STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

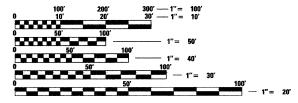
F.A.U. 3726 (LAKE-COOK ROAD /SHERIDAN ROAD) **SECTION (112 & 112X) RS-7 GREEN BAY ROAD TO SHERIDAN ROAD (EAST JUNCTION) RESURFACING (3P)**

THESE IMPROVEMENTS ARE LOCATEDWITHIN THE VILLAGE OF GLENCOE AND CITY OF HIGHLAND PARK

LAKE /COOK COUNTY C-91-559-09

TRAFFIC DATA

2006 ADT - 6,600 POSTED SPEED LIMIT - 35 MPH



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

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

CONTRACT NO. 60H03

Ciorba Group, Inc.

BEGIN PROJECT STA. 102 + 96

184-001016 CONSULTING ENGINEERS SUITE 402, 5507 NORTH CUMBERLAND AVE CHICAGO, ILLINOIS 60656 :: (773) 775-4009 MORAINE & NEW TRIER TOWNSHIP LOCATION MAP 1'' = 2,500'

GROSS LENGTH OF PROJECT = 4,504 FT = 0.85 MI. NET LENGTH OF PROJECT = 4,199 FT = 0.80 MI.



(112 & 112X) RS-7 LAKE/COOK 19 1 ILLINOIS CONTRACT NO. 60H03 FED. ROAD DIST. NO. 1

D-91-559-09



DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

DESIGN FIRM

REGISTRATION NUMBER

LAKE MICHIGAN **●**DEERFIELD HIGHLAND 133 + 75 OMISSION LAKE-COOK RD T 42N END PROJECT STA. 148 + 00 **●**GLENCOE 117 + 74 118+60

R 12E R 13E

INDEX OF SHEETS

DESCRIPTION
COVER SHEET
INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
SUMMARY OF QUANTITIES
TYPICAL SECTIONS
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DETECTOR LOOP REPLACEMENT PLANS
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PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
BUTT JOINT AND HMA TAPER DETAILS (BD-32)
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS,
INTERSECTIONS, AND DRIVEWAYS (TC-10)
TYPICAL APPLICATIONS RAISED REFLECTIVE
PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)
DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS
(TO REMAIN OPEN TO TRAFFIC) (TC-14)
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC-16)
ARTERIAL ROAD INFORMATION SIGN (TC-22)

DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR

ROADWAY RESURFACING (TS-07)

19

<u>s</u>	TATE STAN	<u>DARDS</u>
	000001- <i>05</i>	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
	442201- 03	CLASS C AND D PATCHES
	482011 - <i>03</i>	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
	602401- <i>0</i> 2	MANHOLE TYPE A
	602601- <i>0</i> 2	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
	604001-03	FRAME AND LIDS, TYPE 1
	606001 -04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
	701301- <i>0</i> 3	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
	701311 - 03	LANE CLOSURE, 2L, 2W, MOVING DAY OPERATIONS-DAY ONLY
	701501 - 05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
	701701 - <i>00</i>	URBAN LANE CLOSURE, MULTI LANE INTERSECTION
	701801-04	LANE CLOSURE MULTILANE 1W, 2W, CROSSWALK OR SIDEWALK CLOSURE
	701901 <i>- 01</i>	TRAFFIC CONTROL DEVICES
	780001- <i>0</i> 2	TYPICAL PAVEMENT MARKINGS
	886001- <i>01</i>	DETECTOR LOOP INSTALLATIONS
	886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES, (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FEET (3 METER) TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTER 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.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
- 4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 5. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 6. THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES:

BITUMINOUS	MATERIALS	(PRIME	COAT)

0.0004 TONS/SQ YD

HOT-MIX ASPHALT SURFACE COURSE

112 LBS/SQ YD/INCH

POLYMERIZED LEVELING BINDER

105 LBS/SQ YD/INCH

(MACHINE METHOD)

- 7. THE ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISORS AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE START OF WORK.
- 8. TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE ENGINEER SHALL CONTACT DEBBI HANLON, AREA TRAFFIC FIELD ENGINEER, AT (847) 438-2300.
- 9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2" (40 MM) WHERE THE SPEED LIMIT IS 45 MPH (80 KM/H) OR LESS AND 1" (25 MM) WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH (80 KM/H). WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).
- 10. BUTT JOINTS WILL BE INSTALLED AT THE END OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT). IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 11. FOR PAVEMENT MARKING, REFER TO DISTRICT ONE TYPICAL MARKINGS FOR DETAILS SHOWN.
- 12. MATCH EXISTING PAVEMENT MARKINGS AT PROJECT AND OMISSION LIMITS.
- 13. ALL PATCHES OPENED ON A PARTICULAR DAY MUST BE FILLED THAT DAY TO THE TOP OF THE EXISTING PAVEMENT SURFACE.

- 14. IDOT TRAFFIC SIGNAL AND SYSTEM DETECTION LOOPS ARE PRESENT AT GREEN BAY ROAD AND SHERIDAN ROAD. THE CONTRACTOR MUST NOTIFY THE IDOT AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER AT (847) 705-4139 AND THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO BEGINNING WORK, AT WHICH TIME ARRANGEMENTS WILL BE MADE TO ADJUST THE TRAFFIC CONTROLLER TIMING TO COMPENSATE FOR THE ABSENCE OF DETECTION. REPLACEMENT OF LOOPS DOES NOT REQUIRE MAINTENANCE TRANSFER, BUT DOES REQUIRE NOTIFICATION OF WORK AND INSPECTION. COORDINATION WITH THE DISTRICT IS CONSIDERED INCIDENTAL TO THIS CONTRACT.
- 15. NO OVERNIGHT LANE CLOSURES SHALL BE ALLOWED.
- 16. CONTINGENCY QUANTITIES HAVE BEEN INCLUDED FOR THE FOLLOWING ITEMS TO BE USED AT THE DIRECTION OF THE ENGINEER:

60406000 FRAMES AND LIDS, TYPE 1, OPEN LID - 3 EACH 60406100 FRAMES AND LIDS, TYPE 1, CLOSED LID - 3 EACH

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PLOT DATE = 4/18/2009	DATE	-	4/16/2009	REVISED	-	

				J.,, Di					
		SUMMARY OF QUANTITIES	100:/. STATE CONSTRUCTION TYPE CODE TOTAL QUANTITY		-	SUMMARY OF QUANTITIES			
	CODE NO.	DESCRIPTION	UNIT	TOTAL GRANTITY	LAKE COUNTY 1000	COOK COUNTY IOOO		CODE NO.	DESCRIPTION
	-20200100	EARTH EXCAVATION	CU-YD-	20	10	10		60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)
	20201006	GRADING AND SHAPING SHOULDERS	UNIT	30	15	15		60406000	FRAMES AND LIDS, TYPE 1, OPEN LID
	35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	20	10	10		60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID
	35800200	ACCREGATE BASE REPAIR	TON	30	15	-15		67000400	ENGINEER'S FIELD OFFICE, TYPE A
	40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	10	5	5		67100100	MOBILIZATION
	40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	12		6		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501
	40600300	AGGREGATE (PRIME COAT)	TON	60	30	30		70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	2	1	1		70300100	SHORT-TERM PAVEMENT MARKING
	40600535	LEVELING BINDER (HAND METHOD), N70	TON	10	5	5		70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS
	40600895	CONSTRUCTING TEST STRIP	EACH	.1	0.5	0.5		70300220	TEMPORARY PAVEMENT MARKING - LINE 4"
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	500	250	250	Г	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"
	40600990	TEMPORARY RAMP	SQ YD	720	360	360-		70300260	TEMPORARY PAVEMENT MARKING - LINE 12"
	40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	50	25	25		70300280	TEMPORARY PAVEMENT MARKING - LINE 24"
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	2	1	1		70301000	WORK ZONE PAVEMENT MARKING REMOVAL
	40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1244	622	622	*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
F	44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	14,800	7,400	7,400	*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	20	10	10		78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"
	44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	280	140	140	*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"
	44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	500	250	250	•	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"
	44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	180	90	90	•	78100100	RAISED REFLECTIVE PAVEMENT MARKER
	44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	210	105	105		78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL
	44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	196	98	98	•	88600600	DETECTOR LOOP REPLACEMENT
	48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	90	45	45		X0322256	TEMPORARY INFORMATION SIGNING
	55039700	STORM SEWERS TO BE CLEANED	FOOT	1,300	650	650		X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50
	60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1	0		Z0018500	DRAINAGE STRUCTURES TO BE CLEANED
	60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	2	1	1		Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE
L_	<u> </u>	DEGIALTY ITEM				<u></u>	L_		

URBAN

*	DENOTES	SPECIALTY	ITEM

	44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	210	105	105		78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL
	44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	196	98	98	*	88600600	DETECTOR LOOP REPLACEMENT
	48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	90	45	45		X0322256	TEMPORARY INFORMATION SIGNING
	55039700	STORM SEWERS TO BE CLEANED	FOOT	1,300	650	650		X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50
	60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	1	0		Z0018500	DRAINAGE STRUCTURES TO BE CLEANED
	60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	2	1	1		Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE
*	DENOTES SP	ECIALTY ITEM							
	0:-	L DESIGNED - MRT	REVISED		1				LAKE-COOK ROAD /SHERIDAN ROAD

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URBAN 1001.STATE

TOTAL QUANTITY

15

3

4

2,520

480

20,900

2,100

420

750

3,400

160

12,700

700

200

300

180

172

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584

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CONSTRUCTION TYPE CODE

COOK COUNTY IOOO

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1,050

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LAKE COUNTY IOOC

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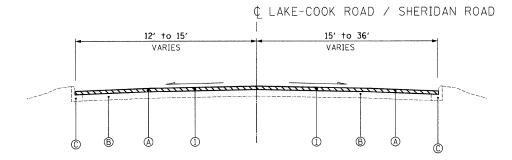
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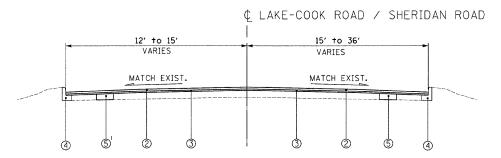
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**



EXISTING TYPICAL SECTION STA. 102+96 TO STA. 111+60 STA. 129+29 TO STA. 133+75 STA. 135+94 TO STA. 148+00



PROPOSED TYPICAL SECTION STA. 102+96 TO STA. 111+60 STA. 129+29 TO STA. 133+75 STA. 135+94 TO STA. 148+00

EXISTING CONDITIONS:

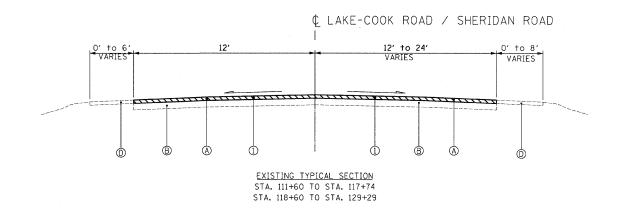
- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3" AND VARIES
- ® PORTLAND CEMENT CONCRETE BASE COURSE, 9"
- © COMBINATION CONCRETE CURB AND GUTTER
- AGGREGATE SHOULDER

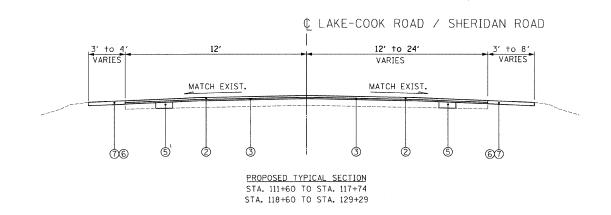
PROPOSED IMPROVEMENTS:

- ① HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ② HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- 3 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- 4 COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DIRECTED BY ENGINEER)
- (5) CLASS D PATCHES, 9" (DETERMINED BY ENGINEER IN FIELD)
- 6 AGGREGATE WEDGE SHOULDER, TYPE B
- 7 GRADING AND SHAPING SHOULDERS

A QUANTITY FOR LEVELING BINDER (HAND METHOD) HAS BEEN PROVIDED FOR USE AT ENTRANCES, AROUND HAND HOLES, PRIVATE UTILITY STRUCTURE FRAMES AND ANY OTHER STRUCTURE FRAMES THAT ARE NOT ABLE TO BE LOWERED UNDER THE ITEM "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)" AFTER GRINDING OF THE EXISTING PAVEMENT.

¹ QUANTITIES FOR EARTH EXCAVATION AND AGGREGATE BASE REPAIR HAVE BEEN INCLUDED FOR SUBGRADE FAILURES BELOW THE CLASS D PATCHES





HOT-MIX ASPHALT MIXTURE REQUIREMENTS CHART

ODEDATIONS	MANTHEE TYPE	40 TVDE	PERCENT
OPERATIONS	MIXTURE TYPE	AC TYPE	AIR VOIDS
DOADWAY DECUDEAGING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N7O (IL-9.5MM)	PG 64-22	4% @ 70 GYR
ROADWAY RESURFACING	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% @ 50 GYR
INCIDENTAL	LEVELING BINDER (HAND METHOD), N70 (IL-9.5MM)	PG 64-22 *	4% @ 70 GYR
DAVEMENT DATCHING	CLASS D PATCHES, 9" (HMA BINDER IL-19 MM)	PG 64-22 *	4% @ 70 GYR
PAVEMENT PATCHING	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES (HMA BINDER IL-19 MM)	PG 64-22 *	4% @ 70 GYR
DRIVES BEHIND CURB	HOT-MIX ASPHALT SURFACE COURSE MIX "C" N50 (IL-9.5MM) 2"	PG 64-22	4% @ 50 GYR
SHITES SEMIND COMB	HOT-MIX ASPHALT BASE COURSE, 8" (HMA BINDER IL-19 MM)	PG 64-22*	4% @ 50 GYR

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

 \bullet WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.



Ciorba Group, Inc. CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014

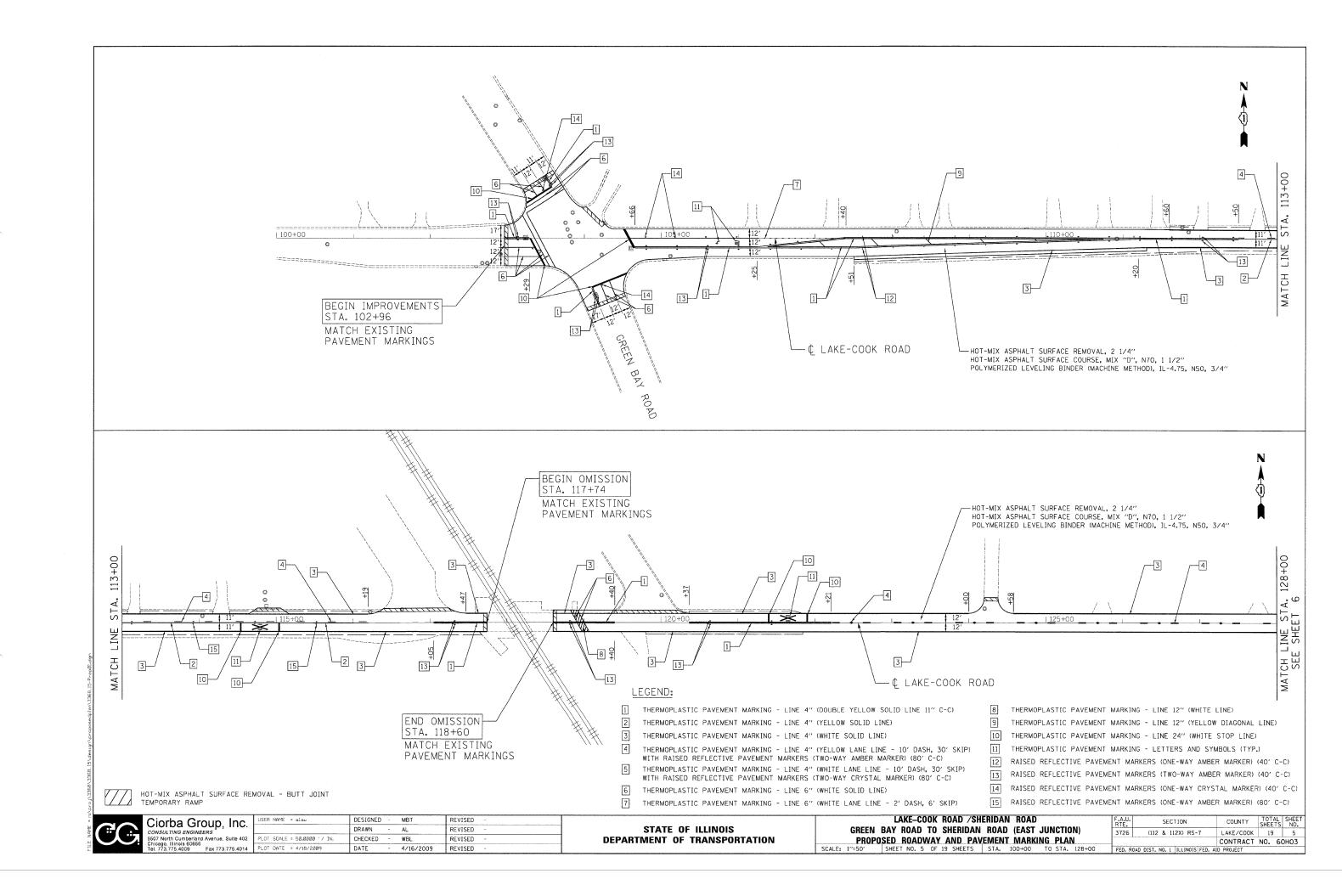
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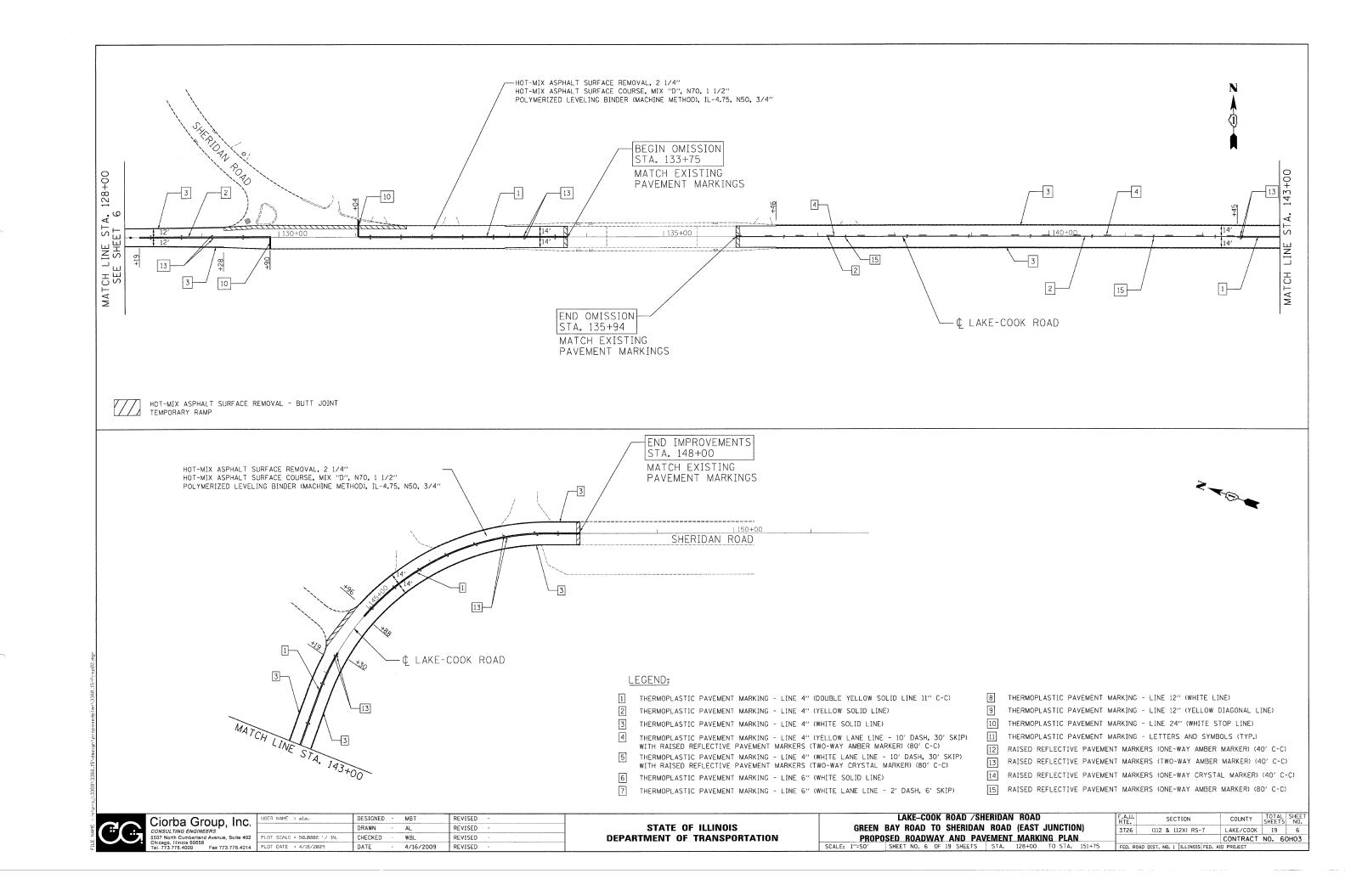
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

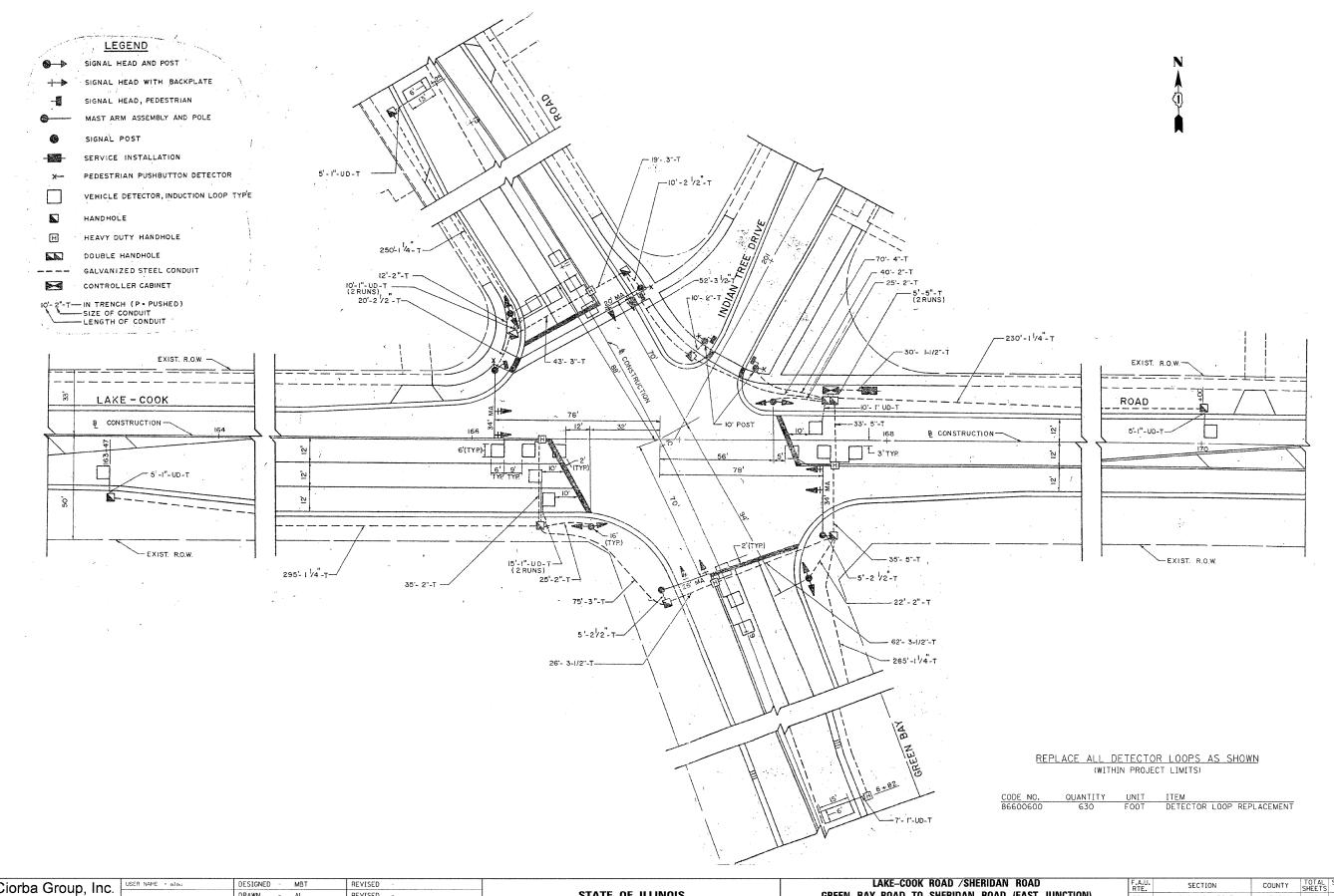
	LAKE-COOK ROAD /SHERIDAN ROAD							
	GREEN	BAY ROAD	TO SHERIDAN	•	T JUNCTION)	RT 37		
TYPICAL SECTIONS								
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3726	(112 & 112X) RS-7	LAKE/COOK	19	4
		CONTRACT	NO. 60	OH03
FED RO	NAD DIST NO 1 ILLINOIS FED	AID PROJECT		

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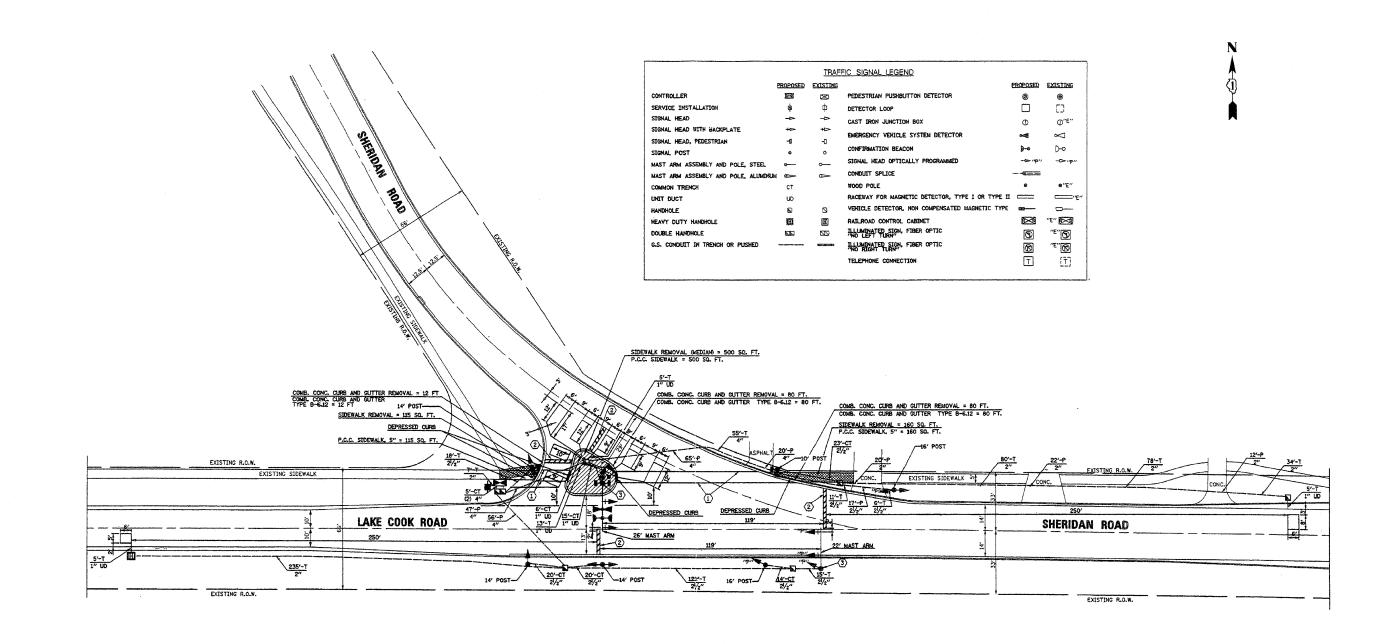
Ciorba Group, Inc.

CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60658
Tel. 773.775.4009 Fax 773.775.4014
PLOT DATE = 4/18/2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LAKE-COOK ROAD / SHERIDAN ROAD
GREEN BAY ROAD TO SHERIDAN ROAD (EAST JUNCTION)
DETECTOR LOOP REPLACEMENT PLAN

N.T.S. SHEET NO. 7 OF 19 SHEETS STA. TO STA. FED. R



REPLACE ALL DETECTOR LOOPS AS SHOWN (WITHIN PROJECT LIMITS)

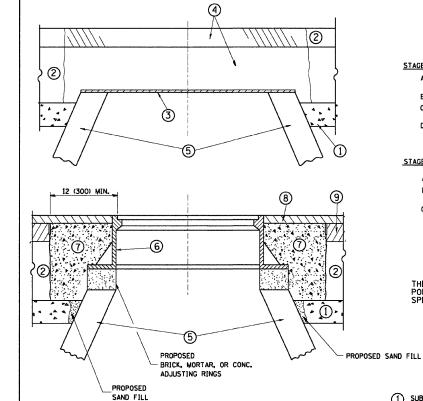
CODE NO.	QUANTITY	UNIT	ITEM
86600600	70	FOOT	DETECTOR LOOP REPLACEMENT

Ciorba Group, Inc.	ŀ
CONSULTING ENGINEERS	ŀ
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656	ŀ
Tel. 773.775.4009 Fax 773.775.4014	L

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PLOT DATE = 4/18/2009	DATE		4/16/2009	REVISED	-

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	LAKE-COOK ROAD /SH			F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
GREEN	BAY ROAD TO SHERIDAN		,	3726	(112 & 112X) RS-7	LAKE/COOK	19	8
	DETECTOR LOOP REPLA	CEMENT	PLAN			CONTRACT	NO. 6	ОНОЗ
SCALE: N.T.S.	SHEET NO. 8 OF 19 SHEETS	STA.	TO STA.	FED. RC	DAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



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

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

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

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

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

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

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

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

LOCATION OF STRUCTURES:

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

BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

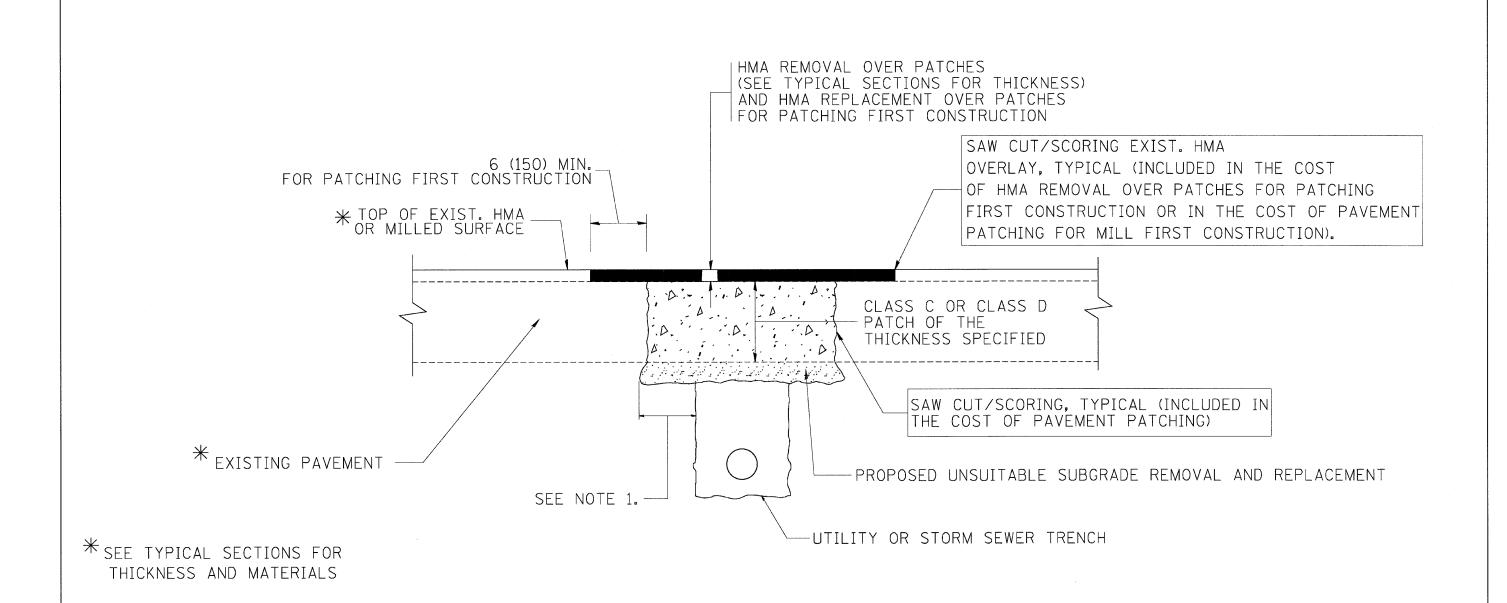
NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = gaglianobt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95		DETAILS FOR	F.A.U. SECTION	COUNTY TOTAL SHEET
W:\distatd\22x34\bdØ8.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		3726 (112 & 112X) RS-7	LAKE/COOK 19 9
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-04	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 60H03
	PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT

NOTES:



NOTES:

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

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

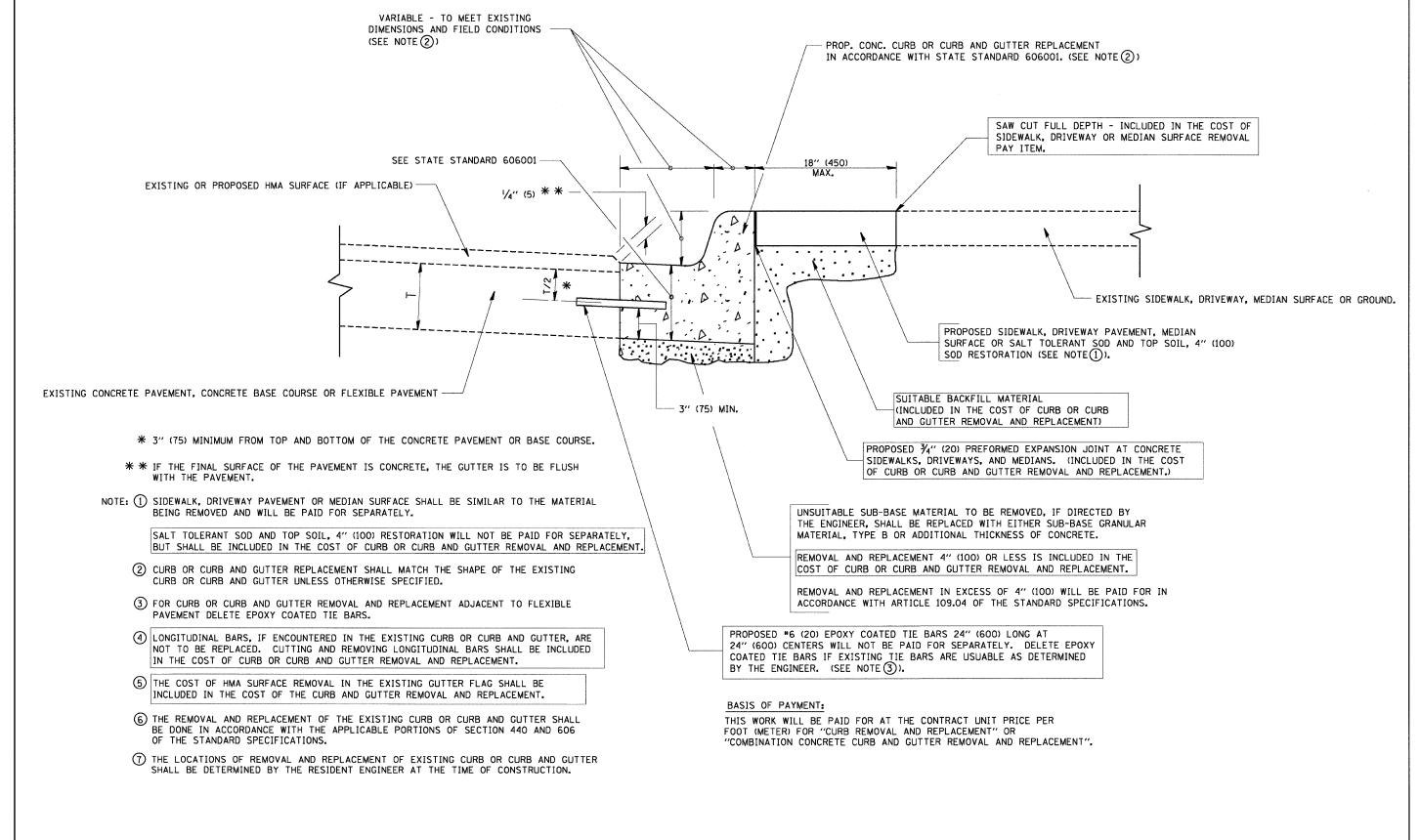
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

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

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

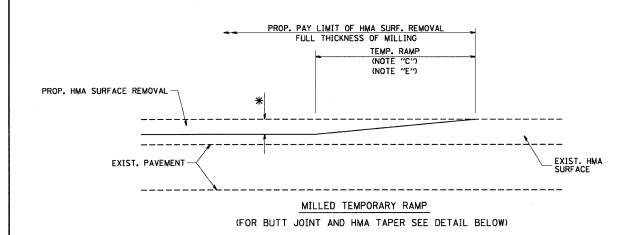
FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHIN	IG FOR	F.A.U. SECTION	ON COUNTY SH	TOTAL SHEET
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS	HMA SURFACED PA		3726 (112 & 112X	RS-7 LAKE/COOK	19 10
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	NWA SUNFACED FA		BD400-04 (BD	-22) CONTRACT N	NO. 60H03
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 IL	LINOIS FED. AID PROJECT	



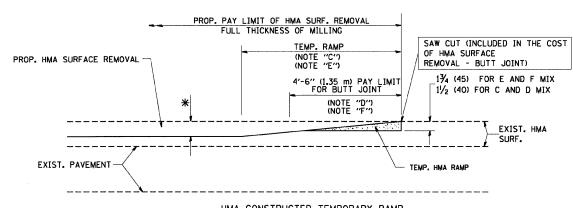
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = geglienobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	F.A.U. SECTION COUNTY TOTAL SHEET
W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		3726 (112 & 112X) RS-7 LAKE/COOK 19 11
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD-24) CONTRACT NO. 60H03
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT



OPTION 1

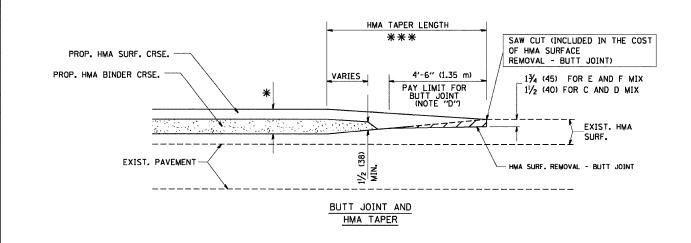


HMA CONSTRUCTED TEMPORARY RAMP

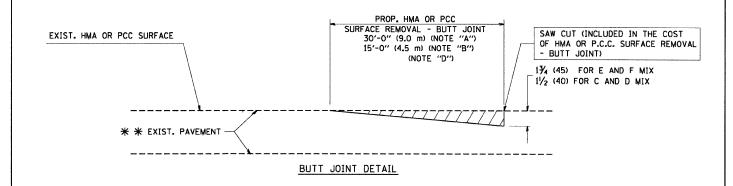
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

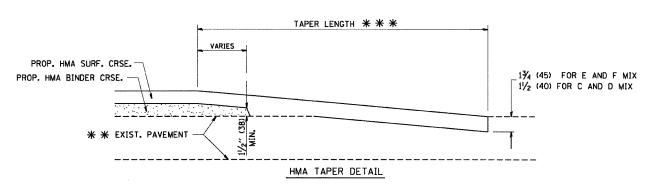
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

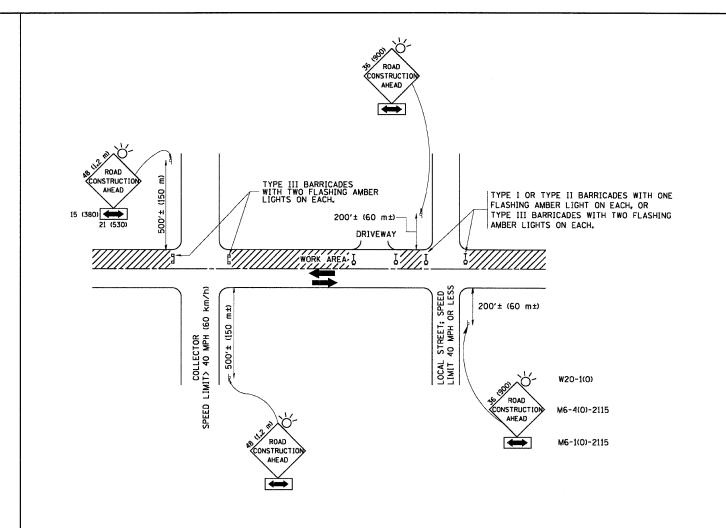
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- ** * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER)
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

FILE NAME =	USER NAME = geglienobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94		BUTT JOINT AND	F.A.U	SECTION	COUNTY	TOTAL S	SHEET
W:\diststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		3726	6 (112 & 112X) RS-7	LAKE/COOK	19	12
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01	DEPARTMENT OF TRANSPORTATION	HMA TAPER DETAILS		BD40005 BD32	CONTRACT	T NO. 60	н03
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED.	ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT		



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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

All dimensions are in millimeters (inches) unless otherwise shown. COUNTY TOTAL SHEET NO.

LAKE/COOK 19 13

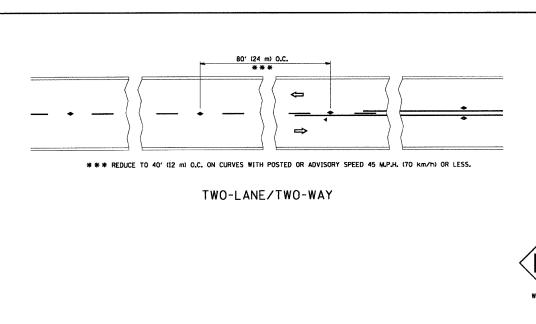
TC-10 CONTRACT NO. 60H03
NO. 1 ILLINOIS FED. AID PROJECT

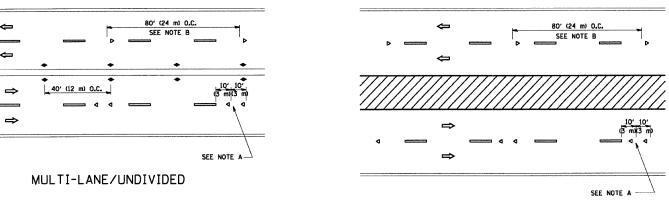
SECTION

DESIGNED - LHA REVISED - J. OBERLE 10-18-95 TILE NAME = JSER NAME = gaglianobt \diststd\22x34\to10.dan DRAWN REVISED - A. HOUSEH 03-06-96 PLOT SCALE = 50.000 '/ IN. CHECKED REVISED - A. HOUSEH 10-15-96 DATE 06-89 REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	TRAFFIC CO	NTROL AND P	ROTECTI	ON FOR	F.A.U. RTE.	SECTION
	SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS					
						TC-10
SCALE: NONE	SHEET NO. 1 O	F 1 SHEETS	STA.	TO STA.	FED. RI	DAD DIST. NO. 1 ILLINOIS FED.





MULTI-LANE/DIVIDED

GENERAL NOTES

3 e 40' (12 m) O.C.

LANE REDUCTION TRANSITION

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

LANE MARKER NOTES

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

SYMBOLS

---- YELLOW STRIPE

1 5

SEE NOTE A

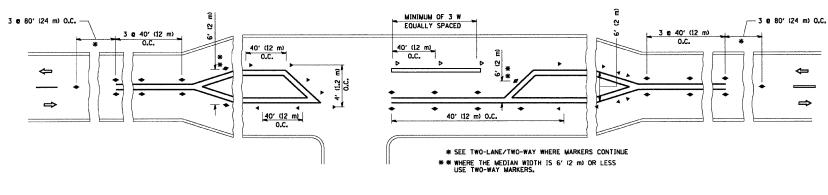
TWO-WAY LEFT TURN

40' (12 m) O.C.

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

DESIGN NOTES

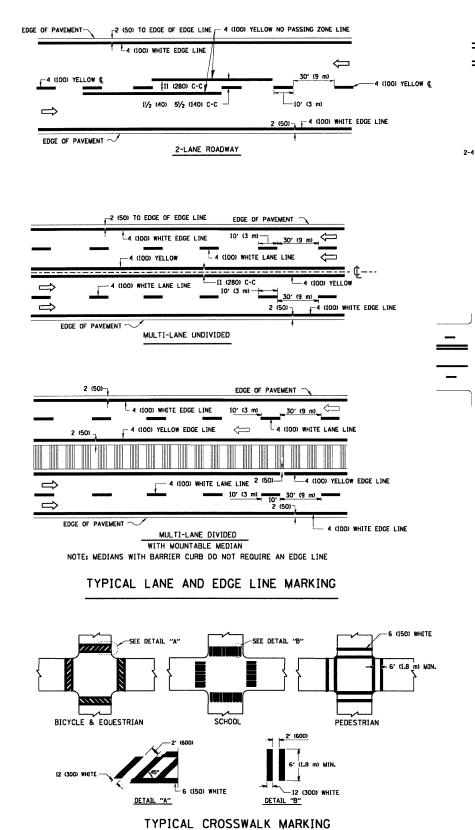
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS SHOULD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

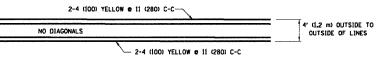


LEFT TURN

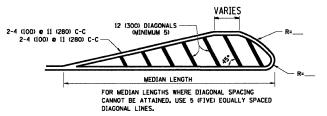
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = goglianobt	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.U. SECTION	COUNTY TOTAL SHEET
Ws\dastatd\22x34\to11.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99	0171111 01 1111111010		3726 (112 & 112X) RS-7	LAKE/COOK 19 14
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	TC-11	CONTRACT NO. 60H03
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT



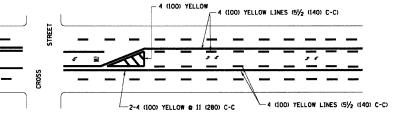


4' (1.2 m) WIDE MEDIANS ONLY

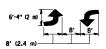


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

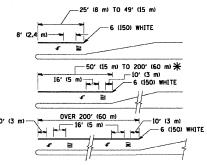


A WINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

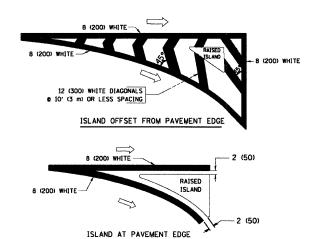


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SQ. FT. (1.5 m²) \P AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



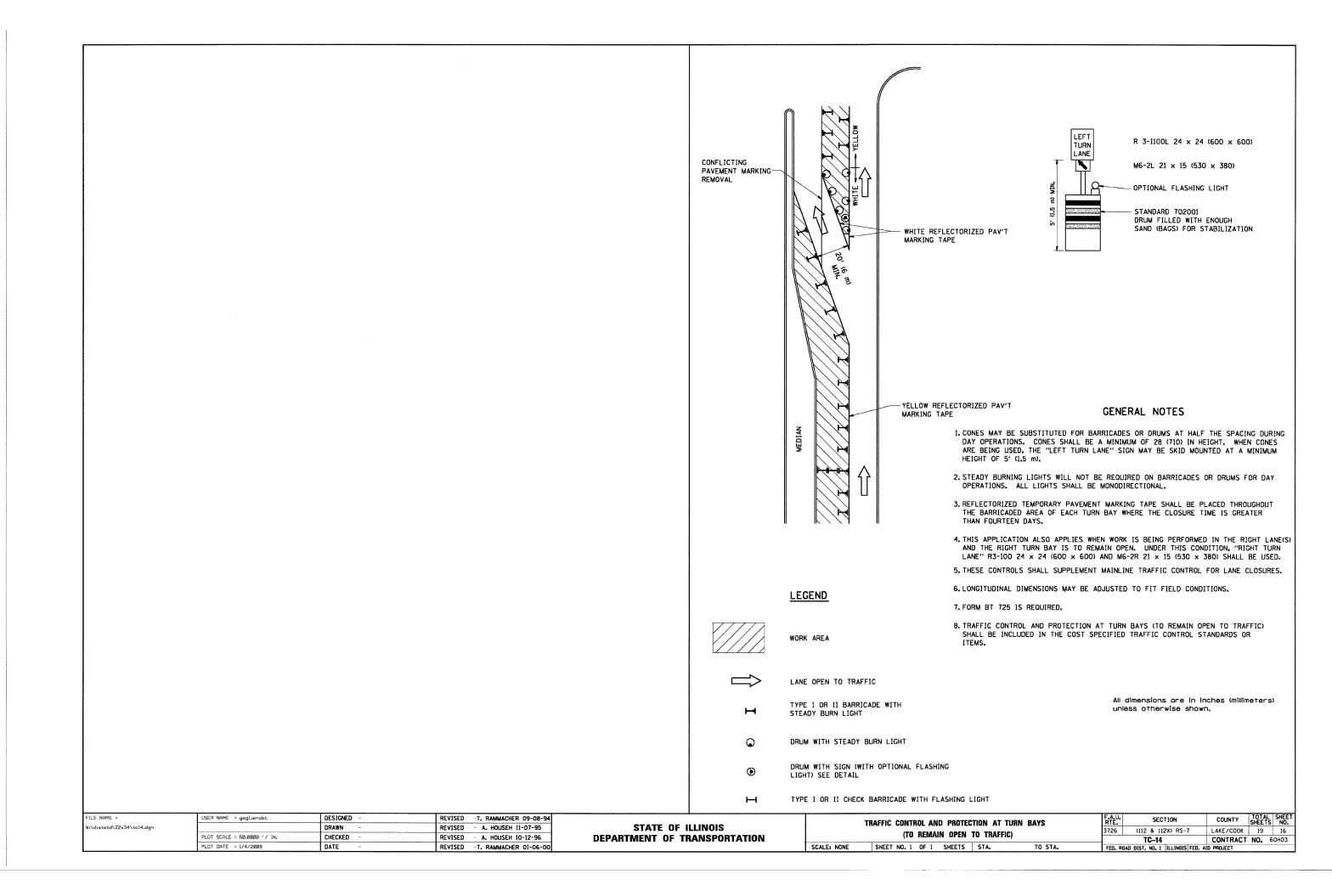
TYPICAL ISLAND MARKING

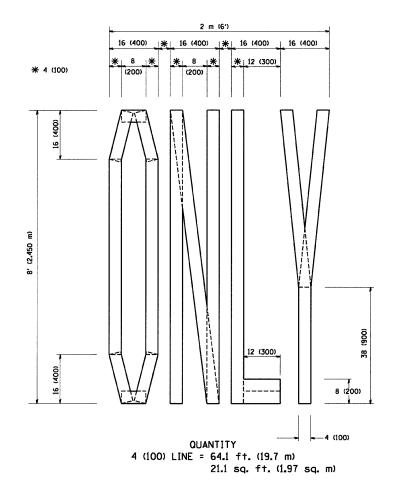
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 a 4 (100)	SOLID SOLID	AETFOM AETFOM	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW, EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN WARKING	2 0 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 e 6 (150) 12 (300) e 45° 12 (300) e 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (I.8 m) APART 2' (500) APART 2' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSFALM, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) e 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0YER 45MPH (70 km/h))

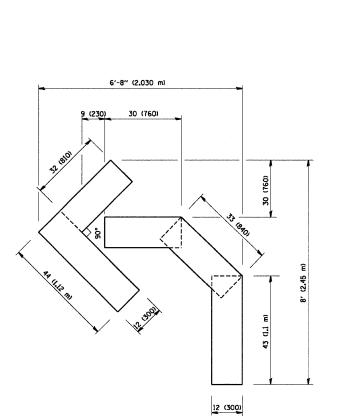
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

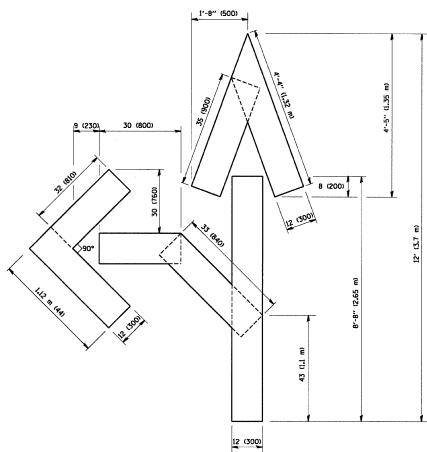
FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE	F.A.U. RTE.	SECTION		TOTAL SHEETS	SHEE
Wi\diststd\22x34\tol3.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96	STATE OF ILLINOIS	TYPICAL PAVEMENT MARKINGS 3726		(112 & 112X) RS-7	LAKE/COOK	19	15
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96	DEPARTMENT OF TRANSPORTATION			TC-13	CONTRACT	NO. 6	оноз
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED - T. RAMMACHER 01-06-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT	-	







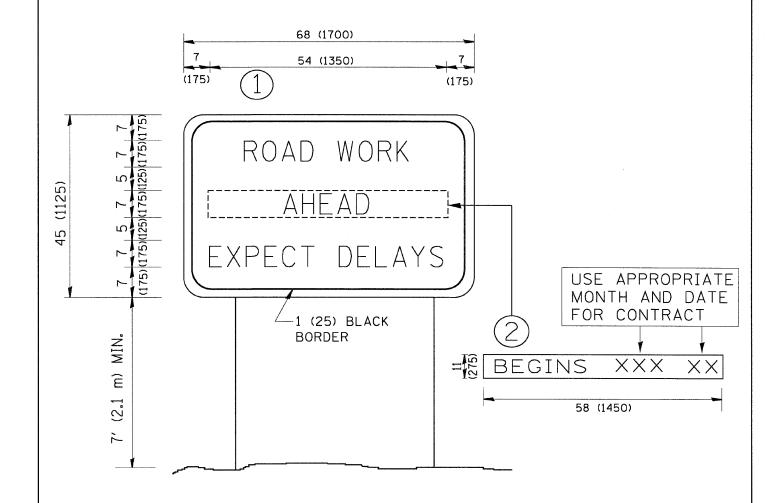
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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

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

FILE NAME =	USER NAME = geglienobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96			PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.U.	SECTION	COUNTY	TOTAL SHEET SHEET NO.
W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS	FOR TRAFFIC STAGING		3726	(112 & 112X) RS-7	LAKE/COOK	19 17
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION			3.23	TC-16	CONTRACT	T NO. 60H03
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROA	AD DIST. NO. 1 ILLINOIS FED. A		



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 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

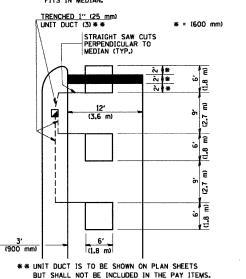
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97		ARTERIAL ROAD INFORMATION SIGN		F.A.U. SECTION	COUNTY TOTAL SHEET NO.	
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS				3726 (112 & 112X) RS-7	LAKE/COOK 19 18
	PLOT SCALE = 50.000 '/ IN,	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION				TC-22	CONTRACT NO. 60H03
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT

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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

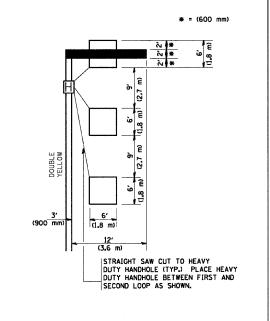
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

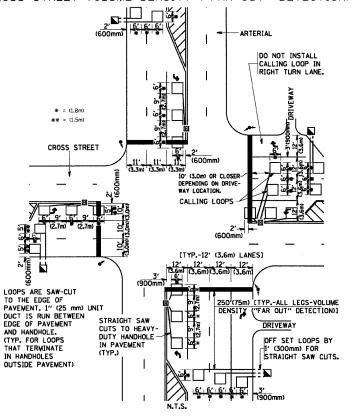


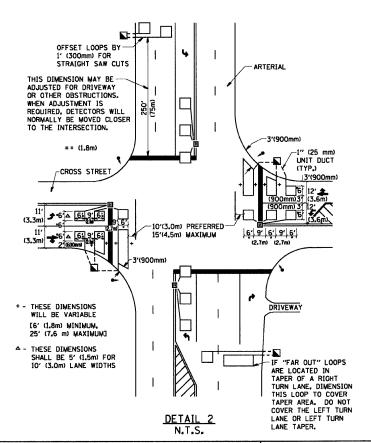
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

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

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





NOTE

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE

ALL DETAILS AND NOTES SHOWN ARE FROM THE 1.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.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -
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	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

SHEET NO. 1 OF 1 SHEETS STA. TO STA.

A:L. SECTION COUNTY TOTAL SHEET SHEET SHEET SHEETS OF SH