VALVE SCHEDULE

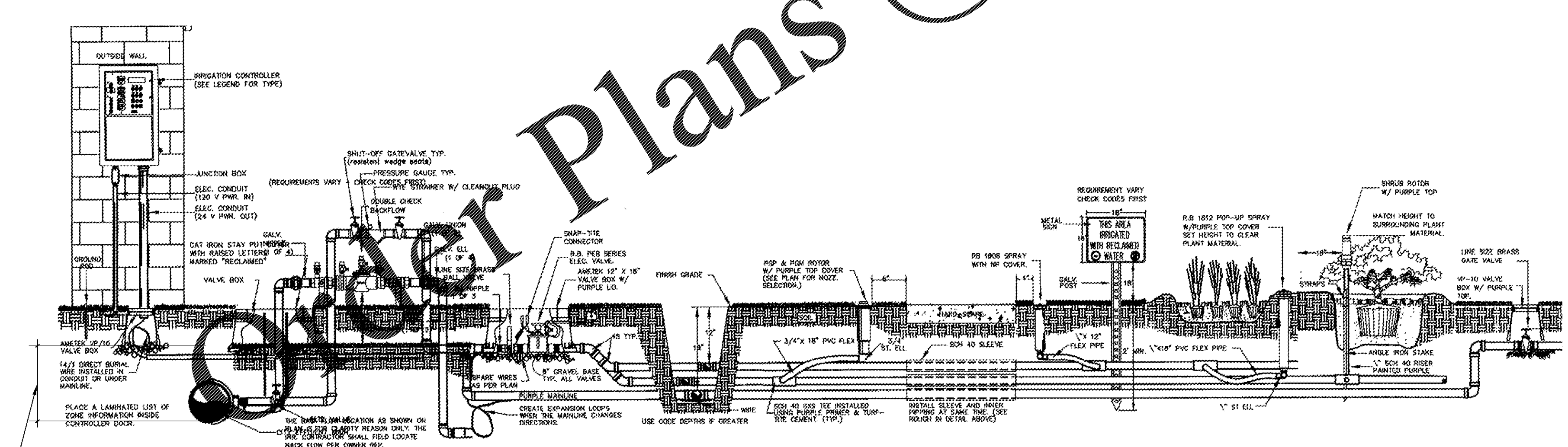
NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE	WIRE	DESIGN PSI	FRICTION LOSS	PSI	PSI @ POC	PRECIP
1	Rain Bird XCZ-100-PRB-R	1"	Area for Dripline	3.25	433.0 l.f.	142.3	285.6	50	0.42	52.67	52.91	0.36 in/h
2	Rain Bird PESBR-PRS-D	1"	Turf Spray	20.73	15	210.6	332.8	30	0.50	33.34	36.12	1.47 in/h
3	Rain Bird PESBR-PRS-D	1"	Bubbler	8.00	32	581.6	378.6	40	0.62	43.51	44.12	7.66 in/h
4	Rain Bird PESBR-PRS-D	1"	Turf Spray	15.16	13	207.4	424.9	30	0.57	33.31	35.03	1.42 in/h
5	Rain Bird PESBR-PRS-D	1-1/2"	Shrub Rotor	28.90	10	283.3	447.6	25	0.41	28.56	35.65	0.47 in/h
6	Rain Bird PESBR-PRS-D	1"	Turf Spray	16.73	10	233.1	423.9	30	0.59	33.28	35.61	1.08 in/h
7	Rain Bird PESBR-PRS-D	1"	Turf Spray	16.53	14	375.5	94.9	30	0.38	33.09	35.52	0.91 in/h
8	Rain Bird PESBR-PRS-D	1"	Turf Spray	15.58	11	265.0	104.7	30	0.36	33.09	35.02	0.92 in/h
9	Rain Bird PESBR-PRS-D	1"	Bubbler	1.75	7	406.9	193.4	40	0.37	42.38	42.59	7.66 in/h
	Common Wire						971.3					

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Rain Bird XCZ-100-PRB-R	Area for Dripline	0.36 in/h	1	167	542.4	
2	Rain Bird PESBR-PRS-D	Turf Spray	1.47 in/h	1	41	850.1	
3	Rain Bird PESBR-PRS-D	Bubbler	7.66 in/h	1	8	64	
4	Rain Bird PESBR-PRS-D	Turf Spray	1.42 in/h	1	43	651.7	
5	Rain Bird PESBR-PRS-D	Shrub Rotor	0.47 in/h	1	128	3,699	
6	Rain Bird PESBR-PRS-D	Turf Spray	1.08 in/h	1	56	936.9	
7	Rain Bird PESBR-PRS-D	Turf Spray	0.91 in/h	1	66	1,091	
8	Rain Bird PESBR-PRS-D	Turf Spray	0.92 in/h	1	66	1,028	
9	Rain Bird PESBR-PRS-D	Bubbler	7.66 in/h	1	8	14	
		TOTALS:			583	8,878	

CRITICAL ANALYSIS

Generated:	2019-04-02 12:34
P.O.C. NUMBER: 01	
Water Source Information:	1" METER OFF OF 6" RECLAIM WATER LINE
FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available:	37.50 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	55.00 psi
Elevation Change:	0.00 ft
Service Line Size:	6"
Length of Service Line:	5.00 ft
Pressure Available:	55.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	28.90 gpm
Flow Available at POC:	37.50 gpm
Residual Flow Available:	8.60 gpm
Critical Station:	1
Design Pressure:	50.00 psi
Friction Loss:	0.41 psi
Fittings Loss:	0.01 psi
Elevation Loss:	0.00 psi
Loss through Valve:	2.25 psi
Pressure Req. at Critical Station:	52.67 psi
Loss for Fittings:	0.00 psi
Loss for Main Line:	0.04 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	0.00 psi
Loss for Water Meter:	0.20 psi
Critical Station Pressure at POC:	52.91 psi
Pressure Available:	55.00 psi
Residual Pressure Available:	2.09 psi



6" CITY EFFLUENT PVC MAIN LINE AT 3'-4' BELOW FINAL GRADE

IRRIGATION NOTES

1. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
5. THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS.
6. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
7. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
8. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTER AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
9. CONTRACTOR IS TO PROVIDE AN ADDITIONAL PILOT WIRE FROM CONTROLLER ALONG ENTIRETY OF MAIN LINE TO THE LAST RCV ON EACH AND EVERY LEG OF MAIN LINE. LABEL SPARE WIRES AT BOTH ENDS.
10. ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN SLEEVING TWICE THE DIAMETER OF THE PIPE CARRIED. SEE LEGEND FOR TYPE. ALL WIRE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
11. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER AND REMOTE CONTROL VALVES WITHIN 18" OF HARDSCAPE.
12. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES, BUT NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.
13. THE CONTRACTOR SHALL USE PROPER GROUNDING TECHNIQUES FOR GROUNDING THE CONTROLLER AND RELATED EQUIPMENT PER MANUFACTURERS SPECIFICATIONS. THOMAS ENGINEERING GROUP RECOMMENDS MEASURING FOR PROPER GROUND AT LEAST ONCE ANNUALLY, AND NECESSARY ADJUSTMENTS MADE TO COMPLY WITH MANUFACTURER SPECIFICATIONS.
14. CONTRACTOR TO RECERTIFY EXISTING PUMP AND PVB IF APPLICABLE.

NOTE A:
POINTS OF CONNECTION SHALL BE FROM CITY EFFLUENT WATER SOURCE. ALL EQUIPMENT TO HAVE PURPLE CAPS, HANDLES, ETC, AND BE CLEARLY IDENTIFIED AS USING EFFLUENT WATER. VERIFY THE ACTUAL LOCATION, SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWING IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

MINIMUM PRESSURE REQUIRED	35.02 PSI @ POC
DESIGN WATER PRESSURE	55 PSI
MAXIMUM SYSTEM DEMAND	28.90 GPM

NOTE B:
CONTROLLER IS AS SPECIFIED. CONTRACTOR TO VERIFY CONDITION AND FINAL LOCATION OF CONTROLLER AND ELECTRICAL POC SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE C:
MAINLINE AND RELATED EQUIPMENT SHOWN WITHIN PAVING FOR CLARITY ONLY, ACTUAL MAINLINE AND RELATED EQUIPMENT LOCATION TO BE WITHIN PLANTERS AND A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYP.

NOTE D:
CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, ETC. VERIFY ALL HEAD LAYOUT WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE E:
BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN PAVING FOR CLARITY ONLY, ACTUAL LOCATION TO BE WITHIN PLANTER. BUBBLERS SHALL BE ALIGNED WITH TREES AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

THOMAS ENGINEERING GROUP
4950 W. KENNEDY BLVD, SUITE 600
TAMPA, FLORIDA 33609
Phone: (813) 379-4100
Fax: (813) 379-4040
ThomasEngineeringGroup.com

REV.	DATE	DRN/CHK	DESCRIPTION
▲	01/17/2019	AG	
			DOCUMENT CONTROL

MICHAEL D. GROSSWIRTH
REGISTERED LANDSCAPE ARCHITECT
LA 6666871
STATE OF FLORIDA
June 6, 2019
FLORIDA LICENSE No. 6666871
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

DOLLAR TREE

OCOEE, FL

IRRIGATION SCHEDULES AND NOTES

PROJ. NO. F180066 | DWG. NO. **L-3.1**