IRRIGATION NOTES & SPECIFICATIONS

AUTOMATIC IRRIGATION SYSTEM	
WATER DEMAND / ZONE	REFER TO PLAN
WATER SOURCE / SYSTEM	2" CITY WATER METER
PRESSURE REQUIRED	50 PSI

GENERAL

IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, CONTRACT DRAWINGS, CONTRACT SPECIFICATIONS. AND APPENDIX "F" OF THE SOUTH FLORIDA BUILDING CODE.

IRRIGATION DESIGN BASED ON KIM MOYER "LANDSCAPE PLAN" DATED JUNE 11, 2024 CONTRACTOR SHALL REFER TO THIS PLAN TO COORDINATE SPRINKLER LOCATIONS AND PIPE ROUTING WITH NEW AND EXISTING PLANT LOCATIONS.

THIS IRRIGATION PLAN SHALL BE USED AS A GUIDE ONLY. THIS IRRIGATION SHALL BE INSTALLED TO MATCH ON SITE CONDITIONS AND TO OVERCOME THE INHERENT INACCURACIES THAT RESULT WHEN DESIGNING FROM BASE PLANS SCALED AT 1" = 20'

THIS SITE SHALL BE IRRIGATED WITH THREE INDEPENDENT SYSTEMS. THE WATER SOURCE FOR EACH SHALL BE A 2" CITY WATER METER DEDICATED FOR IRRIGATION USE.

BACKFLOW PREVENTION SHALL BE INSTALLED IN EACH SYSTEM TO MEET LOCAL CODE REQUIREMENTS FOR CROSS CONNECTION CONTROL. A REDUCED PRESSURE UNIT SHALL BE INSTALLED PER SYSTEM.

IRRIGATION HAS BEEN DESIGNED AS A TYPICAL BLOCK VALVE TYPE USING RAINBIRD SPRAY SPRINKLERS, IN-LINE VALVES, AND AN ESP CONTROL SYSTEM. RAIN SENSORS SHALL BE INSTALLED TO CONSERVE WATER.

CONTRACTOR IS ADVISED TO STUDY THE PLANS FOR ADDITIONAL INFORMATION AND TO VISIT THE SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS.

TO ENSURE PROPER OPERATION, PRESSURE REQUIRED, SOURCE SIZE, VALVE SIZES, ZONE CAPACITIES, SPRINKLER SPACING, PIPE AND WIRE SIZES, INSTALLATION NOTES AND DETAILS, AND SPECIFICATIONS SHALL BE FOLLOWED AS SHOWN.

PIPING

PIPE ROUTING IS SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR ON SITE CONDITIONS. PIPE SHALL BE INSTALLED TO MINIMIZE DAMAGED TO THE ROOT SYSTEMS OF EXISTING TREES

PIPE SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND PIPE MANUFACTURER'S INSTRUCTIONS.

PIPE ROUTED UNDER HARDSCAPED AREAS SHALL BE SLEEVED IN SCH 40 PVC. EACH SLEEVE SHALL: (1) BE BURIED TO A MINIMUM DEPTH OF 18", (2) BE TWO PIPE SIZES LARGER THAN THE CARRIER PIPE, AND (3) EXTEND 3' BEYOND HARDSCAPED AREA ON EACH END. CONTRACTOR SHALL VERIFY THE SIZE, DEPTH AND LOCATION OF ALL EXISTING SLEEVES.

PIPE INSTALLED ABOVE GRADE FOR EACH BACKFLOW PREVENTER SHALL BE SCH 40 GALVANIZED STEEL. ALL OTHER PIPE AND FITTINGS SHALL BE TYPE 1120 PVC. MAIN LINE, PIPE HUNG FROM SLAB AND FITTINGS SHALL BE SCH 40. LATERALS SIZED 1" AND LARGER SHALL BE SDR 26, CLASS 160. LATERALS SIZED 3/4" SHALL BE SDR 21, CLASS 200

PIPE SIZED TO LIMIT FLOW VELOCITIES TO 5 FEET/SECOND AND TO LIMIT FRICTION LOSS IN THE PIPING NETWORK.

PIPE SHALL BE INSTALLED AT SUFFICIENT DEPTH BELOW GROUND TO PROTECT IT FROM HAZARD SUCH AS VEHICULAR TRAFFIC OR ROUTINE OCCURRENCES WHICH OCCUR IN THE NORMAL USE AND MAINTENANCE OF THE PROPERTY. DEPTHS OF COVER SHALL MEET OR EXCEED SCS CODE 430-DD. REFER TO THE APPLICABLE DETAIL FOR ADDITIONAL INFORMATION.

BACKFILL SHALL BE OF SUITABLE MATERIAL, FREE OF ROCKS, STONES, AND OTHER DEBRIS THAT WOULD DAMAGE IRRIGATION SYSTEM COMPONENTS.

A BALL VALVE SHALL BE INSTALLED IN EACH SYSTEM FOR ISOLATION. EACH VALVE SHALL BE TO LINE SIZE AND INSTALLED IN A VALVE BOX. POROUS MATERIAL SHALL BE INSTALLED PER BOX TO PROMOTE DRAINAGE.

SPRINKLERS

SPRINKLER LOCATIONS ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR LANDSCAPING, FENCES, SITE LIGHTING, PREVAILING WIND, MOUNDING, ETC., TO ENSURE PROPER COVERAGE WITH MINIMAL UNDESIRABLE OVERTHROW. A PRIME OBJECTIVE SHALL BE TO ELIMINATE OVERTHROW ONTO PAVEMENT, SIDEWALKS, AND BUILDINGS.

SPRAY HEADS SHALL BE RAINBIRD 1800 SERIES. SIX INCH POP-UP TYPE SHALL BE INSTALLED IN AREAS LANDSCAPED WITH SOD AND MULCH, TWELVE INCH POP UP TYPE SHALL BE INSTALLED IN AREAS LANDSCAPED WITH GROUNDCOVER AND LOW SHRUBS, SHRUB HEADS SHALL BE INSTALLED IN AREAS WITH TALL SHRUBS, AND BUBBLERS SHALL BE INSTALLED IN NARROW LANDSCAPED AREAS AND AT TREES.

POP-UP TYPE LOCATED IN SOD, MULCH, AND GROUND COVERS SHALL BE INSTALLED ON FLEXIBLE SWING JOINTS CONSISTING OF THICKWALLED POLY PIPE 1/2" AND INSERT ELBOWS.

SHRUB TYPE AND BUBBLERS SHALL BE INSTALLED ON 1/2" SCH 40 PVC RISERS. SHRUB HEADS SHALL BE INSTALLED A STANDARD HEIGHT OF 6" ABOVE PLANTS AND SHALL BE INSTALLED WITHIN PLANTS TO BE CONCEALED FROM VIEW. BUBBLERS SHALL BE INSTALLED AT THE BASE OF TALL SHRUBS FOR LOW LEVEL WATERING. RISERS SHALL BE PAINTED FLAT BLACK TO BE LESS VISIBLE.

EACH SPRAY HEAD SHALL BE EQUIPPED WITH THE APPROPRIATE SPRAY NOZZLE AS SHOWN ON PLANS.

ADJUSTMENT FEATURES OF SPRINKLERS SPECIFIED SHALL BE UTILIZED TO INSURE PROPER COVERAGE WITH MINIMAL UNDESIRABLE OVERTHROW. LOW ANGLE, FLAT SPRAY, AND ADJUSTABLE ARC NOZZLES SHALL BE USED TO MINIMIZE OVERTHROW.

SPRINKLERS LOCATED ADJACENT TO HARDSCAPED AREAS SHALL BE INSTALLED AWAY FROM HARDSCAPED AREAS TO MINIMIZE OVERTHROW AND THE CHANCE OF DAMAGE BY VEHICLES, PEDESTRIANS, AND LAWN MAINTENANCE PERSONNEL. AS A GENERAL RULE, 6" POP-UP SPRAY HEADS SHALL BE INSTALLED IN 4", AND SHRUB HEADS AND 12" POP-UP SPRAY HEADS SHALL BE INSTALLED IN 6".

CONTROL SYSTEM

A RAIN BIRD ESP SERIES ELECTRIC CONTROLLER AND RAIN SENSOR SHALL BE INSTALLED PER SYSTEM.

CONTROLLERS SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S INSTRUCTIONS. PROPER GROUNDING EQUIPMENT SHALL BE PROVIDED.

CONTROLLER LOCATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. A 120 VAC ELECTRIC SOURCE IS REQUIRED PER LOCATION

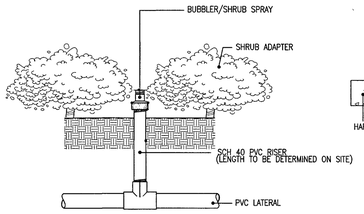
CONTROL LINES FROM EACH AUTOMATIC CONTROLLER TO IN-LINE AUTOMATIC VALVES SHALL BE #14 AWG THHN TYPE WHICH SHALL BE: (1) INSTALLED IN ACCORDANCE WITH LOCAL CODES, (2) INSTALLED IN WIRE CONDUIT, (3) BURIED TO A MINIMUM DEPTH OF 15". SPLICES SHALL BE MADE WATERPROOF USING APPROVED METHODS. SPARE WIRES SHALL BE INSTALLED AS NOTED ON THE PLANS.

AUTOMATIC VALVE LOCATIONS ARE SCHEMATIC ONLY AND SHALL BE ADJUSTED FOR ON SITE CONDITIONS. EACH VALVE SHALL BE INSTALLED IN A VALVE BOX A MINIMUM OF ONE CUBIC FOOT OF GRAVEL SHALL BE PROVIDED PER BOX TO PROMOTE DRAINAGE.

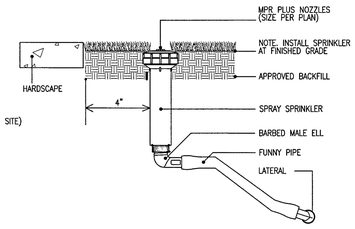
WATER CONSERVATION EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. EACH RAIN SENSOR SHALL BE PLACED ON A STATIONARY STRUCTURE. MINIMUM OF 5' CLEARANCE FROM OTHER OUTDOOR EQUIPMENT, FREE AND CLEAR OF ANY TREE CANOPY OR OTHER OVERHEAD OBSTRUCTION, AND ABOVE THE HEIGHT OF SPRINKLER COVERAGE.

TIMING AND PRECIPITATION

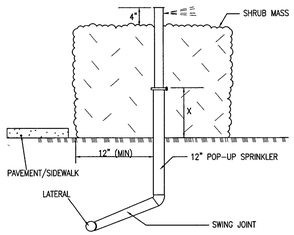
TIMING OF EACH STATION SHALL BE SET IN THE FIELD TO MATCH LOCAL REQUIREMENTS. REFER TO ZONE SUMMARY CHARTS FOR RECOMMENDED RUN TIMES TO APPLY 1.0 INCHES/WEEK



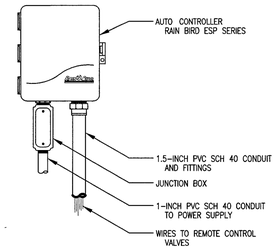
SPRINKLER DETAIL (NTS)
BUBBLER/SHRUB SPRAY INSTALLED AT THE BASE OF PLANTS FOR LOW LEVEL WATERING



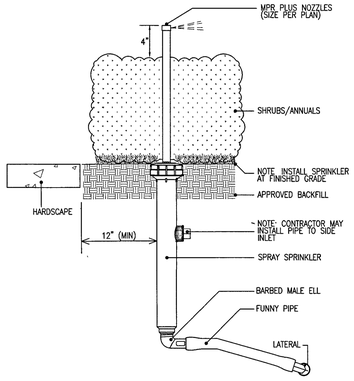
SPRINKLER DETAIL (NTS)
POP-UP SPRAY ON POLY PIPE SWING JOINT LOCATED IN SOD OR MULCH



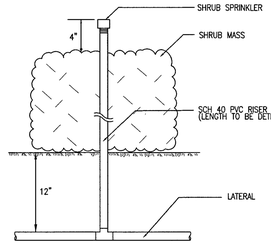
SPRINKLER DETAIL (NTS)
12" POP-UP INSTALLED ON PVC SWING JOINT LOCATED IN PLANT MASS MAINTAINED TO A MAXIMUM HEIGHT OF 18".



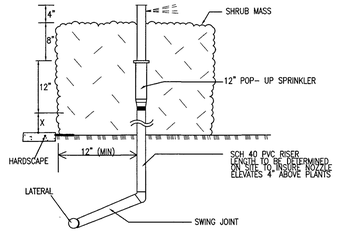
ESP AUTOMATIC CONTROLLER
NOT TO SCALE



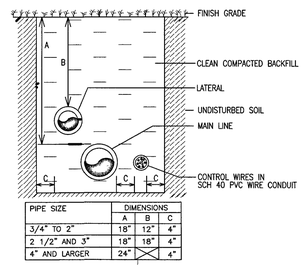
SPRINKLER DETAIL (NTS)
12" POP-UP SPRAY ON POLY PIPE SWING JOINT LOCATED IN PLANTS MAINTAINED TO A MAXIMUM HEIGHT OF 8".



SPRINKLER DETAIL (NTS)
SHRUB SPRAY ON RISER AT INTERIOR LOCATION IN PLANT MASS.

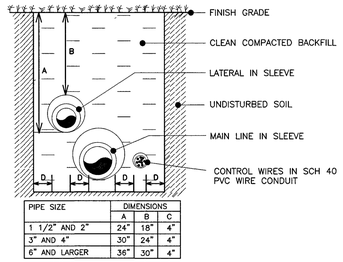


SPRINKLER DETAIL (NTS)
12" POP-UP ON PVC SWING JOINT WITH RISER LOCATED IN PLANT MASS MAINTAINED TO A MINIMUM HEIGHT OF 24".



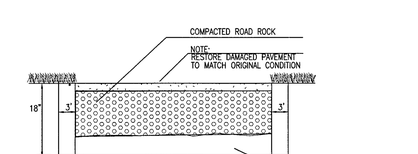
PIPE SIZE	DIMENSIONS		
	A	B	C
3/4" TO 2"	18"	12"	4"
2 1/2" AND 3"	18"	18"	4"
4" AND LARGER	24"		4"

TRENCHING DETAIL (NTS)
NON-TRAFFIC AREAS

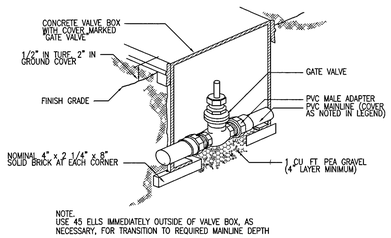


PIPE SIZE	DIMENSIONS		
	A	B	C
1 1/2" AND 2"	24"	18"	4"
3" AND 4"	30"	24"	4"
6" AND LARGER	36"	30"	4"

TRENCHING DETAIL (NTS)
TRAFFIC AREAS



PIPE SLEEVE DETAIL
NOT TO SCALE



GATE VALVE DETAIL
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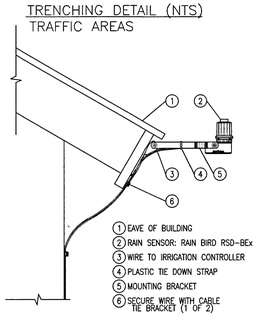
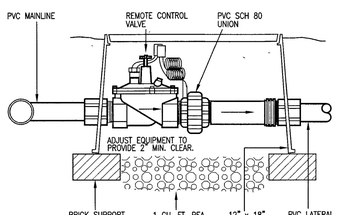


RAIN SENSOR RSD-BEx
NOT TO SCALE



REMOTE CONTROL VALVE DETAIL
NOT TO SCALE

DRC
PZ24-12000011
07/17/2024

DYNAMIK DESIGN
5901 PEACHTREE DUNWOODY RD
BUILDING C, SUITE 250
ATLANTA, GEORGIA 30328
TELEPHONE: 678-506-8830
DYNAMIKDESIGN.COM

CONSULTANT

SEAL
Kimberly Moyer
Digitally signed by Kimberly Moyer
Date: 2024.06.10 12:27:08 -04'00'

1736 E ATLANTIC BLVD
POMPANO BEACH, FL 33060

220 MAIN ST
GAINESVILLE, FL 32601

PROJECT NUMBER CLR2023-03

ATLANTIC ONE

CLIENT

DRAWING RELEASE	DATE
	06/11/2024

TITLE
IRRIGATION NOTES AND DETAILS

SHEET NUMBER
IR-4

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