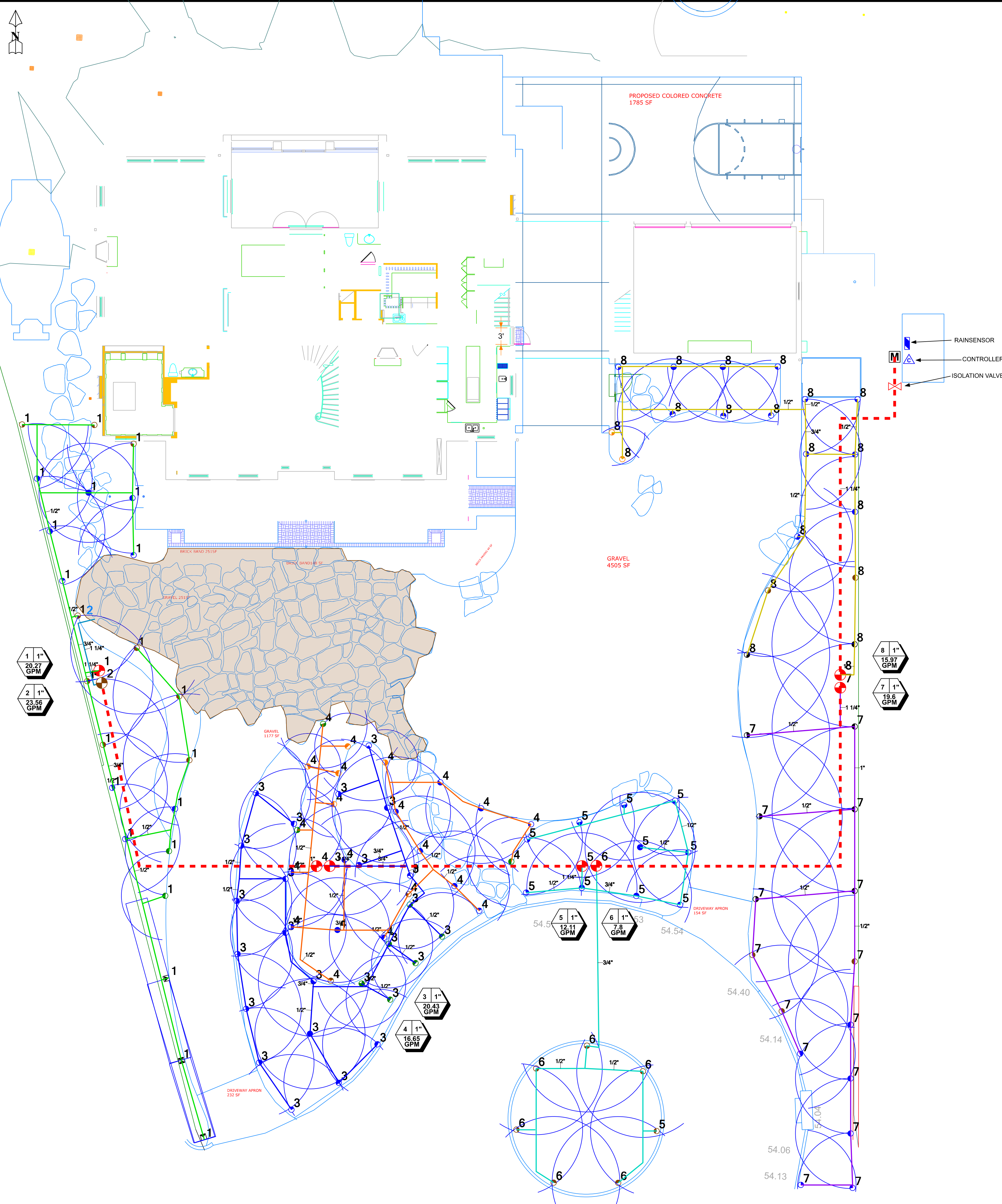




Irrigation

Quantity	Symbol	Description	Part Number	Pressure	Flow	Radius
Sprinklers						
4	●	Rain Bird 10F - 1804	10F	30 psi	1.58 gpm	10 ft
37	●	Rain Bird 10H - 1804	10H	30 psi	0.79 gpm	10 ft
14	●	Rain Bird 10Q - 1804	10Q	30 psi	0.39 gpm	10 ft
10	●	Rain Bird 10-VAN 180 - 1806	10-VAN	30 psi	1.45 gpm	10 ft
4	●	Rain Bird 10-VAN 90 - 1804	10-VAN	30 psi	0.75 gpm	10 ft
7	●	Rain Bird 12H - 1804	12H	30 psi	1.3 gpm	12 ft
3	●	Rain Bird 12Q - 1804	12Q	30 psi	0.65 gpm	12 ft
10	●	Rain Bird 12-VAN 180 - 1804	12-VAN	30 psi	1.3 gpm	12 ft
3	●	Rain Bird 12-VAN 90 - 1804	12-VAN	30 psi	0.65 gpm	12 ft
1	⬮	Rain Bird 15CST - 1804	15CST	30 psi	1.21 gpm	30 x 4 ft
1	⬮	Rain Bird 15EST - 1804	15EST	30 psi	0.61 gpm	15 x 4 ft
8	●	Rain Bird 15H - 1804	15H	30 psi	1.85 gpm	15 ft
1	⬮	Rain Bird 15SST - 1804	15SST	30 psi	1.21 gpm	30 x 4 ft
5	●	Rain Bird 6-VAN 180 - 1804	6-VAN	30 psi	0.6 gpm	6 ft
2	●	Rain Bird 6-VAN 90 - 1804	6-VAN	30 psi	0.37 gpm	6 ft
10	●	Rain Bird 8H - 1804	8H	30 psi	0.52 gpm	8 ft
1	●	Rain Bird 8-VAN 270 - 1804	8-VAN	30 psi	1.55 gpm	8 ft

Meters/Pumps			
1	Ⓜ		

Control Valves			
7	⊕	Rain Bird 100-DVF-SS	100-DVF-SS
1	⊕	Rain Bird XCZ-100-PRF	XCZ-100-PRF

Irrigation Accessories			
1	⬮	Hunter MINI-CLIK	MINI-CLIK
1	⬮	Hunter XC-800i	XC-800i
1	⊗	Nibco 1" isolation valve	

Lateral Line Pipe			
882 ft	—	Class 315 1/2"	
192 ft	—	Class 200 3/4"	
150 ft	—	Class 200 1"	
38 ft	—	Class 200 1 1/4"	

Mainline Pipe			
266 ft	---	Class 200 1 1/4"	

Drip Tubing			
500 ft	—	Rain Bird XFS-09-12	XFS-09-12

Sprinkler Zone Data			
Zone #	Total Area	Total Flow	Precip Rate
1	1319.44 Sq/Ft	20.27 gpm	1.48 in/hr
3	1428.42 Sq/Ft	20.43 gpm	1.38 in/hr
4	1082.6 Sq/Ft	16.65 gpm	1.48 in/hr
5	718.19 Sq/Ft	12.11 gpm	1.62 in/hr
6	621.84 Sq/Ft	7.8 gpm	1.21 in/hr
7	1560.79 Sq/Ft	19.6 gpm	1.21 in/hr
8	1240.49 Sq/Ft	15.97 gpm	1.24 in/hr

Drip Zone Data			
Zone #	Total Area	Total Flow	Precip Rate
2	1571.72 Sq/Ft	1413.9 gph	1.44 in/hr

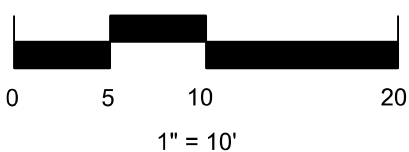
Water Source #1	
Available Working Pressure	65 psi
Maximum Pump Flow	50 gpm

Run Set: 3	
Water Source #1	
Type	Pump
Pump Pressure	65 psi

Mainline Components	
Backflow Loss	0 psi
Master Valve Loss	0 psi
Filter Loss	0 psi

Zone 3 @ 20.43 gpm	
Mainline Loss	3.06 psi
Valve Loss	5.156 psi
Lateral Loss	2.595 psi
Fittings Loss	0.566 psi
Elevation	0 psi
Sprinkler Requirement	30 psi
Total Design Pressure	40.812 psi
Residual Pressure	24.188 psi

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.



TEXAS
IRRIGATION
DESIGN

281 341-0499

SHEET DESCRIPTION:
Irrigation Design
Hector Caicedo
01/20/2017

PROJECT:
Hudson Residence
102 Maple Valley Rd.
Houston, TX 77056

REVISIONS:
None

DATE:
01/20/2017

JOB NUMBER:
D1-01202017

DRAWN BY:
Sebastian Caicedo

CHECKED BY:
CLR

SCALE:
1" = 10'

SHEET:
LI.00