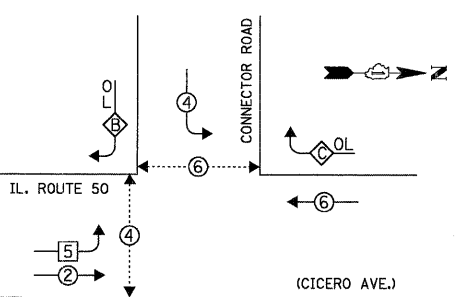


DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ GRADES CHECKED: \_\_\_\_\_  
 PLAN: \_\_\_\_\_ NOTE BOOK NO. \_\_\_\_\_  
 ALIGNED: \_\_\_\_\_ RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
 9575 West Higgins Road, Suite 600  
 Chicago, Illinois 60638  
 (847) 823-0500  
 DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ GRADES CHECKED: \_\_\_\_\_  
 PROFILE: \_\_\_\_\_ NOTE BOOK NO. \_\_\_\_\_  
 ALIGNED: \_\_\_\_\_ RT. OF WAY CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_

**CONTROLLER SEQUENCE**



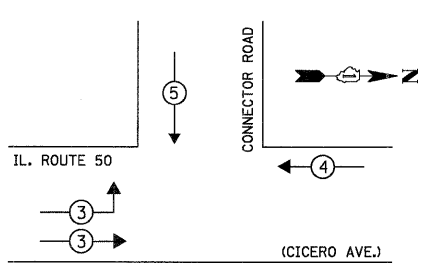
**LEGEND**  
 DUAL ENTRY PHASE  
 PROTECTED PHASE  
 OVERLAP  
 PEDESTRIAN PHASE  
 NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

**RIGHT TURN OVERLAP PHASE DESIGNATION**

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5
C	= 6	+ 4

**EMERGENCY VEHICLE PREEMPTION SEQUENCE**

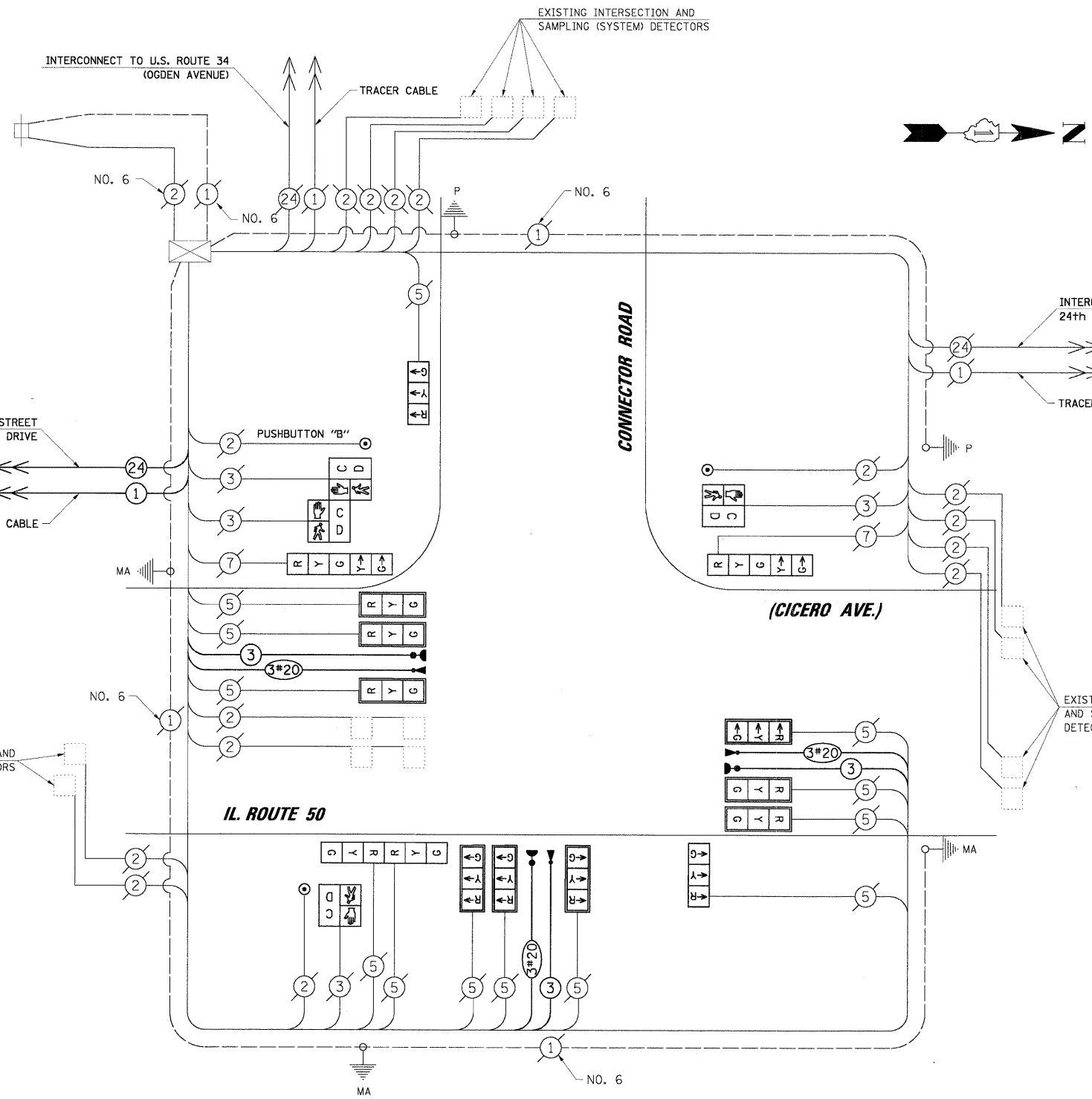


PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION		
SIGNAL (RED)	15	17	0.50	127.50	
(YELLOW)	15	25	0.25	93.75	
(GREEN)	15	15	0.25	56.25	
ARROW	4	12	0.10	4.80	
PED. SIGNAL	4	25	1.00	100.00	
CONTROLLER	1	100	1.00	100.00	
ILLUM. SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
FLASHER	-	-	0.50	-	

ENERGY COSTS TO: TOTAL = 482.30  
**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD  
 PHONE: (708) 235-2327  
 COMPANY: COMED

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 - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2' = (6m+L-0.6m) =
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
E - M. ARM POLE	-	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	6 (1.8)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)



NOTE: PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

**CABLE PLAN**

**CABLE PLAN LEGEND**

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

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	TOTAL
DETECTABLE WARNINGS	SQ FT	36
SIGN PANEL - TYPE 1	SQ FT	10
POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	534
PAVEMENT MARKING REMOVAL	SQ FT	262
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	690
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	690