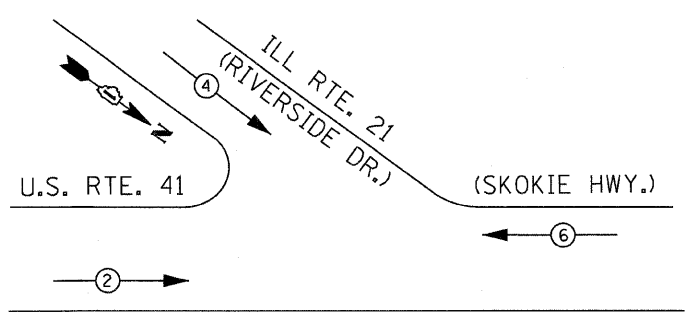


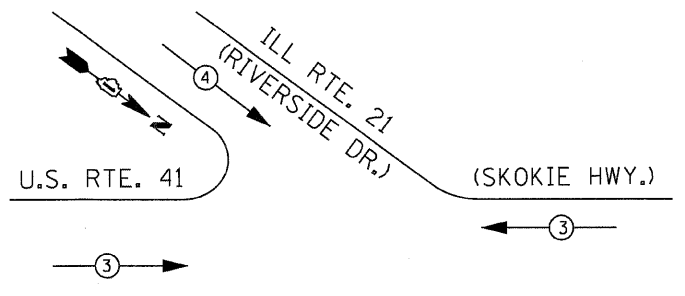
**CONTROLLER SEQUENCE**



**LEGEND**

- ← ⊕ ← DUAL ENTRY PHASE
- ← ⊕ ← SINGLE ENTRY PHASE
- ← ⊕ ← PEDESTRIAN PHASE
- OL OVERLAP
- \* NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**



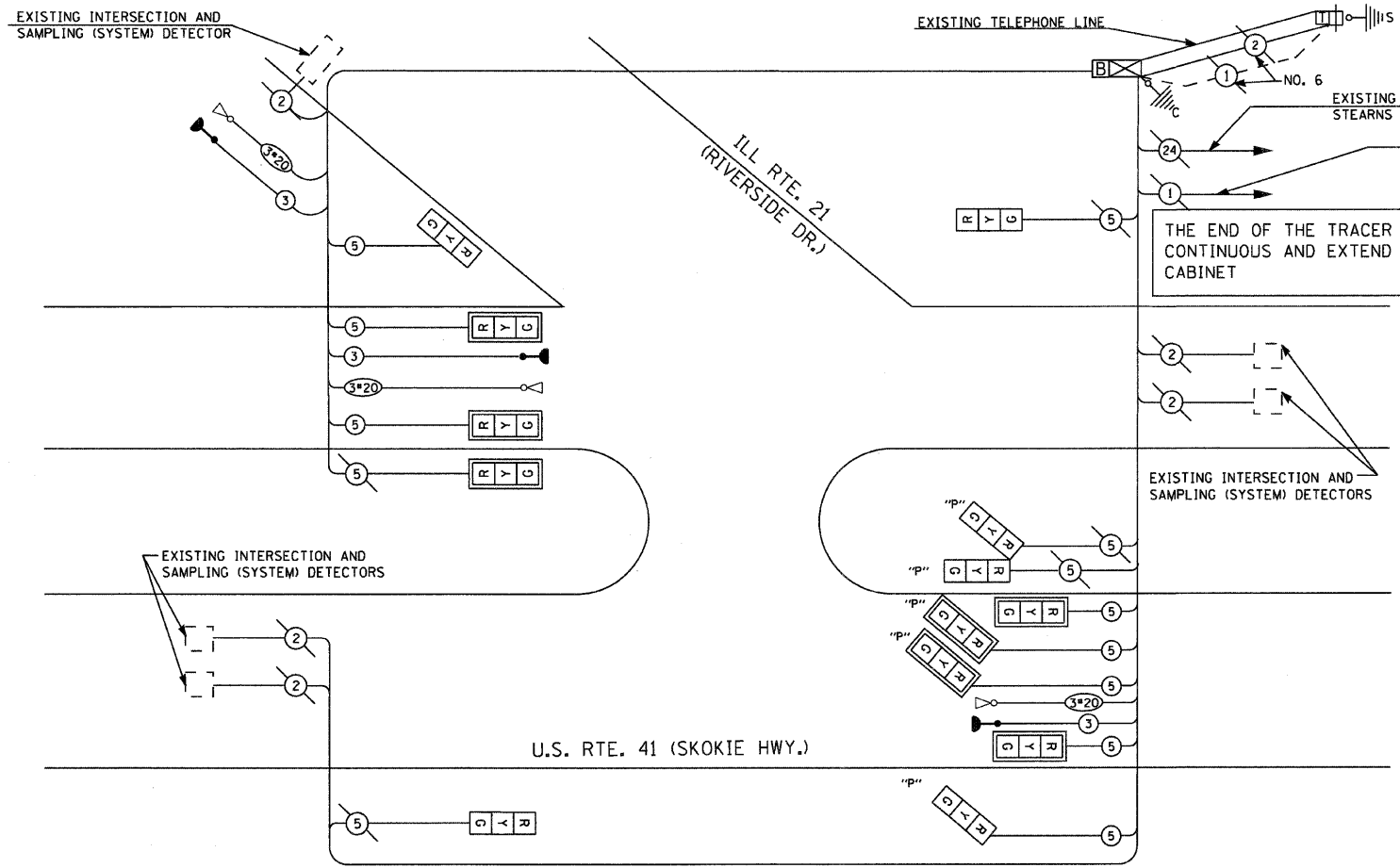
PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	← →	↘	

**I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	13	135	17	0.50	110.5
(YELLOW)	13	135	25	0.25	81.25
(GREEN)	13	135	15	0.25	48.75
ARROW	-	135	12	0.10	-
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	-	252	25	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
FLASHER LED					
<b>TOTAL =</b>					<b>340.5</b>

ENERGY COSTS - BILLED TO: IDOT DISTRICT 1  
 201 WEST CENTER COURT  
 SCHAMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT ALICE TAYLOR  
 PHONE (847) 816-5458  
 COMPANY COMED



**CABLE PLAN**

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE II	SO FT	45
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	80
THERMOPLASTIC PAVEMENT MARKING REMOVAL	SO FT	160
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	73
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	173
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	203
HEAVY-DUTY HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	246
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
* ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	932
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2223
DRILL EXISTING HANDHOLE	EACH	6
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	7
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
TEMPORARY INFORMATION SIGNING	SO FT	77.1
UNINTERRUPTABLE POWER SUPPLY (UPS)	EACH	1
* ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	932
OPTICALLY PROGRAMMED SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
OPTICALLY PROGRAMMED SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
* 100% COST TO VILLAGE OF GURNEE		

FOUNDATION	DEPTH (FT.)	CABLE SLACK (FT.)	VERTICAL (FT.)
TYPE A - POST	4	HANDHOLE	6.5
D - CONTOLLER	4	DOUBLE HANDHOLE	13
E - MAST ARM POLE		SIGNAL POST	2
30"	15	CONTOLLER CAB.	1
36"	15	FIBER OPTIC	13
42"	25	ELECTRICAL SERVICE	1
		GROUND CABLE	1

**THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM**

**CABLE PLAN LEGEND**

- | EXISTING | PROPOSED | DESCRIPTION   |
|----------|----------|---|
| ⊗        | G        | 8" (200mm) TRAFFIC SIGNAL SECTION   |
| ⊗        | R        | 12" (300mm) TRAFFIC SIGNAL SECTION  |
| ⊗        | W        | 12" (300mm) PEDESTRIAN SIGNAL SECTION   |
| ⊗        | ⊗        | 12" (300mm) PEDESTRIAN SIGNAL SECTION   |
| ⊗        | C        | 12" (300mm) PEDESTRIAN SIGNAL SECTION W/ COUNTDOWN TIMER  |
| ⊗        | D        | CONTROLLER CABINET  |
| ⊗        | ⊗        | SERVICE INSTALLATION  |
| ⊗        | ⊗        | TELEPHONE CONNECTION  |
| ⊗        | ⊗        | MAGNETIC DETECTOR   |
| ⊗        | ⊗        | EMERGENCY VEHICLE LIGHT DETECTOR  |
| ⊗        | ⊗        | CONFIRMATION BEACON   |
| ⊗        | ⊗        | PUSHBUTTON DETECTOR   |
| ⊗        | ⊗        | VEHICLE DETECTOR, INDUCTION LOOP  |
| ⊗        | ⊗        | ⊗ DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| ⊗        | R        | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD   |
| "E" ⊗    | "P" ⊗    | RAILROAD CONTROL CABINET  |
| "E" ⊗    | ⊗        | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"  |
| "E" ⊗    | ⊗        | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"   |
| H/C      | H/C      | GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER  |
| P        | P        | GROUND ROD AT POST OR MAST ARM POLE   |
| S        | S        | 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  |
| ⊗        | ⊗        | ⊗ UNINTERRUPTED POWER SUPPLY  |