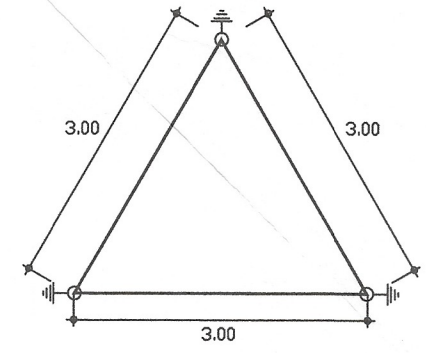


"Introduccion de Red de Energía Eléctrica Aerea en la Loc de Alvaro Obregon , Municipio de El Bosque, Chiapas.



-SISTEMA DE TIERRAS-



- PROYECTO ELÉCTRICO-
ESCALA 1: 2,000

CROQUIS DE MACROLOCALIZACION



CROQUIS DE MICROLOCALIZACION



CUADRO DE DISPOSITIVOS

CUADRO DE DISPOSITIVOS										
POSTE No.	ALTURA Y RESISTENCIA	No. DE SERIE	DISPOSITIVOS PROYECTO					COORDENADAS (UTM)		
			MEDIA TENSION	BAJA TENSION	RETENIDAS	TIERRA	IPC	X	Y	
49	PC-13-600	T330		IP1			K.		520454.8839	1881575.7099
50	PC-9-400	T330		IP1					520475.8509	1881651.8677
51	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.		520486.8400	1881728.1150
52	PC-13-600	T330		IP1					520485.1548	1881784.7059
53	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.		520593.4750	1881841.3030
54	PC-13-600	T330		IP1					520578.7272	1881902.6845
55	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.		520584.0000	1881994.0000
56	PC-9-400	T330		IP1					520492.0700	1881978.3680
57	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.		520404.4830	1881983.8810
58	PC-13-600	R330/R330 30CF 30 15KV		IR1/IR1	2RDA.		K.		520425.0610	1882021.5350
59	PC-13-600	T330		IR1/IR1			K.	3IPC	520474.8990	520474.8990
60	PC-13-600	T330 ITR29 15 KVA 20CF T1		IP3			3K	3IPC	520524.3519	1882051.0788
61	PC-13-600	R330/R330		IR1/IR1	2RDA.			3IPC	1882055.9440	1882055.9440
62	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.	3IPC	520573.5700	1882134.6980
63	PC-13-600	R330/R330		IR1/IR1	2RDA.			3IPC	520597.7500	1882170.5850
64	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.		520593.9000	1882190.0000
65	PC-13-600	V330		IP3					520547.1541	1882244.0644
66	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.	3IPC	520529.5300	1882301.6430
67	PC-13-600	V330 ITR29 15 KVA 20CF T2		IP3	RDA		K.	3IPC	520593.8410	1882335.5140
68	PC-13-600	V330		IP3			K.	3IPC	520617.3205	1882337.7570
69	PC-13-600	R330/R330		IR1/IR1	2RDA.		K.	3IPC	520651.0000	1882350.0000
70	PC-13-600	R330/R330		IR1/IR1	RDA/RDAD		K.	3IPC	520640.5300	1882376.8500
71	PC-13-600	V330		IR1/IR1/IR1			K.	3IPC	520628.2400	1882380.3800
71a	PC-9-400									
72	PC-12-750			IR1	REA					
72	PC-12-750			IR1	REA		K.	3IPC	520687.7400	1882398.9000
73	PC-13-600	V330 ITR29 25 KVA 20CF T3		IP3			3K	3IPC	520592.2000	1882389.4500
74	PC-13-600	V330		IR1/IR1/IR1			K.	3IPC	520555.3000	1882400.6100
74a	PC-9-400									
75	PC-12-750			IR1	REA		K.	3IPC	520599.0000	1882436.0000
76	PC-13-600	V330		IR1/IR1/IR1			K.	3IPC	520616.5800	1882410.3400
77	PC-13-600	V330/R330		IR1/IR1	RDA		K.	3IPC	520477.5300	1882417.4599
77a	PC-9-400				RVED					
78	PC-13-600	V330 ITR29 25 KVA 20CF T4		IP3			3K	3IPC	520474.3700	1882458.0499
79	PC-13-600	A330		IR1/IR1	2RDA		K.	3IPC	520499.0700	1882501.0700
80	PC-13-600	V130		IR1/IR1	RDA		K.	3IPC	520482.5300	1882539.4800
81	PC-13-600	R330/R330		IR1/IR1	2RDA		K.	3IPC	0520501.7200	1882576.4200
82	PC-13-600	V330/V330		IR1/IR1/IR1			K.	3IPC	520488.0000	1882593.0000
82a	PC-9-400				RVED					
83	PC-12-750	V330		IP3			K.	3IPC	520524.8900	1882573.3200
84	PC-12-750	R330 ITR29 25 KVA 20CF T5		IR1/IR1	RDA/RDA		3K	3IPC	520593.2600	1882584.3300
85	PC-12-750			IR1/IR1	2RDA		K.	3IPC	520555.8900	1882595.2300
86	PC-12-750			IR1	REA		K.	3IPC	520590.1700	1882603.0900
87	PC-13-600	V330/R330		IR1	RDA		K.	3IPC	520490.7200	1882616.5500
88	PC-13-600	R330/R330 30CF 30 15 KV		IR1/IR1	2RDA		K.	3IPC	520490.0000	1882654.0000
89	PC-12-750	A330		IR1/IR1	2RDA		K.	3IPC	520616.0000	1882649.0000
90	PC-13-600	A330 ITR29 25 KVA 20CF T6		IP3-IR1	RDA		3K	3IPC	520548.2500	1882663.1300
91	PC-12-750	R330/R330		IR1/IR1/IR1	2RDA		K.	3IPC	520587.1200	1882678.6200
92	PC-12-750			IR1	REA		K.	3IPC	520555.0000	1882648.0000
93	PC-12-750	A330/R330		IR1/IR1/IR1	RDA/RDAD		K.	3IPC	520603.8800	1882653.4700
94	PC-12-750	V330 ITR29 25 KVA 20CF T7		IR1/IR1/IR1	REA		3K	3IPC	520595.8000	1882641.7600
95	PC-12-750			IP3			K.	3IPC	520624.0000	1882615.0000
96	PC-12-750			IR1	REA		K.	3IPC	520604.0000	1882586.0000
97	PC-13-600	A330/R330 ITR29 25 KVA 20CF T8		IR1/IR1/IR1	2RDA		3K	3IPC	520687.5200	1882619.6100
98	PC-12-750	R330 ITR29 15 KVA 20CF T9		IR1/IR1	RDA/RDA		3K	3IPC	520686.8800	1882570.3600
99	PC-12-750			IR1	REA		K.	3IPC	520696.0000	1882520.6500
100	PC-12-750	R330/R330		IP3-IR1	2RDA		K.	3IPC	520699.0700	1882568.7100
101	PC-12-750	R330 ITR29 15 KVA 20CF T10		IR1/IR1	RDA		3K	3IPC	520743.2200	1882625.0800
102	PC-12-750			IP3	REA		K.	3IPC	520726.0000	1882583.0000
103	PC-12-750			IR1	REA		K.	3IPC	520739.1100	1882569.6700
104	PC-12-750	A330 30CF 15 KV		IR1/IR1	2RDA		K.	3IPC	520650.9800	1882682.3500
105	PC-12-750	V330		IP3	REA		K.	3IPC	520687.4800	1882686.9000
106	PC-13-600	R330/R330 ITR29 15 KVA 20CF T11		IR1/IR1	2RDA		3K	3IPC	520726.4400	1882735.4400
107	PC-12-750	A330		IR1/IR1	2RDA		K.	3IPC	520773.9600	1882684.0800
108	PC-12-750	A330		IR1/IR1	2RDA		K.	3IPC	520693.4000	1882685.7000
109	PC-12-750	A330		IR1/IR1	2RDA		K.	3IPC	520642.7400	1882684.0800
110	PC-12-750	R330 ITR29 15 KVA 20CF T12		IP3	RDA/RDA		3K	3IPC	520679.2200	1882688.4800
111	PC-12-750			IP3	REA		K.	3IPC	520628.3600	1882700.5800
112	PC-12-750			IR1	REA		K.	3IPC	520675.2100	1882721.5300
113	PC-12-750	A330		IR1/IR1	2RDA		K.	3IPC	520578.7500	1882708.5800
114	PC-12-750	R330/R330		IR1/IR1	2RDA		K.	3IPC	520582.8300	1882740.4200
115	PC-12-750	V330 ITR29 15 KVA 20CF T13		IR1/IR1			K.	3IPC	520621.7400	1882742.5900
115a	PC-9-400				READ					
116	PC-12-750	V330		IR1/IR1			K.	3IPC	520659.0000	1882732.0000
117	PC-12-750	V330		IR1/IR1/IR1			K.	3IPC	520694.0000	1882721.0000
117a	PC-9-400				REA					
118	PC-12-750			IR1	REA		K.	3IPC	520642.0000	1882715.0000
119	PC-12-750			IR1	REA		K.	3IPC	520703.0000	1882773.0000
120	PC-12-750	V330 ITR29 25 KVA 20CF T14		IP3	RVP		K.	3IPC	520742.0600	1882714.2600
121	PC-12-750			IR1/IR1			K.	3IPC	520784.0500	1882709.6400
121a	PC-9-400				REA					
122	PC-12-750			IR1	REA		K.	3IPC	520830.9600	1882697.0700

CUADRO DE TRANSFORMADORES

No. DE TRANSF.	UBICACION DE LA OBRA	No. DE POSTE	RELACION VOLTAGE	No. DE USUARIOS		KVA POR SERV.	SUMA KVA.	F A S E S			KVA. TOTAL	KW. TOTAL	CAP. DEL TRANSF.	% DE UTILIZACION
				EXISTENTES	NUEVOS			A	B	C				
T-1	ALVARO OBREGON	60	220-127	9.00		1.00	9.00	4.00		5.00	9.00	8.10	18 KVA 2A	90.00 %
T-2	ALVARO OBREGON	67	220-127	14.00		1.00	14.00	7.00	7.00		14.00	12.60	15 KVA 2A	93.33 %
T-3	ALVARO OBREGON	73	220-127	24.00		1.00	24.00		12.00	12.00	24.00	20.60	25 KVA 2A	96.00 %
T-4	ALVARO OBREGON	78	220-127	24.00		1.00	24.00	12.00	12.00		24.00	20.60	25 KVA 2A	96.00 %
T-5	ALVARO OBREGON	84	220-127	24.00		1.00	24.00		12.00	12.00	24.00	20.60	25 KVA 2A	96.00 %
T-6	ALVARO OBREGON	90	220-127	24.00		1.00	24.00	12.00		12.00	24.00	20.60	25 KVA 2A	96.00 %
T-7	ALVARO OBREGON	94	220-127	14.00		1.00	14.00	7.00	7.00		14.00	12.60	15 KVA 2A	93.33 %
T-8	ALVARO OBREGON	97	220-127	24.00		1.00	24.00	12.00		12.00	24.00	20.60	25 KVA 2A	96.00 %
T-9	ALVARO OBREGON	98	220-127	9.00		1.00	9.00	4.00	5.00		9.00	8.10	18 KVA 2A	90.00 %
T-10	ALVARO OBREGON	101	220-127	9.00		1.00	9.00		5.00	4.00	9.00	8.10	18 KVA 2A	90.00 %
T-11	ALVARO OBREGON	106	220-127	14.00		1.00	14.00	7.00	7.00		14.00	12.60	15 KVA 2A	93.33 %
T-12	ALVARO OBREGON	110	220-127	24.00		1.00	24.00		12.00	12.00	24.00	20.60	25 KVA 2A	96.00 %
T-13	ALVARO OBREGON	115	220-127	14.00		1.00	14.00	7.00		7.00	14.00	12.60	15 KVA 2A	96.00 %
T-14	ALVARO OBREGON	120	220-127	24.00		1.00	24.00	12.00	12.00		24.00	20.60	25 KVA 2A	96.00 %
T-15	ALVARO OBREGON	123	220-127	9.00		1.00	9.00		5.00	4.00	9.00	8.10	18 KVA 2A	90.00 %
T-16	ALVARO OBREGON	127	220-127	14.00		1.00	14.00		7.00	7.00	14.00	12.60	15 KVA 2A	93.33 %
T-17	ALVARO OBREGON	134	220-127	24.00		1.00	24.00	12.00		12.00	24.00	20.60	25 KVA 2A	96.00 %
T-18	ALVARO OBREGON	140	220-127	24.00		1.00	24.00		12.00	12.00	24.00	20.60	25 KVA 2A	96.00 %
T-19	ALVARO OBREGON	148	220-127	24.00		1.00	24.00	12.00		12.00	24.00	20.60	25 KVA 2A	96.00 %
T-20	ALVARO OBREGON	153	220-127	24.00		1.00	24.00	12.00		12.00	24.00	20.60	25 KVA 2A	96.00 %
T-21	ALVARO OBREGON	157	220-127	24.00		1.00	24.00		12.00	12.00	24.00	20.60	25 KVA 2A	96.00 %
T-22	ALVARO OBREGON	162	220-127	14.00		1.00	14.00	7.00		7.00	14.00	12.60	15 KVA 2A	93.33 %
T-23	ALVARO OBREGON	164	220-127	9.00		1.00	9.00	5.00	4.00		9.00	8.10	18 KVA 2A	90.00 %
T-24	ALVARO OBREGON	170	220-127	9.00		1.00	9.00	5.00		4.00	9.00	8.10	18 KVA 2A	90.00 %
T-25	ALVARO OBREGON	175	220-127	24.00		1.00	24.00	12.00	12.00		24.00	20.60	25 KVA 2A	96.00 %
T-26	ALVARO OBREGON	182	220-127	24.00		1.00	24.00		12.00	12.00	24.00	20.60	25 KVA 2A	96.00 %
T-27	ALVARO OBREGON	187	220-127	24.00		1.00	24.00	12.00		12.00	24.00	20.60	25 KVA 2A	96.00 %
TOTAL				498.00			498.00	166.00	166.00	166.00	498.00	448.20	330 KVA 2A	97.64 %