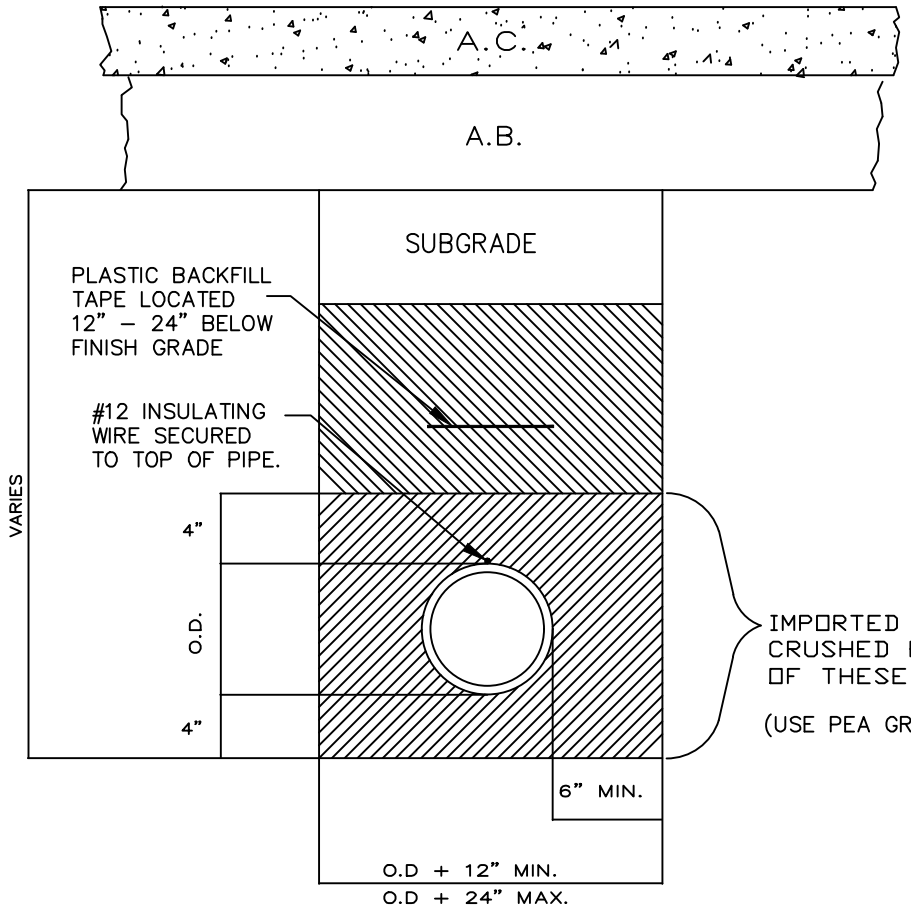


TRENCH BACKFILL REQUIREMENTS:

1. PROPOSED STREETS – REFER TO DETAIL TB–1 OF SECTION 31 FOR BACKFILL REQUIREMENTS ABOVE THE PIPE ZONE.
2. EXISTING STREETS – REFER TO DETAILS TB–1 AND TB–3 OF SECTION 31 FOR BACKFILL REQUIREMENTS ABOVE THE PIPE ZONE.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

NOTES:

BACKFILL SHALL BE MECHANICALLY CONSOLIDATED OR SHOVEL SLICED UNDER THE HAUNCHES OF THE PIPE.

IN ROCKY OR UNYIELDING SOIL, THE TRENCH SHALL BE EXCAVATED A MINIMUM OF 12" BELOW THE PIPE AND THE TRENCH WIDTH SHALL BE INCREASED BY 12".

ONE 12" WIDE STRIP OF BACKFILL TAPE SHALL BE USED FOR EVERY 12" PIPE DIAMETER OR FRACTION THERE OF.

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

WATER MAIN TRENCH AND BACKFILL

SCALE: NONE
REVISED: JANUARY 2019
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–1

NOTES:

NO WATER SHALL BE DRAWN THROUGH THE BACKFLOW DEVICE UNTIL IT HAS BEEN TESTED BY THE THE ENVIRONMENTAL UTILITIES DEPT.

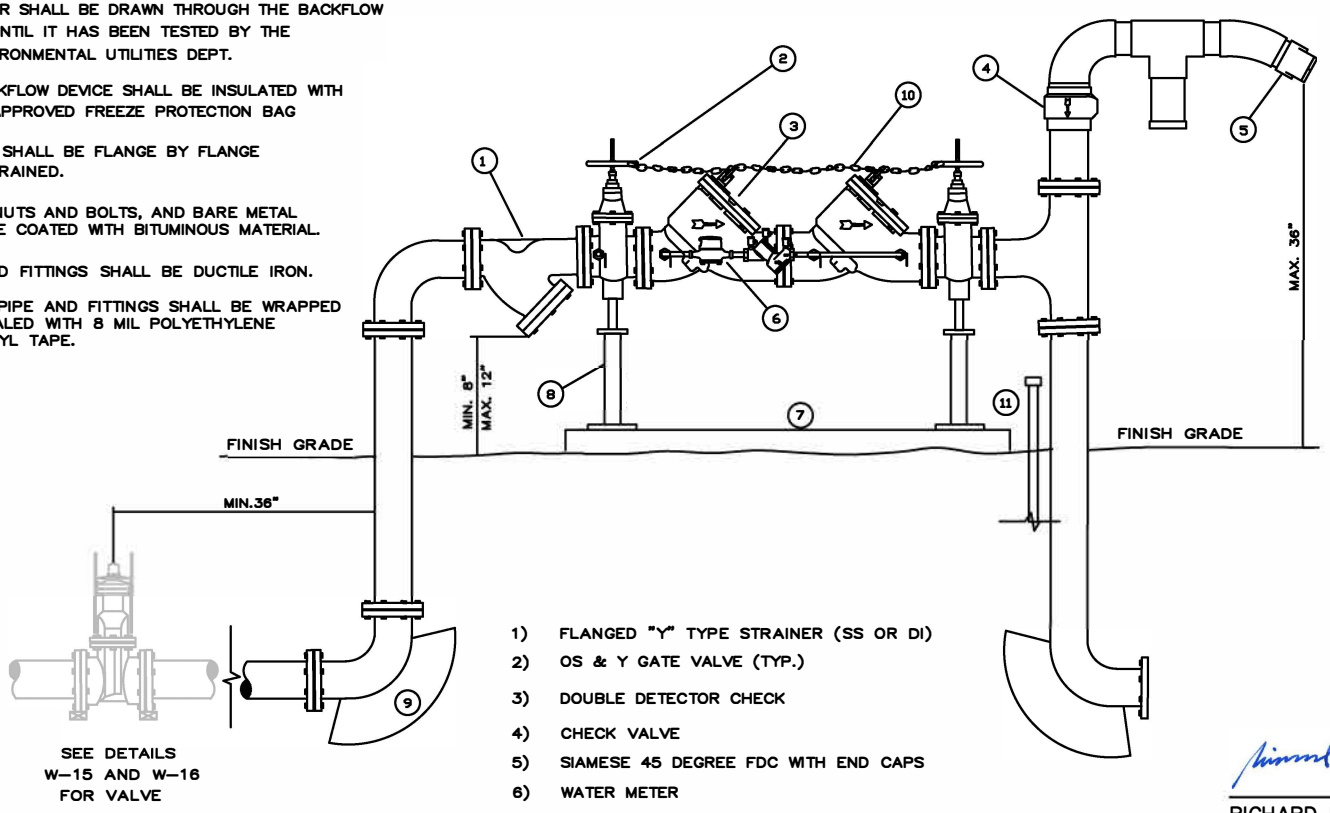
THE BACKFLOW DEVICE SHALL BE INSULATED WITH A CITY APPROVED FREEZE PROTECTION BAG

FITTINGS SHALL BE FLANGE BY FLANGE OR RESTRAINED.

BURIED NUTS AND BOLTS, AND BARE METAL SHALL BE COATED WITH BITUMINOUS MATERIAL.

PIPE AND FITTINGS SHALL BE DUCTILE IRON.

BURIED PIPE AND FITTINGS SHALL BE WRAPPED AND SEALED WITH 8 MIL POLYETHYLENE AND VINYL TAPE.



SEE DETAILS W–15 AND W–16 FOR VALVE

1) FLANGED "Y" TYPE STRAINER (SS OR DI)
2) OS & Y GATE VALVE (TYP.)
3) DOUBLE DETECTOR CHECK
4) CHECK VALVE
5) SIAMESE 45 DEGREE FDC WITH END CAPS
6) WATER METER
7) 3 1/2" THICK REINFORCED CONCRETE SLAB. WITH #4 REBAR 12" ON CENTER
8) SUPPORTS 2–TYP. SHALL BE BOLTED DOWN WITH A MINIMUM OF TWO BOLTS EACH
9) THRUST BLOCK (TYP.)
10) 1/4" NON CASE HARDENED CHAIN WITH BREAKAWAY LOCK BETWEEN VALVES.
11) VALVE TAMPER SWITCH CONDUIT TO BUILDING FIRE CONTROL ROOM

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

FIRE PROTECTION ASSEMBLY

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–2

NOTES:

NO WATER SHALL BE DRAWN THROUGH THE BACKFLOW DEVICE UNTIL IT HAS BEEN TESTED BY THE THE ENVIRONMENTAL UTILITIES DEPT.

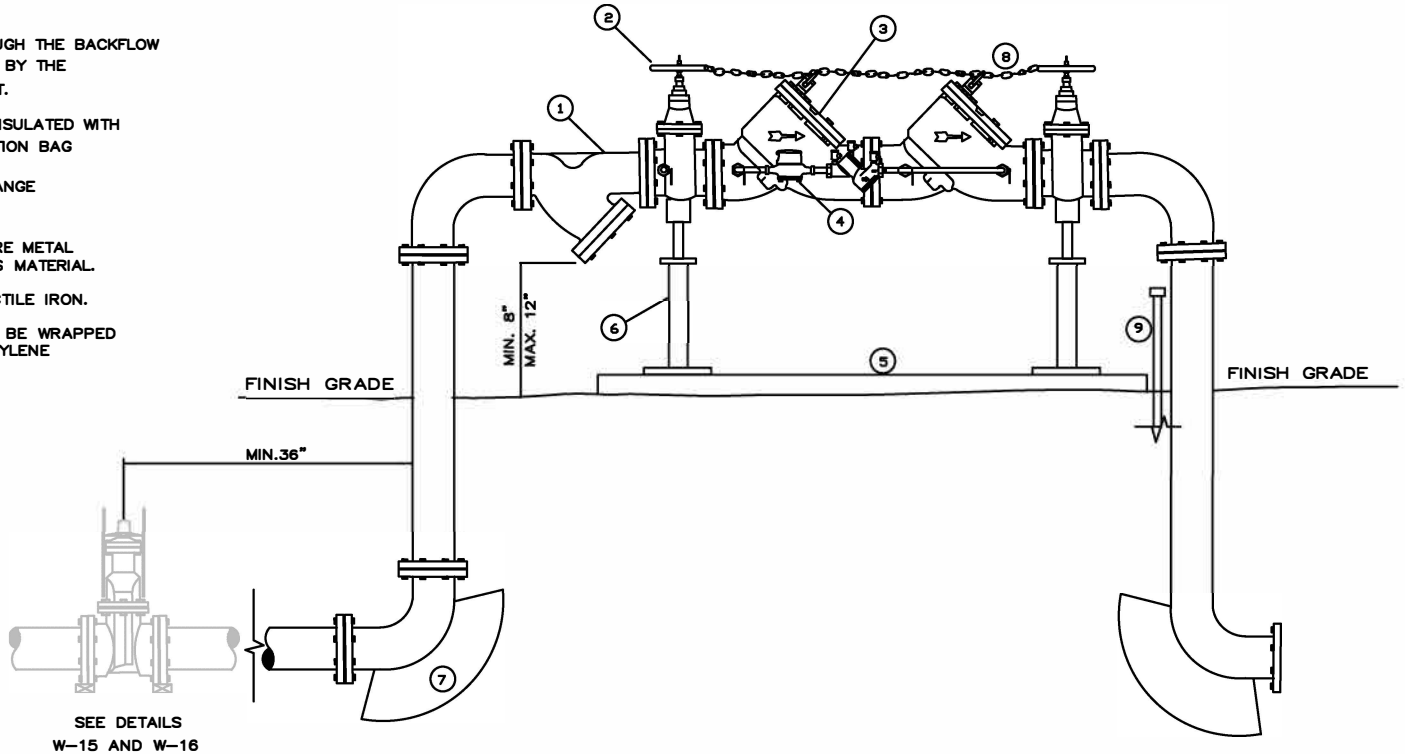
THE BACKFLOW DEVICE SHALL BE INSULATED WITH A CITY APPROVED FREEZE PROTECTION BAG

FITTINGS SHALL BE FLANGE BY FLANGE OR RESTRAINED.

BURIED NUTS AND BOLTS, AND BARE METAL SHALL BE COATED WITH BITUMINOUS MATERIAL.

PIPE AND FITTINGS SHALL BE DUCTILE IRON.

BURIED PIPE AND FITTINGS SHALL BE WRAPPED AND SEALED WITH 8 MIL POLYETHYLENE AND VINYL TAPE.



1) FLANGED "Y" TYPE STRAINER (SS OR DI)
2) OS & Y GATE VALVE (TYP.)
3) DOUBLE DETECTOR CHECK
4) WATER METER
5) 3 1/2" THICK REINFORCED CONCRETE SLAB W/#4 REBAR 12" ON CENTER.
6) SUPPORTS 2-TYP. SHALL BE BOLTED DOWN WITH A MINIMUM OF TWO BOLTS EACH
7) THRUST BLOCK (TYP.)
8) 1/4" NON CASE HARDENED CHAIN WITH BREAKAWAY LOCK BETWEEN VALVES.
9) VALVE TAMPER SWITCH CONDUIT TO BUILDING FIRE CONTROL ROOM.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

ONSITE FIRE PROTECTION

SCALE: NONE
REVISED: JANUARY 2019
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-3

NOTES:

NO WATER SHALL BE DRAWN THROUGH THE BACKFLOW DEVICE UNTIL IT HAS BEEN TESTED BY THE THE ENVIRONMENTAL UTILITIES DEPT.

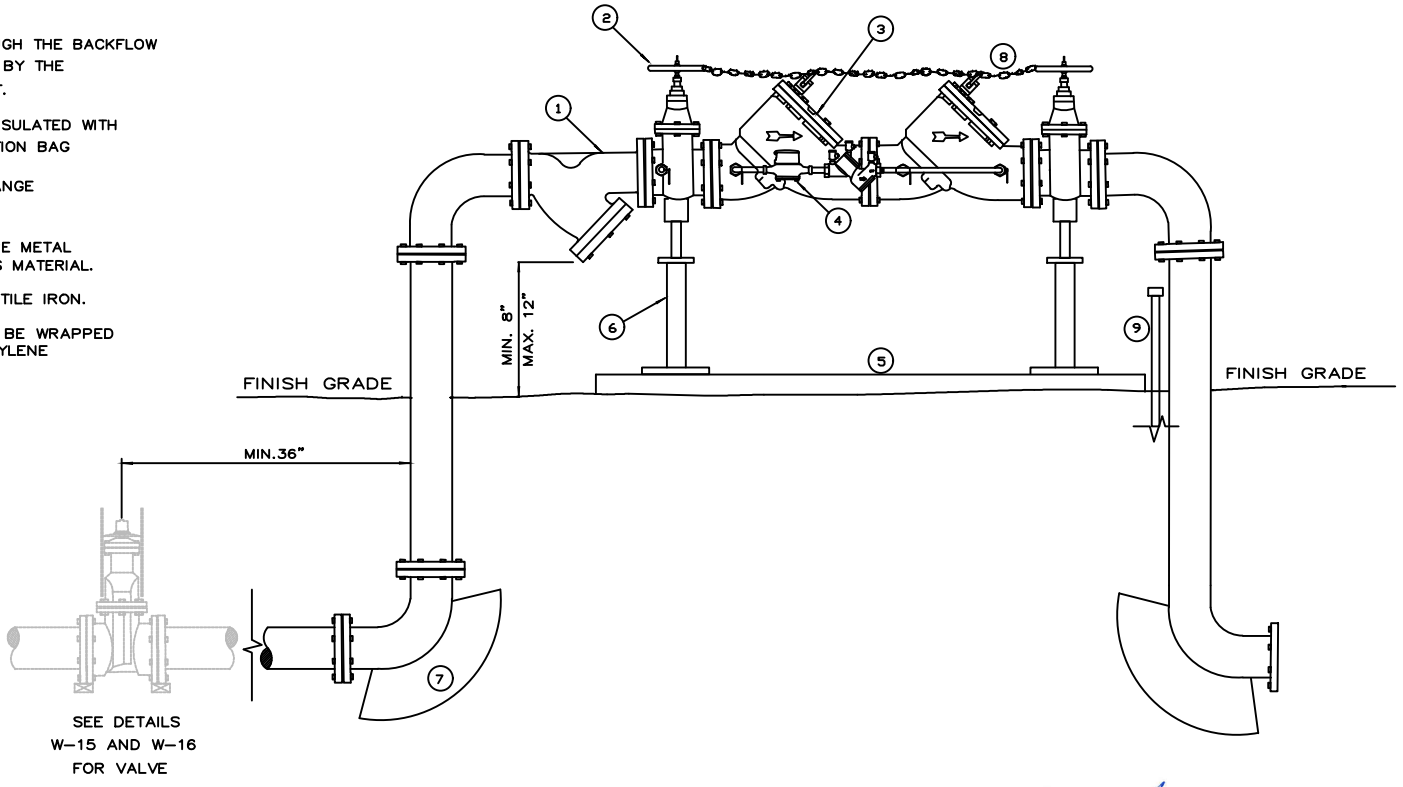
THE BACKFLOW DEVICE SHALL BE INSULATED WITH A CITY APPROVED FREEZE PROTECTION BAG

FITTINGS SHALL BE FLANGE BY FLANGE OR RESTRAINED.

BURIED NUTS AND BOLTS, AND BARE METAL SHALL BE COATED WITH BITUMINOUS MATERIAL.

PIPE AND FITTINGS SHALL BE DUCTILE IRON.

BURIED PIPE AND FITTINGS SHALL BE WRAPPED AND SEALED WITH 8 MIL POLYETHYLENE AND VINYL TAPE.



1) FLANGED "Y" TYPE STRAINER (SS OR DI)
2) OS & Y GATE VALVE (TYP.)
3) DOUBLE DETECTOR CHECK
4) WATER METER
5) 3 1/2" THICK REINFORCED CONCRETE SLAB W/#4 REBAR 12" ON CENTER.
6) SUPPORTS 2-TYP. SHALL BE BOLTED DOWN WITH A MINIMUM OF TWO BOLTS EACH
7) THRUST BLOCK (TYP.)
8) 1/4" NON CASE HARDENED CHAIN WITH BREAKAWAY LOCK BETWEEN VALVES.
9) VALVE TAMPER SWITCH CONDUIT TO BUILDING FIRE CONTROL ROOM.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

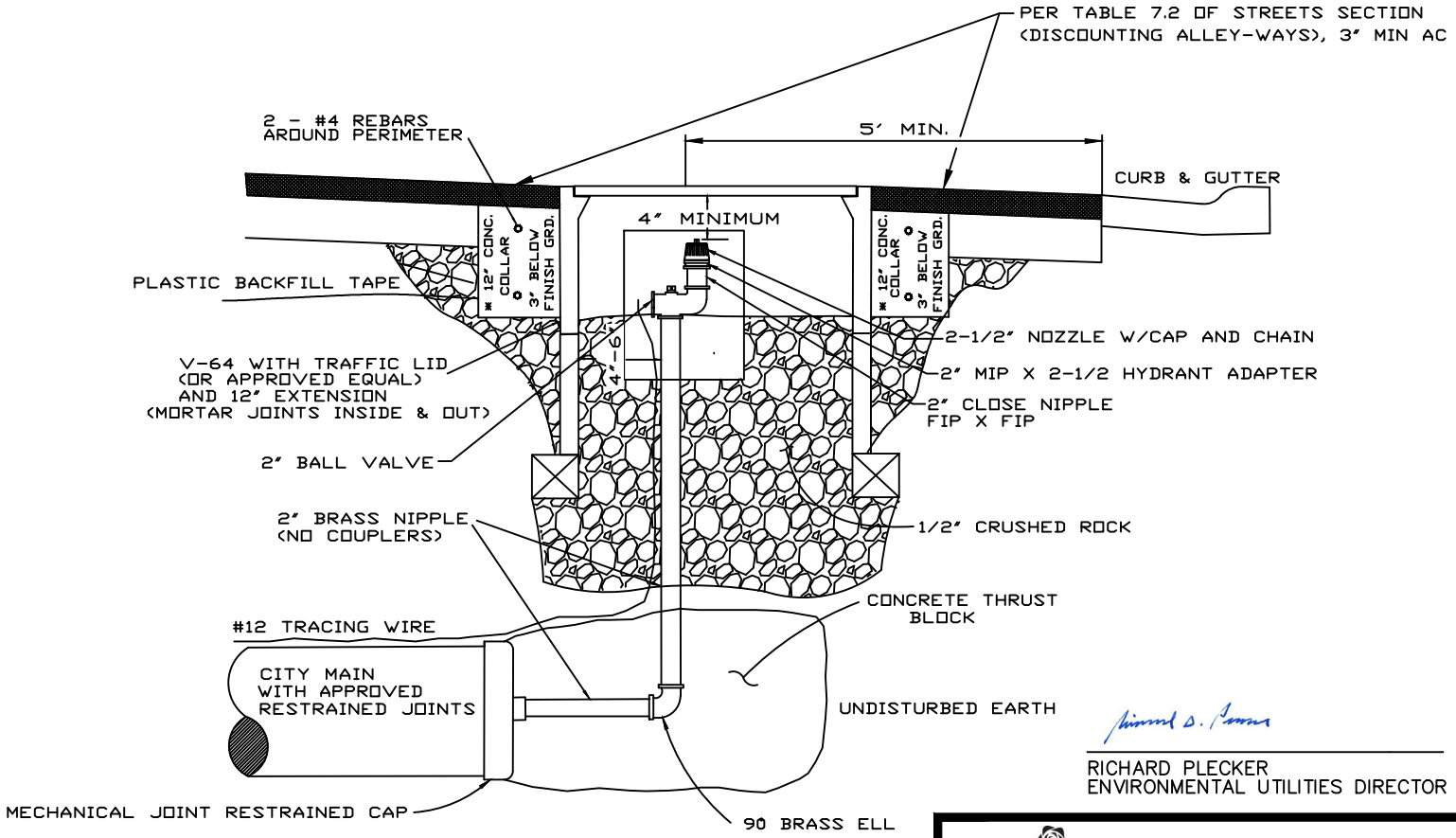
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

ONSITE FIRE PROTECTION

SCALE: NONE
REVISED: JANUARY 2019
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-3



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

2" BLOWOFF HYDRANT ASSEMBLY

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

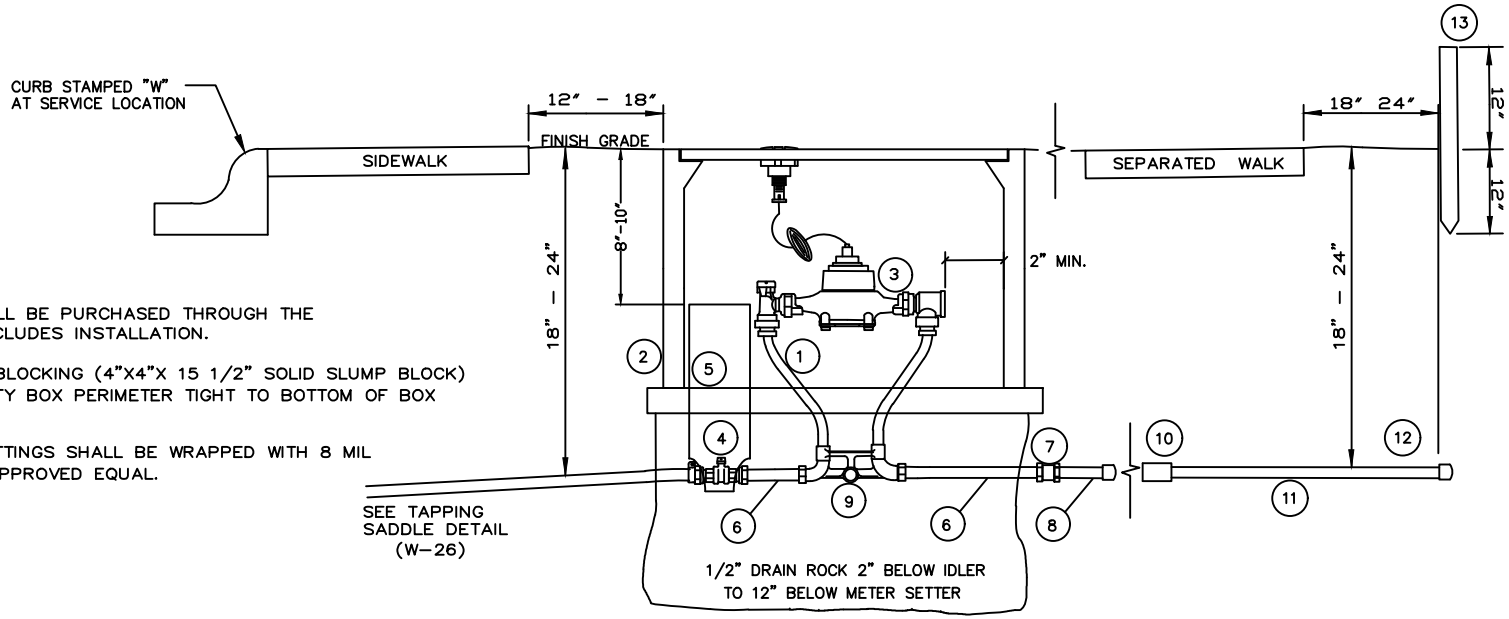
W-4

NOTE:

BURIED BRASS PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.

BLOWOFFS OUTSIDE OF PAVED AREAS SHALL BE A MINIMUM OF 6" ABOVE GRADE AND MARKED WITH A CARSONITE MARKER.

* OPTION: CONCRETE COLLAR MAY BE PLACED FLUSH TO FINISHED SURFACE WITH MEDIUM BROOM FINISH PERPENDICULAR TO VEHICLE TRAVEL DIRECTION.



NOTES:

WATER METERS SHALL BE PURCHASED THROUGH THE CITY. PURCHASE INCLUDES INSTALLATION.

INSTALL CONCRETE BLOCKING (4"X4"X 15 1/2" SOLID SLUMP BLOCK) UNDER ENTIRE UTILITY BOX PERIMETER TIGHT TO BOTTOM OF BOX NO GAPS ALLOWED

BURIED PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.

1) METER SETTER WITH IDLER
2)* N-30 UTILITY BOX WITH FL 30 METER LID FOR 1" SERVICE
3) WATER METER (PURCHASED THROUGH CITY)
4) CURB STOP (COMPRESSION X FIPT)
5) 4" DIA. BLUE SCHEDULE 40 RISER (NOTCHED OVER PIPE AT BASE)
6) 4" METER SPUD
7) BRASS COUPLING (FIPT X FIPT)
8) 18" BRASS NIPPLE WITH END CAP (FOR ATTACHED SIDEWALK)
9) SCH. 40 PVC THROUGH PIPE EYE
10) BRASS-PVC ADAPTER
11) 1 1/2" PVC
12) PVC END CAP
13) 2"X2" RDWD. STAKE PAINTED BLUE

* IF LOCATED IN THE DRIVEWAY USE A B1324 BOX W/STEEL CHECKER COVER #B1324-51JH OR APPROVED EQUAL.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

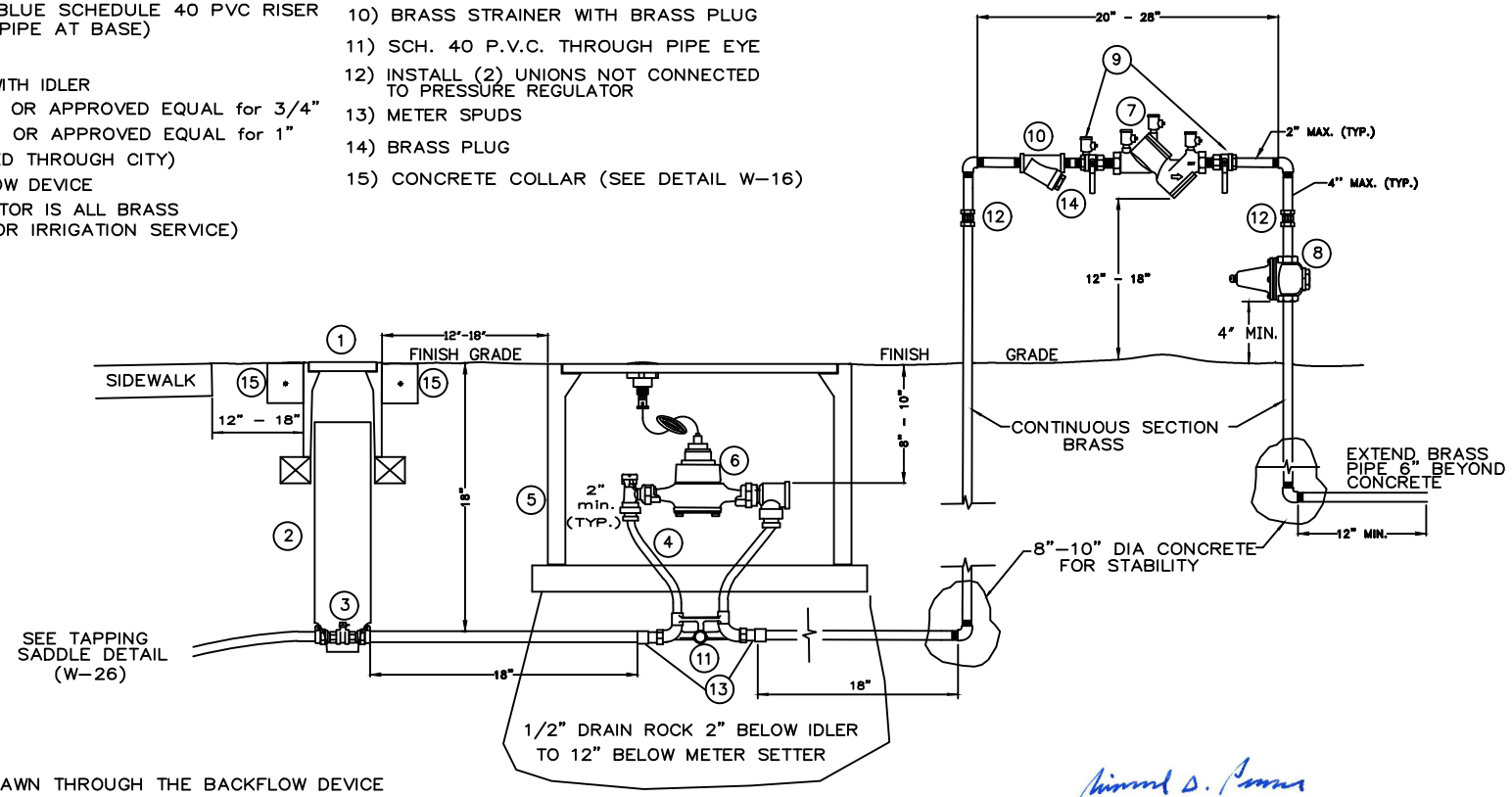
ENVIRONMENTAL UTILITIES DEPARTMENT

RESIDENTIAL 1" SERVICE LINE

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-5

1) CONCRETE VALVE BOX (G–5 PER DETAIL W–16)
2) 6" CONTINUOUS BLUE SCHEDULE 40 PVC RISER (NOTCHED OVER PIPE AT BASE)
3) CURB STOP
4) METER RESETTER WITH IDLER
5) N–16 UTILITY BOX OR APPROVED EQUAL for 3/4"
   N–30 UTILITY BOX OR APPROVED EQUAL for 1"
6) METER (PURCHASED THROUGH CITY)
7) R.P TYPE BACKFLOW DEVICE
8) PRESSURE REGULATOR IS ALL BRASS (NOT REQUIRED FOR IRRIGATION SERVICE)
9) BALL VALVES
10) BRASS STRAINER WITH BRASS PLUG
11) SCH. 40 P.V.C. THROUGH PIPE EYE
12) INSTALL (2) UNIONS NOT CONNECTED TO PRESSURE REGULATOR
13) METER SPUDS
14) BRASS PLUG
15) CONCRETE COLLAR (SEE DETAIL W–16)



NOTES:

NO WATER SHALL BE DRAWN THROUGH THE BACKFLOW DEVICE UNTIL IT HAS BEEN TESTED BY THE ENVIRONMENTAL UTILITIES DEPT.

ALL FITTINGS AND PIPING SHALL BE BRASS BEGINNING AT CURB STOP

IF USED FOR IRRIGATION DO NOT INCLUDE PRESSURE REGULATOR.

INSTALL (3" X 5") CONCRETE BRICK UNDER PERIMETER OF UTILITY BOXES.

WATER METERS SHALL BE PURCHASED THROUGH THE CITY. PURCHASE INCLUDES INSTALLATION.

THE BACKFLOW DEVICE SHALL BE INSULATED WITH A CITY APPROVED FREEZE PROTECTION BAG.

BURIED PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

COMMERCIAL 1" SERVICE LINE

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–6

NOTES:

NO WATER SHALL BE DRAWN THROUGH THE BACKFLOW DEVICE UNTIL IT HAS BEEN TESTED BY THE ENVIRONMENTAL UTILITIES DEPT.

WATER METERS SHALL BE PURCHASED THROUGH THE CITY. PURCHASE INCLUDES INSTALLATION.

THE BACKFLOW DEVICE SHALL BE INSULATED WITH A CITY APPROVED FREEZE PROTECTION BAG.

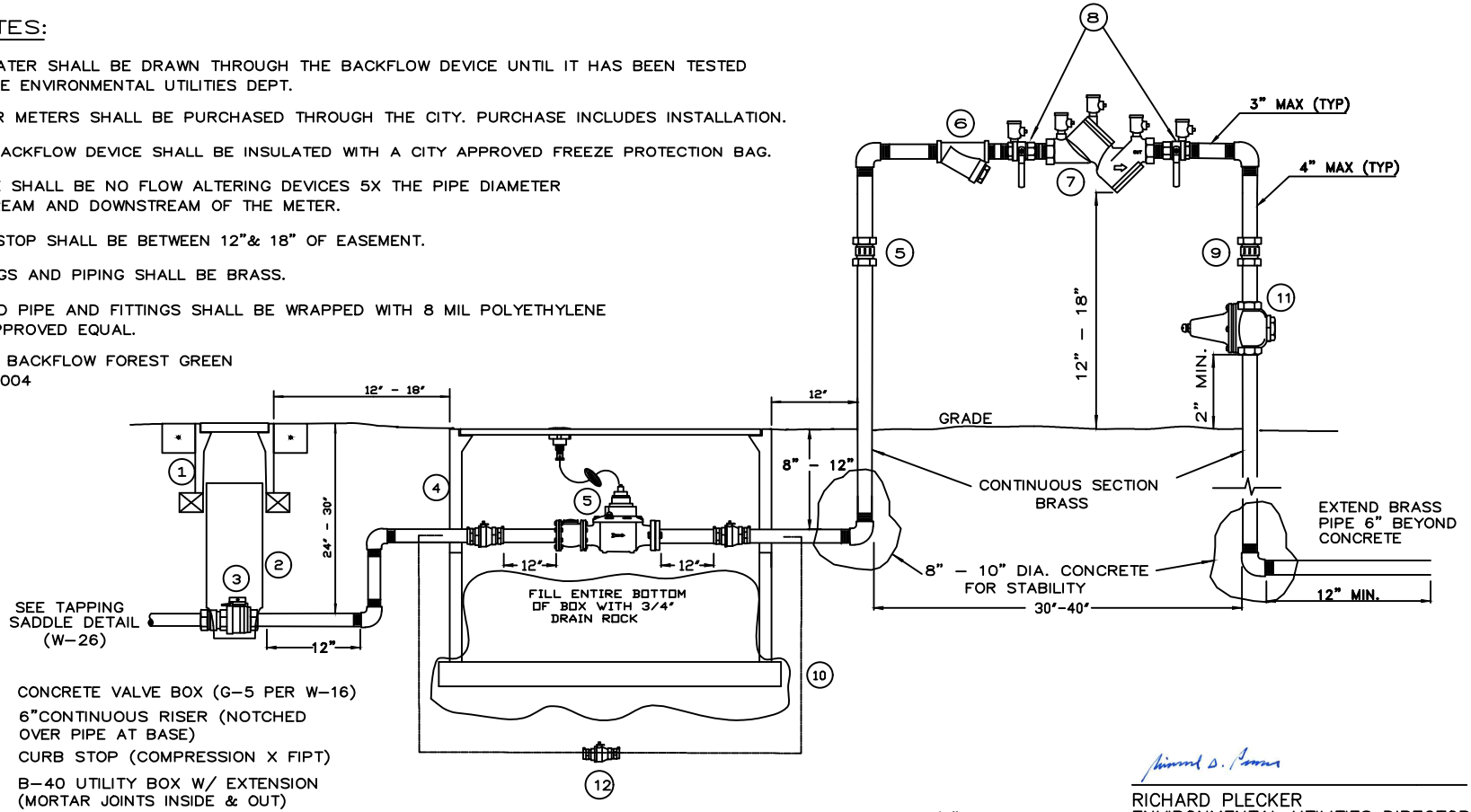
THERE SHALL BE NO FLOW ALTERING DEVICES 5X THE PIPE DIAMETER UPSTREAM AND DOWNSTREAM OF THE METER.

CURBSTOP SHALL BE BETWEEN 12"& 18" OF EASEMENT.

FITTINGS AND PIPING SHALL BE BRASS.

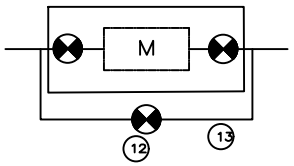
BURIED PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.

PAINT BACKFLOW FOREST GREEN
RAL 6004

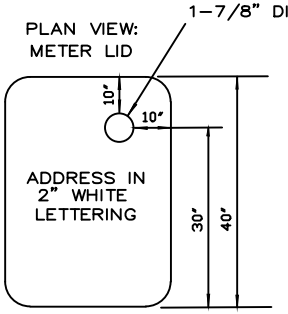


1) CONCRETE VALVE BOX (G-5 PER W-16)
2) 6"CONTINUOUS RISER (NOTCHED OVER PIPE AT BASE)
3) CURB STOP (COMPRESSION X FIPT)
4) B-40 UTILITY BOX W/ EXTENSION (MORTAR JOINTS INSIDE & OUT)
5) TURBO METER WITH STRAINER FOR IRRIGATION. COMPOUND METER FOR COMMERCIAL (PURCHASED THROUGH CITY). INSTALL IDLER SPOOL DURING INSTALLATION OF METER BOX.
6) "Y" STRAINER WITH BRASS PLUG
7) R.P. TYPE BACKFLOW DEVICE
8) BALL VALVES
9) INSTALL (2) UNIONS
10) CONCRETE BRICK (4"X4"X15 1/2") UNDER ENTIRE PERIMETER OF UTILITY BOX
11) BRASS PRESSURE REGULATOR NOT REQUIRED FOR IRRIGATION SERVICE
12) 3/4" LOCKING CURB STOP IN G-5 BOX NOT REQUIRED FOR IRRIGATION SERVICE
13) 3/4" BY PASS MATERIAL TO BE SOFT COPPER TYPE K AND FITTINGS TO BE BRASS COMPRESSION TYPE. NOT REQUIRED FOR IRRIGATION SERVICE

PLAN VIEW:
METER BYPASS



PLAN VIEW:
METER LID



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA
ENVIRONMENTAL UTILITIES DEPARTMENT

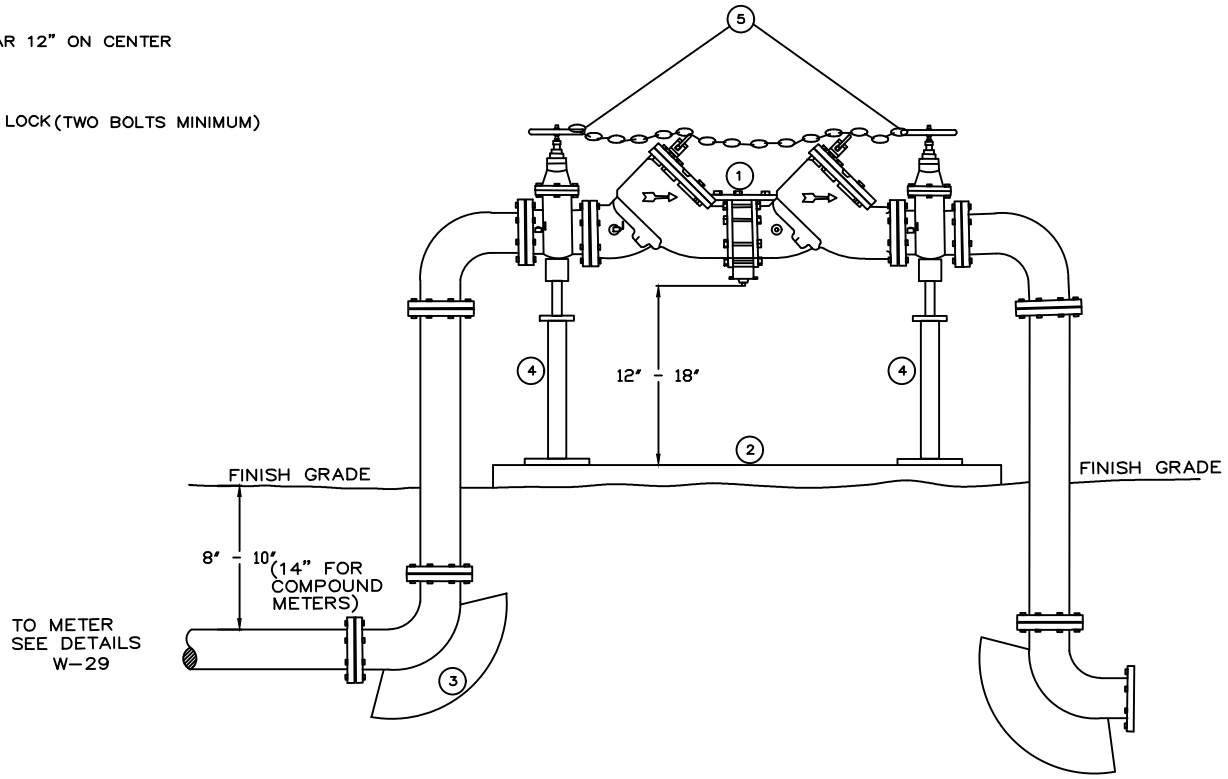
COMMERCIAL/IRRIGATION 1 1/2" & 2" SERVICE LINE

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: D.SAMUELSON
APPROVED BY: RICHARD PLECKER

W-7

MATERIALS:

1) R.P. TYPE BACKFLOW DEVICE (CITY APPROVED)
2) 4" THICK REINFORCED CONCRETE SLAB WITH #4 REBAR 12" ON CENTER
3) THRUST BLOCKS (TYP.)
4) SUPPORT STANDS BOLTED INTO CONCRETE
5) 1/4" NON-CASE HARDENED CHAIN WITH BREAKAWAY LOCK (TWO BOLTS MINIMUM)



NOTES:

NO WATER IS TO BE DRAWN THROUGH THE BACKFLOW DEVICE UNTIL IT HAS BEEN TESTED BY THE ENVIRONMENTAL UTILITIES DEPT.

PIPE SHALL BE DUCTILE IRON.

PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL. POLYETHYLENE

USE CITY APPROVED RESTRAINED JOINTS OR FLANGED SPOOLS

THE BACKFLOW DEVICE SHALL BE INSULATED WITH A CITY APPROVED FREEZE PROTECTION BAG.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

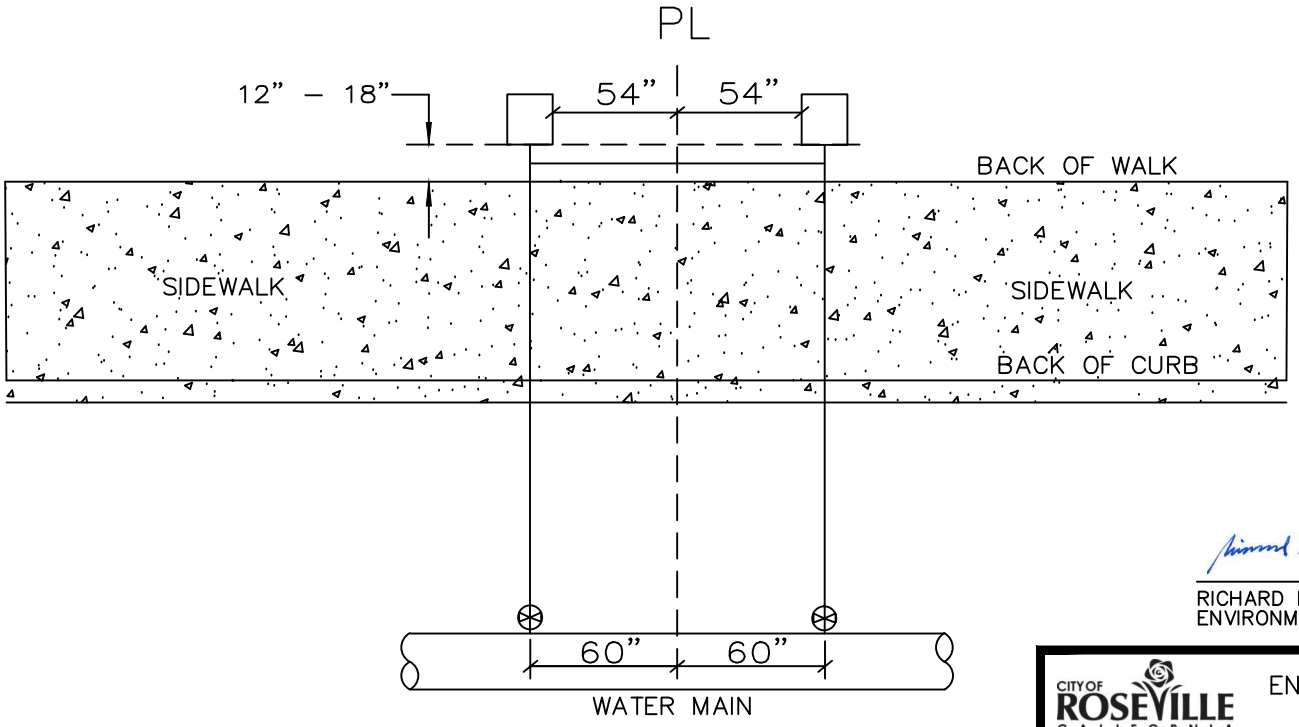
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

COMMERCIAL 3" & LARGER SERVICE

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-8



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

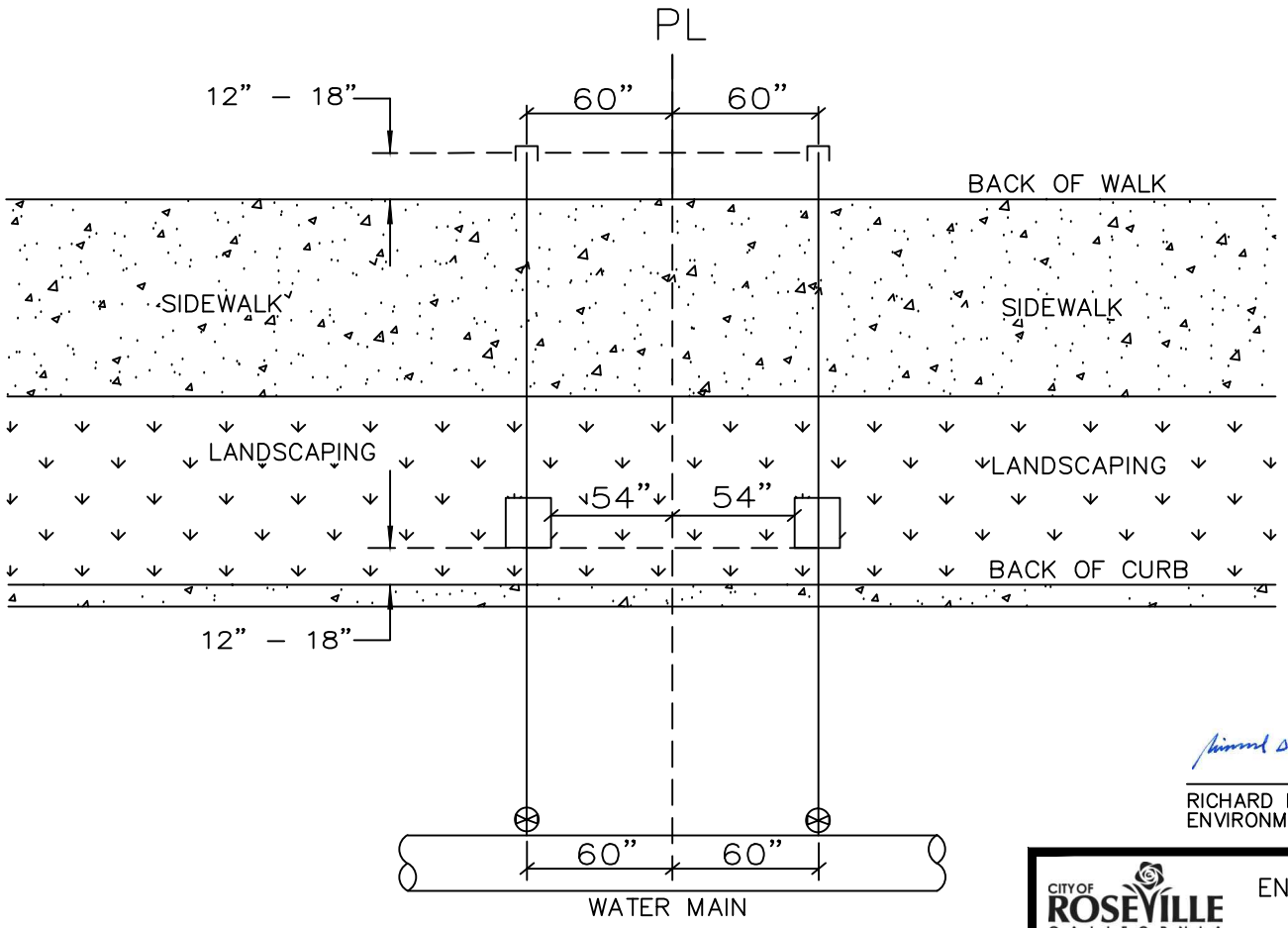
ENVIRONMENTAL UTILITIES DEPARTMENT

RESIDENTIAL WATER SERVICE

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–9

NOTE: REFER TO DETAIL W–18 FOR "WATER SERVICE TRENCH AND BACKFILL"



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

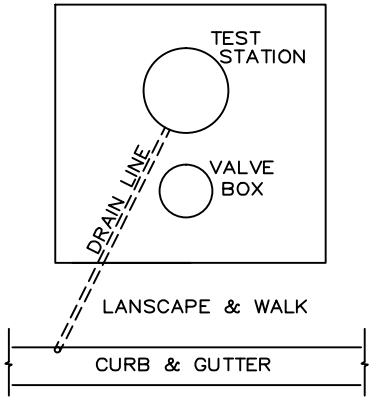
RESIDENTIAL WATER SERVICE FOR SEPARATED SIDEWALKS

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–10

NOTE: REFER TO DETAIL W–18 FOR "WATER SERVICE TRENCH AND BACKFILL"

DRAIN LINE DETAIL



NOTES:

INSTALL CONCRETE BLOCKING UNDER ENTIRE PERIMETER OF VALVE BOX

INSTALL #12 INSULATED TRACING WIRE FROM MAIN TO CURBSTOP BOX

INSTALL SAMPLING STATION DOOR FACING TOWARD STREET

ABOVE GROUND PIPING SHALL BE INSULATED

1) 3/4" COPPER SERVICE LINE POLYETHYLENE ENCASED.
2) 6" DIAMETER SCHEDULE 40 RISER NOTCHED OVER PIPE AT BASE)
3) CHRISTY TRAFFIC BOX WITH METAL LID
4) CURBSTOP
5) 3 1/2" THICK REINFORCED CONCRETE SLAB
6) 1" SCH. 40 PVC DRAIN TO GUTTER
7) 3/4" BRASS PIPE
8) 3/4" TO 1/2" REDUCER (BRASS)
9) 1/2" COPPER TUBING
10) (4) ANCHOR BOLTS WITH WASHERS & NUTS
11) INSTALL TRACING WIRE FROM MAIN TO CURB STOP. PLACE WIRE OUTSIDE THE RISER, BUT INSIDE THE BOX.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

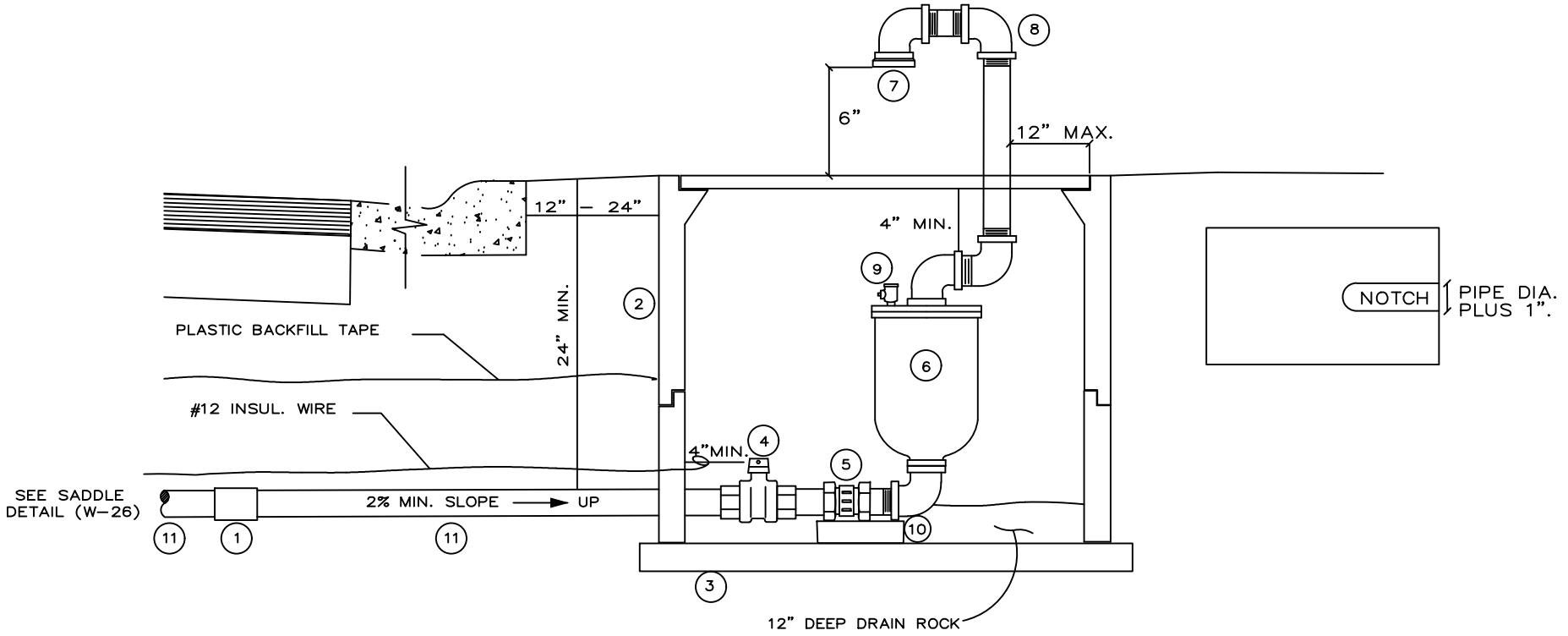
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

SAMPLING STATION

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–11



1) BRASS THREADED COUPLING (IF REQUIRED)
2) B–40 UTILITY BOX W/TRAFFIC COVER MARKED, "RSVL ARV"
   IF EXTENSION IS REQ. MOTAR EXTENSION JOINT INSIDE & OUT.
3) 3" x 5" CONCRETE BRICK UNDER
   ENTIRE PERIMETER OF UTILITY BOX.
4) CURB STOP
5) BRASS UNION
6) COMBINATION AIR / VACUUM VALVE
7) BRASS CAP WITH 9 DRILLED 1/16" HOLES OR APPROVED EQUAL.
8) USE GALVANIZED PIPE AND FITTINGS ABOVE GROUND
9) 1/4" TEST COCK
10) CONCRETE BLOCK FOR SUPPORT
11) THREADED BRASS PIPE

NOTE:

BURIED PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

1" AND 2" AIR RELEASE VALVE ASSEMBLY

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–12

NOTES:

FITTINGS SHALL BE DUCTILE IRON

VALVES AND FITTINGS SHALL BE WRAPPED IN 8 MIL. OR THICKER POLYETHYLENE.

BURIED NUTS AND BOLTS SHALL BE COATED WITH A BITUMINOUS MATERIAL. "T" BOLT HEADS DO NOT REQUIRE COATING.

HYDRANT BOLTS SHALL BE BREAK AWAY TYPE INSTALLED NUT SIDE UP AND FILLED WITH 25 YEAR SILICONE CAULK.

VALVE SHALL BE A MINIMUM OF 15' FROM HYDRANT.

USE APPROVED RESTRAINING JOINTS FROM VALVE TO HYDRANT BURY.

MARK THE LOCATION OF THE HYDRANT WITH A BLUE REFLECTOR PLACED 1' OFF STREET CENTERLINE. HYDRANTS LOCATED AT INTERSECTIONS SHALL BE MARKED ON BOTH STREETS, PER PROVISIONS IN SECTION 84 OF THE CALTRANS SPECIFICATIONS.

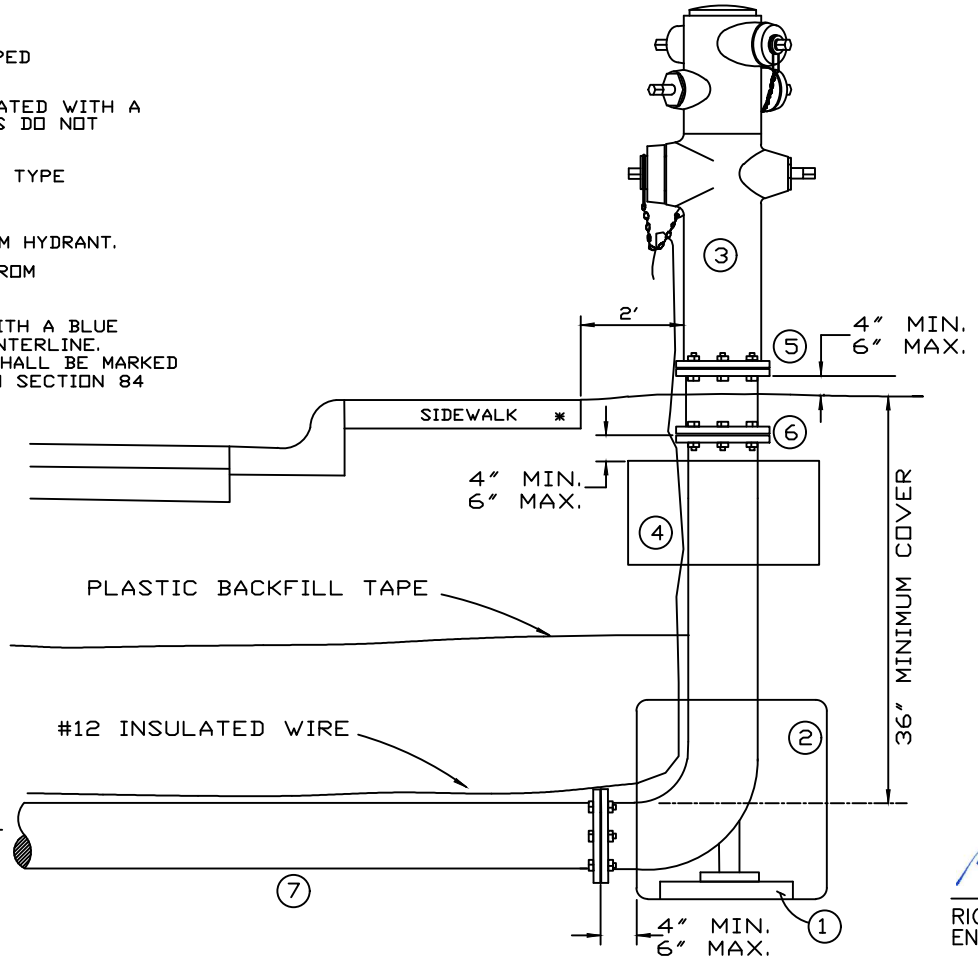
HYDRANTS USED AS BLOW-OFFS SHALL HAVE THE TOP 2" PAINTED WHITE AND BE MARKED WITH AN "X".

A MINIMUM 3 FOOT CLEAR AREA SHALL BE MAINTAINED AROUND THE FIRE HYDRANT.

CITY MAINTAINED HYDRANTS SHALL BE PAINTED WITH TWO COATS SAFTEY-YELLOW.

PRIVATELY OWNED HYDRANTS SHALL BE PAINTED WHITE.

* - HYDRANTS SHALL BE 2' BEHIND CURB WHEN THE SIDEWALK IS DETACHED.



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

MATERIALS:

1) CONCRETE BLOCKING
2) CONCRETE SUPPORT AGAINST UNDISTURBED SOIL
3) FIRE HYDRANT (LEAD FREE)
4) 12" X 12" X 12" CONCRETE COLLAR FOR STABILITY
5) BREAK AWAY SPOOL WITH BREAK AWAY BOLTS ON HYDRANT FLANGE ONLY
6) NON-BREAKAWAY BOLTS
7) FULLY RESTRAINED DUCTILE IRON PIPE ENTIRE LENGTH

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

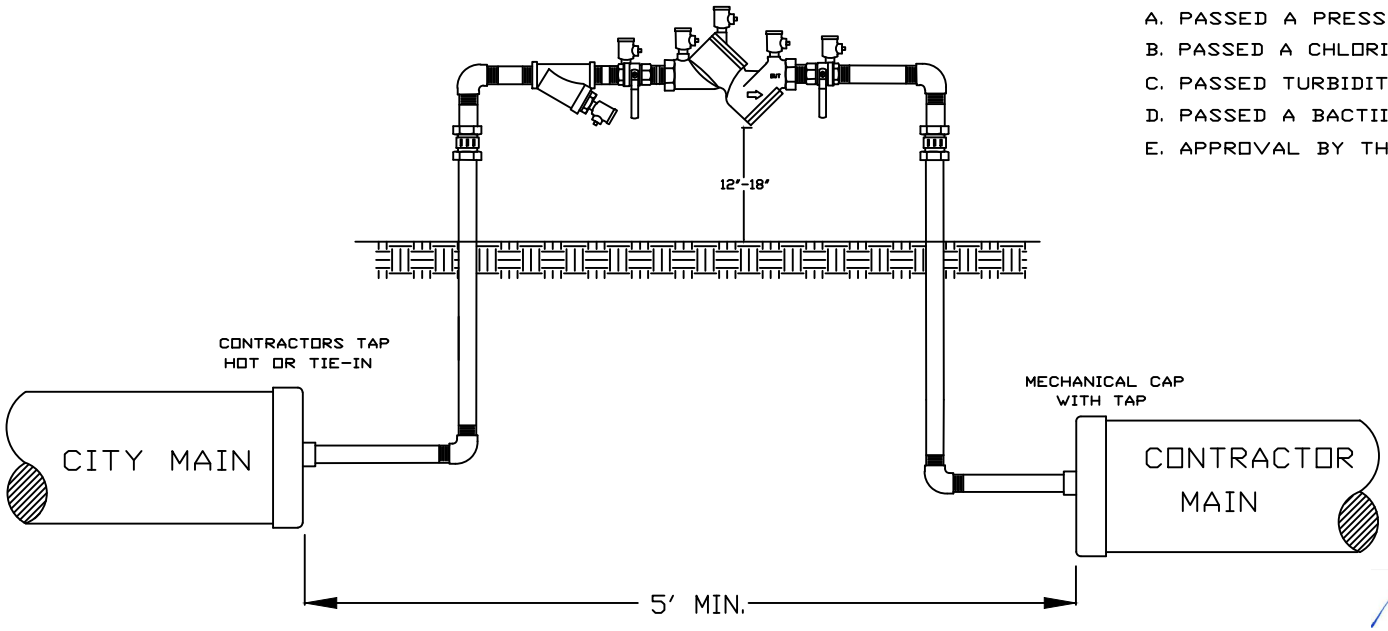
FIRE HYDRANT ASSEMBLY

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-13

PRIOR TO CONNECTION TO THE CITY MAIN, THE FOLLOWING CONDITIONS SHALL BE MET:

A. PASSED A PRESSURE TEST
B. PASSED A CHLORINE TEST
C. PASSED TURBIDITY TEST
D. PASSED A BACTII TEST
E. APPROVAL BY THE EUD INSPECTOR



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

NOTES:

WATER SHALL ONLY BE DRAWN INTO THE CONTRACTORS MAIN THROUGH A CITY APPROVED RP TYPE BACKFLOW DEVICE WHICH HAS BEEN TESTED AND TAGGED BY THE ENVIRONMENTAL UTILITIES DEPARTMENT.

FINAL SYSTEM COMPONENTS NECESSARY FOR TIE-IN SHALL BE PRE-CHLORINATED AND PRE-FLUSHED IN THE PRESENCE OF AN ENVIRONMENTAL UTILITIES DEPARTMENT INSPECTOR.

UPON COMPLETION OF THE CONDITIONS NOTED ABOVE AND WITH THE APPROVAL OF THE EUD INSPECTOR, CONNECTION TO THE CITY SYSTEM MAY BE MADE. THE EUD INSPECTOR SHALL BE NOTIFIED 48 HOURS PRIOR TO THE START OF WORK.

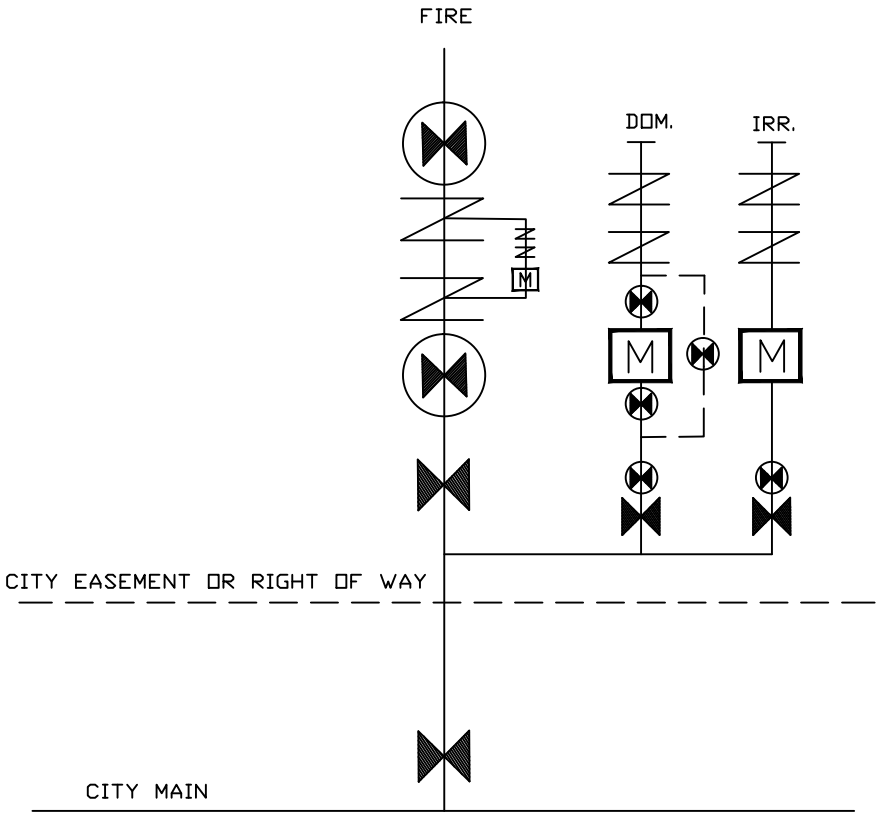
CONTRACTOR IS TO SIZE JUMPER ADEQUATELY FOR FLUSHING PURPOSES.

CITY OF ROSEVILLE CALIFORNIA
CITY OF ROSEVILLE
ENVIRONMENTAL UTILITIES DEPT.

CONSTRUCTION WATER DETAIL

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-14



NOTES:

1) RESTRAINT ENTIRE MANIFOLD WITH APPROVED RESTRAINT SYSTEMS.

2) TAPS SHALL BE MADE SUCH THAT NO DEAD END LINES RESULT.

3) ALL LINES 3" AND LARGER SHALL BE DIP.

4) AFTER THE MANIFOLD, UNDERGROUND AND ABOVE, HAS BEEN ACCEPTED, METERS SHALL BE PURCHASED THROUGH THE CITY AND INSTALLED BY CITY CREWS. WATER MAY NOT DRAWN PRIOR TO TESTING AND TAGGING THE BACKFLOW DEVICE BY THE EUD

5) PROVIDE A PAD WITHIN THE LIMITS OF THE BACKFLOW MANIFOLD WITH POSITIVE DRAINAGE AND A 2% MAX. SLOPE.

6) IN A BACKFLOW MANIFOLD CONFIGURATION THAT INCLUDES DOMESTIC AND IRRIGATION SERVICES, THE IRRIGATION SERVICE TAP SHALL BE DOWNSTREAM OF THE DOMESTIC SERVICE TAP.

7) PROVIDE A MINIMUM 3 FOOT SEPARATION BETWEEN BACKFLOWS IN PARALLEL.

8) PROVIDE A 3' MINIMUM CLEARANCE FROM TOE OR TOP OF ANY SLOPE. NO SLOPES GREATER THAN 2:1 ADJACENT TO BACKFLOW MANIFOLD. IF THE ABOVE CRITERIA IS NOT MET, A RETAINING WALL IS REQUIRED. THE RETAINING WALL SHALL BE CONSTRUCTED OF CONCRETE OR MASONRY ONLY.

9) PROVIDE CURB STOPS AS REQUIRED PER THESE STANDARDS.

10) METER LID SHALL BE STENCILLED WITH THE NUMBER ADDRESS IT SERVES. USE WHITE ENAMEL PAINT AND 2" TALL STENCILING.

11) A METER BYPASS WITH A LOCKING CURB STOP OR LOCKING VALUE SHALL BE REQUIRED FOR ALL DOMESTIC SERVICES 3" AND LARGER OR WHERE REQUIRED.

12) MANIFOLD PIPING SHALL BE A MAXIMUM DEPTH OF 6 FEET.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

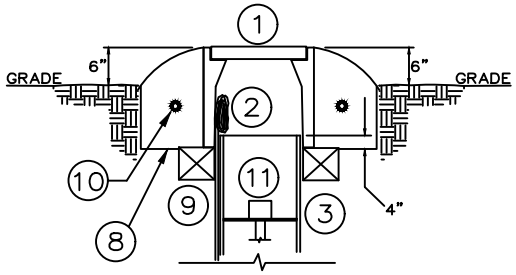
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

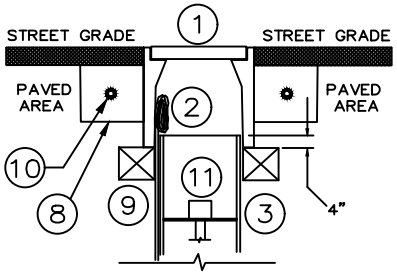
BACKFLOW MANIFOLD SCHEMATIC

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

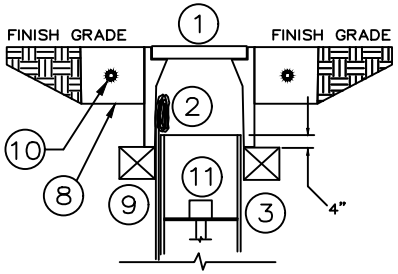
W-15



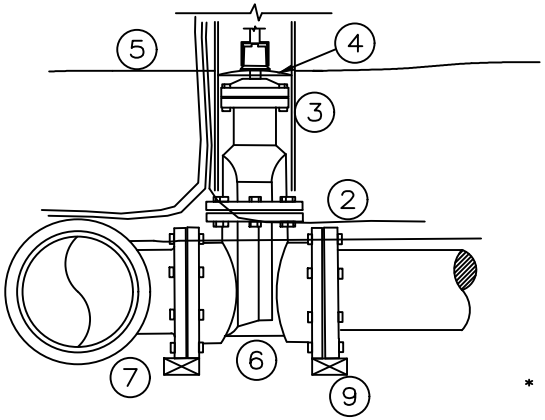
UNDEVELOPED AREA



PAVED AREA



LANDSCAPED AREA



GATE VALVE

MATERIALS

1) CONCRETE VALVE BOX
2) #12 INSULATED TRACING WIRE OUTSIDE RISER
3) 8" RISER STOCK
4) RISER ALIGNER
5) PLASTIC BACKFILL TAPE
6) GATE VALVE
7) DUCTILE IRON TEE
8) CONCRETE COLLAR (SEE NOTES) *
9) CONCRETE BRICK (SEE NOTES)
10) #4 REBAR AROUND CIRCUM. (TYP.)
11) VALVE EXTENSION PER SECTION 81-12.B

* CONCRETE COLLAR SHALL BE PLACED FLUSH TO FINISH GRADE IN ALL COLLECTORS AND ARTERIALS, OPTIONAL IN ALL OTHER ROADWAYS. FINISH SURFACE SHALL BE MEDIUM BROOM FINISH WITH PATTERN PERPENDICULAR TO VEHICLE TRAVEL DIRECTION. SET COLLAR 1/8" BELOW ADJACENT FINISHED PAVEMENTS.

NOTES:

TRACING WIRE THROUGH VALVE BOXES SHALL BE PLACED OUTSIDE OF RISER BUT INSIDE OF BOX.

TRACING WIRE SHALL BE SPLICED INSIDE THE VALVE BOX PER (W-17) AND SHALL LOOP WITHIN THE VALVE BOX WITH 18" OF SLACK WIRE

ALL GATE VALVES SHALL BE CENTERED IN A ONE PIECE RISER STOCK WITH THE USE OF A RISER ALIGNER

OPERATOR NUTS DEEPER THAN 40 INCHES FROM FINISH GRADE SHALL REQUIRE A VALVE NUT EXTENSION 2 FEET MINIMUM IN LENGTH.

VALVE BOXES LOCATED IN A PAVED AREA SHALL BE PLACED IN A 6" X 6" CONCRETE COLLAR A MINIMUM OF 3" BELOW PAVEMENT

VALVE BOXES LOCATED IN A LANDSCAPED AREA SHALL BE PLACED IN A 6" X 6" CONCRETE COLLAR AT FINISHED GRADE.

VALVE BOXES LOCATED IN AN UNDEVELOPED AREA SHALL BE PLACED IN A 12" DEEP BY 6" WIDE CONCRETE COLLAR 6 INCHES ABOVE GRADE.

INSTALL (3" X 5" CONCRETE BRICK) UNDER ENTIRE PERIMETER OF BOX.

VALVES AND FITTINGS SHALL BE WRAPPED AND SEALED IN 8 MIL POLYETHYLEN.E

VALVE RISOR STOCK SHALL BE A MINIMUM OF 4" INSIDE VALVE BOX AND MINIMUM 2" BELOW METAL RING.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

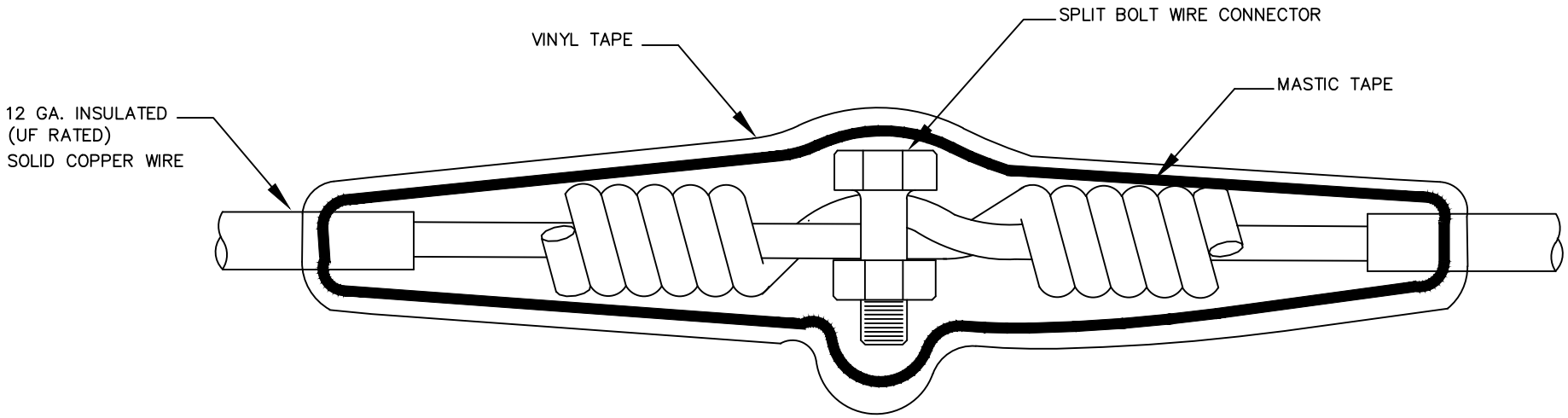
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

GATE VALVE & BOX

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-16



NOTES:

1. TWIST THE WIRE A MINIMUM OF (5) TIMES ON EACH END.
2. INSTALL SPLIT BOLT CONNECTOR.
3. SOLDER WIRE
4. COVER THE ENTIRE SPLICE WITH MASTIC TAPE WRAP
5. WRAP MASTIC WITH VINYL TAPE.
6. WIRE SPLICES SHALL BE LOCATED WITHIN A VALVE BOX PER DETAIL W–16.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

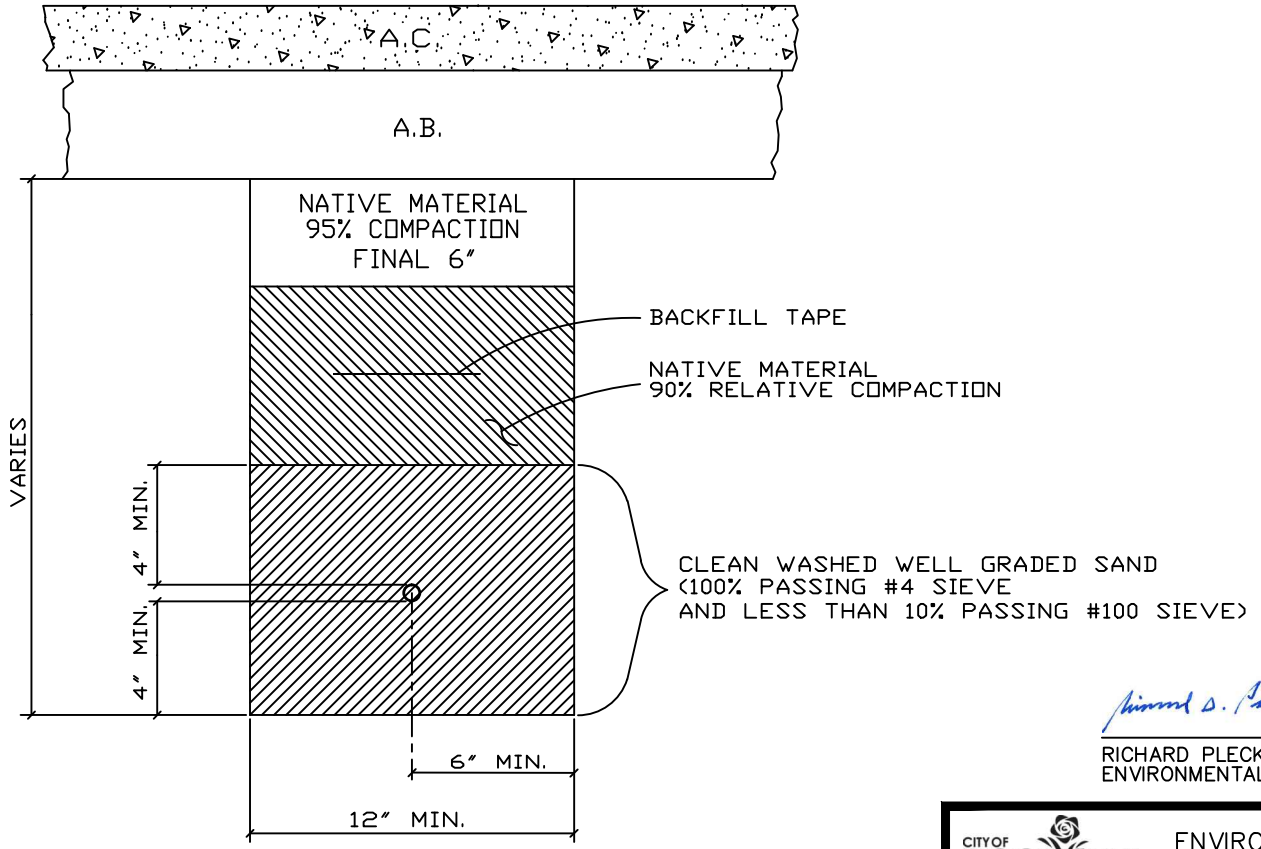
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

TRACING WIRE SPLICE

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–17



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

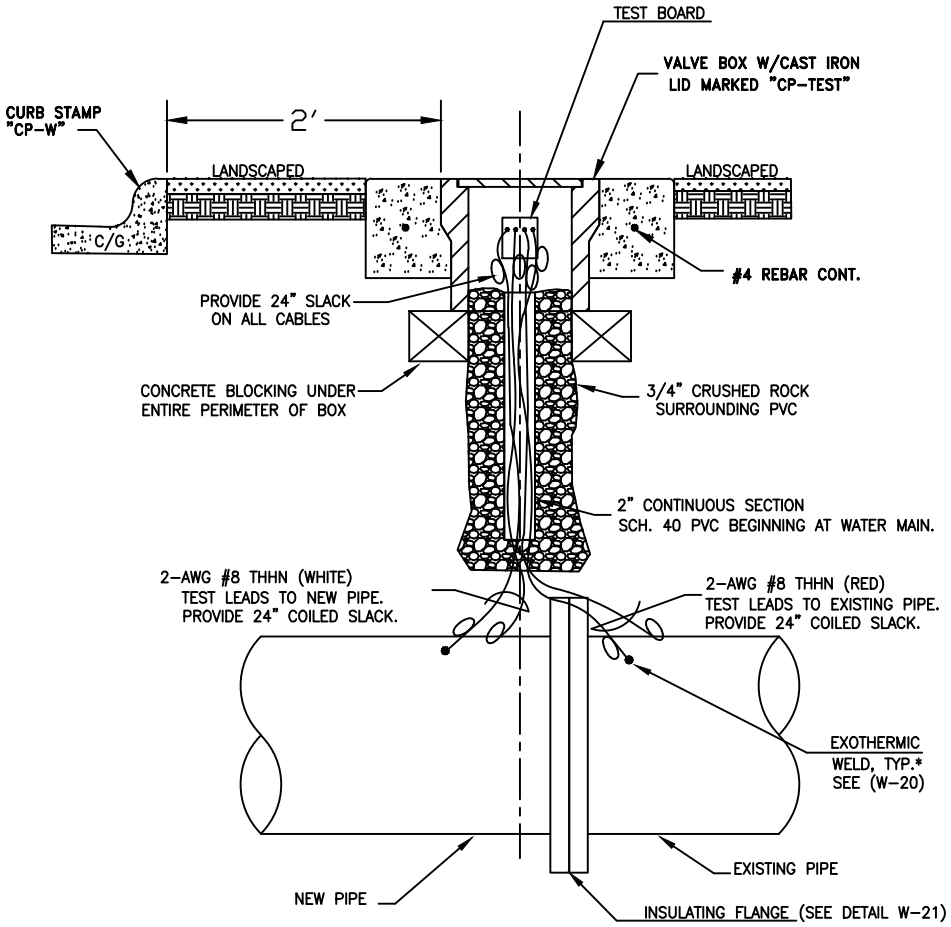
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

TRENCH AND BACKFILL FOR ALL WATER LINES 2" AND SMALLER

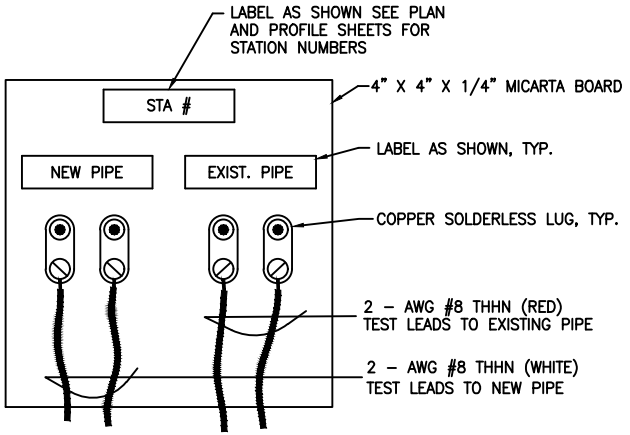
SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-18



TEST STATION (TYPICAL)

*FOR VALVES WELD ON FLANGE



TEST STATION BOARD (TYPICAL)

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

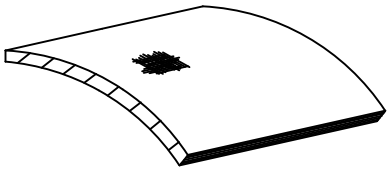
ENVIRONMENTAL UTILITIES DEPARTMENT

INSULATING FLANGE TEST STATION

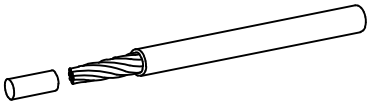
SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

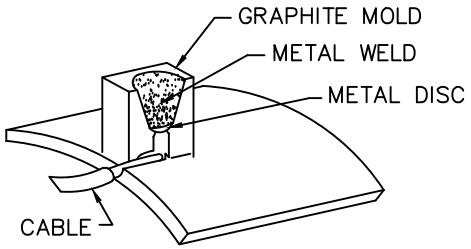
W-19

1) FILE TO BARE METAL & CLEAN OVER SURFACE

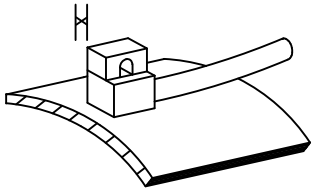


2) STRIP INSULATION FROM WIRE AND ATTACH SLEEVE



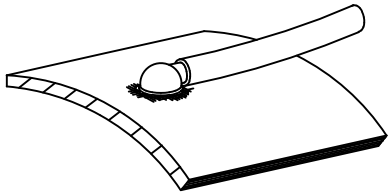


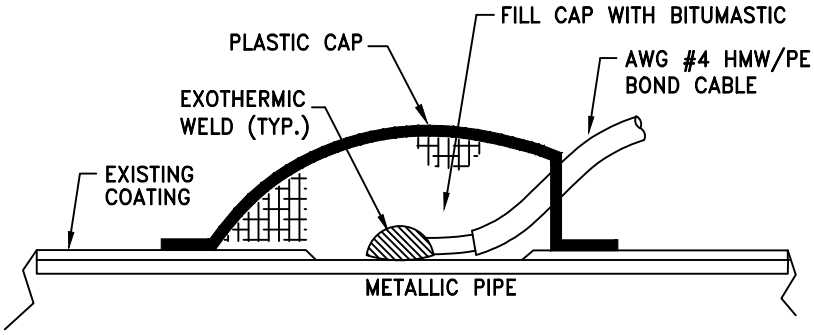
3) HOLD MOLD FIRMLY WITH OPENING AWAY FROM OPERATOR, IGNITE WITH FLINT GUN



NOTE:
EACH JOINT SHALL HAVE TWO SEPARATE WELD WIRES.

4) REMOVE SLAG FROM CONNECTION, COVER CONNECTION WITH COMPATIBLE COATING AND CAP OVER ALL EXPOSED METAL





RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

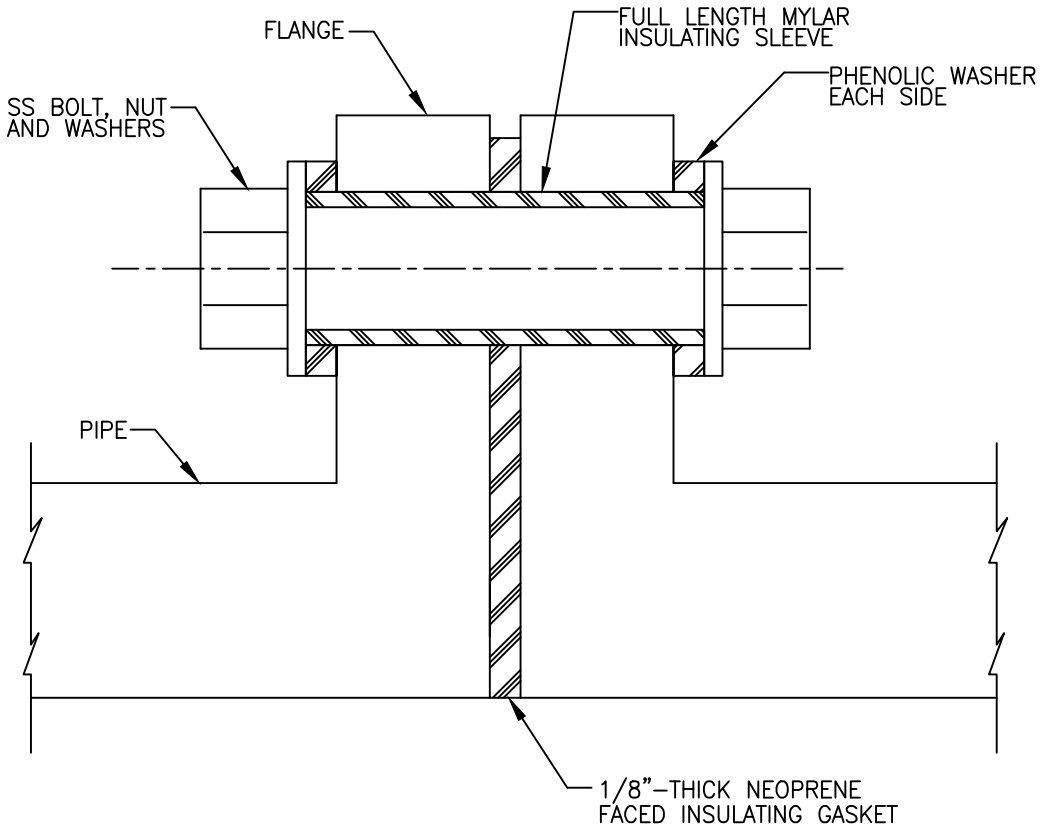
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

EXOTHERMIC WELD

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–20



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

NOTES:

1. DIELECTRIC FLANGE KITS SHALL BE MANUFACTURED BY F.H. MALONEY CP., CALPICO OR APPROVED EQUAL

2. PROVIDE AN INSULATING FLANGE TEST STATION FOR THE INSULATED FLANGE.

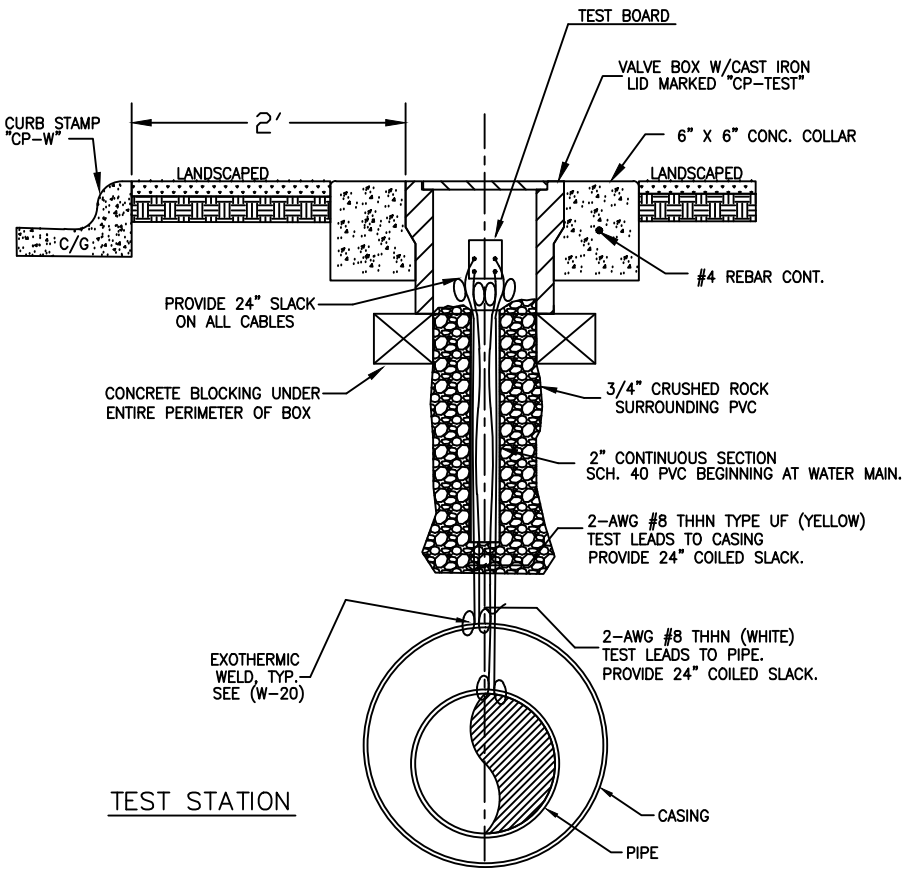
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

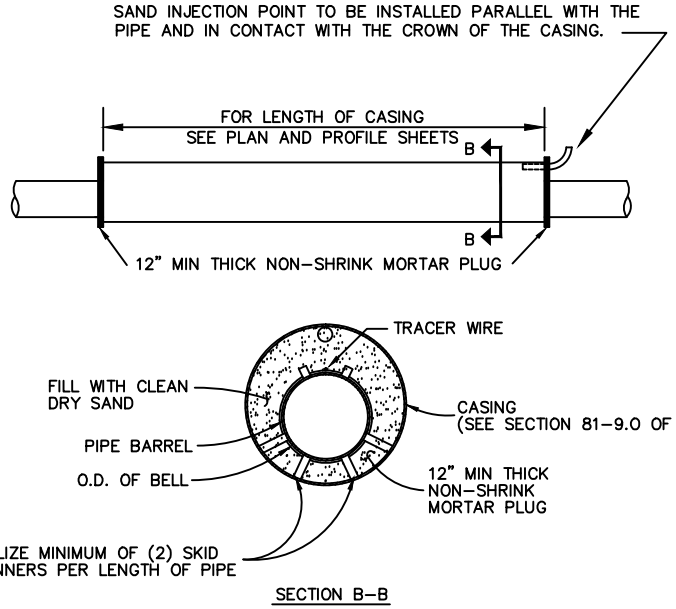
INSULATED FLANGE

SCALE: NONE
REVISED: JANUARY 2015
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–21



TEST STATION

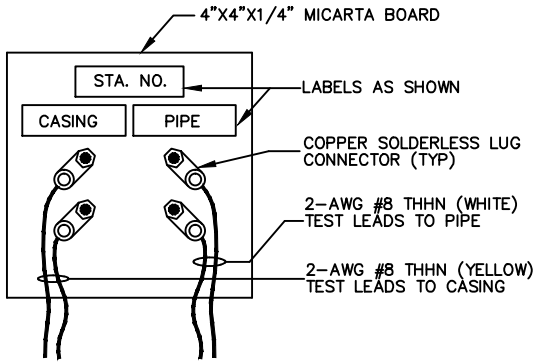


SECTION B-B

NOTES:

1. THE MINIMUM STRENGTH FOR STEEL CASING SHALL BE 35,000 PSI
2. 18 MIL COAL TAR EPOXY SHALL BE APPLIED ON THE INSIDE & OUTSIDE OF THE STEEL CASING.
3. RESTRAINED PIPE WITHIN CASINGS OR BRIDGES SHALL BE FULLY EXTENDED OR "STRETCHED OUT" TO REMOVE THE SLACK BETWEEN THE JOINTS THE ENTIRE LENGTH OF THE STRUCTURE.

CASING DETAIL



TEST BOARD

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

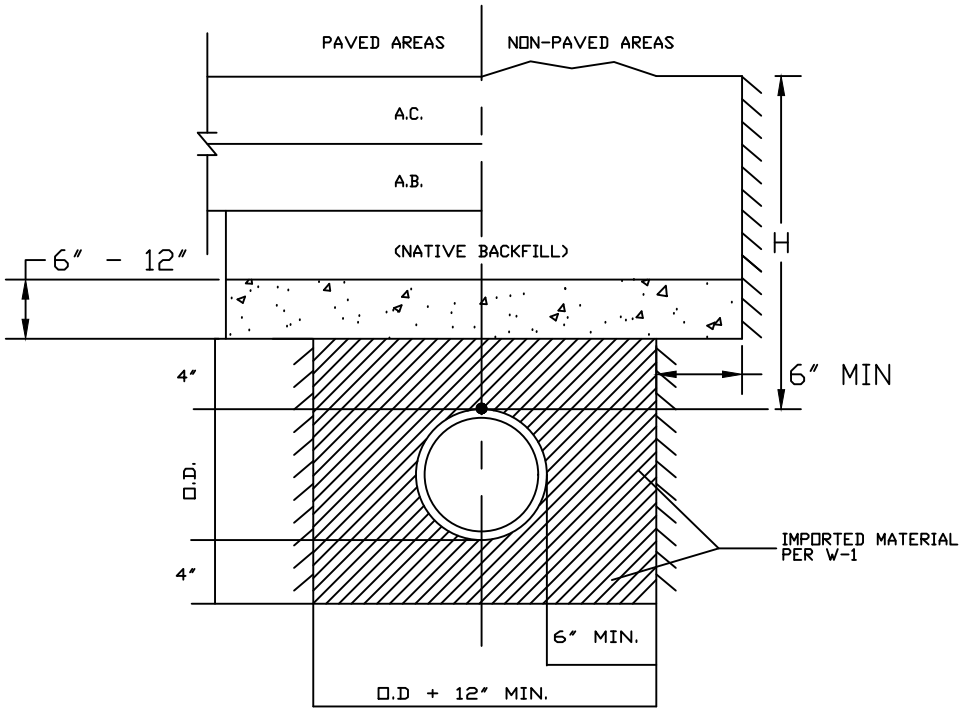
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

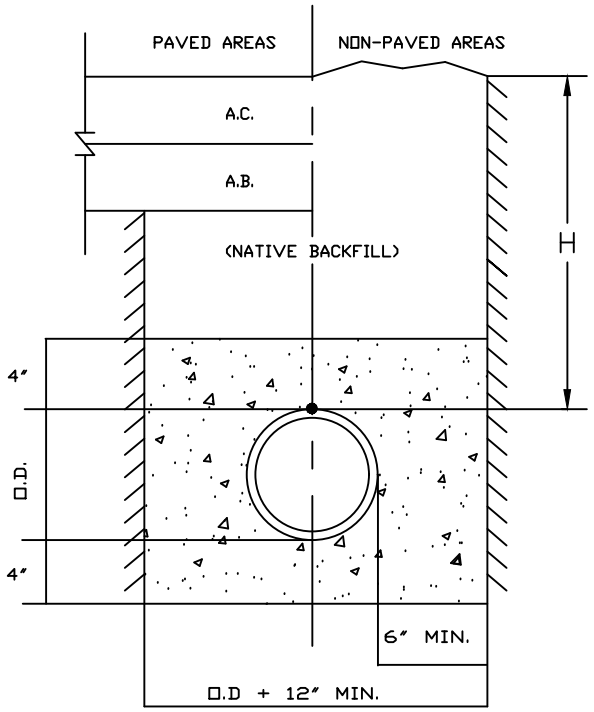
CASING & TEST STATION

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-22



CONCRETE CAP



CONCRETE ENCASEMENT

APPLICATION:

- WHERE 30" < H < 36", USE DIP ONLY
- WHERE 20" < H < 30"
  - WITH SERVICES, USE DIP AND CONCRETE CAP
  - WITHOUT SERVICES, USE DIP AND CONCRETE ENCASE (WRAP DIP IN 1/2" CLOSED CELL FOAM PRIOR TO ENCASEMENT)
- WHERE H < 20", REDESIGN WATERLINE

NOTE:

THIS DETAIL SHALL BE USED ON A CASE-BY-CASE BASIS WITH THE APPROVAL OF THE EUD DIRECTOR. IN MOST CASES, THE 36" MINIMUM COVER SHALL PREVAIL.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

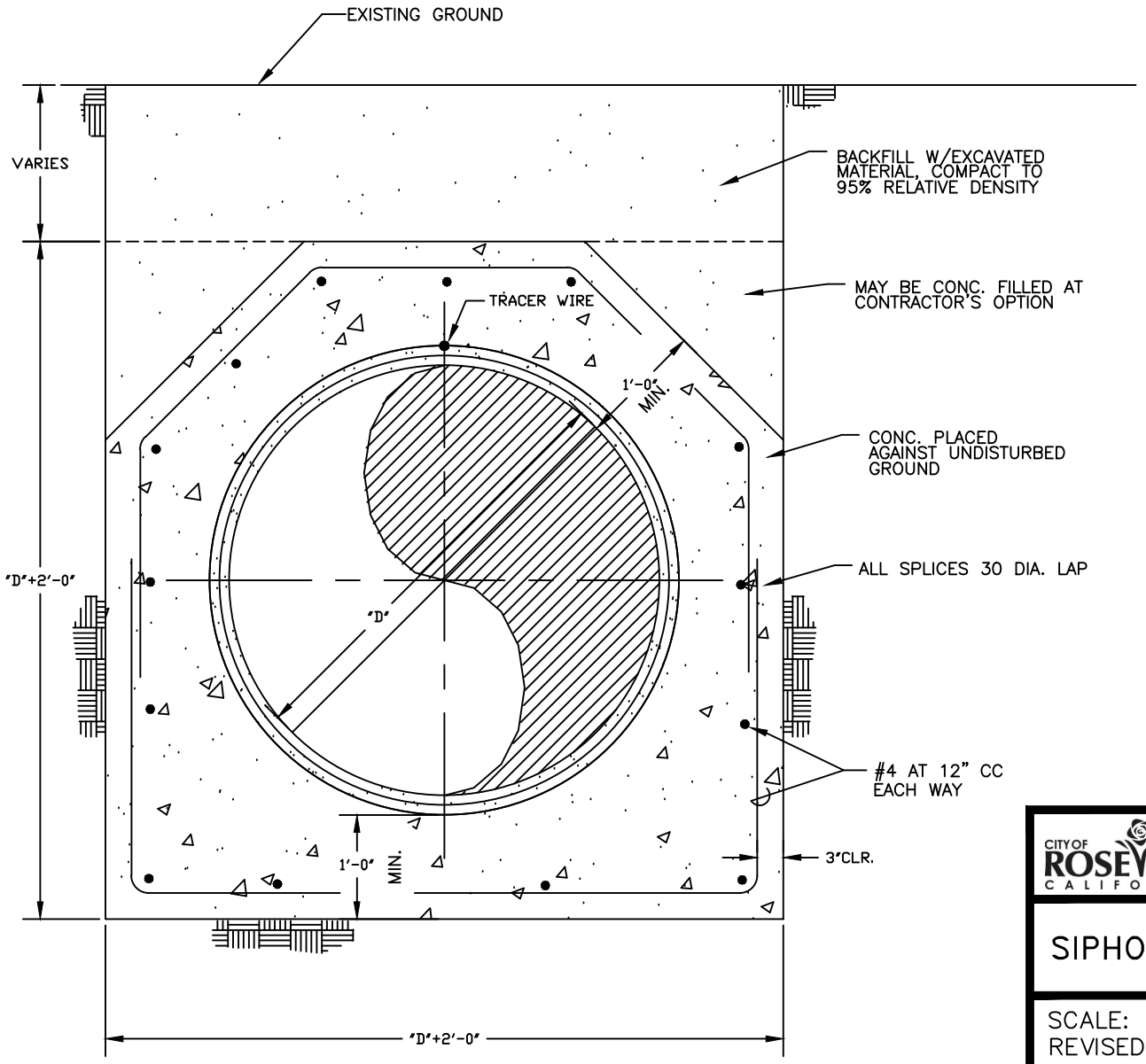
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

SHALLOW WATER MAINS

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-23



NOTES:

1. RESTRAINED PIPE WITHIN CASINGS OR BRIDGES SHALL BE FULLY EXTENDED OR "STRETCHED OUT" TO REMOVE THE SLACK BETWEEN THE JOINTS THE ENTIRE LENGTH OF THE STRUCTURE.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

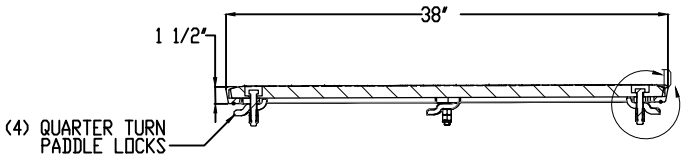
ENVIRONMENTAL UTILITIES DEPARTMENT

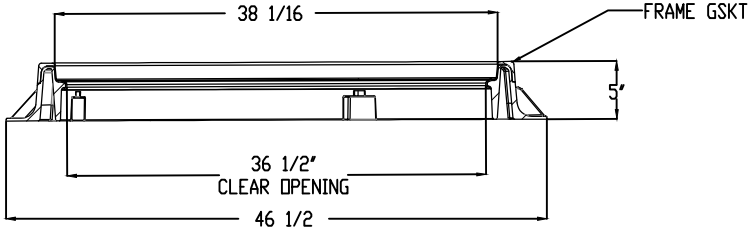
SIPHON CONCRETE ENCASEMENT

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

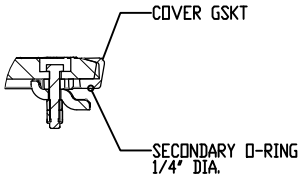
W-24

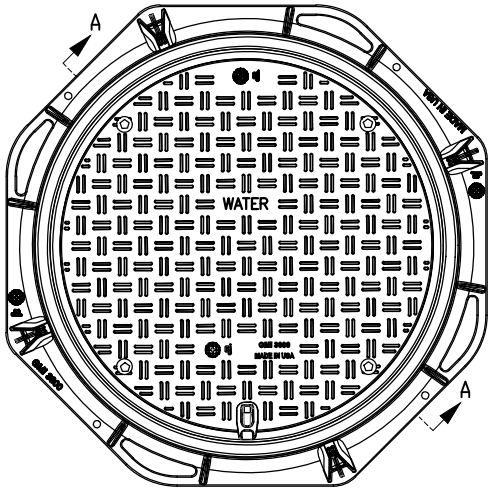
GMI Cover and Frame Assembly





SECTION A-A





RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA
ENVIRONMENTAL UTILITIES DEPARTMENT

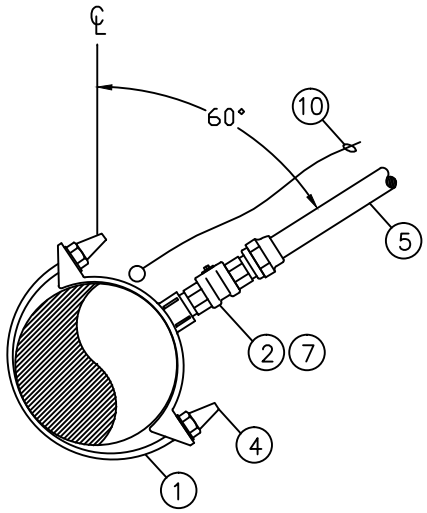
36" MANHOLE RING AND COVER

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

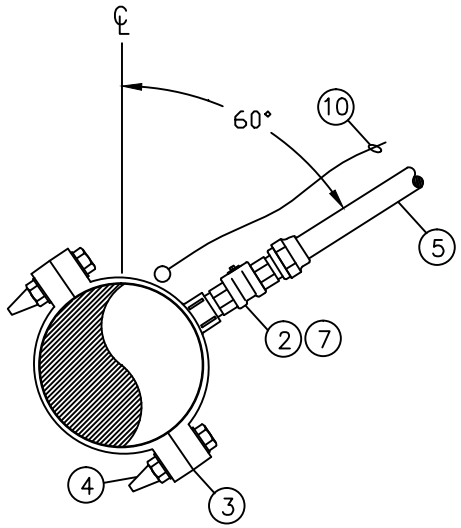
W-25

NOTES:

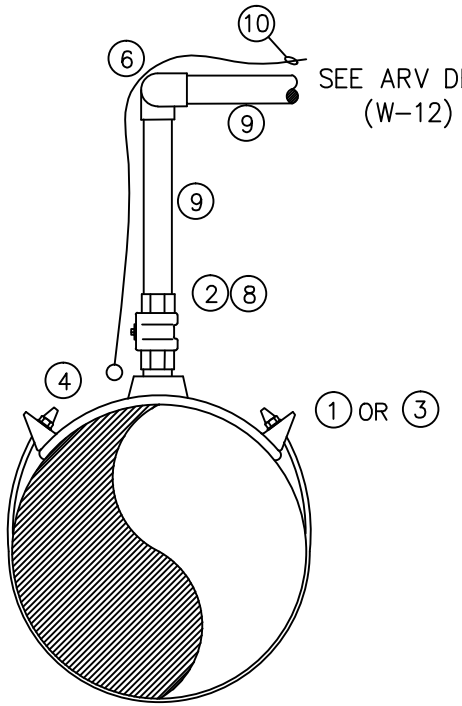
TO CONFORM TO AASHTO M306-05, H-20 AND H-25 EN/24 D4000.



DOUBLE STRAP
DUCTILE IRON PIPE SADDLE



PVC PIPE SADDLE



ARV SADDLE

MATERIALS:

1.) DOUBLE STRAP BRASS SADDLE FOR DUCTILE IRON MAIN
2.) INSULATING CORPORATION STOP OR NON INSULATED CORPORATION STOP WITH NYLON BUSHING
3.) BRASS SADDLE FOR PVC MAIN
4.) ZINC CAPS ON ALL BOLTS (ONLY WITH NON-INSULATED CORPORATION STOP)
5.) COPPER SERVICE
6.) SWING JOINT (2 – 90° BRASS FITTINGS)
7.) CORP STOP W/COMPRESSION COUPLING
8.) CORP STOP W/THREADED COUPLING
9.) THREADED BRASS PIPE
10.) TRACING WIRE (FOR COMMERCIAL SERVICES ONLY)

NOTES:

WRAP CORPORATION STOP AND COPPER SERVICE A MINIMUM OF 3' WITH AN APPROVED DIELECTRIC TAPE AND POLYKEN PRIMER PER MANUFACTURER'S RECOMENDATIONS.

SADDLES SHALL BE WRAPPED IN 8 MIL POLYETHYLENE AND BACKFILLED WITH SAND.

TRACING WIRE SHALL BE REQUIRED ON ARV, HYDRANT RUNS, BLOW OFFS, SERVICES WITHOUT CONTINUOUS COPPER PIPE, AND OTHER MAJOR APPURTENANCES.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

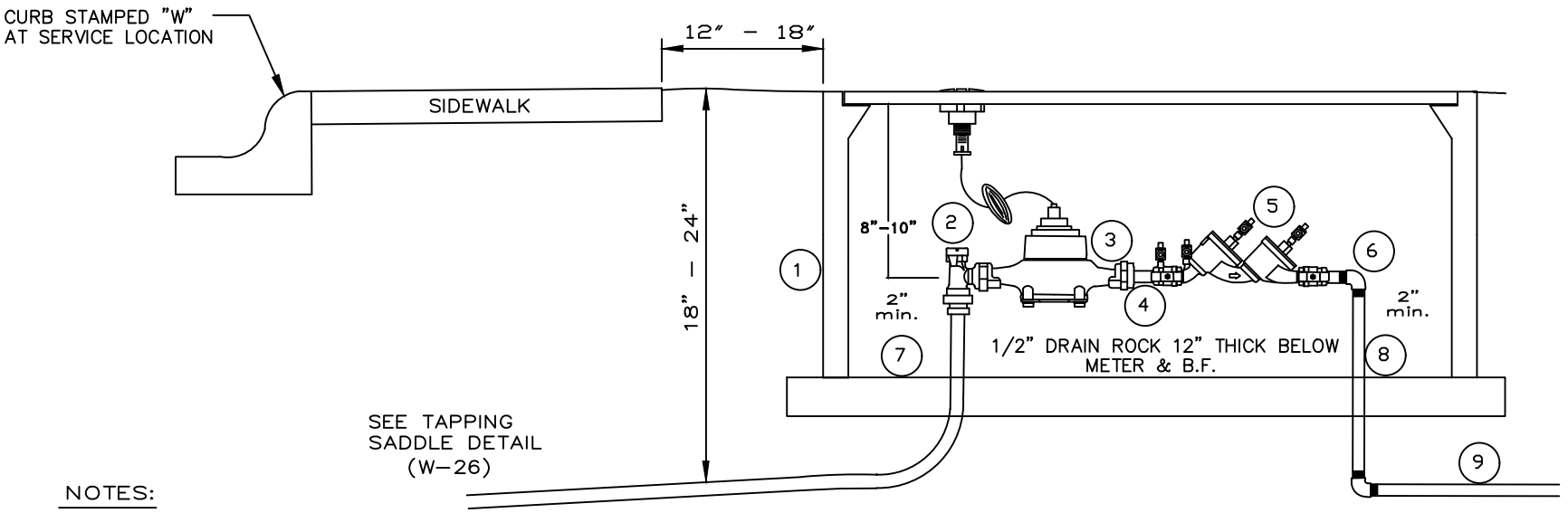
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

SADDLE DETAIL

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-26



NOTES:

WATER METERS SHALL BE PURCHASED THROUGH THE CITY PURCHASE INCLUDES INSTALLATION.

INSTALL CONCRETE BLOCKING (4"X4"X 15 1/2" SOLID SLUMP BLOCK) UNDER ENTIRE UTILITY BOX PERIMETER.

BURIED PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

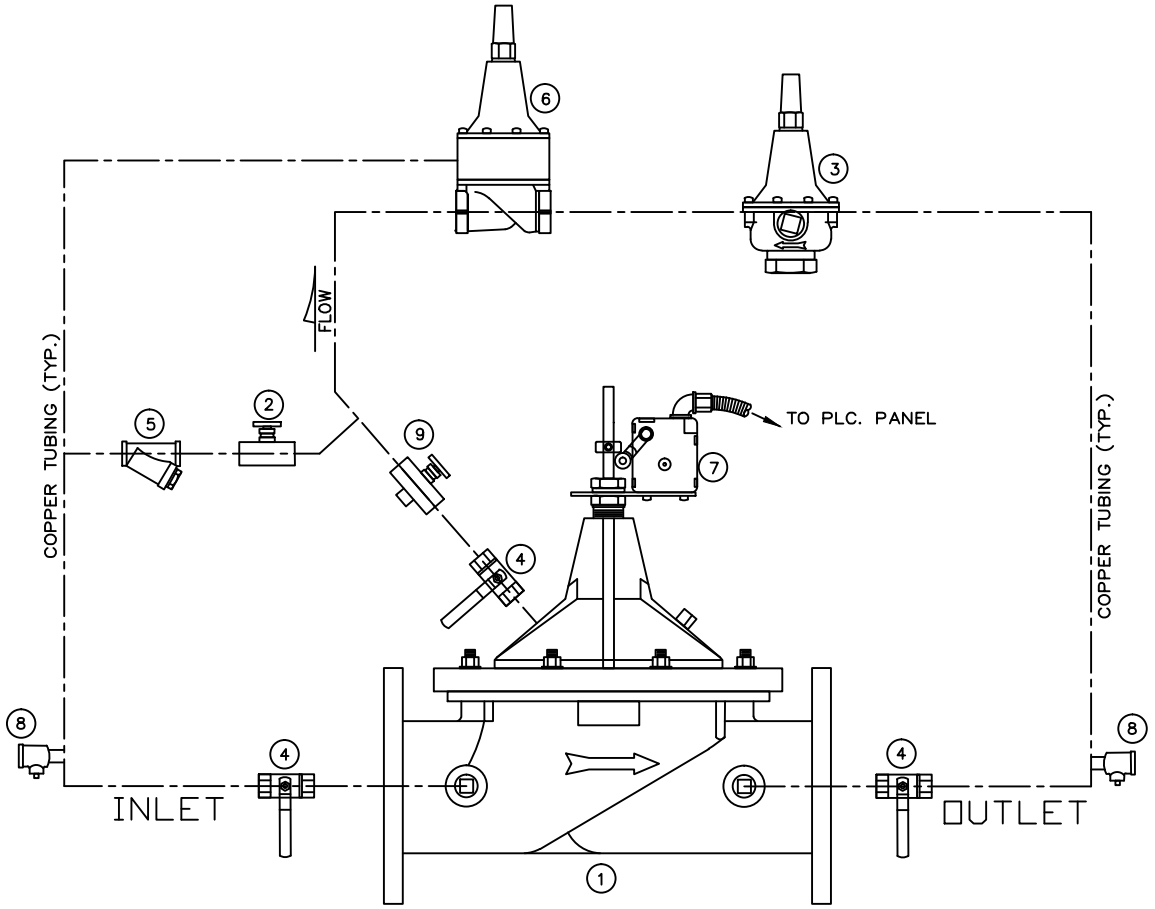
1) N 36 UTILITY BOX
2) ANGLED METER VALVE W/PADLOCK WINGS (PACK JOINT)
3) WATER METER (PURCHASED THROUGH CITY)
4) 4" BRASS NIPPLE
5) DOUBLE CHECK VALVE (WATTS SERIES 719)
6) STREET "L" (BRASS)
7) 3" X 5" CONCRETE BRICK UNDER ENTIRE PERIMETER OF BOX.
8) 12" BRASS NIPPLE
9) 18" BRASS NIPPLE (MIN.)

CITY OF ROSEVILLE CALIFORNIA
ENVIRONMENTAL UTILITIES DEPARTMENT

DUAL WATER USE (POTABLE) 3/4" & 1" SERVICE LINE

SCALE: NONE
REVISED: JANUARY 2017
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-27



1) MAIN VALVE, STAINLESS STEEL BODY, AMES, CLA VAL
2) NEEDLE VALVE, DELTRO
3) PRESSURE REDUCING CONTROL, AMES CP-15,
4) BALL VALVES, APOLLO OR HOKE
5) "Y" STRAINER WITH BRASS PLUG 1/4"NPT
6) PRESSURE SUSTAINING VALVE, AMES CP-16,
7) OPEN LIMIT SWITCH, MICROSWITCH
8) TEST COCK, MIPT 1/4" BRASS
9) OPENING SPEED CONTROL, DELTRO

RICHARD PLECKERD
ENVIRONMENTAL UTILITIES DIRECTOR

NOTES:

CITY APPROVED GATE VALVES SHALL BE PLACED UP AND DOWN STREAM OF MAIN VALVE.

FITTINGS SHALL BE BRASS COMPRESSION TYPE

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

COMBINATION PRESSURE REDUCING AND PRESSURE SUSTAINING VALVE

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-28

NOTES:

PIPE SHALL BE DUCTILE IRON FOR 3" AND LARGER.

INSTALL (3" X 5") CONCRETE BRICK UNDER ENTIRE PERIMETER OF THE UTILITY BOX.

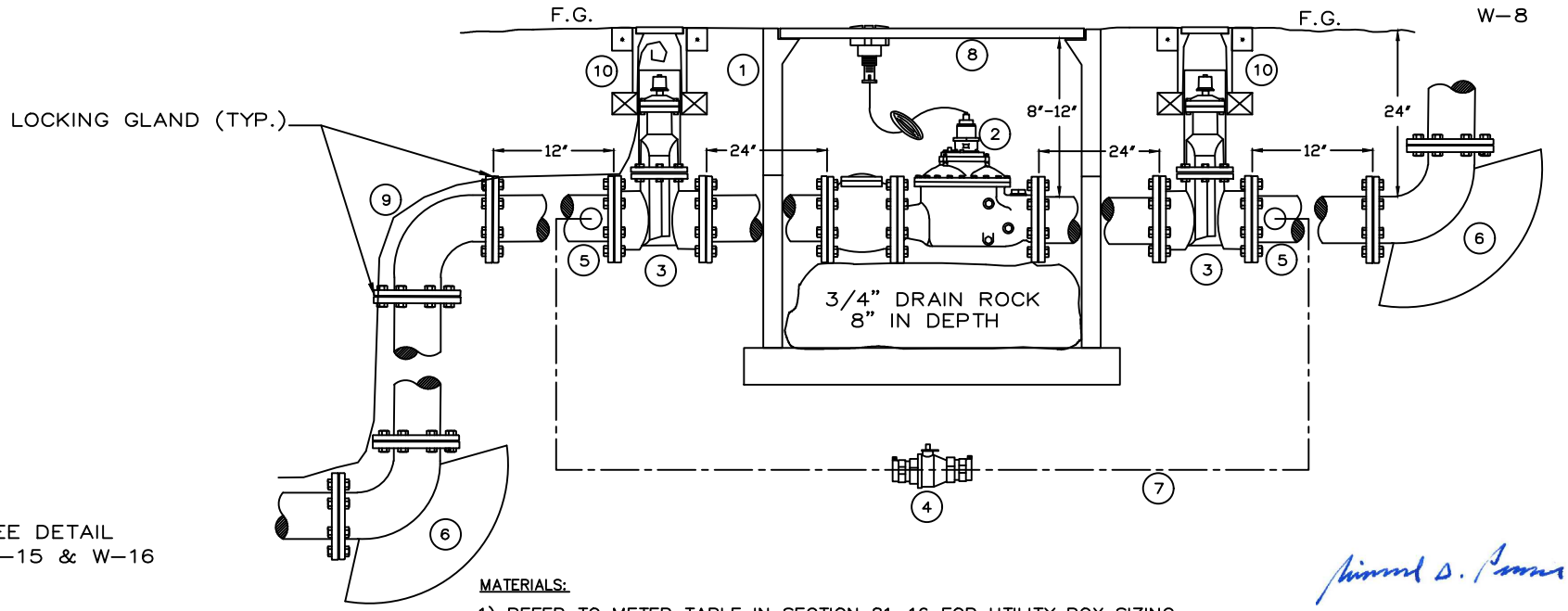
PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL. POLYETHYLENE

USE CITY APPROVED RESTRAINED JOINTS OR FLANGED SPOOLS

WATER METER SHALL BE PURCHASED THROUGH THE CITY. PURCHASE INCLUDES INSTALLATION.

USE TURBO METER FOR IRIGATION & COMPOUND METER FOR COMMERCIAL SERVICE.

TO BACKFLOW
SEE DETAIL
W–8

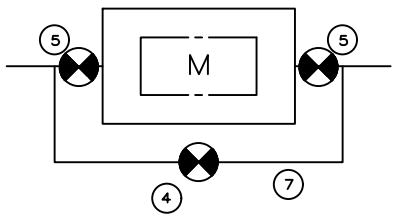


SEE DETAIL
W–15 & W–16

MATERIALS:

1) REFER TO METER TABLE IN SECTION 81–16 FOR UTILITY BOX SIZING. WITH EXTENSION. MORTAR EXTENSION JOINT INSIDE AND OUT.
2) METER WITH STRAINER (PURCHASED THROUGH CITY) INSTALL IDLER SPOOL DURING INSTALLATION OF METER BOX.
3) RESILENT SEAT GATE VALVE (3"–6")
4) 2" LOCKING CURB STOP IN G–5 BOX
5) 2" DOUBLE STRAP BRASS SADDLE FOR DUCTILE IRON MAIN WITH 2" MIPT BY COMPRESSION ADAPTER
6) THRUST BLOCKS (TYP.)
7) 2" BYPASS PIPE MATERIAL TO BE SOFT COPPER TYPE K (STICK NOT ROLLED COPPER) AND FITTINGS TO BE BRASS COMPRESSION TYPE.
8) METAL TRAFFIC LID WELD MARKED "RSVL WATER"
9) TRACING WIRE
10) SEE W–16 FOR VALVE BOX AND RISER DETAIL

PLAN VIEW:
METER BYPASS



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

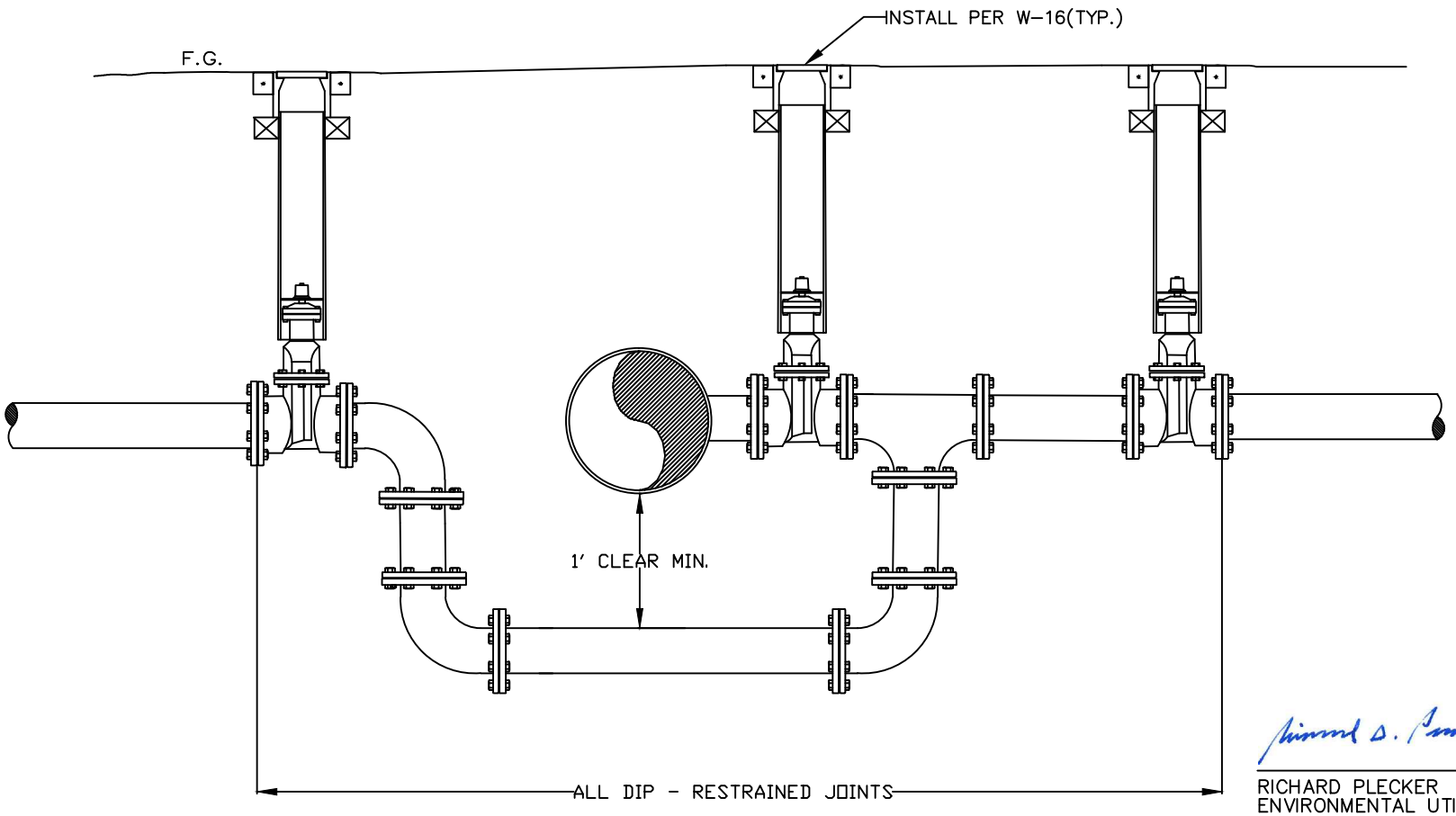
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

3", 4", 6", 8" COMPOUND & TURBO METER WITH BYPASS

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W–29



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

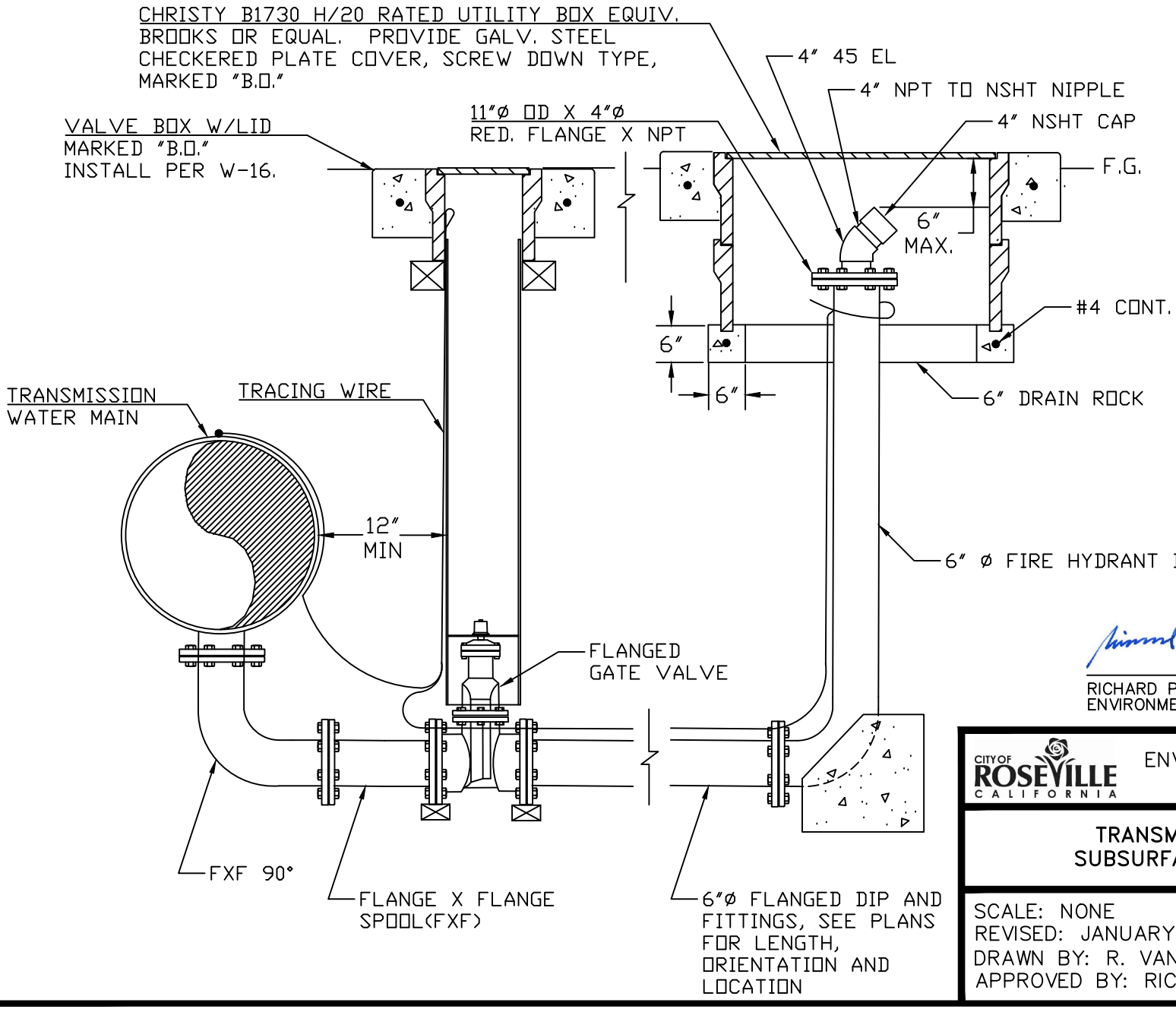
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

FLOW THRU DETAIL

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-30



NOTE:

ALL THREADED PIPE FITTINGS SHALL BE BRASS

CONCRETE INSTALLED FOR STABILITY

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

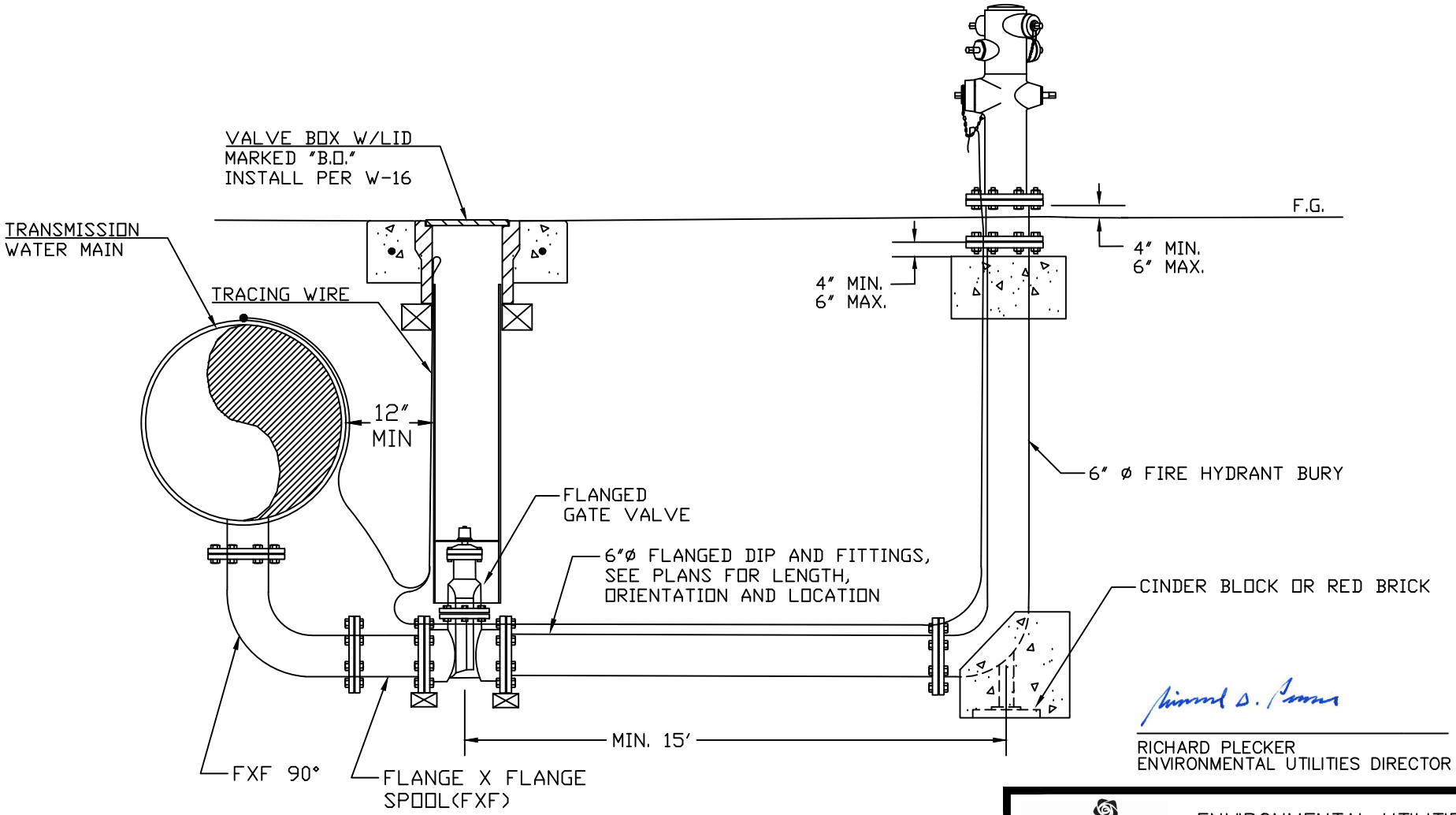
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

TRANSMISSION MAIN SUBSURFACE BLOW OFF

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-31



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

NOTES:
1. STATION LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. PLACE BLOW-OFFS ADJACENT TO LOW POINT IN MAIN LINE.
2. ALL FITTINGS SHALL BE DIP.
3. HYDRANT BOLTS SHALL BE BREAK AWAY. INSTALLED NUT SIDE UP AND FILLED WITH 25 YEAR (MIN) SILICONE CAULK.
4. ENTIRE LENGTH TO BE RESTRAINED.
5. CONTRACTOR HAS THE OPTION OF USING MECHANICAL JOINT (MJ) FITTING. IF MJ FITTINGS ARE USED, MEGALUGS SHALL BE INSTALLED.
6. CONCRETE INSTALLED FOR STABILITY.

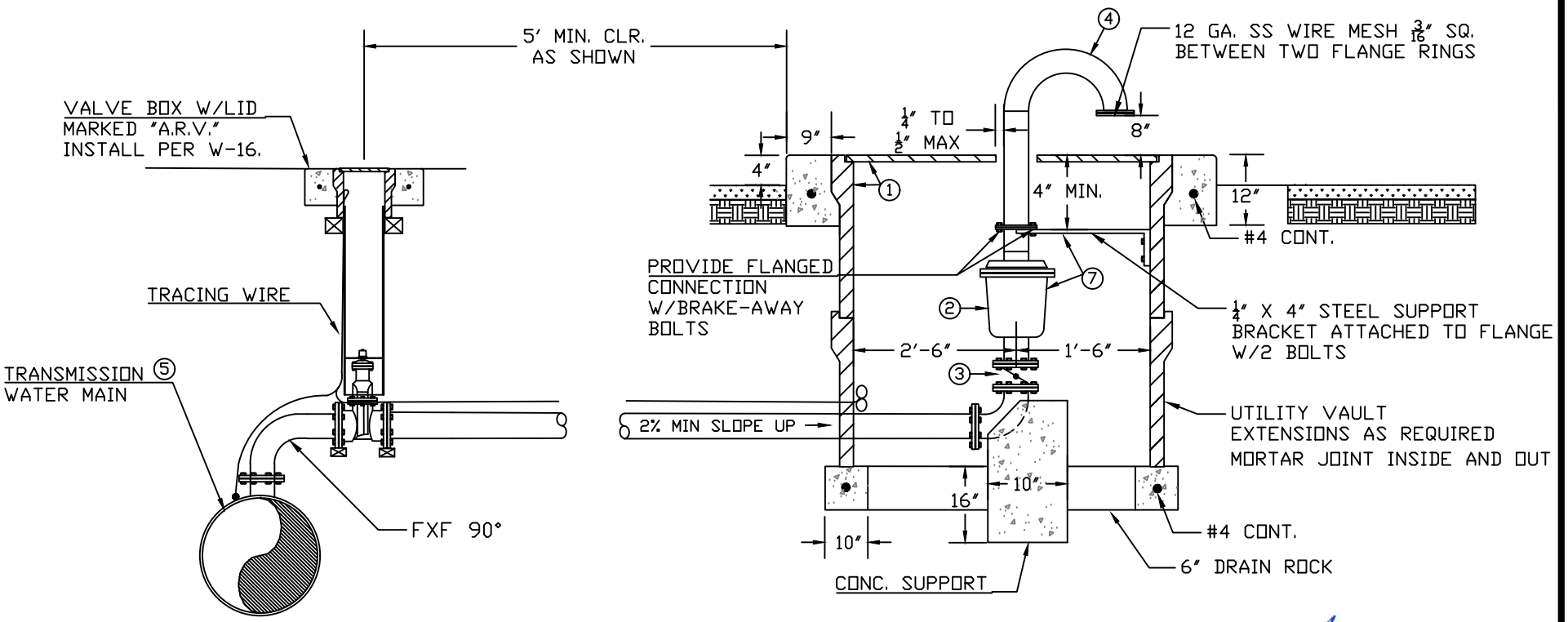
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

TRANSMISSION MAIN HYDRANT BLOW OFF

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-32



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

NOTES:

1. PRECAST CONC. UTILITY BOX (48"X48" I.D.) WITH GALV. STEEL LID CHECKERED PLATE COVER (2 PIECE SPLIT LID, DESIGNED FOR H20 LOADING) MARKED "RSVL A.R.V." (USE SS HOLD DOWN SCREWS).
2. COMBINATION AIR/VACUUM RELEASE VALVE, PIPING, AND FITTINGS SIZED AS SHOWN ON PLAN & PROFILE SHEETS. (VALVE SHALL BE FLANGED)
3. FLANGED BUTTERFLY VALVE WITH HAND WHEEL OPERATOR.
4. WSP VENT, SCH 40, GALV. AFTER FABRICATION.
5. ARV TO BE PLACED AT HIGH POINT OF PIPE AT SIDE OUTLET FLANGE.
6. RESTRAIN ALL JOINTS BETWEEN C.C.P. AND ARV. RESTRAINED MJ WITH MEGALUG GLANDS MAY BE USED IN LUE OF FLANGED FITTINGS BEYOND G.V.
7. EXPOSED NON-GALVANIZED PIPING, VALVES, AND APPUR. SHALL BE PAINTED WITH TWO PRIMER AND TWO FINISH COATS OF MACHINERY ENAMEL (COLOR TO BE SELECTED BY EUD)
8. ALL BURIED PIPE, FITTINGS, VALVES AND APPUR. SHALL BE DUCTILE IRON AND ENCASED WITH 8 MIL. POLYETHYLENE.
9. CONCRETE INSTALLED FOR STABILITY.

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

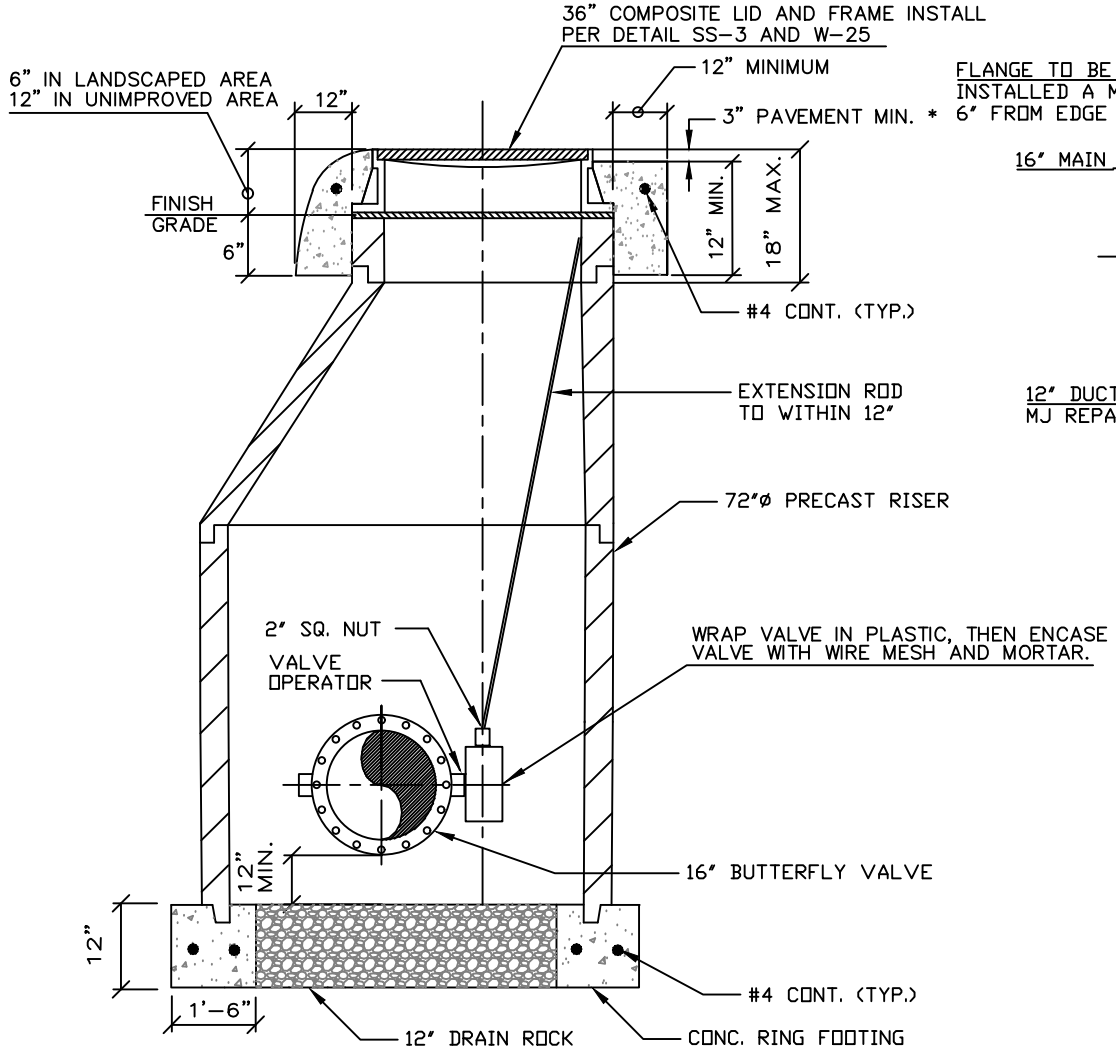
3" THROUGH 6" ARV

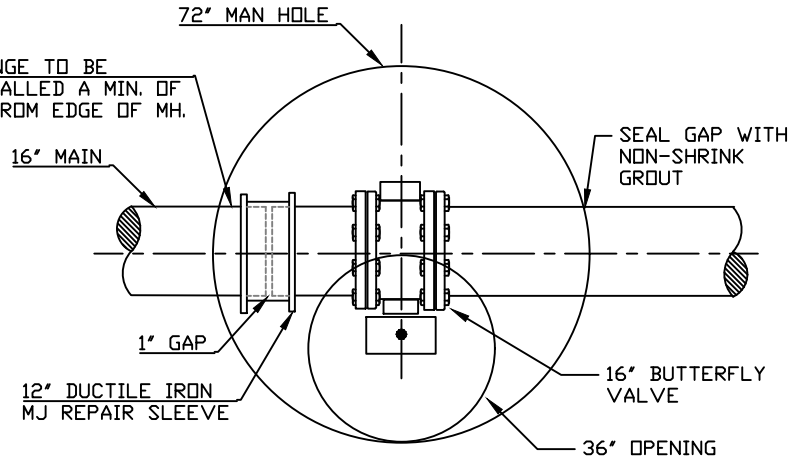
SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-33

NOTES

1. SEE VALVE BONDING DETAIL FOR ADDITIONAL REQUIREMENTS.





* NOTE: CONCRETE COLLAR MAY BE PLACED FLUSH TO FINISHED SURFACE WITH MEDIUM BROOM FINISH PERPENDICULAR TO VEHICLE TRAVEL DIRECTION.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

16" MAINLINE VALVE ENCLOSURE

SCALE: NONE
REVISED: JANUARY 2018
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

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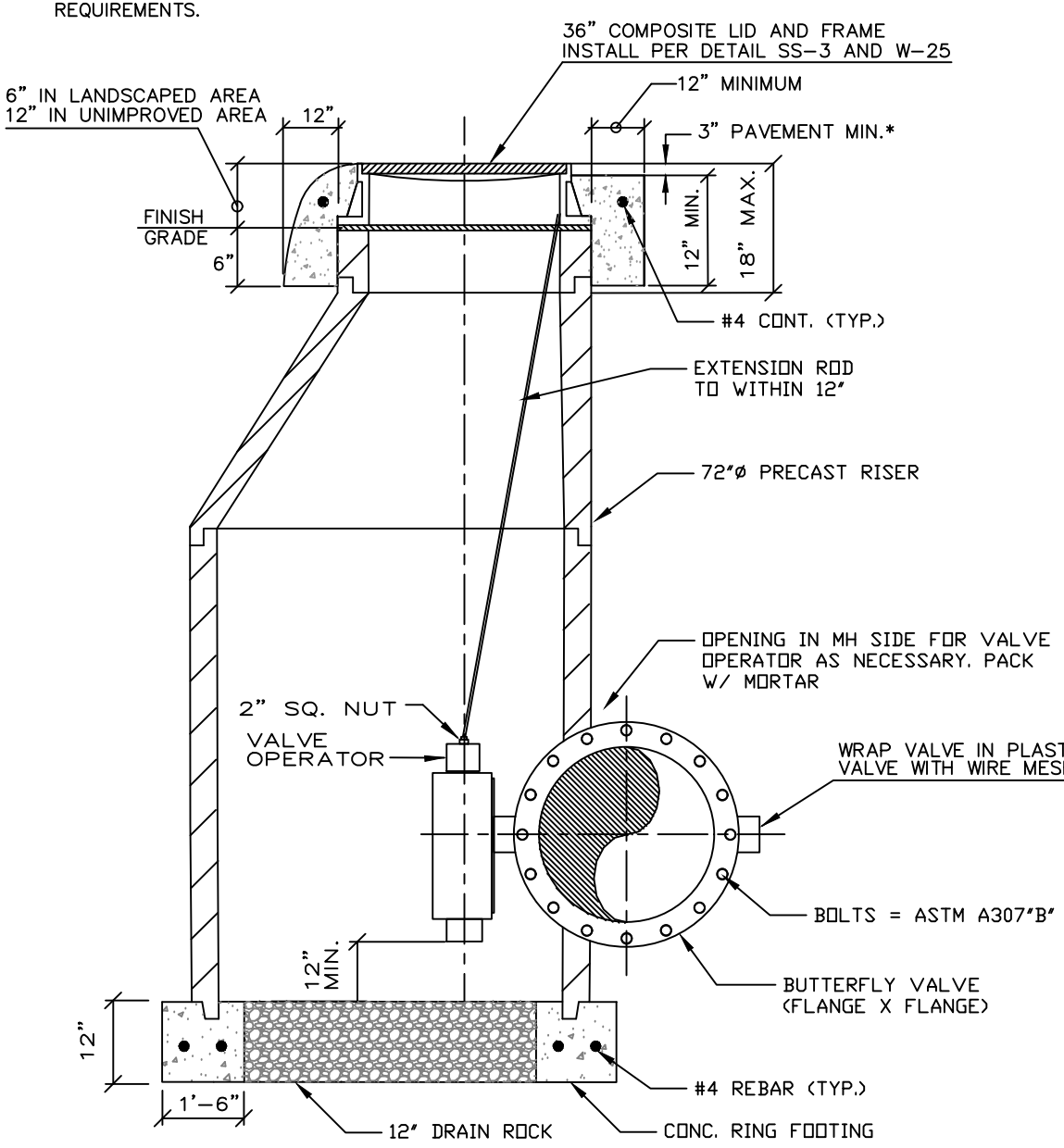
NOTES

1. SEE VALVE BONDING DETAIL FOR ADDITIONAL REQUIREMENTS.



* NOTE: CONCRETE COLLAR SHALL BE PLACED FLUSH TO FINISH GRADE IN ALL COLLECTORS & ARTERIALS, OPTIONAL FOR ALL OTHER ROADWAYS. FINISH SURFACE SHALL BE MEIDUM BROOM FINISH WITH PATTERN PERPENDICULAR TO VEHICLE TRAVEL DIRECTION. SET COLLAR 1/8" BELOW ADJACENT FINISHED PAVEMENT.

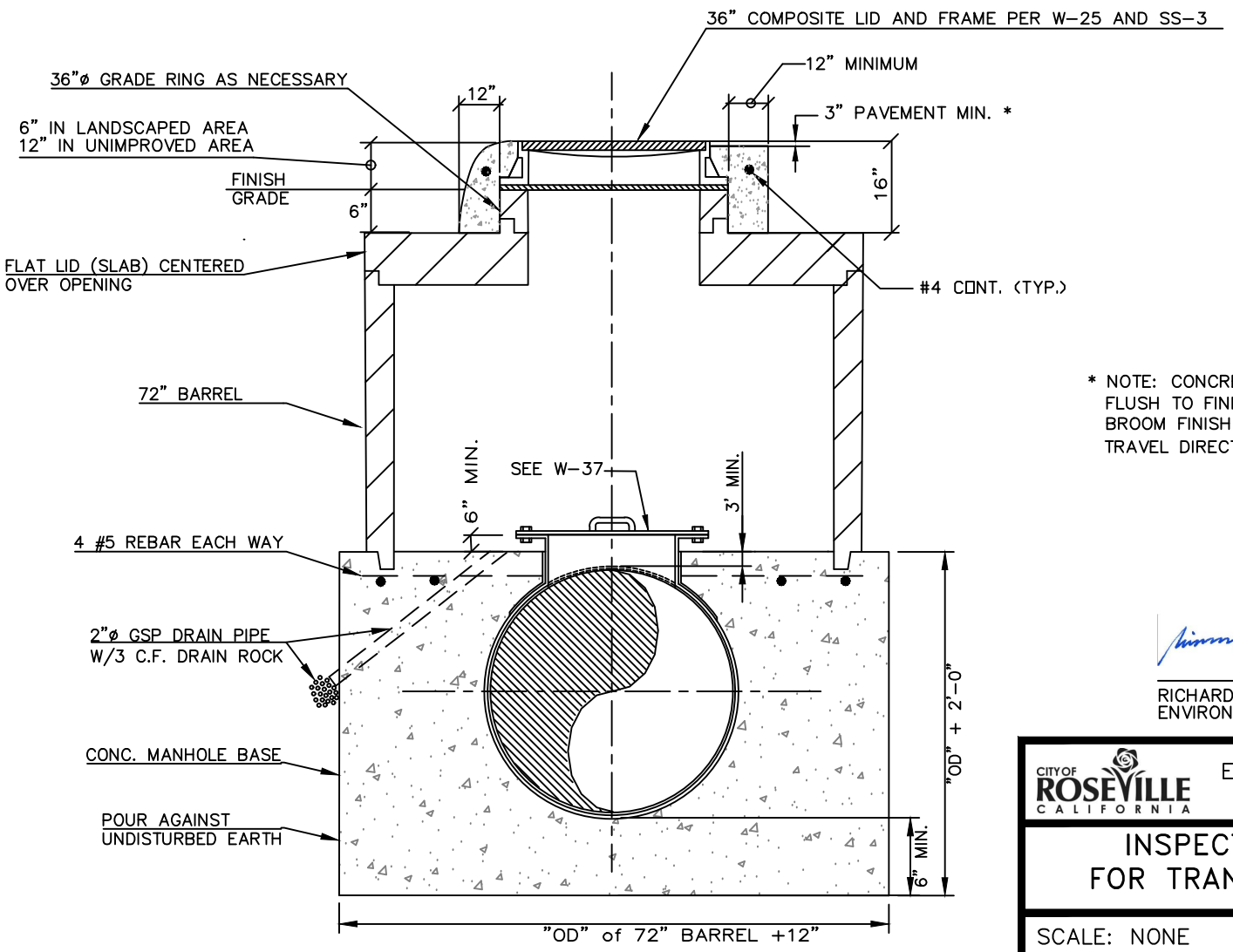
RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA
ENVIRONMENTAL UTILITIES DEPARTMENT

24" & LARGER MAINLINE VALVE

SCALE: NONE
REVISED: JANUARY 2020
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-35



* NOTE: CONCRETE COLLAR MAY BE PLACED FLUSH TO FINISHED SURFACE WITH MEDIUM BROOM FINISH PERPENDICULAR TO VEHICLE TRAVEL DIRECTION.

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

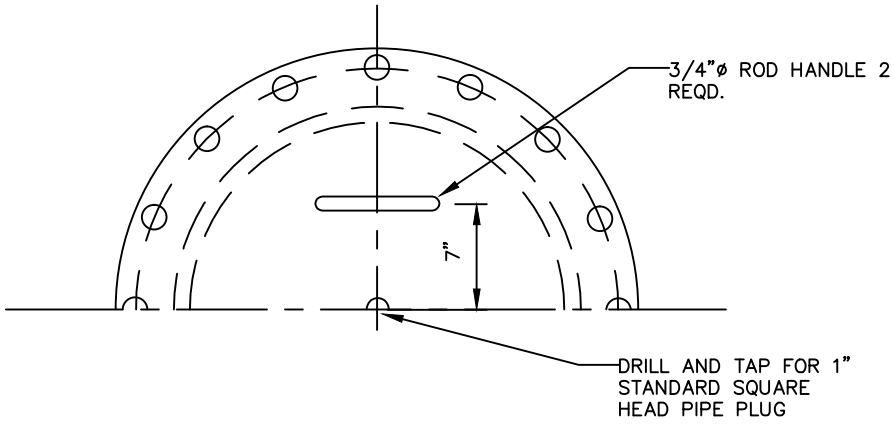
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

INSPECTION MANHOLE FOR TRANSMISSION MAINS

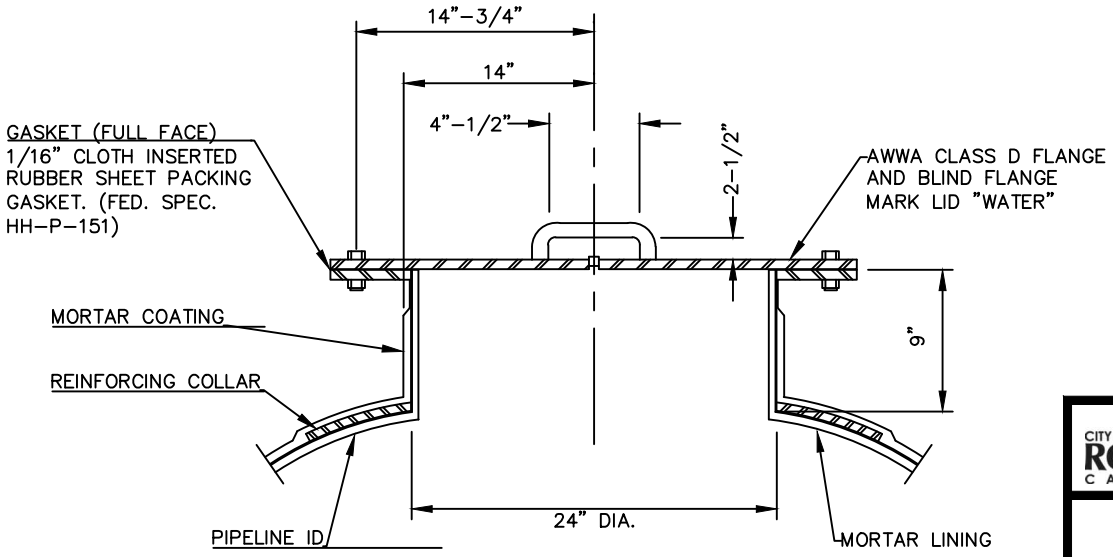
SCALE: NONE
REVISED: JANUARY 2018
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-36



NOTES

CONSTRUCT MANHOLE PER AWWA C208 AND C303. DESIGN PRESSURE SHALL MEET OR EXCEED PIPELINE DESIGN PRESSURE.



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

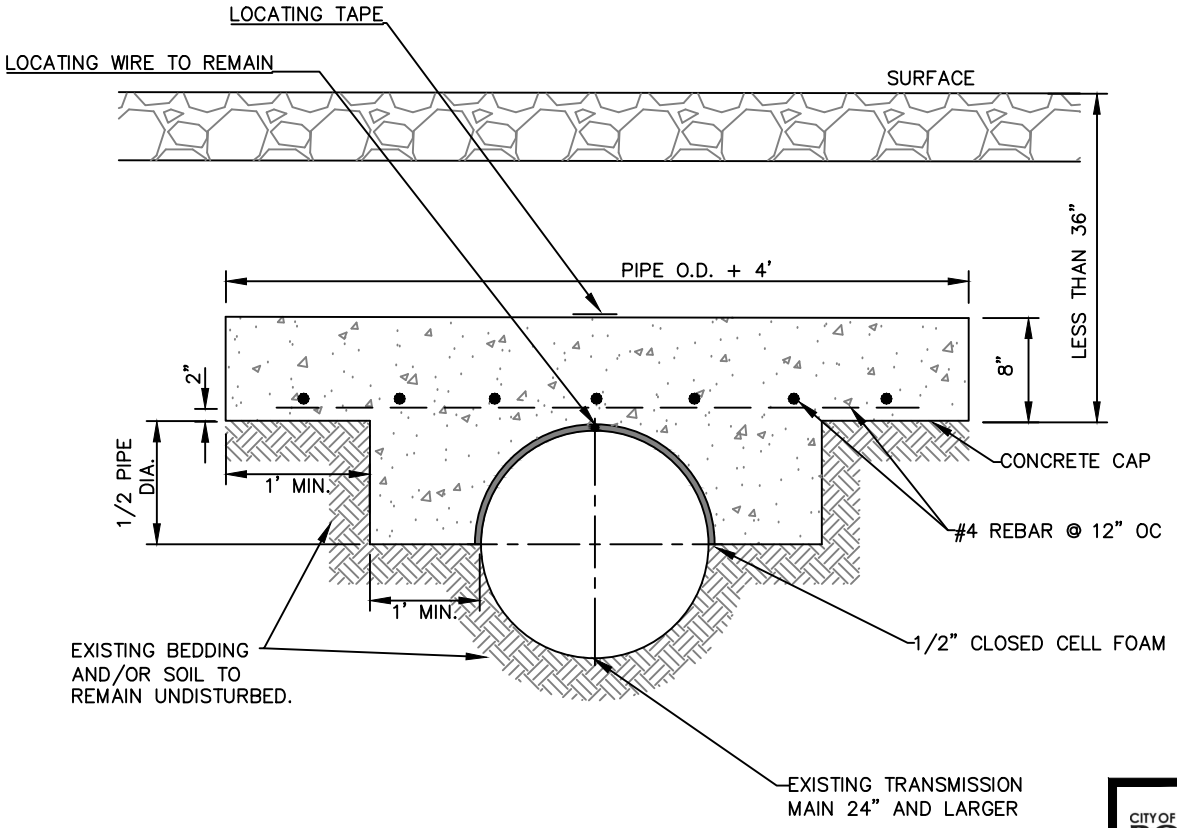
INSPECTION PORT FOR TRANSMISSION MAINS

SCALE: NONE
REVISED: JANUARY 2016
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-37

NOTES

1. CONCRETE CAP REQUIRED FOR ALL AREAS WITH LESS THAN 36" COVER
2. CONCRETE SHALL BE 5 SACK MIX MECHANICALLY TAMPED TO ELIMINATE VOIDS.



RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

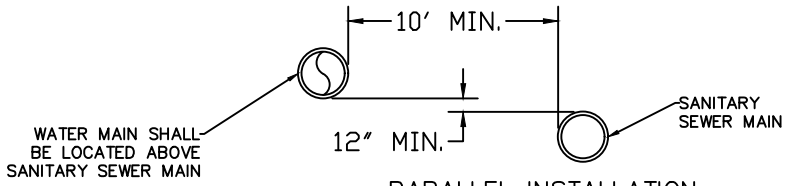
CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

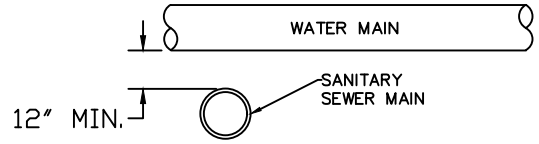
CONCRETE CAP ON SHALLOW C.C.P. TRANSMISSION MAIN

SCALE: NONE
REVISED: JANUARY 2019
DRAWN BY: R. VAN NESS
APPROVED BY: RICHARD PLECKER

W-38

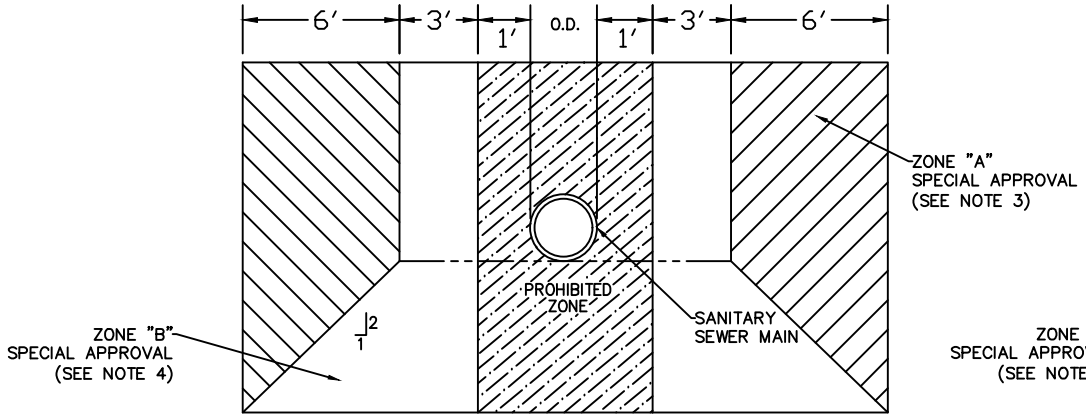


PARALLEL INSTALLATION

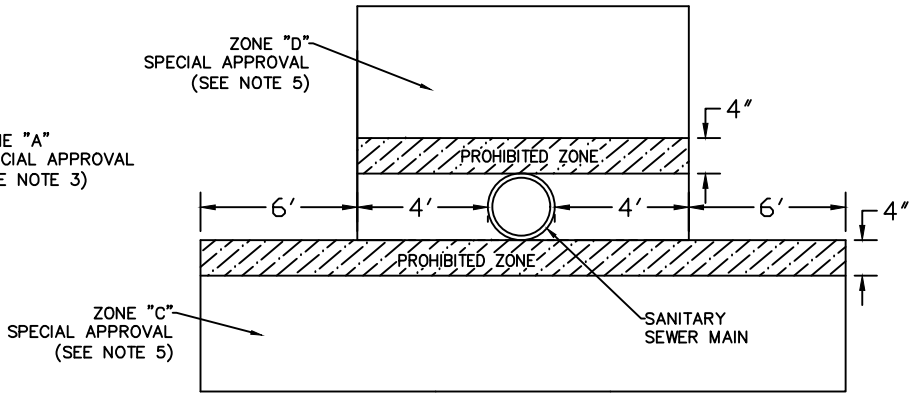


PERPENDICULAR CROSSING

BASIC SEPERATION REQUIREMENTS



PARALLEL INSTALLATION



PERPENDICULAR CROSSING

NOTES:

1. THE CONTRACTOR SHALL FOLLOW THE CITY OF ROSEVILLE STANDARDS AND TITLE 22 OF THE CALIFORNIA ADMINISTRATIVE CODE FOR THE SEPARATION REQUIREMENTS BETWEEN WATER MAINS AND SANITARY SEWER MAINS GUIDELINES PREPARED BY THE STATE OF CALIFORNIA DEPARTMENT OF HEALTH SERVICES.
2. WHEN THE BASIC SEPARATION REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL INSTALL WATER MAINS ACCORDING TO THE SPECIAL SEPARATION REQUIREMENTS.
3. WHEN LOCATED IN ZONE "A", THE WATER MAIN SHALL BE DUCTILE IRON PIPE (DIP) OR PVC C-900 CLASS 200 PR CITY OF ROSEVILLE STANDARDS.
4. NO WATER MAINS PARALLEL TO SANITARY SEWER MAINS SHALL BE INSTALLED WITHIN ZONE "B" WITHOUT SPECIAL APPROVAL FROM THE DEPARTMENT OF HEALTH SERVICES.
5. WHEN LOCATED IN ZONE "C", THE WATER MAIN SHALL HAVE NO JOINTS WITHIN FIVE FEET (5') FROM EITHER SIDE OF THE SANITARY SEWER CROSSING AND BE DUCTILE IRON PIPE (DIP) AND CONCRETE ENCASED.
6. WHEN LOCATED IN ZONE "D", THE WATER MAIN SHALL HAVE NO JOINTS WITHIN FIVE FEET (5') FROM EITHER SIDE OF THE SANITARY SEWER CROSSING AND BE DUCTILE IRON PIPE (DIP) PER CITY OF ROSEVILLE STANDARDS.
7. WATER MAINS AND SANITARY SEWER MAINS SHALLL NOT BE INSTALLED IN THE SAME TRENCH.

RICH PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

WATER MAIN AND SEWER MAIN CROSSING

SCALE: NONE
REVISED: JANUARY 2018
DRAWN BY: J. CUMMINGS
APPROVED BY: R. PLECKER

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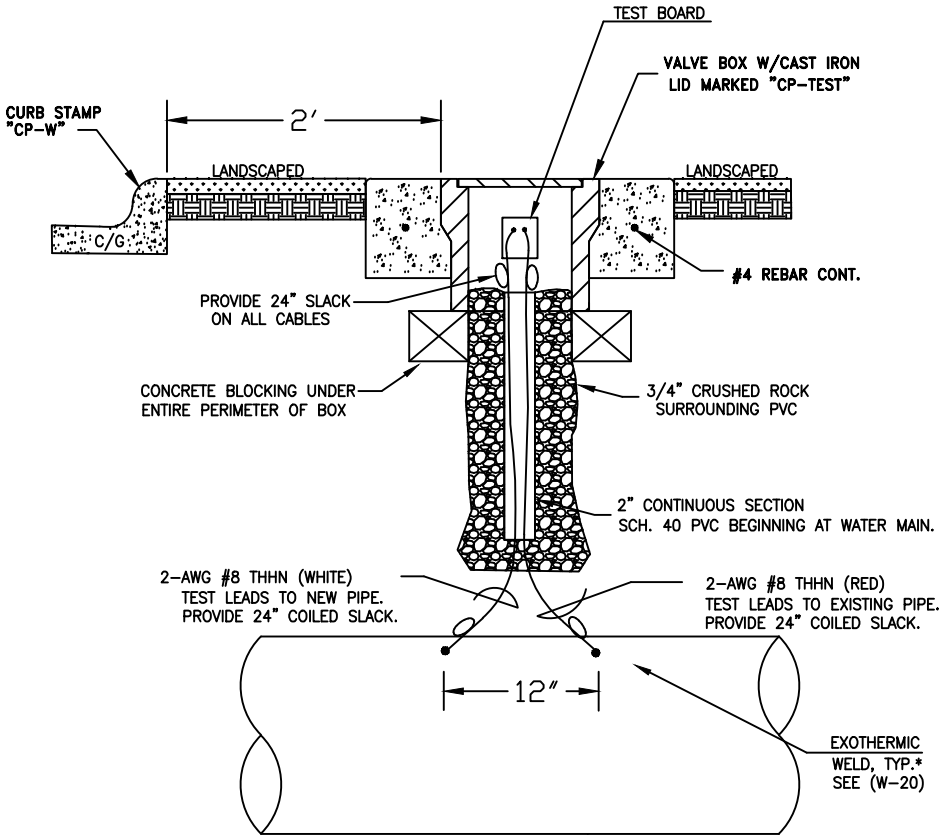
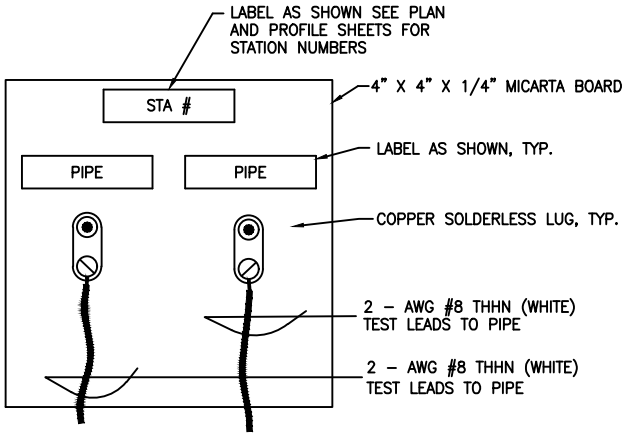


TEST STATION (TYPICAL)



TEST STATION BOARD (TYPICAL)

RICHARD PLECKER
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE CALIFORNIA

ENVIRONMENTAL UTILITIES DEPARTMENT

TEST STATION

SCALE: NONE
REVISED: JANUARY 2019
DRAWN BY: D. SAMUELSON
APPROVED BY: RICHARD PLECKER

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