STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED

HIGHWAY PLANS

F.A.U. 1521 (GALENA BOULEVARD) SECTION W-RS-4 IL-56 (BUTTERFIELD ROAD) TO CANTERBURY ROAD **RESURFACING**

> KANE COUNTY C-91-076-09

THESE IMPROVEMENTS ARE LOCATED WITHIN THE VILLAGE OF SUGAR GROVE AND CITY OF AURORA

TRAFFIC DATA

2005 ADT - 12,800 POSTED SPEED LIMIT - 55 MPH

FOR INDEX OF SHEETS, SEE SHEET NO. 2

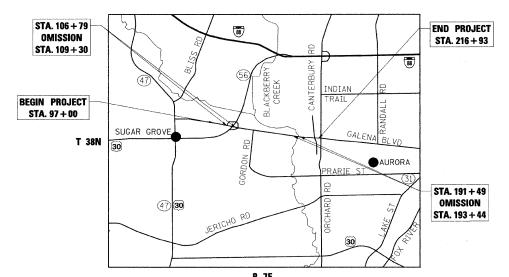
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

Ciorba Group, Inc. DESIGN FIRM

> REGISTRATION NUMBER 184-001016

CONSULTING ENGINEERS SUITE 402, 5507 NORTH CUMBERLAND AVE
CHICAGO, ILLINOIS 60656 :: (773) 775-4009



SUGAR GROVE TOWNSHIP

LOCATION MAP 1" = 5000'

GROSS LENGTH OF PROJECT = 11,992 FT = 2.27 MI. NET LENGTH OF PROJECT = 11,547 FT = 2.19 Mi.



SECTION W-RS-4 KANE 22 ILLINOIS CONTRACT NO. 60F45

D-91-076-09



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** DIVISION OF HIGHWAYS

MARCH 24 2009

Diane M. O'Keepe

Charles Ongesselle ENVIRONMENT

Chrubia M. Feed D. Chief ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 60F45

INDEX OF SHEETS

SHEET NO DESCRIPTION

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- 701606-00 URBAN LANE CLOSURE, MULTI LANE, 2W WITH MOUNTABLE MEDIAN
- 701701-06 URBAN LANE CLOSURE, MULTI LANE INTERSECTION
- 701801-04 LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
- 701901-0/ TRAFFIC CONTROL DEVICES
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 886001-01 DETECTOR LOOP INSTALLATIONS
- 886006-01 TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

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

POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE

112 LBS/SQ YD/INCH

POLYMERIZED LEVELING BINDER

105 LBS/SQ YD/INCH

(MACHINE METHOD)

THE ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISORS AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE START OF WORK.

TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS THE ENGINEER SHALL 8. CONTACT DON CHIARUGI, AREA TRAFFIC FIELD ENGINEER, AT (847) 741-5302.

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN

9. 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

10. MAXIMUM GRADE DIFFERENTIAL OF 3" (75 MM) MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 3:1 (H:V).

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. NO OVERNIGHT LANE CLOSURES SHALL BE ALLOWED.
- 14. ALL PATCHES OPENED ON A PARTICULAR DAY MUST BE FILLED THAT DAY TO THE TOP OF THE EXISTING PAVEMENT SURFACE.

15. IDOT TRAFFIC SIGNAL AND SYSTEM DETECTION LOOPS ARE PRESENT AT BARNES ROAD, HANKES ROAD, AND CANTERBURY 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.

	Ciorba Group, Inc.	U
	CONSULTING ENGINEERS	
し、	5507 North Cumberland Avenue, Suite 402	P
	Chicago, Illinois 60656	T _P

JSER NAME = wlancaster	DESIGNED	MWR	REVISED	-
	DRAWN	MWR	REVISED	-
PLOT SCALE = 1.00000 '/ IN.	CHECKED	WBL	REVISED	-
PLOT DATE = 4/2/2009	DATE	4/2/09	REVISED	-

	SUMMARY OF QUANTITIES	URBAN 100% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE	
CODE NO.	DESCRIPTION	UNIT		ROADWAY IOOO
20200100	EARTH EXCAVATION	CU YD	100	100
20201006	GRADING AND SHAPING SHOULDERS	UNIT	210	210
35800200	AGGREGATE BASE REPAIR	TON	125	125
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	46	46
40600300	AGGREGATE (PRIME COAT)	TON	240	240
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	60	60
40600535	LEVELING BINDER (HAND METHOD), N70	TON	10	10
40600895	CONSTRUCTING TEST STRIP	EACH	2	2
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	480	480
40600990	TEMPORARY RAMP	SQ YD	700	700
40601005	HOT-MIX ASPHALT REPLACEMENT OVER PATCHES	TON	280	280
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	5,100	5,100
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SQ YD	58,600	58,600
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	F00T	100	100
44002212	HOT-MIX ASPHALT REMOVAL OVER PATCHES, 3"	SQ YD	1,600	1,600
44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQ YD	120	120
44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQ YD	700	700
44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQ YD	220	220
44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQ YD	350	350
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	450	450
55039700	STORM SEWERSTO BE CLEANED	F00T	600	600
60262700	INLETS TO BE RECONSTRUCTED	EACH	4	4
60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	10	10
64200105	SHOULDER RUMBLE STRIP	FOOT	1,750	1,750
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6
67100100	MOBILIZATION	L SUM	1	1

* DENOTES SPECIALTY ITE	*	DENOTES	SPECIALTY	ITE
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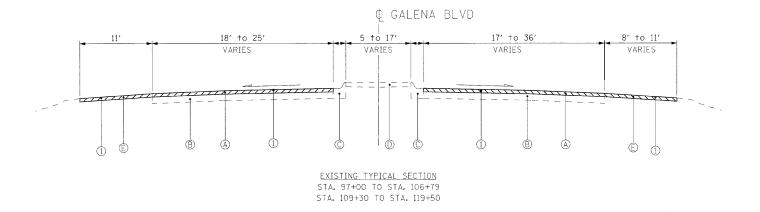
		SUMMARY OF QUANTITIES	URBAN 1001.STATE	CONSTRUCTION TYPE CODE	
	CODE NO.	DESCRIPTION	UNIT	TOTAL GOARTIT	ROADWAY 1000
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
	70102630	*TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	E SUM	1	1
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	2,400	2,400
*	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1,380	1,380
*	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	57,400	57,400
*	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	7,500	7,500
*	70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	1,230	1,230
*	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	1,650	1,650
*	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	1,320	1,320
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	18,100	18,100
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	460	460
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	43,900	43,900
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2,500	2,500
*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	410	410
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	550	550
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	440	440
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	600	600
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	570	570
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	1,900	1,900
	X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	103	103
	X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	3,170	3,170
	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	10	10

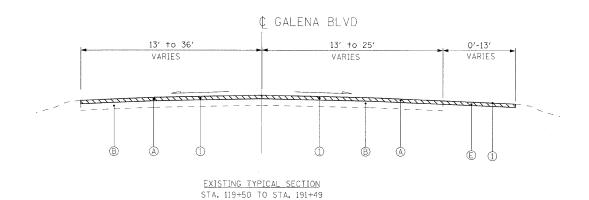
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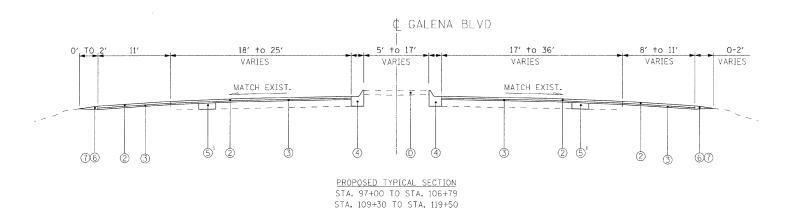
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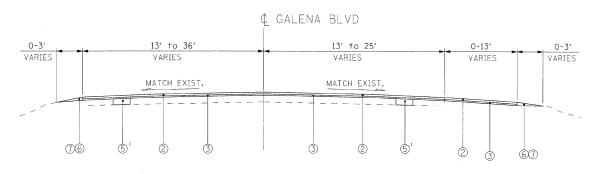
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:









PROPOSED TYPICAL SECTION STA. 119+50 TO STA. 191+49 STA. 193+44 TO STA. 213+74

STA. 193+44 TO STA. 213+74

EXISTING CONDITIONS:

- (A) HOT-MIX ASPHALT SURFACE AND BINDER COURSE, 3" AND VARIES
- B PORTLAND CEMENT CONCRETE BASE COURSE, 9"
- © COMBINATION CONCRETE CURB AND GUTTER
- D RAISED CONCRETE MEDIAN
- (E) HOT-MIX ASPHALT SHOULDER

PROPOSED IMPROVEMENTS:

- ① HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"
- ② HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 1/2"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
 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 ADJUSED (SPECIAL)" AFTER GRINDING OF THE EXISITING 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	MIVILIDE TYPE	AC TYPE	PERCENT
OPERATIONS	MIXTURE TYPE	AC LIFE	AIR VOIDS
ROADWAY RESURFACING	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N7O (IL-9.5MM)	PG 64-22	4% @ 70 GYR
ROADWAT RESURFACING	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% © 50 GYR
MAINTENANCE OF TRAFFIC	LEVELING BINDER (HAND METHOD), N70 (IL-9.5MM)	PG 64-22 *	4% @ 70 GYR
PAVEMENT PATCHING	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

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

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

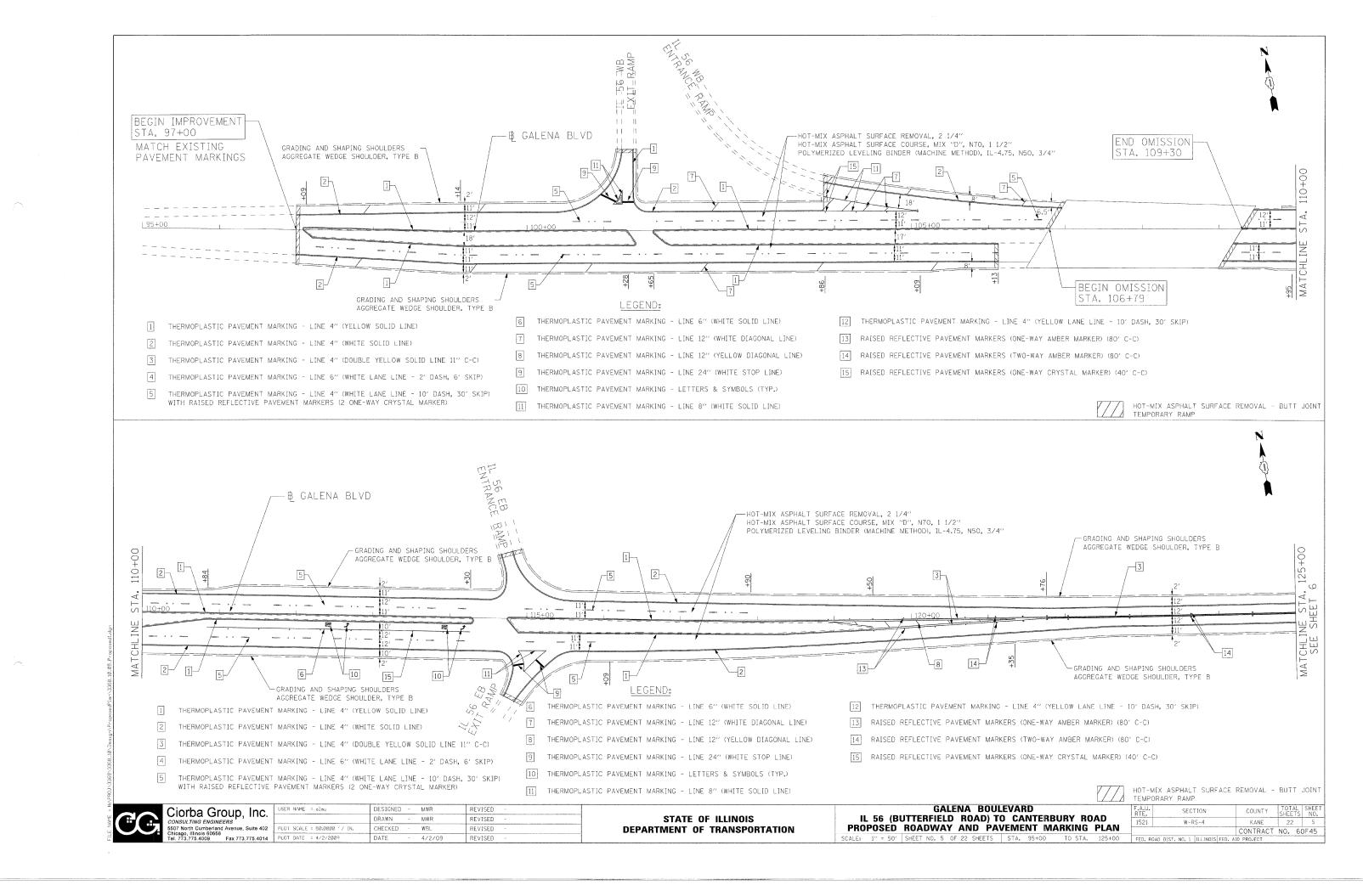
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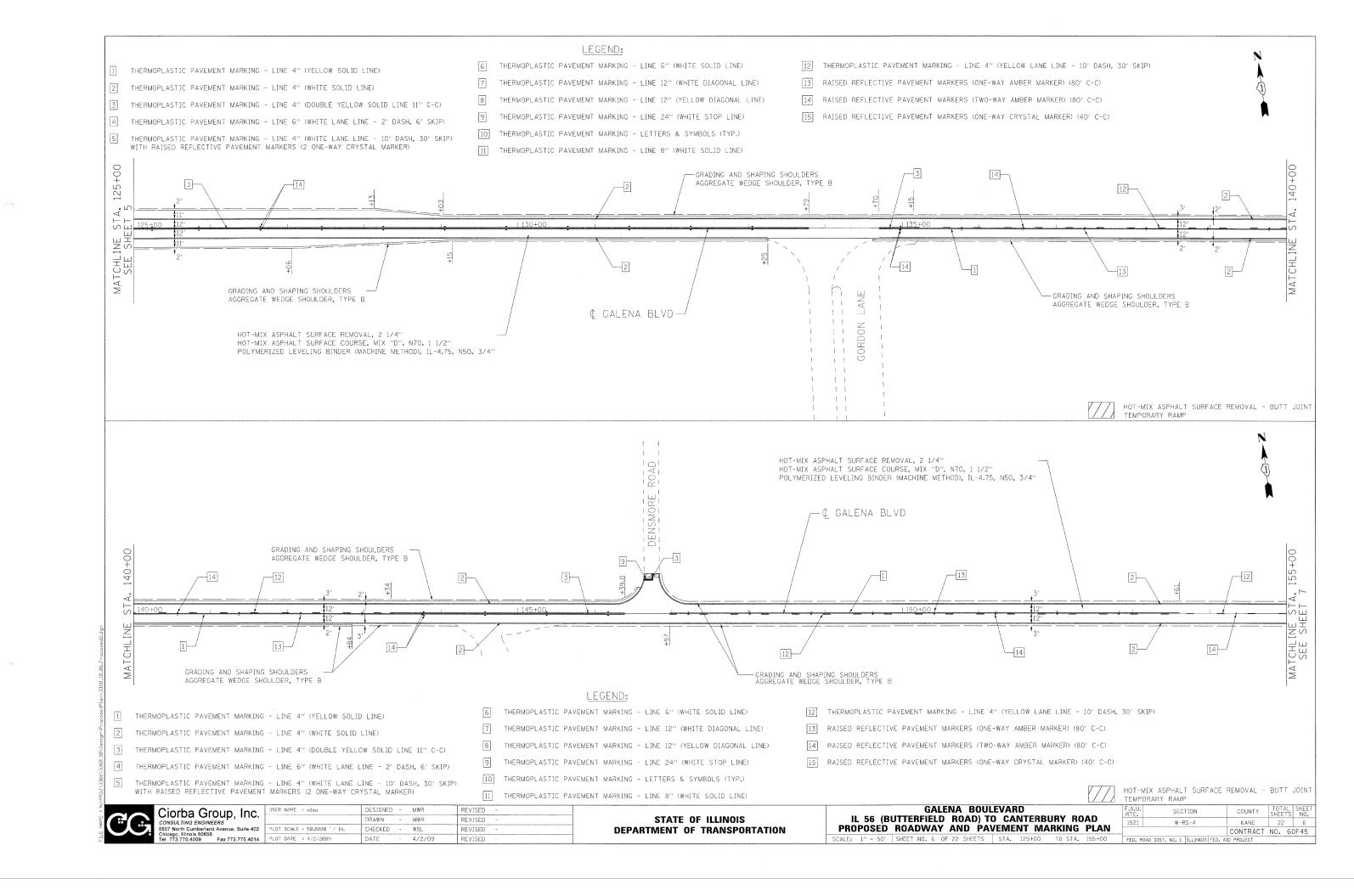
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	CONSULTING ENGINEERS
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	Chicago, Illinois 60656
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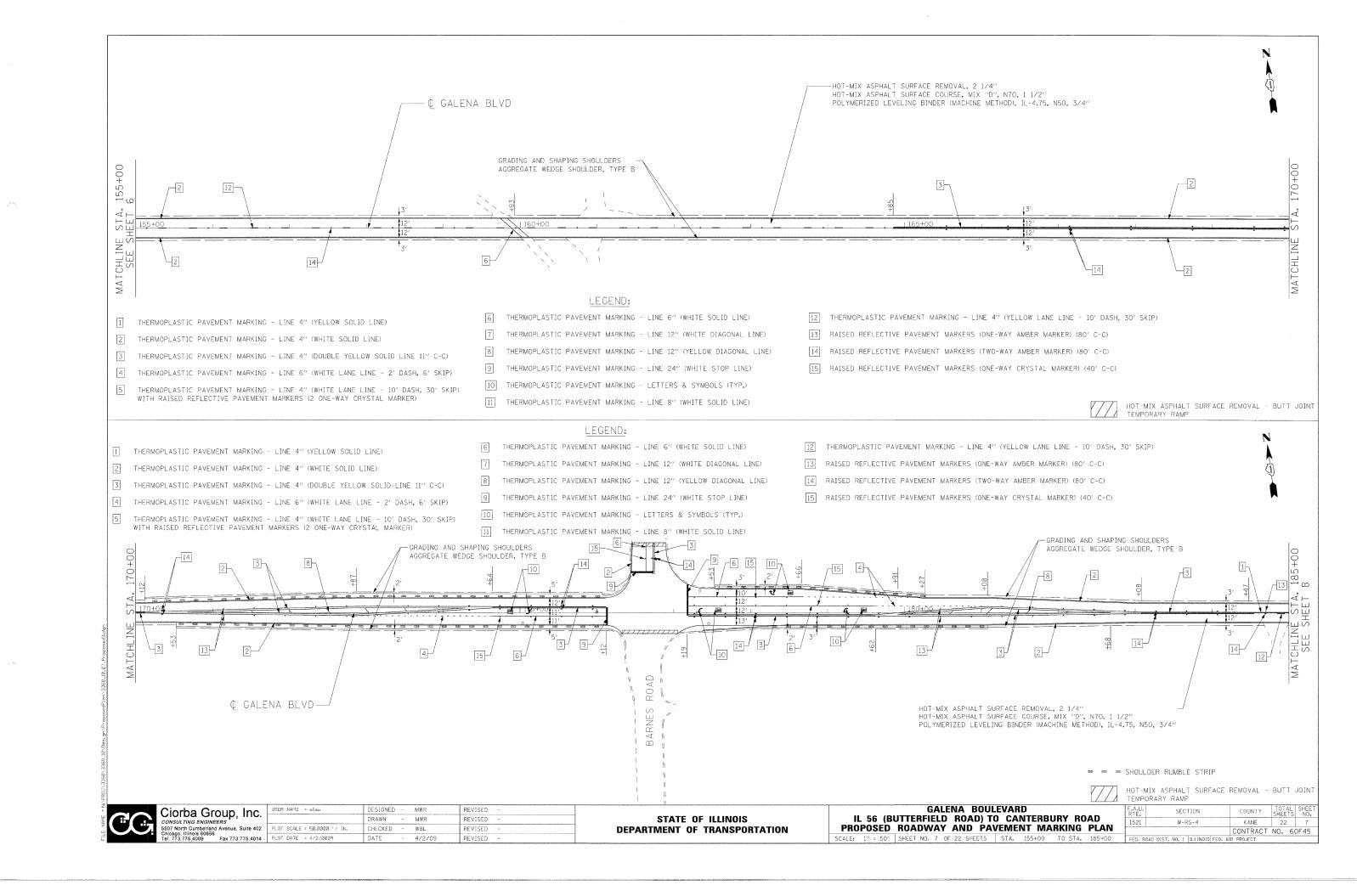
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PLOT DATE = 4/2/2009	DATE 4/2/09	REVISED -

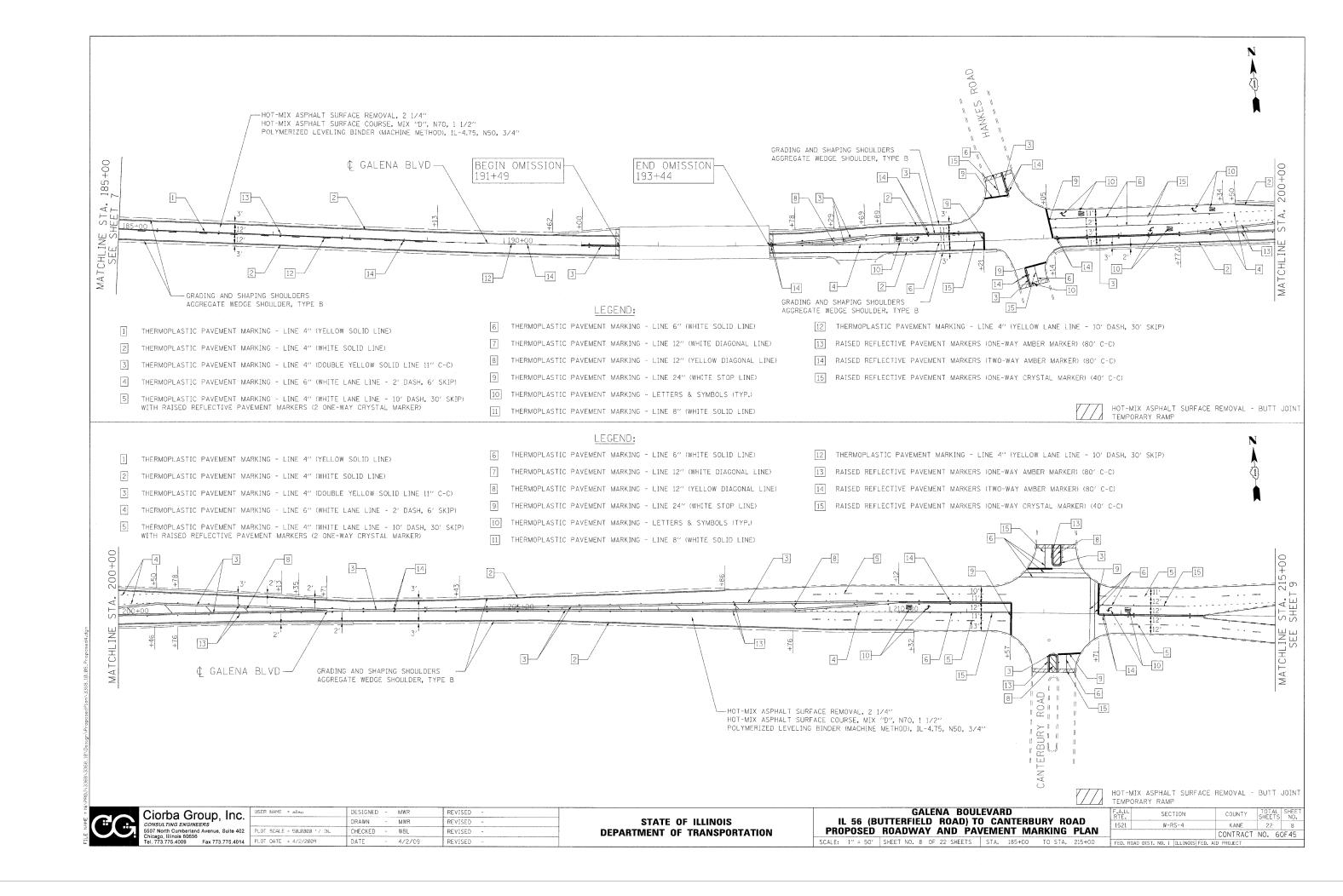
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

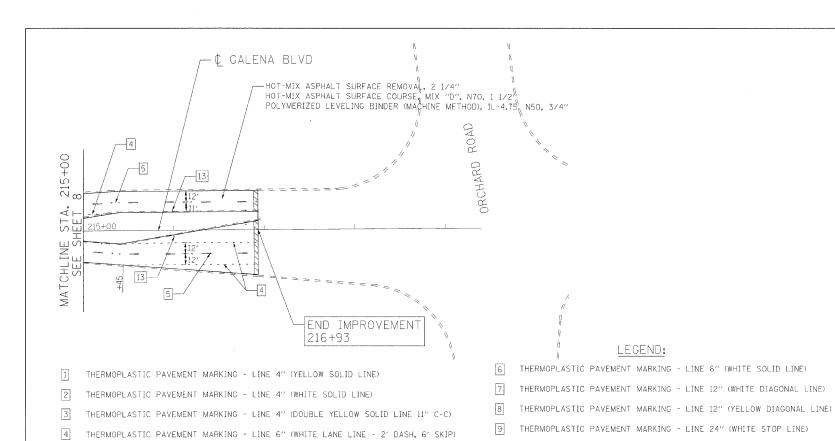
GALENA BOULEVARI	='	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
IL 56 (BUTTERFIELD ROAD) TO CAN		1521	W-RS-4	KANE	22	4
TYPICAL SECTIONS				CONTRACT	NO. 6	OF 45
SHEET NO. 4 OF 22 SHEETS STA.	TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS	FED. AID PROJECT		











THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP)

WITH RAISED REFLECTIVE PAVEMENT MARKERS (2 ONE-WAY CRYSTAL MARKER)

12 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW LANE LINE - 10' DASH, 30' SKIP)

13 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER MARKER) (80' C-C)

14 RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER MARKER) (80' C-C)

15 RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY CRYSTAL MARKER) (40' C-C)

9 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP LINE)

10 THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS (TYP.)

11 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE)

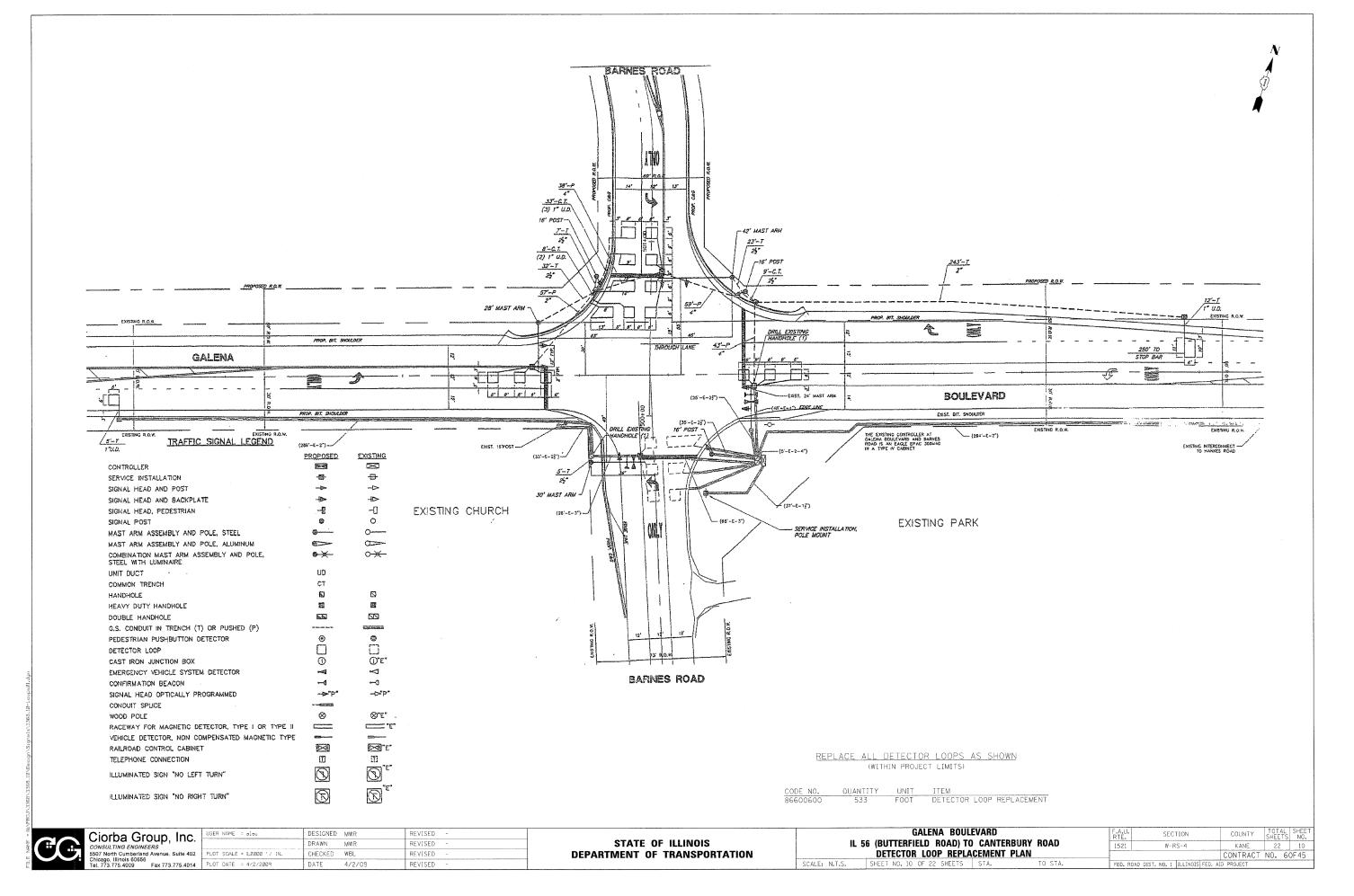
HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT TEMPORARY RAMP

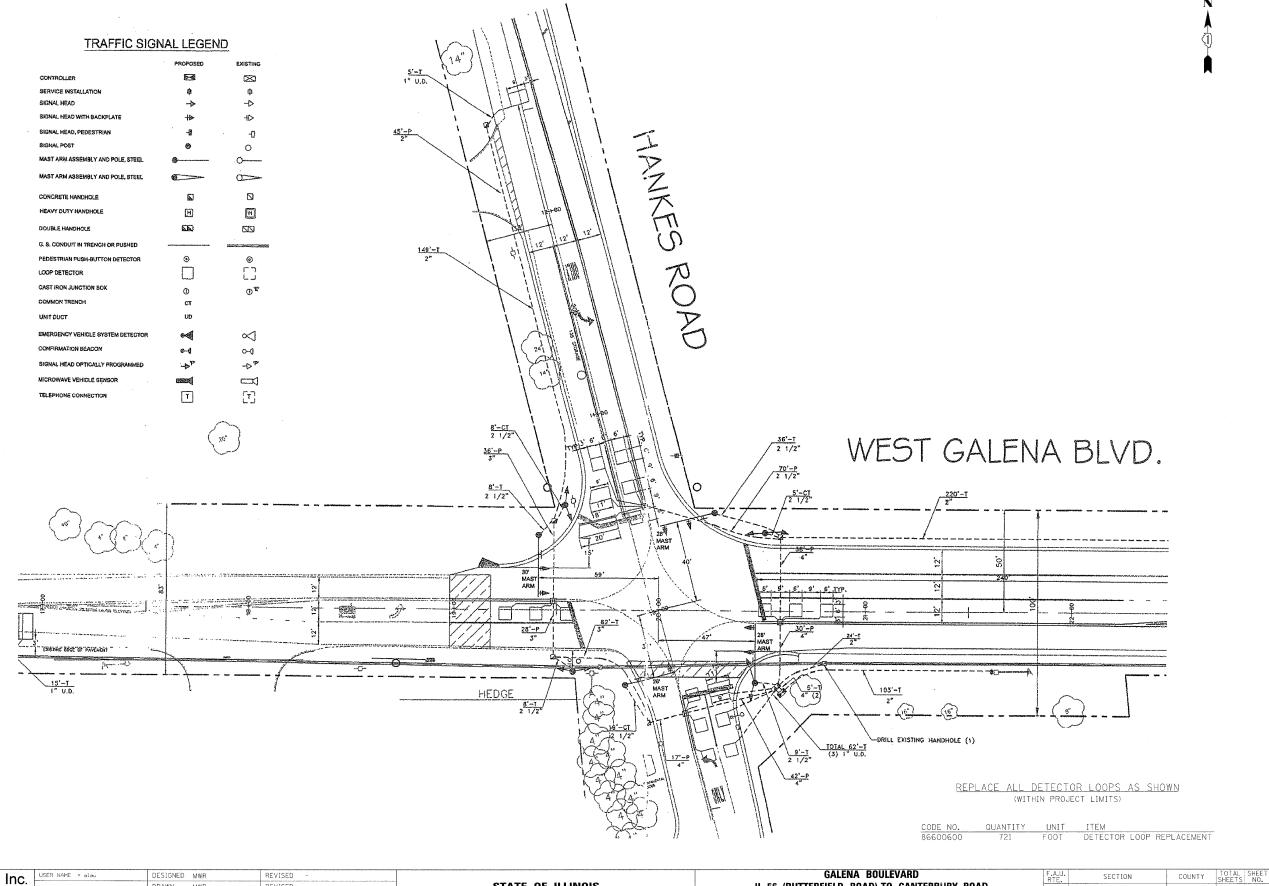
Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402

DESIGNED REVISED DRAWN MWR REVISED CHECKED Fax 773.775.4014 PLOT DATE = 4/2/2009 REVISED

GALENA BOULEVARD IL 56 (BUTTERFIELD ROAD) TO CANTERBURY ROAD STATE OF ILLINOIS PROPOSED ROADWAY AND PAVEMENT MARKING PLAN **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY TOTAL SHEET NO. KANE CONTRACT NO. 60F45

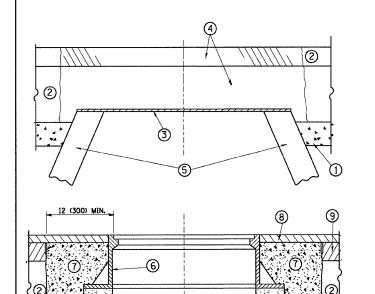






STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTRACT NO. 60F45



PROPOSED
BRICK, MORTAR, OR CONC.

ADJUSTING RINGS

SAND FILL

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE REGINEER. 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.

NOTES:

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 $1\frac{1}{2}$ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

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

PROPOSED SAND FILL

- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT

5 EXISTING STRUCTURE

- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HAMA SURFACE MIX
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 8 PROPOSED HMA SURFACE COURSE
- 9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

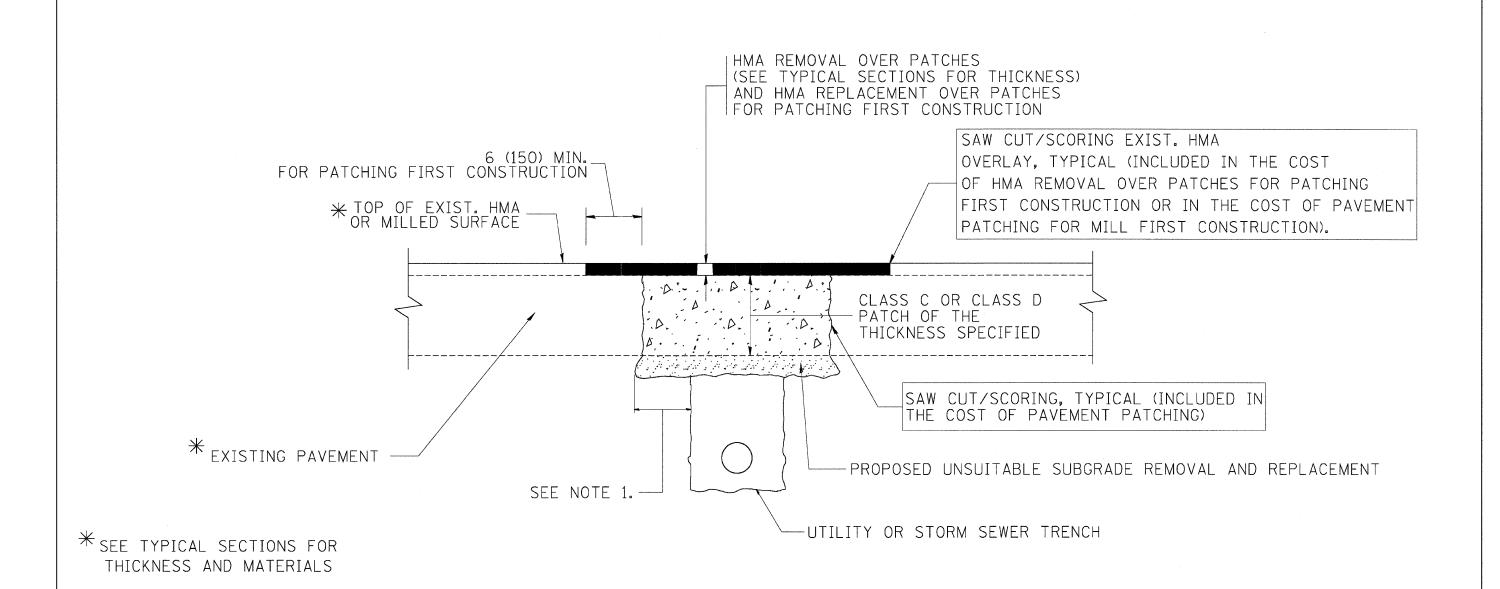
THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95		DETAILS FOR	RTE. SECTION	COUNTY TOTAL SHEET SHEET NO.
Wr\diatatd\22x34\bdØ8.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	FRAMES AND LIDS ADJUSTMENT WITH MILLING	1521 W-RS-4	KANE 22 12
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. WIEDEMAN 05-14-04	DEPARTMENT OF TRANSPORTATION		BD600-03 (BD-8)	CONTRACT NO. 60F45
	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 JULINOIS FED. 4	AID PROJECT



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".

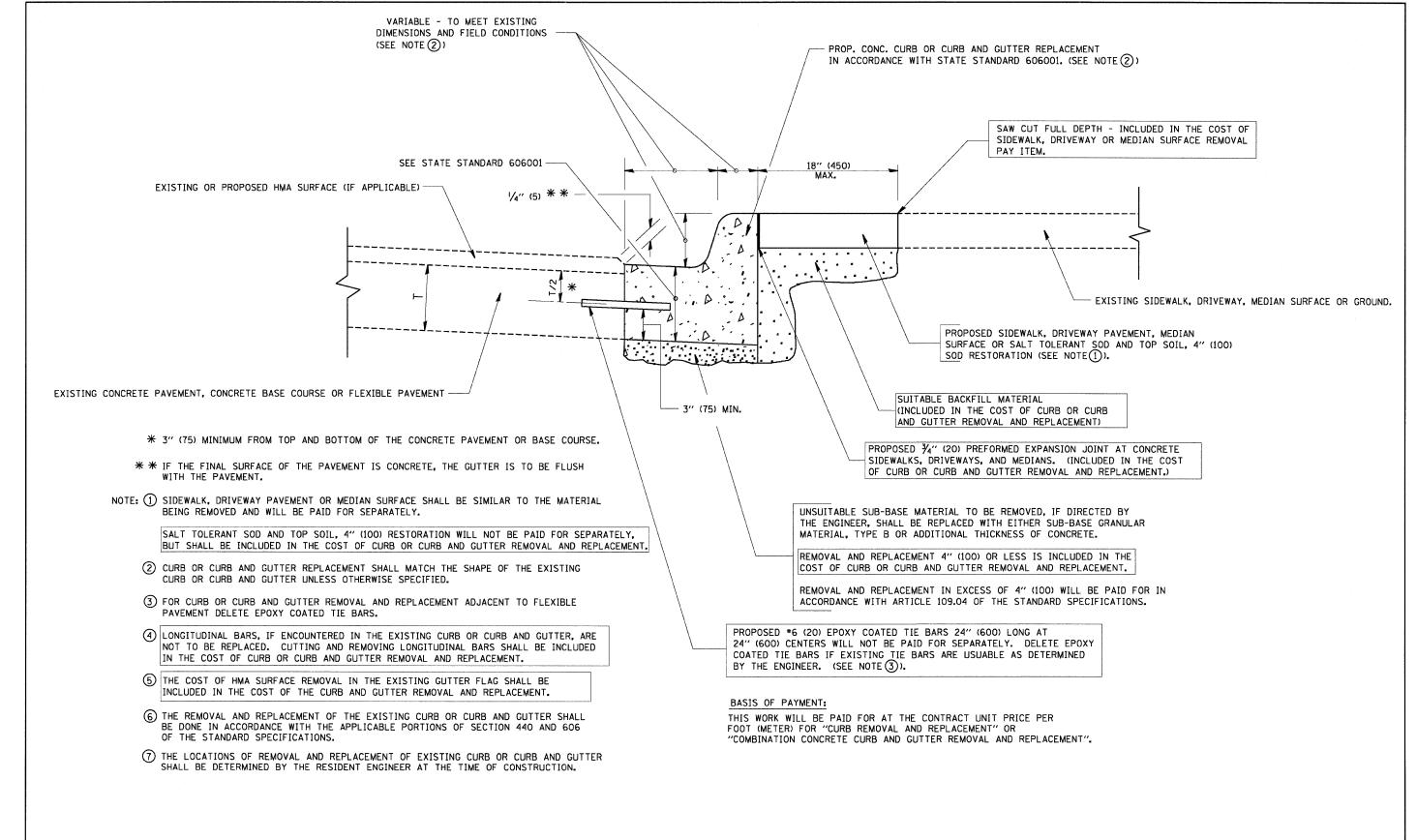
SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 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)

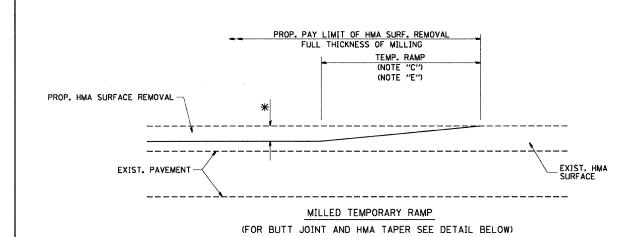
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

FILE NAME =	USER NAME = bouerd1	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98			PAVEMENT PATCHING FOR		F.A.U. SEC	TION	COUNTY	SHEETS NO.
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS				1521 W-R	25-4	KANE	22 13
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT		BD400-04 (I		CONTRACT	NO. 60F45
	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		PROJECT	

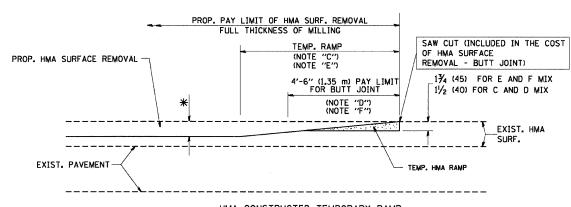


CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

FILE NAME =	USER NAME = gaglianobt	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		1521 W-RS-4	KANE 22 14
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT 1521 W-RS-4 BD600-06 (BD-24)		
	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	



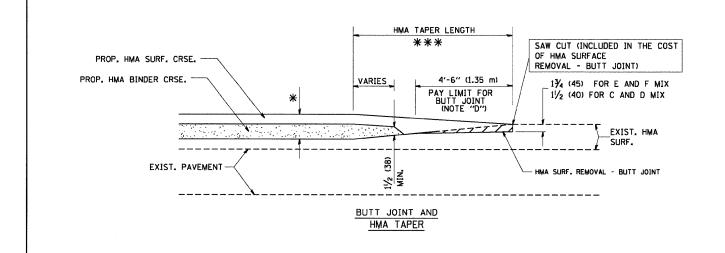
OPTION 1



_____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

FILE NAME = USER NAME = goglionobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94

M:\distatid\22x34\bd32.dgn

PLOT SCALE = 58.0000 // IN.

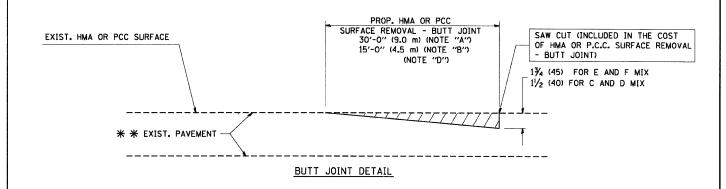
CHECKED - REVISED - M. GOMEZ 04-06-01

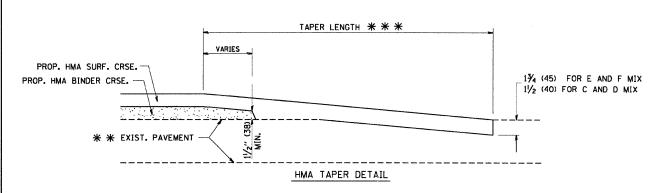
PLOT DATE = 1/4/2088

DATE - 06-13-90

REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

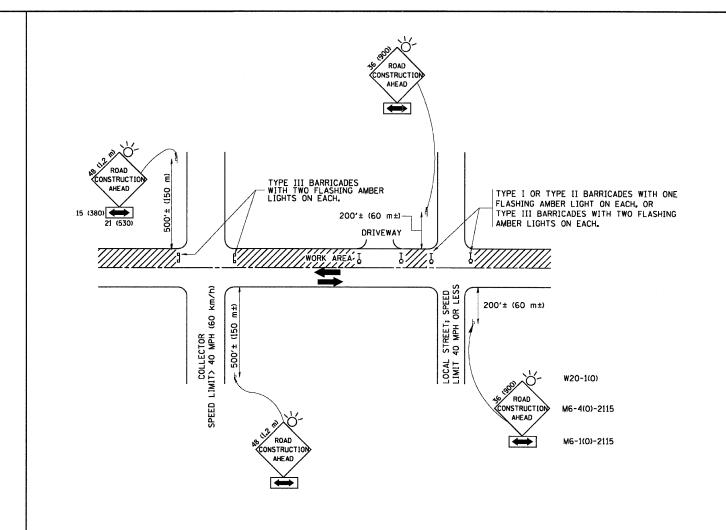
* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

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



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:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
- 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).

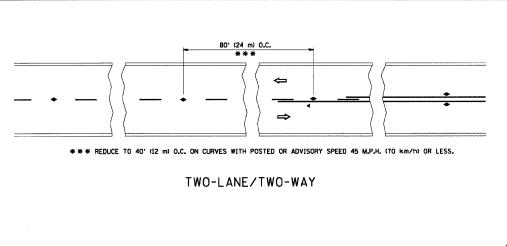
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL 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.

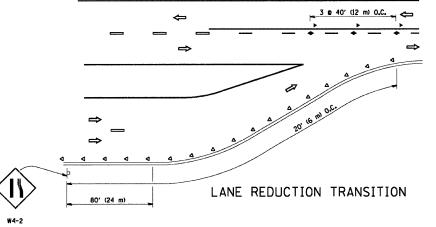
All dimensions are in millimeters (inches) unless otherwise shown.

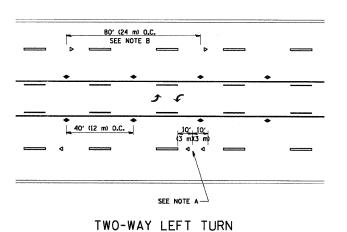
COUNTY

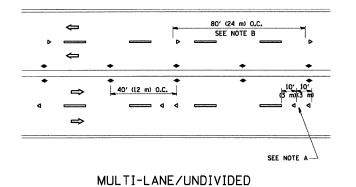
CONTRACT NO. 60F45

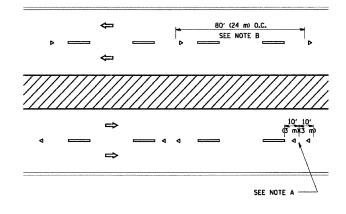
FILE NAME = DESIGNED - LHA USER NAME = gaglianobt REVISED - J. OBERLE 10-18-95 SECTION TRAFFIC CONTROL AND PROTECTION FOR STATE OF ILLINOIS W:\distatd\22x34\to10.dan DRAWN REVISED - A. HOUSEH 03-06-96 W-RS-4 SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS PLOT SCALE = 50.000 '/ IN. CHECKED REVISED - A. HOUSEH 10-15-96 **DEPARTMENT OF TRANSPORTATION** TC-10 PLOT DATE = 1/4/2008 DATE 06-89 REVISED -T. RAMMACHER 01-06-00 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIST, NO. 1 ILLINOIS FED. AID PROJECT











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 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 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

WHITE STRIPE

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

DESIGN NOTES

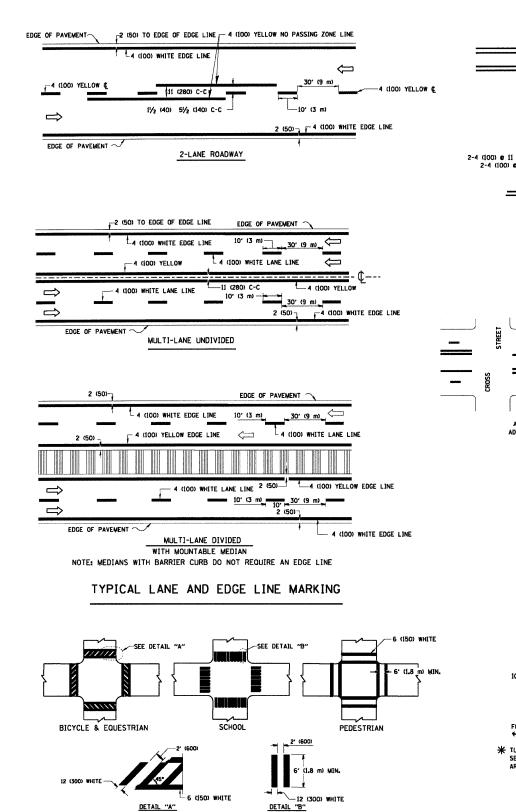
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAWP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINGS.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- 4. MARKERS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

3 © 80' (24 m) O.C. | MINIMUM OF 3 W | EQUALLY SPACED | So | 80' (24 m) O.C. | So | 80' (24 m) O.C. | So | 80' (24 m) O.C. | So | 80' (12 m) | So | 80' (12

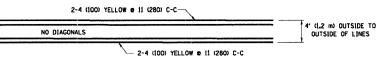
LEFT TURN

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

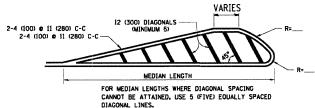
FILE NAME =	USER NAME = geglienobt	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.U.	SECTION		TAL SHEET
W:\d:statd\22x34\tc1l.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS		1521	W-RS-4	KANE 22	2 17
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)		TC-11	CONTRACT NO.	
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. RO		S FED. AID PROJECT	***************************************



TYPICAL CROSSWALK MARKING

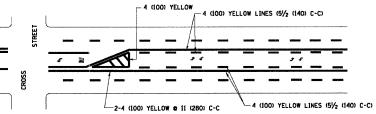


4' (1.2 m) WIDE MEDIANS ONLY

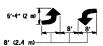


DIAGONAL LINE SPACING 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

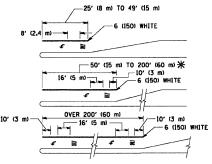


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

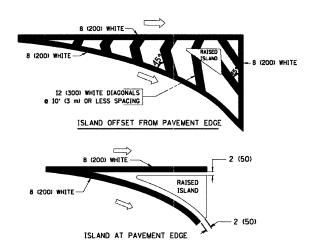


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) Π AREA = 20.8 SO. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



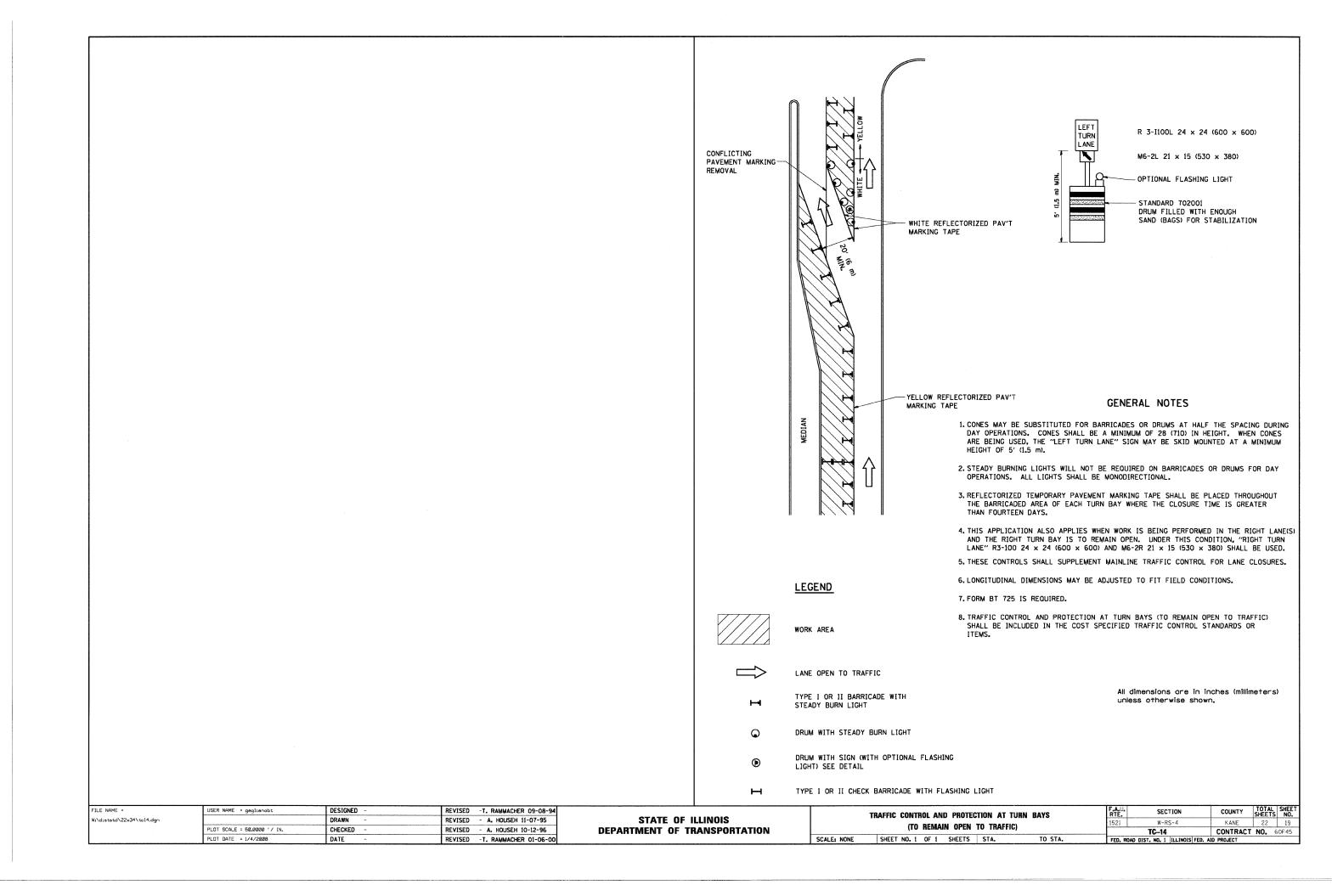
TYPICAL ISLAND MARKING

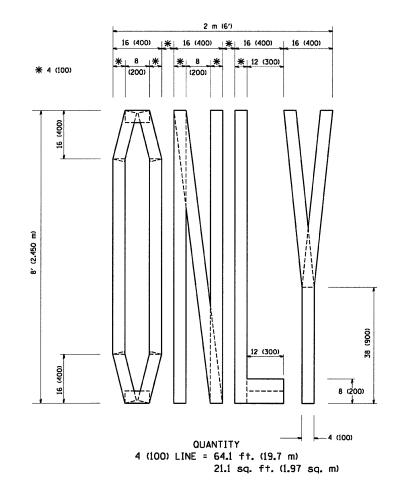
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 8 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 e 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 1280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (GOO) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 2 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 6 6 (150) 12 (300) 8 45° 12 (300) 9 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (I.B m) APART 2' (60D) APART 2' (50D) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' 11,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 m 4 (100) WITH 12 (300) DIAGONALS m 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 WEDIAN 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 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) & 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 (OVER 45MPH (70 km/h))

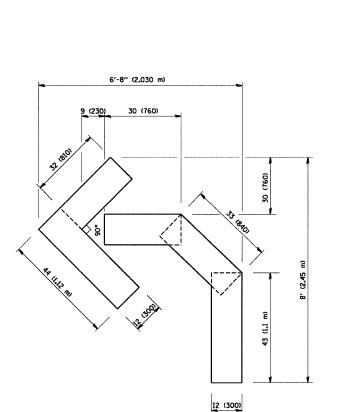
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

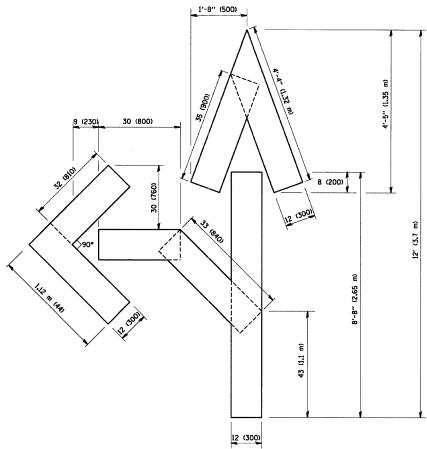
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FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEE	ا ٦ <u>ــــــــــــــــــــــــــــــــــــ</u>
Ws\diststd\22x34\tol3.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96	STATE OF ILLINOIS		1521	W-RS-4	KANE	22	18	,
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96	DEPARTMENT OF TRANSPORTATION	TYPICAL PAVEMENT MARKINGS		TC-13	CONTRAC	T NO.	60F45	ó
	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. ROAL	AD DIST. NO. 1 ILLINOIS	S FED. AID PROJECT			_







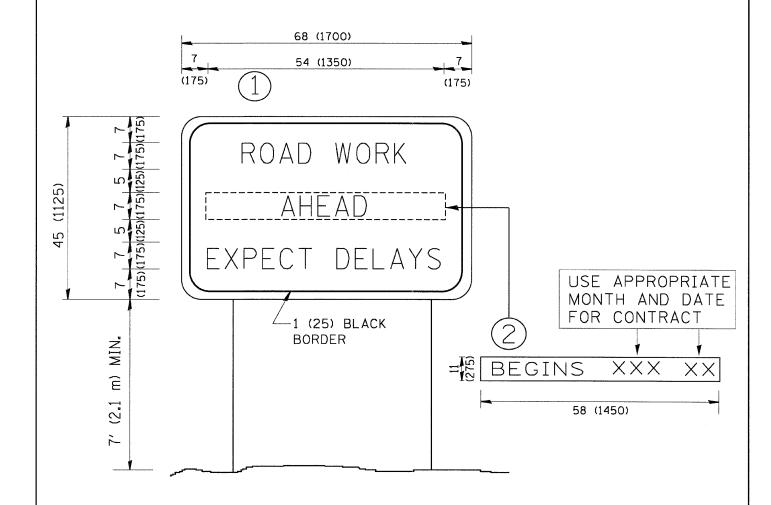
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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

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

FILE NAME = USER NAME = geglienobt DESIGNED REVISED -T. RAMMACHER 06-05-96 COUNTY TOTAL SHEET NO. SECTION PAVEMENT MARKING LETTERS AND SYMBOLS W:\diststd\22x34\tc16.dgn STATE OF ILLINOIS DRAWN REVISED -T. RAMMACHER 11-04-97 W-RS-4 FOR TRAFFIC STAGING PLOT SCALE = 50.0000 '/ IN. CHECKED -REVISED -T. RAMMACHER 03-02-98 **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60F45 TC--16 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. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

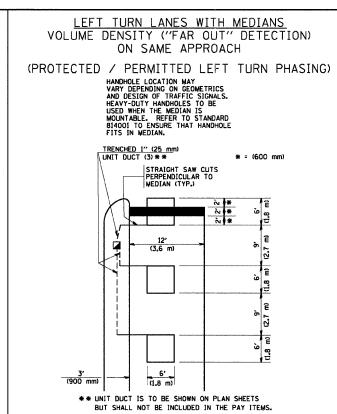


NOTES:

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROA	D	F.A.U.	SECTION		TOTAL SHEET SHEETS NO.
W:\diststd\22x34\to22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS				1521	W-RS-4	KANE	22 21
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN		1	TC-22	CONTRACT	T NO. 60F45	
	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		

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER I'' (25 mm) UNIT DUCT - TRENCHED TO E/P ** * * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.



VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

* = (600 mm)

* = (600 mm)

* = (600 mm)

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

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

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

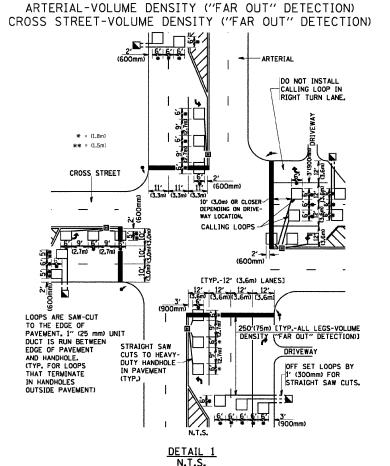
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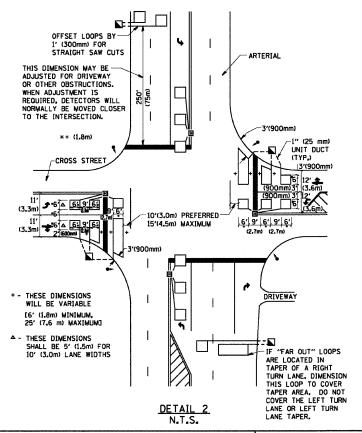
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

OF PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

OF PLAN SHEET FOR DETECTION)

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





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 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. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> 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 $\underline{\mathsf{ALL}}$ 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.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -			DISTRICT 1 – DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING		F.A.U.	SECTION	COUNTY	TOTAL SHEET
W:\diststd\22x34\tsØ7.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS				1521	W-RS-4	KANE	22 22
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -	DEPARTMENT OF TRANSPORTATION					TS-07	CONTRACT N	NO. 60F45
	PLOT DATE = 1/4/2008	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIST	T. NO. 1 ILLINOIS FED			