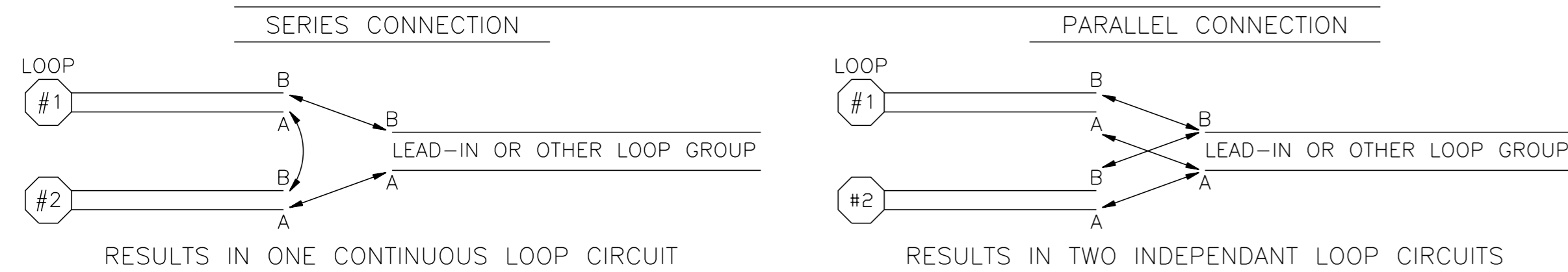


LOOP INDUCTANCE & RESISTANCE DETAILS

RED ENTRIES ARE FINAL READINGS

INTERSECTION	LANE	LOOP DETAILS					LEAD - IN			TOTAL		PULLBOX / POLE BASE				LEAD - IN			TOTAL		CONTROLLER CABINET			
		NO.	SIZE	# TURNS	I	R	LEN.	I	R	I	R	NO.	CONNECTION	I	R	LEN.	I	R	I	R	CONNECTION	I	R	
RIVERSIDE AVE/	WB LT	1	6' - OCT	3	69	0.19	17	4	0.06	73	0.25													
N. WINOOSKI AVE/	WB LT	2	6' - OCT	3	69	0.19	18	5	0.06	74	0.25	PB #18	SERIES	223	0.78	144	36	0.47	259	1.25	---	378 259	1.0 1.25	
HYDE ST	WB LT	3	6' - OCT	3	69	0.19	27	7	0.09	76	0.28													
INTERSECTION	WB LT	4	6' - OCT	4	114	0.25	18	5	0.06	119	0.31	PB #19	-----	119	0.31	246	62	0.8	181	1.11	---	411 170	2.0 1.65	
	WB TH	5	6' - OCT	3	69	0.19	7	2	0.02	71	0.21	PB #18	SERIES	216	0.68	144	36	0.47	525	1.15	---	92.5 252	0.7 1.15	
	WB TH	6	6' - OCT	3	69	0.19	8	2	0.03	71	0.22													
	WB TH	7	6' - OCT	3	69	0.19	18	5	0.06	74	0.25													
	WB TH	8	6' - OCT	4	114	0.25	7	2	0.02	116	0.27	PB #19	-----	116	0.27	246	62	0.8	178	1.07	---	210 178	2.0 1.07	
	EB ALL	9	6' - OCT	3	69	0.19	5	1	0.02	70	0.21	PB #2	SERIES	214	0.68	106	27	0.34	241	1.02	---	443 241	2.0 1.02	
	EB ALL	10	6' - OCT	3	69	0.19	8	2	0.03	71	0.22													
	EB ALL	11	6' - OCT	3	69	0.19	17	4	0.06	73	0.25													
	EB ALL	12	6' - OCT	4	114	0.25	6	2	0.02	116	0.27	PB #1	-----	116	0.27	210	53	0.68	169	0.95	---	376 169	1.4 0.95	
	NB LT/TH	13	6' - OCT	3	69	0.19	13	3	0.04	72	0.23	PB #6	SERIES	219	0.72	58	15	0.19	234	0.91	---	166 234	1.4 0.91	
	NB LT/TH	14	6' - OCT	3	69	0.19	13	3	0.04	72	0.23													
	NB LT/TH	15	6' - OCT	3	69	0.19	22	6	0.07	75	0.26													
	NB RT	16	6' - OCT	3	69	0.19	6	2	0.02	71	0.21	PB #6	SERIES	216	0.68	58	15	0.19	231	0.87	---	256 231	2.0 0.87	
	NB RT	17	6' - OCT	3	69	0.19	8	2	0.03	71	0.22													
	NB RT	18	6' - OCT	3	69	0.19	18	5	0.06	74	0.25													
	NB ALL	19	6' - OCT	4	114	0.25	8	2	0.03	116	0.28	PB #5	-----	116	0.28	165	41	0.53	157	0.81	---	177 157	1.5 0.81	
	COMM HEALTH SB	20	6' - OCT	3	69	0.19	6	2	0.02	71	0.21	PB #14	-----	71	0.21	95	24	0.31	95	0.52	---	160 95	1.0 0.52	
	APT SB	22	6' - OCT	3	69	0.19	20	6	0.07	75	0.26	PB #14	-----	75	0.26	95	24	0.31	99	0.57	---	149 99	1.5 0.57	

LOOP CONNECTION DETAILS



NOTES

- 1) REFER TO STD. E-172 FOR LOOP TESTING DETAILS
- 2) LOOP INDUCTANCE & RESISTANCE READINGS WHICH FALL OUTSIDE THE LIMITS SHOWN ON STD. E-172 BUT CONSIDERED ACCEPTABLE AS DETERMINED BY THE ENGINEER, SHALL BE NOTED ON THIS SHEET.
- 3) SERIES OR PARALLEL INDICATES THE TYPE OF CONNECTION TO GET THE PROPER READINGS, SEE CONNECTION DETAILS.
- 4) LEAD-IN INDUCTANCE IS BASED ON ESTIMATED 25 MICROHENRIES PER 100 FEET.
- 5) RESISTANCE IS BASED ON:
 #14 WIRE = 3.24 OHMS/1000 FT.
 #12 WIRE = 1.98 OHMS/1000 FT.
- 6) I = INDUCTANCE IN MICROHENRIES
 R = RESISTANCE IN MILLIOHMS
 L = LENGTH IN FEET
- 7) LOOP INDUCTANCE FOR 6-FOOT OCTAGONAL LOOPS HAS BEEN CALCULATED USING THE $I = KPN$ FORMULA, WHERE $K = 5/10 + N$, $P = 19.875'$
 3-TURN LOOP, I = 69 H
 4-TURN LOOP, I = 114 H
- 8) RESISTANCE OF 3-TURN LOOP = 0.19 M.OHMS
 RESISTANCE OF 4-TURN LOOP = 0.25 M.OHMS (USING AWG #14 WIRE)

PB = PULLBOX
 JB = JUNCTION BOX
 I = INDUCTANCE IN MICROHENRIES
 P = POLE (BASE)
 R = RESISTANCE IN MILLIOHMS

DATUM
 VERTICAL _____
 HORIZONTAL _____

LOOP INDUCTANCE & RESISTANCE DETAILS

SURVEYED BY _____ DATE _____
 DRAWN BY BND DATE 6/92
 SQUAD LEADER KRD
 DESIGN FILE NO. 89108
 PRF FILE 89108 DATE PLOTTED _____
 PROJ. NAME BURLINGTON
 PROJ. NO. MEGC 5000(15)
 SHEET 156 OF 252 SHEETS