

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. ATE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	ILLINOIS	17*	1
CONTRACT NO. 78947				
* 17 + 8 = 25 TOTAL SHEETS				
D-99-041-22				

FOR INDEX OF SHEETS, SEE SHEET NO. 3

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4

**PROPOSED
HIGHWAY PLANS**
VARIOUS ROUTES
SECTION D9 RAILROAD SIGNAL FY22-1
PROJECT
TRAFFIC SIGNAL IMPROVEMENT
VARIOUS COUNTIES

C-99-054-22



P.B.F.

3-23-2022

P. BRIEN FUNK II
EXPIRES: 11-30-2023

DATE

iteris

ITERIS, INC.
319 W STATE STREET, SUITE 200
GENEVA, IL 60134

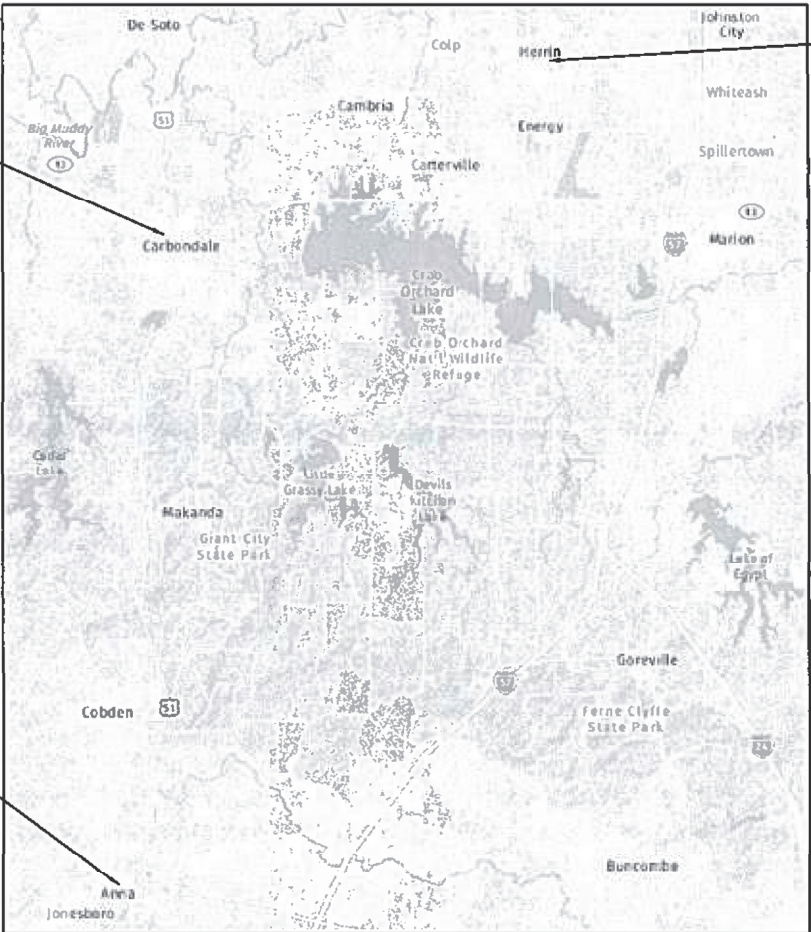
IL DESIGN FIRM NO: 184007145-0002

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER SUSAN POE

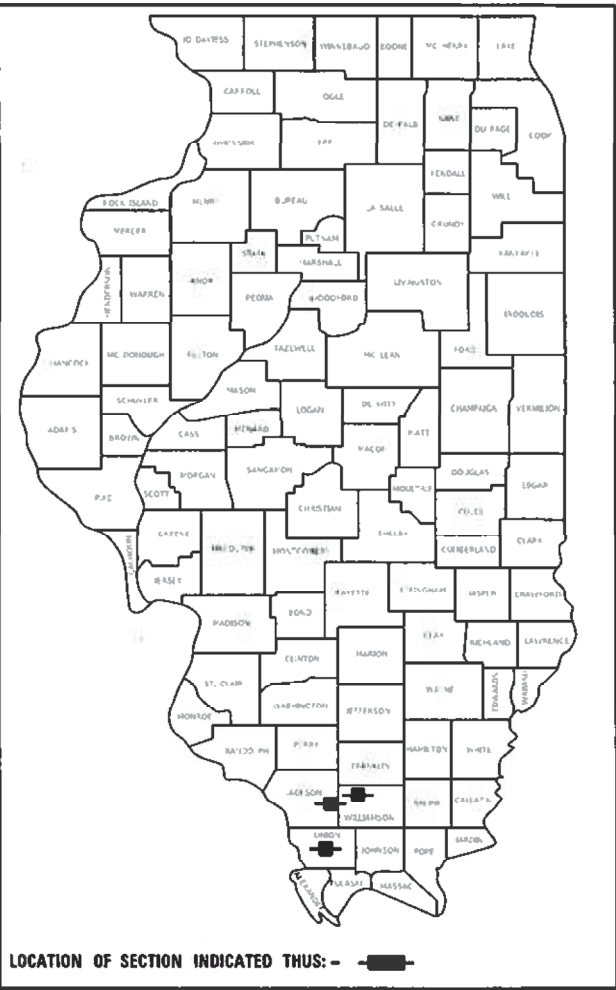
CONTRACT NO. 78947

**PROJECT LOCATION
CARBONDALE**
-US 51 NB AND OAK ST
-US 51 NB AND IL 13 WB
-IL 13 EB AND WASHINGTON ST
-US 51 NB AND COLLEGE ST
-US 51 AND GRAND AV



**PROJECT LOCATION
ANNA**
-IL 146 AND DAVIE ST

**PROJECT LOCATION
HERRIN**
-IL 148 AND CHERRY ST



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 23 20 22
Stephen M. Javala
REGION FIVE ENGINEER
May 13, 2022 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT
May 13, 2022 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

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- 3 LOCATION MAP, INDEX OF SHEETS, HIGHWAY STANDARDS
- 4 SUMMARY OF QUANTITIES
- 5-16 TRAFFIC SIGNAL MODIFICATION PLANS
- 17 GROUND MOUNT SERVICE DETAIL
- 17A-17G PAVEMENT MARKING AND SIGNING PLANS
- 17H PAVEMENT MARKING DETAILS

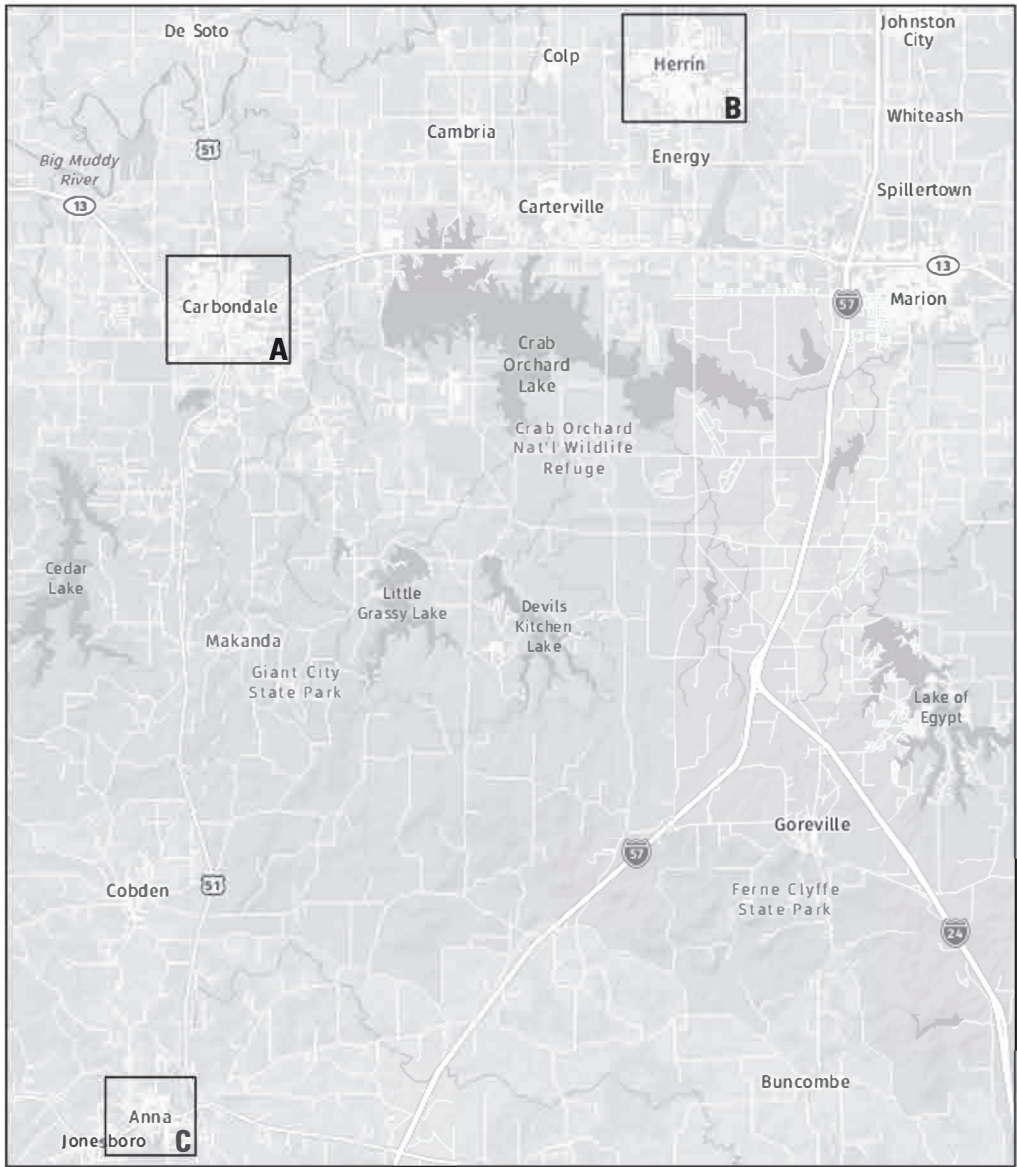
IDOT HIGHWAY STANDARDS

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-08 TRAFFIC CONTROL DEVICES
- 878001-11 CONCRETE FOUNDATION DETAILS
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
- 862001-01 UNINTERRUPTABLE POWER SUPPLY

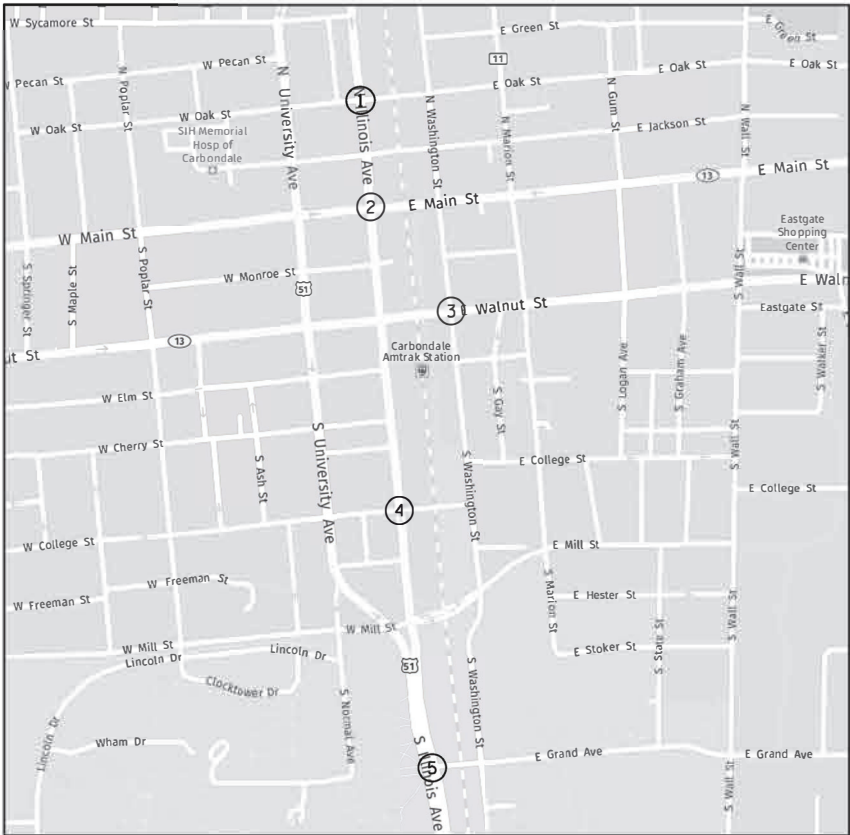
SUMMARY OF LOCATIONS

NO.	SHEET	INTERSECTION/INTERCONNECT
1	5	US ROUTE 51 NB (ILLINOIS AVENUE) & OAK STREET
2	7	US ROUTE 51 NB (ILLINOIS AVENUE) & IL ROUTE 13 WB (MAIN STREET)
3	9	IL ROUTE 13 EB (WALNUT STREET) & WASHINGTON STREET
4	11	US ROUTE 51 NB (ILLINOIS AVENUE) & COLLEGE STREET
5	13	US ROUTE 51 (ILLINOIS AVENUE) & GRAND AVENUE
6	15	IL ROUTE 148 (PARK AVENUE) & CHERRY STREET
7	16	IL ROUTE 146 (MAIN STREET) & DAVIE STREET

LOCATION MAP



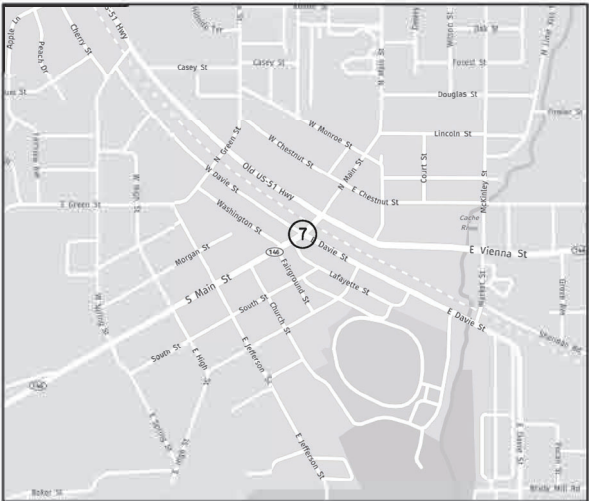
A



B



C



REVISED 6-2-2022

REV. - MS

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USER NAME = \$USERS	DESIGNED - BF	REVISED -
DRAWN - BF	REVISED -	
PLOT SCALE = \$SCALES	CHECKED - ASG	REVISED -
PLOT DATE = \$DATES	DATE - 3/23/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS, LOCATION MAP

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	3
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

				COUNTY :	JACKSON		WILLIAMSON		UNION	
				ROUTE :	VARIOUS		FAP 726 (IL 148)		FAP 885 (IL 146)	
				FUNDING :	100% STATE		100% STATE		100% STATE	
				LOCATION :	URBAN		URBAN		URBAN	
				STATEWIDE RR FUNDS		D9 FUNDS		STATEWIDE RR FUNDS		STATEWIDE RR FUNDS
CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY							
				0021	0021	0021	0021			
67100100	MOBILIZATION	L SUM	1	0.7		0.15	0.15			
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.6		0.2	0.2			
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.8		0.2				
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.7		0.15	0.15			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.7		0.15	0.15			
* 72000100	SIGN PANEL - TYPE 1	SQ FT	149		109	20 △	20 △		△1	
80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	5		5					
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	240		240				△1	
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	265		265					
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1432		698	222 △	512 △		△1	
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	2			1	1			
* 78008240	POLYUREA PAVEMENT MARKING TYPE I - LINE 8"	FOOT	106		32	31 △	43 △		△1	
87301815	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	350		350					
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	174		174				△1	
87900100	DRILL EXISTING FOUNDATION	EACH	4		4					
85700310	RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	7	5		1	1		△1	
88500100	INDUCTIVE LOOP DETECTOR	EACH	34	24		4	6			
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	5						
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	7	5		1	1			
X1400168	RAILROAD, FULL ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	7	5		1	1		△1	
X1400214	SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	7	5		1	1			
X1700066	POTHOLING	EACH	6		6					
X7340100	CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	2.5		2.5					
X8100105	CONDUIT SPLICE	EACH	2		2					
X0328018	RAILROAD TRAFFIC SIGNAL CABINET TRAINING	L SUM	1		1					

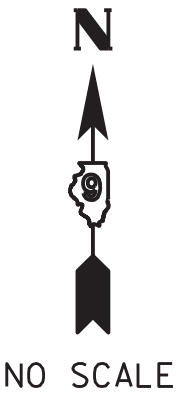
* SPECIALTY ITEM
△ D9 FUNDS

$$\wedge_1$$

$$\triangle 1$$
 \triangle \triangle

1 REVISED 6-2-2022

REV. - MS



TRAFFIC SIGNAL LEGEND

PROP. TRAFFIC SIGNAL CONTROLLER

PROP. GROUND MOUNT SERVICE

EX. VEHICLE DETECTOR, INDUCTION LOOP

EX. TERMINAL BLOCK

EX. NO. OF CONDUCTORS IN CABLE

EX. 12" SIGNAL HEAD

EX. PEDESTRIAN PUSH BUTTON

EX. PEDESTRIAN SIGNAL HEAD

EXISTING CONTROLLER SEQUENCE

LEGEND:

PROTECTED PHASE

PROTECTED/PERMITTED PHASE

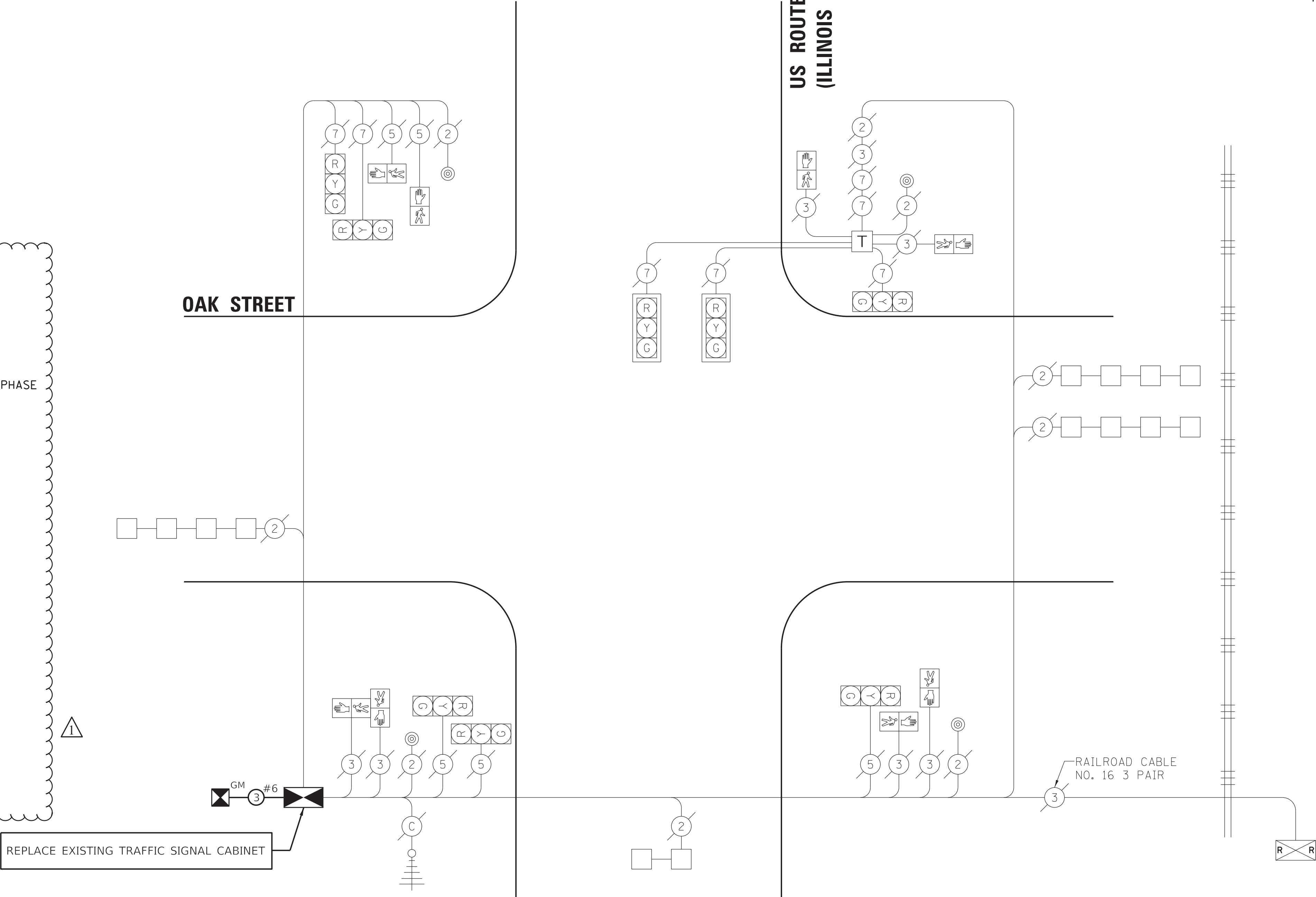
PEDESTRIAN PHASE

OVERLAP

RAILROAD PREEMPTION SEQUENCE:

TRACK CLEAR PHASE: 4
DWELL PHASE: 6
EXIT PHASE: 4+8

UPON A DEMAND FOR RR PREEMPTION, ANY ACTIVE NON-TRACK CLEAR PHASES SHALL TERMINATE. PEDESTRIAN CLEARANCE SHALL BE LIMITED TO THROUGH THE ASSOCIATED VEHICULAR YELLOW CLEARANCE INTERVAL ONLY.



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	35
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	60
DRILL EXISTING FOUNDATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	4
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	1
POTHOLING	EACH	1
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5

MODEL: SH06LNAME\$
FILE NAME: ST115



USER NAME = \$USERS	DESIGNED - KSB	REVISED - BF 5/27/22
PLOT SCALE = \$SCALES	DRAWN - KSB	REVISED -
PLOT DATE = \$DATES	CHECKED - BF	REVISED -
	DATE - 3/23/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
US ROUTE 51 (ILLINOIS AVENUE) AND OAK STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	6
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

△ REVISED 6-2-2022

TRAFFIC SIGNAL LEGEND

PROP. TRAFFIC SIGNAL CONTROLLER

PROP. GROUND MOUNT SERVICE

EX. FIBER OPTIC CABLE

EX. VEHICLE DETECTOR, INDUCTION LOOP

EX. TERMINAL BLOCK

EX. NO. OF CONDUCTORS IN CABLE

EX. 12" SIGNAL HEAD

EX. LUMINAIRE

EX. PEDESTRIAN SIGNAL HEAD

EXISTING CONTROLLER SEQUENCE

LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMITTED PHASE
- PEDESTRIAN PHASE
- OVERLAP

PHASE 6
SHALL BE ON RECALL

RAILROAD PREEMPTION SEQUENCE:

TRACK CLEAR PHASE: 6
DWELL PHASE: 8
EXIT PHASE: 6

UPON A DEMAND FOR RR PREEMPTION, ANY ACTIVE NON-TRACK CLEAR PHASES SHALL TERMINATE. PEDESTRIAN CLEARANCE SHALL BE LIMITED TO THROUGH THE ASSOCIATED VEHICULAR YELLOW CLEARANCE INTERVAL ONLY.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	36
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	41
INDUCTIVE LOOP DETECTOR	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	1
POTHOLING	EACH	1
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5
CONDUIT SPLICE	EACH	1

CABLE PLAN
(NOT TO SCALE)

MODEL: SH06ELNAMES
FILE NAME: ST115

USER NAME = \$USERS	DESIGNED - KSB	REVISED - BF 5/27/22
	DRAWN - KSB	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - BF	REVISED -
PLOT DATE = \$DATES	DATE - 3/23/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION









TRAFFIC SIGNAL CABLE PLAN
US ROUTE 51 (ILLINOIS AVENUE) AND IL ROUTE 13 (MAIN STREET)

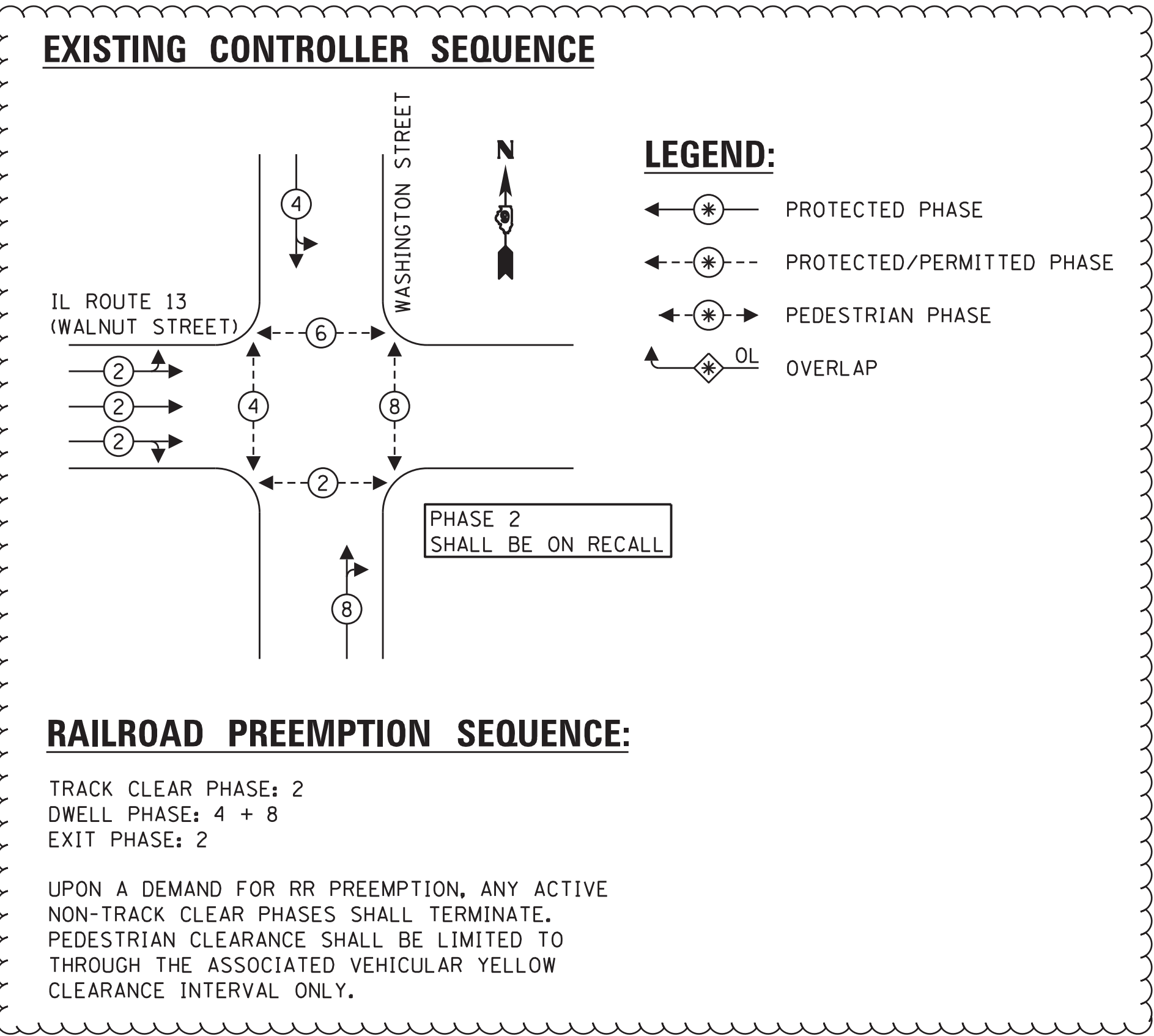
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	8
CONTRACT NO. 78947				
ILLINOIS		FED. AID PROJECT		

REVISED 6-2-2022

TRAFFIC SIGNAL LEGEND

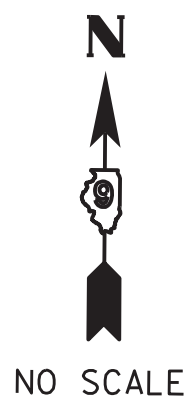
	PROP. TRAFFIC SIGNAL CONTROLLER
	PROP. GROUND MOUNT SERVICE
	EX. FIBER OPTIC CABLE
	EX. VEHICLE DETECTOR, INDUCTION LOOP
	EX. NO. OF CONDUCTORS IN CABLE
	EX. 12" SIGNAL HEAD
	EX. PEDESTRIAN PUSH BUTTON
	EX. PEDESTRIAN SIGNAL HEAD

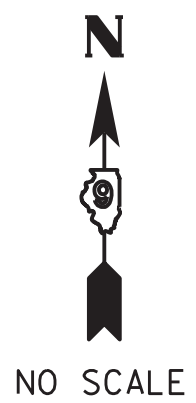


TRACK CLEAR PHASE: 2
DWELL PHASE: 4 + 8
EXIT PHASE: 2

UPON A DEMAND FOR RR PREEMPTION, ANY ACTIVE
NON-TRACK CLEAR PHASES SHALL TERMINATE.
PEDESTRIAN CLEARANCE SHALL BE LIMITED TO
THROUGH THE ASSOCIATED VEHICULAR YELLOW
CLEARANCE INTERVAL ONLY.

ITEM DESCRIPTION	UNIT	QTY.
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	80
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	106
DRILL EXISTING FOUNDATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	1
POTHOLING	EACH	2
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5





TRAFFIC SIGNAL LEGEND

PROP. TRAFFIC SIGNAL CONTROLLER

PROP. GROUND MOUNT SERVICE

EX. VEHICLE DETECTOR, INDUCTION LOOP

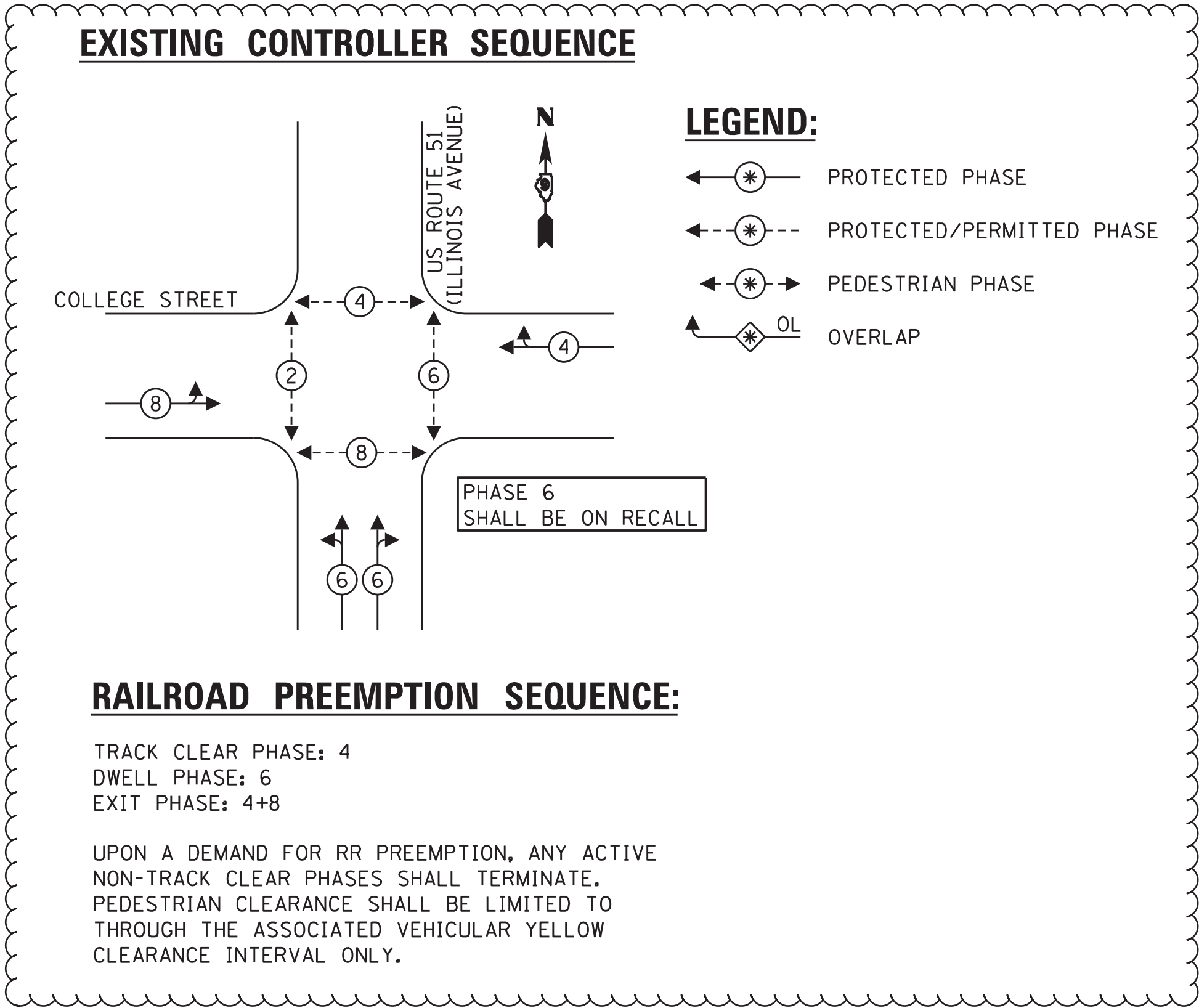
EX. TERMINAL BLOCK

EX. NO. OF CONDUCTORS IN CABLE

EX. 12" SIGNAL HEAD

EX. PEDESTRIAN PUSH BUTTON

EX. PEDESTRIAN SIGNAL HEAD



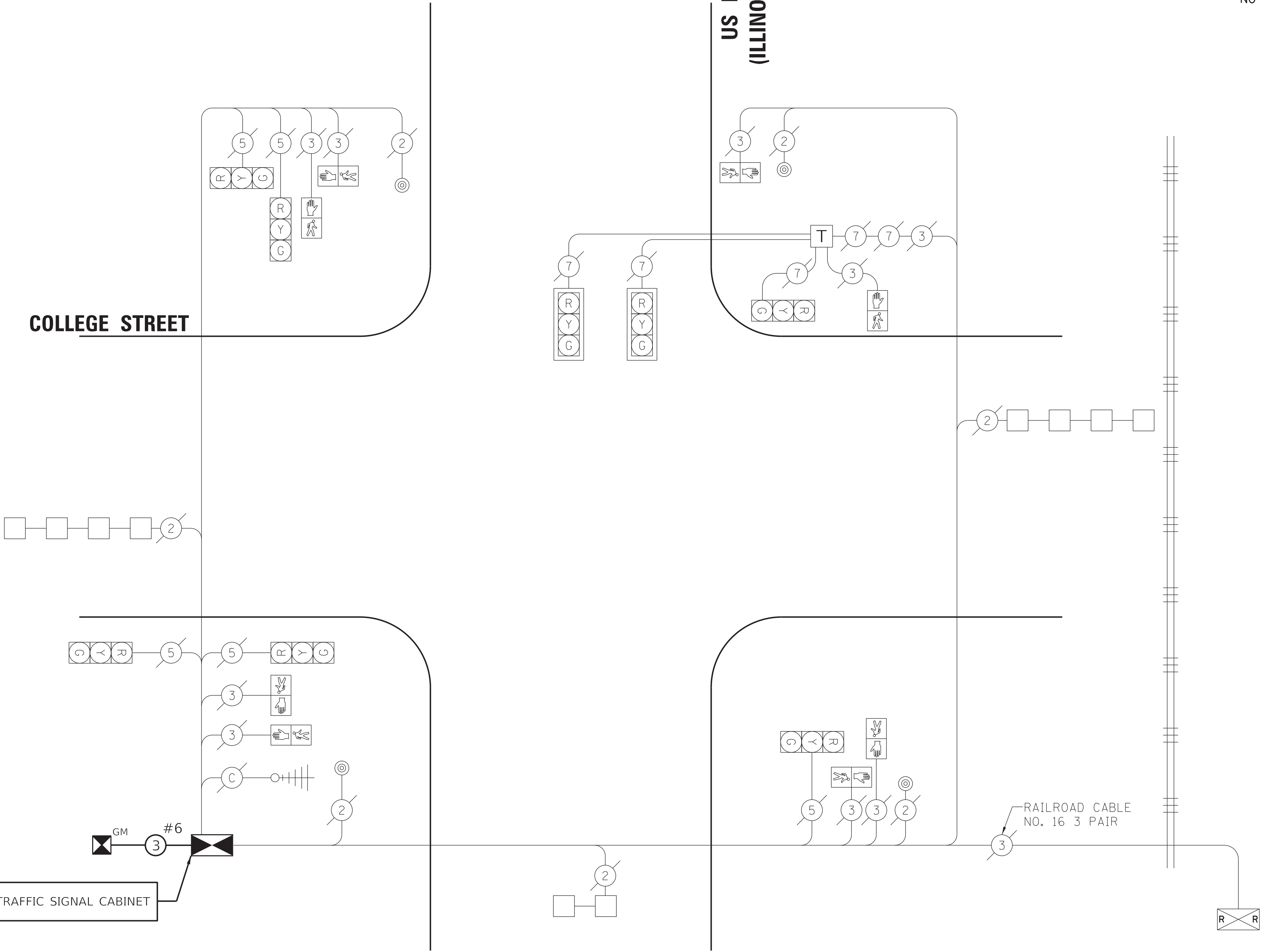
RAILROAD PREEMPTION SEQUENCE:

TRACK CLEAR PHASE: 4
DWELL PHASE: 6
EXIT PHASE: 4+8

UPON A DEMAND FOR RR PREEMPTION, ANY ACTIVE
NON-TRACK CLEAR PHASES SHALL TERMINATE.
PEDESTRIAN CLEARANCE SHALL BE LIMITED TO
THROUGH THE ASSOCIATED VEHICULAR YELLOW
CLEARANCE INTERVAL ONLY.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	66
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	92
DRILL EXISTING FOUNDATION	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	3
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER, SPECIAL	EACH	1
POTHOLING	EACH	1
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5



REVISED 6-2-2022

MODEL: SH06ELNAMES
FILE NAME: STYLES



USER NAME = \$USERS	DESIGNED - KSB	REVISED - BF 5/27/22
PLOT SCALE = \$SCALES	DRAWN - KSB	REVISED -
PLOT DATE = \$DATES	CHECKED - BF	REVISED -
	DATE - 3/23/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
US ROUTE 51 (ILLINOIS AVENUE) AND COLLEGE STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	12
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

PROP. TRAFFIC SIGNAL CONTROLLER

PROP. GROUND MOUNT SERVICE

EX. VEHICLE DETECTOR, INDUCTION LOOP

EX. NO. OF CONDUCTORS IN CABLE

EX. 12" SIGNAL HEAD

EX. TERMINAL BLOCK

EX. LUMINAIRE

EX. PEDESTRIAN PUSH BUTTON

EX. PEDESTRIAN SIGNAL HEAD

EXISTING CONTROLLER SEQUENCE

LEGEND:

PROTECTED PHASE

PROTECTED/PERMITTED PHASE

PEDESTRIAN PHASE

OVERLAP

RIGHT TURN OVERLAP
PHASE DESIGNATION:

OVERLAP
LETTER

=

PROTECTED
PHASE

B

=

5

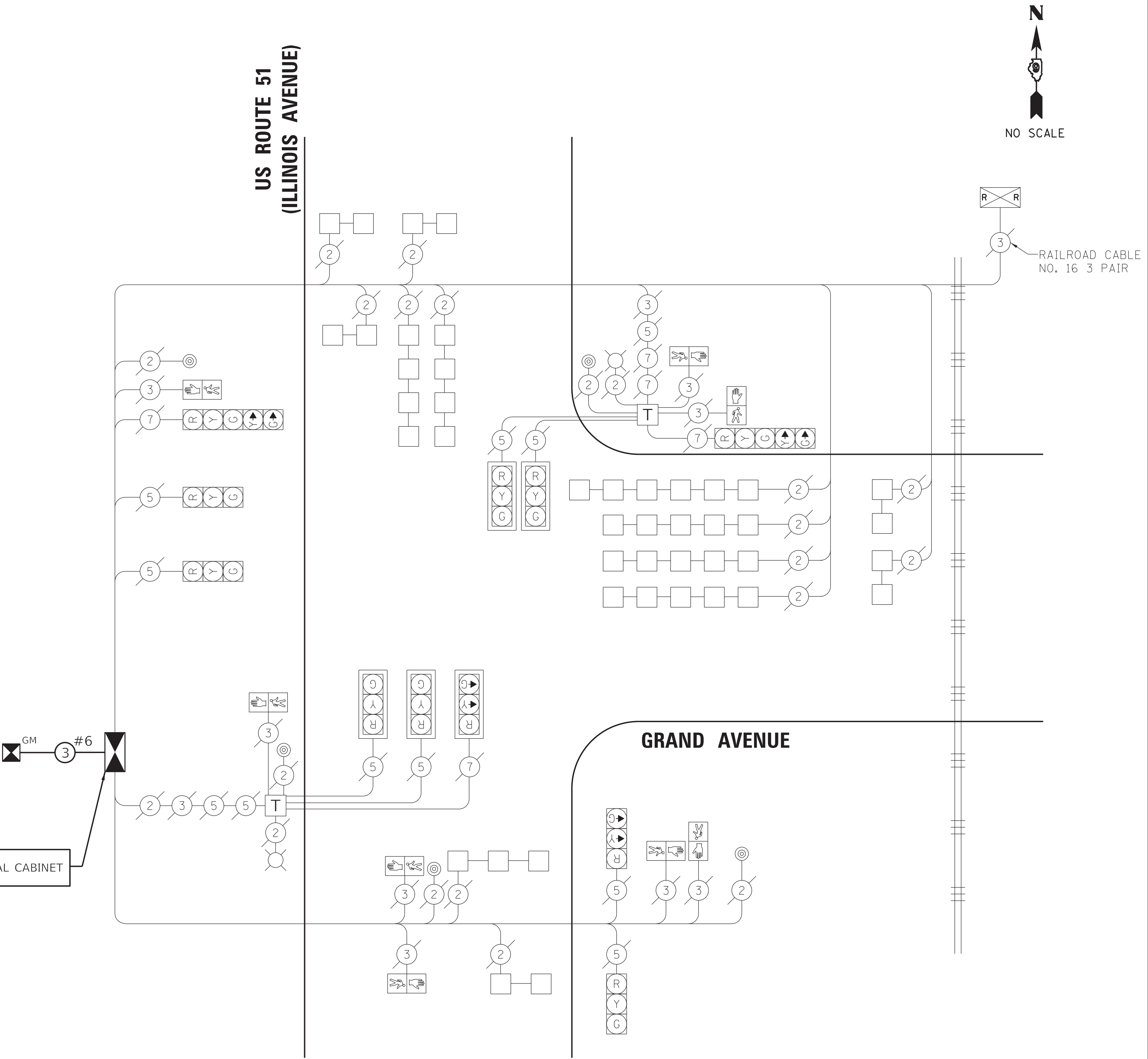
PHASES 2+6
SHALL BE ON RECALL

RAILROAD PREEMPTION SEQUENCE:

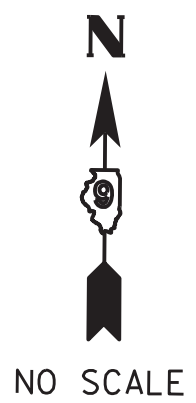
TRACK CLEAR PHASE: 4
DWELL PHASE: 2 + 6
EXIT PHASE: 4

UPON A DEMAND FOR RR PREEMPTION, ANY ACTIVE
NON-TRACK CLEAR PHASES SHALL TERMINATE.
PEDESTRIAN CLEARANCE SHALL BE LIMITED TO
THROUGH THE ASSOCIATED VEHICULAR YELLOW
CLEARANCE INTERVAL ONLY.

SCHEDULE OF QUANTITIES			
ITEM DESCRIPTION	UNIT	QTY.	
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1	
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	48	
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	51	
DRILL EXISTING FOUNDATION	EACH	1	
INDUCTIVE LOOP DETECTOR	EACH	13	
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1	
SPARE RAILROAD, FULL ACTUATED CONTROLLER , SPECIAL	EACH	1	
POTHOLING	EACH	1	
CONCRETE FOUNDATIONS, GROUND MOUNT	CU YD	0.5	
CONDUIT SPLICE	EACH	1	



CABLE PLAN
(NOT TO SCALE)



TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. GROUND MOUNT SERVICE
- EX. FIBER OPTIC CABLE
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
- EX. 12" SIGNAL HEAD
- EX. PEDESTRIAN PUSH BUTTON
- EX. PEDESTRIAN SIGNAL HEAD

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RETURNED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION. THIS WORK SHALL BE PAID FOR UNDER "REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- 1 EACH TRAFFIC SIGNAL CONTROLLER
- 4 EACH LOOP AMPLIFIER
- 1 EACH CONFLICT MONITOR UNIT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THIER OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

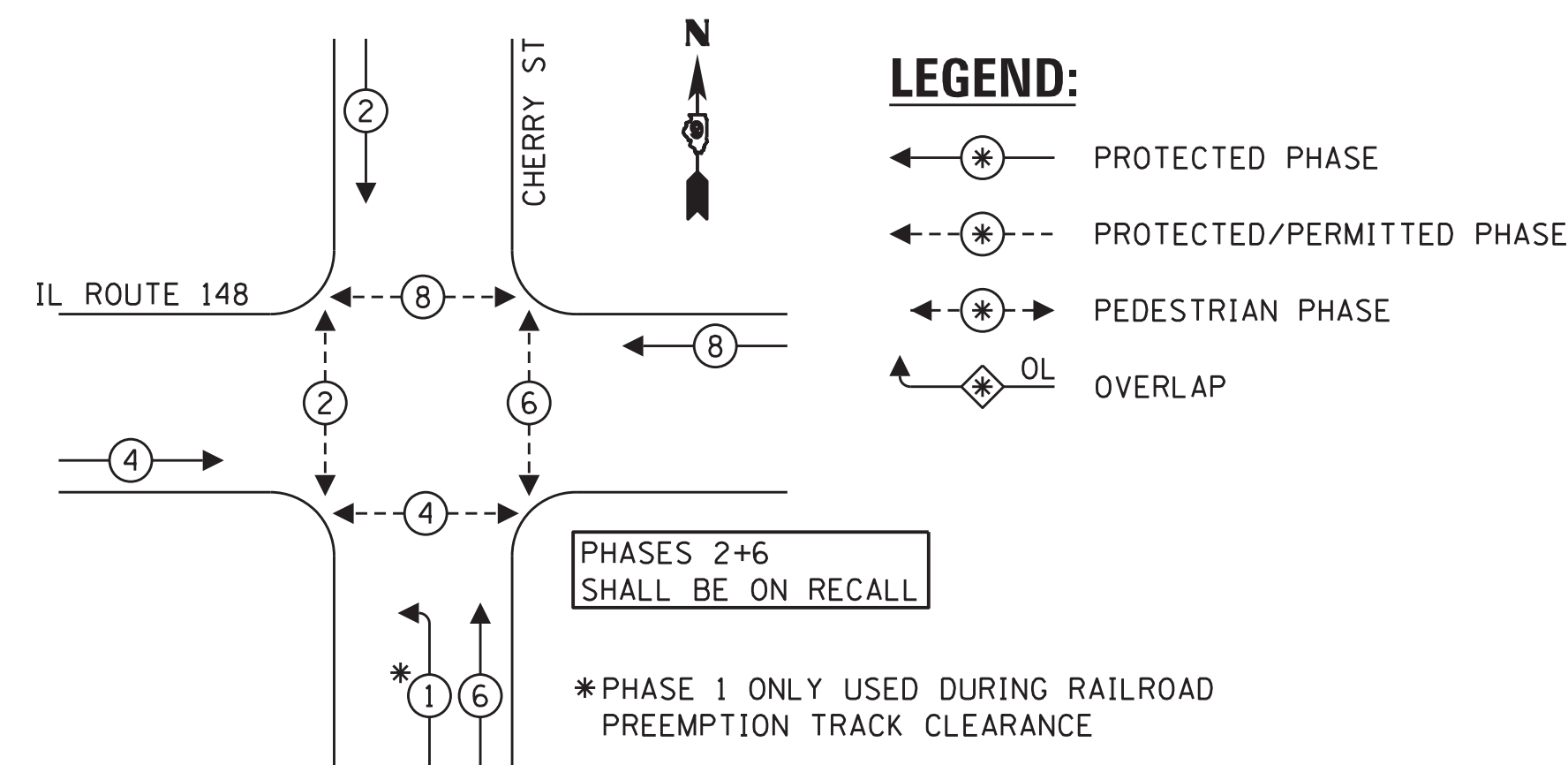
- 1 EACH TRAFFIC SIGNAL CABINET

RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CABINET. THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- 1 EACH WIRELESS RADIO

EXISTING CONTROLLER SEQUENCE



RAILROAD PREEMPTION SEQUENCE:

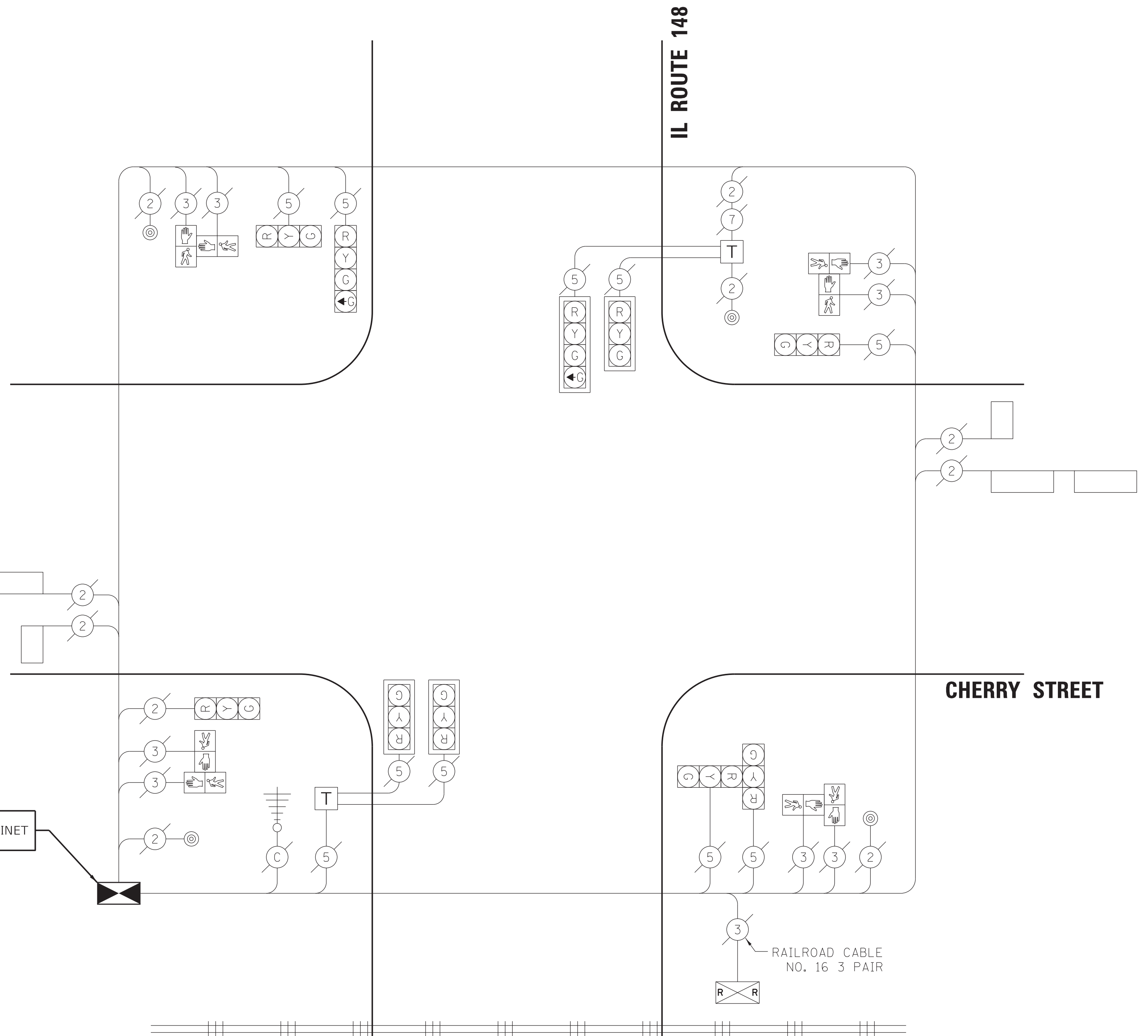
TRACK CLEAR PHASE: 1 + 6
DWELL PHASE: 4 + 8
EXIT PHASE: 2 + 6

UPON A DEMAND FOR RR PREEMPTION, ANY ACTIVE NON-TRACK CLEAR PHASES SHALL TERMINATE. PEDESTRIAN CLEARANCE SHALL BE LIMITED TO THROUGH THE ASSOCIATED VEHICULAR YELLOW CLEARANCE INTERVAL ONLY.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER, SPECIAL	EACH	1

REPLACE EXISTING TRAFFIC SIGNAL CABINET



CABLE PLAN
(NOT TO SCALE)

REVISD 6-2-2022

iteris

USER NAME = \$USERS	DESIGNED - KSB	REVISED - BF 5/27/22
	DRAWN - KSB	REVISED -
PLOT SCALE = \$SCALES	CHECKED - BF	REVISED -
PLOT DATE = \$DATES	DATE - 3/23/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN
IL ROUTE 148 AND CHERRY STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	15
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

- PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. GROUND MOUNT SERVICE
- EX. FIBER OPTIC CABLE
- EX. VEHICLE DETECTOR, INDUCTION LOOP
- EX. NO. OF CONDUCTORS IN CABLE
-

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RETURNED TO THE ILLINOIS DEPARTMENT OF TRANSPORTATION. THIS WORK SHALL BE PAID FOR UNDER "REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- 1 EACH TRAFFIC SIGNAL CONTROLLER
- 6 EACH LOOP AMPLIFIER
- 1 EACH CONFLICT MONITOR UNIT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

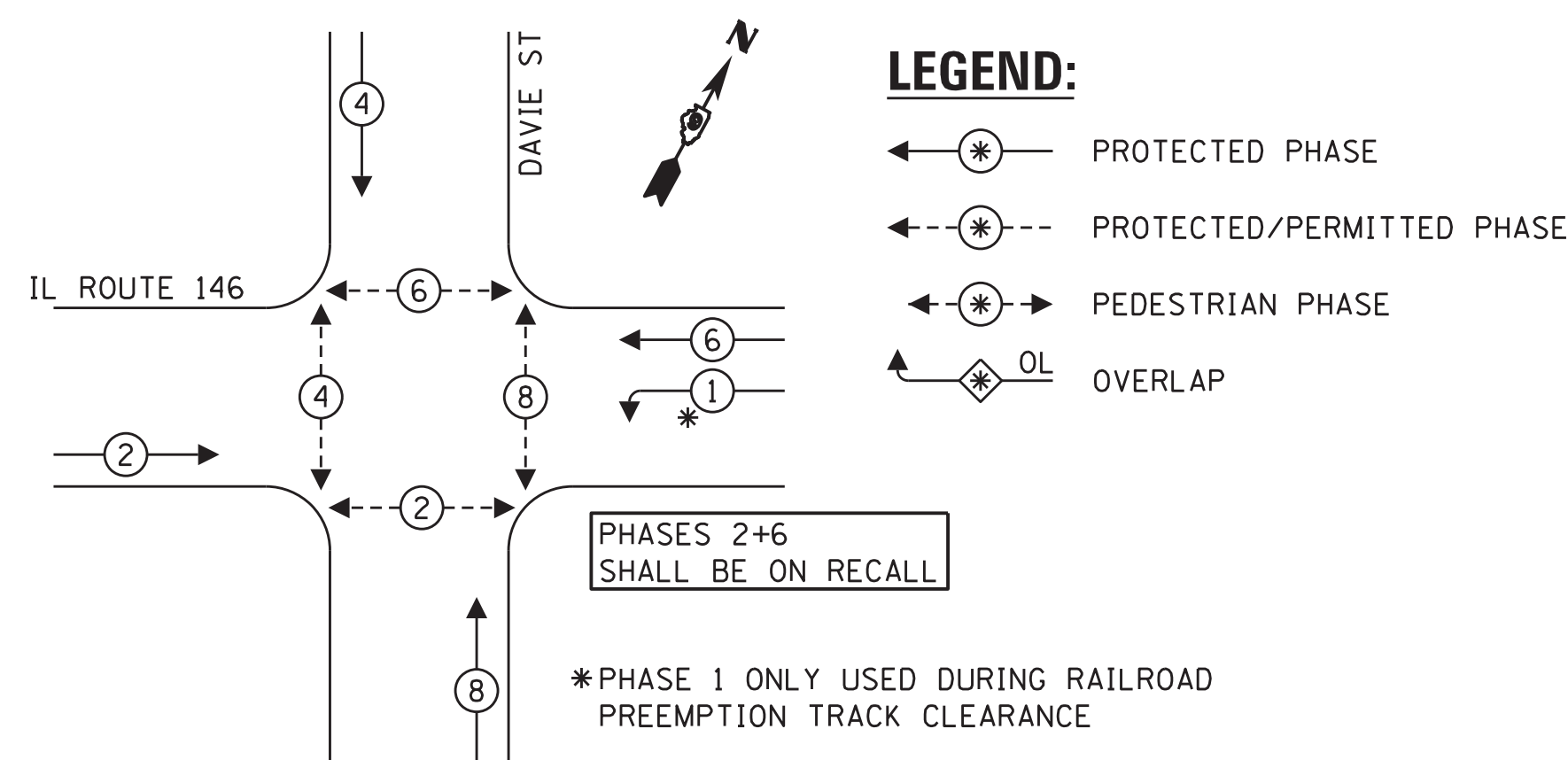
- 1 EACH TRAFFIC SIGNAL CABINET

RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED TRAFFIC SIGNAL CABINET. THIS WORK SHALL BE PAID FOR UNDER "RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT".

- 1 EACH WIRELESS RADIO

EXISTING CONTROLLER SEQUENCE



RAILROAD PREEMPTION SEQUENCE:

TRACK CLEAR PHASE: 1 + 6
DWELL PHASE: 4 + 8
EXIT PHASE: 2 + 6

UPON A DEMAND FOR RR PREEMPTION, BLANK-OUT SIGNS SHALL ACTIVATE AND ANY ACTIVE NON-TRACK CLEAR PHASES SHALL TERMINATE. PEDESTRIAN CLEARANCE SHALL BE LIMITED TO THROUGH THE ASSOCIATED VEHICULAR YELLOW CLEARANCE INTERVAL ONLY.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QTY.
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RAILROAD, FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1
SPARE RAILROAD, FULL ACTUATED CONTROLLER, SPECIAL	EACH	1

IL ROUTE 146

REPLACE EXISTING TRAFFIC SIGNAL CABINET

DAVIE STREET

CABLE PLAN (NOT TO SCALE)

- NOTES:**
1. RR SYMBOL SHALL BE IN ACCORDANCE WITH MUTCD FIGURE 8B-7 (GRADE CROSSING PAVEMENT MARKINGS).
 2. W10-1 SIGNS AND CENTER OF RR SYMBOL SHOULD BE PLACED AS CLOSE TO 100 FT BEFORE RR TRACKS AS POSSIBLE.
 3. THE LOCATION OF THE RR STOP LINE AND CROSS HATCHING SHALL BE IN ACCORDANCE WITH IDOT'S "TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS" (SEE SHEET 25).

US ROUTE 51
(ILLINOIS AV)

OAK ST

POLYUREA PVMT MARKING
RR CROSSING DIAGONALS @ 45° 8' C-C
LINE 6" (SOLID WHITE)

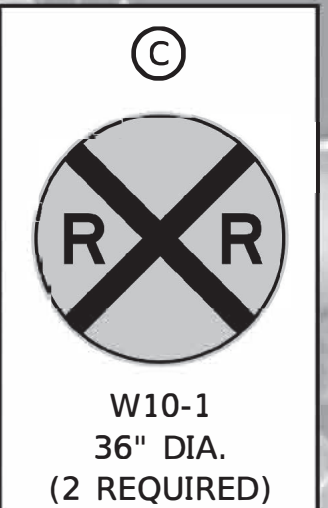
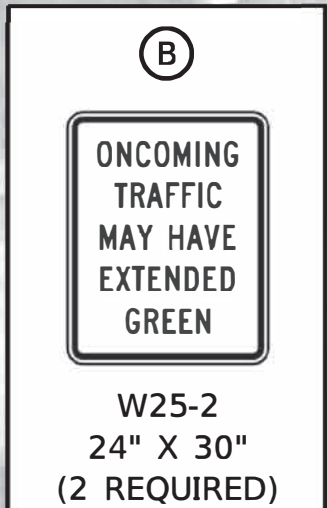
POLYUREA PVMT MARKING
LINE 8" (SOLID WHITE)
SEE NOTE 3

POLYUREA PVMT MARKING
LINE 24" (SOLID WHITE)
SEE NOTE 3

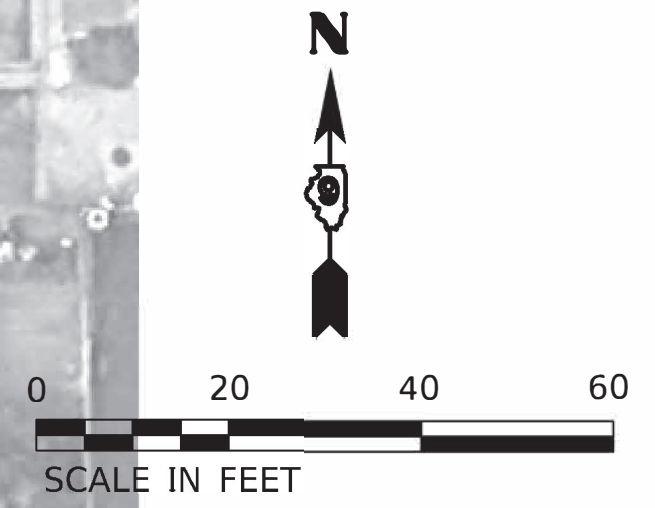
POLYUREA PVMT MARKING
RR SYMBOL
(SOLID WHITE)

POLYUREA PVMT MARKING
LINE 24" (SOLID WHITE)
SEE NOTE 3

POLYUREA PVMT MARKING
RR SYMBOL
(SOLID WHITE)



1 SHEET ADDED 6-2-2022



iteris

USER NAME = \$USER\$	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - ASG	REVISED -
PLOT DATE = \$DATE\$	DATE - 5/26/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
US ROUTE 51 (ILLINOIS AV) AND OAK STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17A
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

NOTES:

- 1. THE RR CROSS HATCHING SHALL BE IN ACCORDANCE WITH IDOT'S "TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS" (SEE SHEET 25).
- 2. W10-1 SIGNS SHOULD BE PLACED AS CLOSE AS POSSIBLE TO 100 FT BEFORE RR TRACKS.

US ROUTE 51
(ILLINOIS AV)

IL ROUTE 13
(MAIN ST)

POLYUREA PVMT MARKING
RR CROSSING DIAGONALS @ 45° 8' C-C
LINE 6" (SOLID WHITE)

A

DO NOT
STOP
ON
TRACKS

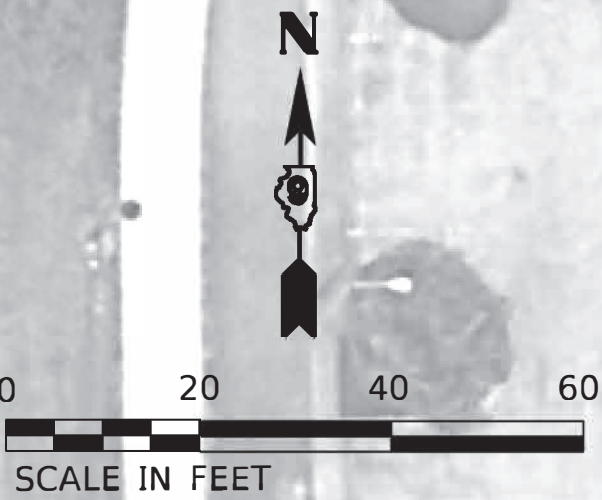
R8-8
24" X 30"
(2 REQUIRED)

B



W10-1
36" DIA.
(2 REQUIRED)

1 SHEET ADDED 6-2-2022



iteris

USER NAME = \$USER\$	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - ASG	REVISED -
PLOT DATE = \$DATE\$	DATE - 5/26/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
US ROUTE 51 (ILLINOIS AVENUE) AND IL ROUTE 13 (MAIN STREET)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17B
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

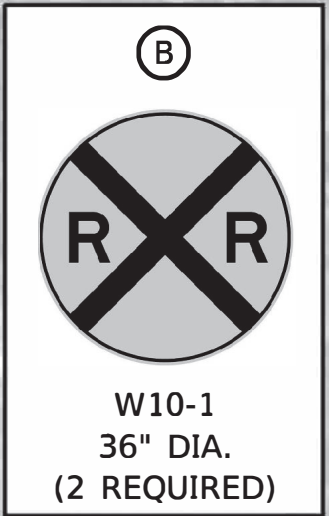
NOTES:

1. THE RR CROSS HATCHING SHALL BE IN ACCORDANCE WITH IDOT'S "TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS" (SEE SHEET 25).
2. W10-1 SIGNS SHOULD BE PLACED AS CLOSE AS POSSIBLE TO 100 FT BEFORE RR TRACKS.

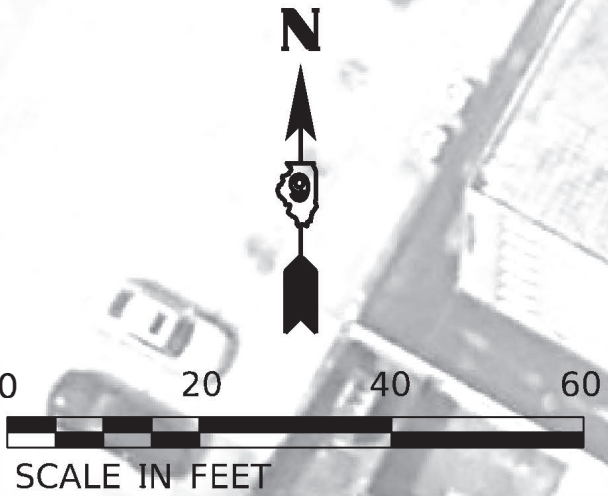
POLYUREA PVMT MARKING
RR CROSSING DIAGONALS @ 45° 8' C-C
LINE 6" (SOLID WHITE)

WASHINGTON ST

IL ROUTE 13
(WALNUT ST)



△ SHEET ADDED 6-2-2022



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USER NAME = \$USERS	DESIGNED - BF
	DRAWN - BF
PLOT SCALE = \$SCALE\$	CHECKED - ASG
PLOT DATE = \$DATE\$	DATE - 5/26/22

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL ROUTE 13 (WALNUT STREET) AND WASHINGTON STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17C
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

NOTES:

- RR SYMBOL SHALL BE IN ACCORDANCE WITH MUTCD FIGURE 8B-7 (GRADE CROSSING PAVEMENT MARKINGS).
- W10-1 SIGNS AND CENTER OF RR SYMBOL SHOULD BE PLACED AS CLOSE TO 100 FT BEFORE RR TRACKS AS POSSIBLE.
- THE LOCATION OF THE RR STOP LINE AND CROSS HATCHING SHALL BE IN ACCORDANCE WITH IDOT'S "TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS" (SEE SHEET 25).

US ROUTE 51
(ILLINOIS AV)

COLLEGE ST

POLYUREA PVMT MARKING
RR CROSSING DIAGONALS @ 45° 8' C-C
LINE 6" (SOLID WHITE)

POLYUREA PVMT MARKING
LINE 8" (SOLID WHITE)
SEE NOTE 3

POLYUREA PVMT MARKING
LINE 24" (SOLID WHITE)
SEE NOTE 3

POLYUREA PVMT MARKING
RR SYMBOL
(SOLID WHITE)

POLYUREA PVMT MARKING
LINE 24" (SOLID WHITE)
SEE NOTE 3

POLYUREA PVMT MARKING
RR SYMBOL
(SOLID WHITE)

A

**DO NOT
STOP
ON
TRACKS**

R8-8
24" X 30"
(1 REQUIRED)

B

**ONCOMING
TRAFFIC
MAY HAVE
EXTENDED
GREEN**

W25-2
24" X 30"
(2 REQUIRED)

C

R X R

W10-1
36" DIA.
(2 REQUIRED)

1 SHEET ADDED 6-2-2022



iteris

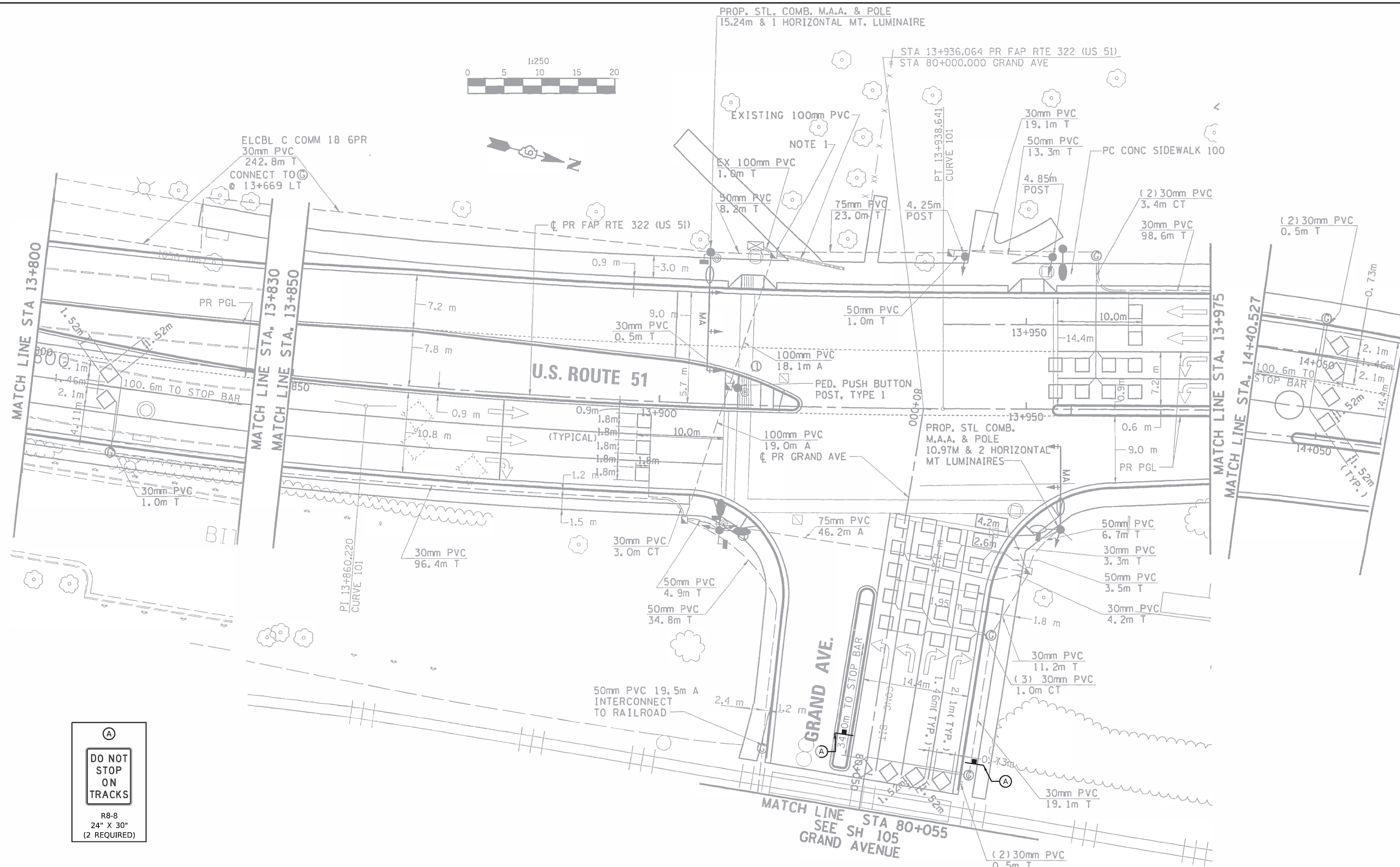
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PLOT DATE = \$DATES\$	DATE - 5/26/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
US ROUTE 51 (ILLINOIS AVENUE) AND COLLEGE STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17D
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				



(A)
**DO NOT
STOP
ON
TRACKS**
R8-8
24" X 30"
(2 REQUIRED)

MODEL: SH001LMMAMES
FILE NAME: ST01E15

iteris

USER NAME = \$USERS\$	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - ASG	REVISED -
PLOT DATE = \$DATES\$	DATE - 5/26/22	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING PLAN
US ROUTE 51 (ILLINOIS AVENUE) AND GRAND AVENUE**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17E
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

△ SHEET ADDED 6-2-2022

NOTES:

1. THE RR CROSS HATCHING SHALL BE IN ACCORDANCE WITH IDOT'S "TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS" (SEE SHEET 25).

CHERRY ST

IL ROUTE 148

POLYUREA PVMT MARKING
LINE 8" (SOLID WHITE)

POLYUREA PVMT MARKING
RR CROSSING DIAGONALS @ 45° 8' C-C
LINE 6" (SOLID WHITE)

Ⓐ
DO NOT
STOP
ON
TRACKS
R8-8
24" X 30"
(1 REQUIRED)

Ⓑ
ONCOMING
TRAFFIC
MAY HAVE
EXTENDED
GREEN
W25-2
24" X 30"
(2 REQUIRED)

⚠ SHEET ADDED 6-2-2022



iteris

USER NAME = \$USERS\$
PLOT SCALE = \$SCALE\$
PLOT DATE = \$DATES\$

DESIGNED - BF
DRAWN - BF
CHECKED - ASG
DATE - 5/26/22

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
IL ROUTE 148 AND CHERRY STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17F
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

NOTES:

1. THE RR CROSS HATCHING SHALL BE IN ACCORDANCE WITH IDOT'S "TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS" (SEE SHEET 25).

DAVE ST

IL ROUTE 146

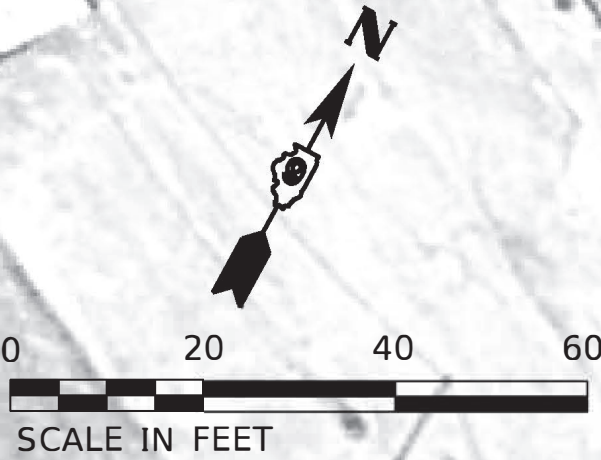
POLYUREA PVMT MARKING
LINE 8" (SOLID WHITE)

POLYUREA PVMT MARKING
RR CROSSING DIAGONALS @ 45° 8' C-C
LINE 6" (SOLID WHITE)

POLYUREA PVMT MARKING
LINE 8" (SOLID WHITE)

A
DO NOT
STOP
ON
TRACKS
R8-8
24" X 30"
(2 REQUIRED)

B
ONCOMING
TRAFFIC
MAY HAVE
EXTENDED
GREEN
W25-2
24" X 30"
(2 REQUIRED)



1 SHEET ADDED 6-2-2022

iteris

USER NAME = \$USERS	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - ASG	REVISED -
PLOT DATE = \$DATES	DATE - 5/26/22	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

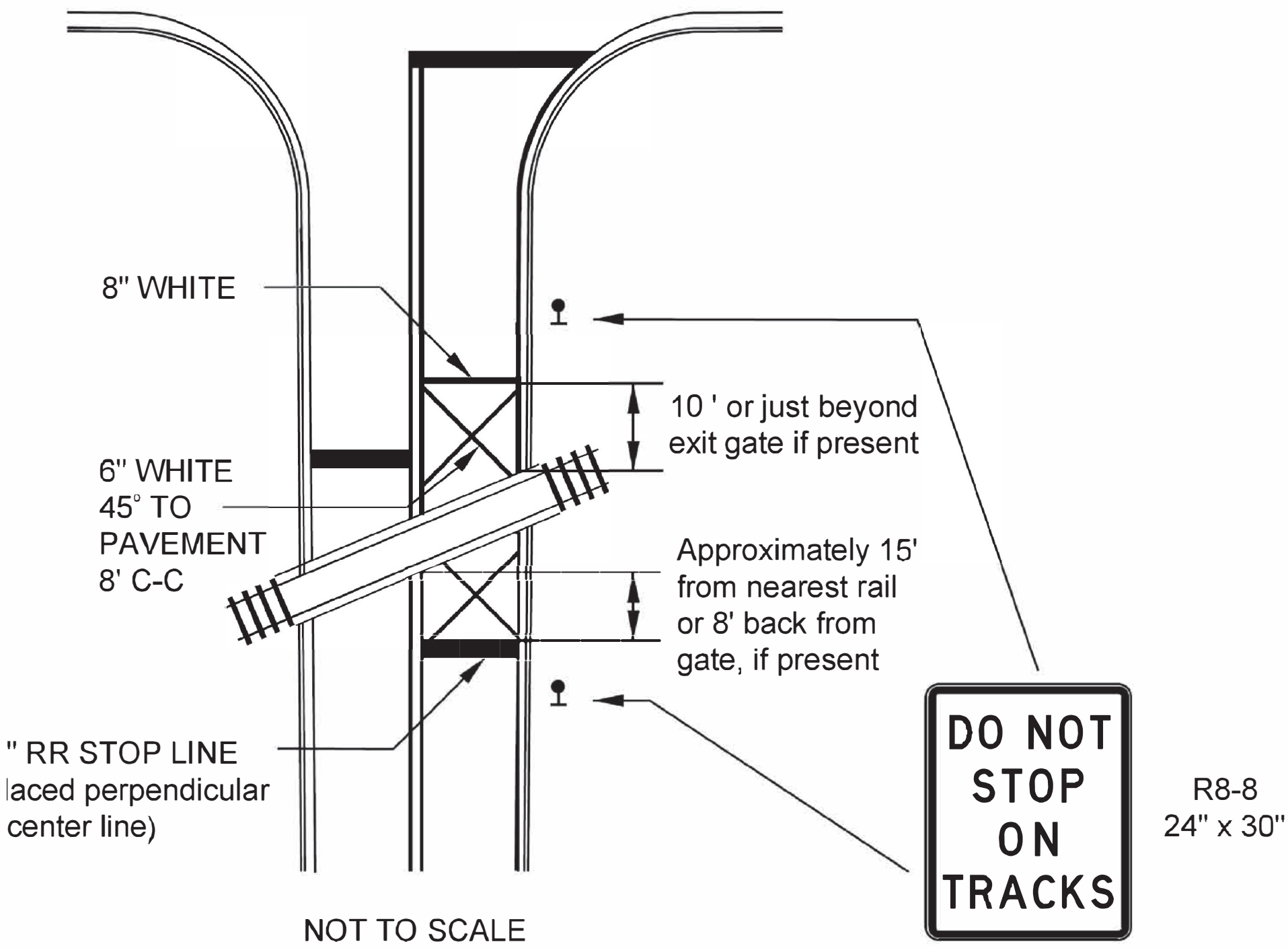
PAVEMENT MARKING AND SIGNING PLAN
IL ROUTE 146 AND DAVIE STREET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17G
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				

TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING
TREATMENT FOR RAILROAD CROSSINGS

WITH SIGNALIZED INTERSECTION

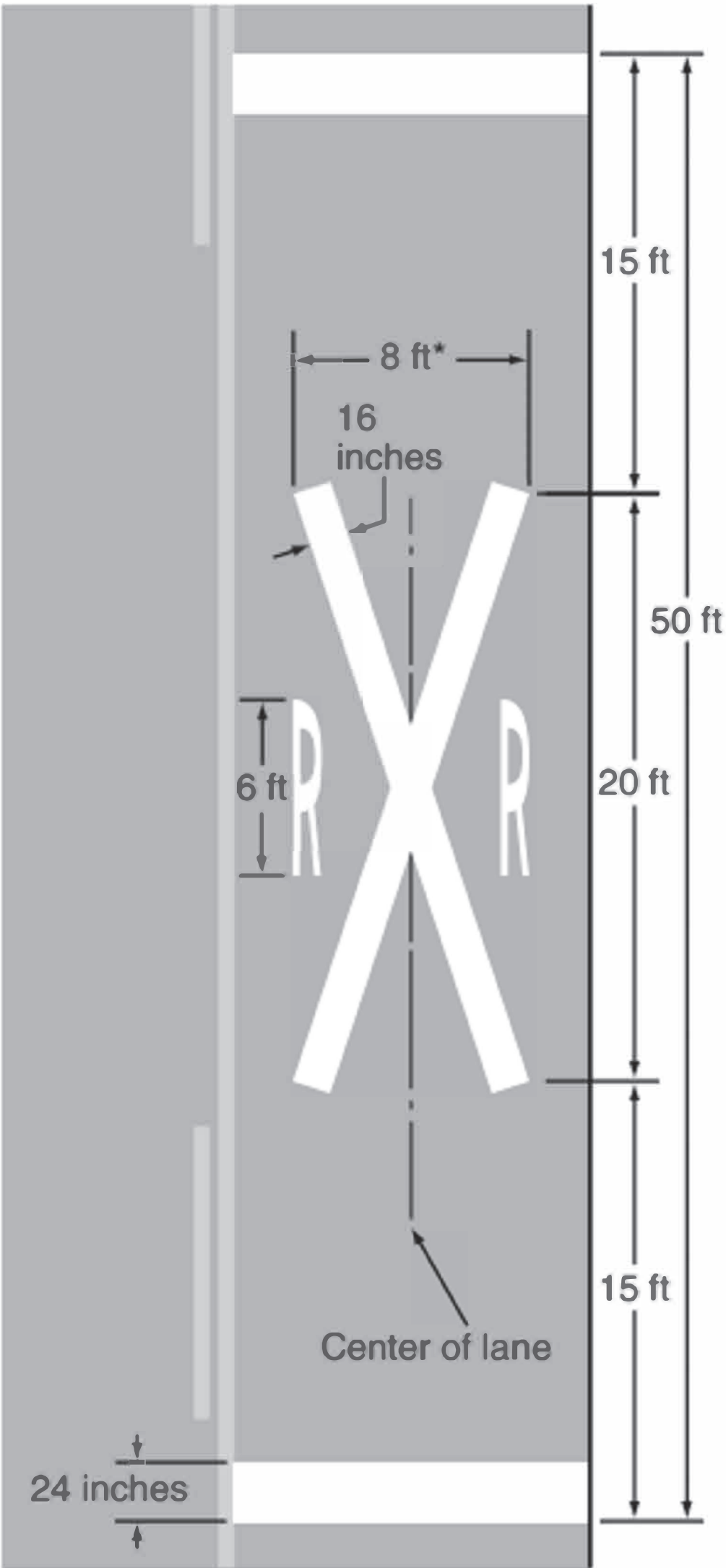


- Note:
- 1. Cross-hatch pavement markings may be installed in opposite direction lanes of grade crossing approach as needed.
 - 2. Where near-side traffic signals are used the pavement markings extend to the intersection. (See Detail for Pre-Signals)
 - 3. At multiple track locations, continue cross-hatch markings between tracks on pavement.
 - 4. Cross-hatch markings may be installed at locations without a signalized intersection based on an engineering review or as directed by ICC.

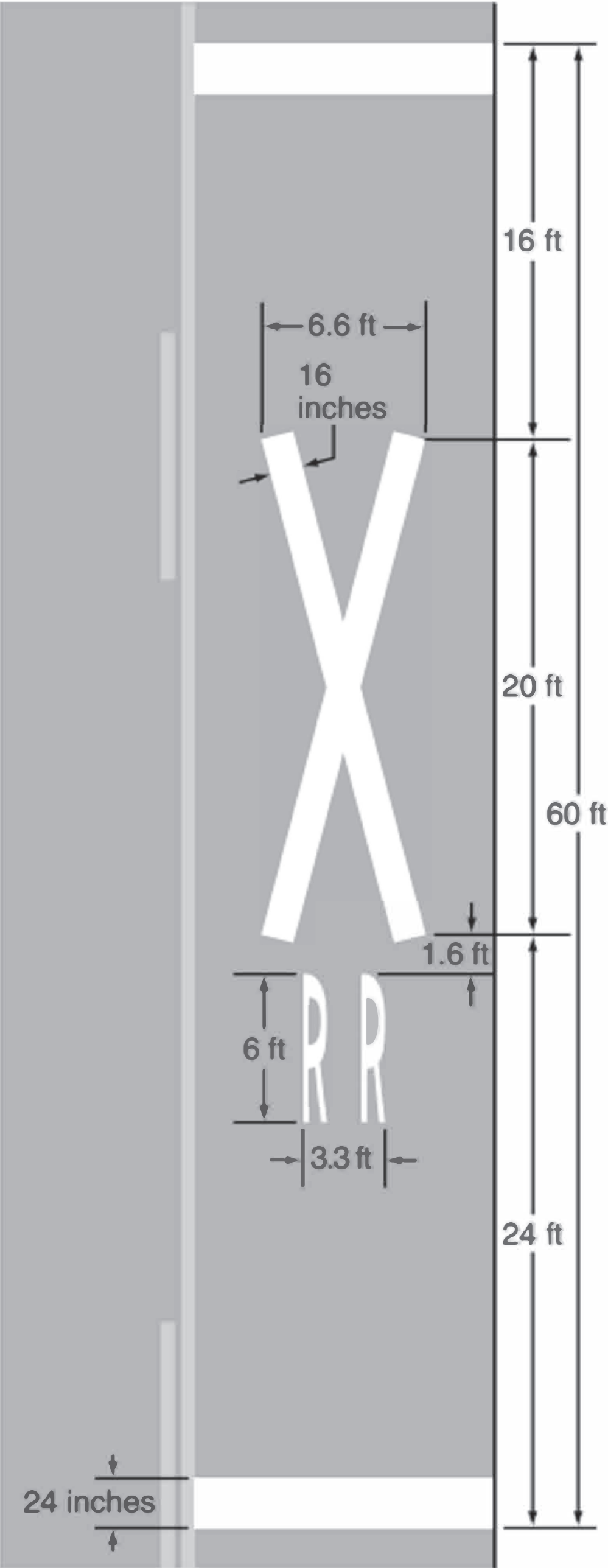
MUTCD RAILROAD MARKING DETAIL

Figure 8B-7. Grade Crossing Pavement Markings

A - Grade crossing pavement marking symbol



B - Grade crossing alternative (narrow) pavement marking symbol



Note: Refer to Figure 8B-6 for placement

△ SHEET ADDED 6-2-2022

USER NAME = \$USER\$	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - ASG	REVISED -
PLOT DATE = \$DATE\$	DATE - 5/26/22	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	D9 RAILROAD SIGNAL FY22-1	VARIOUS	17	17H
CONTRACT NO. 78947				
ILLINOIS FED. AID PROJECT				