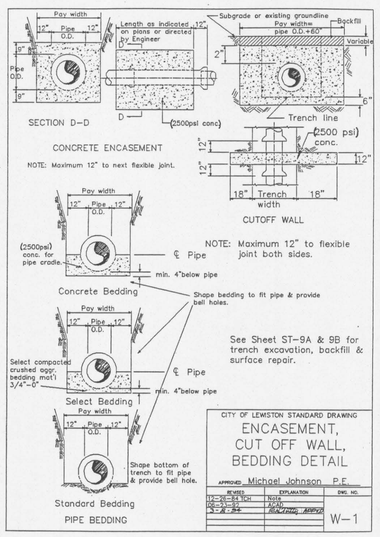
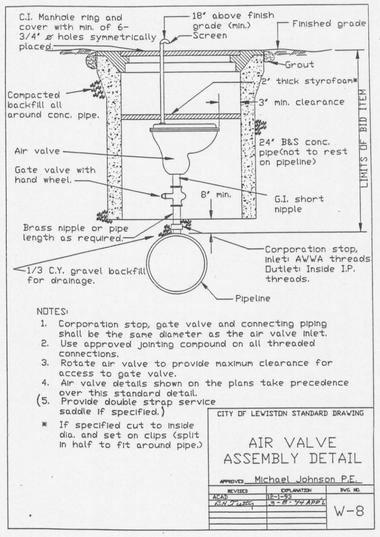


CITY OF LEWISTON STANDARD DRAWING

ENCASEMENT, CUT OFF WALL, BEDDING DETAIL

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
12-20-93	NEW	W-1
10-13-94	ACAD	
3-28-94	Building Appr.	



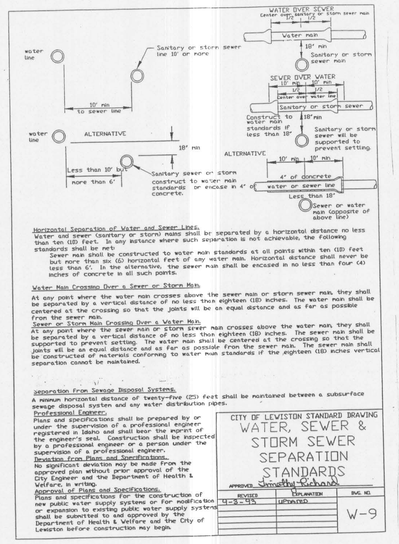
NOTES:
1. Corporation stop, gate valve and connecting piping shall be the same diameter as the air valve inlet.
2. Use approved jointing compound on all threaded connections.
3. Rotate air valve to provide maximum clearance for access to gate valve.
4. Air valve details shown on the plans take precedence over this standard detail.
(5. Provide double strap service saddle if specified.)
* If specified cut to inside dia. and set on clips (split in half to fit around pipe.)

CITY OF LEWISTON STANDARD DRAWING

AIR VALVE ASSEMBLY DETAIL

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
12-20-93	NEW	W-8
10-13-94	ACAD	
3-28-94	Building Appr.	



Horizontal Separation of Water and Sewer Lines:
Water and sewer (sanitary or storm) mains shall be separated by a horizontal distance no less than ten (10) feet. In any instance where such separation is not achievable, the following standards shall be met:
Sewer mains shall be constructed to water main standards at all points within ten (10) feet but not less than six (6) horizontal feet of any water main. Horizontal distance shall never be less than 6". In the alternative, the sewer main shall be encased in no less than four (4) inches of concrete in all such points.

Water Main Crossing Over a Sewer or Storm Main:
At any point where the water main crosses above the sewer main or storm sewer main, they shall be separated by a vertical distance of no less than eighteen (18) inches. The water main shall be centered at the crossing so that the joints will be an equal distance and as far as possible from the sewer main.
Sewer or Storm Main Crossing Over a Water Main:
At any point where the sewer main or storm sewer main crosses above the water main, they shall be separated by a vertical distance of no less than eighteen (18) inches. The sewer main shall be supported to prevent settling. The water main shall be centered at the crossing so that the joints will be an equal distance and as far as possible from the sewer main. The sewer main shall be constructed of materials conforming to water main standards if the eighteen (18) inches vertical separation cannot be maintained.

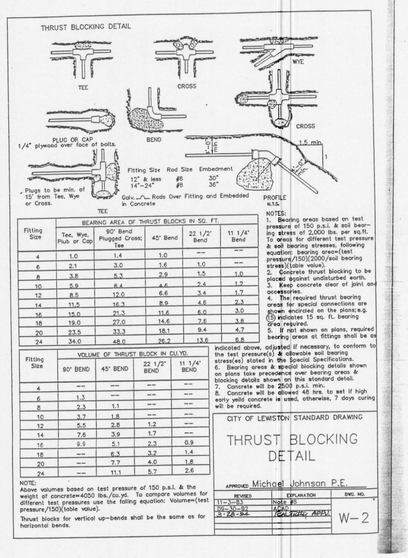
Separation from Sewage Disposal System:
A minimum horizontal distance of twenty-five (25) feet shall be maintained between a subsurface sewage disposal system and any water distribution pipes.
Professional Engineer:
Plans and specifications shall be prepared by or under the supervision of a professional engineer registered in Idaho and shall bear the imprint of the engineer's seal. Construction shall be inspected by a professional engineer or a person under the supervision of a professional engineer.
Deviation from Plans and Specifications:
No significant deviation may be made from the approved plan without prior approval of the City Engineer and the Department of Health & Welfare, in writing.
Approval of Plans and Specifications:
Plans and specifications for the construction of new public water supply systems or for modification or expansion to existing public water supply systems shall be submitted to and approved by the Department of Health & Welfare and the City of Lewiston before construction may begin.

CITY OF LEWISTON STANDARD DRAWING

WATER, SEWER & STORM SEWER SEPARATION STANDARDS

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
12-20-93	NEW	W-9
10-13-94	UPDATED	



TEE

Fitting Size	BEARING AREA OF THRUST BLOCKS IN SQ. FT.				
	Tee, Wye, Plug or Cap	90° Bend Plugged Cross; Tee	45° Bend	22 1/2° Bend	11 1/4° Bend
4	1.0	1.4	1.0	--	--
6	2.1	3.0	1.6	1.0	--
8	3.8	5.3	2.9	1.5	1.0
10	5.9	8.4	4.6	2.4	1.2
12	8.5	12.0	6.6	3.4	1.7
14	11.5	16.3	8.9	4.6	2.3
16	15.0	21.3	11.6	6.0	3.0
18	19.0	27.0	14.6	7.6	3.8
20	23.5	33.3	18.1	9.4	4.7
24	34.0	48.0	26.0	13.6	6.8

Fitting Size	VOLUME OF THRUST BLOCK IN CU.YD.			
	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	--	--	--	--
6	1.3	--	--	--
8	2.3	1.1	--	--
10	3.7	1.8	--	--
12	5.5	2.8	1.2	--
14	7.6	3.9	1.7	--
16	9.9	5.1	2.3	0.9
18	--	6.3	3.2	1.4
20	--	7.7	4.0	1.8
24	--	11.1	5.7	2.6

NOTES:
1. Bearing areas based on test pressure of 150 p.s.i. & soil bearing stress of 2,000 lbs. per sq.ft. To compute bearing area for pressure & soil bearing stresses, following equation: bearing area=(test pressure/150)(2000/soil bearing stress)(table value).
2. Concrete thrust blocking to be placed against undisturbed earth.
3. Keep concrete clear of joint and accessories.
4. The required thrust bearing areas for special connections are shown encircled on the plans.e.g. (35) indicates 35 sq. ft. bearing area required.
5. If not shown on plans, required bearing areas at fittings shall be as indicated above, adjusted if necessary, to conform to the test pressure(s) & allowable soil bearing stress(es) stated in the Special Specifications.
6. Bearing areas & special blocking details shown on plans take precedence over bearing areas & blocking details shown on this standard detail.
7. Concrete will be 2500 p.s.i.
8. Concrete will be allowed 48 hrs. to set if high early yield concrete is used, otherwise, 7 days curing will be required.

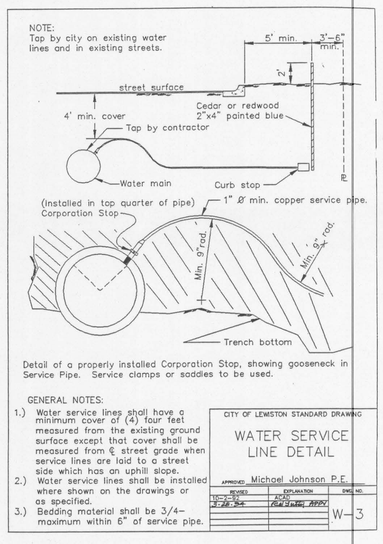
NOTE:
Above volumes based on test pressure of 150 p.s.i. & the weight of concrete=4000 lbs./cu.yd. To compare volumes for different test pressures use the following equation: Volume=(test pressure/150)(table value).
Thrust blocks for vertical up-bends shall be the same as for horizontal bends.

CITY OF LEWISTON STANDARD DRAWING

THRUST BLOCKING DETAIL

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
11-1-93	NEW	W-2
10-13-94	ACAD	
3-28-94	Building Appr.	



Detail of a properly installed Corporation Stop, showing gooseneck in Service Pipe. Service clamps or saddles to be used.

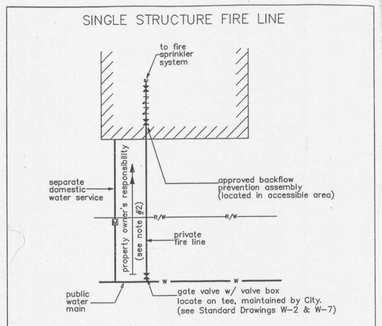
GENERAL NOTES:
1.) Water service lines shall have a minimum cover of (4) four feet measured from the existing ground surface except that cover shall be measured from ℄ street grade when service lines are laid to a street side which has an uphill slope.
2.) Water service lines shall be installed where shown on the drawings or as specified.
3.) Bedding material shall be 3/4"-maximum within 6" of service pipe.

CITY OF LEWISTON STANDARD DRAWING

WATER SERVICE LINE DETAIL

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
12-20-93	NEW	W-3
10-13-94	ACAD	
3-28-94	Building Appr.	



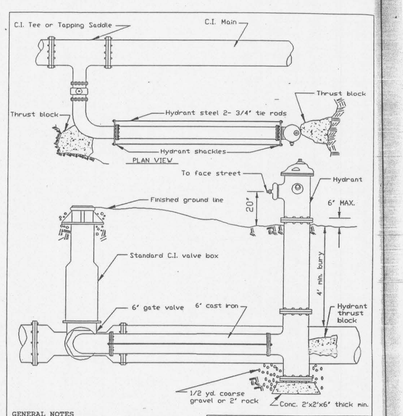
1. This standard is based on Lewiston City Code Section 36-103.
2. Installation of all fire lines from the public water main to the property served, including the fire line gate valve shall be the responsibility of the owner or occupant of the premises. The fire line, excluding the fire line gate valve, shall be the property of the owner and shall be maintained by the owner/occupant.
3. No fire line larger than six (6) inches in diameter shall be installed without special permission from the Public Works Director.
4. Approved backflow devices shall be installed and located in accessible areas for annual testing. (LCC Section 36-126)

CITY OF LEWISTON STANDARD DRAWING

PRIVATE FIRE LINES (SINGLE STRUCTURE)

APPROVED Timothy Richard 6/24/94

REVISED	EXPLANATION	DWG. NO.
		W-10A



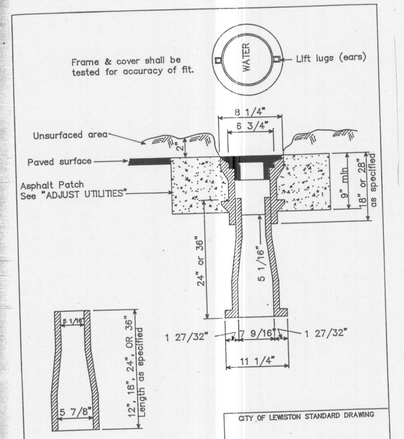
GENERAL NOTES
1. Engineer to approve location and elevation on all fire hydrants on streets.
2. An unobstructed clear zone of 36" must be maintained from all outer edges of any hydrant.
3. No obstructions shall be placed between the hydrant and the edge of the travel way.
4. Hydrant placement must also comply with all other state and local regulations.

CITY OF LEWISTON STANDARD DRAWING

OFFSET HYDRANT SETTING

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
12-1-93	ACAD Special Details	W-6
3-29-94	Building Appr.	

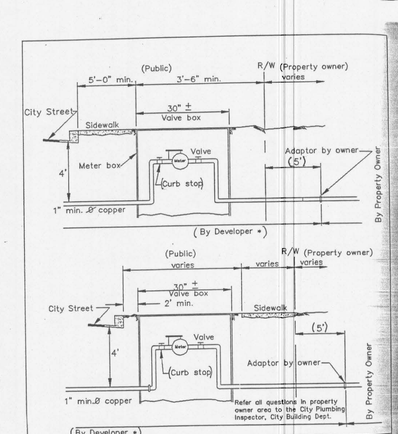


CITY OF LEWISTON STANDARD DRAWING

CAST IRON VALVE BOX

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
1-3-90	NEW	W-7
4-13-92	Cover, Panel Length correct / ACAD	



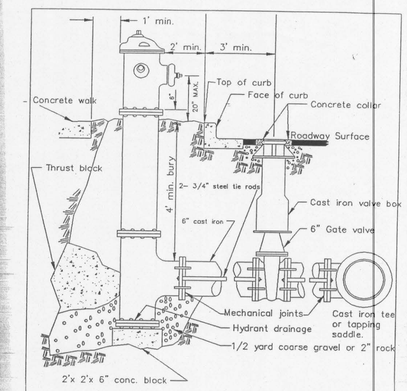
* Meter to be installed by City. Meter yoke, angle valve, curb stop meter box and the placement of, by Developer.

CITY OF LEWISTON STANDARD DRAWING

WATER METER LOCATION DETAIL

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
10-1-93	NEW	
3-28-94	Building Appr.	W-4



GENERAL NOTES
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3. No obstructions shall be placed between the hydrant and the edge of the travel way.
4. Hydrant placement must also comply with all other state and local regulations.

CITY OF LEWISTON STANDARD DRAWING

HYDRANT SETTING

APPROVED Michael Johnson P.E.

REVISED	EXPLANATION	DWG. NO.
10-15-92	ACAD	
12-1-93	Hydrant Height	W-5
3-8-94	Building Appr.	

PROFESSIONAL ENGINEER REGISTERED 1501 STATE OF IDAHO WARREN S. WRIGHT