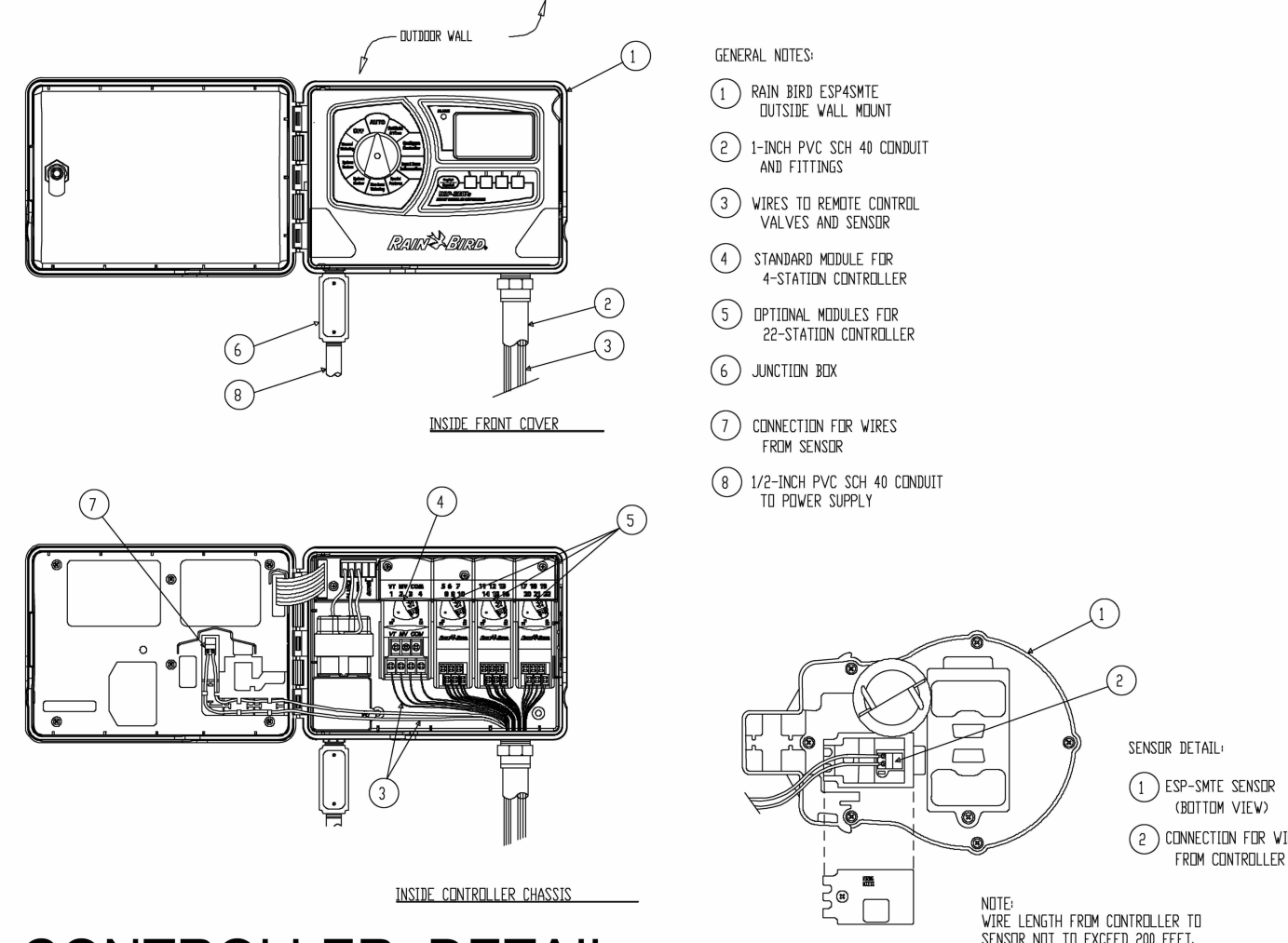
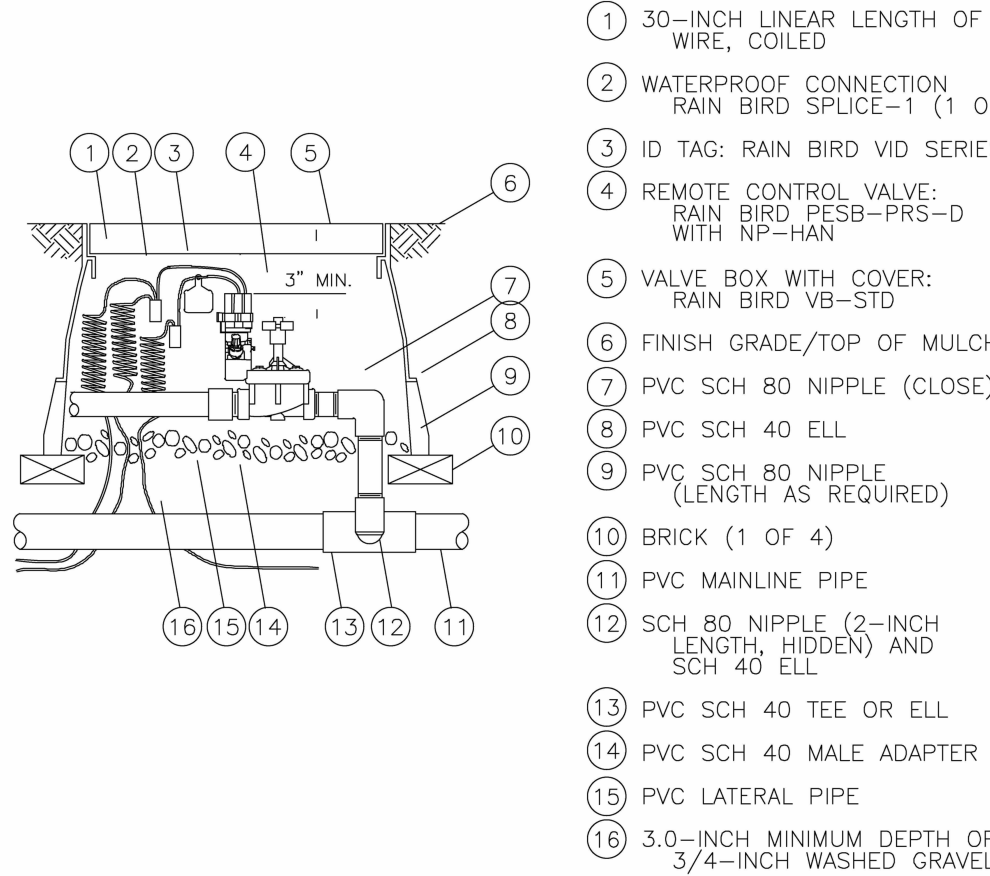


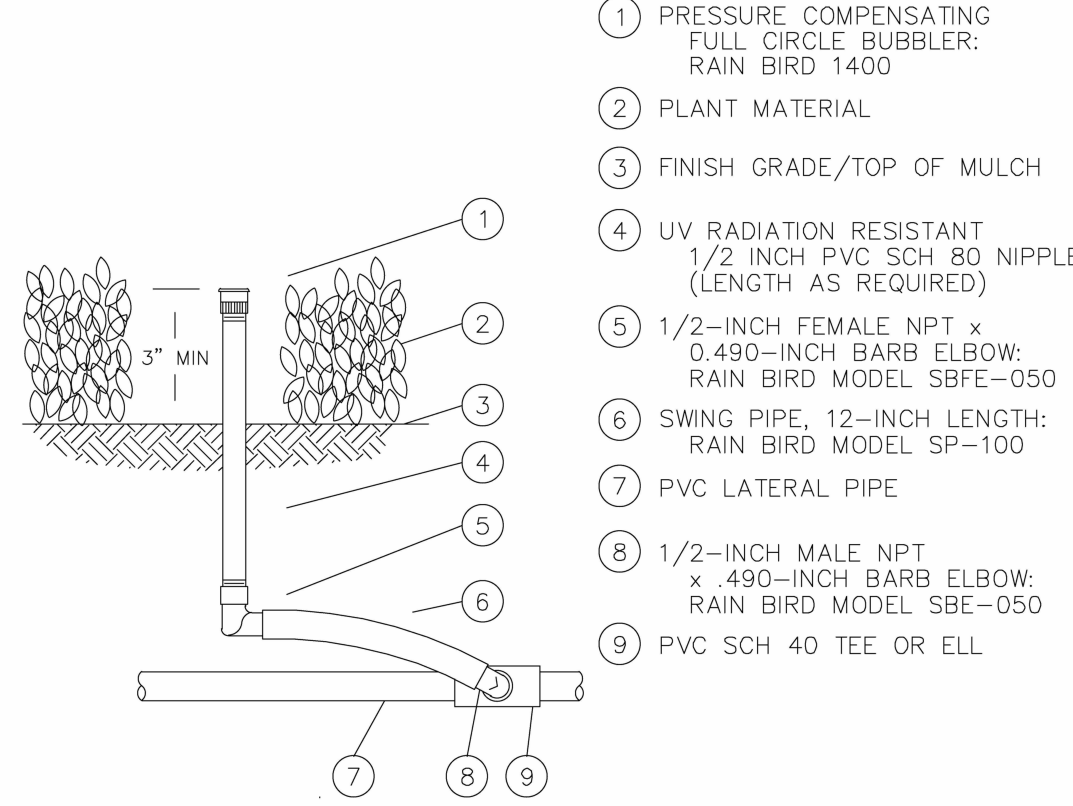
PRESSURE VACUUM BREAKER IRRIGATION SYSTEM
WS 4.10 (SHEET 1 OF 2)



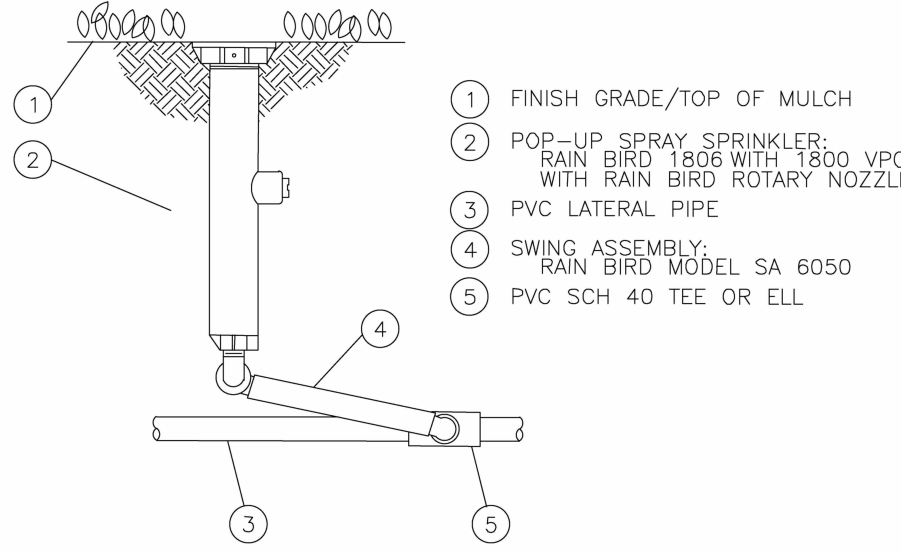
CONTROLLER DETAIL



VALVE DETAIL



1400 BUBBLER DETAIL



1806 POP-UP SPRAY HEAD DETAIL

1. IRRIGATION SYSTEM DESIGN REQUIREMENTS: 20 GPM MIN. @ 40PSI MIN. AT THE POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY THE AVAILABLE GPM ADN PSI PRIOR TO INSTALLATION OF THE SYSTEM. POINT OF CONNECTIONS SHALL BE TO POTABLE WATER SERVICE LINE.

2. DO NO WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT CONDITIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN PROCESS. FOR EXAMPLE : OBSTRUCTIONS , GRADE DIFFERENCES, WATER LEVELS, DIMENSIONAL DIFFERENCES,ETC. REFER TO LANDSCAPE PLAN TO AVOID CONFLICTS WITH PROPOSED TREES OR SHRUBS.

3. PIPING MAY SOMETIMES BE INDICATED AS BEING LOCATED IN UNLIKELY AREA: I.E., UNDER BUILDINGS OR PAVEMENTS, OUTSIDE OF PROPERTY LINE, IN LAKES OR DITCHES, ETC. THIS IS DONE FOR GRAPHIC CLARITY ONLY. WHENEVER POSSIBLE PIPING IS TO BE INSTALLED IN OPEN GREEN AREAS.

4. CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR IS ADVISED THAT CITY UNDERGROUND UTILITIES ARE PRESENT IN THE WORK AREA. CONTRACTOR SHALL SECURE LOCATES FROM UTILITIES PRIOR TO ANY EXCAVATION.

5. CONTRACTOR SHALL INSTALL POP-UP SPRINKLERS 6" FROM EDGE OF SIDEWALK, 12" FROM WALLS AND EDGE OF ROAD OR PARKING AREA. INSTALL SHRUB RISERS 18" FROM SIDEWALK, WALLS AND EDGE OF ROAD OR PARKING AREA.

6. IRRIGATION SYSTEM IS DIAGRAMMATIC TO IMPROVE CLARITY. ALL MAINLINE PIPING, ELECTRIC VALVES AND WIRING ARE TO BE INSTALLED IN LANDSCAPE AREAS AND WITHIN RIGHT OF WAY BOUNDARIES.

7. IF REQUIRES, THE IRRIGATION CONTRACTOR SHALL PROVIDED THE NECESSARY " RIGHT OF WAY" USE PERMITS .

8. INSTALL BUBBLERS ON ALL LARGE TREES AND PALMS.

9. SIZE ALL PIPE TO INSURE FLOW VELOCITY IS UNDER 5 FEET PER SECOND.

10. PIPE SIZES SHALL CONFORM TO THOSE ON THE DRAWINGS. SUBSTITUTING WITH SMALLER PIPE SIZES WILL NO BE PERMITTED.

11. MAINLINE SHALL BE INSTALLED WITH A MINIMUM OF 24" DEPTH OF COVER. LATERAL LINE SHALL BE INSTALLED WITH A MINIMUM OF 12" DEPTH OF COVER.

12. WHEREVER PRACTICAL, INSTALLED VALVES IN MULCHED BEDS AND/OR OUT OF HIGH TRAFFIC AREAS. ALL VALVES AND WIRE SPLICES SHALL BE INSTALLED IN HEAVY DUTY PLASTIC VALVES BOXES COVERS THAT READ IRRIGATION AND BE SIZED AS FOLLOWS:

- REMOTE CONTROL VALVES: STANDARD 12" DEEP RECTANGLE VALVE BOX
- DRIP ZONE CONTROL KITS: JUMBO 15" DEEP RECTANGLE VALVE BOX.
- ISOLATION GATE VALVES: STANDARD 12" DEEP RECTANGLE VALVE BOX.
- WIRE SPLICES: STANDARD 12" DEEP RECTANGLE VALVE BOX.

13. REFER TP VALVE DESIGNATION SYMBOLS FOR VALVE SIZE, STATION NUMBER AND DESIGNED FLOW RATE FOR EACH REMOTE CONTROL VALVE.

14. AL 24 VOLT CONTROL CABLE TO BE UL LISTED, SINGLE STRAND, TYPE UF 600 VOLT CONTROL CABLE. SIZE AND COLOR AS FOLLOWS:

- COMMON WIRES-SIZE AWG #14 AND WHITE IN COLOR
- HOT WIRES-SIZE AWG #14 AND RED IN COLOR
- SPARE WIRES-SIZE AWG #14 AND BLUE IN COLOR

15.AL SPLICES TO THE 24 VOLT CONTROL WIRING SHALL BE MADE WITH DBY OR EQUAL TYPE CONNECTORS.

16. RUN ONE (2) SPARE WIRES FROM CONTROLLER IN EACH DIRECTION OF THE MAINLINE TO FURTHEST VALVES.

17. ALL POP UP SPRINKLER HEADS SHALL BE INSTALLED LEVEL AND FLUSH TO GRADE.

18. PROVIDED AND INSTALL RAIN SENSOR WHERE IT WILL BE EXPOSED TO UNOBSTRUCTED SUN/RAINFALL AND CONNECT TO IRRIGATION CONTROLLER.

19. ALL SLEEVES SHALL BE 2 NOMINAL PIPE SIZES LARGER THAN THE SIZE OF THE PIPE TO BE ACCOMMODATED. ALL PIPE CROSSING OVER 5 FEET LENGTH SHALL BE INSTALLED INSIDE PVC PIPE SLEEVING.

20. ANY OTHER EQUIPMENT REQUIRED THAT IS NOT OTHER WISE DETAILED OR SPECIFIED SHALL BE INSTALLED AS PER MANUFACTORY'S RECOMMENDATIONS AND SPECIFICATIONS.

21. THE FINAL LOCATION OF ALL COMPONENTS SHALL BE APPROVED BY THE PROJECT ENGINEER AND/OR OWNER.

