

2. Added Pvmt. Sect. Note: 11/08

1. Changed Company Name 1/00

REVISION HISTORY:



P.O. Box 880339  
 3310 Clear Water Trail  
 Steamboat Springs, CO 80488  
 (970) 879-2424 fax (970) 879-8169

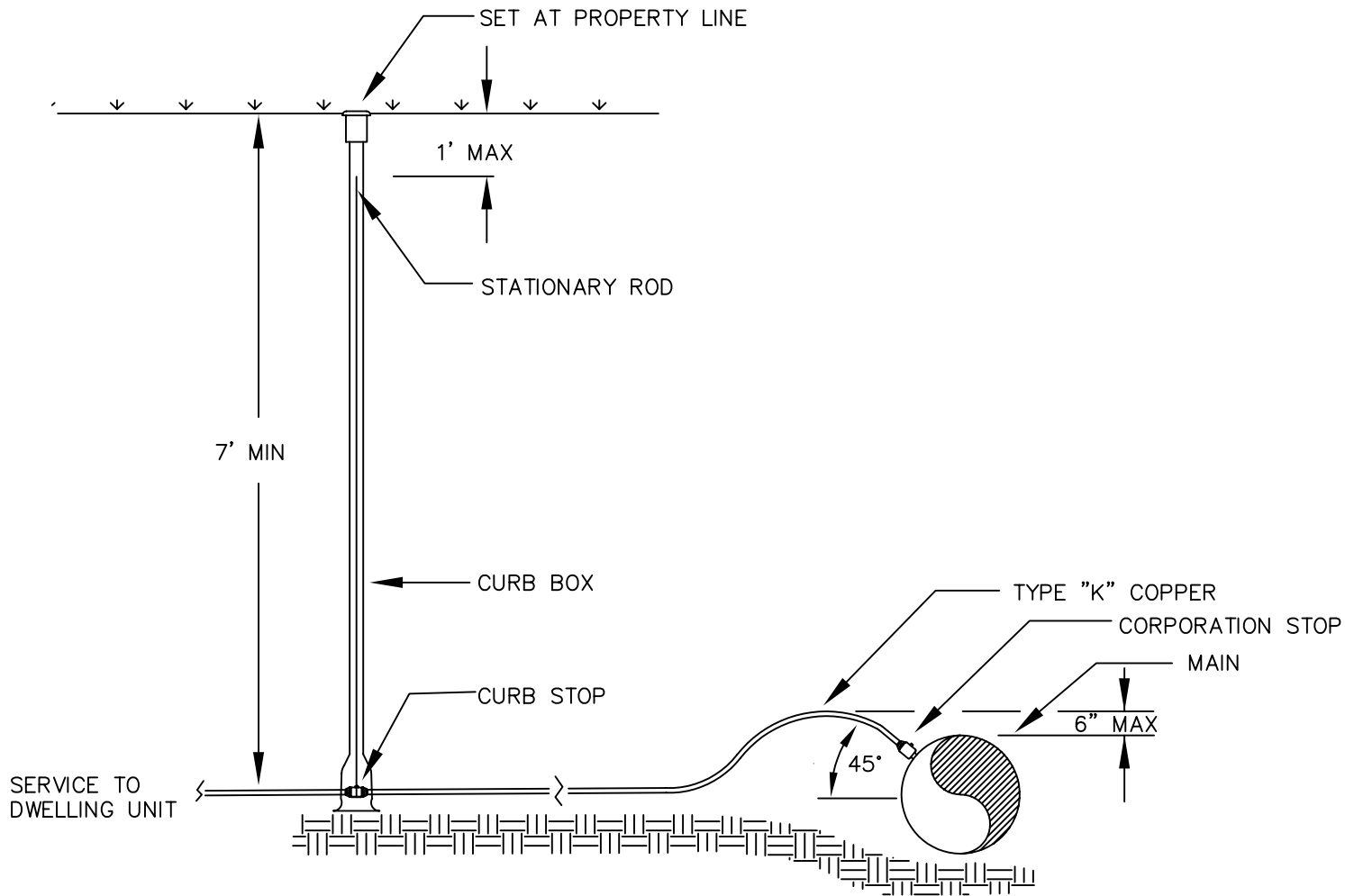
TRENCH CROSS SECTION  
 AND PIPE EMBEDMENT DETAIL

DRAWN BY: RBS

DATE: 2/2003

SCALE: NONE

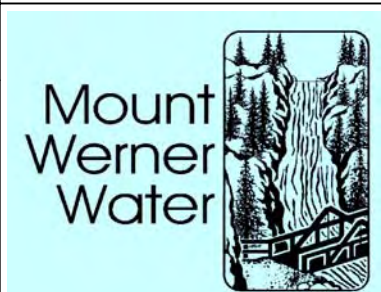
SHEET: 1



2. Added Gooseneck Dim.: 11/08

1. Changed Company Name 1/00

REVISION HISTORY:



P.O. Box 880339  
 3310 Clear Water Trail  
 Steamboat Springs, CO 80488  
 (970) 879-2424 fax (970) 879-8169

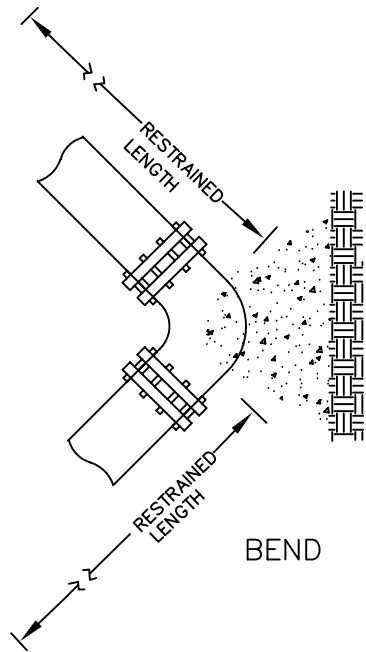
SERVICE LINE  
DETAIL

DRAWN BY: RBS

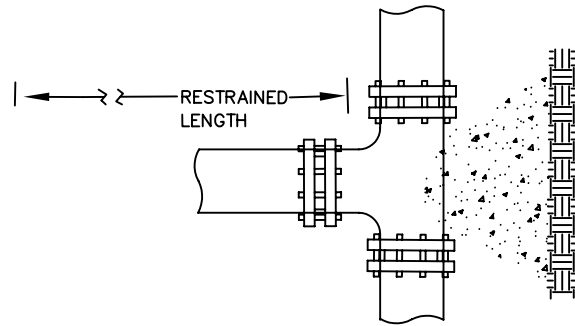
DATE: 2/2003

SCALE: NONE

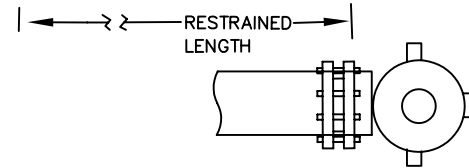
SHEET: 2



BEND



TEE



DEAD END OR FIRE HYDRANT

REQUIRED RESTRAINT LENGTH (FT)

MAIN SIZE (INCHES)

FITTING TYPE	4"	6"	8"	10"	12"
90° BEND, BRANCH OF TEE OR DEAD END	30'	45'	60'	73'	86'
45° BEND	18'	18'	18'	21'	25'
22 1/2° BEND	18'	18'	18'	18'	18'
11 1/4° BEND	18'	18'	18'	18'	18'

NOTE: THRUST BLOCKS ARE REQUIRED IN ADDITION TO JOINT RESTRAINT.

2. Changed Restraint Lengths: 11/08

1. Changed Company Name 1/00

REVISION HISTORY:



P.O. Box 880339  
3310 Clear Water Trail  
Steamboat Springs, CO 80488  
(970) 879-2424 fax (970) 879-8169

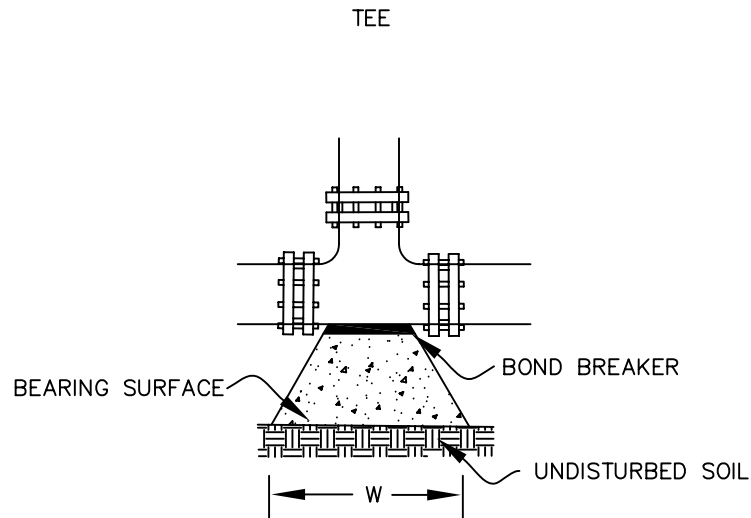
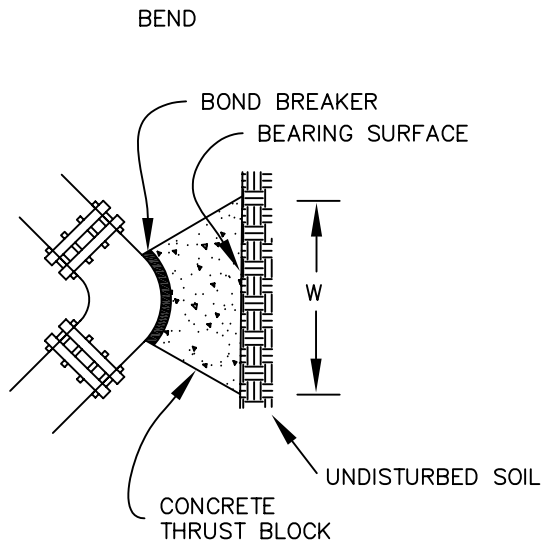
PIPE RESTRAINT  
DETAIL

DRAWN BY: RBS

DATE: 2/2003

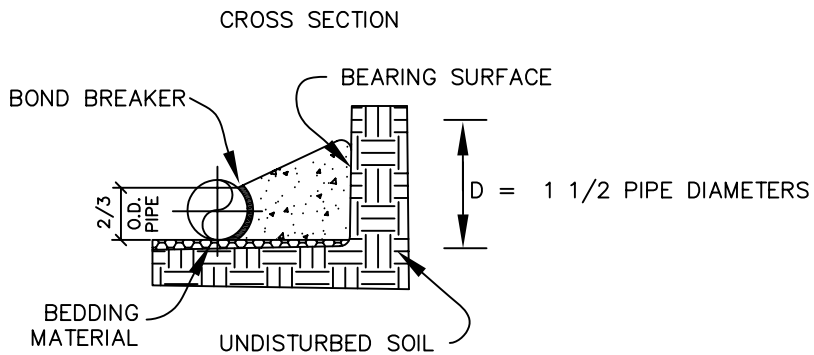
SCALE: NONE

SHEET: 3



**NOTES:**


1. THRUST BLOCKS ARE REQUIRED IN ADDITION TO JOINT RESTRAINTS.
2. ALL THRUST BLOCKS TO BE SUITABLY FORMED. EARTH EXCAVATED FORMS WILL NOT BE ACCEPTED.
3. WRAP FITTINGS WITH POLYETHYLENE PRIOR TO POURING THRUST BLOCKS SO THAT CONCRETE DOES NOT COME IN CONTACT WITH JOINT BOLTS.
4. THRUST BLOCKS SHALL BE INSTALLED SO THAT ALL JOINTS ARE ACCESSIBLE.

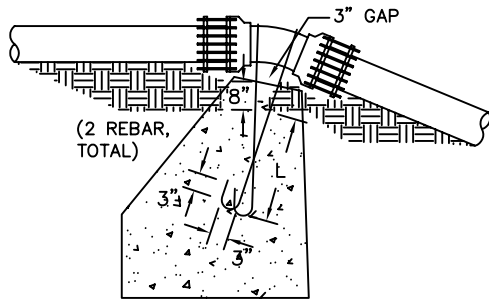


MINIMUM BEARING SURFACE AREA  
(IN SQUARE FEET)  
(AREA = W X D)

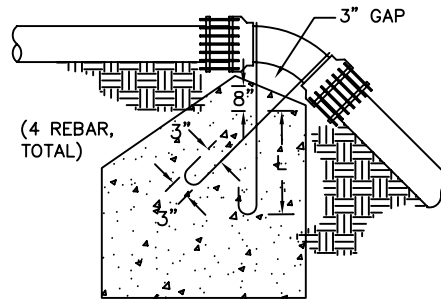
FITTING TYPE	MAIN SIZE (INCHES)			
	<6"	8"	10"	12"
45° OR LESS BEND	3	3	3	5
90° BEND	3	4	6	9
TEE OR PLUG	3	3	4	6

NOTE: THRUST BLOCKS ARE REQUIRED IN ADDITION TO JOINT RESTRAINT.

2. Added Notes: 11/08	
1. Changed Company Name 1/00	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>THRUST BLOCK DETAIL</b>	
DRAWN BY: RBS	DATE: 2/2003
SCALE: NONE	
SHEET: 4	



**TYPE A RESTRAINT**  
11-1/4' & 22-1/2' VERTICAL OVER-BENDS




**TYPE B RESTRAINT**  
45° VERTICAL OVER-BENDS

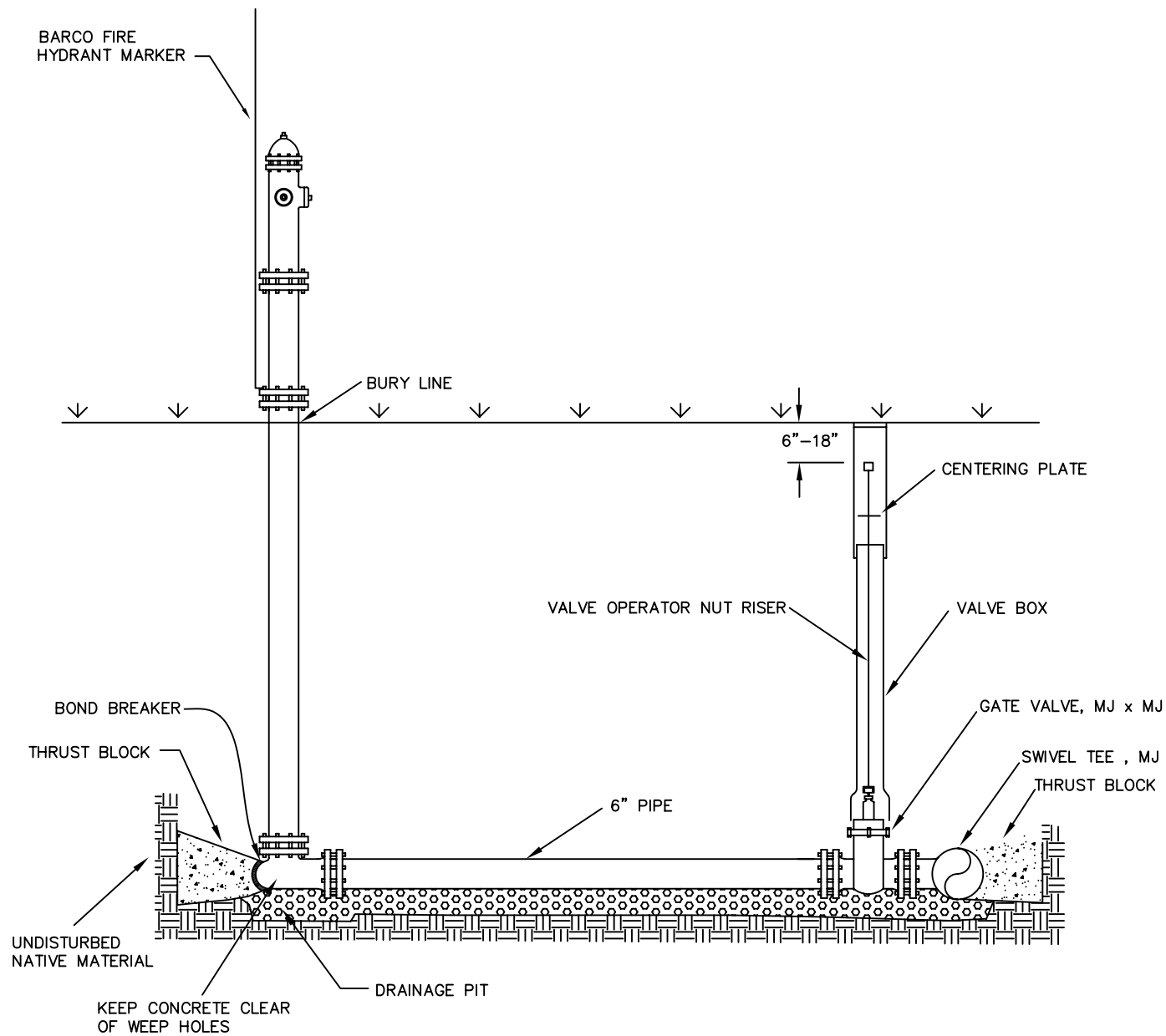
**NOTES:**


1. THRUST BLOCKS ARE REQUIRED IN ADDITION TO JOINT RESTRAINT.
2. SPECIAL REQUIREMENTS:
  - a. THRUST BLOCKS FOR PIPE SIZES OR CONFIGURATIONS NOT SHOWN REQUIRE SPECIAL DESIGN.
  - b. BEARING AREAS, VOLUMES, AND SPECIAL THRUST BLOCKING DETAILS SHOWN ON DRAWINGS TAKE PRECEDENCE OVER THIS TYPICAL DETAIL.
  - c. REINFORCING STEEL BARS TO BE EPOXY COATED, AT LEAST 15 MILS THICK. MINIMUM YIELD STRENGTH OF REBAR IS 60,000 PSI.
  - d. RESTRAINT SIZING IS BASED UPON A MAXIMUM OPERATING PRESSURE OF 150 PSI, A TEST PRESSURE OF 200 PSI, AND A MINIMUM SOIL BEARING STRENGTH OF 2000 PSF. OPERATING PRESSURES IN EXCESS OF 150 PSI OR SOILS WITH LESS THAN 2000 PSF BEARING STRENGTH WILL REQUIRE SPECIAL DESIGN.
3. FOR VERTICAL UNDER-BEND FOLLOW HORIZONTAL THRUST BLOCK DETAIL

TABLE OF DIMENSIONS				
PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND DEGREES	NO. OF CU. FT. OF CONC. BLOCKING	DIAMETER OF REBAR, "d" INCH	DEPTH OF RODS IN CONCRETE, "L" FT.
4"	11-1/4'	5	5/8"	1.5
	22-1/2'	10	5/8"	2.0
6"	11-1/4'	11	5/8"	2.0
	22-1/2'	22	5/8"	2.0
8"	11-1/4'	20	5/8"	2.0
	22-1/2'	39	5/8"	2.0
12"	11-1/4'	45	3/4"	2.0
	22-1/2'	88	3/4"	3.0
16"	11-1/4'	79	3/4"	3.0
	22-1/2'	156	3/4"	4.0
20"	11-1/4'	123	3/4"	3.5
	22-1/2'	243	1"	4.0
24"	11-1/4'	177	3/4"	4.0
	22-1/2'	350	1"	4.0
30"	11-1/4'	277	1"	4.0
	22-1/2'	546	1-1/4"	4.0

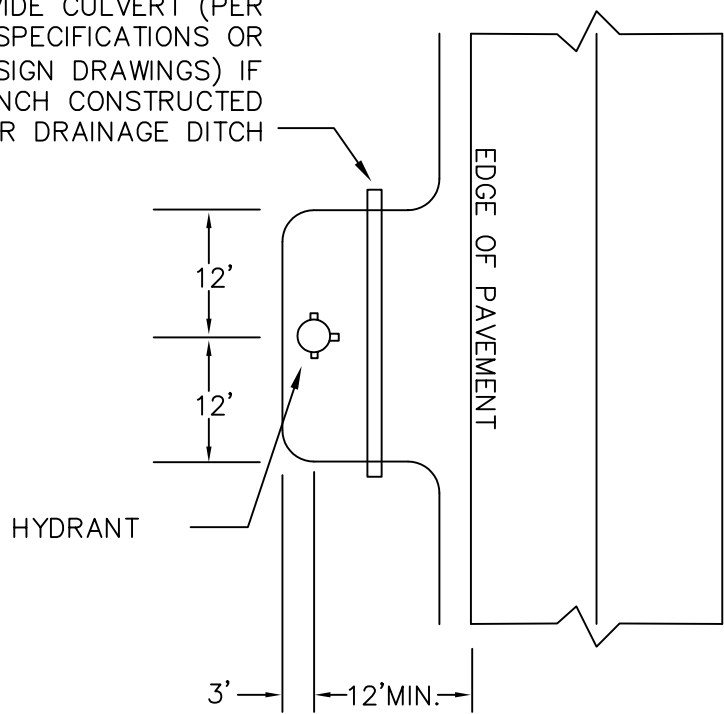
TABLE OF DIMENSIONS				
PIPE SIZE NOMINAL DIAMETER - INCH	VERTICAL BEND DEGREES	NO. OF CU. YD. OF CONC. BLOCKING	DIAMETER OF REBAR, "d" INCH	DEPTH OF RODS IN CONCRETE, "L" FT.
4"	45°	0.7	5/8"	2.0
6"	45°	1.5	5/8"	2.5
8"	45°	2.7	5/8"	3.0
12"	45°	6.1	3/4"	4.0
16"	45°	10.9	3/4"	4.0
20"	45°	17.1	1"	4.0
24"	45°	24.6	1"	4.0
30"	45°	38.4	1-1/4"	4.0

1. Initial Release 3/07	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>VERTICAL THRUST BLOCK DETAIL</b>	
DRAWN BY: CL, RM	DATE: 2/2003
SCALE: NONE	
SHEET: 5	



2. Added Riser Length: 11/08	
1. Changed Company Name 1/00	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>FIRE HYDRANT          DETAIL</b>	
DRAWN BY: RBS	DATE: 2/2003
SCALE: NONE	
SHEET: 6	

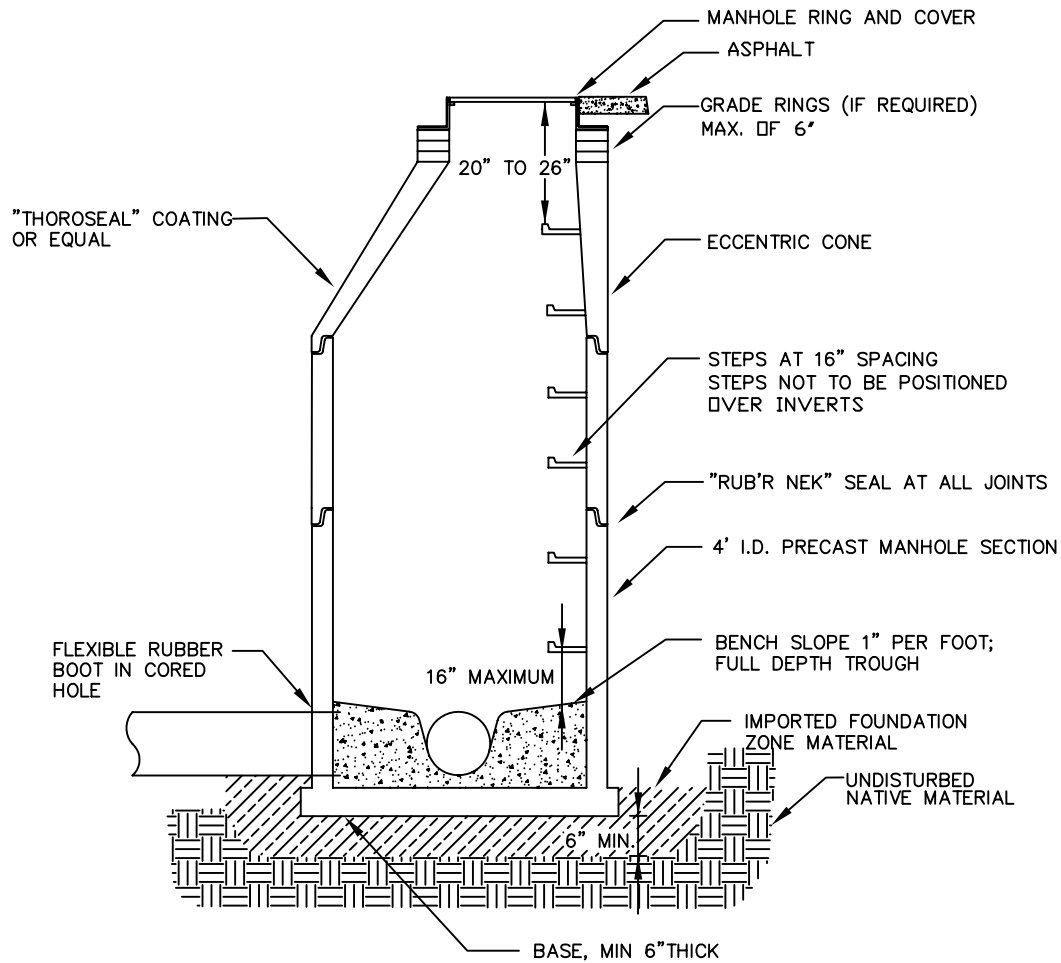
PROVIDE CULVERT (PER CITY SPECIFICATIONS OR DESIGN DRAWINGS) IF BENCH CONSTRUCTED OVER DRAINAGE DITCH



NOTES:

NO OBSTRUCTIONS SUCH AS TREES, PEDESTALS, FENCES OR OTHER OBJECTS MAY BE PLACED WITHIN A 15-FOOT RADIUS OF A HYDRANT.

1. Changed Notes: 11/08	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>FIRE HYDRANT BENCH          DETAIL</b>	
DRAWN BY: RBS	DATE: 2/2003
SCALE: NONE	
SHEET: 7	



NOTE:

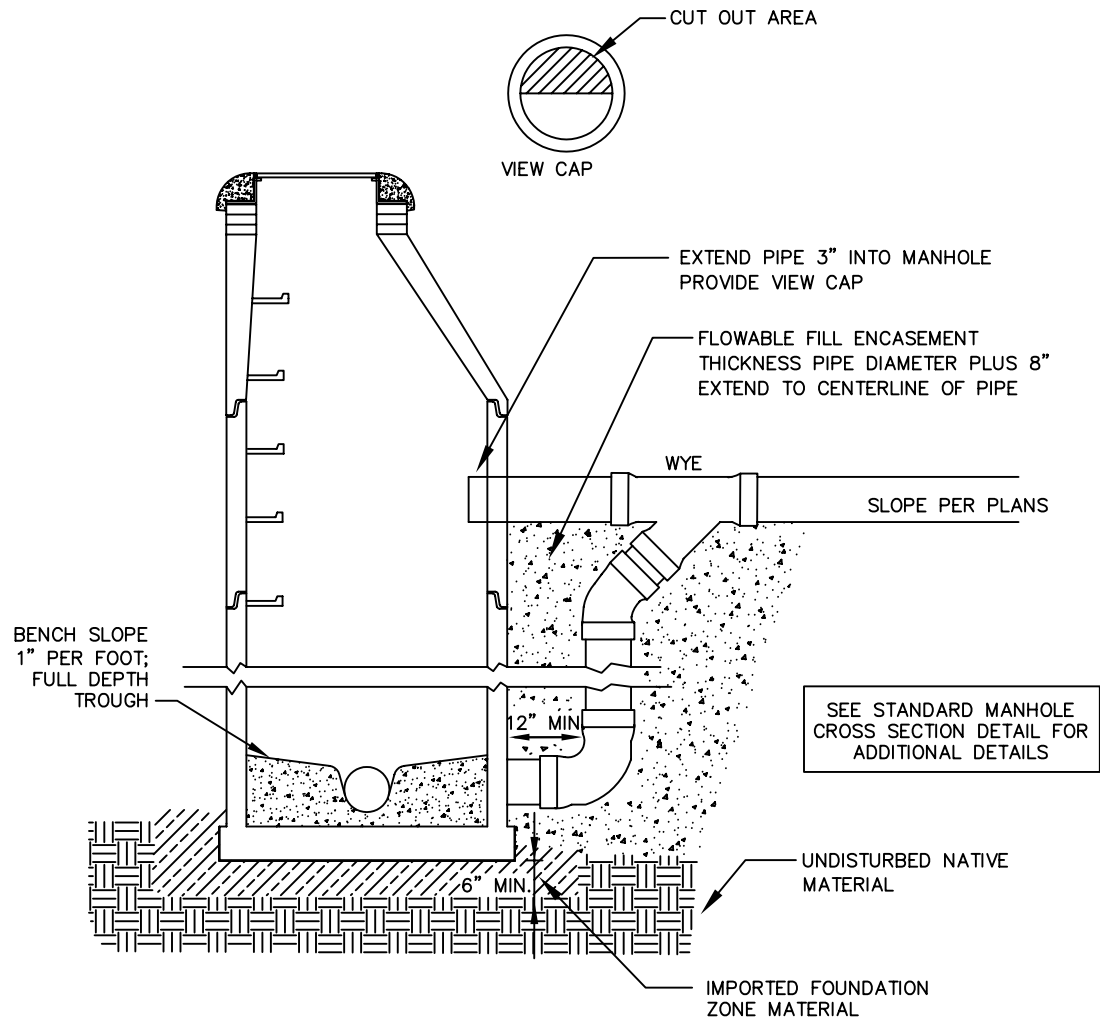
RUB'R NEK SEALS AT ALL JOINTS; INCLUDING CASTING TO GRADE RING, BETWEEN ALL GRADE RINGS AND AT ALL PRECAST JOINTS.

2. Added Note: 11/08
1. Revised MH Trough: 5/07
REVISION HISTORY:

Mount  
 Werner  
 Water

P.O. Box 880339  
 3310 Clear Water Trail  
 Steamboat Springs, CO 80488  
 (970) 879-2424 fax (970) 879-8169

STANDARD MANHOLE CROSS SECTION DETAIL	
DRAWN BY: RBS	DATE: 2/2003
SCALE: NONE	
SHEET: 8	

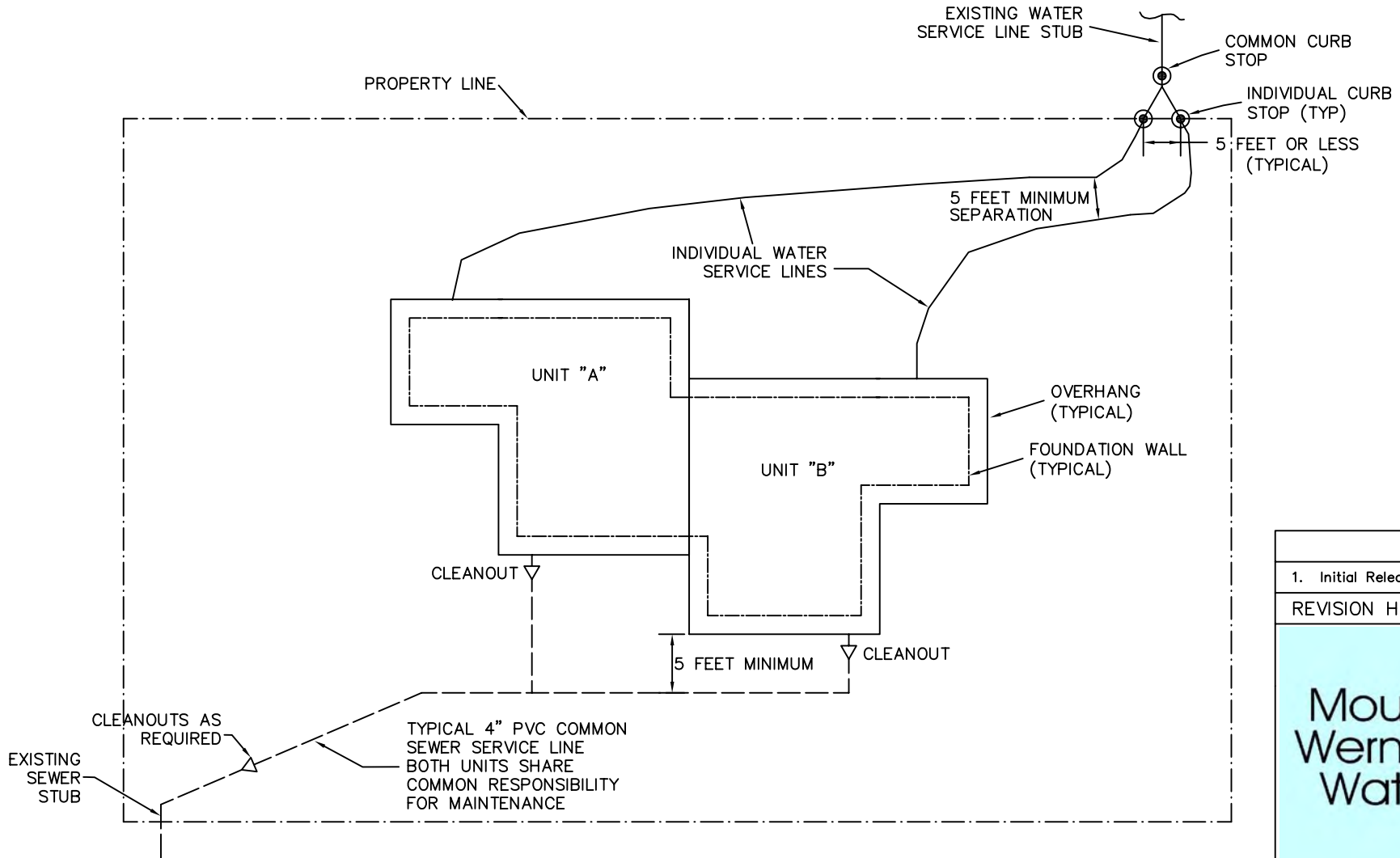


1. REVISED MH TROUGH 5/07  
REVISION HISTORY:

Mount  
Werner  
Water

P.O. Box 880339  
3310 Clear Water Trail  
Steamboat Springs, CO 80488  
(970) 879-2424 fax (970) 879-8169

DROP MANHOLE DETAIL	
DRAWN BY: RBS	DATE: 2/2003
SCALE: NONE	
SHEET: 9	



1. Initial Release 2/2001

REVISION HISTORY:



P.O. Box 880339  
 3310 Clear Water Trail  
 Steamboat Springs, CO 80488  
 (970) 879-2424 fax (970) 879-8169

TYPICAL DUPLEX SERVICE  
 LINE LOCATION DETAIL

DRAWN BY: RBS

DATE: 2/2003

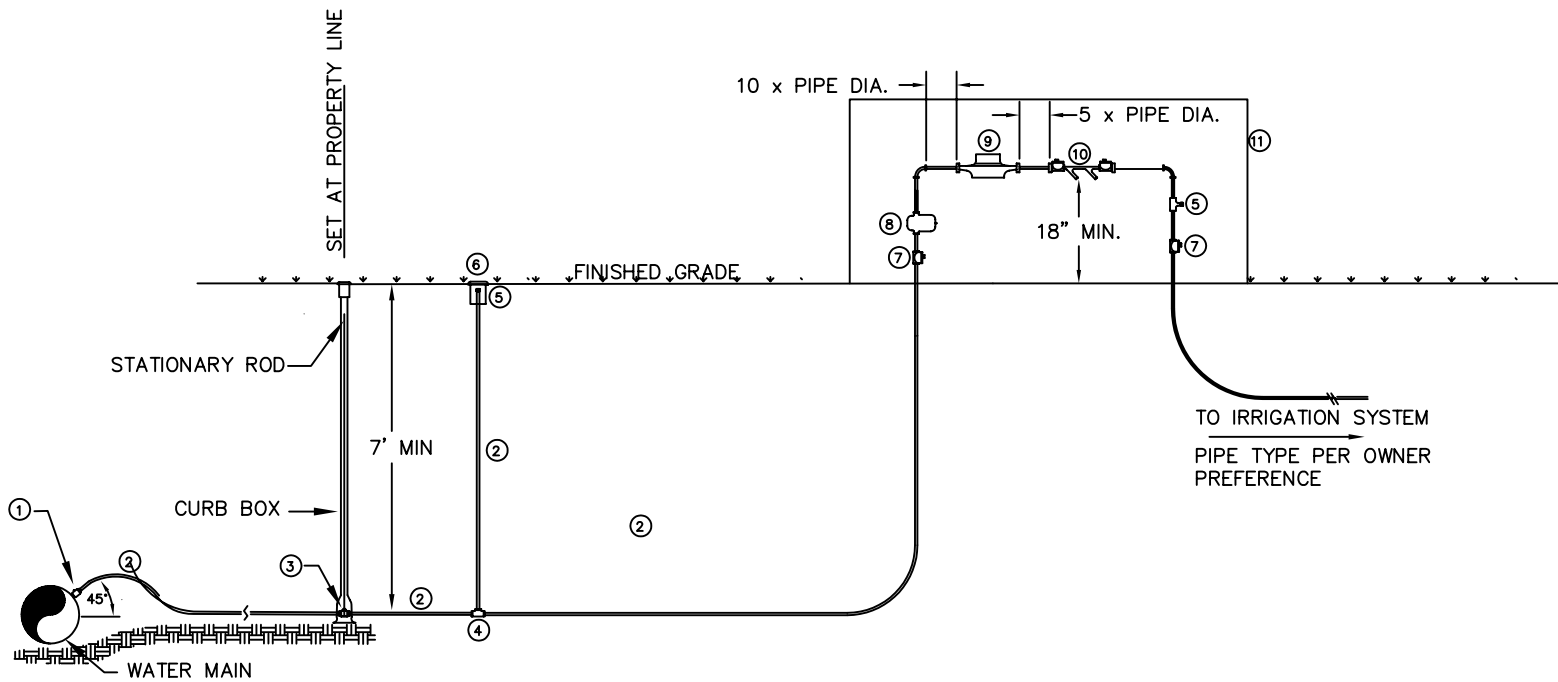
SCALE: NONE

SHEET: 10

INDIVIDUAL SERVICE LINE SIZE	COMMON SERVICE LINE SIZE
3/4"	1"
1"	1-1/2"

NOTES:

1. ALL WATER SERVICE LINES ARE TO BE INSTALLED TO A MINIMUM DEPTH DEPTH OF 7- FEET AS MEASURED FROM THE TOP OF PIPE TO FINISHED GRADE.
2. SEWER SERVICE LINES ARE TO BE LAYED AT A GRADE OF 2% MINIMUM.



GENERAL NOTES:

1. PLANT INVESTMENT FEE REQUIRED. METER ISSUED BY THE MOUNT WERNER WATER DISTRICT. TYPE AND SIZE TO BE APPROVED BY MOUNT WERNER WATER.
2. BACKFLOW PREVENTER TO BE APPROVED PER THE MANUAL OF CROSS CONNECTION CONTROL NINTH EDITION, AS PUBLISHED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.

ITEM	DESCRIPTION	QTY
1	CORPORATION STOP	1
2	TYPE "K" COPPER	-
3	CURB STOP	1
4	TEE	2
5	AIR CHUCK	2
6	VALVE BOX TOP	1
7	BALL VALVE	2
8	PRESSURE REDUCING VALVE	1
9	METER (SEE NOTE 1)	1
10	RPP BACKFLOW PREVENTER (SEE NOTE 2)	1
11	VAULT (PRE-APPROVED BY MWW)	1

1. Initial release 1/01

REVISION HISTORY:



P.O. Box 880339  
 3310 Clear Water Trail  
 Steamboat Springs, CO 80488  
 (970) 879-2424 fax (970) 879-8169

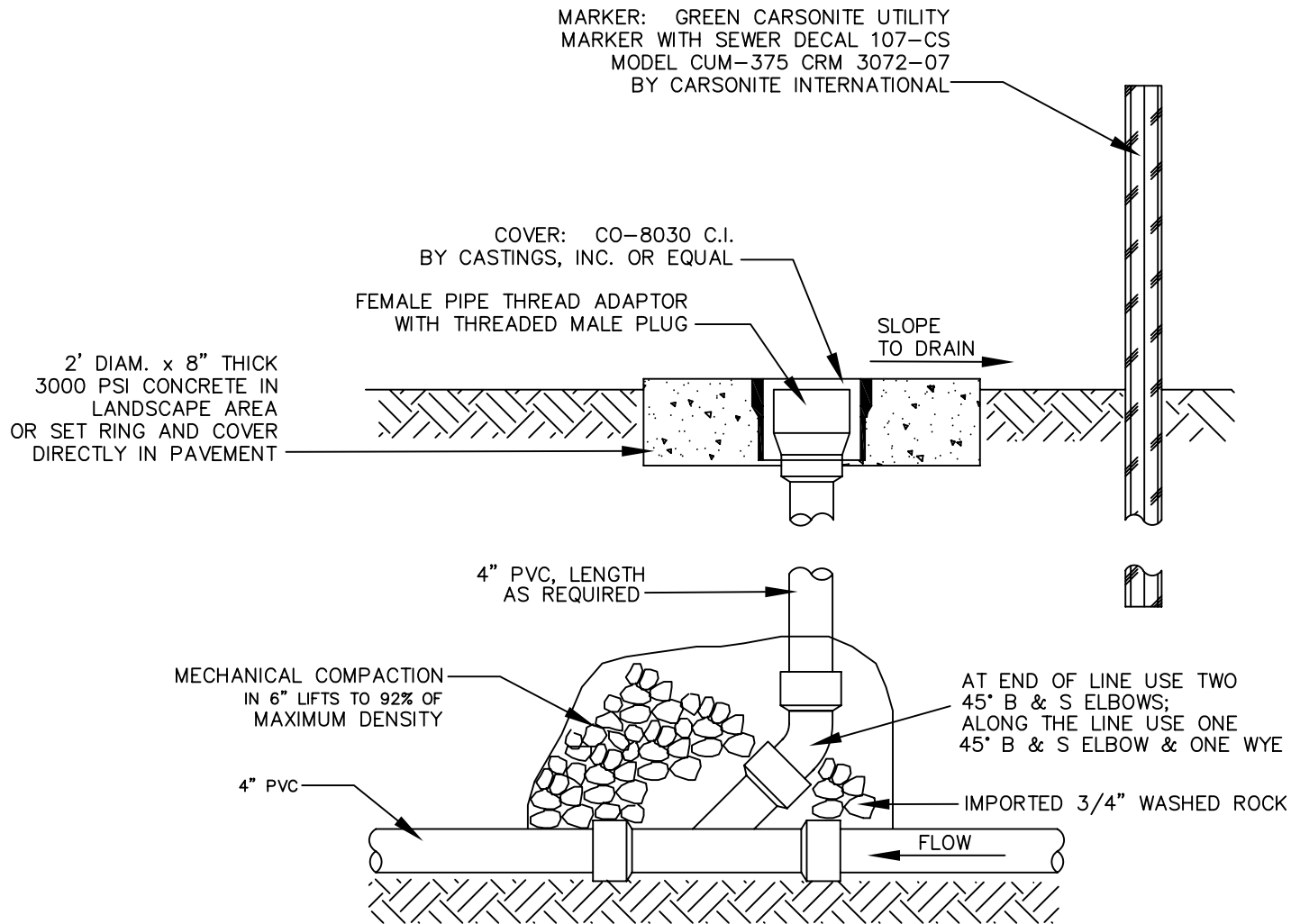
IRRIGATION SERVICE  
 DETAIL

DRAWN BY: RBS

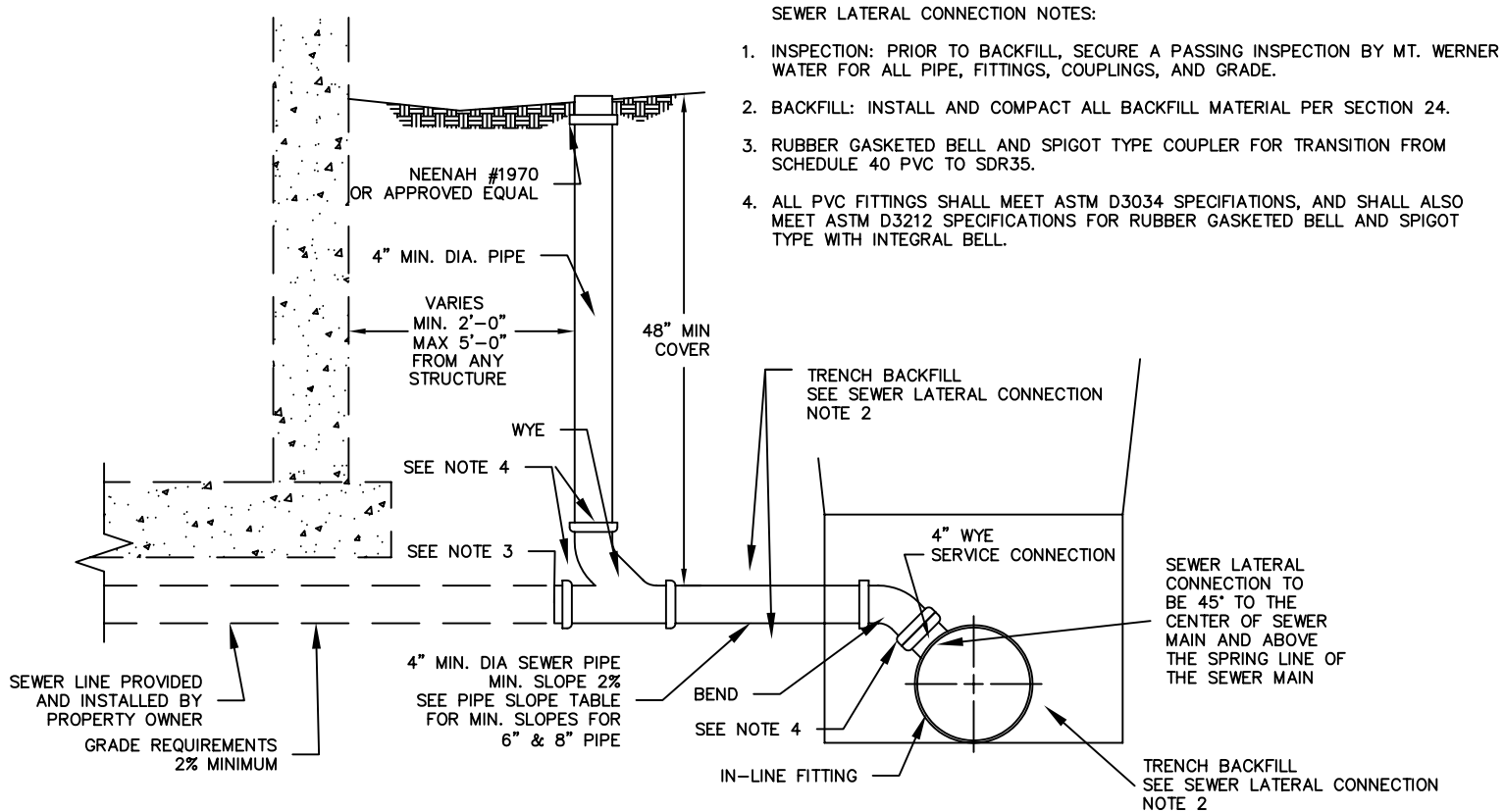
DATE: 2/2003

SCALE: NONE

SHEET: 11



1. Original Release 7/01	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
SEWER CLEANOUT DETAIL	
DRAWN BY: RBS	DATE: 2/2003
SCALE: NONE	
SHEET: 12	



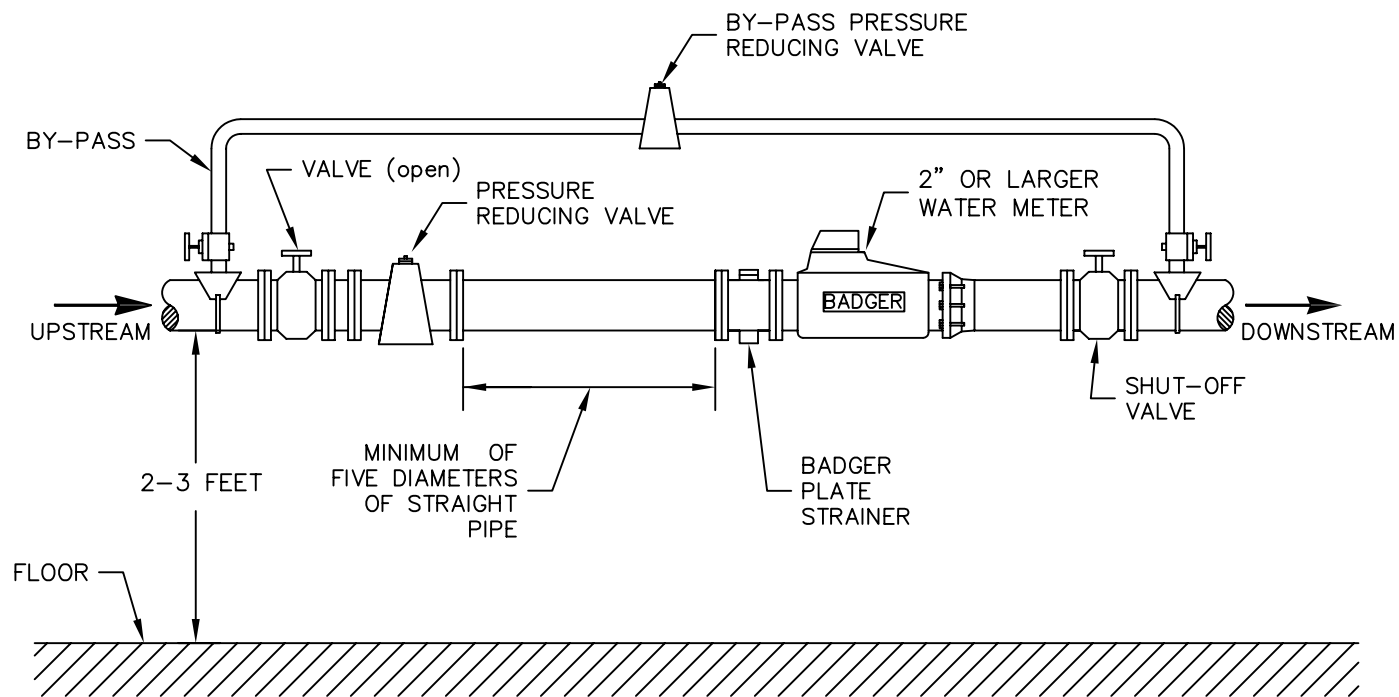
SEWER LATERAL CONNECTION NOTES:

1. INSPECTION: PRIOR TO BACKFILL, SECURE A PASSING INSPECTION BY MT. WERNER WATER FOR ALL PIPE, FITTINGS, COUPLINGS, AND GRADE.
2. BACKFILL: INSTALL AND COMPACT ALL BACKFILL MATERIAL PER SECTION 24.
3. RUBBER GASKETED BELL AND SPIGOT TYPE COUPLER FOR TRANSITION FROM SCHEDULE 40 PVC TO SDR35.
4. ALL PVC FITTINGS SHALL MEET ASTM D3034 SPECIFICATIONS, AND SHALL ALSO MEET ASTM D3212 SPECIFICATIONS FOR RUBBER GASKETED BELL AND SPIGOT TYPE WITH INTEGRAL BELL.

SECTION

MINIMUM PIPE SLOPES FOR SEWER SERVICES		
4"	1/4" PER FOOT	2%
6"	1/8" PER FOOT	1%
8"	1/16" PER FOOT	0.5%

1. Original Release 11/08	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
SERVICE LATERAL CONNECTION DETAIL	
DRAWN BY: RF	DATE: 11/2008
SCALE: NONE	
SHEET: 13	



GENERAL NOTES:

1. THE METER IS TO BE INSTALLED IN A HORIZONTAL ORIENTATION AS SHOWN.
2. AVOID LOCATING THE METER IN CLOSE QUARTERS. ALLOW SUFFICIENT SPACE TO PERMIT ACCESS FOR METER READING, TESTING AND MAINTENANCE.

1. Initial release 4/03

REVISION HISTORY:



P.O. Box 880339  
 3310 Clear Water Trail  
 Steamboat Springs, CO 80488  
 (970) 879-2424 fax (970) 879-8169

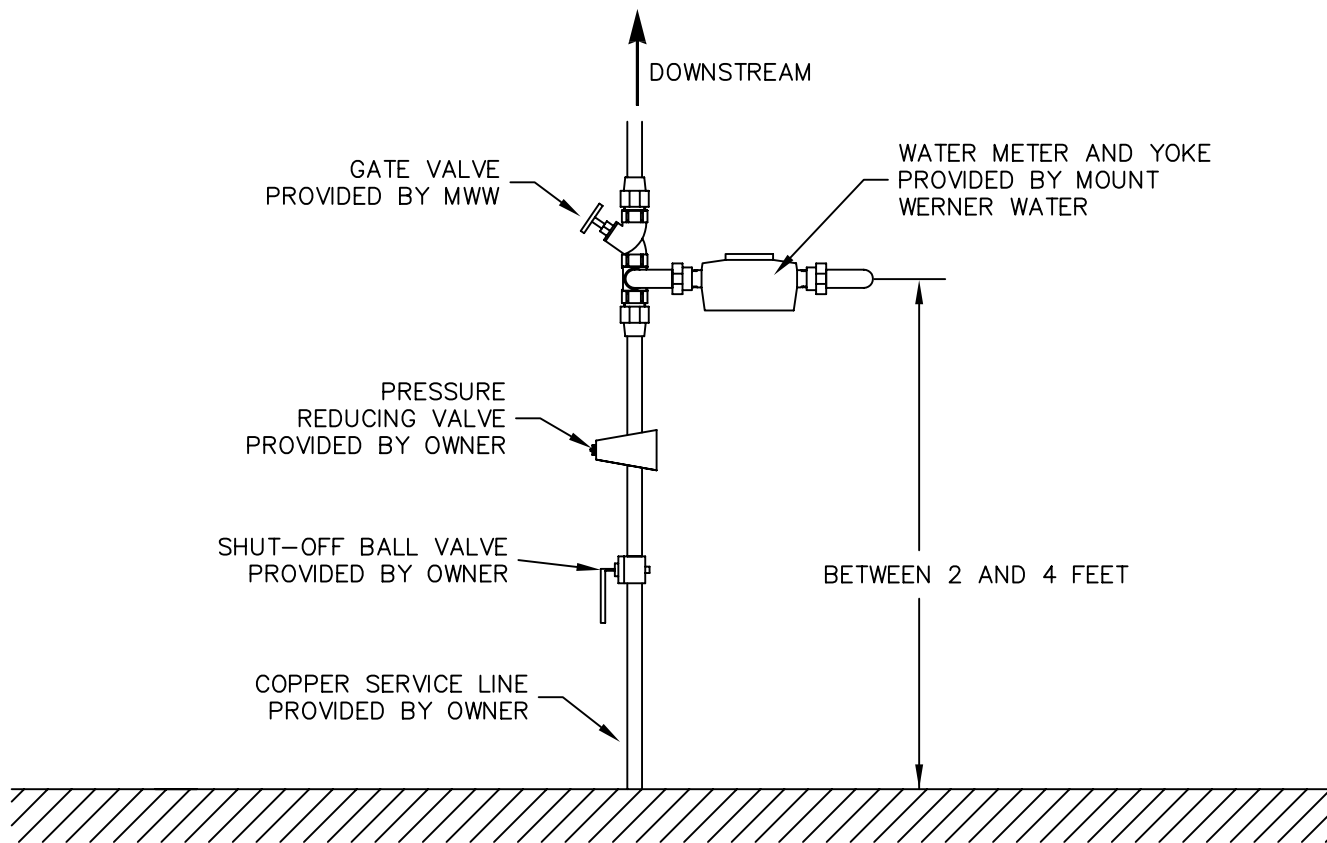
2" AND LARGER METER  
 INSTALLATION DETAIL

DRAWN BY: RBS

DATE: 4/2003


SCALE: NONE

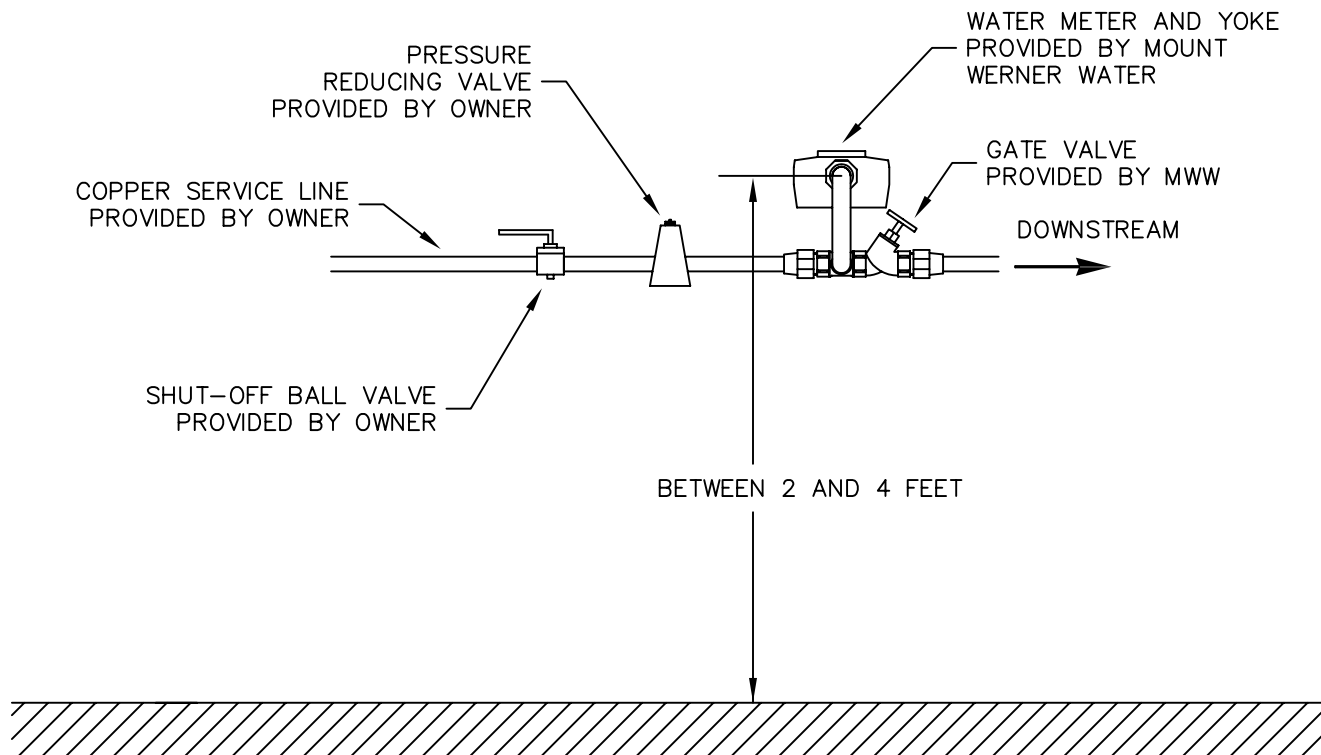
SHEET: 14



GENERAL NOTES:

1. THE METER IS TO BE INSTALLED IN A HORIZONTAL ORIENTATION AS SHOWN.
2. AVOID LOCATING THE METER IN CLOSE QUARTERS. ALLOW SUFFICIENT SPACE TO PERMIT ACCESS FOR METER READING, TESTING AND MAINTENANCE.

1. Initial release 4/03	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
3/4" - 1 1/2" METER VERTICAL SET INSTALLATION DETAIL	
DRAWN BY: RBS	DATE: 4/2003
SCALE: NONE	
SHEET: 15	



GENERAL NOTES:

1. THE METER IS TO BE INSTALLED IN A HORIZONTAL ORIENTATION AS SHOWN.
2. AVOID LOCATING THE METER IN CLOSE QUARTERS. ALLOW SUFFICIENT SPACE TO PERMIT ACCESS FOR METER READING, TESTING AND MAINTENANCE.

1. Initial release 4/03

REVISION HISTORY:



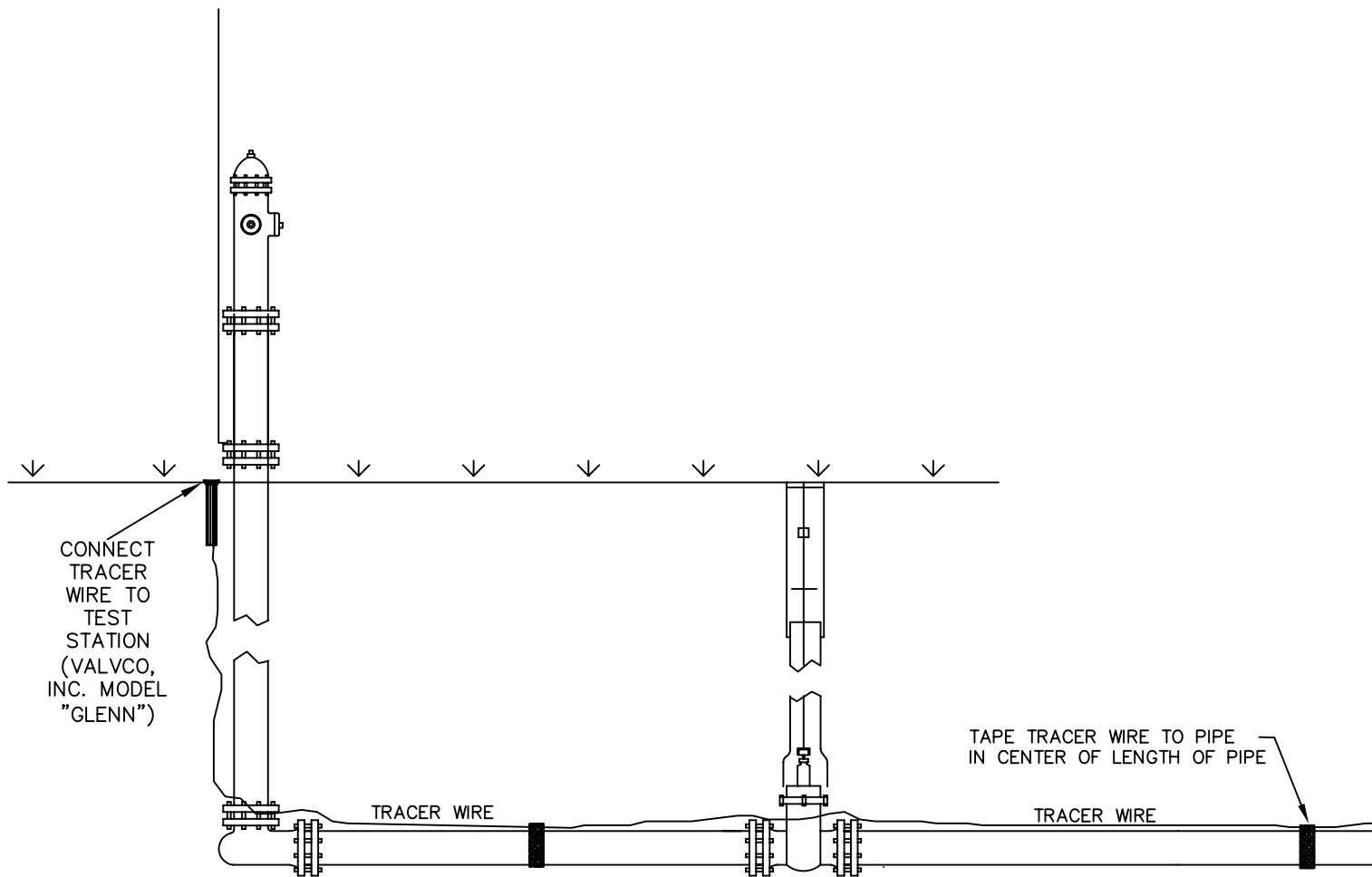
P.O. Box 880339  
 3310 Clear Water Trail  
 Steamboat Springs, CO 80488  
 (970) 879-2424 fax (970) 879-8169


3/4" - 1 1/2" METER  
 HORIZONTAL SET INSTALLATION DETAIL

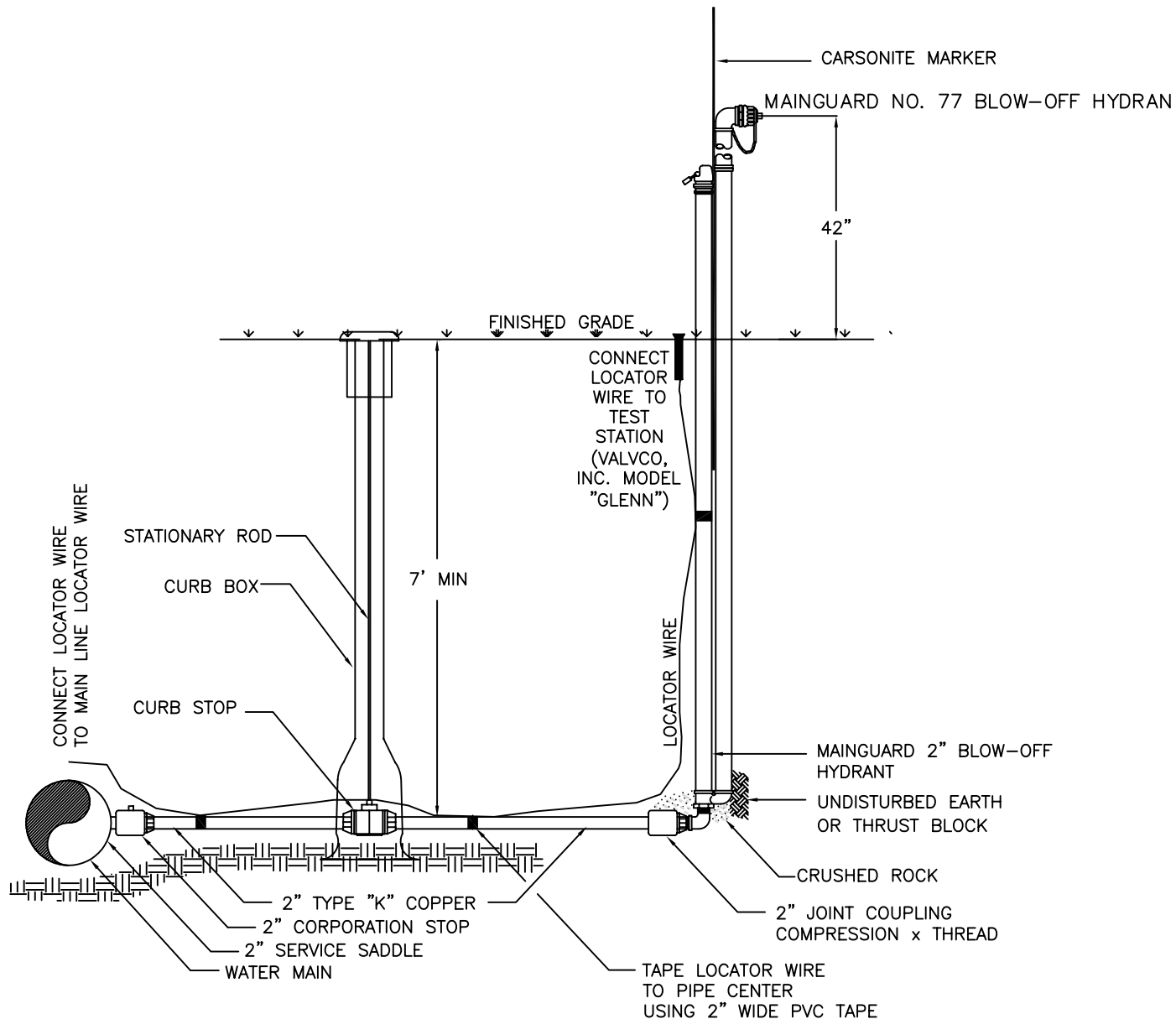
DRAWN BY: RBS      DATE: 4/2003

SCALE: NONE


SHEET: 16



1. Initial release 2/04	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>TRACER WIRE          INSTALLATION DETAIL</b>	
DRAWN BY: RBS	DATE: 2/2004
SCALE: NONE	
SHEET: 17	

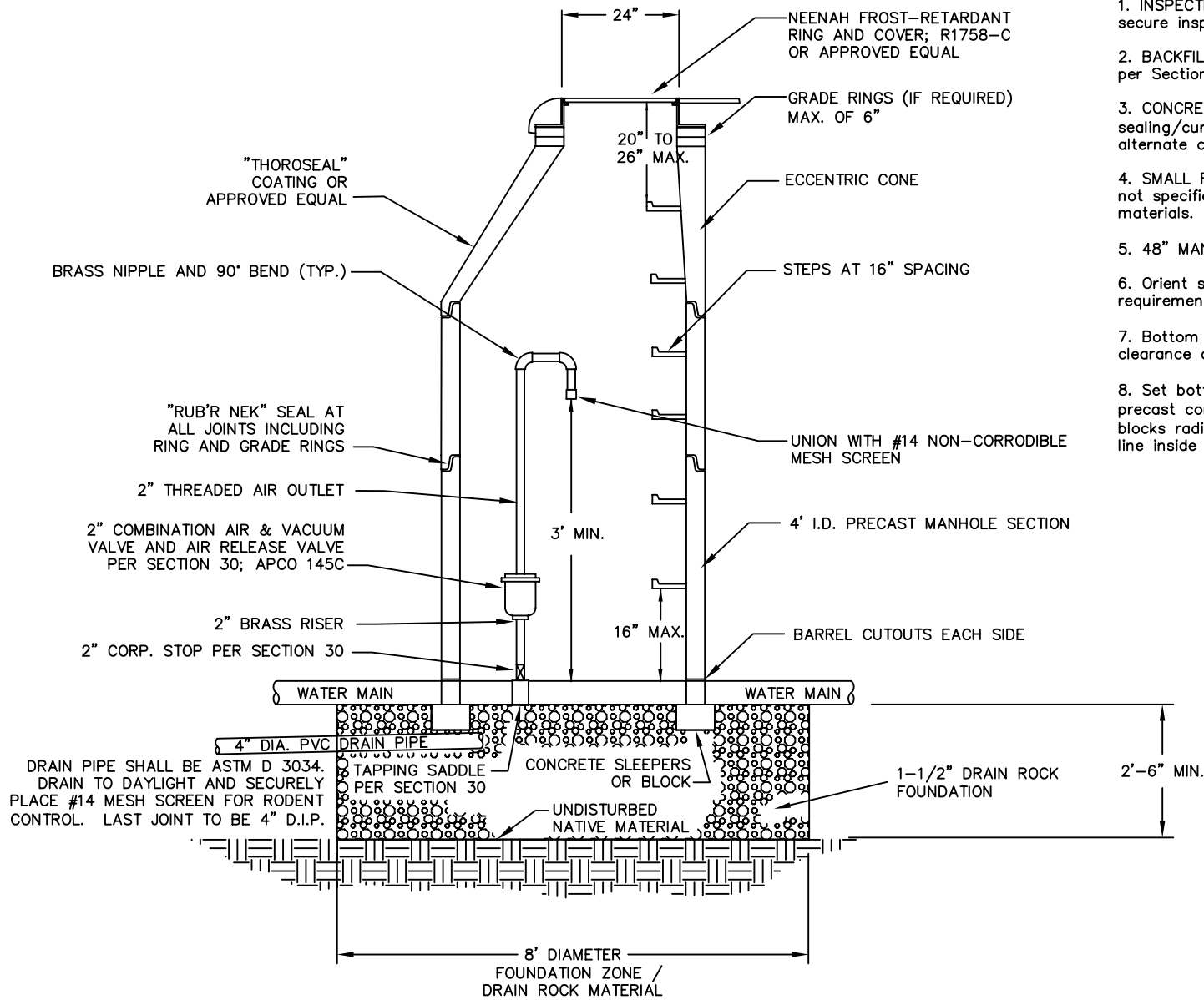


Post Hydrants shall be non-freezing, self draining type with a 7' bury. These hydrants will be furnished with a 2" FIP inlet, a non-turning operating rod, and shall open to the left. All of the working parts shall be of bronze-to-bronze design, and be servicable from above grade with no digging. The outlet shall also be bronze and be 2-1/2" NST. Hydrants shall be lockable to prevent unauthorized use as manufactured by Kupferle Foundry Co., St. Louis, MO, or approved equal.

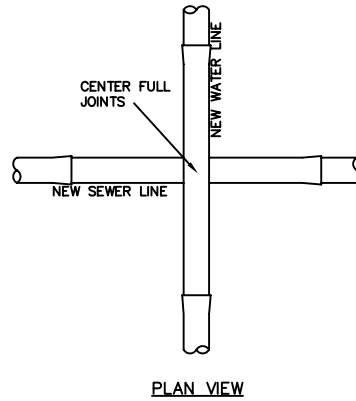
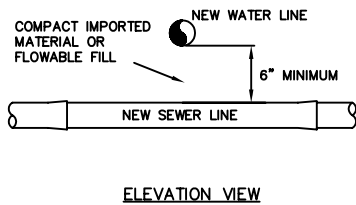
1. Initial Release 2/2001	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>2" BLOW-OFF HYDRANT DETAIL</b>	
DRAWN BY: RBS	DATE: 2/2003
SCALE: NONE	
SHEET: 18	

**AIR RELEASE ASSEMBLY**

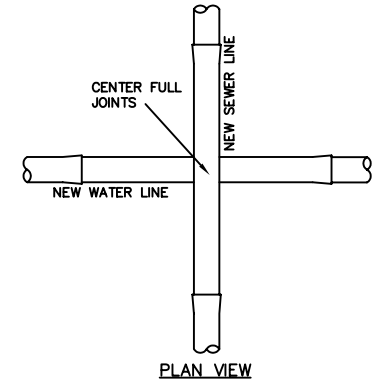
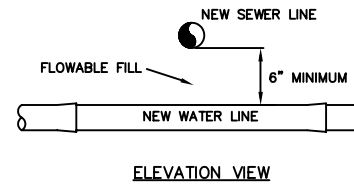
1. **INSPECTION:** Prior to backfilling around the assembly, secure inspection of installation by ENGINEER.
2. **BACKFILL:** Install and compact all backfill material per Section 24.
3. **CONCRETE:** 4000 PSI strength concrete. Apply a sealing/curing compound or use an acceptable alternate curing compound.
4. **SMALL FITTINGS:** Provide brass fittings and nipples if not specified otherwise. Do not use galvanized materials.
5. **48" MANHOLE HOLE:** Specifications per section 40.
6. Orient steps, ring and cover to best fit site requirements.
7. Bottom barrel section to have cutouts w/ 2" min. clearance around pipe.
8. Set bottom barrel section on 12"x12"x6" reinf. precast concrete sleepers radially. (12" concrete blocks radially acceptable alternate). Shade to spring line inside M.H.



1. Initial Release 11/2008	
REVISION HISTORY:	
 <p><b>Mount Werner Water</b></p>	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>AIR RELEASE ASSEMBLY DETAIL</b>	
DRAWN BY: RF	DATE: 11/2008
SCALE: NONE	
SHEET: 19	

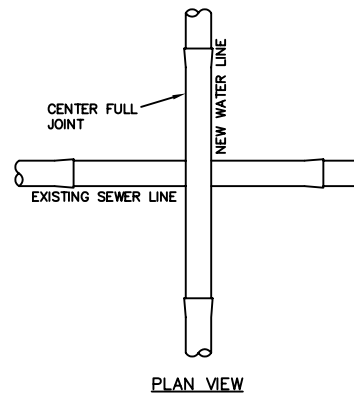
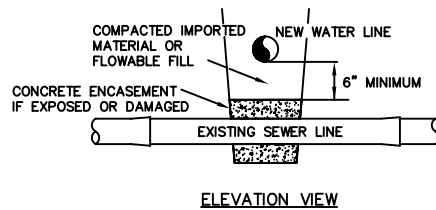


NOTE:  
CROSSING CONDITIONS APPLY TO ALL MAIN AND SERVICE LINES



CONDITION #1: NEW WATER LINE LESS THAN 18" ABOVE NEW SEWER LINE


CONDITION #2: NEW WATER LINE BELOW NEW SEWER LINE

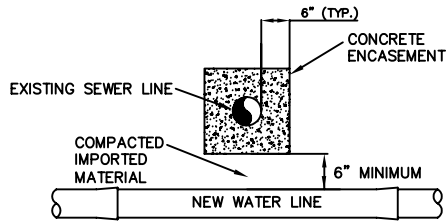


CONDITION #3: NEW WATER LINE LESS THAN 18" ABOVE EXISTING SEWER LINE

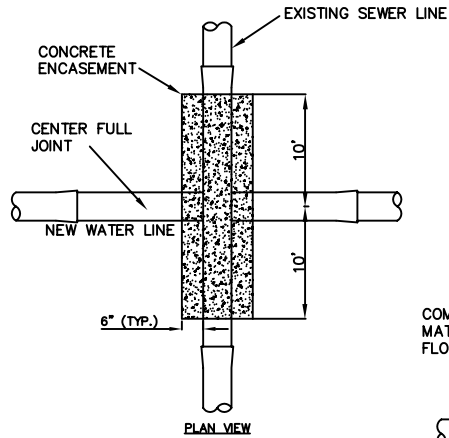
CONDITIONS 1,2,& 3 (SHEET 1 OF 2)

NTS

1. Initial Release 11/2008	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>WATER &amp; SEWER CROSSINGS DETAIL</b>	
DRAWN BY: GLB	DATE: 11/2008
SCALE: NONE	
SHEET: 20	

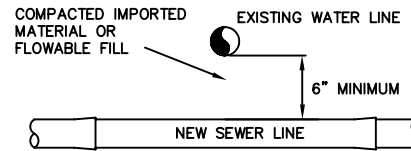


ELEVATION VIEW

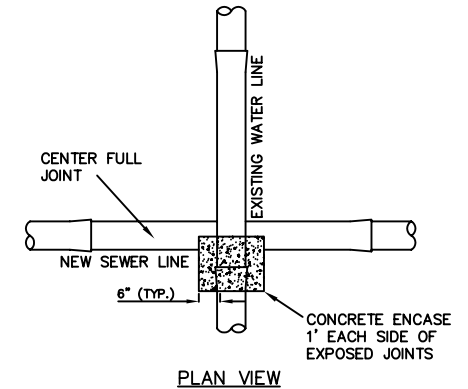


PLAN VIEW

NOTE:  
CROSSING CONDITIONS APPLY TO ALL MAIN AND SERVICE LINES



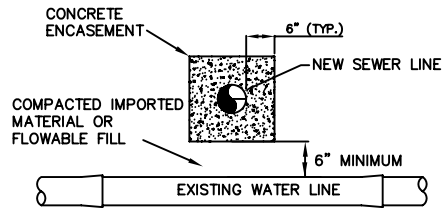
ELEVATION VIEW



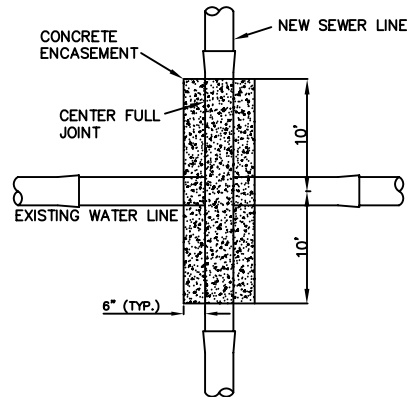
PLAN VIEW

CONDITION #4: NEW WATER LINE BELOW EXISTING SEWER LINE

CONDITION #5: NEW SEWER LINE LESS THAN 18" BELOW EXISTING WATER LINE



ELEVATION VIEW




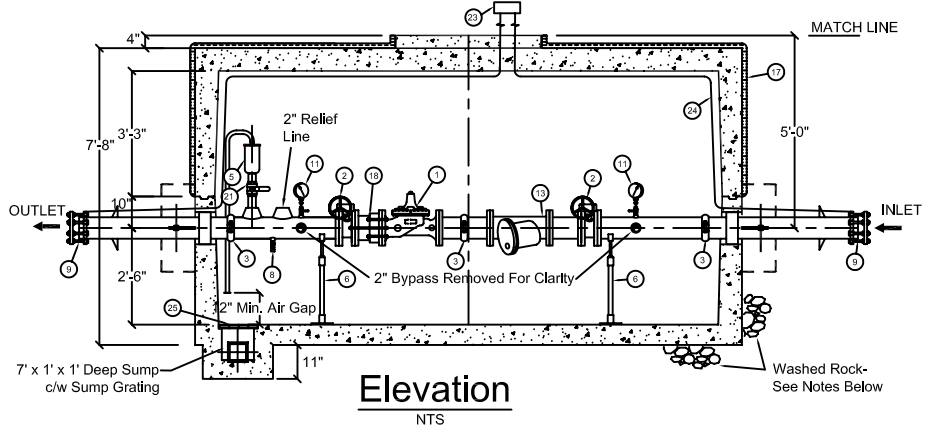
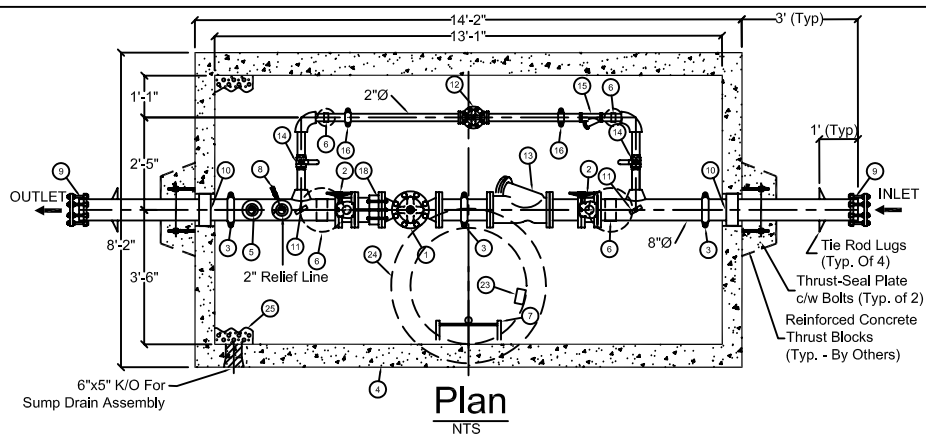
PLAN VIEW

CONDITION #6: NEW SEWER LINE ABOVE EXISTING WATER LINE

CONDITIONS 4,5,& 6 (SHEET 2 OF 2)

NTS

1. Initial Release 11/2008	
REVISION HISTORY:	
	
P.O. Box 880339 3310 Clear Water Trail Steamboat Springs, CO 80488 (970) 879-2424 fax (970) 879-8169	
<b>WATER &amp; SEWER CROSSINGS DETAIL</b>	
DRAWN BY: GLB	DATE: 11/2008
SCALE: NONE	
SHEET: 21	

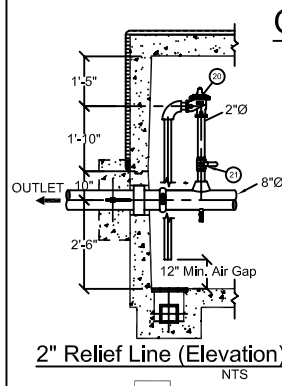


**STANDARD FABRICATION AND FINISHING SPECIFICATION**

- ALL FABRICATED STEEL PIPE SHALL BE SCHEDULE 40 FOR SIZES FROM 3" UP TO AND INCLUDING 10", AND 3/8" WALL FOR 12" AND LARGER.
- FOR 3" AND LARGER PIPE, INSIDE WETTED SURFACES TO BE SANDBLASTED, EPOXY LINED AND COATED TO AWWA C-210 AND NSF-61 SPECIFICATION.
- ALL PIPING AND FITTINGS LESS THAN 3" SHALL BE BRASS AND/OR BRONZE.
- THE EXTERIOR SURFACES OF ALL 3" AND LARGER PIPING AND ALL VALVES, FITTINGS, STRAINERS, COUPLINGS, ETC. SHALL BE FINISH COATED WITH BLUE EPOXY ENAMEL.
- FITTINGS: ALL CLASS 125/150 ANSI.

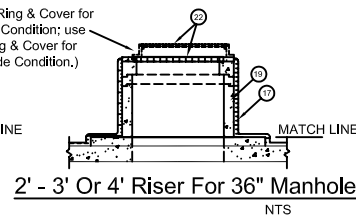
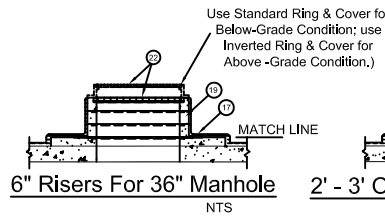
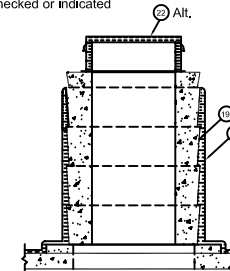
**NOTES**

- SEE WATER AND SEWER DRAWINGS FOR SITE SPECIFIC LAYOUT, ASSOCIATED COMPONENTS AND ADDITIONAL REQUIREMENTS.
- CONCRETE VAULT SHALL BE PRECAST WITH A LEVEL FLOOR. WASHED ROCK BASE SHALL BE GRADED AND VAULT SHALL BE SET WITH A 1/8" PER FT. (1%) SLOPE TOWARD THE SUMP. ALLOW FOR VERTICAL PIPE BENDS OR DEFLECTIONS EITHER SIDE OF VAULT WHILE MAINTAINING MINIMUM REQUIRED COVER.
- SEE MOUNT WERNER WATER SPECIFICATIONS FOR COMPLETE DESCRIPTIONS AND ADDITIONAL REQUIREMENTS FOR ALL EQUIPMENT.
- SUMP SHALL BE CONSTRUCTED UNDER THE ARV AND PRESSURE RELIEF VALVE DISCHARGE LINES UNLESS OTHERWISE APPROVED. GRAVITY DRAIN PIPE SUMP TO DAYLIGHT.
- SUBMITTALS REQUIRED FOR ALL COMPONENTS PRIOR TO ORDERING VAULT.
- INSTALLATION SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.



**Optional Items**

Supply as checked or indicated



**PROJECT SPECIFIC INFORMATION**

- STANDARD 8" PRV IS DEPICTED. PRV'S BETWEEN PUMP ZONE AND HIGH ZONE SHALL ALSO HAVE A PRESSURE SUSTAINING FEATURE. VERIFY ALL COMPONENTS AND SIZES WITH VALVE MANUFACTURER FOR COMPATABILITY WITH OPERATING CONDITIONS.
- PIPE SIZES:  
MAINLINE = 8"      BYPASS = 2"      RELIEF = 2"
- FLOW RATES (G.P.M.)  
DOMESTIC      MINIMUM \_\_\_\_\_      MAXIMUM \_\_\_\_\_  
FIREFLOW      MINIMUM \_\_\_\_\_      MAXIMUM \_\_\_\_\_
- ELEVATIONS:  
TOP OF PIPE ELEV. \_\_\_\_\_  
FINISH GRADE ELEV. \_\_\_\_\_  
TOP OF M.H. COVER OR HATCH ELEV. \_\_\_\_\_
- WORKING PRESSURES: DEPENDENT ON LOCATION, VERIFY WITH MT. WERNER WATER.  
8" PRV      2" PRV      2" PRESS. RELIEF PRV  
UPSTREAM, PSIG      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_  
UPSTREAM SUSTAINED, PSIG      \_\_\_\_\_      \_\_\_\_\_      OPEN SETTING  
DOWNSTREAM, PSIG      \_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_
- MINIMUM DEPTH OF COVER TO TOP OF PIPE AT LOWEST SIDE = 7 FT.
- VAULT: #13765 (H-20 LOADING)      INSIDE DIMENSIONS: 13'-0" L X 7'-0" W X 6'-6" H
- FOR OTHER MAIN LINE SIZES, VERIFY OPERATING REQUIREMENTS WITH MT. WERNER WATER AND VERIFY VAULT AND ALL COMPONENTS WITH VAULT AND VALVE MANUFACTURERS.
- CATHODIC PROTECTION PER USE OF ANODES TO BE PROVIDED IF SPECIFIED BY ENGINEER.

BILL OF MATERIALS		
ITEM	QTY	DESCRIPTION
1	1	8" CLA-VAL 90G-01 BYKC PRV c/w X101 Position Indicator
2	1	DIBT - #150 Fld. CRD 30-300 PSI
2	2	8" DEZURIK AWWA Butterfly Valve
3	3	8" VICTAULIC #07 Coupling
4	1	Precast Concrete Vault, (13765#) c/w White Interior & Black Exterior Sealant
5	1	ARV with Isolation Valve, 2" APCO 145c Combination Air/Vacuum Valve
6	4	Adjustable Galvanized Pipe Supports w/ Rubber Gaskets
7	1	Aluminum Ladder c/w Telescopic Locking Safety Post. Height Determined Station By Station
8	1	3/4" Hose Bib c/w Isolation Ball Valve
9	2	8" Transition Couplings, STLxDIP, Long Solid Sleeve & Megalugs
10	2	8" Pipe Seal Assembly
11	2	4 1/2" Liquid Filled Pressure Gauge c/w Gauge Cock
12	1	2" CLA-VAL 90G-01 BSKYK PRV c/w X101 Position Indicator, DIBT - 300# Threaded, CRD 30-300 PSI
13	1	8" MUELLER 758 Y Cast Iron Wye Strainer
14	2	2" Brass Ball Valve
15	1	2" MUELLER 11M Cast Iron Wye Strainer
16	1	2" VICTAULIC #07 Coupling
17	2	Chamber Insulation
18	1	8" DJ400 Dismantling Joint
23	1	Locate Wire Terminal Box
24	1	10 Gage Locate Wire
25	1	Aluminum Plank Gate

OPTIONAL ITEMS		
19	1	Manhole Risers As Required
20	1	2" CLA-VAL 50A-01 BKC PRV Angle c/w X101 Position Indicator, DIBT - 300# Threaded CRD set @ 20-200 PSI
21	1	2" Brass Ball Valve
22	1	36"Ø Aluminum Manhole, H20-44, Single Lid Castings Inc. Manhole Ring and Cover, MH 700-36-24-AL Alternate: 30"x54" BILCO "NB" Hatch c/w Curb Liner
-	2	12 lb Anodes Shipped Loose, Installed By Contractor

1. Initial Release 1/2009

**REVISION HISTORY:**



P.O. Box 880339  
3310 Clear Water Trail  
Steamboat Springs, CO 80488  
(970) 879-2424 fax (970) 879-8169

**STANDARD PRV  
DETAIL**

DRAWN BY: RF      DATE: 1/2009

SCALE: NONE

SHEET: 22