

SIGNAL DISPLAY CHART

SIGNAL HEAD	#2				#3				#4				FLASH
	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	
A	G	G	Y	R	R	R	R	R	R	R	R	R	Y
B	G	G	Y	R	R	R	R	R	R	R	R	R	Y
C	G	G	Y	R	R	R	R	R	R	R	R	R	Y
D	G	G	Y	R	R	R	R	R	R	R	R	R	Y
E	R	R	R	R	R	R	R	R	G	G	Y	R	R
F	R	R	R	R	R	R	R	R	G	G	Y	R	R
W-W	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DW	DARK
X-X	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DARK

① IF #3 IS NEXT REMAINS GREEN

SIGNAL TIMING

INTERVAL	#2	#3	#4
INITIAL	16	7	18
PASSAGE	3.0	2.5	2.5
YELLOW	3.6	3.6	3.1
RED CLEAR	1.2	1.2	1.9
MAX I	37	23	36
MAX II	37	23	36
WALK	7	0	7
PED CLEAR	8	0	11
RECALL	MIN	NONE	NONE
MEMORY	ON	ON	ON

COORDINATION TIMING

	DIAL 1	DIAL 2	DIAL 3
CYCLE LENGTH	75 SEC.	110 SEC.	95 SEC.
PHASE 2 SPLIT	36%	37%	44%
PHASE 3 SPLIT	24%	25%	19%
PHASE 4 SPLIT	40%	37%	37%
PERMISSIVE	10%	10%	10%
OFFSET	45%	75%	93%
TIME OF DAY SCHEDULE	ALL OTHER TIMES	6:30AM TO 9:00AM MON-SAT	3:30PM TO 6:30PM MON-SAT

NOTES:

1. PHASE SPLITS SHALL INCLUDE ALL GREEN PLUS YELLOW & ALL RED
2. PERMISSIVES SHALL START AT THE ZERO POINT OF THE CYCLE
3. OFFSETS SHALL BE REFERENCED TO THE BEGINNING OF PHASE 2 YELLOW

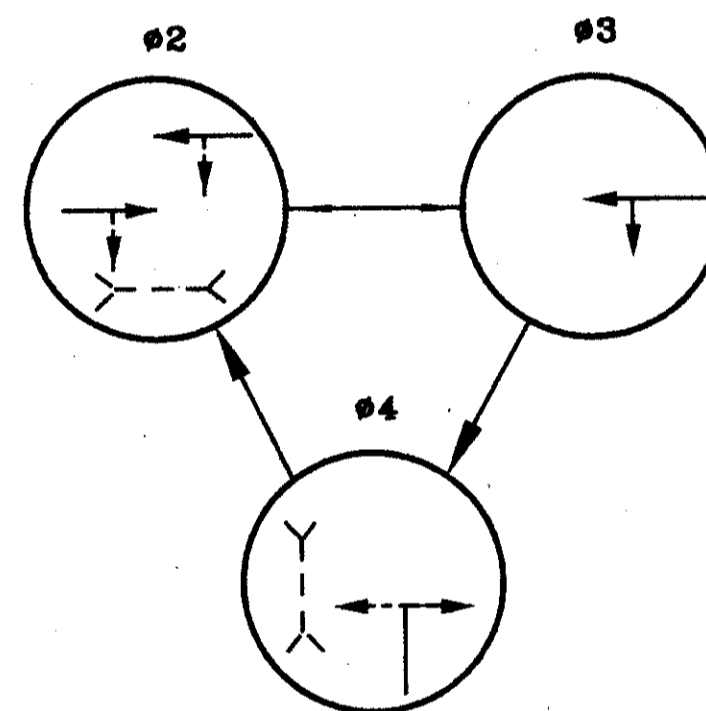
LOOP DETECTOR CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	AMP #	PHASE
L1	1.8mm x 12mm	2-4-2	PRESENCE	8	1	4
L2	1.8mm x 6mm	2-4-2	PRESENCE	10	2	3
S5	1.9mm x 3.7mm	3	PRESENCE	0	3	SYSTEM
S6	1.9mm x 3.7mm	3	PRESENCE	0	4	SYSTEM

ESTIMATED QUANTITIES

ITEM	QUANT	UNIT	DESCRIPTION
202	5.9	SQ. METER	WALK REMOVED, AS PER PLAN
608	5.9	SQ. METER	100mm CONCRETE WALK
625	137.5	METER	CONDUIT, 51 mm, 713.04
625	3	METER	CONDUIT, 102 mm, 713.04
625	24.2	METER	CONDUIT, JACKED OR DRILLED, SIZE: 51 mm
625	40.3	METER	CONDUIT, JACKED OR DRILLED, SIZE: 76 mm
625	140.5	METER	TRENCH
625	5	EACH	PULLBOX, 713.08, 450 mm
625	1	EACH	PULLBOX, 713.08, 600 mm
625	4	EACH	GROUND ROD
630	4.3	METERS	GROUND MOUNTED SUPPORT, NO. 3 POST
630	1	EACH	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN
630	1	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED
630	.99	SQ. METER	SIGN, FLAT SHEET, TYPE G
630	1	EACH	REMOVAL OF POLE MOUNTED SIGN & REERECTION
632	5	EACH	VEHICULAR SIGNAL HEAD, 3-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	1	EACH	VEHICULAR SIGNAL HEAD, 5-SECT., 300 mm LENS, 1-WAY, AS PER PLAN
632	4	EACH	PEDESTRIAN SIGNAL HEAD, TYPE D2, AS PER PLAN
632	6	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	4	EACH	PEDESTRIAN PUSHBUTTON, AS PER PLAN
632	4	EACH	DETECTOR LOOP
632	2	EACH	LOOP DETECTOR UNIT, AS PER PLAN
632	2	EACH	LOOP DETECTOR UNIT, DELAY & EXTENSION TYPE, AS PER PLAN
632	169.9	METER	SIGNAL CABLE, 3 CONDUCTOR, NO. 14 AWG
632	181.9	METER	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	119.5	METER	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	169.9	METER	SIGNAL CABLE, MISC.: PREEMPT DETECTOR CABLE
632	2	EACH	SIGNAL SUPPORT FOUNDATION
632	1	EACH	PEDESTAL FOUNDATION
632	13.6	METER	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
632	3	EACH	CONDUIT RISER, 51mm DIAMETER
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 1
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20M, DES. 4
632	1	EACH	PEDESTAL, 2.4M, TRANSFORMER BASE
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION
633	1	EACH	CONTROLLER, ACTUATED, 8 PHASE SOLID-STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	1.4	CU. METER	CONCRETE FOR CABINET FOUNDATION
633	1.04	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 = #2 (EASTBOUND ONLY) CHANNEL 3 = #4 (NORTHBOUND ONLY)
CHANNEL 2 = #2 (WESTBOUND ONLY)

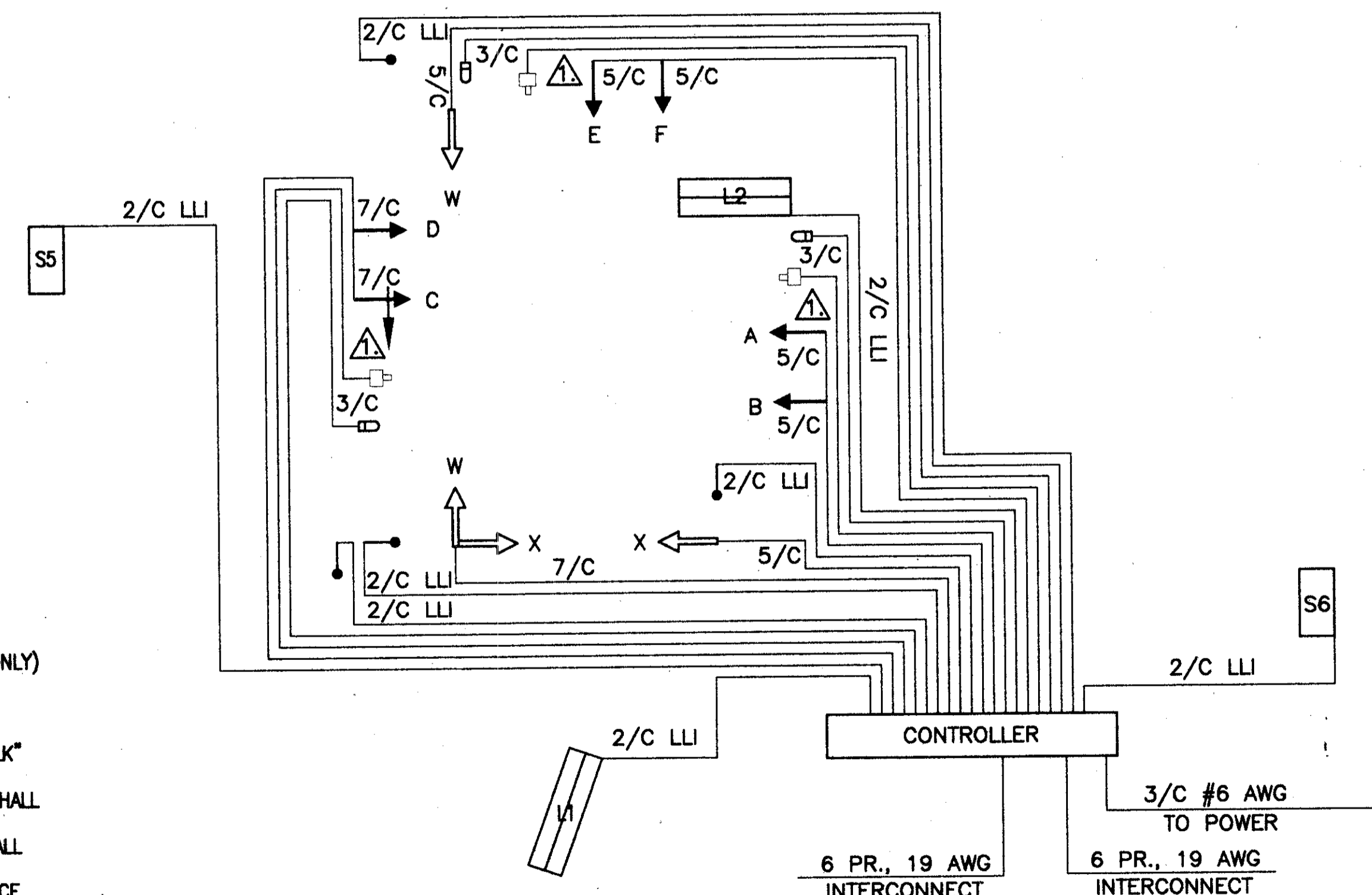
PREEMPT NOTES:

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 #2.
5. IF PREEMPT PHASES = RETURN PHASE #2 THEN YELLOW AND ALL RED CLEARANCE AFTER PREEMPT SHALL NOT BE DISPLAYED.

NOTES:

ALL PUSHBUTTONS SHALL BE WIRED WITH 2 CONDUCTOR LOOP LEAD-IN CABLE. CONTRACTOR SHALL HOOK UP DRAIN WIRE OF CABLE TO GROUND TERMINAL IN CONTROLLER.

WIRING DIAGRAM



SYMBOL

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

TRAFFIC CONTROL PLAN
MENTOR AVE.(U.S. 20) AND CHESTNUT STREET

LAKE COUNTY
LAK-20-22.916/VARIOUS