LAYOUT IRRIGATION SYSTEM MAINLINES AND LATERAL LINES. MAKE ALL NECESSARY ADJUSTMENTS AS REQUIRED TO TAKE INTO ACCOUNT ALL SITE OBSTRUCTIONS AND LIMITATIONS PRIOR TO EXCAVATING TRENCHES.
FLAG ALL SPRINKLER HEAD LOCATIONS. ADJUST LOCATION AND MAKE THE NECESSARY MODIFICATIONS TO NOZZLE TYPES ETC. AS REQUIRED TO INSURE 100% COVERAGE AND 50% OVERLAP.
LOW ANGLE TRAJECTORY NOZZLES SHALL BE USED WHEN ALL SPRINKLERS AND ROTORS ARE LOCATED WITHIN 100' OF POOLS OR PUBLIC GATHERING AREAS.

PIPE

PIPE LOCATIONS SHOWN ON PLAN ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED IN THE FIELD. WHEN LAYING-OUT MAINS AND LATERALS, LOCATE PIPE NEAR EDGES OF PAVEMENT OR AGAINST BUILDINGS WHEREVER POSSIBLE TO ALLOW SPACE FOR PLANT ROOT BALLS.
PIPING UNDER HARDSCAPES SUCH AS ROADS, WALKS, AND PATIOS ARE TO BE SLEEVED USING SCH. 40 PIPE.
ALL PIPES TO BE IN ACCORDANCE WITH APPENDIX F OF THE 2017 FLORIDA BUILDING CODE.
PIPES 4" AND UNDER TO BE SOLVENT WELD. LARGER PIPES TO BE GASKETED 'O' RING PIPES AND USE THRUST BLOCKS OR MEGA LUGS AND DUCTILE IRON FITTINGS AT TURNING LOCATIONS.
*SIZE ALL PIPE SO NOT TO EXCEED 5' PER SECOND
*INSTALL RAIN SENSOR AS PER LOCAL CODE
PIPES CONVEYING RECLAIM WATER SHALL HAVE A 3' HORIZONTAL DISTANCE SEPARATION FROM OTHER PIPING OR UTILITY SERVICES. AN 18" VERTICAL SEPARATION SHALL BE MAINTAINED WHEN APPLICABLE.
AIR RELEASE VALVES TO BE USED AT THE END OF ALL MAINLINE RUNS.

WIRES

LOW VOLTAGE WIRE TO BE INSTALLED ALONG MAINLINE INSTALLATION. USE 2" SCH. 40 PVC WITH SWEEP ELBOWS AT TURNING LOCATIONS WHEN SLEEVING IS REQUIRED. ALL SPLICES SHALL BE ENCLOSED WITHIN A VALVE/SPLICE BOX.
WIRE SIZED AND COLORED AS FOLLOWS:
#12 WHITE FOR COMMON
#12 SPARE BLACK COMMON (1 SPARE NEEDED PER 10 HOT WIRES)
#14 RED HOT WIRES
#14 SPARE YELLOW HOT WIRE (1 SPARES NEEDED PER 10 HOT WIRES, 3 SPARE MINIMUM)
WHEN WIRE RUNS EXCEEDS 3,500 LINEAR FEET, USE #10 FOR COMMON WIRES AND #12 FOR HOT/SPARE WIRES.
ALL IRRIGATION CONTROLLERS TO BE PROPERLY GROUNDED IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.

FLUSHING

PRIOR TO PLACEMENT OF HEADS FLUSH ALL LINES UNTIL LINES ARE COMPLETELY CLEAN OF DEBRIS.
TRENCHING

TRENCH BOTTOM TO BE UNIFORM AND FREE OF DEBRIS. NATIVE EXCAVATED MATERIAL USED TO BACKFILL TRENCH SHALL BE FREE FROM ROCKS OR STONES LARGER THAN 1" IN DIAMETER.
MISC.
PRESSURE TEST MAINLINE AS PER FLORIDA BUILDING CODE. INSTALL IRRIGATION SYSTEM AS PER LATEST EDITION OF THE FLORIDA BUILDING CODE, APPENDIX F., AND ALL PERTINENT LOCAL CODES.
SPRAY HEADS INSTALLED IN SHRUB AREAS TO BE 12 INCH POP-UPS OR INSTALLED ON RISERS.

DESIGN

THIS DESIGN IS DIAGRAMMATIC. ALL IRRIGATION EQUIPMENT SUCH AS PIPES, VALVES, , ETC., SHOWN WITHIN PERVIOUS AREAS ARE FOR DESIGN CLARIFICATION ONLY. THE IRRIGATION CONTRACTOR SHALL INSTALL IRRIGATION EQUIPMENT IN PLANTING AREAS WHEREVER POSSIBLE.
THE IRRIGATION CONTRACTOR IS RESPONSIBLE TO FAMILIARIZE THEMSELVES WITH THE SCOPE OF WORK, INCLUDING BUT NOT LIMITED TO GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, UTILITIES AND EXISTING IRRIGATION EQUIPMENT. THE IRRIGATION CONTRACTOR IS RESPONSIBLE SHALL REPAIR AND/OR REPLACE ANY DAMAGE CREATED BY THEIR WORK. THEY SHALL COORDINATE HIS WORK WITH OTHER CONTRACTOR OR MUNICIPAL AUTHORITIES FOR THE LOCATION AND INSTALLATION OF IRRIGATION EQUIPMENT UNDER ROADWAYS AND PAVING, SLEEVES THROUGH WALLS AND FLOORS, ETC.
NSTALL ALL IRRIGATION EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. SUBSTITUTIONS FOR IRRIGATION EQUIPMENT TO BE APPROVED BY THE IRRIGATION DESIGNER. EQUIPMENT CHANGES TO INCLUDE BUT NOT LIMITED TO PUMP, CONTROLLER, SPRAY HEADS, ROTORS, AND VALVES.
DO NOT INSTALL IRRIGATION EQUIPMENT AS SHOWN ON THE DRAWINGS WHEN FIELD CONDITIONS DIFFER. OBSTRUCTIONS OR DIFFERENCES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR TO ASSUME FULL RESPONSIBILITY.

3100 NORTH BAY ROAD, MIAMI BACH, FLORIDA
DECEMBER 10, 2023

ELECTRIC

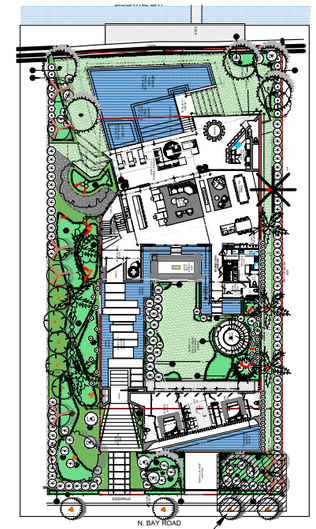
POWER TO BE PROVIDED TO THE CONTROLLER BY ELECTRICIAN.

IRRIGATION AUDIT PROCEDURE

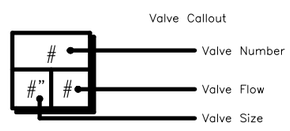
1. INSPECT EVERY IRRIGATION ZONE AND A WRITTEN REPORT SHALL BE GENERATED DESCRIBING PROBLEMS. THE REPORT SHALL INCLUDE A LIST OF EACH ZONE INSPECTED. USE THE FOLLOWING LIST TO ASSIST IN THE REPORT.

- TURN OFF EACH ZONE FROM THE CONTROLLER (WHEN POSSIBLE) TO VERIFY AUTOMATIC OPERATION. FOR BATTERY OPERATED ZONES, TURN ZONES ON AT BATTERY CONTROLLERS.
- CHECK REMOTE CONTROL VALVES TO ENSURE PROPER OPERATION.
- CHECK SETTING ON PRESSURE REGULATOR TO ENSURE PROPER SETTING.
- CHECK FLOW CONTROL AND ADJUST AS NEEDED. ENSURE VALVE IS CLOSED WITHIN 10-15 SECONDS AFTER VALVE HAS BEEN TURNED OFF.
- CHECK FOR LEAKS IN MAINLINE, LATERAL LINES, VALVES AND HEADS.
- CHECK SPRAY HEADS AND ROTORS TO ENSURE PROPER OPERATION. (e.g. LEAKS, POP-UP HEIGHT, PROPER PATTERN, AND PROPER ALIGNMENT.)

2. CHECK PUMP STATION FOR PROPER OPERATION, WATER VOLUME, FLOW RATE, PRESSURE AND PUMP CAPABILITIES.
3. INSPECT ALL FILTERS.
4. CHECK THE CONTROLLER FOR PROPER GROUNDING.
5. CHECK RAIN SHUT-OFF DEVICE FOR PROPER OPERATION.
6. INSPECT ALL VALVE BOXES AND COVERS TO ENSURE GOOD CONDITION.
7. CONDUCT ANY ADDITIONAL INSPECTIONS IF NECESSARY.



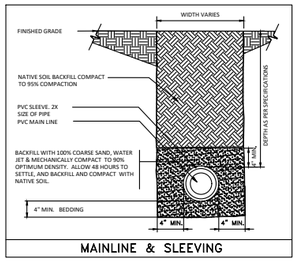




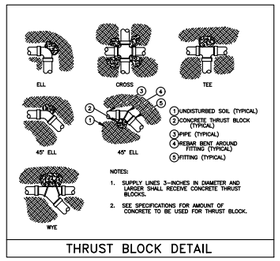
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
A EST, A LCS, A RCS, A CST, A SST	Rain Bird 1806 15 Strip Series Shrub Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	47
Q Q, T Q, H Q, F Q	Rain Bird 1806 8 Series MPR Shrub Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	55
Q Q, T Q, H Q, F Q	Rain Bird 1806 10 Series MPR Shrub Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	19
Q Q, T Q, H Q, F Q	Rain Bird 1806 12 Series MPR Shrub Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	8
Q Q, T Q, H Q, F Q	Rain Bird 1806 15 Series MPR Shrub Spray 6.0in. Pop-Up Sprinkler with Co-Molded Wiper Seal. Side and Bottom Inlet. 1/2in. NPT Female Threaded Inlet.	27
1401, 1402, 1404, 1406	Rain Bird 1804-1400 Flood Flood Bubbler 4.0in. popup	44

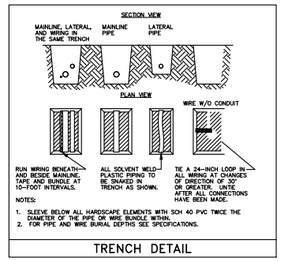
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PGA Angle 1-1/2" 1in., 1-1/2in., 2in. Electric Remote Control Valve, Angle.	3
	Rain Bird PGA Angle 1" 1in., 1-1/2in., 2in. Electric Remote Control Valve, Angle.	2
BF	Zurn 950XL 1-1/2" Double Check Valve Assembly	1
C	Rain Bird ESP4ME3 with (1) ESP-SM3 7 Station, Hybrid Modular Outdoor Controller. For Residential or Light Commercial Use. LNK WiFi Module and Flow Sensor Ready.	1
	Rain Bird RSD-BEx Rain Sensor, with metal latching bracket, extension wire.	1
M	Water Meter 1-1/2"	1
	Irrigation Lateral Line: PVC Schedule 40 3/4"	1,511 l.f.
	Irrigation Lateral Line: PVC Schedule 40 1"	292.8 l.f.
	Irrigation Lateral Line: PVC Schedule 40 1 1/4"	410.9 l.f.
	Irrigation Lateral Line: PVC Schedule 40 1 1/2"	156.2 l.f.
	Irrigation Lateral Line: PVC Schedule 40 2"	255.3 l.f.
	Irrigation Lateral Line: PVC Schedule 40 3"	121.5 l.f.
	Irrigation Mainline: PVC Schedule 40 2"	36.5 l.f.
	Pipe Sleeve: PVC Schedule 40 2"	56.2 l.f.
	Pipe Sleeve: PVC Schedule 40 3"	27.3 l.f.
	Pipe Sleeve: PVC Schedule 40 5"	28.4 l.f.



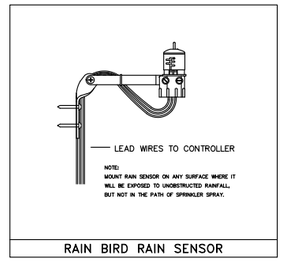
MAINLINE & SLEEVING



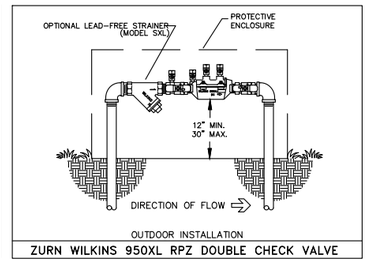
THRUST BLOCK DETAIL



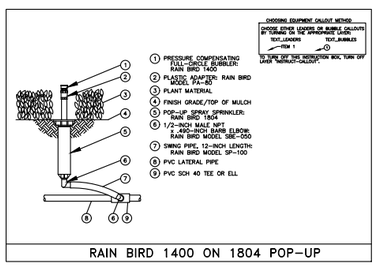
TRENCH DETAIL



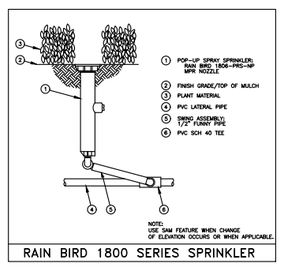
RAIN BIRD RAIN SENSOR



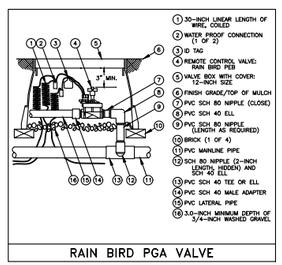
ZURN WILKINS 950XL RPZ DOUBLE CHECK VALVE



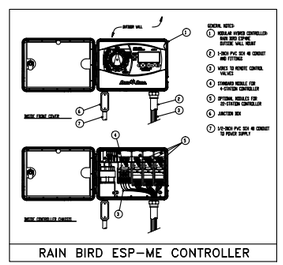
RAIN BIRD 1400 ON 1804 POP-UP



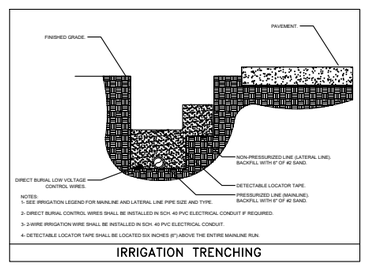
RAIN BIRD 1800 SERIES SPRINKLER



RAIN BIRD PGA VALVE



RAIN BIRD ESP-ME CONTROLLER



IRRIGATION TRENCHING

Vincent Filigenzi
Digitally signed by Vincent Filigenzi
Date: 2023.12.08 16:58:29 -05'00'

VFD
VINCENT FILIGENZI DESIGN
LANDSCAPE ARCHITECTURE | PLANNING | IMPLEMENTATION

L-301