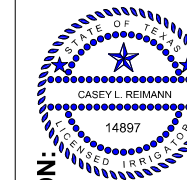




281 341-0499



**SHEET DESCRIPTION:**  
IRRIGATION DESIGN  
Casey Reimann  
03/16/2014

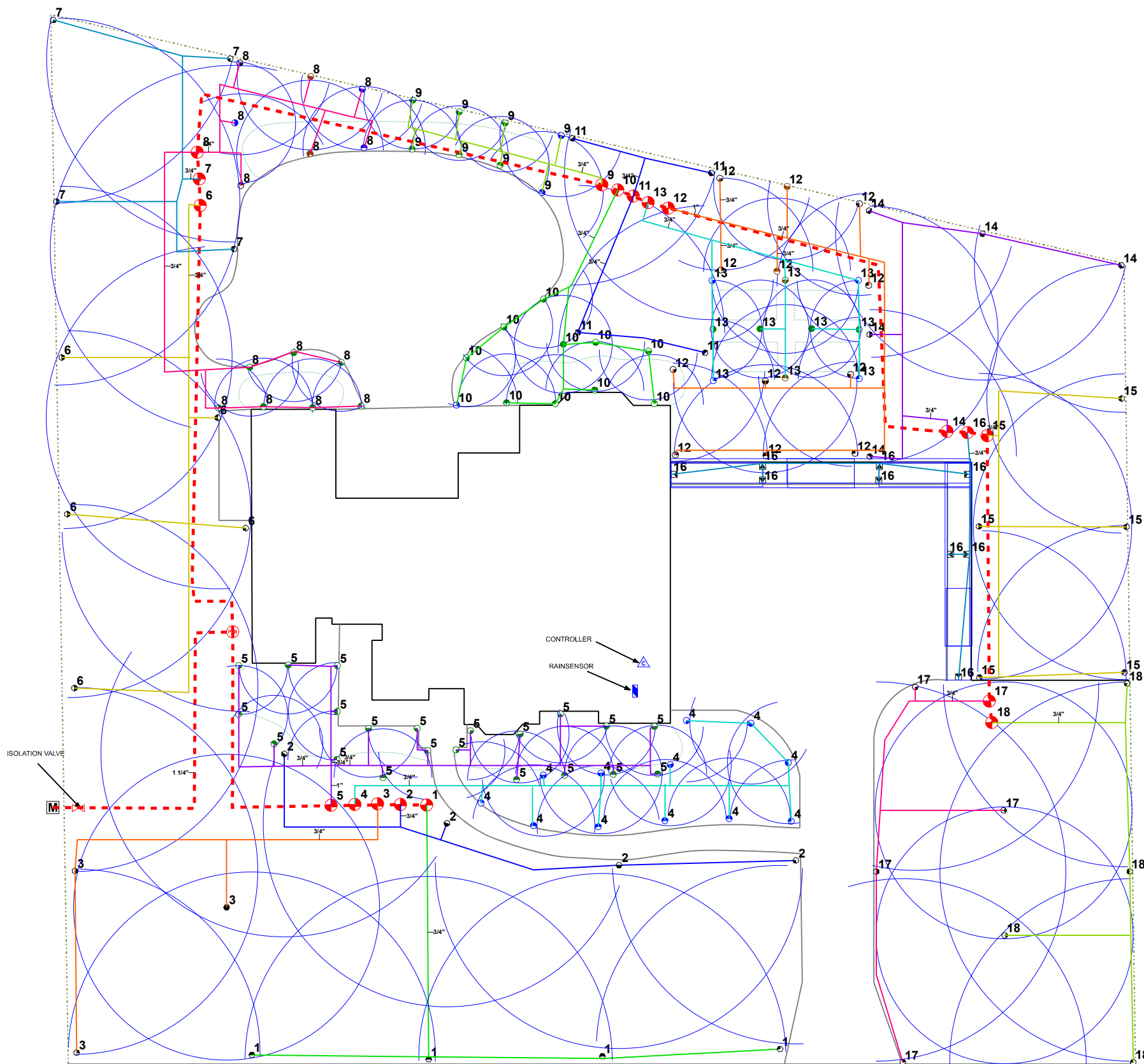
**PROJECT:**  
KEVIN GRAY  
SHADOW GRASS DRIVE  
MISSOURI CITY, TX

**REVISIONS:**  
None

**DATE:**  
03/17/2016  
**JOB NUMBER:**  
D1-03172016  
**DRAWN BY:**  
CASEY REIMANN  
**CHECKED BY:**  
CLR

**SCALE:**  
1" = 20'

**SHEET:**  
1 of 1



**Irrigation**

Quantity	Symbol	Description	Part Number	Pressure	Flow	Radius
<b>Sprinklers</b>						
12	●	Rain Bird 10H - 1804	10H	30 psi	0.79 gpm	10 ft
7	●	Rain Bird 10Q - 1804	10Q	30 psi	0.39 gpm	10 ft
2	●	Rain Bird 10-VAN 180 - 1806	10-VAN	30 psi	1.45 gpm	10 ft
1	●	Rain Bird 10-VAN 90 - 1804	10-VAN	30 psi	0.75 gpm	10 ft
5	●	Rain Bird 12H - 1804	12H	30 psi	1.3 gpm	12 ft
1	●	Rain Bird 12-VAN 270 - 1804	12-VAN	30 psi	1.95 gpm	12 ft
3	●	Rain Bird 15EST - 1804	15EST	30 psi	0.81 gpm	15 x 4 ft
2	●	Rain Bird 15H - 1804	15H	30 psi	1.85 gpm	15 ft
8	●	Rain Bird 15Q - 1804	15Q	30 psi	0.92 gpm	15 ft
6	●	Rain Bird 15SST - 1804	15SST	30 psi	1.21 gpm	30 x 4 ft
2	●	Rain Bird 15-VAN 90 - 1804	15-VAN	30 psi	0.92 gpm	15 ft
2	●	Rain Bird 3500 Series 1.0 - 3504-PC	1.0	45 psi	1.06 gpm	21 ft
9	●	Rain Bird 3500 Series 1.5 - 3504-PC	1.5	45 psi	1.48 gpm	24 ft
5	●	Rain Bird 3500 Series 2.0 - 3504-PC	2.0	45 psi	1.93 gpm	27 ft
10	●	Rain Bird 5000 Series 1.5 - 5004-PL-PC	1.5	45 psi	1.54 gpm	35 ft
15	●	Rain Bird 5000 Series 2.0 - 5004-PL-PC	2.0	45 psi	2.07 gpm	37 ft
1	●	Rain Bird 5000 Series 2.5 - 5004-PL-FC	2.5	45 psi	2.51 gpm	37 ft
3	●	Rain Bird 8F - 1806	8F	30 psi	1.05 gpm	8 ft
21	●	Rain Bird 8H - 1804	8H	30 psi	0.52 gpm	8 ft
8	●	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
6	●	Rain Bird 8-VAN 90 - 1804	8-VAN	30 psi	0.72 gpm	8 ft

<b>Meters/Pumps</b>	
1	
<b>Backflow Devices</b>	
1	Febco 765 - 1"
<b>Control Valves</b>	
18	Rain Bird 100-DVF-SS
<b>Irrigation Accessories</b>	
1	Hunter MINI-CLIK
1	Nibco 1" isolation valve
1	Rain Bird ESP4Mei (22 Stations)
<b>Lateral Line Pipe</b>	
2111 ft	Class 200 3/4"
25 ft	Class 200 1"
<b>Mainline Pipe</b>	
417 ft	Class 200 1 1/4"

**Sprinkler Zone Data**

Zone #	Total Area	Total Flow	Precip Rate
1	3226.59 Sq/Ft	7.75 gpm	0.23 in/hr
2	3437.69 Sq/Ft	7.75 gpm	0.22 in/hr
3	2376.33 Sq/Ft	6.12 gpm	0.25 in/hr
4	697.74 Sq/Ft	8.28 gpm	1.14 in/hr
5	713.63 Sq/Ft	10.84 gpm	1.46 in/hr
6	2952.34 Sq/Ft	9.82 gpm	0.32 in/hr
7	1784.77 Sq/Ft	7.22 gpm	0.39 in/hr
8	641.32 Sq/Ft	13.04 gpm	1.96 in/hr
9	394.84 Sq/Ft	9.38 gpm	2.29 in/hr
10	480.59 Sq/Ft	7.08 gpm	1.42 in/hr
11	793.37 Sq/Ft	5.92 gpm	0.72 in/hr
12	917.85 Sq/Ft	13.66 gpm	1.43 in/hr
13	389.94 Sq/Ft	7.3 gpm	1.8 in/hr
14	1421.2 Sq/Ft	8.3 gpm	0.56 in/hr
15	1510.05 Sq/Ft	8.75 gpm	0.56 in/hr
16	370.32 Sq/Ft	9.09 gpm	2.36 in/hr
17	2277.25 Sq/Ft	6.21 gpm	0.26 in/hr
18	2151.4 Sq/Ft	6.21 gpm	0.28 in/hr

<b>Water Source #1</b>	
Available Working Pressure	60 psi
Maximum Pump Flow	15 gpm

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 13087, Austin, Texas 78711-3087.  
TCEQ's website is: www.tceq.state.tx.us.  
Backflow preventer will need to be tested yearly.

