03-26-13 LETTING ITEM 002

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**IMPROVEMENT IS LOCATED** 

IN THE CITY OF JOLIET

0

0

0

0

# PROPOSED HIGHWAY PLANS

FAP RTE 607: US 6 / US 30 (CASS AVE)

MICHIGAN ST./MAYOR ART SCHULTZ DRIVE TO 0.05 MI. E OF CASSEDAY AVE.

**SECTION: 2010-040 RS** 

RESURFACING WILL COUNTY

IMPROVEMENT BEGINS
STA 23+37.00

R10E

R10E

R10E

SMOREWOOD

STA 58+00

.U.L.I.E.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

PROJECT ENGINEER

PROJECT MANAGER

TRAFFIC DATA

2011 ADT = 14100

POSTED SPEED = 30-40 MPH

BORO, ROBERT (847) 705 - 4237 RAYYAN, ISSAM (847) 705 - 4178 JOLIET TOWNSHIP

GROSS LENGTH OF IMPROVEMENT = 3463 FT = 0.656 MILES

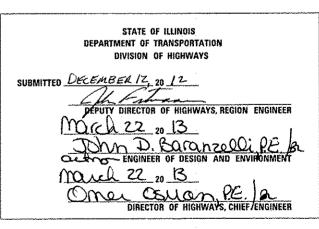
CONTRACT NO. 60K97

D-91-625-10

2010-040RS

WILL





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

# INDEX OF SHEETS

DESCRIPTION

# SHEET NO. COVER SHEET 2 INDEX OF SHEETS. STANDARDS AND GENERAL NOTES 3-4 SUMMARY OF QUANTITIES TYPICAL SECTIONS ROADWAY & PAVEMENT MARKING PLANS 6-7 EXISTING DETECTOR LOOP PLAN DRIVEWAY DETAILS (BD-2) 10 FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-8) PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22) 11 12 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24) BUTT JOINT AND HMA TAPER DETAILS (BD-32) 13 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS. 14 INTERSECTIONS AND DRIVEWAYS (TC-10) TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT 15 MARKERS (SNOW-PLOW RESISTANT) (TC-11) DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13) 16 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO 17 REMAIN OPEN TO TRAFFIC) (TC-14) PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC 18 STAGING (TC-16) ARTERIAL ROAD INFORMATION SIGNING (TC-22) 19 20 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-7)

# LIST OF STATE STANDARDS

STANDARD NO.

DESCRIPTION

442201-03 CLASS C AND D PATCHES

606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER

701427-01 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS < 40 MPH

701601-08 URBAN LANE CLOSURE, MULTILANE 1W OR 2W WITH NONTRAVERSABLE MEDIAN

701606-06 URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN

701701-08 URBAN LANE CLOSURE. MULTILANE INTERSECTION

701801-05 LANE CLOSURE, MULTILANE IW OR 2W CROSSWALK OR SIDEWALK CLOSURE

701901-02 TRAFFIC CONTROL DEVICES

EXISTING PAVEMENT MARKINGS SHALL BE TEMPORARILY COVERED PRIOR TO APPLICATION OF THE DECK SURFACE TREATMENT, TO PREVENT THE MATERIAL FROM BEING APPLIED TO THE MARKINGS. THE TEMPORARY COVERING SHALL BE REMOVED AFTER APPLICATION OF THE DECK SURFACE TREATMENT AND PRIOR TO OPENING TO TRAFFIC. COST IS INCLUDED WITH THE DECK SURFACE TREATMENT SPECIFIED.

THE CONTRACTOR SHALL CONTACT THE CITY OF JOLIET, DEPARTMENT OF PUBLIC WORKS AT (815) 724-4200, FOR ALL LOOP DETECTOR REPLACEMENT INFORMATION PRIOR TO BEGINNING OF WORK.

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

**TRANSPORTATION** 

# **GENERAL NOTES**

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

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

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.

LOCATION OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT LOR COMBINATION CURB AND GUTTER (THE TYPE SPECIFIED ON THE PLANSIL WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

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 45 MPH (80KM/H) OR LESS AND 1 INCH (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H), WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A

BEFORE BEGINING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES AND REVISED 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.

THE ENGINEER SHALL CONTACT CORY JUCIUS, ARTERIAL TRAFFIC OPERATIONS ENGINEER AT (847) 705-4411 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

SIDEWALK REMOVAL AND P.C.C. SIDEWALK 5" LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

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

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1		PLQT DATE + 12/17/2012	DATE -	REVISED -	

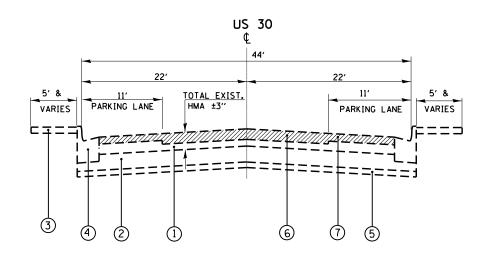
	US 6 /US 30 (CASS AVE)
1	(MICHIGAN ST/MAYOR ART SCHULTZ DR. TO EAST OF CASSEDAY AVE)
	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
1	SCALE: SHEET NO. OF SHEETS STA. TO STA.

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	SUMMARY OF QUANTITIES		STATE	<u> </u>		CONSTRUCT	TION TYPE	CODE	Т		SUMMARY OF QUANTITIES		STATE		Į	CONSTRUCT	ION TYPE	CODE	0005
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21101615	TOPSOIL FURNISH AND PLACE, 4"	SO YD	15	15						44000600	SIDEWALK REMOVAL	SO FT	38	38					
								AF RESTANDANCE								***************************************			
25200110	SODDING. SALT TOLERANT	SO YO	15	15						44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3	s" SO YO	79	79					
35501316	HOT-MIX ASPHALT BASE COURSE. 8"	SO YD	4	4						44201803	CLASS D PATCHES, TYPE II. 13 INCH	SO YD	50	50					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	13	13						44201807	CLASS D PATCHES, TYPE III. 13 INCH	SO YD	12.5	12.5					
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40600300	AGGREGATE (PRIME COAT)	TON	66	66						50300300	PROTECTIVE COAT	SO YD	21	21					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	25	25	····			1		60250200	CATCH BASINS TO BE ADJUSTED	EACH	-	1					
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	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4,75, N50	. TON	615	615			Constitution of the Consti			60266600	VALVE BOXES TO BE ADJUSTED	EACH	5	5		<b> </b>			
40600895	CONSTRUCTING TEST STRIP	EACH	1	1						60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	5	5					
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	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	232	232						67000400	ENGINEER'S FIELD OFFICE. TYPE A	CAL MO	3	3					
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	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	13. 3	13.3	-					67100100	MOBILIZATION	L SUM	•	[					
	HOT-MIX ASPHALT SURFACE COURSE. MIX "D", N50	TON	0.5	0.5						70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	•	1					
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l l	HOT-MIX ASPHALT SURFACE COURSE, MIX:"D", N70	TON	1386	1386						70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	100	1					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	38	38	·					70102635	TRAFFIC CONTROL AND PROTECTION.	L SUM		1					
					····	<u> </u>		ļ			STANDARD 701701							-	<u> </u>
44000154	HOT-MIX ASPHALT SURFACE REMOVAL. 1 1/4"	SO YD	1600	1600						70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	***	1					
4400																			
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SO YD	14900	14900						70300100	SHORT TERM PAVEMENT MARKING	FOOT	895	895					
14000200	DRIVEWAY PAVEMENT REMOVAL	SO YD	4	4						70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SO FT	181.5	181.5					
LE NAME *	1	IGNED -		REVISED		<u> </u>	<u> </u>	<del></del>		11/8	US 6 /US 3 (MICHIGAN ST/MAYOR ART SC	30 (CASS AVE)	EACT OF AAA	CENAV 41"	F.A.P RTE.	SEC	CTION	COUNTY	YOTAL SHE SHEETS NO
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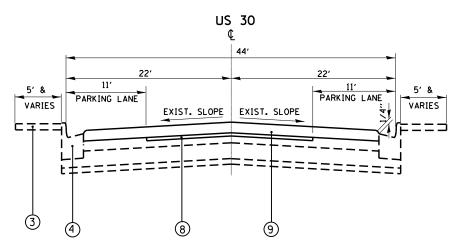
CONSTRUCTION TYPE CODE 0005 CONSTRUCTION TYPE CODE 0005 100% SUMMARY OF QUANTITIES SUMMARY OF QUANTITIES STATE TOTAL TOTAL CODE NO ITEM UNIT QUANTITIES 0005 CODE NO ITEM UNIT QUANTITIES X 88600600 DETECTOR LOOP REPLACEMENT FOOT 500 500 70300220 TEMPORARY PAVEMENT MARKING - LINE 4" FOOT 5790 5790 ¥ 89502376 REBUILD EXISTING HANDHOLE EACH 2 2 FOOT 880 70300240 880 TEMPORARY PAVEMENT MARKING - LINE 6" X4404700 SIDEWALK REMOVAL (SPECIAL) SO FT 23 23 70300250 TEMPORARY PAVEMENT MARKING - LINE 8" FOOT 130 130 x6030310 FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) EACH 50 50 70300260 TEMPORARY PAVEMENT MARKING - LINE 12" FOOT 860 860 COMBINATION CONCRETE CURB AND GUTTER 20004562 FOOT 95 95 REMOVAL AND REPLACEMENT 70300280 FOOT 330 330 TEMPORARY PAVEMENT MARKING . LINE 24" Z0030850 TEMPORARY INFORMATION SIGNING SO FT 128.5 128.5 70301000 SO FT 305 WORK ZONE PAVEMENT MARKING REMOVAL 305 THERMOPLASTIC PAVEMENT MARKING 78000100 SQ FT 181,5 181.5 - LETTERS AND SYMBOLS 78000200 THERMOPLASTIC PAVEMENT MARKING - LINE 4" FOOT 5790 5790 78000400 THERMOPLASTIC PAVEMENT MARKING - LINE 6" FOOT 880 880 78000500 THERMOPLASTIC PAVENENT MARKING - LINE 8" 130 130 FOOT 78000600 THERMOPLASTIC PAVEMENT MARKING - LINE 12" FOOT 860 860 78000650 THERMOPLASTIC PAVEMENT MARKING - LINE 24" FOOT 330 330 78100100 RAISED REFLECTIVE PAVEMENT MARKER EACH 205 205 RAISED REFLECTIVE PAVEMENT MARKER 78300200 EACH 110 110 REMOVAL \*\* Specialty Items US 6 /US 30 (CASS AVE)
(MICHIGAN ST/MAYOR ART SCHULTZ DR. TO EAST OF CASSEDAY AVE)
SUMMARY OF QUANTITIES

SHEETS | STA. TO STA. FILE NAME = DESIGNED . REVISED COUNTY SHEETS NO.
WILL 20 4 REVISED -STATE OF ILLINOIS 607 2010-040RS CHECKED -REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60K97 PLOT DATE + 12/17/2012 DATE REVISEO -FED. POAD DIST, NO. 1 ILLINGIS FED. AID PROJECT

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TYPICAL EXISTING CROSS SECTION US ROUTE 30 (JEFFERSON ST) STA. 23+37 TO STA. 30+88



PROPOSED TYPICAL CROSS SECTION US ROUTE 30 (JEFFERSON ST) STA. 23+37 TO STA. 30+88

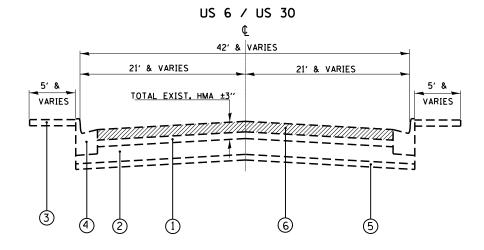
HMA MIXTURE REQUIREMENTS							
MIXTURE TYPE	AIR VOIDS & Ndes						
PAVEMENT RESURFACING							
HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70, (IL 9.5 mm)	4% <b>e</b> 70 GYR						
POLYMERIZED LEVELING BINDER (M M), IL -4.75, N50	3.5% @ 50 GYR						
PATCHING							
CLASS D PATCHES, (HMA BINDER IL-19mm)	4% @ 70 GYR						
HMA REPLACEMENT OVER PATCHES (HMA BINDER IL-19 mm)	4% @ 70 GYR						
DRIVEWAY							
HMA SURFACE COURSE, MIX D, N50, (IL 9.5 mm); 2"	4% <b>©</b> 50 GYR						
HMA BASE COURSE (HMA BINDER IL -19mm); CE -8"	4% <b>e</b> 50 GYR						

# LEGEND

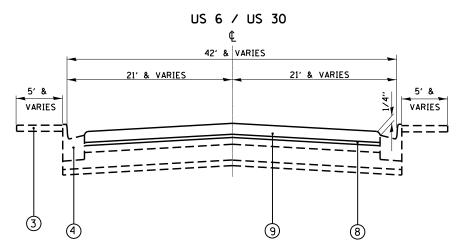
- 1 EXISTING HMA SURFACE COURSE, ±3"
- ② EXISTING P.C.C. BASE COURSE ±10"
- (3) EXISTING SIDEWALK
- EXISTING COMBINATION CONCRETE

  CURB & GUTTER
- 5 EXIST. SUB-BASE GRANULAR MATERIAL, ±4"
- (6) PROPOSED HMA SURFACE REMOVAL. 2 "
- 7 PROPOSED HMA SURFACE REMOVAL. 1 1/4"
- (8) PROPOSED POLYMERIZED LEVELING BINDER
  (M M), IL -4.75, N 50, 3/4"
- PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1 1/2"

THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING



TYPICAL EXISTING CROSS SECTION
US 6 (COLLINS ST) / US 30 (JEFFERSON & CASS ST)
STA. 30+88 TO STA. 58+00



PROPOSED TYPICAL CROSS SECTION
US 6 (COLLINS ST) / US 30 (JEFFERSON & CASS ST)
STA. 30+88 TO STA. 58+00

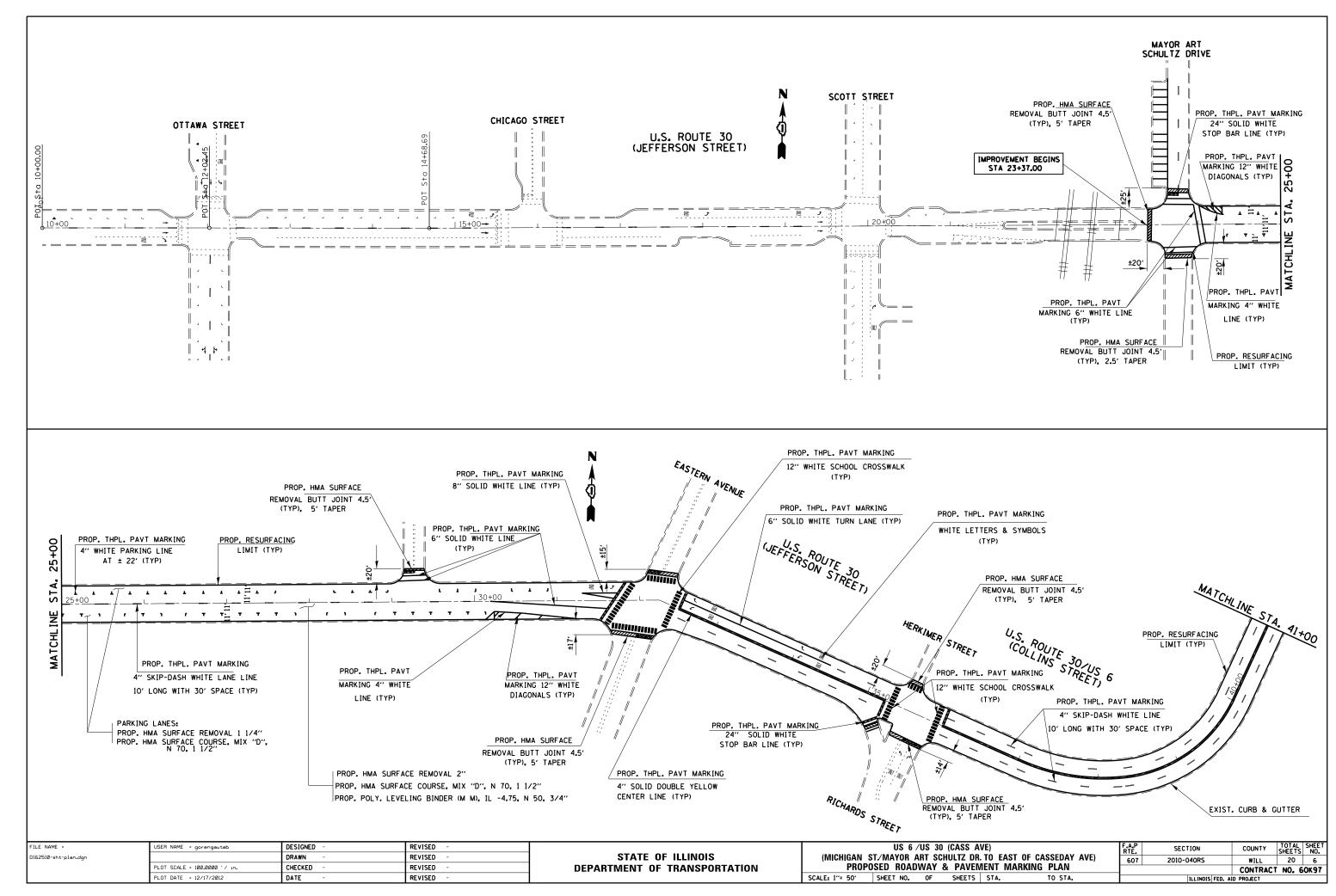
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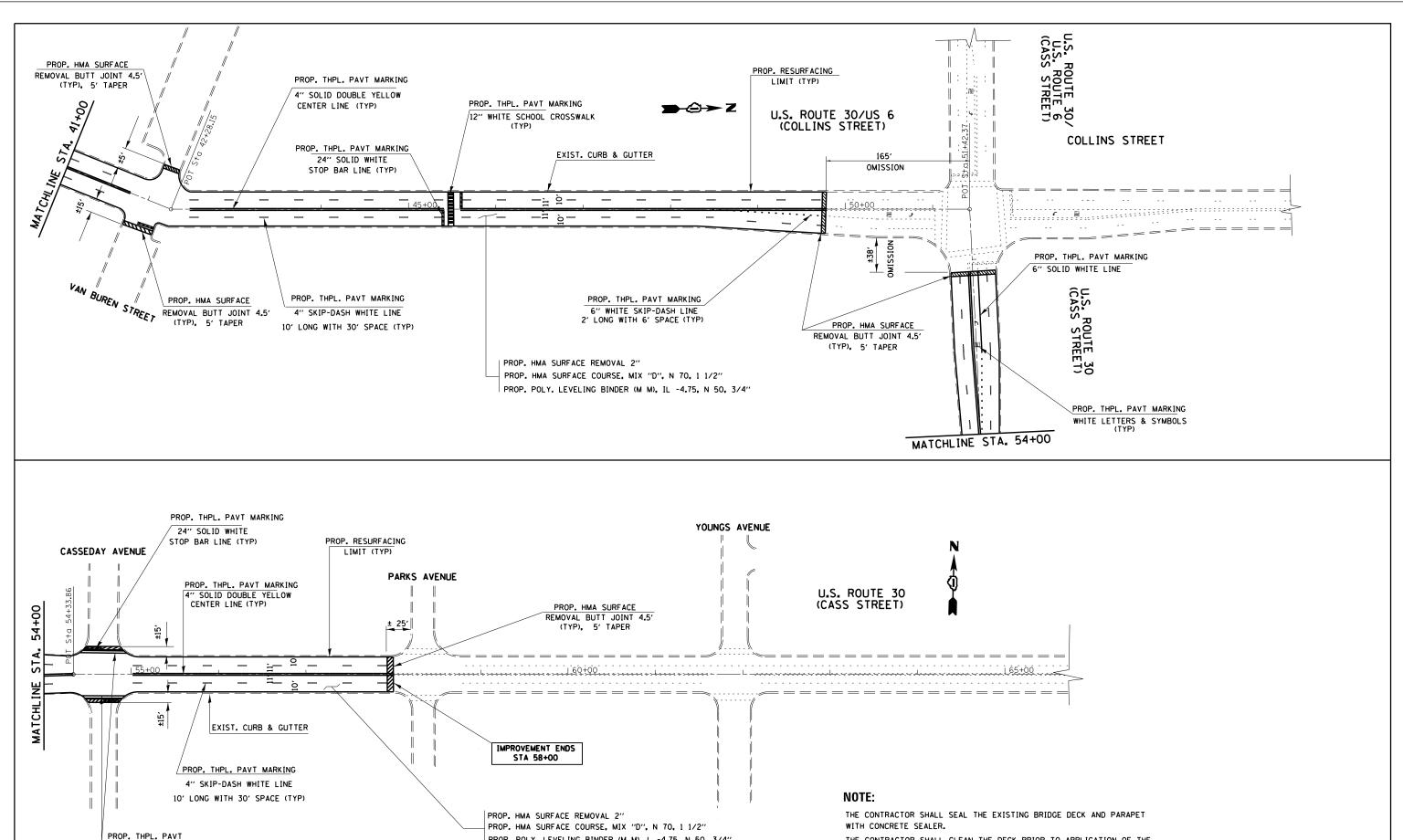
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SO. YD. / IN.

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

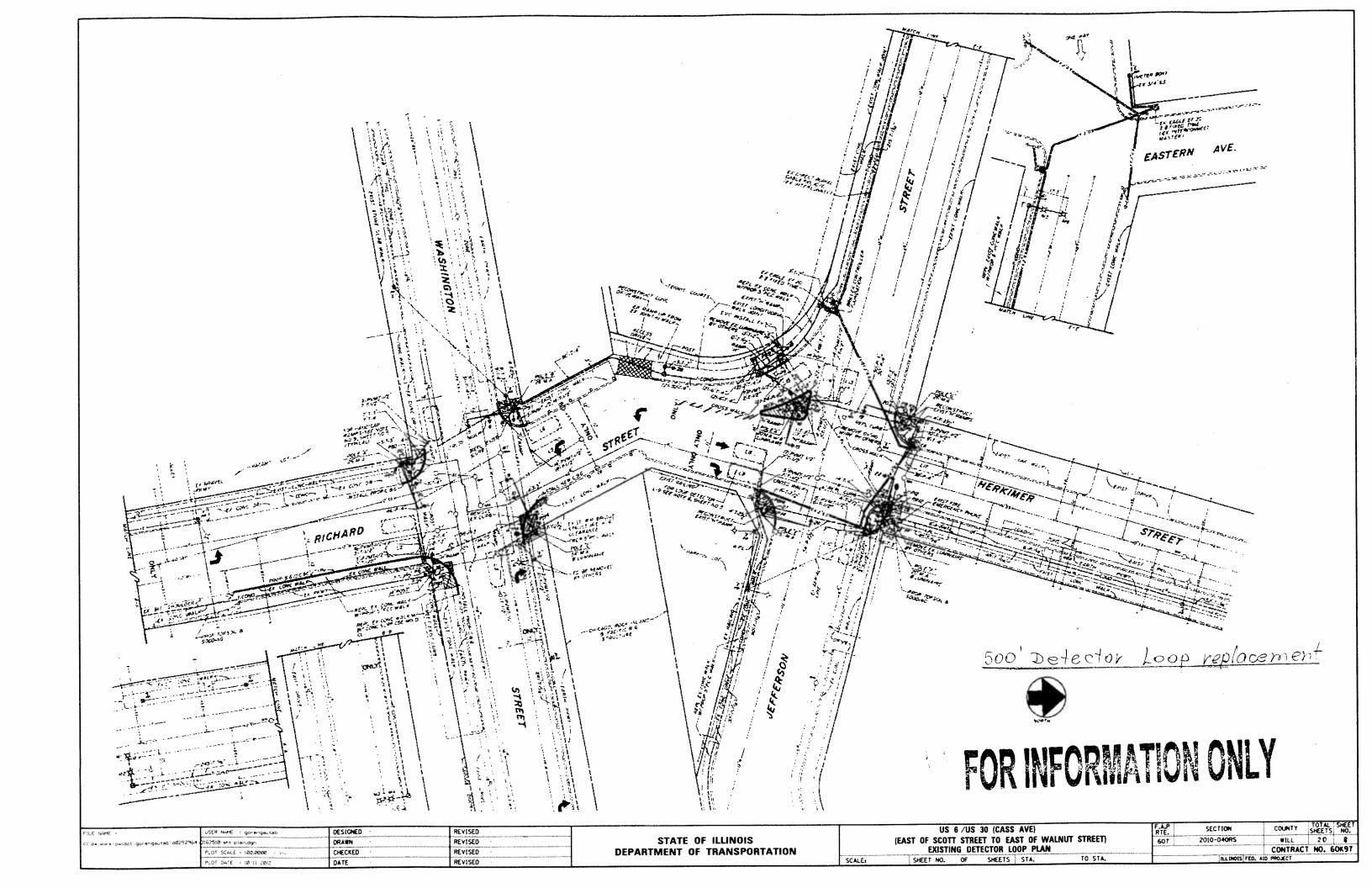
FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

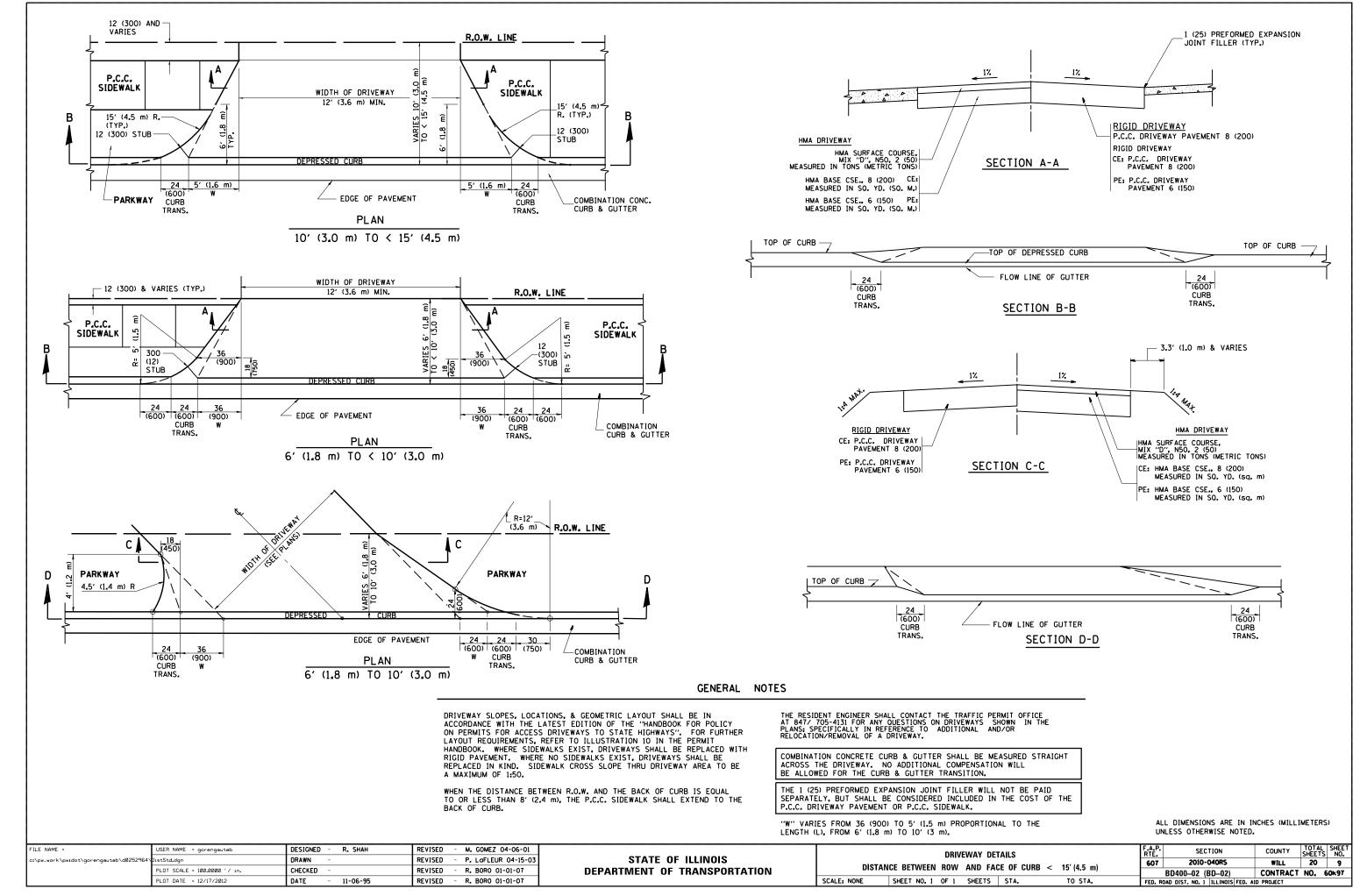
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	PLOT DATE = 12/17/2012	DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

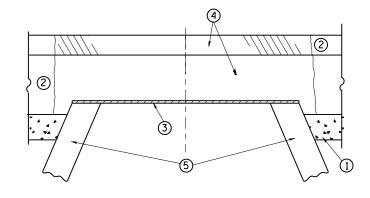


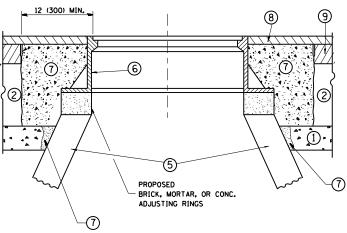


PROP. THPL. PAVT PROP. POLY. LEVELING BINDER (M M), L -4.75, N 50, 3/4" THE CONTRACTOR SHALL CLEAN THE DECK PRIOR TO APPLICATION OF THE MARKING 6" WHITE LINE (TYP) PROTECTIVE COAT TO THE SATISFACTION OF THE ENGINEER. COST OF THE CLEANING IS INCLUDED IN THE COST OF CONCRETE SEALER. SEE BRIDGE PLAN SHEET \* 10. US 6 /US 30 (CASS AVE) (MICHIGAN ST/MAYOR ART SCHULTZ DR. TO EAST OF CASSEDAY AVE) COUNTY TOTAL SHEETS NO. WILL 20 7 FILE NAME = ISER NAME = gorengautab DESIGNED REVISED SECTION COUNTY STATE OF ILLINOIS 162510-sht-plan.dgm RAWN REVISED 607 PROPOSED ROADWAY & PAVEMENT MARKING PLAN **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 100.3282 '/ in CHECKED REVISED CONTRACT NO. 60K97 REVISED SCALE: 1"= 50' SHEET NO. OF SHEETS STA. ILLINOIS FED. AID PROJECT D162510-sht-plan.dgn 12/17/2012 8:28:35 AM User=gorengautab









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.

SCALE: NONE

### 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 PP-1\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- \* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

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

# LEGEND

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

# LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK. THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

# BASIS OF PAYMENT:

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

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

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

COUNTY

WILL 20 10

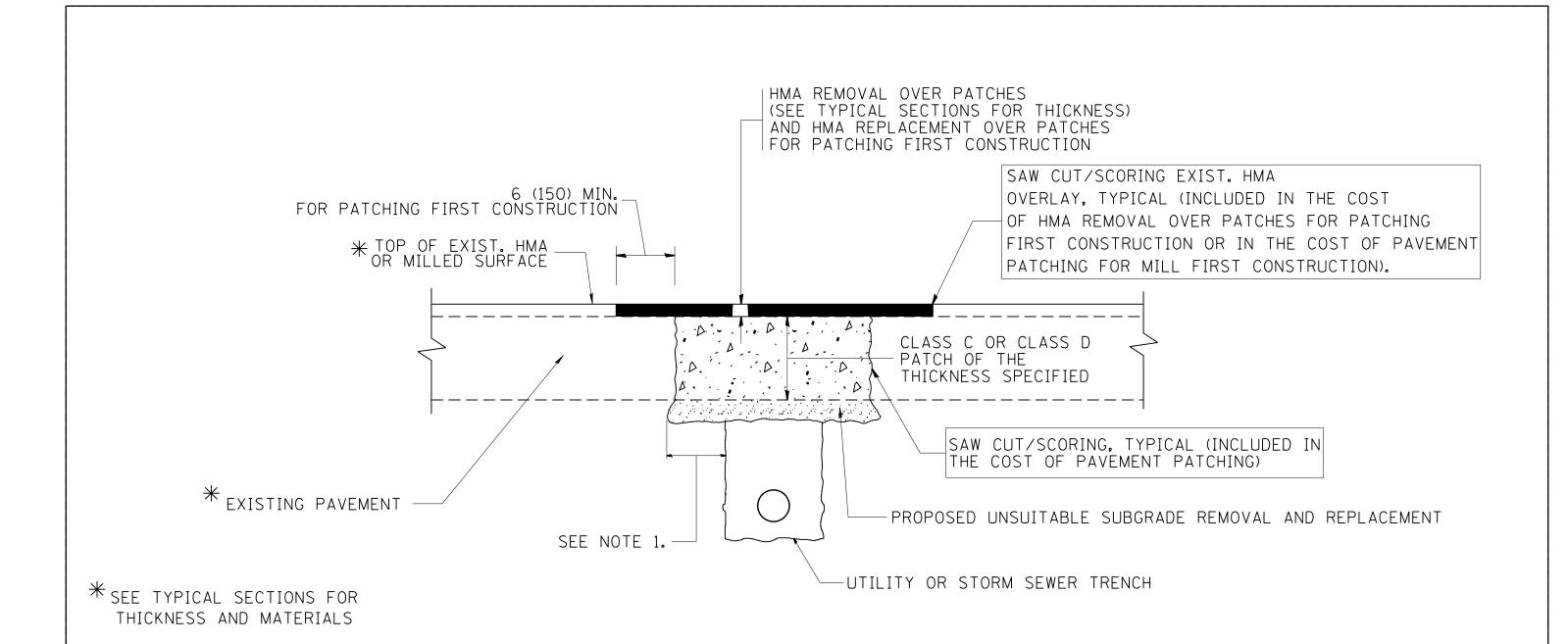
CONTRACT NO. 60K97

FILE NAME =	USER NAME = gorengautab	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
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	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/17/2012	DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION **DETAILS FOR** 2010-040RS 607 FRAMES AND LIDS ADJUSTMENT WITH MILLING BD600-03 (BD-8) SHEET NO. 1 OF 1 SHEETS STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

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# 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.

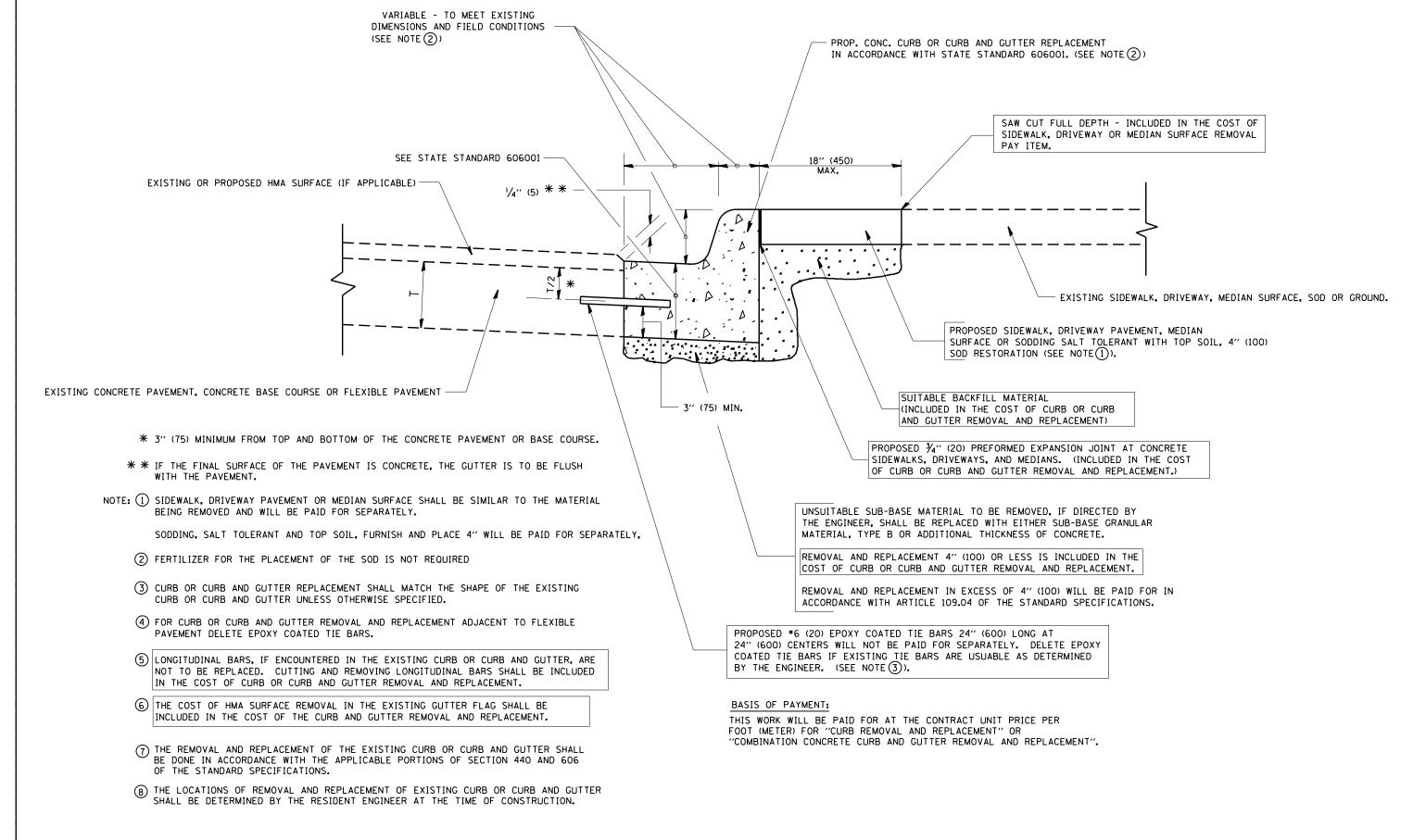
# SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 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 = gorengautab	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P.	SECTION	COUNTY	TOTAL S	SHEET
c:\pw_work\pwidot\gorengautab\d0252964\	DistStd.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		607	2010-040RS	WILL	20	11
	PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT		BD400-04 (BD-22)	CONTRACT	T NO. 60	)K97
	PLOT DATE = 12/17/2012	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED B	OAD DIST NO 1 ILLINOIS FED.			

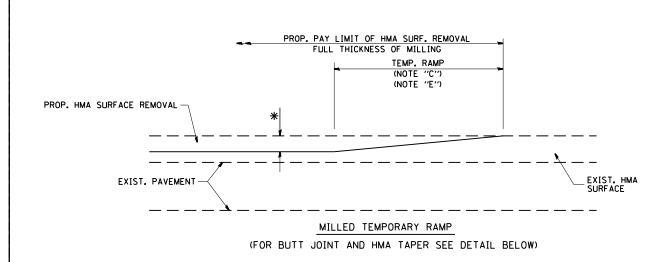
histStd.dan 12/17/2012 0:15:02 AM User-garenge



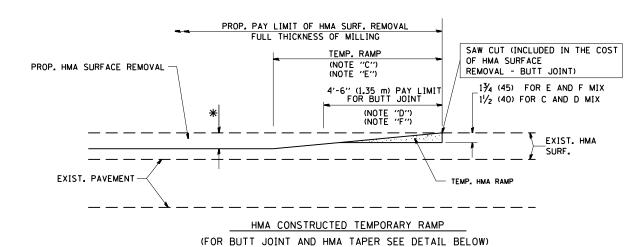
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAM	1E =	USER NAME = gorengautab	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER	RTE.	SECTION	COUNTY	SHEETS N	作.
c:\pw_wor	rk\pwidot\gorengautab\d0252964\	DistStd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS			607	2010-040RS	WILL	20 1	2
		PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		REMOVAL AND REPLACEMENT			CONTRACT	NO. 60K	97
		PLOT DATE = 12/17/2012	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.		OAD DIST. NO. 1 ILLINOIS FED. AI			

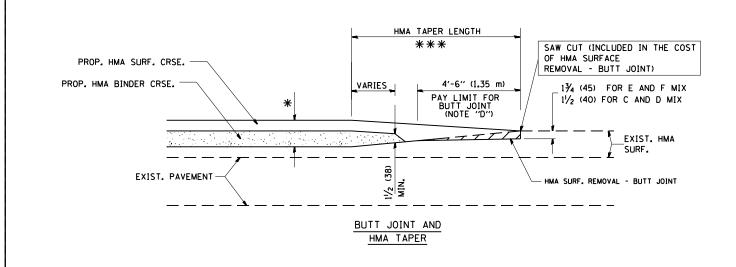


# OPTION 1



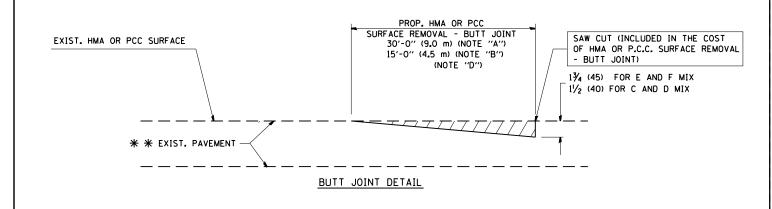
# OPTION 2

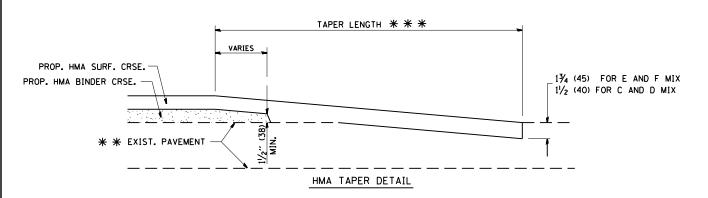
# TYPICAL TEMPORARY RAMP



# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

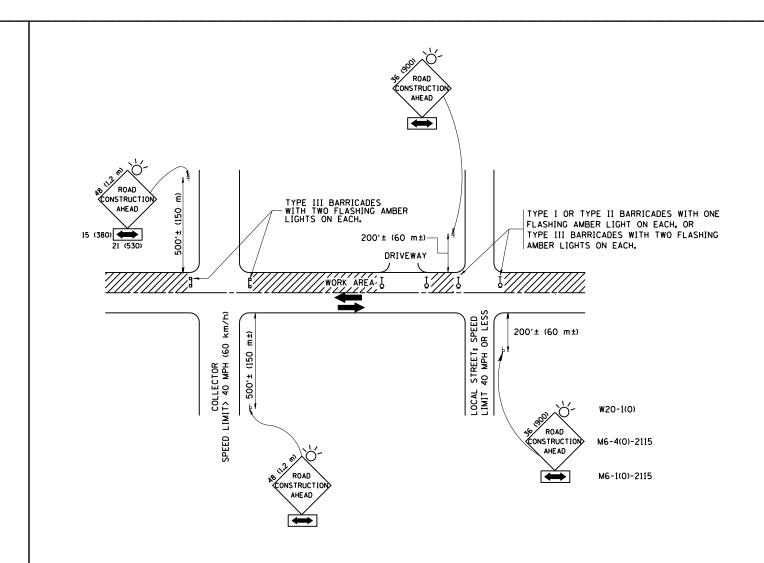
# NOTES

- 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.

# 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
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h)
  AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) 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.

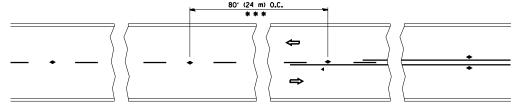
FILE NAME -	USER NAME - gorengautab	DESIGNED - LHA	MEATOED	- J. OBEKLE 10-18-95
c:\pw_work\pwidot\gorengautab\d0252964\	DistStd.dgn	DRAWN -	REVISED	- A. HOUSEH 03-06-96
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED	- A. HOUSEH 10-15-96
	PLOT DATE = 12/17/2012	DATE - 06-89	REVISED	-T. RAMMACHER 01-06-00

DESTONED - LUA

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

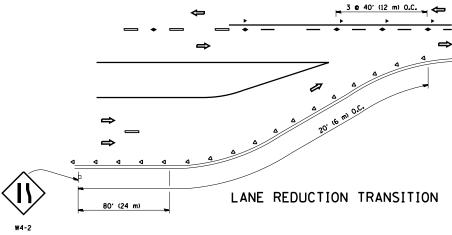
TRAFFIC	CONTRO	DL AND P	ROTECTION	FOR
SIDE ROADS	S, INTER	SECTIONS	, AND DRIV	/EWAYS
SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.
	SIDE ROADS	SIDE ROADS, INTER	SIDE ROADS, INTERSECTIONS	TRAFFIC CONTROL AND PROTECTION SIDE ROADS, INTERSECTIONS, AND DRIV SHEET NO. 1 OF 1 SHEETS STA.

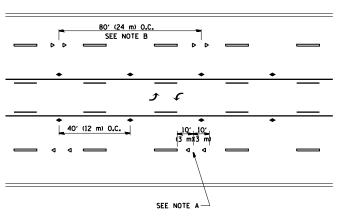
TC-10 CONTRACT NO. 60K97
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



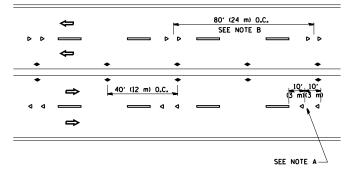
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

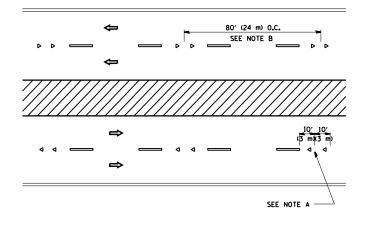




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



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

# LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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

# SYMBOLS

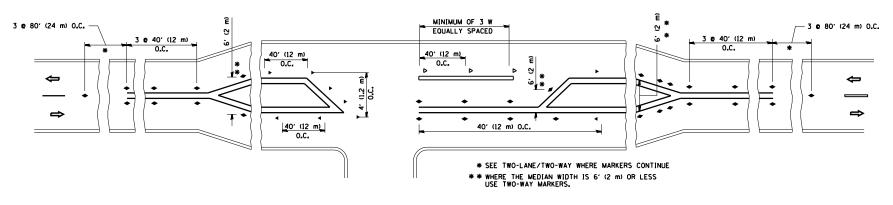
- YELLOW STRIPE

WHITE STRIPE

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

# DESIGN NOTES

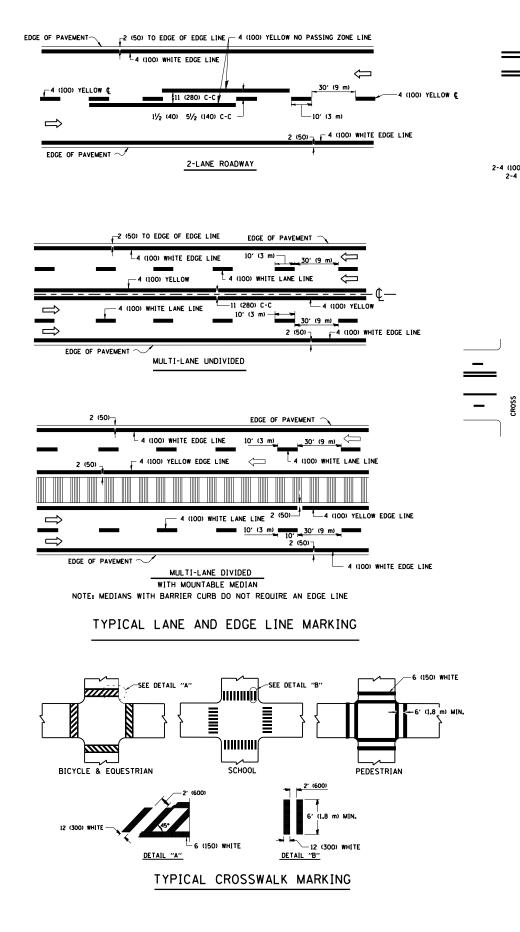
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL. MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD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

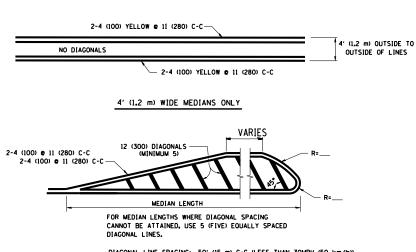


LEFT TURN

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

FILE NAME =	USER NAME = gorengautab	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	RTF.	SECTION	COUNTY	SHEETS	NO.
c:\pw_work\pwidot\gorengautab\d0252964\	DistStd.dgn	DRAWN -	REVISED -T. RAMMACHER 03-12-99	STATE OF ILLINOIS		607	2010-040RS	whi	20	15
	PLOT SCALE = 100.00000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	1	TC-11	CONTRACT	T NO. 60	K97
	PLOT DATE = 12/17/2012	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROA	AD DIST. NO. 1 ILLINOIS FED. A			

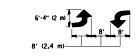




DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

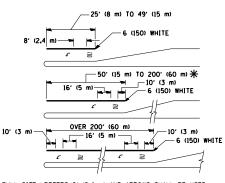
# MEDIANS OVER 4' (1.2 m) WIDE 4 (100) YELLOW LINES (5½ (140) C-C) 2-4 (100) YELLOW 0 11 (280) C-C 4 (100) YELLOW LINES (5½ (140) C-C)

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

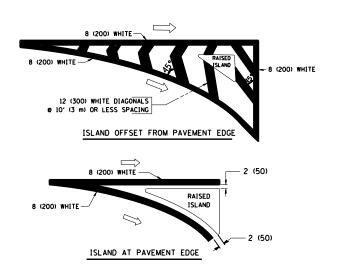


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SO. FT. (1.5 m² )  $\P$  AREA = 20.8 SO. FT. (1.9 m²)

\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

# TYPICAL TURN LANE MARKING



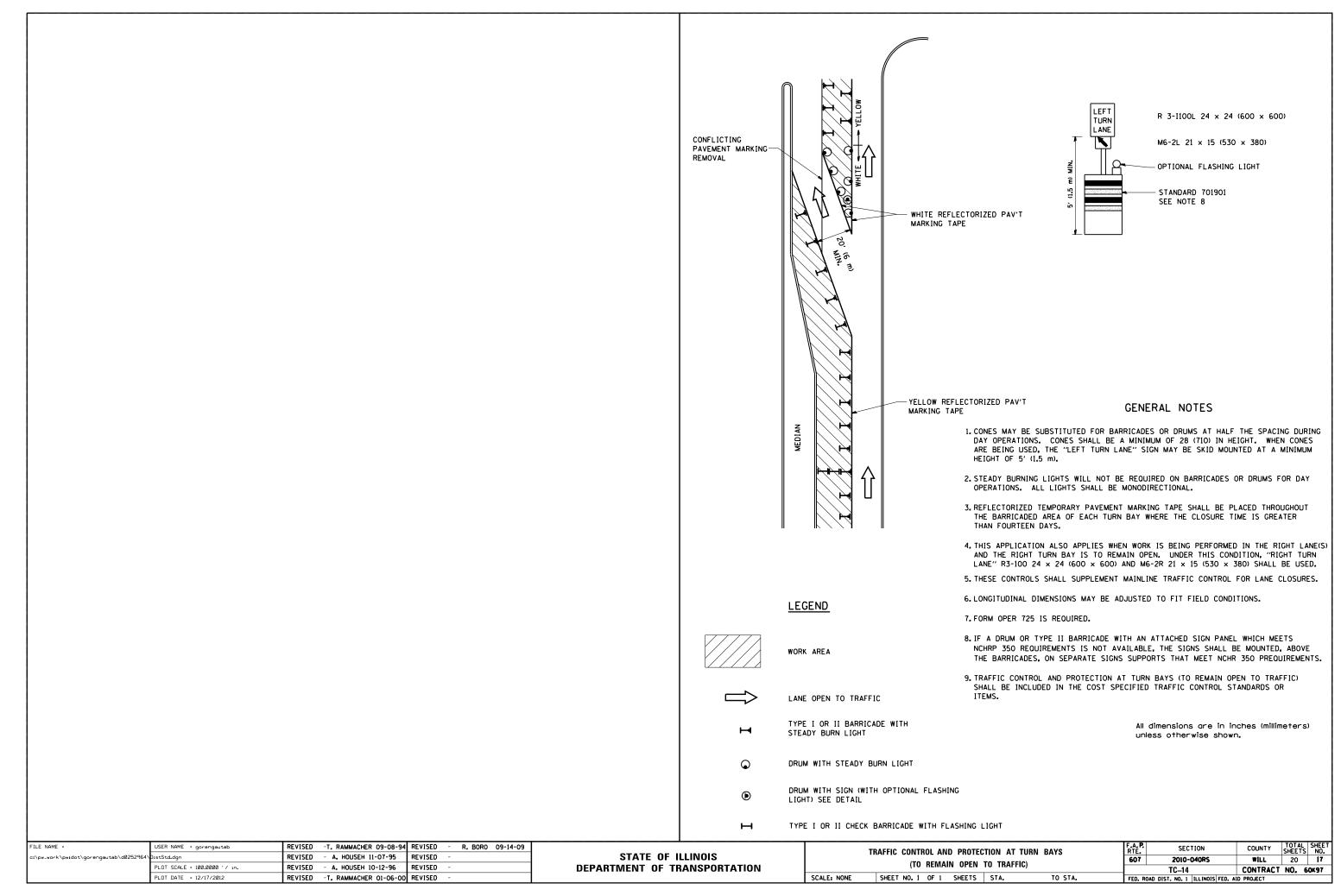
# TYPICAL ISLAND MARKING

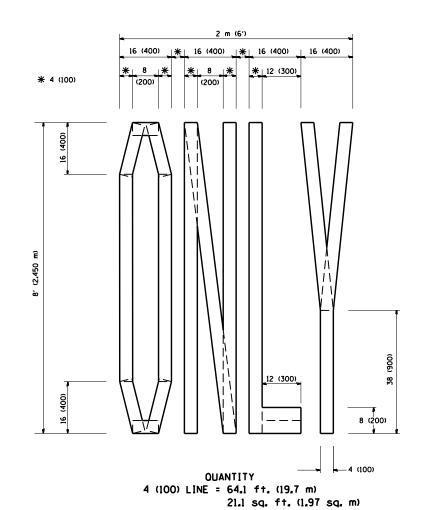
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 <b>e</b> 4 (100)	SOL ID SOL ID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 1280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE: FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH, 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 <b>e</b> 6 (150) 12 (300) <b>e</b> 45° 12 (300) <b>e</b> 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4" (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) <b>e</b> 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))

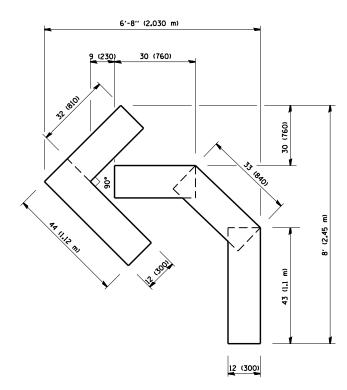
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

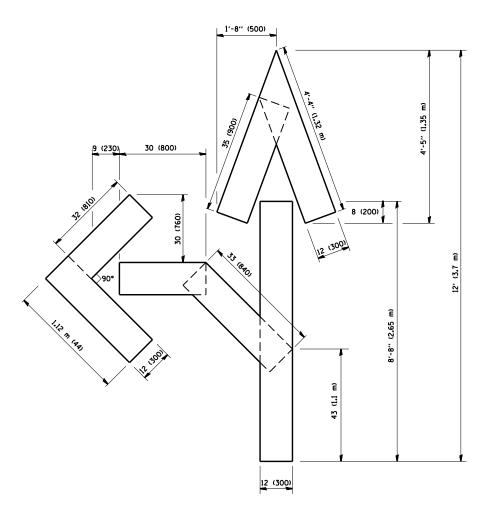
FILE NAME =	USER NAME = gorengautab	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE TYPICAL PAVEMENT MARKINGS		F.	A.P. SECTION	COUNTY	TOTAL	SHEET NO.
c:\pw_work\pwidot\gorengautab\d0252964	DistStd.dgn	DRAWN -	REVISED -C. JUCIUS 09-09-09	STATE OF ILLINOIS			6	07 2010-040RS	WILL	20	16
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				TC-13	CONTRAC	CT NO. 60	K97
	PLOT DATE = 12/17/2012	DATE - 03-19-90	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FI	ED. ROAD DIST. NO. 1 ILLINOIS F	ED. AID PROJECT		







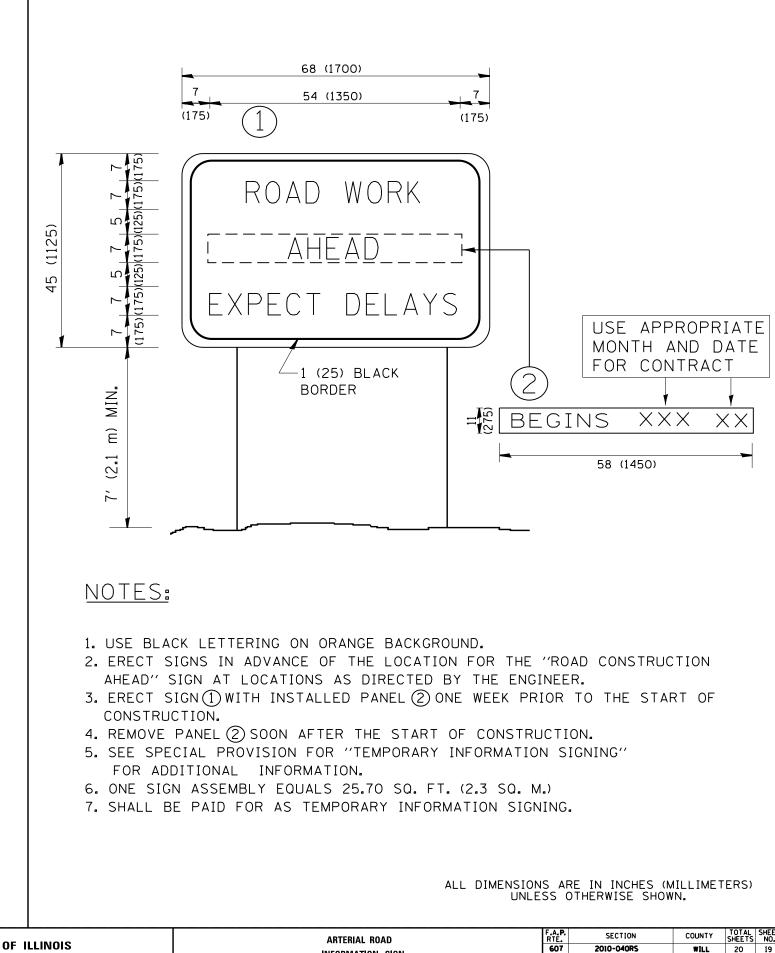
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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

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

FILE NAME =	USER NAME = gorengautab	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.P. SECTION	COUNTY TOTAL SHEET
c:\pw_work\pwidot\gorengautab\d0252964\	DistStd.dgn	DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS		607 2010-040RS	WILL 20 18
	PLOT SCALE = 100.00000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	FOR TRAFFIC STAGING	TC-16	CONTRACT NO. 60K97
	PLOT DATE = 12/17/2012	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST, NO. 1 ILLINOIS FED. A	



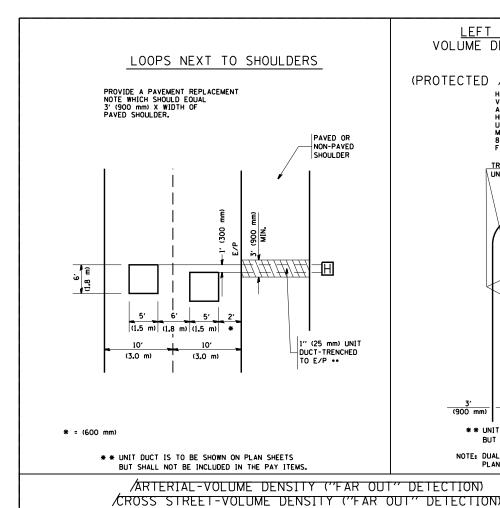
### DESIGNED REVISED - R. MIRS 09-15-97 stStd.dan DRAWN REVISED - R. MIRS 12-11-97 LOT SCALE = 100.0000 '/ in. CHECKED REVISED -T. RAMMACHER 02-02-99 PLOT DATE = 12/17/2012 REVISED - C. JUCIUS 01-31-07 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCALE: NONE

INFORMATION SIGN TC-22 SHEET NO. 1 OF 1 SHEETS STA. TO STA.

**WILL** 20 19 CONTRACT NO. 60K97 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT



# 

VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

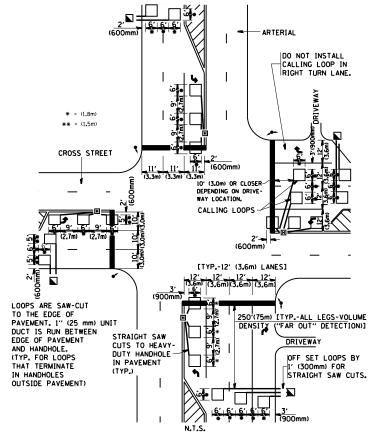
\* = (600 mm)

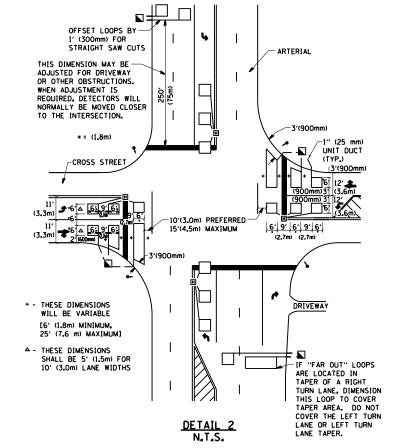
\* = (600 mm)

\* = (600 mm)

STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

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





SCALE: NONE

### NOTE

# **VEHICLES LOOP DETECTORS**

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

# JOTE-

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

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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION