CALLOUTS

1. REDUCE BENDS, FITTINGS, ETC. FOR A DISTANCE EQUAL TO 10X THE DIA. OF THE PIPE. SIMILAR ON BOTH SIDES OF SENSOR

2. PRE-CAST CONCRETE VALVE BOX WITH BOLT DOWN COVER AND BOX EXTENSION IF REQUIRED. REFER TO SPECIFICATIONS.

3. PIGTAIL EXPANSION LOOP (18" MIN. LOOP)

4. FLOW SENSOR

5. FINISH GRADE

6. COMMUNICATION CABLE. RETURN TO CONTROLLER IN 1" GREY SCH. 40 PVC CONDUIT

7. SCH. 80 PVC FLANGES TYP. (2) PLACE

8. SCH. 80 PVC UNION DOWNSTREAM OF VALVE

9. BRICK OR CINDER BLOCK TYP. (2) PLACES

10. PLACE 3" DIA DRAIN ROCK AT BASE OF VALVE BOX PRIOR TO INSTALLATION.

NOTES:

1. INSTALL FLOW SENSOR A MINIMUM OF 12" FROM ANY STRUCTURES OR HARDSCAPE.

2. INSTALL FLOW SENSOR IN PLANTING BEDS WHEREVER POSSIBLE.

3. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPES.

4. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH FINISH GRADE OF ADJACENT HARDSCAPING.
FLOW

FLOW

CALLOUTS

1. CONCRETE UTILITY BOX (12" X 20") WITH BOLT DOWN CAST IRON LID. BOX EXTENSION IF REQUIRED.
2. MASTER CONTROL VALVE
3. CONTROL AND COMMON WIRES EXPANSION LOOP (18" MIN.)
4. FINISH GRADE
5. SCH 40 PVC FLANGES, (2) PLACES TYP.
6. BRICK, MINIMUM (2) PER BOX, TYP.
7. 3/4" DIAMETER DRAIN ROCK

NOTES

1. INSTALL FLOW SENSOR A MINIMUM OF 12" FROM ANY STRUCTURES OR HARDSCAPE.
2. INSTALL FLOW SENSOR IN PLANTING BEDS WHEREVER POSSIBLE
3. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPES.
4. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH FINISH GRADE OF ADJACENT HARDSCAPING.
CALLOUTS

1. 10" ROUND CONCRETE VALVE BOX AND COVER LABELED WATER, W/ BOX EXTENSIONS AS REQUIRED.

2. GATE VALVE BRONZE OR CAST IRON HANDWHEEL. SEE PLANS AND SPECIFICATIONS FOR MANUFACTURER AND MODEL NUMBER.

3. FINISH GRADE

4. BRICK, TYPICAL. (2) PLACES.

5. 10" DIAMETER SCHEDULE 40 PVC.

6. SCHEDULE 80 PVC UNION, TYPICAL. (2) PLACES.

7. 3/4" DIA. DRAINAGE ROCK

NOTES

1. INSTALL GATE VALVES A MINIMUM OF 24" FROM STRUCTURES OR HARDSCAPE.
2. INSTALL GATE VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
3. DOMESTIC GATE VALVES SHALL BE LEAD FREE ONLY.
4. VALVE SIZE SHALL BE EQUAL WITH THE MAINLINE SIZE UNLESS LABELED OTHERWISE.
CALLOUTS

1. 10" ROUND CONCRETE VALVE BOX AND COVER LABELED WATER, W/ BOX EXTENSIONS AS REQUIRED.
2. GATE VALVE W/ 2" OPERATING NUT - SEE PLANS AND SPECIFICATIONS FOR MANUFACTURER AND MODEL NUMBER.
3. FINISH GRADE.
4. BRICK, TYPICAL. (2) PLACES.
5. 10" SCHEDULE 40 PVC.
6. SCHEDULE 40 PVC FLANGES, TYPICAL. (2) PLACES.
7. VALVE SIZE SHALL BE EQUAL WITH THE MAINLINE SIZE UNLESS LABELED OTHERWISE.
8. 3/4" DIA. DRAIN ROCK.

NOTES

1. INSTALL GATE VALVES A MINIMUM OF 24" FROM STRUCTURES OR HARDSCAPE.
2. INSTALL GATE VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
3. DOMESTIC GATE VALVES SHALL BE LEAD FREE ONLY.
4. VALVE SIZE SHALL BE EQUAL WITH THE MAINLINE SIZE UNLESS LABELED OTHERWISE.
CALLOUTS:

1. STRUCTURE OR PAVING
2. FINISH GRADE BEFORE PLANTING.
3. BRICK SUPPORT, TYPICAL (2) PLACES.
4. 3/4" DIA. DRAIN ROCK.
5. SCHEDULE 80 PVC THREADED NIPPLE, 12" LONG.
6. #5 REBAR ANGLE IRON, 36" LONG.
7. SCHEDULE 80 PVC 90 DEGREES 127 ELL (FIPTxMIPT).
8. SCHEDULE 80 PVC 90 DEGREES 127 ELL (FIPTxMIPT).
9. SCHEDULE 80 PVC 90 DEGREES 127 ELL (FIPTxMIPT).
10. SCHEDULE 80 PVC TEE (SLIPxSLIPxFIPT).
11. 10" ROUND PLASTIC VALVE BOX WITH LOCKING COVER.
12. QUICK COUPLING VALVE, SEE PLANS OR SPECS FOR MANUFACTURER AND MODEL NUMBER.
13. STAINLESS STEEL HOSE CLAMPS, MINIMUM OF (3) PLACES.
14. SCHEDULE 80 PVC THREADED NIPPLE, 12" LONG.

NOTES:

1. INSTALL QUICK COUPLING VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
2. SEE PLAN & SPECIFICATIONS FOR MORE INFORMATION.
3. SIZE OF ASSEMBLY TO BE EQUAL TO THE FIPT OF THE QUICK COUPLER.
CALLOUTS:

1. SOIL IN IRRIGATION MAIN AND LATERAL LINES SHALL BE COMPACTED IN 6" LIFT WITH EACH LIFT COMPACTED TO 85% R.D. IN LANDSCAPED AREAS AND 95% R.D. IN PAVING AREAS.

2. VALVE CONTROL WIRE PROVIDE "3M DBY" SEAL PACKS AT ALL SPLICES & 36" OF EXCESS UF WIRE IN A 1" DIA. COIL.

3. REMOTE CONTROL VALVE.

4. FINISH GRADE.

5. 13" X 20" JUMBO RECTANGULAR LOCKING VALVE BOX.

6. FULL PORT \( \frac{\pi}{4} \) TURN PVC BALL VALVE.

7. SCH. 80 PVC 90 DEGREE ELL.

8. SCH. 80 PVC NIPPLE.

9. BRICK - TYP (4) PER BOX

10. \( \frac{3}{8} \)" DIA. DRAIN ROCK

11. SCH. 80 PVC TEE.

12. PVC MAIN LINE.

13. IRRIGATION SUPPLY LINE.

14. SCH. 40 UNION.
KEYNOTES

1. 6" COMPACTED LIFTS 95% R.D. IN PAVING AREAS
2. HARDSCAPE MATERIAL
3. BASE MATERIAL
4. IRRIGATION CONTROL WIRES
5. IRRIGATION CONTROL WIRES IN CONDUIT UNDER PAVED AREAS
6. SNAKE ALL PIPES IN TRENCHING
7. FINISH GRADE
8. EXCAVATED FILL COMPACTED IN 6" LIFTS AT 85% R.D. IN LANDSCAPE AREAS AND 95% R.D. IN PAVING AREAS
9. LATERAL PIPE (TYP)
10. IRRIGATION MAINLINE (TYP)
CALLOUTS

1. 10" ROUND LOCKING VALVE BOX
2. 13" X 20" JUMBO RECTANGLE LOCKING VALVE BOX
3. EDGE OF STRUCTURE, HARDSCAPE, ETC.

NOTES

1. CENTER BOXES OVER VALVES.
2. INSTALL BOXES IN PLANTER BED WHEREVER POSSIBLE.
3. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE.
4. AVOID EXCESSIVE COMPACTION SOIL AROUND BOXES TO PREVENT DAMAGING VALVE BOXES.
STEP 1: STRIP WIRES 1/2" FROM ENDS.

STEP 2: APPLY SCOTCHLOK SPRING CONNECTOR IN A CLOCKWISE DIRECTION.

STEP 3: INSERT SPLICE TO BOTTOM OF GEL-FILLED TUBE. CHECK TO MAKE SURE CONNECTOR HAS BEEN PUSHED PAST LOCKING FINGERS AND IS SEATED AT BOTTOM OF TUBE.

STEP 4: POSITION WIRES IN WIRE CHANNELS AND CLOSE INSULATOR TUBE COVER.
CALLOUTS

1. FINISH GRADE.
2. ROTOR POP-UP SPRINKLER.
3. PVC SCH. 40 NIPPLE (LENGTH AS REQUIRED).
4. MARLEX STREET ELL.
5. PVC SCH. 40 NIPPLE. (LENGTH AS REQUIRED).
6. PVC SCH. 40 TEE OR ELL.
7. PVC LATERAL PIPE.

NOTE

1. SPRAY HEADS LOCATED ADJACENT TO ROADWAYS AND PARKING LOTS SHALL BE LOCATED 24" FROM EDGE OF HARDSCAPE.
1/2" IN PLANTER & FLUSH WITH FINISH GRADE IN TURF AREAS

12"±1"

4"±1/2"

BUILDINGS, FENCES OR WALLS
CURBS, PAVEMENT OR HEADERBOARDS

SECTION

CALLOUTS

1. FINISH GRADE.
2. MARLEX STREET ELLS.
3. IRRIGATION LATERAL.
4. PVC SCHEDULE 40, 90 DEGREE ELL (SxT) OR TEE (SxSxT)
5. POP-UP SPRAY HEAD.
6. PVC SCHEDULE 40 NIPPLE. (LENGTH AS REQUIRED).

NOTE

1. SPRAY HEADS LOCATED ADJACENT TO ROADWAYS AND PARKING LOTS SHALL BE LOCATED 24" FROM EDGE OF HARDSCAPE.
CALLOUTS

1. GRATED CAP
2. BARK MULCH.
3. FINISH GRADE.
4. BUBBLER HEAD.
5. CHECK VALVE (T X T)
6. SWING JOINT
7. TREE PIT WALL BUBBLER SLEEVE
8. PVC SCHEDULE 40 TEE (SXST) OR 90 DEGREE ELL (SXT), CONNECTED TO IRRIGATION LATERAL.
9. IRRIGATION LATERAL LINE
10. 1/2" PVC SCHEDULE 40 MALE ADAPTER.
11. ROOTBALL.
12. WATER BASIN
13. TREE BUBBLER (TWO PER TREE)
14. TREE TRUNK
KEYNOTES

1. IRRIGATION LATERAL LINE CONNECTION
2. TYPICAL PIPE ROUTING (SUBJECT TO FIELD ADJUSTMENTS)
3. TREE PER TYPICAL TREE PLANTING DETAIL
4. PLANTING BOUNDARY NO PLANTS TO BE PLANTED WITHIN 2' OF TRUNK
5. LOW FLOW TECHNOLOGY NOZZLES PER SPRAY HEAD STANDARD DETAIL (PLACED ON OPPOSITE SIDES OF TREE)

NOTES

1. SCH 40 PVC FITTINGS TYP.
2. FOLLOW TREE PLANTING DETAIL FOR EXCAVATION, BACKFILL AND MULCHING.
1. Rip or scarify top 12" of subgrade prior to planting.
2. Add amendments and fertilizer per soils report.
3. Rototill amendments and fertilizer into top 12" of topsoil or per soils report.
5. Bark mulch, mulch shall not cover root crown.

CALLOUTS
1. Groundcover spacing: see planting legend.
2. Groundcover centers.
3. Wall, sidewalk or edge or groundcover planting.
4. Half space of the groundcover spacing or as specified on the plans.

NOTES
2X ROOTBALL DIAMETER

TREE

REMOVE NURSERY STAKE.

VINYL OR NON-ABRASIVE RUBBER TREE TIES: 2 PER STAKE. WRAP NO WIRE AROUND TRUNK OR LIMB.

BARK MULCH, NO MORE THAN 1" OF MULCH ON TOP OF ROOT BALL. KEEP TRUNK BASE CLEAR OF BARK

TOP OF ROOT BALL SHALL BE A MINIMUM OF 1" ABOVE FINISHED GRADE.

4" HIGH EARTH WATERING BERM IN PLANTER AREA ONLY. BERM SHALL BEGIN AT ROOT BALL PERIPHERY.

FINISH SURROUNDING GRADE.

LOOSENED NATIVE SOIL, PER STANDARD SPECIFICATIONS.

ROOTS SHALL BE LOOSENED, SCORED, AND UNTANGLED PRIOR TO PLACING ROOT BALL IN HOLE.

UNDISTURBED OR COMPACTED SOIL.

SECTION

CALLOUTS

1. TREE
2. REMOVE NURSERY STAKE.
3. VINYL OR NON-ABRASIVE RUBBER TREE TIES: 2 PER STAKE. WRAP NO WIRE AROUND TRUNK OR LIMB.
4. BARK MULCH, NO MORE THAN 1" OF MULCH ON TOP OF ROOT BALL. KEEP TRUNK BASE CLEAR OF BARK
5. TOP OF ROOT BALL SHALL BE A MINIMUM OF 1" ABOVE FINISHED GRADE.
6. 4" HIGH EARTH WATERING BERM IN PLANTER AREA ONLY. BERM SHALL BEGIN AT ROOT BALL PERIPHERY.
7. FINISH SURROUNDING GRADE.
8. LOOSENED NATIVE SOIL, PER STANDARD SPECIFICATIONS.
9. ROOTS SHALL BE LOOSENED, SCORED, AND UNTANGLED PRIOR TO PLACING ROOT BALL IN HOLE.
10. UNDISTURBED OR COMPACTED SOIL.
TIES OR FASTENERS FOR SUPPORT AS NEEDED.
ATTACH TO WALL OR TRELLIS.
SET ROOT CROWN 1" ABOVE BACKFILL.
BARK MULCH, KEEP ROOT CROWN CLEAR OF MULCH
SOIL AMENDMENTS, PER STANDARD SPECIFICATIONS.
ROOT CROWN, PULL BARK MULCH AWAY FROM ROOT CROWN
PLANT ROOT CROWN 1" ABOVE FINISH GRADE.
2" HIGH EARTH MOUND. FINISH GRADE
BARK MULCH, MULCH SHALL NOT COVER ROOT CROWN.
FINISH GRADE.
SHRUB ROOTBALL.
BACKFILL MIX, PER STANDARD SPECIFICATIONS.
SECTION

CALLOUTS:

1. PLAY AREA SURFACE
2. GEOTEXTILE FABRIC PER SPECIFICATIONS
3. 3/4" DIA. DRAIN ROCK
4. 3/16" GALVANIZED STEEL COVER
5. 1/2" Ø X 4" GALV. STEEL BOLT (TYP. OF 4)
6. DRAIN PIPE PER PLANS AND SPECIFICATIONS
7. GROUT SHALL BE NON-SHRINK EPOXY GROUT
8. SQUARE CATCH BASIN MAY BE POURED IN PLACE OR PRECAST.
9. 3/4" DIA. DRAIN ROCK
10. COMPACTED SUBGRADE OR UNDISTURBED SOIL.
SECTION

CALLOUTS

1. EXPANSION JOINT
2. CONCRETE PAVING
3. 12" SMOOTH DOWEL AT 24" O.C. W/ SLEEVE
4. COMPACTED SUBGRADE OR UNDISTURBED SOIL.
5. #4 REBAR 24" O.C. VERTICALLY AND TWO ROWS RUNNING HORIZONTAL ENTIRE DISTANCE OF CURB.
6. ENGINEERED WOOD FIBER
7. GEOTEXTILE FABRIC, TURN UP EDGES 6"
8. tooled edge 1" MIN. RADIUS.

NOTES:

1. PROVIDE EXPANSION JOINTS AT 20' ON CENTER.
12" PLAY AREA CURB

CALLOUTS

1. 12" CONCRETE PLAY AREA CURB
2. TOOLED EDGE, 1" MIN. RADIUS
3. #4 REBAR, TWO HORIZONTAL ROWS AND VERTICAL ROW 24" ON CENTER.
4. COMPACTED SUBGRADE OR UNDISTURBED SOIL.
5. ENGINEERED WOOD FIBER
6. GEOTEXTILE FABRIC, TURN UP EDGES 6"

NOTES

1. PROVIDE EXPANSION JOINTS AT 20' ON CENTER.
CALLOUTS
1. BARK MULCH, REFER TO SPECIFICATIONS
2. CONCRETE MOW CURB
3. FINISH GRADE
4. #4 REBAR
5. COMPACTED SUBGRADE OR UNDISTURBED SOIL.

NOTES
1. EXPANSION JOINTS SHALL BE INSTALLED AT EVERY 20’ O.C. AND SCORE JOINTS AT 10’ O.C.
TOP OF INFIELD MIX

CONCRETE PAVING / CURBING. COMPACTED INFIELD MIX SHALL BE FLUSH WITH THE TOP OF PAVING.

INFIELD MIX SHALL BE INSTALLED AND COMPACTED IN TWO LIFTS AT 95% R.D.

PRE-EMERGENT WEED SUPPRESSION.

COMPACTED SUBGRADE OR UNDISTURBED SOIL
1/2" IN TURF
1-1/2" IN PLANTER

3-1/2"

9"

VARIES PER PLAN

SECTION

CALLOUTS
1. CONCRETE MOW CURB
2. DECOMPOSED GRANITE SHALL BE FLUSH WITH THE TOP OF MOW CURB AND COMPACTED 95% R.D. (2 LIFTS).
3. COMPACTED SUBGRADE AT 95%.
4. PRE-EMERGENT WEED CONTROL
CALLOUTS

1. DRINKING FOUNTAIN, INSTALL PER MANUFACTURES SPECIFICATIONS
2. VALVE BOX WITH LOCKING LID, TYPICAL.
3. BLOWOFF VALVE (1" TEE, 1" THREADED GALV. RISER, 1" PVC CAP, HAND TIGHTEN TYPICAL
4. 1" GATE VALVE (TYP.)
5. TRACER WIRE TAPE TO WATER LINE EVERY 5' O.C.
6. SCHEDULE 40 P.V.C. PIPE, CONNECT TO WATER METER AND BACKFLOW
7. 3/4" DIA. DRAIN ROCK
8. 2" ABS DRAIN LINE SLOPED AT 2% TO CLEANOUT
9. JUG FILLER WITH VACUUM BREAKER
10. 4-1/2" DIA. BOLTS SET IN CONCRETE
11. 12"+/- AREA OF CONCRETE SURROUNDING GRATE SHALL BE SLOPED TO GRATE CLEANOUT: 12" INSIDE DIAMETER CONCRETE BOX STEEL GRATE
12. WATER STOP, TYP.
13. POUR IN PLACE CONCRETE BOTTOM
14. 3/4" DIA. DRAIN ROCK
15. CLEANOUT: 12" X 18" CONCRETE BOX WITH SOLID TRAFFIC RATED LID
16. FINISH GRADE BEFORE PLANTING
17. REINFORCED CONCRETE VALVE BOX AND LID
18. JIMMY CAP
19. ABS DRAIN LINE (TYP.)
20. LONG SWEEP "Y" FITTING
21. 45 DEGREE ABS ELBOWS TYP.
22. WHEN TOP OF GRATE IS LOWER THAN THE NEXT UPSTREAM MANHOLE COVER, A BACKWATER VALVE IS REQUIRED AT THIS LOCATION.
23. 4" ABS DRAIN PIPE SLOPED AT MIN. 2% TO SANITARY SEWER STUB.

NOTE:

1. IF DRINKING FOUNTAIN HAS JUG FILLER SLOTTED CLEANOUT DRAIN MUST BE LOCATED ON JUG FILLER SIDE, SLOPED TO DRAIN.
SECTION
SURFACE MOUNT

CALLOUTS
1. SITE FURNISHING POST CLEAN AND FREE OF CONCRETE SPLATTERS. INSTALL PER MANUFACTURES SPECIFICATIONS
2. TACK WELD AND SECURE NUT.
3. BASE PLATE PER MANUFACTURES SPECIFICATIONS.
4. FINISH GRADE
5. CONCRETE PAVING
6. CONCRETE ANCHOR BOLT
7. CONCRETE FOOTING PER MANUFACTURE’S SPECIFICATIONS