

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	1

CONTRACT 62677

LOC. 1: D-91-040-04
LOC. 2: D-91-050-04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
HIGHWAY**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

THE IMPROVEMENT IS LOCATED IN THE CITY OF PALOS HEIGHTS AND THE VILLAGE OF PALOS PARK IN COOK COUNTY

FAU ROUTE 1587 - 123RD ST. & 123RD ST./127TH ST.
SECTION: 2004-042 RS
LOCATION 1: (FROM US 45 TO 86TH AVE.)
LOCATION 2: (FROM 80TH AVE. TO ILL 43)
MAINTENANCE RESURFACING
COOK COUNTY
C-91-040-04

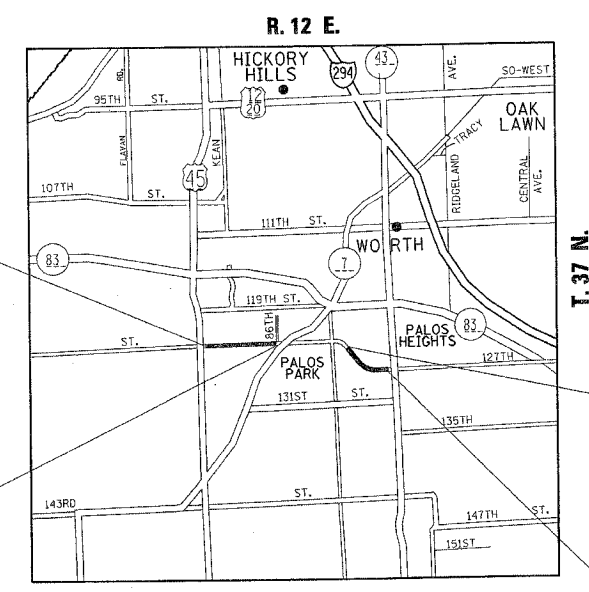


TRAFFIC DATA

LOC. NO. 1:
2002 ADT = 8,200
POSTED SPEED LIMIT = 35 MPH

LOC. NO. 2:
2002 ADT = 10,400
POSTED SPEED LIMIT = 35 MPH

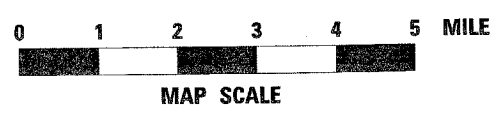
LOCATION #1
IMPROVEMENT BEGINS
STA. 17+85



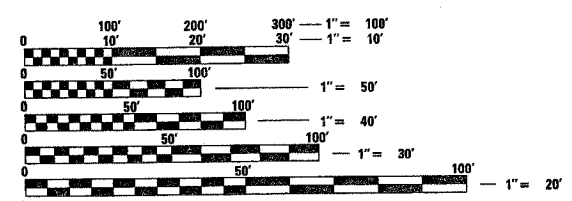
LOCATION #2
IMPROVEMENT BEGINS
STA. 0+00

LOCATION #1
IMPROVEMENT ENDS
STA. 76+21

LOCATION #2
IMPROVEMENT ENDS
STA. 45+25



GROSS AND NET LENGTH OF LOC. NO. 1 = 5836 LIN. FT. = 1.110 MILES
GROSS AND NET LENGTH OF LOC. NO. 2 = 4525 LIN. FT. = 0.857 MILES



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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED March 30, 20 05
Diana O'Keefe DISTRICT ENGINEER
May 13, 20 05
Mike Hine ENGINEER OF DESIGN AND ENVIRONMENT
May 13, 20 05
Victor Mader DIRECTOR, DIVISION OF HIGHWAYS

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

CONTRACT NO. 62677

DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER:
KEN ENG/ISSAM RAYAN (847)705-4240

3/29/2005 3:29:25 03/29/2005

3/29/2005
c:\projects\d105004\d105004aa.m32

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	2
STA. N/A		TO STA. N/A		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62677

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-6	TYPICAL CROSS SECTIONS
7-9	PROPOSED ROADWAY PLAN AND PAVEMENT MARKING PLAN FOR LOCATION NO. 1
10-14	PROPOSED ROADWAY PLAN AND PAVEMENT MARKING PLAN FOR LOCATION NO. 2
15	DETECTOR LOOP REPLACEMENT PLAN FOR LOCATION NO. 1
16	FRAMES AND LIDS ADJUSTMENT WITH MILLING; AND FRAMES AND LIDS ADJUSTMENT WITHOUT MILLING.
17	PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT
18	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
19	BUTT JOINT AND BITUMINOUS TAPER DETAILS
20	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
21	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
22	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
23	PAVEMENT MARKING LETTER AND SYMBOLS FOR TRAFFIC STAGING
24	TEMPORARY INFORMATION SIGNING
25	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201	CLASS C AND D PATCHES
604001	FRAME AND LIDS, TYPE 1
606001	CONC. CURB AND COMB. CONC. CURB AND GUTTER
701301	LANE CLOSURE, 2-L, 2-W, SHORT TIME OPERATIONS
701311	LANE CLOSURE 2-L, 2-W, MOVING DAY ONLY OPERATION
701501	URBAN LANE CLOSURE 2-L, 2-W, UNDIVIDED
701606	URBAN LANE CLOSURE MULTILANE 2-W WITH MOUNTABLE MEDIAN
701701	URBAN LANE CLOSURE MULTILANE INTERSECTION
702001	TRAFFIC CONTROL DEVICES
780001	TYPICAL LAYOUT FOR DETECTION LOOPS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUT FOR DETECTION LOOPS
701306	LANE CLOSURE, 2-L, 2-W, SLOW MOVING DAY ONLY OPERATIONS, FOR SPEED >45 MPH.

PLAN NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED.)
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGES OF PALOS HEIGHTS AND PALOS PARK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
-
- BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- PERMANENT PAVEMENT MARKINGS SHALL BE PLACED IN ACCORDANCE WITH THE "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" DETAIL (TC13).
- RAISED REFLECTIVE PAVEMENT MARKERS ARE TO BE PLACED THROUGHOUT THE IMPROVEMENT LIMITS. DOUBLE LANE LINE MARKERS SHALL BE PLACED WHERE APPLICABLE. SEE DETAIL "TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)".
- THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS TRAFFIC ENGINEER AT (708) 597-9800, A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKING.
- THE CONTRACTOR SHALL BE REQUIRED TO COMPLETE ALL PAVEMENT PATCHING PRIOR TO BITUMINOUS SURFACE REMOVAL OPERATIONS
- FOR PAVEMENT MARKING DETAILS SEE "DISTRICT ONE TYPICAL PAVEMENT MARKINGS" SHEET

MIXTURE REQUIREMENTS

ITEM	AC TYPE	VOID	RAP %
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"	SBS/SBR PG 76-28	2.5% @ 50 GYR	0
BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "D", N70, 1 1/2"	PG 64-22	4% @ 70 GYR	10
BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "D", N50, 1 1/2"	PG 64-22	4% @ 70 GYR	15
CLASS D PATCHES, Of TYPE and THICKNESS specified	PG 64-22	4% @ 50 GYR	15
BITUMINOUS REPLACEMENT OVER PATHCHES	PG 64-22	4% @ 70 GYR	15

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
123RD ST./127TH ST.
INDEX OF SHEETS
LIST OF STATE STANDARDS
PLAN NOTES

SCALE: VERT. : NONE
 HORIZ. : NONE
 DATE :
 DRAWN BY: HMO
 CHECKED BY: IR

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		LOC. 1 URBAN 100% STATE 1000	LOC. 2 URBAN 100% STATE 1000			
20201006	GRADING AND SHAPING SHOULDERS	UNIT	201	117	84			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	7	4	3			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	7	4	3			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	7	4	3			
25200110	SODDING, SALT TOLERANT	SQ YD	480	280	200			
25200200	SUPPLEMENTAL WATERING	UNIT	2	1	1			
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	13	7	6			
40600300	AGGREGATE (PRIME COAT)	TON	63	33	30			
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	4	2	2			
40600895	CONSTRUCTING TEST STRIP	EACH	2	1	1			
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	196	38	158			
40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	1225	558	667			
44000124	BITUMINOUS REMOVAL OVER PATCHES 6"	SQ YD	1244	1244				
44000132	BITUMINOUS REMOVAL OVER PATCHES 8"	SQ YD	1489		1489			
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2000	2000				
44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	228	132	96			
44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	290	118	172			
44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	2064	1269	795			
48101200	AGGREGATE SHOULDERS, TYPE B	TON	5381	3123	2258			
50300300	PROTECTIVE COAT	SQ YD	496	496				
55039700	STORM SEWERS TO BE CLEANED	FOOT	600	600				
60253000	CATCH BASINS TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	2	2				
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	28	28				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	2	2			
67100100	MOBILIZATION	L SUM	1	.5	.5			
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	.5	.5			
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	.5	.5			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	.5	.5			

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		LOC. 1 URBAN 100% STATE 1000	LOC. 2 URBAN 100% STATE 1000			
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	1	1				
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	8412	3474	4938			
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	38412	20316	18096			
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	78	78				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	278	10	268			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	935	386	549			
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	38412	20316	18096			
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	78	78				
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	278	10	268			
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	431	275	156			
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	355	275	80			
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	259		259			
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	102.8	51.4	51.4			
X4066424	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50	TON	1383	1383				
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	1266		1266			
X4067100	POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	TON	1324	691	633			
X4409410	BITUMINOUS SURFACE REMOVAL 2 1/4"	SQ YD	31132	16459	14673			
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	28	28				

*SPECIALTY ITEMS

REVISIONS	
NAME	DATE

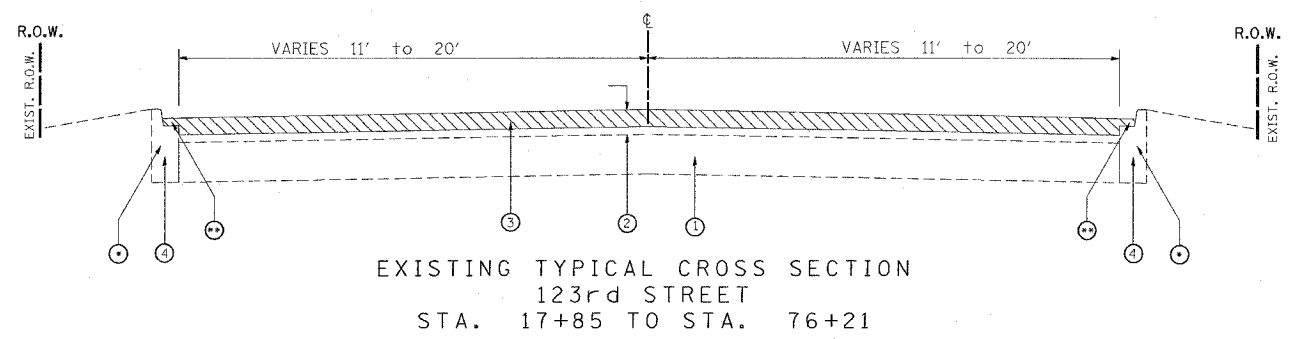
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

PLOT DATE: 3/30/2005

3/30/2005

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	4
STA. N/A		TO STA. N/A		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62677

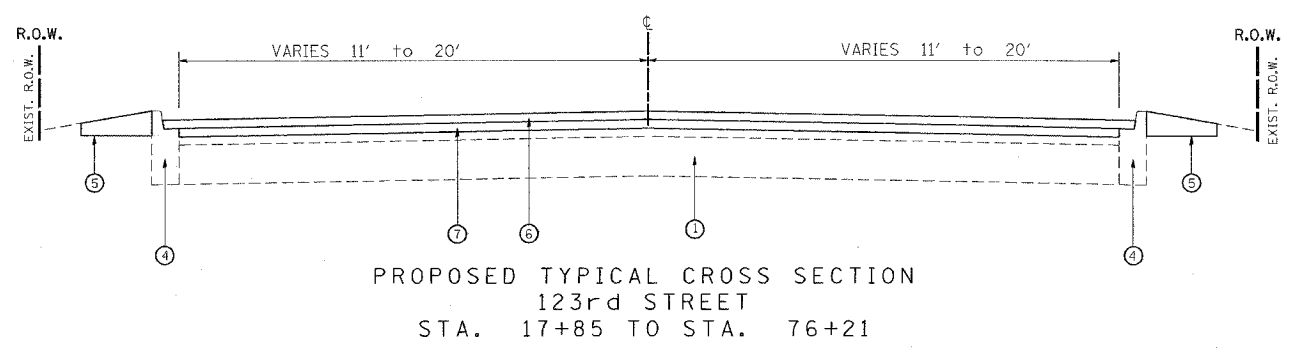
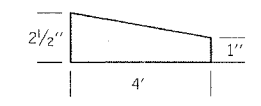


- * TYPE B6.24 CURB & GUTTER FROM STATION 17+85 TO STATION 18+10
TYPE B6.18 CURB & GUTTER FROM STATION 18+10 TO STATION 76+21
- ** LOCATION OF 2" +/- RESURFACED GUTTER FLAG AT THE FOLLOWING STATIONS (SEE NOTE):
STATION 18+10 TO STATION 76+21

- LEGEND**
- 1 EXISTING CONCRETE BASE COURSE, ± 7"
 - 2 EXISTING BITUMINOUS SURFACE COURSE, ± 6"
 - 3 PROPOSED BITUMINOUS SURFACE REMOVAL, 2 1/4"
 - 4 EXISTING COMBINATION CONCRETE CURB & GUTTER
 - 5 PROPOSED AGGREGATE SHOULDER, TYPE B
 - 6 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX. "D", N50, 1 1/2"
 - 7 PROPOSED POLYMERIZED LEVELING BINDER COURSE, (MACHINE METHOD) SUPERPAVE, IL-4.75, N50, 3/4"

NOTE:
REMOVAL OF EXISTING BITUMINOUS RESURFACING OVER GUTTER FLAG WILL BE PAID AS BITUMINOUS SURFACE REMOVAL, 2 1/4"

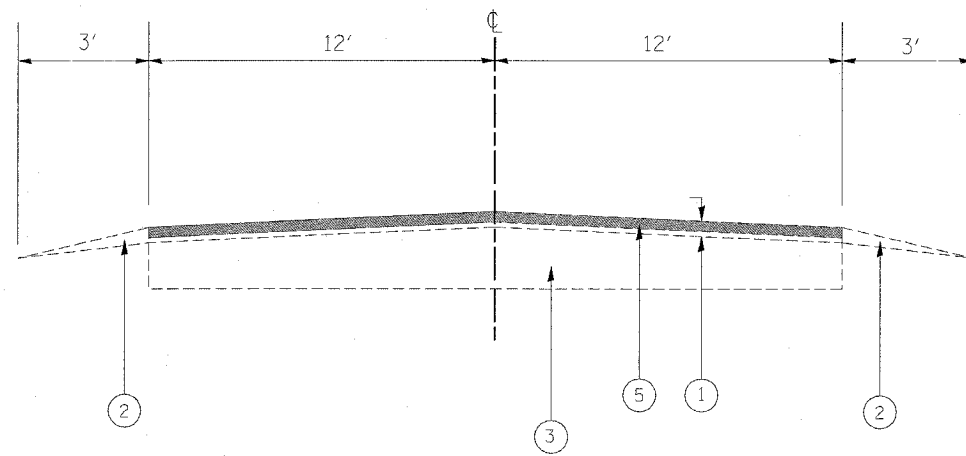
DETAIL: PROPOSED AGGREGATE SHOULDER TYPE B



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		LOCATION #1 123rd ST. PROPOSED ROADWAY AND PAVEMENT MARKING PLANS
SCALE: VERT. 1"=50"		DRAWN BY: JR
DATE: 3/31/2005		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	5
STA. N/A	TO STA. N/A			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

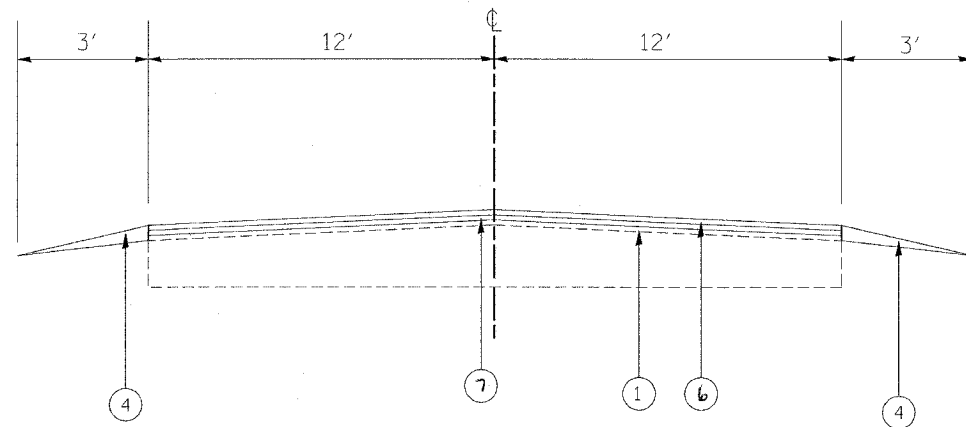
CONTRACT NO. 62677



EXISTING TYPICAL CROSS SECTION
123rd / 127th STREET
STA. 0+00 TO STA. 15+47
STA. 24+20 TO STA. 45+25

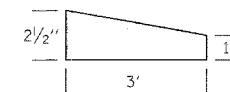
LEGEND

- ① EXISTING BIT. CONC. SURFACE COURSE, ± 8"
- ② EXISTING BIT. AGGREGATE SHOULDER, 3'
- ③ EXISTING SUBBASE GRANULAR MATERIAL, 7"
- ④ PROPOSED AGGREGATE SHOULDER, TYPE B, 3'
- ⑤ PROPOSED BIT. SURFACE REMOVAL (2 1/4")
- ⑥ PROPOSED BIT. CONC. SURFACE COURSE, SUPERPAVE MIX "D", N70 (1 1/2")
- ⑦ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50 (3/4")



PROPOSED TYPICAL CROSS SECTION
123rd / 127th STREET
STA. 0+00 TO STA. 15+47
STA. 24+20 TO STA. 45+25

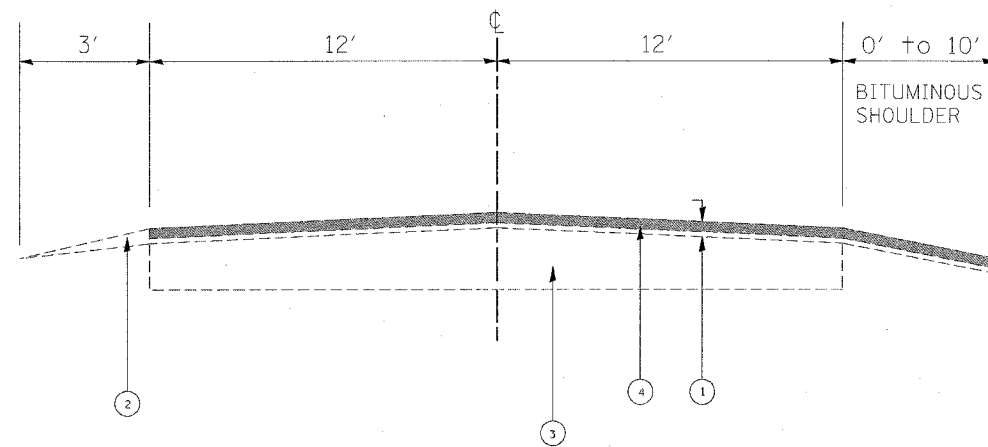
DETAIL: PROPOSED AGGREGATE SHOULDER TYPE B



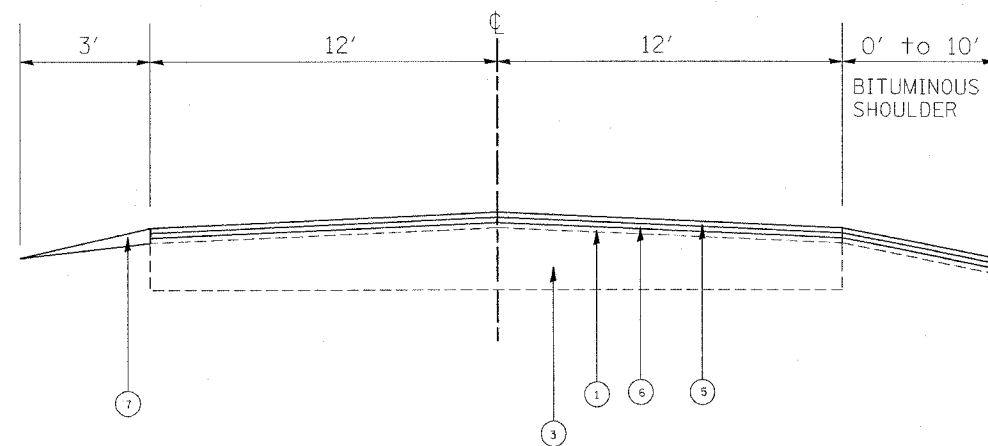
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		LOCATION #2 123RD ST./127TH ST. EXISTING AND PROPOSED TYPICAL SECTION
SCALE : NONE		DRAWN BY: MHO
3/31/2005		CHECKED BY: IR

F. A. U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	6
STA. N/A	TO STA. N/A			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62677



EXISTING TYPICAL CROSS SECTION
123rd / 127th STREET
STA. 15+47 TO STA. 24+20



PROPOSED TYPICAL CROSS SECTION
123rd / 127th STREET
STA. 15+47 TO STA. 24+20

LEGEND

- ① EXISTING BIT. CONC. SURFACE COURSE, ± 8"
- ② EXISTING BIT. AGGREGATE SHOULDER, 3'
- ③ EXISTING SUBBASE GRANULAR MATERIAL, 7"
- ④ PROPOSED BIT. SURFACE REMOVAL (2 1/4")
- ⑤ PROPOSED BIT. CONC. SURFACE COURSE, SUPERPAVE MIX "D", NTO (1 1/2")
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.5, N50 (3/4")
- ⑦ PROPOSED AGGREGATE SHOULDER, TYPE B

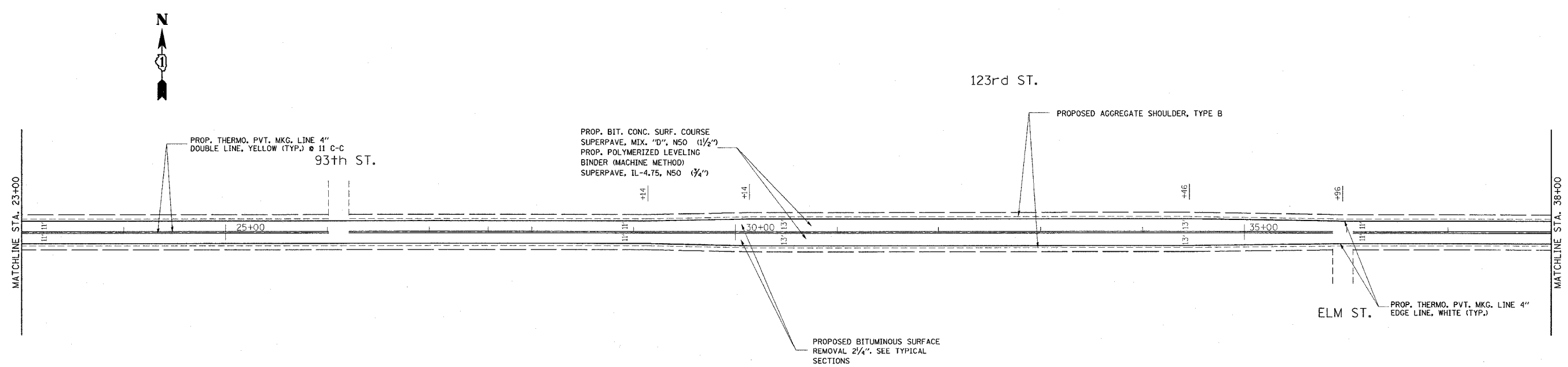
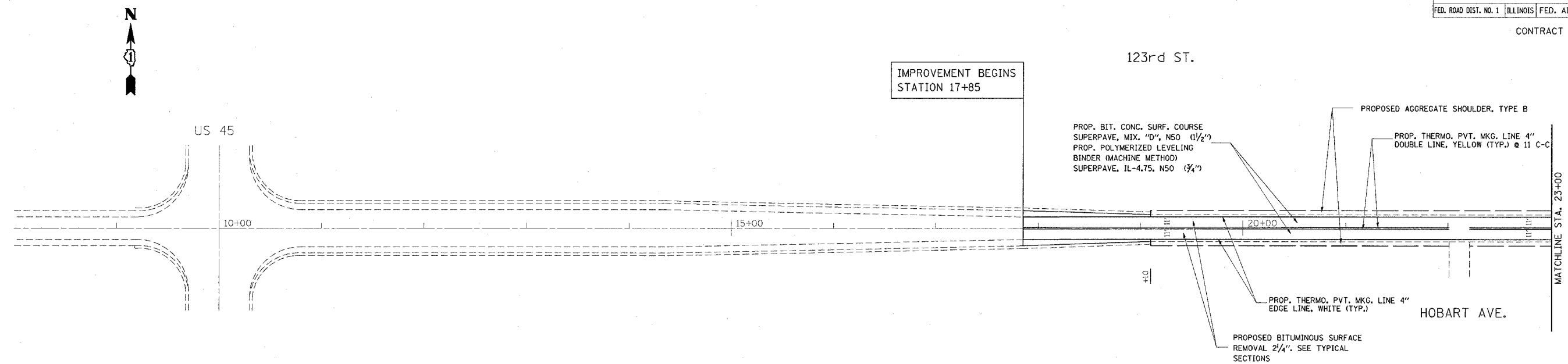
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
LOCATION #2
123RD ST./127TH ST.
EXISTING AND PROPOSED
TYPICAL SECTIONS

SCALE: VERT. NONE
 HORIZ. NONE
DATE 3/31/2005
DRAWN BY: HMO
CHECKED BY: IR

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	7
STA. 8+00		TO STA. 38+00		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62677



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

LOCATION #1
123rd ST.
PROPOSED ROADWAY AND
PAVEMENT MARKING PLANS

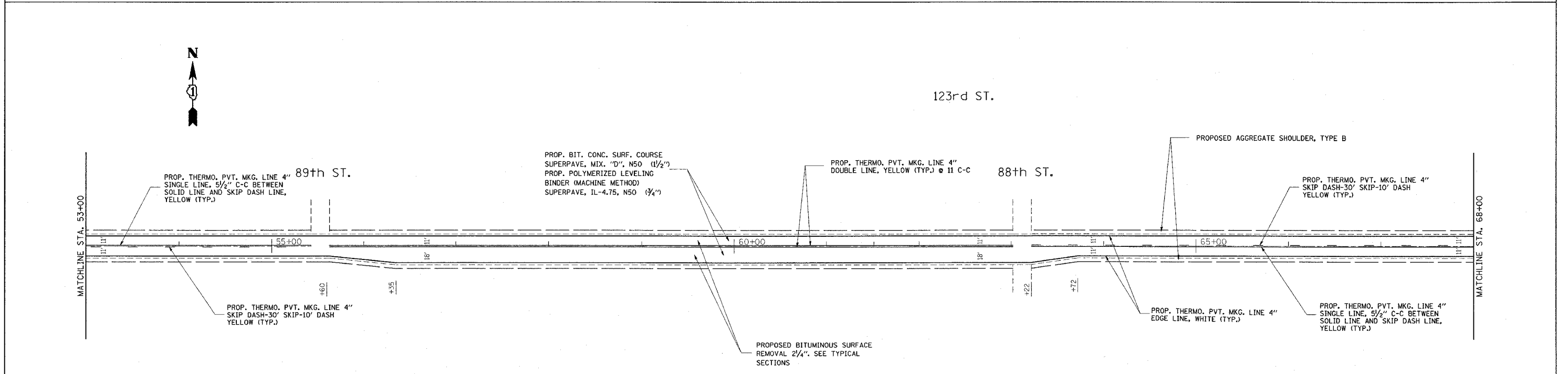
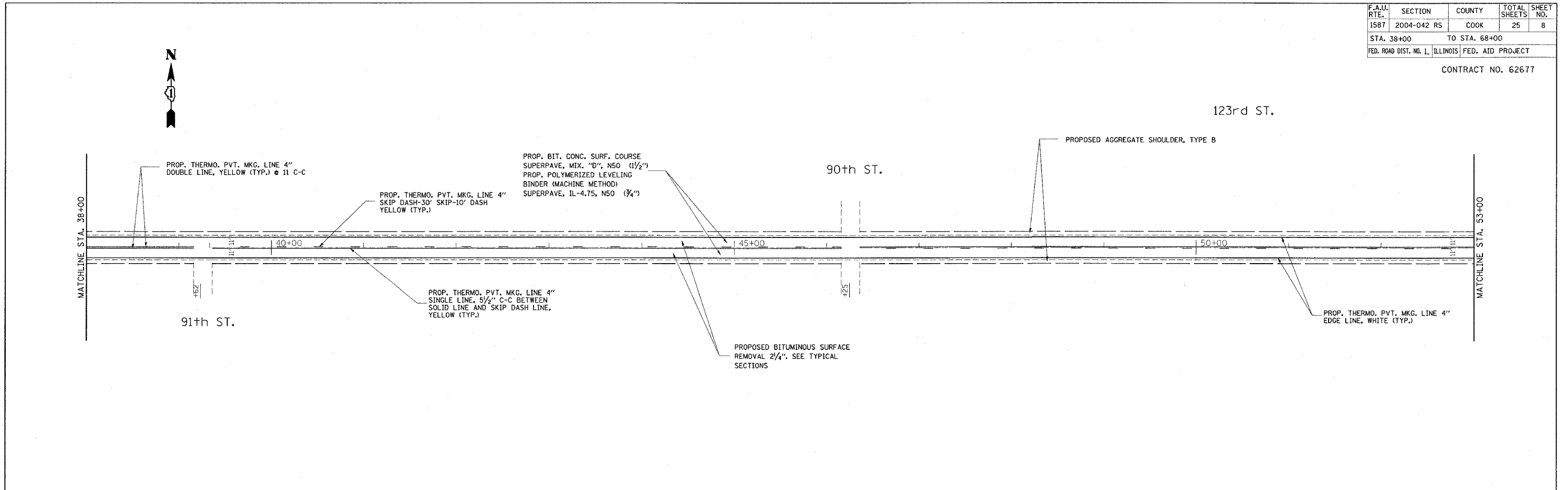
SCALE: VERT. 1"=50'
 HORIZ. 1"=50'
 DATE 3/31/2005

DRAWN BY JR
 CHECKED BY IR

3/31/2005
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	8
STA. 38+00		TO STA. 68+00		
FED. ROAD DIST. NO. 1, ILLINOIS FED. AID PROJECT				

CONTRACT NO. 62677



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

LOCATION #1
123rd ST.
PROPOSED ROADWAY AND
PAVEMENT MARKING PLANS

SCALE: VERT. 1"=50"
 HORIZ. 1"=50"

DATE: 3/31/2005

DRAWN BY: JR
 CHECKED BY: IR

3/31/2005
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F. A. D. DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	10
STA. 0+00		TO STA. 2+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62677

123RD ST.

80TH AVE.

123RD PL.

MC CARTHY RD.



BEGINNING OF IMPROVEMENT
STATION 0+00

- PROPOSED AGGREGATE SHOULDER, TYPE B
- PROP. BIT. CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70
PROP. POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50
- PROPOSED BITUMINOUS SURFACE REMOVAL 2 1/4". SEE TYPICAL SECTIONS
- PROP. THERMO. PVT. MKG. LINE 4" EDGE LINE, WHITE (TYP.)
- PROP. DOUBLE YELLOW LINES - 4" LINES @ 11" C-C
- MATCH LINE STA. 2+00

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
LOCATION #2
123RD ST./127TH ST.
EXISTING AND PROPOSED
ROADWAY PLAN

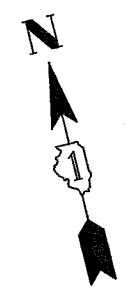
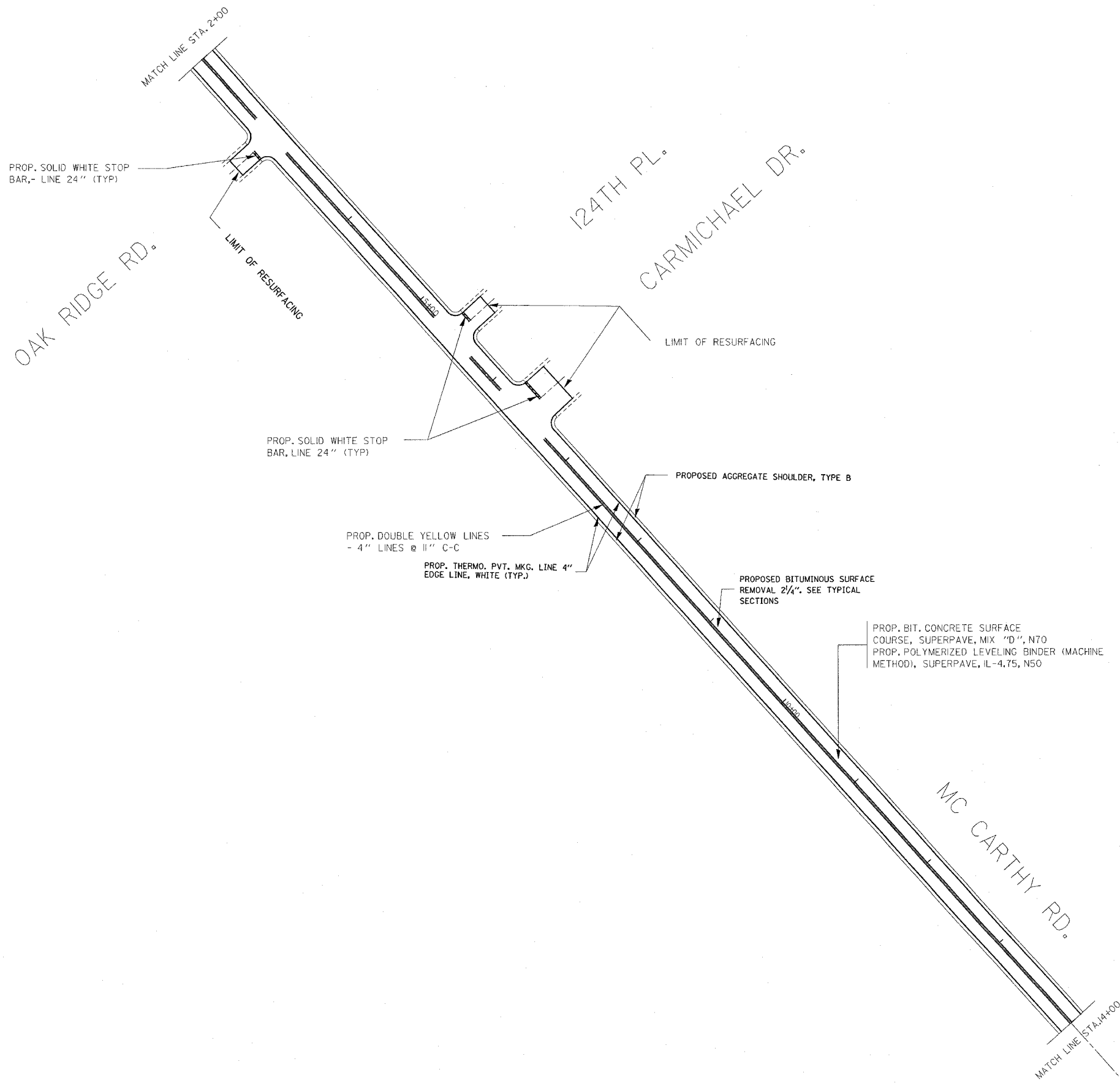
SCALE: VERT. 1"=50'
HORIZ. 1"=50'

DATE 3/31/2005

DRAWN BY: HMO
CHECKED BY: IR

F. & W. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	11
STA. 2+00	TO STA. 14+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62677



REVISIONS	
NAME	DATE

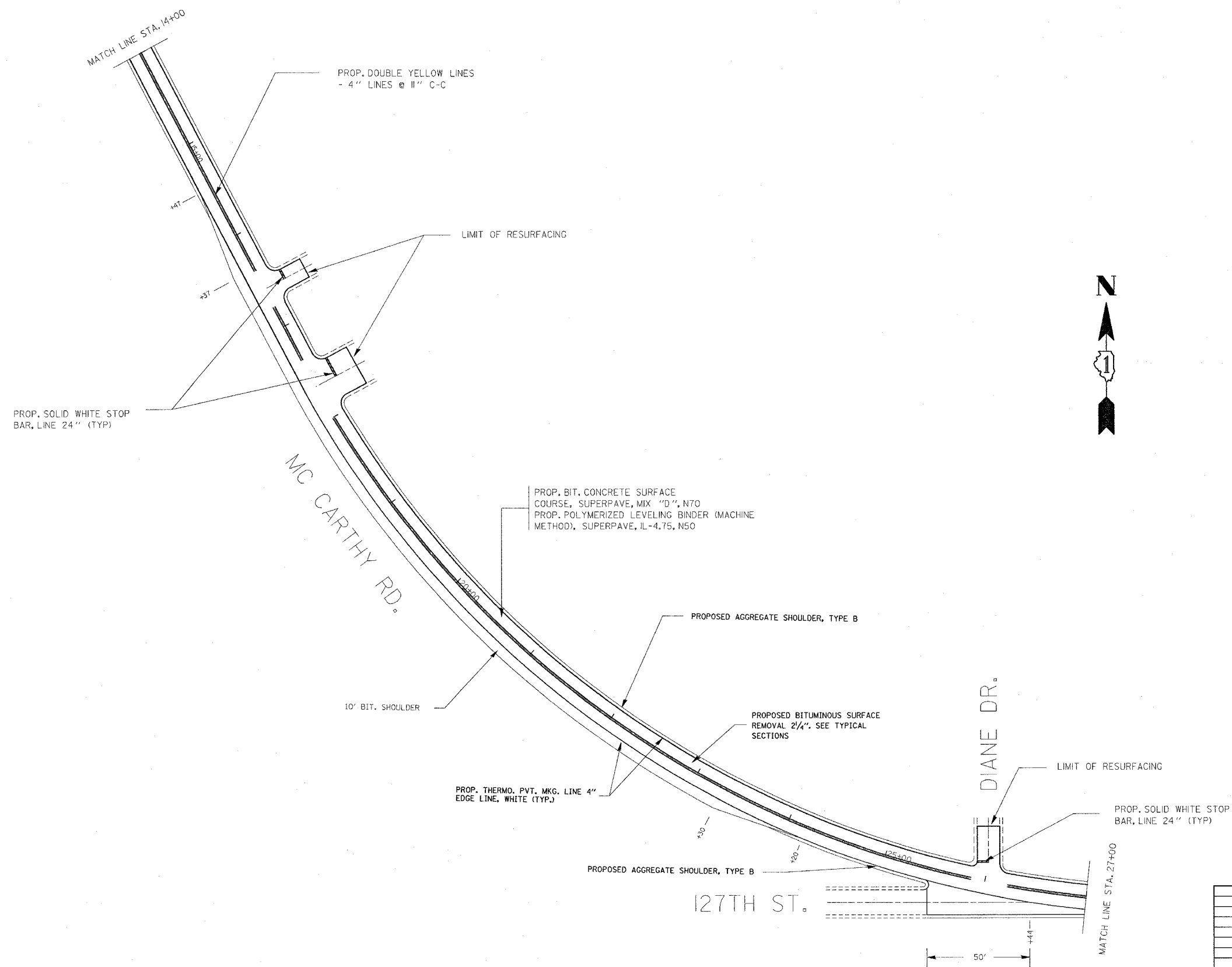
ILLINOIS DEPARTMENT OF TRANSPORTATION
LOCATION #2
123RD ST./127TH ST.
EXISTING AND PROPOSED
ROADWAY PLAN

VERT. SCALE: 1"=50'
HORIZ. SCALE: 1"=50'
DATE: 3/31/2005

DRAWN BY: HMO
CHECKED BY: IR

F. A. DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	12
STA. 14+00	TO STA. 27+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62677



REVISIONS	
NAME	DATE

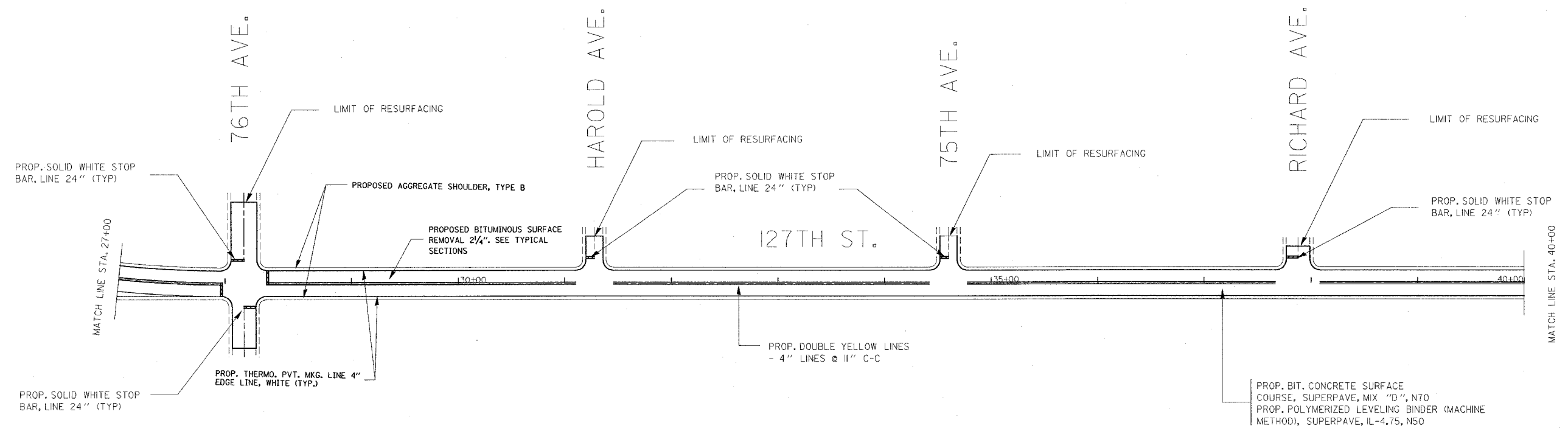
ILLINOIS DEPARTMENT OF TRANSPORTATION

LOCATION #2
123RD ST./127TH ST.
EXISTING AND PROPOSED
ROADWAY PLAN

SCALE: VERT. 1"=50'
 HORIZ. 1"=50'
 DATE 3/31/2005

DRAWN BY HMO
 CHECKED BY IR

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	13
STA. 27+00	TO STA. 40+00			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 62677				



REVISIONS	
NAME	DATE

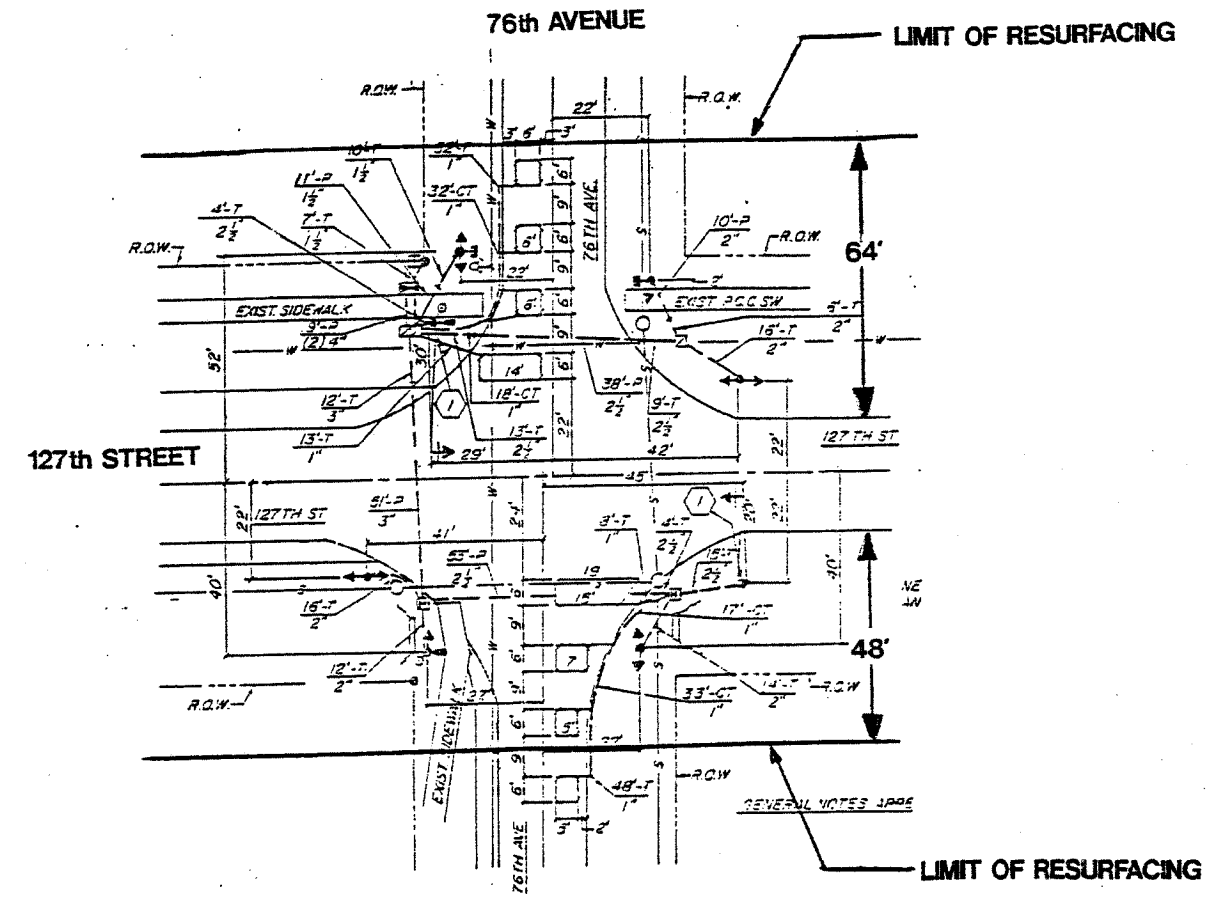
ILLINOIS DEPARTMENT OF TRANSPORTATION
LOCATION #2
123RD ST./127TH ST.
EXISTING AND PROPOSED
ROADWAY PLAN

SCALE: VERT. 1"=50'
 HORIZ. 1"=50'

DATE _____ DRAWN BY HMO
 CHECKED BY IR

P.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-092 RS	COOK	25	15
STA. N/A	TO STA. N/A			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 62677



REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
88600600	259'	FOOT	DETECTOR LOOP REPLACEMENT

NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

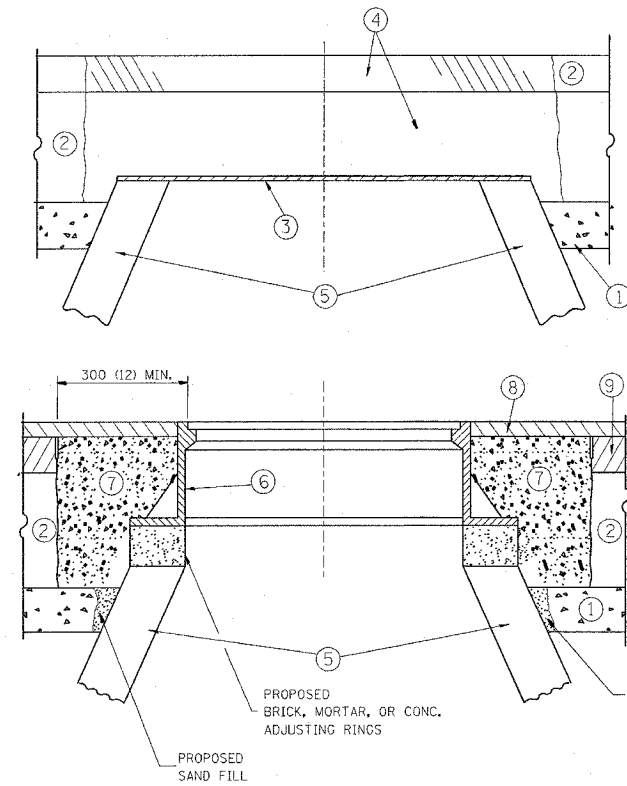


ILLINOIS DEPARTMENT OF TRANSPORTATION
 DETECTOR LOOPS AT:
**127th STREET &
 76th AVENUE**

SCALE 1" =
 DATE
 DESIGNED BY:
 DRAWN BY:
 CHECKED BY:

62677

P.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	16
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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 1/2) 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
- ⑤ EXISTING STRUCTURE
- ⑥ FRAME AND LID (SEE NOTES)
- ⑦ 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.

NOTES:

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

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

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

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

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

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN

ILLINOIS DEPARTMENT OF TRANSPORTATION

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

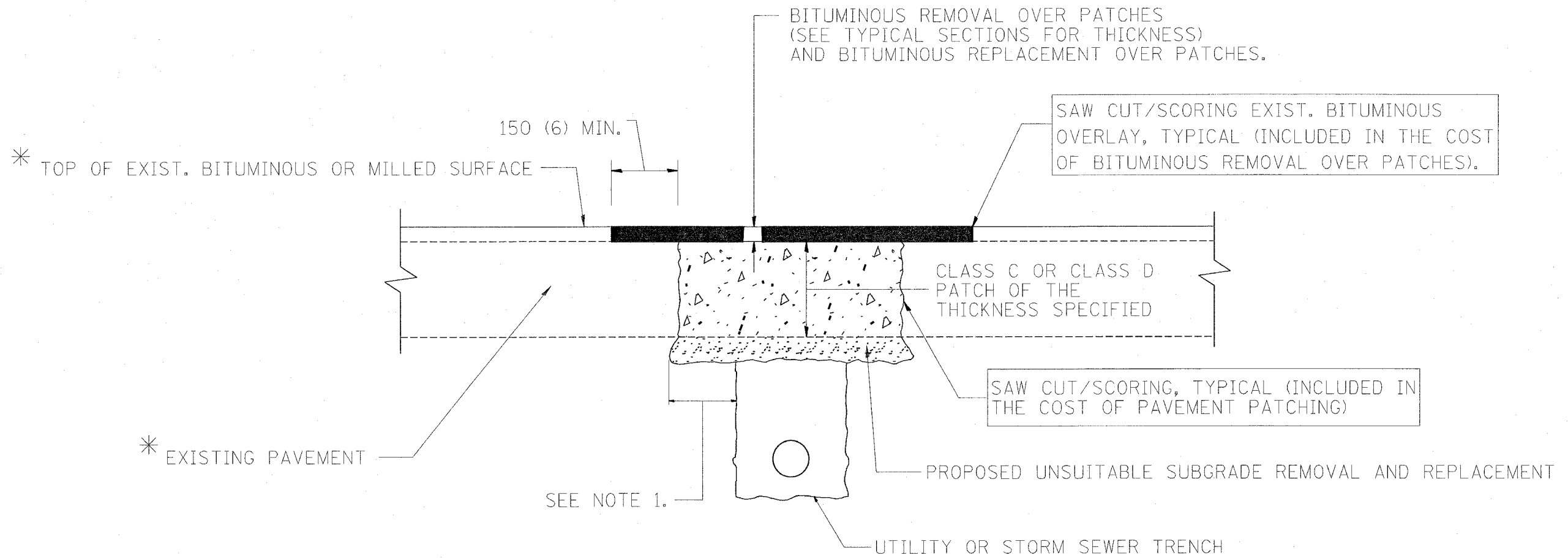
REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04

SCALE: NONE
DATE: 3/9/2005

DRAWN BY
CHECKED BY

BD600-03 (BD-8)
REVISION DATE: 05/17/04

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	17
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/14/95
R. SHAH	03/23/95
R. SHAH	04/24/95
A. HOUSEH	03/15/96
A. ABBAS	03/21/97
A. ABBAS	01/20/98
ART ABBAS	04/27/98

ILLINOIS DEPARTMENT OF TRANSPORTATION

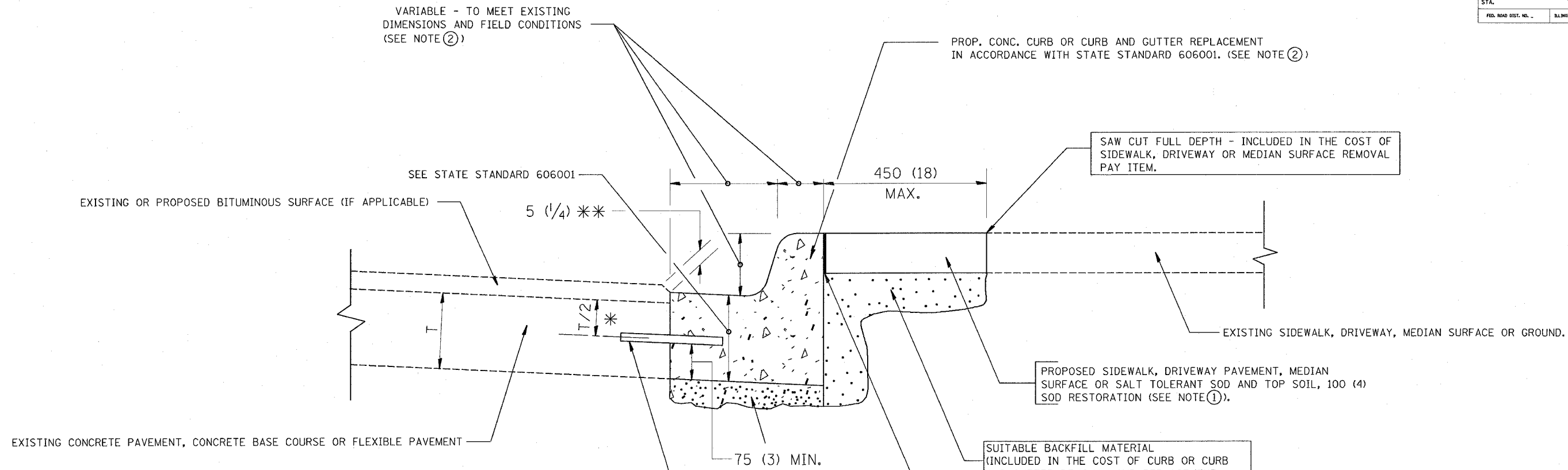
PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT

SCALE: VERT. HORIZ. DATE 3/9/2005

DRAWN BY CHECKED BY

BD400-04 (BD-22) REVISION DATE: 04/27/98

F. A. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	18
STA.		TO STA.		
FED. ROAD DIST. NO.	BILLINGS	FED. AID PROJECT		



- * 75 (3) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- * * IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

- NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.
- SALT TOLERANT SOD AND TOP SOIL, 100 (4) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑤ THE COST OF BITUMINOUS SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.
- ⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.
- ⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

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

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

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

PROPOSED NO. 20 (NO. 6) EPOXY COATED TIE BARS 600 (24) LONG AT 600 (24) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

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

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

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

REVISIONS	
NAME	DATE
M. DE YONG	05/28/91
A. HOUSEH	03/11/94
R. SHAH	02/24/95
R. SHAH	03/02/95
R. SHAH	08/19/96
R. SHAH	09/12/96
R. SHAH	09/19/96
R. SHAH	10/03/96
A. ABBAS	03/21/97
M. GOMEZ	01/22/01

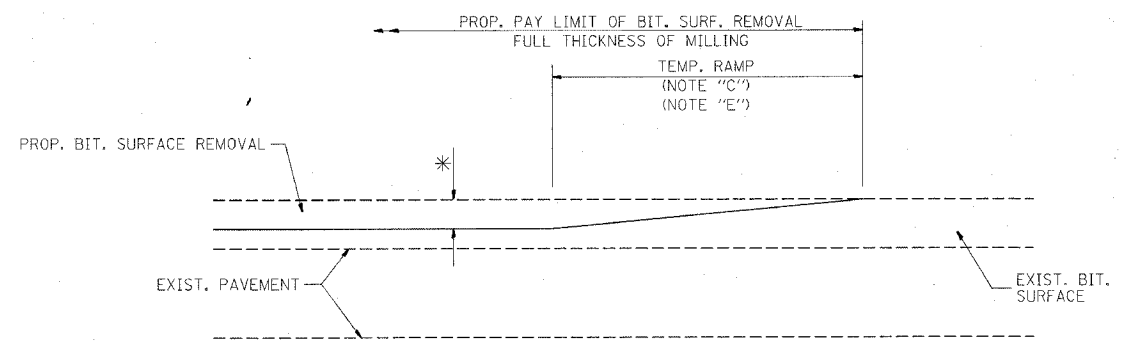
ILLINOIS DEPARTMENT OF TRANSPORTATION
**CURB OR
 CURB AND GUTTER
 REMOVAL AND REPLACEMENT**

SCALE: NONE
 DATE: 3/9/2005
 DRAWN BY:
 CHECKED BY:
 BD600-06 (BD-24)

REVISION DATE: 12/06/88

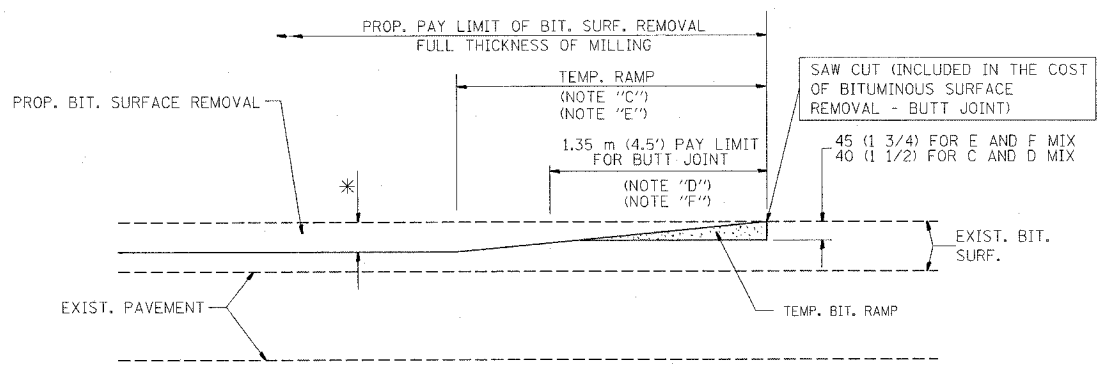
62677

P. A. REL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	19
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

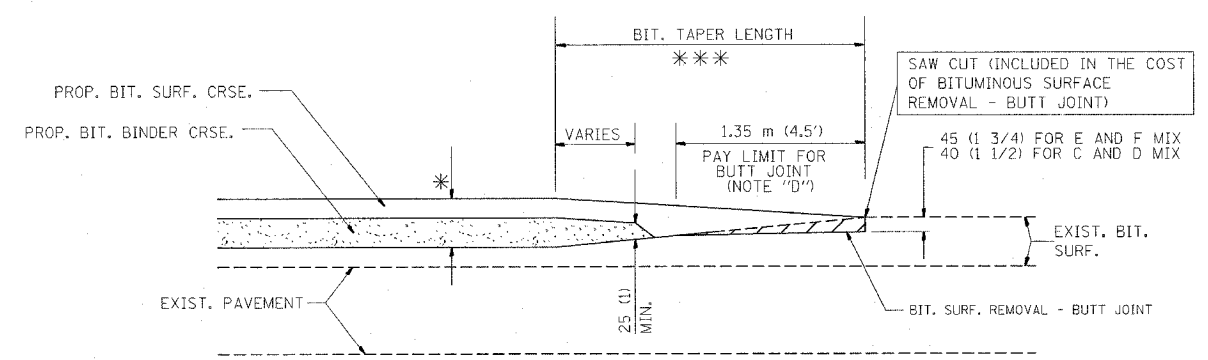
OPTION 1



BITUMINOUS CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

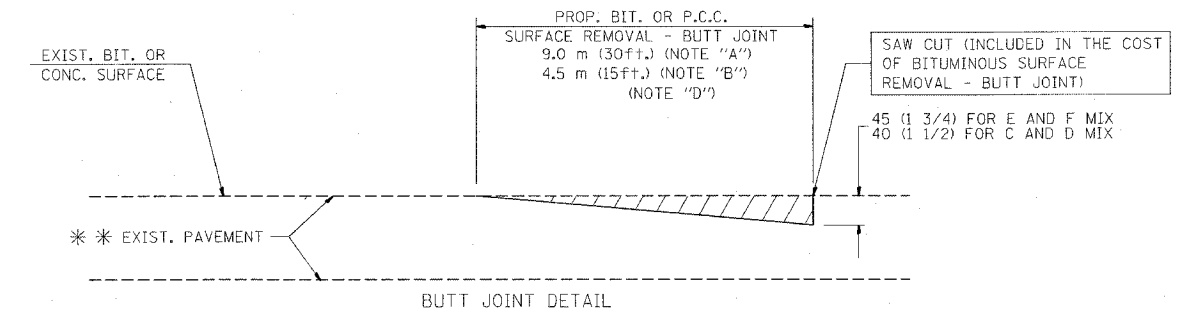
OPTION 2

TYPICAL TEMPORARY RAMP

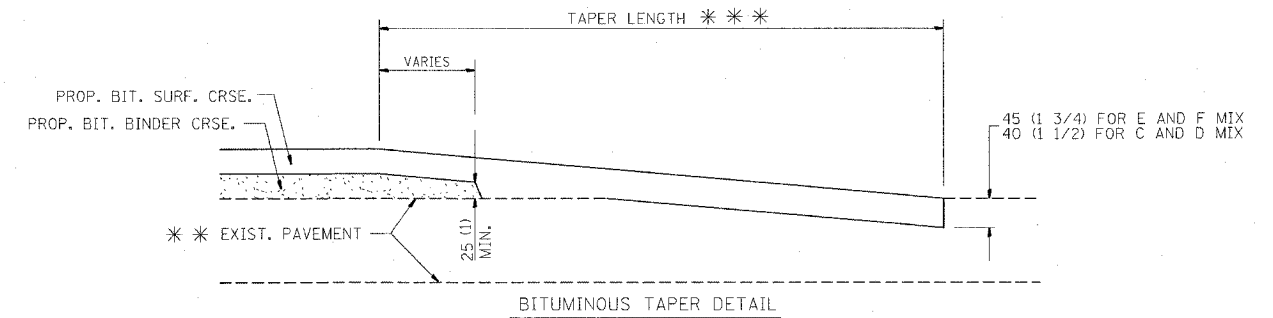


BUTT JOINT AND BITUMINOUS TAPER

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



BITUMINOUS TAPER DETAIL

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.
 - 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.

BASIS OF PAYMENT:

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".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: NONE
DATE PLOTTED: 3/9/2005

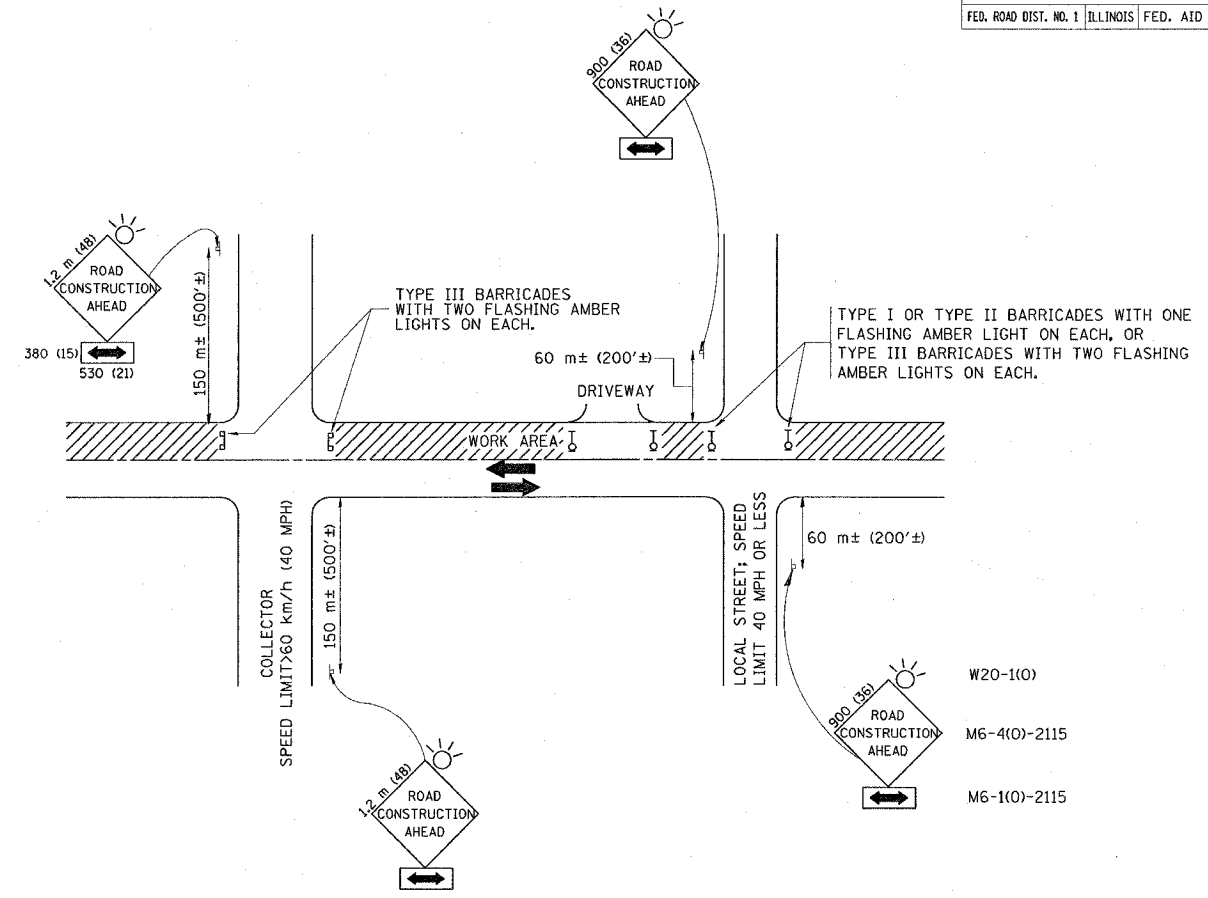
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CHECKED BY
BD400-05 (VI-BD32)

REVISION DATE: 04/06/01

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	20
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 900x900 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - 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.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

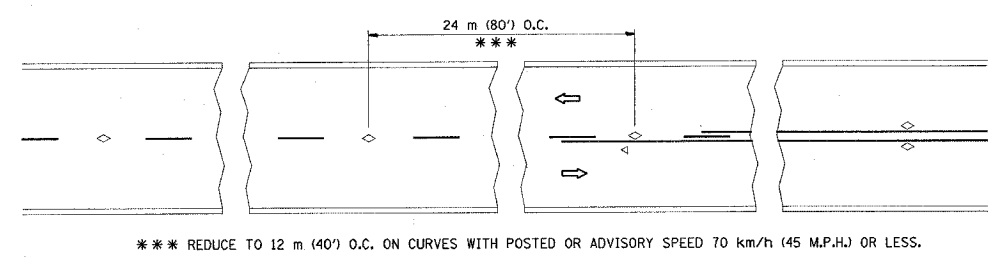
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE: VERT.
 HORIZ.
 DATE 3/9/2005

DRAWN BY
 CHECKED BY
 TC-10

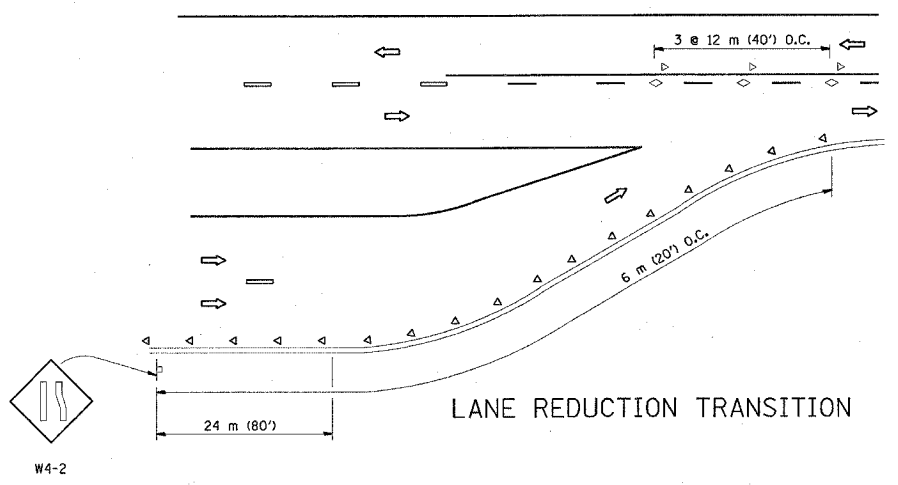
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F. & A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

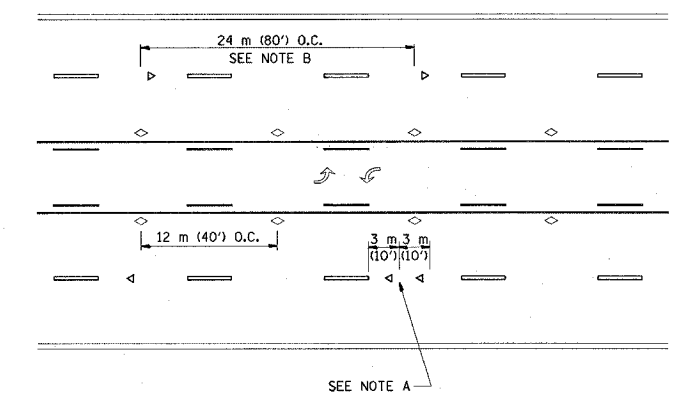


*** REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

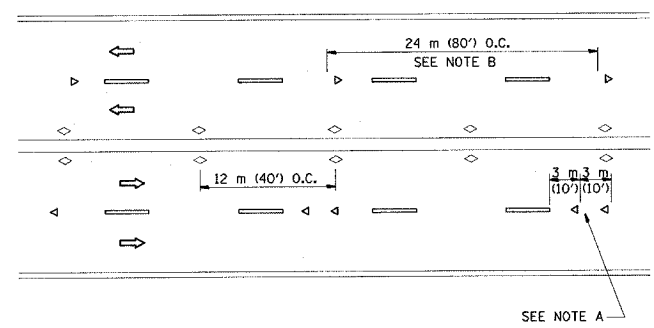
TWO-LANE/TWO-WAY



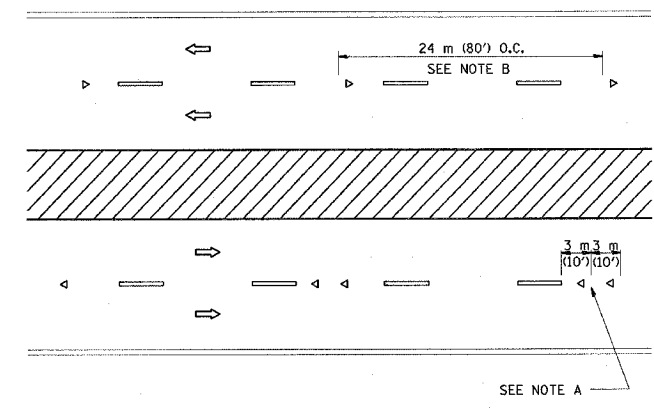
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

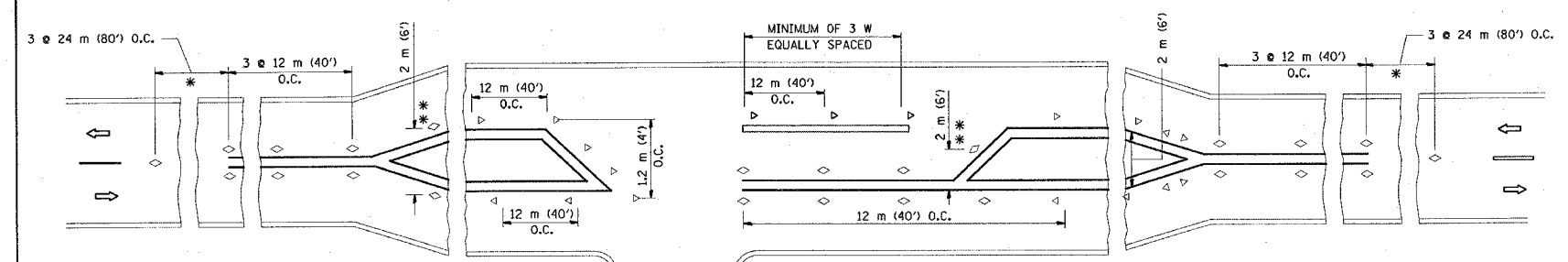
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◊ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 12 m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 20 km/h (10 M.P.H.) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR 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

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

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

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS
 (SNOW-PLOW RESISTANT)

SCALE: NONE
 DATE: 3/9/2005
 DRAWN BY CADD
 CHECKED BY
 TC-11

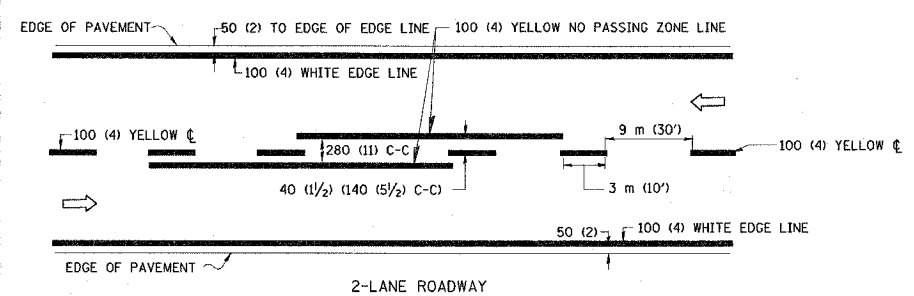
REVISION DATE: 01/06/00

03/09/2005 03:09/2005

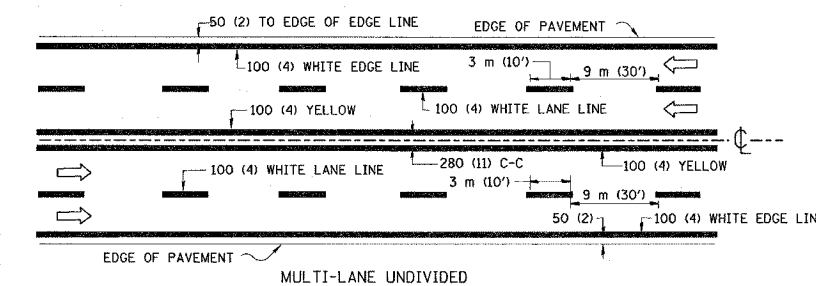
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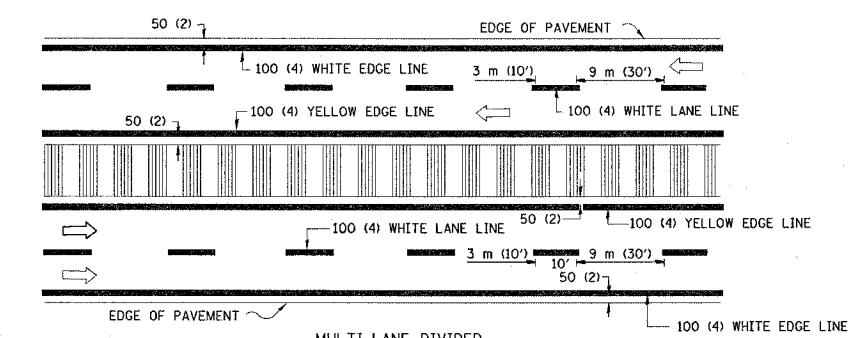
P.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	22
STA.	TO STA.			
FED. ROAD DIST. NO.	BLVD.	FED. AID PROJECT		



2-LANE ROADWAY



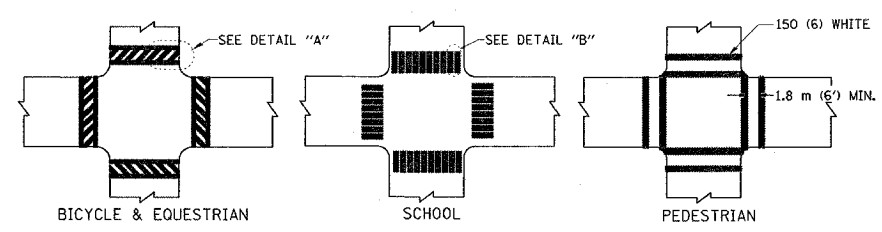
MULTI-LANE UNDIVIDED



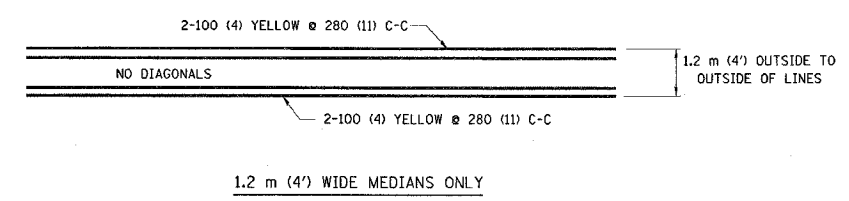
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

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

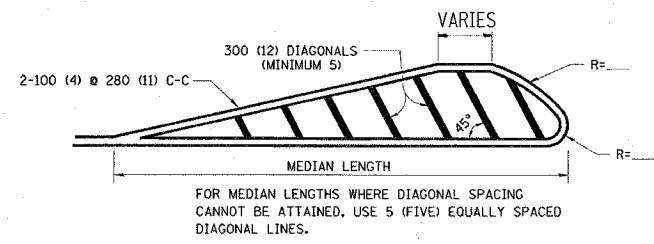
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

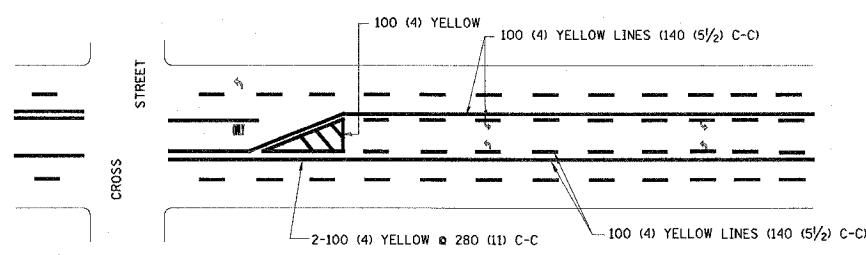


1.2 m (4') WIDE MEDIANS ONLY

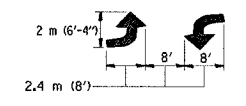


DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
45 m (150') C-C (MORE THAN 70 km/h (45 MPH))

MEDIANS OVER 1.2 m (4') WIDE

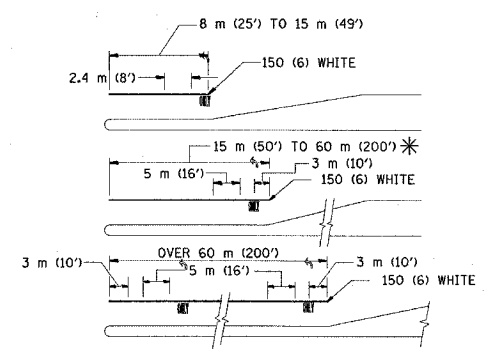


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 60 m (200') TO 90 m (300') INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

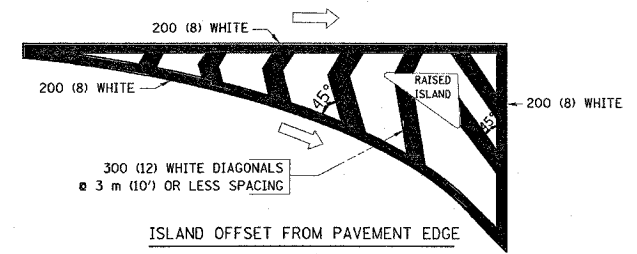
TYPICAL PAINTED MEDIAN MARKING



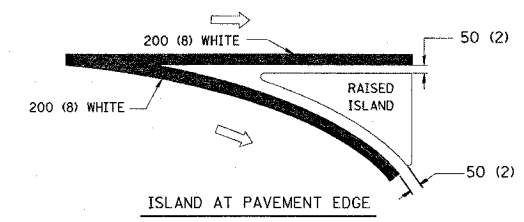
FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)
* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 (4) 2 @ 100 (4)	SOLID SOLID	YELLOW YELLOW	140 (5 1/2) 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 2.4 m (8') LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) 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 @ 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 (11) 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 (OVER 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"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 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

DISTRICT ONE TYPICAL PAVEMENT MARKINGS

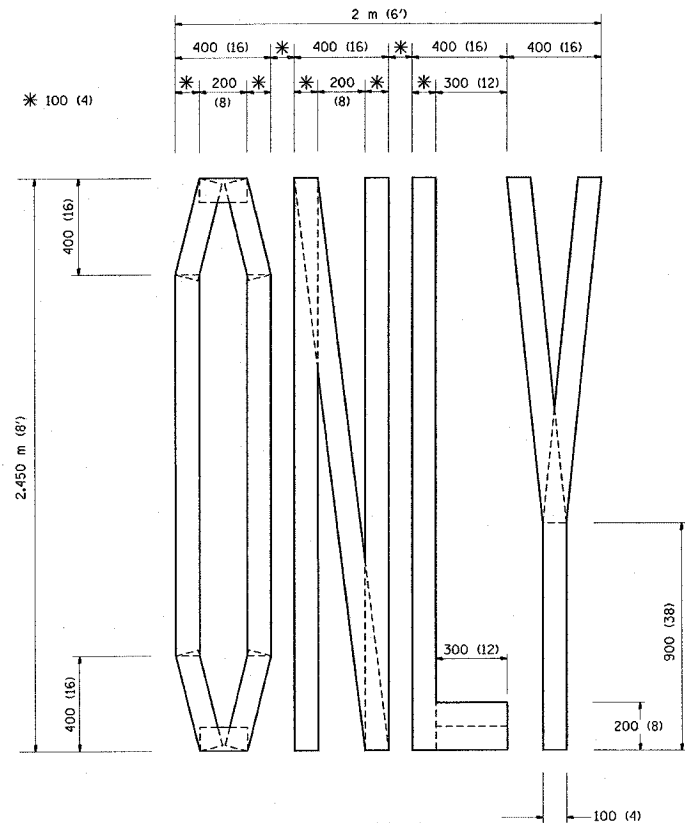
REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

SCALE: NONE
DATE 3/9/2005
DRAWN BY CADD
CHECKED BY

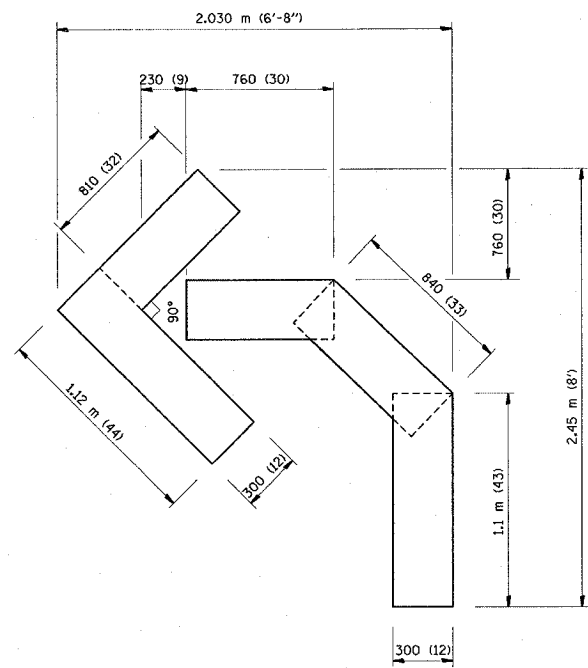
REVISION DATE: 01/06/00

62677

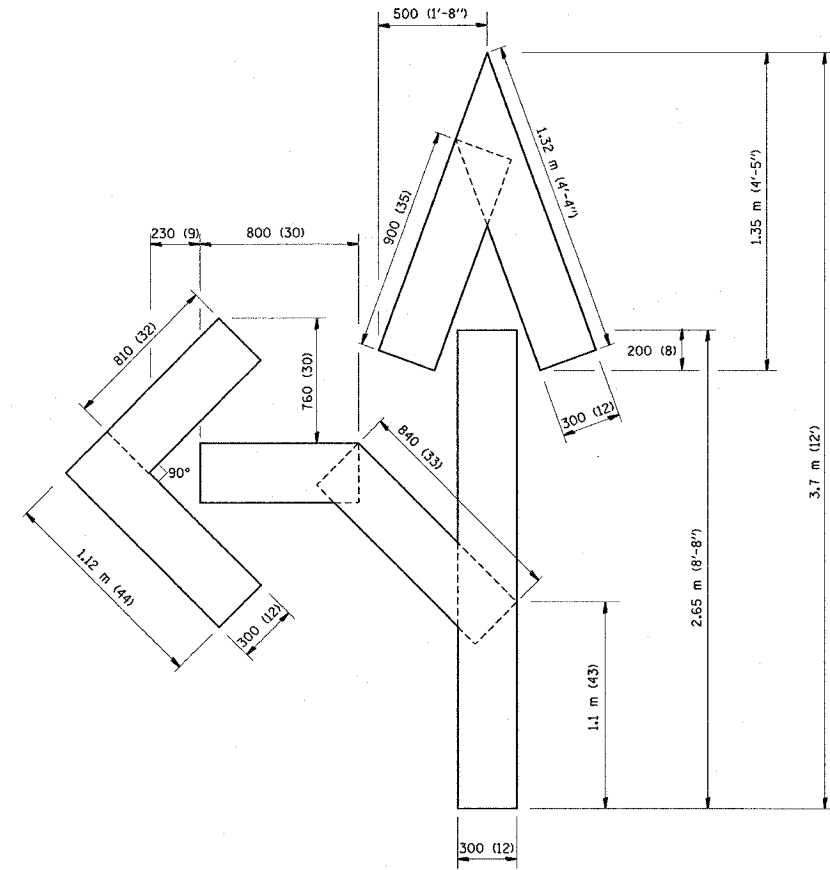
F. A. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	23
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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



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

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

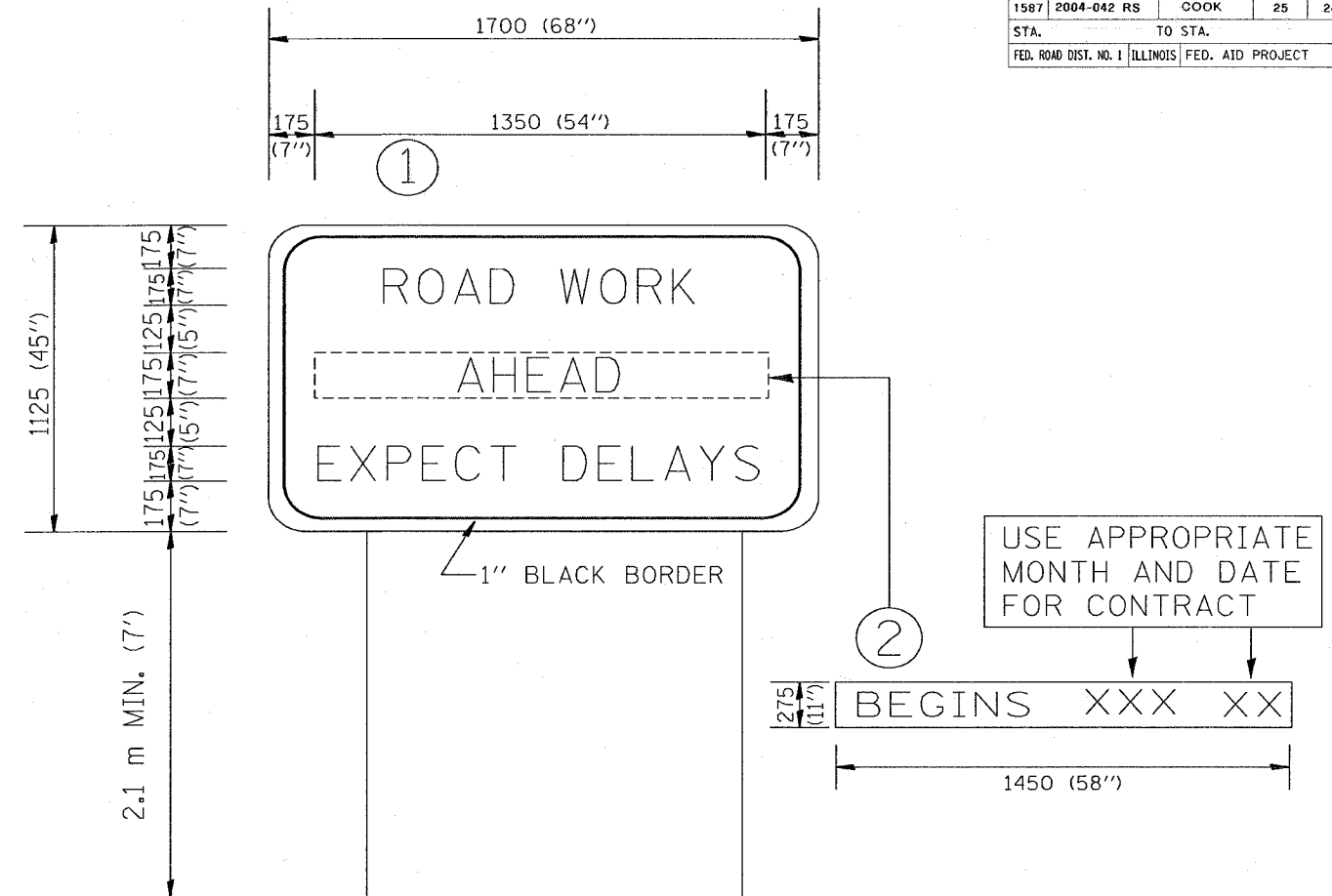
SCALE: NONE
 DATE 3/9/2005

DRAWN BY CADD
 CHECKED BY
 TC-16

REVISION DATE: 08/28/00

62677

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	24
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
R. MIRS	9-15-97	TEMPORARY INFORMATION SIGNING
R. MIRS	2-11-99	
T. RAMMACHER	2-2-99	

SCALE: DATE 3/9/2005
 DRAWN BY: BUR. OF DESIGN
 CHECKED BY:

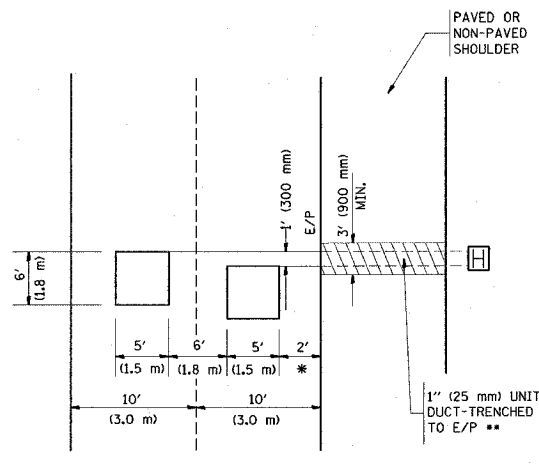
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F.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1587	2004-042 RS	COOK	25	25
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

LOOPS NEXT TO SHOULDERS

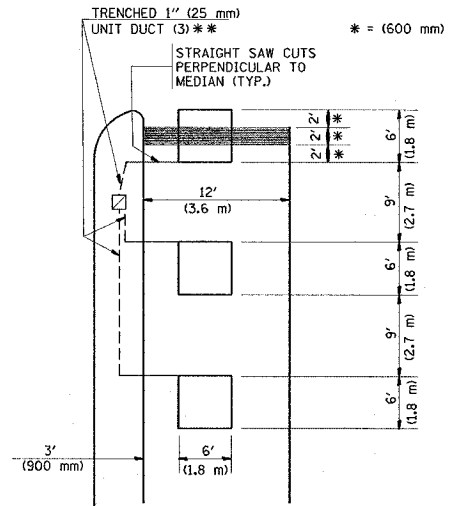
PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



* = (600 mm)
 ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

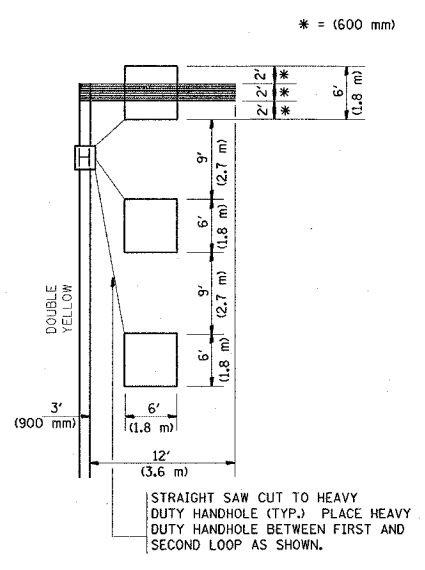
**LEFT TURN LANES WITH MEDIANS
 VOLUME DENSITY ("FAR OUT" DETECTION)
 ON SAME APPROACH
 (PROTECTED / PERMITTED LEFT TURN PHASING)**

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



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

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



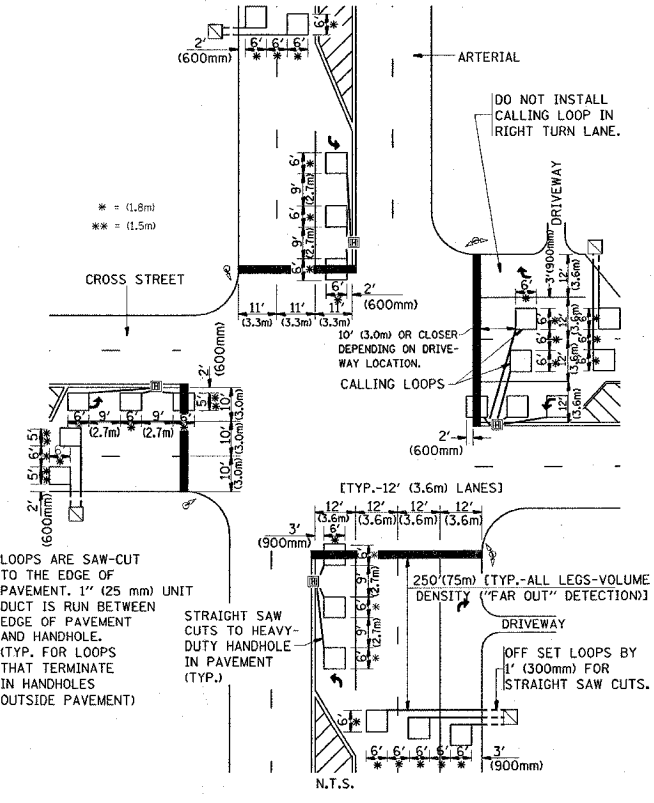
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTES:

VEHICLES LOOP DETECTORS

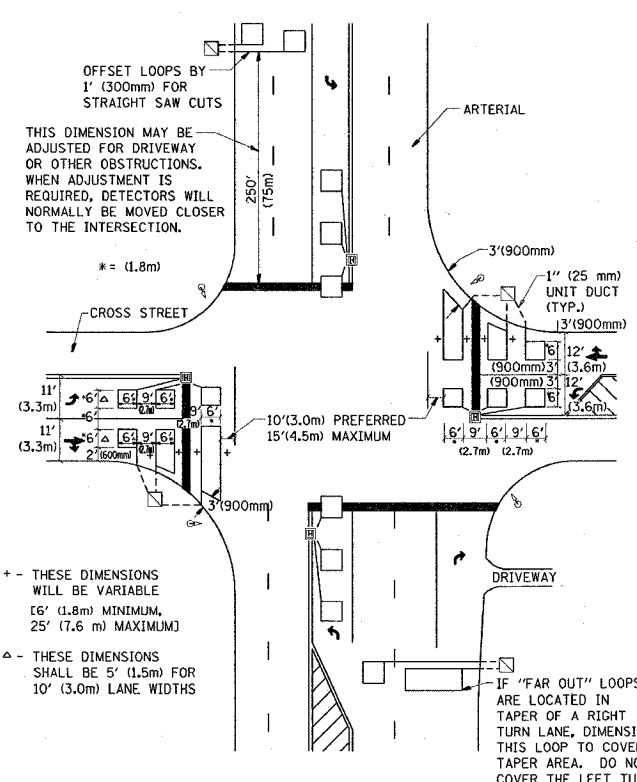
- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST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

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



DO NOT INSTALL CALLING LOOP IN RIGHT TURN LANE.
 CALLING LOOPS
 10' (3.0m) OR CLOSER DEPENDING ON DRIVEWAY LOCATION.
 [TYP.-12' (3.6m) LANES]
 250' (75m) [TYP.-ALL LEGS-VOLUME DENSITY ("FAR OUT" DETECTION)]
 DRIVEWAY
 OFFSET LOOPS BY 1' (300mm) FOR STRAIGHT SAW CUTS.
 N.T.S.
DETAIL 1
 N.T.S.

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



OFFSET LOOPS BY 1' (300mm) FOR STRAIGHT SAW CUTS
 THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION.
 * = (1.8m)
 10' (3.0m) PREFERRED
 15' (4.5m) MAXIMUM
 + THESE DIMENSIONS WILL BE VARIABLE 6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM
 - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS
 IF "FAR OUT" LOOPS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN LANE OR LEFT TURN LANE TAPER.
 N.T.S.
DETAIL 2
 N.T.S.

PLACEMENT OF DETECTORS

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

LOCATIONS AND DIMENSIONS 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.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**DISTRICT 1
 DETECTOR LOOP
 INSTALLATION DETAILS
 FOR ROADWAY RESURFACING**

SCALE: NONE
 DATE: 3/9/2005
 DRAWN BY CADD
 DESIGNED BY
 CHECKED BY R.K.F.
 TS07

REVISION DATE: