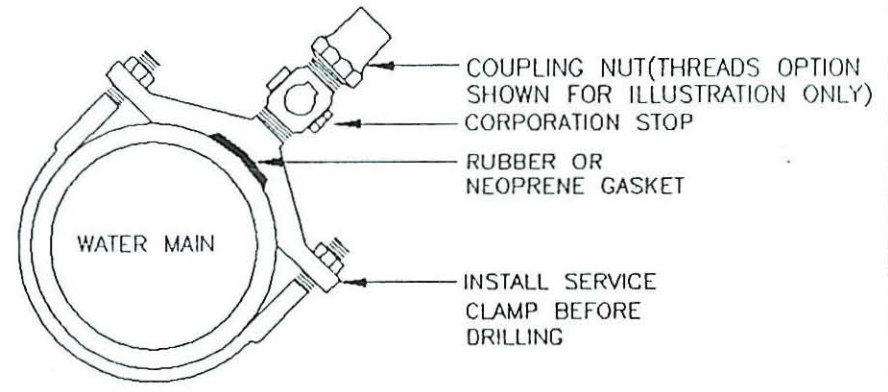


TYPICAL WATER SERVICE
 INSULATED LOCATING WIRE REQUIRED
 ON ALL NON-METALLIC SERVICE LINES.
 SEE STD DWG W-5
 (WIRE SHALL BE SECURED TO
 LOCATING WIRE ALONG WATER MAIN
 FOR CONTINUITY).

NOTES:

1. CORPORATION STOP, METER CURB STOP (see W-7A & W-7B) AND GATE VALVE ARE TO BE OF THE SAME SIZES.
2. SERVICE CLAMPS SHALL BE SINGLE STRAP FOR 1" SERVICES, DOUBLE STRAPS FOR LARGER SIZES, EXCEPT WHERE SIZE OF TAP EXCEEDS MANUFACTURER'S RECOMMENDED LIMIT FOR SIZE OF MAIN. FOR THIS SITUATION, A SPECIAL FITTING WILL BE SPECIFIED.
3. SERVICE SADDLES, CORPORATION STOPS, COUPLING NUTS, AND ALL APPURTENANCES SHALL BE BRONZE.
4. 36" MINIMUM COVER FROM GUTTER FLOWLINE IN STREET R/Ws WIDER THAN 50 FEET.
5. SEE SS-89 FOR FURTHER SPECIFICATIONS.



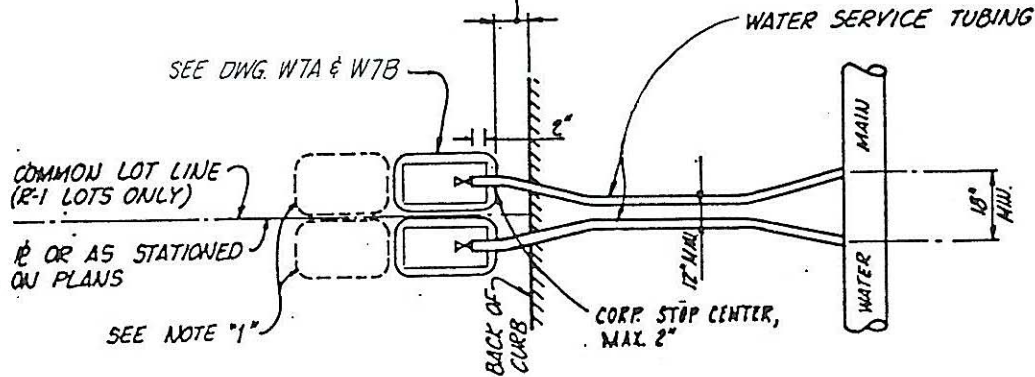
SERVICE TAP DETAIL

APPROVED BY: *K. J. [Signature]*

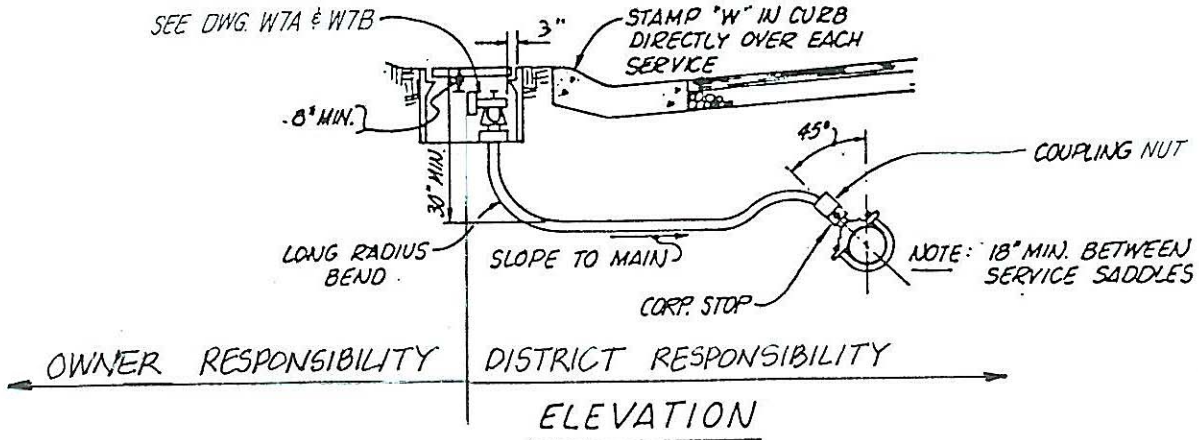
RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
WATER SERVICE INSTALLATION		
DRAWN BY:	SCALE N.T.S.	DRAWING NUMBER W-1
DATE DRAWN:		

6" (54" WHEN SIDEWALKS REQUIRED).
 CENTER METER BOXES ON
 COMMON LOT CORNER, OR AT THE
 STATIONS INDICATED ON THE PLANS.
 PARALLEL WATER SERVICE LINES
 SHALL BE PLACED IN THE SAME
 TRENCH WHERE APPROPRIATE

1" Copper pipe size
 polyethylene



PLAN



NOTES

1. WHERE INDICATED ON THE PLANS THE CONTRACTOR SHALL PLACE A SECOND, IN LINE, METER BOX IF OWNER / ARCHITECT DETERMINES IF PLACEMENT OF PRESSURE REDUCING VALVE IS NEEDED
2. CONTRACTOR TO COORDINATE INSTALLATION OF WATER SERVICES WITH JOINT UTILITY TRENCH. JOINT UTILITIES WILL NOT BE ALLOWED IN WATER LINE TRENCH.

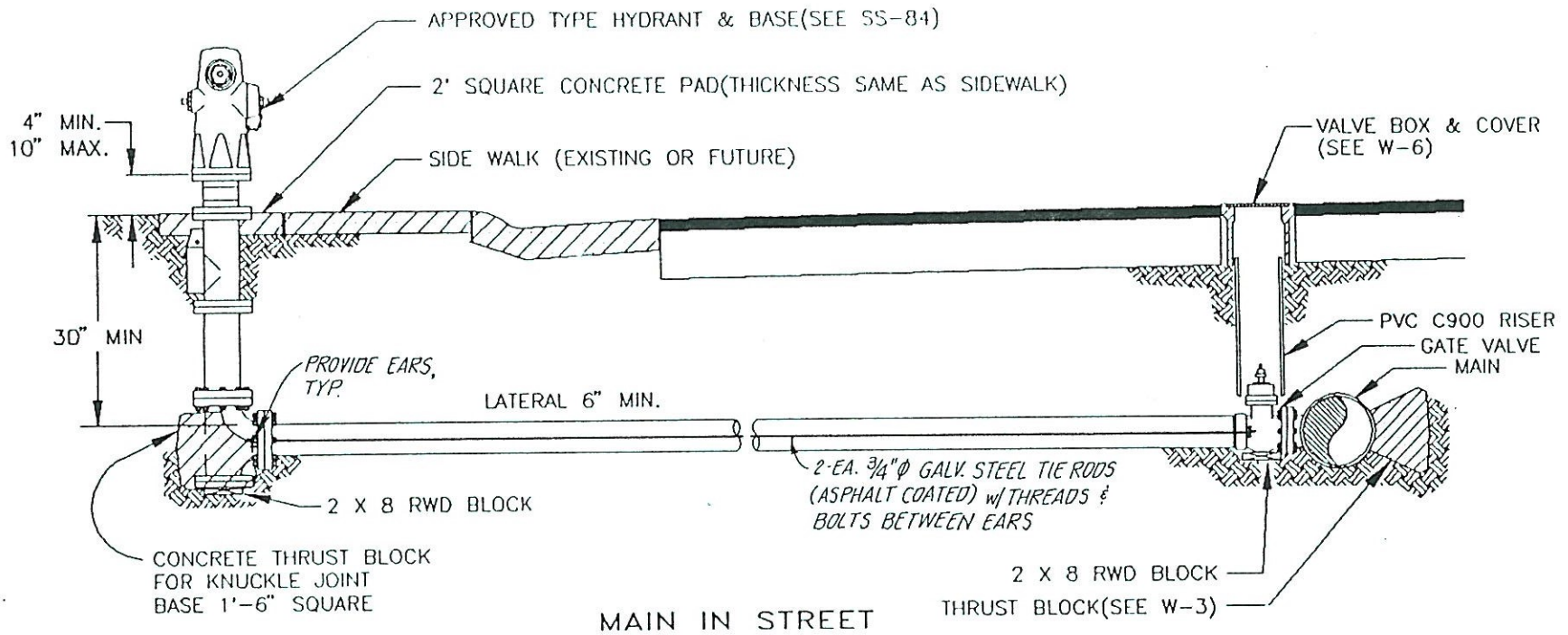
RANCHO MURIETA
 COMMUNITY SERVICES DISTRICT

WATER SERVICE DETAIL

APPROVED BY: *[Signature]*

Scale NONE
 Date
 Drawn By

W-1A

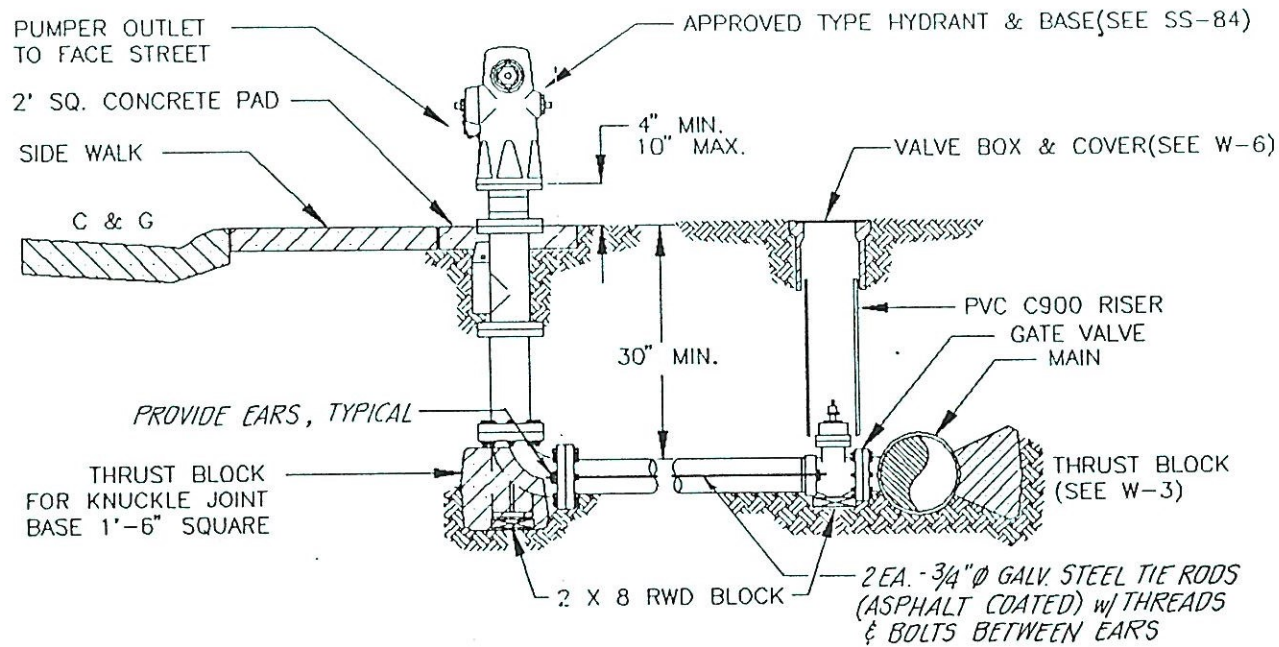


NOTES:

1. IN COMMERCIAL AREAS, FIRE HYDRANTS SHALL BE PROTECTED FROM VEHICULAR DAMAGE AND ACCESSIBLE TO FIRE PROTECTION EQUIPMENTS.
2. DETAILS SHOWN FOR VALVES ON HYDRANT LATERALS SHALL ALSO APPLY TO VALVES ON MAINS.
3. TYPES SHOWN ARE FOR ILLUSTRATIONS ONLY.
4. GATE VALVE SHALL BE FLANGE CONNECTED TO THE MAIN.

APPROVED BY: 

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
TYPICAL VALVE AND FIRE HYDRANT INSTALLATION		
DRAWN BY:	SCALE	DESIGN NUMBER
DATE DRAWN:	N.T.S.	W-2A



MAIN IN EASEMENT

NOTES:

1. IN COMMERCIAL AREAS, FIRE HYDRANTS SHALL BE PROTECTED FROM VEHICULAR DAMAGE AND ACCESSIBLE TO FIRE PROTECTION EQUIPMENTS.
2. DETAILS SHOWN FOR VALVES ON HYDRANT LATERALS SHALL ALSO APPLY TO VALVES ON MAINS.
3. TYPES SHOWN ARE FOR ILLUSTRATIONS ONLY.
4. GATE VALVE SHALL BE FLANGE CONNECTED TO THE MAIN.
5. BREAKAWAY SPOOL EXTENTIONS ARE NOT ALLOWED WITHOUT ENGINEERS APPROVAL.

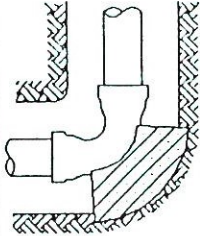
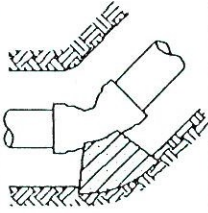
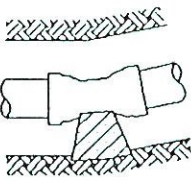
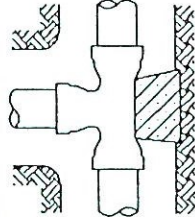
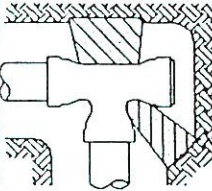
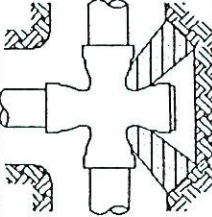

RANCHO MURIETA
COMMUNITY SERVICES DISTRICT

TYPICAL VALVE AND FIRE HYDRANT INSTALLATION

DRAWN BY:	SCALE N.T.S.	DRAWING NUMBER W-2B
DATE DRAWN:		

APPROVED BY:

REQUIRED BEARING AREA – TOTAL SQUARE FEET

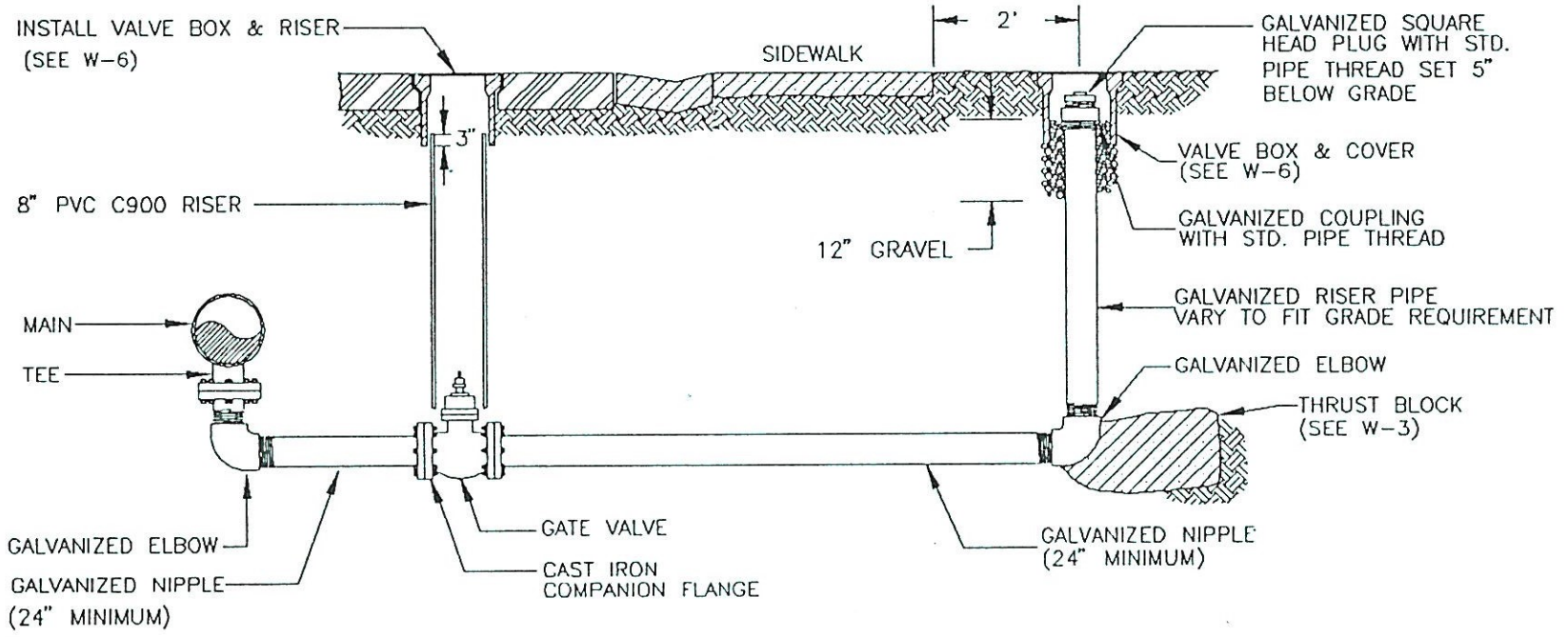
TYPE OF FITTING		90° BEND	45° BEND	11-1/4° BEND 22-1/2° BEND	TEE OR DEAD END	TEE WITH PLUG	CROSS WITH PLUG	CROSS WITH PLUGS
TYPICAL INSTALLATION								
SIZE OF PIPE	4"	2	1	1	2	2	2	2
	6"	4	2	1	3	4	4	4
	8"	7	4	2	5	7	7	7
	10"	12	6	3	8	12	12	12
	12"	16	10	5	12	16	16	16

NOTES:

1. THRUST BLOCKS ARE TO BE CONSTRUCTED OF CLASS "B" CONCRETE.
2. AREAS GIVEN ARE FOR CLASS 150 PIPE AT TEST PRESSURE OF 150 PSI IN SOIL WITH 2,000 PSF BEARING CAPACITY. INSTALLATIONS USING DIFFERENT PIPE, TEST PRESSURES, AND/OR SOIL TYPES SHOULD ADJUST AREAS ACCORDINGLY, SUBJECT TO THE APPROVAL OF THE ENGINEER.
3. BLOCKS ARE TO BE POURED AGAINST UNDISTURBED SOIL.
4. JOINTS AND FACES OF PLUGS ARE TO BE KEPT CLEAR OF CONCRETE.
5. THRUST BLOCKS MAY BE REQUIRED FOR CASES NOT DEPICTED ABOVE, SUCH AS REDUCERS, CROSSES WITH NO PLUGS, OR WHEREVER DEEMED NECESSARY.

APPROVED BY: 

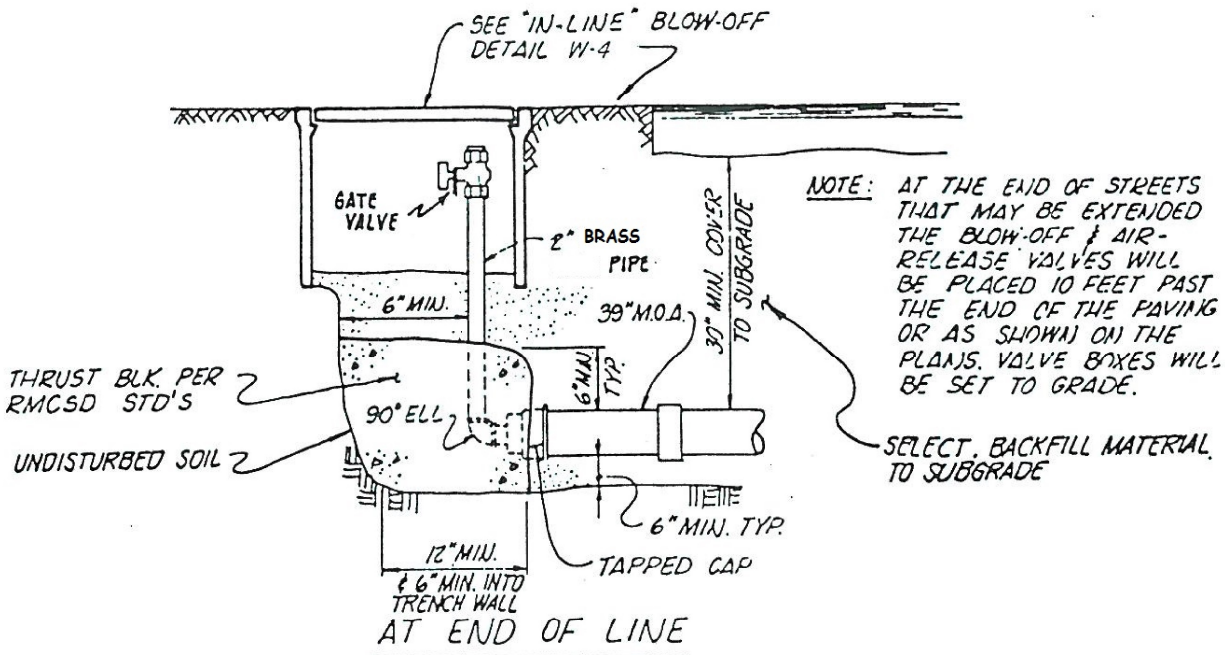
RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
THRUST BLOCK BEARING AREA		
DRAWN BY:	SCALE	DRAWING NUMBER
DATE DRAWN:	N.T.S.	W-3



Galvanized part no longer allowed. Brass wrapped in 10 mil pipe tape of schedule 80 parts. All threaded connection must use NSF approved thread sealant.

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
BLOW-OFF ASSEMBLY DETAIL		
<small>DRAWN BY:</small> 	<small>SCALE</small> N.T.S.	<small>DRAWING NUMBER</small> W-4
<small>DATE DRAWN</small> 		

APPROVED BY: *[Signature]*



BLOW-OFF VALVE

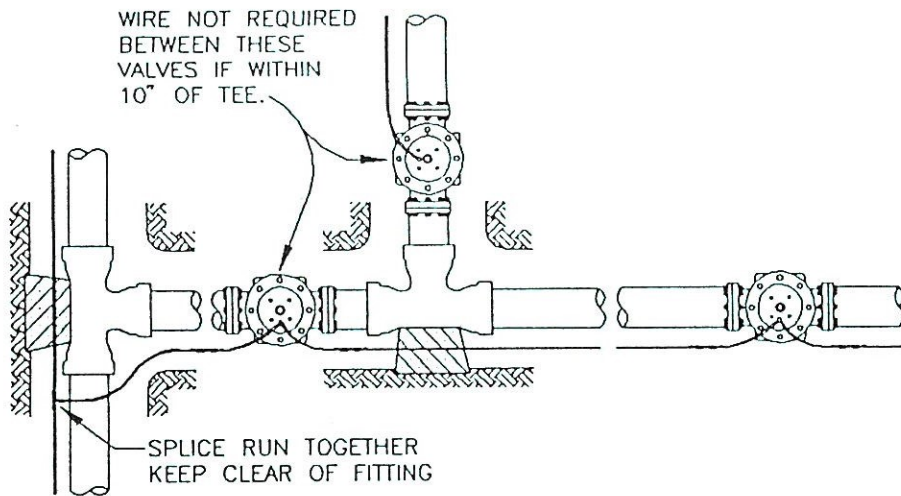
N.T.S.

NOTES

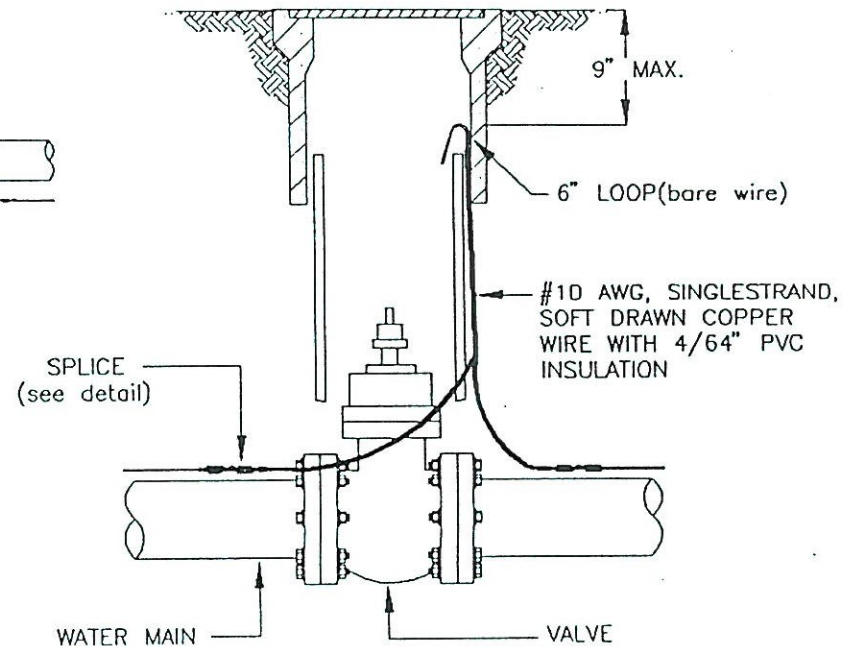
1. COMBINATION AIR RELEASE VALVES & BLOWOFF VALVES SHALL BE LOCATED IN THE SYSTEM AS SHOWN ON THE PLANS.
2. COMBINATION AIR RELEASE VALVES SHALL BE AT THE HIGH POINTS IN THE SYSTEM, BLOWOFF VALVES SHALL BE AT THE LOW POINTS & AT THE END OF LINES IN THE SYSTEM. WATER MAINS SHALL BE CONSTRUCTED TO CONTINUOUS POSITIVE SLOPES TO COMBINATION AIR RELEASE VALVES & BLOWOFF VALVES.
3. PIPING TO BE CONTINUOUSLY WRAPPED WITH 10MIL TAPE

RANCHO MURIETA COMMUNITY SERVICES DISTRICT	
END OF LINE BLOW - OFF VALVE	
Scale NONE Date Drawn By	W-4A

APPROVED BY:




TYPICAL LAYOUT



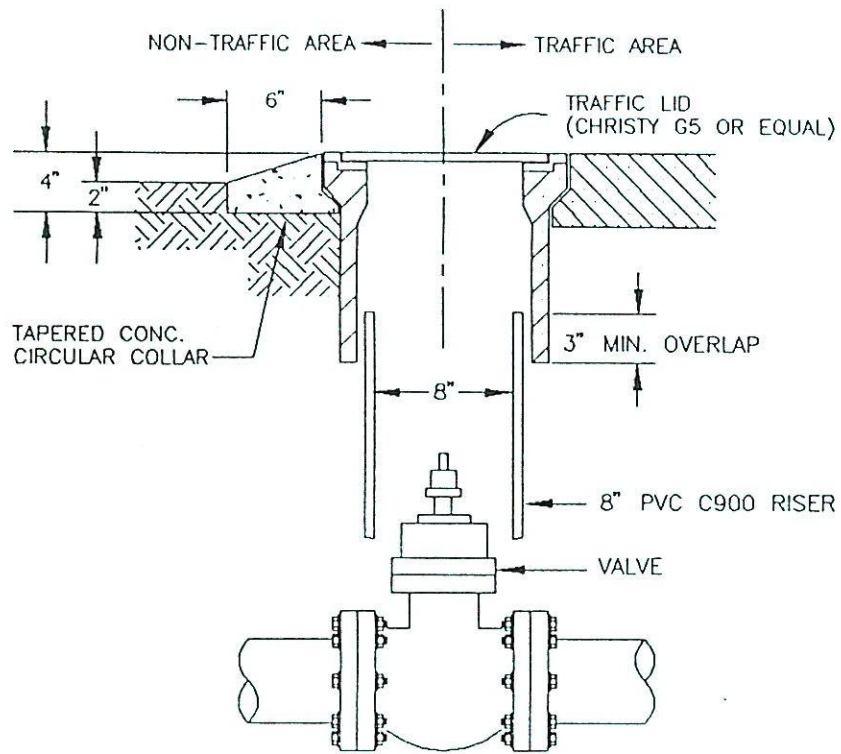
VALVE DETAIL

NOTES:

1. WIRE SHALL BE CONTINUOUS BETWEEN VALVE BOXES, EXCEPT AS NOTED.
2. LOCATING WIRE SHALL BE LAID ON TOP OF THE WATER MAIN, AND SHALL BE TAPED TO IT AT EVERY 10' INTERVAL AND AT ALL CROSSES, TEES, AND ELBOWS.
3. CONTRACTOR SHALL CONDUCT A CONTINUITY TEST ON ALL LOCATING WIRE SPLICES.
4. SOLDERING SHALL BE PERFORMED WHEN REQUESTED BY THE ENGINEER.

APPROVED BY: 

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
LOCATING WIRES FOR WATER MAINS AND SERVICES		
DRAWN BY:	SCALE	DRAWING NUMBER
DATE DRAWN:	N.T.S.	W-5



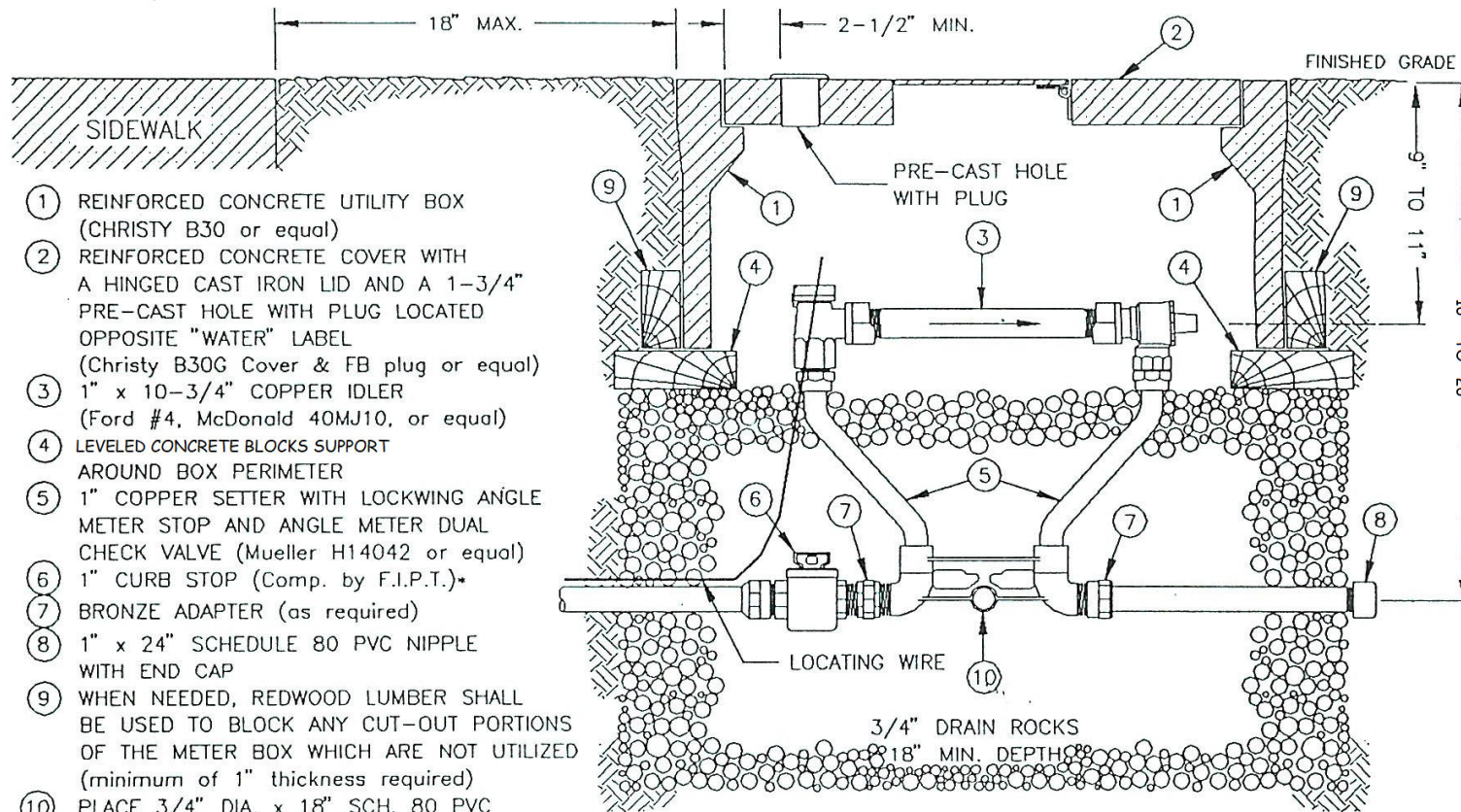
TRAFFIC VALVE BOX

NOTES:

1. SET VALVE BOX TO FINAL FINISH GRADE. IN AREAS WHERE THE FINISH GRADE HAS NOT BEEN DEFINED, PLACE 4"X4" LOCATING POST PAINTED BLUE WITHIN 1 FOOT OF VALVE BOX. POST SHALL BE 6 FEET IN LENGTH AND BURIED 3 FEET.
2. VALVE BOX AND RISER TO BE SET PLUMB AND CENTERED OVER WATER VALVE NUT.

APPROVED BY: 

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
VALVE BOX AND RISER INSTALLATION		
<small>DRAWN BY:</small>	<small>SCALE</small> N.T.S.	<small>DRAWING NUMBER</small> W-6
<small>DATE DRAWN</small>		



- ① REINFORCED CONCRETE UTILITY BOX (CHRISTY B30 or equal)
- ② REINFORCED CONCRETE COVER WITH A HINGED CAST IRON LID AND A 1-3/4" PRE-CAST HOLE WITH PLUG LOCATED OPPOSITE "WATER" LABEL (Christy B30G Cover & FB plug or equal)
- ③ 1" x 10-3/4" COPPER IDLER (Ford #4, McDonald 40MJ10, or equal)
- ④ LEVELED CONCRETE BLOCKS SUPPORT AROUND BOX PERIMETER
- ⑤ 1" COPPER SETTER WITH LOCKWING ANGLE METER STOP AND ANGLE METER DUAL CHECK VALVE (Mueller H14042 or equal)
- ⑥ 1" CURB STOP (Comp. by F.I.P.T.)*
- ⑦ BRONZE ADAPTER (as required)
- ⑧ 1" x 24" SCHEDULE 80 PVC NIPPLE WITH END CAP
- ⑨ WHEN NEEDED, REDWOOD LUMBER SHALL BE USED TO BLOCK ANY CUT-OUT PORTIONS OF THE METER BOX WHICH ARE NOT UTILIZED (minimum of 1" thickness required)
- ⑩ PLACE 3/4" DIA. x 18" SCH. 80 PVC CENTERED IN BRACE PIPE EYE

NOTES:

FOR WATER SERVICE CONNECTION TO WATER MAIN, SEE S.D. W-1

ALL METALLIC PARTS SHALL BE ENCASED WITH 6 MIL PLASTIC SUCH THAT NO SOIL IS IN DIRECT CONTACT WITH PARTS

* Compression by female iron pipe threads

APPROVED BY:

RANCHO MURIETA
COMMUNITY SERVICES DISTRICT

1" WATER SERVICE WITH IDLER

DRAWN BY: v2 - Paul Siebensohn

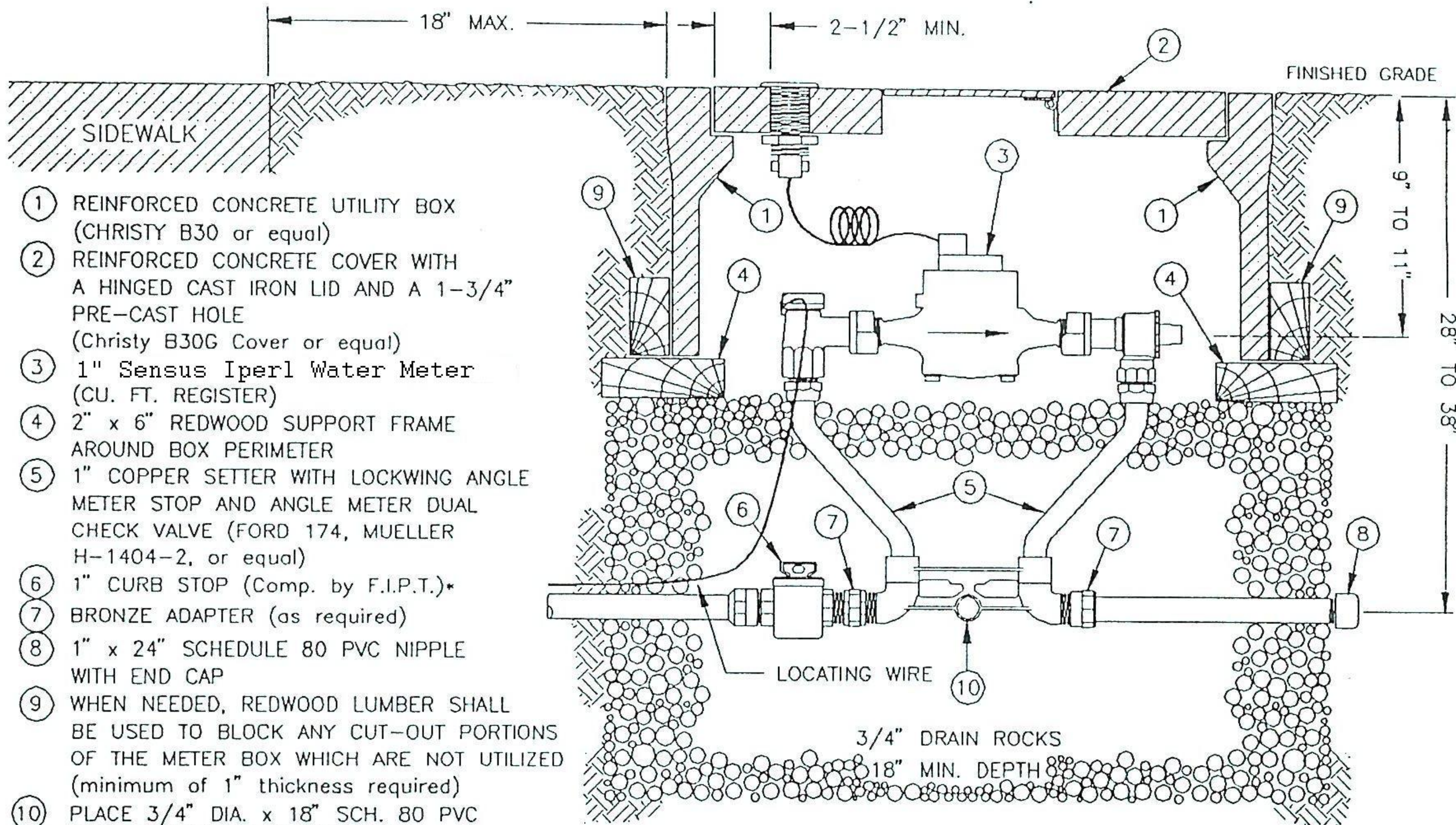
SCALE

DRAWING NUMBER

DATE DRAWN 5/17/2019

N.T.S.

W-7A



- ① REINFORCED CONCRETE UTILITY BOX (CHRISTY B30 or equal)
- ② REINFORCED CONCRETE COVER WITH A HINGED CAST IRON LID AND A 1-3/4" PRE-CAST HOLE (Christy B30G Cover or equal)
- ③ 1" Sensus Iperl Water Meter (CU. FT. REGISTER)
- ④ 2" x 6" REDWOOD SUPPORT FRAME AROUND BOX PERIMETER
- ⑤ 1" COPPER SETTER WITH LOCKWING ANGLE METER STOP AND ANGLE METER DUAL CHECK VALVE (FORD 174, MUELLER H-1404-2, or equal)
- ⑥ 1" CURB STOP (Comp. by F.I.P.T.)*
- ⑦ BRONZE ADAPTER (as required)
- ⑧ 1" x 24" SCHEDULE 80 PVC NIPPLE WITH END CAP
- ⑨ WHEN NEEDED, REDWOOD LUMBER SHALL BE USED TO BLOCK ANY CUT-OUT PORTIONS OF THE METER BOX WHICH ARE NOT UTILIZED (minimum of 1" thickness required)
- ⑩ PLACE 3/4" DIA. x 18" SCH. 80 PVC CENTERED IN BRACE PIPE EYE

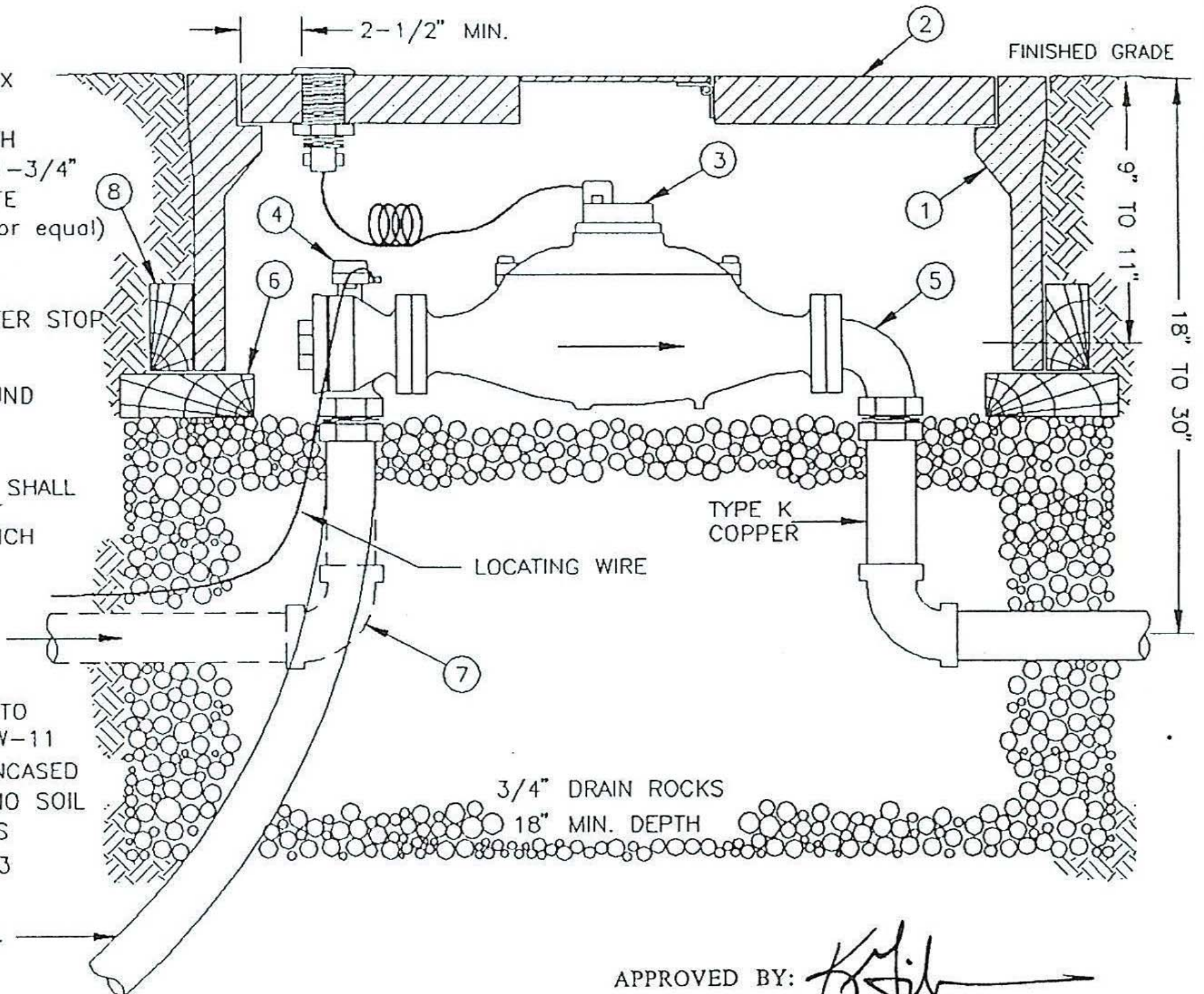
NOTES:
 FOR WATER SERVICE CONNECTION TO WATER MAIN, SEE S.D. W-1
 ALL METALLIC PARTS SHALL BE ENCASED WITH 6 MIL PLASTIC SUCH THAT NO SOIL IS IN DIRECT CONTACT WITH PARTS
 * Compression by female iron pipe threads

APPROVED BY: *[Signature]*

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
1" WATER SERVICE WITH METER		
DRAWN BY:	SCALE	DRAWING NUMBER
DATE DRAWN	N.T.S.	W-7B

- ① REINFORCED CONCRETE UTILITY BOX (CHRISTY B36 or equal)
- ② REINFORCED CONCRETE COVER WITH A HINGED CAST IRON LID AND A 1-3/4" PRE-CAST HOLE LOCATED OPPOSITE WATER LABEL (Christy B36G cover or equal)
- ③ SENSUS IPERL WATER METER & MXU (CU. FT. REGISTER)
- ④ OVAL FLANGED WINGED ANGLE METER STOP
- ⑤ OVAL FLANGED 90° ELBOW
- ⑥ 2" x 6" REDWOOD SUPPORT AROUND ENTIRE BOX PERIMETER
- ⑦ BRONZE 90° ELBOW (as required)
- ⑧ WHEN NEEDED, REDWOOD LUMBER SHALL BE USED TO BLOCK ANY CUT-OUT PORTIONS OF THE METER BOX WHICH ARE NOT UTILIZED (minimum of 1" thickness required)

NOTES:
 FOR WATER SERVICE CONNECTION TO WATER MAIN, SEE S.D. W-1
 FOR WATER SERVICE CONNECTION TO BACKFLOW PREVENTER, SEE S.D. W-11
 ALL METALLIC PARTS SHALL BE ENCASED WITH 6 MIL PLASTIC SUCH THAT NO SOIL IS IN DIRECT CONTACT WITH PARTS
 **... FOR TRAFFIC AREAS, SEE SS92-03



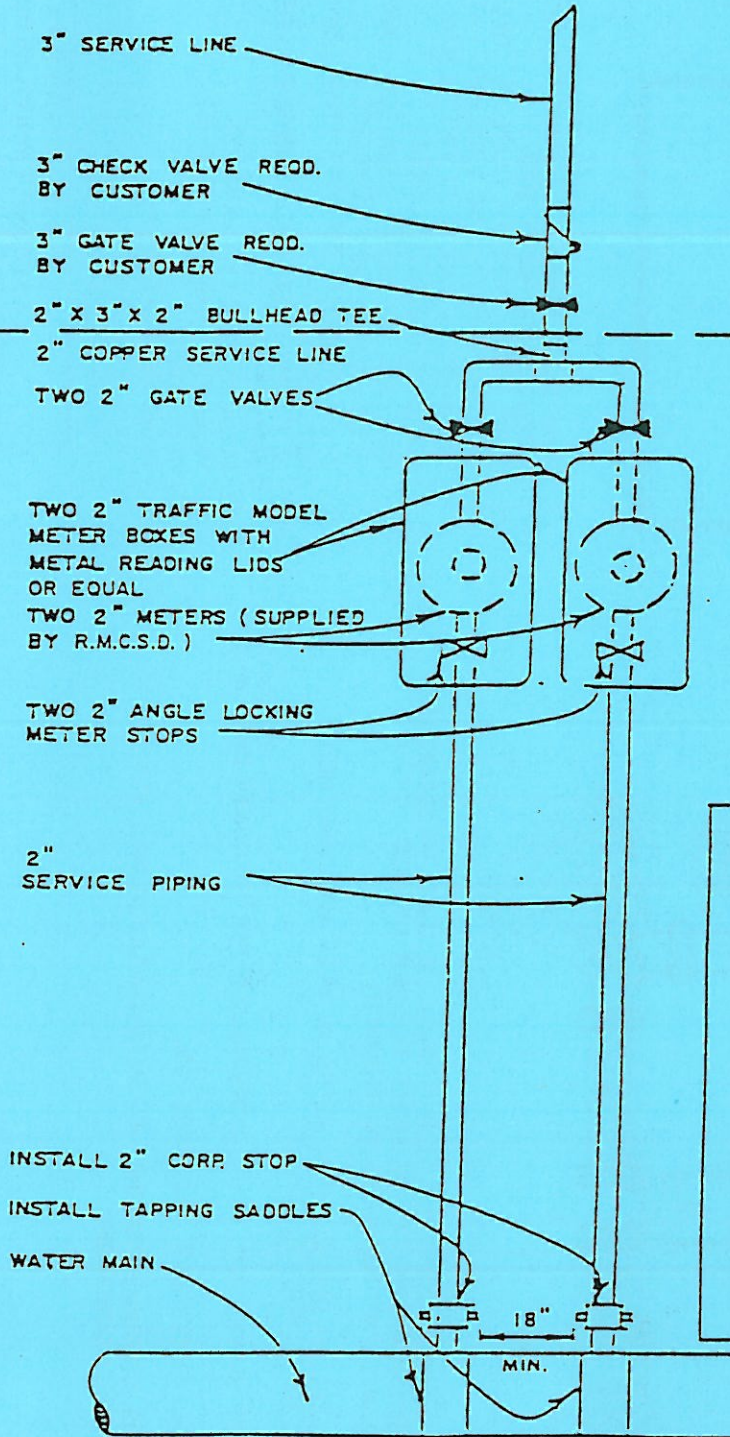
MIN. RADIUS 15 x PIPE O.D.

APPROVED BY: *[Signature]*

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
1-1/2" or 2" METERED WATER SERVICE		
DRAWN BY:	SCALE N.T.S.	DRAWING NUMBER W-7C
DATE DRAWN:		

CUSTOMER MAINTENANCE RESPONSIBILITY

R.M.C.S.D. MAINTENANCE RESPONSIBILITY



3" SERVICE LINE

3" CHECK VALVE REQD. BY CUSTOMER

3" GATE VALVE REQD. BY CUSTOMER

2" X 3" X 2" BULLHEAD TEE

2" COPPER SERVICE LINE

TWO 2" GATE VALVES

TWO 2" TRAFFIC MODEL METER BOXES WITH METAL READING LIDS OR EQUAL

TWO 2" METERS (SUPPLIED BY R.M.C.S.D.)

TWO 2" ANGLE LOCKING METER STOPS

2" SERVICE PIPING

INSTALL 2" CORR. STOP

INSTALL TAPPING SADDLES

WATER MAIN

18"

MIN.

APPROVED BY: *[Signature]*

RANCHO MURIETA
COMMUNITY SERVICES DISTRICT

3" WATER SERVICE INSTALLATION DETAIL

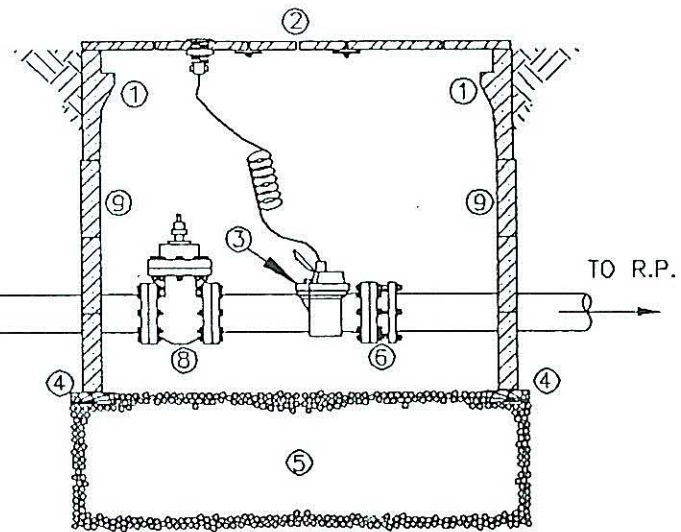
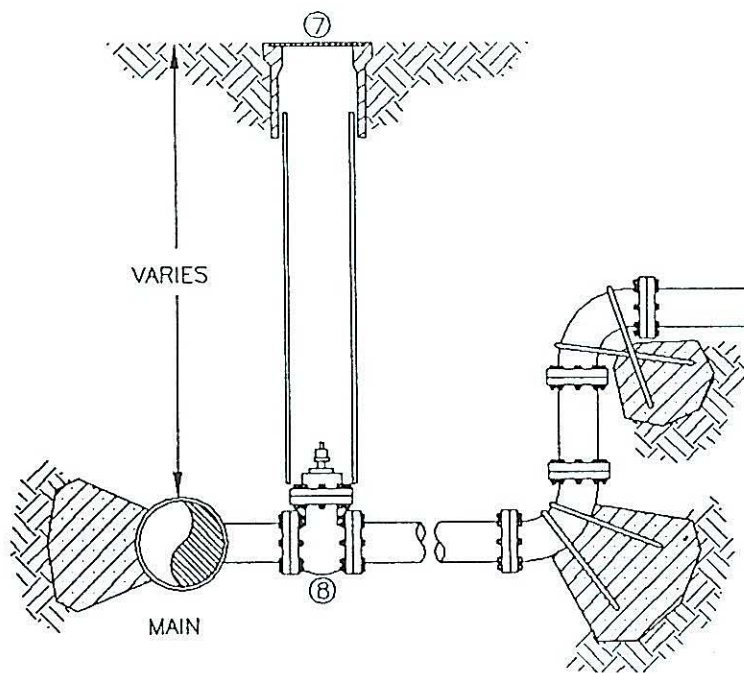
DRAWING NUMBER
W-8

SCALE
N.T.S.

DRAWN BY:
DATE DRAWN:

GENERAL NOTES

- 1) THE TWO 2" GATE VALVES ARE LOCATED WITHIN THE METER BOXES. IF THIS CANNOT BE ACCOMPLISHED, THE CONTRACTOR WILL PROVIDE AND INSTALL GATE VALVE BOXES.
- 2) NO GALVANIZED PIPING IS ALLOWED ON ANY PORTION OF UTILITIES SERVICE



NOTES:

WHEN NEEDED, REDWOOD LUMBER SHALL BE USED TO BLOCK ANY CUT OUT PORTIONS OF THE METER BOX NOT UTILIZED. (MINIMUM OF 1" THICKNESS IS REQUIRED)

ALL STEEL OR DUCTILE IRON JOINTS BETWEEN MAIN AND METER SHALL BE FLANGE CONNECTED.

THRUST BLOCKS ARE TO BE CONSTRUCTED PER STANDARD DWG. W-3.

INSTALL TRACER WIRE PER SS93-05.

THIS IS A TYPICAL DRAWING, ACTUAL INSTALLATION WILL VARY WITH FIELD CONDITIONS.

ALL STEEL OR DUCTILE IRON PIPE TO BE WRAPPED IN 10MIL PIPE TAPE

- ① REINFORCED CONCRETE UTILITY BOX WITH EXTENSIONS (CHRISTY B48)
- ② 2 PC. STEEL CHECKER PLATE W/ TWO 10" ROUND SELF-CLOSING READING LIDS AND 1-3/4" HOLE FOR MXU READ MODULE IN ONE READING LID. (CHRISTY B48-62G COVER)
- ③ SENSUS OMI C2 METER (CUBIC FEET REGISTER)
- ④ 2 x 6 REDWOOD SUPPORT FRAME AROUND BOX PERIMETER.
- ⑤ 3/4" CHRUSHED ROCK SUB-BASE, 12" TO 18" DEEP.
- ⑥ FLANGED COUPLING ADAPTOR.
- ⑦ VALVE BOX AND LID(SEE W-6)
- ⑧ GATE VALVE.
- ⑨ VALVE BOX EXTENSION.

RANCHO MURIETA
COMMUNITY SERVICES DISTRICT

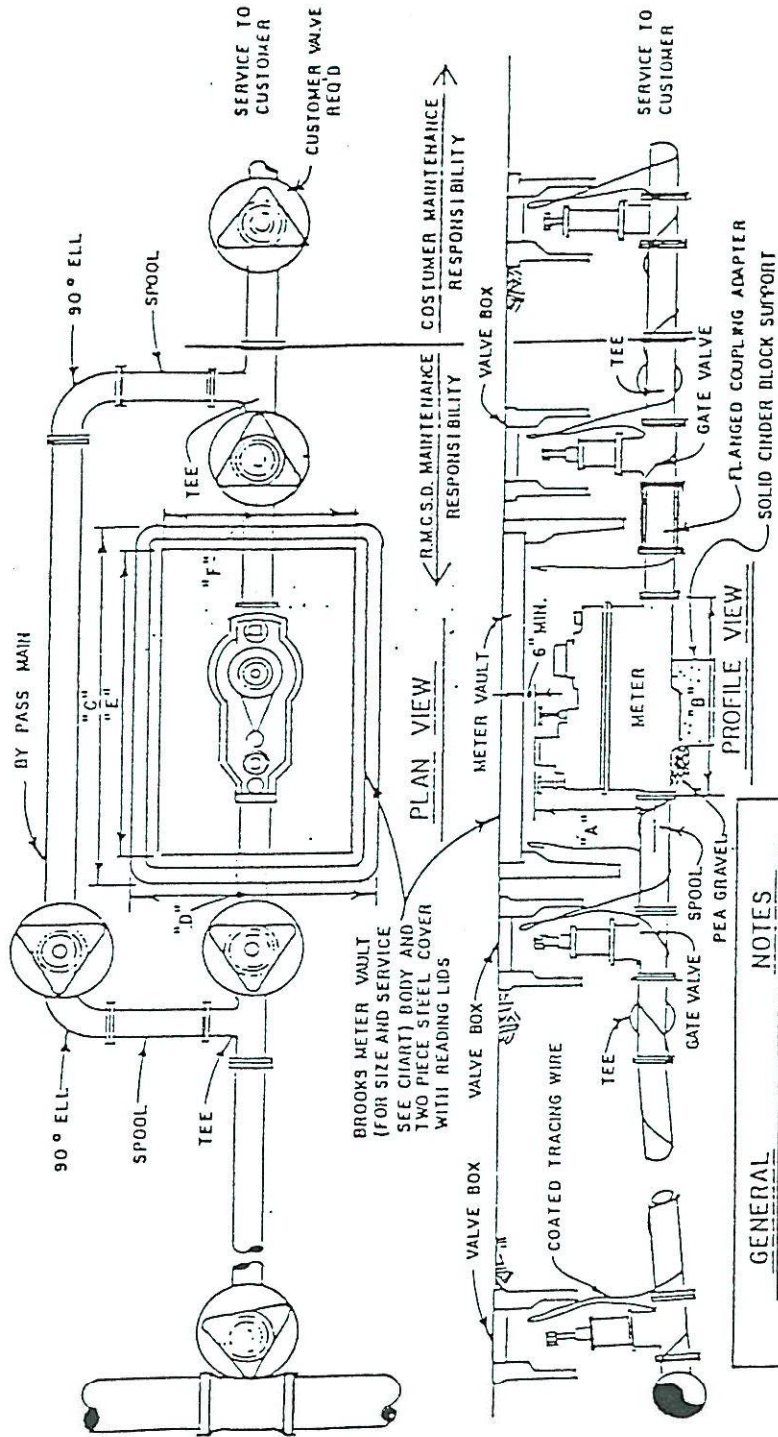
3" TO 6" METER INSTALLATION DETAIL

DRAWN BY: P.SIEB

SCALE
N.T.S.

DRAWING NUMBER
W-9

APPROVED BY:



GENERAL NOTES

- 1) ALL METER AND VAULT SPECS SHALL BE VERIFIED PRIOR TO INSTALLATION
- 2) ALL PIPE SIZE TO CORRESPOND TO METER SIZE
- 3) ALL PIPE USED TO BE DUCTILE IRON PIPE UNLESS OTHERWISE NOTED
- 4) SEE SD-6B FOR SIZE/SERVICE INFORMATION
- 5) VALVE BOXES TO BE BROOKS NO. 4 TT 10 1/4" DIA. TRAFFIC SERIES

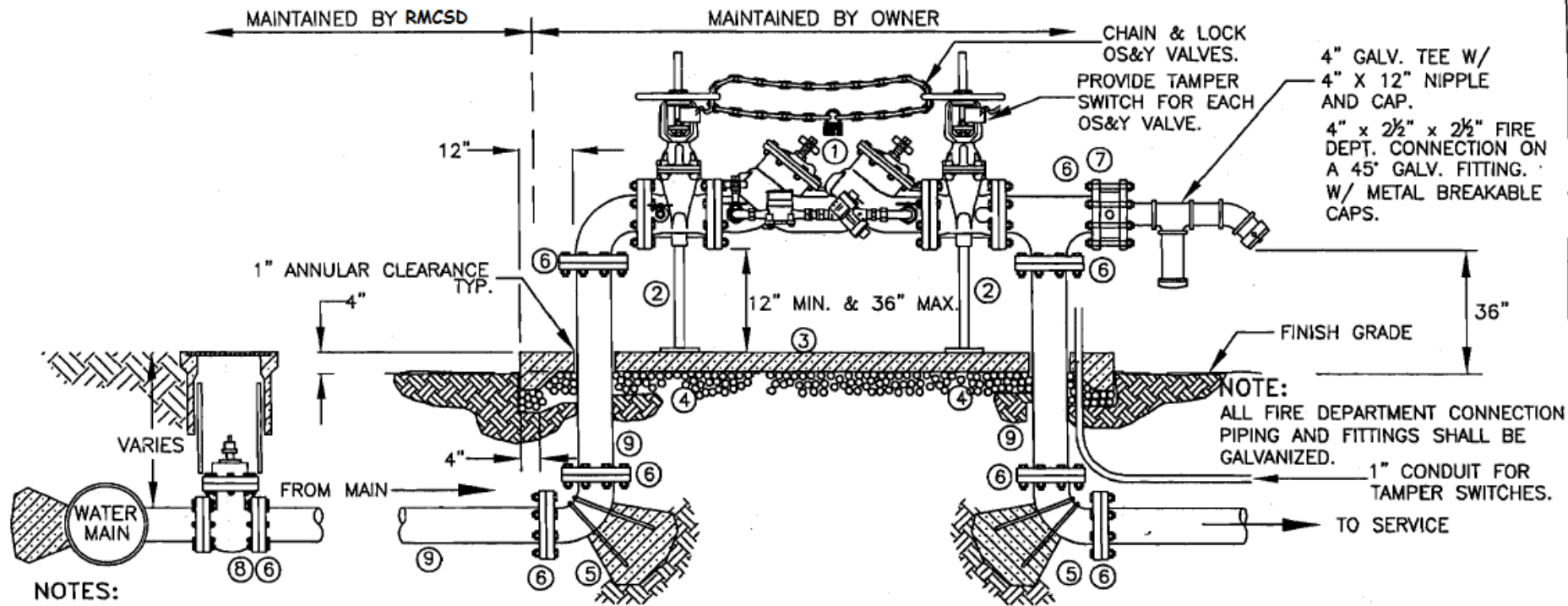
RANCHO MURIETA
COMMUNITY SERVICES DISTRICT

TURBINE/COMPOUND
METER INSTALLATION

APPROVED BY: *[Signature]*

Scale NONE
Date
Drawn By

W-9A



4" GALV. TEE W/
4" X 12" NIPPLE
AND CAP.
4" x 2½" x 2½" FIRE
DEPT. CONNECTION ON
A 45° GALV. FITTING.
W/ METAL BREAKABLE
CAPS.

NOTE:
ALL FIRE DEPARTMENT CONNECTION
PIPING AND FITTINGS SHALL BE
GALVANIZED.

NOTES:
DOUBLE CHECK DETECTOR ASSEMBLY SHALL BE APPROVED BY THE STATE
OF CALIFORNIA DEPT. OF HEALTH SERVICES AND BE ON THE MOST
RECENT LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES FOR
SERVICE ISOLATION FROM THE USC FOUNDATION.
*(www.dhs.ca.gov/ps/ddwem/publications/pubindex.htm)
*(www.usc.edu/dept/fccchr)

PIPE SHALL BE DUCTILE IRON. ABOVE GROUND JOINTS SHALL BE FLANGED.
BURIED JOINTS SHALL BE FLANGED OR RESTRAINED MJ. FLANGES SHALL
BE CLASS D.

INSTALL LOCATING WIRE PER 8-4.

ALL BURIED METAL SHALL BE ENCASED WITH 8 MIL. POLYETHYLENE SO
THAT NO SOIL IS IN CONTACT WITH METAL.

- ① DOUBLE CHECK DETECTOR ASSEMBLY W/ FLANGED OS&Y VALVES.
- ② PIPE SUPPORT, 2" GALVANIZED SCH 40 AT MINIMUM.
- ③ 4" CONCRETE SLAB - 24" WIDE WITH VARYING LENGTH.
- ④ 6" OF CRUSHED AGGREGATE COMPACTED TO 95% COMPACTION

- ⑤ THRUST BLOCK WITH #5 REBARS. WRAP THE PORTION
OF THE REBAR THAT IS NOT EMBEDDED IN THE CONCRETE
WITH 20 MIL POLYETHYLENE TAPE. (SEE 8-3A)
- ⑥ FLANGED CONNECTION ONLY.
- ⑦ WAFER CHECK VALVE
- ⑧ GATE VALVE, WITH BOTH ENDS FLANGED.
- ⑨ DUCTILE IRON PIPE RESTRAINED.

Adopted by
RMCS D

Bypass meter shall be Sensus
Iperl or approved type meter

Handwritten signature

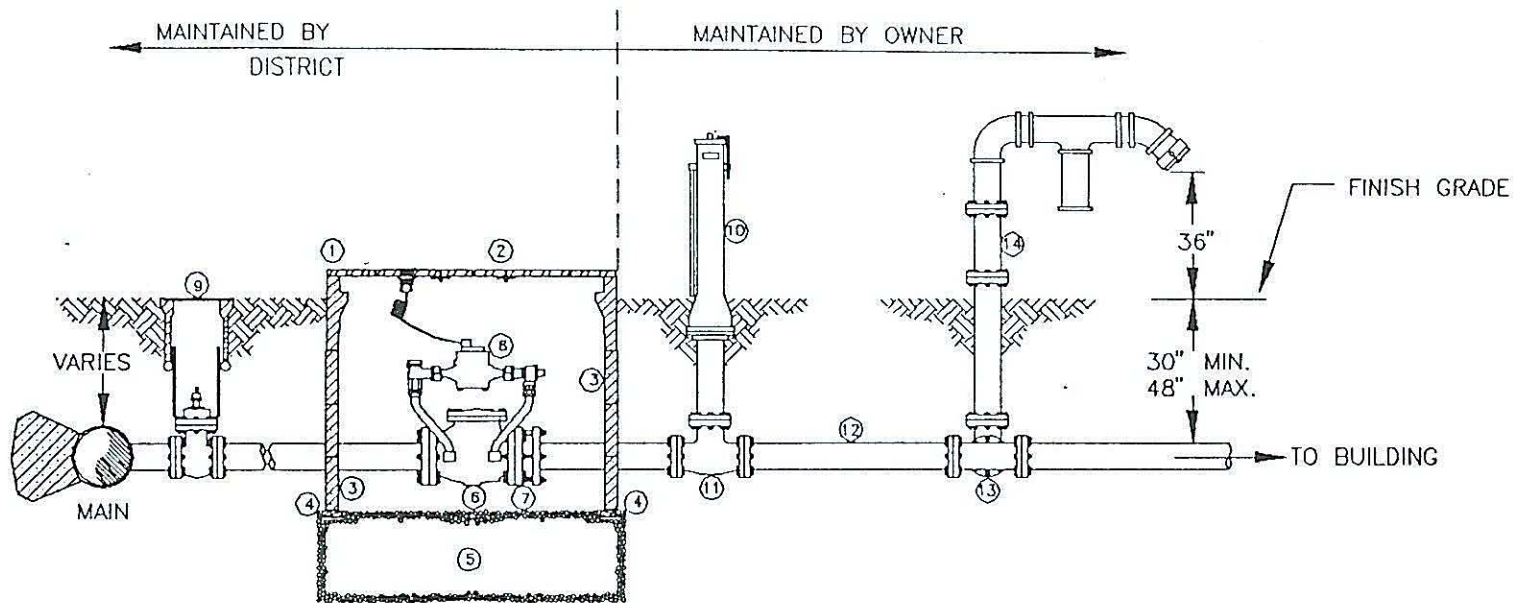
DIRECTOR, DEPARTMENT OF WATER RESOURCES

SACRAMENTO COUNTY
MUNICIPAL SERVICES AGENCY

**FIRE PROTECTION
DETAIL**

SCALE: NONE
DATE:

8-7



- ① REINFORCED CONCRETE UTILITY BOX (CHRISTY B48)
- ② 2 PC. STEEL CHECKER PLATE W/ TWO 10" ROUND SELF-CLOSING READING LIDS AND 1-3/4" HOLE FOR TOUCH READ MODULE IN ONE READING LID. (CHRISTY B48-62G COVER)
- ③ REINFORCED CONCRETE UTILITY BOX EXTENSIONS.
- ④ 2 X 6 REDWOOD SUPPORT FRAME AROUND BOX PERIMETER.
- ⑤ 3/4" CRUSHED ROCK SUB-BASE, 12" TO 18" DEEP.
- ⑥ DETECTOR CHECK VALVE--TYPE AND MODEL TO BE APPROVED BY THE FIRE DEPARTMENT AND THE RMCSO.
- ⑦ FLANGED COUPLING ADAPTOR.
- ⑧ 1" or 3/4" BYPASS METER SHALL BE Sensus Iper1
- ⑨ VALVE BOX AND LID.(SEE W-6)
- ⑩ FLANGED POST INDICATOR VALVE WITH BREAKAWAY LOCK.
- ⑪ FLANGED GATE VALVE.
- ⑫ DUCTILE IRON SPOOL.
- ⑬ FLANGED TEE.
- ⑭ WAFER CHECK.

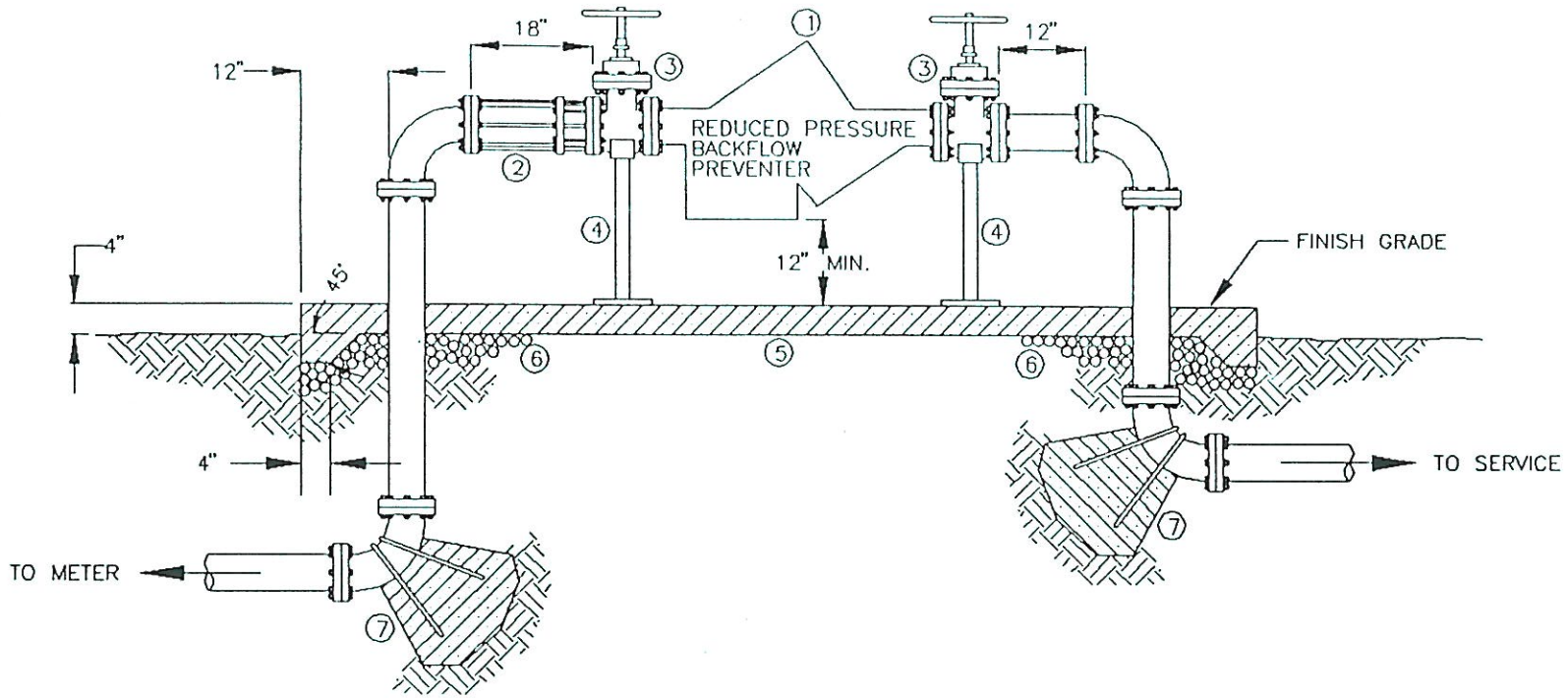
NOTES:

ALL MATERIALS SHALL BE U.L.-F.M. APPROVED.
 TYPICAL LINE DRAWING. ACTUAL INSTALLATION MAY VARY WITH FIELD CONDITIONS AND FIRE DEPARTMENT REQUIREMENTS.
 INSTALL TRACER WIRE PER SS93-05.(SEE W-5)
 ALL JOINTS BETWEEN MAIN AND DETECTOR CHECK SHALL BE FLANGE CONNECTED.

**NO Longer
USED**

APPROVED BY: 

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
FIRE PROTECTION DETAIL		
DRAWN BY:	SCALE	DRAWING NUMBER
DATE DRAWN:	N.T.S.	W-10



NOTES:

REDUCED PRESSURE BACKFLOW PREVENTER IS TO CONFORM WITH SS92A TO BE APPROVED BY THE SACRAMENTO COUNTY HEALTH DEPARTMENT AND THE RMCSO.

FOR 3" AND SMALLER REDUCED PRESSURE BACKFLOW PREVENTER, SUBSTITUTE UNION JOINT FOR FLANGED COUPLING ADAPTOR.

FOR 2-1/2" AND LARGER REDUCED PRESSURE BACKFLOW PREVENTER, PIPE SUPPORTS ARE REQUIRED AS SHOWN.

TYPICAL LINE DRAWING, ACTUAL INSTALLATION MAY VARY WITH FIELD CONDITIONS.

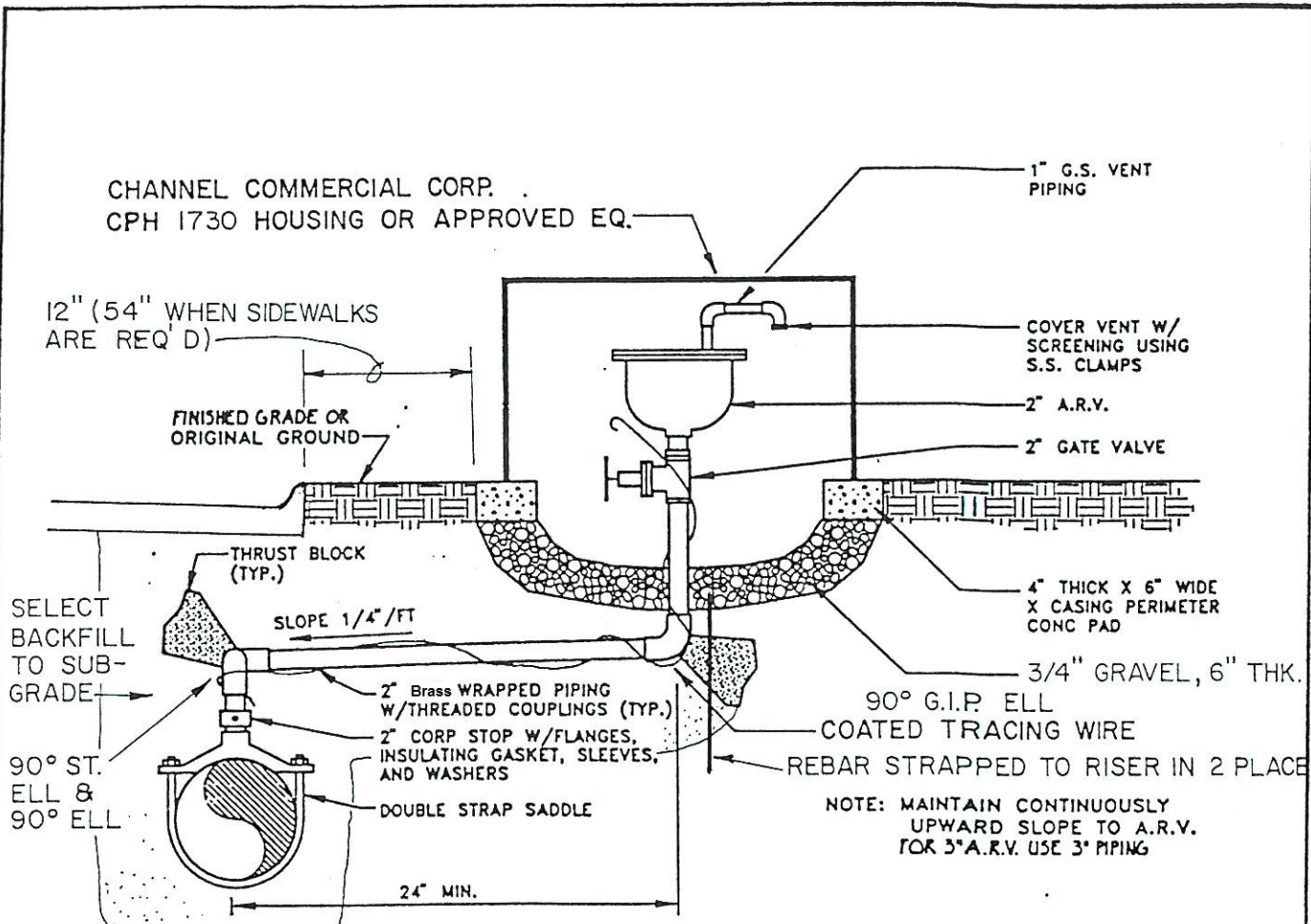
INSTALL TRACER WIRE PER S.S.93-05.

ALL 4" AND LARGER PIPE SHALL BE FLANGED CONNECTED AND EITHER SCH. 40 BLACK STEEL OR DUCTILE IRON PIPE. ALL 3" AND SMALLER PIPE SHALL BE THREADED GALVANIZED SCH. 40 STEEL OR SOLDERED TYPE K COPPER PIPE.

- ① REDUCED PRESSURE BACKFLOW PREVENTER.
- ② FLANGED COUPLING ADAPTOR.
- ③ GATE VALVE.
- ④ PIPE SUPPORT.
- ⑤ 4" SLAB - 24" WIDE WITH VARYING LENGTH.
- ⑥ 4" THICK AGGREGATE BASE.
- ⑦ THRUST BLOCK WITH #5 REBARS.

APPROVED BY:

RANCHO MURIETA COMMUNITY SERVICES DISTRICT		
REDUCED PRESSURE BACKFLOW PREVENTER INSTALLATION DETAIL		
DRAWN BY:	SCALE	DRAWING NUMBER
DATE DRAWN:	N.T.S.	W-11



CHANNEL COMMERCIAL CORP.
 CPH 1730 HOUSING OR APPROVED EQ.

1" G.S. VENT
 PIPING

COVER VENT W/
 SCREENING USING
 S.S. CLAMPS

2" A.R.V.

2" GATE VALVE

4" THICK X 6" WIDE
 X CASING PERIMETER
 CONC PAD

3/4" GRAVEL, 6" THK.

90° G.I.P. ELL

COATED TRACING WIRE

REBAR STRAPPED TO RISER IN 2 PLACE

NOTE: MAINTAIN CONTINUOUSLY
 UPWARD SLOPE TO A.R.V.
 FOR 3" A.R.V. USE 3" PIPING

COMBINATION AIR RELEASE VALVE DETAIL

GENERAL NOTES:

1. AIR RELEASE VALVE TO BE LOCATED BEHIND SIDEWALK.
2. CORPORATION STOP AND/OR SADDLE TO BE AT LEAST 2 FT. FROM END OF WATER MAIN.
3. GATE VALVE, OHIO BRASS NO. 2500 OR EQ.
4. THRUST BLOCK PER RMCSO STANDARDS.
5. HEAVY DUTY STYLE COMBINATION AIR RELEASE VALVE APCO & VAPCO CO. NO. 143C2 OR EQ.
6. BACKFILL MATERIAL PER RMCSO REQUIREMENTS.
7. CORP STOP SHALL BE MEULLER CO. NO. H-10012 OR EQ.

**RANCHO MURIETA
 COMMUNITY SERVICES DISTRICT**

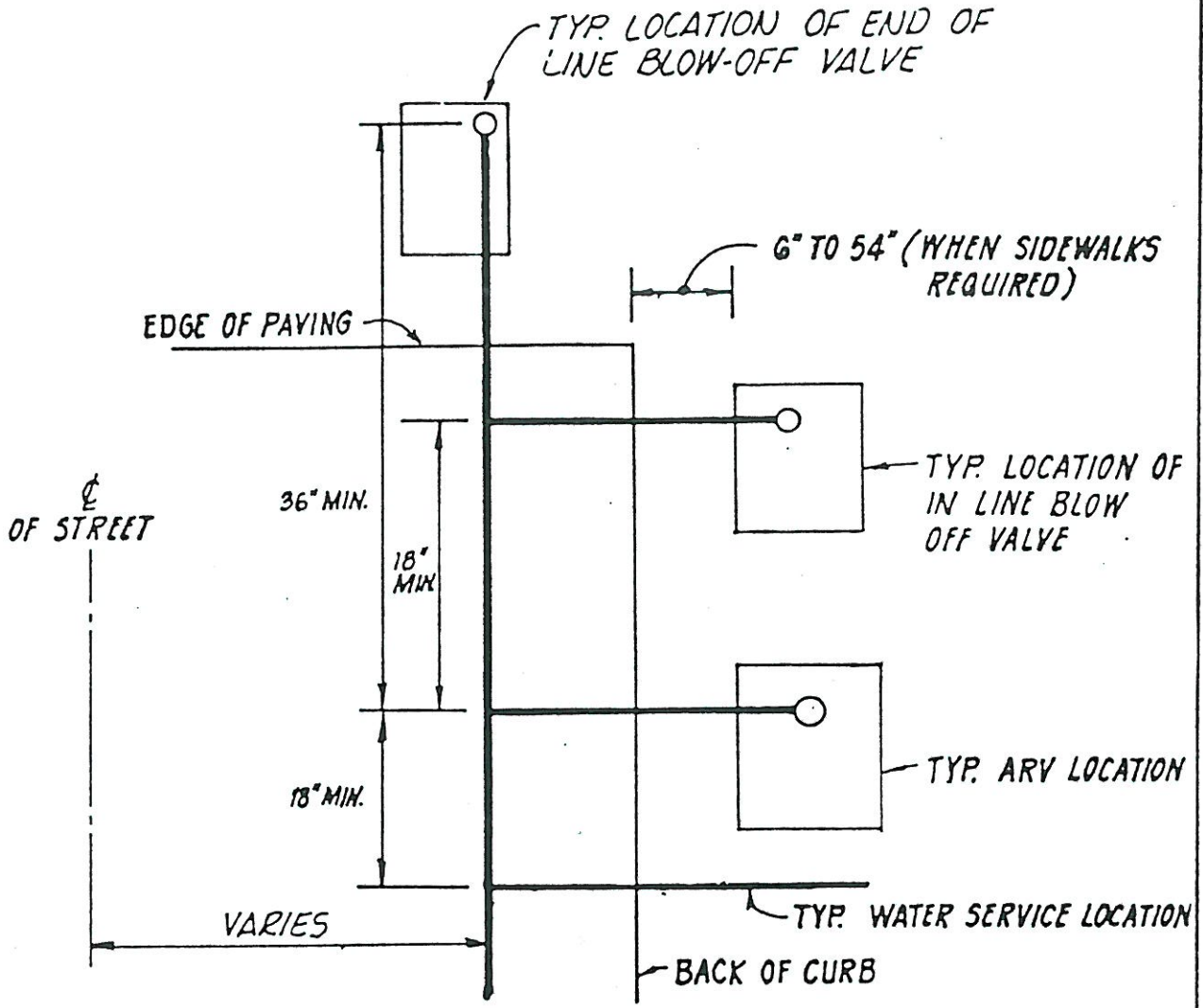
**AIR RELEASE VALVE
 INSTALLATION**

APPROVED BY: *[Signature]*

Scale NONE
 Date
 Drawn By

W-12

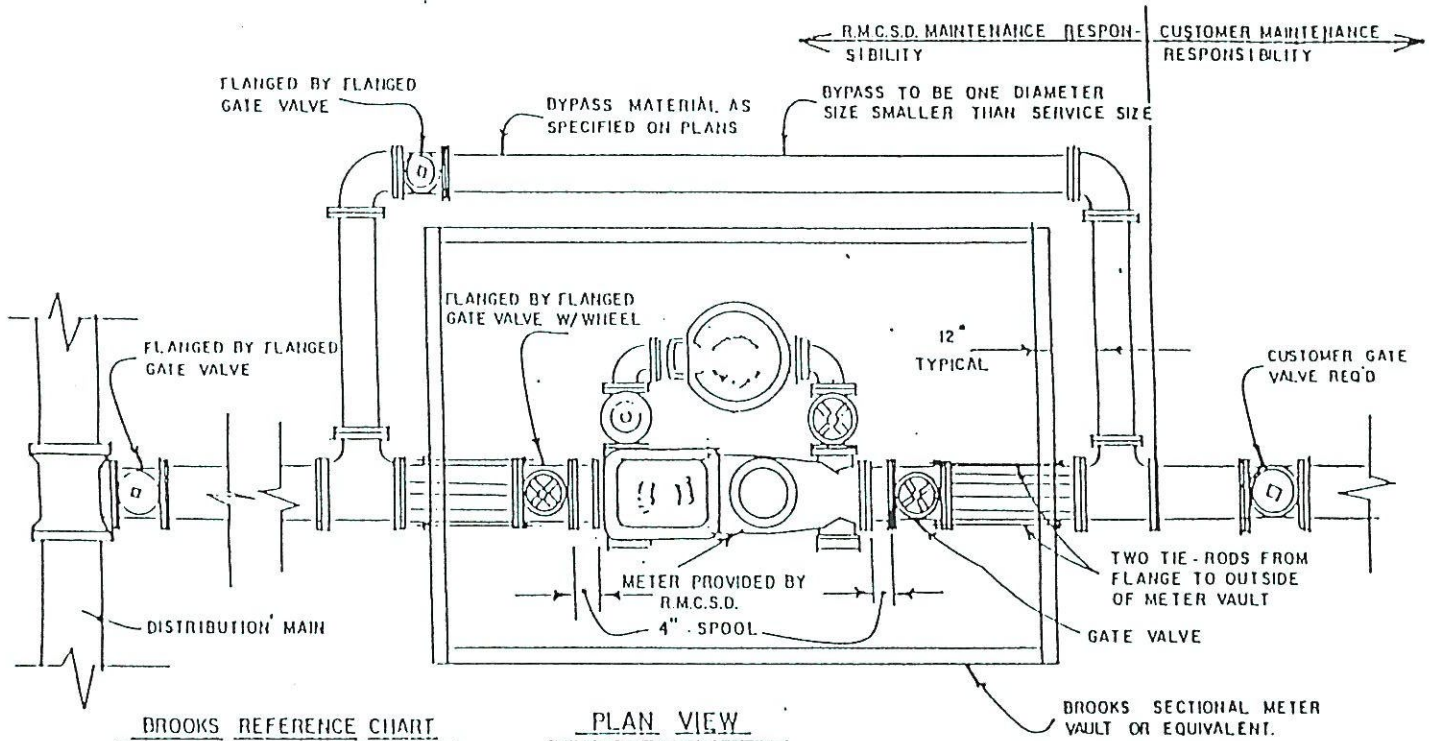
NOTE: LOCATE ALL BOXES FOR ARV & BLOW OFF VALVES
BEHIND CURBS OR PAST EDGE OF PAVING.



RANCHO MURIETA COMMUNITY SERVICES DISTRICT	
AIR RELEASE VALVE AND BLOW-OFF VALVE LOCATION	
Scale NONE Date Drawn By	W-13

APPROVED BY: 

APPROVED BY:



BROOKS REFERENCE CHART

SIZE	CAT. NO.
4" X 2"	857
6" X 3"	868
8" X 4"	869
10" X 6"	8612

GENERAL NOTES

- 1) BOX AND METER SHALL BE BEDDED IN MIN. 2" DEEP BASE OF 3/4" CRUSHED ROAD ROCK
- 2) EACH DIAL ON METER SHALL HAVE A 7/16" ROUND READING LID WITH LOCKING HASP
- 3) METAL LIDS TO BE BOLT-DOWN

PLAN VIEW

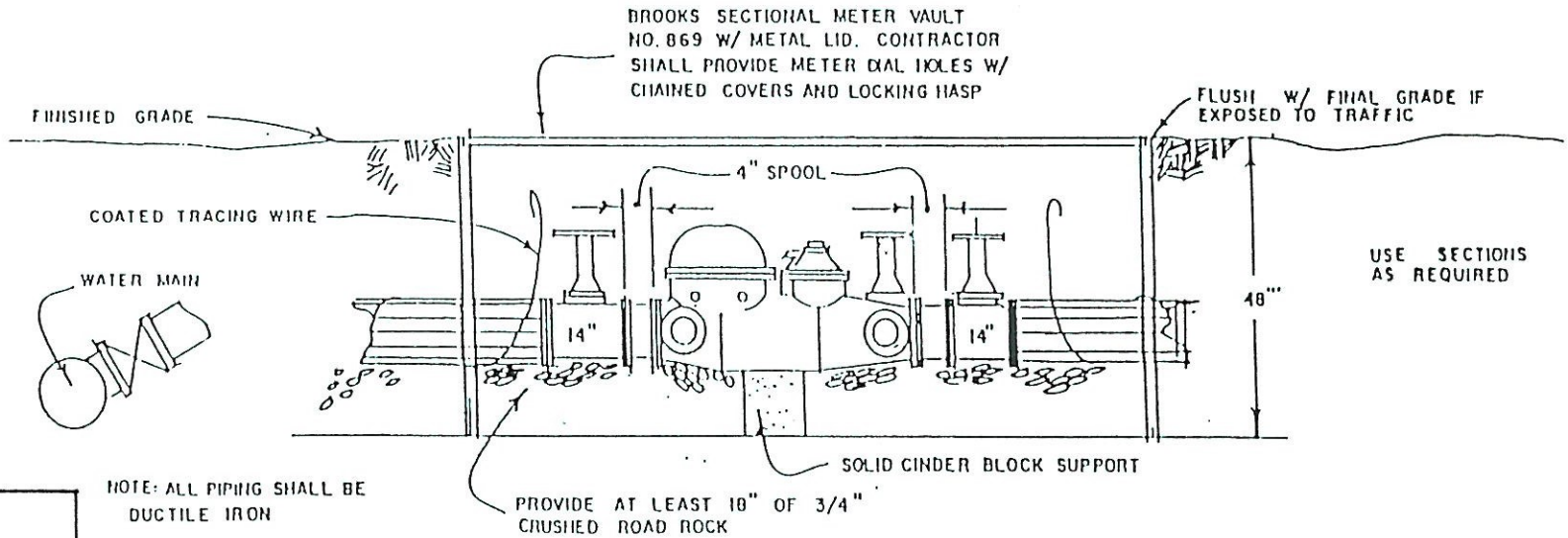
Scale NONE
Date
Drawn By

W-14A

DETECTOR CHECK
METER - PLAN

RANCHO MURIETA
COMMUNITY SERVICES DISTRICT

APPROVED BY:



PROFILE VIEW

Scale NONE
Date
Drawn By

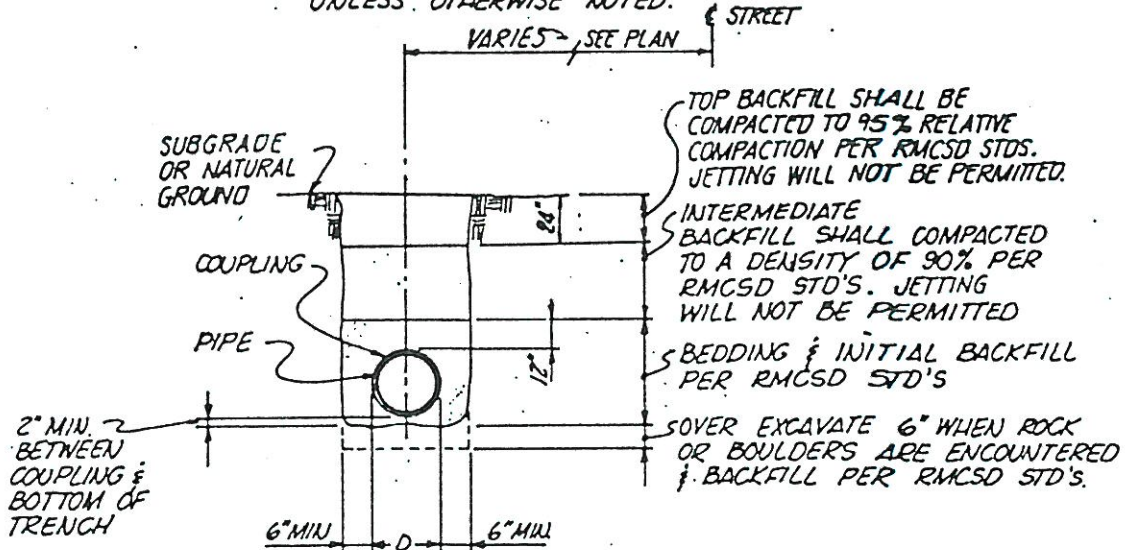
W-14B

DETECTOR CHECK
METER - PROFILE

RANCHO MURIELTA
COMMUNITY SERVICES DISTRICT

NOTES: 1. PIPE SHALL BE PLACED W/30" MIN. COVER BELOW SUBGRADE. WATER MAINS SHALL BE PLACED UNDER CROSS CULVERTS & SHALL HAVE 12" MIN. CLEAR. UNLESS OTHERWISE NOTED ON THE PLANS.

2. WATER MAIN LOCATION SHALL BE 3'± FROM LIP OF GUTTER AS SHOWN ON WATER PLAN UNLESS OTHERWISE NOTED.



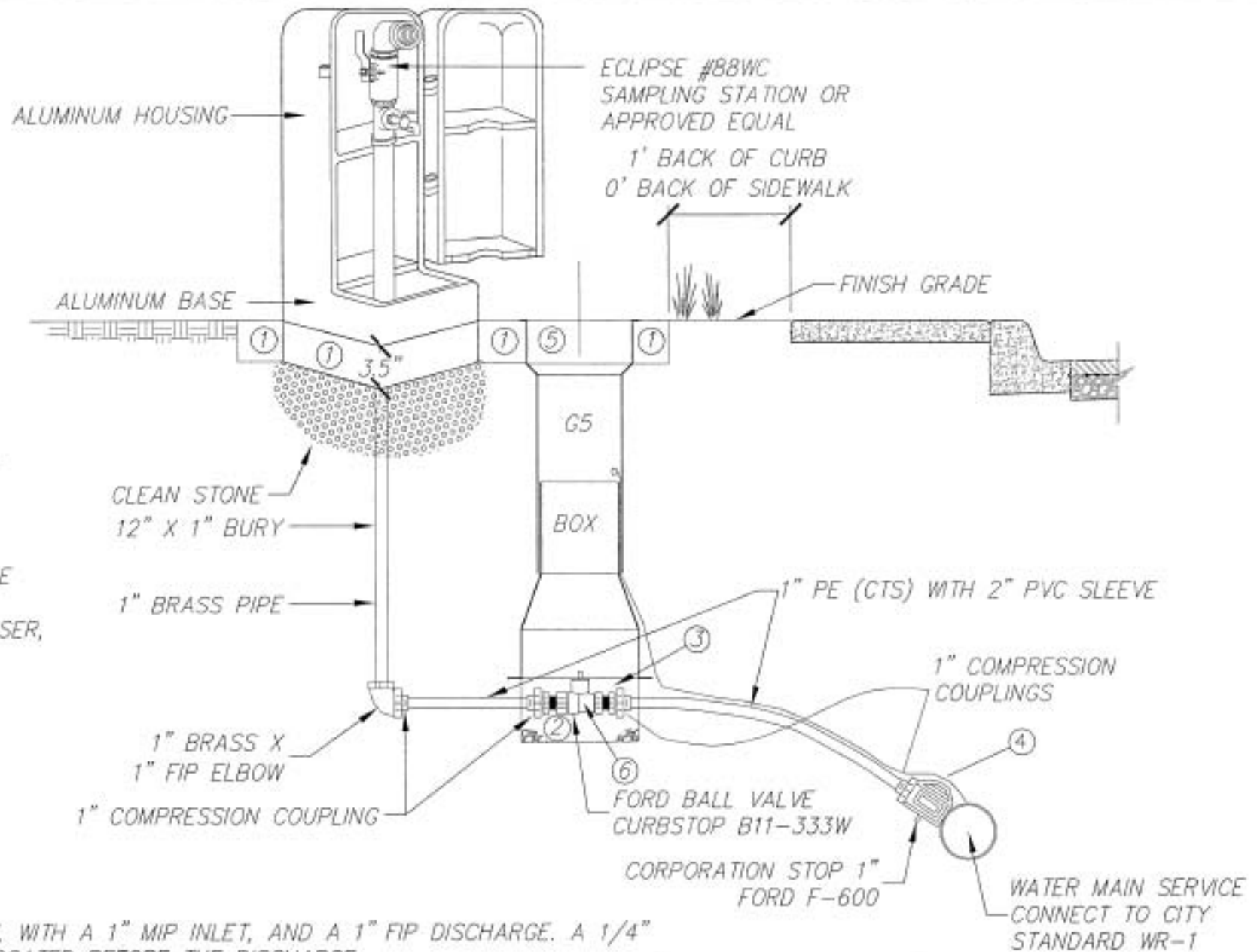
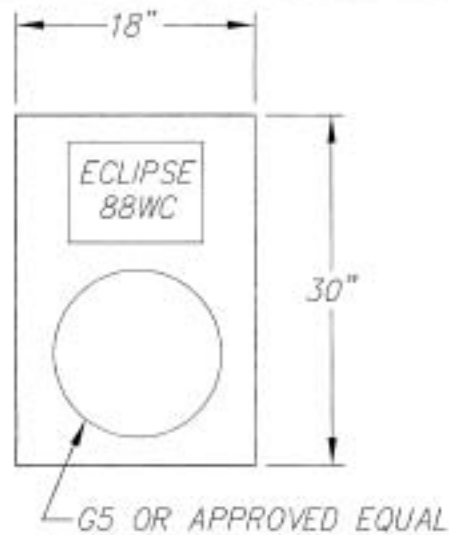
RANCHO MURIETA
COMMUNITY SERVICES DISTRICT

TRENCH DETAIL

APPROVED BY:

Scale NONE
Date
Drawn By

W-15



- ① 3.5" REINFORCED CONCRETE SLAB
- ② 3/4" x 6" DEPTH DRAIN ROCK
- ③ 8" PVC RISER NOTCHED OVER PIPE
- ④ #8 TRACER WIRE, OUTSIDE OF RISER, BUT IN BOX
- ⑤ TRAFFIC VALVE BOX W/METAL LID
- ⑥ 1" BALL VALVE, CURB STOP

*All brass shall be wrapped with 10 mil tape

NOTES:

1. SAMPLING STATIONS SHALL BE 36" BURY, WITH A 1" MIP INLET, AND A 1" FIP DISCHARGE. A 1/4" BENT-NOSE SAMPLING BIBB SHALL BE LOCATED BEFORE THE DISCHARGE.
2. ALL STATIONS SHALL BE ENCLOSED IN A LOCKABLE, NONREMOVABLE, ALUMINUM-CAST HOUSING.
3. WHEN OPENED, THE STATION SHALL REQUIRE NO KEY FOR OPERATION, AND THE WATER WILL FLOW IN AN ALL BRASS WATERWAY.
4. ALL WORKING PARTS WILL BE OF BRASS AND SERVICEABLE FROM ABOVE GROUND WITH NO DIGGING. (OPTIONAL: IF DESIRED, A 1/2" BRASS DRAIN TUBE WILL BE PROVIDED WITHIN THE LOCKING COVER).
5. A 1" BALL VALVE WILL CONTROL THE WATER FLOW, AND BE LOCATED BEFORE (OR AFTER) THE SAMPLING BIBB, AS MANUFACTURED BY KUPFERLE FOUNDRY, ST. LOUIS, MO 63102 OR APPROVED EQUAL.
6. ALL BRASS PIPES AND FITTINGS SHALL BE IDENTIFIED AS "LEAD FREE".

RANCHO MURIETA COMMUNITY SERVICES DISTRICT	
WATER SAMPLING STATION	
SCALE: NONE DATE: MARCH 2013	W-20