

PERMIT CENTER

HANDOUT ON CROSS CONNECTION BACKFLOW

Informational Brochure

January 2018

Prepared by:

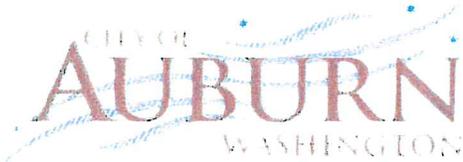
City of Auburn

Customer Service Center

(253) 931-3010

FAX (253) 931-3053





CITY OF AUBURN BACKFLOW REQUIREMENTS

Introduction

The City of Auburn is responsible to protect the public water system throughout Auburn. We do this by making sure that harsh chemicals or other debris, do not back up into our water system. As required by State Law (WAC 246-290-490), the City of Auburn Cross Connection Control program ensures that all commercial business's, irrigation systems and fire line connections have backflow prevention devices installed. The goal of the City of Auburn, is to protect your drinking water system and the City's distribution system from various forms of contamination. This handout will help explain our process.

Who Needs Backflow Protection?

If you are building a new commercial building, adding fire flow protection, irrigating you're landscaping or just updating an existing commercial space, you will need backflow protection. Safety is always our number one priority. Staff will guide you through the permitting process, as smoothly as possible.

You will start by filling out a Utility Application and possibly submitting a plan set. All commercial domestic water meters need to be protected with an RPBA (Reduced Pressure Backflow Assembly). Irrigation and Fire lines need to have DCVA (Double Check Valve Assembly) protection. Once approved by staff, you will be able to pick up your permit and start work. Customers may find it very helpful to meet with staff on site, to determine the best location of your backflow assembly.

The City of Auburn requires all backflow devices to be installed by a Certified Backflow Tester / Installer. Once the Certified Installers, have done the installation, the customer will need to call the phone number on the bottom of the issued permit (253-931-3064) to have City staff come out and inspect the installation and approve your permit. Please give staff 24 hours' notice, for inspection.

As Auburn has some existing commercial buildings, that have not yet been updated with a Reduced Pressure Backflow Assembly (RPBA), you may be required to install one if you are doing any plumbing as part of your project.

Testing your Backflow Devices

Backflow devices need to be tested annually to ensure that they are functioning properly to protect your health and to prevent contaminants and pollutants from entering the public water system. The customer is responsible for hiring a certified backflow testing company to perform this annual test. For information about companies who are registered to perform backflow assembly testing in the City of Auburn, consult the City's 2018 City of Auburn Registered Backflow Assembly Testers list. See attachment

2018 City of Auburn Registered Backflow Assembly Testers

Only test reports from City of Auburn registered testers will be accepted. The Backflow Testers listed below are registered to test within the City's Water System and have chosen to be on this list.

There are Backflow Testers not on this list that have registered to test in Auburn. For verification please email backflowtest@auburnwa.gov or call 253-931-3064

The Plumbing Joint Larry Miller www.plumbingjoint.com	425-228-3204
Ace Backflow Only Terry Leonard www.acebackflow.com	253-250-1295 253-756-6626
Fire Systems West Inc Frank B Carucci Jr.	253-833-1248
P.L.E. Backflow Testing Michael Gittings www.backflowtester.com	253-297-4387
Campell Underground LLC Mark A. Campbell	253-606-1301
Campbell's Backflow, Landscaping & Irrigation Bradley Campbell	253-426-2321
Infinity Fire Protection Kirk Richards-Tucker Esposito-David Moore-Alex Volynets www.infinity-fire.com	877-899-3473
AWA Backflow Jeff Hansen www.AWABackflow.com	206-369-5660
BATMASTER Backflow Service/ABC Water Specialty Thomas C Gammon-Cody Gobbato www.backflowservice.net www.abcwaterspecialty.com	425-397-0275 425-355-9826
Cross Connection Specialist, LLC Nancy Perry	253-318-3156
DM Backflow Testing James Dravis	253-277-8858
D B Plumbing Dale Baxmann	206-795-9192
Auburn Mechanical Nicholas Snow-Brendon Smith-Christopher Karr-Kurt Cushman www.auburnmechanical.com	253-838-9780
Affordable Washington Backflow, LLC David Foy-Jeff Hansen-Marshal Menehan www.washingtonbackflowtesting.com	206-972-7505 425-892-4808
Dennehy's Backflow Service	206-919-9235

Backflows Only, LLC Paul Frederick	253-606-4104
Nautilus Backflow Service Rodger Dent	253-564-1905 253-686-9263
McLaughlins Peninsula Backflow Service Dominic McLaughlin www.McLaughlinsBackflow.com	206-890-8337
Ground Effects Landscaping Jeremy Christensen	253-333-9477 206-963-1274
Madden Mechanical Inc Michael J. Madden	253-826-5797 253-569-0188
American Backflow Services Ryan Hotchkiss www.americanbackflowservices.com	877-950-2468
Available Backflow Testers Jonathan Vangstad	425-652-9970
Emerald Fire LLC Robert Pagay – Shane Foss	253-857-2056
The Safety Team, Inc Scott Parfitt–Stephen Ellisor–Fue Thao–Kenneth Keith www.thesafetyteaminc.com	206-762-1450
A+ Backflow Inc. Dave Kuca www.Aplusbackflowtesting.com	425-830-3749
Backflows Northwest Inc. Chris Sutton-Caleb Holmes-Scott Radcliffe-Tyler Jansen-Tim Fernly-AJ Brevick www.backflowsnorthwest.com	425-277-2888
Pat’s Plumbing Jenny Shaw www.patsplumbing.com	253-946-5999
Columbia Fire Inc. Jason Steinmetz-Nick Przygocki-Janson Byers-Gleen Freed-Frank Swain www.columbiafire.com	206-232-8569
Backflow Systems LLC Manuel Barba www.backflowsystems.net	425-569-9252 310-251-9809

This list is provided for the convenience of the water service customer. The City of Auburn makes no representation regarding the skill or quality of service of the tester listed above. The City of Auburn does not assume or accept any liabilities for the actions or performance of such testers. Water service customers should use their own judgment with respect to contracting with these or any other testers.





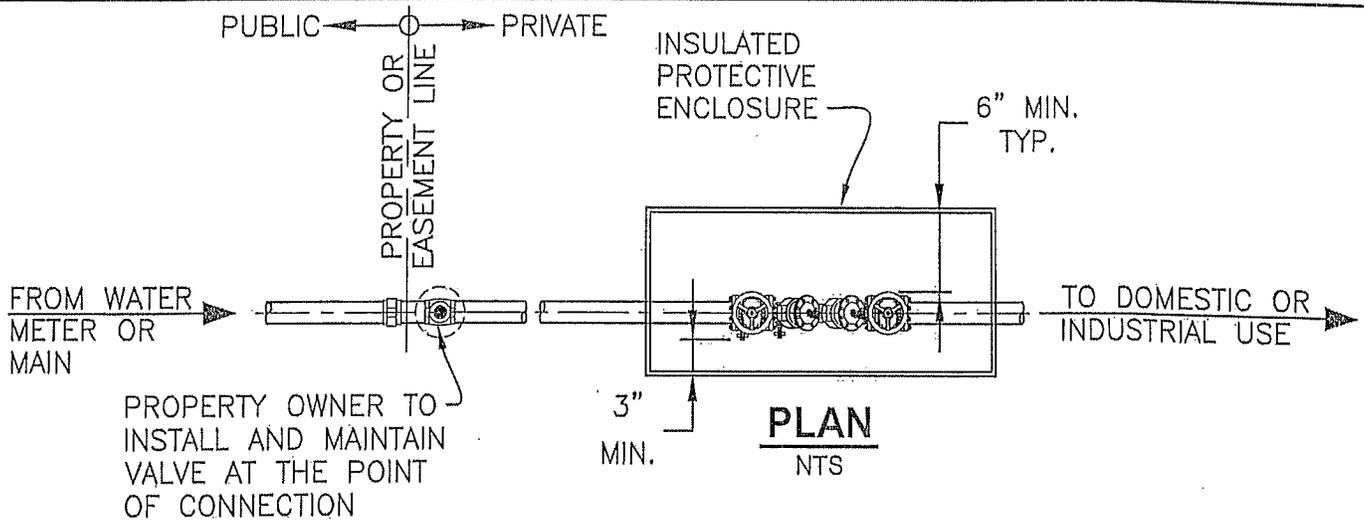
What is Premise Isolation?

Premise Isolation is backflow prevention installed or created at the incoming source to the property (usually at the water meter), with an air gap and or Reduced Pressure Backflow Assembly (RPBA). This will be required for all commercial service connections and those posing a high health cross connection hazard.

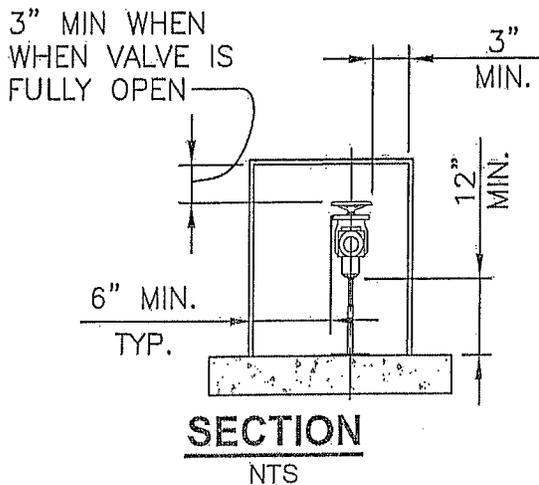
The level of protection required is determined by the degree of hazard as outlined in the Washington Administrative Code (WAC 246-290-490). The general guidelines include:

HIGH HAZARD

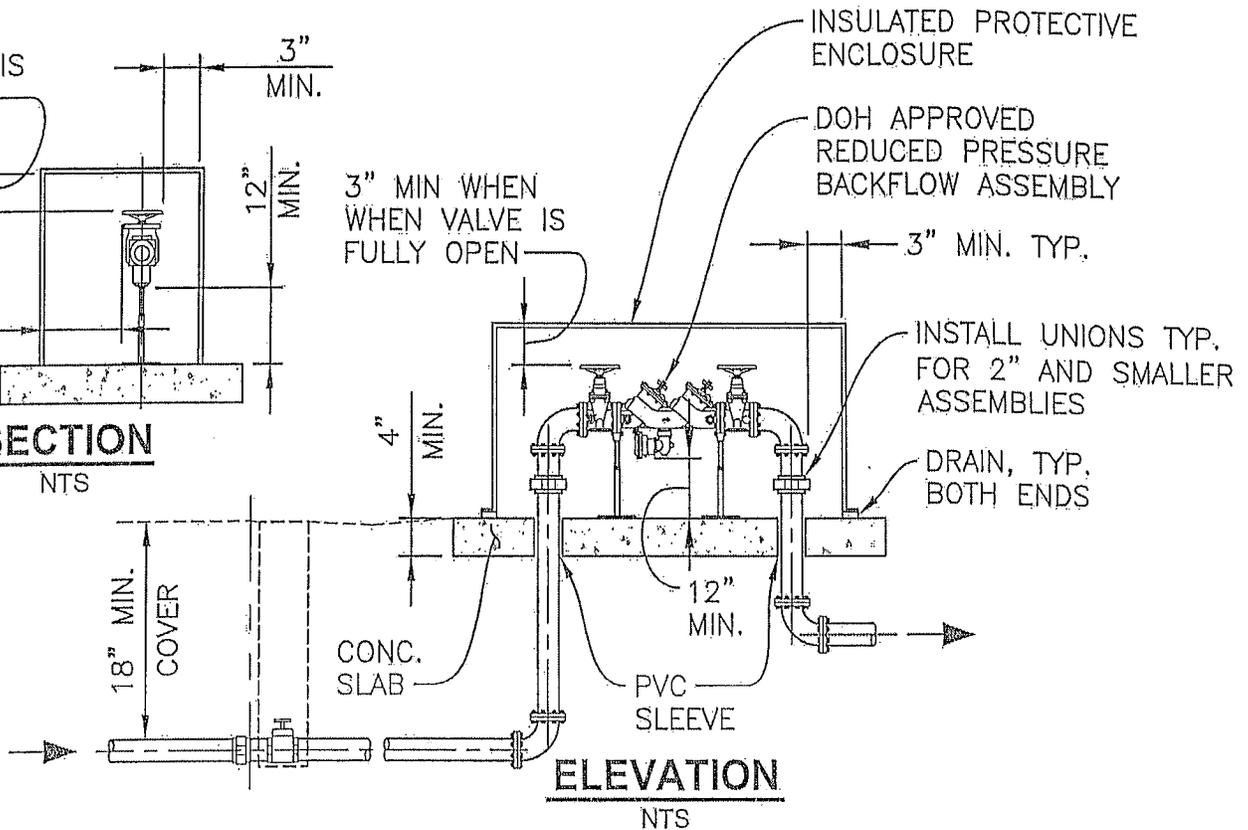
- Agricultural (farms & dairies)
- Beverage bottling plants
- Car washes
- Chemical plants
- Commercial laundries, dry cleaners
- Premises where both reclaimed water and drinking water is provided
- Film processing plants
- Food processing facilities
- Hospitals, nursing homes, veterinary, medical, and dental clinics, and blood plasma centers
- Premises with separate irrigation systems using the purveyor's water supply with chemical addition
- Laboratories
- Metal plating industries
- Mortuaries
- Petroleum processing or storage plants
- Piers and docks
- Radioactive material processing plants or nuclear reactors
- Survey access denied or restricted
- Wastewater lift stations and pumping stations
- Wastewater treatment plants
- Premises with an unapproved auxiliary water supply interconnected with the potable water supply



PROPERTY OWNER TO
INSTALL AND MAINTAIN
VALVE AT THE POINT
OF CONNECTION



SECTION
NTS



ELEVATION
NTS

NOTES:

1. INSULATED PROTECTIVE ENCLOSURE MUST COMPLY WITH THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) 1060 OUTDOOR ENCLOSURES FOR BACKFLOW PREVENTION ASSEMBLIES. IT SHALL BE LOCKABLE WITH A KEY LOCK OR PADLOCK AND SHALL ALLOW FOR MINIMUM CLEARANCES AND PROVIDE ADEQUATE DRAINAGE.
2. RPBA SHALL BE INSTALLED ADJACENT TO THE METER AND HAVE NO BRANCH CONNECTION BETWEEN THE METER AND THE BACKFLOW ASSEMBLY.
3. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
4. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
5. A MINIMUM OF TWO SUPPORTS MUST FIRMLY ANCHOR THE ASSEMBLY.

APPROVED BY CITY ENGINEER:

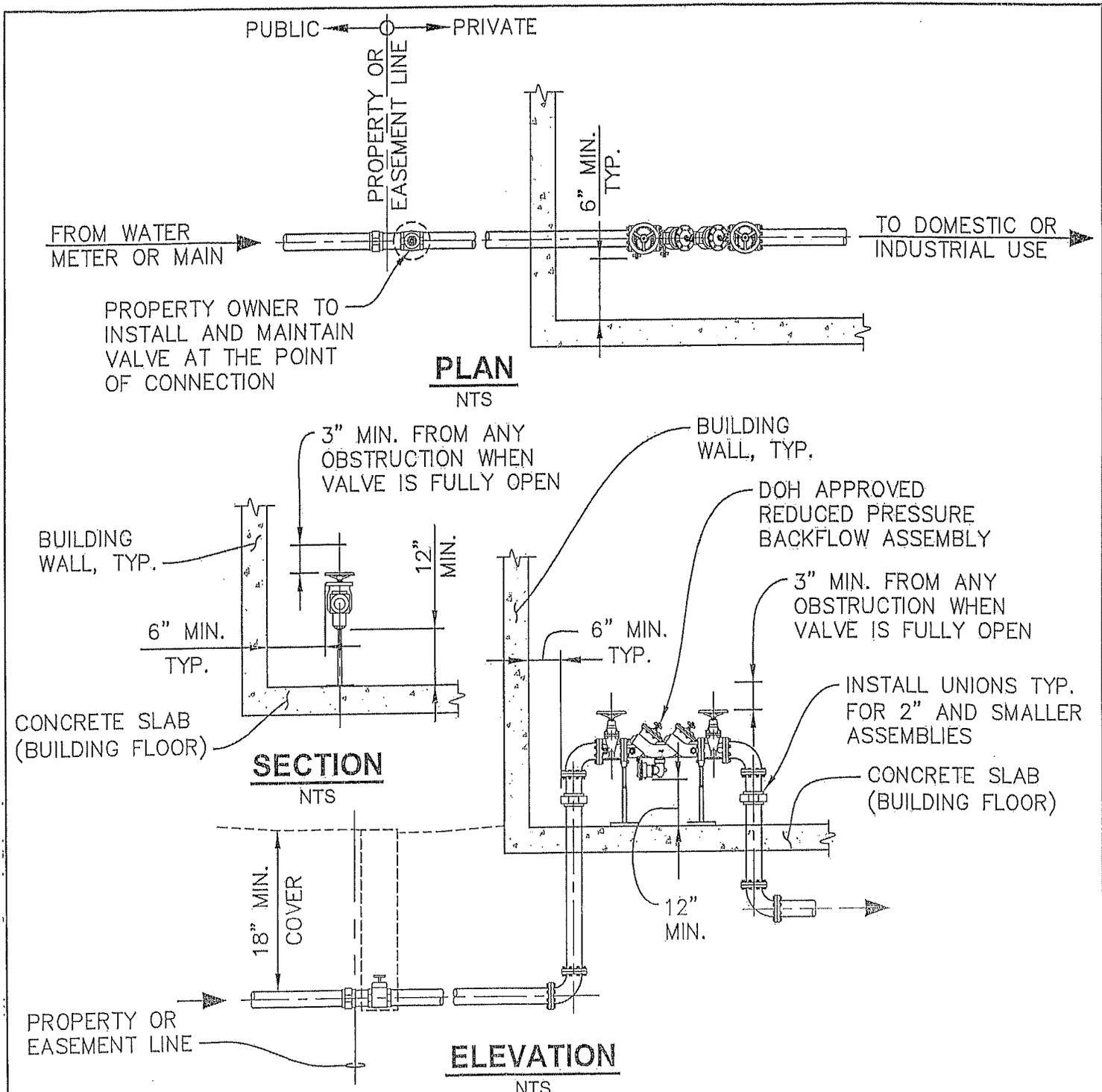
DATE:

Bob Galt

8/5/2016



REDUCED PRESSURE BACKFLOW ASSY.
(OUTSIDE INSTALLATION)



NOTES:

1. RPBA INSTALLED INSIDE BUILDING SHALL HAVE NO BRANCH CONNECTIONS BETWEEN THE METER AND THE BACKFLOW ASSEMBLY.
2. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
3. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
4. A MINIMUM OF TWO SUPPORTS MUST FIRMLY ANCHOR THE ASSEMBLY.

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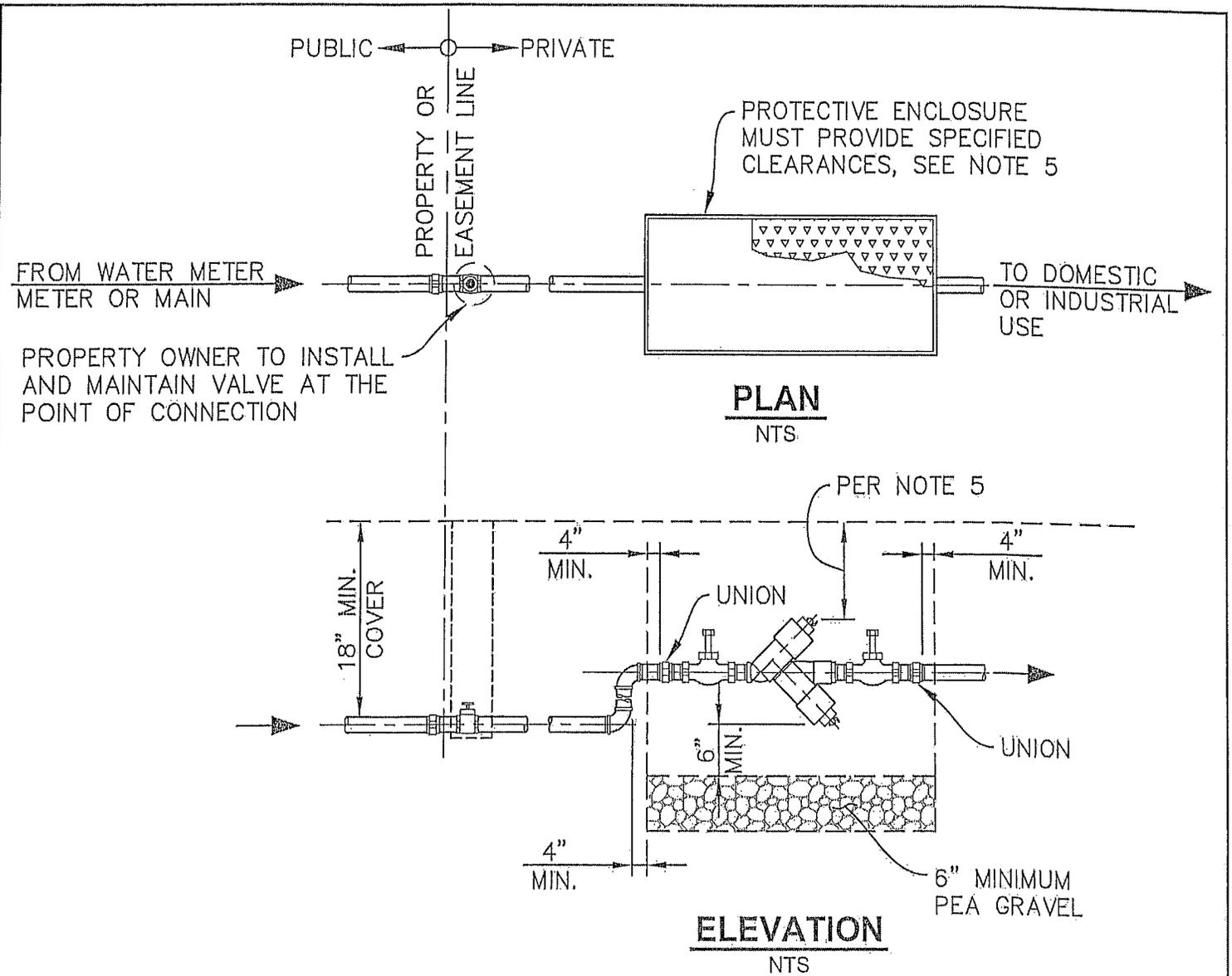
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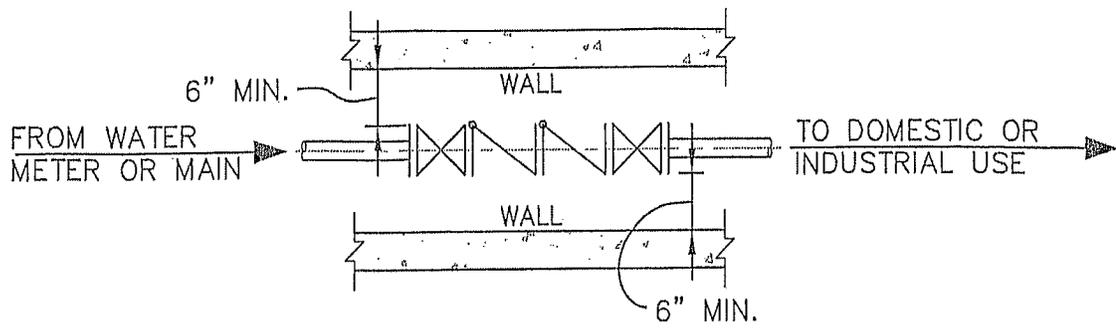
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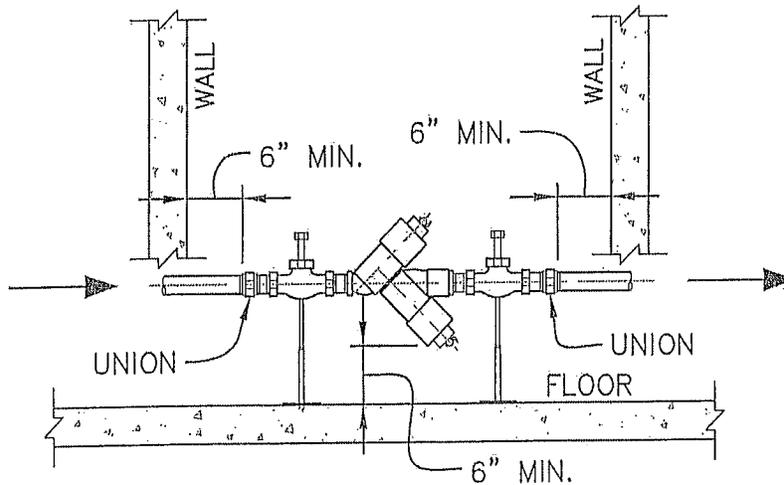
REDUCED PRESSURE BACKFLOW ASSY. (INSIDE INSTALLATION)



- NOTES:**
1. BACKFLOW ASSEMBLY MUST HAVE ADEQUATE SPACE CONSIDERATIONS FOR PROPER TESTING AND MAINTENANCE. A MINIMUM OF 12" CLEARANCE FROM ANY OBSTRUCTIONS ON THE TEST SIDE. A MINIMUM OF 6" CLEARANCE BELOW ASSEMBLY AND A MINIMUM OF 6" OF PEA GRAVEL IN THE BOTTOM OF THE BOX. THE MINIMUM CLEARANCE FROM THE TOP OF THE PEA GRAVEL TO THE BOTTOM OF THE ASSEMBLY IS 6".
 2. DCVA MUST BE INSTALLED WITH TEST COCKS FACING UP. TEST COCKS MUST BE PLUGGED WITH BRASS OR PLASTIC PLUGS.
 3. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
 4. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
 5. MINIMUM CLEARANCE AT ABOVE ASSEMBLY SHALL BE: 9" (FOR 3/4" METER), 12" (FOR 1" METER), AND 14" (FOR 1 1/2" & 2" METER).



PLAN
NTS



ELEVATION
NTS

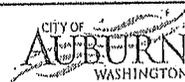
NOTES:

1. BACKFLOW ASSEMBLY MUST HAVE ADEQUATE SPACE CONSIDERATIONS FOR PROPER TESTING AND MAINTENANCE. A MINIMUM OF 6" SIDE CLEARANCE BETWEEN DCVA AND WALL OR ANY OBSTRUCTIONS AND A MINIMUM OF 6" CLEARANCE BELOW ASSEMBLY SHALL BE PROVIDED.
2. DCVA MUST BE INSTALLED WITH TEST COCKS FACING UP, TEST COCKS MUST BE PLUGGED WITH BRASS OR PLASTIC PLUGS.
3. DCVA INSTALLED INSIDE BUILDING SHALL HAVE NO BRANCH CONNECTIONS BETWEEN THE METER AND THE BACKFLOW ASSEMBLY.
4. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
5. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
6. TWO SUPPORTS, EITHER WALL OR FLOOR, ONE ON EACH SIDE OF THE ASSEMBLY, MUST FIRMLY ANCHOR THE ASSEMBLY.

APPROVED BY CITY ENGINEER:

DATE:

8/5/2016



DOUBLE CHECK VALVE ASSEMBLY
(INSIDE INSTALLATION)

COMMUNITY DEVELOPMENT & PUBLIC WORKS DEPT.

STANDARD DETAIL: W-25.1