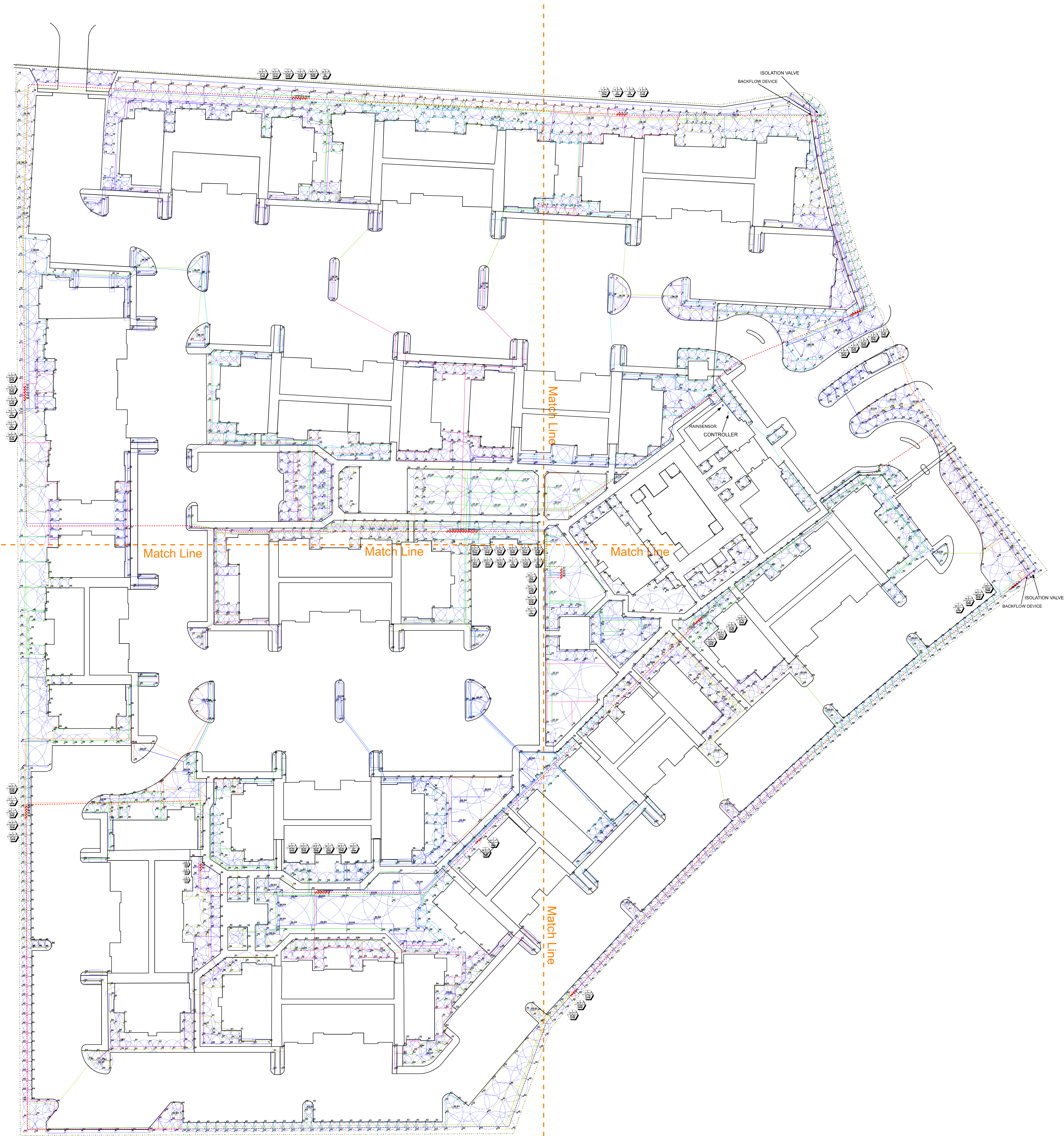




Irrigation

Quantity / Symbol	Description	Part Number	Pressure	Flow	Radius
Sprinklers					
4	Hunter PG-1.0 - PGJ-04	1.0	40 psi	1 gpm	19 ft
25	Hunter PG-1.5 - PGJ-04	1.5	40 psi	1.5 gpm	22 ft
4	Hunter PG-2.0 - PGJ-04	2.0	40 psi	2 gpm	25 ft
1	Hunter PG-2.5 - PGJ-04	2.5	40 psi	2.5 gpm	28 ft
11	Hunter PG-3.0 - PGJ-04	3.0	40 psi	3 gpm	31 ft
4	Hunter PGP-02 - PGP-ADJ	02	50 psi	0.9 gpm	30 ft
8	Hunter PGP-03 - PGP-ADJ	03	50 psi	1.2 gpm	31 ft
10	Hunter PGP-1.5 Blue - PGP-ADJ	1.5	45 psi	1.5 gpm	31 ft
3	Hunter PGP-2.0 Blue - PGP-ADJ	2.0	45 psi	2 gpm	34 ft
7	Hunter PGP-2.5 Blue - PGP-ADJ	2.5	45 psi	2.5 gpm	35 ft
5	Rain Bird 10F - 1804	10F	30 psi	1.58 gpm	10 ft
5	Rain Bird 10F - 1812	10F	30 psi	1.58 gpm	10 ft
80	Rain Bird 10H - 1804	10H	30 psi	0.79 gpm	10 ft
82	Rain Bird 10H - 1804	10H	30 psi	0.39 gpm	10 ft
5	Rain Bird 10-VAN 180 - 1804	10-VAN	30 psi	1.45 gpm	10 ft
7	Rain Bird 10-VAN 90 - 1804	10-VAN	30 psi	0.75 gpm	10 ft
5	Rain Bird 12F - 1804	12F	30 psi	2.8 gpm	12 ft
42	Rain Bird 12H - 1804	12H	30 psi	1.3 gpm	12 ft
27	Rain Bird 12Q - 1804	12Q	30 psi	0.85 gpm	12 ft
13	Rain Bird 12-VAN 180 - 1804	12-VAN	30 psi	1.5 gpm	12 ft
11	Rain Bird 12-VAN 90 - 1804	12-VAN	30 psi	0.85 gpm	12 ft
194	Rain Bird 1402	1402	30 psi	0.5 gpm	6 ft
5	Rain Bird 15CST - 1804	15CST	30 psi	1.5 gpm	30 x 4 ft
225	Rain Bird 15EST - 1804	15EST	30 psi	0.81 gpm	15 x 4 ft
9	Rain Bird 15H - 1804	15H	30 psi	3.7 gpm	15 ft
131	Rain Bird 15H - 1804	15H	30 psi	1.85 gpm	15 ft
75	Rain Bird 15Q - 1804	15Q	30 psi	0.92 gpm	15 ft
119	Rain Bird 15SST - 1804	15SST	30 psi	1.21 gpm	30 x 4 ft
10	Rain Bird 15-VAN 180 - 1804	15-VAN	30 psi	1.85 gpm	15 ft
12	Rain Bird 15-VAN 90 - 1804	15-VAN	30 psi	0.92 gpm	15 ft
42	Rain Bird 6-VAN 180 - 1804	6-VAN	30 psi	0.5 gpm	6 ft
35	Rain Bird 6-VAN 90 - 1804	6-VAN	30 psi	0.37 gpm	6 ft
9	Rain Bird 6-VAN 90 - 1812	6-VAN	30 psi	0.37 gpm	6 ft
4	Rain Bird 8F - 1804	8F	30 psi	1.05 gpm	8 ft
11	Rain Bird 8F - 1812	8F	30 psi	1.05 gpm	8 ft
1106	Rain Bird 8H - 1804	8H	30 psi	0.52 gpm	8 ft
97	Rain Bird 8H - 1812	8H	30 psi	0.52 gpm	8 ft
671	Rain Bird 8Q - 1804	8Q	30 psi	0.26 gpm	8 ft
67	Rain Bird 8Q - 1812	8Q	30 psi	0.26 gpm	8 ft
3	Rain Bird 8Q-FLT - 1804	8Q-FLT	30 psi	0.38 gpm	8 ft
1	Rain Bird 8-VAN 180 - 1804	8-VAN	30 psi	1.15 gpm	8 ft
6	Rain Bird 8-VAN 90 - 1804	8-VAN	30 psi	0.72 gpm	8 ft

Meters/Pumps

1	2 inch meter	
1	2 inch meter	

Backflow Devices

2	Febco 765 - 1 1/2"	765 - 1 1/2"
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Control Valves

12	Hunter ICV-101G	ICV-101G
82	Hunter ICV-151G	ICV-151G

Irrigation Accessories

1	Hunter ACC-99D	ACC-99D
2	Hunter MINI-CLK	MINI-CLK

Lateral Line Pipe

2327 ft	Class 315 1/2"	
5351 ft	Class 200 3/4"	
4332 ft	Class 200 1"	
4390 ft	Class 200 1 1/4"	
1557 ft	Class 200 1 1/2"	
2559 ft	Class 200 2"	

Mainline Pipe

4813 ft	Schedule 40 2"	
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Sprinkler Zone Data

Zone #	Total Area	Total Flow	Precip Rate
1	1577.86 SqFt	23.92 gpm	1.46 in/hr
2	2201.14 SqFt	40.97 gpm	1.79 in/hr
3	983.3 SqFt	30.26 gpm	2.96 in/hr
4	1067.13 SqFt	26.94 gpm	2.52 in/hr
5	1968.04 SqFt	25.23 gpm	1.23 in/hr
6	2044.63 SqFt	31.19 gpm	1.47 in/hr
7	2541.82 SqFt	29 gpm	1.19 in/hr
8	3082.26 SqFt	41 gpm	1.28 in/hr
9	2544.8 SqFt	34.51 gpm	1.24 in/hr
10	3019.65 SqFt	40.89 gpm	1.3 in/hr
11	2945.06 SqFt	36.96 gpm	1.33 in/hr
12	1758.28 SqFt	34.49 gpm	1.89 in/hr
13	2316.88 SqFt	33.14 gpm	1.38 in/hr
14	2630.71 SqFt	37.72 gpm	1.38 in/hr
15	1614.87 SqFt	28.42 gpm	1.52 in/hr
16	2762.3 SqFt	35.35 gpm	1.22 in/hr
17	2095.7 SqFt	31.08 gpm	1.43 in/hr
18	2811.65 SqFt	15 gpm	0.6 in/hr
19	1968.97 SqFt	12 gpm	0.61 in/hr
20	2124.13 SqFt	34.05 gpm	1.54 in/hr
21	2474.35 SqFt	36.74 gpm	1.43 in/hr
22	2072.26 SqFt	31.31 gpm	1.45 in/hr
23	2817.14 SqFt	42.78 gpm	1.41 in/hr
24	2782.72 SqFt	34.26 gpm	1.19 in/hr
25	2182.44 SqFt	32.11 gpm	1.42 in/hr
26	2325.04 SqFt	37.56 gpm	1.56 in/hr
27	2491.07 SqFt	20.5 gpm	0.79 in/hr
28	2461.27 SqFt	20.5 gpm	0.8 in/hr
29	2129.05 SqFt	36.54 gpm	1.65 in/hr
30	1737.3 SqFt	15 gpm	0.82 in/hr
31	2732.15 SqFt	41.02 gpm	1.45 in/hr
32	2282.75 SqFt	14.5 gpm	0.61 in/hr
33	1351.11 SqFt	17.94 gpm	1.28 in/hr
34	1296.07 SqFt	19.34 gpm	1.44 in/hr
35	2549.82 SqFt	13 gpm	0.49 in/hr
36	149.87 SqFt	24 gpm	15.42 in/hr
37	187.34 SqFt	5 gpm	15.42 in/hr
38	2917.9 SqFt	42.96 gpm	1.42 in/hr
39	2865.65 SqFt	40.33 gpm	1.31 in/hr
40	2772.13 SqFt	41.24 gpm	1.43 in/hr
41	2637.02 SqFt	41.15 gpm	1.59 in/hr
42	3103.06 SqFt	43.69 gpm	1.36 in/hr
43	2887.32 SqFt	21.42 gpm	1.39 in/hr
44	2535.7 SqFt	41.12 gpm	1.56 in/hr
45	2721.78 SqFt	42.12 gpm	1.49 in/hr
46	676.16 SqFt	10.59 gpm	1.16 in/hr
47	2078.18 SqFt	13 gpm	0.6 in/hr
48	3392.1 SqFt	40.86 gpm	1.28 in/hr
49	2472.68 SqFt	35.65 gpm	1.39 in/hr
50	2584.84 SqFt	36.65 gpm	1.37 in/hr
51	3304.03 SqFt	37.14 gpm	1.1 in/hr
52	2984.22 SqFt	37.72 gpm	1.23 in/hr
53	2875.16 SqFt	36.51 gpm	1.22 in/hr
54	2610.39 SqFt	36.47 gpm	1.25 in/hr
55	3259.01 SqFt	16.3 gpm	0.3 in/hr
56	3102.68 SqFt	44.32 gpm	1.38 in/hr
57	862.9 SqFt	13 gpm	0.67 in/hr
58	3241.01 SqFt	42.24 gpm	1.26 in/hr
59	1804.8 SqFt	21.06 gpm	1.12 in/hr
60	1783.3 SqFt	23.12 gpm	1.27 in/hr
61	2149.2 SqFt	31.96 gpm	1.43 in/hr
62	2630.34 SqFt	31.12 gpm	1.16 in/hr
63	99.91 SqFt	16 gpm	15.42 in/hr
64	166.6 SqFt	27 gpm	15.42 in/hr
65	2163.36 SqFt	26.95 gpm	1.19 in/hr
66	1826.7 SqFt	22.93 gpm	1.21 in/hr

Water Source #1

Meter Size	2 inch meter
Static Pressure	60 psi
Elevation Change	0 ft

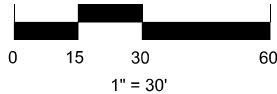
Service Line Information

Pipe Category	Poly 160
Pipe Size	Poly 160 2"
Length	0 ft
Velocity	5 f/s

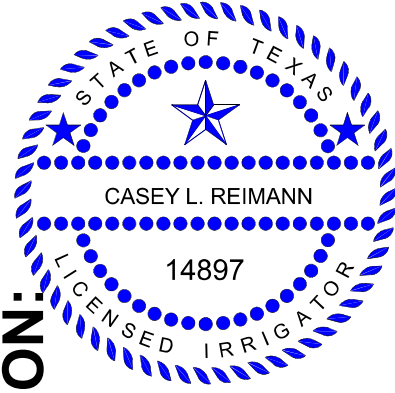
Recommendations

Maximum Recommended Flow	85 gpm
Available Working Pressure	49.2 psi

The irrigation contractor shall confirm minimum static water pressure of 60 psi as well as flow rates at least 7 days before beginning work. If static water pressure is outside the range stated above, do not proceed until directed by the landscape architect. The maximum velocity of the PVC water piping will not exceed 5 linear feet per second. Plans and instruction manuals will be kept on site during the installation of the system. Proposed watering schedule will be programmed into controller. There will be a permanent sticker on controller. Wiring used to connect controller is U.L. approved. Irrigation in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ) (MC-178). PO Box 13057, Austin, Texas 78711-3057. TCEQ's website is: www.tceq.state.tx.us. Backflow preventer will need to be tested yearly.



281 341-0499



SHEET DESCRIPTION:
IRRIGATION DESIGN

Casey Reimann
11/06/2019

PROJECT:
Avalon Apartments
Spring, TX

REVISIONS:
None

DATE:
11/13/2019

JOB NUMBER:
D1-11132019

DRAWN BY:
CASEY REIMANN

CHECKED BY:
CLR

SCALE:
1" = 30'

SHEET:
LI.00