STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

PROPOSED HIGHWAY PLANS

FAP 351: ILLINOIS 7 (159TH STREET)

I-355 TO WILL-COOK ROAD

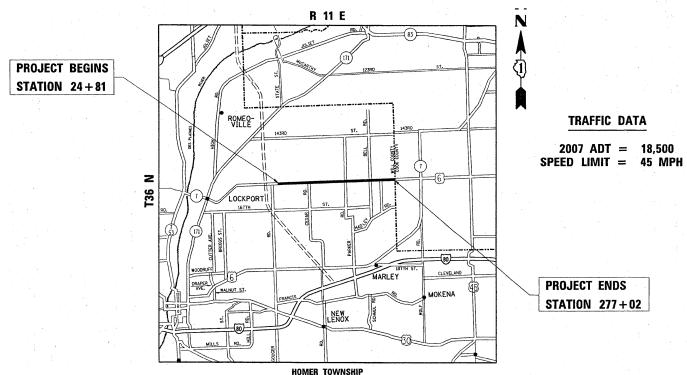
SECTION: 536 RS-3

**RESURFACING (MAINTENANCE)** 

PROJECT NO.: ESP-0351(019)

**WILL COUNTY** 

C-91-319-09



GROSS AND NET LENGTH OF PROJECT = 25,221.00 FEET = 4.78 MILES

# D-91-319-09



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED

FEBRUARY 3, 2009

Dina M. D'Marfe go DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27, 2009

Charles J. Angersol BD

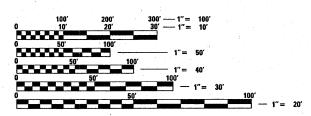
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009

Charlis M. Redd BD

DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE VILLAGE

OF HOMER GLEN

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

J.U.L.I.E

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

1-800-892-0123 ( OR 811)

PROJECT ENGINEER: JENPAI P. CHANG (847) 705 - 4432 PROJECT MANAGER: KEN ENG

CONTRACT NO. 60G05

### INDEX OF SHEETS

SHEET	INDEX OF SHEETS		LIST OF STATE STANDARDS:
NO.	DESCRIPTION		
		STANDARD NO.	DESCRIPTION
	그렇게 하시는 이렇게 그렇게 하고 그리고 있다.		
1	TITLE SHEET	000001-05	TYPICAL SYMBOLS, ABBREVIATIONS, AND PATTERNS
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES	442201 - 03	
3	SUMMARY OF QUANTITIES		CLASS C AND D PATCHES
4-7	EXISTING AND PROPOSED TYPICAL SECTIONS	606001 <i>-04</i>	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
8-17	EXISTING AND PROPOSED ROADWAY AND PAVEMENT MARKING PLANS	701011- 02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
18-22	DETECTOR LOOP REPLACEMENT PLANS	701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY FOR SPEED > 45 MPH
23	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	701306- <i>0</i> 2	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY FOR SPEED > 45 MPH
24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	701501- <i>05</i>	URBAN LANE CLOSURE 2L, 2W, UNDIVIDED
25	BUTT JOINT AND HMA TAPER DETAILS	701901-01	TRAFFIC CONTROL DEVICES
26	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	886001-01	DETECTOR LOOP INSTALLLATION
27	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	886006- <i>01</i>	TYPICAL LAYOUTS FOR DETECTOR LOOPS
28	DISTRICT ONE TYPICAL PAVEMENT MARKINGS		
29	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)		
30	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING		
31	ARTERIAL ROAD INFORMATION SIGN		
32	DISTRICT ONE DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING		

FILE NAME =	USER NAME = gelbennb	DESIGNED -	REVISED -
c:\pw_work\pwidot\galbannb\d0121141\D131		DRAWN	REVISED -
	PLOT SCALE = 50.0000 '/ IN. PLOT DATE = 2/10/2009	CHECKED -	REVISED -
	FC01 DATE = 2710/2004	DATE -	REVISED -

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

# FAP 351: IL 7 (159TH STREET) INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES SHEET NO. OF SHEETS STA. TO STA

 Te . = 1				
F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET
351	536 RS-3	WILL	32	2
		CONTRACT	NO. E	0005

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 HOURS NOTIFICATION IS REQUIRED).

GENERAL NOTES:

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF HOMER GLEN,

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

ANY DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

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

WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1-1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS, AND 1 INCH WHERE THE SPEED LIMIT IS 45 MPH WITH WRITTEN APPROVAL FROM THE RESIDENT ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 3 (V:H)

ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

I000-2A

F.A.P. RTE.	SECTION		COUNT	Υ	TOTAL SHEETS	SHEET NO.
351	536 RS-3		WILL		32	3
FED.	ROAD DIST. NO. 1	ILL	INOIS	HIG	HWAY PR	OJECT

D-91-319-09

			<u> </u>		 · · · · · · · · · · · · · · · · · · ·						URBAN	T .		CONSTRUCT	ION TYPE C	CODE	
	SUMMARY OF QUANTITIES		URBAN 1001.FEO.		CONSTRUCT	ION TYPE (	CODE		SUMMARY OF QUANTITIES		1001. FED .						
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	I000-2A				CODE NO	ITEM	UNIT	TOTAL QUANTITIES	I000-2A					
20201006	GRADING AND SHAPING SHOULDERS	UNIT	416	416				70300260	TEMPORARY PAVEMENT MARKING	FOOT	988	988					
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	39	39				70300280	- LINE 12" TEMPORARY PAVEMENT MARKING	FOOT	398	398					
40600300	AGGREGATE (PRIME COAT)	TON	194	194					- LINE 24"	CO 57	70057	36853					
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	29	29					WORK ZONE PAVEMENT MARKING REMOVAL THERMOPLASTIC PAVEMENT MARKING	SO FT	36853 1268. 8	1268.8					
40600895	CONSTRUCTING TEST STRIP	EACH	2	2				* 78000100	- LETTERS AND SYMBOLS								
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	270	270				<b>*</b> 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	86507	86507					
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", NTO	TON	8368	8368				* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	3987	3987					
42001300	PROTECTIVE COAT	SO YD	89	89				* 78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	350	350					
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	96725	96725				* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	988	988					
44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	400	400				* 78000650		FOOT	398	398					
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SO YD	1935	1935				* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	734	734					
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	1693	1693				78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	660	660					
44201796	CLASS D PATCHES, TYPE IV, 12 INCH AGGREGATE WEDGE SHOULDER, TYPE B	SQ YD TON	1209 832	1209 832				* 88600600	DETECTOR LOOP REPLACEMENT	F00T	3009	3009					
48102100 67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6				X0322256	TEMPORARY INFORMATION SIGNING	SO FT	282.7	282.7					
67100100	MOBILIZATION	L SUM	1	1				X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	4035	4035					
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1				0 2007660	TRAINEES	HOUR	4000	4000					
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1.													
70102620	TRAFFIC CONTROL AND PROTECTION. STANDARD 701501	L SUM	1	1													
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	2	2													
70300100	SHORT-TERM PAVEMENT MARKING	F00T	8212	8212													
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SO FT	1268.8	1268.8				***				*		*			•
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	86507	86507													
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	3987	3987													
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	350	350													
<u>U</u>	나는 동네는 아들은 회문에 모두 잃으라 모네다니?												l				<del></del>

\* SPECIALITY ITEMS

② Y080

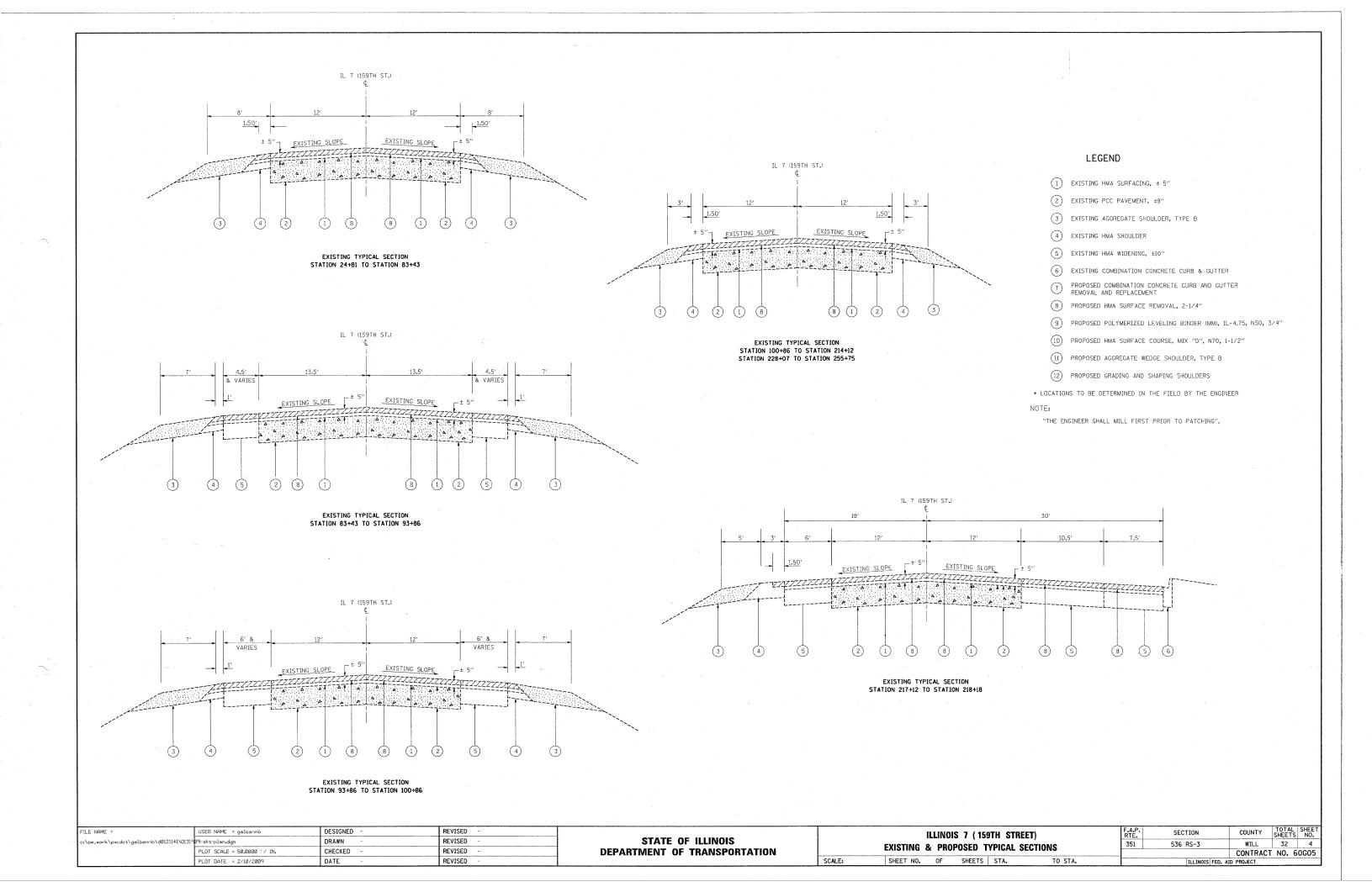
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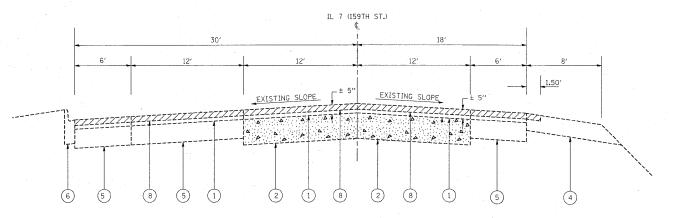
ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS 7 (159TH STREET)

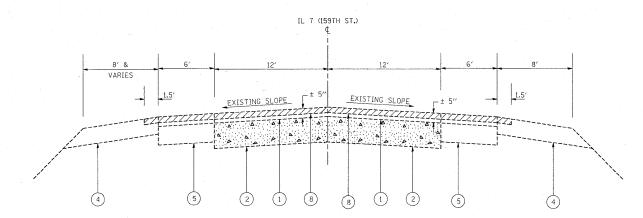
I-355 TO WILL-COOK ROAD

SUMMARY OF QUANTITIES

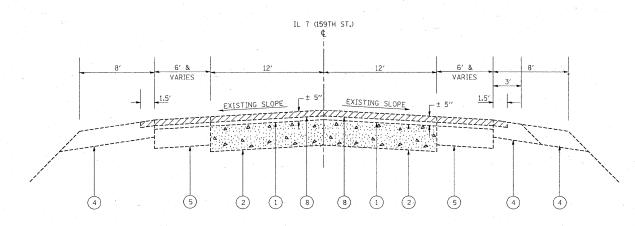




# EXISTING TYPICAL SECTION STATION 218+86 TO STATION 220+08 STATION 255+68 TO STATION 277+02



EXISTING TYPICAL SECTION STATION 220+08 TO STATION 223+36



EXISTING TYPICAL SECTION
STATION 224+86 TO STATION 228+07

### USER NAME = galbannb DESIGNED -REVISED o:\pw\_work\pwidot\galbannb\d0121141\D1319 89-sht-plan.dgn DRAWN REVISED CHECKED -REVISED PLOT DATE = 2/10/2009 DATE REVISED

FILE NAME =

# STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCALE:

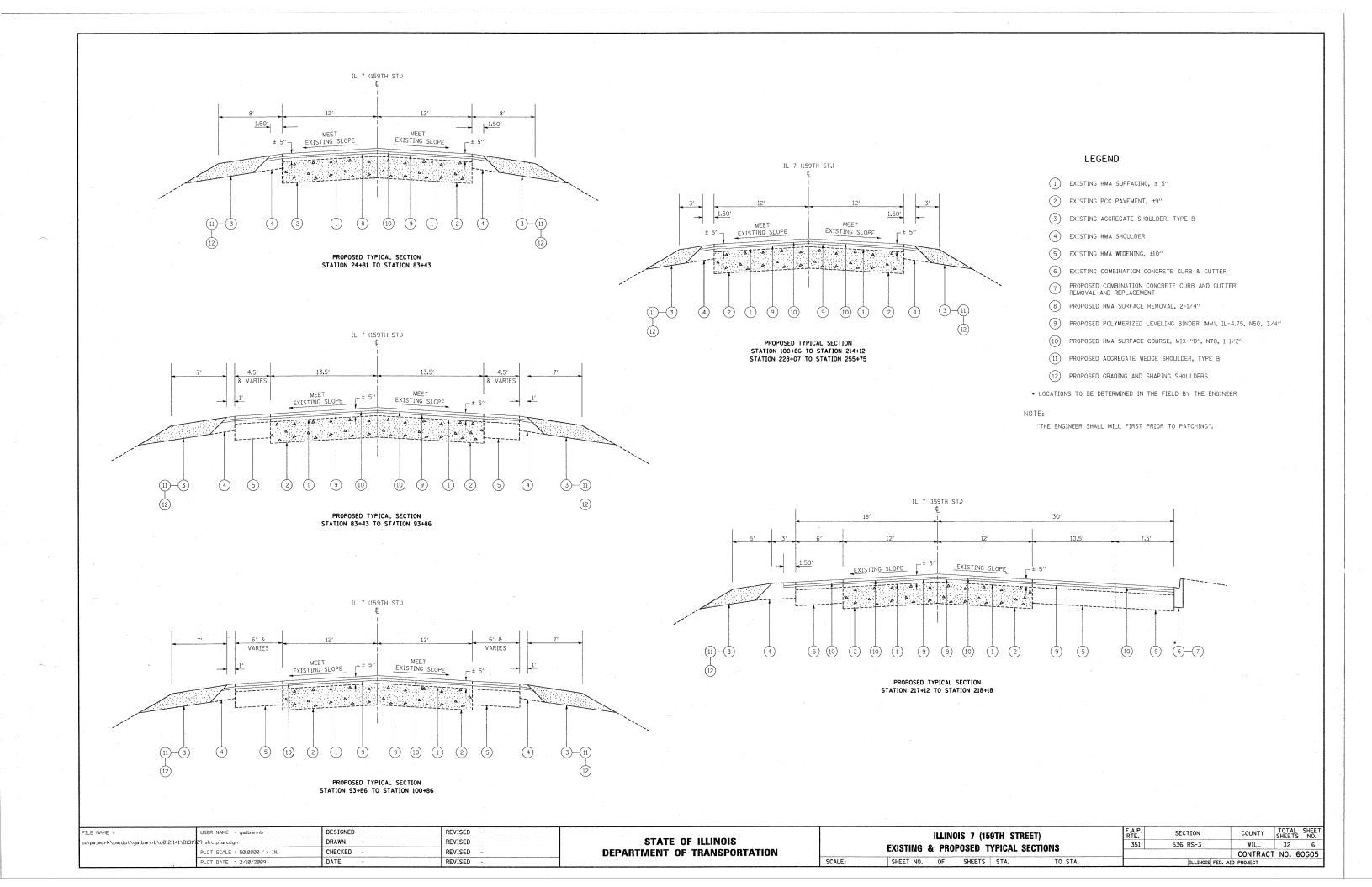
	ILLIN	OIS 7 (15	9TH ST	REET)	
EXISTING	& PRO	POSED T	YPICAL	SECTIONS	
SHEET NO.	OF	SHEETS	STA.	ТО	STA.

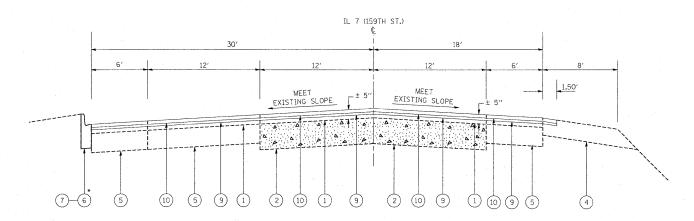
### COUNTY TOTAL SHEET NO. WILL 32 5 SECTION 536 RS-3 351 CONTRACT NO. 60G05

# LEGEND

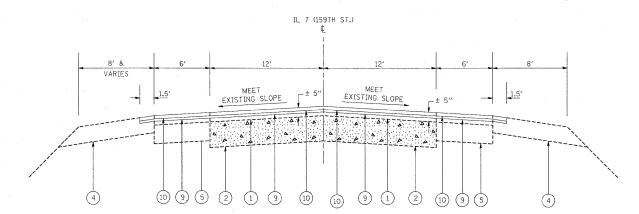
- 1) EXISTING HMA SURFACING, ± 5"
- 2 EXISTING PCC PAVEMENT, ±9"
- (3) EXISTING AGGREGATE SHOULDER, TYPE B
- 4) EXISTING HMA SHOULDER
- 5 EXISTING HMA WIDENING, ±10"
- 6 EXISTING COMBINATION CONCRETE CURB & GUTTER
- PROPOSED COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT
- 8 PROPOSED HMA SURFACE REMOVAL, 2-1/4"
- 9 PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- 10 PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1-1/2"
- 11) PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- 12) PROPOSED GRADING AND SHAPING SHOULDERS
- \* LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER

"THE ENGINEER SHALL MILL FIRST PRIOR TO PATCHING".

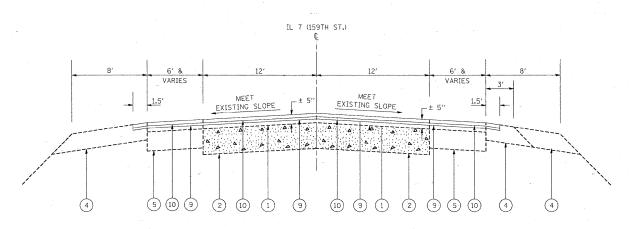




# PROPOSED TYPICAL SECTION STATION 218+86 TO STATION 220+08 STATION 255+68 TO STATION 277+02



### PROPOSED TYPICAL SECTION STATION 220+08 TO STATION 223+36



PROPOSED TYPICAL SECTION STATION 224+86 TO STATION 228+07

# LEGEND

- 1) EXISTING HMA SURFACING, ± 5"
- 2 EXISTING PCC PAVEMENT, ±9"
- 3 EXISTING AGGREGATE SHOULDER, TYPE B
- 4 EXISTING HMA SHOULDER
- (5) EXISTING HMA WIDENING, ±10"
- 6 EXISTING COMBINATION CONCRETE CUR8 & GUTTER
- 7 PROPOSED COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT
- 8 PROPOSED HMA SURFACE REMOVAL, 2-1/4"
- 9 PROPOSED POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 3/4"
- 10 PROPOSED HMA SURFACE COURSE, MIX "D", N70, 1-1/2"
- 11) PROPOSED AGGREGATE WEDGE SHOULDER, TYPE B
- 12) PROPOSED GRADING AND SHAPING SHOULDERS
- \* LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER

# NOTE:

"THE ENGINEER SHALL MILL FIRST PRIOR TO PATCHING".

# HOT-MIX ASPHALT MIXTURE REQUIREMENTS THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

MIXTURE USE	AC/PG	AIR VOIDS (%)
MAINI INC. DECUDEACING		

# MAINLINE RESURFACING

	· · · · · · · · · · · · · · · · · · ·	
HMA SURFACE COURSE MIX "D", N70	PG 64-22	4% @ 70 Gyr.
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% @ 50 Gyr.

# PATCHING

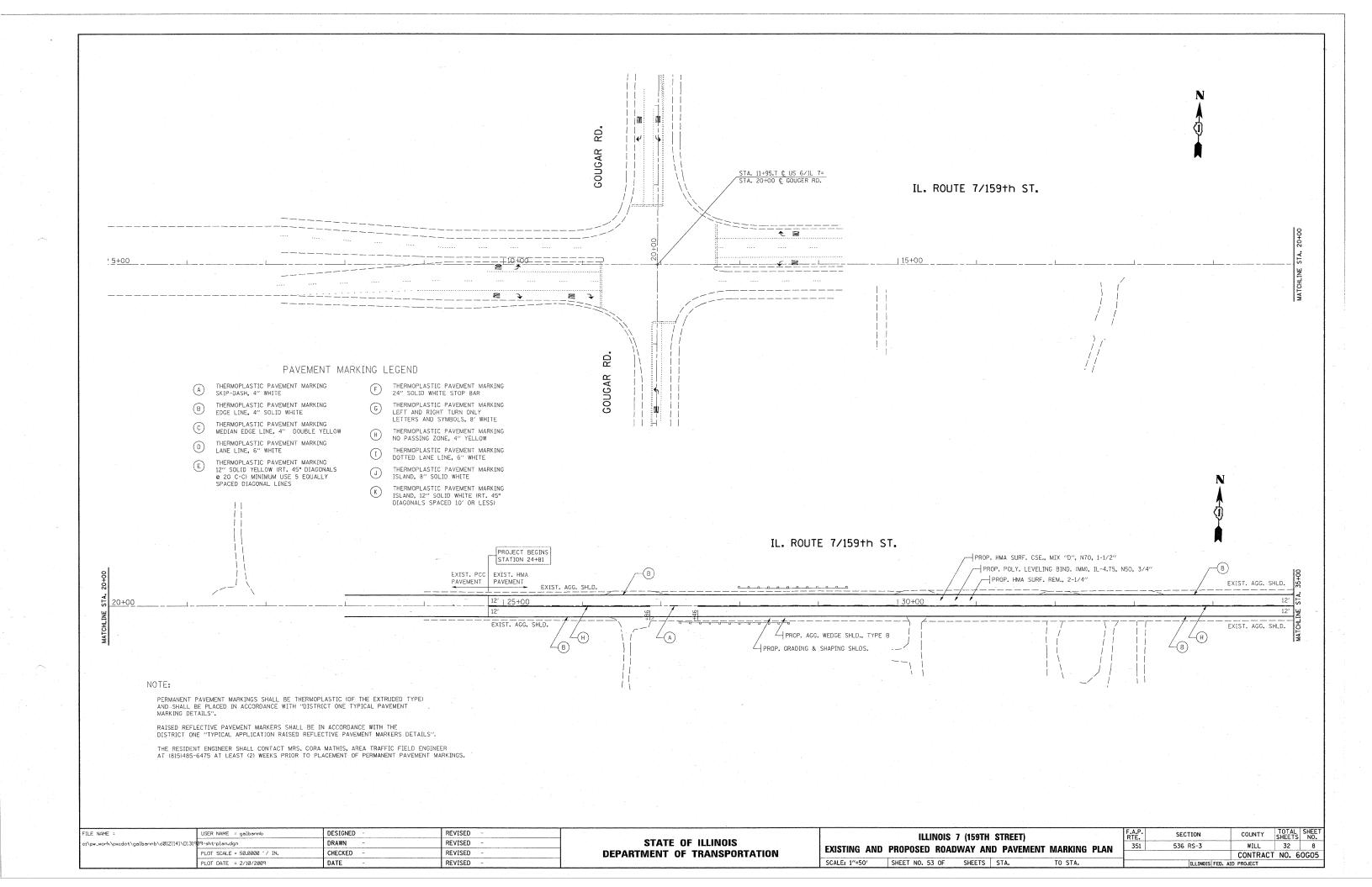
CLASS D PATCH (HMA BINDER IL-19 mm)	PG 64-22 / 58-22*	4% @ 70 Gyr.
SHOULDER RESURFACING		
HMA SURFACE COURSE MIX "D", N70	PG 64-22	4% <b>@</b> 70 Gyr.
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50	SBS/SBR PG 76-28/-22	4% @ 50 Gyr.

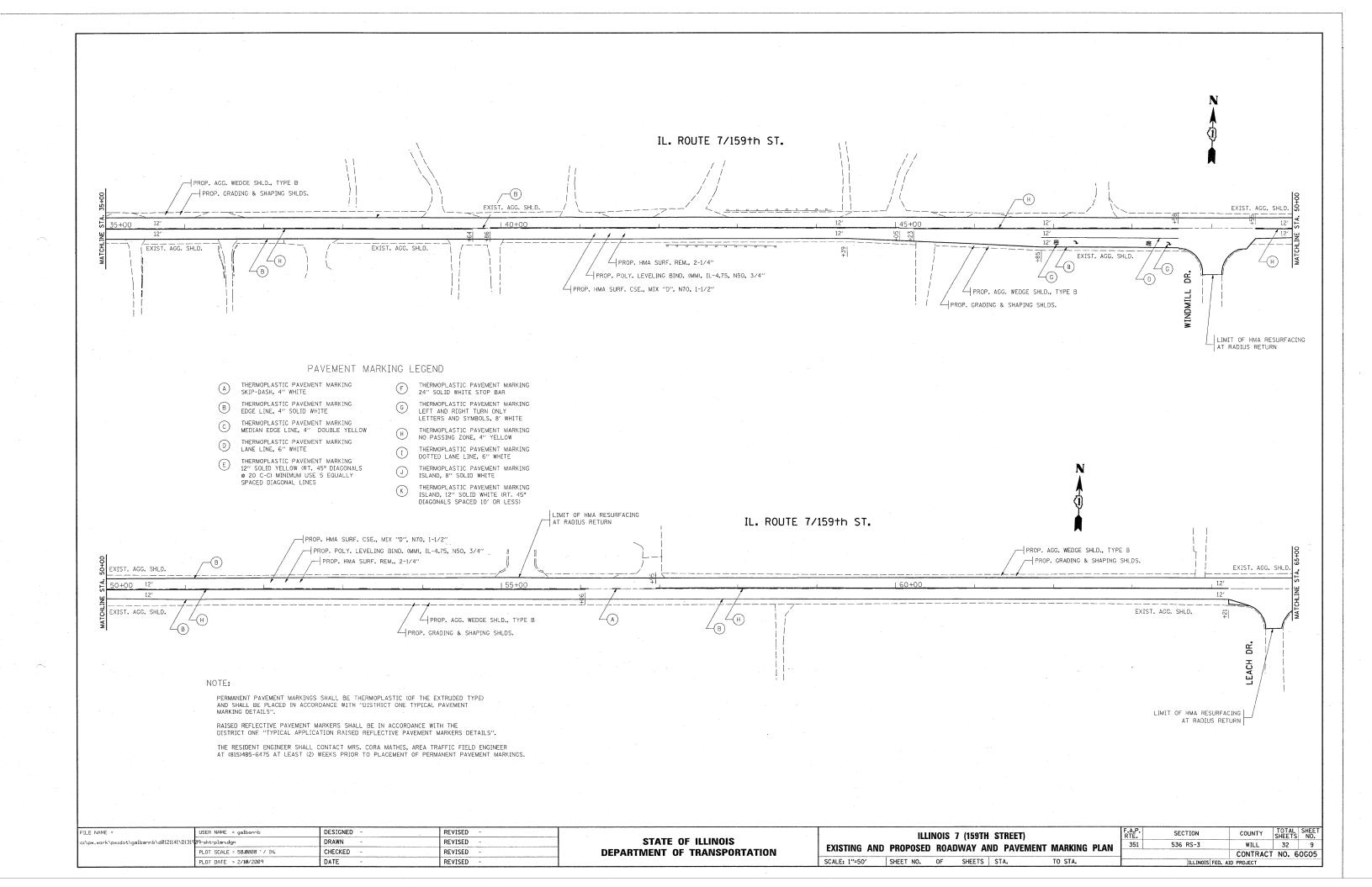
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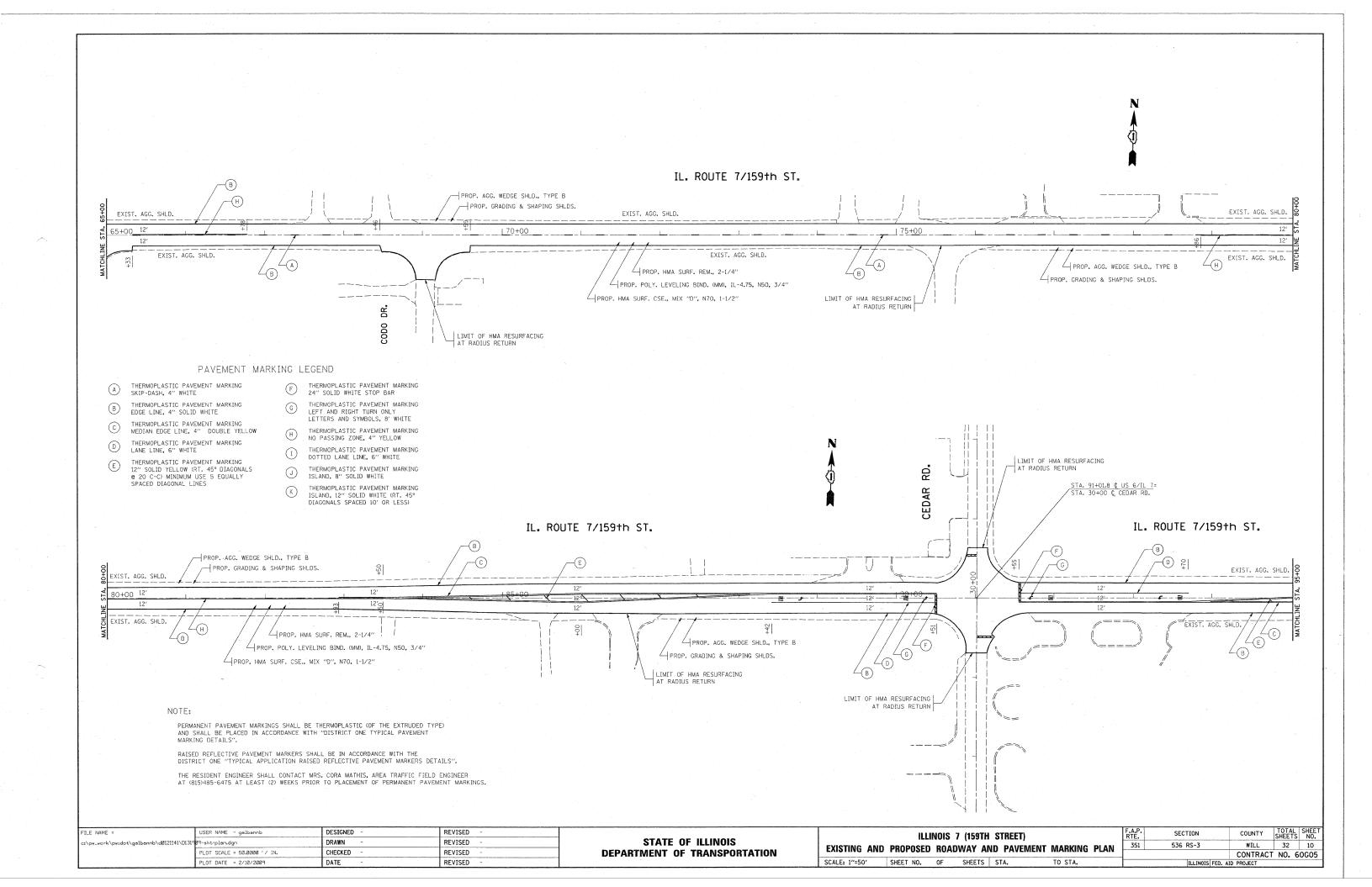
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 PUNDS PER SOUARE YARD PER INCH EXCEPT FOR POLYMERIZED LEVELING BINDER (MM) WHICH IS 105 POUNDS PER SUARE YARD PER INCH.

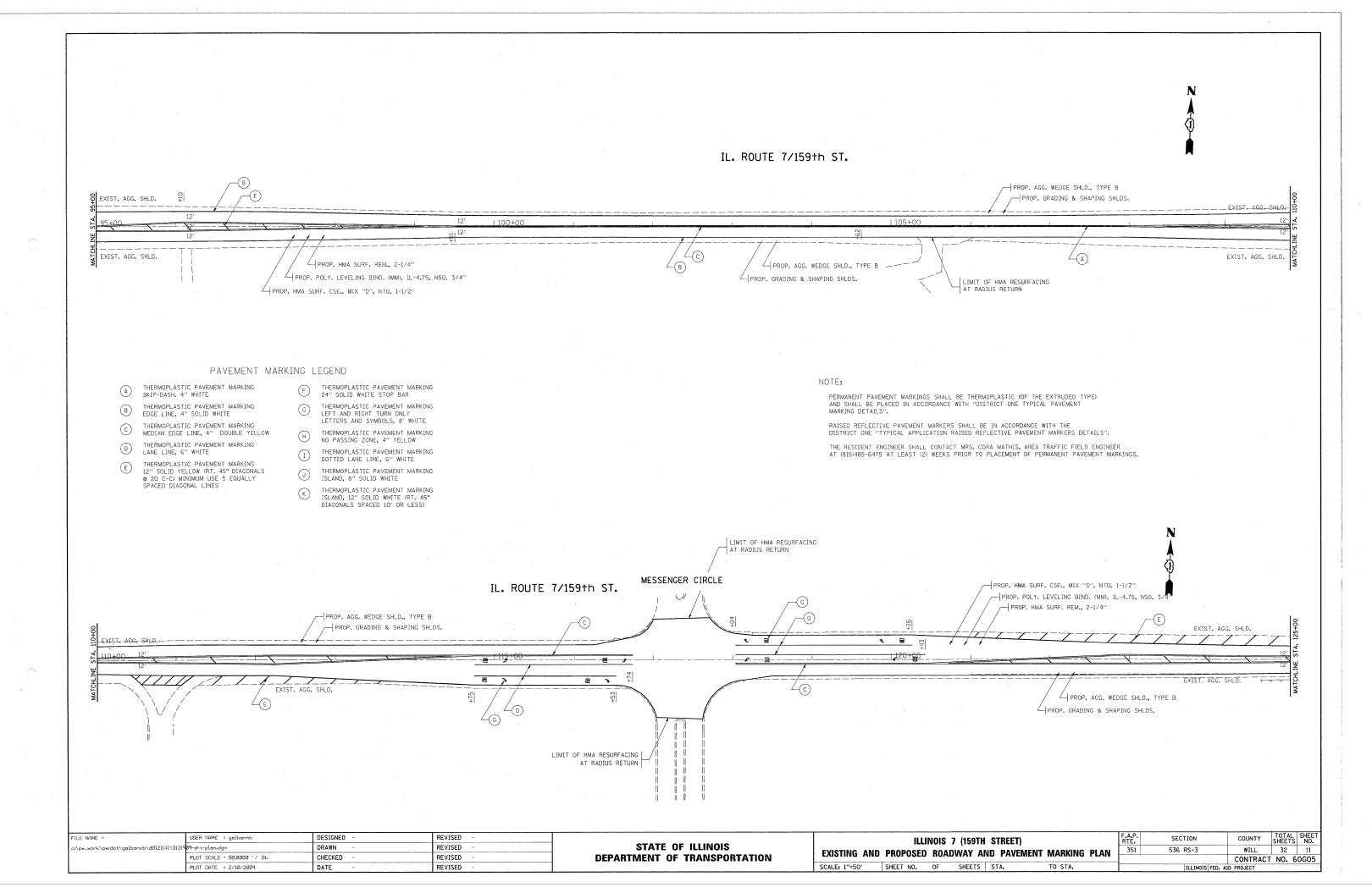
 $\ast$  WHEN RAP EXCEEDS 20% THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

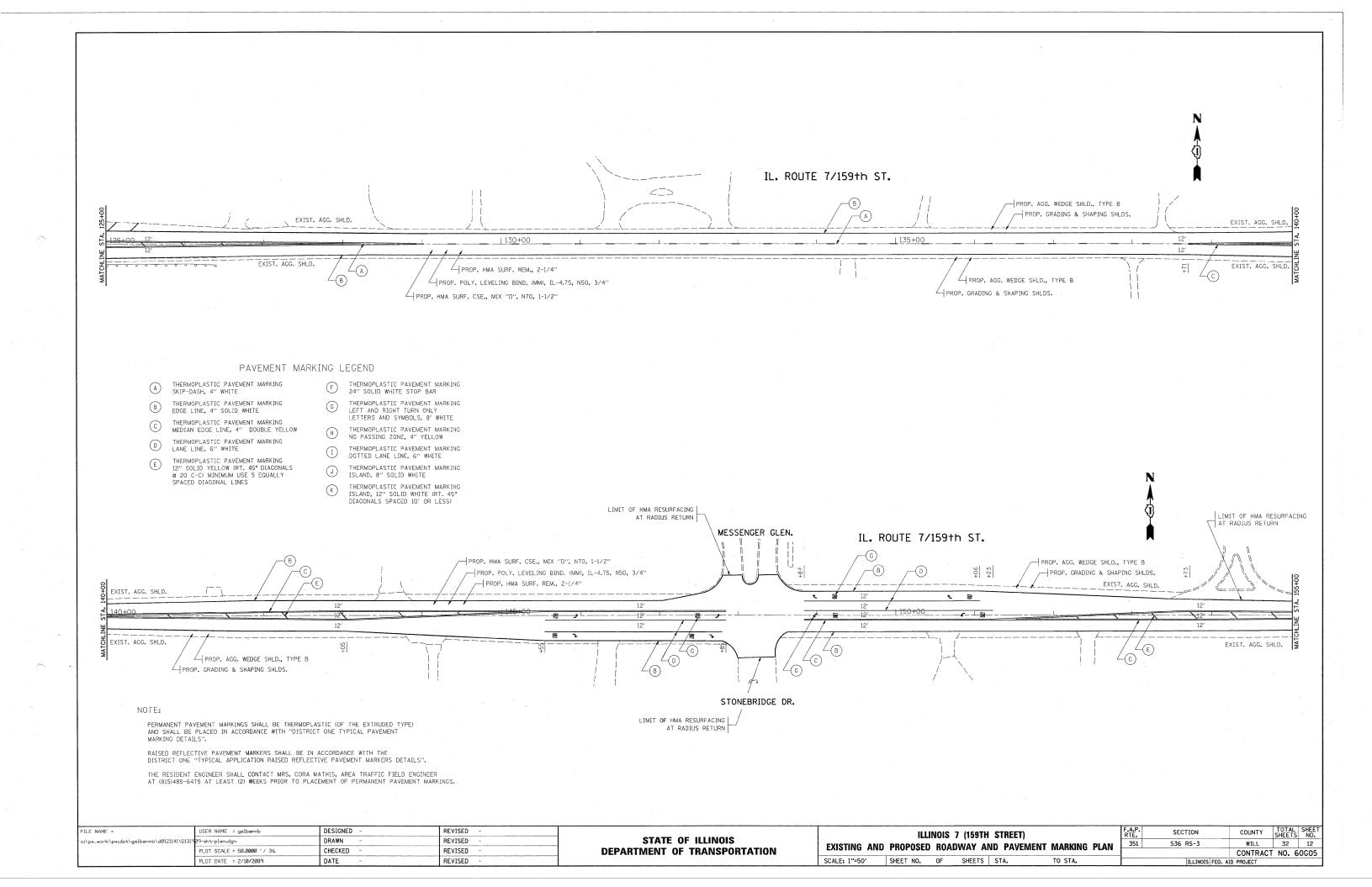
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c:\pw_work\pwidot\galbannb\dØ121141\D1319	19-sht-plan.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS	EXISTING & PROPOSED TYPICAL SECTIONS	351	536 RS-3	WILL	32	7
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	EXISTING & PROPOSED TIPICAL SECTIONS			CONTRACT	T NO. 6	JG05
	PLOT DATE = 2/10/2009	DATE -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT		

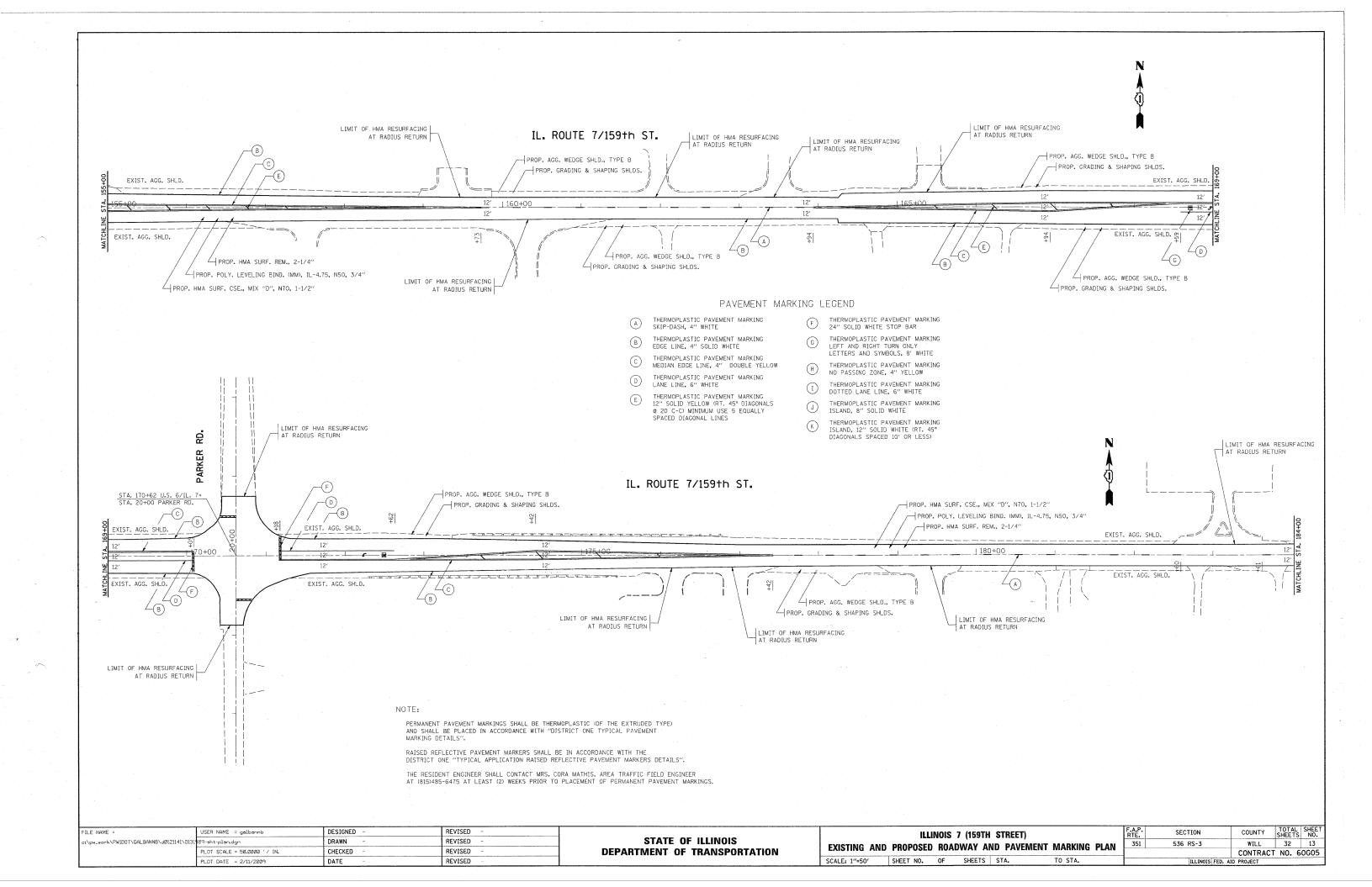


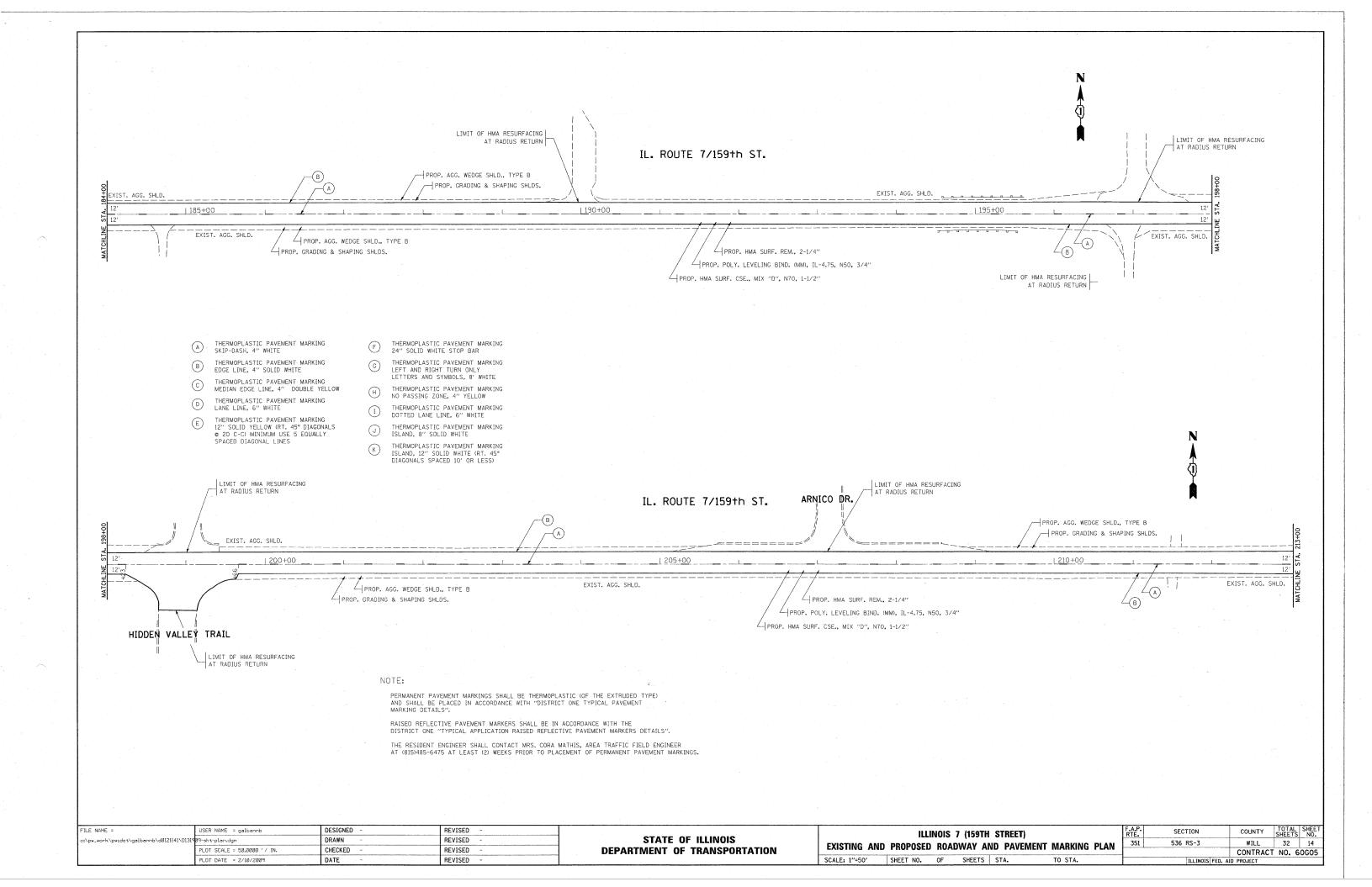


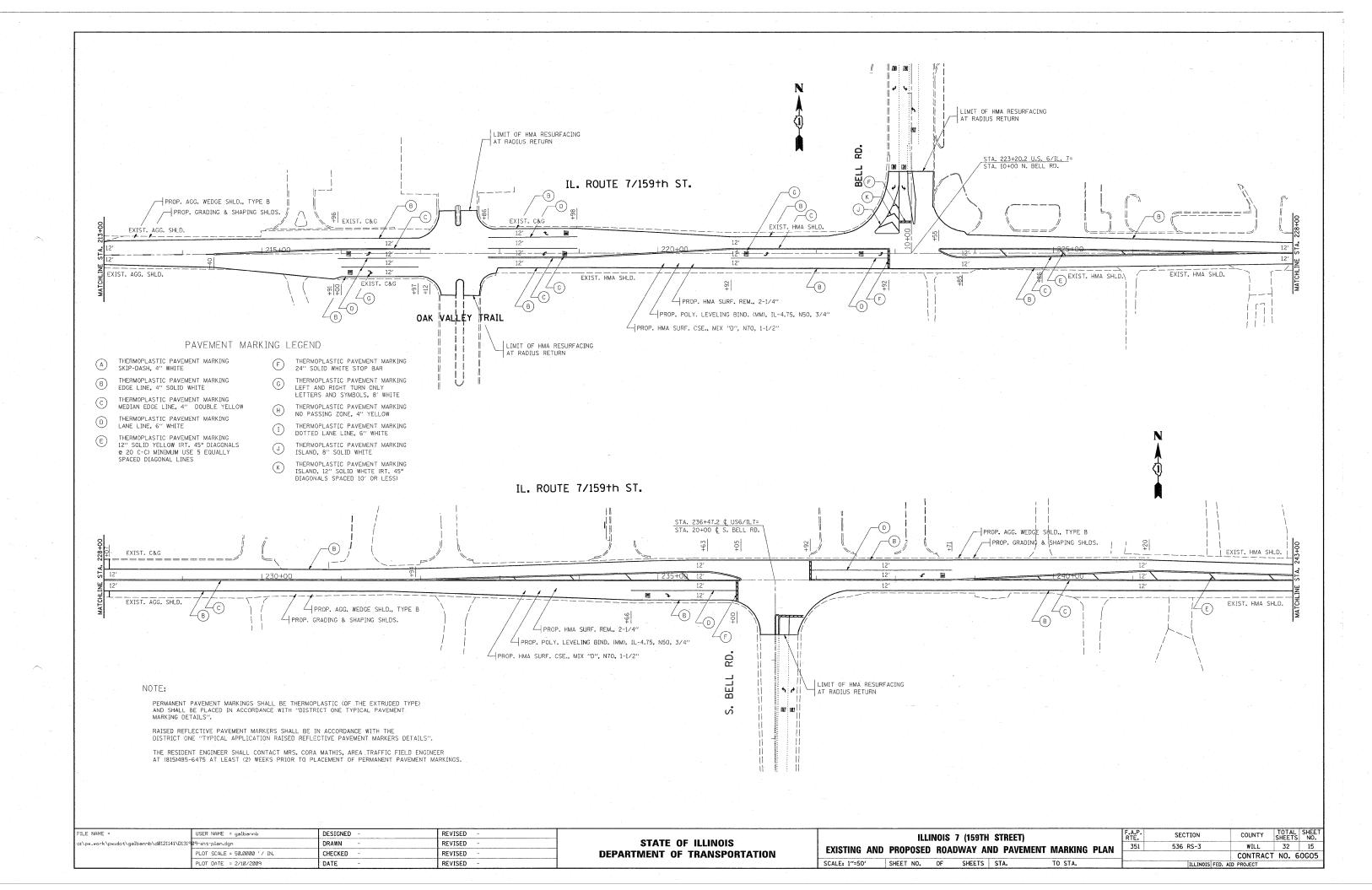


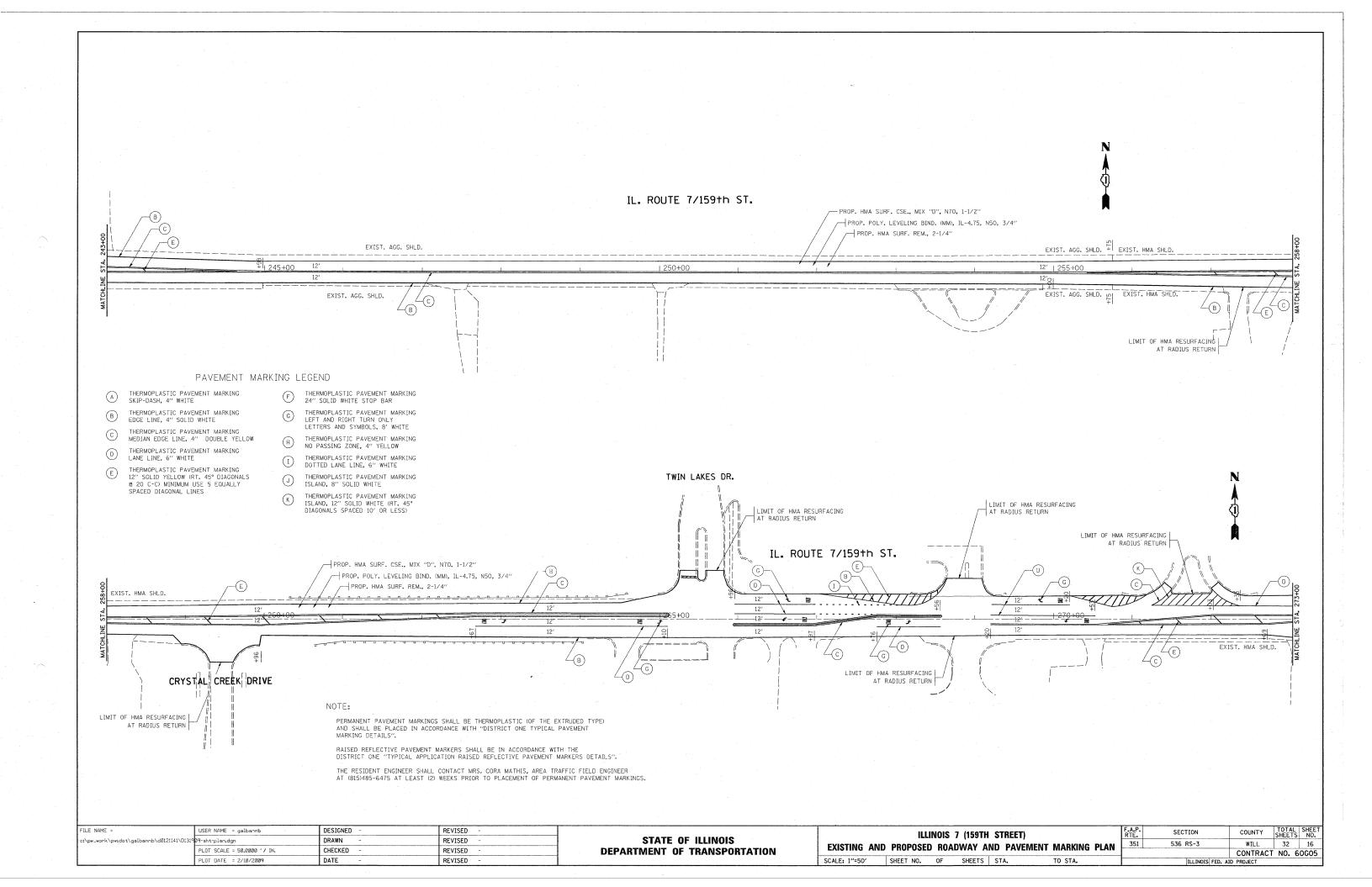


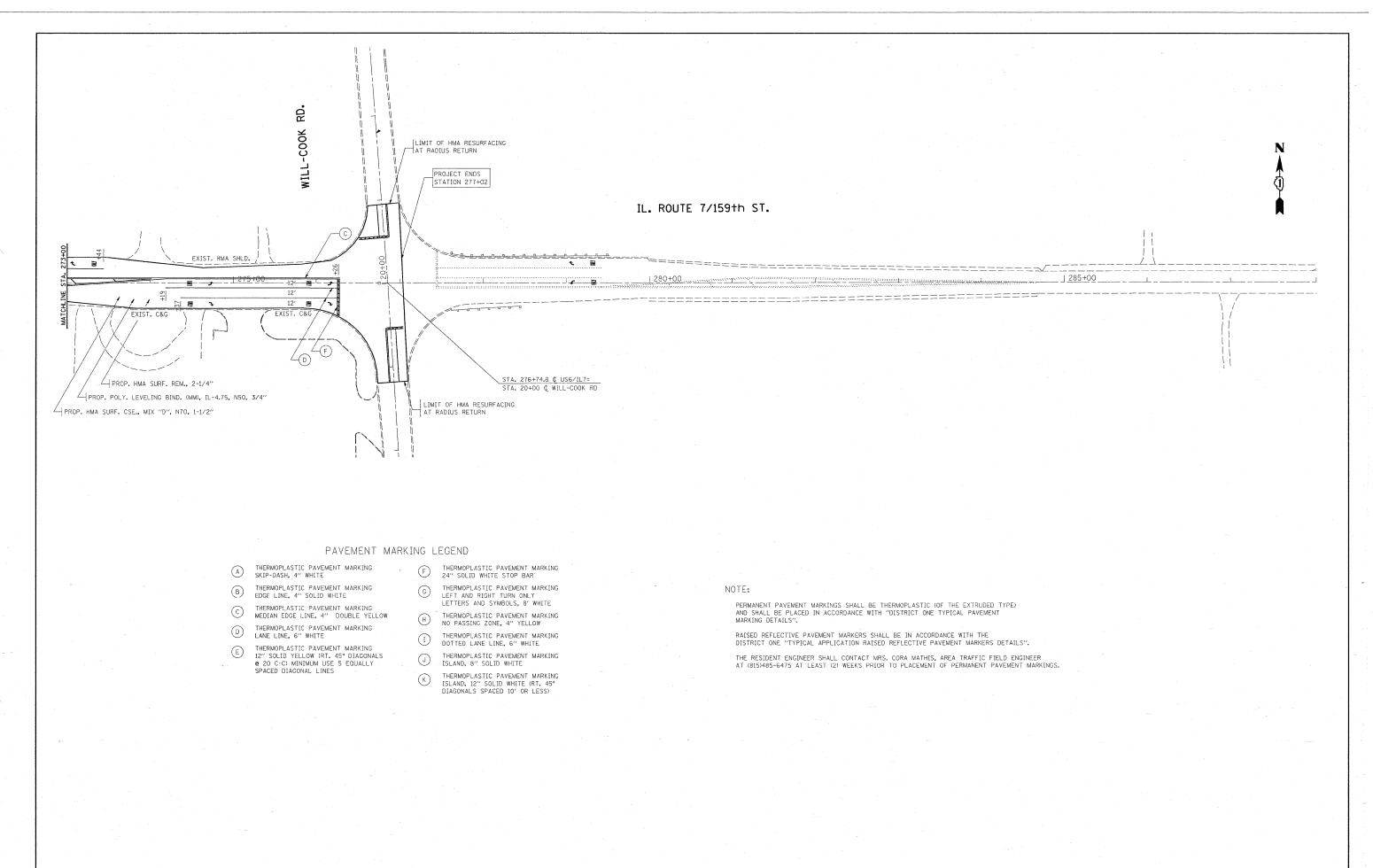










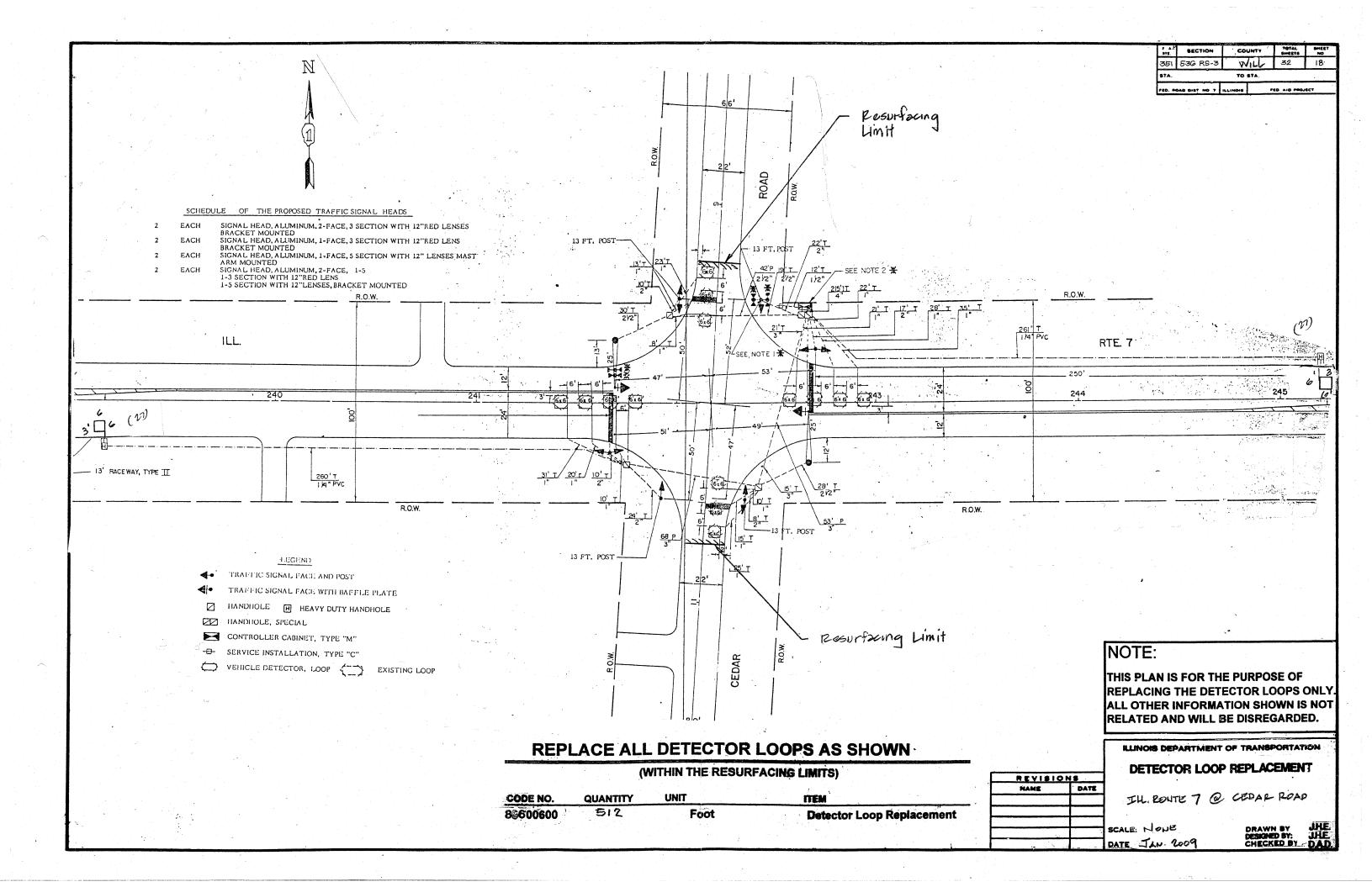


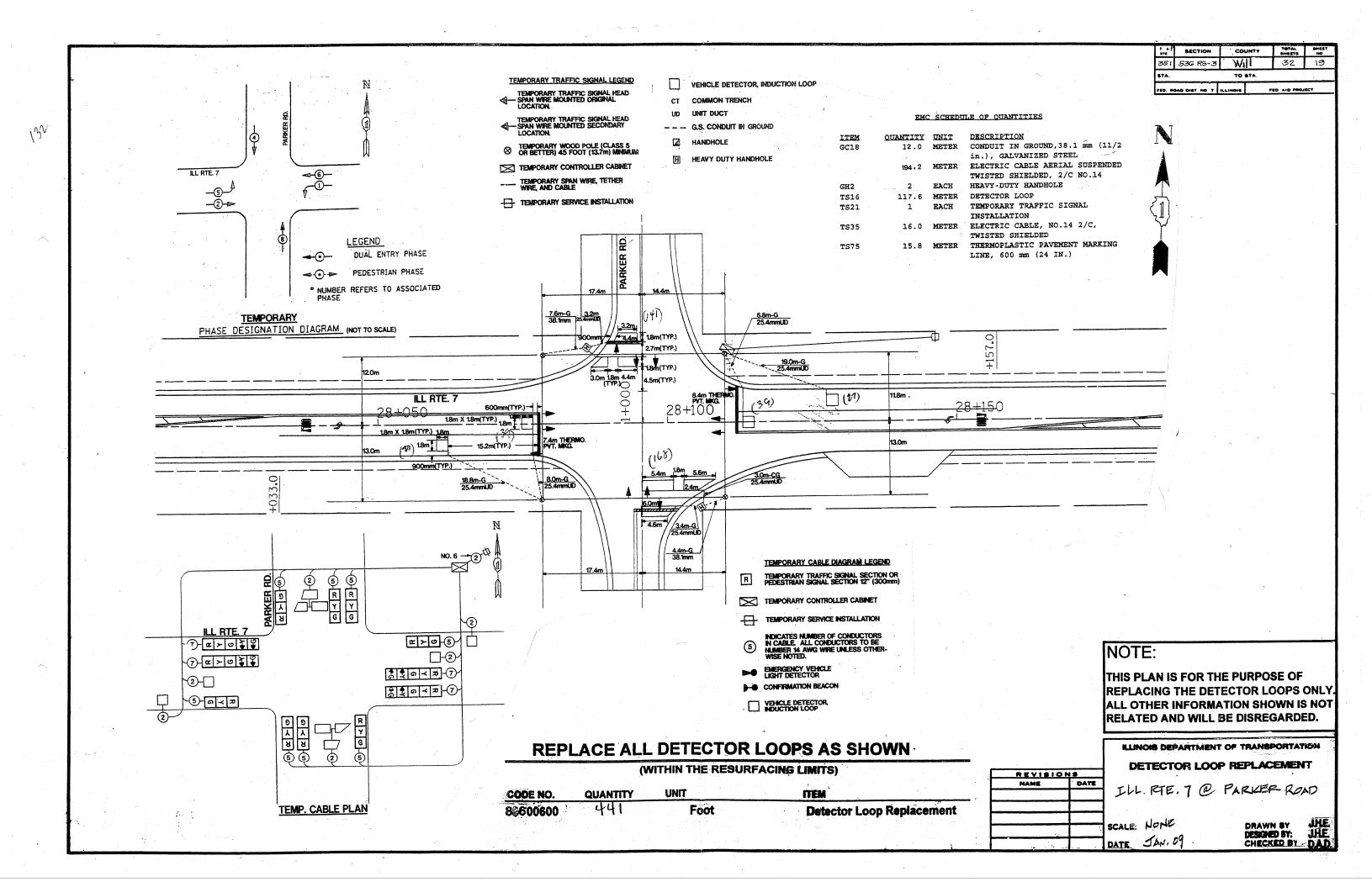
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

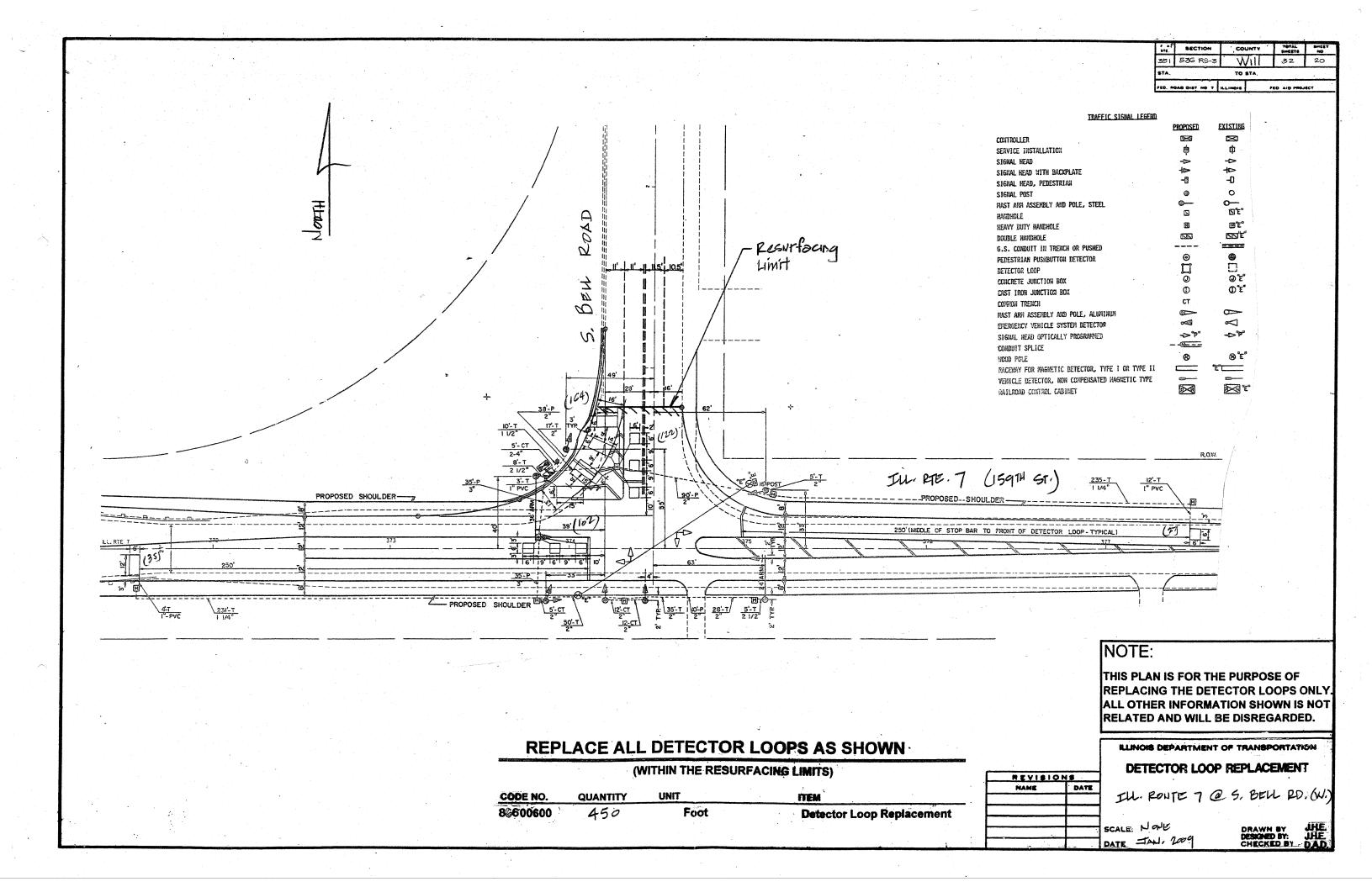
ILLINOIS 7 (159TH STREET)

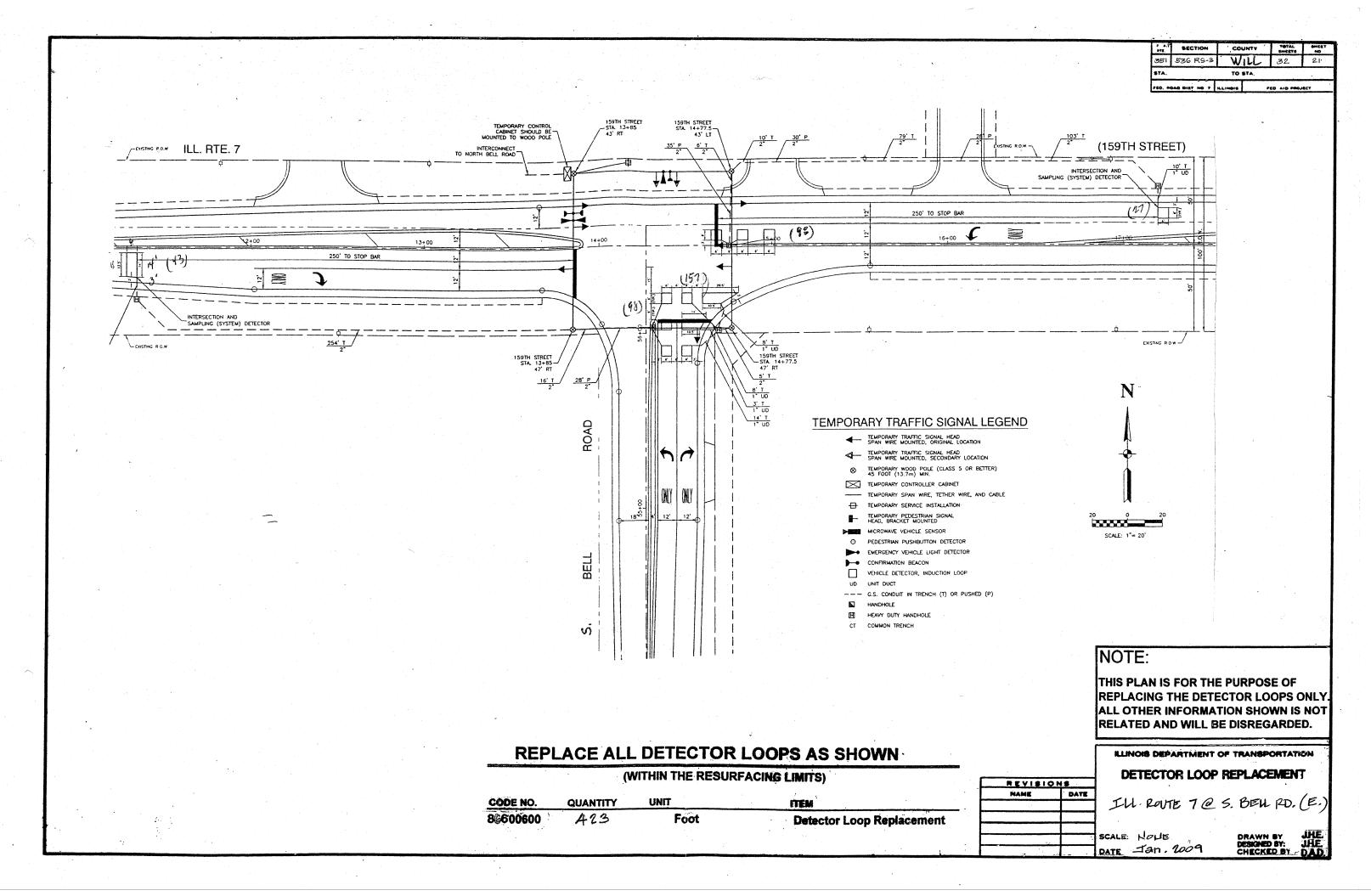
EXISTING AND PROPOSED ROADWAY AND PAVEMENT MARKING PLAN

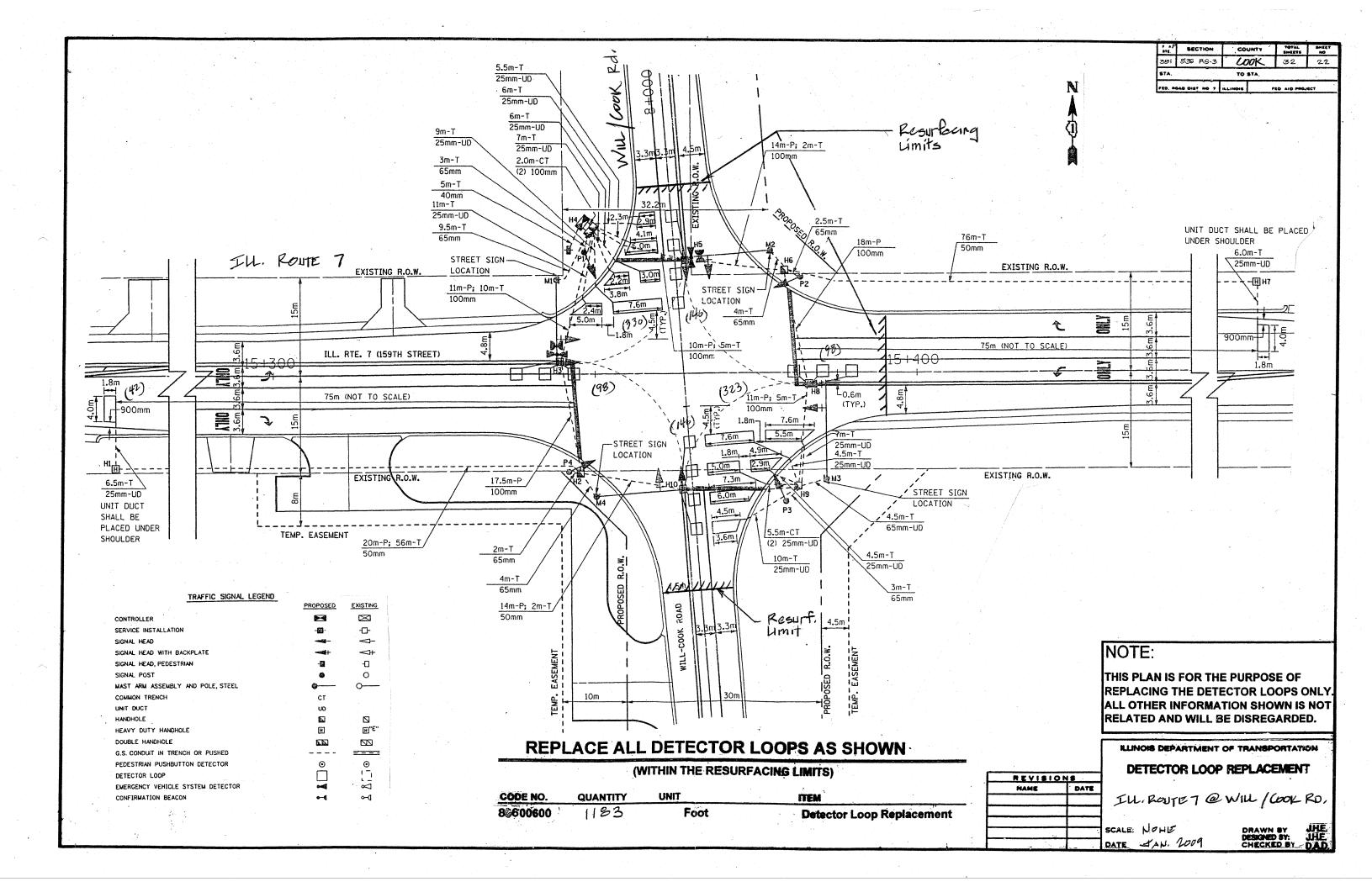
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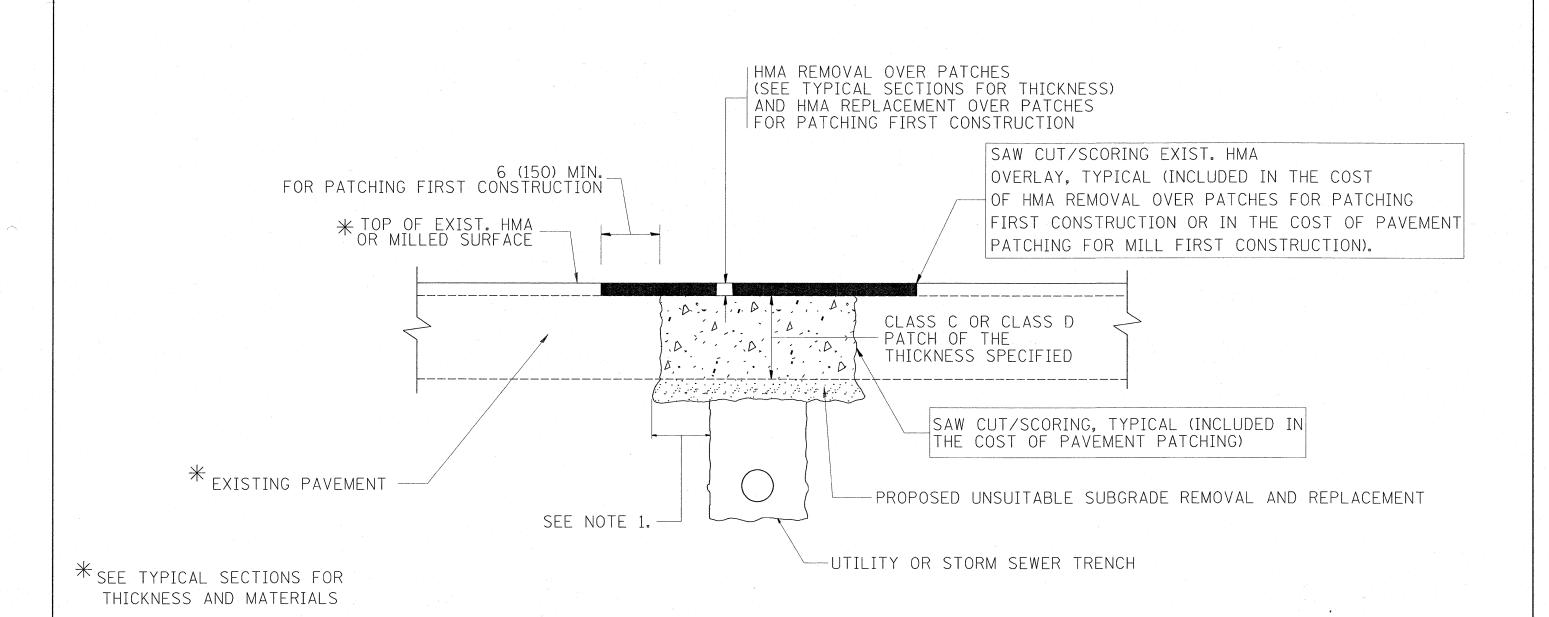












# NOTES:

- 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".

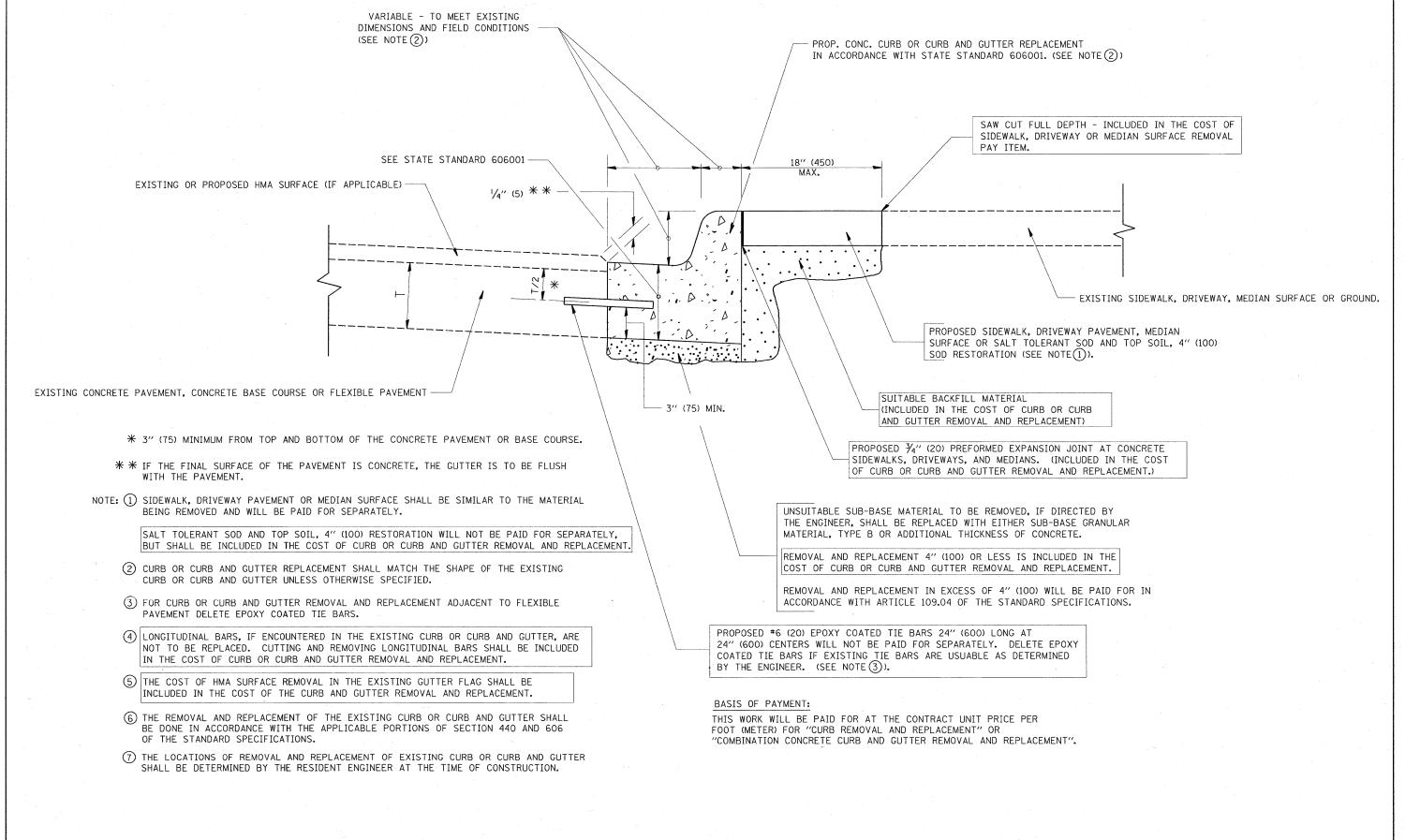
# SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 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)

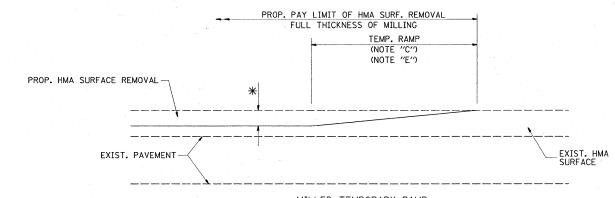
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

FILE NAME =	USER NAME = galbannb	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98			PAVEMENT PATCHING FOR		RTF.	SECTION	COUNTY	SHEETS NO.
c:\pw_work\PWIDOT\GALBANNB\dØ12	21141\Distitd.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS				531	536 RS-3	WTLL	32 23
·	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT		RD	400-04 (BD-22)	CONTRACT	[ NO. 60005
	PLOT DATE = 2/10/2009	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD I			



# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

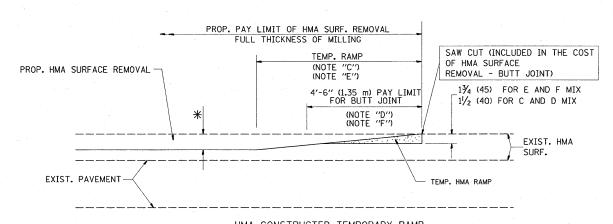
FILE NAME =	USER NAME = galbannb	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER		F.A.P.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
ci/pw_work/PWIDOT/GALBANNB/dØ121141/Dist	itd.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		REMOVAL AND REPLACEMENT		531	536 RS-3	WILL.	32 24
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	NEWOVAL AND NETLACEIVENT			BD60	0-06 (BD-24)	CONTRACT	NO. 60G05
	PLOT DATE = 2/10/2009	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD DIS	ST. NO. 1 ILLINOIS FED. A	AID PROJECT	



# MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

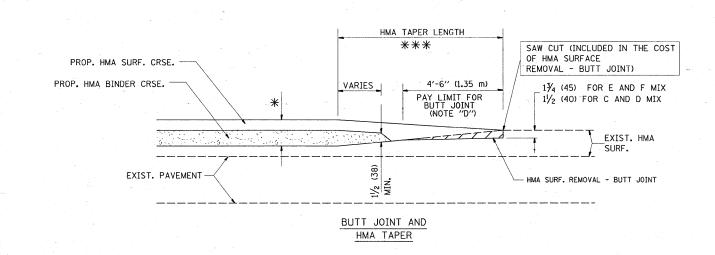
# OPTION 1



\_\_\_\_\_HMA\_\_CONSTRUCTED\_TEMPORARY\_RAMP\_\_\_\_\_(FOR\_\_BUTT\_\_JOINT\_\_AND\_\_HMA\_\_TAPER\_\_SEE\_\_DETAIL\_\_BELOW)

# OPTION 2

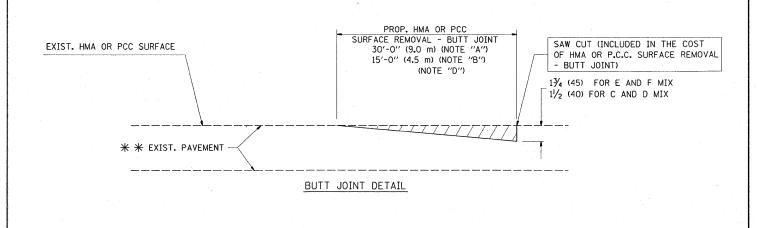
# TYPICAL TEMPORARY RAMP

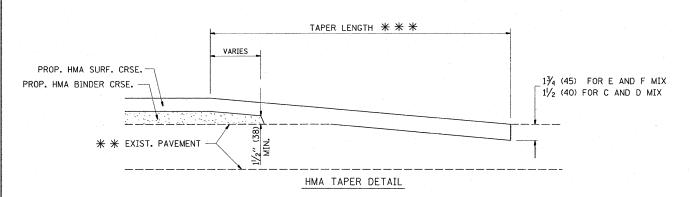


# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| Rect No. 1 OF 1 SHEET | STA. | TO STA. | Feb. Road Dist, No. 1 | Illinois| Fed. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid Project | Feb. Road Dist, No. 1 | Illinois| Feb. Aid





# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

 $\ensuremath{\divideontimes}$  PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

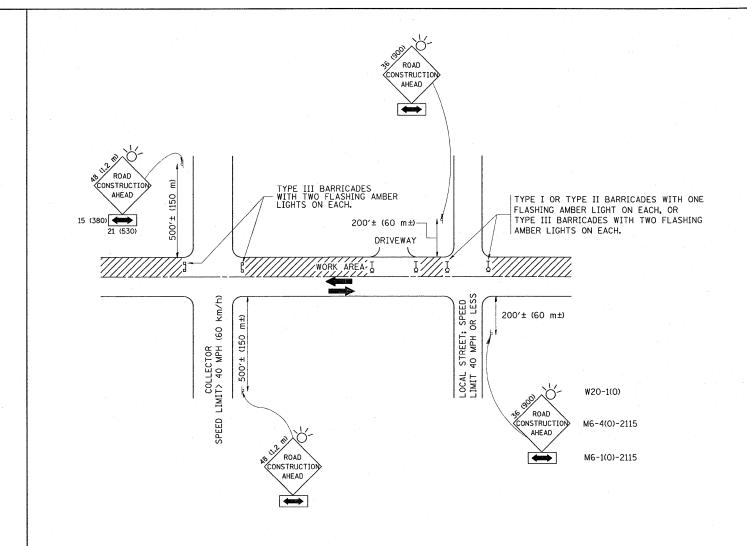
# NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- : 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.
- \*\*  $\times$  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".

SCALE: NONE



# 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:
- Q) 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  $\times$  48 (1.2 m  $\times$  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 OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

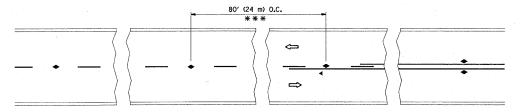
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

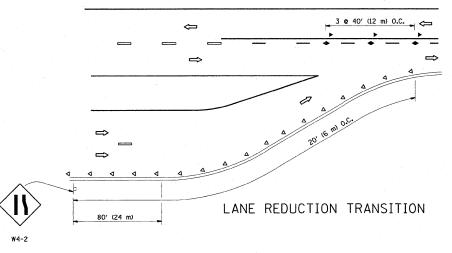
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

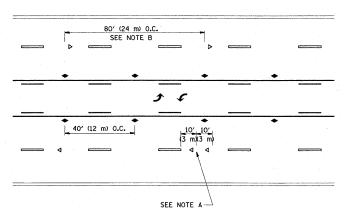
SHEET NO. 1 OF 1 SHEETS STA. TO STA.



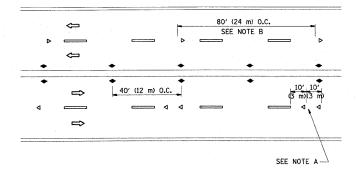
\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

# TWO-LANE/TWO-WAY

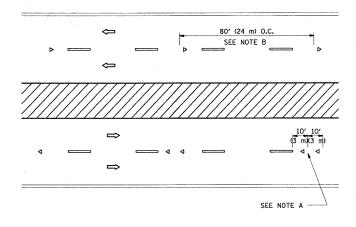




TWO-WAY LEFT TURN



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 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

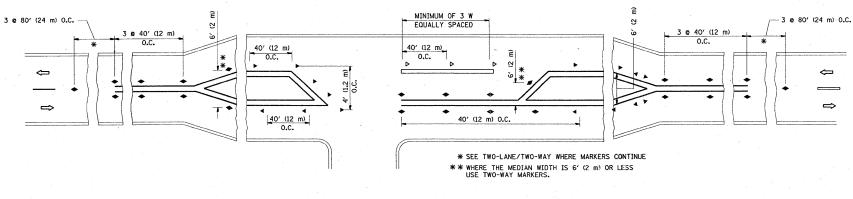
YELLOW STRIPE

WHITE STRIPE

- ONE-WAY AMBER MARKER
- → ONE-WAY CRYSTAL MARKER (W/O)
- ★ TWO-WAY AMBER MARKER

# DESIGN NOTES

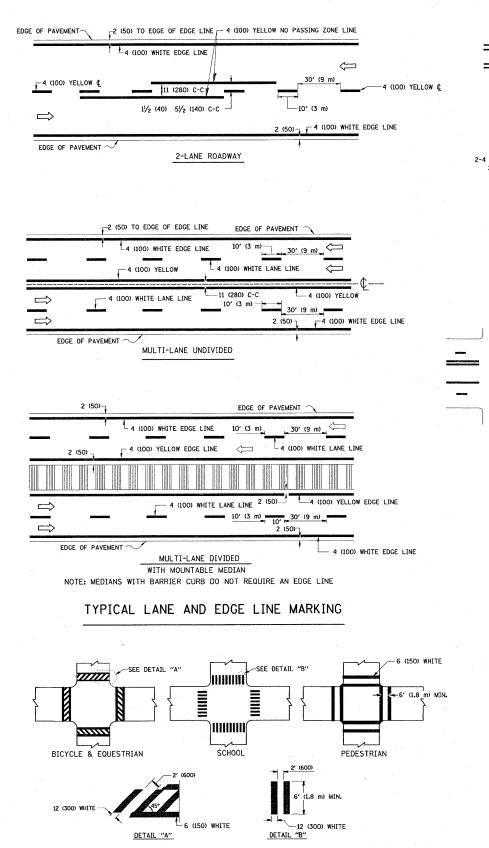
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS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



LEFT TURN

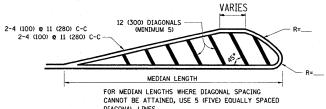
All dimensions are in inches (millimeters) unless otherwise shown.

Ī	FILE NAME ≈	USER NAME = galbannb	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS	F.A.P. SECTION	COUNTY TOTAL S	SHEET
- 1	c:\pw_work\PWIDOT\GALBANNB\dØ121141\Dist	itd.dgn	DRAWN ~	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS		531 536 RS-3	WILL 32	27
		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	TC-11	CONTRACT NO. 600	)G05
		PLOT DATE = 2/10/2009	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLING	DIS FED. AID PROJECT	



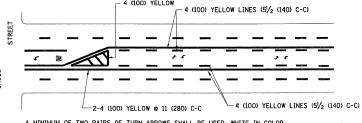
# 2-4 (100) YELLOW @ 11 (280) C-C NO DIAGONALS 4' (1.2 m) OUTSIDE TO OUTSIDE OF LINES 2-4 (100) YELLOW @ 11 (280) C-C

# 4' (1.2 m) WIDE MEDIANS ONLY

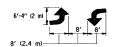


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

# MEDIANS OVER 4' (1.2 m) WIDE

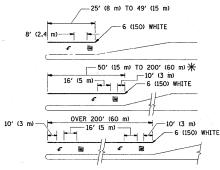


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

# TYPICAL PAINTED MEDIAN MARKING

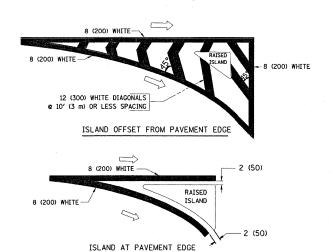


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m²)  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

\* 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 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	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 MARKING	2 & 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 51/2 (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 (150) 12 (300) & 45° 12 (300) & 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE
	e 45°  NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIACONALS: 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 <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) <b>@</b> 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) T0 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.

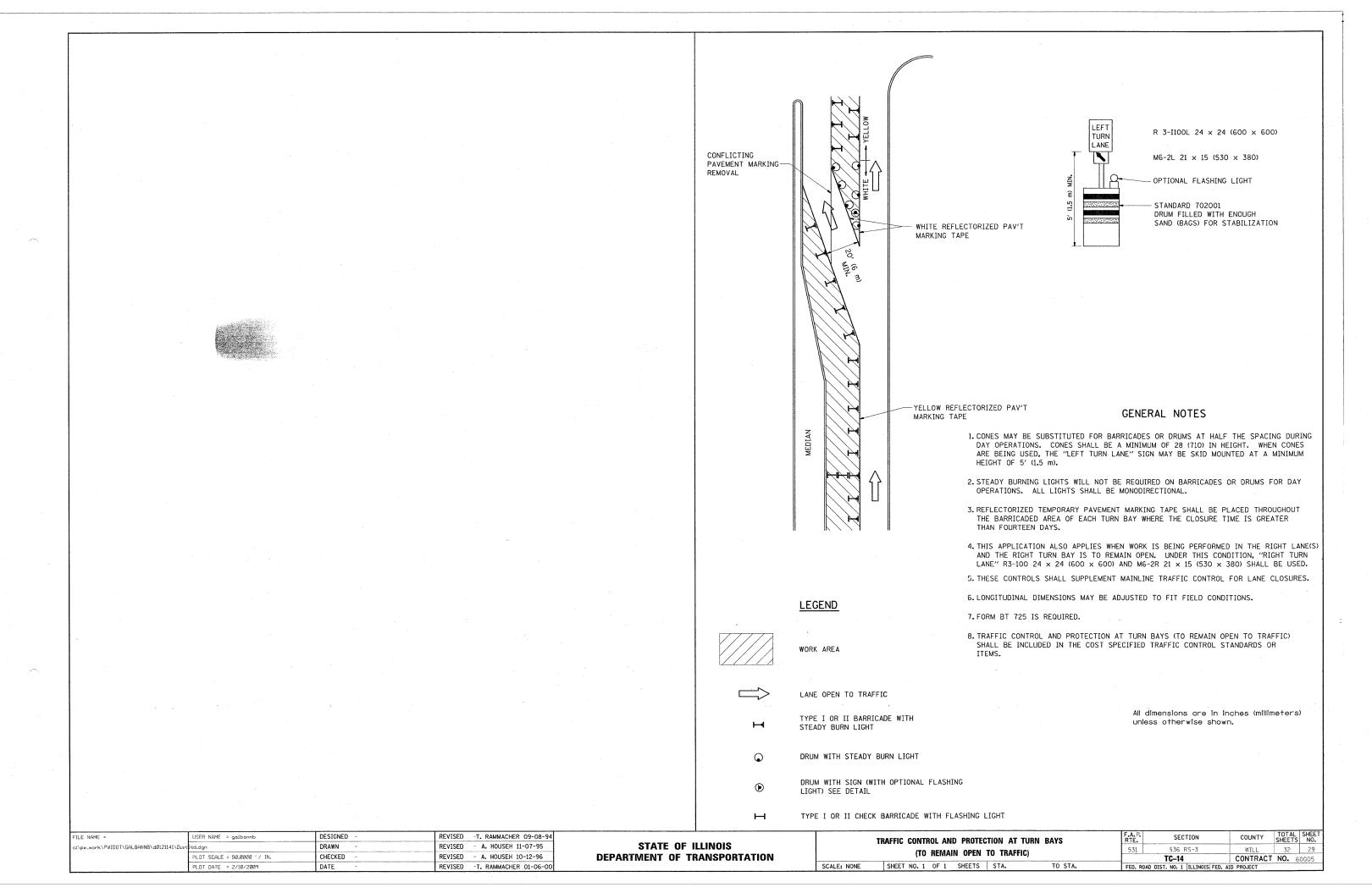
All dimensions are in inches (millimeters) unless otherwise shown.

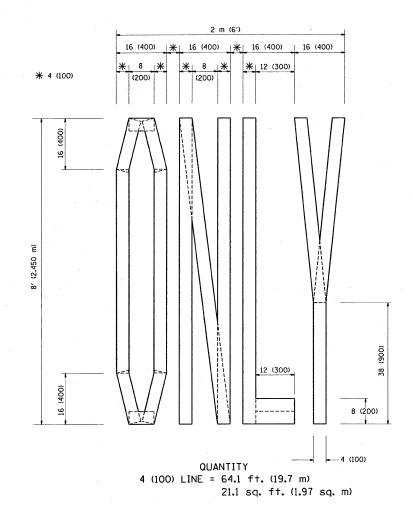
FILE NAME =	USER NAME = galbannb	DESIGNED	-	EVERS	REVISED	-т.	RAMMACHER 10-27-94
c:\pw_work\PWIDOT\GALBANNB\d0121141\Dist	itd.dgn	DRAWN	-		REVISED	-A.	HOUSEH 10-09-96
·	PLOT SCALE = 50.0000 '/ IN.	CHECKED			REVISED	- A.	HOUSEH 10-17-96
	PLOT DATE = 2/10/2009	DATE	- '	03-19-90	REVISED	- T.	RAMMACHER 01-06-00

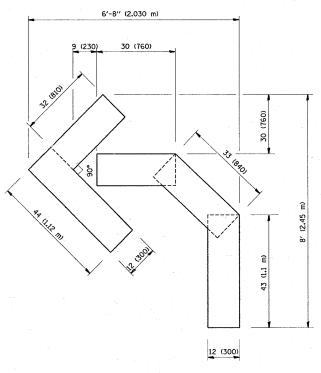
TYPICAL CROSSWALK MARKING

STATE OF ILLINOIS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DEFARIMENT OF INAMOPORTATION

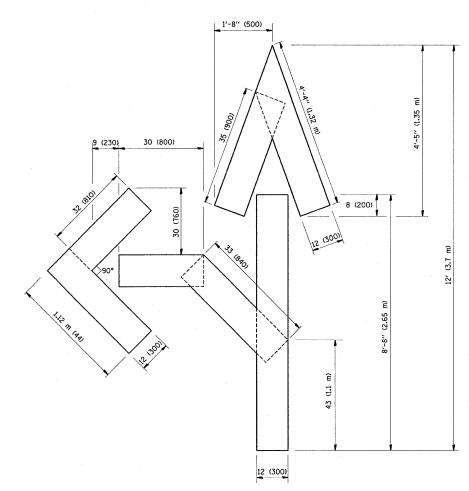
	DISTRICT ONE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TYPICAL PAVEMENT MARKINGS	531	536 RS-3	WILL	32	28
	TITIOAL PAYLININI MARRINGS		TC-13	CONTRACT	<b>NO.</b> 6	0G05
ĺ	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. I	ROAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		







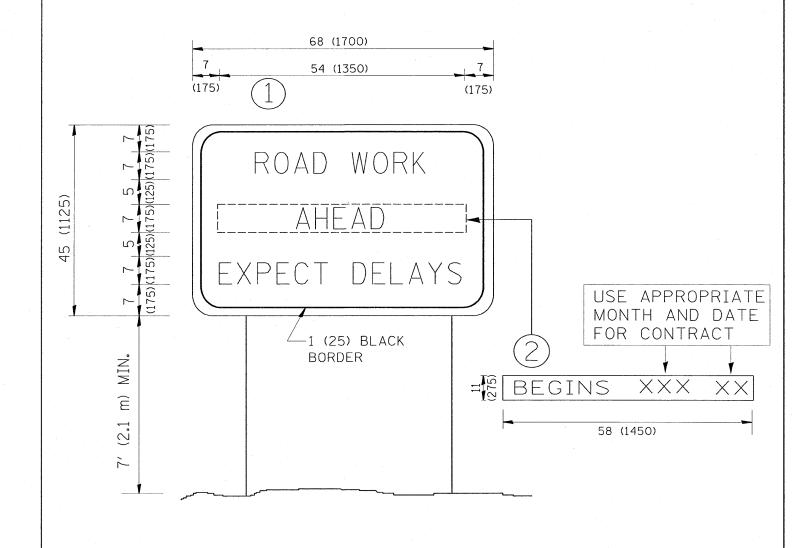
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



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 = galbannb	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.P.	SECTION	COUNTY TOTAL SHEET
c:\pw_work\PWIDOT\GALBANNB\dØI21141\Dist	Std.dgn	DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS		531	536 RS-3	WILL 32 30
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	FOR TRAFFIC STAGING		TC-16	CONTRACT NO. 60G05
	PLOT DATE = 2/10/2009	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 F	ED. 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.

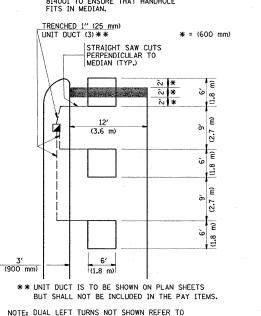
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-	c:\pw_work\PWIDOT\GALBANNB\dØ121141\D19t	td.dgn	DRAWN -	REVISED -	R. MIRS 12-11-97	STATE OF ILLINOIS			531	536 RS-3	WILL	32 31
٠		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. F	RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN		TC-22	CONTRACT	NO. 60G05
	and the second s	PLOT DATE = 2/10/2009	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 PAVED OR NON-PAVED SHOULDER \*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

(PROTECTED / PERMITTED LEFT TURN PHASING).

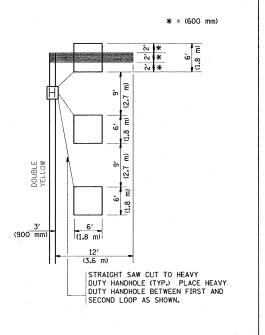
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
814001 TO ENSURE THAT HANDHOLE
FITS IN MEDIAN.



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

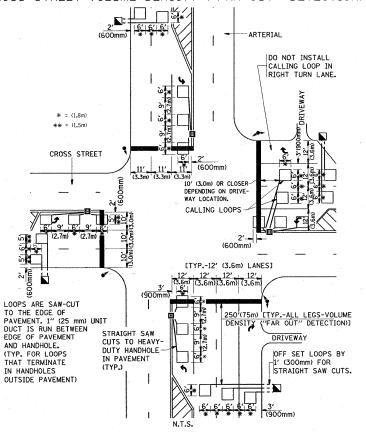


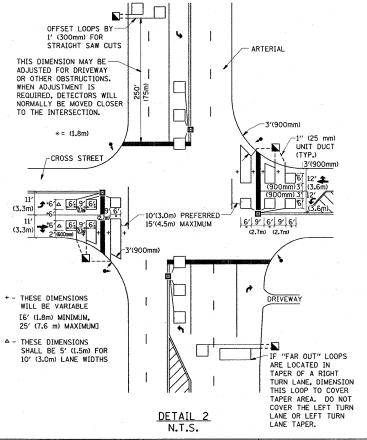
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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)





# 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. 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 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.

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DETAIL 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION

DETAILS FOR ROADWAY RESURFACING

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