COUNTY TOTAL SHEE SHEETS NO. FALL SECTION 2760 1316RS-1

### D-91-245-99



NOTE: WHEREVER IN THESE PLANS OR 42 IS MENTIONED IT SHALL MEAN FAU 2760.

STATE OF ILLINOIS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

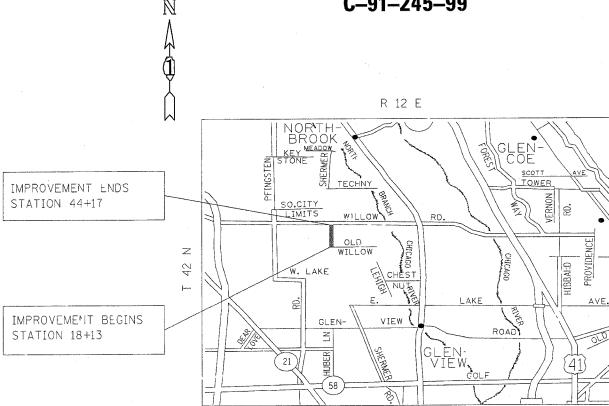
**DIVISION OF HIGHWAYS** 

# **PROPOSED** HIGHWAY PLANS

FAU2760 (SHERMER ROAD) SECTION 1316RS-1 WILLOW ROAD TO OLD WILLOW ROAD **COOK COUNTY** C-91-245-99

GROSS LENGTH OF IMPROVEMENT = 2,604 LINEAL FEET = 0.500 MILES

NET LENGTH OF IMPROVEMENT = 2,604 LINEAL FEET = 0.500 MILES



FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE VILLAGE OF GLENVIEW IN COOK COUNTY

AVERAGE DAILY TRAFFIC = 14,600

POSTED SPEED LIMIT = 35 MPH

(847) 705-4437

PREPARATION ENGINEER: KEN ENG /R. SHAH

PLAN

DISTRICT

ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 60754

Rev

F.A RTE.	SECTION	٧	COUNT	Y	TOTAL	SHEET NO.
	1316RS	-1	COO	K	22	2
FED. RO	DAD DIST. NO.	TLLIN	DIS FED.	AID	PROJECT	

### INDEX OF SHEETS

HEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-8	EXISTING AND PROPOSED TYPICAL SECTIONS
9	ROADWAY AND PAVEMENT MARKING PLANS
10	DETECTOR LOOPS REPLACEMENT PLANS
11	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
12	PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT
13	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
14	BUTT JOINT AND BITUMINOUS TAPER DETAILS
15	METHOD OF FLAGGING
16	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
17	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
18	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
19	TRAFFIC CONTROL AND PROTECTION OF TURN BAYS (TO REMIAN OPEN TO TRAFFIC)
20	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
21	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
22	TEMPORARY INFORMATION SIGNING

### STATE STANDARDS:

000001 -04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001 <b>- 0</b> 4	CURB RAMPS ACCESSIBLE TO THE DISABLED
442201 - 01	CLASS C AND D PATCHES
482011-01	BIT. SHLD STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
604001-02	FRAME AND LIDS, TYPE 1
606001- <i>0</i> 2	CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATION
701501- <i>03</i>	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-04	URBAN LANE CLOSURE MULTILANE, 1-W OR 2-W, WITH NON-TRAVERSABLE MEDIAN, SPEEDS < 45 MPH
701606-04	URBAN LANE CLOSURE MULTILANE 2-W WITH MOUNTABLE MEDIAN
701701 - 04	URBAN LANE CLOSURE MULTILANE INTERSECTION
702001 - <b>05</b>	TRAFFIC CONTROL DEVICES
780001 <b>-0!</b>	TYPICAL PAVEMENT MARKINGS
886001	DETECTOR LOOP INSTALLATIONS

### GENERAL NOTES:

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 FOR FIELD LOCATIONS OR BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF PALATINE.
- THE CONTRACTOR WILL NOT BE ABLE TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.
- 4. ALL BITUMINOUS PAVEMENT PATCHING SHALL BE CLASS D.
- 5. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS UNLESS OTHERWISE SPECIFIED.
- 6. THE RESIDENT ENGINEER SHALL CONTACT MR. WALTER CZARNY. AREA TRAFFIC FIELD ENGINEER, AT (773) 685-8386 A MINIMUM OF 72 HOURS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 7. 3 METER (10 FEET) TRANSITION SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTERS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNTI PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 8. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT. EXCEED 11/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS 45 MPH. WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM OF 1±3 (VIH)
- 9. THE UNIT WEIGHT (CONVERSION FACTOR) QUOTED IS FOR THE ESTIMATING PLAN QUANTITIES ONLY. ACTUAL QUANTITIES TO FULFILL CONTRACT REQUIREMENTS WILL BE DETERMINED BASED ON UNIT WEIGHT OF APPROVED MIX DESIGN. PLAN DIMENSIONS, AND DENSITY LIMITATIONS. MAXIMUM PAYMENT WILL BE COMPUTED BASED ON WEIGHT AVERAGE DENSITIES OF THE IN-PLACE MIXTURE.

REVISIONS
NAME
DATE
SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

INDEX OF SHEETS STATE STANDARDS
AND GENERAL NOTES

SCALE; VERT.
SCALE; HORIZ.
DATE 475/2005
CHECKED BY

RTE.	SECTION		COUNT	Υ	TOTAL SHEETS	SHEET NO.
	1316RS-1		соок		22	3
FED.	ROAD DIST. NO. 1	ILL	INOIS	HIG	HWAY PRO	DJECT

	SUMMARY OF QUANTITIES		URBAN	CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	1000					
20201006	GRADING AND SHAPING SHOULDERS	UNIT	30	30					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	4	4 .					
40600300	AGGREGATE (PRIME COAT)	TON	19	19					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	2	2					
40600895	CONSTRUCTING TEST STRIP	EACH	1	1					
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	75	75					
40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	385	385	,				
44000116	BITUMINOUS REMOVAL OVER PATCHES 4"	SQ YD	1718	1718					
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2300	2300					
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	105	105					
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	282	282					
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	59	59					
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	1222	1222					
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	5276	5276					
48101200	AGGREGATE SHOULDERS, TYPE B	TON	370	370					
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2					
60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	2	2					
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2				ļ	
60260100	INLETS TO BE ADJUSTED	EACH	. 2	2					
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	. 10	10	-				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6					
67100100	MOBILIZATION	L SUM	1	1					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	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					
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	20	20					

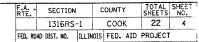
	SUMMARY OF QUANTITIES				CONSTRUCTION TYPE CODE			
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	1000		CONTRACT	NO. 60754	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	983	983				
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	210	210				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	6545	6545				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	300	300				
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	140	140				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	62	62				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3038	3038				
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	36.4	36.4				
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	6545	6545				
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	300	300				
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	140	140				
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	62	62				
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	100	100				
8600600	DETECTOR LOOP REPLACEMENT	FOOT	246	246				
(0656100	DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	20	20				
(4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N7O	TON	781	781				
(4066770	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N7O	TON	390	390				
(4409410	BITUMINOUS SURFACE REMOVAL 2 1/4"	SQ YD	9222	9222				
			,					

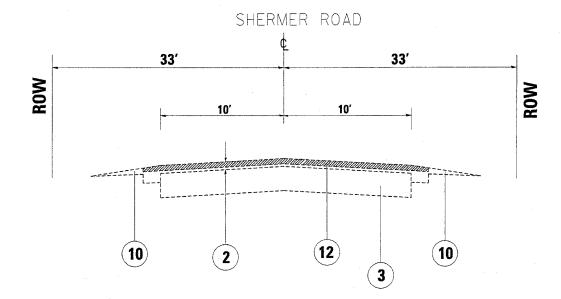
\* SPECIALTY ITEMS

REVISION	s
NAMÉ	DATE

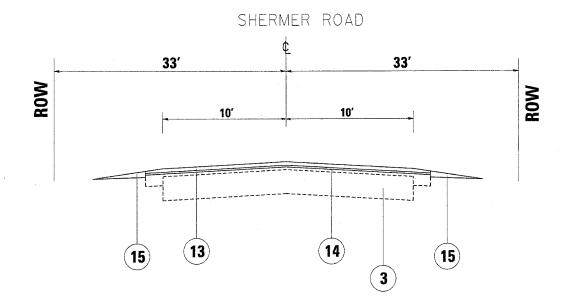
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

PLOT DATE: 4/5/2005





EXISTING TYPICAL CROSS SECTION STA. 18+13 TO 36+10



PROPOSED TYPICAL CROSS SECTION STA. 18+13 TO 36+10

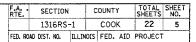
LEGEND
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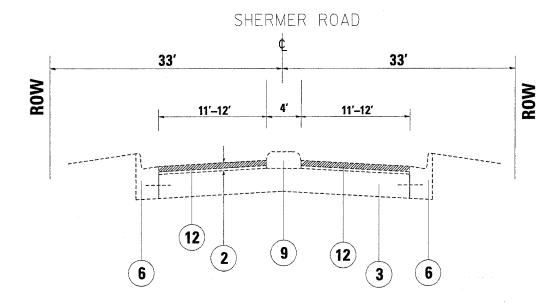
- EXISTING COMPACTED EARTH FILL
- EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
- EXISTIING P.C.C. PAVEMENT, 9"
- EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
- EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12
- EXISTING TIE BARS @ 2'-6" CENTERS
- EXISTING CONCRETE MEDIAN SURFACE
- EXISTING CONCRETE MEDIAN
- EXISTING AGGREGATE SHOULDER
- EXISTING CONCRETE CURB, TYPE BA
- PROP. BITUMINOUS CONCRETE SURFACE REMOVAL, +- 21/4"
- PROP. BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N 70, 11/2"
- PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL - 4.75, N 50,3/4"
- PROP. AGGREGATE SHOULDERS, TYPE B

MIXTURE TYPE	AC/PG	RAP% MAX	AIR VOIDS (%)
POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, N50 3/4"	SBS/SBR PG 76-28	.0	2.5% @ 50 GYR
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	10	4% @ 70 GYR
CLASS D PATCHES, 9" BINDER IL. 19MM	PG 64-22	15	4% @ 70 GYR
BITUMINOUS REPLACEMENT OVER PATCHES BINDER IL - 19MM	PG 64-22	15	4% @ 70 GYR

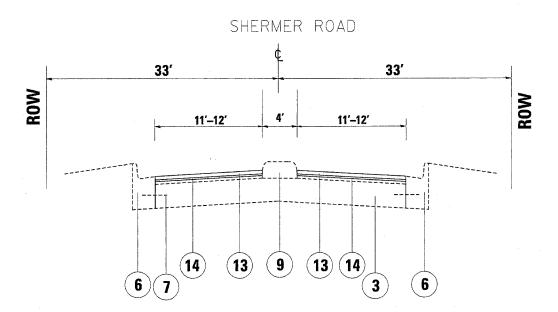
NOTE: THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE MIXTURES IS 112 lbs/syyd/in.

REVISIONS	ILLINOIS DEPARTMENT OF TRANSPORTATION				
NAME DATE	ILLINOIS DEI AITTIM	ENT OF TRANSPORTATION			
	SHE	RMER ROAD			
		TO OLD WILLOW RD.			
	WILLOW ND.	IO OLD WILLOW IID.			
	EXISTING	AND PROPOSED			
	TVPIC	AL SECTIONS			
	1	AL CLUTIONS			
	SCALE: VERT.	DO 44441 DV			
	SCALE: HORIZ.	DRAWN BY			
	DATE 4/6/2005	CHECKED BY			





EXISTING TYPICAL CROSS SECTION STA. 36+10 TO 37+34



PROPOSED TYPICAL CROSS SECTION STA. 36+10 TO 37+34

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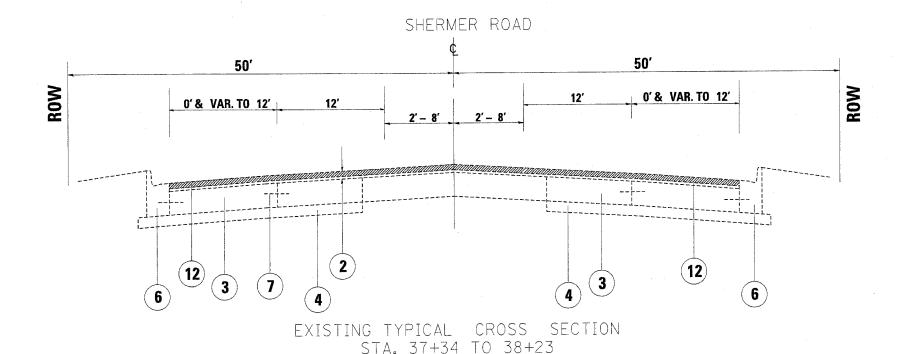
- EXISTING COMPACTED EARTH FILL
- (2) EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
- 3) EXISTIING P.C.C. PAVEMENT, 9"
- (4) EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- (5) EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
- (6) EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12
- 7) EXISTING TIE BARS @ 2'-6" CENTERS
- 8) EXISTING CONCRETE MEDIAN SURFACE
- (9) EXISTING CONCRETE MEDIAN
- (10) EXISTING AGGREGATE SHOULDER
- 11) EXISTING CONCRETE CURB, TYPE BA
- (12) PROP. BITUMINOUS CONCRETE SURFACE REMOVAL, +- 21/4"
- PROP. BITUMINOUS CONCRETE SURFACE
  COURSE, SUPERPAVE. MIX "D", N 70, 11/2"
- PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL 4.75, N 50,3/4"
- (15) PROP. AGGREGATE SHOULDERS, TYPE B

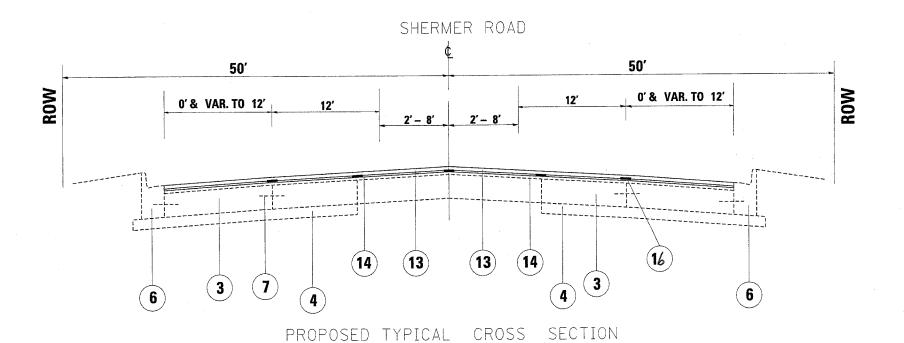
REVISIONS
NAME DATE

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED
TYPICAL SECTIONS

SCALE: HORIZ.
DATE 4/6/2005 CHECKED BY





STA. 37+34 TO 38+23

LEGEND

- EXISTING COMPACTED EARTH FILL
- EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
- EXISTIING P.C.C. PAVEMENT, 9"
- EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
- EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12
- EXISTING TIE BARS @ 2'-6" CENTERS
- EXISTING CONCRETE MEDIAN SURFACE
- EXISTING CONCRETE MEDIAN
- EXISTING AGGREGATE SHOULDER
- EXISTING CONCRETE CURB, TYPE BA
- PROP. BITUMINOUS CONCRETE SURFACE REMOVAL. +- 21/4"
- PROP. BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE. MIX "D", N 70, 11/2"
- PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL - 4.75, N 50,3/4"
- PROP. AGGREGATE SHOULDERS, TYPE B
- PROP. STRIP REFLECTIVE CRACK CONTROL TREATMENT

ILLINOIS DEPARTMENT OF TRANSPORTATION SHERMER ROAD WILLOW RD. TO OLD WILLOW RD. EXISTING AND PROPOSED TYPICAL SECTIONS SCALE: VERT. HORIZ. DATE 4/6/2005 DRAWN BY CHECKED BY

SHERMER ROAD 50' **50**′ ROW 12' & VARIES 12' & VARIES 12' (12) (12) 3 (3) **(5**) **(5**) EXISTING TYPICAL CROSS SECTION STA. 38+23 TO 43+72 SHERMER ROAD **50**′ **50**′ 12' & VARIES 12' & VARIES (14) (13) (14) (13) **(5**) PROPOSED TYPICAL CROSS SECTION STA. 38+23 TO 43+72

CONTRACT NO. 60754

### LEGEND

- EXISTING COMPACTED EARTH FILL
- 2) EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
- 3) EXISTIING P.C.C. PAVEMENT, 9"
- (4) EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- (5) EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
- 6) EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12
- (7) EXISTING TIE BARS @ 2'-6" CENTERS
- (8) EXISTING CONCRETE MEDIAN SURFACE
- (9) EXISTING CONCRETE MEDIAN
- (10) EXISTING AGGREGATE SHOULDER
- (11) EXISTING CONCRETE CURB, TYPE BA
- (12) PROP. BITUMINOUS CONCRETE SURFACE REMOVAL, +- 21/4"
- PROP. BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE. MIX "D", N 70, 11/2"
- PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL 4.75, N 50, 3/4"
- (15) PROP. AGGREGATE SHOULDERS, TYPE B

REVISIONS
NAME DATE

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED
TYPICAL SECTIONS

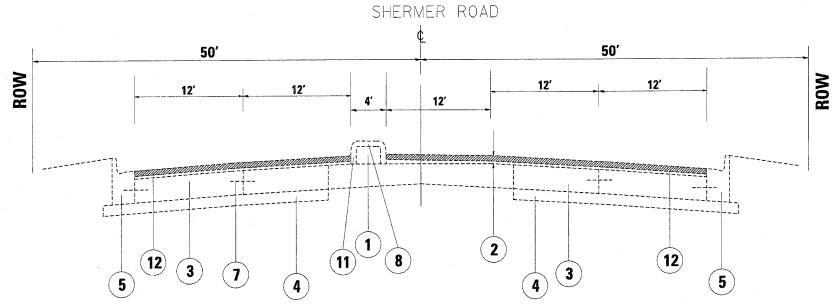
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DATE 4/6/2005 CHECKED BY

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F.A.	SECTION	CDUNTY	TOTAL	SHEET	NO.
1316RS-1	COOK	22	8		
STA.	TO STA.				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID	PROJECT		

CONTRACT NO. 60754



EXISTING TYPICAL CROSS SECTION STA. 43+72 TO 44+17

# SHERMER ROAD 50' 50' 12' 12' 12' 12' 12' 13 11 8 4 3 13 14

PROPOSED TYPICAL CROSS SECTION STA. 43+72 TO 44+17

### LEGEND

- 1) EXISTING COMPACTED EARTH FILL
- 2) EXISTING BITUMINOUS CONCRETE OVERLAY, +-3"
- 3) EXISTIING P.C.C. PAVEMENT, 9"
- 4) EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- (5) EXISTING COMB. CONCRETE CURB & GUTTER, B.6-24
- 6) EXISTING COMB. CONCRETE CURB & GUTTER, B-6.12
- (7) EXISTING TIE BARS @ 2'-6" CENTERS
- (8) EXISTING CONCRETE MEDIAN SURFACE
- (9) EXISTING CONCRETE MEDIAN
- (10) EXISTING AGGREGATE SHOULDER
- (11) EXISTING CONCRETE CURB, TYPE BA
- (12) PROP. BITUMINOUS CONCRETE SURFACE REMOVAL, +- 21/4"
- PROP. BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N 70, 11/2"
- PROP. POLYMERIZED LEVELING BINDER, (MACHINE METHOD), SUPERPAVE, IL 4.75, N 50.%
- 15) PROP. AGGREGATE SHOULDERS, TYPE B

REVISIONS
NAME
DATE

SHERMER ROAD
WILLOW RD. TO OLD WILLOW RD.

EXISTING AND PROPOSED
TYPICAL SECTIONS

SCALE: VERT.
HORIZ.
DATE 4/6/2005
CHECKED BY

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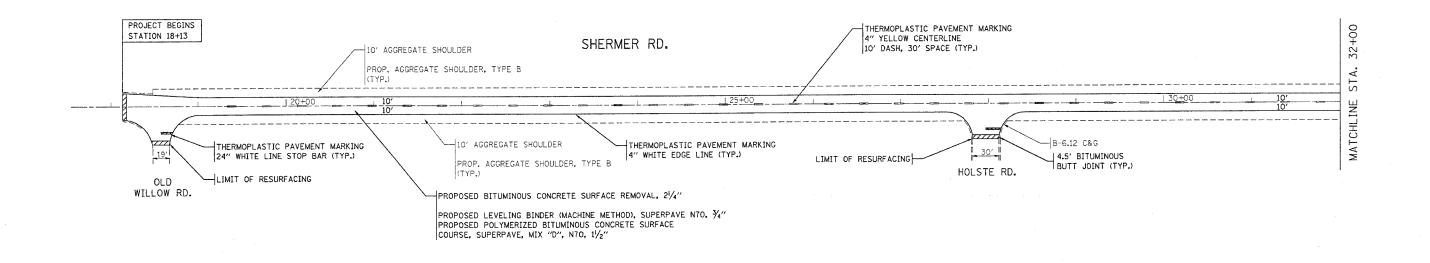
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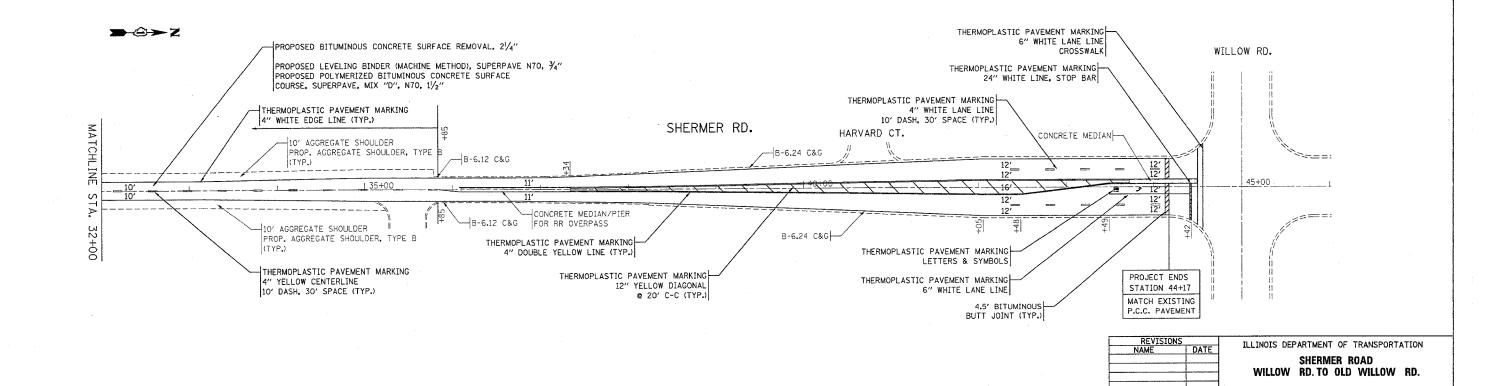
### CONTRACT NO. 60754

**ROADWAY PLAN** 

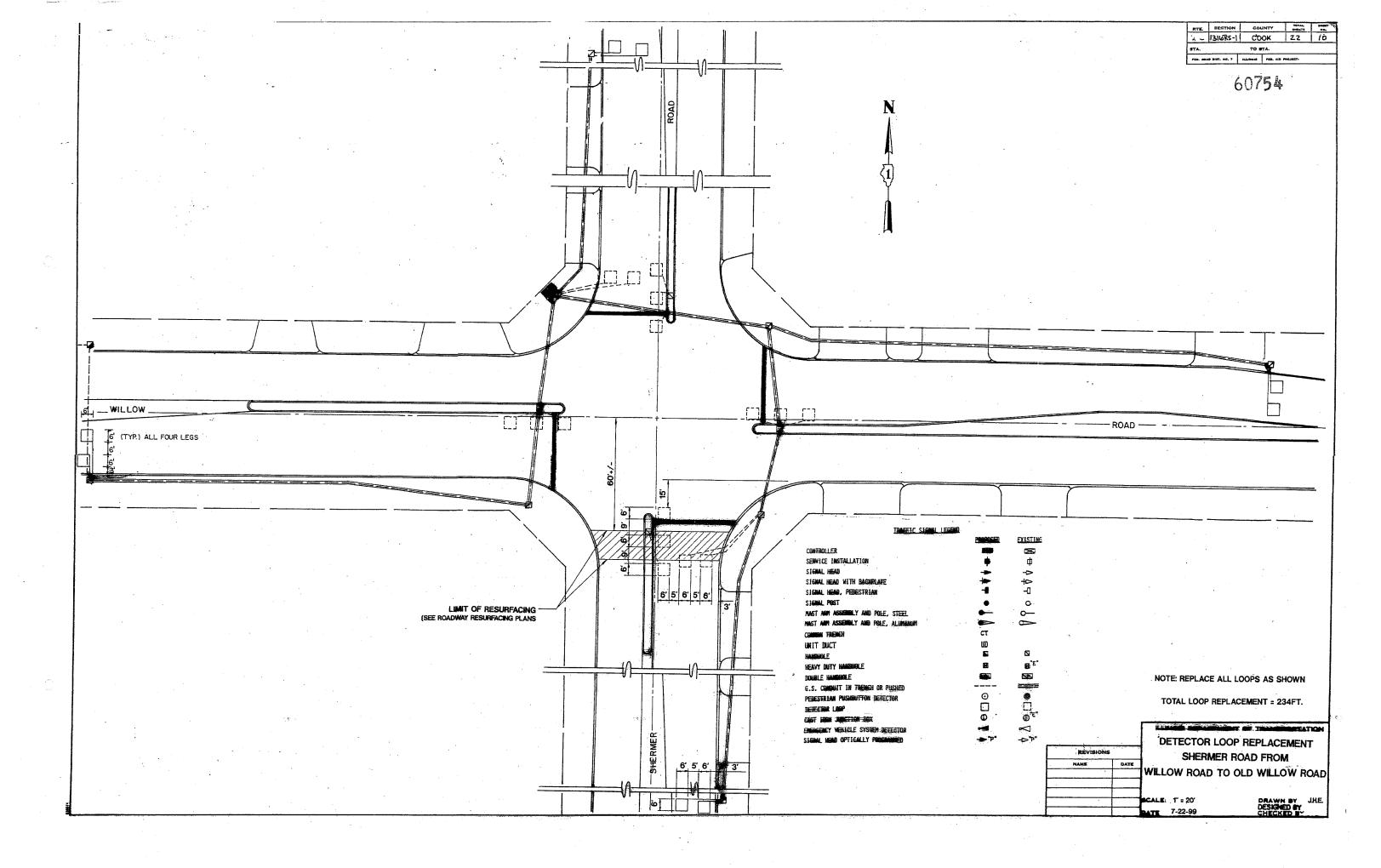
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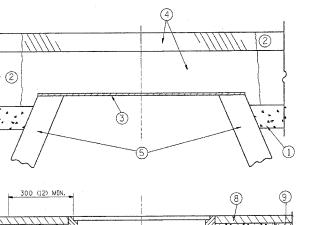


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F. A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET
	1316RS-1	c	юК	22	11
STA.		TO:	STA.		
FEb.	ROAD DIST. NO	TLIMOIS		TED. AID PROJECT	

40754



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### 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.

SAND FILL

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 300 (12) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 900 (36) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 40  $(1/\sqrt{2})$  THICK BITUMINOUS MATERIAL APPROVED BY THE ENGINEER.

### STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE BITUMINOUS MATERIAL 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 BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL TO THE ELEVATION 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.

### LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- 2 EXISTING PAVEMENT
- 3 900 (36) DIAMETER METAL PLATE
- 4 PROPOSED CRUSHED STONE AND BITUMINOUS MATERIAL
- S EXISTING STRUCTURE
- 6 FRAME AND LID (SEE NOTES)
- CLASS SI CONCRETE, BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL
- 8 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE
- 9 PROPOSED BITUMINOUS CONCRETE 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: FRAMES AND LIDS TO BE ADJUSTED, SPECIAL EACH

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

# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE

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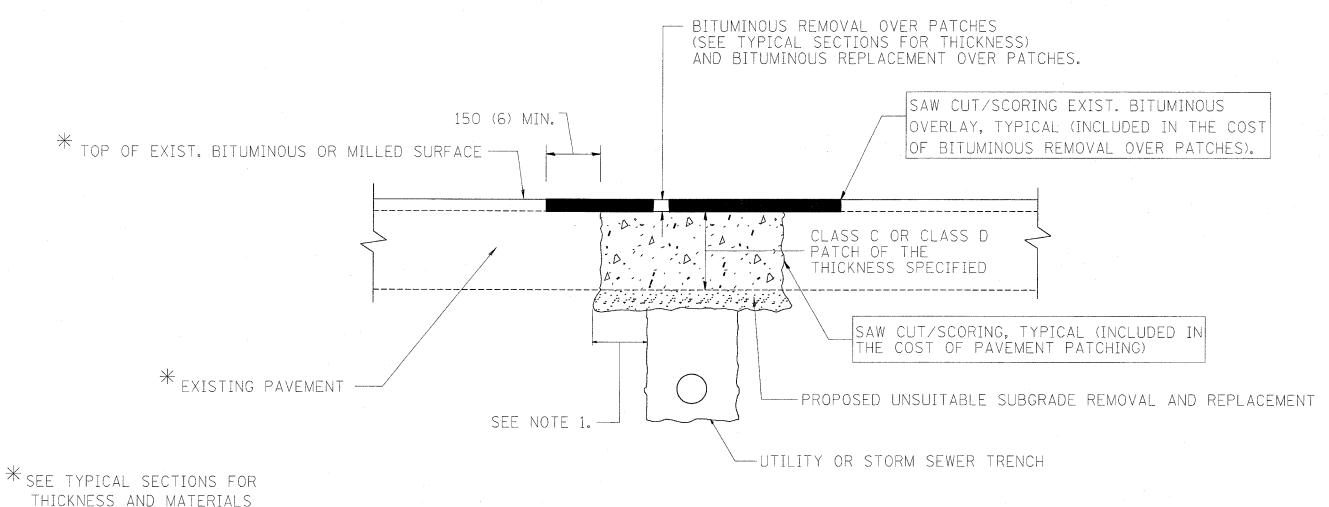
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1316RS-1 COOK FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

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### NOTES:

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

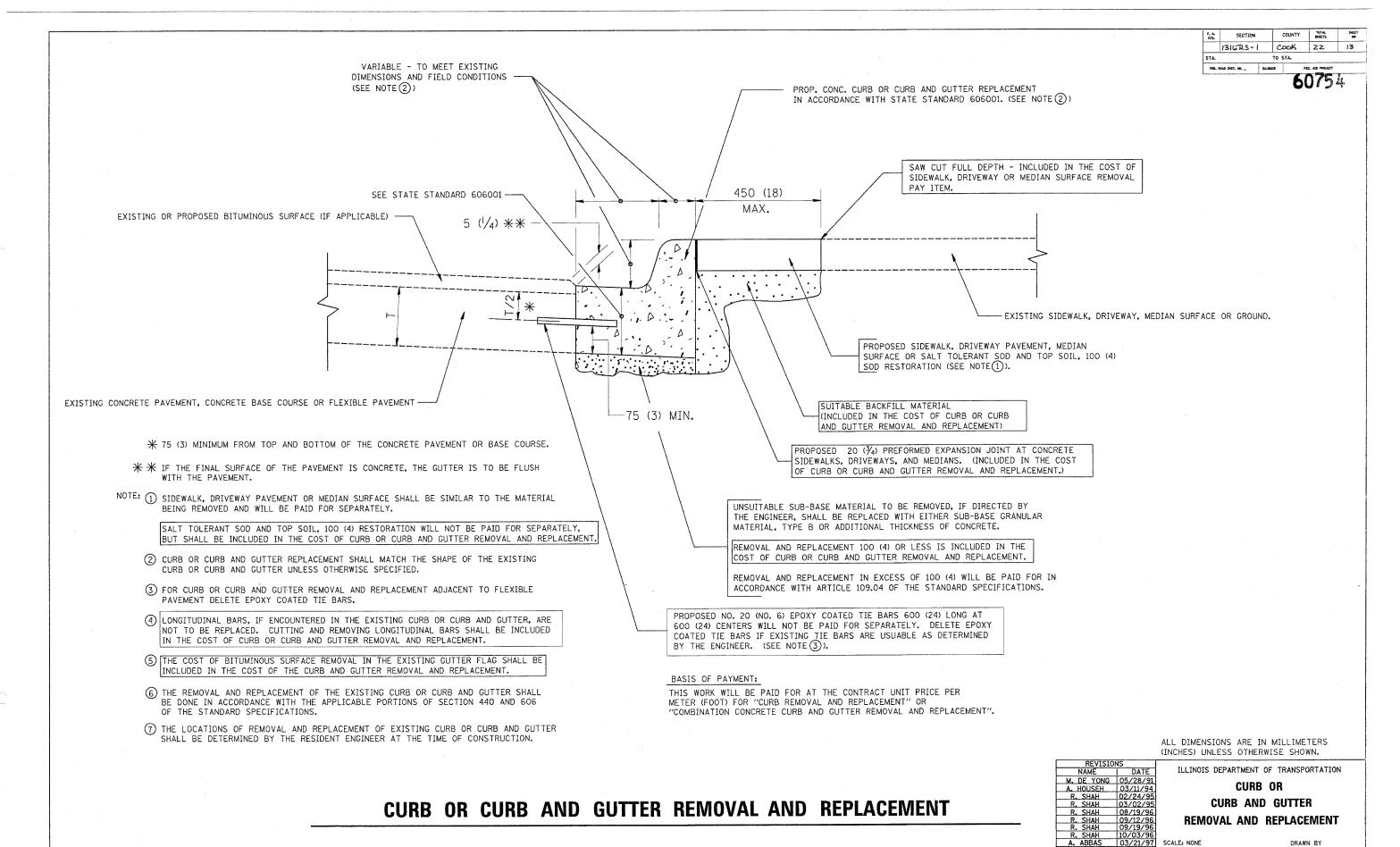
### SEQUENCE OF CONSTRUCTION

- 1. REMOVE THE EXISTING BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE FULL DEPTH PATCHES
- 3. REPLACE BITUMINOUS MATERIAL OVER THE AREA TO BE PATCHED.

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

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION			
NAME	DATE	ILLINOIS DEPARTME	INT OF TRANSPORTATION		
R. SHAH	10/25/94				
R. SHAH	01/14/95				
R. SHAH	03/23/95	PAVEMENT	PATCHING FOR		
R. SHAH	04/24/95	BITUMINOUS SUR	HIG GIIDEVCED		
A. HOUSEH	H 03/15/96	Dironnino	MICHINOUS SUNFACED		
A. ABBAS	03/21/97	PAVEMENT PAVEMENT	VEMENT		
A. ABBAS	01/20/98				
ART ABBAS	04/27/98	SCALE: VERT.			
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		DATE 3/18/2005	CHECKED BY		

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01/22/01 DATE 3/18/2005

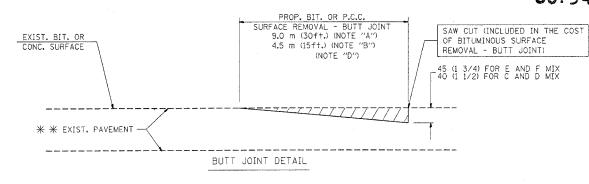
M. GOMEZ

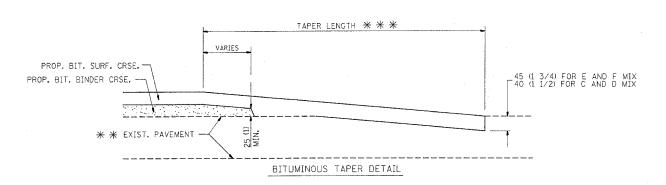
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REVISION DATE: 12/06/88

PROP. PAY LIMIT OF BIT. SURF. REMOVAL FULL THICKNESS OF MILLING TEMP, RAMP (NOTE "E") PROP. BIT. SURFACE REMOVAL EXIST. PAVEMENT MILLED TEMPORARY RAMP (FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW) OPTION 1 PROP. PAY LIMIT OF BIT. SURF. REMOVAL FULL THICKNESS OF MILLING SAW CUT (INCLUDED IN THE COST OF BITUMINOUS SURFACE (NOTE "C") (NOTE "E") PROP. BIT. SURFACE REMOVAL REMOVAL - BUTT JOINT) 45 (1 3/4) FOR E AND F MIX F 40 (1 1/2) FOR C AND D MIX 1.35 m (4.5') PAY LIMIT FOR BUTT JOINT \_EXIST. BIT. SURF. EXIST. PAVEMENT TEMP. BIT. RAMP BITUMINOUS CONSTRUCTED TEMPORARY RAMP (FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW) OPTION 2 TYPICAL TEMPORARY RAMP BIT. TAPER LENGTH \*\*\* SAW CUT (INCLUDED IN THE COST OF BITUMINOUS SURFACE PROP. BIT. SURF. CRSE. REMOVAL - BUTT JOINT) PROP. BIT. BINDER CRSE. 1.35 m (4.5') 45 (1 3/4) FOR E AND F MIX 40 (1 1/2) FOR C AND D MIX PAY LIMIT FOR BUTT JOINT (NOTE "D") EXIST. BIT. EXIST. PAVEMENT - BIT. SURF. REMOVAL - BUTT JOINT BUTT JOINT AND BITUMINOUS TAPER TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING

SECTION COUNTY TOTAL SHEETS 1316RS-1 Cook ZZ STA. TO STA. FED. ROAD DIST. NO. \_ ILLIMOIS





# TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

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

### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

BASIS OF PAYMENT:

- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING BITUMINOUS SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
- G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \* \* \* 6.1 m (20') PER 25 (1) RESURFACING (NOTE "A") 3.0 m (10') PER 25 (1) RESURFACING (NOTE "B")

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER

DETAILS 09/09/94 10/25/94 03/21/97

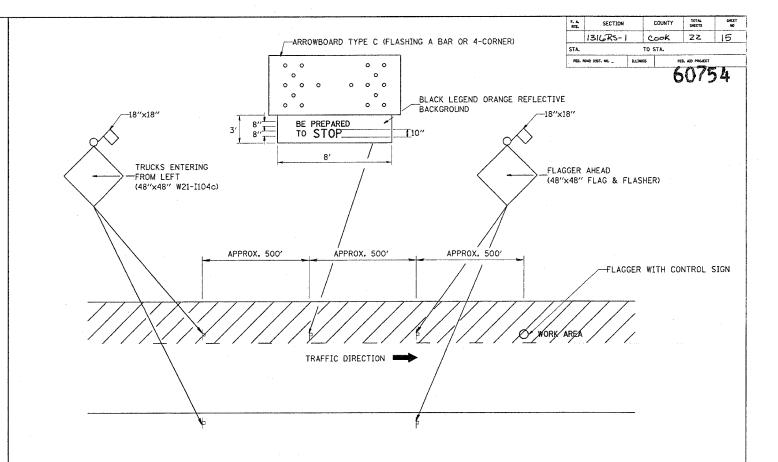
M. DE YONG R. SHAH

SCALE: NONE

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## METHOD OF FLAGGING

### NOTE:

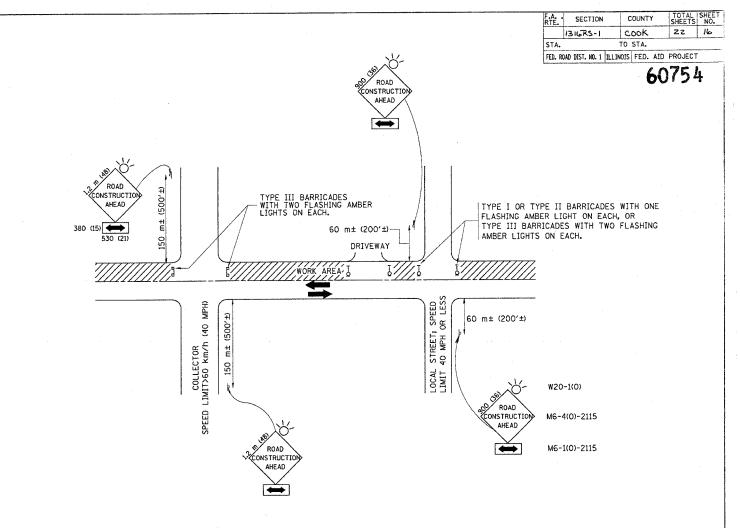
- 1. SIGNS SHALL BE MOUNTED AT A MINIMUM CLEARANCE HEIGHT OF 5 FEET
- 2. ALL SIGNS SHALL BE REMOVED WHEN THE FLAGGING OPERATION CEASES.
- 3. THIS CASE ALSO APPLIES WHEN THE WORK ZONE IS ON THE RIGHT.
  UNDER THESE CONDITIONS "TRUCKS ENTERING FROM RIGHT" SIGNS SHALL BE SUBSTITUTED FOR "TRUCKS ENTERING FROM LEFT" SIGNS. ALSO THE ARROWBOARD AND "BE PREPARED TO STOP" SIGNS SHALL BE RELOCATED TO THE RIGHT SIDE OF THE ROAD.
- 4. WORK ZONE ACCESS POINTS SHOULD BE A MINIMUM OF ONE HALF MILE APART. MEDIAN WORK ZONE ACCESS POINTS SHOULD NOT BE LOCATED OPPOSITE OF EACH OTHER.
- 5. NIGHTTIME FLAGGING OPERATIONS: THE FLAG STATION SHALL BE LIGHTED WITH ADDITIONAL LIGHTS OTHER THAN STREET LIGHTS. THE FLAGGER CONTROL SIGN AND THE FLAGGER'S VEST SHALL BE REFLECTORIZED. IN ADDITION, THE FLAGGER SHALL HAVE A FLASHLIGHT OR LIGHTED WAND.

ILLINOIS DEPARTMENT OF TRANSPORTATION METHOD OF FLAGGING SCALE: NOT TO SCALE DRAWN BY C.A.D. DATE 3/21/2005 CHECKED BY

REVISION DATE: 05/10/00

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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 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 900×900 (36×36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROLLET
- 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 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- g) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m  $\times$  1.2 m (48 $\times$ 48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') 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.

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TR.	6/89	LHA	
1 117	09/08/94	T. RAMMACHER	
1	10/18/95	J. OBERLE	
٠,	03/06/96	A. HOUSEH	
SI	10/15/96	A. HOUSEH	
1	01/06/00	T. RAMMACHER	
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TRAFFIC CONTROL AND PROTECTION
FOR

SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

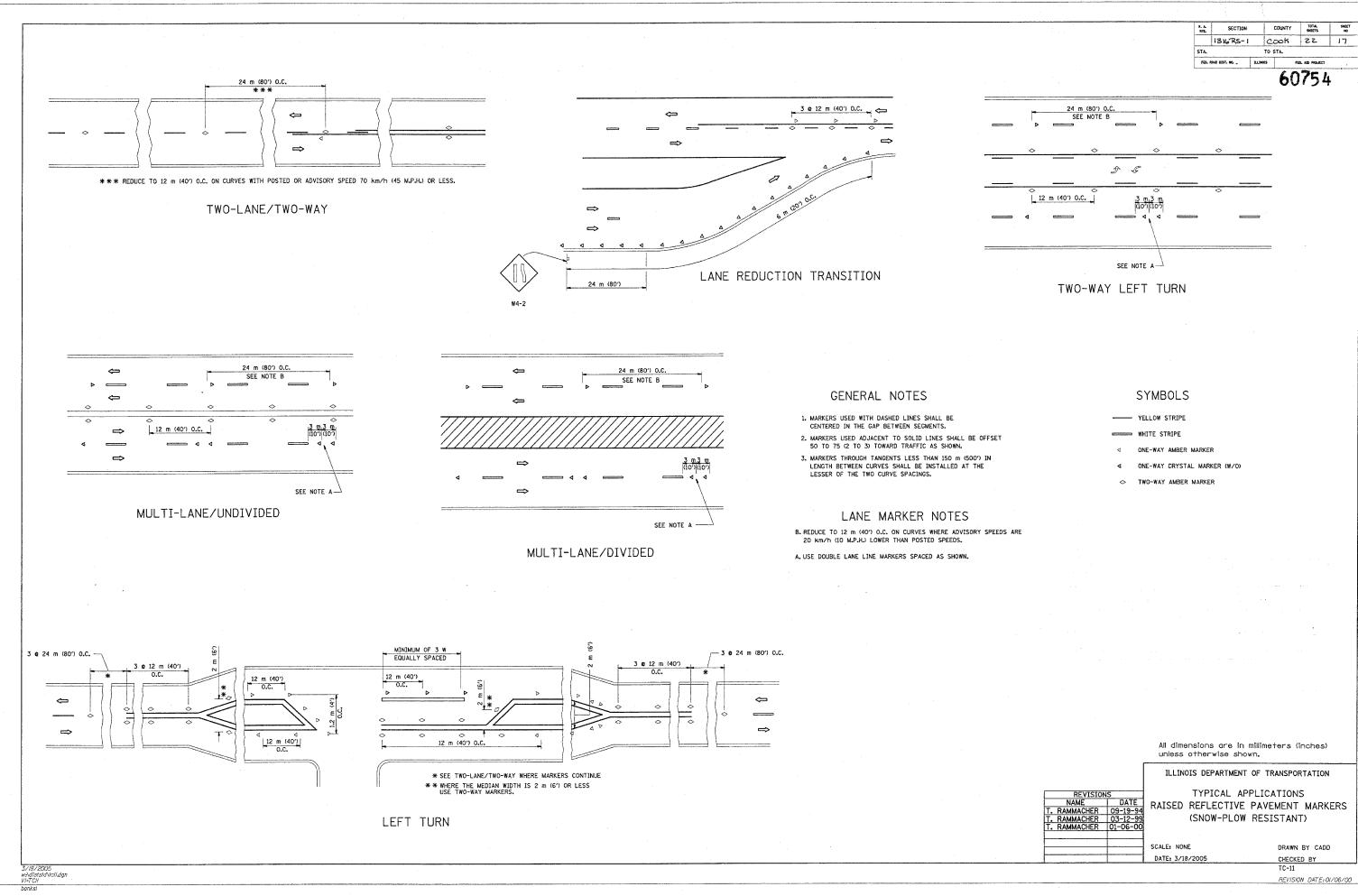
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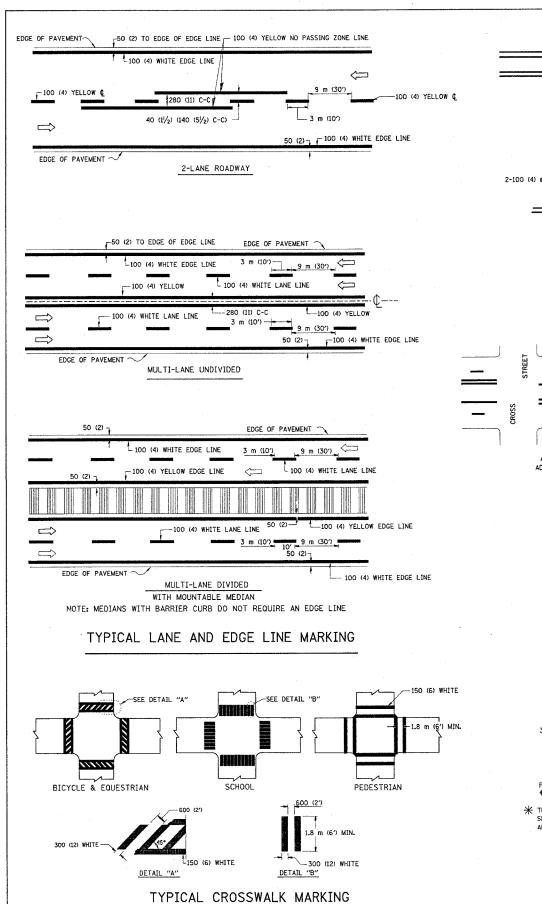
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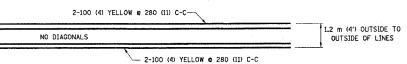
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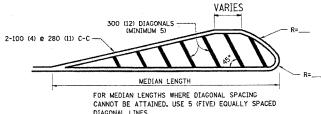
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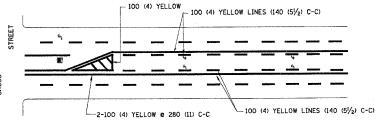


### 1.2 m (4') WIDE MEDIANS ONLY

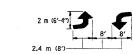


DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

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

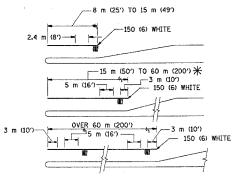


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

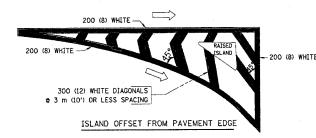
### TYPICAL PAINTED MEDIAN MARKING



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

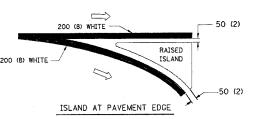
TYPICAL LEFT (OR RIGHT) TURN LANE

### TYPICAL TURN LANE MARKING



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FED, ROAD DIST. NO		LLINOIS	P	ED. AND PROJECT	

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## TYPICAL ISLAND MARKING

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

REVISIO		
NAME	DATE	
VERS	03-19-90	
RAMMACHER	10-27-94	
EX HOUSEH	10-09-96	
EX HOUSEH	10-17-96	
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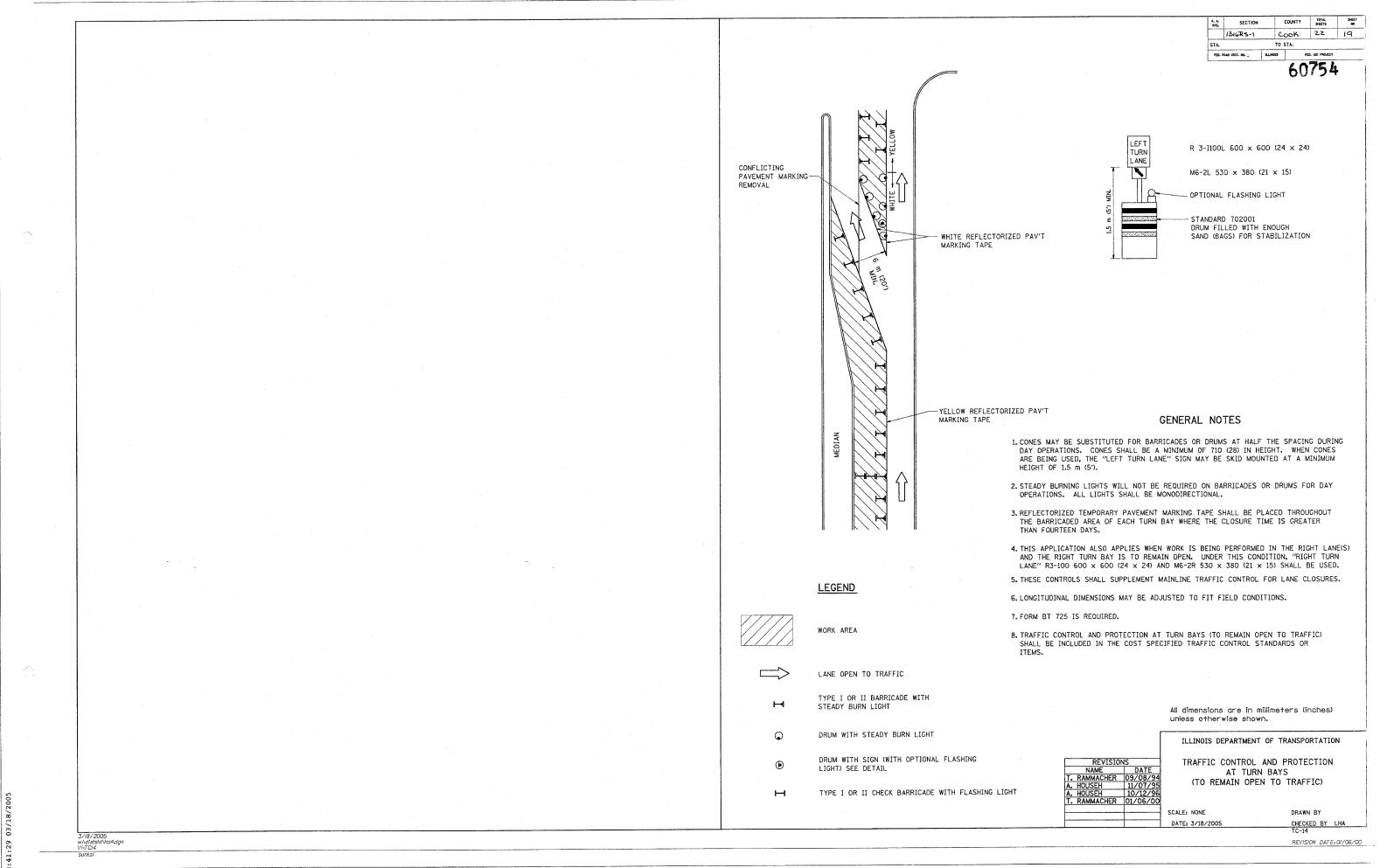
EVISIONS		DISTRICT ONE
E	DATE	TYPICAL PAVEMENT
CHER	10-27-94	MARKINGS
JSEH	10-09-96	
JSEH	10-17-96	

CALE: NONE

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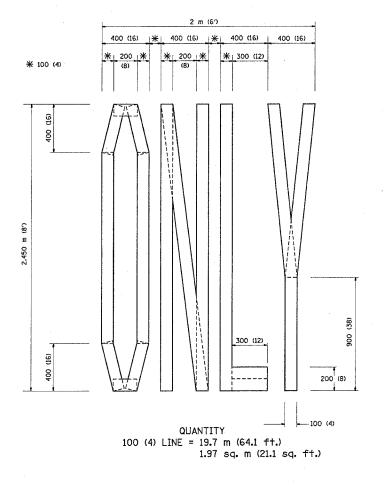
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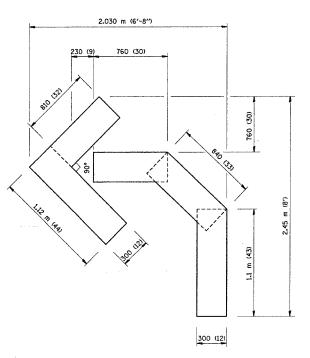
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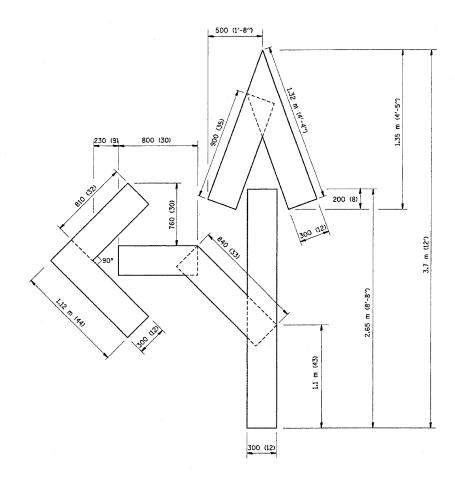
F. A. SECTION COUNTY TOTAL SHEETS 1316RS-1 COOK 22 20 TO STA. FED. ROAD DIST. NO. \_ DLIMOIS FED. AID PROJECT

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



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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

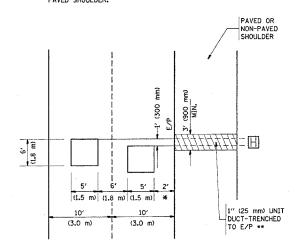
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### LOOPS NEXT TO SHOULDERS

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



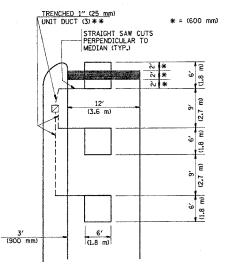
\* = (600 mm)

\* \* 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.

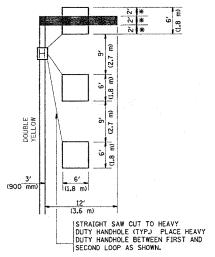


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

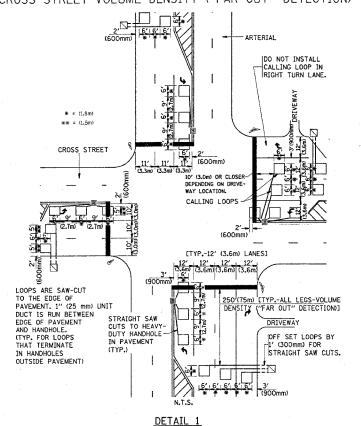
(PROTECTED / PERMITTED LEFT TURN PHASING)

\* = (600 mm)

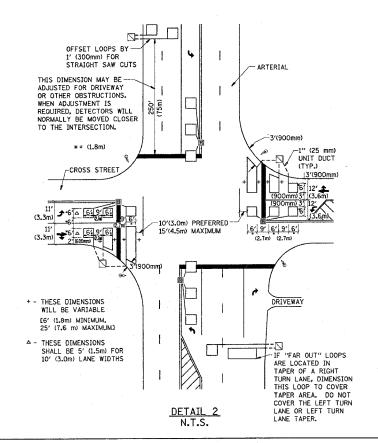


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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)



COUNTY TOTAL SHEETS SECTION 1316RS-1 COOK 22 21 TO STA. FED. ROAD DIST. NO. 7 ILLINOIS

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### 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 ALL DETECTOR LOOPS SHALL BE SIX FEET
- \* 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.

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

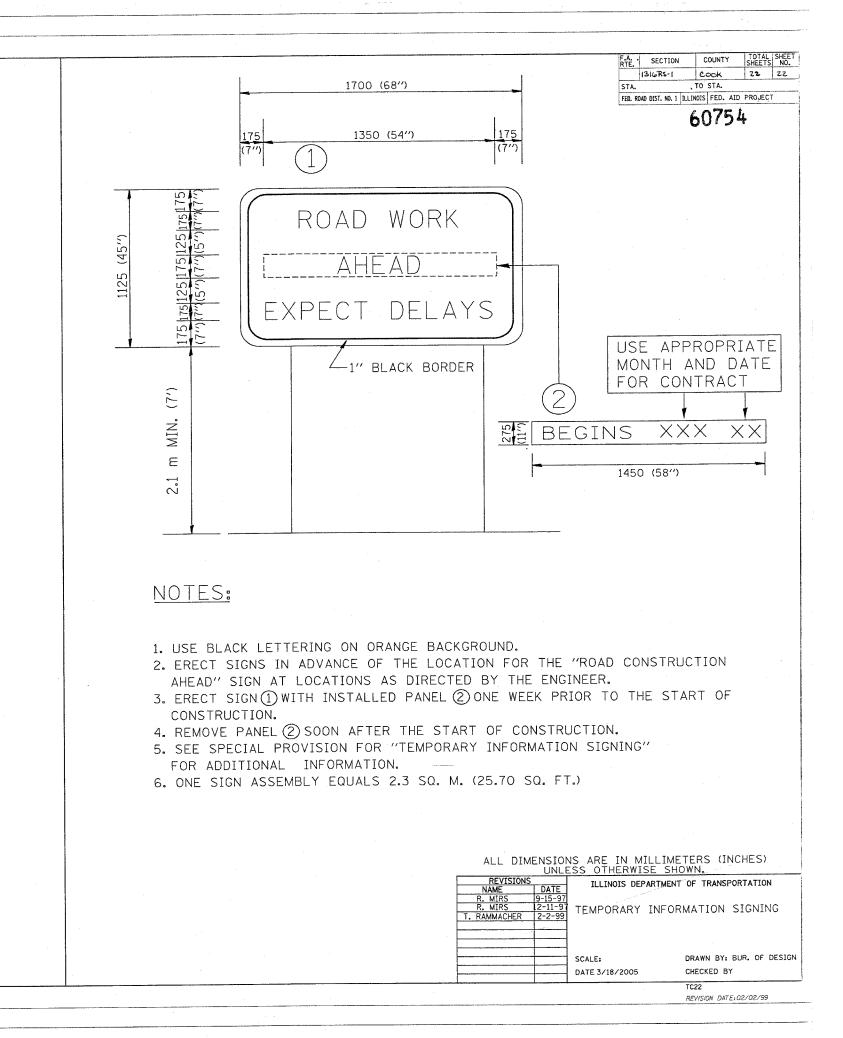
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1 REVISIONS DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING DRAWN BY CADD SCALE: NONE CHECKED BY R.K.F.

REVISION DATE:

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