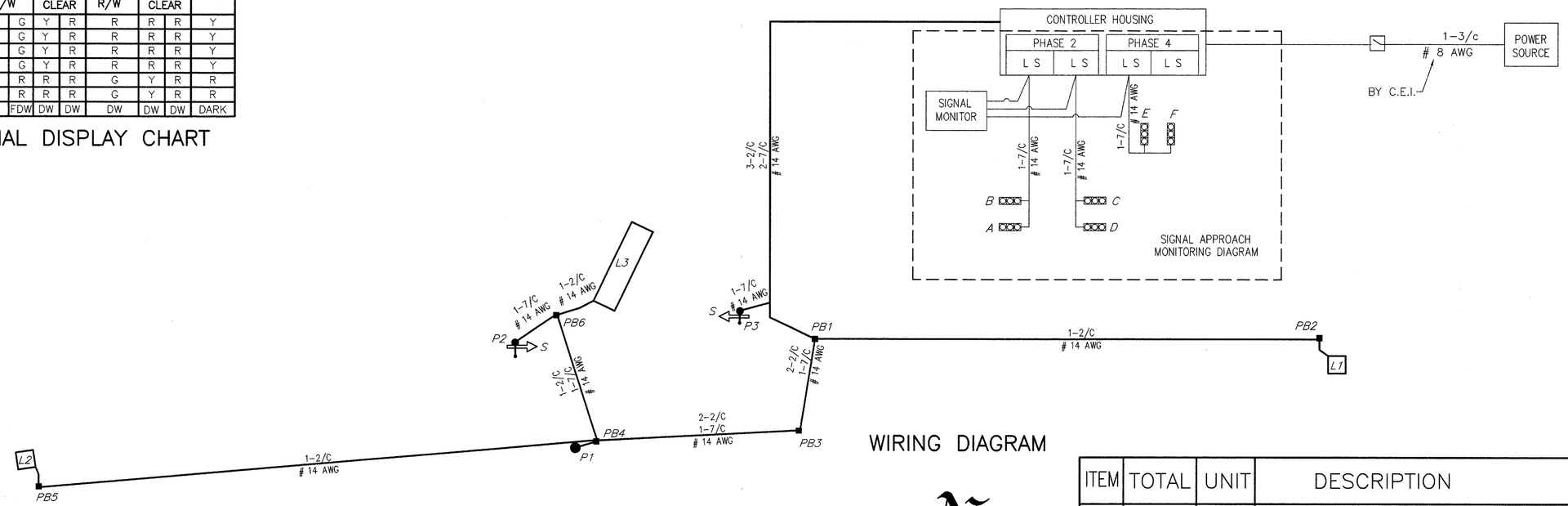
CALC. BY: DATE:	LAKE COUNTY LAK-20-2.70	OHIO
CHKD. BY: DATE:		FHWA REGION 5
		FEDERAL PROJECT

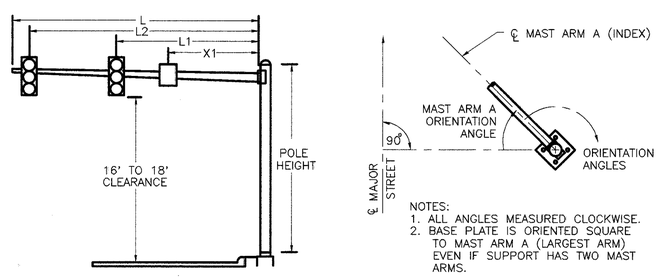
59
98

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

SIGNAL DISPLAY CHART



WIRING DIAGRAM



NOTES:
1. ALL ANGLES MEASURED CLOCKWISE.
2. BASE PLATE IS ORIENTED SQUARE TO MAST ARM A (LARGEST ARM) EVEN IF SUPPORT HAS TWO MAST ARMS.

FUNCTION	ø2	ø4
MINIMUM GREEN	23	8
PED WALK	7	–
PED CLEARANCE	16	–
GREEN EXTENSION	3.0	2.5
MAXIMUM GREEN	55	25
YELLOW CLEARANCE	3.6	3.1
ALL RED CLEARANCE	1.4	1.1
RECALL	MAX	NONE

SIGNAL TIMING

SUPPORT NO.	SIGNAL SUPPORT TC-81.20 TC-12.30: POLE DESIGN NO. TC-81.20	POLE DESIGN NO. TC-12.30	ARM DESIGN NO.	POLE HEIGHT (FT)	FOUNDATION STATION	FOUNDATION OFFSET	L (FT.)	L 1 (FT.)	L 2 (FT.)	L 3 (FT.)	L 4 (FT.)	MAST ARM A ANGLE (DEG.)	ORIENTATION ANGLES (DEG.) FROM MAST ARM "A": MAST ARM B	PEDESTRIAN SIGNALS	PEDESTRIAN PUSH BUTTONS	POWER SERVICE	CONTROLLER	LUMINAIRE BRACKET	HANDHOLE	CABLE ENTRANCE (12" FROM TOP)		
P1	11		4	19'	264+26	22'R	34	10	20	25	33	30							180			
			1				22	7	21				270									
P2	PED			8'	264+10	24'L						0		0	0				180			
P3	PED			8'	264+84	25'L						0		0	0				180			

ORIENTATION ANGLE CHART

LOOP #	SIZE	# TURNS	MODE	DELAY	UNIT #	PHASE
L1	6' x 6'	3	PRESENCE	0	1	2
L2	6' x 6'	3	PRESENCE	0	2	2
L3	8' x 30'	2	PRESENCE	8	3	4

LOOP DETECTOR CHART

ITEM	TOTAL	UNIT	DESCRIPTION
202	60	SQ FT	WALK REMOVED
608	60	SQ FT	4" CONCRETE WALK
625	4	EACH	GROUND ROD
625	6	EACH	PULLBOX, MISC. AS PER PLAN
625	493	LIN FT	CONDUIT, 2", 713.04
625	23	LIN FT	CONDUIT, 3", 713.04
625	77	LIN FT	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 3"
625	519	LIN FT	TRENCH
632	6	EACH	VEHICULAR SIGNAL HEAD, 3 SECT., 12" LENS, 1-WAY, AS PER PLAN
632	2	EACH	PEDESTRIAN SIGNAL HEAD, TYPE D2
632	2	EACH	PEDESTRIAN PUSHBUTTON
632	2	EACH	LOOP DETECTOR UNIT, AS PER PLAN
632	1	EACH	LOOP DETECTOR UNIT, DELAY AND EXTENSION TYPE, AS PER PLAN
632	3.44	CU YD	CONCRETE FOR ANCHOR BASE FOUNDATION
632	1	EACH	SIGNAL SUPPORT, TYPE TC-81.20, DES. 11 WITH MAST ARMS TYPE TC-81.20, DES. 4, 34' AND TYPE TC-81.20, DES. 1, 22'
632	2	EACH	PEDESTAL, 8', TRANSFORMER BASE
632	1	EACH	CABLE SUPPORT ASSEMBLY
632	138	LIN FT	LOOP DETECTOR PAVEMENT CUTTING
632	913	LIN FT	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	1	EACH	PHONE DROP
632	382	LIN FT	LOOP DETECTOR WIRE, TYPE E
632	748	LIN FT	LOOP DETECTOR LEAD-IN CABLE
632	65	LIN FT	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
632	1	EACH	CONDUIT RISER, 1 1/2"
632	6	EACH	COVERING OF VEHICULAR SIGNAL HEAD
632	1	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN
633	8.33	SQ FT	CONTROLLER WORK PAD
633	0.99	CU YD	CONCRETE FOR CABINET FOUNDATION
633	1	EACH	CONTROLLER, ACTUATED, 4 PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN

RIDGE RD. & SHANKLAND RD. TRAFFIC CONTROL PLAN