

FRICTION LOSS CALCULATION

DATE: <u>10/29/00</u>	METER SYSTEM: <u>"G"</u>
PROJECT: <u>Montecito HOA</u>	ZONE: <u>G-9</u>
PROJECT NO.: <u>618 P-HOA</u>	HEAD: <u>22SS</u>
AVAIL. STATIC PSI: <u>53-57 P.S.I.</u>	NOZZLE: <u>same</u>
TAP SIZE: <u>2", 1-1/2" Meter</u>	HGL (top): _____
METER ELEV.: <u>394</u>	HGL (bottom): _____
<input type="checkbox"/> HIGH GPM	LATERAL SIZING: <u>Standard</u>
<input checked="" type="checkbox"/> HIGH ELEV.	AREA SERVICED: _____
<input type="checkbox"/> FURTHEST	

#	SIZE	COMPONENT	GPM	DISTANCE	PSI LOSS
1	3/4"	PVC Sch. 40 (on-grade) lateral line	0.60	25	0.1
2	3/4"	PVC Sch. 40 (on-grade) lateral line	1.20	25	0.2
3	3/4"	PVC Sch. 40 (on-grade) lateral line	1.80	12	0.4
4	1"	PVC Sch. 40 (on-grade) lateral line	2.40	23	0.5
5	1 1/4"	PVC Sch. 40 (on-grade) lateral line	3.00	45	0.9
6	1 1/4"	PVC CL 200 (buried) lateral line	3.60	25	0.4
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21		TOTAL DISTANCE (line #1 thru #20)		155	

22		TOTAL LATERAL LOSS (line #1 thru line #20)			2.5
23	1"	Rain Bird "GB" control valve **	9		2.6
24		min. head press.			20.0
25		Elev. +/- (ft. x .433) 30.00			13.0
26		TOTAL VALVE LOSS=Vn (#22 thru #25)			38.1

27	3"	PVC CI 315 main line piping	9	1785	0.2
28	2"	PVC CI 315 main line piping	9	35	0.1
29					
30					
31					
32		TOTAL DISTANCE (line #27 thru #31)		1820	

33		TOTAL MAIN LINE LOSS (line #27 thru #31)			0.3
34		Elev. +/- (ft. x .433) 13.00			5.7

35	2"	Griswold 2230 PRV/MV master valve	9		1.0
36	2"	Copper Type "K" pipe	9	5	0.1
37	2"	Febco 860 U B.P.	9		13.0
38	2"	Copper Type "K" pipe	9	5	0.1
39	1-1/2"	Water Meter** water meter	9		0.0
40	2"	Copper Type "K" service line	9	20	0.1
41	3/4"	ADV anti-drain valve			6.0
42					
43		TOTAL PSI LOSS (#26 + (#33 thru #42)			64.4
44		5% Margin			3.3
45		MINIMUM OPERATING PSI			67.7
46		LESS #35 thru #41 (PSI + 5%)			21.4
47		SETTING FOR PRV			46

** Should not exceed 10% of Available Static PSI