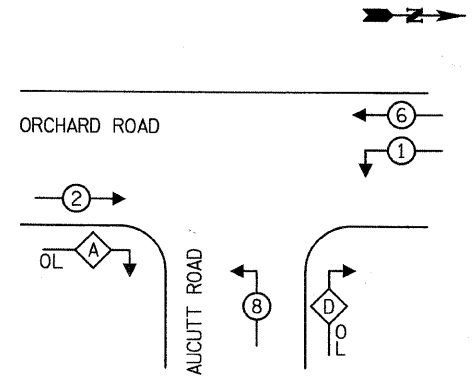


# CABLE PLAN

## CONTROLLER SEQUENCE

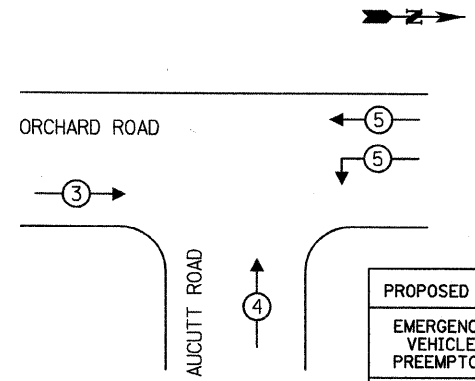


## PHASE DESIGNATION DIAGRAM

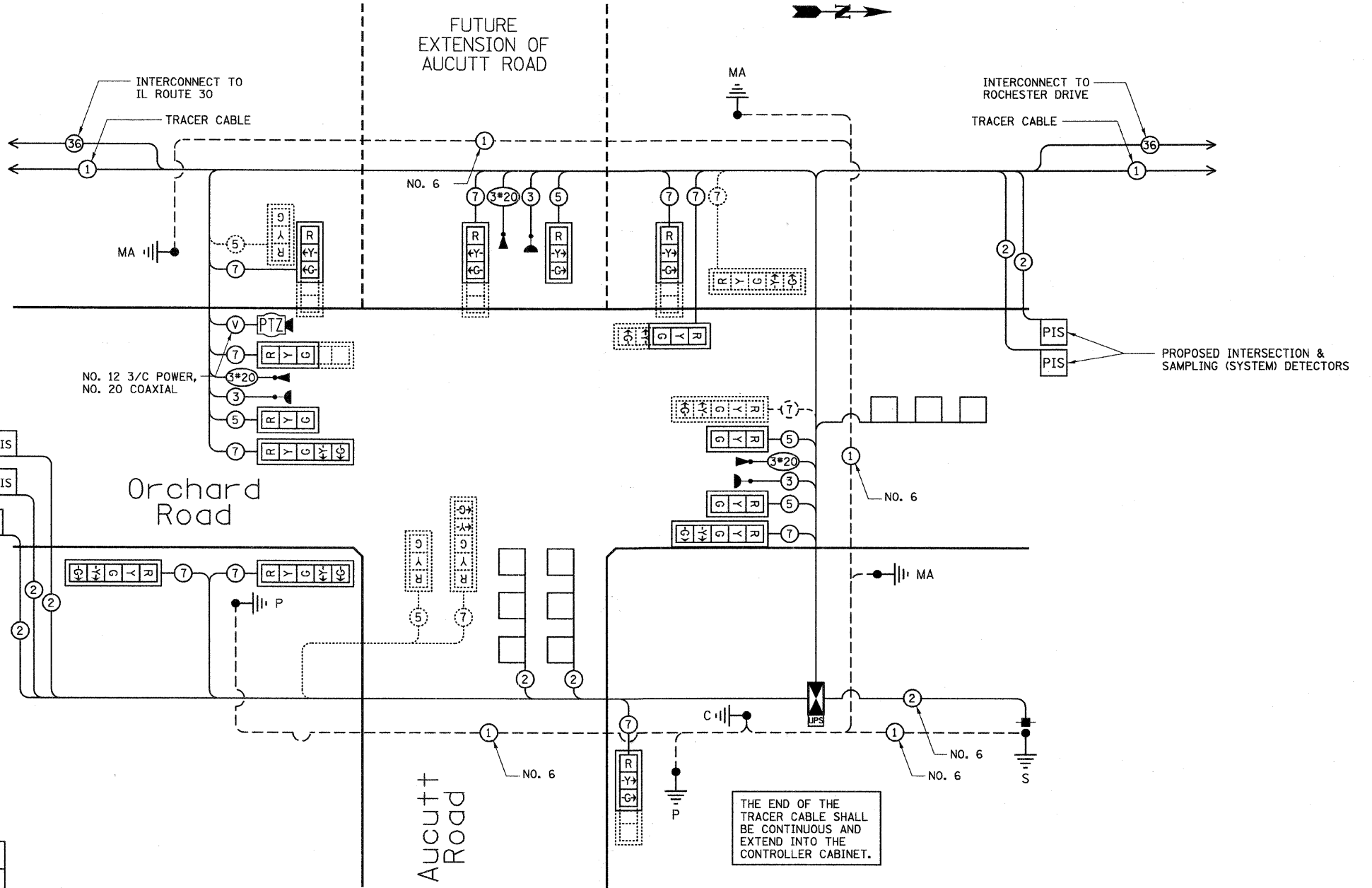
## RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 8
D	= 8	+ 1

## EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



## SCHEDULE OF QUANTITIES

791	FOOT CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 66 FT.
56	FOOT CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	8	FOOT CONCRETE FOUNDATION, TYPE A
38	FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	4	FOOT CONCRETE FOUNDATION, TYPE C
18	FOOT CONDUIT IN TRENCH, 3 1/2" DIA., GALVANIZED STEEL	68	FOOT CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER
168	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	7	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
103	FOOT CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	2	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
409	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	2	EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
5	EACH HANDHOLE	2	EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH HEAVY-DUTY HANDHOLE	13	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
1	EACH DOUBLE HANDHOLE	8	EACH INDUCTIVE LOOP DETECTOR
480	FOOT ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	3	EACH LIGHT DETECTOR
1,105	FOOT TRENCH BACKFILL FOR ELECTRICAL WORK	3	EACH LIGHT DETECTOR AMPLIFIER
2	EACH LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
1	EACH UNINTERRUPTIBLE POWER SUPPLY, STANDARD	1	EACH REMOVE TEMPORARY TRAFFIC SIGNAL INSTALLATION
806	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	385	FOOT COAXIAL CABLE IN CONDUIT
1,247	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	1	EACH VIDEO MONITORING PTZ CAMERA SYSTEM
2,255	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	676	FOOT PREFORMED DETECTOR LOOP
2,940	FOOT ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14, 1PR	385	FOOT POWER LEAD CABLE VIDEO NO. 12, 3/C
195	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	1	EACH SERVICE INSTALLATION - POLE MOUNTED
2	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT	1,029	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	806	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED SHIELDED
1	EACH STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 38 FT. AND 60 FT.		

- NOTES:
1. TRAFFIC CONTROL EQUIPMENT SHALL BE MANUFACTURED BY SIEMENS.
  2. STREET LIGHTING INSTALLED AND ENERGIZED AS PART OF THE ROADWAY LIGHTING PLANS.

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATIONS	
SIGNAL (RED)	13	17	0.50	110.5
(YELLOW)	9	25	0.25	56.3
(GREEN)	9	15	0.25	33.8
ARROW	16	12	0.10	19.2
PEDESTAL SIGNAL	0	25	1.00	0.0
CONTROLLER	1	100	1.00	100.0
ILLUM. SIGN				
VIDEO SYSTEM	1	150	1.00	150.0
FLASHER			0.50	
TOTAL =				496.8

ENERGY COSTS - BILLED TO: Village of Montgomery  
 (ADDRESS) 1300 S. Broadway  
 Montgomery, IL 60538

ENERGY SUPPLY - CONTACT: Mr. Al Arends  
 PHONE: (630) 691-4379  
 COMPANY: Com Ed Customer Const. & Design

**rjngroup**  
 Excellence through Ownership  
 200 West Front Street  
 Wheaton, IL 60187

DESIGNED - MK	REVISED -
DRAWN - DW	REVISED -
CHECKED - MH	REVISED -
DATE - 12/20/2010	REVISED -

**KANE COUNTY**  
**DIVISION OF TRANSPORTATION**  
**ORCHARD ROAD RECONSTRUCTION**

**CABLE PLAN AND PHASE DESIGNATION DIAGRAM**  
**ORCHARD ROAD AND AUCUTT ROAD**  
 SCALE: 1" = 20'  
 SHEET NO. 11 OF 13 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	99-00232-01-WR	KANE	215	120
				CONTRACT NO. 63541

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