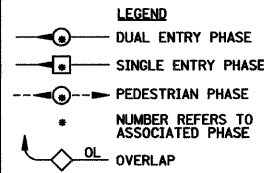
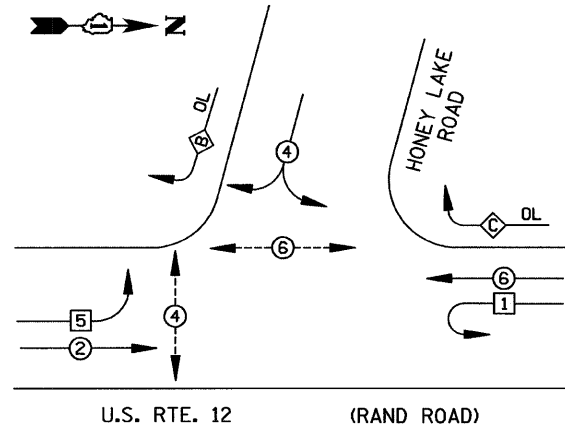


**CONTROLLER SEQUENCE**



**PHASE DESIGNATION DIAGRAM**

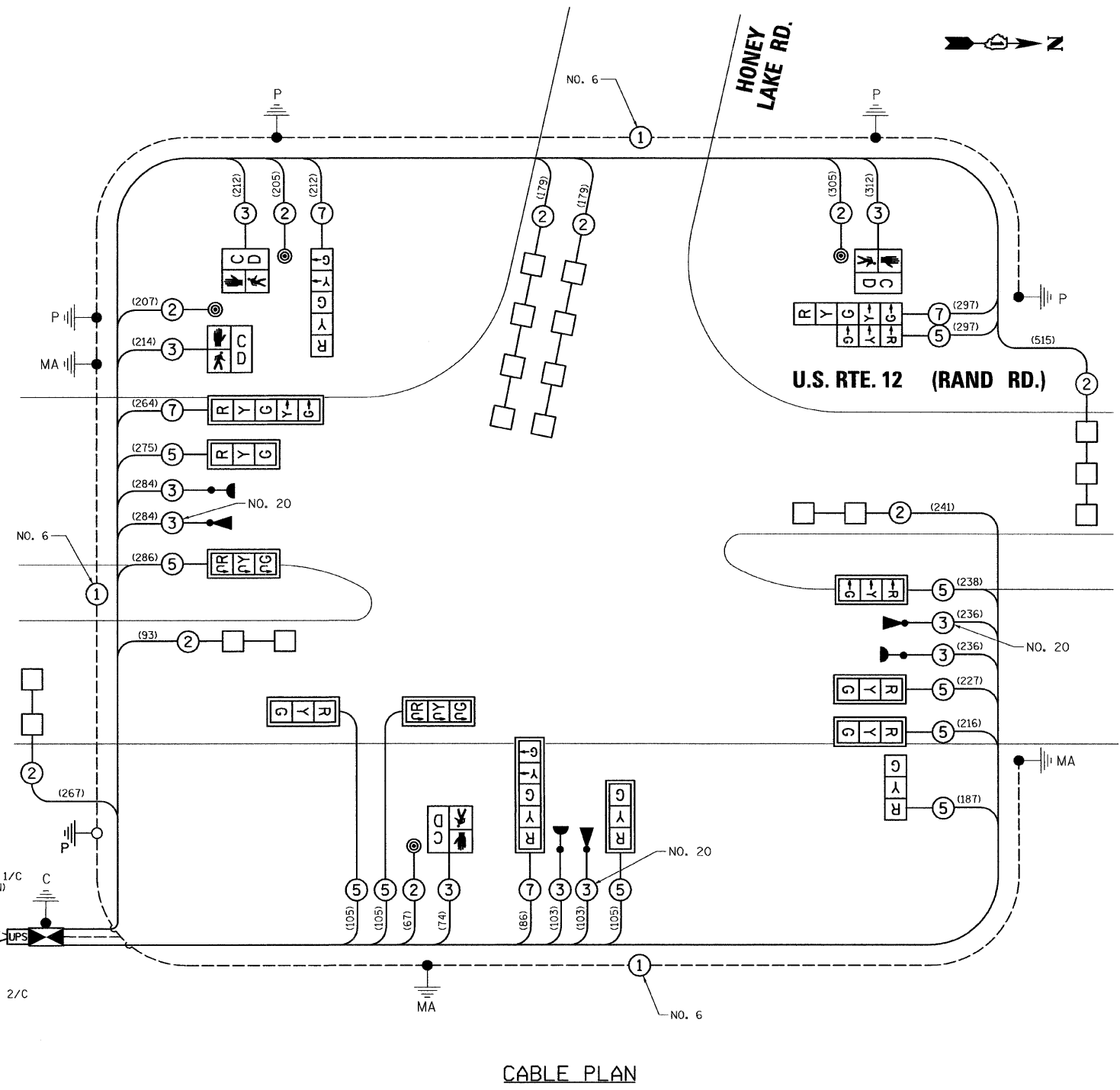
**RIGHT TURN OVERLAP DESIGNATION**

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

**SCHEDULE OF QUANTITIES**

SIGN PANEL, TYPE 1	SQ FT	20
SIGN PANEL, TYPE 2	SQ FT	43.5
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	334
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	59
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	205
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	40
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	313
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	232
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	638
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	784
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1435
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2041
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	859
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	35
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1474
HANDHOLE	EACH	4
HEAVY DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	1
TRANSCEIVER-FIBER OPTIC	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 26 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	40
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE 1	FOOT	587
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH BUTTON	EACH	4
SERVICE INSTALLATION, POLE MOUNT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED & SHIELDED	FOOT	579
	FOOT	623

- 100% COST TO THE VILLAGE OF LAKE ZURICH
- PARTIAL COST TO THE VILLAGE OF LAKE ZURICH



**CABLE PLAN**

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	14	135	17	0.50	119
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	4	90	25	1.00	100
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	438.2
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 W. CENTER COURT SCHAUMBURG, IL 60196					
ENERGY SUPPLY CONTACT:					
PHONE:					
COMPANY:					COMED

**RESTORATION OF WORK AREA**

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**NOTE:**

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

**NOTE:**

(XXX) DENOTES CABLE LENGTH TO CONTROLLER CABINET WITH SLACK CABLE.

FILE NAME =	USER NAME = RDS
\\MICROST\352887\HONEY LAKE CAB.DGN	
PLOT SCALE = 1"=20'	
PLOT DATE = 1-13-11	

DESIGNED - KK	REVISED -
DRAWN - JGC	REVISED -
CHECKED - BPT	REVISED -
DATE - 2-3-11	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM U.S.ROUTE 12 (RAND ROAD) AT HONEY LAKE ROAD			
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA.	TO STA.

PREPARED BY:  
**CEMCON, Ltd.**  
Consulting Engineers, Land Surveyors & Planners  
2250 White Oak Circle, Suite 100  
Aurora, Illinois 60504-9675  
Ph: 630.862.2100 Fax: 630.862.2199  
E-Mail: oadd@cemcon.com Website: www.cemcon.com

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
334	SY-2-N	LAKE	34	15

CONTRACT NO. 60L68  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT