4. HYDROLOGY

LAKE WATER LEVEL (mamn)

Q	AV. LEVEL	JAN	FEB	MAR	APR	MAY	JUN	JULY	AUG	SEP	OCT	NOV	DEC
1948	-				60.28	60.38	60.52	60.61	60.68	60.78	60.88	60.77	60.64
1949	1560.68	60.37	60.33	60.2	60.17	60.26	60.44	60.44	60.46	60.93	61.59	61.53	61.39
1950	1561.32	61.25	61.08	60.96	60.86	60.97	61.17	61.28	61.25	61.47	61.96	61.86	61.72
1951	1561.57	61.58	61.43	61.31	61.21	61.25	61.33	61.39	60.38	61.97	62.11	61.97	61.83
1952	1561.65	61.63	61.52	61.44	61.36	61.39	61.57	61.66	61.66	61.82	62.03	61.88	61.75
1953	1561.57	61.5	61.44	61.31	61.2	61.23	61.35	61.55	61.53	61.61	62.06	62	61.9
1954	1562.24	61.78	61.67	61.6	61.55	61.73	62.17	62.26	62.29	62.52	63.19	63.11	62.95
1955	1562.98	62.83	62.7	62.59	62.46	62.41	62.44	62.8	62.98	63.23	63.85	63.8	63.66
1956	1563.39	63.49	63.28	63.1	62.99	63.05	63.35	63.3	63.35	63.48	63.95	63.75	63.6
1957	1563.31	63.44	63.25	63.16	63.13	63.06	63.21	63.27	63.24	63.49	63.6	63.52	63.34
1958	1563.49	63.18	63.1	63.04	62.93	63.03	63.39	63.81	63.76	63.9	63.99	63.98	63.8
1959	1563.38	63.63	63.5	63.36	63.24	63.19	63.31	63.26	63.25	63.27	63.66	63.55	63.38
1960	1563.43	63.24	63.12	62.98	62.86	62.93	63.2	63.33	63.43	63.83	64.08	64.1	64
1961	1563.51	63.89	63.8	63.69	63.43	63.28	63.13	63.17	63.21	63.4	63.63	63.85	63.79
1962	1563.45	63.65	63.51	63.34	63.18	63.19	63.47	63.4	63.37	63.64	63.72	63.51	63.45
1963	1563.04	63.3	63.19	63	62.88	62.79	62.86	62.95	62.86	63.09			
(EL CAPITAN)													
1962	1563.45							63.33	63.26	63.51	63.66	63.61	63.5
1963	1563.04	63.33	63.19	63.07	62.96	62.88	62.9	63.01	62.92	62.92	63.15	63.12	63.03
1964	1562.66	62.91	62.76	62.63	62.51	62.41	62.42	62.54	62.57	62.74	62.89	62.85	62.74
1965	1562.4	62.56	62.45	62.3	62.25	62.21	62.26	62.34	62.3	62.33	62.62	62.6	62.54
1966	1562.43	62.4	62.23	62.21	62.21	62.21	62.22	62.39	62.53	62.62	62.83	62.75	62.61
1967	1562.07	62.44	62.31	62.12									
(PANJACHEL)													
1966	1562.43								62.62	62.65	62.86	62.79	62.61
1967	1562.07	62.45	62.31	62.15	62.07	61.99	61.99	61.98	61.95	61.97	62.13	62.04	61.68
1968	1561.57	?	?	61.41	61.31	61.2	61.42	61.63	61.56	61.61	61.79	61.9	61.78
1969	1561.96	61.64	61.49	61.4	61.3	61.24	61.46	61.61	61.77	62.49	62.98	63.12	63
1970	1562.74	62.89	62.76	62.67	62.57	62.52	62.5	62.61	62.87	63.21	63.49	63.48	63.32
1971	1562.96	63.18	63.05	62.92	62.79	62.73	62.8	62.83	62.84	63	63.16	63.18	63.06
1972	1562.5	?	?	62.59	62.46	62.42	62.57	62.58	62.51	62.42	62.42	62.31	62.15
1973	1562.24	61.97	61.8	61.68	61.57	61.48	61.71	61.82	61.96	62.35	62.57	62.68	62.56
1974	1562.23	62.41	62.28	62.13	62.03		62.09	62.26	62.19	62.3	62.5	62.4	62.25
1975	1561.75	62.09	61.95	61.84	61.71	61.58	61.64	61.6	61.57	61.69	61.85	61.84	61.69
1976	1561.38	61.5	?	?	61.27	61.18	61.35	61.61	61.34	61.37	61.45	61.34	61.34
	1560.56	60.98	60.83	60.68	60.55	60.55	60.63	60.55	60.48	60.47	60.41	60.34	60.23
		60.1	59.96	59.94	59.94								

Dairy Groundwater Level at San Jose Pinula No.1

Year: 1994

Water level below Ground Surface

Unit: m

Date	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	-	32.14	32.15	32.16	32.12	31.95	31.775
2	-	32.15	32.16	32.16	32.12	31.95	31.775
3	-	32.15	32.15	32.16	32.11	31.95	31.765
4	-	32.15	32.15	32.16	32.11	31.94	31.77
5	-	32.15	32.16	32.16	32.1	31.94	31.775
6	-	32.15	32.16	32.16	32.1	31.94	31.77
7	-	32.15	32.15	32.16	32.1	31.93	31.765
8	-	32.14	32.16	32.16	32.1	31.93	31.76
9	-	32.14	32.16	32.16	32.1	31.93	31.755
10	-	32.13	32.16	32.16	32.1	31.93	31.75
11	-	32.14	32.15	32.15	32.1	31.93	31.755
12	-	32.14	32.15	32.15	32.1	31.93	31.76
13	-	32.13	32.15	32.15	32.1	31.93	31.75
14	32.05	32.13	32.15	32.15	32.09	31.89	-
15	32.05	32.14	32.15	32.15	32.07	31.89	-
16	32.13	32.14	32.15	32.15	32.06	31.89	-
17	32.11	32.14	32.15	32.15	32.05	31.88	-
18	32.11	32.14	32.15	32.15	32.05	31.87	-
19	32.11	32.14	32.15	32.15	32.05	31.86	-
20	32.11	32.15	32.15	32.15	32.05	31.85	-
21	32.11	32.14	32.15	32.15	32.05	31.84	-
22	32.12	32.14	32.15	32.15	32.04	31.83	-
23	32.12	32.15	32.15	32.15	32.04	31.82	-
24	32.12	32.15	32.15	32.15	32.02	31.825	-
25	32.12	32.16	32.16	32.14	32.02	31.82	-
26	32.12	32.16	32.16	32.14	32	31.805	-
27	32.12	32.16	32.16	32.14	31.97	31.785	-
28	32.14	32.16	32.15	32.13	31.95	31.78	-
29	32.14	32.16	32.15	32.13	31.95	31.78	-
30	32.14	32.16	32.16	32.13	31.95	31.775	-
31	-	32.16	32.16	-	31.95	-	-

*** June 14 - Nov.14 by handy detector
& Nov.15 - by Automatic Water Level Recorder

MONTHLY RAINFALL RECORD

STATION: INSIVUMEH

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	3	0	0	6	332	300	166	260	179	156	72	2	1477
1961	9	6	38	26	155	208	198	77	137	19	87	52	1012
1962	0	0	0	38	153	384	220	172	229	105	1	0	1303
1963	1	2	12	16	45	264	151	129	212	50	63	2	948
1964	0	0	0	61	61	207	345	246	239	49	21	8	1238
1965	14	10	0	3	105	307	61	195	245	101	4	3	1047
1966	9	27	38	54	182	271	173	248	121	121	4	0	1247
1967	2	0	9	46	70	152	95	146	134	88	84	58	885
1968	1	0	3	1	128	231	112	95	250	184	44	7	1055
1969	0	3	3	47	103	339	260	359	395	155	7	0	1671
1970	1	0	0	33	97	207	359	265	392	105	13	2	1474
1971	2	3	3	8	133	224	175	255	189	183	34	2	1210
1972	0	0	7	2	129	223	152	105	135	62	28	4	848
1973	1	0	0	12	115	262	187	289	374	133	25	1	1399
1974	12	0	37	0	166	245	101	163	292	40	3	0	1059
1975	3	0	0	15	59	222	89	139	384	162	15	3	1090
1976	0	0	0	81	136	339	133	97	114	177	11	0	1087
1977	0	0	0	14	98	183	51	191	98	93	78	7	813
1978	2	0	33	18	55	107	171	128	252	75	34	8	881
1979	0	0	4	67	86	153	361	213	279	45	1	3	1211
1980	19	2	0	4	121	159	104	176	193	106	9	3	895
1981	14	0	11	6	73	107	162	159	234	249	34	9	1057
1982	5	1	0	2	146	306	150	37	244	96	0	3	990
1983	1	64	44	21	50	307	114	93	260	66	70	15	1106
1984	0	1	7	12	152	211	228	82	309	78	2	1	1083
1985	1	13	4	1	165	146	272	172	194	88	10	2	1067
1986	4	5	0	15	104	175	142	171	246	120	8	0	989
1987	0	0	53	53	92	290	204	153	220	12	1	2	1079
1988	3	1	27	6	66	426	227	458	250	173	3	14	1655
1989	1	4	20	17	139	211	173	252	242	129	11	3	1202
Av.	4	5	12	23	117	239	178	184	235	107	26	7	1136

MONTHLY RAINFALL RECORD

STATION: SAN AGUSTIN LAS MINAS

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	2	0	22	19	229	423	170	198	221	143	4	0	1431
1961	5	12	6	42	104	132	187	90	180	85	79	29	948
1962	0	0	0	40	155	412	269	180	221	106	19	0	1401
1963	1	2	2	7	30	250	243	185	185	157	60	0	1095
1964	0	0	0	40	85	214	344	244	266	44	14	8	1258
1965	0	22	0	14	159	198	75	145	263	70	6	3	954
1966	5	6	6	59	121	227	220	266	180	167	2	8	1265
1967	3	11	14	75	65	137	127	162	174	104	15	28	915
1968	0	0	0	1	141	260	101	103	226	186	33	7	1056
1969	0	2	8	76	91	311	311	307	276	108	6	1	1495
1970	22	0	0	53	98	217	330	350	300	79	31	0	1480
1971	0	11	8	21	145	235	247	282	235	149	33	2	1366
1972	7	0	21	2	162	277	170	135	145	51	33	1	1003
1973	0	0	0	6	136	248	154	353	354	144	23	6	1423
1974	11	0	35	0	218	310	145	65	248	67	1	0	1099
1975	3	1	1	8	86	160	149	243	209	137	3	3	1001
1976	0	0	1	60	74	372	99	131	186	136	14	0	1073
1977	0	0	0	36	36	209	35	248	191	56	79	5	893
1978	1	0	52	52	165	164	232	156	240	90	1	2	1156
1979	2	1	2	66	86	173	171	230	208	68	0	8	1014
1980	29	1	0	9	68	233	193	230	226	68	24	0	1079
1981	8	2	32	10	116	189	301	214	240	259	0	2	1373
1982	7	1	4	13	199	332	119	83	357	83	6	1	1204
1983	1	66	38	1	57	333	202	173	210	60	47	15	1202
1984	0	4	31	20	145	245	274	157	238	85	1	0	1201
1985	1	3	8	6	192	226	258	305	223	92	34	2	1351
1986	1	0	1	11	108	169	131	163	142	81	14	4	823
1987	0	1	39	61	34	362	204	183	194	5	0	20	1104
1988	2	1	5	19	74	572	275	369	244	198	38	1	1771
1989	0	54	17	27	-	215	238	-	-	-	-	-	-
Av.	4	7	12	28	116	260	199	205	227	106	21	5	1187

MONTHLY RAINFALL RECORD

STATION: EXPERIMENTAL INCAP

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1962	6	5	0	21	161	270	176	315	294	111	11	0	1371
1963	0	7	0	10	12	178	219	122	207	33	55	0	843
1964	0	0	0	-	-	-	-	-	-	-	-	-	-
1967	-	-	-	82	23	185	203	100	215	111	4	0	-
1968	25	5	2	13	103	300	141	130	244	140	24	9	1135
1969	0	10	10	61	160	323	248	369	464	173	14	0	1829
1970	2	1	0	34	81	221	447	249	216	163	37	5	1454
1971	5	6	2	31	78	191	153	366	231	245	40	18	1363
1972	4	11	4	15	87	183	199	149	54	93	34	0	830
1973	0	0	0	3	113	205	185	335	165	160	62	0	1226
1974	0	0	26	4	136	329	114	140	220	51	0	0	1018
1975	0	6	12	5	113	155	97	193	239	222	0	2	1043
1976	0	0	0	99	116	311	69	96	166	161	16	0	1032
1977	0	0	0	55	86	241	81	184	227	50	33	9	964
1978	0	0	11	10	106	183	337	184	244	31	6	0	1110
1979	0	8	11	46	155	276	302	187	252	75	0	24	1334
1980	19	0	0	0	160	178	221	213	231	86	0	0	1106
Av.	4	4	5	30	105	233	199	208	229	119	21	4	1177

STATION: ANTIGUA E.E

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1980	19	0	0	7	101	200	107	124	215	80	0	0	853
1981	0	0	9	8	64	180	157	200	272	226	0	0	1116
1982	0	0	0	5	137	326	114	47	358	66	0	0	1053
1983	0	56	56	25	3	448	106	99	217	32	18	2	1062
1984	0	0	7	17	226	162	226	130	234	47	0	0	1049
1985	0	0	0	9	144	173	190	271	229	50	5	0	1071
1986	0	0	0	0	156	119	37	105	125	74	0	0	616
1987	0	0	130	0	95	262	178	67	104	0	0	0	836
1988	0	0	0	0	106	279	170	385	232	183	0	0	1355
1989	0	0	0	0	172	167	284	217	340	75	42	0	1297
Av.	2	6	20	7	120	232	157	165	233	83	7	0	1031

MONTHLY RAINFALL RECORD

STATION: VILLA NUEVA

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	0	0	0	27	204	244	167	199	278	194	0	0	1313
1961	0	0	17	46	92	195	177	52	135	60	67	18	859
1962	0	0	0	34	176	565	220	106	538	119	4	0	1762
1963	0	0	1	0	43	228	264	46	184	22	10	0	798
1964	0	0	0	25	37	272	326	305	365	19	0	4	1353
1965	0	0	0	14	66	318	123	216	253	87	0	0	1077
1966	0	0	15	37	160	307	258	327	106	121	0	0	1331
1967	0	26	0	1	120	151	134	122	101	105	5	0	765
1968	0	0	0	0	91	145	144	167	312	222	49	0	1130
1969	0	0	0	95	143	351	269	372	475	158	0	0	1863
1970	0	0	0	23	232	205	278	245	322	50	0	0	1355
1971	0	0	0	3	128	298	90	90	233	68	36	0	946
1972	0	0	5	0	42	90	-	-	-	-	-	-	-
Av.	0	2	3	23	118	259	204	187	275	102	14	2	1213

MONTHLY RAINFALL RECORD

STATION: AMATITLAN E E

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	0	0	0	50	156	309	111	170	196	161	0	0	1153
1961	0	0	5	9	56	144	227	78	177	39	93	5	833
1962	0	0	0	34	125	361	192	203	269	149	0	0	1333
1963	0	4	3	7	41	237	103	83	164	19	10	0	670
1964	0	0	0	7	87	342	378	229	368	77	53	1	1542
1965	0	0	0	1	47	271	77	216	223	110	8	0	953
1966	0	0	7	80	120	244	189	221	145	54	1	0	1061
1967	0	4	6	5	61	167	143	153	106	58	1	0	704
1968	0	0	0	0	70	275	78	125	181	168	15	0	912
1969	0	0	0	61	151	307	232	262	404	151	2	0	1570
1970	0	0	0	15	94	143	238	201	350	89	1	0	1131
1971	0	0	0	12	122	310	126	126	250	140	20	0	1106
1972	11	0	6	0	83	179	118	158	126	75	26	0	782
1973	0	0	0	35	235	300	167	374	297	85	25	0	1517
1974	4	0	5	0	337	378	155	146	254	80	0	0	1358
1975	0	0	0	8	87	62	293	295	158	121	0	0	1023
1976	0	0	0	28	36	286	111	80	236	37	35	0	849
1977	0	0	0	20	40	178	63	179	150	29	29	0	688
1978	0	0	49	15	80	187	266	126	367	110	0	0	1200
1979	0	0	0	89	123	212	202	191	261	12	0	0	1090
1980	0	0	0	0	35	148	90	213	213	19	0	0	718
1981	28	0	25	10	70	171	226	297	220	265	0	3	1215
1982	19	0	0	13	142	270	169	24	312	104	10	0	1063
1983	0	100	62	23	2	344	120	106	274	90	7	8	1136
1984	0	0	40	35	182	158	249	172	222	72	0	0	1130
1985	0	0	0	2	130	252	244	403	208	116	30	0	1385
1986	0	0	0	39	455	199	89	284	116	120	0	0	1302
1987	0	0	103	45	49	215	241	221	147	15	0	0	1036
1988	0	0	0	1	86	312	144	405	229	29	5	0	1211
1989	0	0	0	0	109	190	206	301	383	167	3	0	1359
Av.	2	4	10	21	114	238	175	201	234	92	12	1	1101

MONTHLY RAINFALL RECORD

STATION: ANTIGUA

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	0	0	0	5	250	303	130	187	139	191	36	0	1241
1961	0	1	9	40	35	124	144	35	87	59	64	16	614
1962	0	0	0	28	100	301	145	207	196	158	0	0	1135
1963	0	3	27	5	66	142	248	48	173	12	8	0	732
1964	0	0	0	18	107	334	260	137	239	21	13	0	1129
1965	0	0	0	0	75	326	32	100	199	67	4	0	803
1966	0	0	0	0	203	286	253	253	119	103	0	0	1217
1967	0	0	0	17	46	48	94	48	122	17	0	0	392
1968	0	0	0	0	48	331	105	64	182	200	38	0	968
1969	0	0	0	86	271	174	139	254	455	157	0	0	1536
1970	0	0	0	6	102	104	324	124	221	56	0	0	937
1971	0	0	0	23	123	264	123	204	226	160	29	5	1157
1972	0	0	28	0	60	177	109	118	31	46	18	0	587
1973	0	0	0	0	119	207	120	353	244	147	32	0	1222
1974	40	0	30	2	191	243	90	86	320	19	0	0	1021
1975	0	0	8	4	79	139	138	149	197	141	36	2	900
1976	0	0	1	62	55	337	51	104	147	124	21	0	902
1977	0	0	2	27	76	182	79	128	181	53	20	0	748
1978	0	0	1	0	27	122	229	75	356	37	0	4	1189
Av.	2	0	6	17	107	218	148	141	202	93	17	1	970

MONTHLY RAINFALL RECORD

STATION: EL POTRERO

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	0	3	0	10	203	264	86	159	156	156	6	0	1042
1961	3	0	13	13	32	111	127	57	143	70	111	16	696
1962	0	0	0	25	98	333	124	181	137	108	3	0	1010
1963	0	48	6	6	76	175	238	57	257	6	111	0	981
1964	0	0	0	6	35	286	299	162		343	23	3	1182
1965	3	6	0	6	51	289	41	146	191	86	0	0	819
1966	0	0	10	54	137	260	213	238	98	57	0	0	1067
1967	3	3	3	19	45	124	102	92	146	57	0	16	610
1968	0	0	0	0	60	276	83	86	137	197	16	0	854
1969	0	0	0	83	140	203	143	235	406	127	0	0	1337
1970	0	0	0	10	98	105	276	159	268	35	16	0	965
1971	0	0	0	38	95	172	114	194	270	67	38	0	988
1972	0	13	6	0	67	216	73	98	25	41	25	3	568
1973	0	0	0	35	169	124	86	251	203	198	19	0	994
1974	16	10	16	0	115	257	60	13	197	19	0	0	703
1975	38	3	6	10	51	48	108	137	171	134	16	0	721
1976	0	29	0	48	73	273	42	54	92	76	16	0	702
1977	0	0	0	70	29	181	32	114	118	32	29	0	604
1978	0	0	54	3	45	188	184	70	294	86	0	0	924
1979	0	0	19	13	57	245	140	175	286	61	0	0	995
1980	35	0	0	0	105	172	102	108	203	32	0	0	757
1981	0	0	10	35	60	241	197	152	175	219	0	0	1089
1982	0	0	0	0	146	264	134	156	279	86	0	0	1065
1983	0	95	51	38	41	152	86	137	184	35	29	10	857
1984	0	3	13	55	206	124	162	127	222	51	0	0	963
1985	0	0	0	0	89	200	206	203	165	92	13	0	969
1986	0	0	0	32	159	137	60	83	121	111	0	0	702
1987	0	0	172	6	51	178	165	45	108	13	-	-	-
Av.	4	8	14	22	90	200	131	132	187	93	17	2	895

MONTHLY RAINFALL RECORD

STATION: SAN PEDRO LA LAGUNA

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	0	9	6	39	210	242	106	159	207	215	12	8	1214
1961	0	21	49	9	65	210	160	89	275	38	212	8	1133
1962	0	0	0	41	128	410	60	125	339	67	17	0	1185
1963	0	10	0	16	74	142	158	31	347	53	132	0	961
1964	0	0	3	4	87	262	193	173	280	135	12	9	1157
1965	5	0	0	15	98	306	74	107	211	176	16	16	1024
1966	0	6	21	75	195	368	221	149	245	232	0	0	1512
1967	0	0	5	39	0	195	120	132	202	98	0	0	792
1968	0	16	0	0	418	335	64	31	238	54	0	12	1168
1969	0	20	16	32	157	465	359	472	408	270	14	0	2212
1972	0	4	6	6	86	307	71	40	97	78	15	0	710
1973	0	0	0	36	164	268	103	288	247	277	17	26	1425
1974	2	0	17	23	183	370	103	90	375	33	0	0	1195
1975	0	0	0	18	51	118	114	169	215	147	34	0	866
1976	0	0	0	41	31	394	54	69	56	175	0	0	820
1977	0	0	0	23	31	71	6	64	80	14	10	0	300
1978	0	11	15	16	63	72	108	45	112	44	0	0	486
1979	0	0	34	77	139	189	26	198	447	84	3	0	1198
1980	5	0	0	52	133	191	134	129	161	70	11	16	900
1981	4	0	76	18	89	381	165	164	198	165	14	6	1278
1982	0	14	0	0	282	257	84	24	258	141	11	0	1072
1983	0	86	61	59	29	245	87	116	136	90	31	0	939
1984	2	3	19	24	168	216	208	161	22	45	0	0	1067
1985	0	0	1	10	110	184	130	185	176	106	92	4	999
1986	0	3	0	32	162	102	92	180	183	153	19	0	925
1987	0	0	173	22	160	250	145	147	198	50	37	2	1185
1988	1	2	2	29	134	383	83	387	284	108	43	5	1461
1989	0	0	21	60	111	145	113	77	356	194	-	-	-
Av.	1	7	19	29	127	253	119	143	227	118	28	4	1081

STATION: CULPAN

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1980	13	15	81	243	333	296	525	563	854	568	42	34	3567
1981	62	65	320	126	438	662	576	558	575	453	116	108	4059
1982	32	200	12	120	243	364	458	339	636	300	119	19	2842
1983	0	66	41	147	121	527	695	578	623	408	375	17	3598
1984	25	113	96	77	554	662	614	567	824	304	63	6	3905
1985	17	12	22	137	451	454	499	378	554	360	148	13	3045
1986	32	40	10	119	468	489	300	495	383	494	148	14	2992
1987	1	5	134	229	155	535	591	607	473	293	100	52	3175
1988	49	59	47	159	270	695	475	761	653	285	144	25	3622
Av.	26	64	85	151	337	520	526	538	619	385	139	32	3423

MONTHLY RAINFALL RECORD

STATION: LA SOLEDAD

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1968	9	10	0	9	125	294	211	121	339	300	185	44	1655
1969	2	7	15	149	259	317	302	349	377	121	15	5	1918
1970	23	16	0	57	131	207	454	346	322	121	29	1	1707
1971	0	28	3	42	84	252	258	275	321	350	57	4	1974
1972	10	1	2	6	232	234	246	171	129	89	66	3	1190
1973	0	0	0	27	157	411	259	447	381	250	97	8	2037
1974	21	5	16	0	270	394	150	147	479	205	0	0	1687
1975	7	0	4	0	117	342	407	208	368	233	13	87	1787
1976	3	0	6	73	117	407	130	105	213	221	36	0	1310
1977	0	0	0	35	133	321	60	315	316	156	89	14	1439
1978	-	-	-	-	-	432	427	265	486	172	17	69	-
1979	0	0	17	83	-	-	-	-	-	-	-	-	-
Av.	7	6	6	44	163	328	264	250	339	202	55	21	1670

STATION: JARDINES MIL FLORES

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1966	-	-	-	-	-	-	-	-	-	-	0	0	-
1967	0	0	0	0	27	157	99	147	117	25	0	10	582
1968	0	0	0	8	67	242	72	81	145	134	23	5	778
1969	0	24	1	35	133	254	215	259	362	108	15	6	1411
1970	4	1	0	38	70	94	207	188	328	62	3	0	995
1971	0	1	0	2	135	245	119	206	147	102	29	11	997
1972	4	4	6	0	71	181	63	139	101	43	23	0	636
1973	0	0	0	31	176	277	127	378	260	116	33	6	1403
1974	8	1	28	1	97	252	104	107	305	57	0	0	960
1975	0	0	2	13	71	90	171	190	155	61	1	3	757
1976	0	1	0	75	73	253	142	69	124	61	31	0	829
1977	0	0	0	23	63	156	80	235	137	18	21	3	736
1978	1	2	-	-	72	119	227	117	299	-	-	24	-
1979	3	1	5	23	90	192	133	190	209	61	16	3	925
1980	2	4	0	1	54	176	131	199	252	44	4	9	876
1981	45	0	18	81	68	191	193	142	185	173	-	1	-
1982	8	0	-	65	115	351	124	24	327	-	-	-	-
1983	-	-	-	-	-	211	99	90	199	87	20	6	-
1984	21	1	26	18	148	167	257	85	-	66	0	0	-
1985	0	0	1	1	-	-	-	-	-	107	-	-	-
1986	0	-	-	-	150	103	79	175	103	119	1	-	-
Av.	5	2	5	24	93	195	139	159	209	80	13	5	914

MONTHLY RAINFALL RECORD

STATION: CHICHOY

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1966	-	-	-	-	-	373	209	186	210	201	49	6	-
1967	24	26	32	99	12	313	178	183	134	235	46	42	1322
1968	10	5	0	0	213	-	-	-	-	-	-	-	-
1977	0	0	0	30	142	161	14	121	116	83	89	40	796
1978	0	0	40	0	240	120	140	185	146	48	75	20	1014
1979	0	21	90	160	143	145	207	114	311	81	81	17	1370
1980	-	0	60	30	107	111	101	-	139	136	125	-	-
Av.	7	9	37	53	143	204	142	158	176	131	77	25	1125

STATION: EL RECUERDO

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1967	-	-	-	-	-	-	125	232	230	206	21	9	823
1968	26	3	1	20	181	366	202	142	253	246	91	23	1554
1969	7	9	15	58	271	224	280	444	682	216	22	5	2233
1970	7	7	12	79	201	132	246	246	385	125	47	8	1496
1971	20	20	5	40	111	445	206	196	308	253	89	11	1704
1972	11	15	3	6	95	168	110	98	95	87	44	22	754
1973	2	3	2	56	197	334	225	485	419	221	33	7	1984
1974	28	15	4	31	146	356	85	91	468	81	20	1	1324
1975	5	0	1	2	35	120	196	137	197	50	21	6	769
1976	0	2	0	64	85	609	233	132	178	41	29	1	1374
1977	0	0	0	120	98	245	128	145	157	21	14	8	935
1978	4	5	78	39	57	166	197	189	299	61	7	8	1109
1979	2	0	15	46	71	139	173	151	516	67	1	11	1192
1980	23	0	1	57	61	268	232	98	288	57	19	8	1112
1981	6	1	41	10	133	295	229	126	182	218	2	7	1249
1982	7	2	3	1	155	238	134	46	360	183	3	4	1137
1983	3	103	41	43	24	176	167	122	188	51	81	5	1004
1984	6	1	23	9	189	171	189	161	294	99	9	10	1160
1985	0	7	4	8	149	258	182	223	330	171	52	4	1389
1986	2	0	0	14	168	216	128	152	200	125	16	7	1028
1987	2	3	177	56	89	218	235	209	156	39	7	4	1195
1988	0	4	0	9	56	303	185	275	280	100	20	10	1243
1989	8	10	3	23	-	116	150	139	298	154	36	16	944
Av.	8	10	20	36	122	253	184	184	294	125	30	8	1248

MONTHLY RAINFALL RECORD

STATION: SAN CARLOS MIRAMAR

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	11	11	0	216	851	656	305	507	489	410	132	16	3604
1961	0	128	75	171	240	546	311	222	674	287	260	65	2978
1962	0	30	25	70	292	824	143	427	586	97	0	0	2494
1963	0	85	48	57	165	290	224	114	530	140	227	0	1880
1964	30	0	0	187	246	808	533	592	570	375	95	44	3480
1965	25	25	0	100	312	812	287	320	742	605	0	0	3228
1966	25	64	14	211	490	424	375	552	778	645	16	34	3628
1967	0	32	116	150	72	735	253	475	597	336	60	150	2976
1968	18	0	27	41	527	1002	270	159	553	448	211	38	3294
1969	5	50	168	256	482	788	406	849	948	873	44	86	4954
1970	24	57	26	127	352	370	764	392	679	185	244	2	3222
1971	135	8	8	137	846	84	290	758	566	680	83	17	3052
1972	8	19	28	42	453	739	349	237	195	148	113	65	2396
1973	5	17	105	201	521	286	308	648	743	465	118	34	4051
1974	34	50	138	34	800	908	283	83	957	66	32	5	3390
1975	5	26	26	76	374	388	513	423	785	413	110	0	3139
1976	0	74	19	342	209	665	267	125	399	424	68	0	2592
1977	16	38	91	139	353	447	93	442	401	38	23	37	2102
1978	16	33	90	123	150	207	234	237	415	147	30	35	1717
1979	14	1	41	278	446	338	594	528	1088	567	8	86	3988
1980	31	62	94	148	282	445	409	509	565	283	156	45	3029
1981	41	5	95	237	594	1067	523	556	686	420	94	51	4369
1982	109	69	35	219	542	364	251	158	593	323	47	0	2710
1983	10	54	34	220	221	523	470	354	609	117	204	0	2816
1984	35	17	65	25	639	519	661	674	544	243	18	10	3450
1985	15	25	35	61	214	623	412	320	415	217	220	0	2557
1986	22	27	0	92	495	511	477	404	188	300	60	11	2287
1987	0	0	259	160	276	372	406	236	403	216	79	0	2407
1988	77	0	58	294	193	772	552	943	740	155	171	33	3988
1989	0	65	83	202	437	346	353	422	544	179	94	43	2768
Av.	24	36	60	154	402	562	377	422	599	327	101	30	3085

MONTHLY RAINFALL RECORD

STATION: LA ESMERALDA

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1961	1	115	60	189	174	541	470	697	1151	283	518	124	4323
1962	36	1	77	390	506	835	522	460	575	498	217	20	4137
1963	6	149	91	141	423	624	546	405	773	481	204	0	3843
1964	17	63	51	73	247	802	439	685	545	586	240	206	3954
1965	21	88	8	155	275	683	501	588	830	683	56	14	3902
1966	24	2	38	357	502	748	679	506	745	467	113	26	4207
1967	5	42	163	168	169	713	353	469	699	393	135	108	3417
1968	37	83	0	97	549	1041	407	560	853	736	181	20	4564
1969	65	110	183	222	578	686	572	899	782	736	218	59	5110
1970	44	12	8	93	322	667	765	502	784	418	342	4	3961
1971	69	87	190	277	559	656	548	665	637	630	151	15	4484
1972	1	83	162	76	576	364	525	313	381	546	236	7	3269
1973	3	26	28	197	566	705	447	807	709	648	216	154	4506
1974	125	46	142	47	488	531	386	291	606	219	133	39	3053
1975	15	25	40	48	376	546	529	495	690	546	354	131	3765
1976	60	2	12	235	308	641	336	463	388	624	205	19	3323
1977	12	22	13	192	484	514	246	489	475	531	179	86	3243
1978	79	85	137	203	360	594	503	598	678	408	81	47	3773
1979	90	22	61	233	406	527	625	581	1001	607	67	75	4295
1980	154	51	43	393	458	544	482	749	718	557	65	86	4300
1981	89	0	306	328	404	855	575	868	637	540	142	202	4946
1982	0	78	21	381	291	436	401	357	731	476	213	24	3409
1983	0	68	55	299	230	543	646	663	659	466	318	45	3992
1984	22	140	108	102	792	729	653	703	1061	242	60	2	4614
1985	130	9	85	224	416	538	558	512	516	475	198	19	3680
1986	22	18	5	70	437	348	414	465	571	387	106	18	2861
1987	10	2	88	235	233	526	661	625	642	423	179	243	3867
1988	48	11	37	174	312	515	469	965	817	338	184	18	3888
1989	2	71	9	177	273	-	-	-	-	-	-	-	-
Av.	41	52	77	199	404	623	509	585	702	498	190	65	3953

MONTHLY RAINFALL RECORD

STATION: SAN JERONIMO

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1961	-	-	-	-	-	-	432	591	1040	438	551	150	-
1962	25	5	76	301	437	1059	584	724	701	762	290	0	4963
1963	15	155	114	231	373	673	696	546	889	658	264	0	4615
1966	0	28	61	142	305	711	922	920	815	975	290	102	5271
1967	0	5	41	371	605	734	615	584	780	747	213	20	4714
1968	0	13	213	231	287	709	457	521	732	422	166	107	3857
1969	6	221	229	216	569	899	704	1095	815	887	213	86	5940
1970	41	10	8	127	196	650	963	666	935	584	249	0	4427
1971	48	56	51	178	536	541	450	574	704	785	168	36	4126
1972	51	58	117	175	608	517	567	385	583	482	183	6	3730
1973	3	29	66	202	570	736	537	710	725	780	150	43	4550
1974	126	31	49	76	418	688	435	338	706	289	64	2	3251
1975	11	19	90	76	401	593	502	591	811	454	278	91	3916
1976	35	2	47	297	477	694	332	388	564	479	203	44	3561
1977	37	23	12	193	489	550	170	579	490	566	182	116	3407
1978	69	14	81	246	345	641	620	589	701	409	46	47	3808
1979	10	31	169	290	537	428	493	674	837	675	55	60	4259
1980	87	4	65	193	398	525	560	679	456	598	133	77	3774
1981	29	56	256	262	408	1026	511	969	509	547	175	72	4850
1982	5	95	6	363	221	458	568	332	717	285	59	10	3117
1983	0	49	30	164	207	701	499	423	843	384	361	0	3661
1984	33	123	108	65	712	656	689	628	909	409	61	0	4391
1985	32	29	57	226	451	386	598	411	459	435	195	80	3358
1986	21	30	32	125	526	326	490	525	562	548	152	7	3343
1987	0	0	114	191	255	522	539	799	903	333	218	138	4011
1988	99	10	40	103	621	811	550	757	707	418	169	38	4323
1989	15	18	3	190	612	381	623	757	700	496	-	-	-
Av.	31	43	82	201	445	639	559	620	726	550	196	51	4129

MONTHLY RAINFALL RECORD

STATION: RANCHO DE TEJA

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1966	-	-	-	-	-	297	239	218	242	137	32	10	-
1967	24	6	8	-	3	214	-	-	-	-	-	-	-
1977	0	5	33	66	156	193	83	156	117	71	60	32	970
1978	12	1	21	30	142	256	290	164	411	93	50	24	1494
1979	25	1	17	73	128	233	230	240	448	128	19	84	1625
1980	35	3	2	48	53	197	188	166	167	63	34	23	976
1981	0	31	19	26	112	372	208	226	305	144	8	11	1463
1982	1	21	10	7	290	310	198	110	330	130	30	3	1439
1983	2	125	62	102	127	296	197	180	207	138	105	13	1524
1984	11	2	10	31	239	211	314	163	189	93	18	18	1299
1985	3	13	18	46	187	273	142	240	238	152	33	40	1384
1986	5	6	2	14	160	123	178	141	293	144	53	8	1126
1987	0	42	57	71	90	233	281	246	189	62	22	9	1269
1988	13	9	2	9	98	411	143	404	279	166	42	4	1581
1989	16	11	2	62	130	191	169	206	307	135	49	6	1284
Av.	10	20	19	45	137	254	204	204	266	118	40	20	1341

MONTHLY RAINFALL RECORD

Unit: mm

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1960	0	17	0	47	179	227	106	111	81	146	78	0	991
1961	11	4	64	10	94	117	137	104	107	65	146	10	869
1962	1	0	0	45	63	276	41	105	119	62	5	0	717
1963	0	3	4	45	36	91	103	72	119	75	57	0	602
1964	0	1	0	20	21	197	159	101	181	72	58	1	807
1965	3	0	0	5	52	186	34	-	-	-	-	-	-
Av.	2	4	11	28	74	182	97	99	121	84	69	2	797

STATION: LABOR OVALLE PHC 'A'

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	OUG	SEP	OCT	NOV	DEC	TOTAL
1971	4	2	0	64	96	147	111	187	87	86	16	0	741
1972	0	0	0	14	150	192	65	47	108	64	32	1	699
1973	0	0	0	12	162	216	91	229	84	190	21	2	1006
1974	1	0	4	1	134	99	82	56	245	21	0	0	644
1975	1	0	1	4	129	150	71	118	179	97	8	5	761
1976	0	2	6	44	78	244	70	87	133	67	16	0	748
1977	0	1	0	57	140	114	22	295	153	63	51	4	900
1978	0	3	1	65	73	124	103	110	173	77	23	18	770
1979	0	0	7	67	113	158	139	180	307	81	3	1	1055
1980	2	3	7	87	63	145	127	193	152	71	26	3	878
1981	0	0	33	37	112	195	115	153	165	83	0	2	894
1982	0	17	4	3	133	138	69	44	146	34	29	1	617
1983	1	104	36	6	43	92	76	93	95	110	69	18	743
1984	0	9	0	16	202	112	206	87	180	47	1	0	860
1985	0	0	0	36	141	109	146	122	162	71	14	13	814
1986	0	3	1	21	180	133	68	120	84	84	7	0	700
1987	0	0	97	24	91	112	120	69	87	19	4	2	723
1988	1	0	1	22	43	245	84	129	223	78	22	0	829
1989	0	-	1	79	171	140	104	115	223	69	9	2	913
Av.	0	8	11	35	119	151	98	128	157	74	18	4	805

Table (1) Existingu Well Record (1)

Location of Well	Aqui-fer	Drilled Depth(m)	Diame-ter(mm)	Discharge (Q=ℓ/s)	S.W.L (GL-m)	D.W.L (GL-m)	Sc(Q/s) (m²/d/m)	T (m²/d)	PH	Ec25 (μs/cm)	Remarks
Groundwater Basin : Rio Platanos Basin ①											
Gu.2 San Jose Pinula No1	Tv	213.30		0.76							Now stop
〃 No2		106.7		3.78					6.3	88	
〃 No3		121.9		3.78							
〃 No4		121.9		9.46	24.4				6.1	95	
Groundwater Basin : Rio Acuapaca Basin ②											
Gu.12 Fraijanes	Tv	121.92	200	0.95	50.29	111.55	1.34				
Groundwater Basin : Rio Vacas & Lago de Amatitlan Basin ③-1											
Gu.13 Amatitlan	Qa	137.16	250	61.00	23.47	23.47					
〃 El Cementerio		106.68	200	27.44	31.70	36.57	483.84				
〃 San Nicolos		128.02	200	32.17	28.04	28.04					
Gu.15 Villa Canales 2		42.0		17.00	12.0						
〃 Baca del Monte 2		134.1	200		9.4	14.3					
〃 3		134.1	200	20.50	6.7	14.3	233.05				
Parque Colon	Qp	182.88	200	18.93	40.95	52.84	137.54	75.2			Guat.City
Talleres Municipales II		230.43	200	18.42	54.86	81.68	59.34	10.0			〃
SAKERTI DAS		177.00	200	4.23	129.54	151.04	17.00	12.0			Guat.City
Talleres Municipales III		229.21	200	18.93	53.39	99.36	35.57	60.0			〃
Ciuadad San Cristobal 9			200	14.19	26.82	60.35	36.57	10.0			〃
Ciuadad Universitaria No3		146.30	150	7.89	93.27	108.72	44.10	95.0			〃
Das-Universidad San Carlos			150	12.93	93.55	94.80	893.95	750.0			〃
Santo Domingo 6		182.88	200	22.67	31.48	46.05	132.05	285.0			〃
Parque Hasted		304.80	200	20.57	45.17	90.89	38.86	297.0			Guat.City
Gu.7 El Molino III		301.75	200	15.77	23.75	102.68	17.26	10.0			Mixco
〃 I		301.75	200	17.35	22.86	44.20	70.24	80.0			〃
Gu.7 Ciudad San Cristobal II-1		121.92	300	10.41	24.54	26.95	373.14	335.0			Mixco
Gu.7 Filtros Brigada 2		291.08	200	18.93	43.16	48.64	298.42	500.0			〃

Table (2) Existingu Well Record (2)

Location of Well	Aqui-fer	Drilled Depth(m)	Diame-ter(mm)	Discharge (Q=ℓ/s)	S.W.L (GL-m)	D.W.L (GL-m)	Sc(Q/s) (m²/d/m)	T (m²/d)	PH	Ec25 (μs/cm)	Remarks
Groundwater Basin : Rio Vacas & Lago de Amatitlan Basin ③−2											
Gu.7 Filtros Brigada II	Qp	315.77	200	18.93	43.54	47.50	17.20	285.0			Mixco
Gu.7 Frorida I		280.42	200	12.62	39.41	112.56	14.19	10.0			〃
Gu.7 BELEN No3		261.52	200	18.93	73.71	88.07	113.88	80.0			〃
Gu.7 PLANTA La BRIGADA No1		213.36	150	20.12	86.87	125.58	44.91	38.0			〃
Gu.7 Brigada Belen Banvi		243.84	200	11.23	64.00	187.44	7.86	15.0			〃
Gu.7 Colonia le de JULIO No4		178.31	200	20.50	51.82	57.00	341.97	6.0			〃
Gu.7 SAN JOSE LOS PINOS		182.88	200	11.36	64.00	120.69	13.30	16.0			〃
Gu.7 Planta la BAIGADA No2		182.88	200	18.30	81.08	135.64	28.97	67.0			〃
Gu.7 EL RODEO II		204.21	200	11.86	63.14	72.65	107.76	190.0			〃
Gu.7 EL RODEO III		173.73	200	11.24	64.08	102.64	25.19	35.0			〃
Gu.7 Carolingia DAS		225.60	150	10.09	65.54	81.26	55.48	23.0			Mixco
Gu.5 Chinautla		121.92	200	1.96	0	77.72	2.18				
Gu.16 San Miguel Petapa 1		182.9	200	1.58	14.3	33.5	7.11				
〃 2		123.1	200		59.4						
DAS el Carmen Guillen		124.08	150	12.68	93.82	94.04	4980.00	5000.0			petapa
Gu.1 Santa Catarina Pinula 1	Tv	152.4		9.46	51.8	112.70	13.42		6.0	140	
〃 2		195.0		12.62	76.2	121.90	38.86				
Ga.14 Villa Nueva S Francisco		245.7	200	18.93	143.2	146.3	527.60				
〃 Sta Isabel		243.8	200	10.35	201.2	201.2					
Ga.15 Villa Canales 1		167.0		64.35	24.0				7.0	247	
Gu.15 Villa Canales 3		247.0		17.0	32.0						
〃 Baca del Monte 1		153.3	200	5.68	91.4	133.5	11.66				
〃 Aldea Calnenas 1		154.8	200	1.73	139.6	152.7	11.41				
Sa.10 Magdalna Milpas Altas		182.9	200	36.09	48.8	162.1	27.57				
Sa.10 Magdalna Milpas Altas		167.0		9.4	126.0						
Boulevard Liberacion	Qp/Tv	185.93	250	18.93	53.34	124.56	22.96	160.0			Guat.City
Avenida Las Americas		182.88	250	11.97	55.47	103.32	21.64	20.0			〃

Table (3) Existingu Well Record (3)

Location of Well	Aqui-fer	Drilled Depth(m)	Diame-ter(mm)	Discharge (Q=ℓ/s)	S.W.L (GL-m)	D.W.L (GL-m)	Sc(Q/s) (m²/d/m)	T (m²/d)	PH	Ec25 (μs/cm)	Remarks
Groundwater Basin : Rio Vacas & Lago de Amatitlan Basin ③−3											
Parque Navidad	Qp/Tv	304.80	200	28.01	41.31	77.58	66.72	17.0			〃
Puerta Parada Das(Villa Canales)		209.00	150	12.62	37.61	45.65	135.61	443.0			Villa Cana.
Gu.14 Villa Nueva 1		189.0		11.04	119.0				7.0	308	
〃 2		183.0		11.04							
〃 3		189.0		18.93	141.73	146.30	357.89				
〃 4		192.0		11.04	82.3	155.5	11.16				
〃 Callos Planes 5		188.37	200	9.46	82.29	155.45	11.16				
Gu.15 Villa Canales A.Porvinil		152.4	200	18.29	50.6	76.8	60.31				
〃 A.S.Jose e Iablon		176.8	150	5.80	42.7	160.9	4.24				
〃 Pila Publica		94.5	150	14.19	42.7	67.0	50.45				
Duralita Zona 6	Br	225.86	200	3.41	90.64	176.74	3.41	3.0			Guat.city
Gu.14 Villa Nueva Lot.S Antonio	?	109.7	200								
S Miguelito				15.14							
Gu.15 Villa Canales		182.9	200								
〃 Aldea Colnenas 2		91.2	150	3.78							
Groundwater Basin : Rio Pixcaya Basin ④−1											
Sa.7 San Bartolome M. Altas 1	Tv	182.9		5.00	152.4						
〃 2		182.9		8.00	152.4						
Sa.8 San Lucas Scatepequez		182.9	150	4.16							
〃		189.6	200	14.26	58.8	124.1	18.87				
Sa.9 San Juan Sacatepequez 1		158.5									
〃 2		182.9									
〃 3		298.7		dry well							
〃 4		182.9		15.14	53.3	81.4	46.55				
Sa.9 San Juan Sacatepequez 5		91.4									
Ch.3 San Martin Jilotepeque		152.4		0.32							
Ch.4 San Juan Comalapa		60.0		5.80							

Table (4) Existingu Well Record (4)

Location of Well	Aqui-fer	Drilled Depth(m)	Diame-ter(mm)	Discharge (Q=ℓ/s)	S.W.L (GL-m)	D.W.L (GL-m)	Sc(Q/s) (m³/d/m)	T (m²/d)	PH	Ec25 (μs/cm)	Remarks
Groundwater Basin : Rio Pixcaya Basin ④−2											
Gu.8 San Pedoro Sacatepequez		158.5	150	9.46	12.2	31.7	41.91				
〃		78.0		3.40	24.0				6.0	145	
Sa.6 Santiago Sacatepequez	Qp/Tv	201.8	200	12.93	116.4	177.1	18.40				
〃		182.9	150	12.62	87.4	106.7	49.56				
〃		201.8	200	15.77	64.9	88.1	58.73				
Ch.1 Chimaltenango 2		155.4	200	1.89	70.1	103.6	4.87				
〃 3		152.4	200	11.36	86.7	99.2	78.52				
〃 4		166.7	200	6.18	97.5	105.2	69.34				
Ch.15 Zaragoza		229.5	200	3.16	30.5	159.4	8.75				
Groundwater Basin : Rio Guacalate Basin ⑤−1											
Sa.1 Antigua Guatemala		33.5	150	6.62	3.0	4.6	357.48				
〃		171.0	150	18.93	0.0	0.0					
〃	Qa	96.0	150	9.46	3.1	4.6	544.89				
〃		91.4	250	11.50	7.3	21.0	72.52				
〃		91.4	250	10.71	16.8	16.8					
Sa.2 Jocotenango		158.8	200	31.55	6.7	19.5	212.96				
Jocotenango 1				12.60							
〃 2				15.80							
〃 3		91.4		11.04	5.8	22.9	55.78				
Sa.11 Santa Maria de Jesus		217.3	200	13.06	104.5	145.7	27.39				
Sa.12 Ciudad Vieja		76.2	150	12.62	28.9	61.0	33.97		7.0	273	
Sa.12 Ciudad Vieja	Qv	144.8	150	15.77	25.3	63.4	35.76				
Sa.12 Ciudad Vieja 1		48.0		4.12	42.0				7.0	273	
〃 2		36.0		31.54	30.0				6.5	253	
〃 3		54.0		6.0	48.0				6.5	276	
Sa.14 San Juan Alotenango		157.0	200	13.56	105.8	119.1	88.09				

Table (5) Existingu Well Record (5)

Location of Well	Aqui-fer	Drilled Depth(m)	Diame-ter(mm)	Discharge (Q=ℓ/s)	S.W.L (GL-m)	D.W.L (GL-m)	Sc(Q/s) (㎡/d/m)	T (㎡/d)	PH	Ec25 (μs/cm)	Remarks
Groundwater Basin : Rio Guacalate Basin ⑤−2											
Sa.7 San Bartolom M. Altas	Tv	182.9	200	15.14	96.0	101.8	225.53				
Sa.9 Santa Lucia M. Altas		182.9	200	3.79	48.8	162.2	2.89		6.5	238	
〃				5.00							
Sa.15 San Antonio Aguas Calientes		121.9		1.70	50.3	107.3	2.57				
Ch.10 Santa Cruz Balanya		185.9	150	7.57	121.3	180.7	11.04				
Ch.13 San Ander Itzap		182.9	200	14.19	100.3	101.8	817.34				
Ch.14 Parramos	Qp/Tv	164.6	200	9.08	97.5	99.1	490.32				
Ch.16 El Tejar 1		152.7	150	17.70	57.9	79.1	83.57				Present Data
		161.5	150	14.89	64.9	69.8	262.55				Initial Data
〃 2		121.9	150	8.83					6.5	223	Present Data
		122.1	150	8.83	59.4	73.5	54.11				Initial Data
〃 3		122.8	150	3.78					6.5	204	Present Data
		146.3	150	3.78	68.4	73.5	70.99				Initial Data
Groundwater Basin : Lago de Atitlan Basin ⑦											
Sa.10 Panajachel	Qa	121.9		27.13	33.8	45.5	200.34				
Groundwater Basin : Rio Samala Basin ⑨−1											
To.1 Totonicapan	Qp	182.9	200	12.62	50.9	92.4	25.18				
Qu.1 Quetzaltenango Lianos Pinal 1		134.1	150	12.62	79.6	84.4	227.16				
〃 Lianos Pinal 2		91.4	150	12.62	39.6	41.4	726.91				
〃 El Chirriez				30.28							
〃 El Chirriez				29.65							
〃 El Chirriez				3.47							
〃 El Chirriez				6.94							
To.2 San Cristobal Totonicapan	?	48.8	150		18.3						
To.4 San Andres Xecul		122.0			36.6						

Table (6) Existingu Well Record (6)

Location of Well	Aqui-fer	Drilled Depth(m)	Diame-ter(mm)	Discharge (Q=ℓ/s)	S.W.L (GL-m)	D.W.L (GL-m)	Sc(Q/s) (m²/d/m)	T (m²/d)	PH	Ec (μs/cm)	Remarks
Groundwater Basin : Rio Samala Basin ⑨−2											
Qu.1 Quetzaltenango El Chirriez				68.81							
〃 〃				13.56							
〃 〃				22.71							
〃 Salida aSan Mercis				11.04							
〃 Cefemero	Qp			12.62							
〃 El Zoologico				29.02							
〃 Llanaa de Pinal				14.19							
〃 Tierro Colorada				12.62							
〃 Las Rosas				11.04							
〃 Las Rosas				16.40							
〃 El Paraiso				8.07							
〃 El Cenisal				22.71							
〃 La Rotonda				22.71							
〃 Inal Col				20.63							
〃 San Iaidro				22.08							
〃 San Jose Chiguilaja				29.02							
〃 Labor Xela				37.85							
〃 Canton Chogui Z-6				12.62							
〃 Benito Juares				9.46							
Qu.2 Salcaja 1		38.1	150	31.54		12.2					
〃 2		121.9	150	37.79	7.0	25.3	178.42				
〃		128.0	200	49.99	2.4	8.5	708.05				
Qu.3 Olintepeque		140.2	200	10.54	11.9	21.3	96.88		6.5	207	
Qu.13 Almolonga 1				29.33							Present Data
		76.2			38.4	44.5	414.43				Initial Data
〃 2				7.57							
〃 3				3.15	47.2	50.3	87.79				Present Data
		160.7	250	1.89	47.2	50.3	56.67				Initial Data

Table (7) Existingu Well Record (7)

Location of Well	Aqui-fer	Drilled Depth(m)	Diame-ter(mm)	Discharge (Q=ℓ/s)	S.W.L (GL-m)	D.W.L (GL-m)	Sc(Q/s) (m²/d/m)	T (m²/d)	PH	Ec (μs/cm)	Remarks
Groundwater Basin : Others											
Gu.10 San Raymundo 3	Qp	159.3	200	14.51	59.7	93.9	34.82				
Qu.22 Flores Costa Cuca	Qv	154.0		9.27	14.0	28.7	54.48				
Gu.3 San del Golfo N	Tv	128.0	150	2.40	97.5				6.0	392	Present Data
		114.0	200	2.40	68.3						Initial Data
〃 S		106.7		9.46	84.7				6.0	312	Present Data
		54.9	150	9.75	38.7						Initial Data
Gu.6 San Pedro Ayampuc 1		91.4		1.89	29.6	79.3	3.28				Present Data
		184.4	200	14.82	53.3	70.1	76.22				Initial Data
〃 2		91.4		3.29	16.8	88.1	3.99				Present Data
		155.4	200	7.26	12.2	139.3	4.94				Initial Data
Gu.10 San Raymundo 1		121.9		11.99							Present Data
		94.5	150	3.78	29.6	79.2	6.58				Initial Data
Gu.24 Palestina de Los Altos		152.4	200	17.41	18.3	21.0	557.12		6.5	146	
〃		152.4	200	8.83	59.4	73.5	54.11				
Gu.10 San Raymundo 2	Br	152.4		10.09					7.5	305	
		138.7	150	5.99	16.8	88.1	7.26				
Gu.11 Chuarrancho		57.0	150	1.39	45.7	51.8	19.66				
〃		58.5	100	1.13	45.7						
〃		123.7	150	76.20	81.7						

5. DRAWINGS OF WATER SUPPLY SYSTEM DESIGN

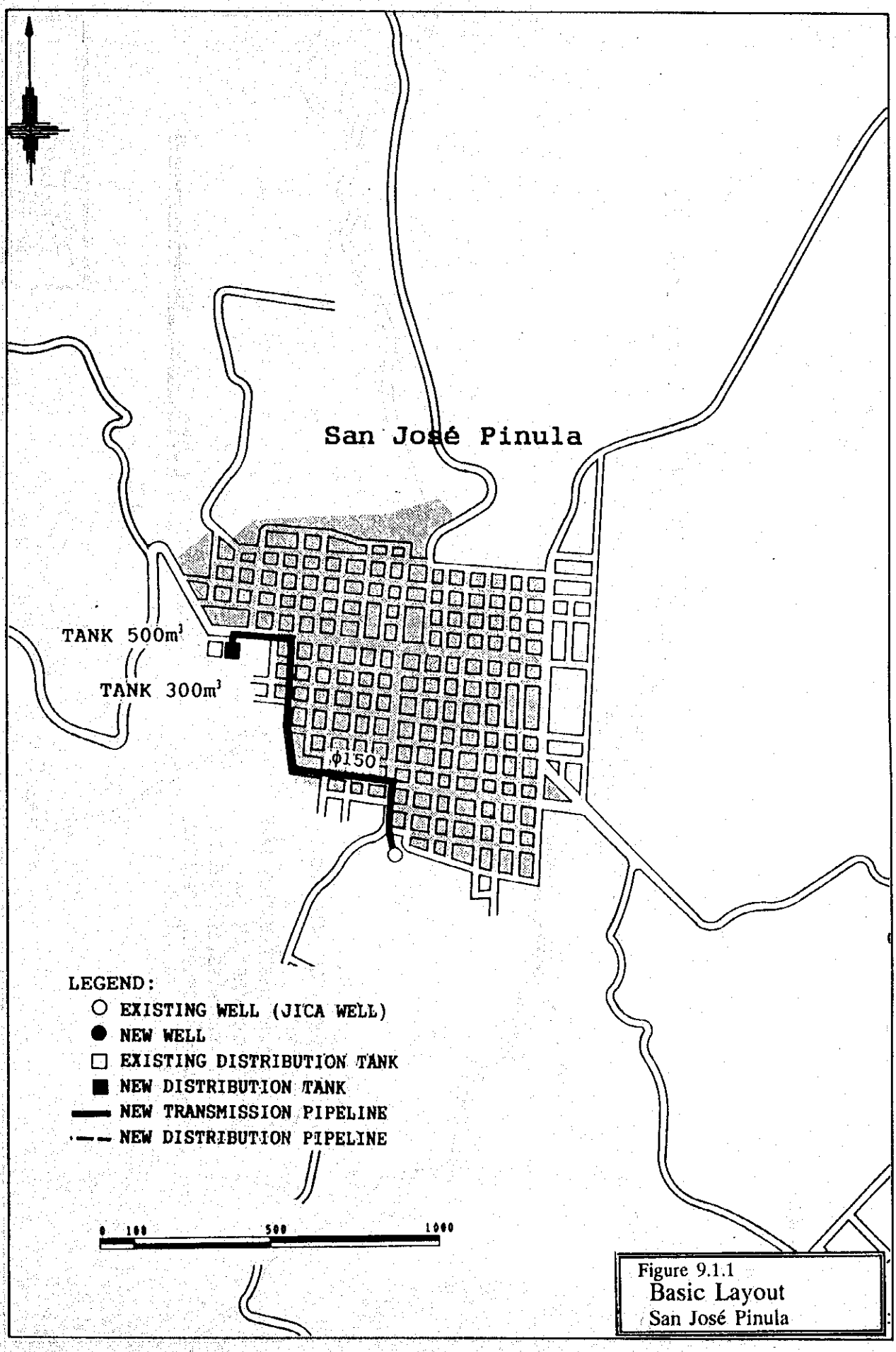

Figure 9.1.1
Basic Layout
San José Pinula

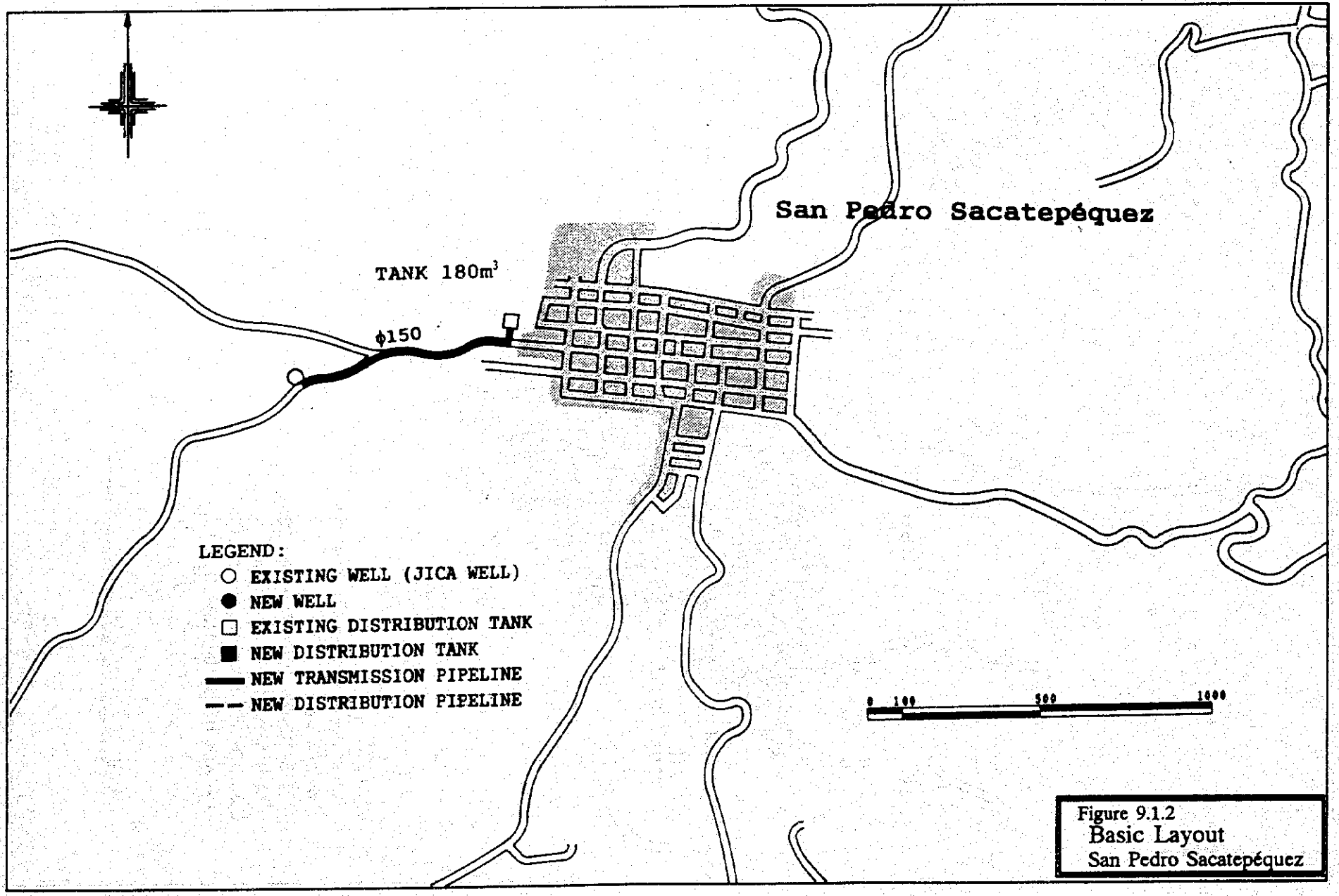

Figure 9.1.2
Basic Layout
San Pedro Sacatepéquez

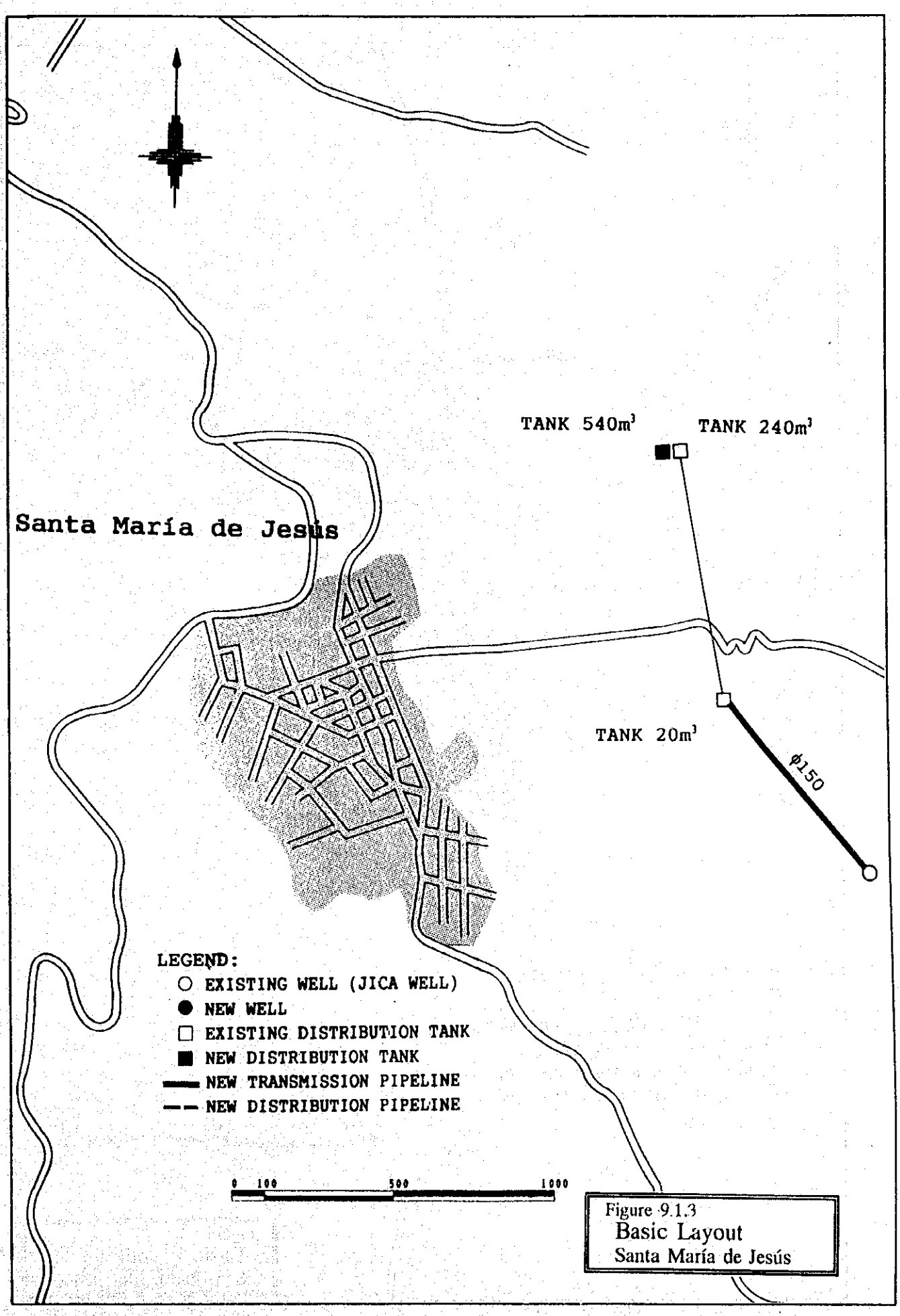

Figure 9.1.3
Basic Layout
Santa María de Jesús

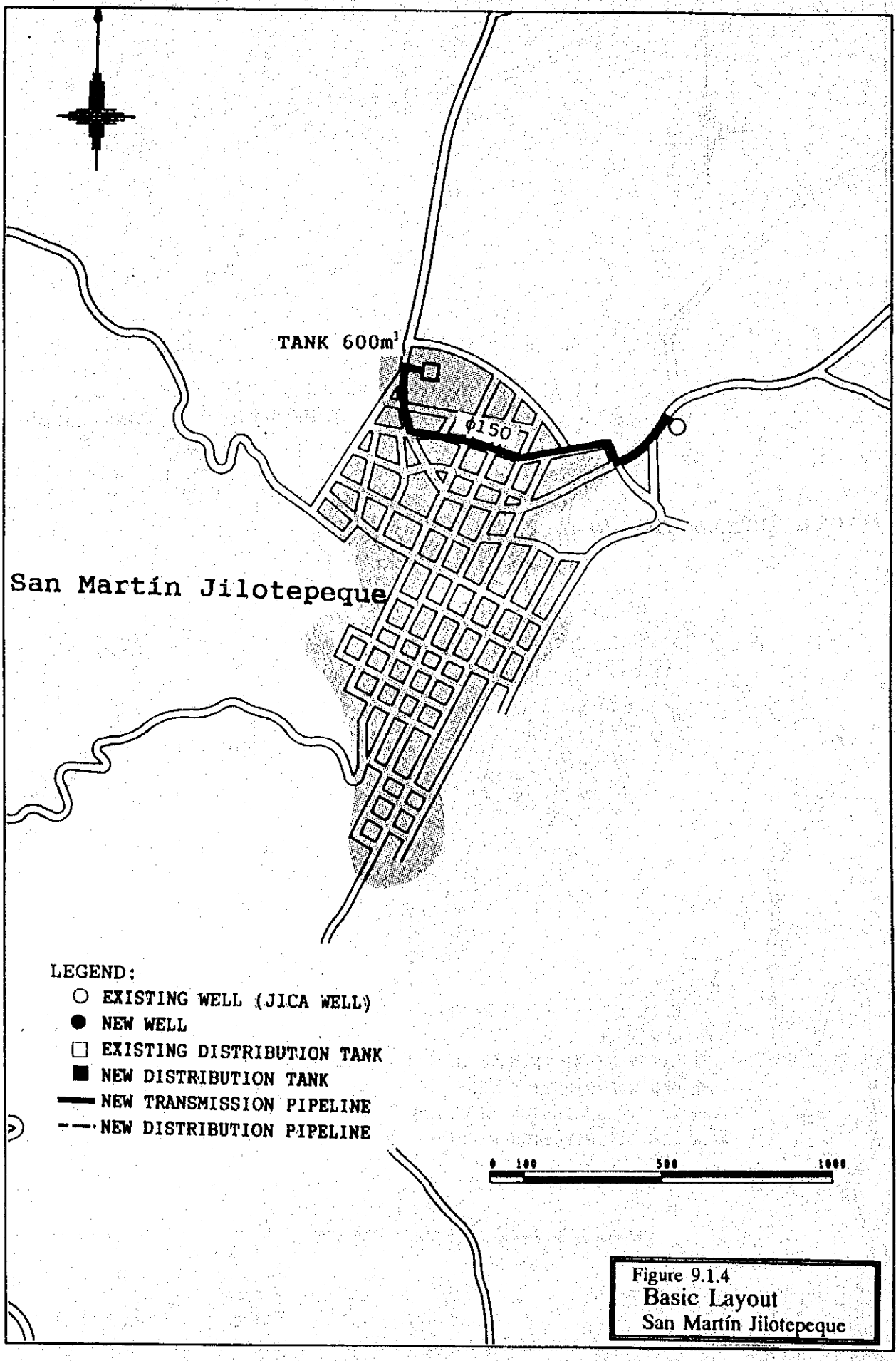

Figure 9.1.4
Basic Layout
San Martín Jilotepeque

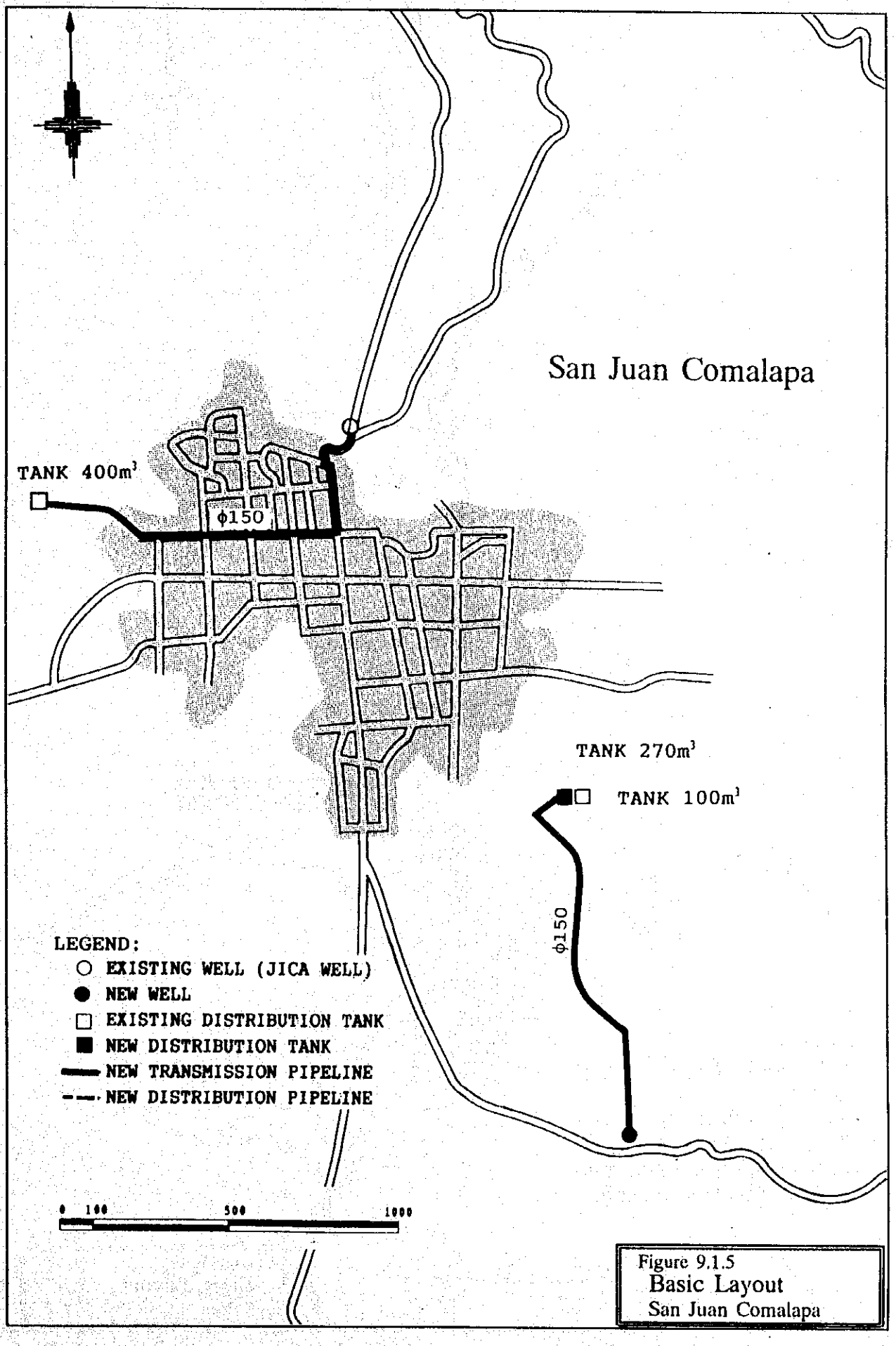

Figure 9.1.5
Basic Layout
San Juan Comalapa

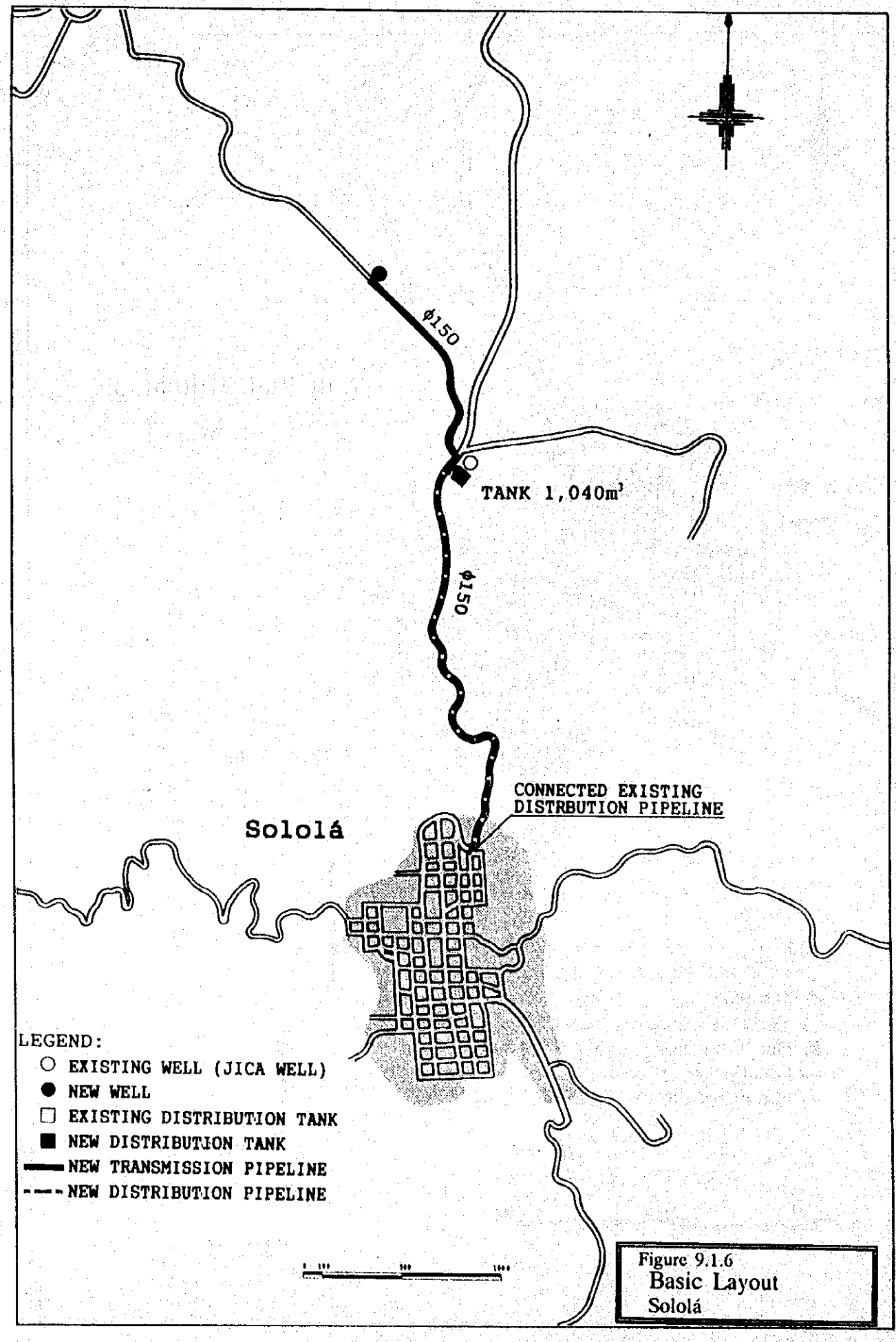

Figure 9.1.6
Basic Layout
Sololá

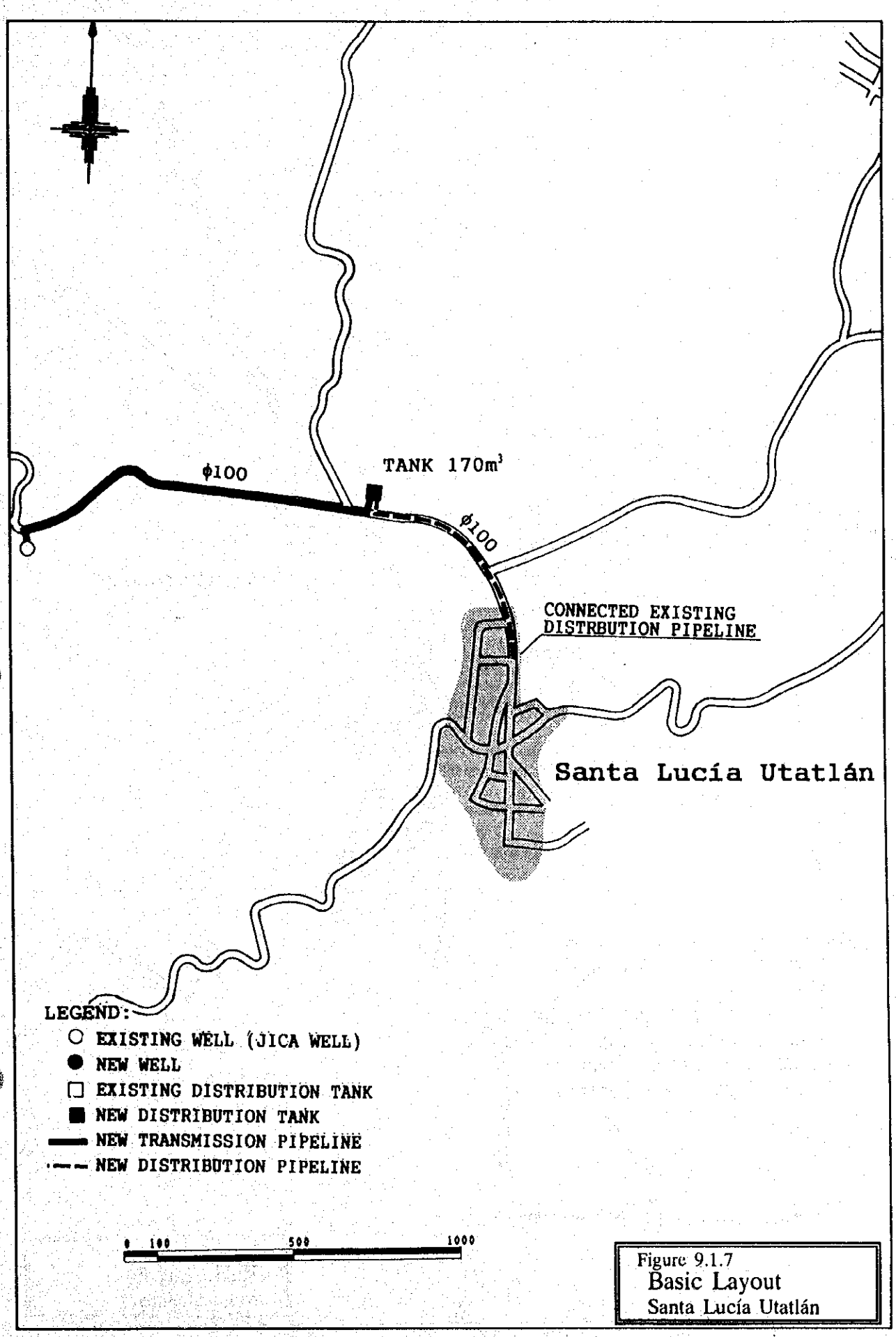

Figure 9.1.7
Basic Layout
Santa Lucía Utatlán

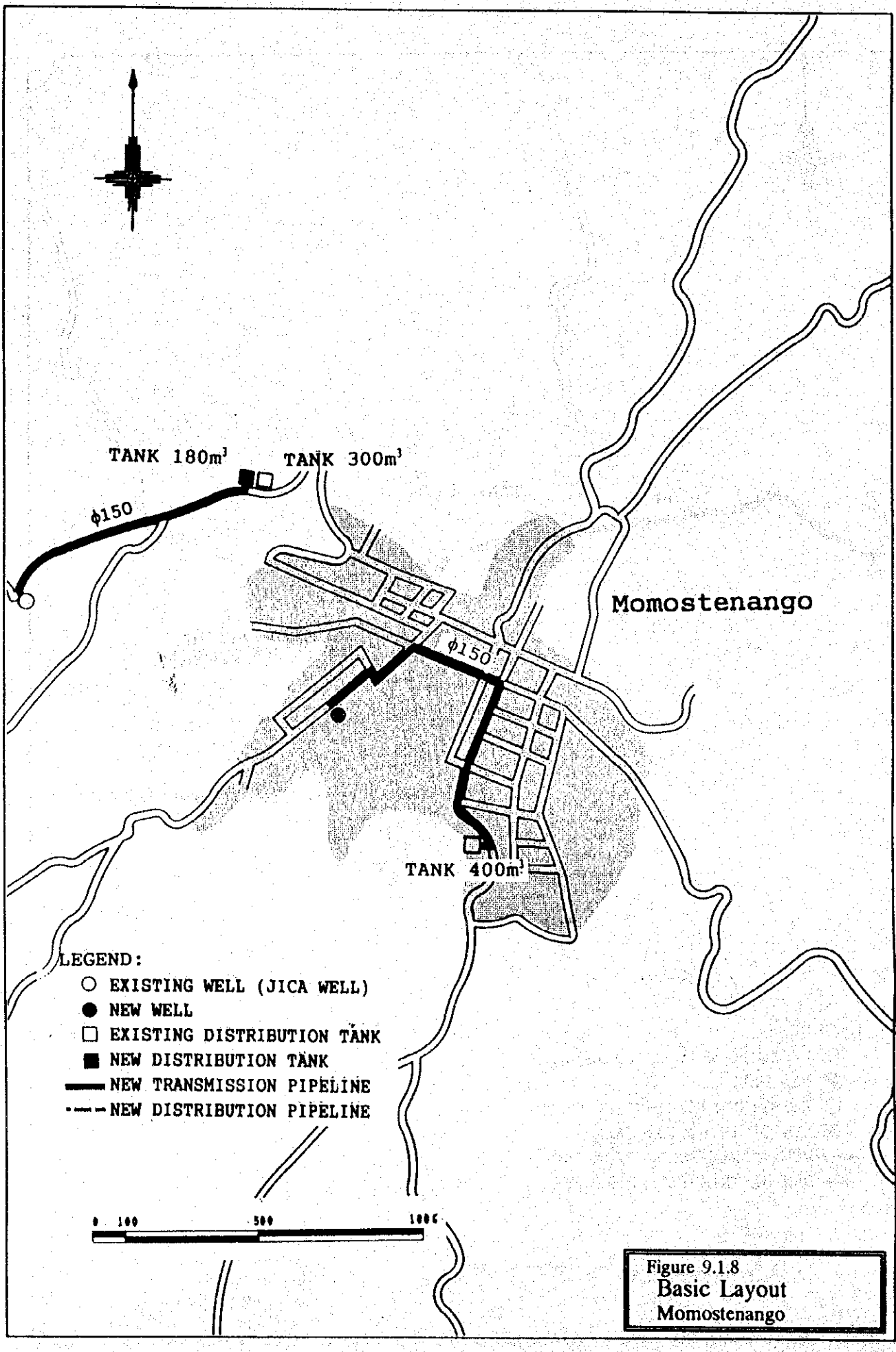

Figure 9.1.8
Basic Layout
Momostenango

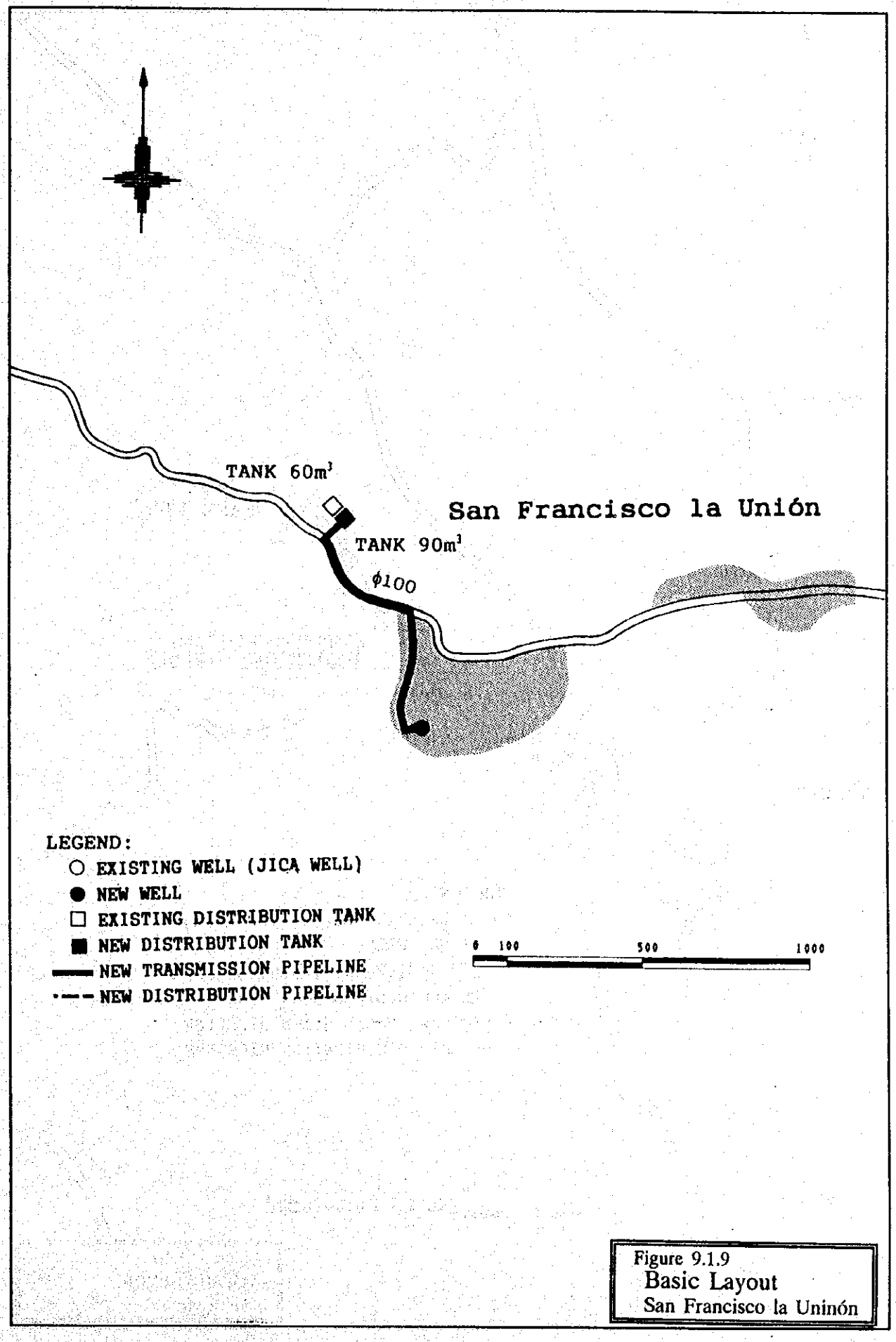

Figure 9.1.9
Basic Layout
San Francisco la Uninón

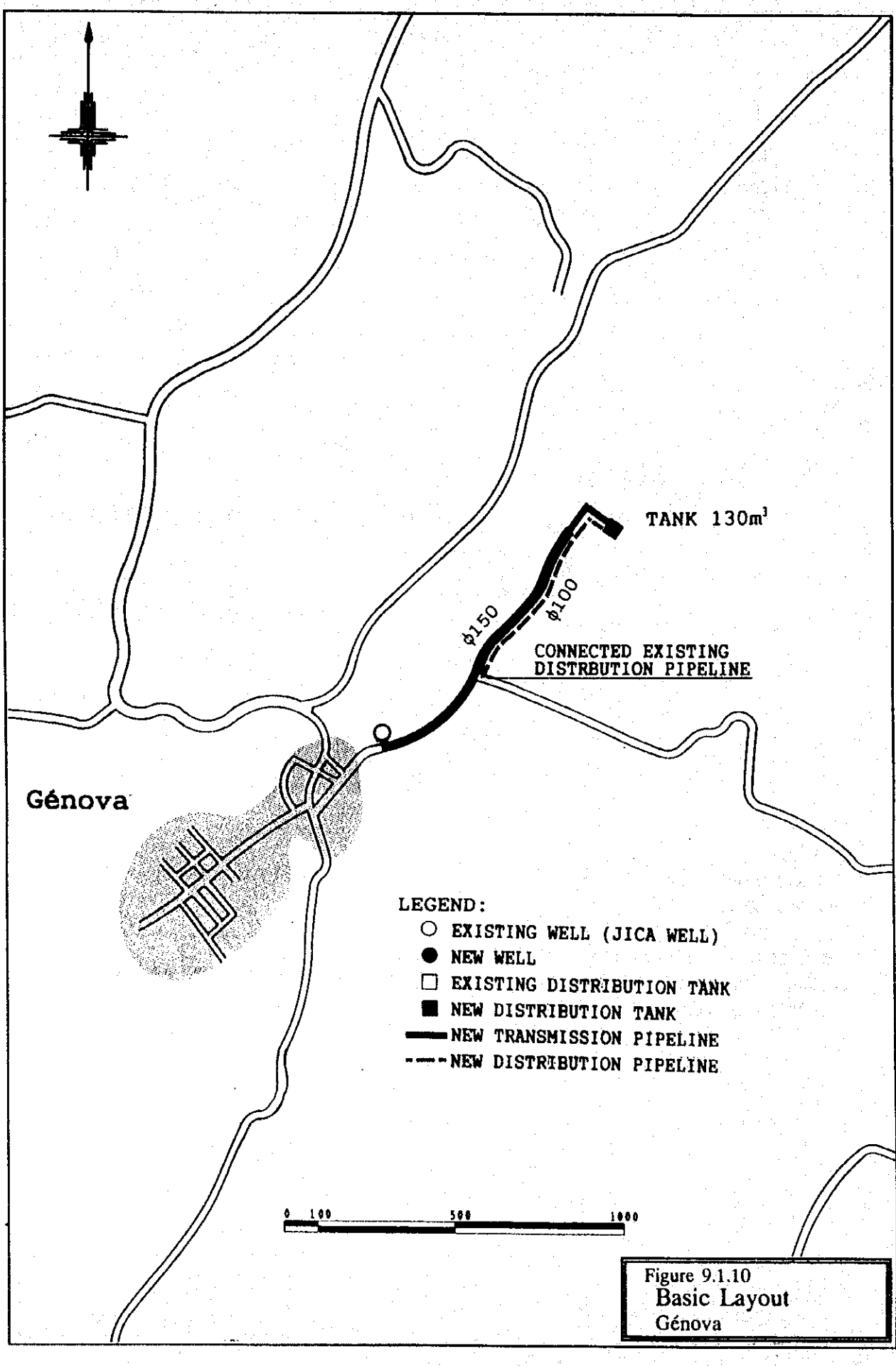

Figure 9.1.10
Basic Layout
Génova