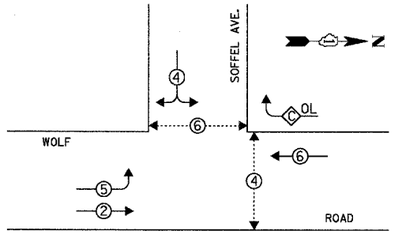
CONTROLLER SEQUENCE

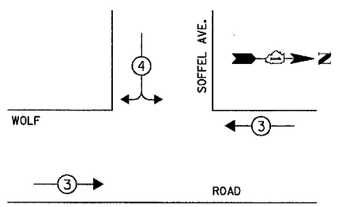


LEGEND

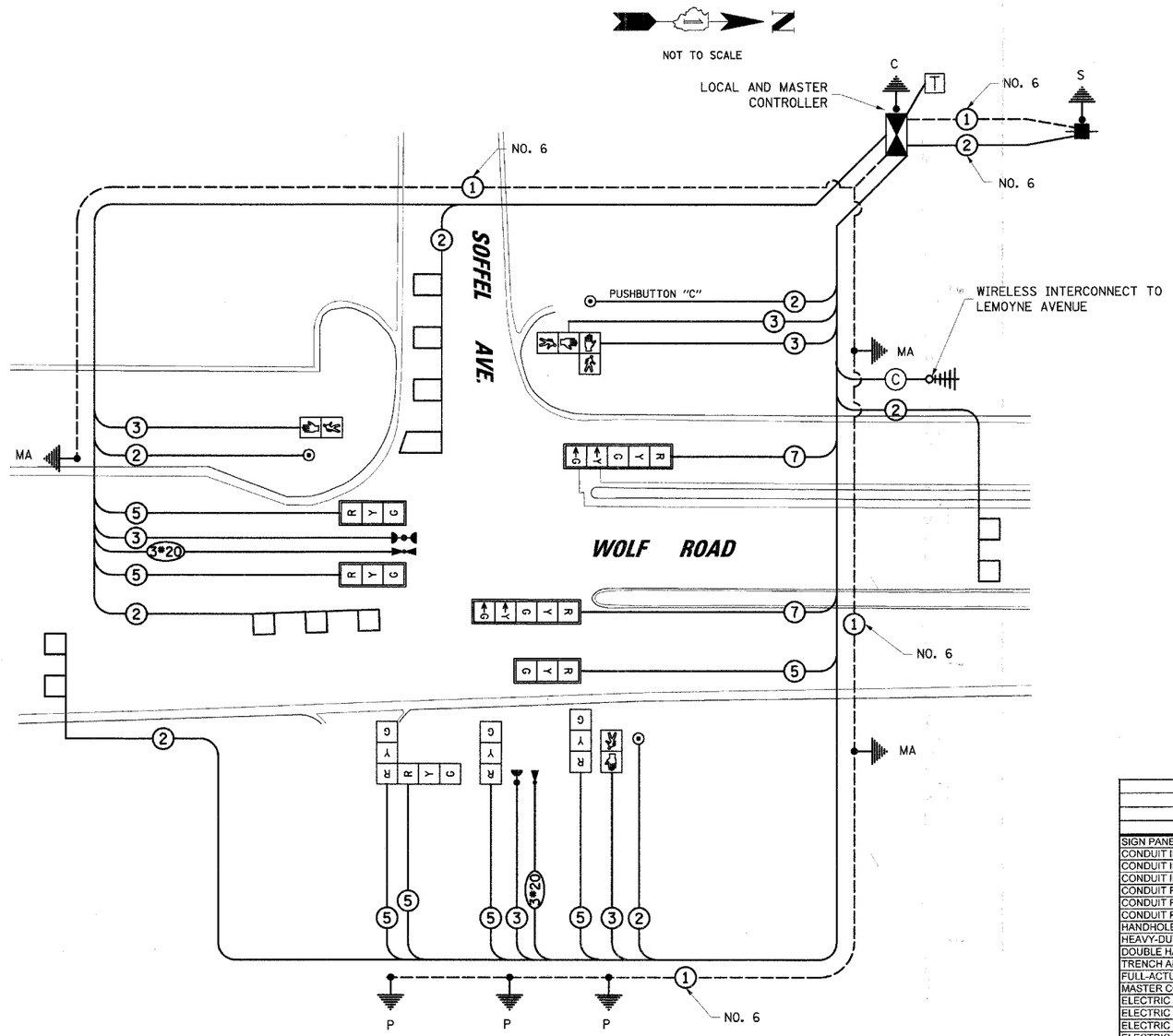
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



NOTE:
PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 4 AND 6.

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
R Y G ←Y ←G "P"	R Y G ←Y ←G "P"	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"E"	"E"	RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
T	T	TELEPHONE
		WIRELESS INTERCONNECT
C	C	COAXIAL CABLE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE XINCAND.	LED	X % OPERATION	
SIGNAL (RED)	9		17	0.50	76.50
(YELLOW)	9		25	0.25	56.75
(GREEN)	9		15	0.25	33.75
ARROW	4		12	0.10	4.80
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	371.30

CITY OF NORTHLAKE

55 E. NORTH AVENUE
NORTHLAKE, ILLINOIS 60164

ENERGY SUPPLY: CONTACT: LINDA KLOC
PHONE: (708) 410-5313
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'+L-2=	
E - M. ARM POLE			SIGNAL POST	2	(1.0)		(6m+L-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)
36" (900mm)	15	(4.6)	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)

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

Schedule of Quantities		
ITEM	UNIT	TOTAL
SIGN PANEL TYPE I	SQ FT	44.5
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	139
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	9
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	654
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	121
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	150
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	149
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
MASTER CONTROLLER, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	275
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	637
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1165
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	289
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	927
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 8 2C	FOOT	80
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
CONCRETE FOUNDATION TYPE A	FOOT	12
CONCRETE FOUNDATION TYPE D	FOOT	4
CONCRETE FOUNDATION TYPE E, 30-INCH DIAMETER	FOOT	30
CONCRETE FOUNDATION TYPE E, 36-INCH DIAMETER	FOOT	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	5
INDUCTIVE LOOP DETECTOR	EACH	4
DETECTOR LOOP, TYPE I	FOOT	441
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	369
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	313

CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PLAN — NOTE BOOK — NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RIGHT WAY CHECKED — CADD FILE NAME — BY — DATE

PROFILE — NOTE BOOK — NO. — SURVEYED — PLOTTED — GRADES CHECKED — BENCH NOTED — STRUCTURE NOTATIONS CHKD — BY — DATE