

LEGEND

SYMBOL	MODEL NO.	DESCRIPTION	*EST. QUANTITY
▲	1404	RAIN BIRD FLOOD BUBBLER	17
● 100	1806-10Q	RAIN BIRD 6" POP-UP SPRAY	08
● 10H	1806-10H	RAIN BIRD 6" POP-UP SPRAY	06
● 10F	1806-10F	RAIN BIRD 6" POP-UP SPRAY	04
● 120	1806-12Q	RAIN BIRD 6" POP-UP SPRAY	01
● 12T	1806-12T	RAIN BIRD 6" POP-UP SPRAY	01
● 12H	1806-12H	RAIN BIRD 6" POP-UP SPRAY	03
● RCS	1806-15RCS	RAIN BIRD 6" POP-UP SPRAY	01
● SST	1806-15SST	RAIN BIRD 6" POP-UP SPRAY	04
● 15V	1806-15V	RAIN BIRD 6" POP-UP SPRAY	04
● 15Q	1806-15Q	RAIN BIRD 6" POP-UP SPRAY	03
● 15H	1806-15H	RAIN BIRD 6" POP-UP SPRAY	03
● 15TQ	1806-15TQ	RAIN BIRD 6" POP-UP SPRAY	01
● 15F	1806-15F	RAIN BIRD 6" POP-UP SPRAY	02
● 15Q	1812-15Q	RAIN BIRD 12" POP-UP SPRAY	01
● 15H	1812-15H	RAIN BIRD 12" POP-UP SPRAY	01
● 2	5004-PL-PC-2.0	RAIN BIRD 4" POP-UP ROTOR	03
● 3	5004-PL-PC-3.0	RAIN BIRD 4" POP-UP ROTOR	09
● 4	5004-PL-FC-4.0	RAIN BIRD 4" POP-UP ROTOR	04
●	100 PEB	RAIN BIRD 1" SOLENOID VALVE	08
□ CW	ESP-8LXME	RAIN BIRD AUTO. CONTROLLER	01
⊕ RS	RSD-BEX	RAIN BIRD RAIN SENSOR	01
▲ BP	765 (1 1/4")	FEBCO PRESSURE VACUUM BREAKER	01

NOT SHOWN	PAIGE THHN WIRE	
	#12 AWG COMMON	240 LF
	#14 AWG CONTROL	1,700 LF

NOT SHOWN	SCH 40 GALVANIZED STEEL	AS REQUIRED
	SCH 40 PVC	AS REQUIRED
---	MAIN LINE	240 LF
---	SLEEVES	AS REQUIRED
---	SPRINKLER RISERS	AS REQUIRED
---	PVC FITTINGS	AS REQUIRED
---	WIRE CONDUIT	240 LF

	TYPE 1120 PVC LATERALS	AS REQUIRED
	SDR 26, CLASS 160 (1"+LARGER)	
	SDR 21, CLASS 200 (3/4")	

✱	BALL VALVE	01
✱	VALVE BOX	08
□ CW	GROUNDING LOCATION	01
☒	CITY WATER METER	01

NOTE: ABOVE QUANTITIES ARE FOR COMPARISON ONLY.
CONTRACTOR SHALL VERIFY PRIOR TO SUBMITTING BID.

ZONE SUMMARY CHART

STA NO.	VALVE	SPRINKLER TYPE	VALVE SIZE	WATER DEMAND	RUN TIME	WEEKLY USAGE
1	CW1	ROTOR	1"	17 GPM	120 MIN/WK	2,040 GAL/WK
2	CW2	ROTOR	1"	16 GPM	120 MIN/WK	1,920 GAL/WK
3	CW3	SPRAY	1"	18 GPM	40 MIN/WK	720 GAL/WK
4	CW4	ROTOR	1"	16 GPM	120 MIN/WK	1,920 GAL/WK
5	CW5	SPRAY	1"	18 GPM	40 MIN/WK	720 GAL/WK
6	CW6	SPRAY	1"	16 GPM	40 MIN/WK	640 GAL/WK
7	CW7	SPRAY	1"	18 GPM	40 MIN/WK	720 GAL/WK
8	CW8	SPRAY	1"	20 GPM	40 MIN/WK	800 GAL/WK
				560 MIN/WK	9,480 GAL/WK	

* TO APPLY 1.0 IN/WK.

IRRIGATION NOTES & SPECIFICATIONS

AUTOMATIC IRRIGATION SYSTEM	REFER TO PLAN
WATER DEMAND / ZONE	3/4" CITY WATER SUB METER
WATER SOURCE	50 PSI
PRESSURE AVAILABLE	

GENERAL

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

IRRIGATION DESIGN BASED ON KIM MOYER "LANDSCAPE PLAN" DATED SEPTEMBER 2021. 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. CONTRACTOR SHALL INSTALL IRRIGATION TO MATCH ON SITE CONDITIONS AND TO OVERCOME THE INHERENT INACCURACIES THAT RESULT WHEN DESIGNING FROM BASE PLANS SCALED AT 1"= 10'.

THIS IRRIGATION HAS BEEN DESIGNED AS A TYPICAL BLOCK VALVE TYPE USING RAIN BIRD SPRINKLERS, IN-LINE VALVES AND CONTROL SYSTEM. WATER CONSERVATION EQUIPMENT SHALL BE INSTALLED.

THE SOURCE SHALL BE A 3/4" CITY WATER SUB METER. THE LOCATION OF THE POINT-OF-CONNECTION TO THE SUPPLY LINE TO THE COMMERCIAL BUILDING SHALL BE VERIFIED ON SITE.

BACKFLOW PREVENTION SHALL BE INSTALLED TO MEET LOCAL CODE REQUIREMENTS FOR CROSS CONNECTION CONTROL. A PRESSURE VACUUM BREAKER HAS BEEN SPECIFIED.

TO ENSURE PROPER OPERATION, PRESSURE REQUIRED, SOURCE SIZE, VALVE SIZE, ZONE CAPACITIES, SPRINKLER SPACINGS, 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 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 BE: (1) BURIED TO A MINIMUM DEPTH OF 18"; (2) TWO PIPE SIZES LARGER THAN CARRIER PIPE; AND (3) EXTENDED 3' BEYOND HARDSCAPED AREA ON EACH END. CONTRACTOR SHALL VERIFY THE SIZE, DEPTH AND LOCATION OF ALL EXISTING SLEEVES.

PIPE AND FITTINGS INSTALLED ABOVE GRADE FOR THE BACKFLOW PREVENTER SHALL BE SCH 40 GALVANIZED STEEL. ALL OTHER PIPE AND FITTINGS SHALL BE TYPE 1120 PVC. MAIN LINE 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.

THE BACKFLOW PREVENTER SHALL BE INSTALLED IN ACCORDANCE WITH THE LOCAL CODES AND SHALL BE LOCATED TO BE CONCEALED FROM VIEW.

A BALL VALVE SHALL BE INSTALLED FOR ISOLATION. THIS 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 THE TOWNHOMES.

SPRAY HEADS SHALL BE RAIN BIRD 1800 SERIES. SIX INCH POP-UP TYPE SHALL BE INSTALLED IN AREAS LANDSCAPED WITH SOD AND MULCH, 12" POP-UP TYPE SHALL BE INSTALLED IN AREAS LANDSCAPED WITH SHRUBS, AND BUBBLERS SHALL BE INSTALLED AT TREES.

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

POP-UP TYPE LOCATED IN SHRUBS SHALL BE INSTALLED ON 1/2" SCH 40 PVC RISERS TO A HEIGHT SO SPRINKLERS ARE CONCEALED FROM VIEW EXCEPT DURING USE.

BUBBLERS SHALL BE INSTALLED ON 1/2" SCH 40 PVC RISERS AT THE BASE OF 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 INDICATED ON THE PLAN.

ROTOR HEADS SHALL BE RAIN BIRD 5000 SERIES WHICH SHALL BE INSTALLED ON FLEXIBLE SWING JOINTS CONSISTING OF THICKWALLED POLY PIPE AND 3/4" INSERT ELBOWS.

ADJUSTMENT FEATURES OF SPRINKLERS SPECIFIED SHALL BE UTILIZED TO ENSURE 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 ROTOR HEADS SHALL BE INSTALLED IN 12".

CONTROL SYSTEM

A RAIN BIRD ESP SERIES 24 VAC ELECTRIC CONTROL SYSTEM SHALL BE INSTALLED. ONE 8 STATION CONTROLLER SHALL ACTIVATE 8 IN-LINE VALVES. A RAIN SENSOR SHALL BE INSTALLED TO CONSERVE WATER.

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

CONTROLLER LOCATION SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. A 110 VAC ELECTRIC SOURCE IS REQUIRED.

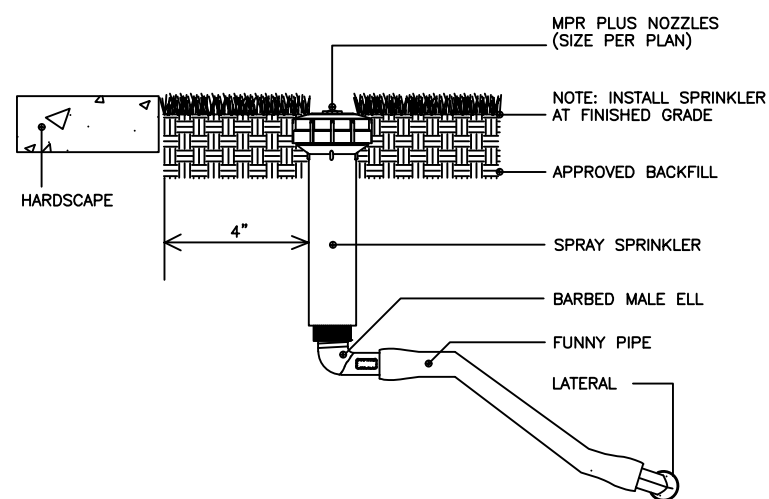
CONTROL LINES FROM AUTOMATIC CONTROLLER TO IN-LINE AUTOMATIC VALVE SHALL BE #14 AWG THHN WIRE WHICH SHALL BE: (1) INSTALLED IN ACCORDANCE WITH LOCAL CODES, (2) INSTALLED IN PVC WIRE CONDUIT, AND (3) BURIED TO THE DEPTH OF THE MAIN LINE.

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.

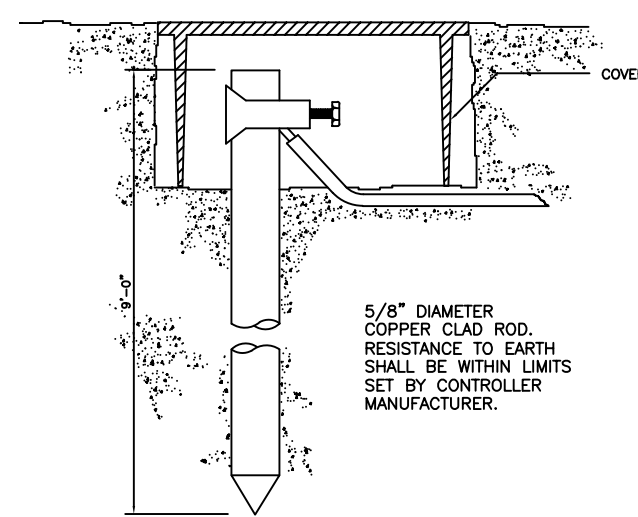
WATER CONSERVATION EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

TIMING AND PRECIPITATION

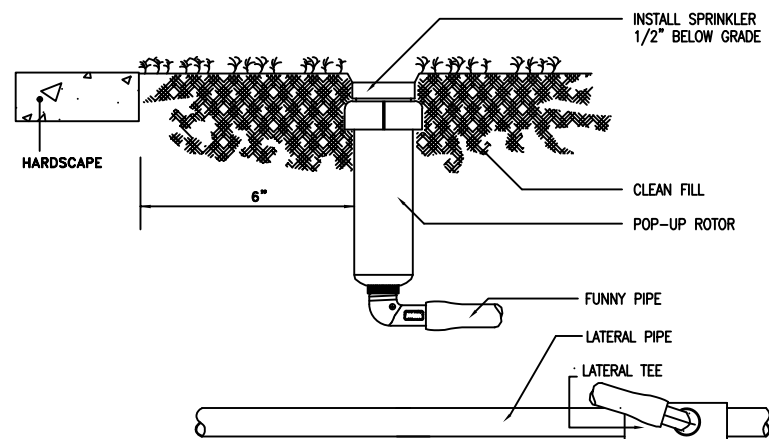
TIMING OF STATION SHALL BE SET IN THE FIELD TO MATCH LOCAL REQUIREMENTS. REFER TO ZONE SUMMARY CHART FOR RECOMMENDED RUN TIMES TO APPLY 1.0 INCHES/WEEK.



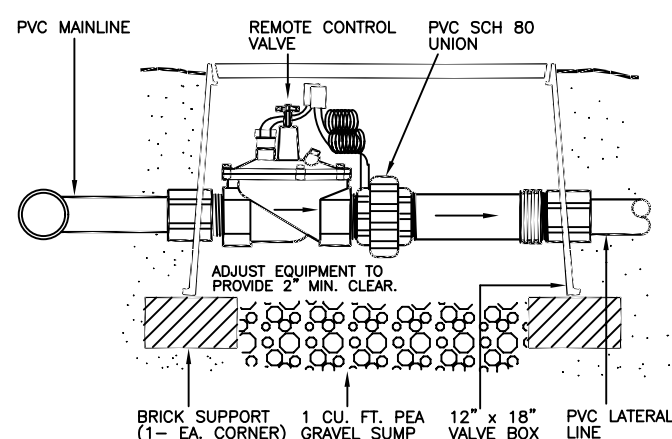
SPRINKLER DETAIL (NTS)
POP-UP SPRAY ON POLY
PIPE SWING JOINT LOCATED
IN SOD OR MULCH



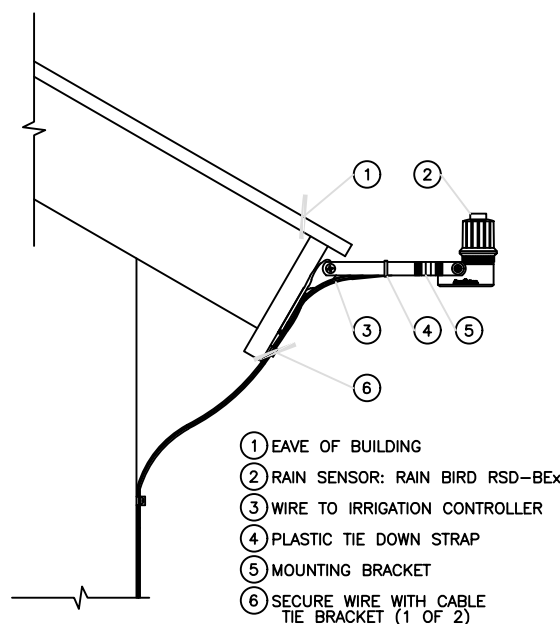
GROUNDING ROD INSTALLATION
NOT TO SCALE



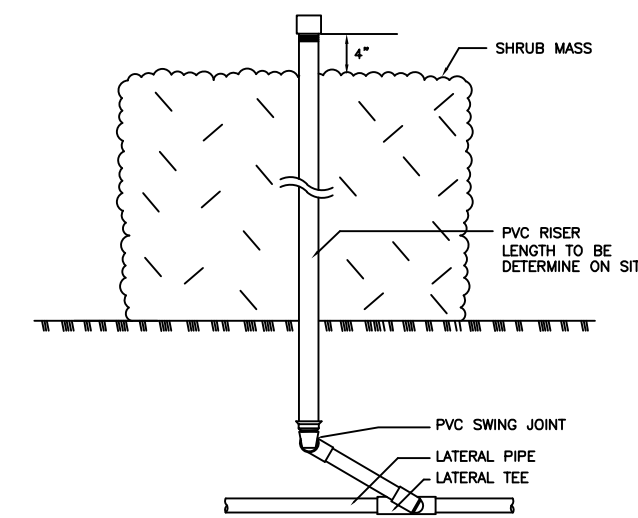
SPRINKLER DETAIL (NTS)
POP-UP ROTOR ON POLY PIPE
SWING JOINT LOCATED IN SOD
OR MULCH



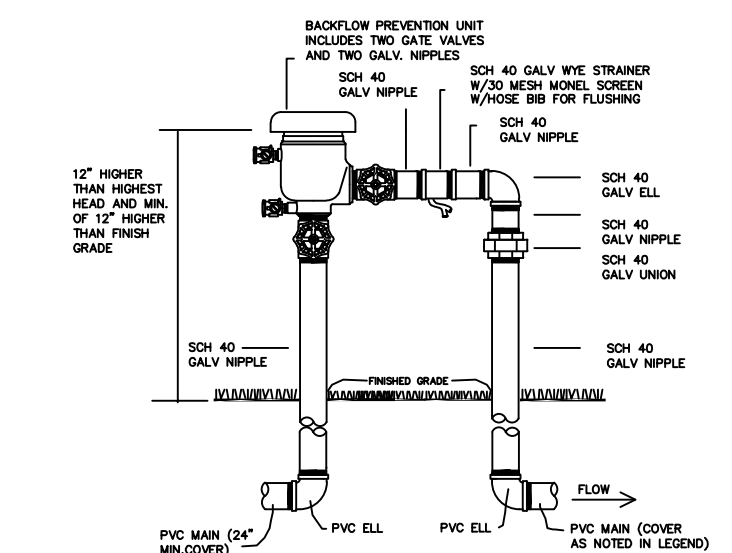
REMOTE CONTROL VALVE DETAIL
NOT TO SCALE



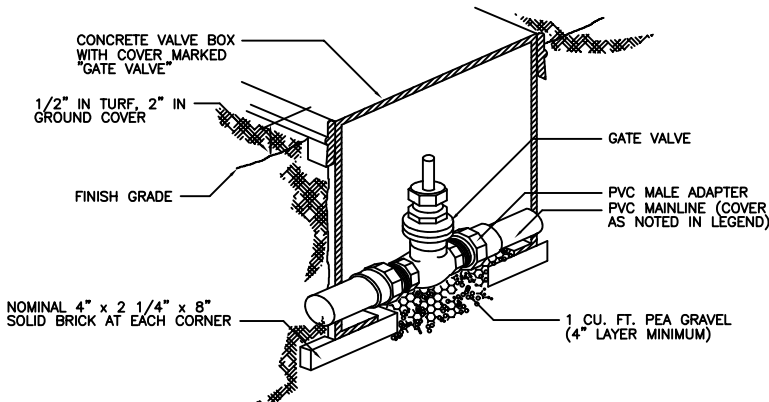
RAIN SENSOR RSD-BEX
NOT TO SCALE



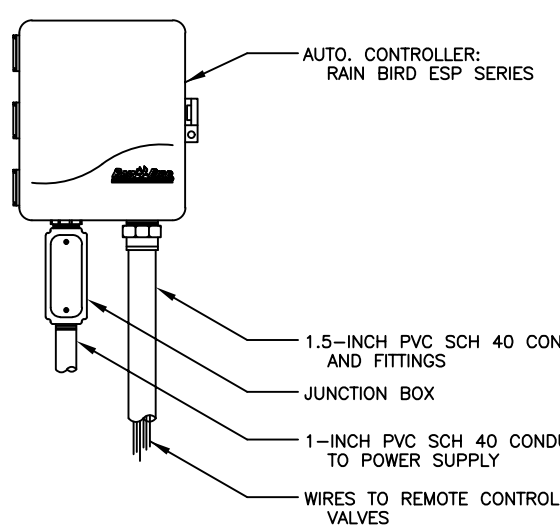
SPRINKLER DETAIL
SHRUB SPRAY ON PVC SWING
JOINT WITH RISER AT INTERIOR
LOCATION IN PLANT MASS.



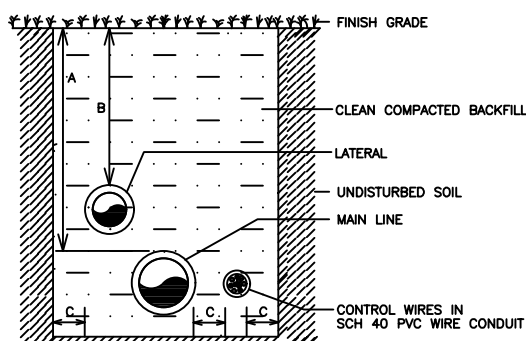
PRESSURE VACUUM BREAKER
NOT TO SCALE



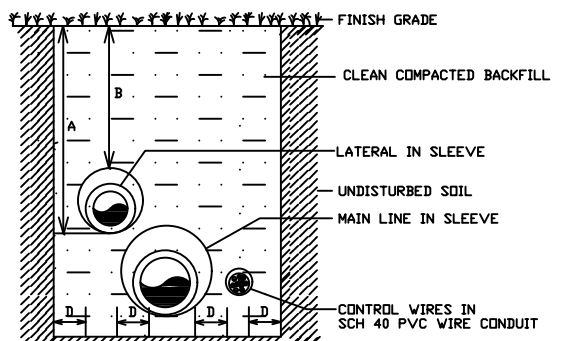
GATE VALVE DETAIL
NOT TO SCALE



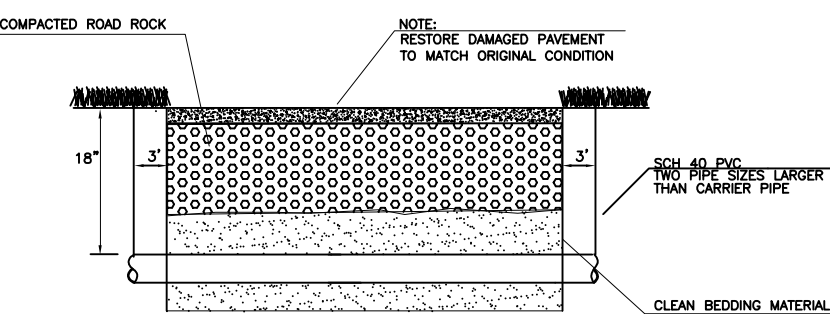
ESP AUTOMATIC CONTROLLER
NOT TO SCALE



TRENCHING DETAIL (NTS)
NON-TRAFFIC AREAS



TRENCHING DETAIL (NTS)
VEHICULAR TRAFFIC AREAS



PIPE SLEEVE DETAIL
NOT TO SCALE

PARKING LOT

NW 6th AVE & NW 6th ST.
POMPANO BEACH, FLORIDA

PREPARED BY:

PREPARED FOR:

DATE:

PROJECT NUMBER:

DRAWN BY:

CHECKED BY:

SCALE: AS NOTED

REVISION: DATE: BY:

SHEET NUMBER:

Digitally signed by Kim Moyer
Date: 2021.01.11 10:03:53 -0500

IR-2
IRRIGATION SCHEDULE, NOTES, AND DETAILS

PZ21-12000017
11/17/2021