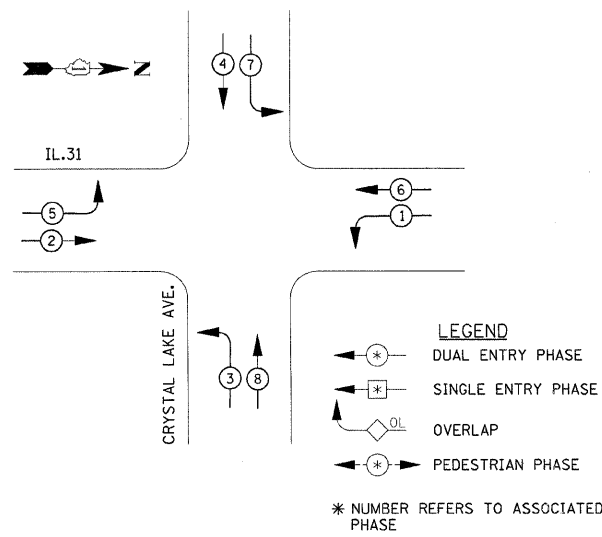
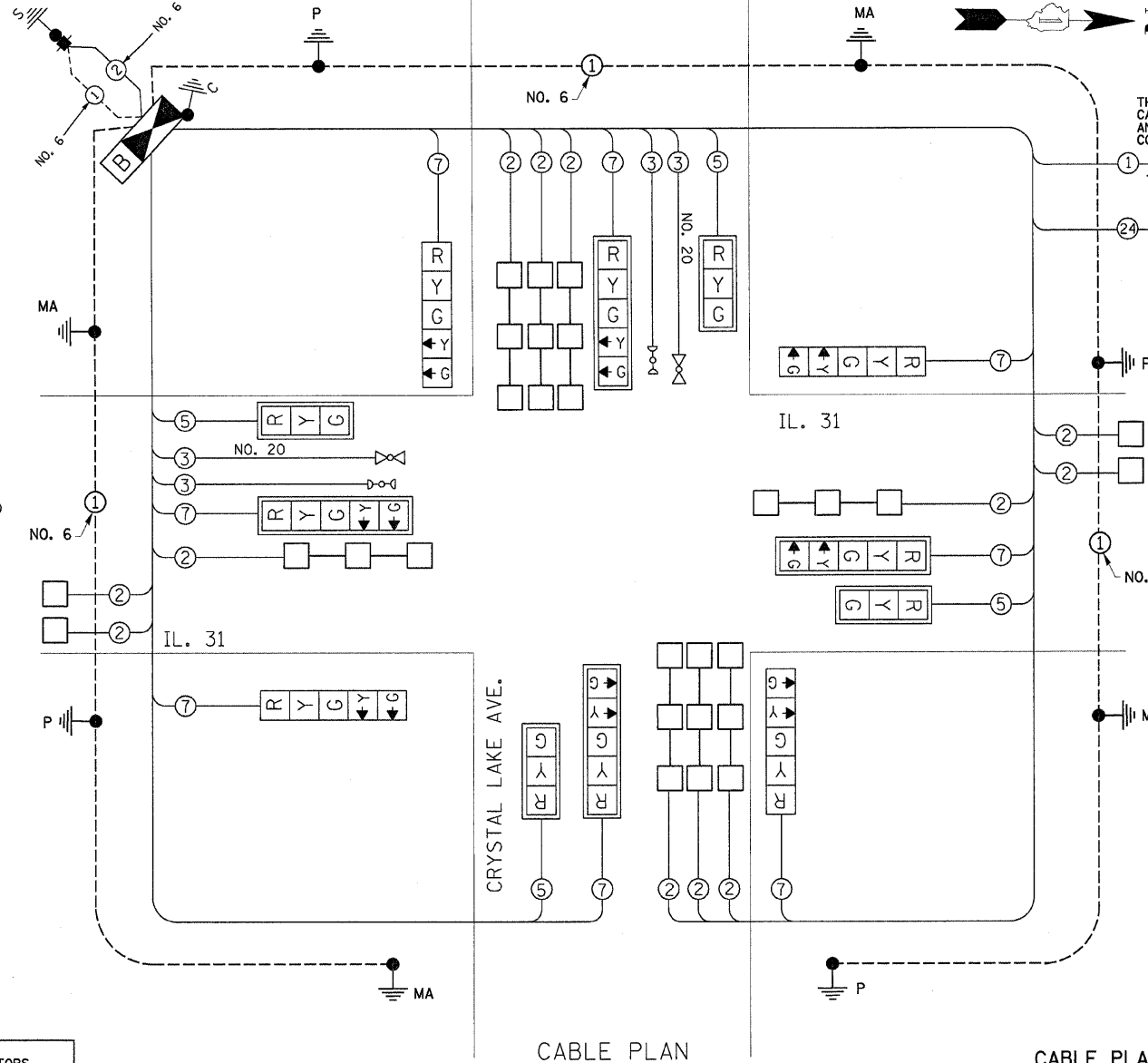
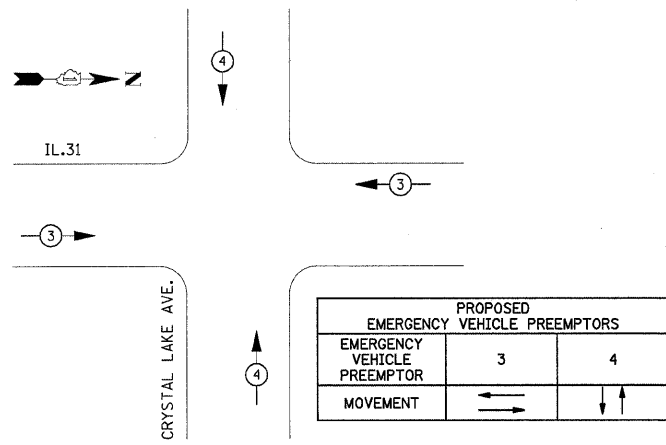


CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED	DESCRIPTION
(1)	(1)	(1)	(1)	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(24)	(24)	(24)	(24)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
(R)	(R)	(R)	(R)	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
(W)	(W)	(W)	(W)	RAILROAD CONTROL CABINET
(E)	(E)	(E)	(E)	ILLUMINATED SIGN "NO LEFT TURN"
(E)	(E)	(E)	(E)	ILLUMINATED SIGN "NO RIGHT TURN"
(H/C)	(H/C)	(H/C)	(H/C)	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
(P)	(P)	(P)	(P)	GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
(S)	(S)	(S)	(S)	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(B)	(B)	(B)	(B)	UN-INTERRUPTIBLE POWER SUPPLY (UPS)

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SERVICE INSTALLATION, POLE MOUNT	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	490
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	41
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	95
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	430
HANDHOLE	EACH	5
HEAVY DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	541
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
ELECTRIC CABLE IN CONDUIT NO.20 3C, TWISTED, SHIELDED	FOOT	300
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO.14, 3C	FOOT	300
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO.14, 5C	FOOT	768
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO.14, 7C	FOOT	3459
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.14, 1 PAIR	FOOT	1718
ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6, 2C	FOOT	25
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6, 1C	FOOT	420
DRILL EXISTING HANDHOLE	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER	FOOT	60
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE 1	FOOT	918
TRANSCEIVER - FIBER OPTIC	EACH	1
UN-INTERRUPTIBLE POWER SUPPLY	EACH	1

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

TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE (LED)	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	17	0.50	102.00
(YELLOW)	12	135	25	0.25	75.00
(GREEN)	12	135	15	0.25	45.00
ARROW	16	135	12	0.10	19.20
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	
ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION 201 WEST CENTER COURT SCHAUMBURG, ILLINOIS 60196-1096					TOTAL = 341.20
ENERGY SUPPLY CONTACT: COMED PHONE: (847) 816-5248 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 - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)
C - M. ARM POLE		SIGNAL POST	2 (1.0)	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)