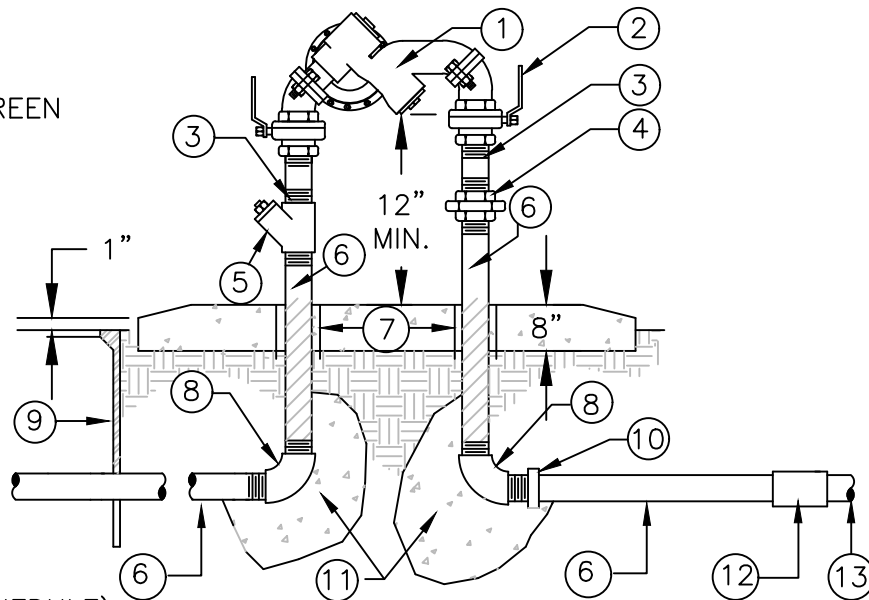


# REDUCED PRESSURE BACKFLOW PREVENTION UNIT



NTS

1. REDUCED PRESSURE BACKFLOW PREVENTION UNIT
2. BRONZE SHUT-OFF VALVE
3. BRASS NIPPLE
4. BRONZE UNION
5. BRONZE WYE STRAINER W/40 MESH SCREEN
6. COPPER PIPE (TYPE K HARD)  
EXTEND 12" BELOW CONCRETE PAD AND  
WRAP WITH 1" ANTI-CORROSION TAPE
7. PVC SLEEVES
8. BRASS OR COPPER 90 DEGREE ELBOW
9. CONC. METER BOX, INSTALLED BY THE  
CITY OF PHOENIX
10. SCH. 80 PVC TOE NIPPLE
11. ½ CUBIC FOOT (MIN) CONC.  
THRUST BLOCK
12. PVC SCH 80 COUPLING
13. PVC MAINLINE PIPE (SEE IRRIGATION SCHEDULE)

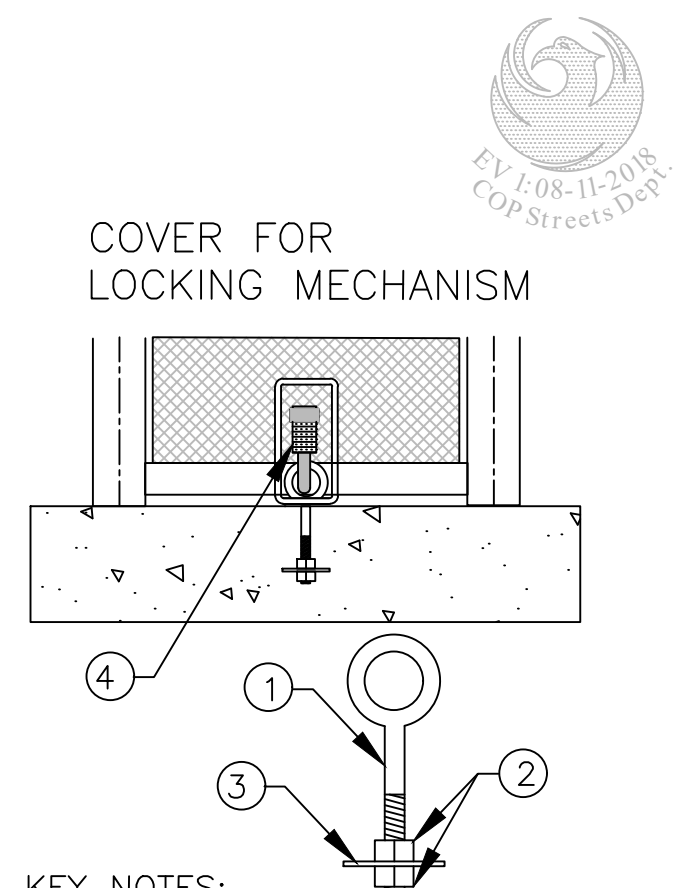
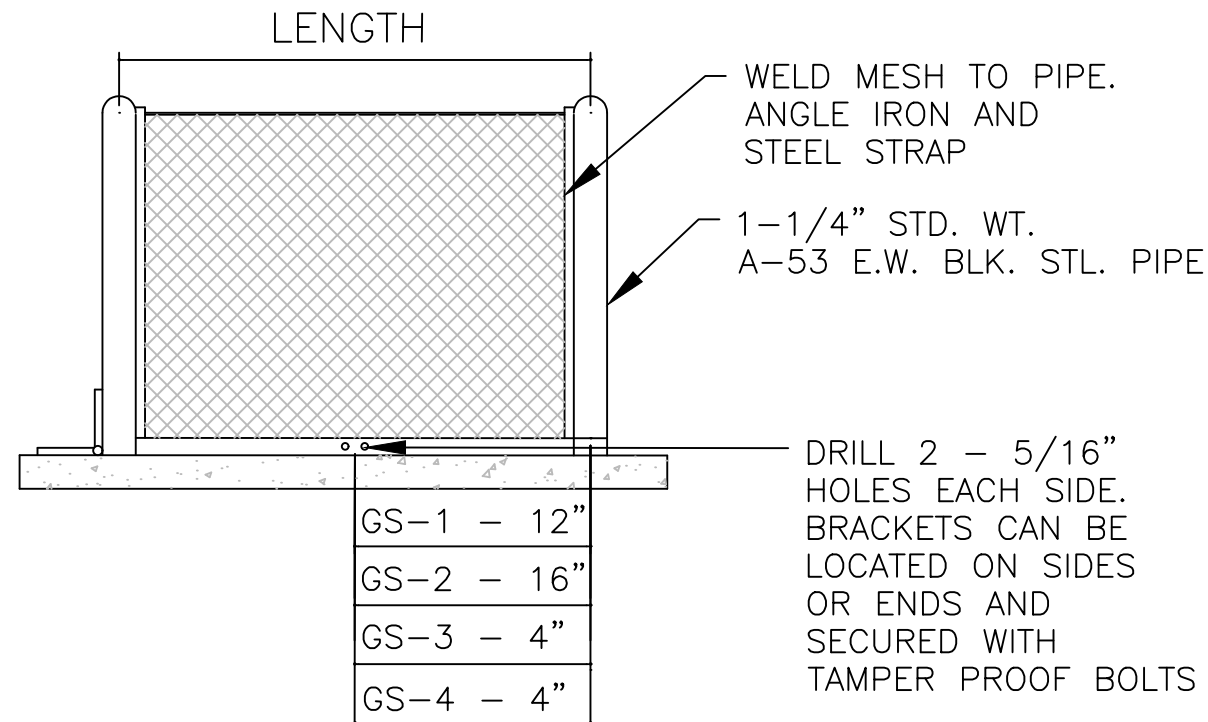
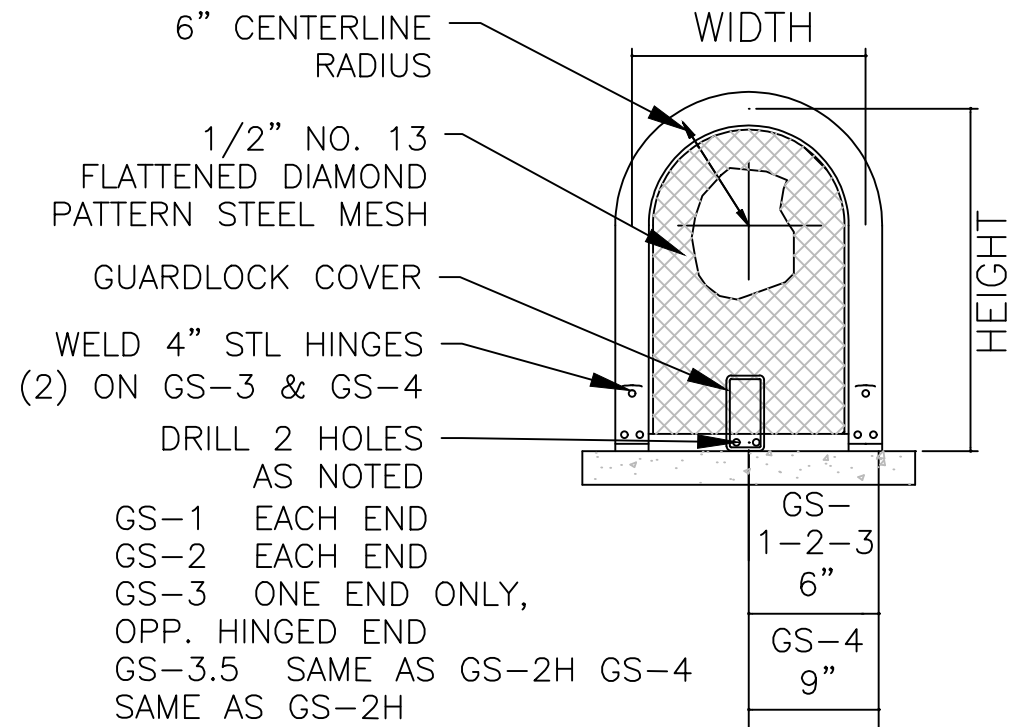


NOTE:

1. ON UNITS 3" AND LARGER, ALL COPPER AND BRASS PIPE FITTINGS SHALL BE FLANGED DUCTILE IRON
2. WRAP ALL BURIED COPPER AND BRASS PIPE AND FITTINGS WITH 1" MIN. ANTI-CORROSION TAPE TO A HEIGHT OF 6" ABOVE CONCRETE
3. OBTAIN REQUIRED CERTIFICATIONS PER AGENCY REQUIREMENTS

# BACKFLOW SECURITY ENCLOSURE

NTS



- KEY NOTES:
1. 3/8"-16-2 1/2" FORGED EYEBOLT (QTY 2)
  2. 3/8"-16 HEX NUT (QTY 4)
  3. 3/8" X 1/2" FENDER WASHER (QTY 2)
  4. PADLOCK BY OWNER

NOTES:

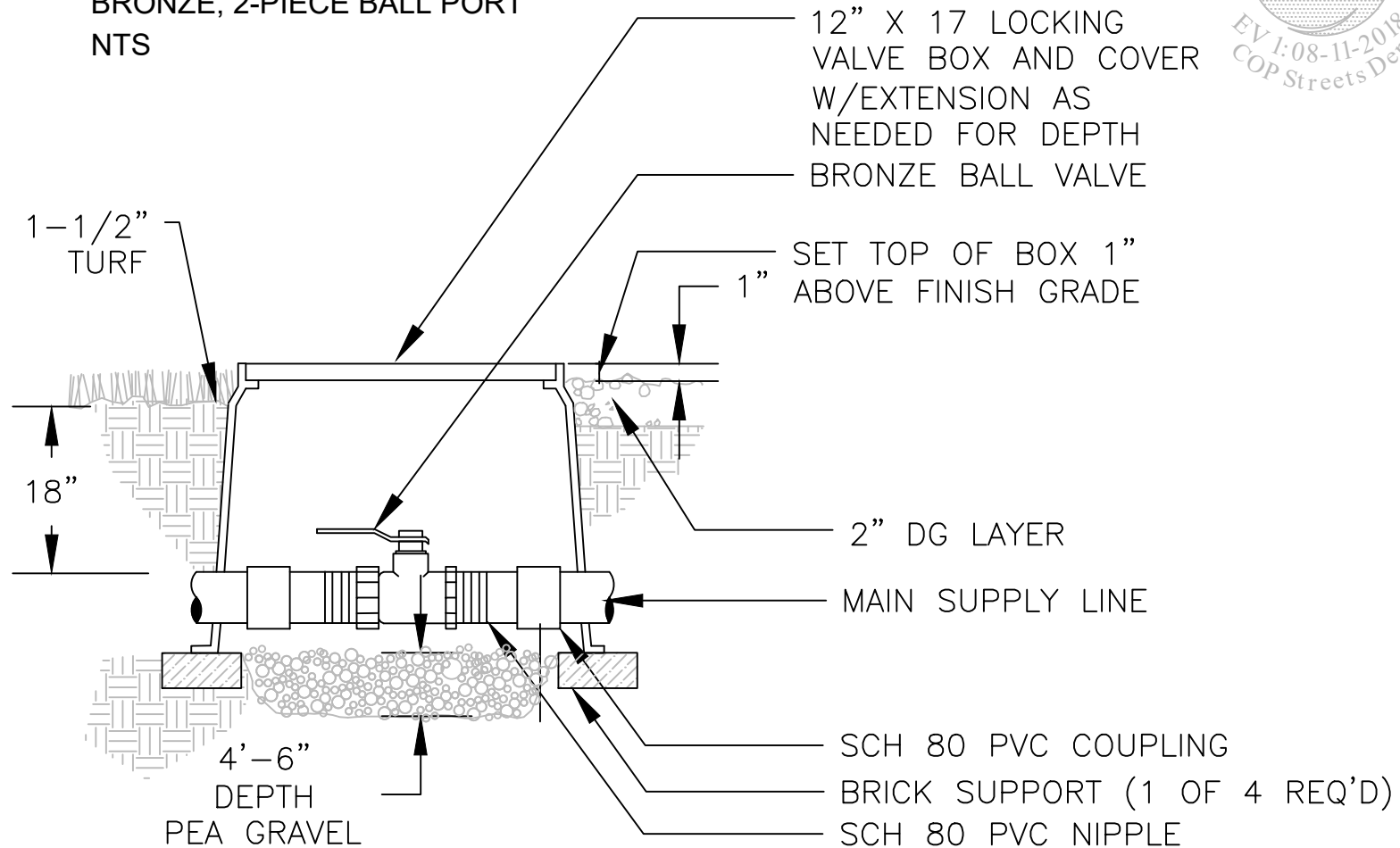
1. AFTER ALL WELDING, ENTIRE UNIT SHALL BE PROCESSED WITH IRON PHOSPHATE PRE-TREATMENT.
2. ELECTROSTATIC APPLICATION OF POWDERCOAT SHALL BE FUSION BONDED - PRS-B-4004-C (BEIGE) OR COLOR SELECTION TO BE APPROVED BY OWNER
3. ALL BOLTS FOR HINGES & HASPS SHALL BE ZINC PLATED & TAMPER PROOF
4. ALL WELDED AREAS SHALL BE A MINIMUM OF 1/4" WIDTH BEAD EVERY 4"
5. GS = POWDERCOATED STEEL GUARD SHACK



# BALL VALVE



BRONZE, 2-PIECE BALL PORT  
NTS

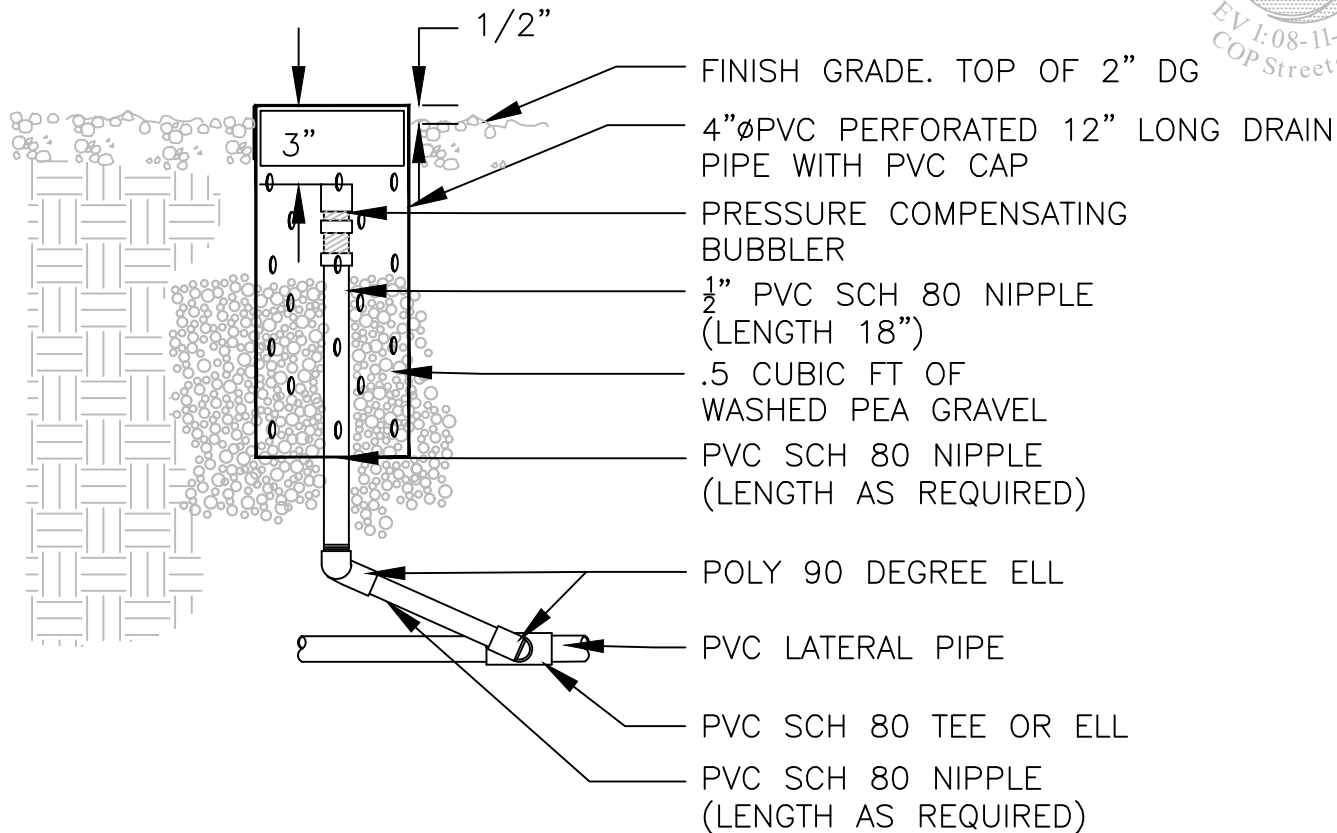


## NOTES:

1. COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS UNDISTURBED ADJACENT SOIL.
2. VALVE BOX SHALL BE SET LEVEL AND PARALLEL TO GRADE.

# BUBBLER IN SLEEVE

NTS

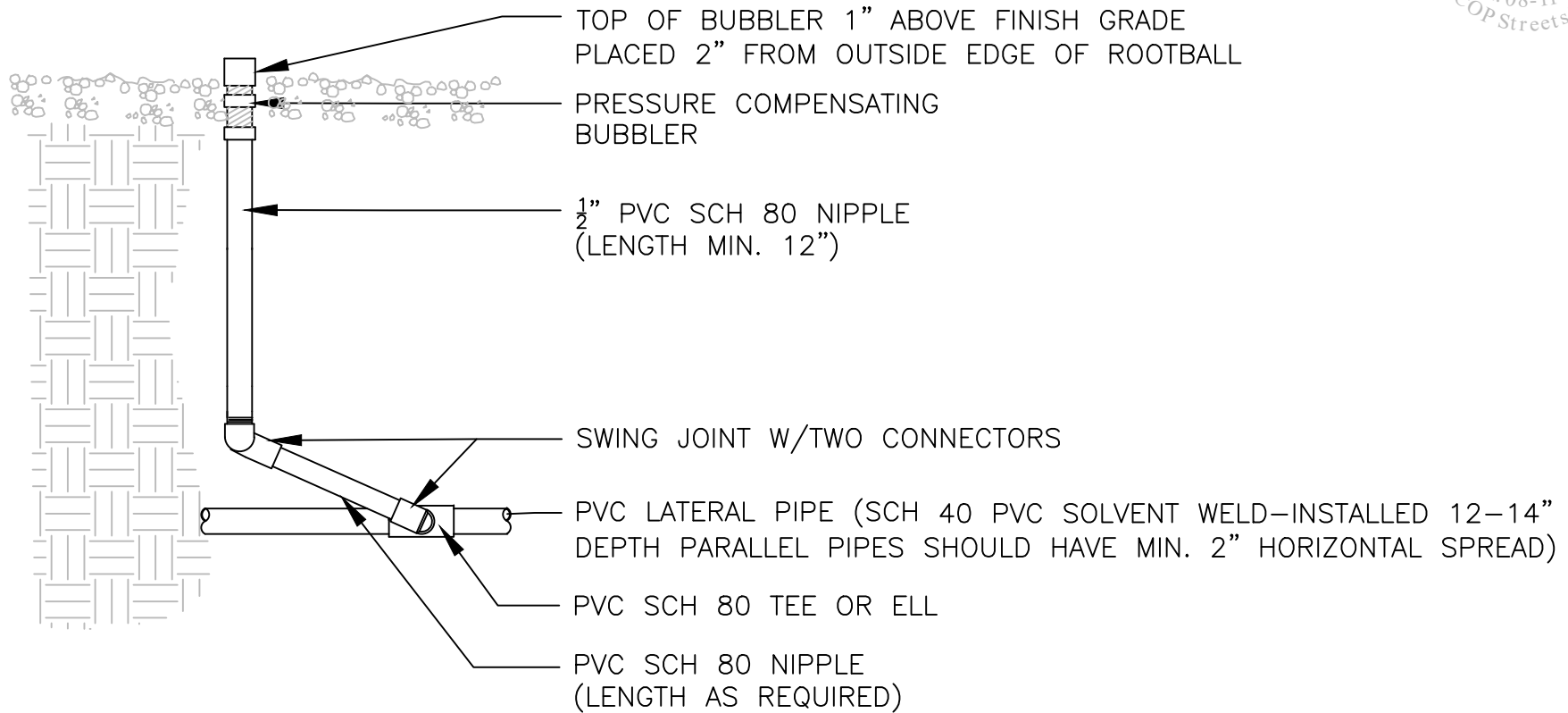


## NOTES:

1. FURNISH NOMINAL FITTING SIZES IDENTICAL TO NOMINAL INLET DIAMETER OF BUBBLER.
2. INSTALL TWO BUBBLERS PER TREE ON OPPOSITE SIDES OF THE ROOT BALL WHERE INDICATED.

# BUBBLER

NTS

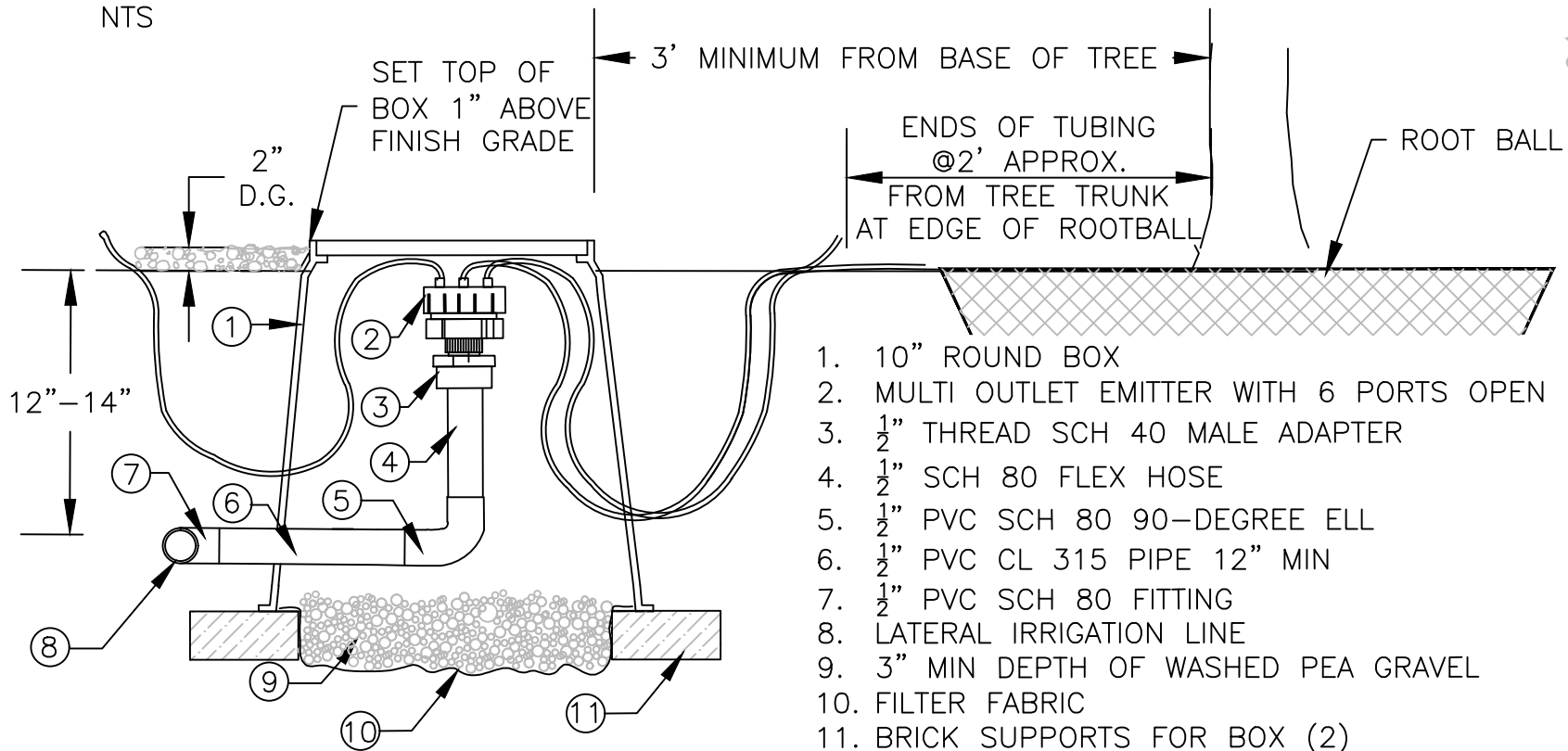


## NOTES:

1. FURNISH NOMINAL FITTING SIZES TO CORRELATE WITH INLET DIAMETER OF BUBBLER.
2. INSTALL TWO BUBBLERS PER TREE ON OPPOSITE SIDES OF THE ROOT BALL.
3. INSTALL ONE BUBBLER PER SHRUB OR AS NOTED.

# EMITTER-MULTI OUTLET IN BOX

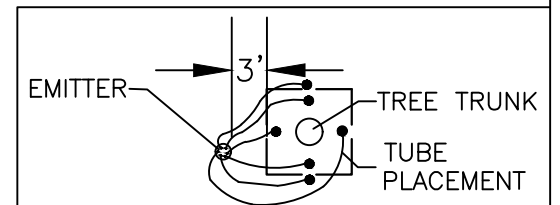
NTS



1. 10" ROUND BOX
2. MULTI OUTLET EMITTER WITH 6 PORTS OPEN
3. 1/2" THREAD SCH 40 MALE ADAPTER
4. 1/2" SCH 80 FLEX HOSE
5. 1/2" PVC SCH 80 90-DEGREE ELL
6. 1/2" PVC CL 315 PIPE 12" MIN
7. 1/2" PVC SCH 80 FITTING
8. LATERAL IRRIGATION LINE
9. 3" MIN DEPTH OF WASHED PEA GRAVEL
10. FILTER FABRIC
11. BRICK SUPPORTS FOR BOX (2)

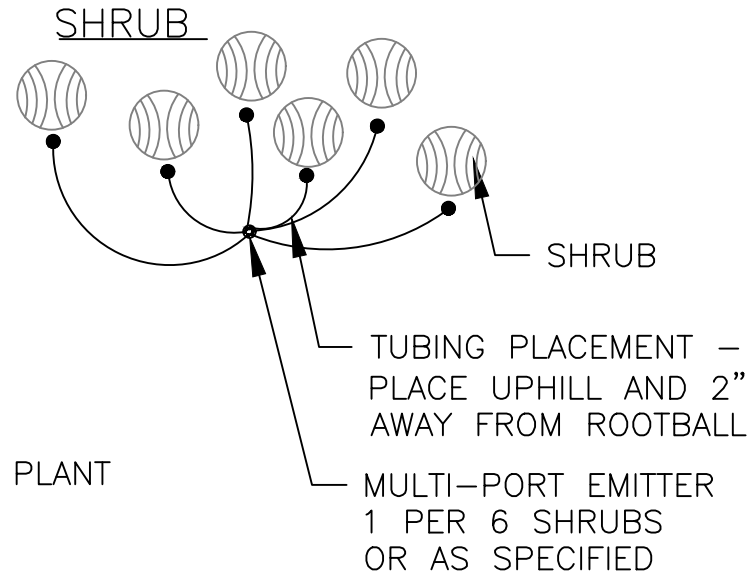
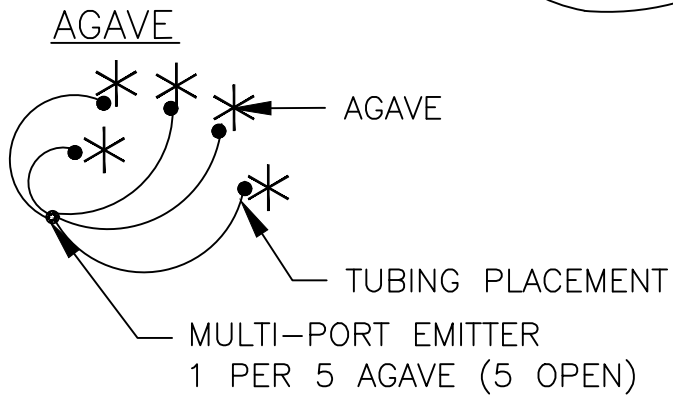
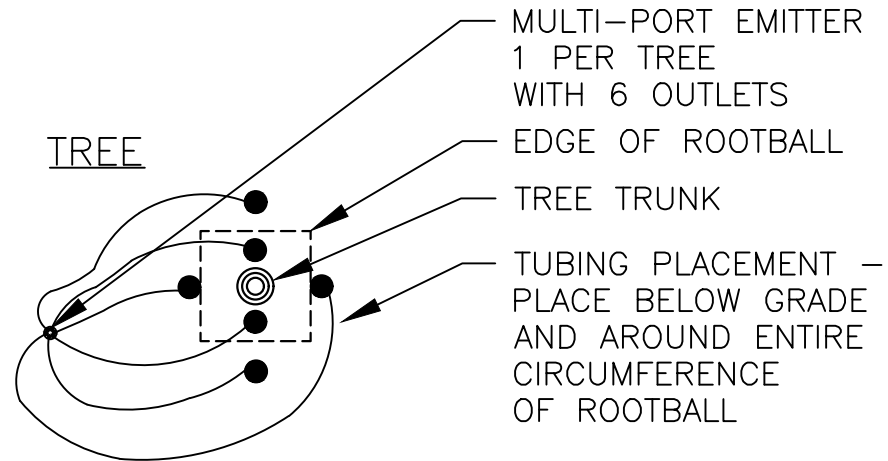
## NOTES:

1. MULTI-OUTLET EMITTER ONE PER TREE (OR AS SHOWN ON DRAWINGS). USE GLUE SPECIFIC FOR CONNECTIONS.
2. MAINTAIN MINIMUM 3' DISTANCE FROM TREE TRUNK TO EMITTER BOX.
3. PLACE ENDS OF SPAGHETTI TUBING NO CLOSER THAN 2' TO TRUNK AND AT EDGE OF ROOTBALL.
4. SPAGHETTI TUBING LENGTH SHALL NOT EXCEED 5'.



# EMITTER PLACEMENT

NTS

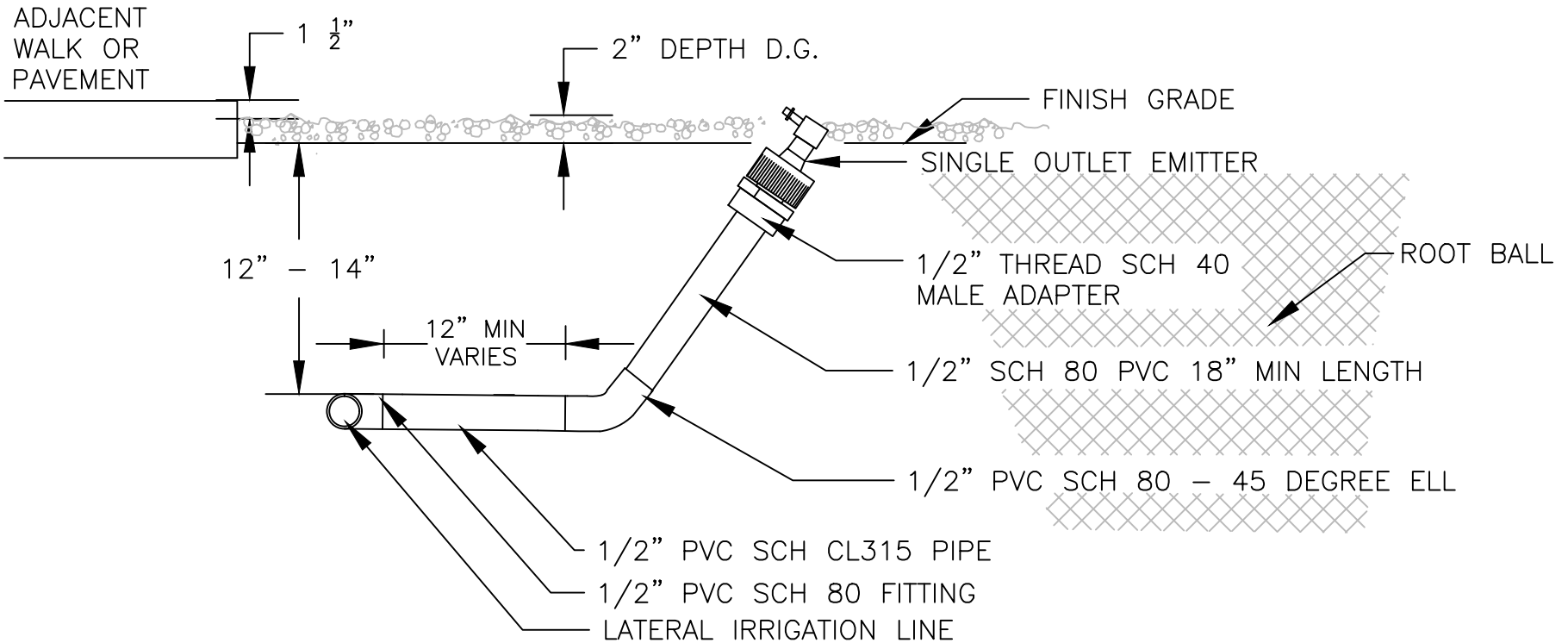


## NOTES:

1. PLACE EMITTERS AT EDGE OF ROOTBALL
2. PLACE EMITTER OUTLET AT UPHILL SIDE OF PLANT IF ON A SLOPE
3. SPAGHETTI TUBING NO LONGER THAN 5'

# EMITTER-SINGLE OUTLET

NTS

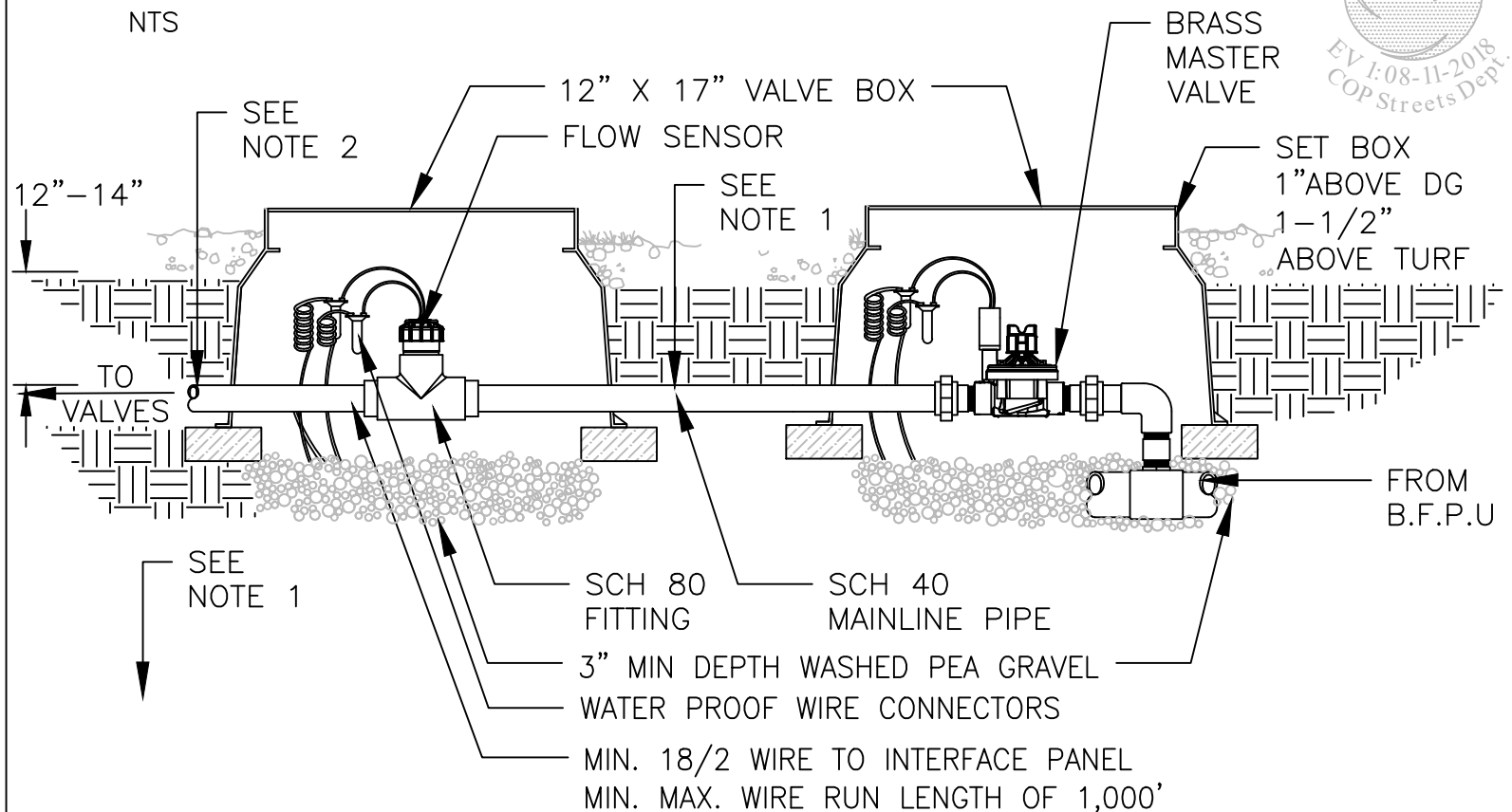


## NOTES:

1. SCH 40 PVC SOLVENT WELD-INSTALLED 12-14" DEPTH PARALLEL PIPES SHOULD HAVE MIN. 2" HORIZONTAL SPREAD
2. PLACE EMITTER AT UPHILL SIDE OF PLANT OUTSIDE ROOTBALL BY 2"



# MASTER VALVE AND FLOW SENSOR

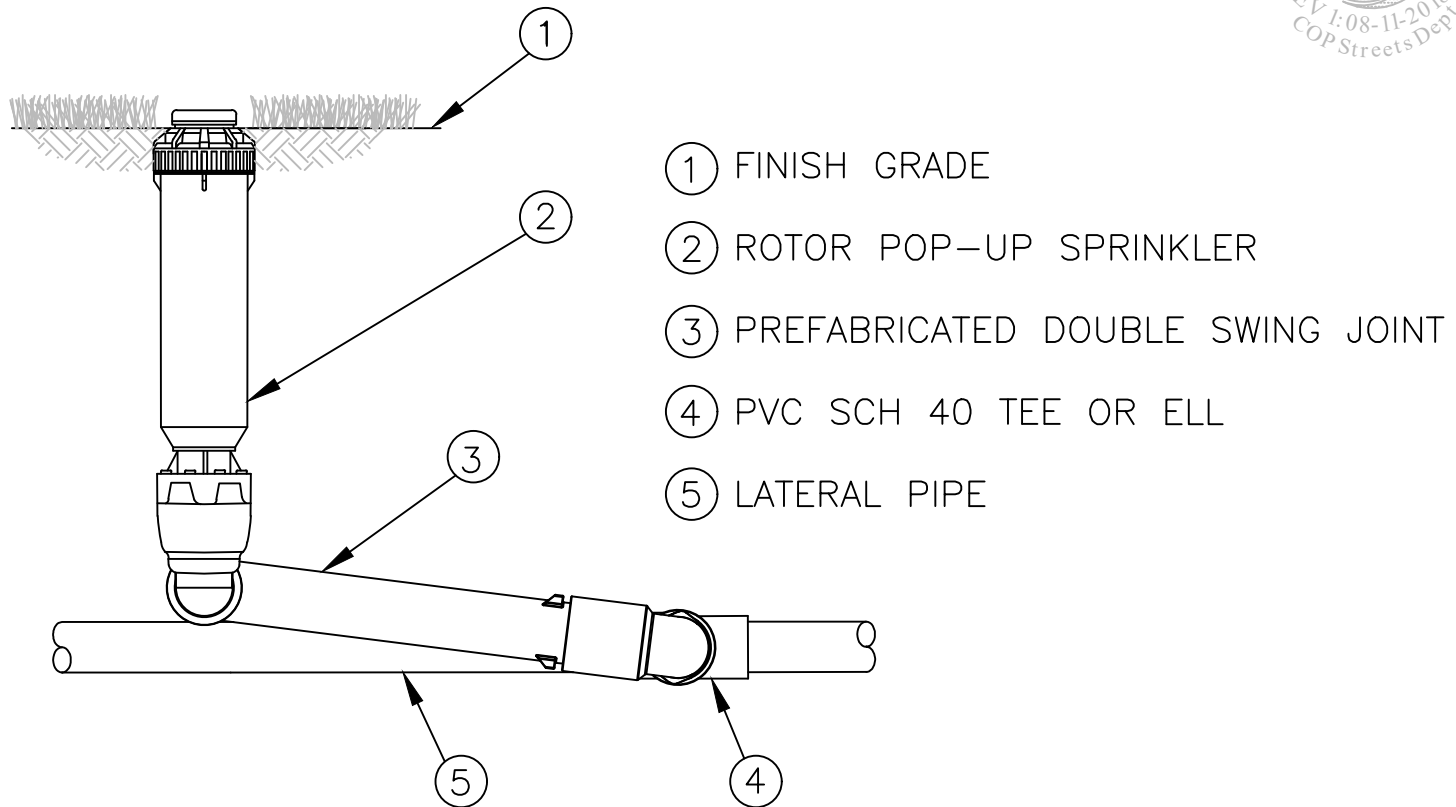


## NOTES:

1. INLET PIPE LENGTH TO FLOW SENSOR MUST BE MIN. 10X PIPE DIA. IN STRAIGHT, UNOBSTRUCTED PIPE, NO FITTINGS OR TURNS.
2. OUTLET PIPE LENGTH FROM SENSOR MUST BE MIN. 5X PIPE DIA. IN STRAIGHT, UNOBSTRUCTED RUN OF PIPE, NO FITTINGS OR TURNS.
3. VERIFY MANUFACTURER SPECIFICATIONS ON DISTANCE REQUIRED BETWEEN MASTER VALVE AND FLOW SENSOR.

# LARGE SPRINKLER ROTOR

NTS

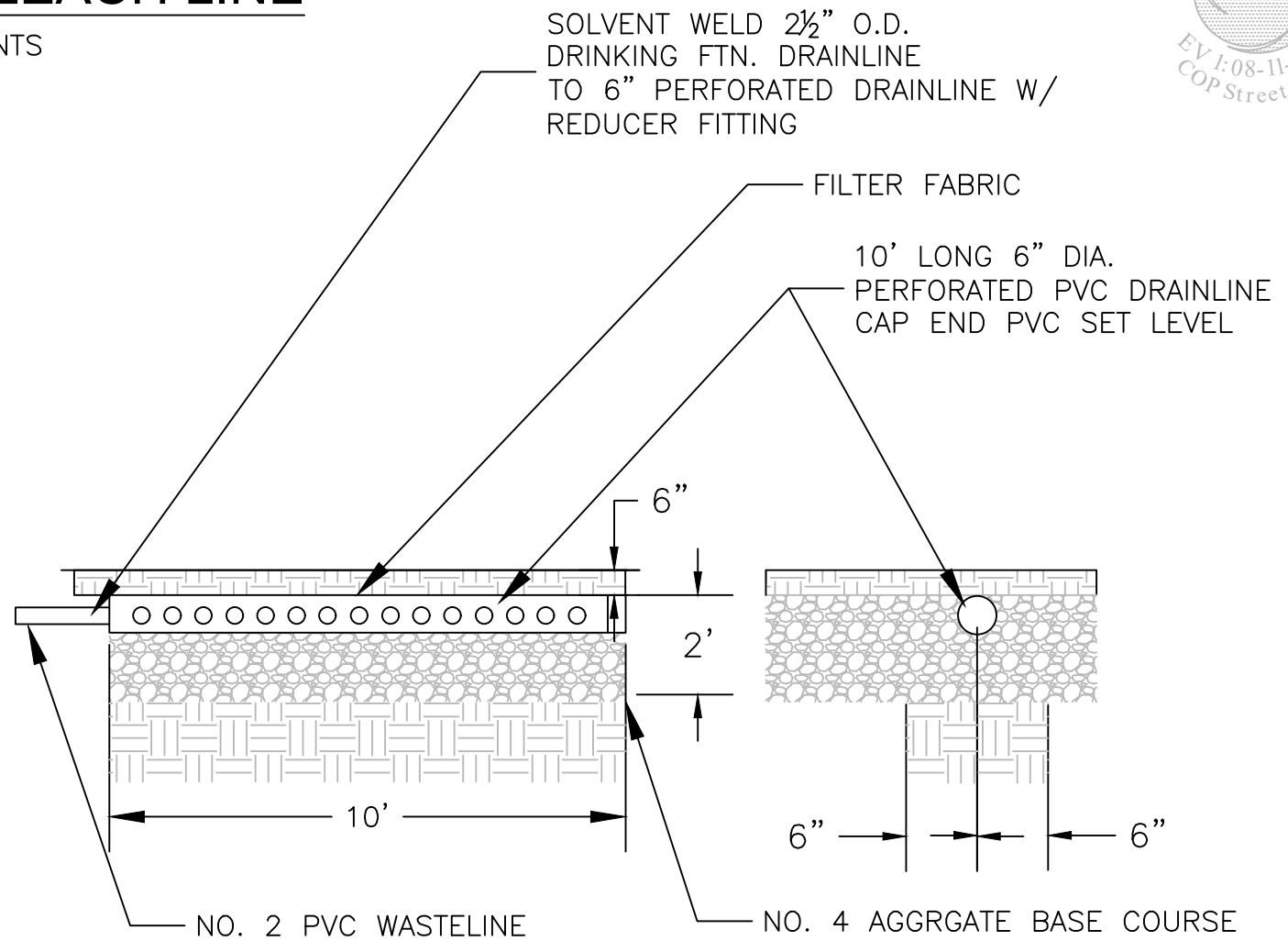


**NOTE:**

SCH. 40 PVC SOLVENT WELD-INSTALLED 12-14" DEPTH. PARALLEL PIPES SHOULD HAVE MIN. 2" HORIZONTAL SPREAD

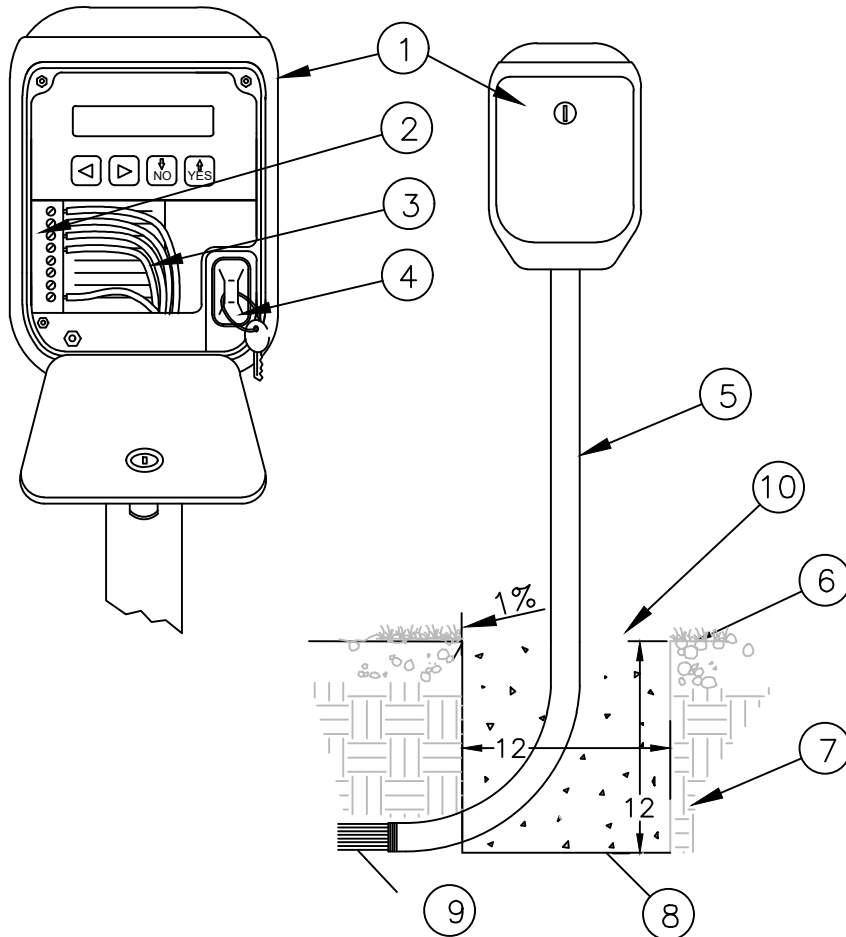
# LEACH LINE

NTS



# SOLAR IRRIGATION CONTROLLER

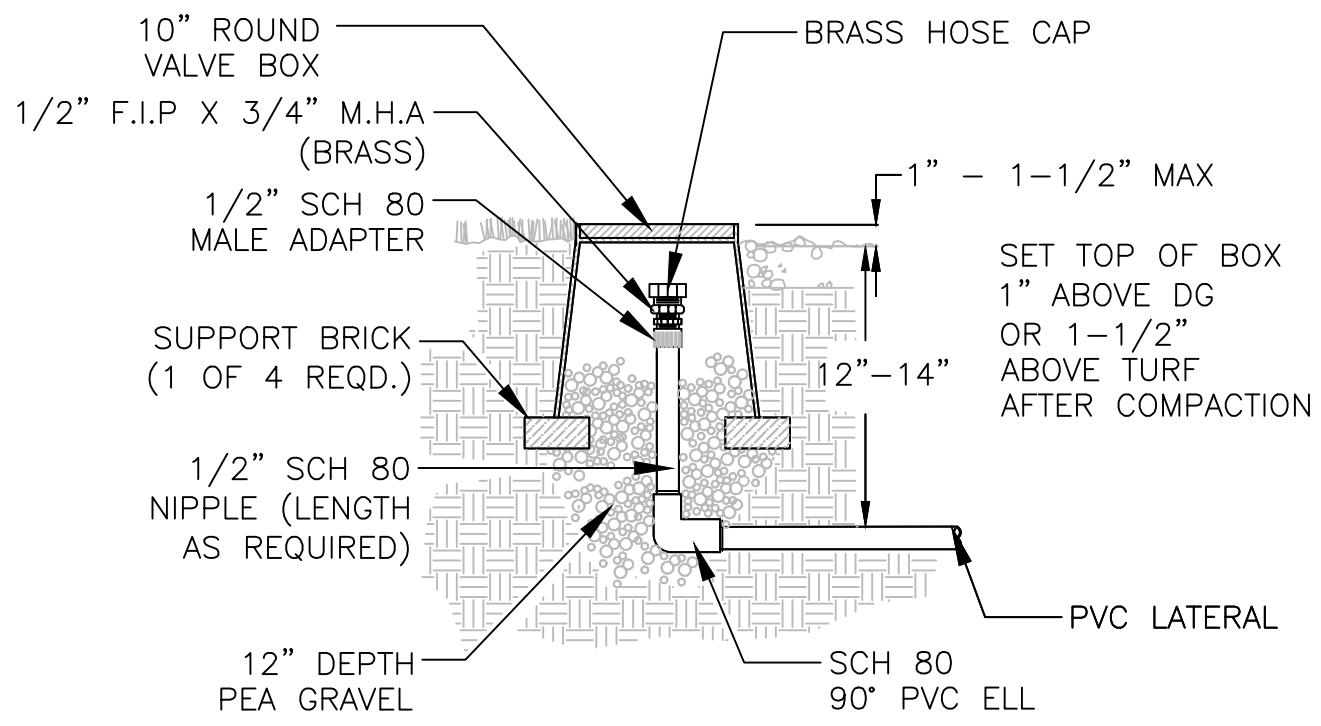
NTS



1. AMBIENT LIGHT POWERED IRRIGATION CONTROLLER
2. TERMINAL STRIP.
3. 12 OR 14 GAUGE WIRE
4. PROGRAMMING KEY
5. 35" HIGH X 31 CM WIDE STEEL MOUNTING COLUMN
6. FINISH GRADE
7. 6-1/2" OF BACKFILL SOIL
8. POURED CONCRETE BASE 1-1/2 CU.FT. INSTALL PER MANUFACTURER'S INSTALLATION GUIDE
9. DIRECT BURIAL CONTROL WIRES TO CONTROL VALVES
10. SLOPE TOP OF FOOTING AWAY FROM CENTER POST (MIN. 1% =  $\frac{1}{2}$ " )

# MANUAL FLUSH CAP FC

NTS



# IRRIGATION PIPE AND SLEEVE SCHEDULE

NTS



| <u>PIPE SIZE</u> | <u>GPM</u> |
|------------------|------------|
| 1/2"             | 0-5        |
| 3/4"             | 6-10       |
| 1"               | 11-15      |
| 1-1/4"           | 16-25      |
| 1-1/2"           | 26-35      |

## SLEEVE SCHEDULE

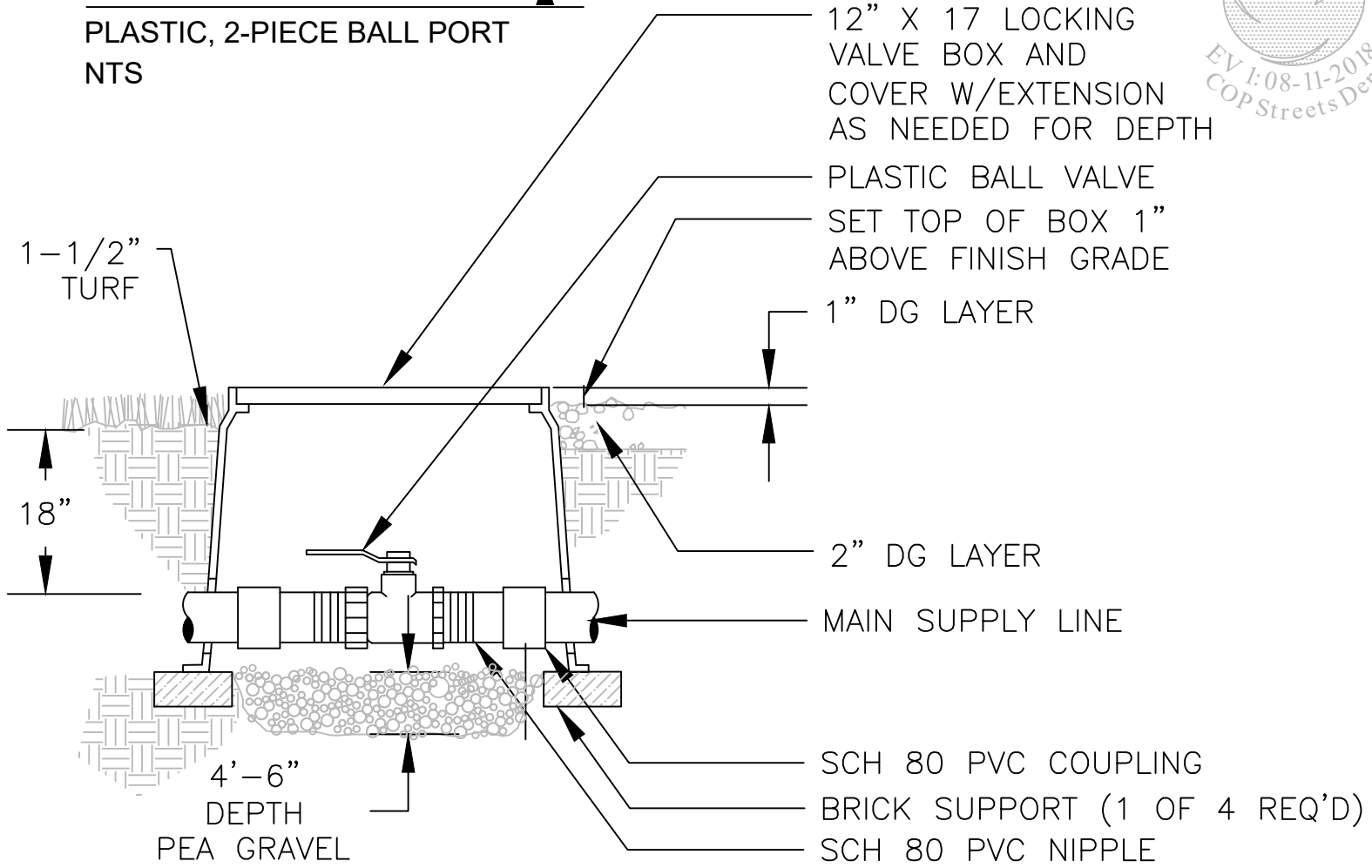
| <u>PIPE SIZE</u> | <u>MINIMUM SLEEVE SIZE</u> |
|------------------|----------------------------|
| 1/2" - 3/4"      | 3"                         |
| 1" - 2"          | 4"                         |

NOTE:

FOR MULTIPLE PIPES IN ONE SLEEVE MINIMUM, 3" OR LARGER SO PIPES MOVE FREELY IN BOTH DIRECTIONS.

# BALL VALVE

PLASTIC, 2-PIECE BALL PORT  
NTS

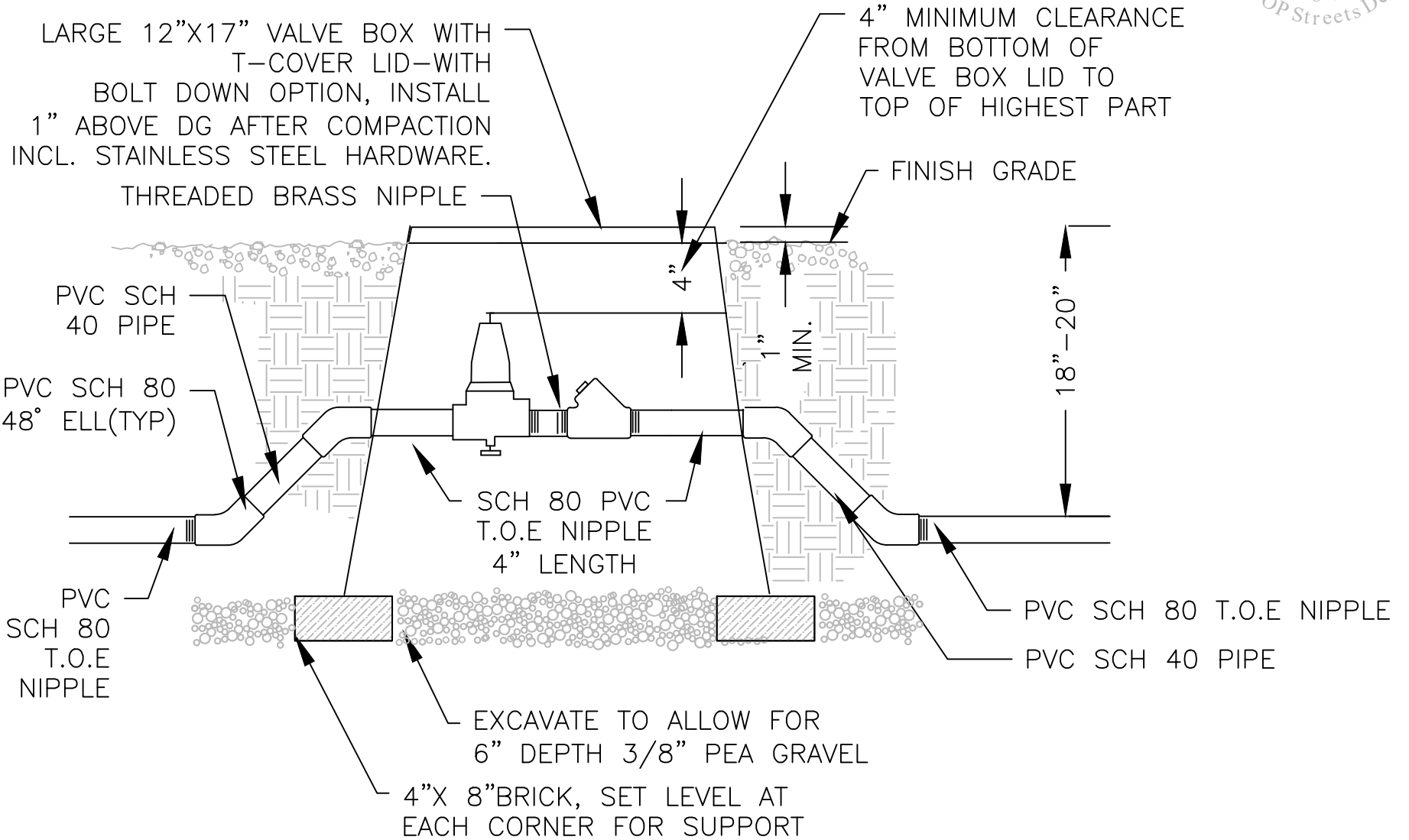


## NOTES:

1. COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS UNDISTURBED ADJACENT SOIL.
2. VALVE BOX SHALL BE SET LEVEL AND PARALLEL TO GRADE.
3. HARDWARE SHALL BE STAINLESS STEEL BATS WITH STAINLESS STEEL WASHERS.

# PRESSURE REGULATOR AND WYE STRAINER

BRONZE (SIZE AS SPECIFIED IN LEGEND)  
NTS





# QUICK COUPLER ASSEMBLY QC

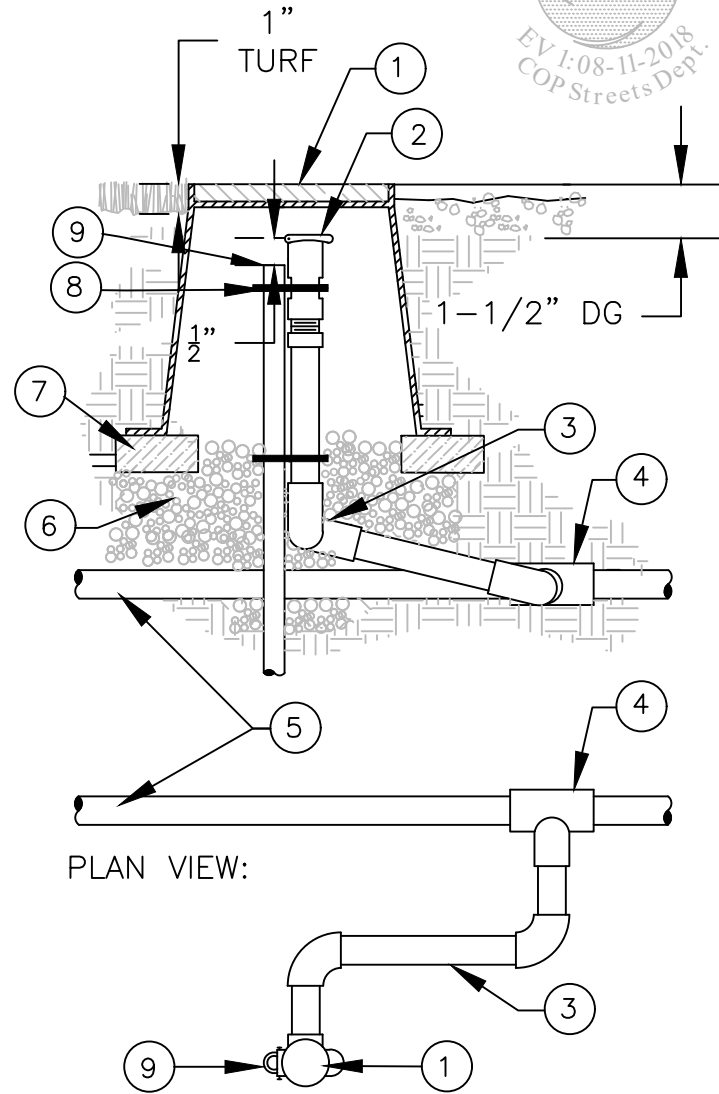
MAINLINES 2 1/2" AND SMALLER  
NTS



1. 10" ROUND VALVE BOX W/T-STYLE, LOCKING BOLT COVER O.A.E. SET TOP OF VALVE BOX, 1" ABOVE TURF or 1-1/2" ABOVE DG AFTER COMPACTION.
2. BRASS QUICK COUPLER VALVE WITH LOCKING RUBBER COVER
3. UNITIZED SWING JOINT W/STABILIZED BRASS NIPPLE
4. PVC SCH 40 SLIP TEE
5. PVC SCH 40 MAINLINE PIPE
6. 6" LAYER PEA GRAVEL. (MIN 1 C.F.) EXTEND BEYOND BOX EDGES 4"x8" STANDARD BRICK
7. 1/2" WIDE STAINLESS STEEL STRAP (2)
8. #4 MIN. REBAR 36" LONG

NOTE:

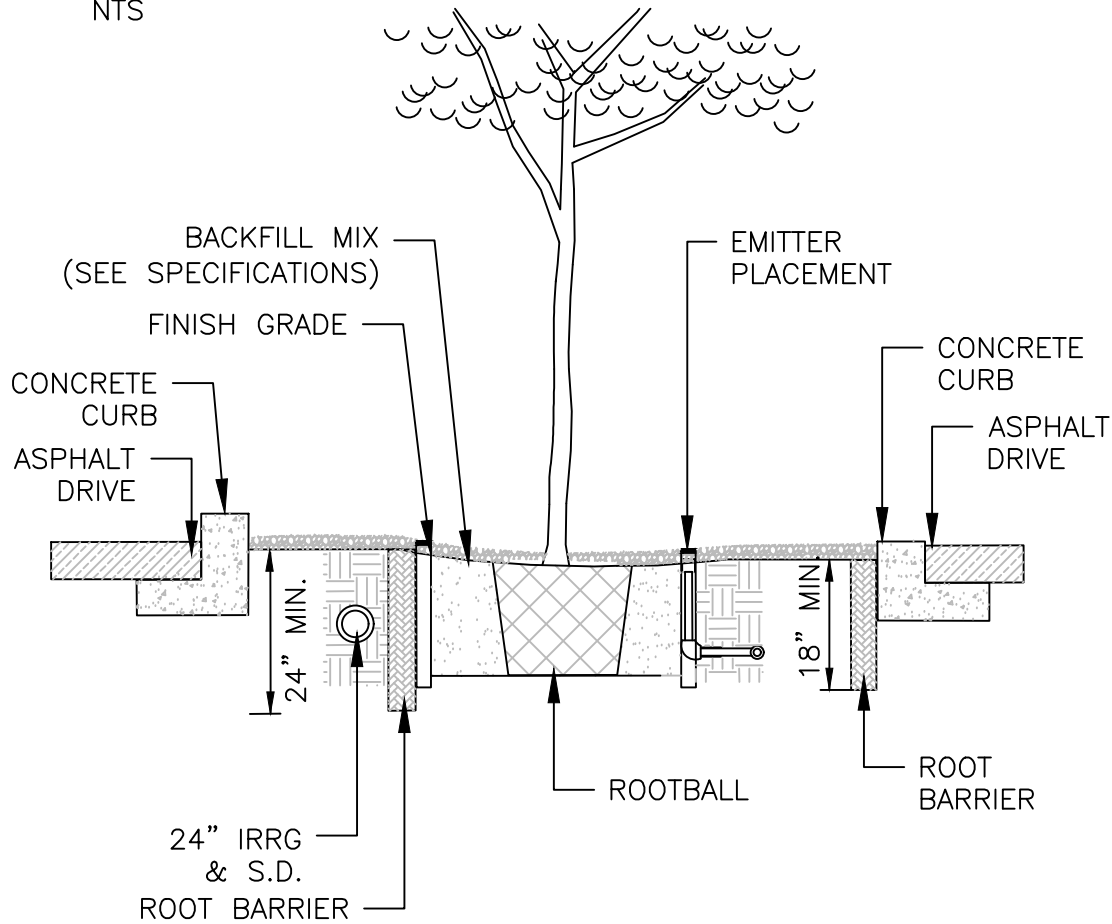
1. 3/4"-2.5" PVC SCH. 40 MAINLINE SOLVENT WELD-INSTALLED 18-20" DEEP
2. SET PIPES PARALLEL IN TRENCH WITH 2" SPACE BETWEEN THEM.





# ROOT BARRIER

NTS



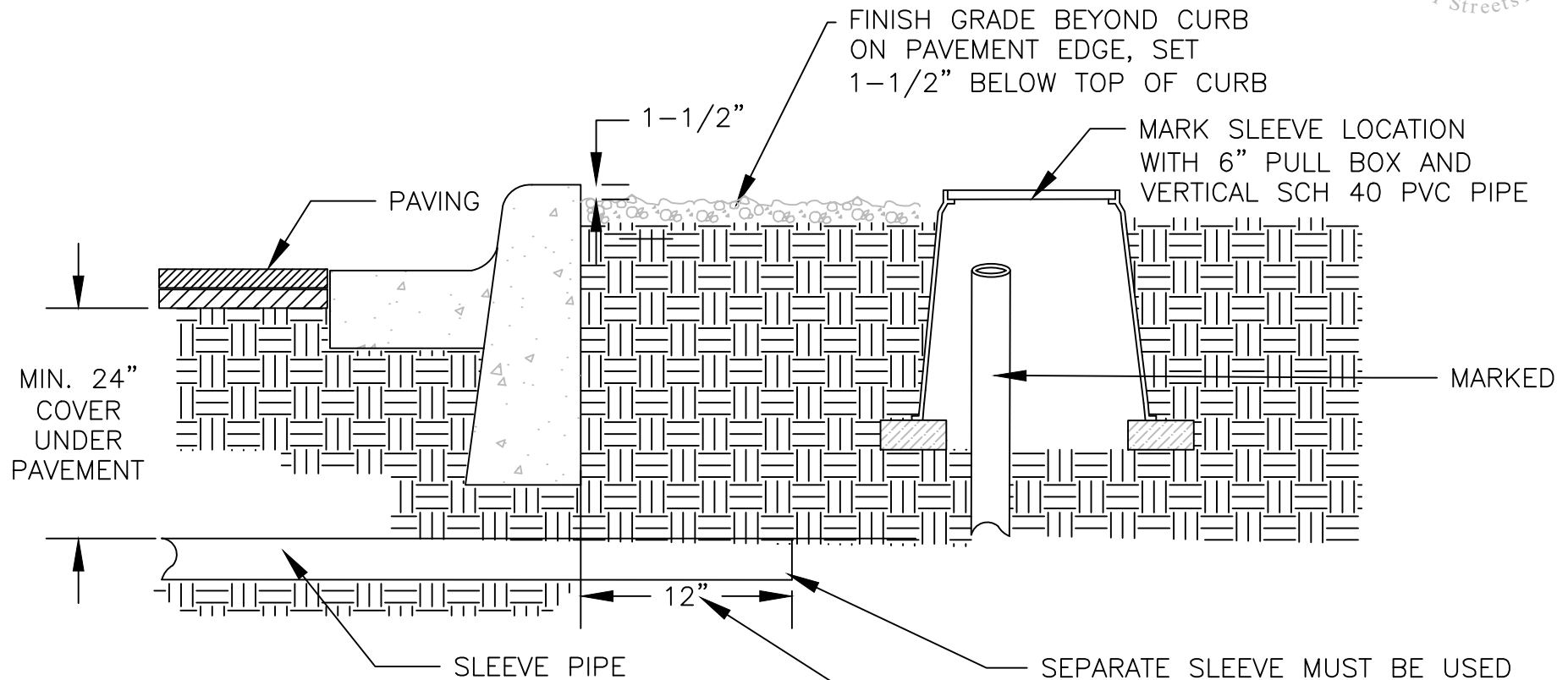
## NOTES:

1. TOP OF ROOT CONTROL BARRIER MUST BE AT GRADE
2. POSITION OF ROOT CONTROL BARRIER SHALL BE ADJACENT TO CURBS
3. RAISED ROOT DEFLECTORS MUST BE FACING PLANTED AREA
4. PROVIDE A MINIMUM LENGTH 12 FEET OF ROOT BARRIER PER TREE. CENTER ON TREE TRUNK.
5. PROVIDE 6 CONTINUOUS FEET PER SIDE OF TREE.
6. ROOT BARRIER SHALL BE A MINIMUM OF 24 INCHES BELOW GRADE ON CURBSIDE.
7. LOCATION OF H<sub>2</sub>O LINE ON SOUTH SIDE OF ROOT BARRIER BETWEEN ROOTBALL AND WIRE





# IRRIGATION SLEEVE UNDER PAVEMENT

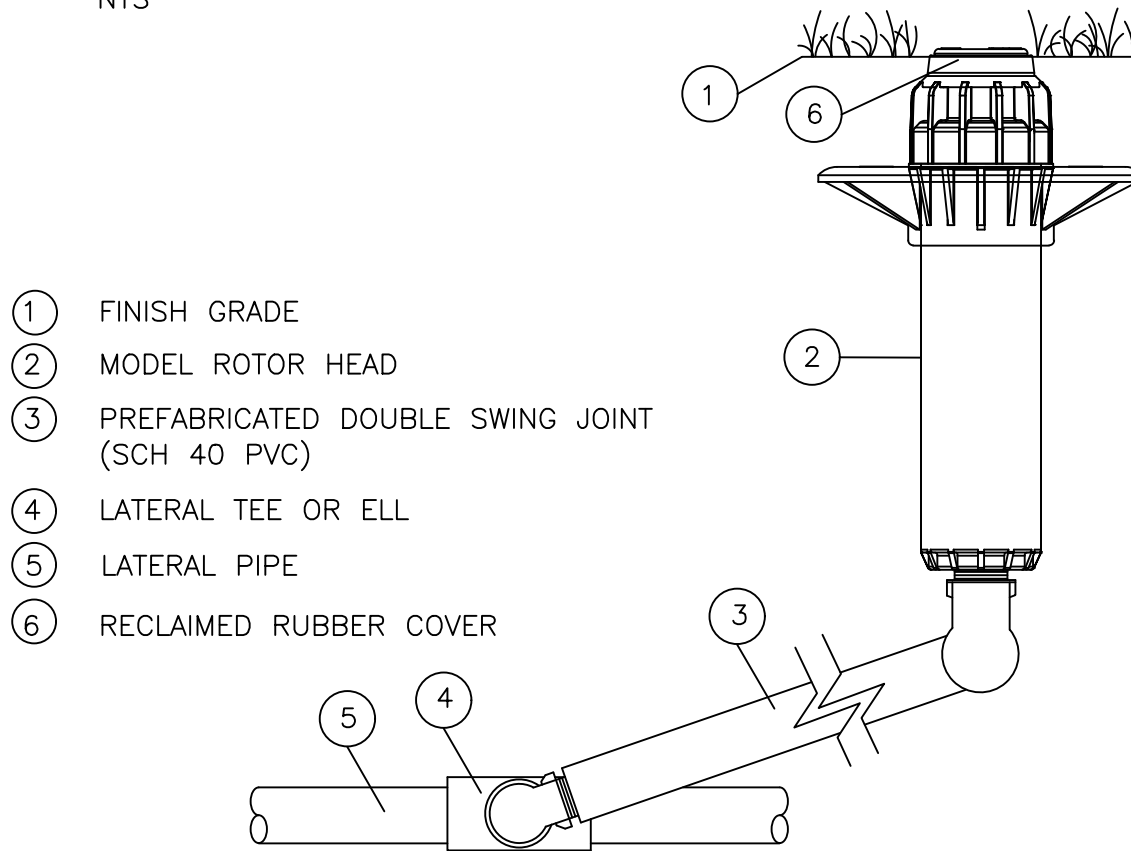


NOTE:  
ALTERNATIVE METHODS FOR MARKING SLEEVE LOCATIONS:  
1. STAMP BACK OF CURB WITH AN 'S' FOR NEW CONCRETE  
2. RETROFIT WILL REQUIRE 'S' TO BE ETCHED BACK OF CURB

SEPARATE SLEEVE MUST BE USED FOR WIRING.  
EXTEND SLEEVE 12\" BEYOND CURB EDGE

# SMALL SPRINKLER ROTOR

NTS



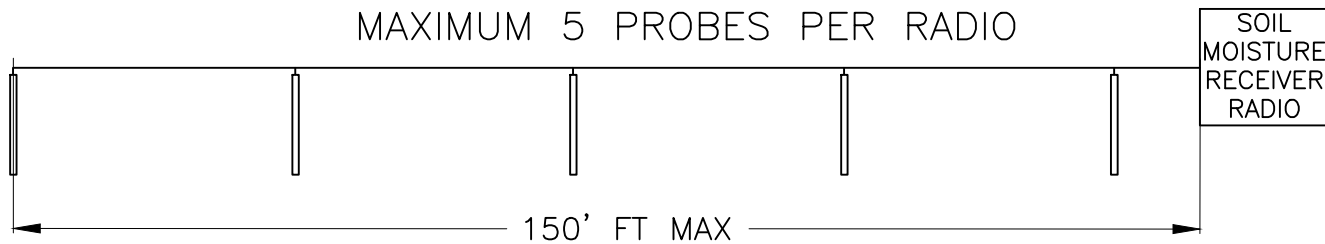
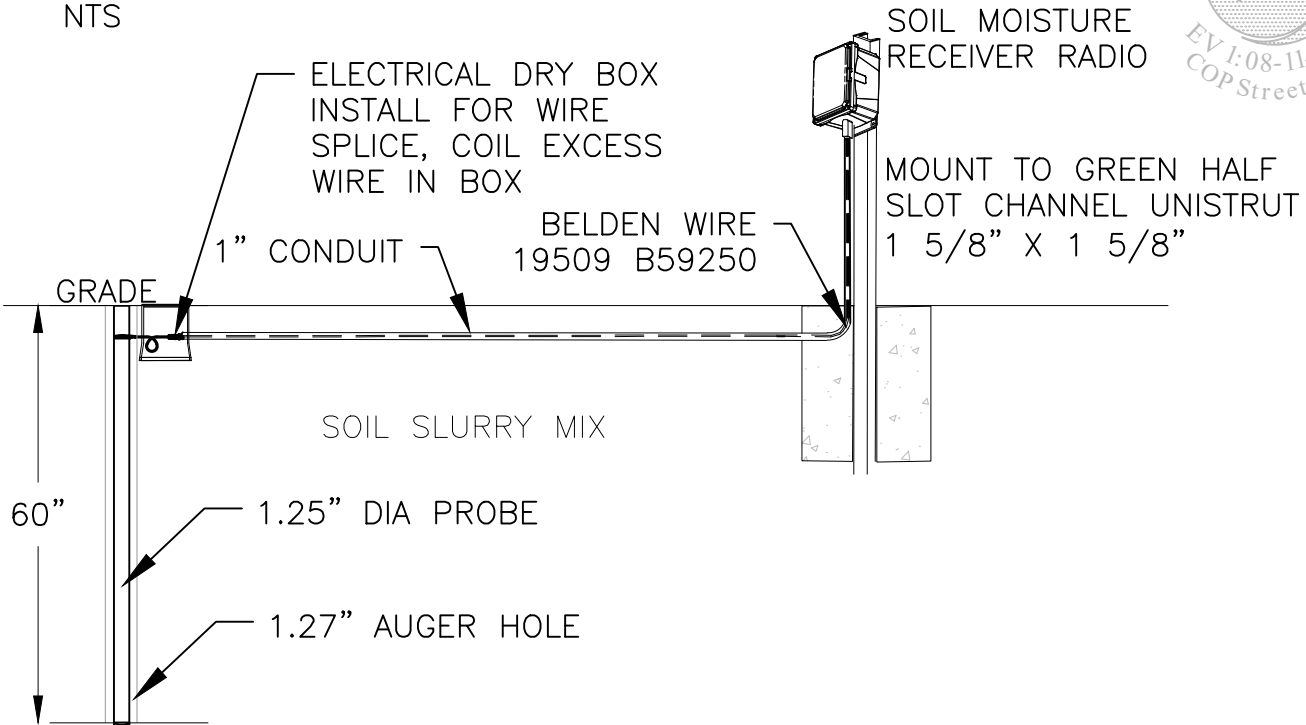
- ① FINISH GRADE
- ② MODEL ROTOR HEAD
- ③ PREFABRICATED DOUBLE SWING JOINT (SCH 40 PVC)
- ④ LATERAL TEE OR ELL
- ⑤ LATERAL PIPE
- ⑥ RECLAIMED RUBBER COVER

NOTE:  
SCH 40 PVC SOLVENT WELD—INSTALLED 12–14” DEPTH. PARALLEL PIPES SHOULD HAVE MIN. 1” HORIZONTAL SPREAD)

(TORO S700C, HUNTER IS-20&IS-25 STAINLESS STEEL)

# SOIL MOISTURE PROBE

NTS

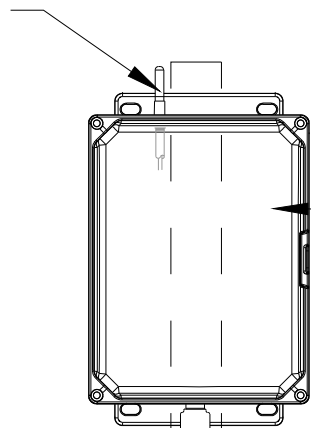


# SOIL MOISTURE RECEIVER RADIO

NTS

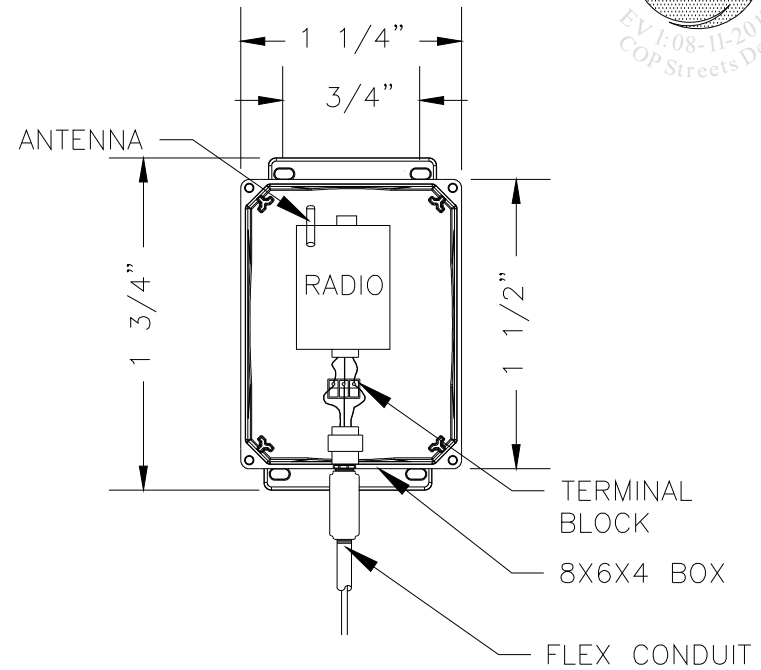
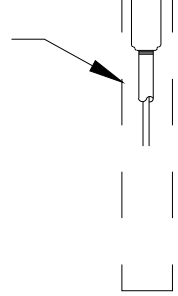


OPTIONAL  
EXTERNAL  
ANTENNA



COVER

MOUNT TO GREEN HALF  
SLOT CHANNEL UNISTRUT  
1 5/8" X 1 5/8"



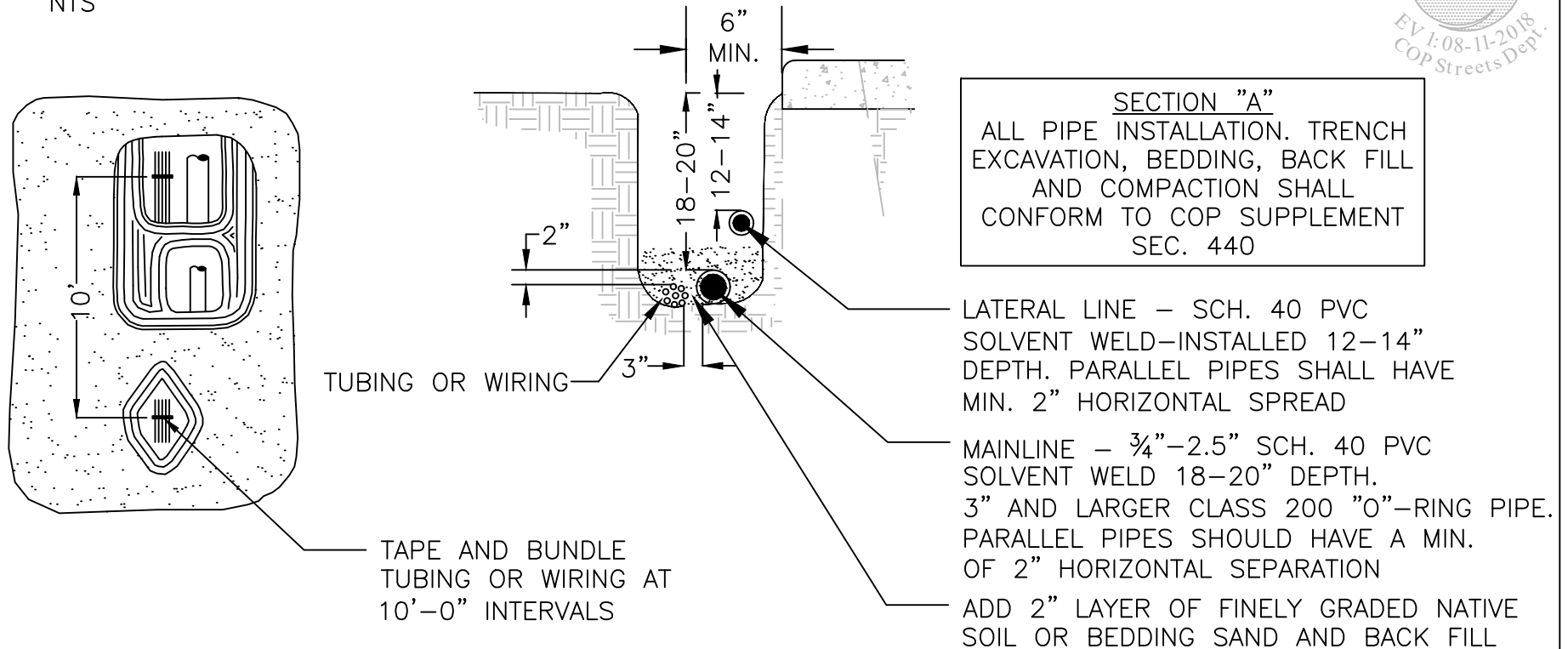
IN ENCLOSURE





# TRENCHING DETAIL

NTS



## NOTES:

1. TOP OF WIRE BUNDLE SHOULD BE 2" BELOW TOP OF PIPE.
2. HORIZONTAL DISTANCE BETWEEN ALL PIPE MIN. 2"
3. ALL PIPING 3" AND LARGER SHALL HAVE 24"-26" OF COVER

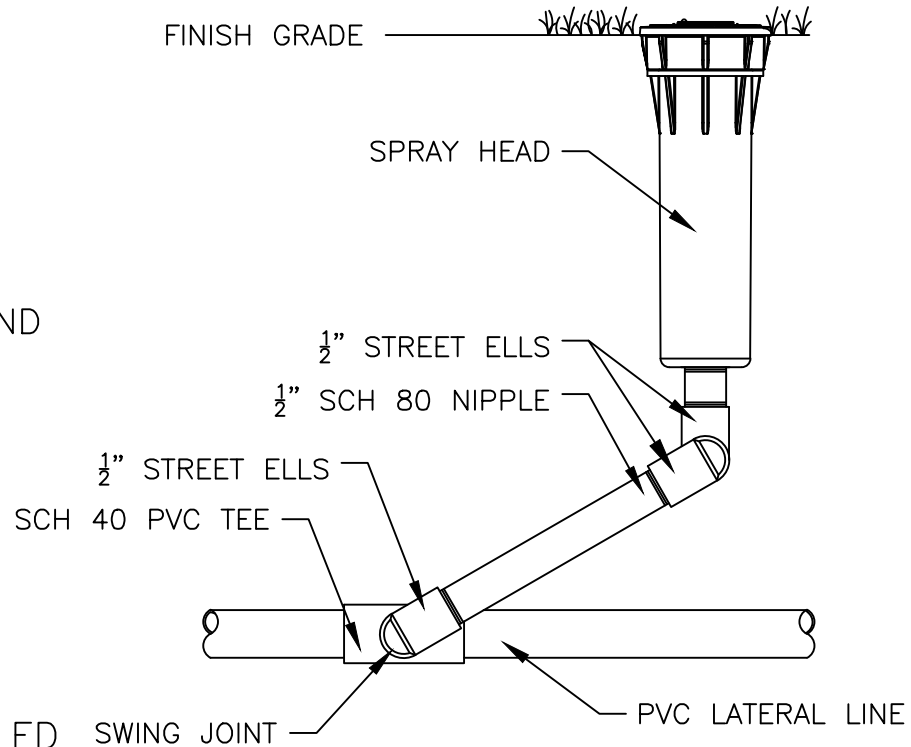
# TURF SPRAY

NTS



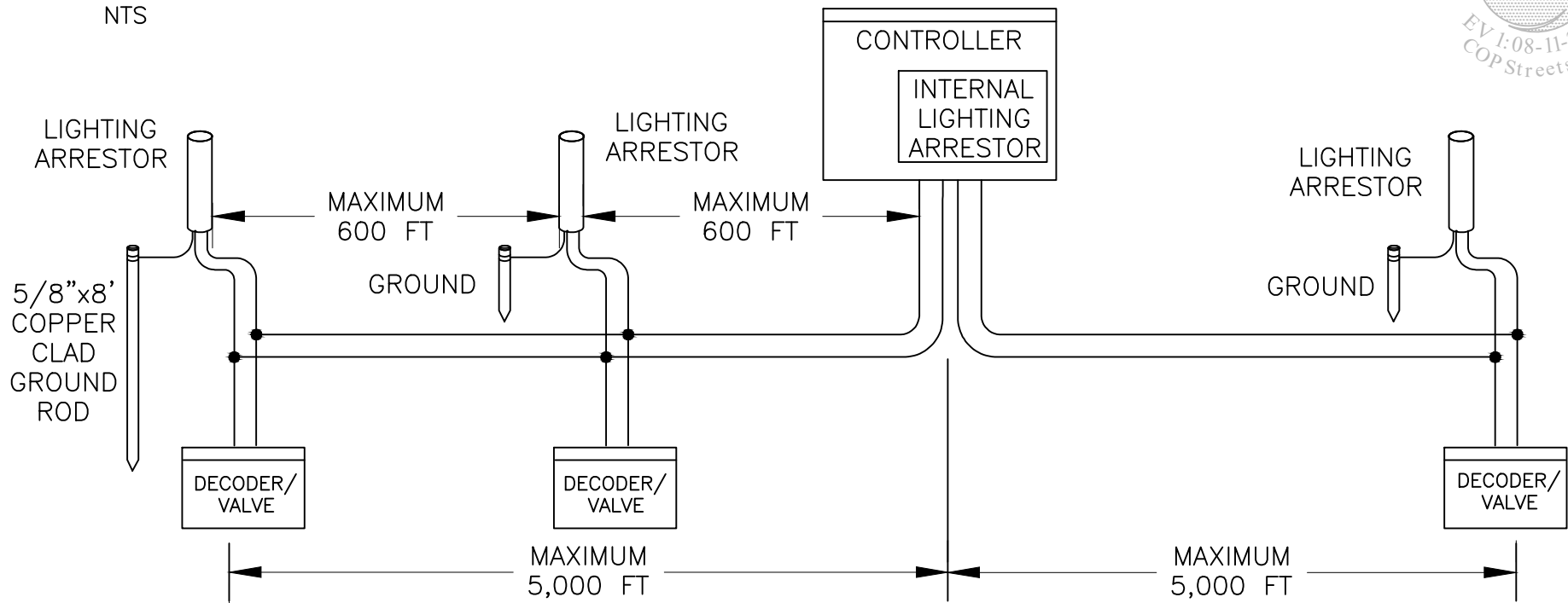
## NOTES:

1. TURF SPRAY  
W/ PRESSURE  
REGULATION AND  
CHECK VALVE  
(ALL NOZZLES  
SHOULD BE  
FIXED, USE  
ADJUSTABLE  
ONLY WHEN  
NECESSARY)
2. SCH. 40 PVC  
SOLVENT  
WELD-INSTALLED  
12-14" DEPTH.  
SWING JOINT
3. PARALLEL PIPES SHOULD HAVE MIN. 2" HORIZONTAL SPREAD



# TWO-WIRE STRAIGHT CONFIGURATION

NTS

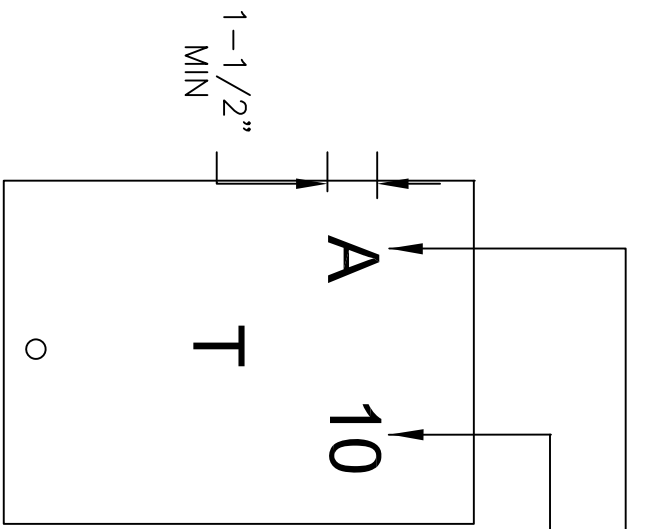


## NOTES:

1. NO MORE THAN ONE DECODER PER VALVE.
2. EACH DECODER HAS A UNIQUE ADDRESS.
3. DECODERS WILL AUTOMATICALLY SHUT-OFF IF CONNECTION IS LOST WITH THE INTERFACE MODULE.
4. AN OPEN CIRCUIT OR SHORT WILL SHUT OFF THE VALVE.
5. ELECTRICAL CONNECTION REQUIREMENTS: WATER TIGHT CONNECTORS.

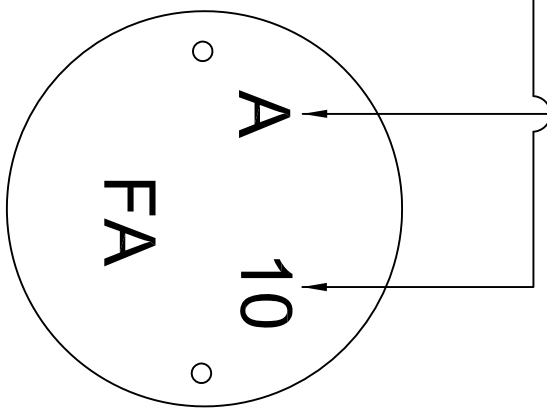
| STRAIGHT LINE CONFIGURATION         |                   |
|-------------------------------------|-------------------|
| WIRE GAUGE                          | TOTAL WIRE LENGTH |
| TW-CAB-14                           | 5,000'            |
| MAX 600' BETWEEN LIGHTING ARRESTORS |                   |

# VALVE BOX MARKING



CONTROL VALVE LID  
 LETTER INDICATING TYPE OF  
 PLANT MATERIAL BEING  
 IRRIGATED BY VALVE:  
 "T" – TREE  
 "S" – SHRUB  
 "F" – FLUSH VALVE  
 "W" – WIRE SPLICE

CONTROLLER  
 STATION NO.



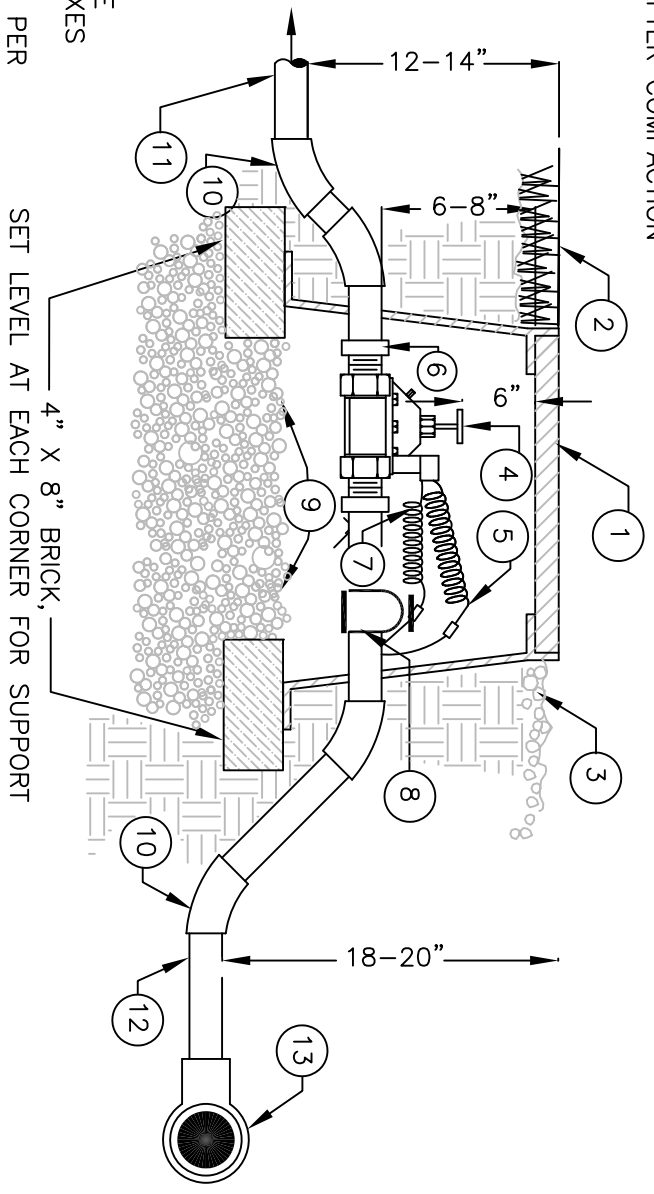
FLUSH ASSEMBLY

# REMOTE CONTROL VALVE



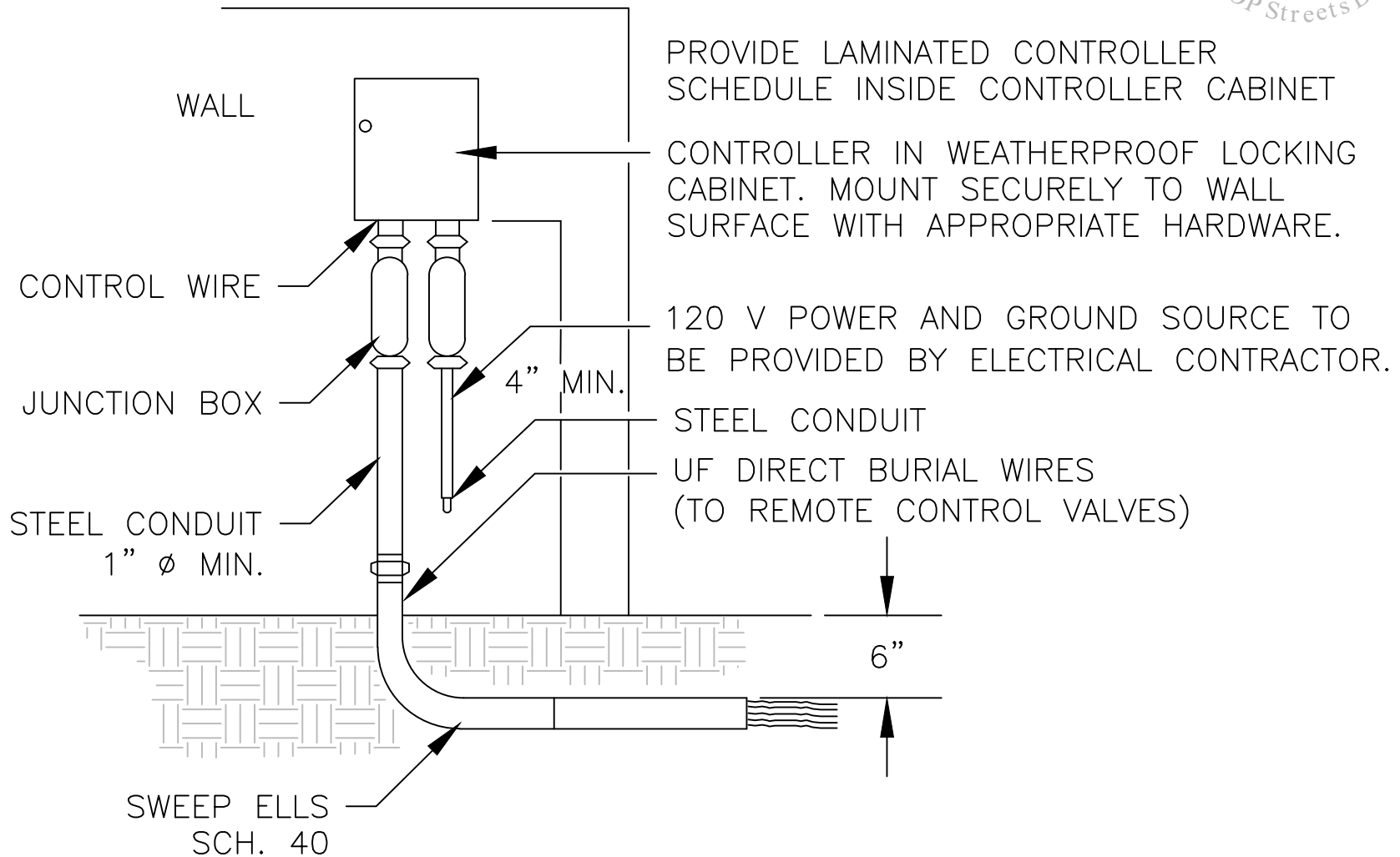
MAINLINES 2 1/2" AND SMALLER  
N.T.S.

1. LARGE VALVE BOX WITH LOCKING COVER
  2. FOR TURF SET BOX 1-1/2" ABOVE FINISH GRADE AFTER COMPACTION
  3. FOR D.G. SET BOX 1" ABOVE FINISH GRADE AFTER COMPACTION
  4. REMOTE CONTROL VALVE
  5. NO. 14 CONTROL WIRE (ORANGE)
  6. PVC SCH 80 EXTRUDED T.O.E NIPPLE
  7. BRASS OR PLASTIC PER VALVE MATERIAL (4" LENGTH BEFORE AND AFTER VALVE)
  8. NO. 12 COMMON WIRE TO OTHER VALVES ON SAME CONTROLLER (WHITE)
  9. LINE SIZE BRASS SHUT OFF VALVE
  10. 6" LAYER 3/8" PEA GRAVEL, MIN 1 CU. FT MATERIAL EXTENDED BEYOND BOX FOR SUPPORT
  11. PVC SCH. 80 - 45° ELL
  12. LATERAL LINE TO IRRIGATION SYSTEM
  13. PVC SCH 80 MAINLINE FITTING
- NOTES:  
 1. PLACE VALVE BOX ON BRICK SUPPORTS  
 2. JUMBO VALVE BOX MAY BE USED TO COMBINE EQUIPMENT IN LIEU OF TWO LARGE VALVE BOXES  
 3. CHRISTY TAG TO BE ATTACHED TO VALVE  
 4. PROVIDE STATION NUMBER ON VALVE BOX LID PER DIAGRAM



# WALL MOUNT CONTROLLER

NTS



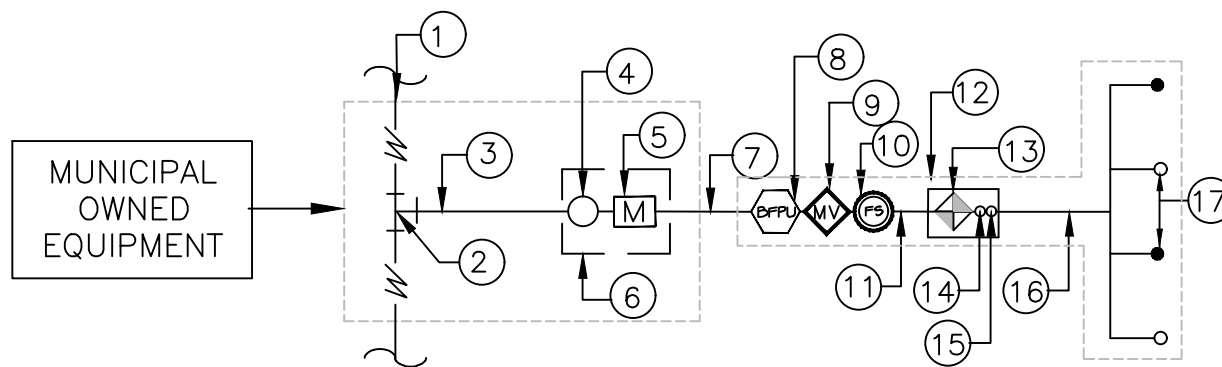
NOTE:

ALL WIRING TO BE INSTALLED AS PER LOCAL CODE: SEE MANUAL FOR MOUNTING INSTRUCTIONS

# WATER SYSTEM SCHEMATIC

NTS

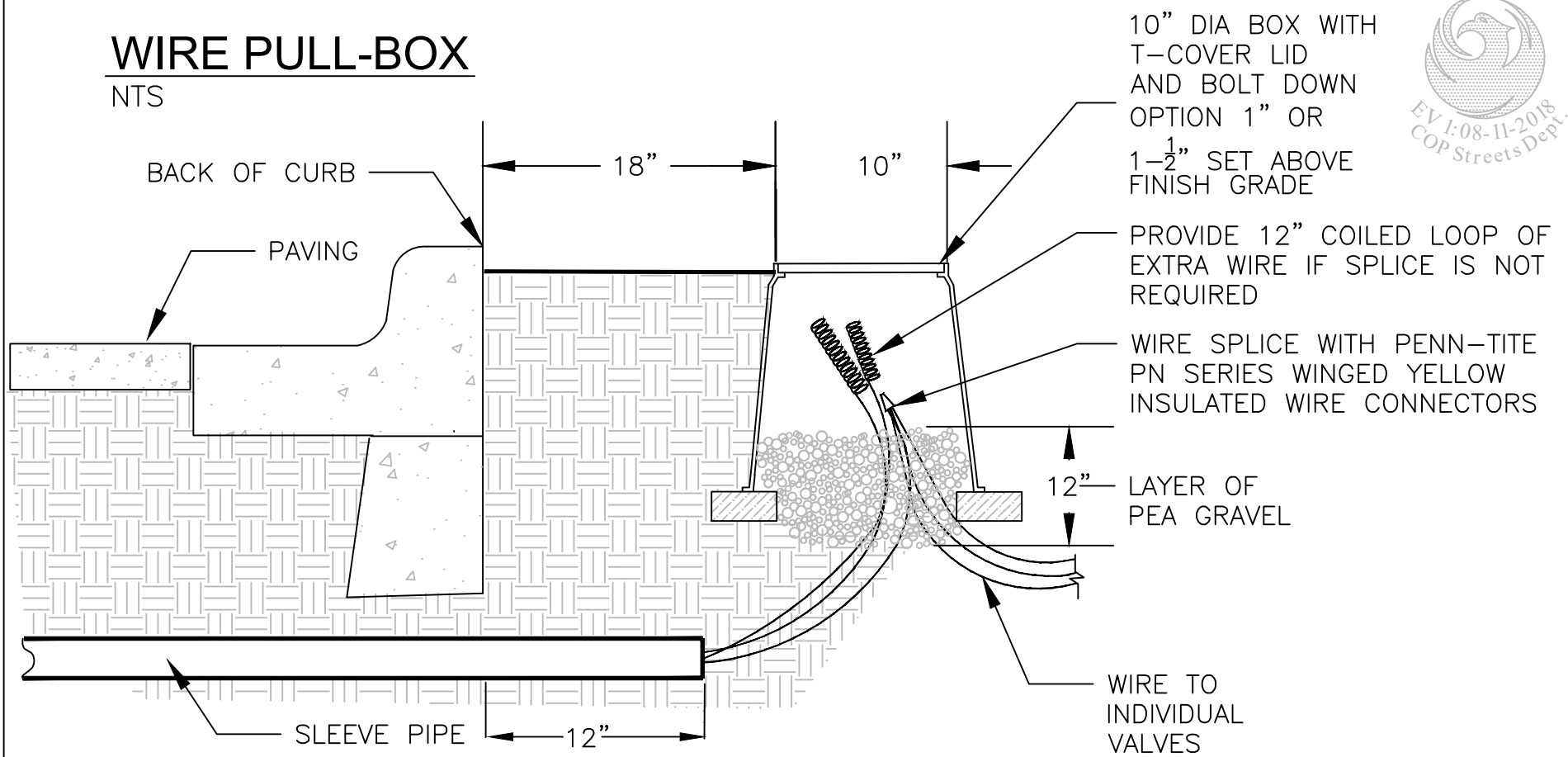
1. WATER SUPPLY LINE
2. WATER TAP
3. WATER MAIN
4. CURB STOP
5. WATER METER
6. CONCRETE WATER METER VAULT PER MAG SPECIFICATIONS TYPE "K" COPPER
7. PIPE TO BACKFLOW PREVENTION UNIT (B.F.P.U.)
8. BACKFLOW PREVENTION UNIT
9. MASTER VALVE
10. FLOW SENSOR
11. PVC MAINLINE PIPE
12. VALVE BOX PER SPECIFICATIONS
13. REMOTE CONTROL VALVE
14. PRESSURE REGULATOR
15. WYE STRAINER
16. PVC LATERAL
17. SPRINKLER, BUBBLER OR EMITTER OUTLET PER PLAN





# WIRE PULL-BOX

NTS



## NOTES:

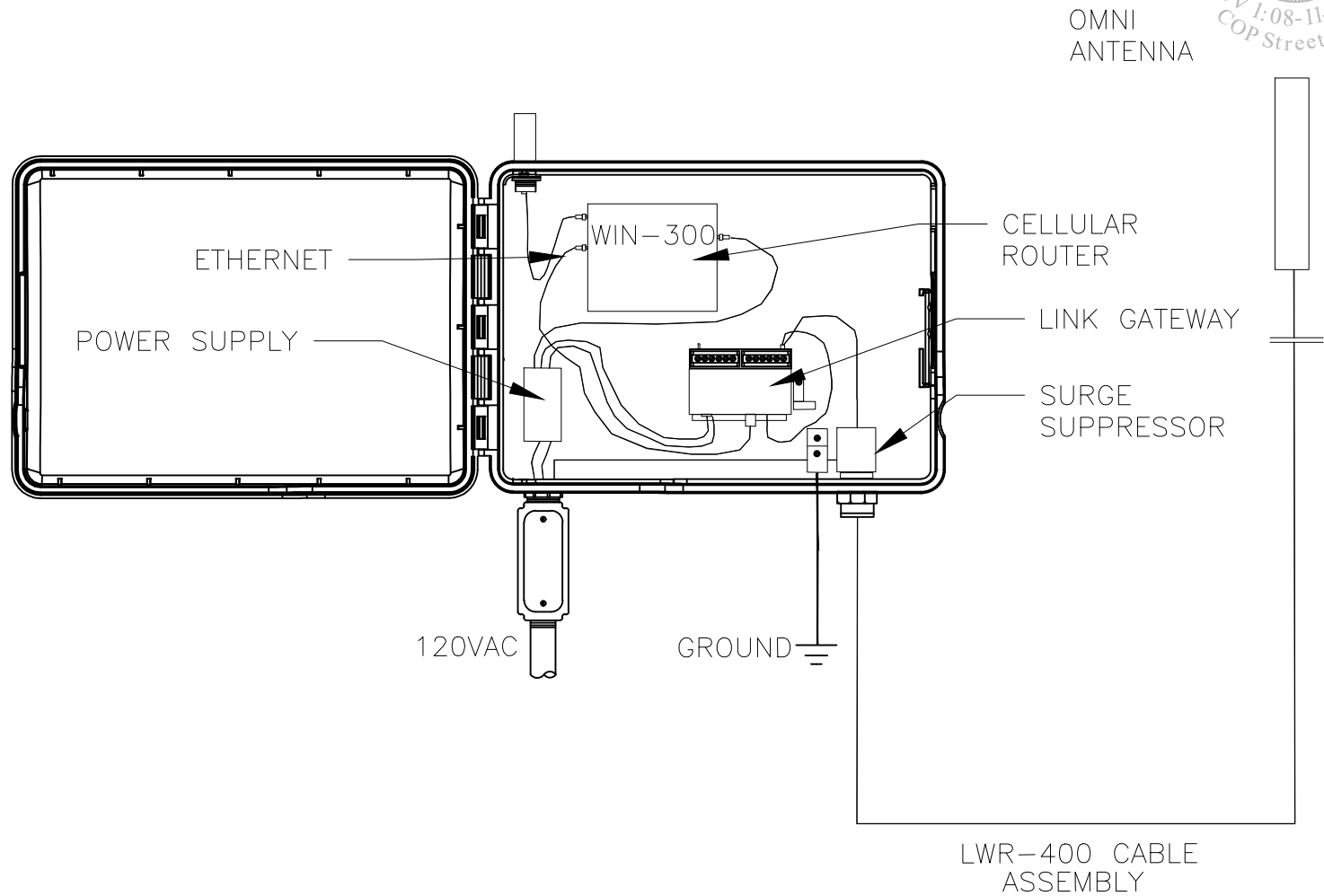
1. IF A SPLICE IS NOT NEEDED AT BOX LOCATION, CONTRACTOR SHALL PROVIDE A 12" COILED LOOP OF EXTRA WIRE IN BOX FOR FUTURE USE.

## ALTERNATIVE METHODS FOR MARKING SLEEVE LOCATION:

1. STAMP BACK OF CURB WITH AN 'S' FOR NEW CONCRETE
2. RETROFIT PROJECT WILL REQUIRE 'S' TO BE ETCHED BACK OF CURB

# WIRELESS GATEWAY ASSEMBLY

NTS

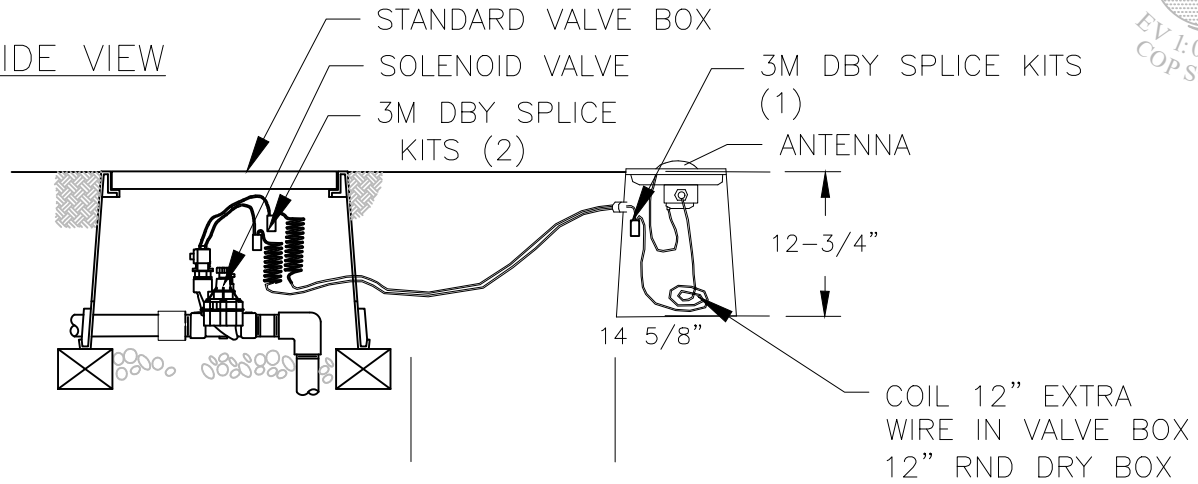


# WIRELESS VALVE ASSEMBLY

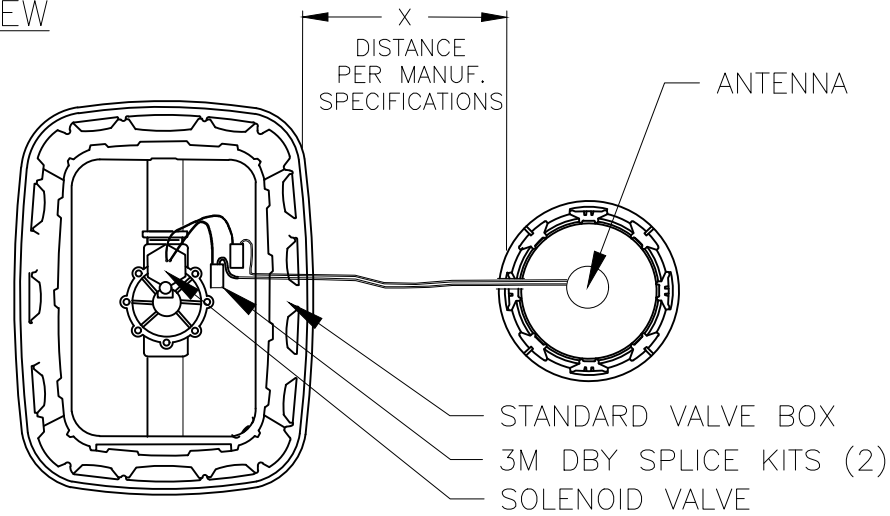
NTS



SIDE VIEW

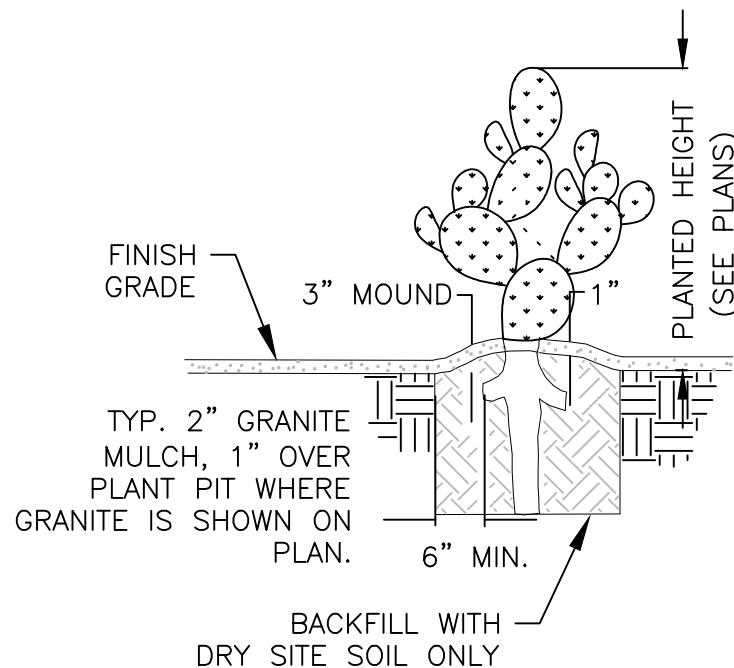


TOP VIEW



# CACTUS PLANTING

NTS



1. ROOT PRUNE ALL SHREDDED OR DAMAGED ROOTS.
2. ENSURE ALL WOUNDS TO THE ROOT SYSTEM ARE CLEAN CUT BEFORE PLANTING. APPLY DUSTING SULFUR TO ALL AREAS BELOW GRADE.
3. PLANT PIT SHALL BE 3 TIMES THE DIAMETER OF ROOTS AND NO DEEPER THAN THE EXTENSION OF THE ROOTS  
BACKFILL PIT WITH 6" LAYERS OF RODDED, COMPACTED 1/3 GOLF SAND AND 2/3 DRY SITE SOIL MIX.
4. USE 3"-4" ROCKS/RIP RAP TO ANCHOR ROOTS.
5. PLANTING DEPTH SHALL BE THE DEPTH AT WHICH PLANT WAS GROWN OR DEEPER BUT THE TAPERING OF THE ROOT COLLAR MUST BE VISIBLE.
6. ENSURE SURFACE WATER CAN NOT STAND AGAINST THE ROOT COLLAR. SLOPE GRADE AWAY FROM BASE OF CACTUS.
7. ALL CACTUS PLACEMENT SHALL MATCH ORIGINAL ORIENTATION W/ORIGINAL NORTH SIDE FACING NORTH.
8. DO NOT WATER FOR THREE WEEKS FOLLOWING PLANTING.
9. WATER WEEKLY THROUGHOUT THE SUMMER. MAINTAIN ORIGINAL GROWING ORIENTATION.

# CONCRETE HEADER

NTS

TOP OF HEADER 1-1/2"  
ABOVE FINISH GRADE

TURF

12"

6"

MAG CLASS "B"  
CONCRETE W/ SMOOTH  
TROWEL FINISH, CONTRACTION  
JOINTS 10' O.C.  
EXPANSION JOINTS 30' O.C.

1/2" RADIUS  
BOTH SIDES

1/2"

D.G.

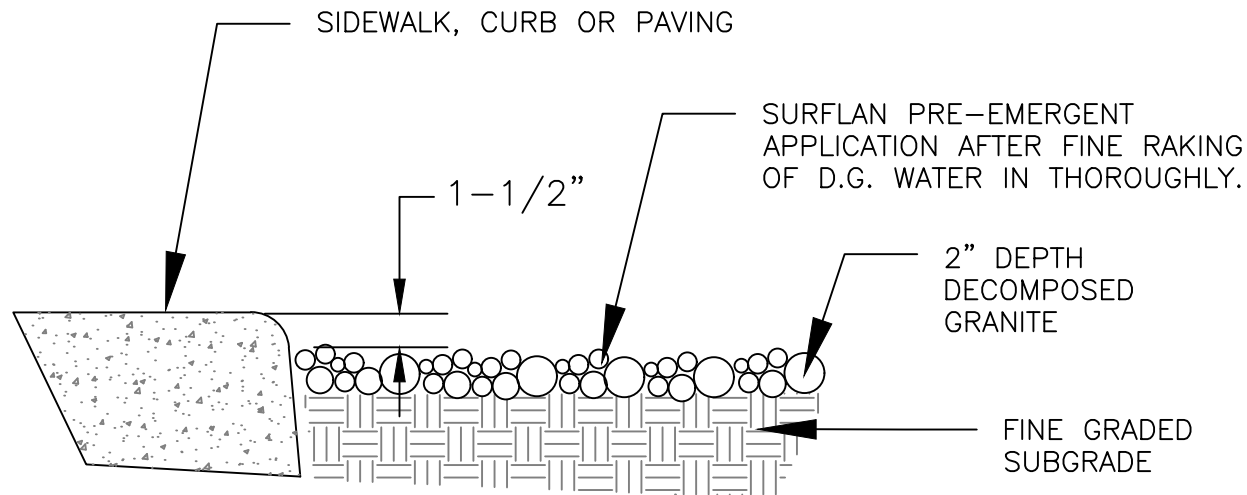
COMPACTED  
SUBGRADE

HEADER DIMENSIONS MODIFIED AS INDICATED BY PLANS



# DECOMPOSED GRANITE

NTS

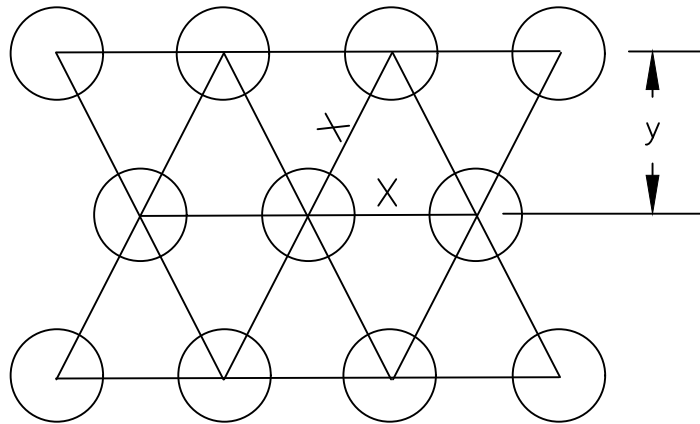


## NOTES:

1. DECOMPOSED GRANITE FINISH GRADE TO BE RAKED SMOOTH. DG FINISH GRADE SHALL BE 1-1/2" BELOW ALL ADJACENT PAVING/CURBS.
2. SUBMIT CERTIFIED PESTICIDE APPLICATOR'S LICENSE PRIOR TO CONSTRUCTION. SUBMIT PRODUCT LABEL FOR APPROVAL.
3. APPLY PRE-EMERGENT HERBICIDE PER MANUFACTURER INSTRUCTIONS. TWO (2) APPLICATIONS ARE REQUIRED. ONE BEFORE PLACEMENT OF D.G. (AFTER SUBGRADE HAS BEEN APPROVED) AND ONE AFTER SPREADING D.G.. CERTIFIED PESTICIDE APPLICATOR SHALL CONDUCT APPLICATION. LICENSE AND NOTIFICATION OF APPLICATION SHALL BE PROVIDED MIN. 48 HOURS IN ADVANCE OF APPLICATION. WATER IN EACH APPLICATION PER MANUFACTURER'S INSTRUCTIONS.
4. D.G. SIZE/STYLE AS SPECIFIED ON PLANT LEGEND.

# GROUNDCOVERS

NTS

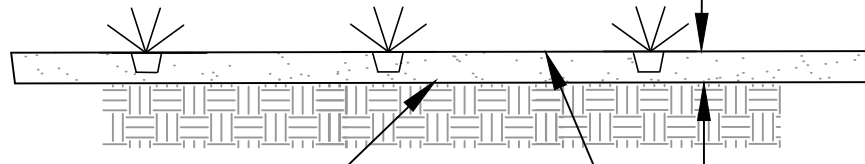


ALL GROUNDCOVERS TO BE PLANTED ON CENTER (SEE PLANT LEGEND) IN A TRIANGULAR PATTERN.

X = O.C. DIMENSION AS NOTED ON PLAN

Y = 0.86 OF DIMENSION "X"

PREPARE SOIL PER SPECIFICATIONS AND ROTOTILL TO A DEPTH OF 6" PRIOR TO ANY SPRINKLER WORK.

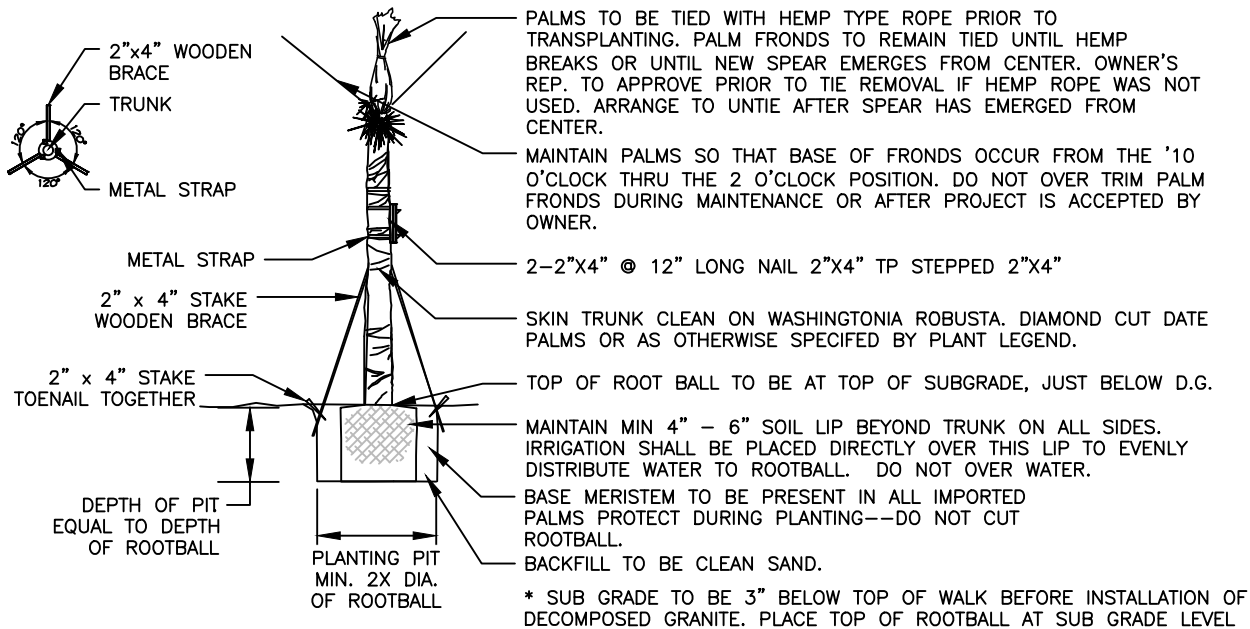


BACKFILL WITH NATIVE SOIL.  
APPLY FERTILIZER TO SURFACE AWAY FROM TRUNK PER SPECIFICATIONS.

MULCH SOIL TO A DEPTH OF 2", 1' IN DIAMETER. KEEP MULCH 2" AWAY FROM PLANT BASE.

## PALM TREE PLANTING

NTS



### NOTES:

#### TRANSPORTING AND SETTING:

1. 4" MIN WIDTH NYLON STRAPS TO BE USED FOR TRANSPORTING, MOVING AND SETTING PALMS. IF IMPROPER STRAPS ARE USED, CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE TREE IF SCARRING ON TRUNK OCCURS.
2. PLACE STRAPS AT MINIMUM TWO POINTS ALONG TRUNK TO EVENLY SUPPORT WEIGHT AND PREVENT TRUNK FROM BENDING OR BOWING DURING SETTING AND TRANSPORT IF TRUNKS ARE DEFORMED DUE TO IMBALANCED SUPPORT, CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE TREES.
3. PALMS SHALL BE GENTLY SET INTO PLANTING PIT AND NOT BE DROPPED AT ANY TIME DURING THE TRANSPORTING AND SETTING PROCESS. IF PALMS ARE DROPPED THEY WILL BE REJECTED AND REPLACED BY CONTRACTOR.

#### PLANTING:

1. IF MATCHED TRUNK HEIGHTS ARE NEEDED, PURCHASE MATCHING TRUNK HEIGHTS. DO NOT OVER BURY PALMS TO ACHIEVE MATCHING TRUNK HEIGHTS.
2. PROTECT APICAL AND BASE MERISTEM THROUGHOUT TRANSPORTING AND PLANTING PROCESS.
3. DO NOT BURY AERIAL ROOT ZONE.

#### IRRIGATION:

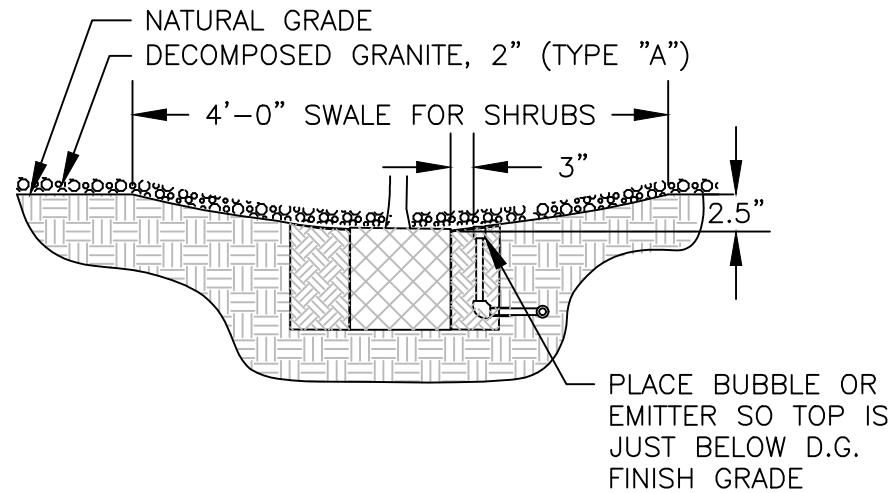
1. PLACE IRRIGATION DIRECTLY OVER ROOT BALL SOIL, EVENLY SPACE AROUND BASE.
2. WATER SO THAT 80% OF FIELD CAPACITY IS MAINTAINED. ADJUST FOR SOIL TYPE.
3. ADJUST WATERING FOR SEASONAL NEEDS.
4. DO NOT USE VERTICAL PVC AND PEA GRAVEL.





# SHRUB PLANTING

NTS



## NOTES:

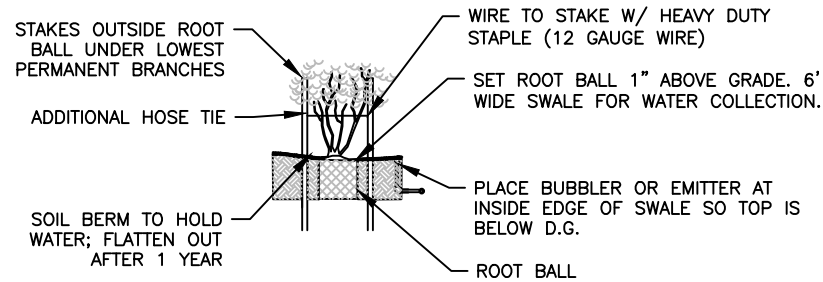
1. PLANT PITS SHALL NOT BE AUGER DUG. SIDES OF PIT SHALL BE RAKED TO LOOSEN PRIOR TO SETTING TREE IN PITS.
2. GENTLY LOOSEN ROOTS AROUND EXTERIOR OF ROOTBALL.
3. DO NOT PLANT ROOT BOUND PLANTS. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY TO VERIFY CONDITION OF PLANT IF ANY QUESTION.
4. REMOVE ENTIRE CONTAINER FROM ALL PLANTS PRIOR TO PLANTING.
5. DO NOT PRUNE NEW PLANTS WITHOUT LANDSCAPE ARCHITECT APPROVAL/DIRECTION.

PLANTING PIT TO BE 3X THE WIDTH OF THE ROOT BALL. CENTER SHRUB IN PLANTING PIT. DO NOT OVER-EXCAVATE FOR DEPTH OF PLANTING PIT TO AVOID SETTLING.  
FERTILIZER: 16:20:0 AMMONIUM PHOSPHATE FOR NON DESERT PLANTS. MIX INTO BACKFILL. DO NOT SPREAD ON TOP OF SOIL.



## TREE PLANTING & STAKING

NTS MULTI TRUNK TREE PLANTING & STAKE DETAIL



### PLANTING NOTES:

1. SIDES OF PLANTING PITS ARE TO BE LOOSENED OR RAKED BEFORE SETTING TREE IN PIT.
2. EXCAVATE DEPTH OF PLANTING PIT TO THE SAME DEPTH AS THE ROOTBALL.
3. THE WIDTH OF THE PLANTING PIT SHALL BE 2 X THE WIDTH OF THE ROOTBALL GENTLY LOOSEN ROOTS AROUND EXTERIOR OF ROOTBALL. CENTER TREE IN PLANTING PIT.
4. INSPECT ROOT BALLS AT POINT OF PURCHASE TO AVOID PURCHASE OF ROOT BOUND MATERIALS. REMOVE ENTIRE CONTAINER FROM ALL PLANTS PRIOR TO PLANTING.
5. NEW TREES SHALL NOT BE PRUNED UNLESS DIRECTED BY OWNER. FORM SWALE AROUND EACH TREE AS SHOWN FOR WATER COLLECTION. REMOVE ALL NURSERY STAKES.

### STAKING NOTES:

1. USE 2- 2" DIA. LODGE POLE STAKES- DOUG FIR, OR APPROVED HARDWOOD.
2. DRIVE STAKE MIN 12" INTO FIRM UNDISTURBED SOIL BELOW THE EXCAVATED DEPTH.
3. PLACE STAKES OUTSIDE THE ROOTBALL.
4. HEIGHT OF STAKE MAY VARY DEPENDING ON NEED FOR SUPPORT.
5. PLACE THE TOP TIE FOR MAXIMUM SUPPORT. THE BOTTOM TIE SHOULD BE APPROXIMATELY 1/2 WAY BETWEEN THE TOP TIE AND GROUND.
6. ALWAYS PLACE STAKE TO PREVENT DAMAGE TO TREE AND CAMBIUM.

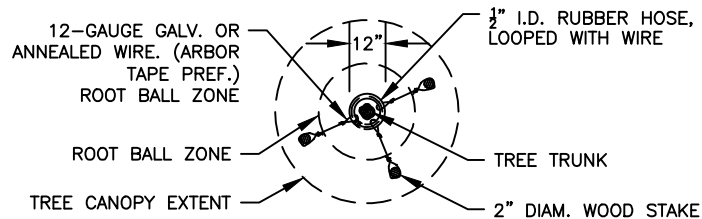
### MISC. NOTES:

1. REMOVE ALL PLASTIC TREE TIE TAPE, BAMBOO NURSERY STAKE, WIRE TIES, AND LABELS FROM TREES AFTER THEY HAVE BEEN APPROVED.
2. BACKFILL ANY HOLES LEFT IN ROOTBALL LEFT FROM NURSERY STAKES. BACKFILL SHALL BE CLEAN SOIL, NOT D.G.
3. SWALE SHALL BE A SMOOTH TRANSITION-NO ABRUPT GRADE CHANGES
4. SWALE SHALL BE WATER TESTED FOR WATER HOLDING CAPACITY PRIOR TO PLACING D.G.
5. PROVIDE ADDITIONAL WIRE HOSE TIE WHEN THE TREE IS NOT RIGIDLY SUPPORTED BY THE TWO REQUIRED SUPPORTS.
6. 2-3" MULCH TOP LAYER, NOT AROUND BASE. 1" D.G. TOP LAYER ALSO SUITABLE.

### BACKFILL NOTES:

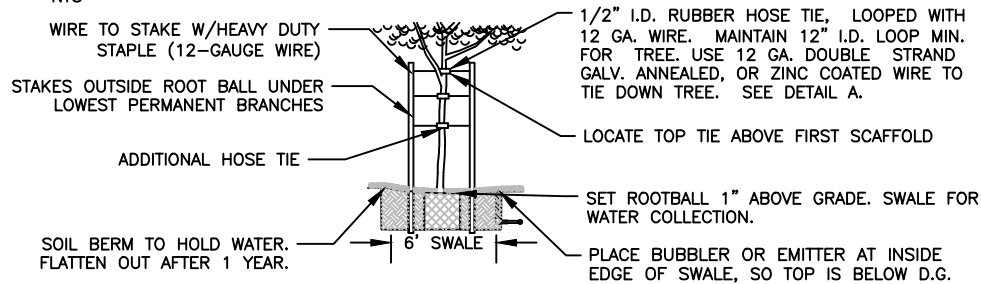
1. PROVIDE MULCH AMENDMENT WITH BACKFILL FOR NON-DESERT TREES.
2. BACKFILL MIX SHALL CONSIST OF 3 PARTS NATIVE SOIL TO 1 PART MULCH.
3. PROVIDE 1 CUP GYPSUM IN BOTTOM OF PLANTING PIT.
4. INCLUDE 16:20:0 AMMONIUM PHOSPHATE FERTILIZER IN PLANTING PIT FOR NON-DESERT TREES. MIX INTO BACKFILL. DO NOT SPREAD ON TOP OF SOIL.

### DETAIL A. WIRE & HOSE TIES

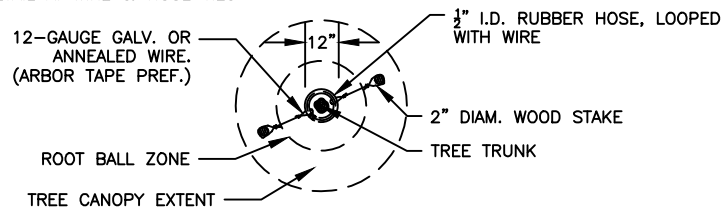


## SINGLE-TRUNK TREE PLANTING & STAKING

NTS



### DETAIL A. WIRE & HOSE TIES



### PLANTING NOTES:

1. SIDES OF PLANTING PITS ARE TO BE LOOSENEED OR RAKED BEFORE SETTING TREE IN PIT.
2. EXCAVATE DEPTH OF PLANTING PIT TO THE SAME DEPTH AS THE ROOTBALL.
3. THE WIDTH OF THE PLANTING PIT SHALL BE 2X THE WIDTH OF THE ROOTBALL
4. GENTLY LOOSEN ROOTS AROUND EXTERIOR OF ROOTBALL.
5. CENTER TREE IN PLANTING PIT.
6. INSPECT ROOT BALLS AT POINT OF PURCHASE TO AVOID PURCHASE OF ROOT BOUND MATERIALS
7. REMOVE ENTIRE CONTAINER FROM ALL PLANTS PRIOR TO PLANTING.
8. NEW TREES SHALL NOT BE PRUNED UNLESS DIRECTED BY OWNER.
9. FORM SWALE AROUND EACH TREE AS SHOWN FOR WATER COLLECTION.
10. REMOVE ALL NURSERY STAKES.

### BACKFILL NOTES:

1. PROVIDE MULCH AMENDMENT WITH BACKFILL FOR NON-DESERT TREES.
2. BACKFILL MIX SHALL CONSIST OF 3 PARTS NATIVE SOIL TO 1 PART MULCH. PROVIDE 1 CUP GYPSUM IN BOTTOM OF PLANTING PIT
3. INCLUDE 16:20:0 AMMONIUM PHOSPHATE FERTILIZER IN PLANTING PIT FOR NON DESERT TREES. MIX INTO BACKFILL. DO NOT SPREAD ON TOP OF SOIL.

### STAKING NOTES:

1. USE 2- 2" DIA. LODGE POLE STAKES- DOUGLAS FIR OR APPROVED HARDWOOD.
2. DRIVE STAKE MIN 12" INTO FIRM UNDISTURBED SOIL BELOW THE EXCAVATED DEPTH.
3. PLACE STAKES OUTSIDE THE ROOTBALL.
4. HEIGHT OF STAKE MAY VARY DEPENDING ON NEED FOR SUPPORT.
5. PLACE THE TOP TIE FOR MAXIMUM SUPPORT. THE BOTTOM TIE SHOULD BE APPROXIMATELY HALFWAY BETWEEN THE TOP TIE AND GROUND.
6. ALWAYS PLACE STAKE TO PREVENT DAMAGE TO TREE AND CAMBIUM.

### MISC. NOTES:

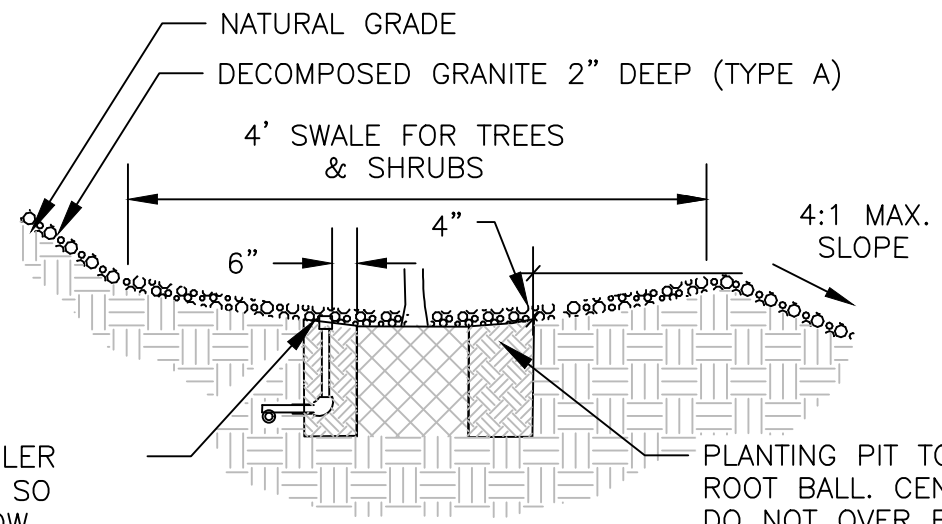
1. REMOVE ALL PLASTIC TREE TIE TAPE, BAMBOO NURSERY STAKE, WIRE TIES, AND LABELS FROM TREES AFTER THEY HAVE BEEN APPROVED.
2. BACKFILL ANY HOLES LEFT IN ROOTBALL LEFT FROM NURSERY STAKES. BACKFILL SHALL BE CLEAN SOIL, NOT D.G.
3. SWALE SHALL BE A SMOOTH TRANSITION-NO ABRUPT GRADE CHANGES.
4. SWALE SHALL BE WATER TESTED FOR WATER HOLDING CAPACITY PRIOR TO PLACING D.G.
5. PROVIDE ADDITIONAL WIRE HOSE TIE WHEN THE TREE IS NOT RIGIDLY SUPPORTED BY THE TWO REQUIRED SUPPORTS.
6. 2-3" MULCH TOP LAYER, NOT AROUND BASE. 1" D.G. TOP LAYER ALSO SUITABLE.





# PLANTING ON SLOPE

NTS



PLACE BUBBLER OR EMITTER SO TOP IS BELOW D.G. ON UPHILL SIDE OF SLOPE

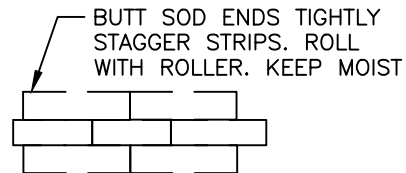
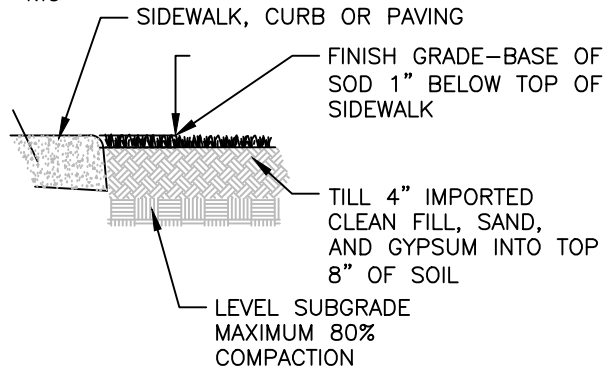
PLANTING PIT TO BE 3X THE WIDTH OF THE ROOT BALL. CENTER SHRUB IN PLANTING PIT. DO NOT OVER EXCAVATE FOR DEPTH OF PLANTING PIT TO AVOID SETTLING. FERTILIZER: MAG SPECIFICATIONS SECTION 430.10 AND 795.3

## NOTES:

1. PLANT PITS SHALL NOT BE AUGER DUG. SIDES OF PIT SHALL BE RAKED TO LOOSEN PRIOR TO SETTING TREE IN PITS.
2. GENTLY LOOSEN ROOTS AROUND EXTERIOR OF ROOTBALL.
3. DO NOT PLANT ROOT BOUND PLANTS. NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY TO VERIFY CONDITION OF PLANT IF ANY QUESTION.
4. REMOVE ENTIRE CONTAINER FROM ALL PLANTS PRIOR TO PLANTING.
5. DO NOT PRUNE NEW PLANTS WITHOUT LANDSCAPE ARCHITECT APPROVAL/DIRECTION.

## SOD INSTALLATION

NTS



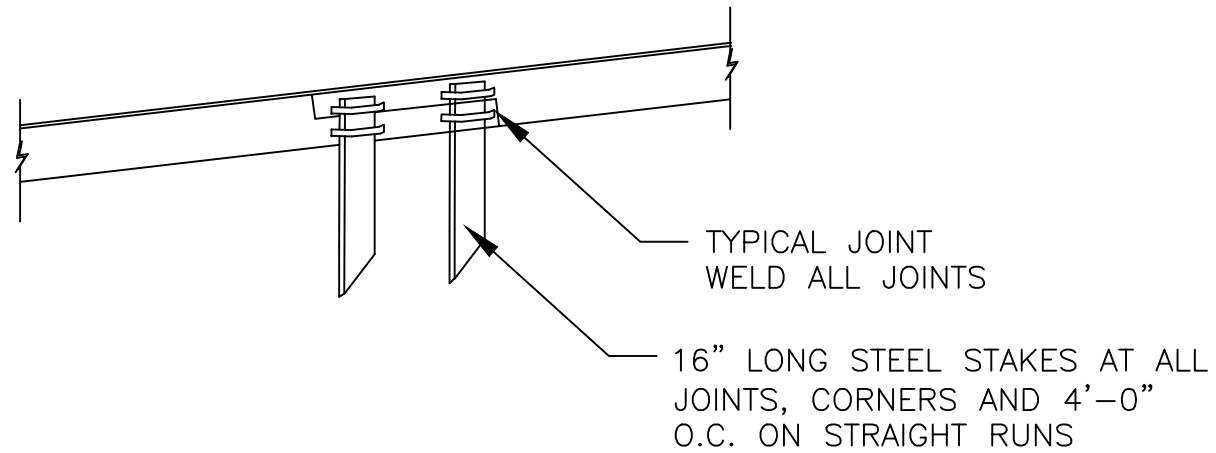
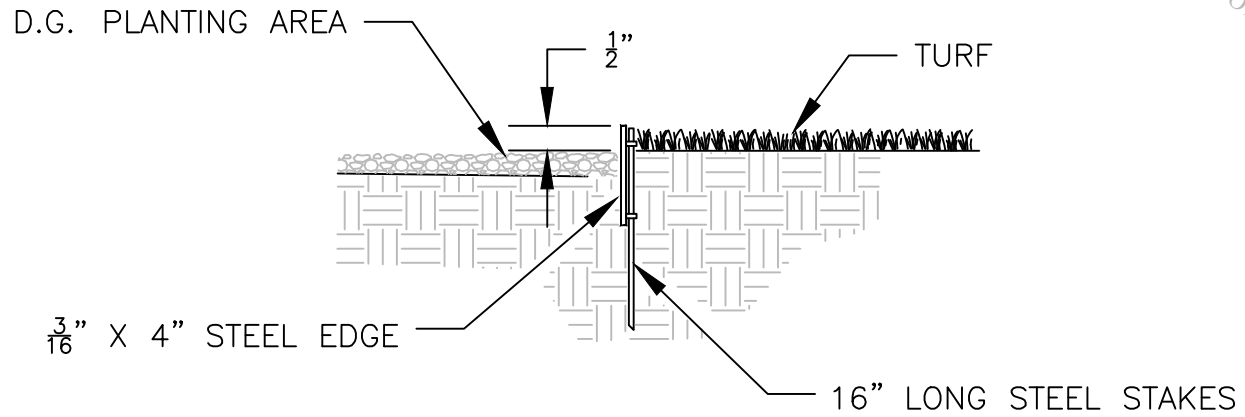
### NOTES:

1. ROUGH GRADE, REMOVE ALL DEBRIS AND UNDESIRED VEGETATION CHEMICALLY AND PHYSICALLY USING APPROVED CHEMICALS AND LICENSED APPLICATORS.
2. PROVIDE SOILS TEST FROM CERTIFIED LAB TO INCLUDE PH, AND ELEMENTS IN SOIL. FURNISH TEST RESULTS TO OWNER REPRESENTATIVE.
3. PROVIDE SOIL ADDITIVES AS RECOMMENDED BY SOILS TEST, INCLUDE IN SUBMITTAL REVIEW FOR PROJECT.
4. APPLY GYPSUM UNIFORMLY OVER IMPORTED TOP SOIL AT A RATE OF 10 POUNDS PER 100 SQUARE FT OF TURF AREA.
5. ROTOTILL GYPSUM, FERTILIZER, AND CLEAN TOPSOIL MIX TO MINIMUM 6" DEPTH INTO EXISTING SOIL. LEVEL GRADE, RAKE SMOOTH, REMOVE ROCK OR OTHER DEBRIS PARTICLES LARGER THAN 1½" FROM SITE. COMPACT AND TO 80%.
6. GRADE TO BE APPROVED BY CLIENT REPRESENTATIVE.
7. THOROUGHLY WATER THE PLANTING AREA WITHIN 2 HOURS OF LAYING SOD. LAY SOD IN MORNING HOURS AND WITHIN 1 DAY OF ARRIVAL ON SITE. KEEP STACKED SOIL MOIST.
8. LAY SOD END TO END AND STAGGERED BETWEEN ROWS, WATER THOROUGHLY AND ROLL WITH WATER FILLED ROLLER.
9. WATER SOD TO MAINTAIN MOISTURE AND PROMOTE ROOTING.
10. REPLACE SOD THAT HAS DRIED OUT, DISCOLORED, OR DIED, IMMEDIATELY. MAINTAIN MOISTURE ON ALL SOD AND ADJUST FOR SEASON.
11. REFER TO RETENTION BASIN NOTES IF INSTALLING LANDSCAPING OR SOD IN RETENTION BASINS



# STEEL HEADER

NTS



# SWALE - BACK OF SIDEWALK

NTS

FINE GRADE TO CREATE RETENTION SWALE. SWALE TO BE APPROVED PRIOR TO PLANTING AND/OR PLACING TURF OR D.G.

