

SIGNAL DISPLAY CHART

SIGNAL HEAD	#1 + #6		#2 + #6		#3 + #7		#3 + #8		#4 + #7		#4 + #8		FLASH
	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	
A	R	R	R	G	G	Y	R	R	R	R	R	R	Y
B	R	R	R	G	G	Y	R	R	R	R	R	R	Y
C	G	G	G	G	G	Y	R	R	R	R	R	R	Y
D	G	G	G	G	G	Y	R	R	R	R	R	R	Y
E	R	R	R	R	R	R	R	R	R	R	R	R	Y
F	R	R	R	R	R	R	R	R	R	R	R	R	Y
G	R	R	R	R	R	R	R	R	R	R	R	R	Y
H	R	R	R	R	R	R	R	R	R	R	R	R	Y
J	R	R	R	R	R	R	R	R	R	R	R	R	Y
W-W	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
X-X	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
Y-Y	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK
Z-Z	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK

NOTES:
REMAINS G/R IF #3 + #8 IS NEXT
REMAINS G/R IF #4 + #7 IS NEXT

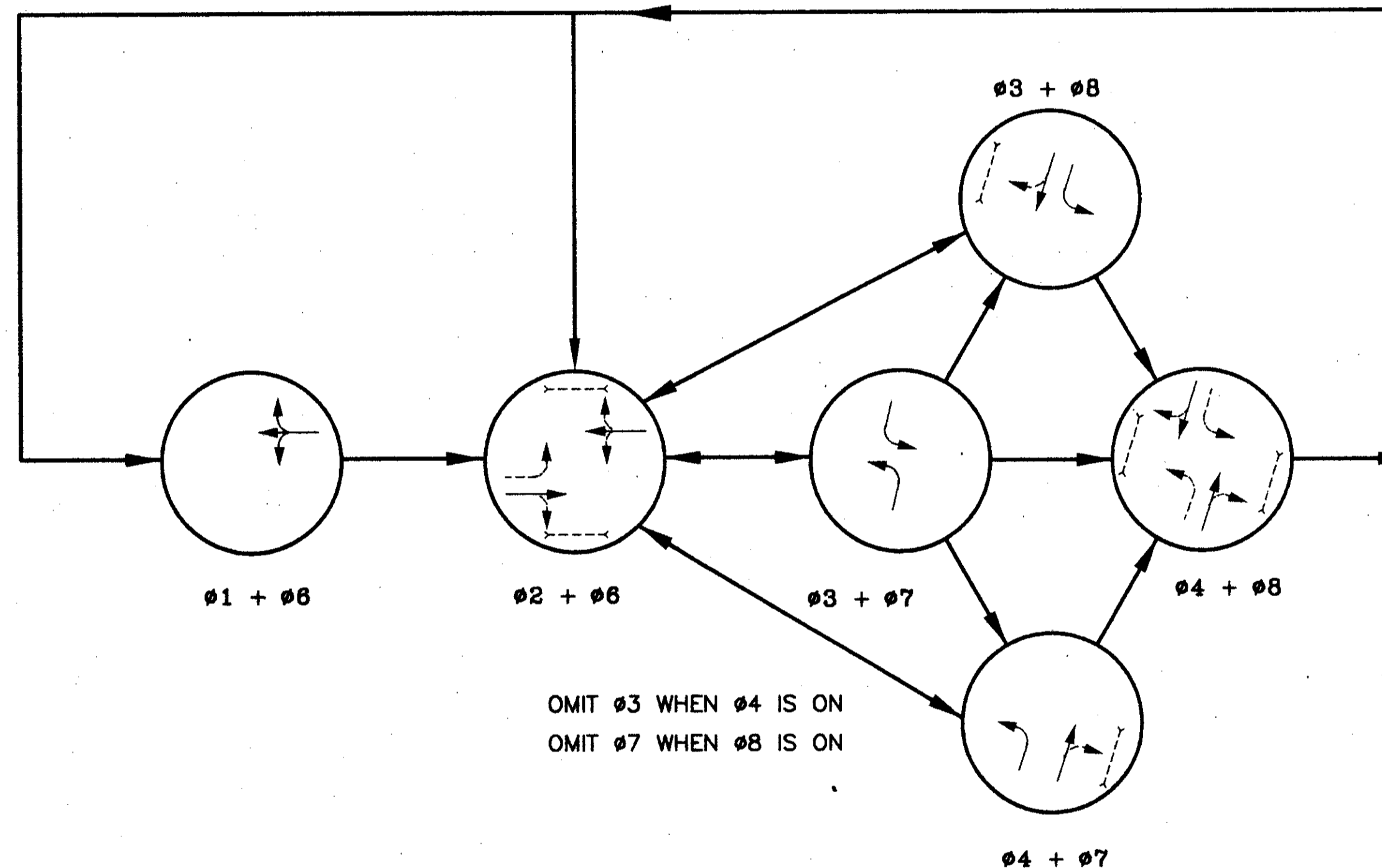
LOOP DETECTOR CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	AMP #	PHASE
L1	2.0m X 9.1 m	2	PRESENCE	2	1	CALL #1
L2	2.0m X 9.1 m	2	PRESENCE	8	2	4
L3	2.0m X 9.1 m	2	PRESENCE	2	3	7
L4	2.0m X 9.1 m	2	PRESENCE	8	4	CALL #2
L5	2.0m X 9.1 m	2-4-2	PRESENCE	2	5	CALL #2
L6	2.0m X 9.1 m	2	PRESENCE	8	6	8
L7	2.0m X 9.1 m	2	PRESENCE	2	7	3
L8	2.0m X 4.0m	3	PRESENCE	2	8	8
L9	2.0m X 4.0m	3	PRESENCE	2	9	EXT #1
L10	2.0m X 2.0m	3	PRESENCE	0	10	2
L11	2.0m X 2.0m	3	PRESENCE	0	11	6

ESTIMATED QUANTITIES

ITEM	QUANT	UNIT	DESCRIPTION
202	33.8	SQ. METER	WALK REMOVED, AS PER PLAN
608	33.8	SQ. METER	100mm CONCRETE WALK
625	85.6	METER	CONDUIT, 51 mm, 713.04
625	11.8	METER	CONDUIT, 76 mm, 713.04
625	2.4	METER	CONDUIT, 102 mm, 713.04
625	24.6	METER	CONDUIT, JACKED OR DRILLED, SIZE: 51 mm
625	92.7	METER	CONDUIT, JACKED OR DRILLED, SIZE: 76 mm
625	98.4	METER	TRENCH
625	3	EACH	PULLBOX REMOVED
625	7	EACH	PULLBOX, 713.08, 450 mm
625	2	EACH	PULLBOX, 713.08, 600 mm
625	5	EACH	GROUND ROD
630	4	EACH	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN
630	2.02	SQ. METER	SIGN, FLAT SHEET, TYPE G
630	4	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE
632	5	EACH	VEHICULAR SIGNAL HEAD, 3-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	3	EACH	VEHICULAR SIGNAL HEAD, 5-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	8	EACH	PEDESTRIAN SIGNAL HEAD, TYPE D2, AS PER PLAN
632	8	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	8	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	12	EACH	DETECTOR LOOP
632	2	EACH	LOOP DETECTOR UNIT, AS PER PLAN
632	10	EACH	LOOP DETECTOR UNIT, DELAY & EXTENSION TYPE, AS PER PLAN
632	251.4	METER	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG
632	41.3	METER	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	424	METER	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	251.4	METER	SIGNAL CABLE, MISC.: PREEMPT DETECTOR CABLE
632	1	EACH	PHONE DROP
632	4	EACH	SIGNAL SUPPORT FOUNDATION
632	987.1	METER	LOOP DETECTOR LEAD-IN CABLE
632	13.5	METER	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
632	2	EACH	CONDUIT RISER, 51mm DIAMETER
632	2	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 4
632	2	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 11
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION
633	1	EACH	CONTROLLER, ACTUATED, 8 PHASE, SOLID-STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	3	EACH	CALLING RELAY
633	1.4	CU. METER	CONCRETE FOR CABINET FOUNDATION
633	1.04	SQ. METER	CONTROLLER WORK PAD
633	4	EACH	CONTROLLER ITEM, MISC.: PREEMPT DETECTORS
633	1	EACH	CONTROLLER ITEM, MISC.: PREEMPT PHASE SELECTOR
633	4	EACH	CONTROLLER ITEM, MISC.: CONFIRMATION LIGHT

PHASING DIAGRAM



PREEMPT CHANNELS

CHANNEL 1 = #2 (EASTBOUND ONLY) CHANNEL 3 = #4 (NORTHBOUND ONLY)
CHANNEL 2 = #2 (WESTBOUND ONLY) CHANNEL 4 = #4 (SOUTHBOUND ONLY)

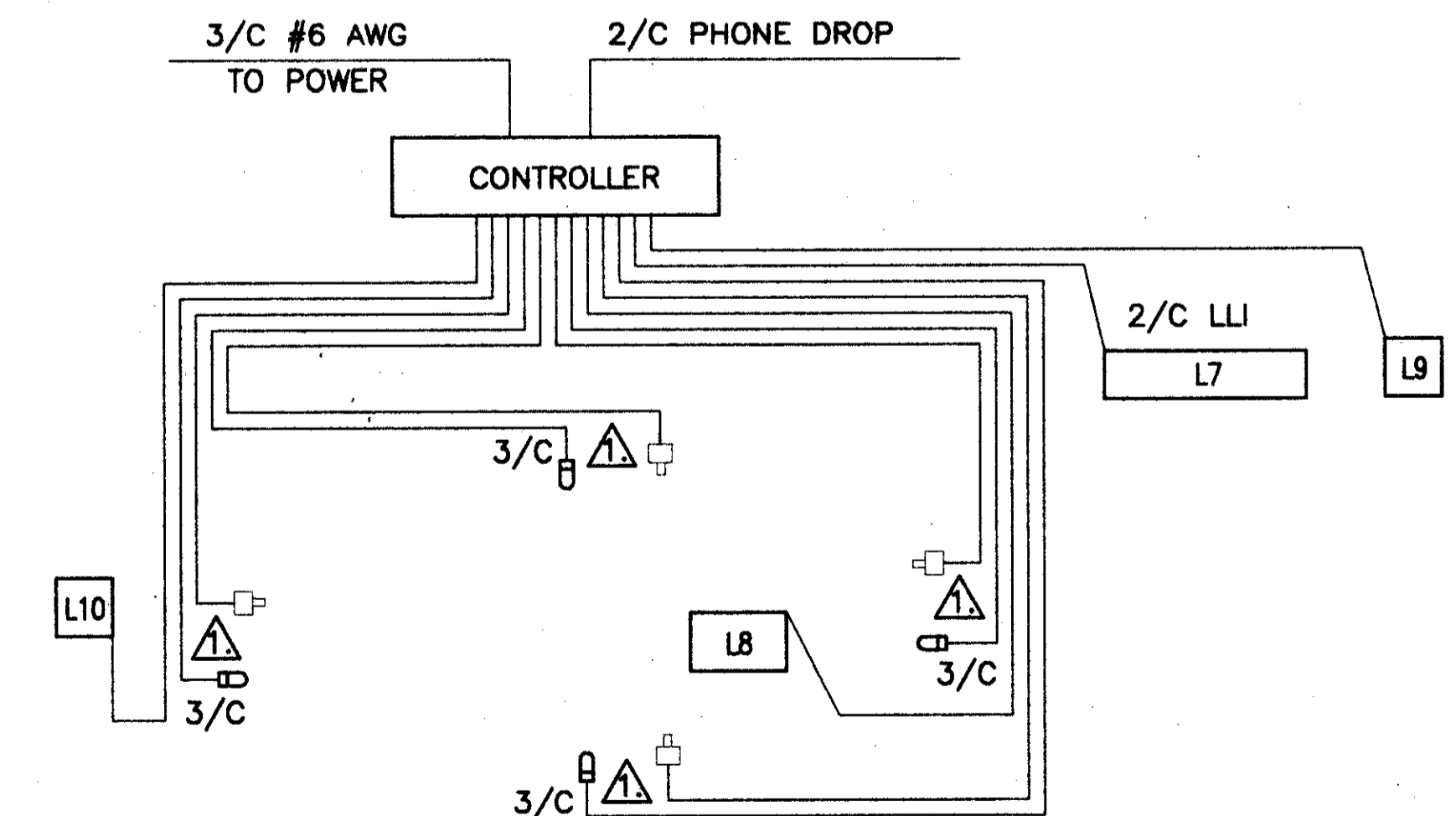
PREEMPT NOTES:

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

SIGNAL TIMING

INTERVAL	#1	#2	#3	#4	#6	#7	#8
INITIAL	7	26	7	7	26	22	25
PASSAGE	2.5	2.5	3.2	3.8	2.5	3.0	3.0
YELLOW	3.2	3.2	3.1	3.1	3.2	3.1	3.1
RED CLEAR	2.0	2.0	1.9	1.9	2.0	1.9	1.9
MAX I	15	60	15	30	75	15	30
MAX II	15	60	15	30	75	15	30
WALK	0	7	0	7	7	0	7
PED CLEAR	0	18	0	15	18	0	15
RECALL	NONE	NONE	NONE	NONE	NONE	NONE	NONE
MEMORY	ON	ON	OFF	ON	ON	OFF	ON

WIRING DIAGRAM



SYMBOL

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

CALCULATED
CHECKED

TRAFFIC CONTROL PLAN
WEST WALNUT AVENUE & LIBERTY STREET

LAKE COUNTY
LAK-20-22.916/VARIOUS