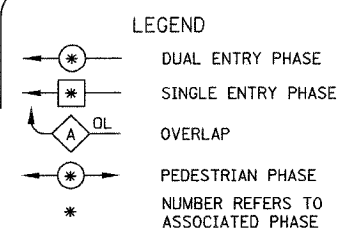
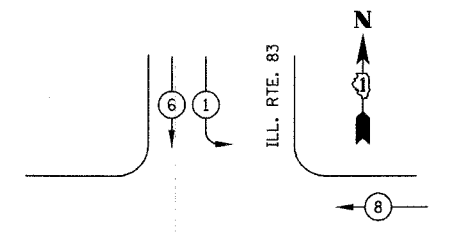
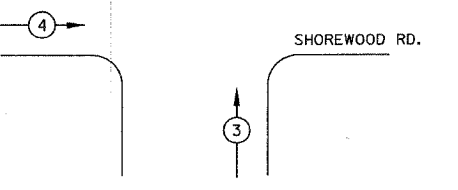
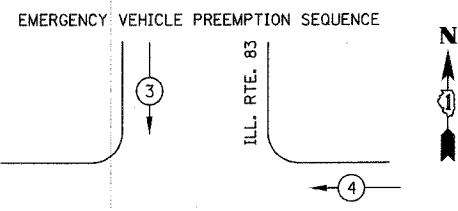


### CONTROLLER SEQUENCE



### PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

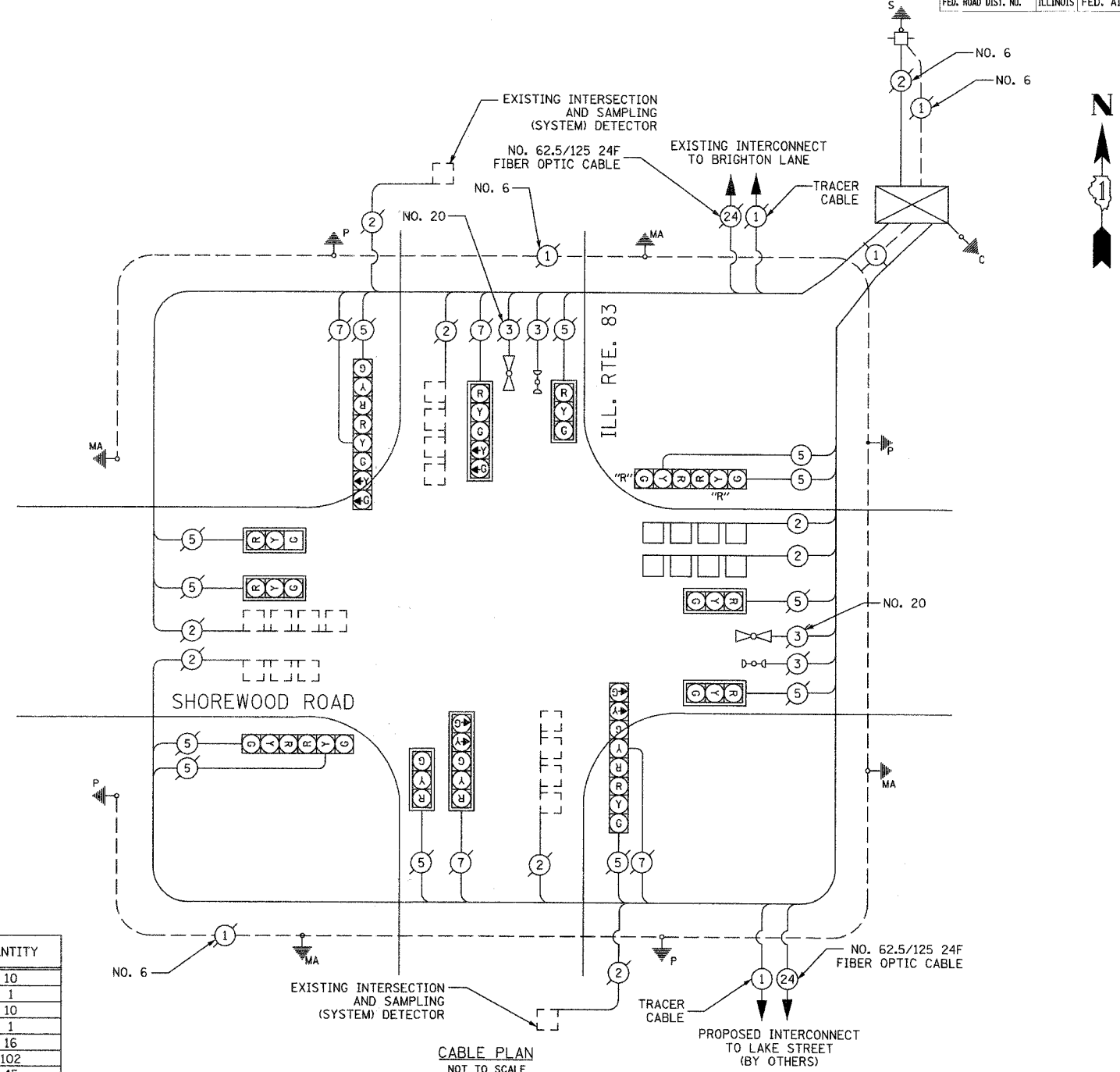
### CABLE PLAN LEGEND

- |          |          |             |   |
|----------|----------|-------------|---|
| EXISTING | PROPOSED |             |   |
|          |          | 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  |
|          |          |             | MAGNETIC DETECTOR   |
|          |          |             | EMERGENCY VEHICLE LIGHT DETECTOR                                    |
|          |          |             | CONFIRMATION BEACON   |
|          |          |             | PUSHBUTTON DETECTOR   |
|          |          |             | VEHICLE DETECTOR, INDUCTION LOOP                                    |
|          |          |             | MICROWAVE VEHICLE SENSOR  |
|          |          |             | 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                         |
|          |          |             | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)                  |
|          |          |             | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F             |
|          |          |             | "R" RELOCATED SIGNAL EQUIPMENT                                      |

### SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	10
HEAVY-DUTY HANDHOLE TO BE ADJUSTED	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	16
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	102
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	45
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	264
RELOCATE EXISTING SIGNAL HEAD	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL POST	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	EACH	163
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1

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 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'= 6m+L-0.6m)=
E- M. ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	16		17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	8		12	0.10	10
PED SIGNAL			25	1.00	
CONTROLLER	1		100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
TOTAL =					406

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 W. CENTER CT.  
SCHAUMBURG, IL 60196

ENERGY SUPPLY: CONTACT: TERRY COLLARD  
PHONE: (847) 816-5472  
COMPANY: COMMONWEALTH EDISON

REVISIONS	
NAME	DATE

VILLAGE OF GRAYSLAKE  
TRAFFIC SIGNAL CABLE PLAN,  
SEQUENCE OF OPERATIONS,  
AND SCHEDULE OF QUANTITIES  
ILL. RTE. 83 AND SHOREWOOD ROAD

SCALE: NONE  
DATE: 6/23/2006

DESIGNED BY: BRD  
DRAWN BY: BRD  
CHECKED BY: JUE

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
PLANNED: \_\_\_\_\_  
NOTE BOOK: \_\_\_\_\_  
NO. \_\_\_\_\_

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
PLANNED: \_\_\_\_\_  
NOTE BOOK: \_\_\_\_\_  
NO. \_\_\_\_\_

PLANS PREPARED BY: CIVILTECH