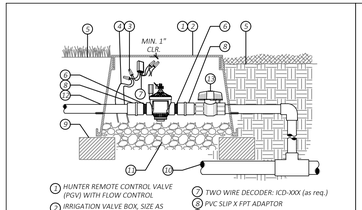
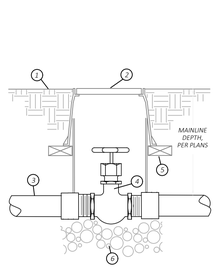


1. HUNTER REMOTE CONTROL VALVE (PGV) WITH FLOW CONTROL
2. IRRIGATION VALVE BOX, SIZE AS REQUIRED
3. WATERPROOF CONNECTORS (2)
4. TWO WIRE PATH
5. FINISH GRADE AT ADJACENT SURFACE (TURF OR MULCH)
6. SCH. 80 CLOSE NIPPLE, MATCH SIZE TO VALVE
7. TWO WIRE DECODER: ICD-XXX (as req.)
8. PVC SLIP X FPT ADAPTOR
9. BRICK SUPPORTS (4)
10. MAINLINE AND FITTINGS
11. 3/4" WASHED GRAVEL - 4" MIN. DEPTH
12. IRRIGATION LATERAL
13. BALL VALVE

HUNTER PGV REMOTE CONTROL VALVE

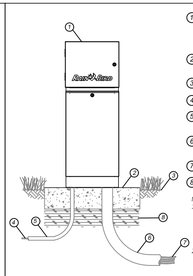
NOT TO SCALE



1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER: EXTENSIONS AS REQ.
3. PVC MAINLINE
4. NIBCO T-113 GATE VALVE
5. BRICK (1 OF 4)
6. 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

NIBCO GATE VALVE

NOT TO SCALE

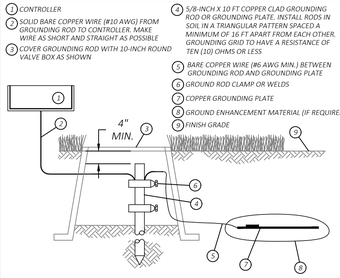


1. IRRIGATION CONTROLLER: RAIN BIRD ESP-LXME CONTROLLER. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.
2. CONCRETE PAD: 6-INCH MINIMUM THICKNESS
3. FINISH GRADE
4. POWER SUPPLY WIRE
5. 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR POWER SUPPLY
6. 3-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR STATION WIRES
7. WIRES TO REMOTE CONTROL VALVES
8. COMPACTED SUBGRADE

NOTES:
1. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
2. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

RAIN BIRD ESP-LXME2 CONTROLLER

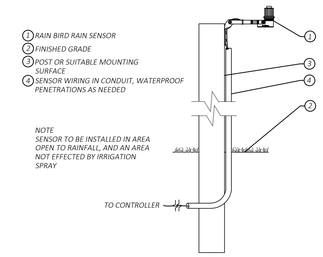
NOT TO SCALE



1. CONTROLLER
2. SOLID BARE COPPER WIRE (#10 AWG) FROM GROUNDING ROD TO CONTROLLER. MAKE WIRE AS SHORT AND STRAIGHT AS POSSIBLE
3. COVER GROUNDING ROD WITH 10-INCH ROUND VALVE BOX AS SHOWN
4. 5/8-INCH X 10 FT COPPER CLAD GROUNDING ROD OR GROUNDING PLATE. INSTALL RODS IN SOIL IN A TRIANGULAR PATTERN SPACED A MINIMUM OF 16 FT APART FROM EACH OTHER. GROUNDING GRID TO HAVE A RESISTANCE OF TEN (10) OHMS OR LESS
5. BARE COPPER WIRE (#6 AWG MIN.) BETWEEN GROUNDING ROD AND GROUNDING PLATE
6. GROUND ROD CLAMP OR WELDS
7. COPPER GROUNDING PLATE
8. GROUND ENHANCEMENT MATERIAL (IF REQUIRED)
9. FINISH GRADE

GROUNDING

NOT TO SCALE

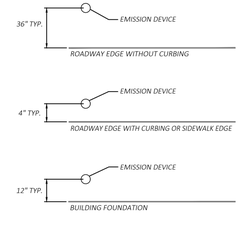


1. RAIN BIRD RAIN SENSOR
2. FINISHED GRADE
3. POST OR SUITABLE MOUNTING SURFACE
4. SENSOR WIRING IN CONDUIT, WATERPROOF PENETRATIONS AS NEEDED

NOTE
SENSOR TO BE INSTALLED IN AREA OPEN TO RAINFALL, AND AN AREA NOT EFFECTED BY IRRIGATION SPRAY

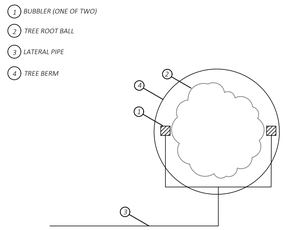
RAIN BIRD RAIN SENSOR

NOT TO SCALE



HEAD PLACEMENT

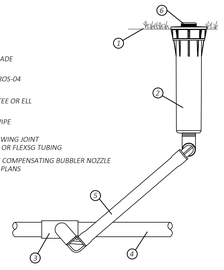
NOT TO SCALE



1. BUBBLER (ONE OF TWO)
2. TREE ROOT BALL
3. LATERAL PIPE
4. TREE BERM

BUBBLER TREE LAYOUT

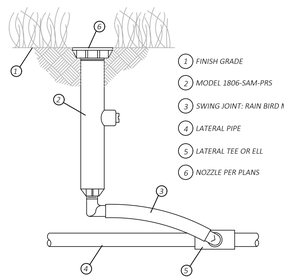
NOT TO SCALE



1. FINISH GRADE
2. MODEL PROS-04
3. LATERAL TEE OR ELL
4. LATERAL PIPE
5. HUNTER SWING JOINT w/ MODEL SJ OR FLEXISS TUBING
6. PRESSURE COMPENSATING BUBBLER NOZZLE #PCB PER PLANS

HUNTER PROS-04 W/ BUBBLER NOZZLE

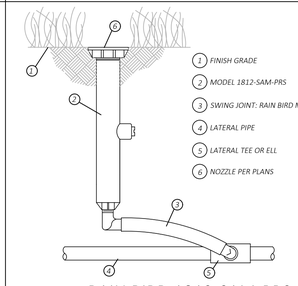
NOT TO SCALE



1. FINISH GRADE
2. MODEL 1806-SAM-PRS
3. SWING JOINT: RAIN BIRD MODEL SP-100
4. LATERAL PIPE
5. LATERAL TEE OR ELL
6. NOZZLE PER PLANS

RAIN BIRD 1806-SAM-PRS

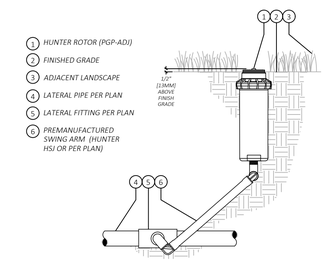
NOT TO SCALE



1. FINISH GRADE
2. MODEL 1812-SAM-PRS
3. SWING JOINT: RAIN BIRD MODEL SP-100
4. LATERAL PIPE
5. LATERAL TEE OR ELL
6. NOZZLE PER PLANS

RAIN BIRD 1812-SAM-PRS

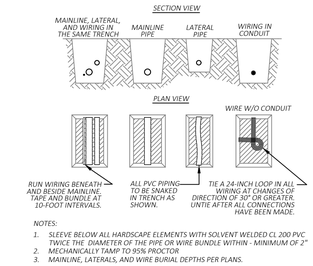
NOT TO SCALE



1. HUNTER ROTOR (PGP-ADJ)
2. FINISHED GRADE
3. ADJACENT LANDSCAPE
4. LATERAL PIPE PER PLAN
5. LATERAL FITTING PER PLAN
6. PREMANUFACTURED SWING ARM (HUNTER HSJ OR PER PLAN)

HUNTER PGP ROTOR

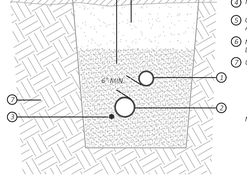
NOT TO SCALE



NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SOLVENT WELDED CL 200 PVC TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN - MINIMUM OF 2"
2. MECHANICALLY TAMP TO 95% PROCTOR
3. MAINLINE, LATERALS, AND WIRE BURIAL DEPTHS PER PLANS.

TRENCHING

NOT TO SCALE

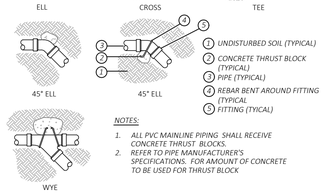


1. LATERAL PIPE
2. MAINLINE
3. CONTROL WIRE
4. MULCH OR TURF
5. CLEAN SAND 6" MIN AROUND ALL PIPES
6. NATIVE MATERIAL <2" IN DIAMETER
7. UNDISTURBED MATERIAL

NOTES:
1. BACKFILL DEPTH PER PLANS
2. PROVIDE A MINIMUM OF 6" OF CLEAN SAND AROUND ALL PIPES WITHIN TRENCH

BACKFILL

NOT TO SCALE

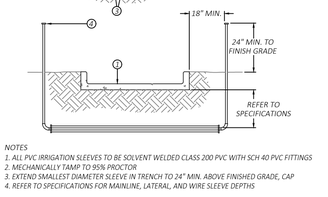


1. UNDISTURBED SOIL (TYPICAL)
2. CONCRETE THRUST BLOCK (TYPICAL)
3. PIPE (TYPICAL)
4. REBAR BENT AROUND FITTING (TYPICAL
5. FITTING (TYICAL)

NOTES:
1. ALL PVC MAINLINE PIPING SHALL RECEIVE CONCRETE THRUST BLOCKS.
2. REFER TO PIPE MANUFACTURER'S SPECIFICATIONS. FOR AMOUNT OF CONCRETE TO BE USED FOR THRUST BLOCK

THRUST BLOCKS

NOT TO SCALE



1. PAVING
2. TRENCH
3. SLEEVES
4. SCH 40 PVC CAP, TYP.

NOTES
1. ALL PVC IRRIGATION SLEEVES TO BE SOLVENT WELDED CLASS 200 PVC WITH SCH 40 PVC FITTINGS
2. MECHANICALLY TAMP TO 95% PROCTOR
3. EXTEND SMALLEST DIAMETER SLEEVE IN TRENCH TO 24" MIN. ABOVE FINISHED GRADE, CAP
4. REFER TO SPECIFICATIONS FOR MAINLINE, LATERAL, AND WIRE SLEEVE DEPTHS

SLEEVING

NOT TO SCALE

IRRIGATION SPECIFICATIONS

1. SYSTEM IS DESIGNED TO PROVIDE COMPLETE COVERAGE TO ALL IRRIGATED AREAS AND HAS BEEN DESIGNED TO MEET OR EXCEED THE FLORIDA BUILDING CODE, APPENDIX F.
2. STATE AND/OR LOCAL CODES SHALL BE FOLLOWED IN THE EVENT ANY INCONSISTENCIES EXIST BETWEEN PLANS AND SAID CODES. MOST STRINGENT CODE SHALL PREVAIL.
3. ALL IRRIGATION EQUIPMENT AND PIPING SHALL BE INSTALLED AND TESTED ACCORDING TO MANUFACTURER RECOMMENDATIONS.
4. OWNER OR IRRIGATION CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS.
5. SYSTEM HAS BEEN DESIGNED BASED BASED ON TWO POINTS OF CONNECTION: BOTH SHALL BE CENTRIFUGAL PUMP STATIONS UTILIZING LAKE WATER AS THE SOURCE.
   - 5.1. THE CLUBHOUSE PUMP STATION SHALL PROVIDE A MINIMUM OF 60 GPM AT 60 PSI DOWNSTREAM OF THE PUMP STATION DISCHARGE.
   - 5.2. THE RESIDENTIAL PUMP STATION SHALL PROVIDE AA MINIMUM OF 100 GPM AT 60 PSI DOWNSTREAM OF THE PUMP STATION DISCHARGE.
   - 5.3. STATIC PRESSURE IN EXCESS OF 25 PSI ABOVE THE DESIGN PRESSURE SHALL REQUIRE PRESSURE REGULATION. CONTRACTOR TO VERIFY PRESSURE AND FLOW PRIOR TO INSTALLATION. IF PRESSURE AND FLOW CANNOT BE ACHIEVED, NOTIFY LANDSCAPE ARCHITECT OR DESIGNER. CONTRACTOR PROCEEDS AT THEIR OWN RISK IF MINIMUM CONDITIONS CANNOT BE MET.
6. CHANGES FROM ORIGINAL PLAN MUST NOT DIMINISH OPERATIONAL INTEGRITY OF SYSTEM OR VIOLATE ANY CODE REQUIREMENTS. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR SAID CHANGES.
7. MAINLINE UP TO 2" SHALL BE COVERED WITH A MINIMUM OF 18" OF SELECT BACKFILL FROM TOP OF PIPE TO FINISHED GRADE AND 24" UNDER VEHICULAR CROSSINGS. MAINLINE 2-1/2" AND ABOVE SHALL BE COVERED WITH A MINIMUM OF 24" OF SELECT BACKFILL FROM TOP OF PIPE TO FINISHED GRADE AND 36" UNDER VEHICULAR CROSSINGS.
8. MAINLINE TESTING IS REQUIRED FOR MAINLINES AS SPECIFIED BELOW:
   - 8.1. SOLVENT WELD PVC: FILL MAINLINE WITH WATER AND PRESSURIZE THE SYSTEM TO 125 PSI USING A HYDROSTATIC PUMP. MONITOR THE SYSTEM PRESSURE USING TWO GAUGES AT OPPOSITE ENDS OF THE MAINLINE FOR TWO HOURS. THERE CAN BE NO LOSS IN PRESSURE AT EITHER GAUGE.
9. LATERAL LINES SHALL BE COVERED WITH A MINIMUM OF 12" OF SELECT BACKFILL FROM TOP OF PIPE TO FINISHED GRADE AND 18" UNDER VEHICULAR CROSSINGS.
10. HAND TRENCH WITHIN AREAS OF EXISTING TREES.
11. WIRE SHALL BE U.L. LISTED, SUITABLE FOR DIRECT BURY, SIZED PER PLANS, AND SHALL BE INSTALLED AT MAINLINE DEPTH. WIRE CONNECTORS SHALL BE 3M DBY/R AND SPLICES SHALL BE INSTALLED A MINIMUM OF 6" ROUND VALVE BOX.
12. SPARE WIRES SHALL BE PROVIDED PER THE BELOW AND EXTENDED TO FURTHEST VALVES IN ALL DIRECTIONS WHERE APPLICABLE:
   - 12.1. 1 TO 6 ZONES: PROVIDE 2 SPARE ZONE WIRES
   - 12.2. 7 TO 12 ZONES: PROVIDE 1 SPARE COMMON WIRE (WHITE) AND 2 SPARE ZONE WIRES (YELLOW)
   - 12.3. 13 TO 24 ZONES: PROVIDE 1 SPARE COMMON WIRE (WHITE) AND 4 SPARE ZONE WIRES (YELLOW)
   - 12.4. 25 TO 36 ZONES: PROVIDE 1 SPARE COMMON WIRE (WHITE) AND 6 SPARE ZONE WIRES (YELLOW)
   - 12.5. 37 TO 48 ZONES: PROVIDE 1 SPARE COMMON WIRE (WHITE) AND 8 SPARE ZONE WIRES (YELLOW)
13. ANY VEHICULAR CROSSING SLEEVES ARE SHOWN AND SIZED. REMAINING SLEEVES SHALL BE TWO SIZES LARGER THAN THE IRRIGATION PIPE IT CARRIES AND NEVER SMALLER THAN 2". SLEEVE DEPTH SHALL BE DETERMINED BY IRRIGATION PIPE DEPTH. ALL MAINLINE SLEEVES SHALL BE ACCOMPANIED BY A 2" WIRE SLEEVE.
14. ELECTRICAL SUPPLY FOR IRRIGATION PUMPS, CONTROLLERS, SENSORS, ETC. TO BE PROVIDED BY IRRIGATION CONTRACTOR. CONTRACTOR TO COORDINATE WITH LOCAL UTILITIES FOR THE INSTALLATION OF, AND CONNECTION TO, SITE AVAILABLE POWER SUPPLIES FOR REQUIRED ELECTRICAL COMPONENTS AS SET FORTH IN THE IRRIGATION PLANS.
15. ALL ELECTRICAL WORK IS TO COMPLY WITH THE NATIONAL ELECTRICAL CODE AND ANY, AND ALL, OTHER APPLICABLE ELECTRICAL CODES, LAWS AND REGULATIONS. A LICENSED ELECTRICIAN SHALL PERFORM ALL ELECTRICAL HOOK-UPS. POWER FOR EACH CONTROLLER SHALL BE A DEDICATED 120 VOLT, 20 AMP CIRCUIT UNLESS OTHERWISE SPECIFIED IN THE PLANS. POWER FOR EACH PUMP TO BE ACCORDING TO PUMP SPECIFICATIONS INDICATED IN THESE PLANS.
16. ALL WALL PENETRATIONS SHOULD BE WATERPROOFED.
17. HEADS SHALL BE CONNECTED TO THE LATERAL LINE USING SWING JOINTS SIZED PER SPRAY BODY OR ROTOR INLET. ALL HEADS SHALL BE INSTALLED A MINIMUM OF 4" FROM IMPERVIOUS SURFACES AND A MINIMUM OF 12" FROM BUILDING FOUNDATIONS. OVERSPRAY ONTO HARDSCAPE AND NON-IRRIGATED AREAS SHOULD BE MINIMIZED.
18. CONTRACTOR SHALL INSTALL RISERS ON SHRUB HEADS WHERE COVERAGE CAN BE IMPROVED; NO RISERS PERMITTED ALONG SIDEWALKS, DRIVES, OR IN AREAS WHERE THEY POSE A SAFETY ISSUE.

AAC
PZ23-12000017
03/05/2025

insite studio
planning + landscape architecture
3601 PGA Blvd, Suite 220, Palm Beach Gardens, FL 33410
phone: 561.249.0940 | email: info@insitestudio.com
www.insitestudio.com | License#:LC26000606

Consultants:

Consulting JK Design
JK Consulting and Design
(346)527-1111

Revisions:
01/29/2025 60% Submittal
04/01/2025 75% Submittal

THE OAKS AT PALM AIRE
Pompano Beach, Florida
MORGUARD

Digitally signed by Brian Terry
DN: C=US, E=bterry@insitestudio.com, O="Insite Studio, Inc.", OU=LA6666978, CN=Brian Terry
Date: 2025.04.04 10:18:05-04'00'

LANDSCAPE ARCHITECT BRIAN TERRY LA6666978 STATE OF FLORIDA

ALWAYS CALL 811 TWO FULL BUSINESS DAYS BEFORE YOU DIG TO HAVE UNDERGROUND UTILITIES LOCATED AND MARKED.
Sunshine811.com

Drawn By:	JJ/JK
Drawing #:	1272
File Name:	LP_1272.dwg
Date:	04/01/2025

IRRIGATION PLAN

SHEET #: IR.30