

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE	WIRE	DESIGN PSI	FRICTION LOSS	PSI	PSI @ POC	PRECIP
1	Rain Bird PEB	1-1/2"	Turf Impact	42.92	4	215.2	108.6	65	0.58	69.11	69.49	0.77 in/h
2	Rain Bird PEB	1"	Bubbler	4.75	19	531.1	383.4	40	6.64	48.32	48.33	7.66 in/h
3	Rain Bird PEB	1-1/2"	Turf Spray	43.43	28	329.0	228.1	30	2.28	35.82	36.42	1.4 in/h
4	Rain Bird PEB	1"	Shrub Rotor	18.04	15	332.5	394.4	25	1.54	29.23	29.34	0.37 in/h
5	Rain Bird PEB	1-1/2"	Turf Impact	42.92	4	262.0	275.6	65	0.76	69.29	69.88	0.31 in/h
6	Rain Bird PEB	1-1/2"	Turf Impact	42.92	4	264.5	210.0	65	0.78	69.31	69.86	0.31 in/h
7	Rain Bird PEB	1-1/2"	Turf Impact	32.19	3	197.6	169.6	65	0.32	68.89	69.18	0.31 in/h
8	Rain Bird PEB	1-1/2"	Turf Spray	38.06	22	187.6	31.0	30	1.1	34.62	34.71	2.2 in/h
9	Rain Bird PEB	1-1/2"	Bubbler	0.75	3	199.3	41.2	40	0.04	43.95	43.95	7.66 in/h
10	Rain Bird PEB	1-1/2"	Turf Impact	42.92	4	280.9	124.7	65	1.79	70.32	70.77	1.14 in/h
11	Rain Bird PEB	1-1/2"	Turf Spray	38.06	22	187.6	88.7	30	1.75	35.27	35.53	2.2 in/h
12	Rain Bird PEB	1-1/2"	Turf Spray	28.60	22	258.5	346.5	30	3.55	37.2	37.49	0.88 in/h
13	Rain Bird PEB	1-1/2"	Turf Spray	57.12	22	268.8	368.1	30	2.9	37.01	38.1	1.54 in/h
14	Rain Bird PEB	1"	Bubbler	5.25	21	754.8	404.2	40	3.71	45.42	45.43	7.66 in/h
15	Rain Bird PEB	1-1/2"	Shrub Rotor	56.42	26	765.4	364.7	25	2.74	31.8	32.74	0.52 in/h
	Common Wire						1,955					

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Rain Bird PEB	Turf Impact	0.77 in/h	0.5	39	1,674	
2	Rain Bird PEB	Bubbler	7.66 in/h	1	8	38	
3	Rain Bird PEB	Turf Spray	1.4 in/h	1	44	1,911	
4	Rain Bird PEB	Shrub Rotor	0.37 in/h	1	162	2,922	
5	Rain Bird PEB	Turf Impact	0.31 in/h	0.5	97	4,163	
6	Rain Bird PEB	Turf Impact	0.31 in/h	0.5	96	4,120	
7	Rain Bird PEB	Turf Impact	0.31 in/h	0.5	97	3,122	
8	Rain Bird PEB	Turf Spray	2.2 in/h	1	28	1,066	
9	Rain Bird PEB	Bubbler	7.66 in/h	1	8	6	
10	Rain Bird PEB	Turf Impact	1.14 in/h	0.5	27	1,159	
11	Rain Bird PEB	Turf Spray	2.2 in/h	1	28	1,066	
12	Rain Bird PEB	Turf Spray	0.88 in/h	1	69	1,973	
13	Rain Bird PEB	Turf Spray	1.54 in/h	1	39	2,228	
14	Rain Bird PEB	Bubbler	7.66 in/h	1	8	42	
15	Rain Bird PEB	Shrub Rotor	0.52 in/h	1	116	6,545	
		TOTALS:			866	32,035	

## Generated: 2022-07-19 08:55

P.O.C. NUMBER: 01  
Water Source Information: 6" Cased Well

FLOW AVAILABLE  
Custom Max Flow: 150 GPM  
Flow Available 150 GPM

PRESSURE AVAILABLE	
Static Pressure at POC:	65.00 PSI
Pressure Available:	65.00 psi

DESIGN ANALYSIS	
Maximum Station Flow:	57.12 GPM
Flow Available at POC:	150 GPM
Residual Flow Available:	92.88 GPM

Critical Station:	10
Design Pressure:	65 PSI
Friction Loss:	1.63 PSI
Fittings Loss:	0.16 PSI
Elevation Loss:	0 PSI
Loss through Valve:	3.53 PSI
Pressure Req. at Critical Station:	70.32 PSI
Loss for Fittings:	0.04 PSI
Loss for Main Line:	0.41 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	0 PSI
Critical Station Pressure at POC:	70.77 PSI
Pressure Available:	65 PSI
Residual Pressure Available:	-5.77 PSI

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. 80 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 OVERTSPRAY 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. SWEENEY AND ASSOCIATES 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.
15. SYSTEM IS TO USE LOWEST QUALITY WATER AVAILABLE AT TIME OF INSTALLATION.
16. CONTROL SYSTEM TO PROVIDE ABILITY TO BE PROGRAMMED IN MINUTES, WEEKDAY, SEASON, AND TIME OF DAY.
17. IRRIGATION SYSTEM SHALL MAINTAIN AND OPERATE A RAIN SENSOR DEVICE OR SWITCH WITH 100% COVERAGE AND 50% OVERLAP THAT WILL OVERRIDE THE IRRIGATION CYCLE OF THE SPRINKLER SYSTEM WHEN ADEQUATE RAINFALL OCCURS.
18. CHECK VALVES MUST BE INSTALLED AT IRRIGATION HEADS AS NEEDED TO PREVENT LOW HEAD DRAINAGE AND PUDDLING.
19. IRRIGATED AREAS SHALL NOT BE LESS THAN FOUR FEET WIDE, EXCEPT WHEN USING MICRO OR DRIP IRRIGATION.
20. NOZZLE PRECIPITATION RATES FOR ALL HEADS WITHIN EACH VALVE CIRCUIT MUST BE MATCHED TO WITHIN 20% OF ONE ANOTHER.
21. ALL IRRIGATION LINES - MAINLINE OR LATERAL LINES - SHALL BE SCHEDULE 40 PVC OR BETTER.

NOTE A:  
POINT OF CONNECTION SHALL BE 10hp CENTRIFUGAL PUMP AND 6" CASED WELL.  
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	29.33 PSI @ POC
DESIGN WATER PRESSURE	65 PSI
MAXIMUM SYSTEM DEMAND	57.12 GPM

NOTE B:  
CONTROLLER IS ASSPECIFIED. CONTRACTOR TO VERIFY FINAL LOCATION AND  
ZONE CAPACITY 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.

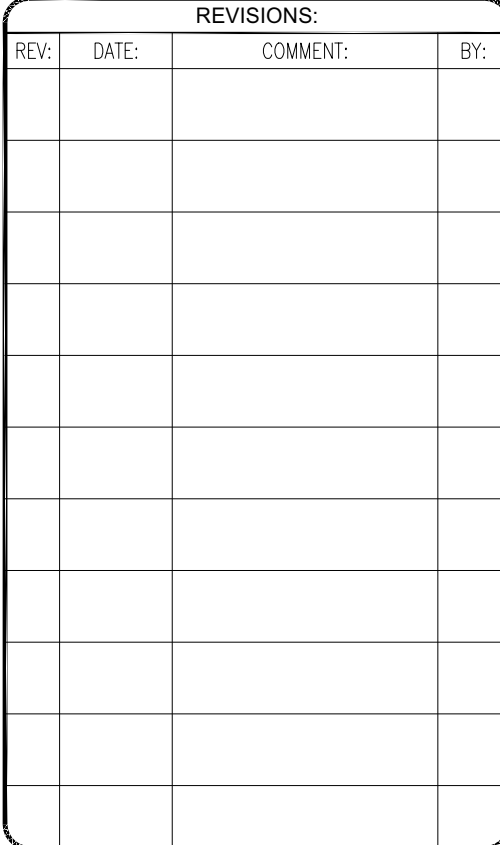
BROWARD COUNTY HIGHWAY CONSTRUCTION AND  
ENGINEERING DIVISION

☐ PLAN CONSISTENT  
WITH PLAT REQUIREMENTS

☐ PUBLIC RIGHT OF WAY APPROVAL  
FOR PAVING, GRADING AND DRAINAGE

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

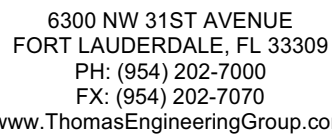
DOES NOT INCLUDE APPROVAL  
OF PAVEMENT MARKING & SIGNS



PROJECT No.:	F190044
DRAWN BY:	JV
CHECKED BY:	MDG
DATE:	05-23-19
CAD I.D.:	F190044 - IRRIGATION

FOR

**696 NE 125TH STREET  
NORTH MIAMI, FL 33415**



SHEET TITLE:

## IRRADIATION NOTES

**SHEET NUMBER**