

**SIGNAL DISPLAYS**

SIGNAL HEAD	ø 2 & ø 5				ø 2 & ø 6				ø 4 & ø 7				FLASH
	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	R/W	CLEAR	
1	R	R	R	R	G	G	Y	R	R	R	R	R	Y
2	R	R	R	R	G	G	Y	R	R	R	R	R	Y
3	R	R	R	R	G	G	Y	R	R	R	R	R	Y
4	G	G	G	G	Y	Y	R	R	R	R	R	R	Y
5	G	G	G	G	Y	Y	R	R	R	R	R	R	Y
6	R	R	R	R	R	R	R	R	G	G	Y	R	R
7	R	R	R	R	R	R	R	R	G	G	Y	R	R
A	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW		DARK
B	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW		DARK
C	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW		DARK
D	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW		DARK

**TRAFFIC SIGNAL DETECTOR CHART**

LOOP DESIGNATION	SIZE (FT.)	TURNS	PULSE OR PRESENCE	DELAY (SEC.)	EXTENSION (SEC.)	OVERRIDE PHASE	CONNECT TO DETECTOR UNIT (UNIT-CHANNEL)	ASSOCIATED CONTROLLER PHASE
L-1	6' x 40'	3	PRESENCE	-	-	-	1	5
L-2	6' x 40'	3	PRESENCE	10	-	-	2	4
L-3	6' x 40'	3	PRESENCE	-	-	-	3	4
L-4	6' x 40'	3	PRESENCE	-	-	-	4	7

**OVERHEAD SIGNS**

FROM SHEET NO.	STATION	SIDE	SIGN CODE AND SIZE					ITEM 630							
			R10-4A-9 (9"x12")	R10-7-24 (24"x30")	D3-H2A (72"x18")	D3-H2A (96"x30")	E1-H1 (108"x84")	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	SIGN, FLAT SHEET	SIGN, OVERHEAD EXTRUSHEET	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN			
1177	122+27.5	LT	1												
1177	122+46	RT	1												
1177	122+65	RT						1			63.0				
1177	122+65	RT						1			63.0				
1177	122+65	RT			1					9.0					1
TOTAL											10.5	126	2		1

**TIMING CHART**

START UP START IN: Y/R FLASH ● ; ALL RED ○  
 TIME FOR FLASH OR ALL RED 3 SEC.  
 FIRST PHASE(S) ø 2 & ø 6  
 COLOR DISPLAYED: GREEN ● ;YELLOW ○

DUAL ENTRY ○  
 REST IN RED: RING 1 ○ RING 2 ○

INTERVAL	CONTROLLER PHASE							
	1	2	3	4	5	6	7	8
MOVEMENT	↶	→	↷	↓	↵	←	↶	↑
MINIMUM GREEN (INITIAL)	-	-	-	16	8	-	-	-
ADDED INITIAL	-	-	-	3	3	-	-	-
PASSAGE TIME	-	-	-	3	3	-	-	-
TIME BEFORE REDUCTION	-	-	-	-	-	-	-	-
MINIMUM GAP	-	-	-	-	-	-	-	-
TIME TO REDUCE	-	-	-	-	-	-	-	-
MAXIMUM GREEN I	40	-	-	31	22	-	-	-
MAXIMUM GREEN II	-	-	-	-	-	-	-	-
YELLOW CHANGE	4.4	-	-	4.2	4.4	-	-	-
ALL RED CLEARANCE	2	-	-	2	-	-	-	-
WALK	7	-	-	7	-	-	-	-
PEDESTRIAN CLEARANCE	26	-	-	17	-	-	-	-
RECALL	MAXIMUM		-	-	-	-	-	-
	MINIMUM		ON	OFF	OFF	-	-	-
	PEDESTRIAN		-	-	-	-	-	-
MEMORY			OFF	OFF	OFF	-	-	-
CALL TO NON-ACUATED	No. 1	-	-	-	-	-	-	-
	No. 2	-	-	-	-	-	-	-
MAXIMUM CYCLE	110							

**SUB-SUMMARY OF TRAFFIC SIGNAL ITEMS**

ITEM	QUANTITY	UNIT	ITEM DESCRIPTION	REFERENCE
625	242	FT	CONDUIT, 2", 725.05	
625	24	FT	CONDUIT, 3", 725.05	
625	179	FT	CONDUIT, 3", 725.04	
625	107	FT	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 3"	
625	433	FT	TRENCH	
625	3	EACH	PULL BOX, 725.08, 18"	
625	1	EACH	PULL BOX, 725.08, 36"	
625	3	EACH	GROUND ROD	
625	1	EACH	GROUND ROD, AS PER PLAN	1038
625	433	FT	PLASTIC CAUTION TAPE	1038
630	1	EACH	SIGN HANGER ASSEMBLY, MAST ARM, AS PER PLAN	1038
630	2	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED, AS PER PLAN	1038
630	11	SF	SIGN, FLAT SHEET	
630	126	SF	SIGN, OVERHEAD EXTRUSHEET	
632	6	EACH	VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, 3-SECTION, 12" LENS, 1-WAY, AS PER PLAN	1038
632	1	EACH	VEHICULAR SIGNAL HEAD WITH LED LAMP UNITS, 5-SECTION, 12" LENS, 1-WAY, AS PER PLAN	1038
632	4	EACH	PEDESTRIAN SIGNAL HEAD WITH LED LAMP UNITS, TYPE A2	
632	2	EACH	PEDESTRIAN PUSHBUTTON	
632	4	EACH	DETECTOR LOOP	
632	4	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN	1038
632	1	EACH	DISCONNECT SWITCH WITH ENCLOSURE	
632	484	FT	SIGNAL CABLE, 2 CONDUCTOR, NO. 14 AWG	
632	486	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
632	763	FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG	
632	3	EACH	SIGNAL SUPPORT FOUNDATION	
632	4	EACH	PEDESTAL FOUNDATION	
632	993	FT	LOOP DETECTOR LEAD-IN CABLE	
632	109	FT	POWER CABLE, 2 CONDUCTOR, NO. 6 AWG	
632	40	FT	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG	
632	1	EACH	POWER SERVICE, AS PER PLAN	1039
632	1	EACH	CONDUIT RISER, 2" DIAMETER	
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20, DESIGN 11	
632	1	EACH	COMBINATION SIGNAL SUPPORT, MISC.: TYPE TC-12.30 DESIGN 4 POLE, WITH MAST ARMS TC-81.20 DESIGN 11 AND DESIGN 1, WITH SIGN SUPPORT TC-12.30 DESIGN 4	1038
632	1	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 1	
632	2	EACH	PEDESTAL, 5', TRANSFORMER BASE	
632	2	EACH	PEDESTAL, 8', TRANSFORMER BASE	
633	1	EACH	CONTROLLER UNIT, TYPE TS2/A2, WITH CABINET, TYPE TS1	1040
633	1	EACH	CABINET RISER	
633	1	EACH	CABINET FOUNDATION	
633	1	EACH	TELEPHONE SERVICE	
633	1	EACH	UNINTERRUPTIBLE POWER SUPPLY (UPS), 1000 WATT	1039
633	3	EACH	CONTROLLER ITEM, MISC.: PREEMPTION RECEIVING UNIT	1039
633	1	EACH	CONTROLLER ITEM, MISC.: PREEMPT PHASE SELECTOR	1039
633	3	EACH	CONTROLLER ITEM, MISC.: PREEMPT CONFIRMATION LIGHT	1040
633	1	EACH	CONTROLLER ITEM, MISC.: PREEMPTION	1040
633	484	FT	CONTROLLER ITEM, MISC.: PREEMPTION DETECTOR CABLE	1040

TRAFFIC SIGNAL DETAILS AND SUB-SUMMARY  
VINE STREET AND WESTBOUND RAMPS

LAK - 2 - 3.32