

NOTES:

1. REMOVE ALL DEAD OR BROKEN BRANCHES.
2. REMOVE SUCKERS, LEAVE ANY SHORT BRANCHES ON TRUNK.
3. WORK ROOTS AWAY FROM ROOT BALL (OUTSIDE EDGE ONLY)
4. REMOVE NURSERY STAKES.
5. INSTALL ROOT BARRIER IF TREE IS LOCATED WITHIN 10' OF WALKWAY OR CURB. AND AT BACK OF CURB WITHIN CUL-DE-SAC PLANTER AREA.
6. 4' EXCAVATION REQUIRED BELOW TREE IF PLANTED IN MEDIAN OR CUL-DE-SAC.
7. ROOT BARRIER PANELS AT BACK OF CURB AND ALONG SIDEWALK 8' EACH WAY CENTER OF TREE.
8. PLACE ROOT BARRIER 24" DEEP AROUND ENTIRE PLANTER AT CUL-DE-SAC.



CITY OF ANTIOCH DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES

DRAWN BY: S. Rodriguez

REVISIONS: 7/2019

TREE STAKING

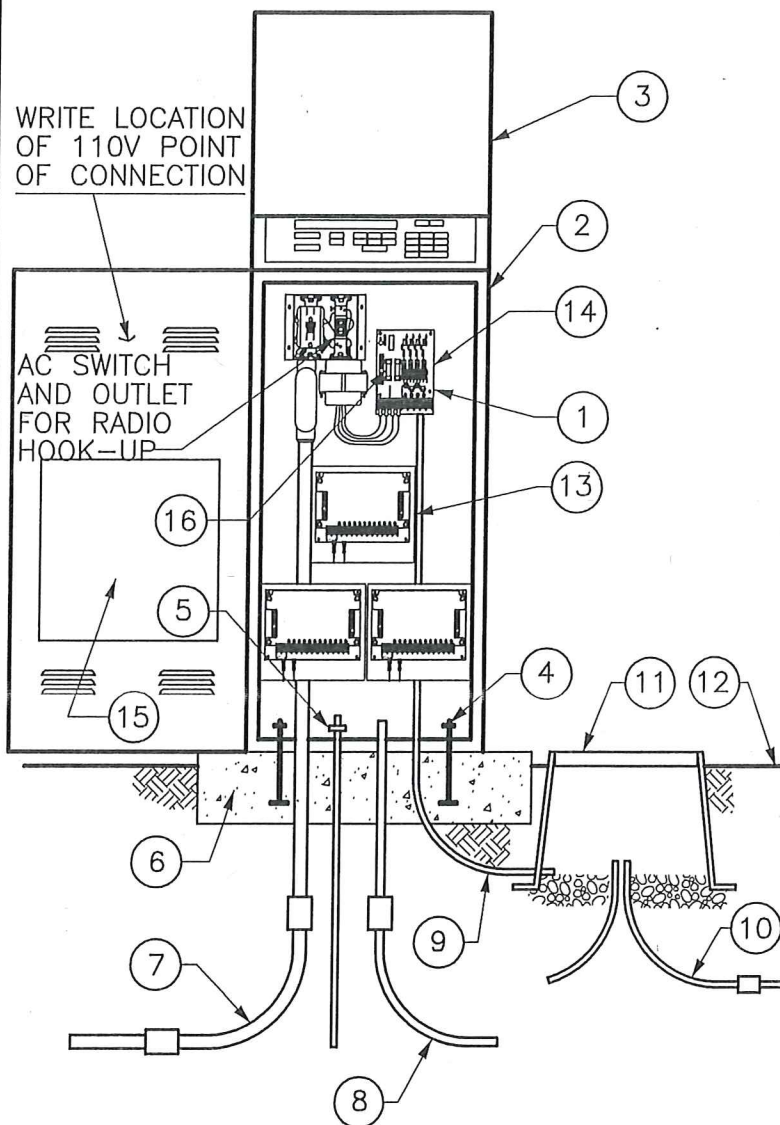
L-03

APPROVED BY:

Jon Blank
JON BLANK, P.E.

PUBLIC WORKS DIRECTOR/
CITY ENGINEER

DATE: JULY, 2019



- ① AUTOMATIC CONTROLLER,
CONTROLLER SHALL BE
RAIN MASTER DX3 48 STATION
- ② RAINMASTER EVOLUTION DX2
STAINLESS STEEL PEDESTAL CABINET.
- ③ SLANT TOP LOCKING LID.
- ④ ANCHOR BOLTS (TYP.)
- ⑤ $\frac{5}{8}$ " DIA. x 8' COPPER - CLAD
GROUNDING ROD W/#6 BARE
COPPER CONNECTOR.
- ⑥ CONCRETE PAD (24"x30"x6")
W/ LAMP BLACK COLOR
(1 $\frac{1}{2}$ " LBS./C. YD.)
- ⑦ 120-VOLT POWER SUPPLY IN 1 $\frac{1}{2}$ "
RIGID STEEL CONDUIT.
- ⑧ 2 $\frac{1}{2}$ " CONTROL WIRING NMC
W/ SWEEP ELBOW.
- ⑨ 1" NMC SWEEP ELBOW
(PHONE LINE CONDUIT)
- ⑩ 2" NMC CONTROL WIRE CONDUIT.
- ⑪ CARSON NO. 1419-12B PULL
6" PEA GRAVEL IN THE BOTTOM.
- ⑫ FINISH GRADE.
- ⑬ TERMINAL STRIP.
- ⑭ RADIO CONTROLLER PROVIDED
BY THE INSTALLER.
- ⑮ PROVIDE REDUCED SCALE, 11 x 17
LAMINATED COLOR CODED
LAYOUT OF IRRIGATION
SYSTEM - ALL VALVES TO BE
IDENTIFIED.
- ⑯ CONTRACTOR TO PROVIDE 15 AMP
FUSED DISCONN. PER LOCAL LOADS.

NOTE:

CONTRACTOR TO EXTEND CONDUIT
& WIRE TO PG.&E SECONDARY BOX
PG&E TO MAKE HOOK-UP AFTER
INSPECTION.



CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES

DRAWN BY: S. Rodriguez

REVISIONS: 7/2019

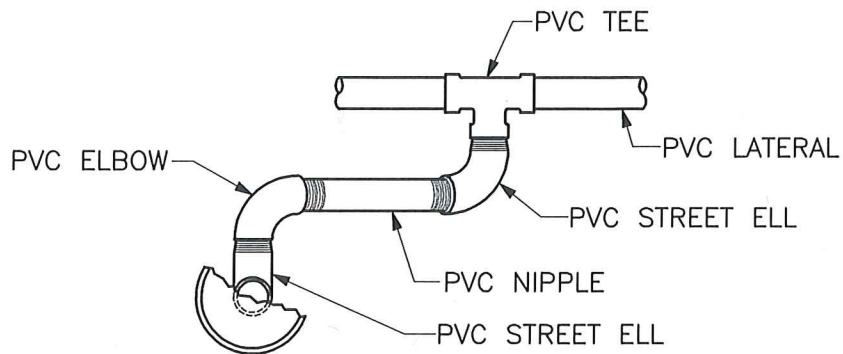
PEDESTAL IRRIGATION CONTROLLER

L-04

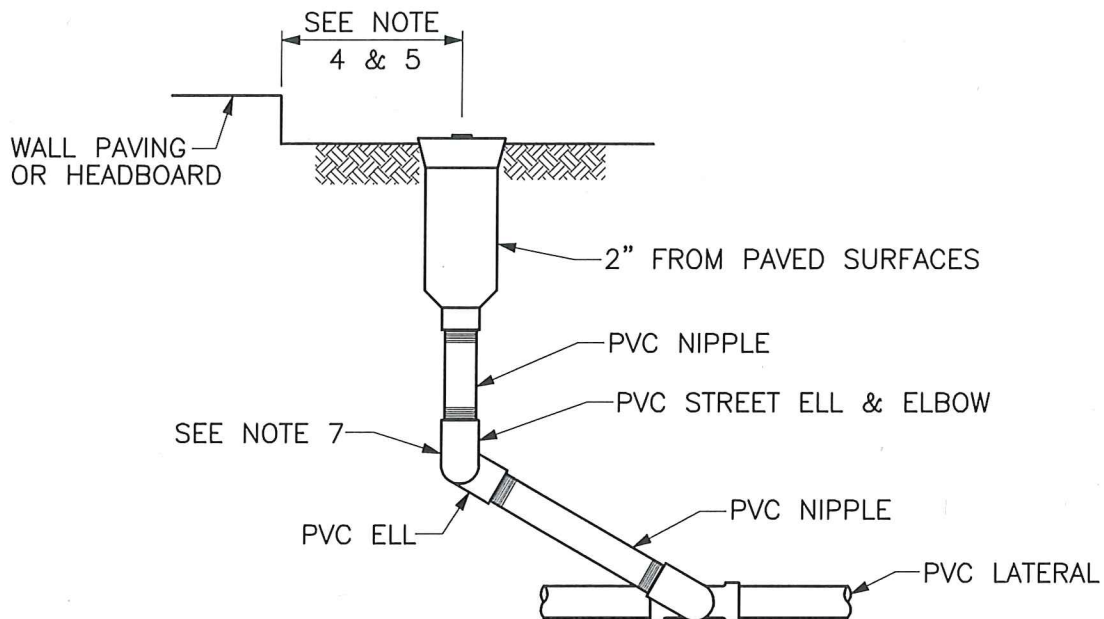
APPROVED BY:

Jon Blank
JON BLANK, P.E.
PUBLIC WORKS DIRECTOR/
CITY ENGINEER

DATE: *JULY, 2019*



PLAN



ELEVATION

NOTES:

1. TEFLON TAPE REQUIRED ON ALL THREADED FITTINGS.
2. SPRINKLER HEAD SHALL BE RAIN BIRD 1800, TORO 570, OR AS APPROVED BY THE CITY ENGINEER.
3. ALL NIPPLES TO BE SCHEDULE 80.
4. PLACE POP-UP SPRAY SPRINKLERS AND BUBBLERS AT 3" MAX FROM WALLS, PAVING AND HEADER BOARDS. PLACE LAWN HEADS NO CLOSER THAN 2".
5. PLACE ROTARY SPRINKLERS AT 6" MAX FROM WALLS, PAVING AND HEADER BOARDS. PLACE LAWN HEADS NO CLOSER THAN 4".
6. LATERAL FITTING FIPT OUTLET, RISER NIPPLES AND FITTINGS SHALL BE THE SAME DIAMETER (IPS) AS SPRINKLER HEAD INLET.
7. FITTING ON LATERAL SIDE CAN BE SCHEDULE 40 OR MARLEX.



CITY OF ANTIOCH DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES

DRAWN BY: S. Rodriguez

REVISIONS:

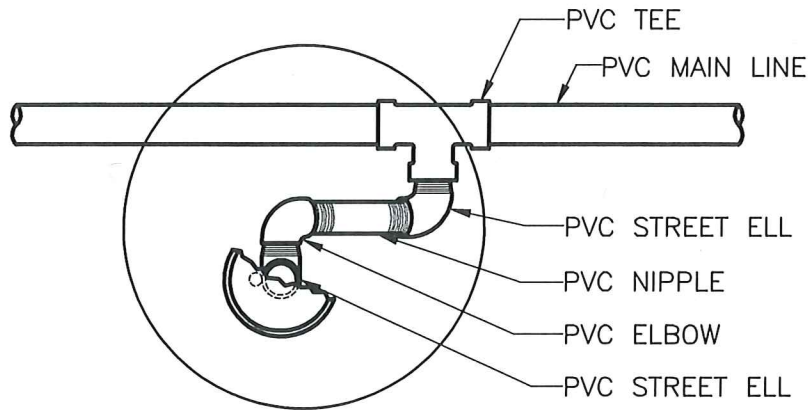
SPRINKLER LATERAL

L-05

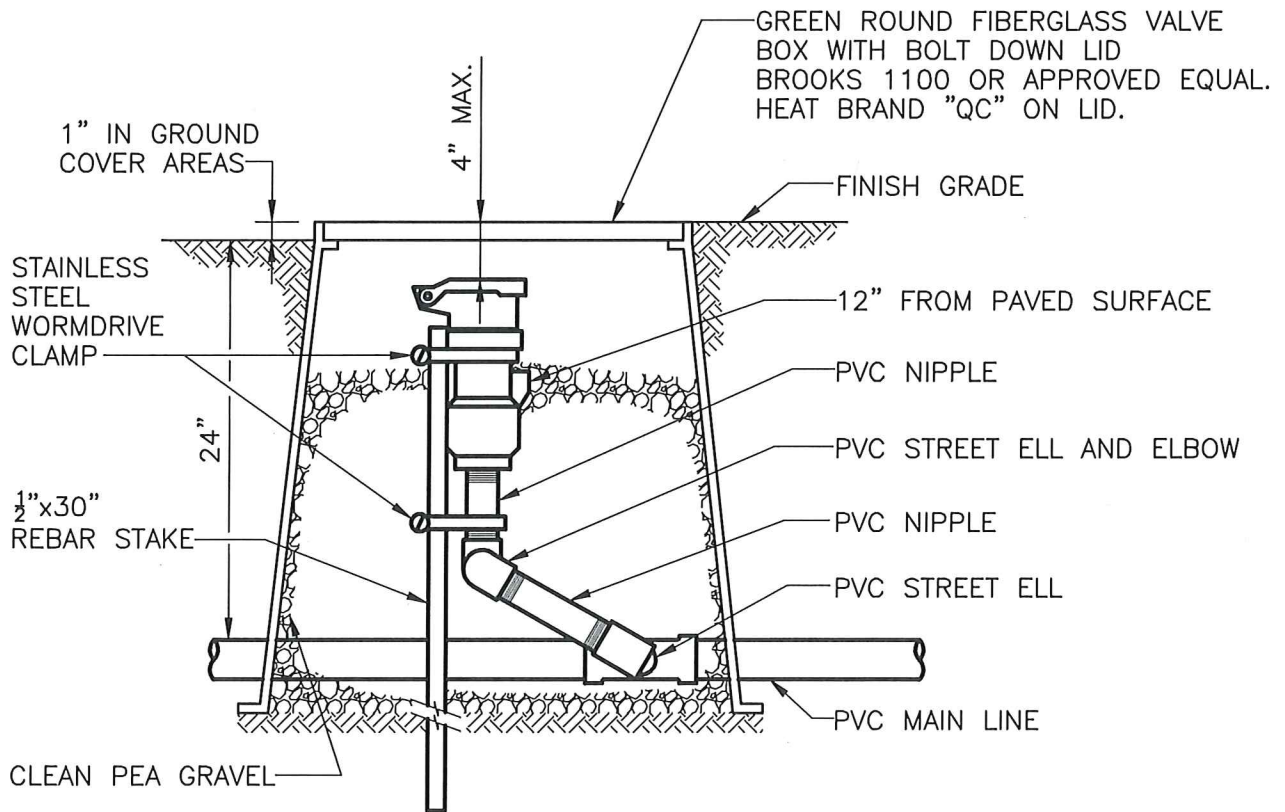
APPROVED BY:
Ron Bernal
RON BERNAL, P.E.
CITY ENGINEER

DATE: DEC 20, 2016

- NOTES:**
1. TEFLON TAPE REQUIRED ON ALL THREADED FITTINGS.
 2. QUICK COUPLER TO BE RAIN BIRD 44LRC OR APPROVED EQUAL
 3. ALL FITTINGS AND NIPPLES TO BE SCHEDULE 80.



PLAN



ELEVATION



CITY OF ANTIOCH DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES

DRAWN BY: S. Rodriguez

REVISIONS:

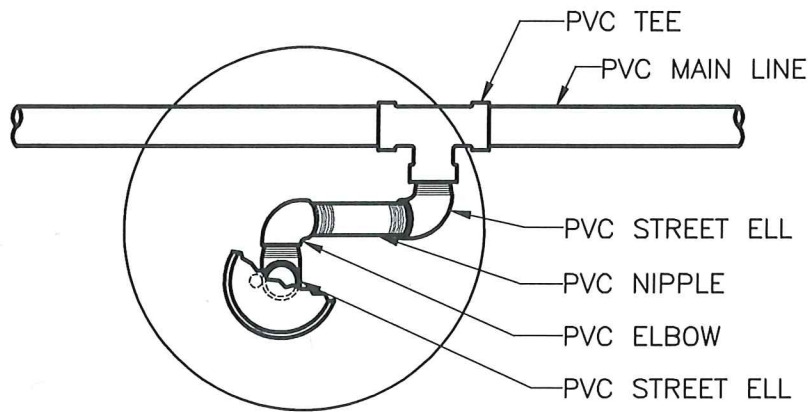
QUICK COUPLER MAIN LINE (POTABLE)

L-06

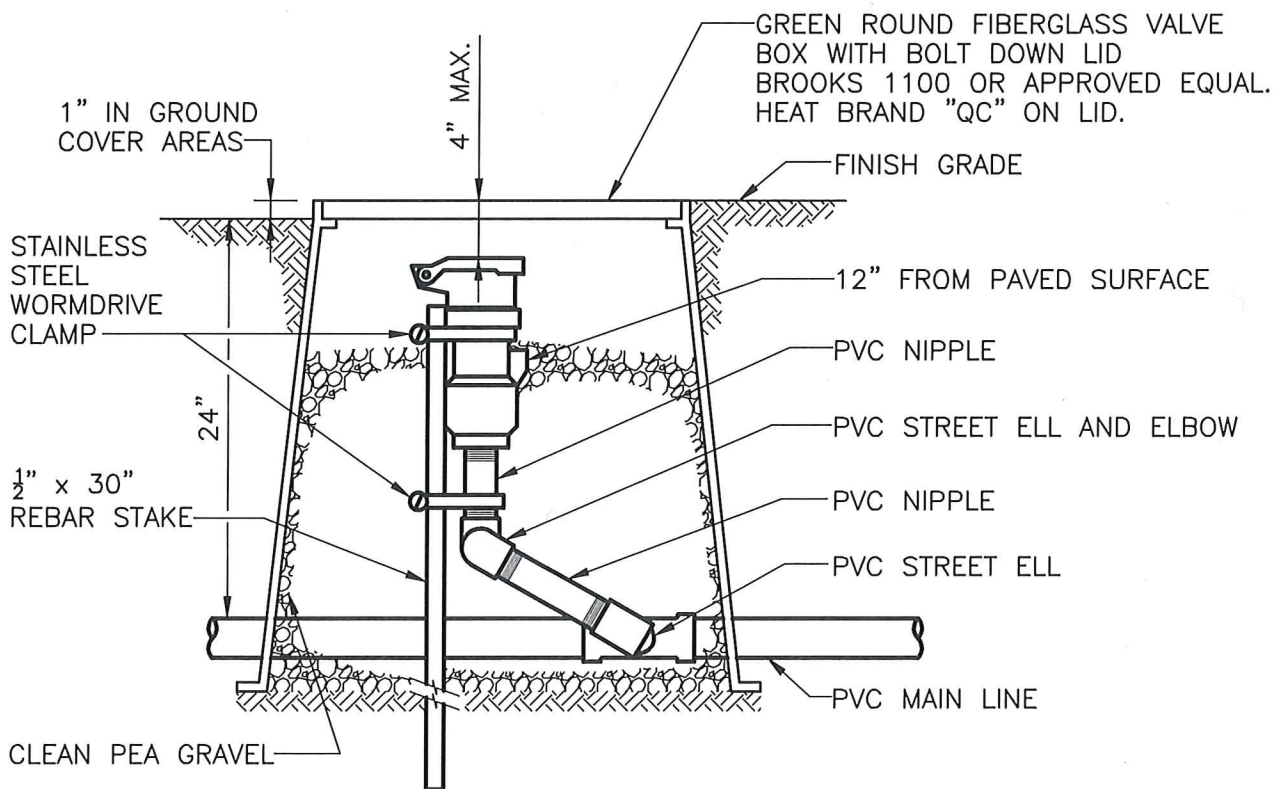
APPROVED BY:
Ron Bernal
RON BERNAL, P.E.
CITY ENGINEER

DATE: DEC 20, 2016

- NOTES:
1. TEFLON TAPE REQUIRED ON ALL THREADED FITTINGS.
 2. QUICK COUPLER TO BE RAIN BIRD 44NP OR APPROVED EQUAL
 3. ALL FITTINGS AND NIPPLES TO BE SCHEDULE 80.



PLAN



ELEVATION



**CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES**

DRAWN BY: S. Rodriguez

REVISIONS:

**QUICK COUPLER
MAIN LINE (NON-POTABLE)**

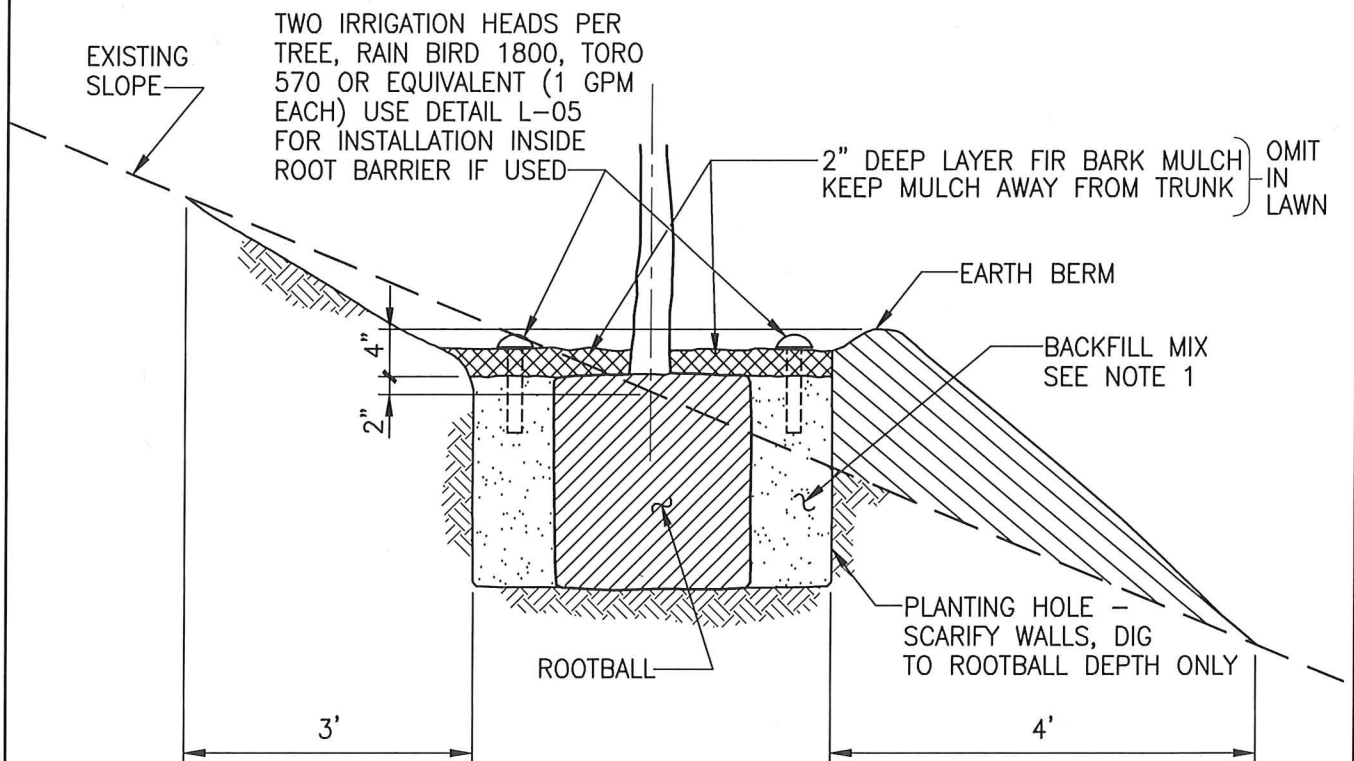
L-07

APPROVED BY:
Ron Bernal
RON BERNAL, P.E.
CITY ENGINEER

DATE: DEC 20, 2016

NOTES:

1. DEPENDENT OF SOIL ANALYSIS. BACKFILL MIX, AGRIFORM TABLETS.
2. PLANTING PIT DIMENSIONS TWICE THE DIAMETER OF CONTAINER.



**CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES**

DRAWN BY: S. Rodriguez

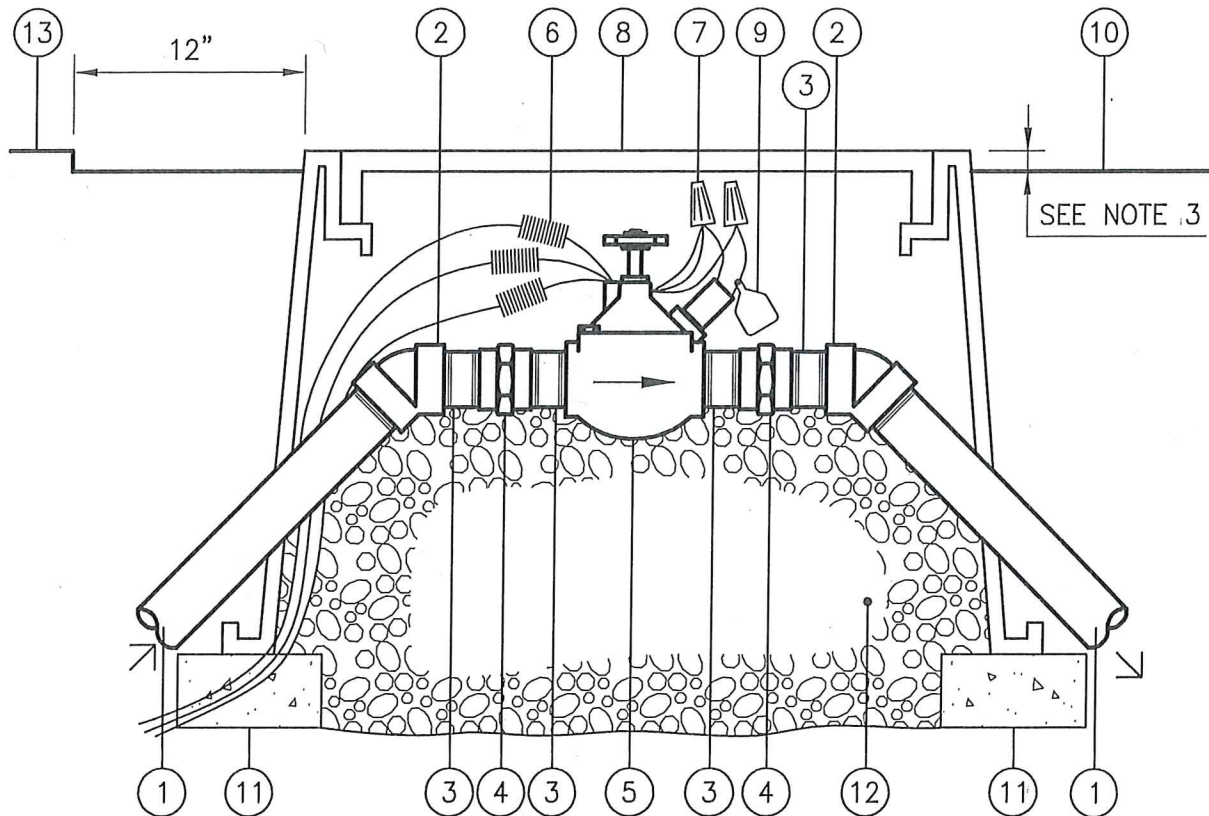
REVISIONS:

**SHRUB & TREE
PLANTING ON SLOPE**

L-10

APPROVED BY:
Ron Bernal
RON BERNAL, P.E.
CITY ENGINEER

DATE: DEC 20, 2016



- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>① IRRIGATION MAINLINE</p> <p>② SCH. 80 PVC 45° ELBOW (S x S) WITH REDUCER BUSHING (S x T)</p> <p>③ SCH. 80 PVC NIPPLE (T.B.E.) 3" LENGTH</p> <p>④ SCH. 80 PVC UNION (T x T)</p> <p>⑤ MASTER CONTROL VALVE RAINBIRD EFB-CP SERIES</p> <p>⑥ CONTROL WIRING - 24 - INCHES COIL EACH</p> <p>⑦ SPLICE KIT: 3M 'DBY', SNAP TITE, PEN TITE</p> | <p>⑧ VALVE BOX: BROOKS No. 1419 W/ BOLT-DOWN 'T' COVER. COLOR GREEN. HEAT BRAND "MCV" ON LID.</p> <p>⑨ BRASS VALVE TAG</p> <p>⑩ FINISH GRADE</p> <p>⑪ 1 - COMMON BRICK AT EACH CORNER</p> <p>⑫ 1/4" CLEAN PEA GRAVEL TO FULLY SUPPORT COMPLETE VALVE ASSEMBLY (MIN. 2 CU. FT.)</p> <p>⑬ EDGE PAVING, HEADER BOARD</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NOTES:

- NIPPLES AND UNIONS TO BE SAME DIAMETER SIZE (IPS) AS THE MASTER CONTROL VALVE. ALL OTHER FITTINGS TO BE SAME SIZE AS THE MAINLINE.
- EXTEND INLET AND DISCHARGE PIPING TO SPECIFIED MAINLINE DEPTH. MAKE TRANSITIONS INTO MAINLINE PIPE RUN WITH 45° ELBOWS.
- SET TOP OF BOX AT 3/4" ABOVE FINISH GRADE IN TURF AREA. IN NON TURF AREAS SET TOP OF BOX TO TOP OF MULCH.



**CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS - ENGINEERING SERVICES**

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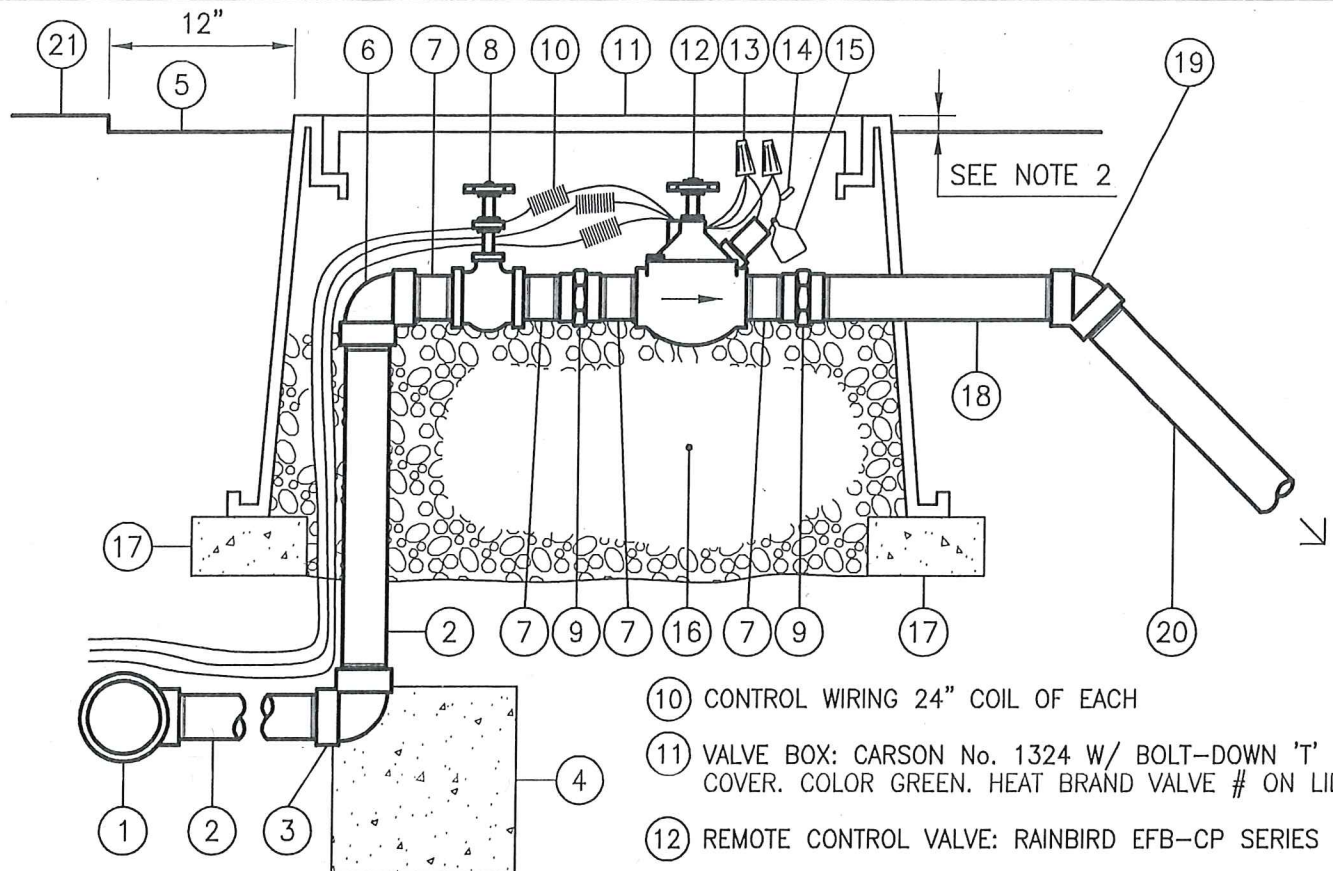
REVISIONS: 7/2019

**IRRIGATION MASTER
CONTROL VALVE**

L-11

APPROVED BY:

Jon Blank
JON BLANK, P.E.
PUBLIC WORKS DIRECTOR/
CITY ENGINEER
DATE: **JULY, 2019**



- ① MAIN LINE FITTING (S x S x T)
- ② SCH. 80 PIPE. LENGTH AS REQUIRED
- ③ SCH. 80 PVC 90° ELBOW (T x T)
- ④ CONCRETE THRUST BLOCK. 1 CU. FT.
- ⑤ FINISH GRADE
- ⑥ SCH. 80 PVC 90° ELBOW (T x T)
- ⑦ SCH. 80 PVC NIPPLE MIN. LENGTH 2"
- ⑧ SHUT-OFF VALVE: NIBCO T-113 W/ WHEEL HANDLE
- ⑨ SCH. 80 PVC UNION (T x T)
- ⑩ CONTROL WIRING 24" COIL OF EACH
- ⑪ VALVE BOX: CARSON No. 1324 W/ BOLT-DOWN 'T' COVER. COLOR GREEN. HEAT BRAND VALVE # ON LID.
- ⑫ REMOTE CONTROL VALVE: RAINBIRD EFB-CP SERIES
- ⑬ SPLICE KIT: 3M 'BY', SNAP TITE, PEN TITE
- ⑭ WIRE LABEL W/ VALVE NUMBER CODE
- ⑮ BRASS VALVE TAG
- ⑯ $\frac{1}{4}$ " CLEAN PEA GRAVEL TO FULLY SUPPORT VALVE (MIN. 2 CU. FT.)
- ⑰ 1 COMMON BRICK AT EA. CORNER
- ⑱ SCH. 80 PVC NIPPLE 12" LENGTH
- ⑲ SCH. 80 PVC 45° ELBOW - ONE OF TWO
- ⑳ REQUIRED TO TRANSITION TO LATERAL DEPTH LATERAL PIPE
- ㉑ EDGE OF PAVING, HEADER BOARD

NOTES:

1. MANIFOLD PIPING, FITTINGS, NIPPLES AND SHUT-OFF VALVE TO BE SAME DIAMETER SIZE (IPS) AS REMOTE CONTROL VALVE.
2. SET TOP OF BOX AT $\frac{3}{4}$ " ABOVE FINISH GRADE IN TURF AREA. IN NON-TURF AREAS SET TOP OF BOX TO TOP OF MULCH.
3. ALL TEES AND FITTINGS ON MAIN LINE SIDE ARE TO BE SCHEDULE 80.



CITY OF ANTIOCH DEPARTMENT OF PUBLIC WORKS - ENGINEERING SERVICES

DRAWN BY: S. Rodriguez

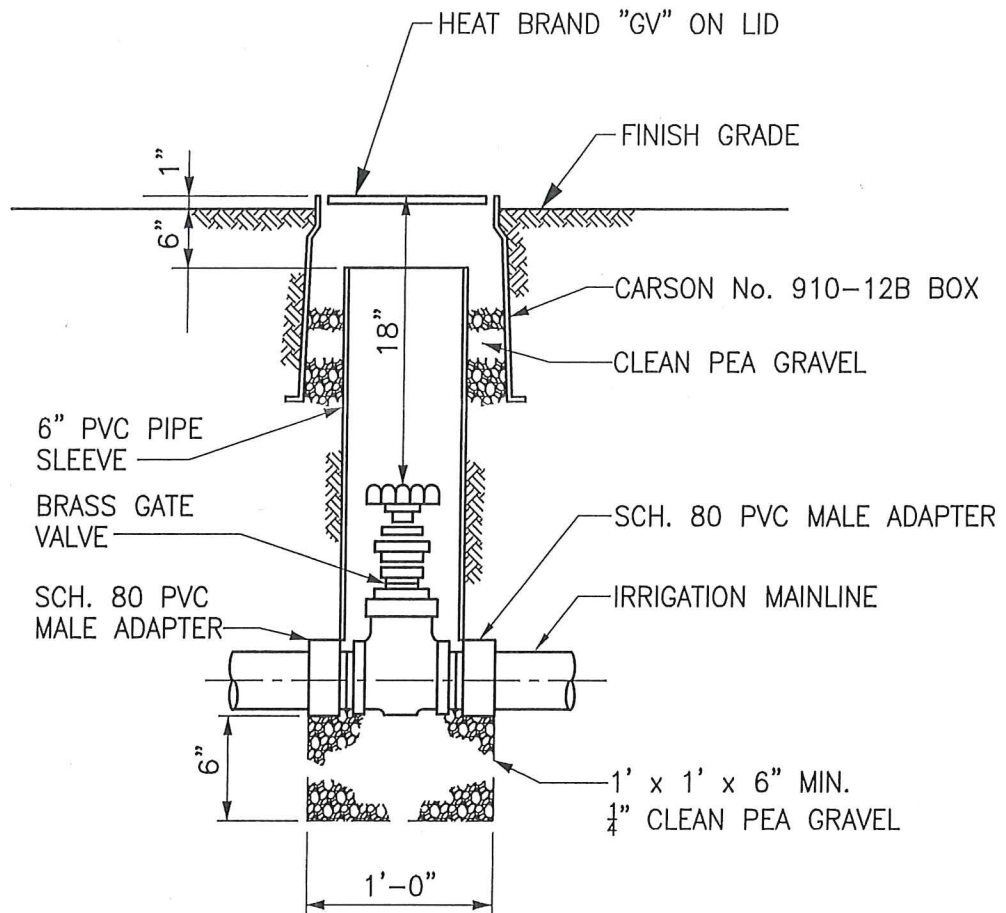
REVISIONS: 7/2019

IRRIGATION REMOTE CONTROL VALVE

L-12

APPROVED BY:

Jon Blank
JON BLANK, P.E.
PUBLIC WORKS DIRECTOR/
CITY ENGINEER
DATE: JULY, 2019



CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES

DRAWN BY: S. Rodriguez

REVISIONS: 7/2019

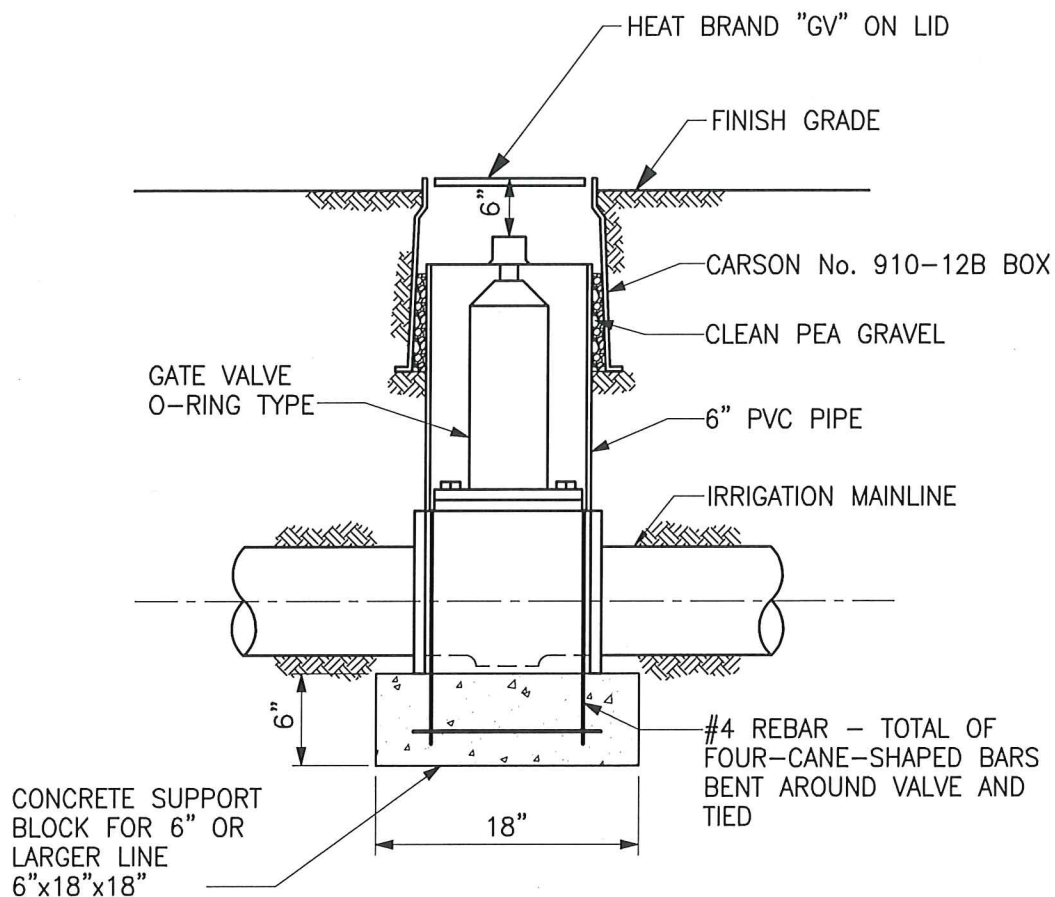
ISOLATION GATE VALVE
2" AND UNDER

L-13

APPROVED BY:

Jon Blank
JON BLANK, P.E.
PUBLIC WORKS DIRECTOR/
CITY ENGINEER

DATE: July, 2019



T:\PW STANDARD DRAWINGS\CURRENT CD'S AUTOCAD\L-14 - ISOLATION GATE VALVE 2 & HALF INCH AND OVER.DWG



**CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES**

DRAWN BY: S. Rodriguez

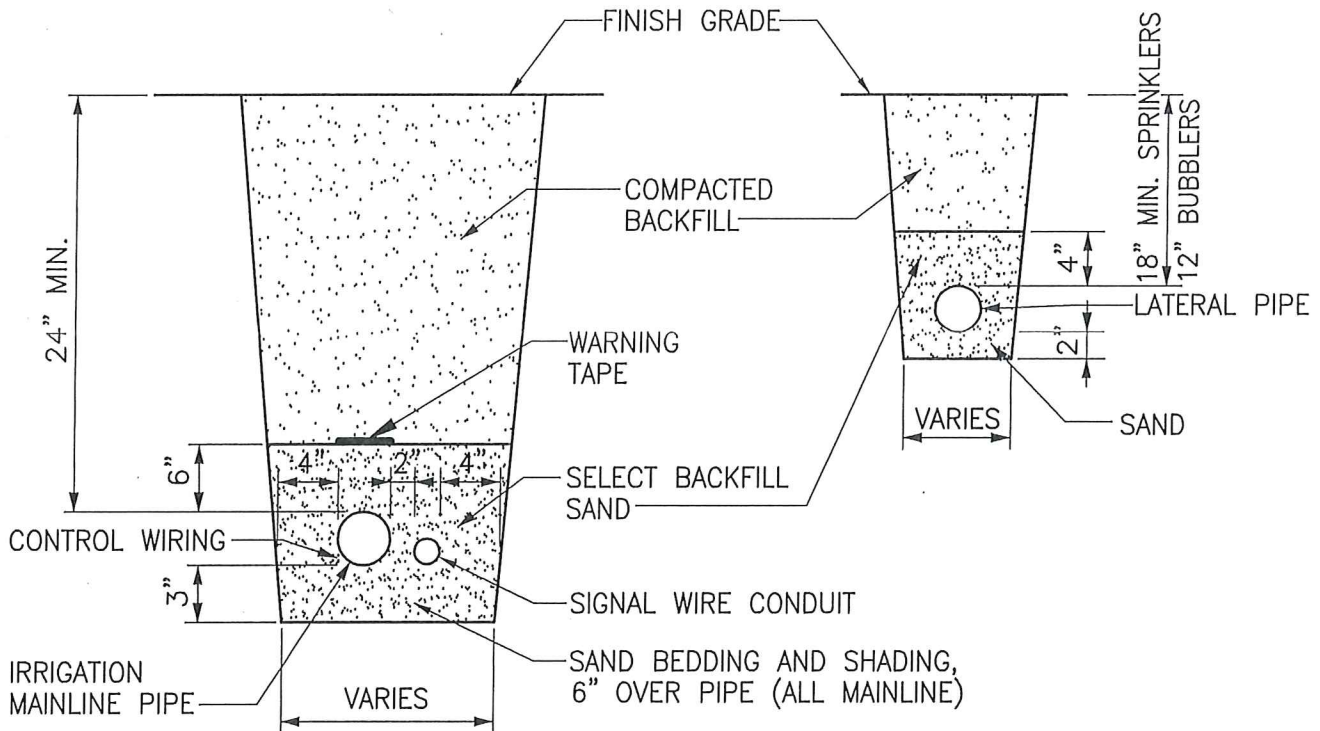
REVISIONS:

**ISOLATION GATE VALVE
2-1/2" & OVER**

L-14

APPROVED BY:
Ron Bernal
RON BERNAL, P.E.
CITY ENGINEER

DATE: **DEC 20, 2016**



NOTES:

1. TAPE CONTROL WIRING AT 10' INTERVALS. LEAVE 24" SLACK AT ALL CHANGES OF DIRECTION.
2. PRESSURE TEST SYSTEM AT 125 P.S.I. FOR 2 HOURS ON MAIN LINE AND LATERALS.



**CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES**

DRAWN BY: S. Rodriguez

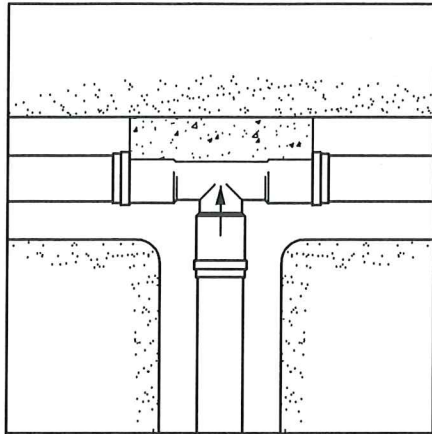
REVISIONS: 7/2019

**TRENCH SECTIONS FOR
IRRIGATION PIPE**

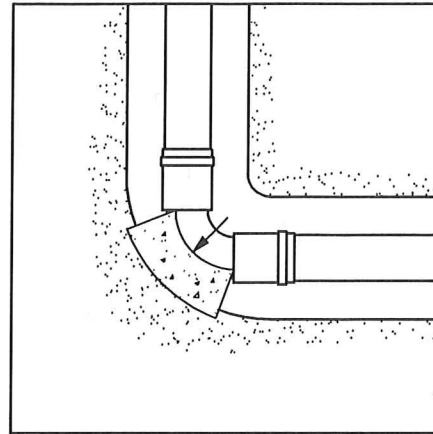
L-15

APPROVED BY:

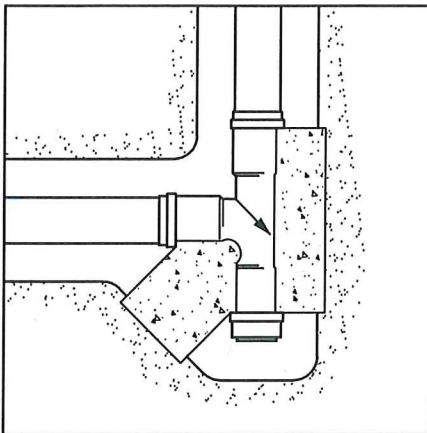
Jon Blank
JON BLANK, P.E.
PUBLIC WORKS DIRECTOR/
CITY ENGINEER
DATE: **JULY, 2019**



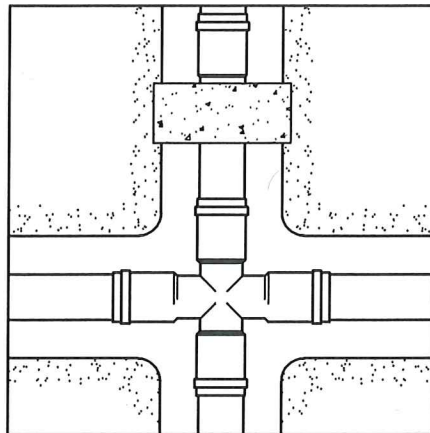
THRU LINE CONNECTION, TEE



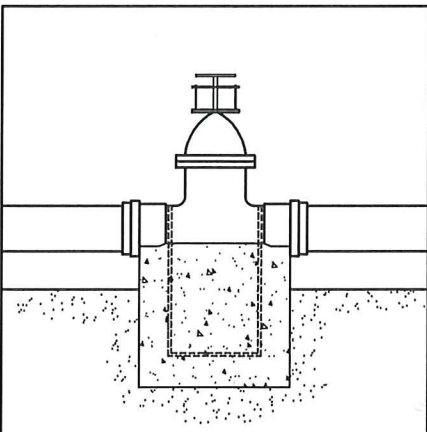
DIRECTION CHANGE, ELBOW



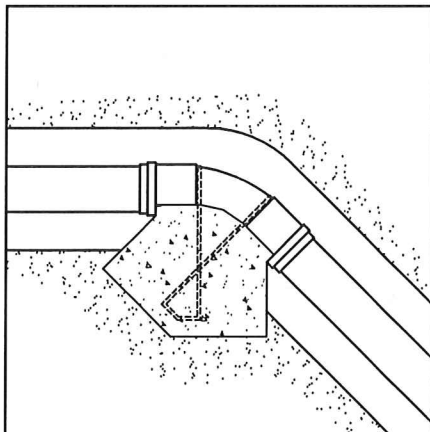
DIRECTION CHANGE, TEE USED
AS ELBOW



CHANGE LINE SIZE, REDUCER



VALVE ANCHOR



DIRECTION CHANGE VERTICAL
BEND ANCHOR

T:\PW STANDARD DRAWINGS\CURRENT CD'S AUTOCAD\L-16 - IRRIGATION TYPICAL THRUST BLOCKS.DWG



CITY OF ANTIOCH
DEPARTMENT OF PUBLIC WORKS – ENGINEERING SERVICES

DRAWN BY: S. Rodriguez

REVISIONS:

IRRIGATION TYPICAL
THRUST BLOCKS

L-16

APPROVED BY:
Ron Bernal
RON BERNAL, P.E.
CITY ENGINEER

DATE: DEC 20, 2016