

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	1

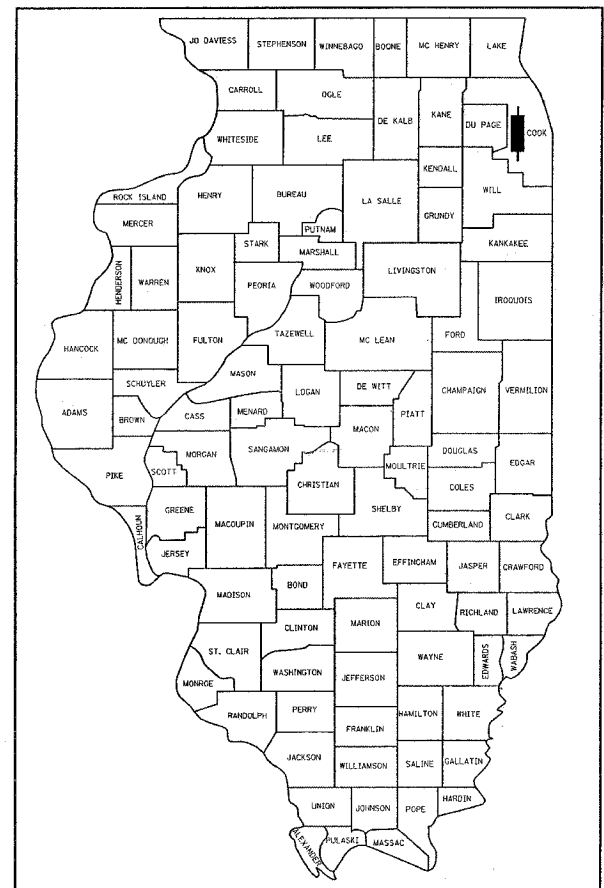
CONTRACT NO. 62921

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY

FAP 348 (IL-43-HARLEM AVE.)
SECTION: 3130 (A&B) RS-1
57TH STREET TO 0.1 MILE SOUTH OF 65TH STREET
RESURFACING (MAINTENANCE)
COOK COUNTY
C-91-153-05

D-91-153-05



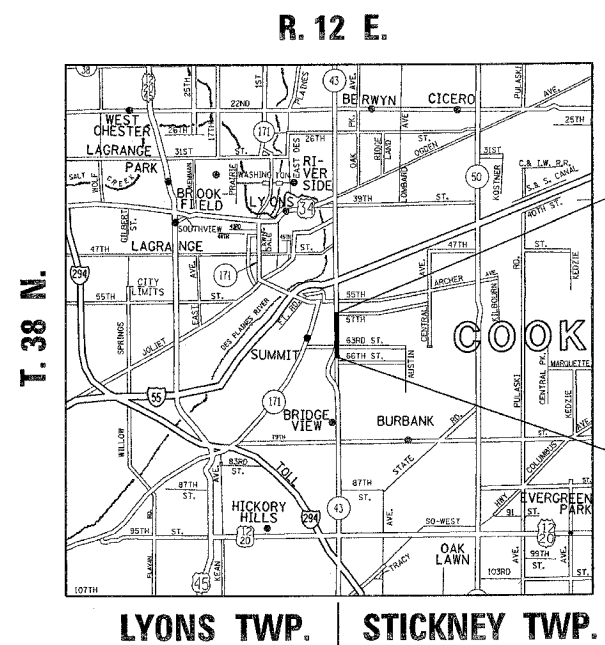
LOCATION OF SECTION INDICATED THUS: - [shaded box] -

FOR INDEX OF SHEETS, SEE SHEET NO.

THE IMPROVEMENT IS LOCATED
IN THE VILLAGE OF SUMMIT &
CITY OF CHICAGO

AVERAGE DAILY TRAFFIC = 48,500

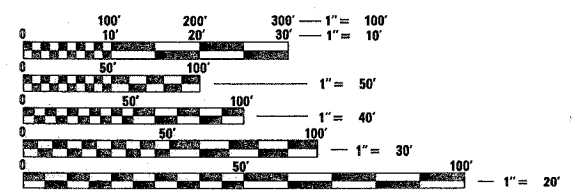
POSTED SPEED LIMIT = 35 - 45 MPH



IMPROVEMENT BEGINS
STA. 667+60

OMISSIONS
AT IL-43 & 63RD ST.
STA. 624+00 TO STA. 631+00
AT R.R. CROSSING
STA. 651+40 TO STA. 651+58

IMPROVEMENT ENDS
STA. 611+30 (N.B.)
STA. 613+25 (S.B.)



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

CONTRACT NO. 62921

GROSS LENGTH OF IMPROVEMENT (N.B.) = 5,630 FT. (1.066 MILES)
GROSS LENGTH OF IMPROVEMENT (S.B.) = 5,435 FT. (1.029 MILES)
NET LENGTH OF IMPROVEMENT (N.B.) = 4,912 FT. (0.930 MILES)
NET LENGTH OF IMPROVEMENT (S.B.) = 4,717 FT. (0.893 MILES)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 6, 20 05

Dina O'Keefe AP
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

July 1, 20 05
Mike Nunez
ENGINEER OF DESIGN AND ENVIRONMENT

July 1, 20 05
Victor Modest
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

DISTRICT 1 DESIGN PLAN PREPARATION ENGINEER: KEN ENG/JENPAI CHANG (847) 705-4432

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT NO. 62921

INDEX OF SHEETS
DESCRIPTION

- 1 COVER SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4-7 TYPICAL SECTIONS
- 8-9 ROADWAY AND PAVEMENT MARKING PLANS
- 10-14 DETECTOR LOOP REPLACEMENT PLANS
- 15 DETAILS FOR FRAMES AND LIDS ADJUSTMENTS WITH MILLING
- 16 PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT
- 17 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
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- 19 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
- 20 TYPICAL APPLICATIONS FOR RAISED REFLECTIVE PAVEMENT MARKERS
- 21 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
- 22 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
- 23 TEMPORARY PAVEMENT MARKING--LETTERS AND SYMBOLS FOR TRAFFIC STAGING
- 24-27 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
- 28 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
- 29 TEMPORARY INFORMATION SIGNING

STATE STANDARDS

- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 442201-01 CLASS C AND D PATCHES
- 604001-02 FRAME AND LIDS, TYPE 1
- 606001-02 CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER
- 701426-02 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION FOR SPEEDS > 45 MPH
- 701601-04 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 701606-04 URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-04 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-03 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 702001-05 TRAFFIC CONTROL DEVICES
- 780001-01 TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 40 MM (1 1/2 INCHES WHERE THE SPEED LIMIT IS 80 KM/H (45 MPH) OR LESS AND 25 MM (1 INCH) WHERE THE SPEED LIMIT IS GREATER THAN 80 KM/H (45 MPH). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 75 MM (3 INCHES) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H)

BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED

OVERNIGHT LANE CLOSURES SHALL BE REQUIRED IF CLASS SI CONCRETE IS BEING USED FOR STRUCTURE ADJUSTMENTS

THE RESIDENT ENGINEER SHALL CONTACT MS. PATRICE HARRIS AREA TRAFFIC FIELD ENGINEER AT (708) 597-9800 AT LEAST TWO (2) WEEKS PRIOR TO INSTALLATION OF FINAL PAVEMENT

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		IL-43 (HARLEM AVE.) 59TH ST. TO 0.1 MILE SOUTH OF 65TH ST. INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES SCALE: VERT. NONE HORIZ. DATE 6/7/2005 DRAWN BY CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

CONTRACT NO. 62921

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		URBAN 100% STATE 1000-2A				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	18	18				
40600300	AGGREGATE (PRIME COAT)	TON	87	87				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	5	5				
40600895	CONSTRUCTING TEST STRIP	EACH	2	2				
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	333	333				
40601000	BITUMINOUS REPLACEMENT OVER PATCHES	TON	167	167				
44000008	BITUMINOUS SURFACE REMOVAL 2 1/2"	SQ YD	12157	12157				
44000009	BITUMINOUS SURFACE REMOVAL 3"	SQ YD	31420	31420				
44000116	BITUMINOUS REMOVAL OVER PATCHES 4"	SQ YD	744	744				
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	152	152				
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	1201	1201				
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	314	314				
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	491	491				
55039700	STORM SEWER TO BE CLEANED	FOOT	100	100				
60250200	CATCH BASIN TO BE ADJUSTED	EACH	2	2				
60260100	INLETS TO BE ADJUSTED	EACH	2	2				
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	30	30				
60406000	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	10	10				
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	17	17				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4				
67100100	MOBILIZATION	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				
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1				
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	6816	6816				
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	105	105				

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		URBAN 100% STATE 1000-2A				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	16580	16580				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	1180	1180				
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	652	652				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	648	648				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	852	852				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	105	105				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	16580	16580				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1180	1180				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	652	652				
* 78000610	THERMOPLASTIC PAVEMENT MARKING - LINE 16"	FOOT	87	87				
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	648	648				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	516	516				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	516	516				
* 81400115	HANDHOLE TO BE ADJUSTED	EACH	2	2				
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	1076	1076				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103	103				
X4066548	POLYMERIZED BITUMINOUS CONC. SURFACE COURSE, SUPER PAVE, MIX. "F", N90	TON	4350	4350				
X4067100	POLYMERIZED LEVELING BINDER (MACHINE METHOD) SUPERPAVE, IL-4.75, N50	TON	2730	2730				
Z0018100	DRAINAGE STRUCTURE ADJUSTMENT (SPECIAL)	EACH	30	30				
Z0018500	DRAINAGE STRUCTURE TO BE CLEANED	EACH	57	57				
Z0048665	RAILROAD PROTECTION LIABILITY INSURANCE	L SUM	1	1				

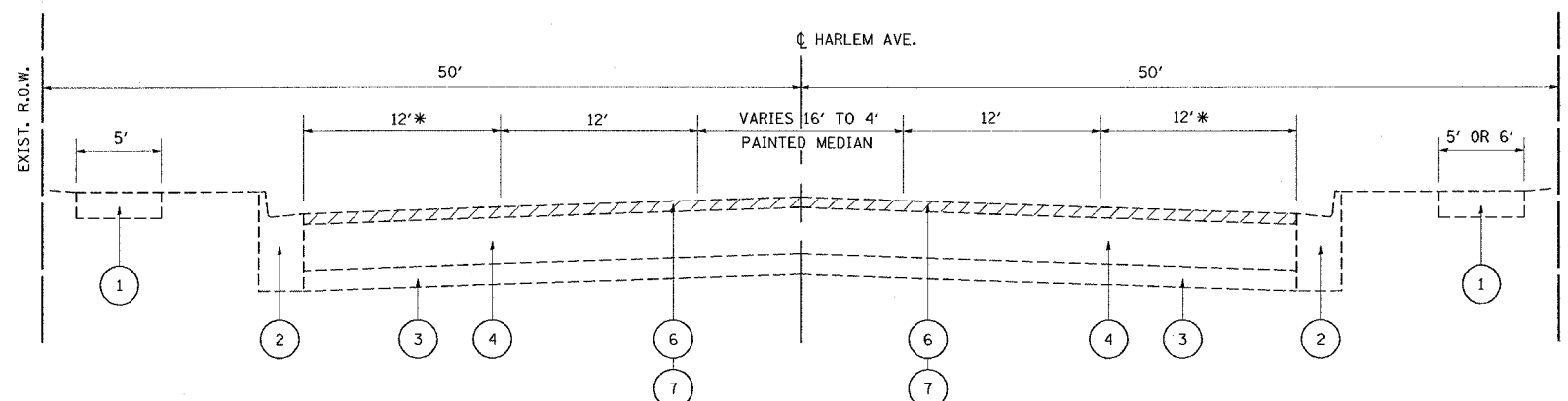
*SPECIALTY ITEMS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
IL RTE. 43 (HARLEM AVE.)

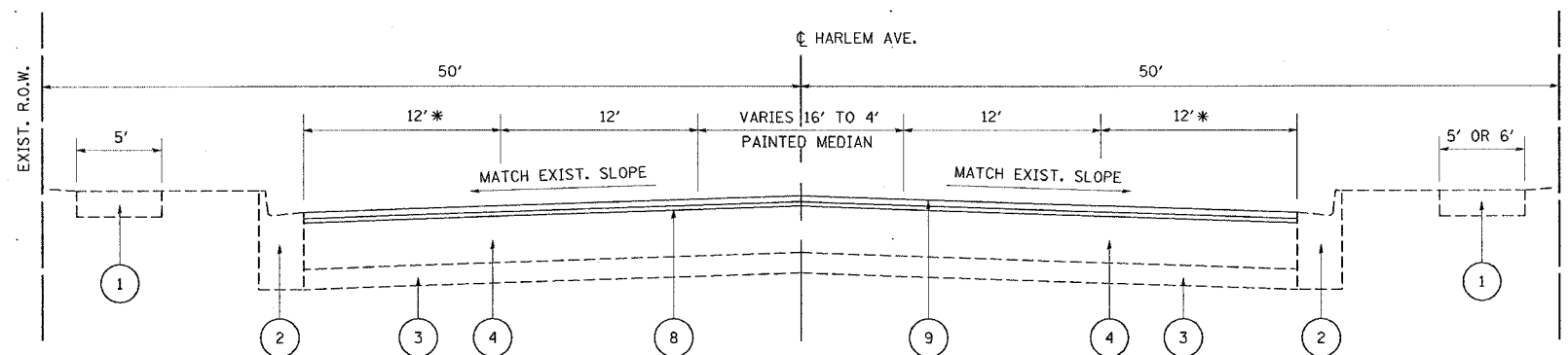
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	4
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

CONTRACT #62921



* STA. 641+70 TO STA. 644+45
VARIES 12' TO 24'

EXISTING TYPICAL CROSS SECTION
59TH STREET TO 57TH STREET
STA. 654+25 TO STA. 667+60
STA. 641+70 TO STA. 648+29



* STA. 641+70 TO STA. 644+45
VARIES 12' TO 24'

PROPOSED TYPICAL CROSS SECTION
59TH STREET TO 57TH STREET
STA. 654+25 TO STA. 667+60
STA. 641+70 TO STA. 648+29

LEGEND

- ① EXIST. CONC. SIDEWALK
- ② EXIST. COMB. CONC. CURB & GUTTER, TYPE B-6.12 OR TYPE B-6.24
- ③ EXIST. AGGREGATE SUBBASE
- ④ EXIST. CONCRETE PAVEMENT
- ⑤ EXIST. CORRUGATED AND BARRIER CONCRETE MEDIAN (MODIFIED)
- ⑥ EXIST. BITUMINOUS SURFACE, 3"
- ⑦ PROP. BITUMINOUS SURFACE REMOVAL, 3"
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MM), SUPERPAVE, IL-4.75, N50 (1 1/4")
- ⑨ PROP. POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX. "F", 1 3/4", N90

MIXTURE REQUIREMENTS

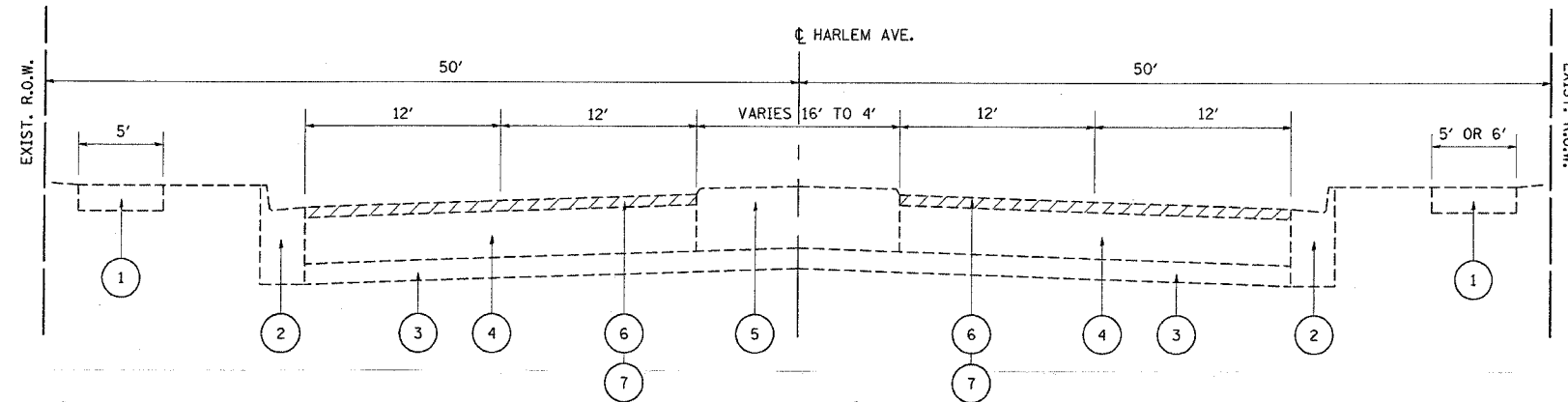
MIXTURE USE	AC/PG	RAP % (MAX)	DESIGN AIR VOIDS	REMARKS
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "F", N90	SBS/SBR PG 70-22	0	4% @ 90 GYR.	
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE IL-4.75, N50	SBS/SBR PG 76-28	0	2.5% @ 50 GYR.	
BITUMINOUS REPLACEMENT OVER PATCHES, IL-19MM	PG 64-22	15	4% @ 70 GYR.	BINDER IL-19MM
CLASS "D" PATCHES	PG 64-22	15	4% @ 70 GYR.	BINDER IL-19MM

NOTE:
THE UNIT WEIGHT USED TO CALCULATE ALL BITUMINOUS SURFACE QUANTITIES IS 112 LBS./SQ.YD./IN"

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		IL 43 (HARLEM AVENUE) EXISTING & PROPOSED TYPICAL CROSS SECTIONS
SCALE:	VERT. NONE HORIZ. DATE 5/26/2005	DRAWN BY CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130IA&B/RS-1	COOK	29	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

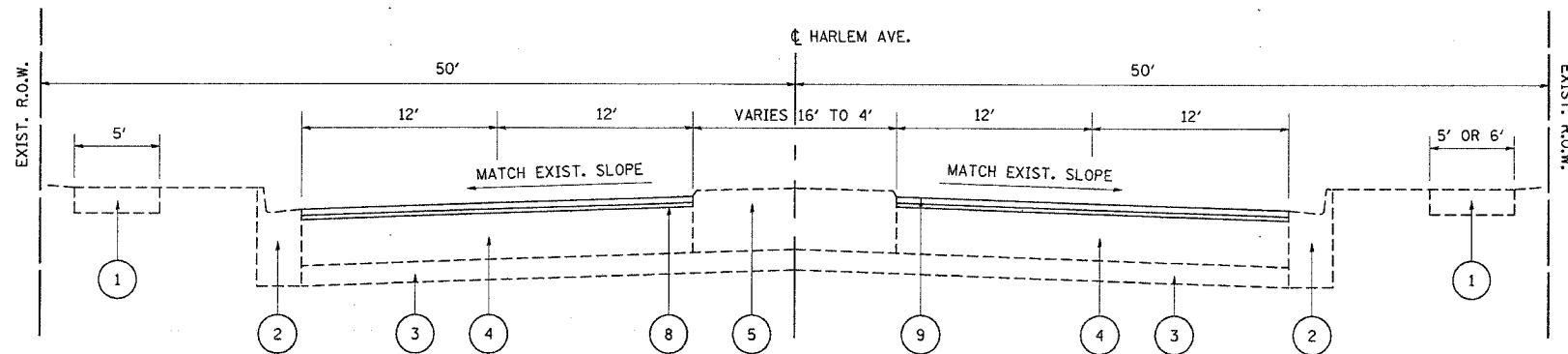
CONTRACT #62921



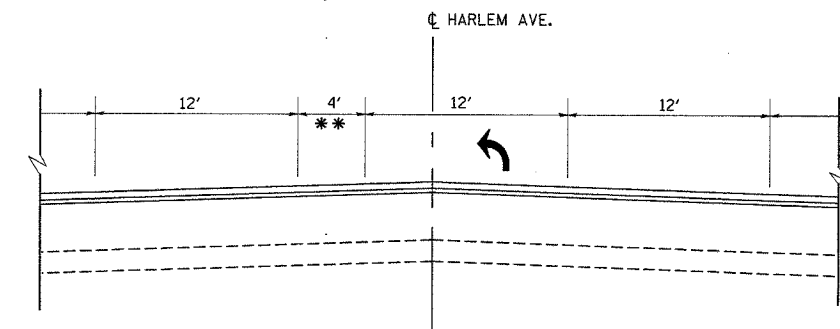
EXISTING TYPICAL CROSS SECTION
59TH STREET TO 60TH STREET
STA. 648+29 TO STA. 654+25

LEGEND

- ① EXIST. CONC. SIDEWALK
- ② EXIST. COMB. CONC. CURB & GUTTER, TYPE B-6.12 OR TYPE B-6.24
- ③ EXIST. AGGREGATE SUBBASE
- ④ EXIST. CONCRETE PAVEMENT
- ⑤ EXIST. CORRUGATED AND BARRIER CONCRETE MEDIAN (MODIFIED)
- ⑥ EXIST. BITUMINOUS SURFACE, 3"
- ⑦ PROP. BITUMINOUS SURFACE REMOVAL, 3"
- ⑧ PROP. POLYMERIZED LEVELING BINDER (MM), SUPERPAVE, IL-4.75, N50, (1 1/4")
- ⑨ PROP. POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX. "F", 1 3/4", N90



PROPOSED TYPICAL CROSS SECTION
59TH STREET TO 60TH STREET
STA. 648+29 TO STA. 654+25



PROPOSED TYPICAL LEFT TURN LANE
** PAINTED OR CORRUGATED MEDIAN
SEE PLANS FOR LOCATIONS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

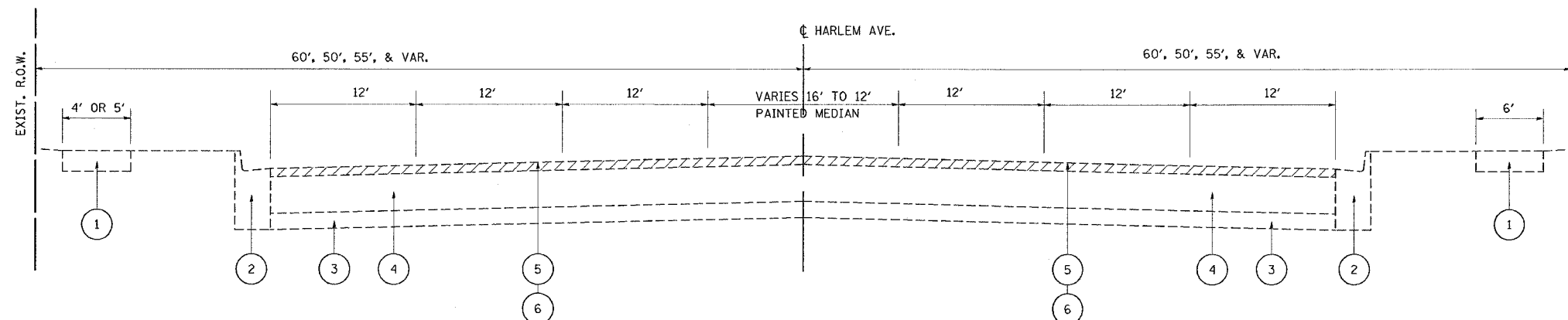
IL 43 (HARLEM AVENUE)
EXISTING & PROPOSED
TYPICAL CROSS SECTIONS

SCALE: VERT. NONE
HORIZ. DATE 5/26/2005

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CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	6
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

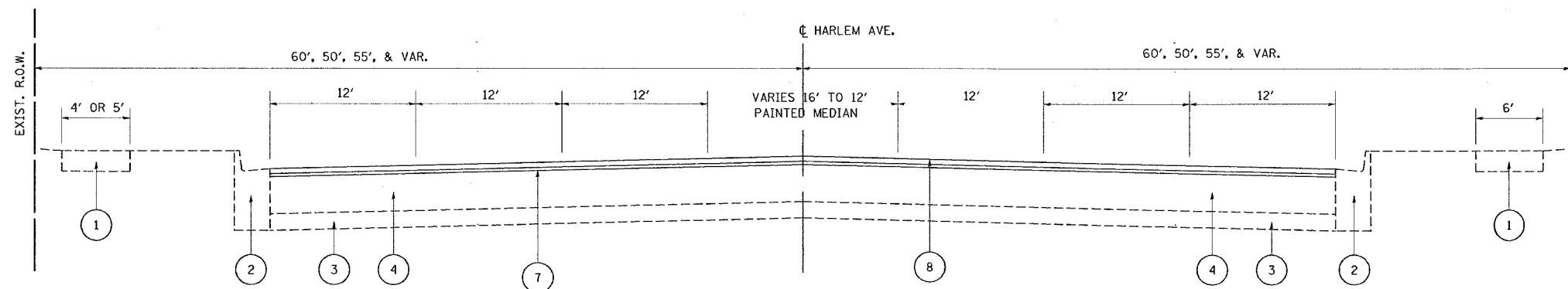
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EXISTING TYPICAL CROSS SECTION
61ST STREET TO 57TH STREET
STA. 631+00 TO STA. 641+70

LEGEND

- ① EXIST. CONC. SIDEWALK
- ② EXIST. COMB. CONC. CURB & GUTTER, TYPE B-6.12 OR TYPE B-6.24
- ③ EXIST. AGGREGATE SUBBASE
- ④ EXIST. CONCRETE PAVEMENT
- ⑤ EXIST. BITUMINOUS SURFACE, 3"
- ⑥ PROP. BITUMINOUS SURFACE REMOVAL, 3"
- ⑦ PROP. POLYMERIZED LEVELING BINDER (MM), SUPERPAVE, IL-4.75, N50 (1 1/4")
- ⑧ PROP. POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX. "F", 1 3/4", N90



PROPOSED TYPICAL CROSS SECTION
61ST STREET TO 57TH STREET
STA. 631+00 TO STA. 641+70

REVISIONS	
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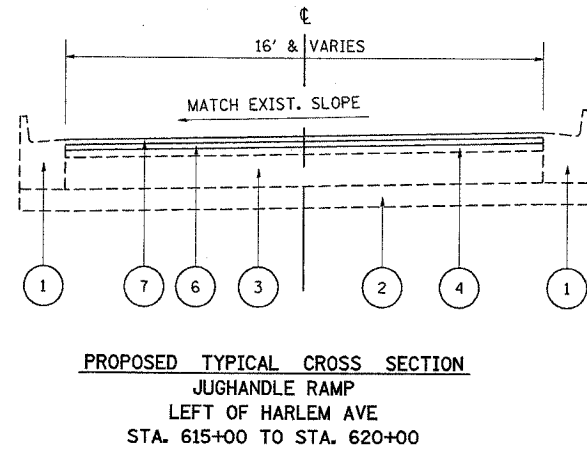
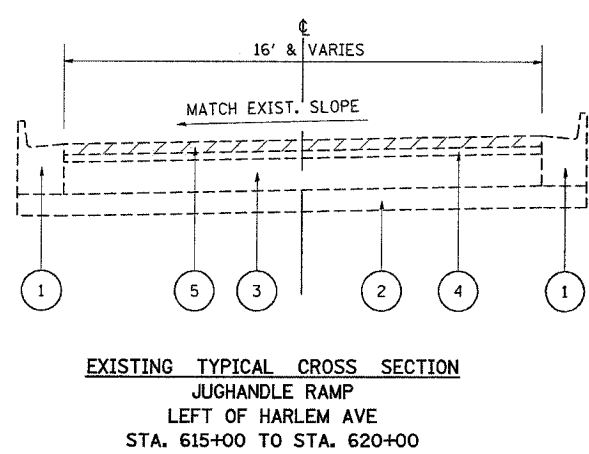
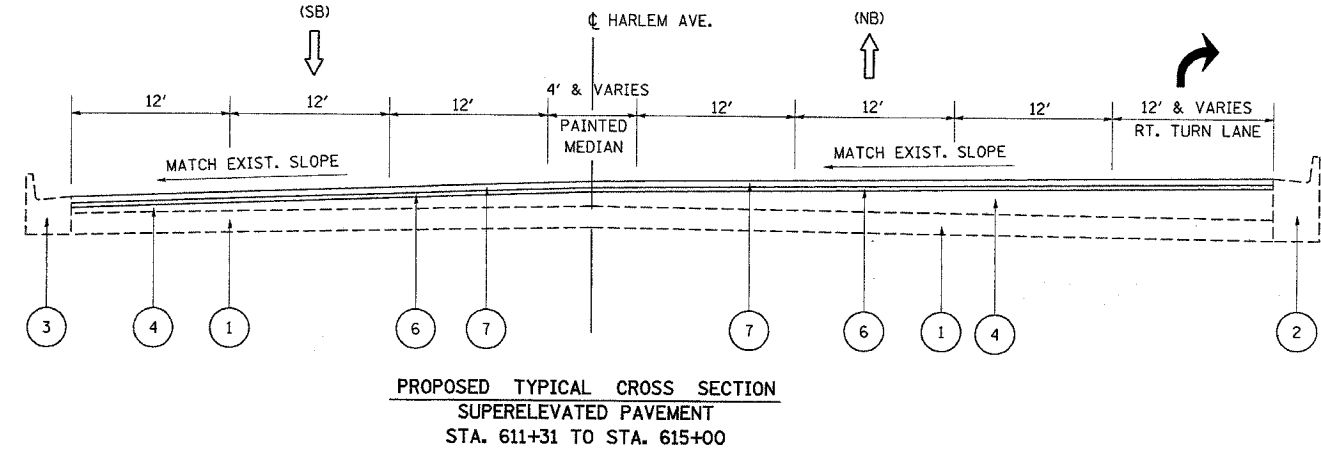
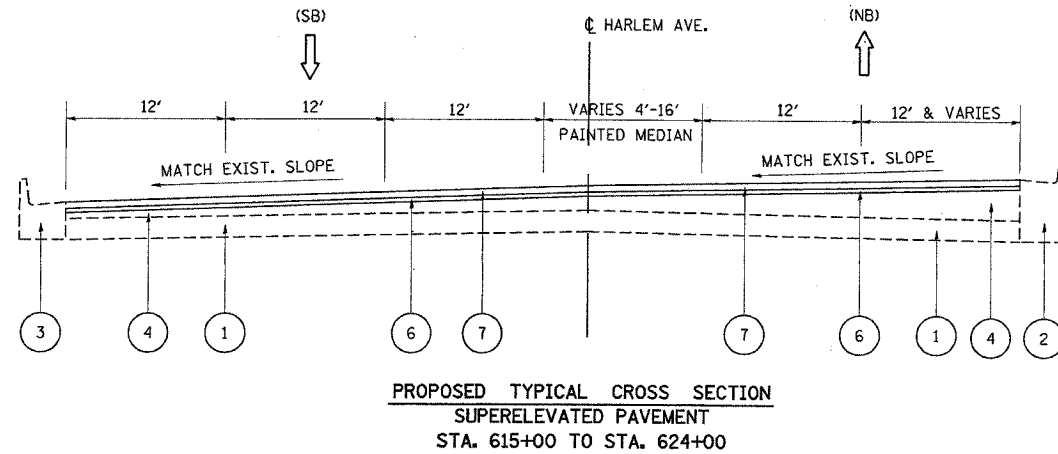
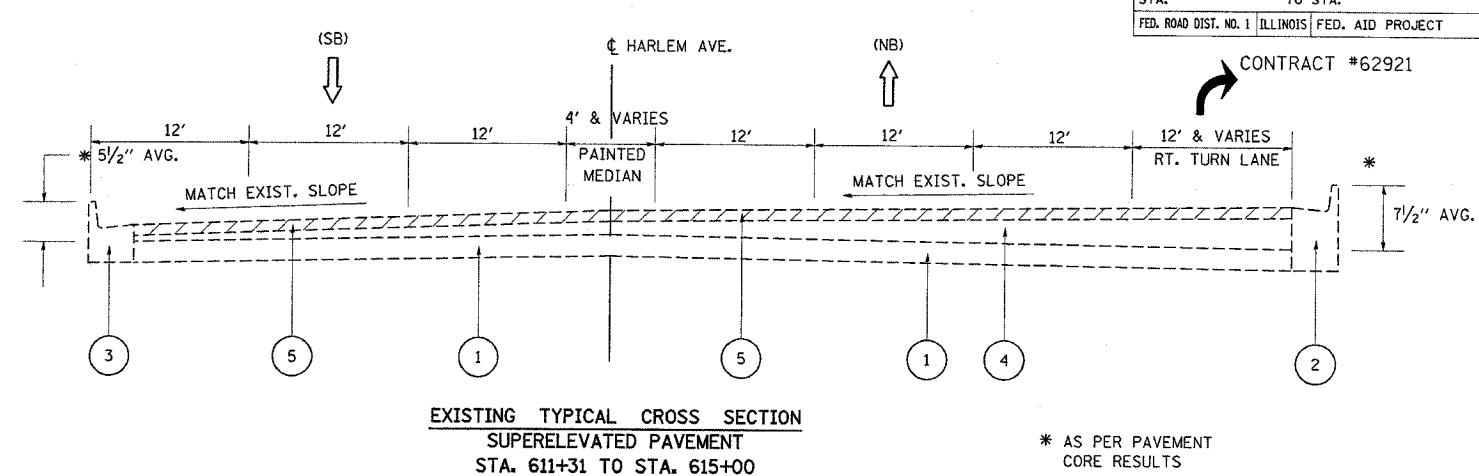
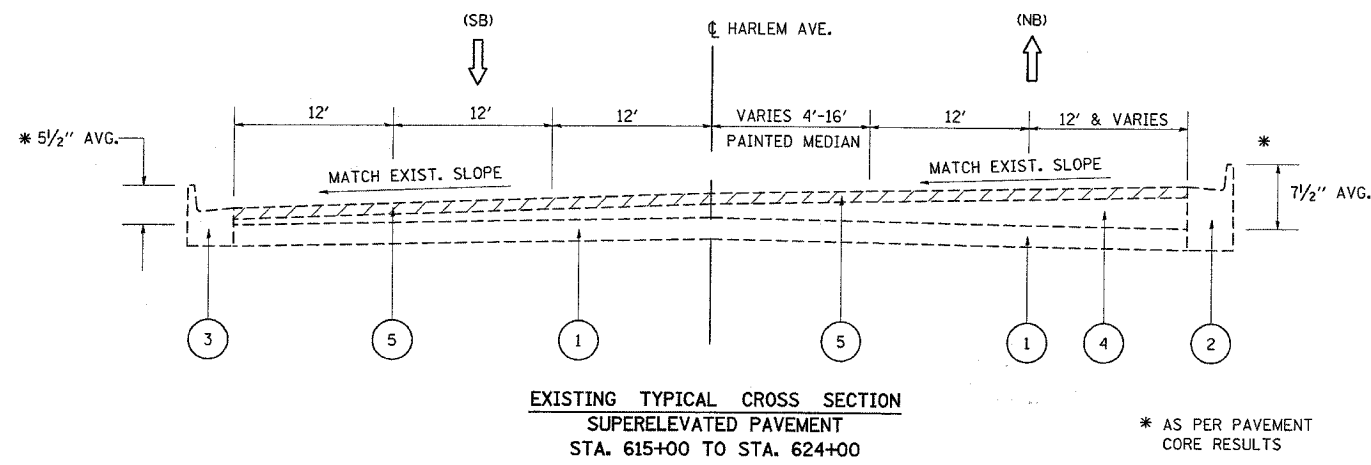
ILLINOIS DEPARTMENT OF TRANSPORTATION
IL 43 (HARLEM AVENUE)
EXISTING & PROPOSED
TYPICAL CROSS SECTIONS

SCALE: VERT. NONE
HORIZ. NONE
DATE 5/26/2005

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STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT		

CONTRACT #62921



LEGEND

- ① EXISTING P.C.C. BASE COURSE
- ② EXIST. COMB. CONC. CURB & GUTTER, TYPE B-9.24
- ③ EXIST. COMB. CONC. CURB & GUTTER, TYPE B-6.24
- ④ EXIST. BITUMINOUS SURFACE, VARIABLE DEPTH, 3" TO 5" (AVG. 4") AFTER MILLING.
- ⑤ PROPOSED BITUMINOUS SURFACE REMOVAL, 2 1/2"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 3/4"
- ⑦ PROPOSED POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX. "F", N90, 1 3/4"

LEGEND

- ① EXIST. COMB. CONC. CURB & GUTTER, TYPE B-6.24
- ② EXIST. SUBBASE GRANULAR MATERIAL, TYPE A, 4"
- ③ EXIST. BITUMINOUS BASE COURSE, 12"
- ④ EXIST. BITUMINOUS SURFACE, 1/2" (AFTER MILLING)
- ⑤ PROPOSED BITUMINOUS SURFACE REMOVAL, 2 1/2"
- ⑥ PROPOSED POLYMERIZED LEVELING BINDER (mm), SUPERPAVE, IL-4.75, N50, 3/4"
- ⑦ PROPOSED POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX. "F", N90, 1 3/4"

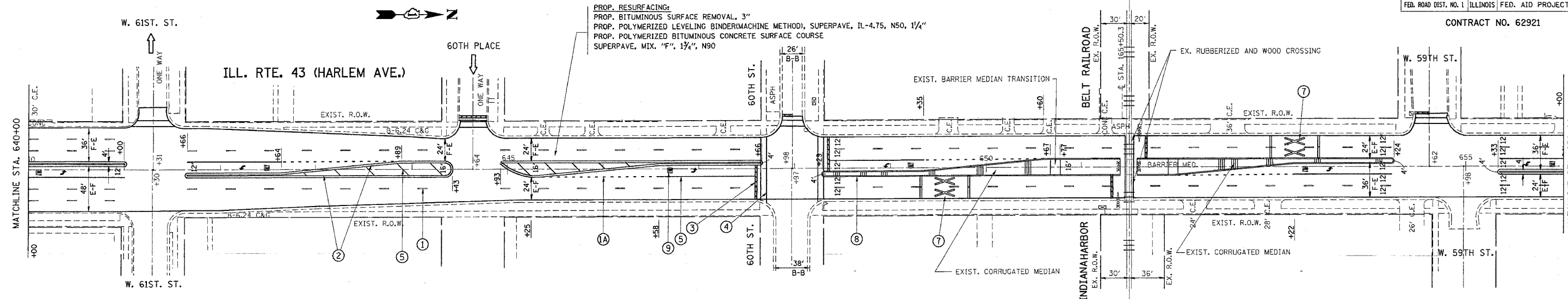
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL 43 (HARLEM AVENUE)
 EXISTING & PROPOSED
 TYPICAL CROSS SECTIONS

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	8
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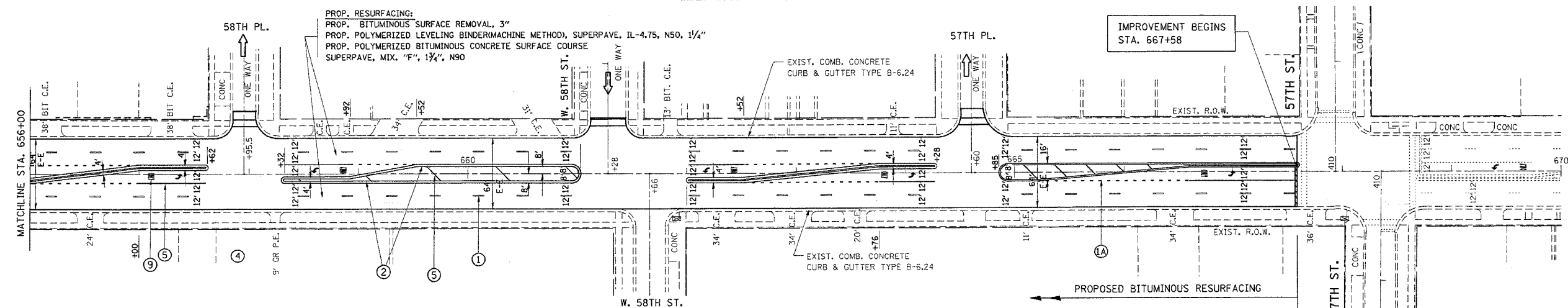


PAVEMENT MARKING LEGEND

- ① PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE - 4" (WHITE LANE LINE, 10' DASH, 30' SKIP) (TYP.)
- ② PROPOSED THERMOPLASTIC PAVEMENT MARKINGS (YELLOW DOUBLE LINE - 4", 11" C-C (TYP.)
- ③ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE LINE, 24" (STOP BAR) (TYP.)
- ④ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE, 2 LINES 6" AT 6' APART (TYP.)
- ⑤ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE SOLID LINE, 6" (TURN LANE LINE) (TYP.)
- ⑥ PROPOSED THERMOPLASTIC PAVEMENT MARKING YELLOW LINE, 12" DIAGONALS @ 45°, 75' C-C (TYP.)
- ⑦ PROPOSED THERMOPLASTIC PAVEMENT MARKING AT RAILROAD - HIGHWAY GRADE CROSSING AS PER IDOT STD. 780001
- ⑧ PROPOSED THERMOPLASTIC PAVEMENT MARKING YELLOW LINE, 4" CONTINUOUS (TYP.)
- ⑨ PROPOSED THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS (TYP.)

* NOTE: THERE ARE APPROXIMATELY 9 STRUCTURES IN THE PAVEMENT AREA ON THE WEST BOUND.
THE FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) WILL BE DONE BY OTHERS.

ILL. RTE. 43 (HARLEM AVE.)

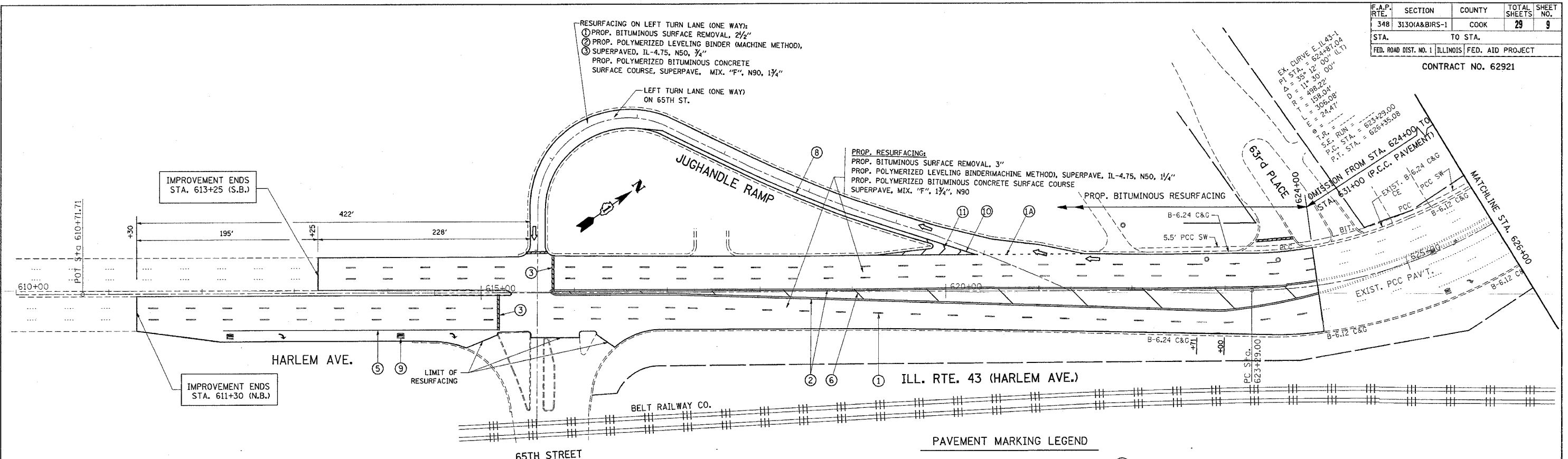


REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE		
		IL-43 (HARLEM AVE.)	
		59TH ST. TO 0.1 MILE SOUTH OF 65TH ST.	
		ROADWAY AND PAVEMENT MARKING PLAN	
		SCALE: VERT. 1"=50'	DRAWN BY
		HORIZ. 1"=50'	CHECKED BY
		DATE 6/7/2005	

PLOT DATE = 6/7/2005
FILE NAME = K:\010505\whellidgn
USER NAME = jlgp

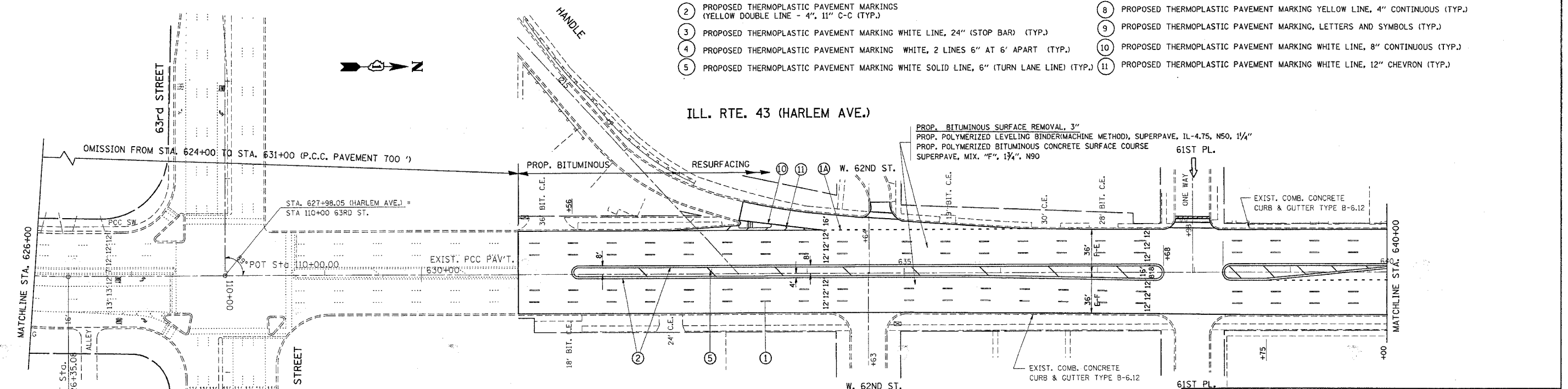
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	9
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CONTRACT NO. 62921



PAVEMENT MARKING LEGEND

- ① PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE - 4" (WHITE LANE LINE, 10' DASH, 30' SKIP) (TYP.)
- ①A PROPOSED THERMOPLASTIC PAVEMENT MARKING LINE - 4" (WHITE LANE LINE, 2' DASH, 6' SKIP) (TYP.)
- ② PROPOSED THERMOPLASTIC PAVEMENT MARKINGS (YELLOW DOUBLE LINE - 4", 11" C-C (TYP.))
- ③ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE LINE, 24" (STOP BAR) (TYP.)
- ④ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE, 2 LINES 6" AT 6' APART (TYP.)
- ⑤ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE SOLID LINE, 6" (TURN LANE LINE) (TYP.)
- ⑥ PROPOSED THERMOPLASTIC PAVEMENT MARKING YELLOW LINE, 12" DIAGONALS @ 45°, 75' C-C (TYP.)
- ⑦ PROPOSED THERMOPLASTIC PAVEMENT MARKING AT RAILROAD - HIGHWAY GRADE CROSSING AS PER IDOT STD. 780001
- ⑧ PROPOSED THERMOPLASTIC PAVEMENT MARKING YELLOW LINE, 4" CONTINUOUS (TYP.)
- ⑨ PROPOSED THERMOPLASTIC PAVEMENT MARKING, LETTERS AND SYMBOLS (TYP.)
- ⑩ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE LINE, 8" CONTINUOUS (TYP.)
- ⑪ PROPOSED THERMOPLASTIC PAVEMENT MARKING WHITE LINE, 12" CHEVRON (TYP.)



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 IL-43 (HARLEM AVE.)
 59TH ST. TO 0.1 MILE SOUTH OF 65TH ST.
 ROADWAY AND PAVEMENT MARKING PLAN
 SCALE: VERT. 1"=50'
 DATE 6/7/2005
 DRAWN BY
 CHECKED BY

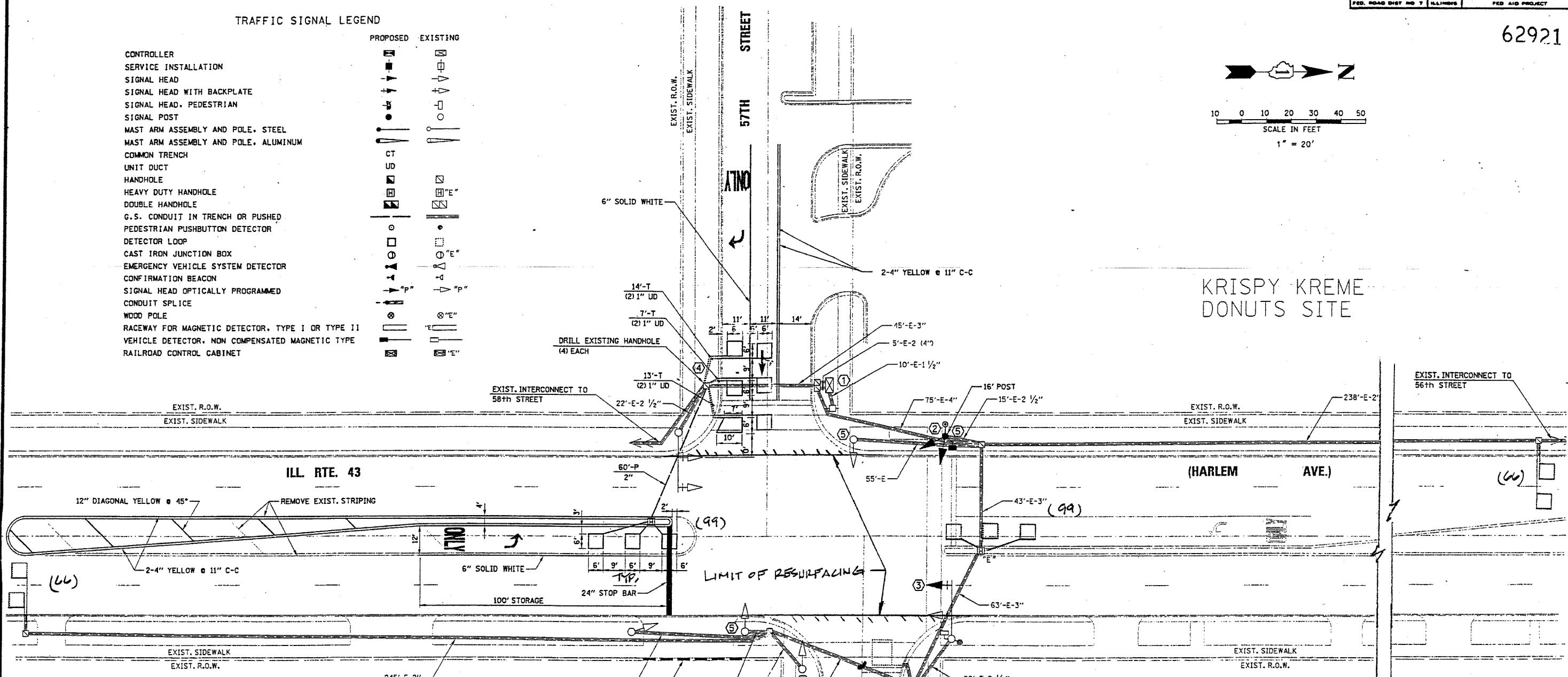
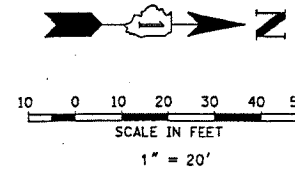
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 FILE NAME = K:\0185395\h.hall.dgn
 PLOT SCALE = 50.0000 / 1 IN.
 USER NAME = teape

F.A.P. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	Cook	29	10
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

62921

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMMON TRENCH		
UNIT DUCT		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED		
CONDUIT SPLICE		
WOOD POLE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		



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

**REPLACE ALL DETECTOR LOOPS AS SHOWN
(WITHIN THE RESURFACING LIMITS)**

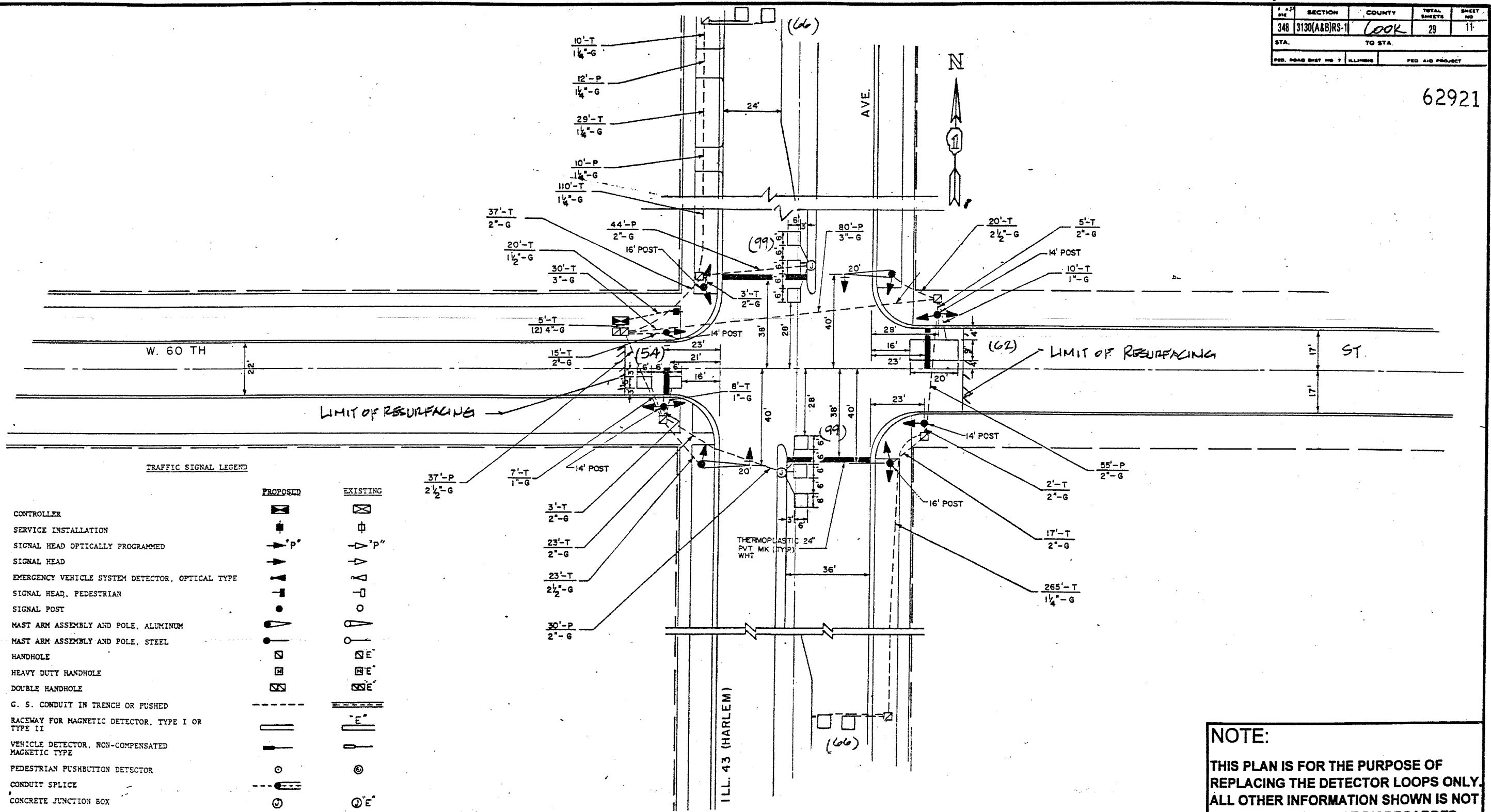
CODE NO.	QUANTITY	UNIT	ITEM
86600600	330	Foot	Detector Loop Replacement

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
ILL. ROUTE 43 (HARLEM AV) @ 57TH ST.
SCALE: 1" = 20'
DATE: APRIL 05
DRAWN BY: J.E.
DESIGNED BY: J.E.
CHECKED BY: J.E.

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348 3130(A&B)RS-1	COOK	29	11
STA.	TO STA.		

62921



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]
SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR, OPTICAL TYPE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
G. S. CONDUIT IN TRENCH OR PUSHED	[Symbol]	[Symbol]
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
VEHICLE DETECTOR, NON-COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
CONDUIT SPLICE	[Symbol]	[Symbol]
CONCRETE JUNCTION BOX	[Symbol]	[Symbol]
WOOD POLE	[Symbol]	[Symbol]
SIGNAL FACE WITH BACKPLATE	[Symbol]	[Symbol]

REPLACE ALL DETECTOR LOOPS AS SHOWN

(WITHIN THE RESURFACING LIMITS)

CODE NO.	QUANTITY	UNIT	ITEM
86600600	446	Foot	Detector Loop Replacement

REVISIONS	
NAME	DATE

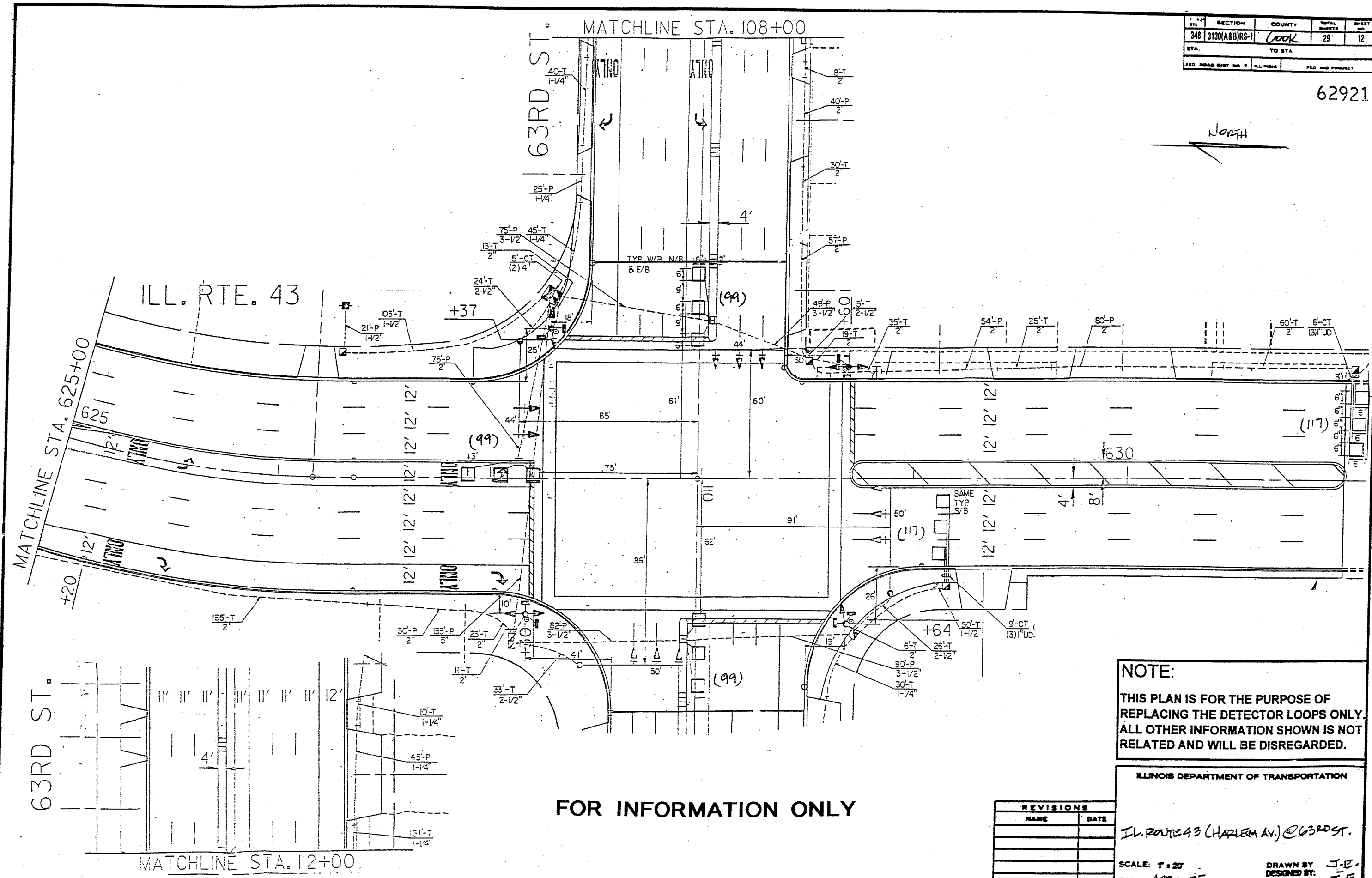
NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
 ILL. ROUTE 43 (HARLEM AVE.) @ 60TH ST.
 SCALE: T = 20
 DATE: APRIL 05
 DRAWN BY: J.E.
 DESIGNED BY: J.E.
 CHECKED BY: J.E.

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348 3130(A&B)RS-1	Cook	29	12
STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS	
		FED. AID PROJECT	

62921

North



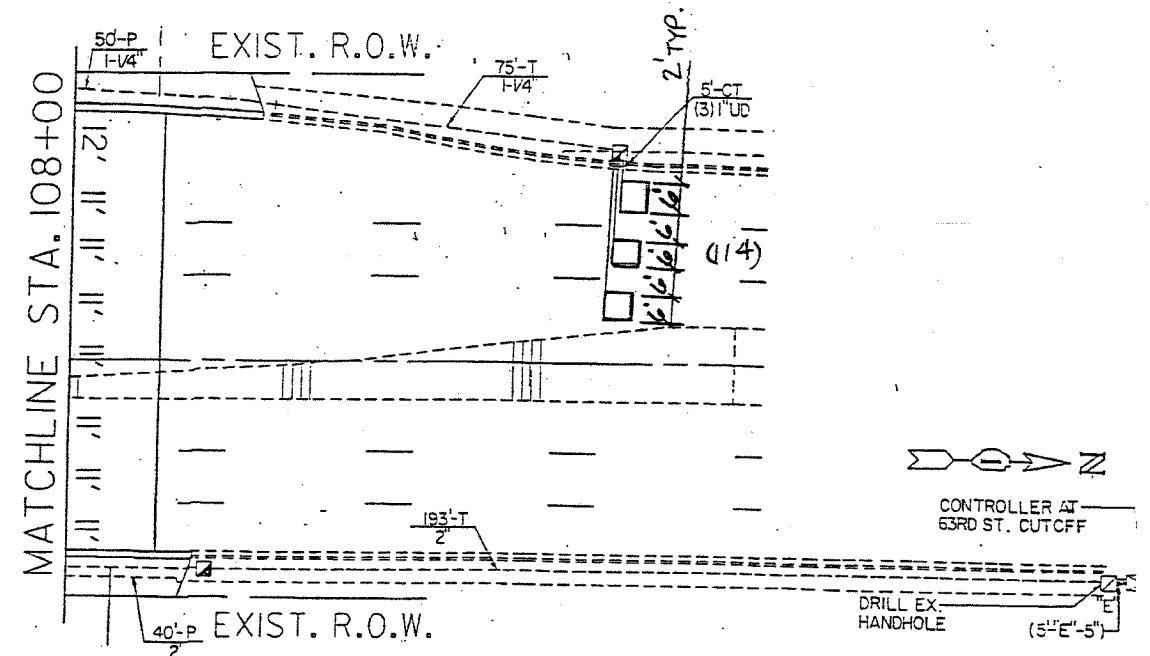
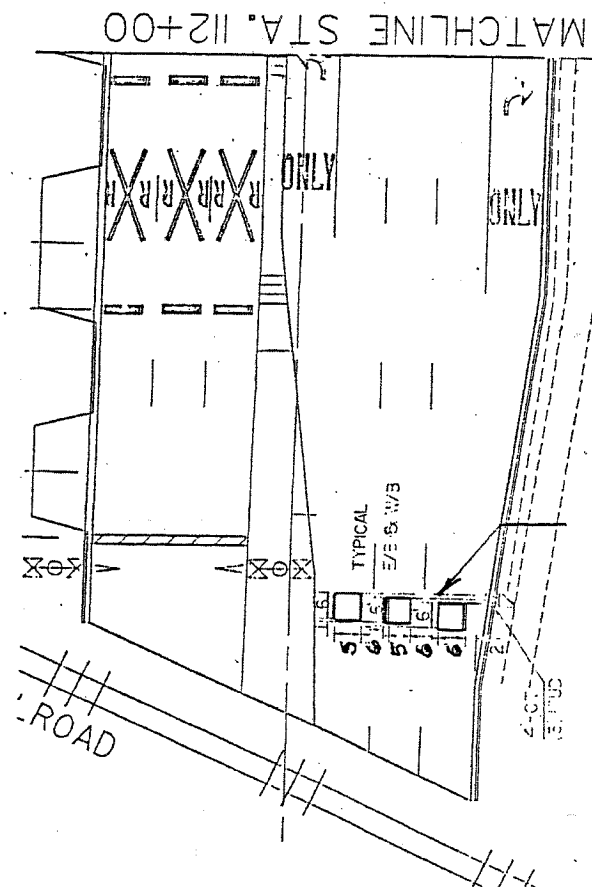
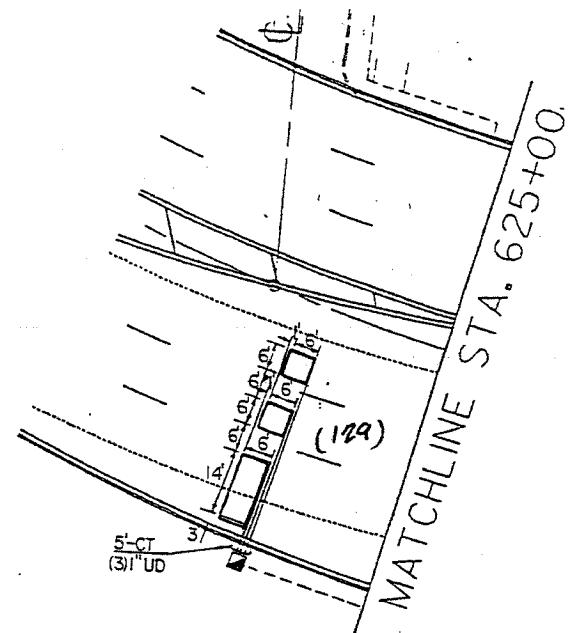
NOTE:
 THIS PLAN IS FOR THE PURPOSE OF REPLACING THE DETECTOR LOOPS ONLY. ALL OTHER INFORMATION SHOWN IS NOT RELATED AND WILL BE DISREGARDED.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ILL. ROUTE 43 (HARLEM AV.) @ 63RD ST.
 SCALE: 1" = 20'
 DATE: APRIL 05
 DRAWN BY: J.E.
 DESIGNED BY:
 CHECKED BY: J.E.

REVISIONS	
NAME	DATE

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348 3130(A&B)RS-1	COOK	29	13
STA. TO STA.		FED. ROAD DIST NO 7 ILLINOIS	
		FED AID PROJECT	

62921



FOR INFORMATION ONLY

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

IL. ROUTE 43 (HARLEM AV) @ 63RD ST.

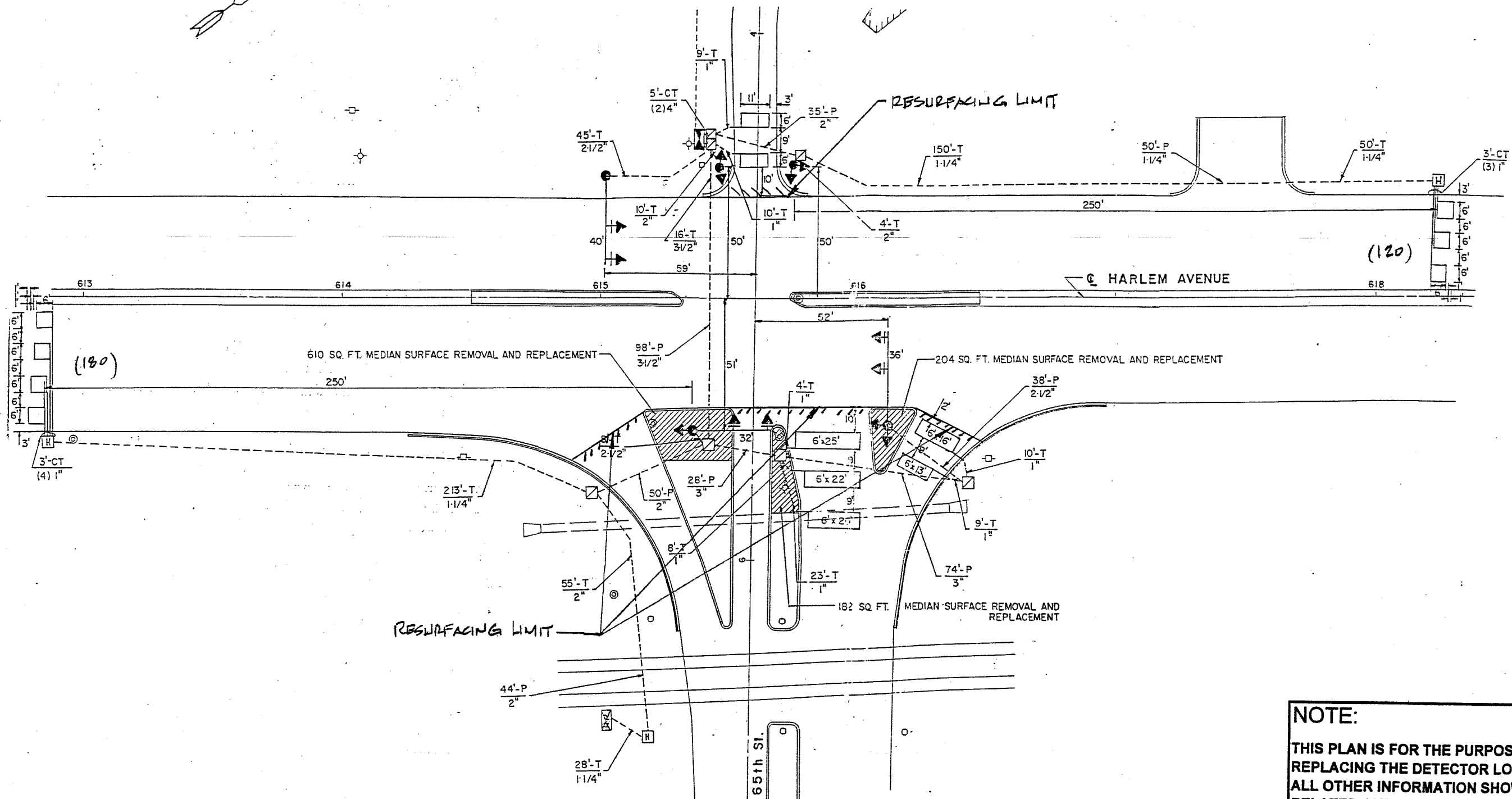
SCALE: 1" = 20'
DATE: APRIL 04

DRAWN BY: J.E.
DESIGNED BY: J.E.
CHECKED BY: J.E.

REVISIONS	
NAME	DATE

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	14
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT

62921



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

REPLACE ALL DETECTOR LOOPS AS SHOWN
 (WITHIN THE RESURFACING LIMITS)

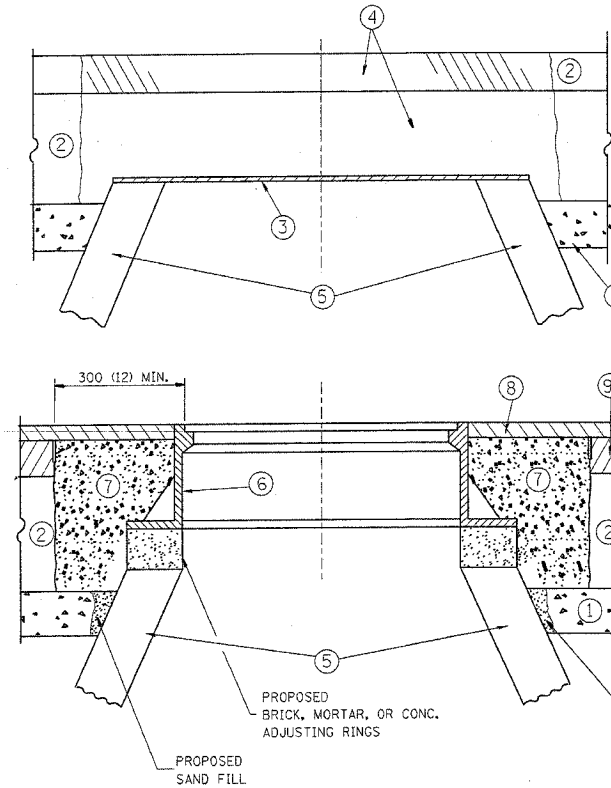
CODE NO.	QUANTITY	UNIT	ITEM
86600600	300	Foot	Detector Loop Replacement

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETECTOR LOOP REPLACEMENT
 ILL. ROUTE 43 (HARLEM AV) @ 65TH ST.
 SCALE: 1" = 20'
 DATE: APRIL 05
 DRAWN BY: J.E.
 DESIGNED BY:
 CHECKED BY: J.E.

P. L. #	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62921



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 | ⑥ FRAME AND LID (SEE NOTES) |
| ② EXISTING PAVEMENT | ⑦ CLASS SI CONCRETE, BITUMINOUS CONCRETE SURFACE OR BINDER COURSE MATERIAL |
| ③ 900 (36) DIAMETER METAL PLATE | ⑧ PROPOSED BITUMINOUS CONCRETE SURFACE COURSE |
| ④ PROPOSED CRUSHED STONE AND BITUMINOUS MATERIAL | ⑨ PROPOSED BITUMINOUS CONCRETE BINDER COURSE |
| ⑤ EXISTING STRUCTURE | |

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

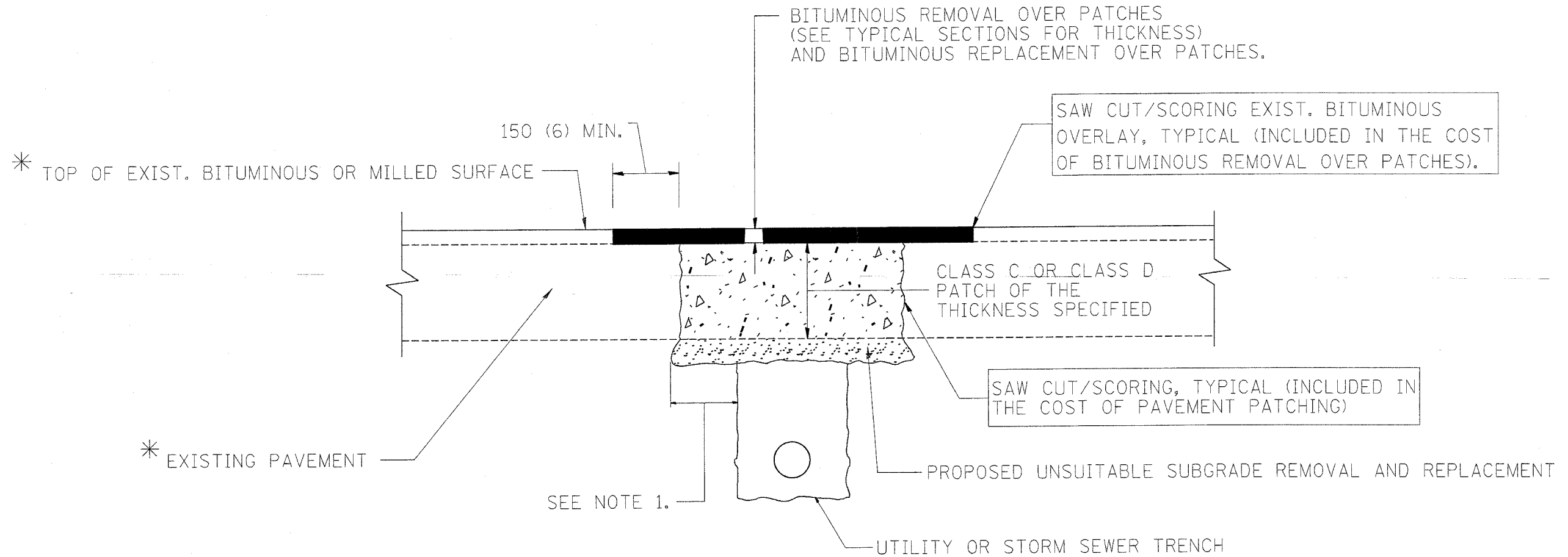
REVISIONS	
NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04

SCALE: NONE
DATE: 5/9/2005

DRAWN BY
CHECKED BY

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

62921



*SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

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

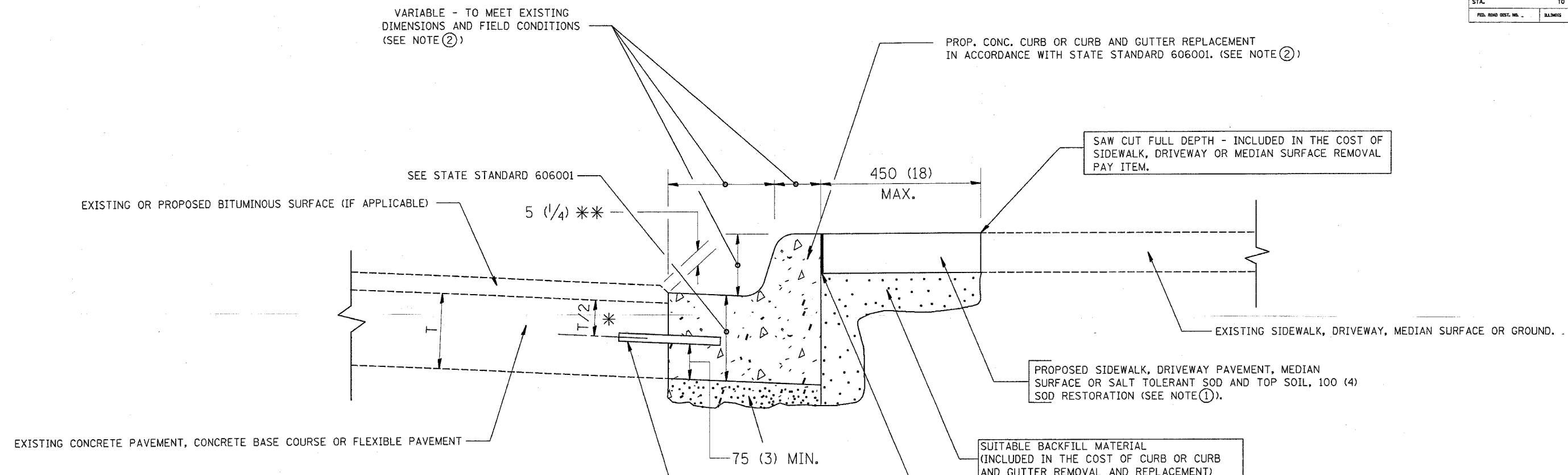
PAVEMENT PATCHING FOR BITUMINOUS SURFACED PAVEMENT

SCALE: VERT. HORIZ. DATE 5/9/2005

DRAWN BY CHECKED BY

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

62921



- * 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.

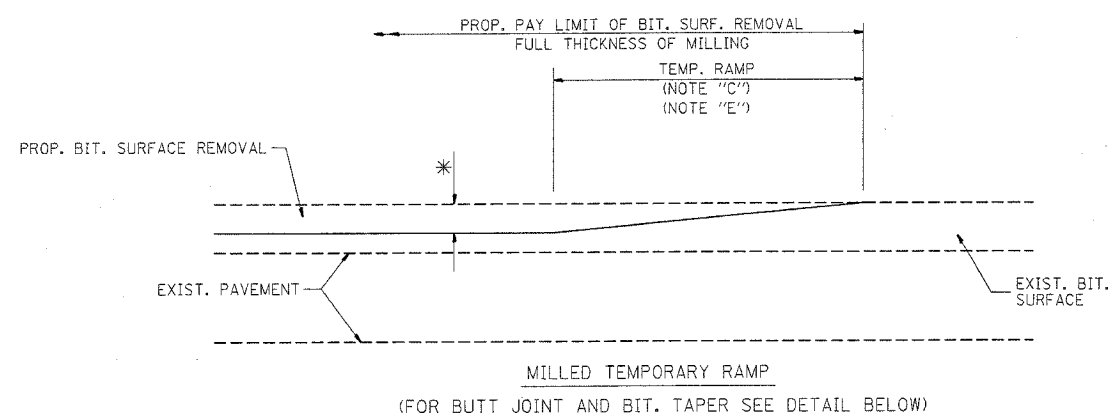
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

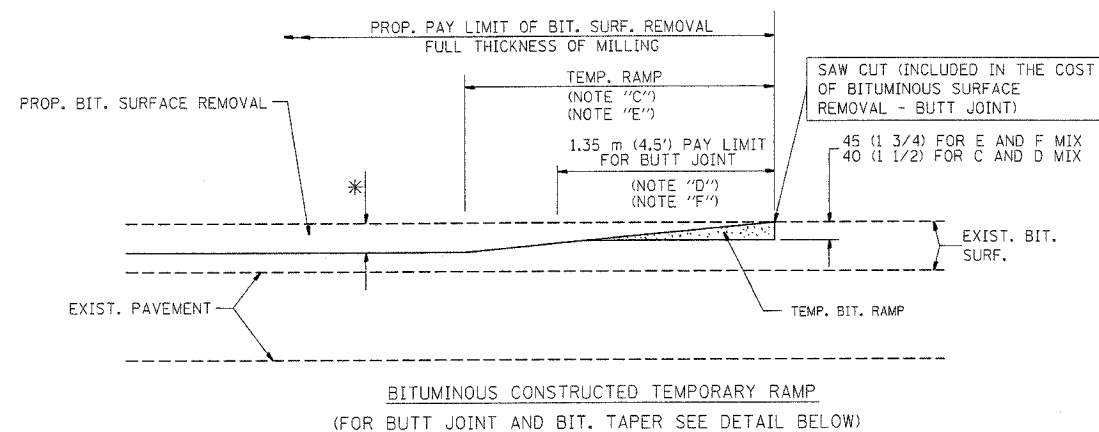
ILLINOIS DEPARTMENT OF TRANSPORTATION
**CURB OR
CURB AND GUTTER
REMOVAL AND REPLACEMENT**

SCALE: NONE
DATE: 5/9/2005
DRAWN BY:
CHECKED BY:
BD600-06 (BD-24)

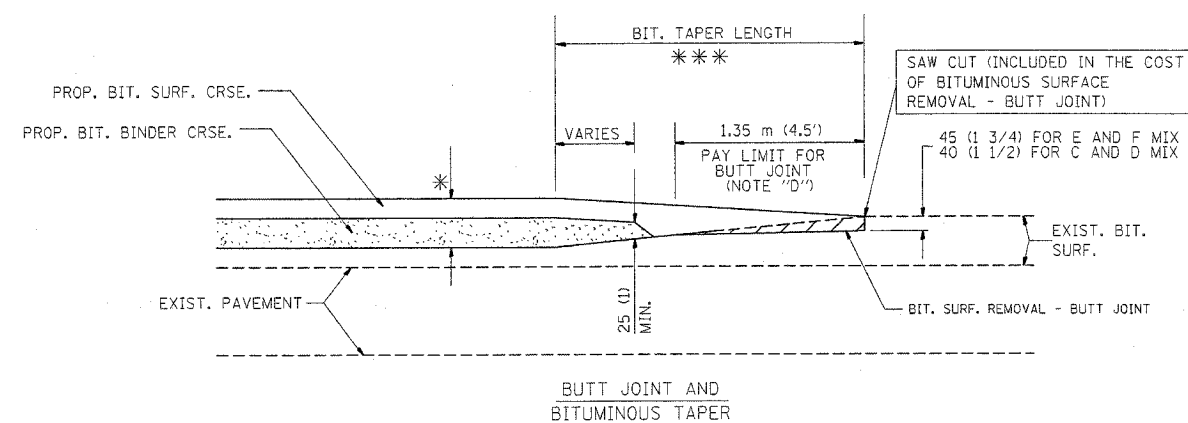
62921



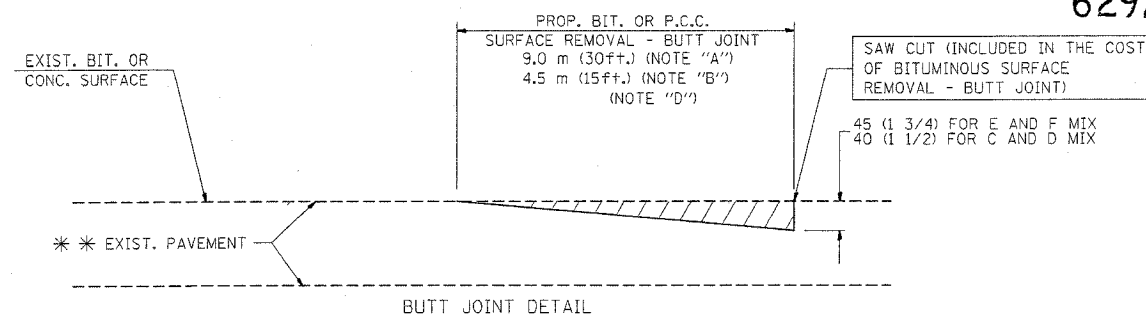
OPTION 1



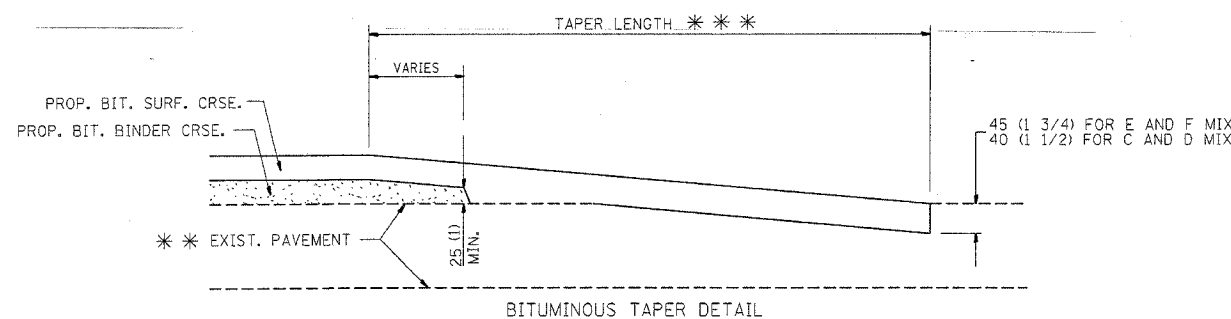
OPTION 2
TYPICAL TEMPORARY RAMP



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.

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND BITUMINOUS TAPER DETAILS

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".

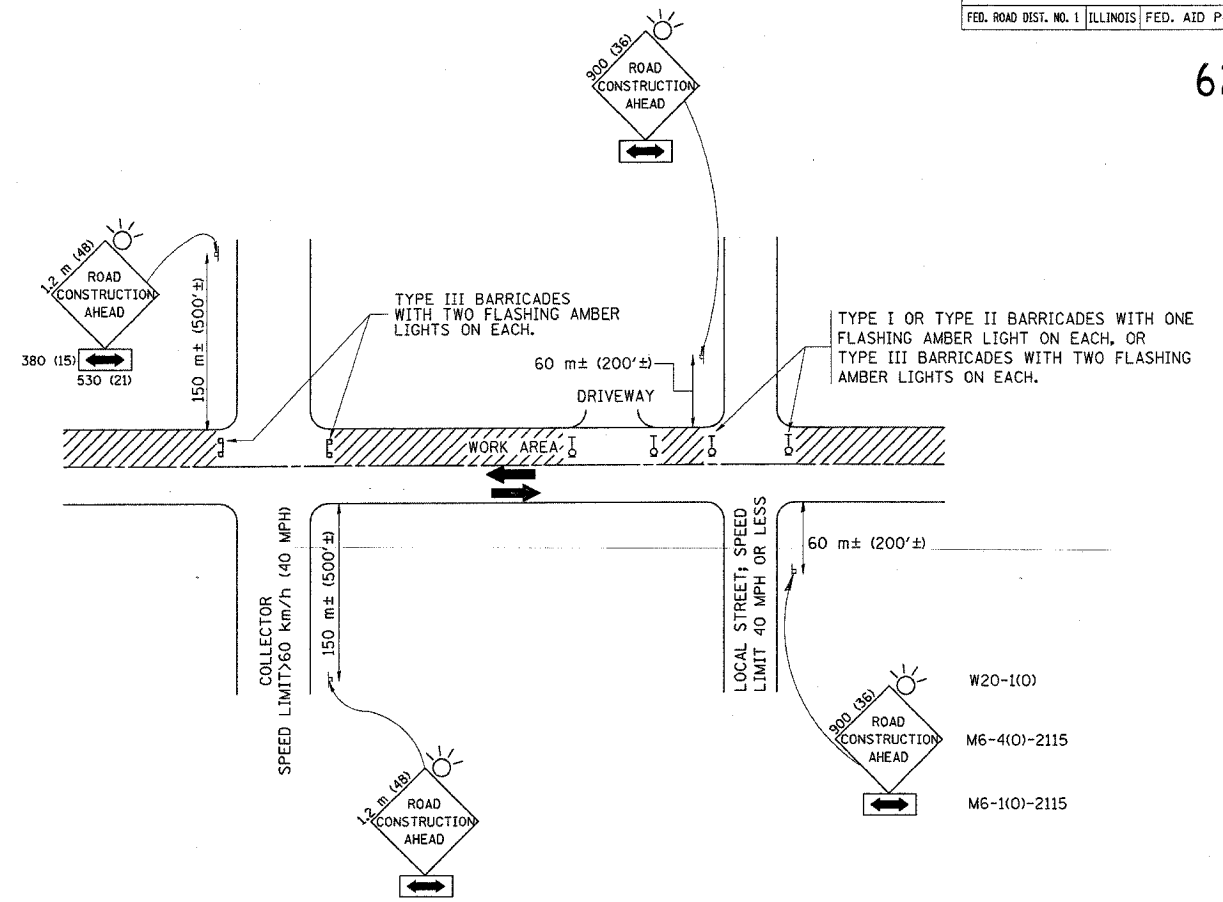
REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01

SCALE: NONE
DATE PLOTTED: 5/9/2005

DRAWN BY
CHECKED BY
BD400-05 (VI=BD32)
REVISION DATE: 04/06/01

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	19
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT	

62921



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

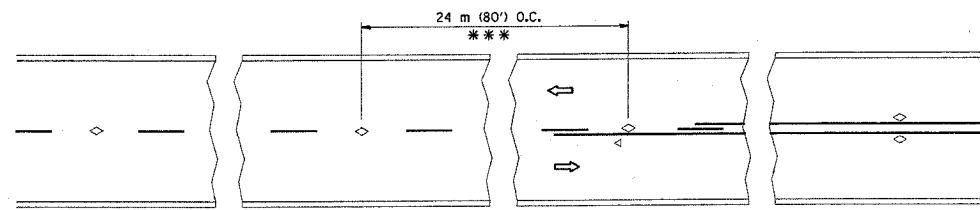
ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

SCALE: VERT.
 HORIZ.
 DATE 5/9/2005

DRAWN BY
 CHECKED BY
 TC-10

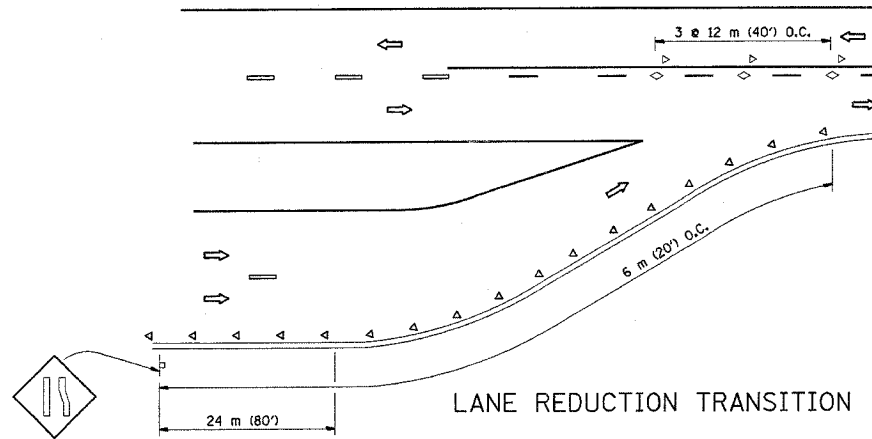
REVISION DATE: 01/06/00

62921

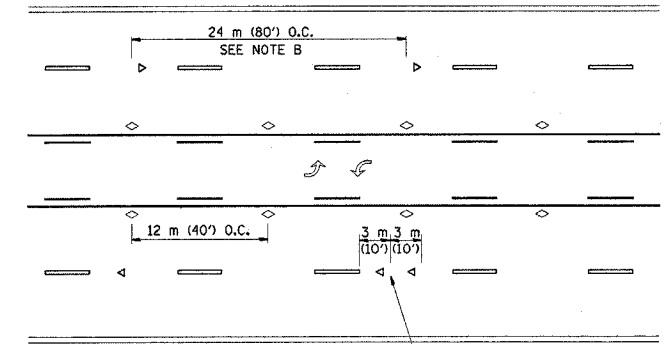


*** REDUCE TO 12 m (40') O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 70 km/h (45 M.P.H.) OR LESS.

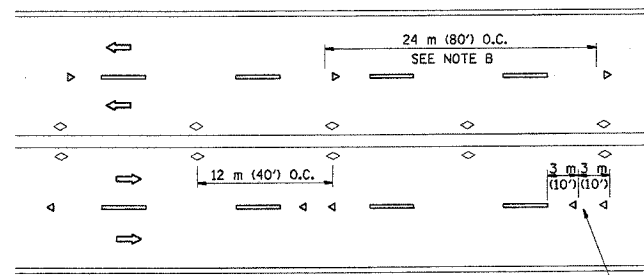
TWO-LANE/TWO-WAY



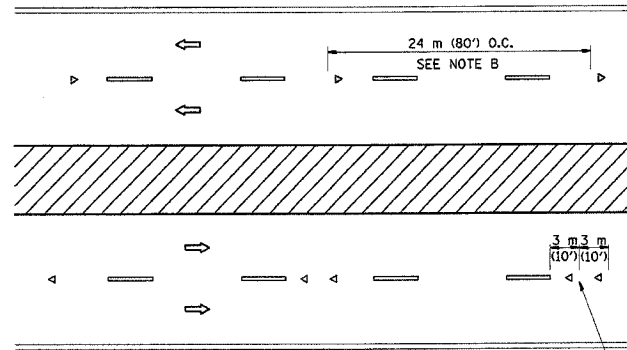
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

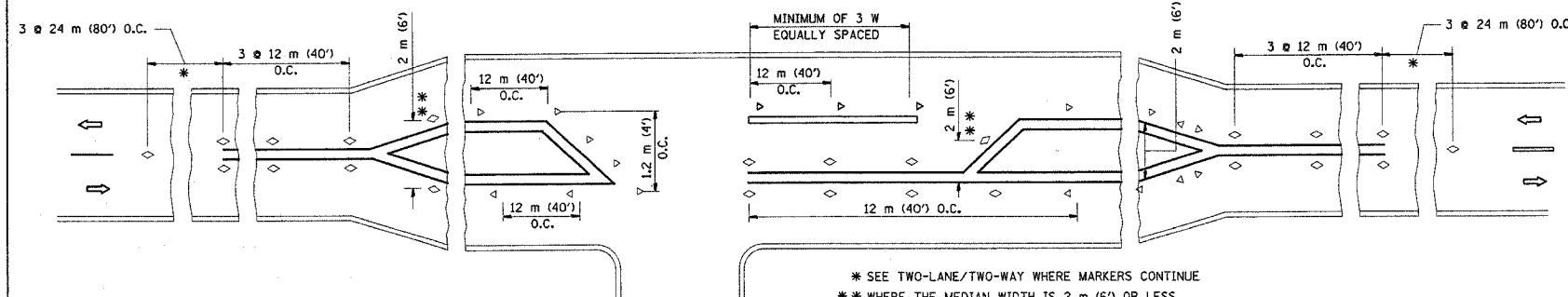
1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 50 TO 75 (2 TO 3) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 150 m (500') IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE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

SYMBOLS

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

LANE MARKER NOTES

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



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.

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS
(SNOW-PLOW RESISTANT)

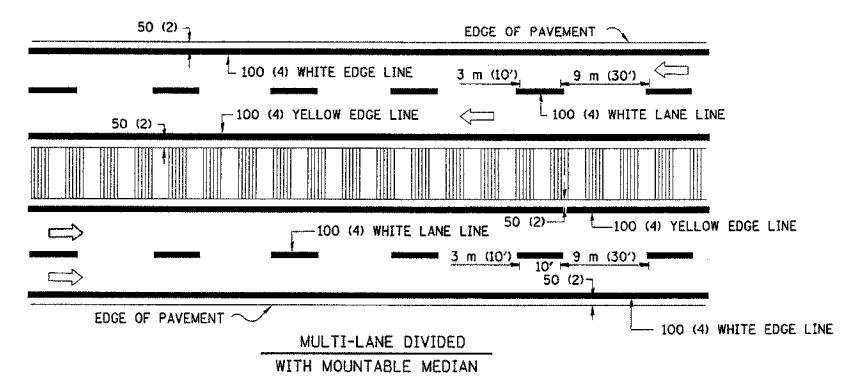
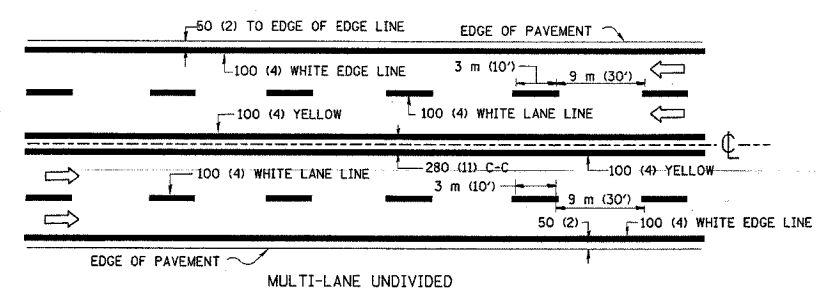
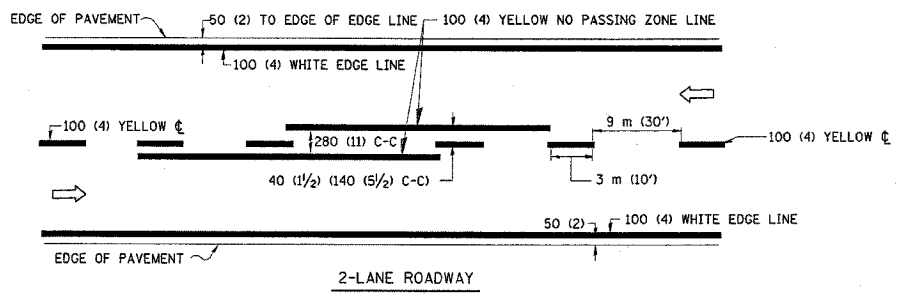
REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

SCALE: NONE
DATE: 5/9/2005

DRAWN BY CADD
CHECKED BY TC-11

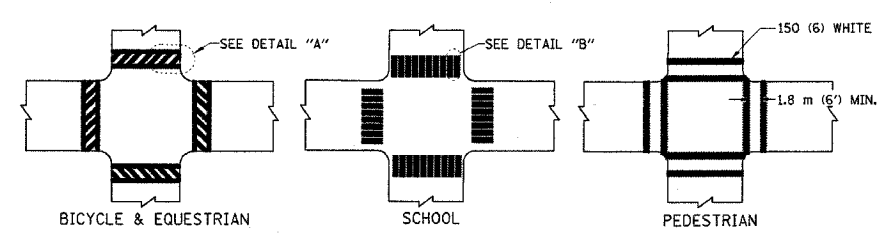
REVISION DATE: 01/06/00

62921

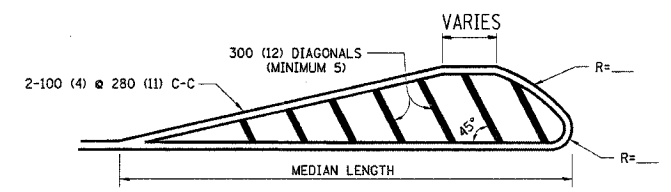
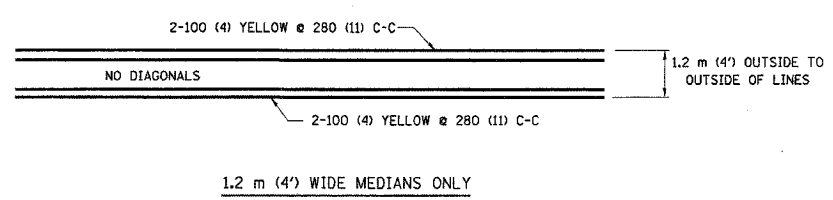


NOTE: MEDIANS WITH BARRIER CURBS DO NOT REQUIRE AN EDGE LINE

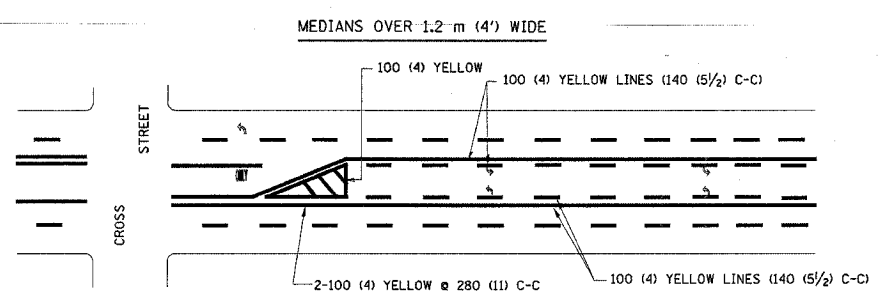
TYPICAL LANE AND EDGE LINE MARKING



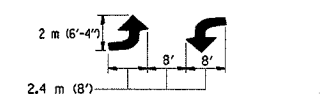
TYPICAL CROSSWALK MARKING



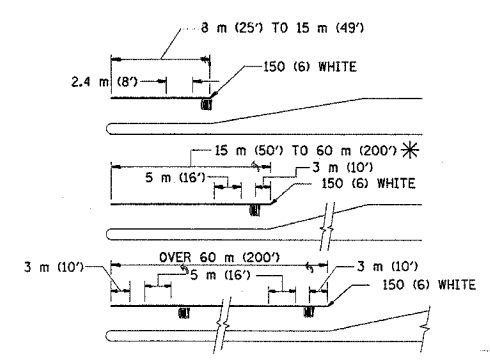
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 15 m (50') C-C (LESS THAN 50 km/h (30 MPH))
 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH))
 45 m (150') C-C (MORE THAN 70 km/h (45 MPH))



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.

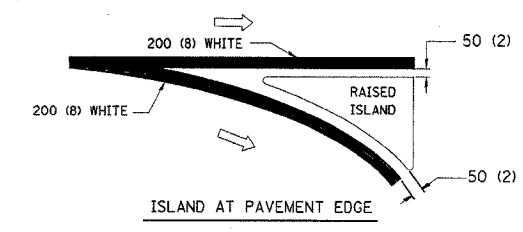
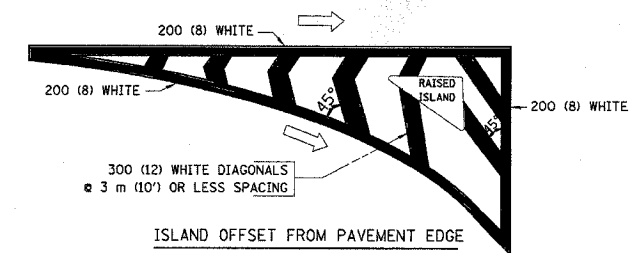


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 2.4 m (8") AND ARROWS SHALL BE USED.
 AREA = 1.5 m² (15.6 SQ. FT.) 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 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	100 (4)	SOLID	YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4)	SKIP-DASH	WHITE	3 m (10') LINE WITH 9 m (30') SPACE
LANE LINES	125 (5) ON FREEWAYS	SKIP-DASH	WHITE	
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 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
TWO WAY LEFT TURN MARKING	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 150 (6)	SOLID	WHITE	NOT LESS THAN 1.8 m (6') APART
CROSSWALK LINES (BIKE & EQUESTRIAN)	300 (12) @ 45°	SOLID	WHITE	600 (2') APART
CROSSWALK LINES (LONGITUDINAL BARS (SCHOOL))	300 (12) @ 90°	SOLID	WHITE	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°	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

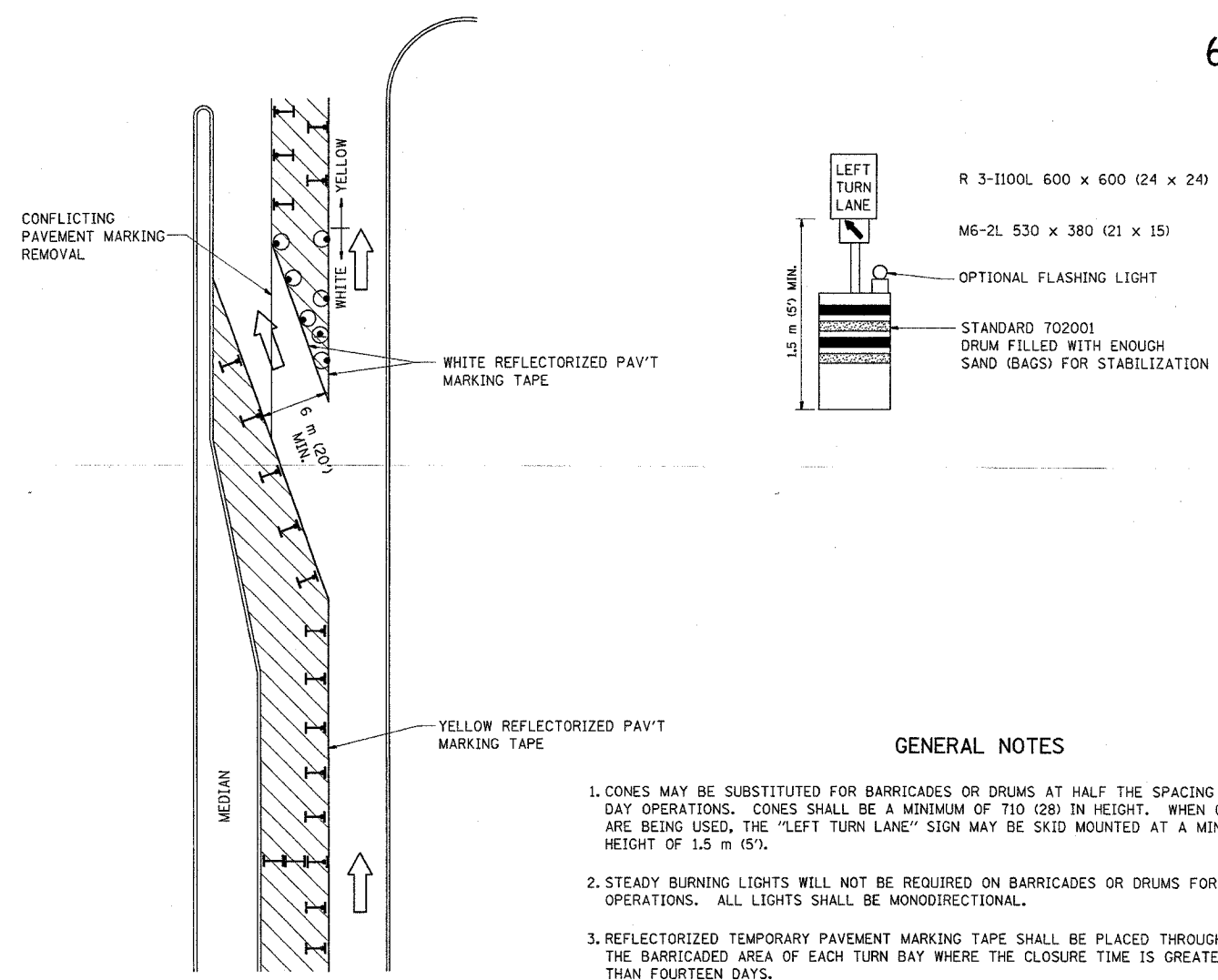
DISTRICT ONE

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 5/9/2005
DRAWN BY CAOD
CHECKED BY TC-13
REVISION DATE: 01/06/00

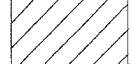





62921



GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 1.5 m (5').
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 600 x 600 (24 x 24) AND M6-2R 530 x 380 (21 x 15) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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

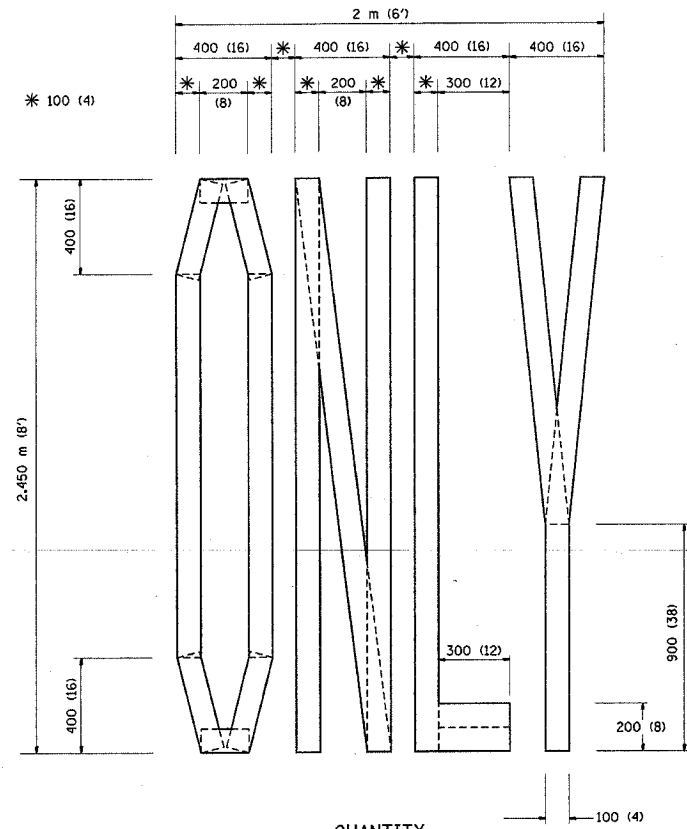
ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL AND PROTECTION
 AT TURN BAYS
 (TO REMAIN OPEN TO TRAFFIC)**

REVISIONS	
NAME	DATE
T. RAMMACHER	09/08/94
A. HOUSEH	11/07/95
A. HOUSEH	10/12/96
T. RAMMACHER	01/06/00

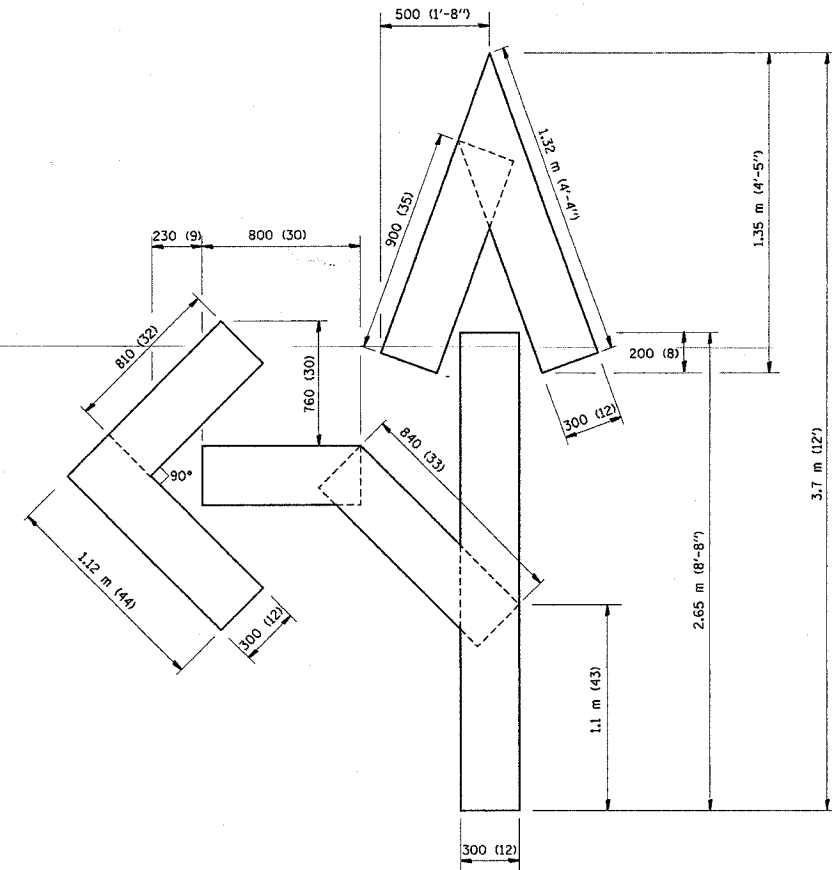
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 DATE: 5/9/2005
 DRAWN BY:
 CHECKED BY: LHA
 TC-14

REVISION DATE: 01/06/00

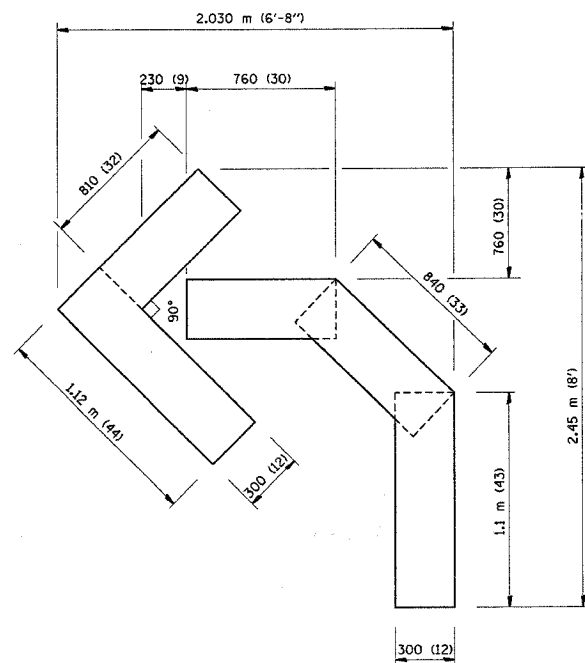
62921



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



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



QUANTITY
100 (4) LINE = 13.9 m (45.5 ft.)
1.39 sq. m (15.2 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 5/9/2005

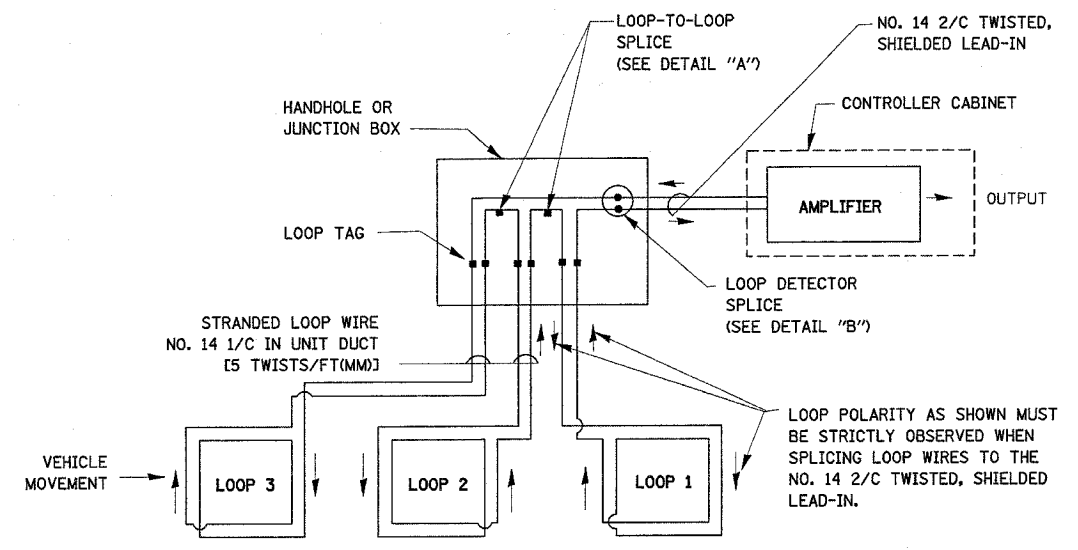
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CHECKED BY TC-16

REVISION DATE: 08/28/00

62921

LOOP DETECTOR NOTES

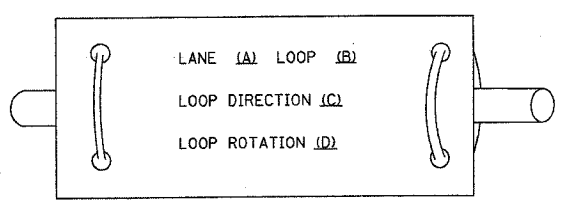
- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



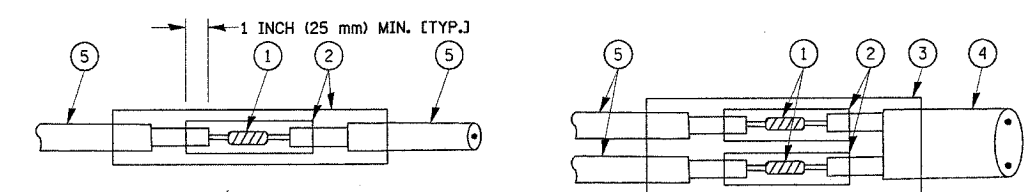
DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

LOOP LEAD-IN CABLE TAG



- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETAIL "A"
LOOP-TO-LOOP SPLICE

DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

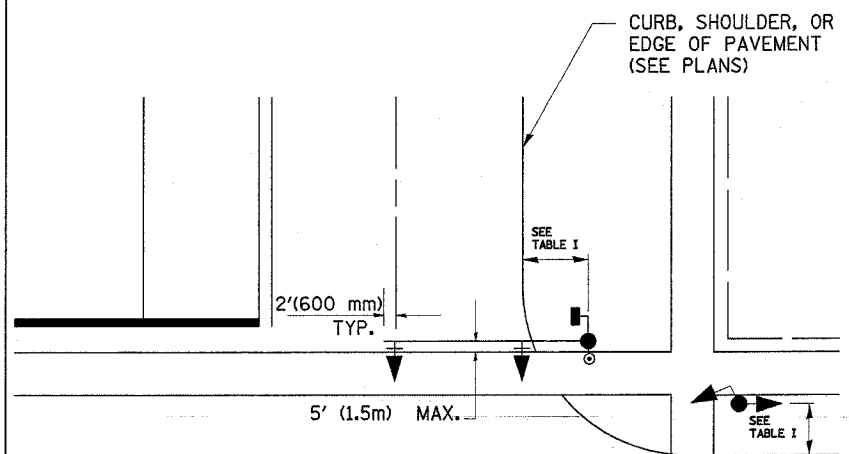
REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS
 SCALE: VERT. NONE
 HORIZ. DATE 5/24/2005
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 1 OF 4

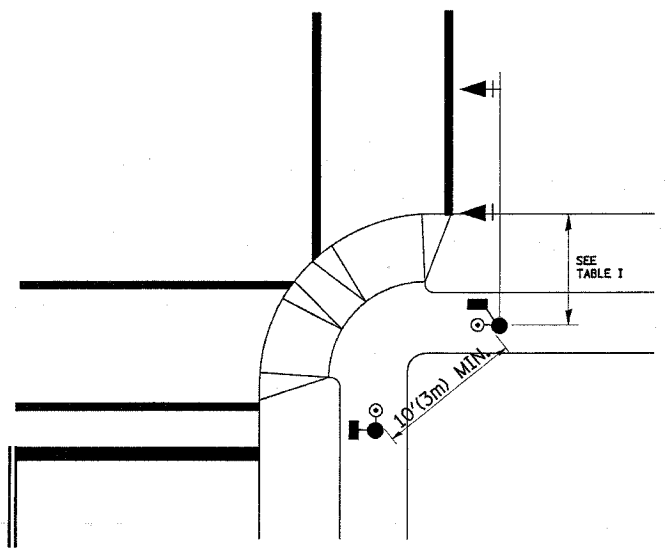
62921

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

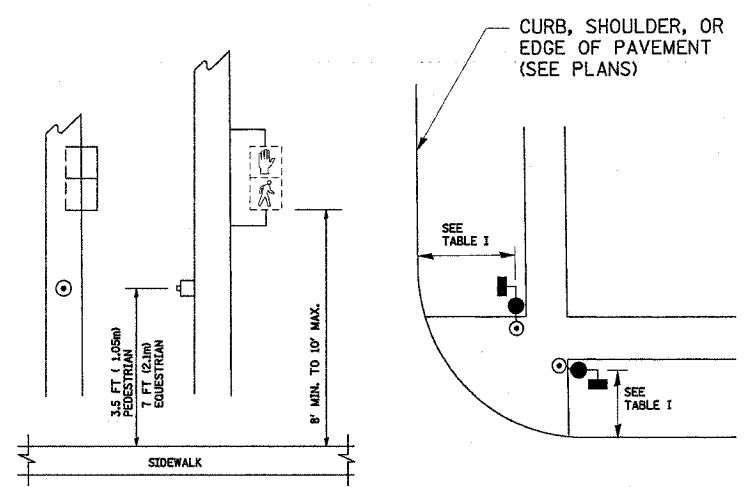


TABLE I

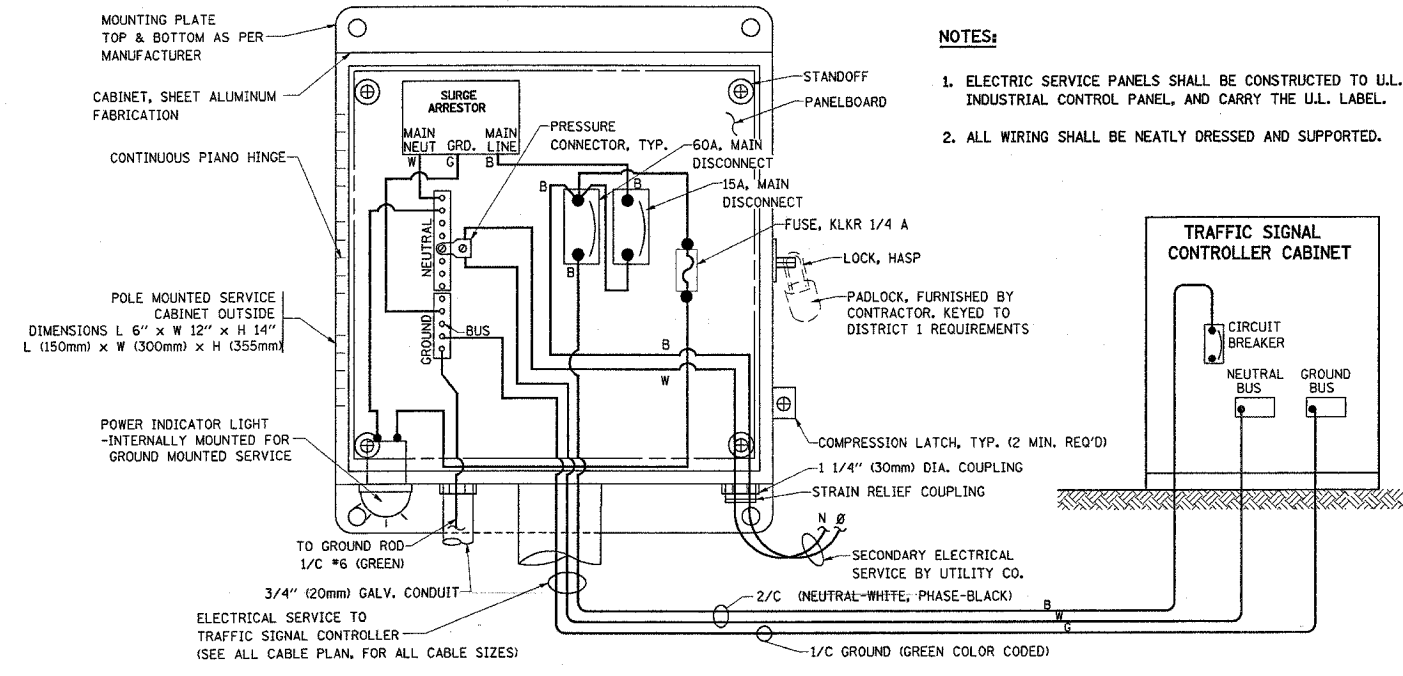
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS
 SCALE: VERT. NONE
 HORIZ. NONE
 DATE 5/24/2005
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 2 OF 4

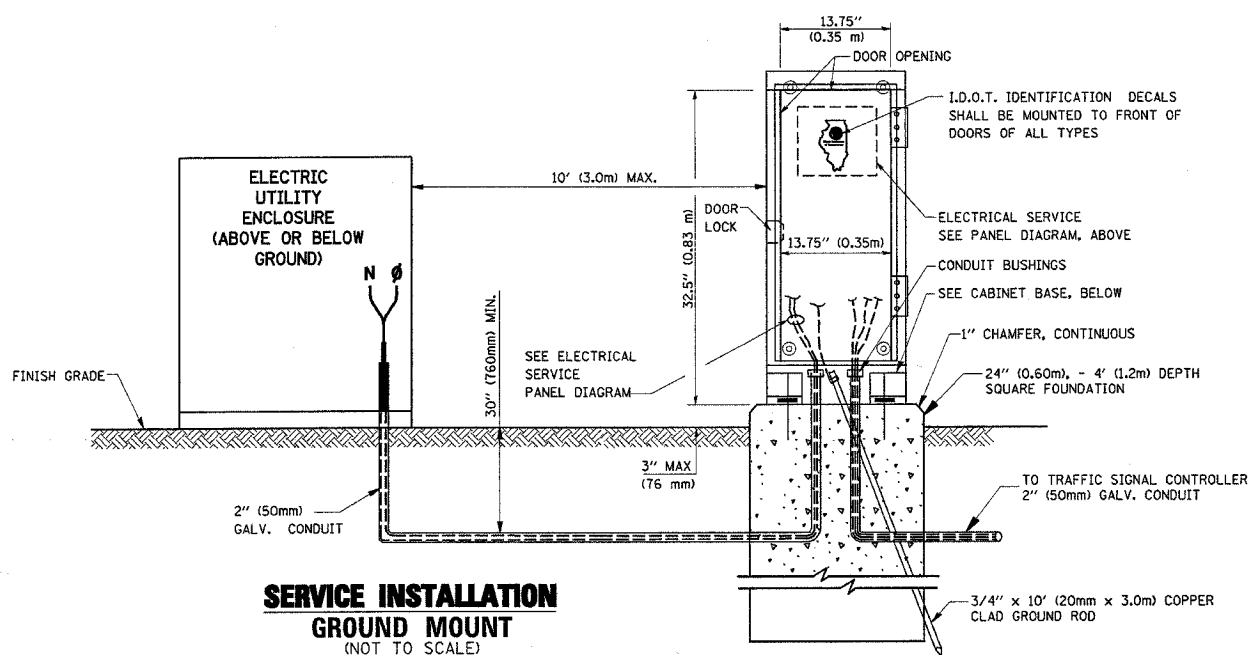
F.A.B. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	3130(A&B)RS-1	COOK	29	26
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62921

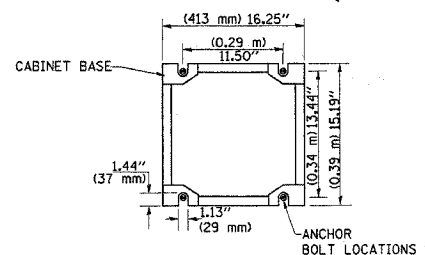


ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

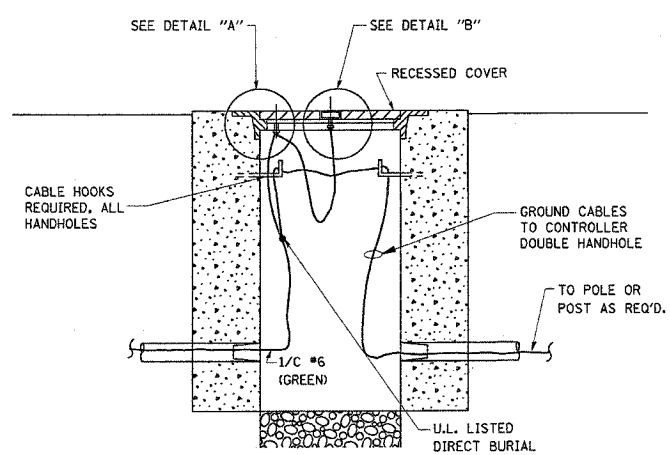
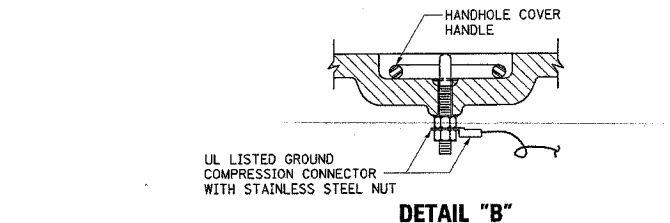
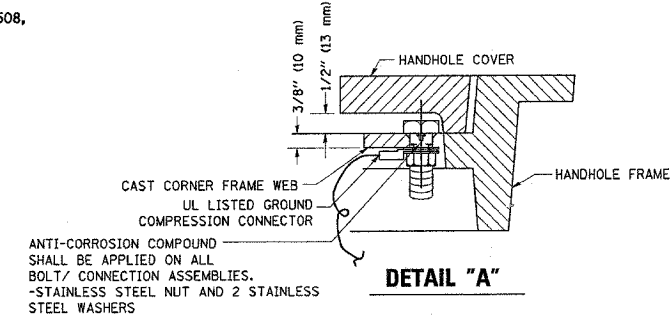
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)



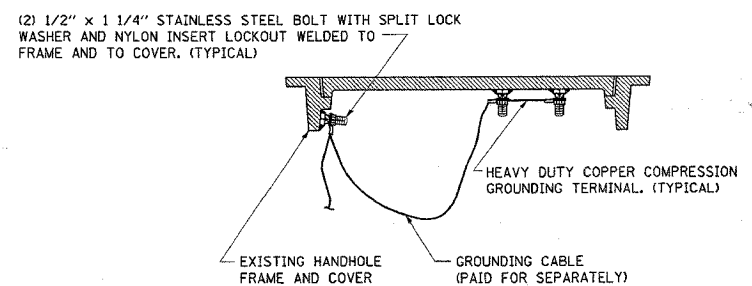
SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)



CABINET - BASE BOLT PATTERN
(NOT TO SCALE)



HANDHOLE COVER & FRAME - GROUNDING DETAIL
(NOT TO SCALE)

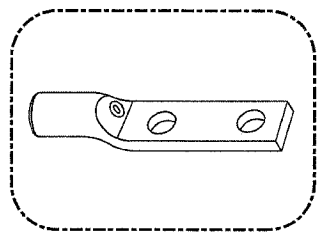


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
(NOT TO SCALE)

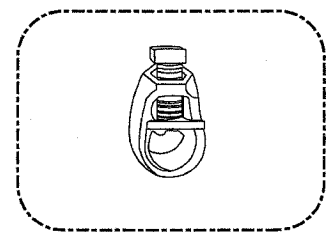
NOTES:

GROUNDING SYSTEM

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



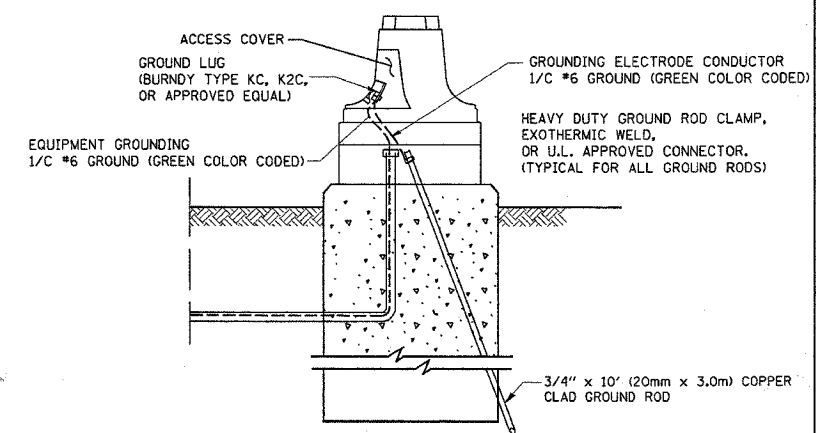
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL
(NOT TO SCALE)

REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02

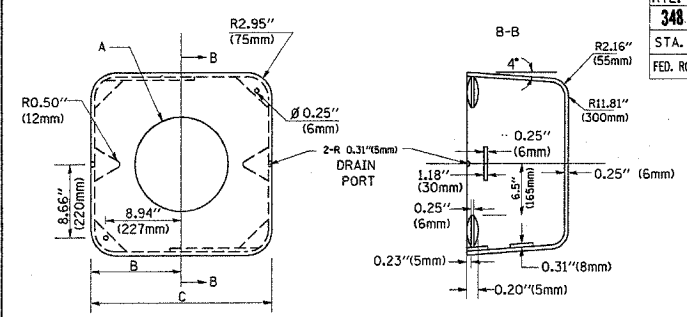
ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
HORIZ. DATE 5/24/2005

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 3 OF 4

62921

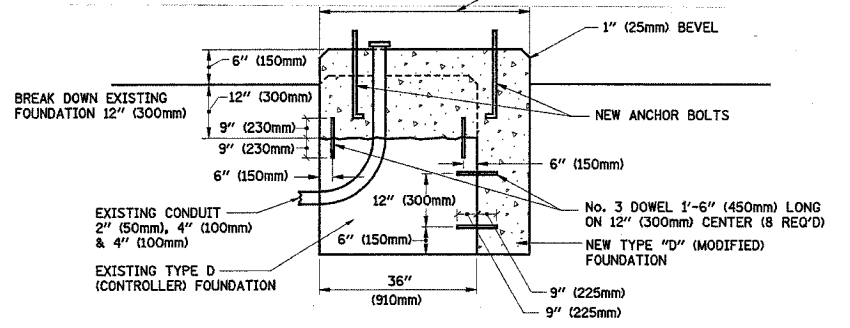
MATERIAL:
 - ASTM A48 CLASS 30 GREY IRON
 - ASTM A123 HOT DIPPED GALVANIZED



TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125" (257mm)	9.5" (241mm)	19" (483mm)	12" (300mm)	24kg
II	∅ 11.125" (283mm)	10.75" (273mm)	21.5" (546mm)	12" (300mm)	26kg

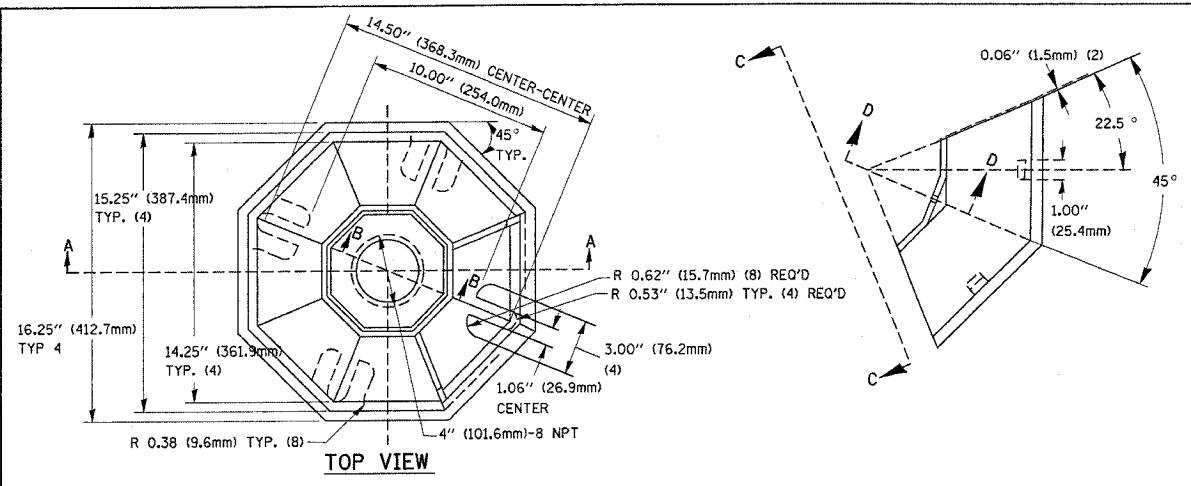
SHROUD DETAIL

NOTE:
 SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.

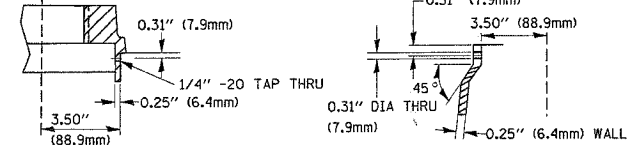


MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

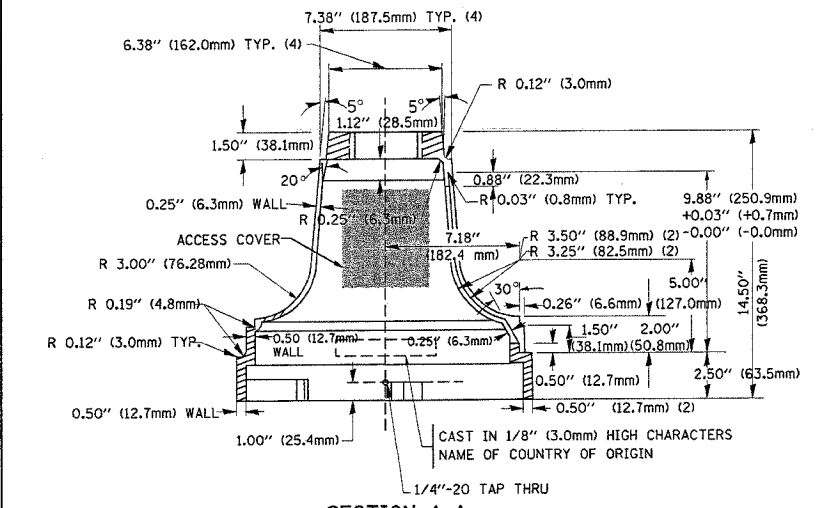


TOP VIEW

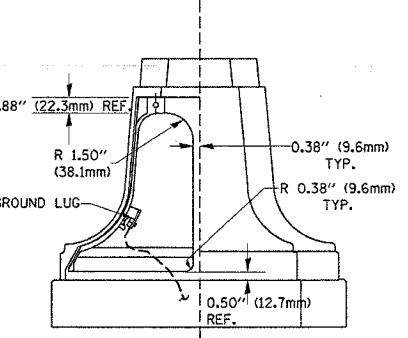


SECTION B-B

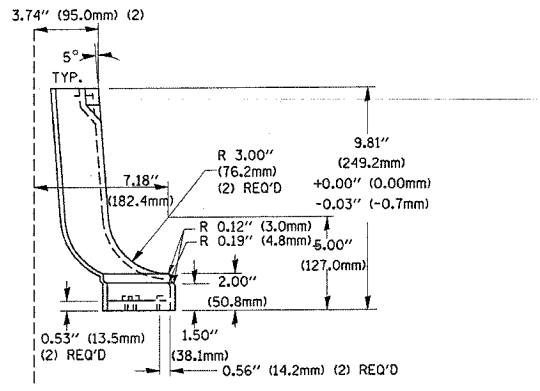
SECTION D-D



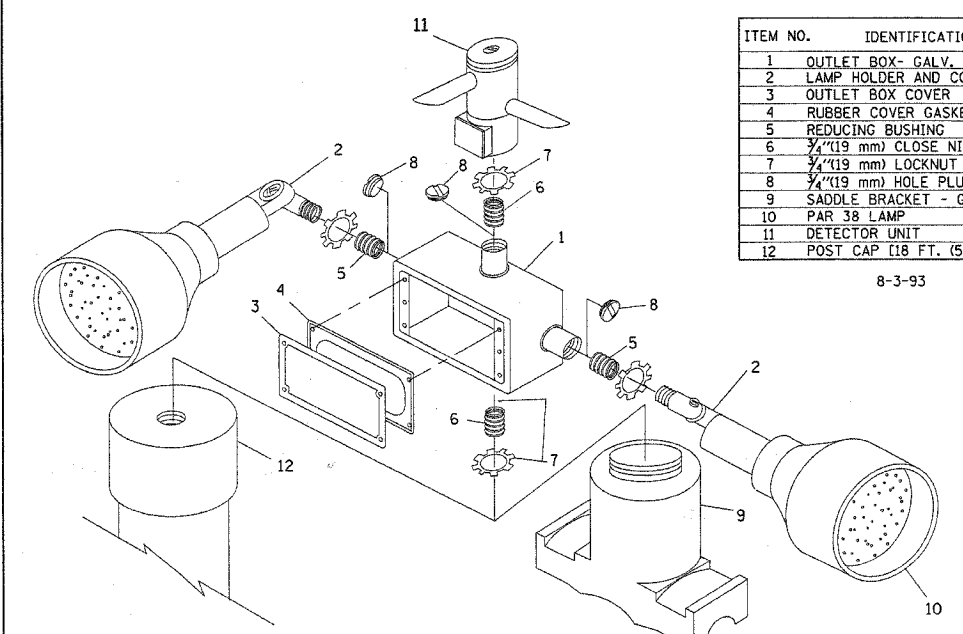
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT

MAST ARM MOUNT

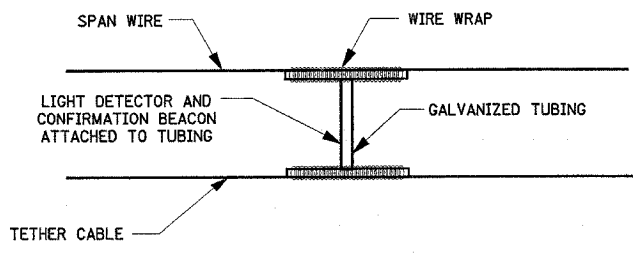
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 21 CU. IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

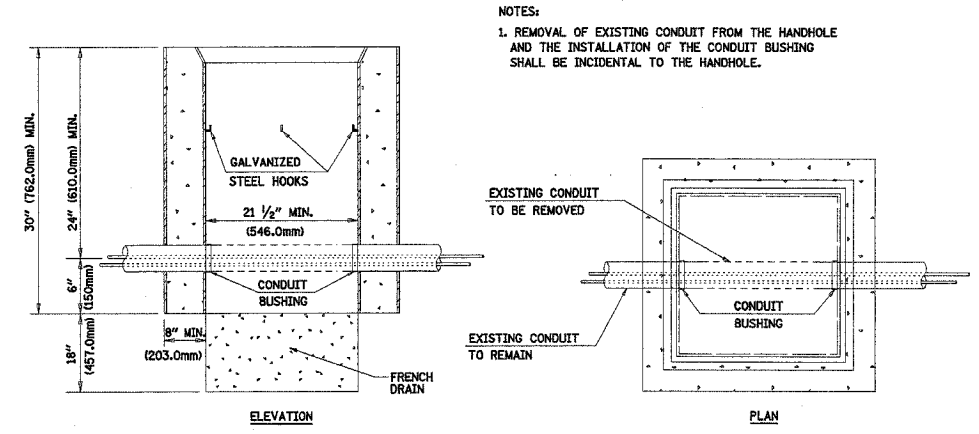
NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)



DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT

N.T.S.

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: VERT. NONE
 HORIZ. DATE 5/24/2005

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 4 OF 4

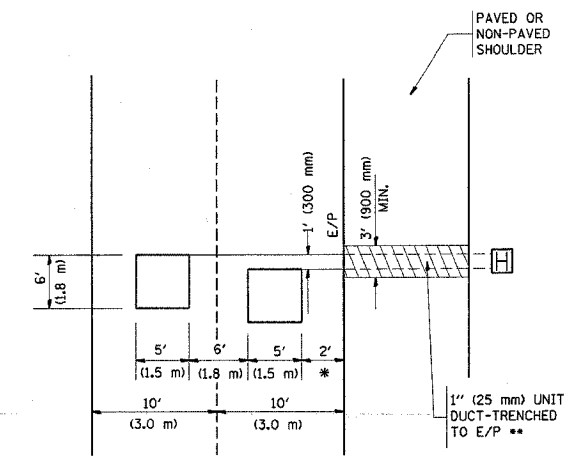
TS05

REVISION DATE: 01/01/02

62921

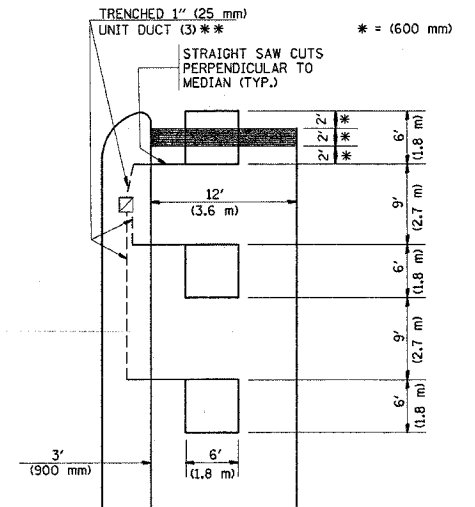
LOOPS NEXT TO SHOULDERS

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

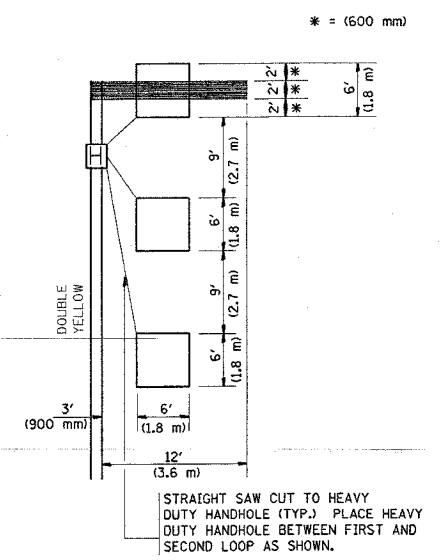


LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)

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.



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

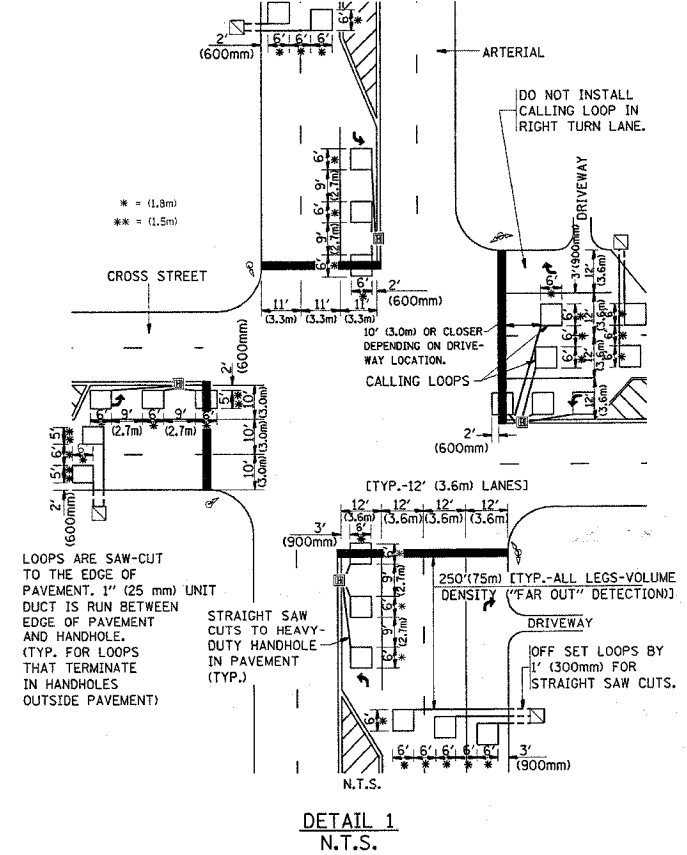


NOTES:

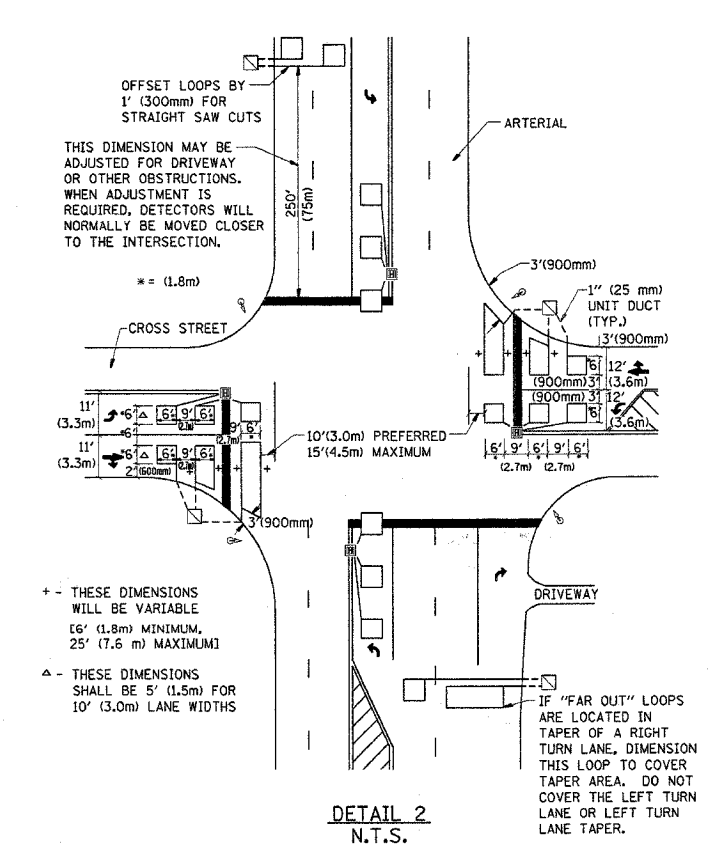
VEHICLES LOOP DETECTORS

- * 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)



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



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:

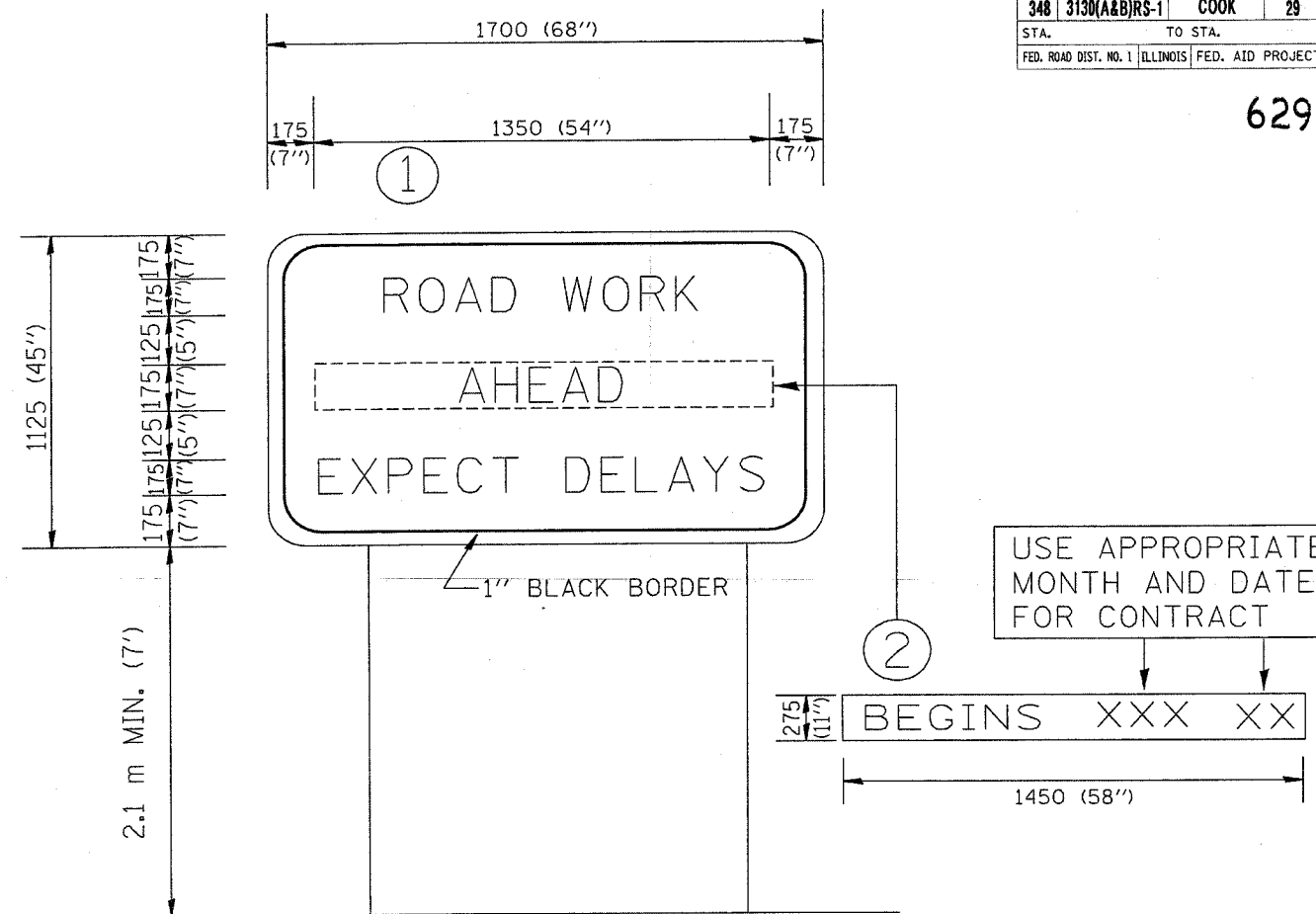
ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

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: 5/24/2005
DRAWN BY: CADD
DESIGNED BY: R.K.F.
CHECKED BY: R.K.F.
TS07
REVISION DATE:



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 TEMPORARY INFORMATION SIGNING
NAME	DATE	
R. MIRS	9-15-97	
R. MIRS	2-11-99	
T. RAMMACHER	2-2-99	

SCALE: DATE 5/9/2005
DRAWN BY: BUR. OF DESIGN
CHECKED BY: