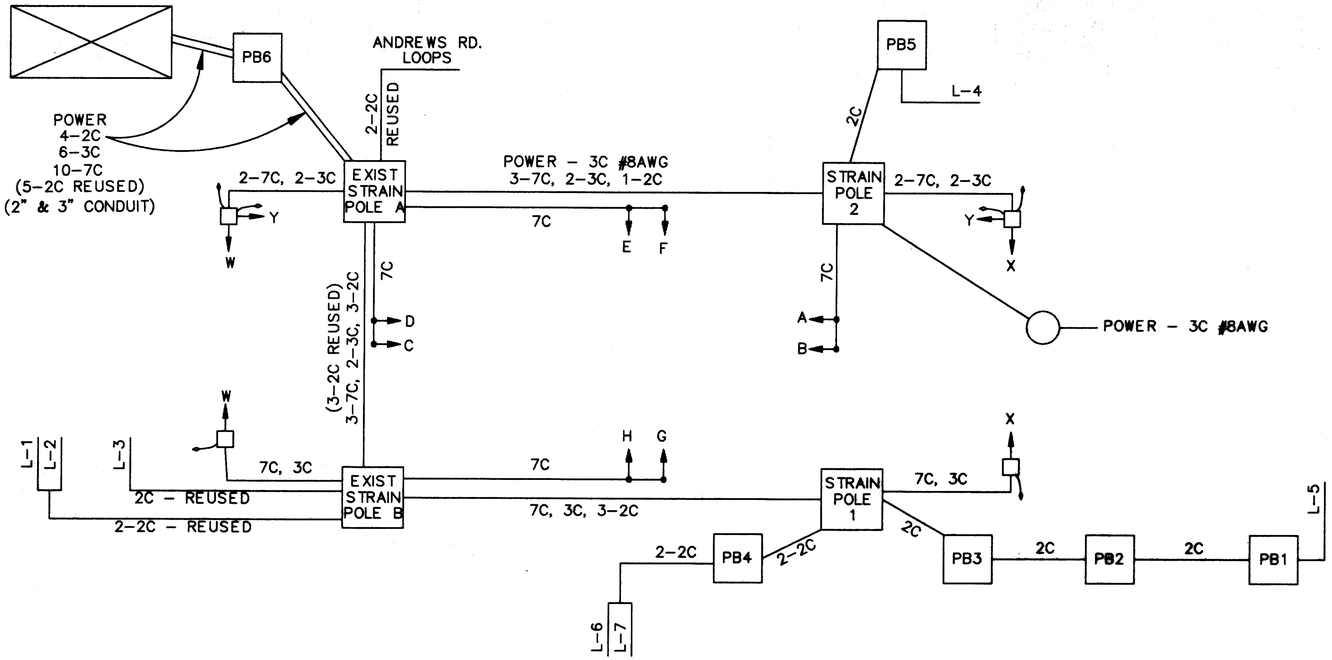
CALC. BY A.E.P. DATE 1-92	LAK – 615 – 4.64	OHIO
CHKD. BY V.D.B. DATE 1-92	LAK – VAR	FHWA REGION 5

180
198



WIRING DIAGRAM

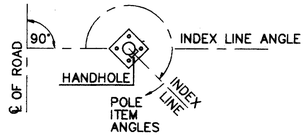
SIGNAL HEAD	ϕ1+ϕ5 R/W	ϕ1+ϕ5 CLEAR	ϕ1+ϕ6 R/W	ϕ1+ϕ6 CLEAR	ϕ2+ϕ5 R/W	ϕ2+ϕ5 CLEAR	ϕ2+ϕ6 R/W	ϕ2+ϕ6 CLEAR	ϕ3+ϕ7 R/W	ϕ3+ϕ7 CLEAR	ϕ3+ϕ8 R/W	ϕ3+ϕ8 CLEAR	ϕ4+ϕ7 R/W	ϕ4+ϕ7 CLEAR	ϕ4+ϕ8 R/W	ϕ4+ϕ8 CLEAR	FLASH	DWELL
A	R/G ①	R	R	R	G/Y ①	G	G	Y	R	R	R	R	R	R	R	R	Y	G
B	R	R	R	R	G	G	G	Y	R	R	R	R	R	R	R	R	Y	G
C	R/G ①	R	G/Y ①	G	R	R	G	Y	R	R	R	R	R	R	R	R	Y	G
D	R	R	G	G	R	R	G	Y	R	R	R	R	R	R	R	R	Y	G
E	R	R	R	R	R	R	R	R	R/G ①	G	G/Y ①	G	R	R	R	R	R	R
F	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R
G	R	R	R	R	R	R	R	R	R/G ①	R	R	R	G/Y ①	G	G	Y	R	R
H	R	R	R	R	R	R	R	R	R	R	R	R	G	G	G	G	R	R
W–W	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DARK	DW
X–X	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	DARK	DW
Y–Y	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW	DW	DW	W	FDW	DW	DW	DARK	DW

① IF ϕ3+ϕ5 NEXT THEN R/G
② IF ϕ1+ϕ6 NEXT THEN R/G
③ ϕ3+ϕ8 NEXT THEN R/G
④ ϕ4+ϕ7 NEXT THEN R/G

SIGNAL SEQUENCE CHART

NOTES

1. ALL ANGLES MEASURED CLOCKWISE
2. INDEX LINE GOES THROUGH THE CENTER OF THE HANDHOLE



TC–81.10 SIGNAL SUPPORT

ORIENTATION ANGLES

POLE No.	DESIGN No.	POLE HEIGHT (FT.)	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE: PEDESTRIAN SIGNALS	PEDESTRIAN PUSHBUTTONS	CONTROLLER	POWER SERVICE	CABLE ENTRANCE
1	4	26'	180°	90°	90°			90° / 195°
2	4	26'	180°	90° / 180°	90° / 180°			195° / 270°

TYPE TC–81.10 STRAIN POLE

NOTE: ALL SIGNAL HEADS MOUNTED BETWEEN STRAIN POLES SHALL MAINTAIN A 16' MINIMUM CLEARANCE FROM THE PAVEMENT.

FUNCTION	ϕ1	ϕ2	ϕ3	ϕ4	ϕ5	ϕ6	ϕ7	ϕ8
INITIAL GREEN	7	20	7	20	7	20	7	14
VEHICLE EXTENSION	2	3	2	3	2	3	2	3
MAXIMUM GREEN	15	40	15	30	15	40	15	30
Y CHANGE INTERVAL	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
R CLEARANCE INTERVAL	3.0	3.0	2.0	2.0	3.0	3.0	2.0	2.0
PEDESTRIAN WALK	–	5.0	–	5.0	–	5.0	–	5.0
PEDESTRIAN CLEARANCE	–	22.0	–	14.0	–	22.0	–	14.0
RECALL	OFF	PED	OFF	OFF	OFF	PED	OFF	OFF
MEMORY	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

SIGNAL TIMING CHART

INTERSECTION SUBSUMMARY

REF	LOCATION	625 CONDUIT, 2", 713.04 LIN. FT.	625 CONDUIT, 3", 713.04 LIN.FT.	625 TRENCH LIN.FT.	625 TRENCH IN PAVED AREAS, TYPE B LIN.FT.	625 PULLBOX MISC.: 713.081, 13"x24", A.P.P. EACH	625 PULLBOX MISC.: 713.081, 24"x30", A.P.P. EACH	625 GROUND ROD EACH	632 REMOVAL OF TRAFFIC SIGNAL INSTALLATION, A.P.P. EACH	632 DETECTOR LOOP EACH	632 REUSE LOOP DETECTOR LEAD IN CABLE LIN. FT.	632 LOOP DETECTOR LEAD-IN CABLE 2 CONDUCTOR, #14 AWG LIN. FT.	632 STRAIN POLE FOUNDATION EACH	632 POWER CABLE 3C NO. 8AWG LIN. FT.	632 MESSENGER WIRE – 7 STRAND, 3/8" DIA. WITH ACCESSORIES LIN. FT.	632 SIGNAL CABLE 7 CONDUCTOR, #14 AWG LIN. FT.	632 SIGNAL CABLE 3 CONDUCTOR, #14 AWG LIN. FT.	632 STRAIN POLE, TYPE TC–81.10, DESIGN 4 EACH	632 VEHICULAR SIGNAL HEAD 5 SECT., 12" LENS, 1–WAY POLYCARBONATE, A.P.P. EACH	632 VEHICULAR SIGNAL HEAD 3 SECT., 12" LENS, 1–WAY POLYCARBONATE, A.P.P. EACH	632 PEDESTRIAN SIGNAL HEAD TYPE D2, AS PER PLAN EACH	632 PEDESTRIAN PUSH BUTTON AS PER PLAN EACH		632 COVERING OF VEHICULAR SIGNAL HEADS EACH	633 CONTROLLER, ACTUATED, 16 SOLID STATE DIGITAL MICROPROCESSOR TRANSYT 1980 EL, AS PER PLAN EACH	633 CONCRETE FOR CABINET FOUNDATION, A.P.P. EACH	633 CONTROLLER WORK PAD S.F.
T–1	PB1 TO L–5					1				1																	
T–2	PB1 TO PB2		129	89	40	1						134															
T–3	PB2 TO PB3	112		112		1						117															
T–4	PB3 TO STRAIN POLE 1	8		8				1				18	1					1									
T–5	STRAIN POLE 1 TO STRAIN POLE 2							1					1		75	75		1	1	1	3	3	2				
T–6	EXISTING STRAIN POLE A TO PB6	9	9	9			1				70	64		16		186	114										
T–7	L–4 TO STRAIN POLE 2	21		21		1				1		33															
T–8	EXIST. STRAIN POLE A TO STRAIN POLE 2											145		135	75	496	292		1	1			2				
T–9	EXISTING STRAIN POLE B TO EXISTING STRAIN POLE A										354	348			76	470	268		1	1			2				
T–10	EXISTING STRAIN POLE B TO STRAIN POLE 1											327			69	155	105		1	1			2				
T–11	L–3 TO EXISTING STRAIN POLE B										90																
T–12	L–1 & L–2 TO EXISTING STRAIN POLE B										580																
T–13	L–6 & L–7 TO PB4					1				2																	
T–14	PB4 TO STRAIN POLE 1	13		13								50															
T–15	ANDREWS LOOPS TO EXISTING STRAIN POLE A										80																
T–16	PB6 TO CONTROLLER	6	6	6				1			65	52		13		130	78								1	1	10.42
TOTALS		169	144	258	40	5	1	3	1	4	1239	1288	2	164	295	1512	857	2	4	4	3	3	8	1	1	10.42

DATE: 07-22-94, CT CONSULTANTS INC. H:\CT\V2533\CAD\TRAFFIC\ANDREW2.DWG Scale:1"=20'

ANDREWS/MUNSON SIGNAL PLAN