

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	114R-1	WILL.	355	229
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

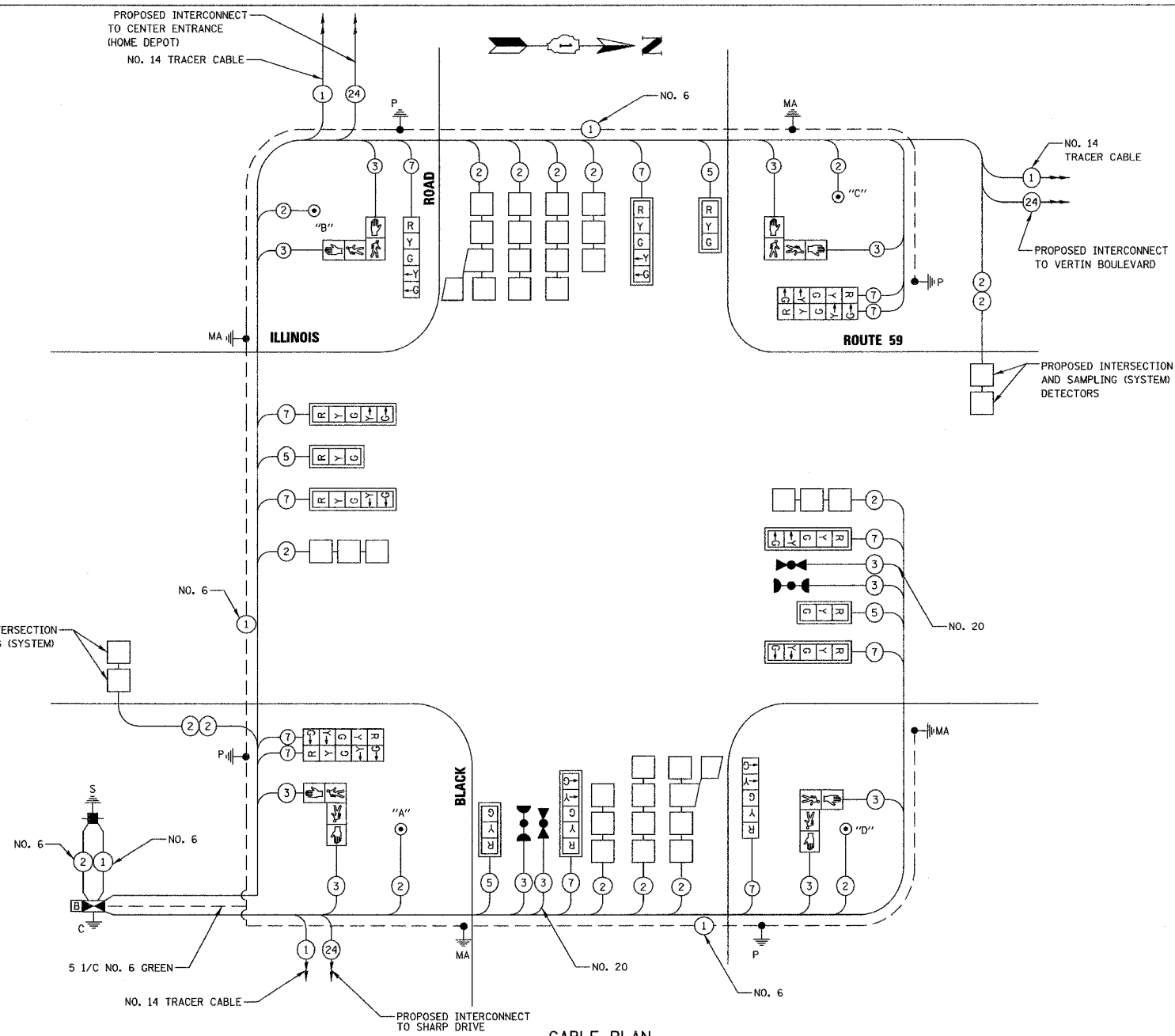
**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	29
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	555
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	96
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	129
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	22
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	530
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	700
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN TRENCH, SIGNAL, NO. 14 2C	FOOT	766
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,991
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,064
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,799
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2,608
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	32
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	13
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
PREFORMED DETECTOR LOOP	FOOT	2,495
** PAINT NEW TRAFFIC SIGNAL POST	EACH	4
** PAINT NEW MAST ARM POLE, 40 FEET AND OVER	EACH	4
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	917
* ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	397
TEMPORARY TRAFFIC SIGNAL INTERCONNECT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

\* 100% OF THE COST FOR EMERGENCY VEHICLE PREEMPTION ITEMS WILL BE PAID FOR BY VILLAGE OF SHOREWOOD.  
 \*\* 100% OF THE COST WILL BE PAID BY VILLAGE OF SHOREWOOD.

NOTE: ALL LOOP DETECTION SHOWN ON THIS PLAN WILL BE "PREFORMED" DETECTION LOOPS.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS SIGNAL SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.



**CABLE PLAN**

**CABLE PLAN LEGEND**

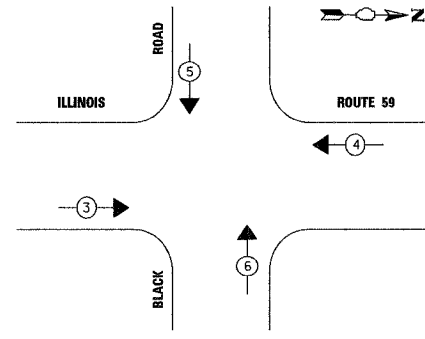
EXISTING	PROPOSED	DESCRIPTION
⊖	⊖	8" (200mm) TRAFFIC SIGNAL SECTION
⊖	⊖	12" (300mm) TRAFFIC SIGNAL SECTION
⊖	⊖	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊖	⊖	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊖	⊖	CONTROLLER CABINET
⊖	⊖	SERVICE INSTALLATION
⊖	⊖	TELEPHONE CONNECTION
⊖	⊖	VEHICLE DETECTOR, PREFORMED INDUCTION LOOP
⊖	⊖	MAGNETIC DETECTOR
⊖	⊖	EMERGENCY VEHICLE LIGHT DETECTOR
⊖	⊖	CONFIRMATION BEACON
⊖	⊖	PUSHBUTTON DETECTOR
⊖	⊖	2 DENOTES NUMBER OF CONDUCTORS ALL CABLE NO. 14 EXCEPT AS INDICATED ALL LOOP DETECTOR CABLE TO BE SHIELDED
⊖	⊖	1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
⊖	⊖	24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
"E"	⊖	RAILROAD CONTROL CABINET
"E"	⊖	ILLUMINATED SIGN "NO LEFT TURN"
"E"	⊖	ILLUMINATED SIGN "NO RIGHT TURN"
"P"	⊖	SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
H/C	⊖	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	⊖	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	⊖	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
⊖	⊖	UNINTERRUPTIBLE POWER SUPPLY (UPS)

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	LED	% OPERATION	
SIGNAL (RED)	16	135	17	0.50	136
(YELLOW)	16	135	25	0.25	100
(GREEN)	16	135	15	0.25	60
ARROW	24	135	12	0.10	28.8
PED. SIGNAL	8	90	25	1.00	200
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	64	0.50	
FLASHER					
ENERGY COSTS TO:			0.50	TOTAL =	624.8

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY CONTACT: JUDY MILLER  
 PHONE: 815-724-5717  
 COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C & D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
30" (750mm)	13.5 (4.1)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
36" (900mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

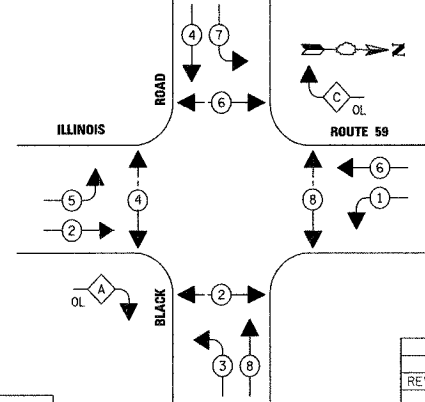
**EMERGENCY VEHICLE PREEMPTION SEQUENCE**



**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	←	↓	↑

**CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**

NOTES:  
 PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4  
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6  
 PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8  
 PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

LEGEND	OVERLAP		
	LETTER	PHASE	PHASE
DUAL ENTRY PHASE	A	= 2	+ 3
OVERLAP	C	= 6	+ 7
PEDESTRIAN PHASE			
* NUMBER REFERS TO ASSOCIATED PHASE			

REVISIONS	
NAME	DATE
REVISED IL59 ALIGN.	12/22/06

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**CABLE PLAN,  
 PHASE DESIGNATION DIAGRAM,  
 AND SCHEDULE OF QUANTITIES**  
 ILLINOIS ROUTE 59 AT BLACK ROAD

SCALE: NONE  
 DATE 3/18/08  
 DRAWN BY BAR  
 DESIGNED BY FA  
 CHECKED BY KMM