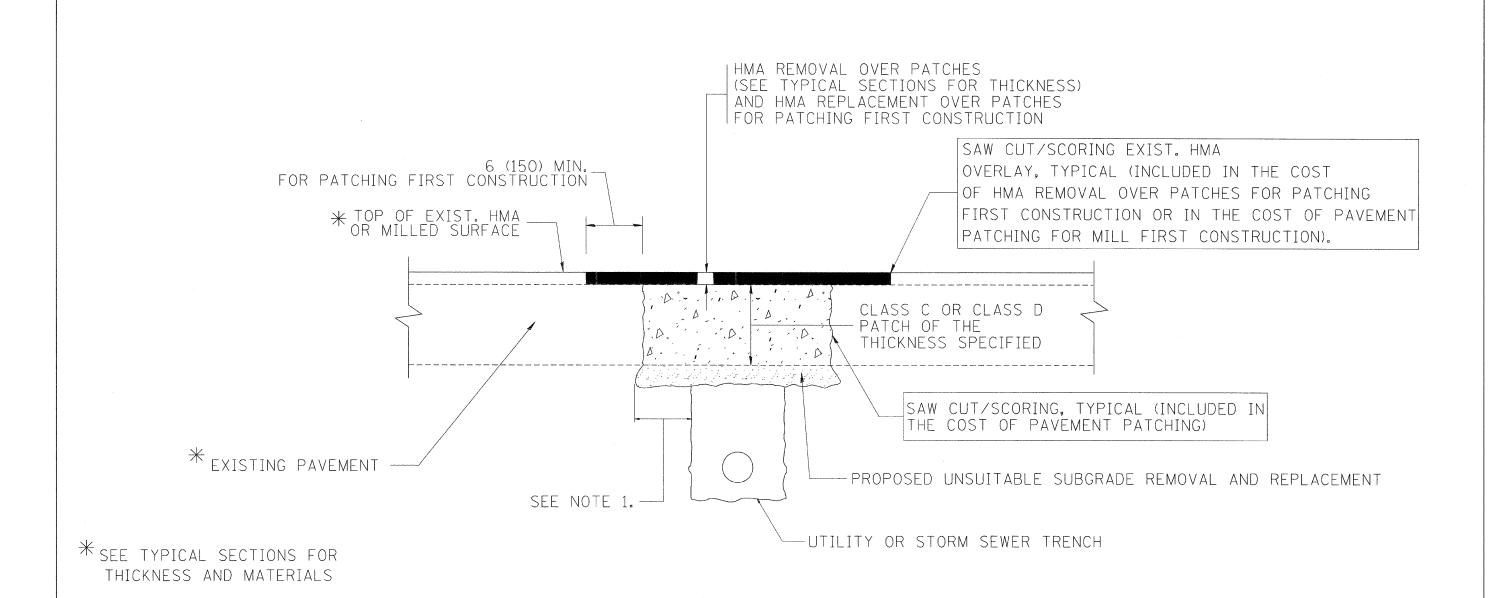
NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| FAMES AND | SHEET NO. 1 | OF 1 SHEETS | STALL STALL



### NOTES:

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

### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

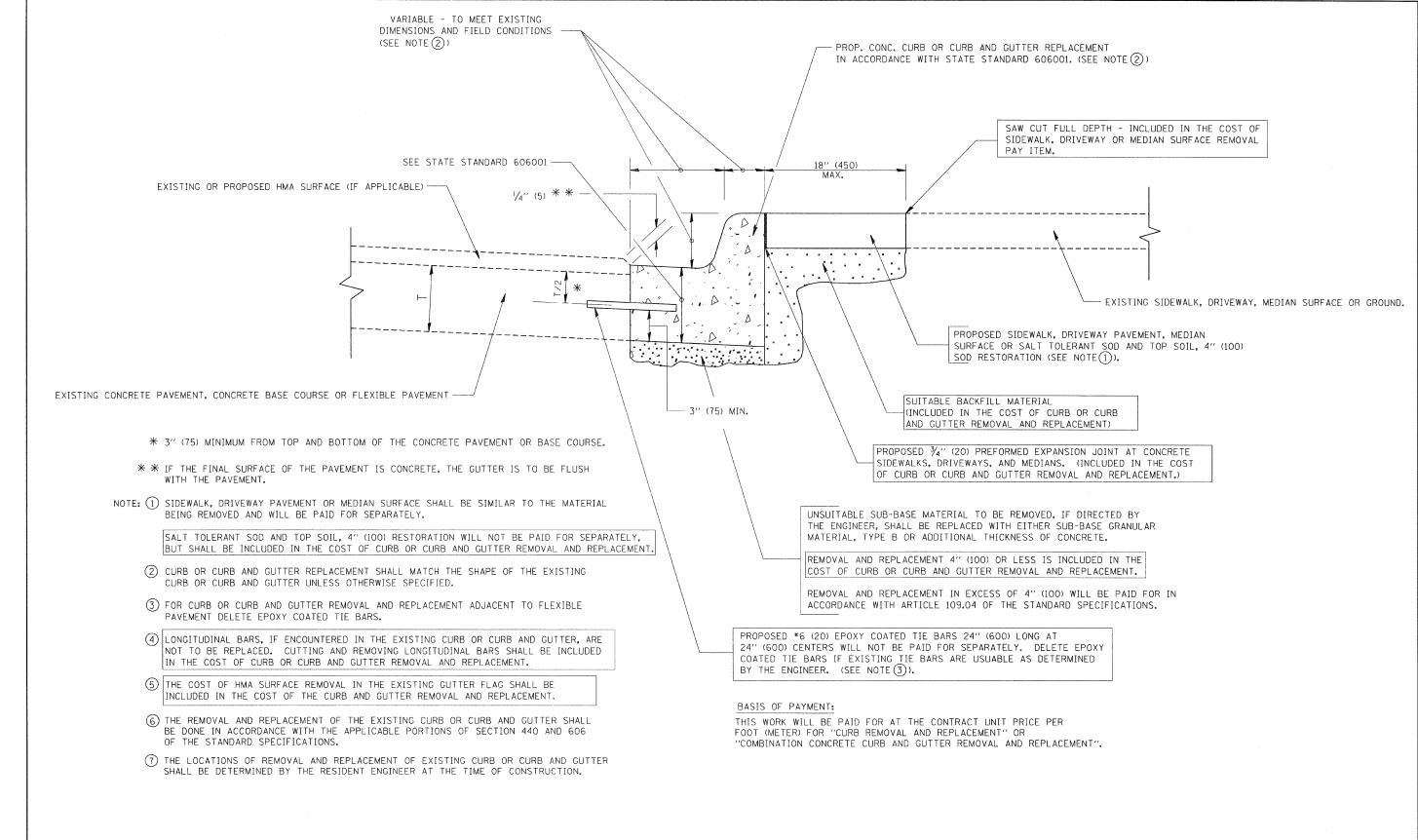
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

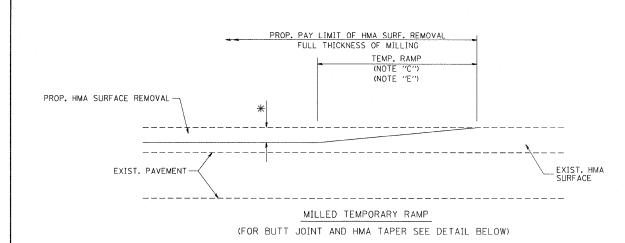
FILE NAME =		USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY SHEET SHEET
ci/projects/dist	tstd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS	HMA SURFACED PAVEMENT	373 2009-053 RS	COOK 20 9
•		PLOT SCALE = 50,000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	MMA SUKFALED PAVENIENI	BD400-04 (BD-22)	CONTRACT NO. 60H41
		PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT



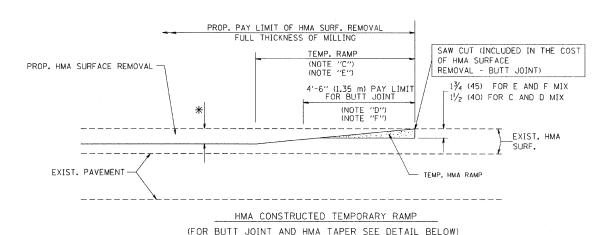
## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	FAP. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		373 2009-053 RS	COOK 20 10
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD24) C	ONTRACT NO. 60H41
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID P	ROJECT

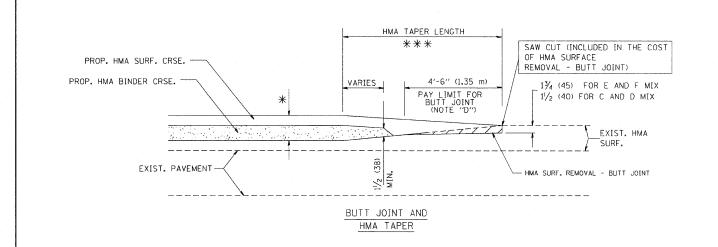


### OPTION 1



### OPTION 2

### TYPICAL TEMPORARY RAMP

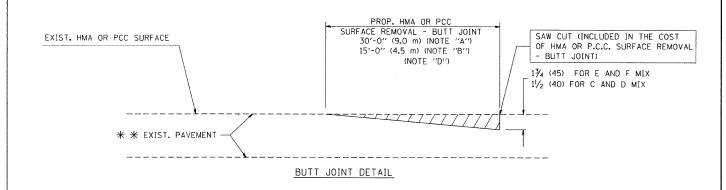


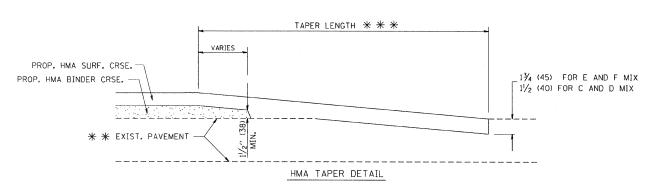
# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = USER NAME = gaglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94
Widdistatd\22x34\bd32.dgn

| DRAWN - REVISED - A. ABBAS 03-21-97
| PLOT SCALE = 56.0000 '/ IN. CHECKED - REVISED - N. GOMEZ 04-06-01
| PLOT DATE = 1/4/2008 DATE - 06-13-90 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

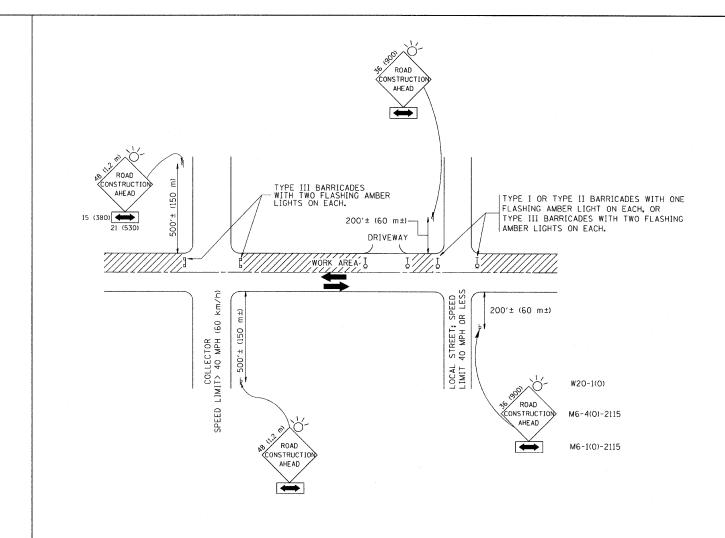
### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- 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.
- \*\*  $\frac{10'-0''}{3.0}$  (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.



### 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;
- O] 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:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 48  $\times$  48 (1.2 m  $\times$  1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500° (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
  BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
  OF THE CLOSED PORTION.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

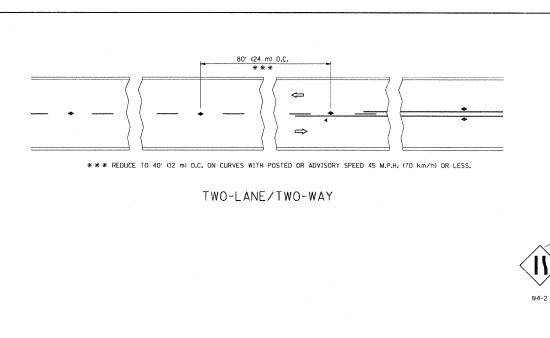
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY LINLESS 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.

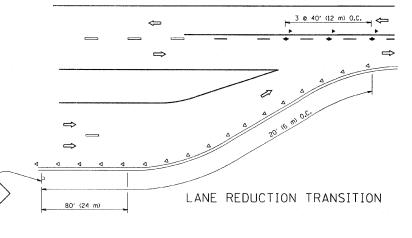
All dimensions are in millimeters (inches) unless otherwise shown.

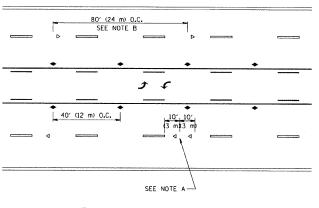
FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\diststd\22x34\tcl0.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATI	E OF	ILLINOIS
DEPARTMENT	0F	TRANSPORTATION

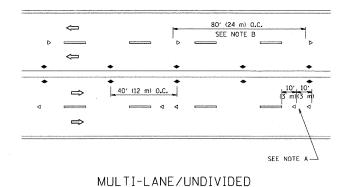
_	TRAFFIC CONTROL AND PROTECTION FOR	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
	SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	373	2009-053 RS	COOK	20	12
		TC-10 CONTRACT NO. 60H				H41
	SCALE: NONE   SHEET NO. 1 OF 1 SHEETS   STA. TO STA.	FED. R	OAD DIST, NO. 1   ILLINOIS FED. AL	D PROJECT		

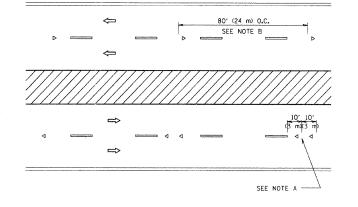






TWO-WAY LEFT TURN





MULTI-LANE/DIVIDED

### GENERAL NOTES

- 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.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

### LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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

### DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.

SYMBOLS

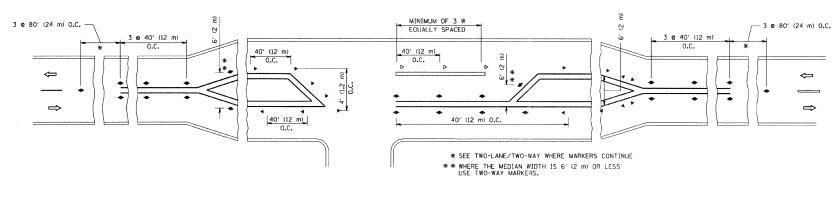
ONE-WAY AMBER MARKER

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

---- YELLOW STRIPE

- WHITE STRIPE

- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

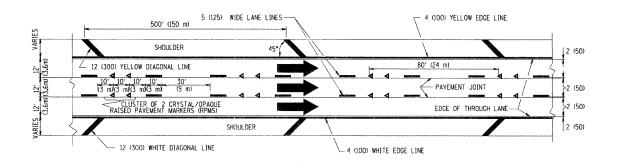
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED	- T. RAMMACHER 09-19-94			TYPICAL APPLICATIONS	E.A.P.	SECTION	COUNTY	OTAL SHEET
W:\diststd\22x34\tallidgn		DRAWN -	REVISED	-T. RAMMACHER 03-12-99	STATE OF ILLINOIS			RIE.	2009-053 RS	COOK	20 13
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED	-T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED	REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	0.0	TC_11		NO 60H41
	PLOT DATE = 1/4/2008	DATE -	REVISED			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED.	ROAD DIST. NO. 1   ILLINOIS FED.	AID PROJECT	101 001141

THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS

THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH

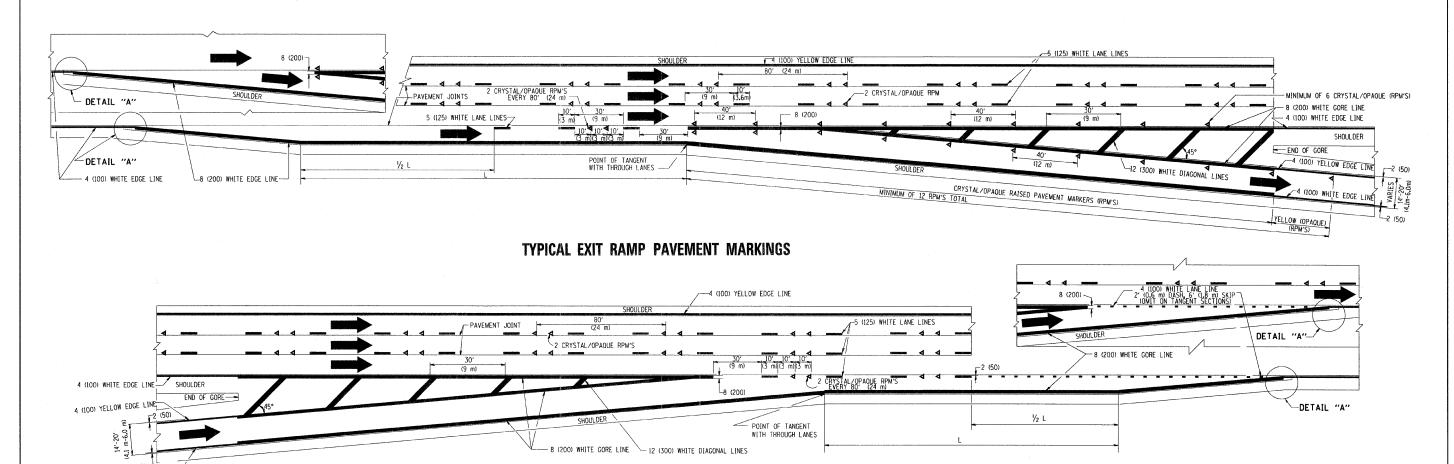
4 (100) WHITE EDGE LINE



### TYPICAL EDGE LINES & LANE LINES

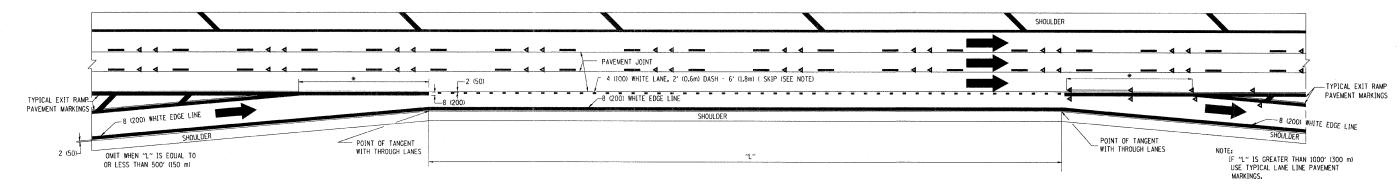
- NOTES:
  1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
- 2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
- 3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC



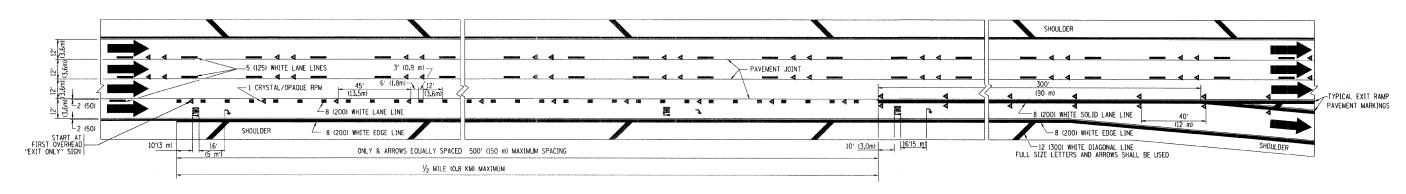


### TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

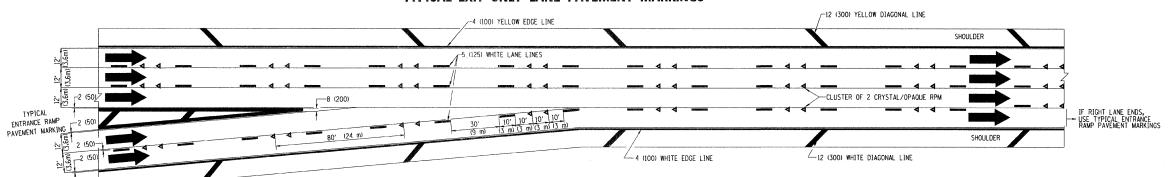
FILE NAME =	USER NAME = gaglianobt	DESIGNED - D.W.S.	REVISED - A.H. 03-96	OTATE OF HARMON	MULTI-LANE FREEWAY	FA	A.P. SECTION	COUNTY TOTA	AL SHEET
W:\distatd\22x34\tc12.dgn	***************************************	DRAWN -	REVISED - D.W.S. 07-96	STATE OF ILLINOIS	PAVEMENT MARKING DETAILS	37	73 2009-053 RS	COOK 20	14
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - J.A.F. 02-06	DEPARTMENT OF TRANSPORTATION	PAYEWENI WARRING DETAILS		TC-12	CONTRACT NO.	60H41
	PLOT DATE = 1/4/2008	DATE - 01-90	REVISED - S.P.B. 01-07		SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO ST	A. FEI		. AID PROJECT	



### TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS

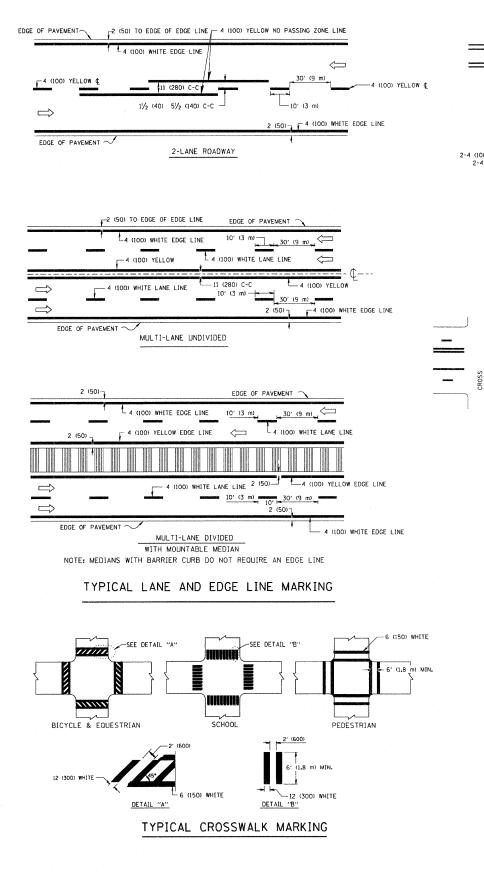


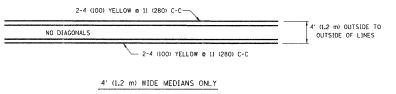
### TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS

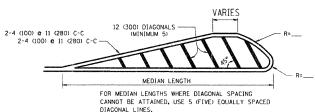


### TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

FILE NAME =	USER NAME = gaglianobt	DESIGNED - D.W.S.	REVISED - A.H. 03-96	STATE OF HUMBIG	MULTI-LANE FREEWAY	F.A.P. SECTION	COUNTY TOTAL SHEET SHEETS NO.
W:\diststd\22x34\tcl2.dgn	PLOT SCALE = 50.000 '/ IN.	DRAWN - CHECKED -	REVISED - D.W.S. 07-96  REVISED - J.A.F. 02-06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING DETAILS  373 2009-053 RS COOK  TC-12 CONTRA		COOK 20 15
	PLOT DATE = 1/4/2008	DATE - 01-90	REVISED - S.P.B. 01-07		SCALE: NONE SHEET NO. 2 OF 2 SHEETS STA. TO STA.		. AID PROJECT







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))

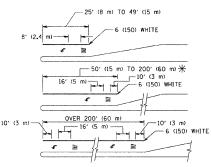
# MEDIANS OVER 4' (1.2 m) WIDE 4 (100) YELLOW 4 (100) YELLOW LINES (5½ (140) C-C) 2-4 (100) YELLOW 6 11 (280) C-C 4 (100) YELLOW LINES (5½ (140) C-C)

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



MEDIAN WITH TWO-WAY LEFT TURN LANE

### TYPICAL PAINTED MEDIAN MARKING

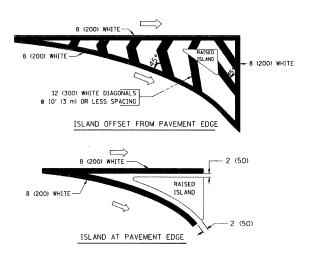


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> )  $\P$  AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

★ 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



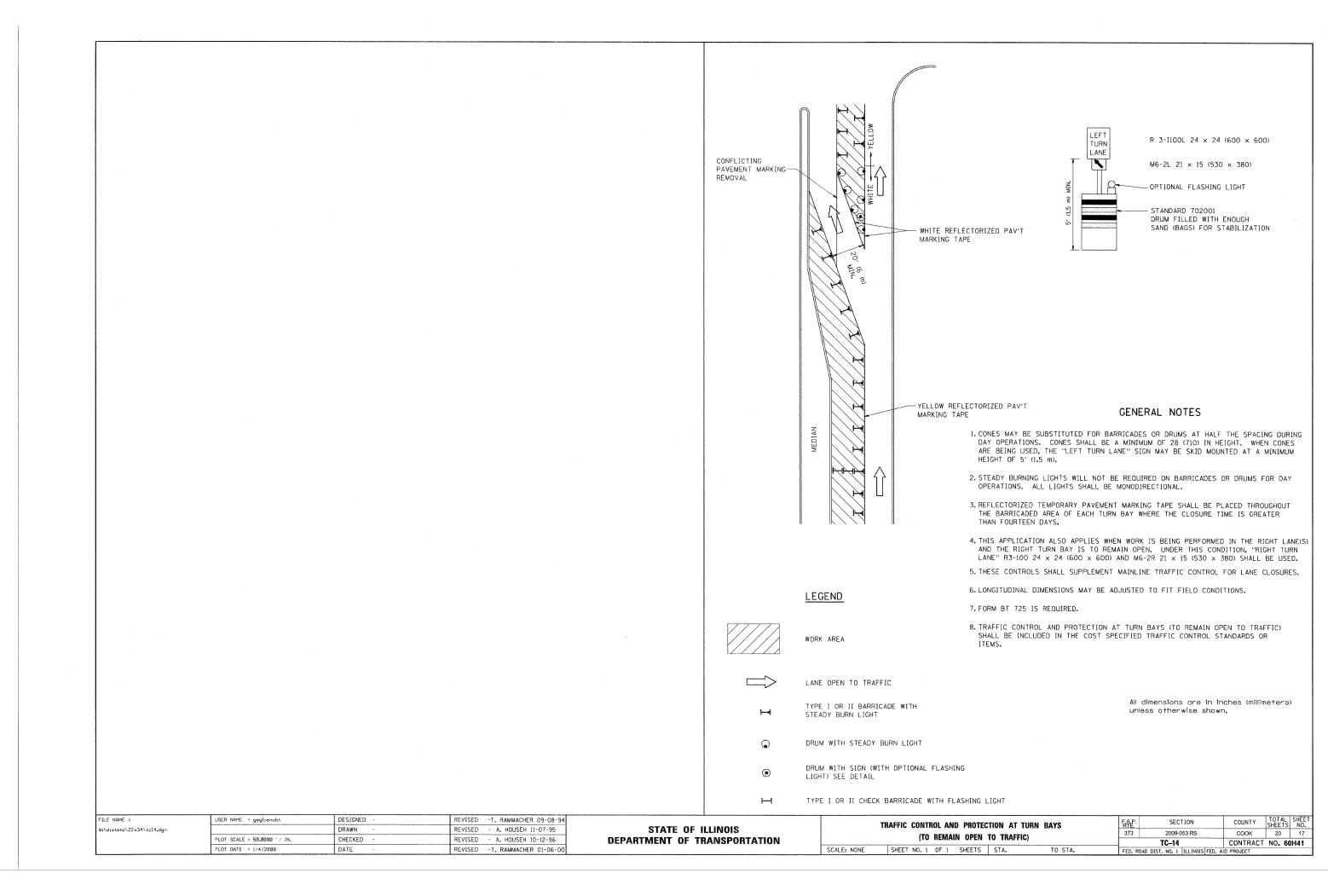
### TYPICAL ISLAND MARKING

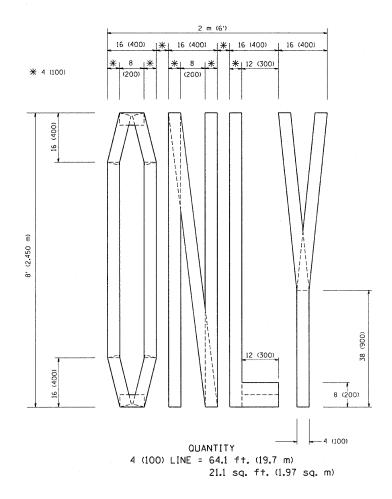
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	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	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 g 4 (100) WITH 12 (300) DIAGONALS 0 45°	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	
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 (UVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 ml LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>©</b> 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) T0 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

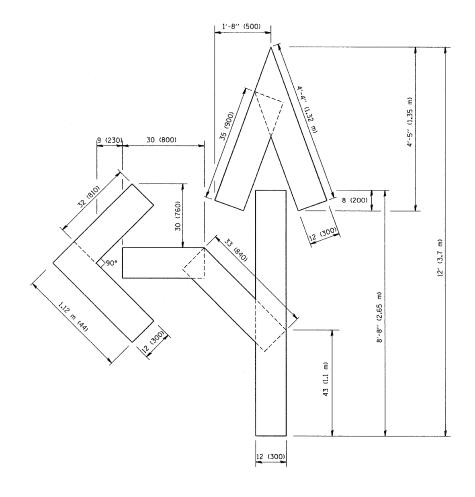
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

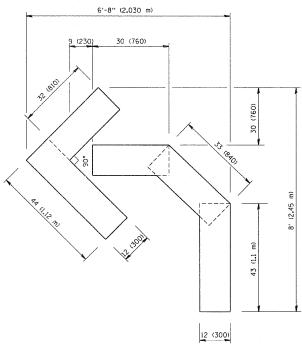
FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE	FAP. SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\tcl3.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96	STATE OF ILLINOIS  TYPICAL PAYEMENT MARKINGS		373 2009-053 RS	COOK 20 16
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96	DEPARTMENT OF TRANSPORTATION		TC-13	CONTRACT NO. 60H41
1	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED.	AID PROJECT







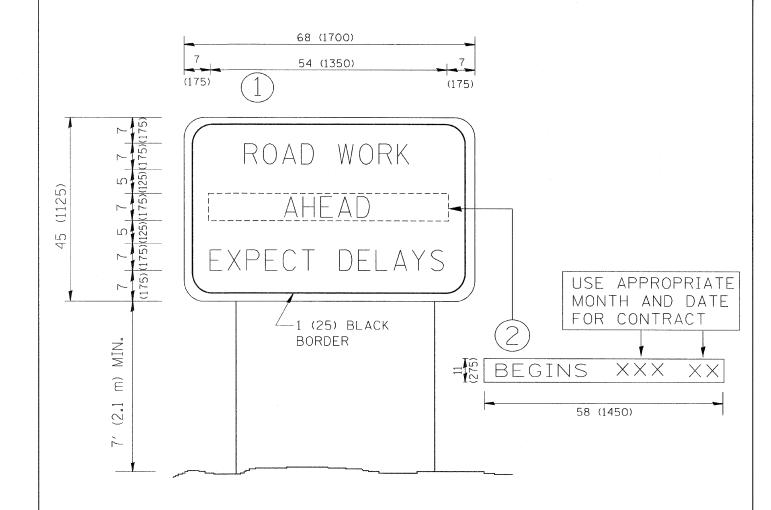
QUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)



OUANTITY 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 = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS	FAP SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\tcl6.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS		373 2009-053 RS	COOK 20 18
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	FOR TRAFFIE STAGING		CONTRACT NO. 60H41
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		ED. AID PROJECT



### NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN () WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATI	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

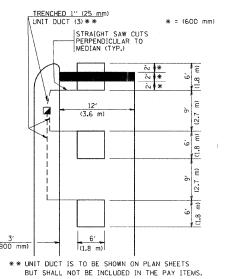
	ARTERIAL ROAD					F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
INFORMATION SIGN						373	2009-053 RS	COOK	20	19
						TC-22		CONTRACT NO. 60H41		
SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

# PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUIAL 3' (900 mm) WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER \* = (600 mm) \* \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL - VOLUME DENSITY ("FAR O

# 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.

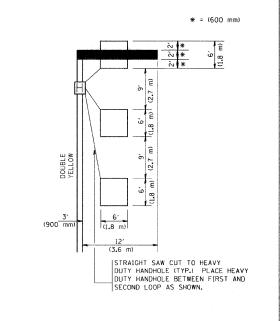


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

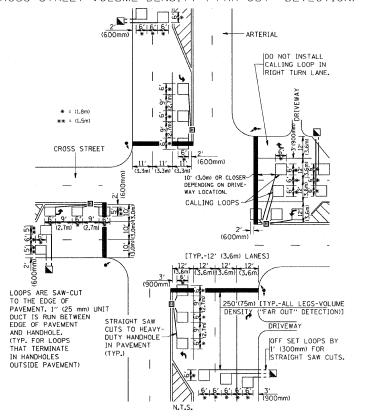
(PROTECTED / PERMITTED LEFT TURN PHASING)

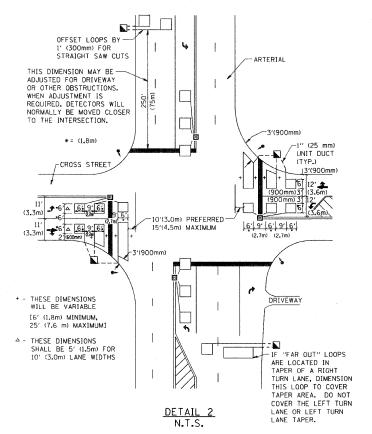


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

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





### NOTE

### VEHICLES LOOP DETECTORS

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

### PLACEMENT OF DETECTORS

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

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

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

### 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.

SHEETS NO.

20 20

COOK

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60H41

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DETAIL 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION						SECT	ION
	373 2009-053 R		3 RS				
	TS-07						
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROA	D DIST. NO. 1	ILLINOI