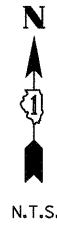
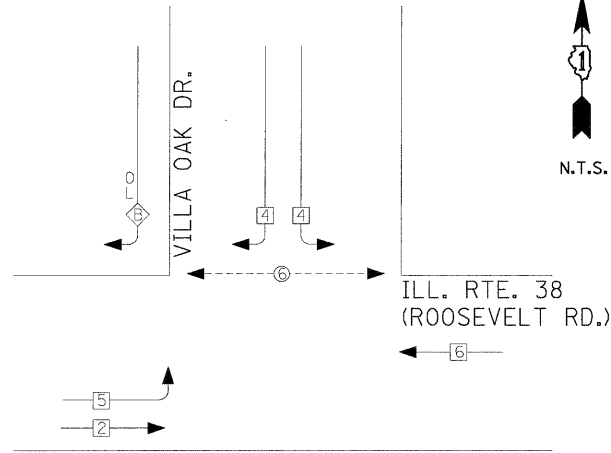
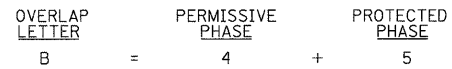


**CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**

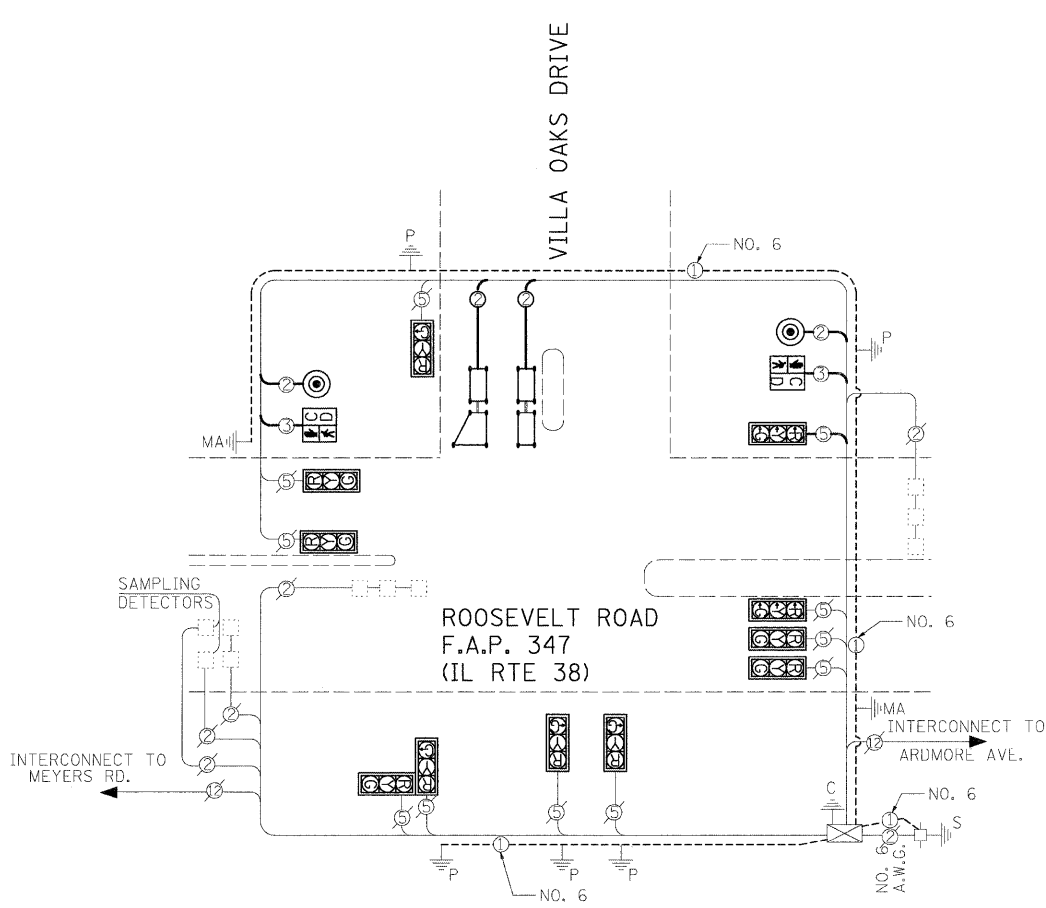
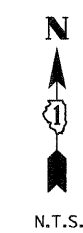


**LEGEND**

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

**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 WITH COUNTDOWN TIMER  |
|          |          | CONTROLLER CABINET  |
|          |          | SERVICE INSTALLATION  |
|          |          | TELEPHONE INSTALLATION  |
|          |          | VEHICLE DETECTOR, INDUCTION LOOP  |
|          |          | MAGNETIC DETECTOR   |
|          |          | EMERGENCY VEHICLE LIGHT DETECTOR  |
|          |          | CONFIRMATION BEACON   |
|          |          | PUSHBUTTON DETECTOR   |
|          |          | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
|          |          | GROUND CABLE IN CONDUIT   |
|          |          | NO. 6 SOLID COPPER (GREEN)  |
|          |          | INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE   |
|          |          | SIGNAL FACE WITH BACKPLATE  |
|          |          | "P" INDICATES PROGRAMMED HEAD.  |
|          |          | "E" 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 ELECTRICAL SERVICE INSTALLATION   |



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	11	-	17	0.50	93.5
(YELLOW)	11	-	25	0.25	68.8
(GREEN)	11	-	15	0.25	41.3
ARROW	-	-	12	0.10	0.0
PED. SIGNAL	2	-	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0

ENERGY COSTS TO: TOTAL = 353.5

**ILLINOIS DEPARTMENT OF TRANSPORTATION**  
DIVISION OF HIGHWAY/DISTRICT 1  
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: DEB RANKIN  
PHONE: (630) 691-4379  
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)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2'
C - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m-H-0.6m)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	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)

SCHEDULE OF QUANTITIES				
ITEM NO	QUANTITY	UNITS	ITEM	
81028200	28	FEET	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	
81028210	8	FEET	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	
81400100	1	EACH	HANDHOLE	
85000100	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	
87300010	6	EACH	GROUNDING EXISTING HANDHOLE FRAME AND COVER	
87301215	383	FEET	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	
87301225	395	FEET	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	
87301245	147	FEET	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	
87301305	512	FEET	ELECTRIC CABLE IN CONDUIT, LEAD IN, NO. 14 1 PAIR	
87301900	678	FEET	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	
87800100	4	FEET	CONCRETE FOUNDATION, TYPE A	
87900200	2	EACH	DRILL EXISTING HANDHOLE	
88102717	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	
88600100	194	FEET	DETECTOR LOOP, TYPE I	
88800100	2	EACH	PEDESTRIAN PUSH BUTTON	
89500100	1	EACH	RELOCATE EXISTING SIGNAL HEAD	
89501150	1	EACH	RELOCATE EXISTING TRAFFIC SIGNAL POST	
89502300	216	FEET	REMOVE ELECTRIC CABLE FROM CONDUIT	
89502385	1	EACH	REMOVE EXISTING CONCRETE FOUNDATION	
X8140115	2	EACH	HANDHOLE TO BE ADJUSTED	
Z0033044	1	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	
Z0073510	1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING	

