

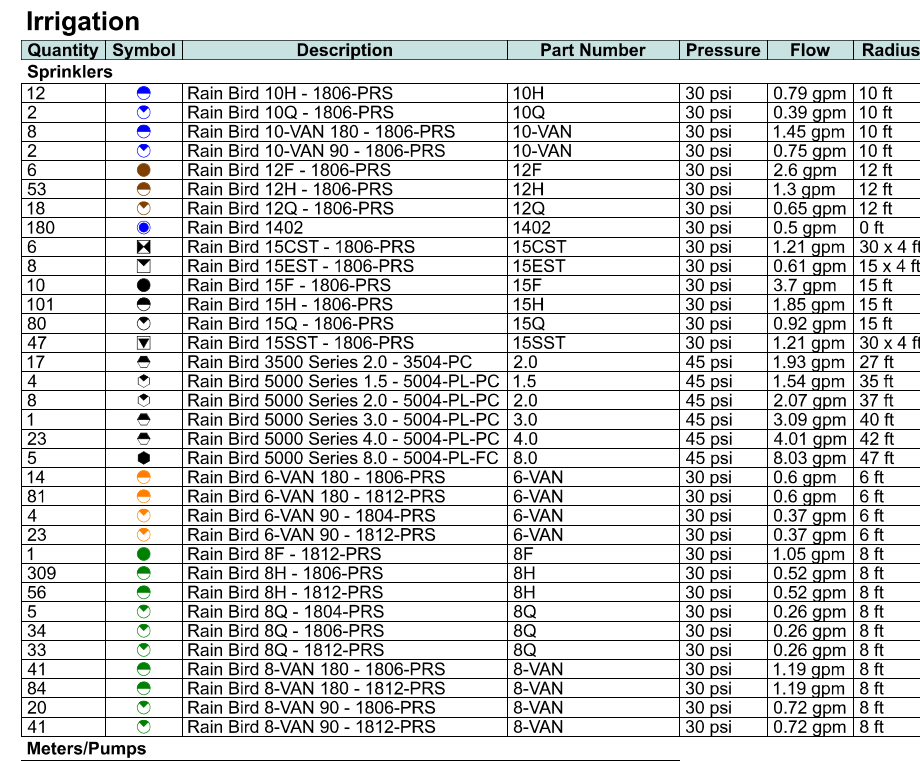


STATE OF TEXAS
CASEY L. REIMANN
14897
LICENSED ENGINEER

IRRIGATION DESIGN

PROJECT:
IVY POINT
FRIENDSWOOD.TX

SHEET:
LI.00



Meters/Ports		1	2	2 inch meter	
Backflow Devices					
1				Febco 765 - 2"	765 - 2"
3				Rain Bird 100-PGA Globe	100 - PGA
40				Rain Bird 200-PGA Globe	150-PGA Globe
1				Rain Bird XCCZ-100-PRB-COM	XCCZ-PRB-100-COM
Irrigation Accessories					
1				RAINBIRD WRC CLICK	
1				RAINBIRD SFXLEX	
1				Sectors 2 Gray PVC - Socket	2621-0200
Lateral Line Pipe					
6853.5 ft				Class 115 1/2"	
1745 ft				Class 200 1"	
2886 ft				Class 200 1"	
3845 ft				Class 200 1 1/4"	
Mainline Pipe					
25.15 ft				Schedule 40 2"	0
Drip Tapping					
4268 ft				Rain Bird XFS-06-18	XFS-06-18

Springer Zone #	Zone #	15' Low	15' High	Price Ratio
	54.67 S.91	1.50	15.42	10.28
	54.67 S.92	1.50	15.42	10.28
	3.188.93 S.91	34.4	1.74	19.81
	3.188.93 S.92	34.4	1.74	19.81
	2.675.93 S.91	40.54	2.08	19.48
	2.675.93 S.92	40.54	2.08	19.48
	1.248.93 S.91	20.0	15.42	10.28
	1.248.93 S.92	20.0	15.42	10.28
	1.938.96 S.91	33.28	1.65	19.81
	1.938.96 S.92	33.28	1.65	19.81
	1.719.13 S.91	28.61	1.55	19.81
	1.719.13 S.92	28.61	1.55	19.81
	1.44.14 S.91	27.3	1.55	19.81
	1.44.14 S.92	27.3	1.55	19.81
	1.067.15 S.91	28.2	0.25	116.1
	1.067.15 S.92	28.2	0.25	116.1
	1.227.16 S.91	31.9	1.35	19.81
	1.227.16 S.92	31.9	1.35	19.81
	2.300.25 S.91	14.1	0.52	27.1
	2.300.25 S.92	14.1	0.52	27.1
	2.180.27 S.91	31.35	1.67	19.81
	2.180.27 S.92	31.35	1.67	19.81
	2.083.49 S.91	45.1	0.36	125.3
	2.083.49 S.92	45.1	0.36	125.3
	2.478.51 S.91	22.76	0.27	84.3
	2.478.51 S.92	22.76	0.27	84.3
	1.980.55 S.91	22.83	1.11	20.56
	1.980.55 S.92	22.83	1.11	20.56
	1.517.67 S.91	42.25	2.52	16.78
	1.517.67 S.92	42.25	2.52	16.78
	1.337.78 S.91	27.66	1.99	13.87
	1.337.78 S.92	27.66	1.99	13.87
	1.744.68 S.91	27.35	1.67	19.81
	1.744.68 S.92	27.35	1.67	19.81
	1.350.94 S.91	1.96	1.37	19.81
	1.350.94 S.92	1.96	1.37	19.81
	1.659.68 S.91	21.24	0.21	101.6
	1.659.68 S.92	21.24	0.21	101.6
	1.110.72 S.91	27.75	2.41	11.53
	1.110.72 S.92	27.75	2.41	11.53
	2.011.93 S.91	30.68	0.47	65.3
	2.011.93 S.92	30.68	0.47	65.3

Zone #	Total Area	Total Flow	Precip Rate
44	1687.08 Sq/Ft	448.8 gph	0.43 in/hr
45	1403.88 Sq/Ft	373.8 gph	0.43 in/hr
46	3340.66 Sq/Ft	890.4 gph	0.43 in/hr

Water Source #1	
Meter Size	2 inch meter
Static Pressure	65 psi
Elevation Change	0 ft
Service Line Information	
Pipe Category	Type K Copper
Pipe Size	Type K Copper 2"
Length	15 ft
Velocity	5 fps
Recommendations	
Maximum Recommended Flow	48.97 gpm
Available Working Pressure	56.56 psi

Run Set: 1			Run Set: 2			Run Set: 3			Run Set: 4			Run Set: 5			Run Set: 6			Run Set: 7			Run Set: 8			Run Set: 9			Run Set: 10			Run Set: 11			Run Set: 12			Run Set: 13			Run Set: 14					
Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1		
Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor						
Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi						
Service Loss	Service Loss	0.041 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi	Service Loss	Service Loss	0.25 psi						
Minor Loss	Minor Loss	0.34 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi	Minor Loss	Minor Loss	0.53 psi						
Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components		
Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi						
Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi						
Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi						
Zone 1 18.01 gpm			Zone 2 24.38 gpm			Zone 3 34.34 gpm			Zone 4 34.37 gpm			Zone 5 40.47 gpm			Zone 6 44.54 gpm			Zone 7 30.26 gpm			Zone 8 20.30 gpm			Zone 9 35.16 gpm			Zone 10 33.28 gpm			Zone 11 18.24 gpm			Zone 12 26.81 gpm			Zone 13 28.21 gpm			Zone 14 27.73 gpm					
Marine Loss	Marine Loss	0.48 psi	Marine Loss	Marine Loss	2.76 psi	Marine Loss	Marine Loss	2.52 psi	Marine Loss	Marine Loss	5.86 psi	Marine Loss	Marine Loss	8.65 psi	Marine Loss	Marine Loss	9.46 psi	Marine Loss	Marine Loss	2.37 psi	Marine Loss	Marine Loss	6.91 psi	Marine Loss	Marine Loss	7.88 psi	Marine Loss	Marine Loss	1.45 psi	Marine Loss	Marine Loss	3.94 psi	Marine Loss	Marine Loss	1.94 psi	Marine Loss	Marine Loss	2.52 psi						
Valve Loss	Valve Loss	0.86 psi	Valve Loss	Valve Loss	2.97 psi	Valve Loss	Valve Loss	2.39 psi	Valve Loss	Valve Loss	5.86 psi	Valve Loss	Valve Loss	8.65 psi	Valve Loss	Valve Loss	9.46 psi	Valve Loss	Valve Loss	1.932 psi	Valve Loss	Valve Loss	2.951 psi	Valve Loss	Valve Loss	1.153 psi	Valve Loss	Valve Loss	1.153 psi	Valve Loss	Valve Loss	1.598 psi	Valve Loss	Valve Loss	1.598 psi	Valve Loss	Valve Loss	1.598 psi						
Friction Loss	Friction Loss	0.40 psi	Friction Loss	Friction Loss	2.19 psi	Friction Loss	Friction Loss	1.88 psi	Friction Loss	Friction Loss	5.86 psi	Friction Loss	Friction Loss	8.65 psi	Friction Loss	Friction Loss	9.46 psi	Friction Loss	Friction Loss	1.88 psi	Friction Loss	Friction Loss	2.442 psi	Friction Loss	Friction Loss	3.02 psi	Friction Loss	Friction Loss	0.784 psi	Friction Loss	Friction Loss	1.382 psi	Friction Loss	Friction Loss	1.664 psi	Friction Loss	Friction Loss	1.664 psi						
Elevation	Elevation	0.26 psi	Elevation	Elevation	0.951 psi	Elevation	Elevation	1.333 psi	Elevation	Elevation	1.965 psi	Elevation	Elevation	2.222 psi	Elevation	Elevation	2.442 psi	Elevation	Elevation	1.745 psi	Elevation	Elevation	1.836 psi	Elevation	Elevation	2.442 psi	Elevation	Elevation	0.784 psi	Elevation	Elevation	1.382 psi	Elevation	Elevation	1.664 psi	Elevation	Elevation	1.664 psi						
Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi						
Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi						
Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi						
Residual Pressure	Residual Pressure	72.733 psi	Residual Pressure	Residual Pressure	10.114 psi	Residual Pressure	Residual Pressure	10.114 psi	Residual Pressure	Residual Pressure	20.699 psi	Residual Pressure	Residual Pressure	17.323 psi	Residual Pressure	Residual Pressure	15.581 psi	Residual Pressure	Residual Pressure	20.301 psi	Residual Pressure	Residual Pressure	20.492 psi	Residual Pressure	Residual Pressure	16.741 psi	Residual Pressure	Residual Pressure	13.445 psi	Residual Pressure	Residual Pressure	22.887 psi	Residual Pressure	Residual Pressure	22.887 psi	Residual Pressure	Residual Pressure	22.887 psi						
Run Set: 15			Run Set: 16			Run Set: 17			Run Set: 18			Run Set: 19			Run Set: 20			Run Set: 21			Run Set: 22			Run Set: 23			Run Set: 24			Run Set: 25			Run Set: 26			Run Set: 27			Run Set: 28					
Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1			Water Source: #1					
Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor	Type	Type	Motor						
Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi	Static Pressure	Static Pressure	65 psi						
Service Loss	Service Loss	0.133 psi	Service Loss	Service Loss	0.133 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi	Service Loss	Service Loss	0.168 psi						
Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi	Minor Loss	Minor Loss	0.08 psi						
Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components			Mainline Components					
Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi	Backflow Loss	Backflow Loss	3 psi						
Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi	Minor Valve Loss	Minor Valve Loss	0 psi						
Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi	Filter Loss	Filter Loss	0 psi						
Zone 15 28.22 gpm			Zone 16 28.22 gpm			Zone 17 33.59 gpm			Zone 18 31.9 gpm			Zone 19 29.64 gpm			Zone 20 41.19 gpm			Zone 21 17.05 gpm			Zone 22 33.36 gpm			Zone 23 28.28 gpm			Zone 24 46.15 gpm			Zone 25 28.49 gpm			Zone 26 19.93 gpm			Zone 27 22.27 gpm			Zone 28 31.91 gpm					
Marine Loss	Marine Loss	2.85 psi	Marine Loss	Marine Loss	2.08 psi	Marine Loss	Marine Loss	1.76 psi	Marine Loss	Marine Loss	2.47 psi	Marine Loss	Marine Loss	2.68 psi	Marine Loss	Marine Loss	4.47 psi	Marine Loss	Marine Loss	0.46 psi	Marine Loss	Marine Loss	1.25 psi	Marine Loss	Marine Loss	1.25 psi	Marine Loss	Marine Loss	0.46 psi	Marine Loss	Marine Loss	0.46 psi	Marine Loss	Marine Loss	0.46 psi	Marine Loss	Marine Loss	0.46 psi						
Valve Loss	Valve Loss	1.786 psi	Valve Loss	Valve Loss	1.457 psi	Valve Loss	Valve Loss	1.457 psi	Valve Loss	Valve Loss	1.457 psi	Valve Loss	Valve Loss	1.457 psi	Valve Loss	Valve Loss	1.457 psi	Valve Loss	Valve Loss	2.077 psi	Valve Loss	Valve Loss	3.224 psi	Valve Loss	Valve Loss	3.224 psi	Valve Loss	Valve Loss	1.532 psi	Valve Loss	Valve Loss	1.532 psi	Valve Loss	Valve Loss	1.532 psi									
Friction Loss	Friction Loss	4.217 psi	Friction Loss	Friction Loss	3.427 psi	Friction Loss	Friction Loss	3.427 psi	Friction Loss	Friction Loss	3.427 psi	Friction Loss	Friction Loss	3.427 psi	Friction Loss	Friction Loss	4.416 psi	Friction Loss	Friction Loss	7.771 psi	Friction Loss	Friction Loss	1.786 psi	Friction Loss	Friction Loss	1.786 psi	Friction Loss	Friction Loss	0.46 psi	Friction Loss	Friction Loss	0.46 psi	Friction Loss	Friction Loss	0.46 psi	Friction Loss	Friction Loss	0.46 psi						
Elevation	Elevation	0.26 psi	Elevation	Elevation	0.951 psi	Elevation	Elevation	1.333 psi	Elevation	Elevation	1.965 psi	Elevation	Elevation	2.222 psi	Elevation	Elevation	2.442 psi	Elevation	Elevation	1.745 psi	Elevation	Elevation	1.836 psi	Elevation	Elevation	2.442 psi	Elevation	Elevation	0.784 psi	Elevation	Elevation	1.382 psi	Elevation	Elevation	1.664 psi	Elevation	Elevation	1.664 psi						
Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi	Backflow Requirement	Backflow Requirement	30 psi						
Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi	Minor Valve Requirement	Minor Valve Requirement	30 psi						
Total Design Pressure	Total Design Pressure	74.733 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi	Total Design Pressure	Total Design Pressure	54.136 psi						
Residual Pressure	Residual Pressure	57.001 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi	Residual Pressure	Residual Pressure	33.593 psi						