

BACKFLOW PREVENTION DEVICE APPLICATION INSTRUCTIONS

For New Construction or Existing Water Service Connections requiring a testable backflow prevention device (Generally 1” or larger). This does not apply to residential services less than 1”. Please provide the following information to the Town of New Windsor Building Department:

1. 1 Copy - Completed Backflow Preventor Permit Application (attached)
2. 4 Copies -Completed OCDOH 347 Form completely filled out (attached)
3. 4 Copies -Engineers Report for Backflow Device (signed and sealed by Design Professional), including:
 - a. Description of building use and hazard classification
 - b. Location Drawing of Backflow Prevention Device
 - c. Cut Sheet for proposed device
4. \$250 Check Payable to Orange County Health Department (For EACH device)
5. \$250 Check Payable to the Town of New Windsor (For EACH device)
6. Postage Paid 10”x13” Envelope addressed to the Orange County Health Department for submission of executed application and report.

Attachments (for Applicants Use and Information)

- Town of New Windsor Backflow Preventer Permit Form
- Town of New Windsor Water Permit Application
<https://www.newwindsor-ny.gov/LinkClick.aspx?fileticket=yrPW2RvC9Oc%3d&portalid=0>
- OCDOH – 347 Rev (10/24)
<https://www.orangecountygov.com/DocumentCenter/View/25614/Backflow-Prevention-Device-Application-PDF>
- DOH 1013 Form
<https://www.health.ny.gov/forms/doh-1013.pdf>
- OCDOH Fact Sheet
<https://www.orangecountygov.com/DocumentCenter/View/4266/Backflow-Prevention-Device-Checklist-PDF>
- NYSDOH Fact Sheet
<https://www.health.ny.gov/environmental/water/drinking/cross/guide.htm>
- New Windsor Town Code Section 287-3
<https://ecode360.com/6192212#6192131>

ONCE APPLICATION IS APPROVED BY OCDOH

If work is proposed outside of the building (excavation is required) a Water Permit is required from the Town Clerk’s Office.

Upon completion of construction a completed DOH **Backflow Test and Maintenance Report** form DOH 1013 and certification from the Design Professional that all work has been performed in accordance with the DOH approved plans shall be provided to the Town Water Department, such that a final inspection can be ordered.

**APPLICATION FOR BACKFLOW PREVENTOR
TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK
Pursuant to New York State Building Code and Town Ordinances**

PLEASE ALLOW FIVE TO TEN DAYS TO PROCESS

This Permit application is required for the installation of any cross-connection control device 1" and over in accordance with the NYS Plumbing Code and the New Windsor Town Code Section 287-3.

Date _____

Owner of Premises: _____ Tax Parcel ID: _____

Property Address: _____

Mailing Address: _____

Phone #: _____ Email: _____

Name of Design Professional: _____ Email: _____

Address: _____ Phone#: _____

Name of Contractor: _____

Address: _____ Phone#: _____

Name of Applicant: _____

Address: _____ Phone#: _____

If applicant is a corporation, signature of duly authorized officer: _____

(Name and title of corporate officer)

-
1. Type of Installation New Service Existing Service
 2. Water Service Size (Include domestic service size and sprinkler size if applicable): _____
 3. Uses in Building – List all Occupancies: _____
 4. Hazard Classification (refer to Town Code Section 287-3) Aesthetically Objectionable Hazardous

Department Head: Jennifer Gallagher
Building Inspectors: John Almeida & William Horton
Secretary: Stephanie Torres
New Windsor Town Hall
555 Union Avenue
New Windsor, New York 12553
(845) 563-4618 Phone and (845) 420-6384 Fax

INSTRUCTIONS

- A. This application must be completely filled in and submitted to the Building Inspector.
- B. Site plan showing building, water service and street line, as well as detailed plans of mechanical room, or location of proposed device shall be included.
- C. This application must be accompanied by FOUR copies of OCDOH FORM 347, Engineering Report and Plans.
- D. The work covered by this application may not be commenced prior to OCDOH issuance of this permit.
- F. The Permit Fee is a \$250 non-refundable fee with a check made payable to the "Town of New Windsor".
- G. No building shall be occupied or used in whole or in part for any purpose whatsoever until a final inspection has been completed by the Water Department and a Certificate of Compliance shall have been granted by the Building Inspector.

APPLICATION IS HEREBY MADE to the Building Inspector for the issuance of a Permit pursuant to the New York Building Construction Code Ordinances of the Town of New Windsor for the construction of buildings, additions, or alterations, or for removal or demolition or use of property as herein described. The applicant agrees to comply with all applicable laws, ordinances, regulations and certifies that he is the owner or agent of all that certain lot, piece or parcel of land and/or building described in this application and if not the owner, that he has been duly and properly authorized to make this application and to assume responsibility for the owner in connection with this application.

(Signature of Applicant)

(Date)

(Owner's Signature)

(Date)

TOWN OF NEW WINDSOR
 555 UNION AVENUE
 NEW WINDSOR, NY 12553
 (845) 565-8800



OBTAINED AT TOWN HALL
 ISSUED BY TOWN CLERK

BUILDING – 845.563.4618
 SEWER/CAMO – 845.561.2550
 HIGHWAY – 845.564.6660
 WATER – 845.563.4636

KNOW BEFORE YOU DIG
UDig NY – Call 811
www.udignny.org

Town of New Windsor

WORK PERMIT #: _____

COPIES TO: APPLICANT BUILDING SEWER/CAMO HIGHWAY WATER
SPECIFICATION SHEETS PROVIDED, IF APPLICABLE

PERMIT TYPE	AUTHORIZATION		COMPLETED & APPROVED			
	<input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> COMMERCIAL	FEE	BY	DATE	DEPT	BY
DITCH INSPECTION ((\$100.00 PER LATERAL))						
DRIVEWAY (DRIVEWAY APRON BOND \$1,000.00)	\$100.00					
SEPTIC – NEW	\$50.00					
SEPTIC – REPAIR OR REPLACE (NEED TO SHOW P/E REPORT)	\$50.00					
**SEWER – NEW (DITCH INSPECTION INCLUDED)	\$425.00					
**SEWER – REPAIR (DITCH INSPECTION INCLUDED)	\$175.00					
STREET OPENING \$2,000.00 BOND \$1 MILLION CERTIFICATE OF INS REQ'D	\$175.00					
*WATER – NEW TAP \$725.00** PLUS COST OF EQUIPMENT (INCLUDES DITCH INSPECTION & FINAL INSPECTION)						
*WATER – REPAIR \$225.00** (INCLUDES INSPECTION FEES)						
WELL	NO FEE					

**REFER TO WATER DEPT FOR ADDITIONAL SERVICES AND PARTS.*

***IF CONTRACTOR APPLYING FOR PERMIT: CERTIFICATE OF LIABILITY INS (ACORD 25), CERTIFICATE OF NYS WORKERS' COMP (C-105.2), & CERTIFICATE OF INS COVERAGE FOR NYS DISABILITY & PAID FAMILY LEAVE BENEFITS LAW (DB-120.1) REQUIRED NAMING TOWN OF NEW WINDSOR AS CERTIFICATE HOLDER.*

911 / METER ADDRESS **MUST HAVE 911 ADDRESS FOR PERMIT TO BE APPROVED**

PROPERTY OWNER NAME PHONE

BILLING ADDRESS - **ISSUANCE OF PERMIT WILL BEGIN QUARTERLY SEWER/WATER OPERATION AND MAINTANCE BILLING**

CONTRACTOR PHONE

SECTION # BLOCK # LOT # SEWER DISTRICT # WATER DISTRICT #

ACCOUNT # METER # REMOTE #

AMOUNT: \$ _____ CHECK #: _____ CREDIT/DEBIT CARD CASH

BOND COLLECTED AMOUNT: \$ _____ PAYMENT RECEIVED FROM _____

TOWN CLERK DATE *OWNER, AGENT, OR CONTRATOR DATE

**Owner Authorization attached in lieu of owner signature.*



IMPORTANT INFORMATION

1. Failure to comply with this ordinance is punishable by a fine of \$50.00 for each offense.
2. Prior to excavation, the contractor is required to notify the appropriate town department **24 hours in advance**.
3. All work must be done on the highway before 3:30 p.m.
4. To avoid delays, notify the town inspector 24 hours in advance for inspection.
5. All facilities must be inspected prior to being backfilled.
6. **All permits are valid for a period of one (1) year from date of issuance.**

Application for Approval of Backflow Prevention Devices

PRINT OR TYPE ALL ENTRIES EXCEPT SIGNATURES				Section/Block/Lot:		<i>FOR OCDOH USE ONLY CGN:</i>		
1. Name of Facility				2. City/Village/Town:		3. County ORANGE		
4. Address of Facility				street	city	state	zip code	
5. Proposed Backflow Prevention Device(s): Total Number of Devices: _____	5a. QTY	5b. Mfg. Model #	5c. Size of Device(s)	5d. Fire or Domestic	5e. Degree of Hazard, i.e. Hazardous, Aesthetically Objectionable, etc. (list processes or reasons that lead to degree of hazard identified)		5f. Approx. Location of Device	
5g. Additional Description/information:								
6. Name of Owner/Applicant, Title				6a. Phone Number		7. Nature of Works <input type="checkbox"/> Initial Device Installation <input type="checkbox"/> Replace Existing Device		
6b. Owner/Applicant Full Mailing Address: _____ street				7a. <input type="checkbox"/> New Service <input type="checkbox"/> Existing Service		7b. <input type="checkbox"/> New Building <input type="checkbox"/> Existing Building <input type="checkbox"/> Major Renovations		
city _____ state _____ zip code _____				Date: ___/___/___				
6c. Applicant's E-mail address:								
8. Name of Design Engineer or Architect		Name: _____				8a. NYS License # _____		
		Firm: _____				<input type="checkbox"/> PE <input type="checkbox"/> RA <input type="checkbox"/> Other		
		Full Mailing Address: _____ street				8b. Telephone Number		
		city _____ state _____ zip code _____				8c. E-mail address		
Original ink signature and seal required on all copies		Signature: _____				Date of Signature: ___/___/___		
9. Water System Pressure (psi) at Point of Connection: Max _____ Avg _____ Min _____				10. Estimated Installation Cost:		10a. Estimated Design Cost:		
11. Public Water Supply Name: _____ PWS ID#: NY _____ Mailing Address: _____ _____				11a. Name of Water Supplier's Designated Representative: _____ Title: _____ Signature: _____ Date: ___/___/___				
Telephone No: _____								

Note: All applications must be accompanied by plans, specifications, review fee, and an engineer's report describing the project in detail. The project must first be submitted to the water supplier, who will complete Sections 11 and 11a and forward it to the Orange County Department of Health. Appropriate fee and submittal checklist can be found on the website: <https://www.orangecountygov.com/539/Applications-Forms-Permits-Documents>

Report on Test and Maintenance of Backflow Prevention Device

PART A

Please use a separate form for each device.

For the year _____
 Initial test - Complete entire form
 Annual test - Complete Part A only

Public Water Supply		Account No.		County	Block	Lot
Facility Name _____ Address _____ Street City Zip				Location of Device _____ _____		
Device Information	Manufacturer	Type <input type="checkbox"/> RPZ <input type="checkbox"/> DCV	Model	Size (in inches)	Serial Number	
	Check Valve No. 1	Check Valve No. 2	Differential Pressure Relief Valve	Line Pressure _____ psi		
Test before repair	Leaked <input type="checkbox"/> Closed tight <input type="checkbox"/>	Leaked <input type="checkbox"/> Closed tight <input type="checkbox"/>	Opened at _____ psid	Date <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M D Y		
	Pressure drop across first check valve _____ psid					
Describe repairs and materials used				Repaired by Name _____ Lic # _____ Date repaired: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M D Y		
Final test	Closed tight <input type="checkbox"/>	Closed tight <input type="checkbox"/>	Opened at _____ psid	Date <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M D Y		
	Pressure drop across first check valve _____ psid					
Water Meter Number		Meter Reading	Type of Service: (check one) <input type="checkbox"/> Domestic <input type="checkbox"/> Fire <input type="checkbox"/> Other _____			

Remarks (Describe deficiencies: bypasses, outlets before the device, connections between the device and point of entry, missing or inadequate airgaps, etc.)

Certification: This device meets, does NOT meet, the requirements of an acceptable containment device at the time of testing
 I hereby certify the foregoing data to be correct.

Print Name _____ Certified Tester No. _____ Signature _____ Expiration Date _____

Property owners (or owners agent) certification that test was performed:

Print Name _____ Title _____ Signature _____ Telephone _____

PART B

Certification that installation is in accordance with the approved plans.

(To be completed by the design engineer or architect or water supplier.)

I hereby certify that this installation is in accordance with the approved plans.

Name	Title	Date	NYS DOH Log #
License Number	Phone ()	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> m d y	_____
Representing	Describe minor installation changes		
Address			
City State Zip			
Signature _____			

NOTE: Send one completed copy to the designated health department representative and one copy to the water supplier within 30 days of the testing device.
 Notify owner and water supplier immediately if device fails test and repairs cannot immediately be made.

**INSTRUCTIONS FOR COMPLETING DOH-1013 (9/91)
REPORT ON TEST AND MAINTENANCE OF BACKFLOW PREVENTION DEVICE**

PART A - To Be Completed by Certified Tester

- Indicate the test year and whether initial or annual test.
- Complete public water supply name, customer account number (if available) and county.
- Complete block and lot (if available) for New York City Metropolitan area tests.
- Complete facility name, address and specific location of device (e.g., meter room, etc.)
- Complete device information including manufacturer, type, model, size and serial number.
- Complete section •Test Before Repair• and indicate:
 - Whether check valve #1 leaked or closed tight. For RPZ devices, the pressure drop across the check valve must be at least 5.0 psid.
 - Whether check valve #2 leaked or closed tight.
 - Opening of RPZ differential pressure relief valve - must be at least 2.0 psid or device must be failed and/or repaired.
 - Complete water system line pressure in psi and indicate test date.
- Describe any repairs and materials used and the name and license number of the repairer and indicate repair date.
- Complete •final test• section only if repairs have been made.
- Indicate the water meter number/meter reading and the type of service (describe •other• e.g., boiler feed, irrigation line, etc.)
- Complete the Remarks section if there are any deficiencies.
- Complete the certification indicating if the device meets or does not meet the requirements at the time of testing - print and sign your name and indicate certificate number and expiration date.
- Have the property owner (or owner's agent) certify that test was performed.

PART B - To Be Completed By Design Engineer, Architect or Water Supplier for initial Tests Only

- Complete name, title, license number, phone number, company name and address.
- Sign and date form and indicate NYSDOH (or local health department/water supplier).
- Describe minor installation changes.

After completion, submit copies of test reports to the supplier of water, customer, State or local health department and retain copies for the tester's personal records.

**ORANGE COUNTY DEPARTMENT OF HEALTH
BACKFLOW PREVENTION DEVICE CHECKLIST**

SUBMISSION:

1. Plans must be prepared by a NYS registered Professional Engineer or Architect.
2. The cover sheet of the plans must include an Orange County Department of Health approval box which includes a minimum white area of 5" x 3". Plan sheets should be sized large enough to accommodate this area.
3. The application DOH-347 must be signed by the water supplier or his designated representative, prior to submission. Application must also be signed and sealed by the engineer or architect.
4. Include review fee of \$250.00 per device made payable to the Orange County Dept. of Health.
5. The Design Professional will be required to submit scanned copies of the approved documents to the OCHD within 30 days following OCHD approval. Please provide an email address.

ENGINEER'S REPORT:

1. Describe the degree of hazard that was provided on the application (hazardous or aesthetically objectionable), type of device selected, and the make & model number.
2. Describe system conditions including flows (domestic/fire demand) and pressures as appropriate.
3. Address sizing of the unit, based on hydraulic requirements.
4. Ensure that devices appear on the list generated by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (FCCCHR).
5. Estimate maximum possible discharge from any RPZ drain. Ensure adequate drainage is provided.
6. Describe the fire fighting system and indicate the AWWA Manual M-14 class of sprinkler.
7. Parallel units should be considered for facilities where water service cannot be interrupted.

PLAN REVIEW:

1. GENERAL:

- a. Plans provided should generally be larger than 8.5" x 11" to show adequate detail, all required notes, and accommodate this department's 5" x 3" stamp.
- b. The preferred installation is a separate building as close as possible to the property line, with a floor that is a minimum of 6" above finished grade. Where containment at the property line cannot be achieved or is waived, installation of the device may be done immediately inside the building.
- c. Site plans must be provided to demonstrate that containment is achieved, and the location of the device is satisfactory. A site plan (to scale or with dimensions) of the facility should contain the size and location of public water main(s) and all fire and domestic water services.
- d. Ideally, no platforms or ladders should be required for access.
- e. Provide adequate heat to prevent freezing and if installed where temperatures will reach 100 degrees F or above, a hot water type assembly must be proposed.
- f. Provide adequate lighting to facilitate servicing of the device.
- g. Below grade or basement installations are acceptable for DCVA's. RPZ's are allowed below grade only if at least one of the following conditions is met:
 - i. Adequate gravity drainage system to accommodate relief valve on RPZ's.
 - ii. Level alarms are installed to detect flow from the device.
 - iii. Sump pumps are sized to accommodate a relief valve failure and are connected to an auxiliary power supply.

- iv. Floor area and volume below device could handle discharge from a relief valve failure. For 2” and smaller units, 2000 cu.ft. is acceptable. For larger units, the time to submerge the unit based on maximum discharge rate shall not be less than 8 hours.

2. CLEARANCES:

- a. All assemblies must be installed with a centerline height of 30-60” above the floor. Any installation at a greater height shall be provided with a fixed platform, a portable scaffold or a lift meeting OSHA standards.
- b. All RPZ devices must have 18” minimum clearance between bottom of relief valve and floor to prevent submersion and provide access for servicing.
- c. A minimum of 12 inches clearance must be provided above the device for servicing.
- d. 30 inches minimum clearance shall be provided in front of the device to the nearest wall or obstruction.
- e. At least 8 inches clearance should be maintained from the back side of the device to the nearest wall or obstruction. This clearance may need to be increased for models that have side mounted test cocks or relief valves that would be facing the back wall.
- f. Devices shall be adequately supported and/or restrained to prevent movement. Pipe hangers, braces, saddles, stanchions, piers, etc., should be used to support the device and should be placed in a manner that will not obstruct the function of or access to the relief valve.

3. DRAINAGE:

- a. Drainage shall be provided to accommodate discharge during testing or relief valve discharge.
- b. For RPZ devices, drainage must be sized to accommodate intermittent discharge and catastrophic failure of the relief valve.
- c. Discharge from relief valves must be readily visible. Adequate lighting must be provided.
- d. All drainage from RPZ’s must be by gravity drains through a properly designed air gap. Sump pumps are not allowed unless they are sized to accommodate maximum discharge and are connected to emergency power source(s). Manufacturer’s air gap fittings may not be sized to accommodate catastrophic discharge. Confirm capacity.
- e. Discharge piping from any relief valve must terminate at least 1 inch above grade or receiving receptacle.
- f. In pit installations, floors pitched to drain, and discharge piping must terminate above grade in an area not subject to flooding. The end of the pipe must be equipped with a rodent screen.

4. NOTES – These notes must appear on the plans:

- a. New and replacement devices must be tested after installation and before entering into service. Devices must be tested annually thereafter.
- b. Strainers are recommended prior to each backflow device on non-fire fighting lines **ONLY!** No strainer is to be used on a fire line without Insurance Underwriter approval.
- c. Assemblies should be specified and installed with manufacturer supplied valves.
- d. Water lines should be thoroughly flushed before installation of device to prevent debris fouling the device check valves.
- e. Devices must be mounted horizontally unless approved for vertical installation.

- f. Assemblies should not be installed in areas containing corrosive or toxic gases which could render the device inoperable.
- g. Due to inherent design of RPZ assemblies, fluctuating supply pressure on a low flow condition may cause nuisance dripping. Installation of a soft seated check valve ahead of the RPZ will often hold pressure constant during periods of low flow.
- h. Where the distance between the water meter and device is greater than 10 feet, all exposed piping should be marked “Feed line to Backflow Preventer – Do Not Tap” at 5-foot intervals.
- i. Adequate heat will be provided to prevent freezing and adequate lighting will be provided to facilitate servicing of the device.
- j. **This note must appear on page 1 of the plans** Orange County Department of Health plan approval is limited to 5 years. Time extensions for plan approval may be granted by the Orange County Department of Health based upon development facts and any new regulations, or guidance, in effect at that time. A new plan submission may be required to obtain a time extension.
- k. **This note must appear on page 1 of the plans** Only details and notes associated with the installation of the proposed backflow prevention device are subject to the review and approval by the Orange County Department of Health.

Guidelines for Designing Backflow Prevention Assembly Installations

Supplement to the 1981 Cross Connection Control Manual - January 1992

Purpose

The purpose of these guidelines is to augment and/or clarify those guidelines outlined in the January 1981 Cross Connection Control manual. These guidelines reflect accepted design considerations based on experience in implementing cross connection control programs and policies set forth by the American Water Works Association, Environmental Protection Agency, USC Foundation for Cross Connection Control and Hydraulic Research and state and local health departments. Pending revisions to the manual, these guidelines should clearly outline what an acceptable design and installation constitutes. They are to be reasonably interpreted and will be updated as new design solutions and technologies are offered.

General Installation Details

I. Clearances

All double check valve (DCV) and reduced pressure zone (RPZ) backflow prevention assemblies are designed for in-line service and must be installed to prevent freezing, flooding and mechanical damage with adequate space to facilitate maintenance and testing. Ideally, the installation should not require platforms, ladders or lifts for access. Adequate clearances from floors, ceilings and walls must be provided to access the test cocks and to allow the repair and/or removal of the relief valve and check valves; as follows:

- All assemblies shall be installed with a centerline height from 30 inches to 60 inches above the floor. Any installation at a greater height shall be provided with a fixed platform, a portable scaffold or a lift meeting OSHA standards.
- All RPZ devices must have an 18 inch minimum clearance between the bottom of the relief valve and the floor to prevent submersion and provide access for servicing and relief valve.
- A minimum of 12 inches of clear space shall be maintained above the assembly to allow for servicing check valves and for operation of shut-off valves.
- A minimum of 30 inches of clear space shall be maintained between the front side of the device and the nearest wall or obstruction.
- At least 8 inches clearance should be maintained from the back side of the device to the nearest wall or obstruction. This clearance may need to be increased for models that have side mounted test cocks or relief valves that would be facing the back wall.

II. Miscellaneous Considerations

- All assemblies shall be adequately supported and/or restrained to prevent lateral movement. Pipe hangers, braces, saddles, stanchions, piers, etc., should be used to support the device and should be placed in a manner that will not obstruct the function of or access to the relief valve.
- Strainers are recommended prior to each backflow prevention assembly on non-fire fighting water lines. **No strainer is to be used in a fire line without the approval of the Insurance Underwriters or the authority having jurisdiction.**
- The assembly should be sized hydraulically, taking into account both the volume requirements of the service and the head loss of the assembly. The head loss of the assembly is not necessarily directed proportional to flow. (Refer to the manufacturers head loss curves).

- Before selection and installation, refer to manufacturers literature for temperature ranges. All assemblies must be protected from freezing temperatures and if installed where temperatures will reach 100 degrees F or above, a hot water type assembly must be used. Consult manufacturers specifications for recommendations.
- Thermal water expansion and/or water hammer downstream of the assembly can cause excessive pressure. To avoid possible damage to the system and assembly, use water hammer arresters, surge protectors or expansion tanks as appropriate.
- All assemblies should be specified and installed with the manufacturer supplied resilient seated shut-off valves integral to the assembly.
- Water lines should be thoroughly flushed before installing the assembly. Most test failures on new installations are the result of debris fouling one of the check valves or the relief valve.
- All assemblies must be installed horizontally unless they are specifically approved for vertical installation. (Ref. Technical Reference PWS-14).
- Parallel installations should be considered at those facilities where water service cannot be interrupted. Manifold installations may also be used on any water line larger than 10 inches.
- Assemblies shall not be installed in areas containing corrosive, toxic or poisonous fumes or gases which could render the assembly inoperable or pose a safety hazard to personnel.
- Because of the inherent design of a reduced pressure backflow assembly, fluctuating supply pressure on an extremely low flow or static flow condition may cause nuisance dripping and potential fouling of the assembly. While not effective in all cases, the installation of a soft seated check valve immediately ahead of the RPZ will often hold the pressure constant to the assembly in times of fluctuating supply pressure.
- Where the distance between the water meter and the device is greater than 10 feet, all exposed piping should be stenciled "Feed Line to Backflow Preventer – DO NOT TAP" at 5 foot intervals.

III. Drainage

Drainage for backflow prevention assemblies shall be provided for **all** installations of DCV or RPZ to accommodate discharge during testing or draining of the unit and for RPZ relief valve discharges, as follows:

- For RPZ devices, drainage capacity shall be sized to accommodate both intermittent discharges **and** a catastrophic failure of the relief valve. Refer to manufacturers flow curves to determine maximum discharge rate based on supply pressure or on-site pressure; whichever is greater.
- Discharge from relief valves must be readily detectable to maintenance personnel either visually or by means of water level alarms, flow indicator lights, etc.
- All drainage from RPZ's must be by gravity drains. Sump pumps are not allowed unless they are sized to accommodate the maximum discharge rate **and** connected to emergency power supplies.
- An air gap must be maintained between the RPZ relief valve opening and any discharge piping. The air gap must be at least twice the dimension of the effective opening of the relief valve; but in no case less than 1 inch.
- Manufacturer's air gap fittings may be utilized provided that they maintain a proper air gap and do not enclose or cover the relief valve. These fittings are only sized to handle intermittent and low flow discharges. Additional drainage capacity may be required to accommodate a catastrophic relief valve failure.
- Discharge piping from relief valves shall be terminated a minimum of one inch above any floor drain or other receiving receptacle.
- Discharge piping connected to a storm sewer shall be equipped with backwater check valve.
- Discharge piping connected to a sanitary sewer shall be trapped **and** equipped with a backwater check valve.
- Discharge piping from pits or other structures must be terminated above grade in an area not subject to flooding (generally one foot above the 100 year flood elevation). The terminal end of the discharge piping must have a rodent screen and may need to be supported by a headwall. Flap valves should also be considered to prevent entry of cold air.
- All exterior drains shall be kept free of snow during winter.

IV. Pit Installations

Primarily due to considerations for access, safety and gravity drainage, it is preferred that backflow prevention devices not be installed in pits. Where pit installations are proposed, however, they shall be designed:

- To be watertight with watertight manholes or access doors extending a minimum of 6 inches above grade and located to allow natural light into the pit during testing/maintenance.
- With stairways, ladders or step irons.
- For crane access for installing and removing large assemblies.
- With adequate horizontal and vertical clearances to allow access to the device.
- With a full flow screened gravity drain terminating above grade for all RPZ installations as detailed in the drainage requirements.
- With sump pumps or gravity daylight drains for all DCVA installations.
- With floors pitched to drain.
- With adequate ground cover to prevent freezing.
- With surface grading to divert runoff away from the entrance way.
- Semi-buried pits for berm installations may be necessary to satisfy gravity drainage requirements.

V. Above Grade Installations- Protective Enclosures

An above grade installation is generally necessary to provide gravity drainage from RPZ devices. The additional benefits of improved access and enhanced safety are also realized with an above grade installation. Two companies, "Hot Box" and "Hydrocowl", have designed prefabricated insulated enclosures that provide heat, gravity drainage and removable access panels for servicing and testing. As an alternate, wood frame, fiberglass, steel, masonry or precast concrete structures may be utilized. All enclosures shall be designed:

- With a floor elevation that is at least 6 inches above finished grade.
- To provide adequate clearances around the device to access the test cocks, shutoff valves, check valves and relief valve.
- With electric heaters or heat trace wire for any water service used year round.
- With provisions for natural or artificial light.
- With full flow gravity drains according to the drainage requirements.
- With security measures such as locking doors and panels, flow alarms or flow indicator lights, power indicator lights, etc.

VI. Installation Within a Building

Where containment at the property line cannot be achieved or is waived based on extenuating circumstances, installation within a building is often desirable as the unit can be installed in a mechanical room or other area that has heat and light. Access and drainage considerations must also be satisfied and the devices should be located to avoid electrical panels, areas of excessive heat, etc.

1. Above grade installations shall be provided with adequate clearances and discharge can be directed to floor or drains or through a sidewall above grade via screened louvers, scuppers, pipe sleeves with flap valves, etc., in accordance with the drainage requirements.
2. Below grade or basement installations are acceptable for DCVA's. RPZ's are only allowed below grade where one or more of the following conditions can be met:
 - Where an adequate gravity drainage system is provided to accommodate a relief valve failure.
 - Where water level alarms are installed to detect flow from the device and alert maintenance or security personnel.
 - Where sump pumps are sized to accommodate a relief valve failure and are connected to emergency power.
 - Where the floor area and volume below the device could accommodate discharge from a relief valve failure. For 2 inch and smaller units, 2,000 cubic feet is generally acceptable. For larger

units, the time to submerge the device based on the maximum discharge rate and floor area/volume should be no less than 8 hours.

In any of the above cases, the property owner must be made aware of the potential for water damage in the event of a discharge.

VII. Submission and Approval of Plans

In accordance with Section 10 of the Cross Connection Control manual, the submission of plans and specifications for the installation of backflow prevention assemblies must include the following:

1. A **site plan** (to scale or with dimensions) of the facility containing a general location map, name and address of facility, property lines, buildings, the size and location of public water main(s) and all fire and domestic water services, meter pits, yard piping and hydrants, pumper connection(s), interconnections, and the location of the proposed backflow preventer(s).
2. A **plumbing floor plan** (plan view) or **partial floor plan** indicating water services, name and address of facility, water meter layout, proposed backflow preventer(s), booster pump system, floor drain(s) and all nearby objects (examples: electrical panels, boilers, chillers, storage tanks, fire pumps, fire sprinkler risers, etc.). The plan must be drawn **to scale** or **with dimensions** indicated from walls and all nearby objects.
3. A **vertical cross section(s)** of the proposed installation with elevations from floor, ceiling, outside grade and all nearby objects.
4. All drawings must include the name and address of the facility, be stamped and signed by the designer and have a clear space for approval stamps.

VIII. Engineer's Report

An engineering report must be included with the plan submittal. The report must describe the project **in detail**. Items that should be included or described in the report include:

1. General use of water within the facility;
2. Size and description of all fire and domestic water services;
3. Number of floors within the facility
4. Actual or estimated maximum flow demand;
5. Pressures - existing and after the installation of the backflow preventer;
6. Description of the fire fighting system - indicate the A.W.W.A. Manual M-14 class of sprinkler service;
7. Description of the proposed installation of the backflow preventer – indicate the location of backflow preventer, drainage, lighting, heating, access to unit, square footage of the floor level where the backflow preventer is to be located;
8. Description of the existing or proposed booster pump system, answering the following questions:
 - A. After the installation of the proposed backflow preventer(s), will the Net Positive Suction Head (NPSH) required for the proper operation of the booster pump system be adequate?
 - B. After the installation of the backflow preventer(s) in the suction line to the booster pump system, will the booster pump system operate properly at peak demand to deliver adequate pressure to the highest elevation and/or most remote fixture unit or any other operation requiring a certain pressure? Note: The New York State Uniform Fire Prevention and Building Code Part 902.4c requires the **minimum** pressure at water outlets at all times to be as follows:

Fixture - non flush valve - 8 psi

Fixture - flush valve - 15 psi

- C. Does the booster pump system have a pressure cutoff switch in the suction line? What is the pressure setting of the switch? An existing or proposed cutoff switch must be set at the following setting:

For a cutoff switch where the backflow preventer is located upstream of the booster pump(s) - set at 10 psi.

For a cutoff switch where the backflow preventer is located downstream of the booster pump(s) - set at 20 psi.

9. The need for dual backflow preventers. Does the facility need a continuous water supply?
10. The elevation and location of the 100 year flood plain in relation to the facility. A reduced pressure zone (RPZ) backflow preventer must generally be installed 1 foot above the 100 year flood plain elevation.
11. An inventory of any existing containment devices to include the make, model, size and serial number of the device. Current annual test reports must also be submitted. The degree of hazard for these services must be determined to insure that the device provides the correct protection.

IX. Certified Testing and Completed Works Approval

After an approval of plans has been issued and the assembly has been installed, it must be tested by a certified tester. The designer (or water supplier) is then responsible to certify that the installation was done in accordance with approved plans; or describe any changes or submit "As Built" plans as appropriate.

The initial test results and certification are then submitted to the water supplier and approving agent for issuance of a Completed Works Approval. DOH - Form 1013 has been designed for both the certified test results and the designer's certification of the installation.

After issuance of the Completed Works Approval, the assembly must be tested at least annually by a certified tester with the results reported to the water supplier.

Chapter 287. Water

[HISTORY: Adopted by the Town Board of the Town of New Windsor 6-4-1997 by L.L. No. 3-1997 (Ch. 46 of the 1972 Code). Amendments noted where applicable.]

GENERAL REFERENCES

Environmental quality review — See Ch. **130**.

Flood damage prevention — See Ch. **151**.

Sewers — See Ch. **240**.

Streets and sidewalks — See Ch. **252**.

Subdivision of land — See Ch. **257**.

§ 287-1. Water Superintendent appointment.

A Water Superintendent shall be appointed for the Town of New Windsor Consolidated Water District, as the Town Board may determine, who, on behalf of the Town Board, shall have general supervision of the operation of the water system. In place and stead of a Water Superintendent, the Town Board designates the Code Enforcement Officer.

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I).*

§ 287-2. Application for service.

- A. No person or corporation shall use the water supplied by the Consolidated Water District for any purpose whatsoever without having first obtained a permit, after having first paid the charges pertaining to the introduction of water to the premises.
- B. All applications for introduction of water to any property or for the use of water shall be made upon a form furnished by the Town and shall be signed by the owner or contractor engaged by the owner. Such application shall contain a statement of all uses for which water is desired, and a use of water for any purpose other than mentioned in the application shall be sufficient cause to justify discontinuance of water service.

§ 287-3. Cross-connection control.

The purpose of this section is to safeguard the municipal water supply from potential contamination by preventing backflow from a water user into the Town of New Windsor municipal water supply system. The adoption of this section will enable the Town of New Windsor to comply with the requirements of the New York State Sanitary Code, Part 5, Section 5-1-1.31, and, in some cases, supersede the requirements of the state code. The safeguarding shall be accomplished by a requirement for the installation by the owner of the premises of an approved air-gap separation, reduced-pressure zone (RPZ) device or a double-check valve assembly (DCVA), all as defined in § **287-36**, consistent with the degree of hazard posed by a service connection from the premises to the municipal water supply system.

- A. Facilities requiring cross-connection control devices as designated:
 - (1) Hazardous facilities requiring air-gap separation or reduced-pressure zone (RPZ) device.

- (a) Sewage and industrial wastewater treatment plants and pumping stations; sewer flushers.
 - (b) Paper manufacturing or processing; dye plants; petroleum processing; printing plant; chemical manufacturing or processing; industrial fluid systems; steam generation; rubber processing; tanneries.
 - (c) Canneries; breweries; food processing; milk processing; ice manufacturing; meat packers; poultry processing; rendering companies.
 - (d) Hospitals; clinics; laboratories; medical office buildings; veterinary hospitals; mortuaries; embalmers.
 - (e) Airports; aircraft hangers; passenger and freight terminals; trucking terminals; shipyards; marinas.
 - (f) Metal-plating; photo-processing; laundries; commercial car washes; commercial refrigeration systems; dry-cleaning establishments.
 - (g) Commercial greenhouses; spraying and irrigation systems using weedicides or herbicides; exterminators.
 - (h) Boiler systems; cooling towers or internal fire-fighting systems using conditioners, inhibitors or corrosion-control chemicals (typically: apartment buildings, cooling towers and warehouses).
 - (i) Residential units with lawn and irrigation system with chemical injection.
 - (j) Any building or premises on which there exists an auxiliary water supply which is not separated from the municipal water supply system.
- (2) Aesthetically objectionable facilities requiring double-check valve assembly (DCVA).
- (a) Customer fire-protection loops; fire storage tanks with no chemical additives.
 - (b) High-temperature potable water.
 - (c) Utilization of food-grade dyes.
 - (d) Complex plumbing systems in commercial buildings (typically: barbershops, beauty salons, churches, apartment buildings, gas stations, supermarkets, nursing homes, construction sites and carnivals).
 - (e) Residential units with lawn and irrigation systems.
 - (f) Industrial, commercial, professional and business facilities which receive a building permit after the effective date of this chapter.
 - (g) Existing residential and nonresidential buildings containing an auxiliary water supply in a separate piping system (i.e., a well) with no known cross-connection to the municipal water supply system.
 - (h) Existing residential and nonresidential buildings containing an internal cross-connection of any type to the municipal water supply system.
- B. Nonhazardous facilities not requiring a cross-connection control device:
- (1) All residences, up to four units, except those containing an auxiliary water supply, an internal cross-connection to a municipal water supply system or a lawn irrigation system.
 - (2) All business, professional and commercial establishments, whose use of the municipal water supply system is restricted to drinking and toilet purposes for employees and customers, except those containing an auxiliary water supply, an internal cross-connection to a municipal water supply system or a lawn or irrigation system service or water meters.

- (3) The Water Superintendent or designee with the assistance of the engineer for the Town shall evaluate any facility which is not listed above, and make a determination as to the category and requirements for installation of a cross-connection protection device.
- C. Approval of cross-connection control devices. The Water Superintendent or designee with the assistance of the engineer for the Town shall have the responsibility for approving each cross-connection control device, on the basis of catalog or other professional information submitted to the Code Enforcement Officer. The installation of an air-gap separation device, RPZ or DCVA requires prior plan approval from the Orange County Health Department or the New York State Health Department prior to installation, and documentation of such approval shall be provided to the Code Enforcement Officer. The design and installation of an acceptable cross-connection control device hook-up must be in accordance with New York State laws and regulations.
- D. Testing requirement.
- (1) The testing of every cross-connection control device required shall be performed on initial installation and on an annual basis by a certified inspector, and the cost shall be borne by the owner of the premises. The tests shall be performed by a New York State certified tester on file with the Orange County Health Department.
 - (2) The owner shall send a certified copy of all test results to the Code Enforcement Officer. Residential dwellings of four units shall be exempt from this annual requirement, as are certain businesses under § **287-3B** above.
 - (3) Certifications of such tests, as well as records of repairs and overhaul of the devices, shall be maintained at the premises for a period of 10 years and shall be made available to the Code Enforcement Officer, as well as the Orange County and New York State Health Departments, upon request. In the case of nonresidential buildings which are subject to annual inspection by the Code Enforcement Officer, the Code Enforcement Officer shall check the certification of the cross-connection control device by a certified inspector.

§ 287-4. Water meters required.

[Amended 4-1-2020 by L.L. No. 2-2020]

- A. Permanent water service is to be rendered through a water meter only.
- B. In order that there is uniformity in make and design of the water meters used throughout the Town of New Windsor Consolidated Water District, and to afford the greatest efficiency in operation, billing and maintenance for same, all such meters are to be of a make and design that is approved by the Water Superintendent or the designee appointed by the Town Board to perform the duties and responsibilities of the Water Superintendent.
- C. All water meters are to be procured from the Town of New Windsor.
- D. All water meters shall be sealed by the Water Superintendent or the aforementioned designee, or their agent or representative. Any person or property owner who removes such seal shall be subject to penalty in accordance with § **287-34** below.
- E. Any person or property owner who does not permit the Town, or any representative acting on behalf of the Town, access to a water meter for it to be read, inspected, changed, modified, upgraded, altered, maintained or replaced, shall be subject to nonrefundable surcharges on their water bills in accordance with § **287-6F** below.

§ 287-5. Separate meters for separate units.

Each dwelling or building, or parts thereof having unrelated occupancy or distinctive use, shall at the option of the Water Superintendent have a separate meter.

§ 287-6. Maintenance, inspection, repair and replacement of meters and connections.

[Amended 5-5-2004 by L.L. No. 1-2004; 4-1-2020 by L.L. No. 2-2020]

- A. The Town, is responsible for the repair and replacement of all water meters up to and including one inch in size. All water meters over one inch in size are the responsibility of the property owner.
- B. Water service lines up to and including one inch in size are the responsibility of the Town for repairs up to the curb valve (but not including the curb valve). All property owners are responsible for the curb valve and service line to any building receiving service on their property.
- C. All property owners are responsible for the entire service line, up to the water main, for any services above one inch in diameter.
- D. After installation of a water meter of any size, no person shall make any attachment to or connection with any of the pipes or mains of the Consolidated Water District nor make any repairs, additions or alterations to the service piper, except on the consumer's side of the meter, unless such person is an employee of the Town, or a person or corporation authorized to do so by the Water Superintendent or designee appointed by the Town Board to perform the duties and responsibilities of the Water Superintendent.
- E. All water meters shall be kept accessible and free from obstruction at all times. Any reasonable request by the Town, or any representative of the Town, for access to a water meter in order to read, inspect, change, modify, upgrade, alter, maintain or replace same, must be granted by the property owner or anyone occupying the property. If the Town, or any representative of the Town, seeking such access to a water meter, is denied access or unable to obtain access due to it being inaccessible or obstructed, notice shall be provided to the owner of the property where the water meter is located advising that access must be provided. Notice shall be deemed effective upon the postmarked date said notice is placed in the mail after a copy of same is also affixed to the front door of the premises. Such mailing is to be made via certified mail, return receipt requested, to the address listed on the Town of New Windsor tax rolls. Within 10 calendar days from the effective date of such mailing, the property owner shall remedy, at the property owner's sole expense, whatever issue may be keeping the Town from gaining access to the water meter and notify the Town's Water Department that the issue has been resolved and an appointment can be made for the Town to perform whatever service is needed to the meter.
- F. If the owner of the property fails to comply with § **287-4E** above, or any notice provided in compliance with § **287-6E** above, a nonrefundable surcharge will be added to the property owner's water bill for the quarter of such noncompliance. Additional surcharges will be added to the property owner's water bill in subsequent quarters as well, until such time as the noncompliance ceases. These quarterly surcharges shall be in an amount fixed by resolution of the Town Board in its Standard Schedule of Fees. These surcharges may be in an amount up to two times the estimated water usage attributable to the subject water meter or property during the quarter of initial noncompliance and any subsequent quarter of noncompliance. Such surcharges may be waived by the Town Supervisor, for good cause shown. Failure to comply with this section shall be considered a violation of the provisions of this chapter and the property owner shall be subject to the provisions of §§ **287-31**, **287-32**, **287-33**, and **287-34** herein, and all other applicable laws.

§ 287-7. (Reserved)

[1] *Editor's Note: Former § 287-7, Repairs and subsequent connections, was repealed 4-1-2020 by L.L. No. 2-2020.*

§ 287-8. Service pipes; meter location; fittings.

- A. Service pipes shall be laid at least four feet below the surface of the ground at all points. The curb cock shall be installed between the right-of-way line and the edge of the road or curblineline. The meter shall be installed within the building to be served, as close as practicable to the point where the service pipe enters, unless otherwise permitted, and shall be set with the inlet and outlet in a horizontal line with the register on top and shall be so located as to be readily accessible at all times for reading, inspection or repair. A stop valve shall be provided within the building on the inlet side of the meter. Provision shall be made to prevent hot water from reaching the meter. No red or white lead or joint compound shall be used on joints between the main and the meter. No tee or other fitting through which water can be taken will be permitted on the service pipe between the main and the meter. Meters may be set outside of buildings in underground pits only by permission of the Water Superintendent at the expense of the property owner; and, in such cases, the construction of the pit and the method of setting the meter shall conform to directions which will be furnished by the Water Superintendent.
- B. All meters shall be installed with a remote reading device located so as to be readily accessible from the outside of the building or underground pit.

§ 287-9. Service boxes at grade; elevation changes.

- A. All curb boxes shall be maintained at grade, and any curb box projecting above grade or lower than grade shall be corrected to grade level by the property owner and, upon failure by such owner to do so after 30 days' notice to do so by the Water Superintendent, may be corrected by the Consolidated Water District, and the cost shall be borne by the property owner.
- B. After installations are made, no change in ground elevation above the service pipe on the consumer's side of the curb box or at the curb box shall be made without the written consent of the Water Superintendent; and in the event that such change in grade shall require the lowering of the service pipe or the raising or lowering of the curb box to grade, the cost shall be borne by the property owner. In the event that such change shall require that the water be shut off, a charge will be made and paid by the property owner to the Consolidated Water District for costs incurred.

§ 287-10. Fixtures kept in good repair.

Service pipes and meters and the appurtenances thereto shall be kept in good repair and protected from the frost by the consumer at his own expense.

§ 287-11. Stopcock.

A stopcock or waste cock shall be provided by each new water service within the building, so located that all piping on the consumer's side of the meter can be drained whenever necessary. The Consolidated Water District assumes no responsibility where installations do not comply with this section.

§ 287-12. Notification to shut off service.

In case a house or other building is to be closed or become vacant, notice thereof should be given the Water Superintendent in order that the meter may be read and curb cock closed. Where such notice is not given and pipes burst from freezing or other cause, the value of water lost by reason thereof, as metered or estimated by the Water Superintendent, together with the additional sum to cover labor and expense to the Consolidated Water District, shall be handled by a special billing by the Consolidated Water District.

§ 287-13. Closing of curb cock; inspection before reopening.

Where a new connection is made with street mains and where new extensions or attachments are made in unoccupied houses, the curb cock shall be closed by the person making the connection, extension or attachment. Notice of the completion of the work shall be given the Water Superintendent, and the curb cock shall not again be opened until the work has been inspected and approved by the Water Superintendent and the meter read. Pipes and connections between the main and meter shall not be covered until so inspected and approved.

§ 287-14. Owner's agreement; highway disturbances; revocation.

- A. Any person or corporation may make application to the Water Superintendent for the purposes set forth in § 287-5.
- B. All applications for permits shall include an agreement on the part of the owner that he will comply with these regulations, rules and ordinances and will pay to the Consolidated Water District all fees, penalties or other charges required hereby in consequence of the work undertaken. A charge per square foot for restoring the roads to their original condition by the Highway Superintendent will be included in the application fee. This charge shall be established by the Town Board and may be subject to change. The Water Superintendent may, in its discretion, grant or deny such application.

§ 287-15. Street and public place openings.

No street or public place shall be opened by any person for the purpose of making a connection with the mains or for the laying of water pipes or fixtures, unless permission shall have been granted pursuant to a road opening permit. Any installation made within the limits of a public street or highway shall be the property of the Consolidated Water District.

§ 287-16. Public protection in excavations.

Whenever any street or public place shall have been opened for the purpose of making a connection with the mains or for the laying of water pipes or fixtures, the applicant shall have proper regard for public safety and convenience and shall notify the Highway Superintendent when backfill is completed so that the applicant may restore the street or place to its original condition. Open trenches shall be backfilled at the end of each workday or otherwise secured and guarded with barricades and sufficient warning lights or flares shall be displayed at night by the applicant. The road must be kept open for traffic at all times during construction.

§ 287-17. Application for discontinuance.

Notice in writing delivered to the Water Superintendent office at least 10 days before the quarterly billing date shall be required in all cases of applications for discontinuance of water service. Otherwise, the consumer shall be liable for the minimum charge for the following quarter-year.

§ 287-18. Water for building construction.

When water is required for use in connection with building construction, application shall be made to the Water Superintendent. All applicants shall deposit such sum as the Water Superintendent shall deem sufficient to pay for water to be used. Such charges shall be paid in advance. Where, after installation and commencement of the use of water, in the opinion of the Water Superintendent, more water is used or will be used than is covered by the deposit, he may then require a further deposit, in default of which he may discontinue service when the amount of water charges and other Consolidated Water District charges equal the amount of the deposit.

§ 287-19. Water for other construction purposes.

Persons or corporations desiring to use water for construction purposes, other than mentioned in § 287-18, shall make application setting forth the name and address of the applicant, the object and purpose of the use of water and the quantity estimated to be needed and shall give such other information as the Water Superintendent shall require. If such application is granted, the supply of water shall be furnished as the Consolidated Water District shall allow and the charge shall be established by the Water Superintendent. A meter shall be furnished by the Consolidated Water District for the use of which a reasonable deposit will be required.

§ 287-20. Use of water to be for construction purposes only.

Except with the permission of the Water Superintendent, water for construction purposes shall not be taken from any service connection used for any other purpose whether or not on the same premises or from any main or hydrant.

§ 287-21. Use of fire hydrants.

- A. No person shall open, interfere with or draw water from any fire hydrant in the Consolidated Water District without permit from the district therefor, except that hydrants may be opened by or on the order of any member of a fire department or any fire commissioner or fire inspector within the Consolidated Water District.
- B. Whenever a hydrant has been opened and used, notification of such fact and an estimate of the quantity of water used shall be promptly given the Water Superintendent.
- C. No tools or implements shall be used to open hydrants, except such as are furnished by the Consolidated Water District or by a fire department operating within the Water District.

§ 287-22. Turning on water.

Where water has been turned off at the curb cock by the Water Superintendent, the water may only be turned on again by the Water Superintendent or designee.

§ 287-23. Boilers and hot-water tanks.

In all places where steam boilers or hot-water tanks are supplied with water from the water system, the owner must install a suitable safety valve, pressure reducing valve, vacuum valve or other proper device, to prevent damage from collapse or explosion when water is shut off. The Consolidated Water District shall not be liable for any damage resulting from sudden shutting off of the supply of water from any steam boiler or other fixture deriving its supply from the water system.

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I).*

§ 287-24. Specifications.

- A. Service pipes and fittings, corporation cocks, curb cocks, curb boxes, meters, meter settings and backflow prevention devices shall conform to such standards and shall be of such make and type and shall be of such size as the Water Superintendent or designee deems proper. Service pipes from the street main to the meter, less than two inches in diameter, shall be of pure, seamless, soft-

tempered K copper tubing with compression bronze fittings. Tubing shall be of the following thickness:^[1]

Nominal Pipe Size	Outside Diameter Of Tubing	Gauge (B.W.G.)
3/4 inch	7/8 inch	16

[1] *Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I).*

- B. On all new applications, meters shall be equipped with remote readers by the Water Department.
- C. See also Chapter **142**, Fire Prevention, § **142-12**, Fire hydrants; water main lines.

§ 287-25. Minimum charge.

Subject to change, a Standard Schedule of Fees shall be established by the Town Board.^[1]

[1] *Editor's Note: See Ch. 137, Fees.*

§ 287-26. Bills.

[Amended 4-1-2020 by L.L. No. 2-2020]

Bills for water services shall become due and payable to the District, at such place and to such person as designated by the Town Board, and shall be rendered for such billing periods as the Receiver of Taxes shall designate. If bills are not paid within 30 days after the billing date designated by the Receiver of Taxes, a penalty of 10% will be added and the water service to the real property upon which the water is used may be cut off by order of the Water Superintendent, or designee, and the Town Supervisor upon 30 days' written notice to the property owner of record in the office of the Town Assessor.

§ 287-27. Charges for connecting, fittings and damages.

- A. The corporation cock, curb cock and box and service pipe from the street main to a point between the street right-of-way and edge of road or curb line shall be installed by the owner. It is the responsibility of the property owner to provide and pay for all work done and material shed in the completion of the service-connection line from the curb cock to the meter placed on the service line. The service pipes and fittings and the meter settings shall be of a make, size and pattern determined by the Water Superintendent, with the installation of all of these items to be made under these rules, regulations and ordinances and under the direction of the Water Superintendent.
- B. After an application for service has been approved by the Water Superintendent; the permit to open the road obtained from the Highway Superintendent or Town Clerk, as applicable, and the installation charge or deposit remitted by the applicant; and appropriate liability insurance procured as established by the Highway Superintendent and Attorney for the Town, the property owner may excavate the trench to his property line and may, under the supervision of the Water Superintendent or his designee, install and complete the line to the meter.
- C. Any damage to service pipes or water mains resulting from excavation or the backfill shall be paid for by the property owner. In the event that the road is paved, the cost of replacing the pavement will be included in the original installation charge and the work done by the owner. Such road shall remain open for traffic at all times.

§ 287-28. Connections to out-of-Town water systems.

The Consolidated Water District of the Town of New Windsor is the municipal water supplier for lands in the Town of New Windsor. No lands in the Town of New Windsor shall be connected to any out-of-Town water system, municipal or private, without the approval of the Town Board by resolution. When water service becomes available to such lands via the Consolidated Water District, then such lands may be ordered to disconnect from the out-of-Town supplier and ordered to connect to the Consolidated Water District, on the order of the Water Superintendent and at the expense of the owner.

§ 287-29. Right to enter premises.

The Water Superintendent or his authorized agents shall have full power to enter the premises of any consumer, at all reasonable hours and on reasonable notice, if practicable, to read meter or to examine fixtures, plumbing and manner of using water.

§ 287-30. Nonliability for damages.

The Consolidated Water District or Town of New Windsor shall not be liable for any damage or loss of any name or kind to property or persons which may arise from or be caused by any change, diminution in or increase of the water pressure from any cause whatsoever.

§ 287-31. Right to shut off and limit supply.

The Consolidated Water District reserves the right to limit the amount of water furnished to any consumer should circumstances warrant such action; or the Consolidated Water District may entirely shut off the water supply used for any manufacturing purposes; or the Water Superintendent may direct the nonuse of the water supply for lawn sprinkling or pool filling at any time by giving reasonable notice by publication or personal service of a notice to the owner or water user.

§ 287-32. Shut off of water for violations.

[Amended 4-1-2020 by L.L. No. 2-2020]

Whenever any of the provisions of this chapter are violated, the water supply may, in the discretion of the Water Superintendent or designee appointed by the Town Board to perform the duties and responsibilities of the Water Superintendent, be shut off and the meter removed.

§ 287-33. Rents, charges and penalties to be lien.

[Amended 4-1-2020 by L.L. No. 2-2020]

Unpaid water rents, charges, surcharges and penalties thereon shall be a lien upon the real property upon which the water is used, and added to the taxes.

§ 287-34. Penalties for offenses.

[Amended 5-5-2004 by L.L. No. 1-2004]

Each violation of any of the provisions of this chapter shall constitute a misdemeanor and shall be punishable by a fine not less than \$250 and not more than \$1,000 or by imprisonment not exceeding one year, or both, for each offense. Each day of a continuous violation shall be considered a separate offense. A director, officer, agent or employee of any corporation found guilty of violating any of the foregoing sections shall be subject to the penalties prescribed herein.

§ 287-35. Water rate schedule.

The Town Board shall establish meter rates, fire protection and hydrant installation and maintenance rates, water consumption rates and any other applicable rates annually or from time to time by resolution or local law filed in the Town Clerk's office.

§ 287-36. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

AIR-GAP SEPARATION

A physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, and in no case less than one inch.

AUXILIARY WATER SUPPLY

Any water supply on or available to the building premises other than the municipal water supply.

CERTIFIED BACKFLOW PREVENTION DEVICE TESTER

A person who presents proof of satisfactory completion of a training course for tests of backflow devices which has been approved by the New York State Department of Health.

DOUBLE-CHECK VALVE ASSEMBLY

An assembly of at least two independently acting check valves, including tightly closing shutoff valves on each side of the check valve assembly, and suitable leak detector drains, plus connections available for testing the water tightness of each check valve. The check valve shall be designed to seat readily and completely. It must be carefully machined to have free moving parts and assured watertightness. The face of the closure element and valve seat must be bronze composition or other noncorrodible material which will seat tightly under all prevailing conditions of field use. Pins and bushings shall be of bronze or other noncorrodible, nonsticking material, machined for easy, dependable operation. The closure element, e.g. clapper, shall be internally weighted or otherwise, internally equipped to promote rapid and positive closure in all sizes where this feature is obtainable.

MUNICIPAL WATER SUPPLY SYSTEM

The Town of New Windsor water supply system which is also known as the "New Windsor Consolidated Water District."

REDUCED-PRESSURE ZONE (RPZ) DEVICE

A minimum of two independently acting check valves, together with an automatically operated pressure differential relief valve located between the two check valves. During normal flow and at the cessation of normal flow, the pressure between these two checks shall be less than the upstream (supply) pressure. In case of leakage of either check valve, the differential relief valve, by discharging to the atmosphere, shall operate to maintain the pressure between the checks at less than the supply pressure. The unit must include tightly closing shutoff valves located at each end of the device, and each device shall be fitted with properly located test cocks.

WATER USER

The owner or tenant of the building or premises which draws the water from the municipal water supply system.

§ 287-37. Water conservation.

[Added 5-8-2013 by L.L. No. 1-2013]

- A. Purpose. The intent of this section is to restrict the wasteful, inefficient or nonessential use of water, especially during periods of shortage or reduced access to water from the New York City Catskill and/or Delaware Aqueduct(s), to provide measures for increasing public awareness of the need to

conserve water not only during such shortages but at all times, to establish penalties for violations and to provide for enforcement of water conservation measures in Town of New Windsor for the protection of the health, safety and welfare of the people of the Town.

B. Applicability. In the event of a water shortage or reduced access to water as declared by the Town Supervisor of the Town of New Windsor, the following regulations shall be in effect.

(1) Stage I.

(a) No person or entity shall cause, permit or allow:

- [1] The continuing of any leak or waste from any water pipe, valve, faucet, conduit, equipment, facility or device connected to the water system, or which utilizes water on or in any premises owned, leased, managed, operated or controlled by such person or entity.
- [2] The washing of any vehicle by means of a hose, fire hydrant or other active source connected to the water system, except a commercial vehicle washing operation if equipment has been installed and is utilized so that at least 50% of the water used is recirculated.
- [3] The washing of any street, sidewalk, driveway, outdoor area, outdoor steps, building exterior or other structure by means of a hose, fire hydrant or other active source connected to the water system or which utilizes water.
- [4] The use of nonrecirculated water from any source for any ornamental purpose, including but not limited to, use in fountains, artificial waterfalls, reflecting pools, lakes and ponds.
- [5] The use of water from the water system to water any lawn, ornamental shrub, plant or tree, except that:
 - [a] Water may be used to water any vegetable garden from 4:00 a.m. to 5:00 a.m. and from 9:00 p.m. to 10:00 p.m.
 - [b] Water may be used at any time to irrigate, from a handheld container, vegetables or fruits grown for human consumption.
 - [c] Plant nurseries and other commercial users engaged in the business of growing, distributing or selling plants, fruits or vegetables may use such water on their business premises for watering ornamental shrubs, plants or trees or for watering fruits or vegetables grown for commercial purposes, provided that each such user reduces its use of water by 15% or such other percentage as may hereafter be prescribed for nonresidential water users.
- [6] The opening or use of any fire hydrant, or the water therefrom, for any purpose other than actual fire protection, except in accordance with a permit obtained from the Town Supervisor and only for the period of and the purpose authorized by such permit and in strict adherence to all terms and conditions set forth therein.
- [7] The use of water from the water system to fill any swimming pool, but may be used to maintain the level in any swimming pool.
- [8] Automatically serving water to patrons in restaurants.
- [9] Watering of golf courses, except for greens, tees and aprons or ground under repair.

(b) Each nonresidential user of water from the Town of New Windsor Consolidated Water District shall prepare and retain a water consumption reduction plan, enabling it to reduce its use of water in stages of 15%, 20% and 25% based upon its water consumption during the calendar year. Such plans shall be designed so as to achieve and maintain the 15% reduction promptly and to achieve the 20% and 25% reduction immediately upon the

declaration of a Stage II and Stage III emergency, respectively. Each such user shall promptly implement the first phase of its plan during Stage I and shall reduce its consumption by 15%. On and after 30 days from the effective date of this regulation, each such user shall have its water consumption reduction plan in place and available for review by the Town upon request.

- (2) Stage II. If at any time the Supervisor of the Town of New Windsor determines that the measures set forth under Stage I of this regulation have not resulted in a sufficient level of conservation in light of existing water supply conditions, a Stage II emergency shall be declared. Upon declaration of a Stage II emergency, in addition to the measures set forth in Stage I:
 - (a) No person or entity shall cause, permit or allow the use of water from the water system to maintain the level in any swimming pool, to water any lawn, ornamental shrub or plant, except that water may be used to irrigate, from a handheld container only, vegetables or fruits grown for human consumption.
 - (b) Each nonresidential user of water from the water system shall fully implement its Stage II water consumption reduction plan and shall immediately reduce its use of water by no less than 20%.
- (3) Stage III. If, after the imposition of the measures set forth in Stage II of this regulation, the Supervisor of the Town of New Windsor finds that the water consumption must be further reduced, a Stage III emergency shall be declared. Upon declaration of a Stage III emergency, in addition to the measures set forth hereinabove:
 - (a) All nonresidential users of water from the water system shall fully implement their Stage III water consumption reduction plan and shall reduce consumption by no less than 25%.

§ 287-38. Lawn sprinklers.

[Added 5-8-2013 by L.L. No. 1-2013]

- A. Definitions. For the purposes of this section, the following terms, phrases, words and their derivations shall have the meaning herein:

PERSON

Any person, agent, firm, partnership, association, corporation, company or organization of any kind.

WATER

Water from the Town of New Windsor water supply system.

- B. Applicability. The provisions of this section shall apply to all persons using water from the Town of New Windsor water supply system in the Town of New Windsor Consolidated Water District.
- C. Permit required.
- (1) A permit shall be obtained prior to the installation of any new underground lawn sprinkler system or the alteration or addition to an existing underground lawn sprinkler system. A permit shall be obtained by filing an application and plan with the Town Code Enforcement Officer and paying the appropriate fee as established in the Town of New Windsor Standard Schedule of Fees. The data submitted with the application shall include:
 - (a) One copy of the site plan showing details of the layout of the sprinkler system, including all zones, designating individual zones by number and showing each zone within a dashed-line enclosure.

- (b) A table showing the sprinkler heads and flow capacity for each zone, and including manufacturer's catalog number for each head and attaching a copy of the manufacturer's catalog sheet showing the flow characteristics of each head.

D. Standards.

- (1) All underground lawn sprinkler systems shall be automatically controlled systems, equipped with electrically operated time-clock-actuated valves with a rain and soil moisture sensor designed to shut off the sprinkler system during periods of inclement weather and when the soil is already moist.
- (2) The maximum size water supply line to the underground sprinkler system shall be limited to one inch in diameter.
- (3) The maximum flow rate to any underground sprinkler system shall not exceed 30 gallons per minute. The maximum number of zones permitted shall be eight.
- (4) If separately metered, each underground sprinkler system shall be equipped with a curb stop shut off valve, water meter and double-check valve backflow preventer. All materials shall meet the standards used or specified by the Town Code Enforcement Officers. The double-check valve assembly shall be a unit approved by the New York State Department of Health.
- (5) The Town assumes no responsibility for water pressure on the premises when the supply to the sprinkler system is connected to the house service line. Any form of temporary connection of underground lawn sprinkler systems to any part of the domestic water supply is prohibited. Any attempt to bypass the sprinkler system water service line, water meter or backflow preventer is a violation of New York State Health Department regulations. Violations will be reported to the County Health Department and the service line to the lawn sprinkler system will be disconnected permanently.

E. Lawn sprinkling.

- (1) During the hours of 10:00 a.m. to 4:00 p.m., no person shall water, hose, sprinkle or otherwise irrigate any outdoor lawn, field, garden, hedge or shrub in the Town of New Windsor, except in accordance with the following:
 - (a) Persons occupying residences or other establishments with even-numbered addresses may water, hose, sprinkle or otherwise irrigate other than during the above hours on even-numbered days of the month.
 - (b) Persons occupying residences or other establishments with odd-numbered addresses may water, hose, sprinkle or otherwise irrigate other than during the above hours on odd-numbered days of the month.
 - (c) Persons occupying residences or other establishments without numbered addresses may water, hose, sprinkle or otherwise irrigate other than during the above hours on even-numbered days of the month.
 - (d) Nothing in this section shall be construed to limit, restrict or prohibit, irrigation of any sort which is done by means of water obtained from sources other than the Town of New Windsor's municipal water supply system.

F. Sensors required.

- (1) As of June 1, 2013, no person shall use a sprinkler system in the Town with any type of device which automatically turns the system on and/or off unless the sprinkler system is controlled by a properly working rain or soil moisture sensor capable of interrupting the operation of the sprinkler system when watering, as determined by the sensor, is not required by virtue of rain or soil moisture, in accordance with the following criteria:
 - (a) The rain sensor shall be of a type capable of detecting a minimum of 1/8 inch of rainfall and automatically interrupting and preventing the sprinkler system from operating. It shall

further be capable of allowing the rainfall to evaporate and, when sufficient evaporation has occurred, to automatically rest and allow continuation of normal sprinkling in accordance with the programmed schedule.

G. Use of time clocks; automatic sprinkler system without rain or soil moisture sensor.

(1) All automatic underground lawn sprinkler systems equipped with time clock electrically operated valves shall be of a type approved by the Town. Such sprinklers shall only be permitted if the sprinkler system is equipped with a properly working rain or soil moisture sensor, and used only on days and during the hours established by the Town. Violations shall be subject to the following warnings or penalties:

(a) First violation: warning.

(b) Any additional violation: for any and every additional violation of the provisions of this section, the owner or his general agent or contractor of a building or premises where such violation has been committed or shall exist and the lessee or tenant of premises where such violation has been committed or shall exist and any person who commits, takes part or assists in such violation or maintains any premises upon which such violation shall exist shall, for each and every violation, be subject to the penalty provisions contained in § **287-34** of this chapter.

H. Hardship exceptions. Upon prior written application, the Town Code Enforcement Officer is authorized to grant a special exception from the limitations of this section of the Water Law for water users who demonstrate a hardship.

I. Change or limitation of sprinkling hours. Nothing herein contained is intended to prohibit the Town Supervisor from changing or otherwise limiting sprinkler hours in case of emergency or to meet the demands for water for other domestic use.

§ 287-39. Testing of water meters.

[Added 5-8-2013 by L.L. No. 1-2013]

A. Requirement and frequency of testing. To ensure reliable meter measurements and proper meter calibration, each property owner with a water meter service of more than one inch must periodically test the meter pursuant to the testing interval set forth below. All such water meters shall be tested by an independent testing service, and calibrated or replaced in order to ensure proper and accurate water meter operation.

[Amended 4-1-2020 by L.L. No. 2-2020]

Meter Size (inches)	Required Testing Interval
1.5	Every 5 years
2	Every 4 years
3	Every 3 years
4	Every 2 years
6	Every year
8	Every year

B. Records of water meter testing. Proof of testing and any corrective action as required in § **287-39A**, and a certified report of the results demonstrating the accuracy of the meter, shall be maintained by the property owner on the premises, and such records shall be made available for review and inspection by the Water Department.

- C. Violations. It shall be a violation, punishable as provided in § **287-34**, for an owner to fail to comply with the requirements of this section.