SIGNAL DISPLAY CHART

SIGNAL HEAD	ø2				ø4				FLASH
	R/W		CLEAR		R/W		CLEAR		
A	G	G	Y	R	R	R	R	R	Y
B	G	G	Y	R	R	R	R	R	Y
C	G	G	Y	R	R	R	R	R	Y
D	G	G	Y	R	R	R	R	R	Y
E	R	R	R	R	G	G	Y	R	R
F	R	R	R	R	G	G	Y	R	R
X–X	DW	DW	DW	DW	W	FDW	DW	DW	DARK
Y–Y	W	FDW	DW	DW	DW	DW	DW	DW	DARK
Z–Z	DW	DW	DW	DW	W	FDW	DW	DW	DARK

SIGNAL TIMING

INTERVAL	ø2	ø4
INITIAL	20	10
PASSAGE	3.0	2.5
YELLOW	3.1	3.1
RED CLEAR	1.6	1.4
MAX I	60	30
MAX II	60	30
WALK	10	10
PED CLEAR	9	11
RECALL	MAX	NONE
MEMORY	ON	OFF

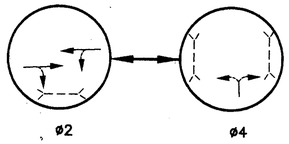
LOOP DETECTOR CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	AMP #	PHASE
L1	2.0m X 3.7m	2–4–2	PRESENCE	8	1	4
L2	2.0m X 9.1m	2	PRESENCE	8	2	4

ESTIMATED QUANTITIES

ITEM	QUANT	UNIT	DESCRIPTION
625	19.8	METER	CONDUIT, 51 mm, 713.04
625	1.4	METER	CONDUIT, 102 mm, 713.04
625	3.2	METER	CONDUIT, JACKED OR DRILLED, SIZE: 51 mm
625	34.5	METER	CONDUIT, JACKED OR DRILLED, SIZE: 76 mm
625	19.1	METER	TRENCH
625	3	EACH	PULLBOX, 713.08, 450 mm
625	1	EACH	PULLBOX, 713.08, 600 mm
625	5	EACH	GROUND ROD
631	2	EACH	REMOVAL MISC.: SCHOOL SPEED LIMIT ASSEMBLY
631	2	EACH	SCHOOL SPEED LIMIT ASSEMBLY, 600 mm x 1200 mm
632	6	EACH	VEHICULAR SIGNAL HEAD, 3–SECT., 300 mm LENS, 1–WAY, AS PER PLAN
632	6	EACH	PEDESTRIAN SIGNAL HEAD, TYPE D2, AS PER PLAN
632	6	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	6	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	2	EACH	DETECTOR LOOP
632	2	EACH	LOOP DETECTOR UNIT, DELAY & EXTENSION TYPE, AS PER PLAN
632	132.6	METER	MESSENGER WIRE, 7 STRAND, 6mm DIAMETER WITH ACCESORIES
632	109.5	METER	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG
632	371.7	METER	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	83.5	METER	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	109.5	METER	SIGNAL CABLE, MISC.: PREEMPT DETECTOR CABLE
632	2	EACH	SIGNAL SUPPORT FOUNDATION
632	2	EACH	PEDESTAL FOUNDATION
632	254.7	METER	LOOP DETECTOR LEAD–IN CABLE
632	14.2	METER	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
632	2	EACH	CONDUIT RISER, 51mm DIAMETER
632	1	EACH	SIGNAL SUPPORT, TYPE TC–81.20M, DES. 3
632	1	EACH	SIGNAL SUPPORT, TYPE TC–81.20M, DES. 11
632	2	EACH	PEDESTAL, 2.4M, TRANSFORMER BASE
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION
633	1	EACH	CONTROLLER, ACTUATED, 4 PHASE, SOLID–STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	.72	CU. METER	CONCRETE FOR CABINET FOUNDATION
633	.80	SQ. METER	CONTROLLER WORK PAD
633	3	EACH	CONTROLLER ITEM, MISC.: PREEMPT DETECTORS
633	1	EACH	CONTROLLER ITEM, MISC.: PREEMPT PHASE SELECTOR
633	3	EACH	CONTROLLER ITEM, MISC.: CONFIRMATION LIGHT

PHASING DIAGRAM



PREEMPT CHANNELS

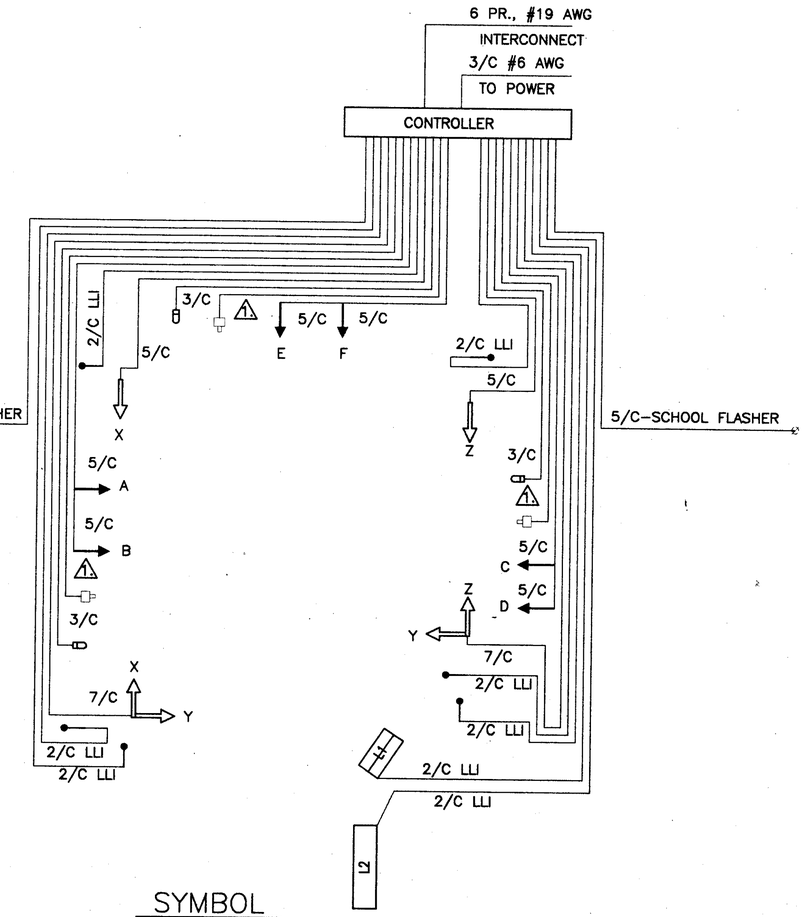
CHANNEL 1 = ø2 (NORTHBOUND ONLY)
CHANNEL 2 = ø2 (SOUTHBOUND ONLY)
CHANNEL 3 = ø4 (EASTBOUND ONLY)

PREEMPT NOTES:

1. ACTIVE WALK INDICATIONS SHALL IMMEDIATELY GO TO "DON'T WALK" UPON RECEIVING PREEMPTION SIGNAL.
2. IF PHASE ACTIVE CONFLICTS WITH PREEMPT PHASE CALLED, IT SHALL IMMEDIATELY TIME ITS YELLOW AND ALL RED CLEARANCES.
3. IF ACTIVE PHASE = THE PREEMPT PHASE, THEN THE PHASE SHALL HOLD FOR THE DURATION OF THE PREEMPT SIGNAL.
4. AFTER RELEASE FROM PREEMPT, YELLOW AND ALL RED CLEARANCE SHALL BE DISPLAYED AND RETURN PHASE SHALL BE ø2.
5. IF PREEMPT PHASES = RETURN PHASE ø2 THEN YELLOW AND ALL RED CLEARANCE AFTER PREEMPT SHALL NOT BE DISPLAYED.

NOTE:
ALL PUSHBUTTONS SHALL BE WIRED WITH 2 CONDUCTOR LOOP LEAD–IN CABLE.

WIRING DIAGRAM



SYMBOL

- = PREEMPT DETECTOR
- = CONFIRMATION LIGHT
- = PREEMPT DETECTOR CABLE

CALCULATED
CHECKED

TRAFFIC CONTROL PLAN
STATE STREET & PROSPECT STREET

LAKE COUNTY
LAK-20-22.916/VARIOUS