



Irrigation

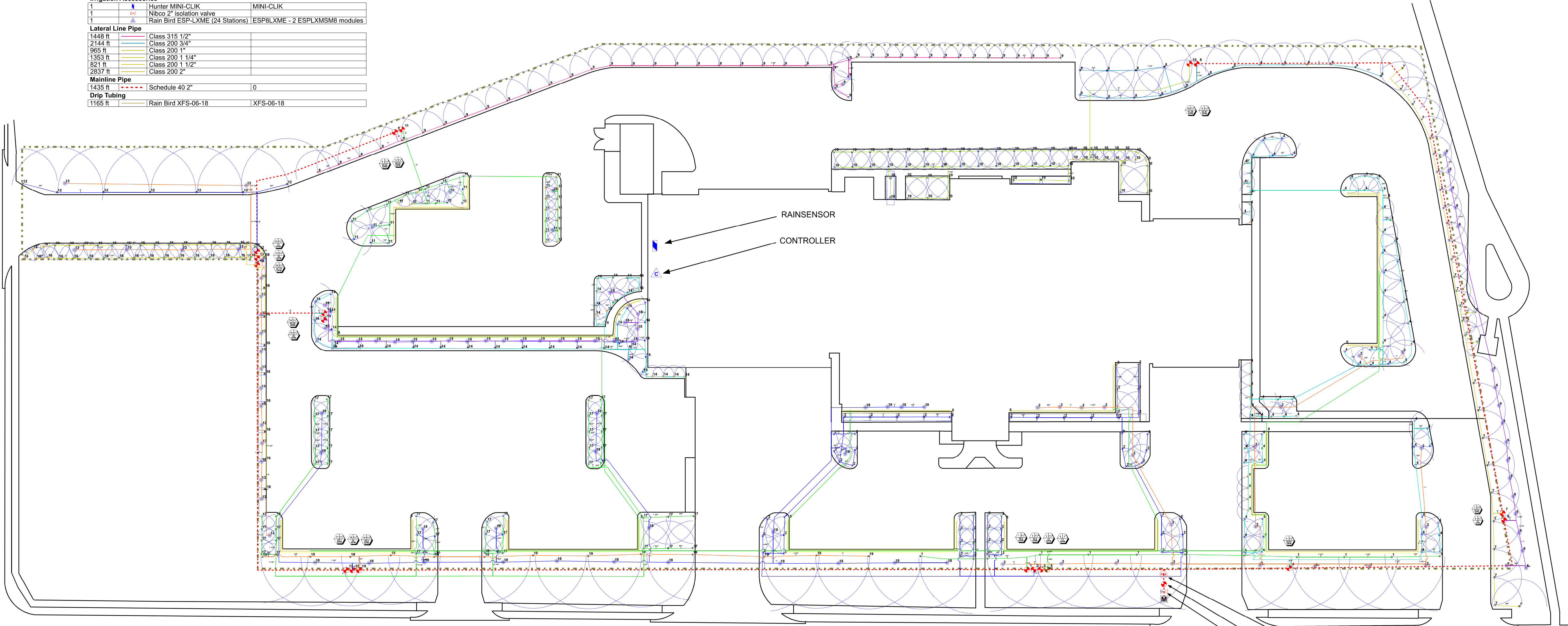
Quantity	Symbol	Description	Part Number	Pressure	Flow	Radius
Sprinklers						
6	☼	Hunter PGJ-1.0 - PGJ-04	1.0	40 psi	1 gpm	19 ft
10	☼	Hunter PGJ-2.0 - PGJ-04	2.0	40 psi	2 gpm	25 ft
16	☼	Hunter PGP-02 - PGP-ADJ	02	50 psi	0.9 gpm	30 ft
61	☼	Hunter PGP-05 - PGP-ADJ	05	50 psi	2 gpm	36 ft
44	☼	Rain Bird 10H - 1804	10H	30 psi	0.75 gpm	10 ft
20	☼	Rain Bird 10Q - 1804	10Q	30 psi	0.39 gpm	10 ft
13	☼	Rain Bird 10-VAN 180 - 1804	10-VAN	30 psi	1.45 gpm	10 ft
1	☼	Rain Bird 12F - 1804	12F	30 psi	2.6 gpm	12 ft
36	☼	Rain Bird 12H - 1804	12H	30 psi	1.3 gpm	12 ft
6	☼	Rain Bird 12Q - 1804	12Q	30 psi	0.65 gpm	12 ft
7	☼	Rain Bird 12-VAN 180 - 1804	12-VAN	30 psi	1.3 gpm	12 ft
112	☼	Rain Bird 1404	1404	30 psi	1 gpm	0 ft
8	☼	Rain Bird 15C-ST - 1804	15C-ST	30 psi	1.21 gpm	30 x 4 ft
9	☼	Rain Bird 15EST - 1804	15EST	30 psi	0.61 gpm	15 x 4 ft
3	☼	Rain Bird 15F - 1804	15F	30 psi	3.7 gpm	15 ft
22	☼	Rain Bird 15H - 1804	15H	30 psi	1.65 gpm	15 ft
10	☼	Rain Bird 15Q - 1804	15Q	30 psi	0.92 gpm	15 ft
18	☼	Rain Bird 15SST - 1804	15SST	30 psi	1.21 gpm	30 x 4 ft
50	☼	Rain Bird 6-VAN 180 - 1804	6-VAN	30 psi	0.6 gpm	6 ft
18	☼	Rain Bird 6-VAN 90 - 1804	6-VAN	30 psi	0.37 gpm	6 ft
82	☼	Rain Bird 8H - 1804	8H	30 psi	0.52 gpm	8 ft
25	☼	Rain Bird 8Q - 1804	8Q	30 psi	0.26 gpm	8 ft
10	☼	Rain Bird 8-VAN 180 - 1804	8-VAN	30 psi	1.19 gpm	8 ft
5	☼	Rain Bird 8-VAN 90 - 1804	8-VAN	30 psi	0.72 gpm	8 ft
Meters/Pumps						
1	☼	2 inch meter				
Backflow Devices						
1	☼	Febco 765 - 1 1/2"	765 - 1 1/2"			
Control Valves						
18	☼	Rain Bird 150-PGA Globe	150-PGA			
1	☼	Rain Bird 200-PGA Globe	200-PGA Globe			
1	☼	Rain Bird XCZ-100 COM	XCZ-100 COM			
Irrigation Accessories						
1	☼	Hunter MINI-CLIK	MINI-CLIK			
1	☼	Nibco 2" isolation valve				
1	☼	Rain Bird ESP-LXME (24 Stations)	ESP8LXME - 2 ESPLXMSM8 modules			
Lateral Line Pipe						
1448 ft	☼	Class 315 1/2"				
2144 ft	☼	Class 200 3/4"				
965 ft	☼	Class 200 1"				
1363 ft	☼	Class 200 1 1/4"				
821 ft	☼	Class 200 1 1/2"				
2837 ft	☼	Class 200 2"				
Mainline Pipe						
1435 ft	☼	Schedule 40 2"	0			
Drip Tubing						
1165 ft	☼	Rain Bird XFS-06-18	XFS-06-18			

Sprinkler Zone Data

Zone #	Total Area	Total Flow	Precip Rate
1	7620.16 Sq/Ft	18.5 gpm	0.23 in/hr
2	2181.39 Sq/Ft	34.3 gpm	1.51 in/hr
3	65.57 Sq/Ft	21 gpm	30.84 in/hr
4	3390.81 Sq/Ft	54.93 gpm	1.56 in/hr
6	56.2 Sq/Ft	18 gpm	30.84 in/hr
7	4104.9 Sq/Ft	35.64 gpm	0.84 in/hr
8	3370.18 Sq/Ft	33.87 gpm	0.97 in/hr
9	4703.61 Sq/Ft	44.45 gpm	0.91 in/hr
10	2330.52 Sq/Ft	41.36 gpm	1.71 in/hr
11	1088.74 Sq/Ft	29.25 gpm	2.59 in/hr
12	4010.1 Sq/Ft	13 gpm	0.31 in/hr
13	65.57 Sq/Ft	21 gpm	30.84 in/hr
14	2005.83 Sq/Ft	45.36 gpm	2.18 in/hr
15	71.81 Sq/Ft	23 gpm	30.84 in/hr
16	1627.9 Sq/Ft	27.79 gpm	1.64 in/hr
17	1689.99 Sq/Ft	25.1 gpm	1.43 in/hr
18	74.94 Sq/Ft	24 gpm	30.84 in/hr
19	7818.72 Sq/Ft	20.5 gpm	0.25 in/hr

Drip Zone Data

Zone #	Total Area	Total Flow	Precip Rate
5	2036.09 Sq/Ft	462 gph	0.36 in/hr



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	
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	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter
Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi
Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi
Meter Loss	0.435 psi	Meter Loss	0.949 psi	Meter Loss	0.51 psi	Meter Loss	2.196 psi	Meter Loss	0.164 psi	Meter Loss	0.42 psi	Meter Loss	0.983 psi	Meter Loss	0.935 psi	Meter Loss	1.545 psi	Meter Loss	1.3 psi
Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components	
Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.534 psi
Master Valve Loss	0.555 psi	Master Valve Loss	1.029 psi	Master Valve Loss	0.63 psi	Master Valve Loss	1.796 psi	Master Valve Loss	0.231 psi	Master Valve Loss	0.54 psi	Master Valve Loss	1.069 psi	Master Valve Loss	1.016 psi	Master Valve Loss	1.334 psi	Master Valve Loss	1.241 psi
Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi
Zone 1 @ 18.5 gpm		Zone 2 @ 34.3 gpm		Zone 3 @ 21 gpm		Zone 4 @ 54.93 gpm		Zone 5 @ 7.7 gpm		Zone 6 @ 18 gpm		Zone 7 @ 35.64 gpm		Zone 8 @ 33.87 gpm		Zone 9 @ 44.45 gpm		Zone 10 @ 41.36 gpm	
Mainline Loss	0.25 psi	Mainline Loss	0.76 psi	Mainline Loss	0.29 psi	Mainline Loss	1.76 psi	Mainline Loss	0.04 psi	Mainline Loss	0.61 psi	Mainline Loss	2.19 psi	Mainline Loss	5.07 psi	Mainline Loss	11.27 psi	Mainline Loss	7.38 psi
Valve Loss	1.172 psi	Valve Loss	2.459 psi	Valve Loss	1.33 psi	Valve Loss	6.042 psi	Valve Loss	5.955 psi	Valve Loss	1.14 psi	Valve Loss	2.633 psi	Valve Loss	2.403 psi	Valve Loss	3.912 psi	Valve Loss	3.415 psi
Lateral Loss	0.158 psi	Lateral Loss	0.213 psi	Lateral Loss	0.248 psi	Lateral Loss	3.513 psi	Lateral Loss	0 psi	Lateral Loss	0.275 psi	Lateral Loss	1.184 psi	Lateral Loss	0.389 psi	Lateral Loss	2.615 psi	Lateral Loss	4.277 psi
Fittings Loss	0.082 psi	Fittings Loss	0.194 psi	Fittings Loss	0.108 psi	Fittings Loss	1.054 psi	Fittings Loss	0.009 psi	Fittings Loss	0.177 psi	Fittings Loss	0.676 psi	Fittings Loss	1.091 psi	Fittings Loss	2.776 psi	Fittings Loss	2.332 psi
Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi
Sprinkler Requirement	50 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	0 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi
Total Design Pressure	55.072 psi	Total Design Pressure	37.909 psi	Total Design Pressure	35.511 psi	Total Design Pressure	48.175 psi	Total Design Pressure	16.897 psi	Total Design Pressure	35.484 psi	Total Design Pressure	40.563 psi	Total Design Pressure	42.308 psi	Total Design Pressure	53.283 psi	Total Design Pressure	50.152 psi
Residual Pressure	4.928 psi	Residual Pressure	22.091 psi	Residual Pressure	24.489 psi	Residual Pressure	11.825 psi	Residual Pressure	43.103 psi	Residual Pressure	24.516 psi	Residual Pressure	19.437 psi	Residual Pressure	17.692 psi	Residual Pressure	6.717 psi	Residual Pressure	9.848 psi
Run Set: 11		Run Set: 12		Run Set: 13		Run Set: 14		Run Set: 15		Run Set: 16		Run Set: 17		Run Set: 18		Run Set: 19			
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	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter	Type	Meter		
Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi	Static Pressure	60 psi		
Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi	Service Line	0 psi		
Meter Loss	0.767 psi	Meter Loss	0.29 psi	Meter Loss	0.51 psi	Meter Loss	1.6 psi	Meter Loss	0.58 psi	Meter Loss	0.714 psi	Meter Loss	0.634 psi	Meter Loss	0.6 psi	Meter Loss	0.5 psi		
Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components		Mainline Components			
Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi	Backflow Loss	2.5 psi		
Master Valve Loss	0.878 psi	Master Valve Loss	0.39 psi	Master Valve Loss	0.63 psi	Master Valve Loss	1.361 psi	Master Valve Loss	0.69 psi	Master Valve Loss	0.834 psi	Master Valve Loss	0.753 psi	Master Valve Loss	0.72 psi	Master Valve Loss	0.615 psi		
Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi	Filter Loss	0 psi		
Zone 11 @ 29.25 gpm		Zone 12 @ 13 gpm		Zone 13 @ 21 gpm		Zone 14 @ 45.36 gpm		Zone 15 @ 23 gpm		Zone 16 @ 27.79 gpm		Zone 17 @ 25.1 gpm		Zone 18 @ 24 gpm		Zone 19 @ 20.5 gpm			
Mainline Loss	5.22 psi	Mainline Loss	0.99 psi	Mainline Loss	2.38 psi	Mainline Loss	10.01 psi	Mainline Loss	2.86 psi	Mainline Loss	3.98 psi	Mainline Loss	2.25 psi	Mainline Loss	2.06 psi	Mainline Loss	1.52 psi		
Valve Loss	1.852 psi	Valve Loss	0.823 psi	Valve Loss	1.33 psi	Valve Loss	4.058 psi	Valve Loss	1.457 psi	Valve Loss	1.76 psi	Valve Loss	1.59 psi	Valve Loss	1.52 psi	Valve Loss	1.298 psi		
Lateral Loss	1.775 psi	Lateral Loss	0.295 psi	Lateral Loss	0.094 psi	Lateral Loss	1.736 psi	Lateral Loss	0.276 psi	Lateral Loss	0.077 psi	Lateral Loss	0.272 psi	Lateral Loss	1.75 psi	Lateral Loss	0.218 psi		
Fittings Loss	1.388 psi	Fittings Loss	0.256 psi	Fittings Loss	0.495 psi	Fittings Loss	2.35 psi	Fittings Loss	0.628 psi	Fittings Loss	0.812 psi	Fittings Loss	0.505 psi	Fittings Loss	0.761 psi	Fittings Loss	0.349 psi		
Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi	Elevation	0 psi		
Sprinkler Requirement	30 psi	Sprinkler Requirement	40 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	30 psi	Sprinkler Requirement	50 psi		
Total Design Pressure	42.889 psi	Total Design Pressure	37.446 psi	Total Design Pressure	37.446 psi	Total Design Pressure	51.403 psi	Total Design Pressure	38.365 psi	Total Design Pressure	39.865 psi	Total Design Pressure	38 psi	Total Design Pressure	39.147 psi	Total Design Pressure	56.656 psi		
Residual Pressure	17.011 psi	Residual Pressure	14.716 psi	Residual Pressure	22.554 psi	Residual Pressure	8.597 psi	Residual Pressure	21.635 psi	Residual Pressure	20.135 psi	Residual Pressure	22 psi	Residual Pressure	20.853 psi	Residual Pressure	3.344 psi		

Water Source #1	
Meter Size	2 inch meter
Static Pressure	60 psi
Elevation Change	0 ft
Service Line Information	
Pipe Category	Poly 160
Pipe Size	Poly 160 2"
Length	0 ft
Velocity	5 fps
Recommendations	
Maximum Recommended Flow	85 gpm
Available Working Pressure	49.2 psi