

AGENDA
PORTLAND WATER DISTRICT

225 Douglass Street, Portland, Maine

Jeff P. Nixon Training Center

6:00 p.m. on Monday, October 27, 2025

<https://us06web.zoom.us/j/82561198197?pwd=fL3byc0yD5aK9aKD7Y8fChTyp8qwQb.1>

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| 1. | <u>Convene Meeting</u> with Pledge of Allegiance and moment of silence. | President Lunt |
| 2. | <u>Roll Call</u> | Clerk |
| 3a. | <u>Acceptance of Minutes</u> of the Regular Meeting of September 29, 2025 | President Lunt |
| 3b. | <u>Acceptance of Minutes</u> of the Workshop Meeting of October 14, 2025 | President Lunt |
| 4. | <u>Invitation for Public Comment</u> | President Lunt |
| 5. | <u>Reports:</u> | |
| | ▪ Operations Committee Report | Trustee Crockett |
| | ▪ Planning Committee Report | Trustee Shaughnessy |
| | ▪ Administration & Finance Committee Report | Trustee Levinsky |
| | ▪ General Manager's Report | General Manager |
| 6. | <u>New Business</u> | |
| | A. Order 25-024 amending the 2025 Capitol Improvement Plan to include an additional project (Douglass Street Facility 3 rd Floor Room 2025-3327). | Operations Committee |
| | B. Order 25-025 approving the revised Cross Connection Control Program, with an effective date of January 1, 2026. | Operations Committee |
| | C. Order 25-026 authorizing the General Manager to execute a Memorandum of Agreement with the Town of Windham, related to the Windham School Conveyance System. | Planning Committee |
| 7. | <u>Other Business</u> An item may be added to this agenda provided seven trustees vote to waive the rule regarding agendas. | President Lunt |
| 8. | <u>Second Invitation for Public Comment</u> | President Lunt |
| 9. | <u>Trustee Comments</u> | President Lunt |
| 10. | <u>Executive Session</u> A motion may be made to go into Executive Session at any time during the meeting to discuss, pursuant to 1 M.R.S. §405(6)(A) personnel, 1 M.R.S. §405(6)(C) real estate, 1 M.R.S. §405 (6)(D) labor negotiations, or 1 M.R.S. §405(6)(E) legal matters. | President Lunt |
| 11. | <u>Adjournment</u> | President Lunt |

Donna M. Katsiaficas
Clerk

Portland Water District
Board of Trustees Regular Meeting
October 27, 2025

New Business

Agenda Item 6A-6C

BOARD OF TRUSTEES/AGENDA ITEM SUMMARY

Agenda Item: 6A Order 25-024
Date of Meeting: October 27, 2025
Subject: Douglass Street Facility 3rd Floor Roof Replacement
Presented By: Kyle Jacobson, Senior Project Manager

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, that the 2025 Capital Improvement Plan is amended to include an additional project (Douglass Street Facility 3rd Floor Roof 2025-3327) ("Project") and to fund the Project for a sum not to exceed \$485,000 related to the construction of the third-floor roof, and that the General Manager and the Treasurer, each acting singly, are authorized to take such other steps as may be necessary to accomplish the intent of this vote;

BE IT FURTHER ORDERED, that the General Manager is authorized to execute a construction contract with Garland/DBS, Inc. in the amount of \$433,259 for the replacement of the Douglass Street Facility 3rd Floor Roof.

BACKGROUND

In 2017, staff hired repair services to install an overlay roofing product on the 3rd Floor Roof, following a leak identified in 2015. The repair was expected to last 10 years. However, in 2024 and early 2025, the roof began leaking again in the same locations, indicating that the 2017 repair had started to fail. Staff included the project in the 2026 CIP planning discussions.

With the office area below currently vacant due to ongoing HVAC and office upgrade projects, staff believe this is an ideal time to replace the roof and minimize future disruptions. Additionally, because the leaks in 2025 already caused damage, any new leaks could harm the newly installed HVAC and office materials.

Considering these factors, staff recommends replacing the roof before winter, accelerating the planned project by a few months. To fund the work without increasing long-term costs, staff has reallocated money from several under-budget projects and moved some planned expenses forward.

FISCAL REVIEW/FUNDING

Staff planned and listed this project on the 2026 CIP, and with this set of Board orders, we will move it forward into the 2025 CIP. The project will be bond-financed. The operating fund impact is the estimated debt service on the bond of \$33,250. This cost is allocated to all water and wastewater funds.

LEGAL REVIEW

Corporation Counsel has reviewed the proposed motion and approved it as to form.

CONCLUSION(S)

Staff recommends that the Project be added to the 2025 CIP to facilitate construction prior to winter. The Committee recommends that it be forwarded to the full Board for consideration.

ATTACHMENT(S)

None.

BOARD OF TRUSTEES/AGENDA ITEM SUMMARY

Agenda Item: 6B Order 25-025
Date of Meeting: October 27, 2025
Subject: Update Cross Connection Control Program
Presented By: James Wallace, Director of Water Services

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, that the revised Cross Connection Control Program attached hereto is approved, with an effective date of January 1, 2026.

BACKGROUND

The State of Maine requires all public drinking water suppliers to maintain a Cross Connection Control Program. The program prevents the contamination of drinking water by the backflow of water or other liquids, mixtures, or substances into the distribution pipes of a water supply system from an unintended source.

This is a minor revision of the program. The proposed changes primarily clarify language and refer to new backflow testing software.

Staff will communicate these changes to testers, plumbing professionals, and municipal partners and update the program documents on pwd.org. The changes will then go into effect on January 1, 2026.

Project #: N/A

FISCAL REVIEW / FUNDING

The District will initiate some outreach and education relative to this update; however, these are not expected to require additional funding.

LEGAL REVIEW

Corporation Counsel has reviewed the proposed motion and approved it as to form.

CONCLUSION(S)

Staff recommends the proposed changes to the Cross Connection Control Program. The Committee recommends that it be forwarded to the full Board for consideration.

ATTACHMENT(S)

Updated Program Document

PORTLAND WATER DISTRICT



CROSS-CONNECTION CONTROL PROGRAM

CREATED 1989
REVISED MAY, 2006
REVISED SEPTEMBER, 2009
REVISED AUGUST 2015
REVISED JUNE 2017
REVISED JAN 2019
REVISED JUL 2021
REVISED OCT 2025

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**Portland Water District
Cross-Connection Control Program**

I. PURPOSE & SCOPE

- A. To protect the public water system of the Portland Water District (District), from the possibility of contamination or pollution by cross-connections. The primary method for protection of the public water system will be the installation of an approved backflow preventer at the water service entrance to the Owner's premises.
- B. To promote the elimination or control of actual or potential cross-connections between the District's public water system and the Owner's private water system.
- C. To provide for a continuing program of cross-connection control, which will effectively prevent the contamination or pollution of the public water system by cross-connection.

II. AUTHORITY

- A. This program derives its enforceability from the Federal Safe Drinking Water Act of 1974, and the statutes of the State of Maine, 22 M.R.S.A. §§ 42(1), 42(3), 2612(2) & 2612(5) Maine Department of Health and Human Services, Division of Environmental Health, Cross-Connection Rules 10-144.
- B. In addition, authority rises from the Rules and Regulations as adopted by the Portland Water District and as approved by the Public Utilities Commission of the State of Maine, from provisions of the Occupational Safety and Health Act, and from provisions of the Maine State Internal Plumbing Code as administered by the Department of Professional and Financial Regulation 02-395 CMR 4.

III. RESPONSIBILITIES

~~The Portland Water District's mission is to protect public health, safety, and the environment by providing our customers first-class water, wastewater, and related services. If, in the judgment of the Director of Water Services, an approved backflow preventer is required at the water service entrance to any Owner's premises to prevent backflow into the public water system, the Director, or his delegated agent, shall give notice to the Owner to install an approved backflow preventer. It shall be the responsibility of the Owner to comply with all provisions of the Cross-Connection Control Program of the District including the installation and maintenance of approved backflow preventers. Failure or refusal to install and maintain such devices, or allow access for inspection, shall constitute grounds for discontinuance of water service to the premises until such devices have been properly installed to the satisfaction of the District.~~

- ~~A. The Portland Water District's mission is to protect public health, safety, and the environment by providing our customers first-class water, wastewater, and related services.~~
- ~~B. If, in the judgement of the Director Water Services, an approved backflow preventer is required at the water service entrance to any Owner's premises to prevent backflow into the public water system, the Director, or his delegated agent, shall give notice to the Owner to install an approved backflow preventer.~~
- ~~C. It shall be the responsibility of the Owner to comply with all provisions of the Cross-Connection Control Program of the District including the installation and maintenance of approved backflow preventers. Failure or refusal to install and maintain such devices, or allow access for inspection, shall constitute grounds for discontinuance of water service~~

to the premises until such devices have been properly installed to the satisfaction of the District.

D. Interpretation of the District's Cross Connection Rules is at the discretion of the Director of Water Services.

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IV. DEFINITIONS

Approved

Accepted by the District as meeting the applicable specification or procedures as stated or cited in these regulations.

Approved Source

A source of potable water approved by the District for distribution to the public for consumptive purposes following a required and approved treatment process.

Auxiliary Water Supply

Any water supply other than the District's approved source, on or available to the Owner's premises and used for consumptive and/or other purposes.

Backflow

The undesirable reversal of flow of water or other foreign liquids, gases or other substances, under positive or reduced pressure, into the District's public water system from any source.

Backflow Preventer

A backflow protection device or means designed to prevent backpressure or backsiphonage. Examples of which are contained herein (testable and atmospheric devices are not approved for submerged applications, i.e. meter pits):

Air Gap Separation

A physical separation of at least two (2) pipe diameters, but not less than one inch, to prevent backflow between the free-flowing discharge end of the public water system and any other system. An air gap may be easily defeated if the proper gap distance is not maintained, thus requiring frequent inspections to verify backflow protection is achieved.

Atmospheric Vacuum Breaker (AVB)

A device that prevents backsiphonage by creating an atmospheric vent where there is either a negative pressure or sub-atmospheric pressure in a water system. Atmospheric vacuum breakers are among the simplest and least expensive mechanical means of backflow protection. Not an acceptable containment device.

Double Check Valve Assembly (Testable DCVA)

A device having two (2) independently operating spring-loaded check valves, with shutoff valves and test cocks for regular testing. They may be used under continuous pressure to protect against both backpressure and backsiphonage.

Dual Check Valve Assembly (Non-testable Dual Check)

A device containing two (2) independently acting spring loaded check valves without test cocks. It is used primarily on residential services and is not subject to periodic testing.

Hose Bibb Vacuum Breaker (HBVB)

A device that is permanently attached to a hose bibb and which acts as an atmospheric vacuum breaker (AVB). Not an acceptable containment device.

Reduced Pressure Principle Backflow Preventer (Testable RPZ)

An assembly consisting of two (2) independently operating spring-loaded check valves with an automatically operating differential relief valve located between the two check valves. Includes tightly closing shut off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and the relief valve.

Backflow Testing Software

Software for certified testers to submit backflow test results to the District. Refer to pwd.org for the current software.

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Backpressure

A condition in which the Owner's water system pressure is greater than the District's water system pressure at the service entrance. This condition can force hazardous substances into the public water system.

Backsiphonage

Backflow resulting from negative or less than atmospheric pressure in the District's public water system. This reduced pressure will allow water to flow opposite the normal direction of flow, potentially introducing hazardous substances into the public water system.

Certified Tester of Backflow Prevention Devices~~Certified Backflow Prevention Device Tester~~

A person certified by New England Water Works Association (NEWWA), the American Backflow Prevention Association (ABPA), or the American Society of Safety Engineers (ASSE) as having completed necessary training in the testing of backflow devices.

Containment

A method of backflow prevention that requires a PWD approved backflow preventer at the water service entrance to prevent backflow of hazardous substances from an Owner's premises into the District's public water system. Protection by containment protects the District's public water system and is in no way meant to protect the premises from internal cross-connections that may be present.

Containment Device

An approved backflow preventer installed at the service entrance, immediately down-stream of any required District water meter and prior to any branch in the private piping.

Contaminant

A substance that will impair the quality of the water to a degree that it creates a contamination hazard to the public leading to poisoning or the spread of disease, by sewage or waste.

Cross-Connection

Any physical or potential connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other water or other substances of unknown or questionable safety, whereby water or other substances may flow from one

system to the other. The direction of flow depends on the pressure differential between the two systems.

Cross-Connection Control Program

The administrative and technical procedures the District implements to protect the public water system from contamination via cross connections.

Department

State of Maine Department of Health and Human Services Drinking Water Program.

District

The Portland Water District.

Director of Water Services

The Director, or his delegated representative in charge of the Portland Water District water services, invested with the authority and responsibility for the implementation of the Cross-Connection Control Program and for the enforcement of the provisions herein.

Fixture Isolation

A method of backflow protection in which a backflow preventer is located at or near the potential source of hazard, which is generally a plumbing fixture, to correct an internal cross-connection within an Owner's premises.

Owner

Any person who has legal title to or license to operate or inhabit a property served by the District's public water system through a service connection.

Person

Any individual, partnership, company, public or private corporation, political subdivision or agency of the State, department, agency or instrumentality of the United States or any other legal entity.

Plumbing System

A system of pipes, valves, and appurtenances used to convey water for a wide range of applications.

Pollutant

A foreign substance that, if permitted to get into the public water system, will degrade its quality so as to constitute a pollution hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such water for domestic use.

Potable Water

An approved water, free from impurities present in any amount sufficient to cause disease or harmful physiological effects. Its physical, chemical, bacteriological and radiological quality conforms to the Maine Safe Drinking Water Regulations or any regulations pertaining thereto.

Premises

Any house or building, together with its land and structures, occupied as a residence or business

Private Water system

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Any privately owned plumbing system that begins at the point of delivery from the public water system and is located within the property lines of the Owner's premises, containing all water piping, fixtures, devices, fittings and connections.

Public Water System

Any publicly owned plumbing system through which potable water is sold, furnished or distributed to the public for human consumption and which is under the control of the District. The system shall not include any portion of a private water system owned and maintained by the Owner.

Substantial Renovation

Renovations in which all, or substantially all, of a building or a buildings plumbing system is removed, replaced, or expanded. Renovations need not involve major structural changes to be considered substantial by the District.

Water Service Entrance

The point of potable water delivery to the Owner's premises, which is beyond the control of the District and is first readily accessible for connections. This will ordinarily be at the point where the water service enters the building and always before an unprotected connection.

V. ADMINISTRATION

- A. The District will operate the Cross-Connection Control Program, to include the keeping of necessary records to fulfill Department requirements.
- B. The District will protect the public water system through containment; it is the responsibility of the Owner to control water quality on the premises beyond the District prescribed backflow preventer.
- C. The District shall review the Cross-Connection Control Program at least every five (5) years. Updates shall be made as needed and communicated to the public.
- D. The Owner shall follow the provisions of the District's Cross-Connection Control Program.
- E. The Owner shall ensure the proper operation and maintenance of a backflow preventer and the registration and testing as required by the Maine State Internal Plumbing Code.
- F. The ~~Owner~~ **Certified Tester** shall provide access upon request during normal working hours to the premises for any representative of the District, Department, or any other state or federal agency authorized to do so for the express purpose of inspecting cross-connections and/or backflow preventers.
- G. The Owner shall provide copies to the District of any plans, drawings, reports or specifications relating to the private water system.

VI. REQUIREMENTS

- A. All water service connections to the District's public water system, including connections provided specifically for fire suppression systems shall be evaluated by the District for cross-connection potential and assigned a degree of hazard. The District shall not allow an unprotected cross-connection at any point within its public water system.
- B. Cross-connections shall be protected from backflow, under any backpressure or backsiphonage condition, by the use of backflow preventers, assemblies, and methods specified in the Maine State Internal Plumbing Code at 02-395 CMR 4.
- C. The Owner shall install only backflow preventers of type and manner approved by the District. The Owner agrees to bear all costs for the installation, testing, repair, maintenance and replacement of the backflow preventer.

July 1, 2021

- D. The Owner shall not install a by-pass around any backflow preventer unless there is the same type of backflow preventer on the bypass. The Owner shall not make a connection to the water service line prior to any backflow preventer.
- E. The Owner shall inform the District of any new or modified cross-connections within the premises, also any existing cross-connection that the Owner is aware of but has not yet been discovered by the District. The Owner agrees to obtain approval from the District for all changes in water use and shall comply with any additional requirements imposed by the District for cross-connection control.
- F. The Owner shall be responsible for submitting the following to the District: Backflow preventer test results; the name and certification of the certified backflow device tester; the nature of device test failures if any; and the status of necessary repairs.
- ~~G.~~ The Owner shall correct any malfunction of the backflow preventer, which is revealed by regular testing or discovered by PWD. This shall include the replacement of any parts or the replacement of the backflow preventer in whole, if deemed necessary by the District.

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- H. The District may allow re-establishment of service before the repair or replacement of a backflow preventer when the District determines that no immediate threat to the public exists, and after an agreement has been made between the District and the Owner indicating the intention of the Owner to comply with the provisions of these rules. A confirmed purchase order and installation date shall be evidence of good intention to comply by the Owner.
- I. Any Owner having an auxiliary water supply available for use must receive permission from the District for any proposed connection to the public water system. The District may deny permission to connect to the public water system while an auxiliary water supply is present. If a connection is approved, the Owner will be required to install a backflow preventer at the water service entrance from the public water supply if the auxiliary water supply is maintained by the Owner, regardless of an identified cross-connection to the District's system.
- J. Effective the date of the acceptance of this Cross-Connection Control Program revision, all new residential buildings and substantial renovations (determined by the District), ~~and activations of year round water service that require a meter installation~~ will be required to install at a minimum a non-testable Dual Check Valve Assembly backflow preventer immediately downstream of the water meter. Installation of the dual check valve assembly results in a potential closed loop system within the premises. The Owner shall make provisions to provide for thermal expansion within this closed loop system, i.e. the installation of thermal expansion devices and/or pressure relief valves and surge tanks.
- K. When multiple buildings within a development are served with a single domestic water service, or a combined fire and domestic water service line, a single backflow preventer shall be installed immediately after the meter to serve the site. See Appendix B for pictorial representation of requirement.
- L. When a meter is installed in a meter pit or enclosure on the site (outside of the house or building being served), the backflow preventer shall be installed immediately after the meter, which will result in a non-testable device being installed within the meter pit or a testable device installed in an above grade enclosure; testable devices are not approved for subsurface installation. Testable backflow preventers installed in an above grade enclosure shall be protected from damage and frost and shall be equipped with proper drainage and power as necessary. See Appendix B for pictorial representation of requirement.

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- M. At the discretion of the District, water service may be terminated if the District determines at any time that a threat to the public health exists, regardless of the status of the installed backflow preventer.
- N. The Owner agrees to indemnify and hold harmless the District from any damages that arise from an unprotected or inadequately protected cross-connection within the Owner's premises.
- O. Backflow protection for multi-family residential shall be based on the size (at the tap) of the domestic service line supplying water to the site. For domestic services of 2" diameter and less, a non-testable dual check valve assembly is acceptable. For domestic services greater than 2", a testable double check valve assembly is required at a minimum.
- P. For residential and non-residential landscape irrigation systems connected to the internal plumbing system after the backflow preventer, backflow protection shall be achieved through the appropriate containment device associated with the degree of hazard of the domestic water service. In the event that the internal plumbing system does not contain an acceptable backflow preventer, the customer shall install a backflow preventer per the guidelines of this manual in order to supply water for a residential or non-residential landscape irrigation system. Fixture isolation shall be the responsibility of the Owner per the State of Maine plumbing code.

VII. DEGREE OF HAZARD

The District recognizes the threat to the public water system arising from cross-connections. All threats will be classified by degree of hazard and will require the installation of approved backflow preventers. These hazards can be classified as follows:

A. Low Degree of Hazard / Residential Hazard

A pollution hazard, as defined in the Maine State Internal Plumbing Code at 02-395 CMR 4. If a backflow were to occur, the resulting health significance would be limited to changes in aesthetic quality such as taste, odor or color. The foreign substance must be non-toxic and non-bacterial in nature with no significant health effect.

B. High Degree of Hazard

A contamination hazard, as defined in the Maine State Internal Plumbing Code at 02-394 CMR 4. If a backflow were to occur, the resulting effect on the water supply could cause illness or death if consumed by humans. The foreign substance may be toxic and/or harmful to humans either from a chemical, bacteriological, or radiological standpoint. The effects of the contaminants may result from a short or long-term exposure.

Please refer to Table 1 in Appendix A: Device Type Based on Water Use and Degree of Hazard for a list of water uses and the corresponding backflow device requirement for the degree of hazard.

VIII. CROSS-CONNECTION APPROVALS

The District shall not approve an unprotected cross-connection to the public water system. A backflow preventer is required to protect the public water system from backflow anywhere a connection or potential for one exists.

The District shall review all requests for connections to the public water system. The review will include the degree of hazard of any cross-connection and the method of backflow prevention specified. All backflow preventers, assemblies, and methods must be approved per the requirements of the current Maine State Internal Plumbing Code 02-395 CMR 4. When the District determines that backflow protection has been adequately addressed, the District will grant approval to the applicant seeking connection to the public water system.

IX. EXEMPTIONS

For premises existing prior to the start of the program, the District will perform evaluations and inspections at times of redevelopment or when the Owner requests a change in the quantity or type of service provided. Any existing properly functioning backflow preventer shall be allowed by the District to continue in service unless the degree of hazard is such as to supersede the effectiveness of the existing backflow preventer, or result in an unreasonable risk to the public health. Where no backflow preventer is present, or the degree of hazard at the premises has increased, a new backflow preventer must be installed and/or an existing backflow preventer must be upgraded to a device equitable to the degree of hazard present as described in Table 1 in Appendix A. The duration to accomplish such action shall be dependent on the degree of hazard involved as determined by the District. An exemption shall not alter the degree of hazard classification of the cross-connection and shall not exclude the use of some other appropriate backflow preventer. Each exemption may be conditioned on monitoring, testing, analyzing or other requirements to ensure the protection of public health, and shall include a compliance schedule.

X. REGULAR TESTING

Regular testing and inspection of all backflow preventers is necessary to ensure that the backflow preventer has not failed and the method of protection subverted.

- A. The District shall be responsible for conducting the initial test and inspection of an Owner's installed backflow preventer at time of service activation. The Owner shall be charged for any testing and inspection performed by the District.
- B. The Owner is responsible for regular testing and inspection of the backflow preventer. A certified backflow device tester shall perform the tests on a schedule established by the District. The Owner must inform the District of all test results. Failure by the Owner to test and inspect the device may result in the District performing the work or disconnecting the service.
- C. The Owner ~~must-is responsible for the~~ repair ~~of~~ any backflow preventer that fails during testing as soon as possible. Any extended delay shall require disconnection of service or other means to ensure protection of the public water system unless the District grants an exemption. Upon completion of the repair, the device will be re-tested at the Owner's expense to ensure correct operation.
- D. Certain high degree of hazard cross-connections will not be allowed to continue unprotected if the backflow preventer fails testing and inspection and cannot be immediately repaired. Parallel installation of two devices is an effective means for the Owner to ensure uninterrupted water service during testing or repair and is strongly recommended when the Owner desires such continuity.
- E. The minimum testing frequency for backflow preventers on domestic and fire services connected to the District's public water system shall be as follows:
 - (1) Reduced pressure principle backflow preventers on high degree of hazard cross-connections shall be tested and inspected at least annually or as directed by the District.

- (2) Double check valves assemblies, reduced pressure principle backflow preventers and pressure type vacuum breakers on low degree of hazard cross-connections shall be tested annually.
- (3) Mechanical air gaps shall be inspected annually. If the air gap has been defeated, a reduced pressure principle backflow preventer shall be installed at the service entrance.
- F. Backflow preventers may be tested more frequently than as specified above in cases where there is a history of test failures, or the District feels that due to the degree of hazard involved additional testing is warranted. Cost of the additional tests will be borne by the Owner.
- G. As a quality assurance measure, the District may randomly select devices for additional testing. This testing, performed by the District, will be at no additional cost to the Owner.
- H. When an Owner elects to install a testable backflow preventer in an application where a testable device is not required by the District's Cross-Connection Control Program, the Owner need not test the device annually for the benefit of the District or in satisfaction of the District's testing requirements. The District recommends the Owner follow the manufacturer's guidance for the testing and inspection of the device and will accept results from the Owner for informational purposes.

XI. RECORDS AND REPORTS

Records of cross-connection control devices and locations shall be kept on file with the District as long as the cross-connection is present and until five (5) years after the cross-connection is eliminated. Records of tests for testable cross-connection control devices shall be kept on file with the District and available for inspection by District staff.

The District shall have on file and make available to the public a list of private contractors who are certified with the New England Water Works Association (NEWWA), American Backflow Prevention Association (ABPA), and the American Society of Safety Engineers (ASSE) as backflow device testers.

XII. FEES AND CHARGES

A cross connection device must be tested and operated to the standards outlined in the District's Cross-Connection Control Program as approved by the State of Maine's Department of Health and Human Services.

The District will perform the initial test and inspection of the backflow preventer at the time of service activation, the cost of which will be incurred by the Owner. Regular testing of the device, done by private contractors hired by the Owner and at the cost to the Owner, must verify compliance with the program. ~~If the Owner requests additional tests from the District on a periodic basis, the costs to perform the work can be found in the District's Terms and Conditions.~~

XIII. FIRE PROTECTION SERVICE LINES

- A. All new fire sprinkler systems and new fire service lines connected to the District's public water system, and all existing unprotected fire sprinkler systems receiving substantial renovations (determined by the District), will be protected from backflow by the installation of

a testable double-check valve assembly backflow preventer at the service entrance and before the fire sprinkler valve.

- B. All fire sprinkler antifreeze loop systems and systems with chemical additives will be protected from backflow by the installation of a reduced pressure principle backflow preventer at the fire service entrance and before the fire sprinkler valve.
- C. Backflow preventers for fire sprinkler systems shall be tested and inspected per the frequency as outlined in Section X.
- D. Fire protection service lines dedicated for private fire hydrants only are not required to have backflow preventers installed on the service line.
- E. Fire hydrants used for truck fill operations shall be protected from backflow by an approved air gap between the end of the filling hose and the water storage container on the truck.
- F. The rules in this section do not apply to Section XIV, NFPA 13D Residential Life Safety Sprinkler Systems; automatic sprinkler systems for one and two family dwellings and manufactured homes.

XIV. NFPA 13D RESIDENTIAL LIFE SAFETY SPRINKLER SYSTEMS

Facilities designed to be protected through an approved automatic sprinkler system installed on the domestic service line, in accordance with NFPA 13D standards, must provide backflow protection through a non-testable dual check valve assembly at the water service entrance or in a meter pit as applicable, immediately after the meter and before any branch line.

XV. LIABILITY

The District, its employees or agents, shall not be liable to any person for any damage, injuries or loss arising out of any act or omission by the District, its employees or agents, in connection with the application or implementation of these rules.

APPENDIX A: DEVICE TYPE BASED ON WATER USE AND DEGREE OF HAZARD

Water Use	System / Degree of Hazard	Device Type	
		Residential	Non-Residential
Domestic Water	Low Hazard / Residential Hazard	Non-Testable Dual Check**	Testable DCVA
	High Hazard*	Testable RPZ	Testable RPZ
Irrigation Water	Dedicated landscape Irrigation**	Testable RPZ	Testable RPZ
Private Fire Protection	NFPA 13/13R	Testable DCVA	Testable DCVA
	NFPA 13 (with chemical agents)	Testable RPZ	Testable RPZ
	NFPA 13D	Non-Testable Dual Check	N/A

TABLE 1

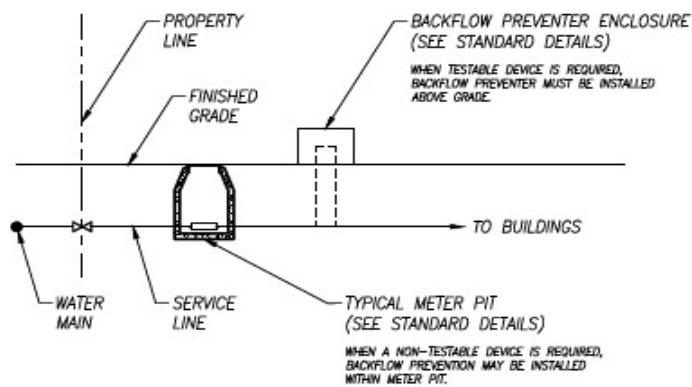
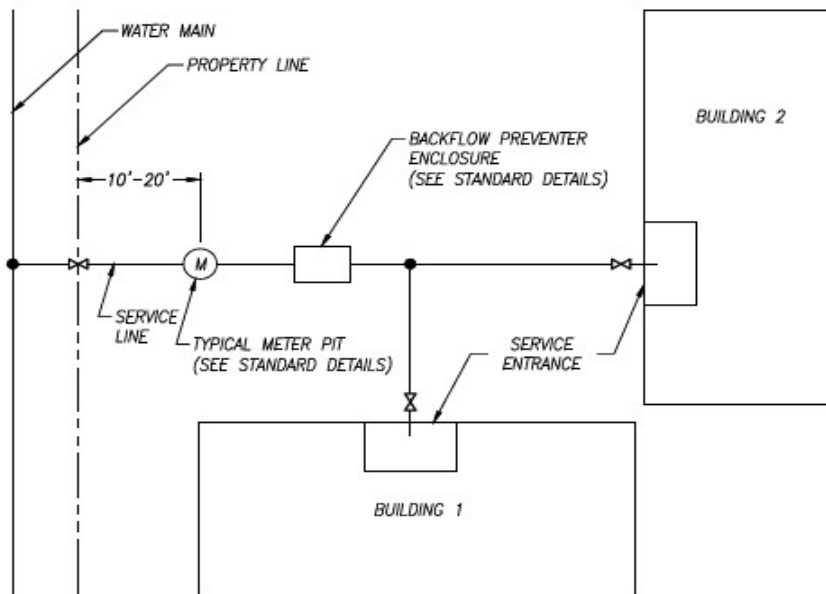
Backflow protection devices listed above are considered the minimum standard for the assumed degree of hazard. The District will evaluate each water system as necessary to determine appropriate degree of hazard present.

*The District considers the following installations to warrant a High Hazard classification:

- Hazardous Material Sites
- Hospitals, Dental Facilities, and Medical Centers
- Laboratories
- Veterinary Clinics
- Food Processing and Beverage Bottling Facilities
- Piers, Docks, and Marinas
- Plasma Centers
- Dry Cleaners
- Mortuaries
- Car Wash Facilities
- Processing Plants
- Auxiliary Water Supplies
- Metal Plating Facilities
- Restricted Access Facilities
- Sewage Treatment Plants and Pump Stations
- Waste Dump Stations
- Commercial Greenhouses
- Others as determined by PWD

**See Section VI(O, P): Requirements for additional information pertaining to backflow preventers.

APPENDIX B: DIAGRAMS



BOARD OF TRUSTEES/AGENDA ITEM SUMMARY

Agenda Item: 6C Order 25-026
Date of Meeting: October 27, 2025
Subject: MOA for Windham School Conveyance System
Presented By: Greg Pellerin, Executive Director of AMAP

RECOMMENDATION

The following proposed language is presented for Board of Trustee approval:

ORDERED, the General Manager is authorized to execute a Memorandum of Agreement with the Town of Windham in substantial form as attached hereto, related to the Windham School Conveyance System. This authorization is contingent on the Town of Windham approving said agreement.

BACKGROUND

PWD and the Town of Windham are preparing for the design and construction of the Windham School Conveyance System, which is the next phase of the North Windham Sewer Project. The Conveyance System will convey flow from the new Regional School Unit 14 middle school and the Windham Center area to the North Windham Wastewater Treatment Facility.

In PWD and the Town's 2020 Memorandum of Understanding (MOU), the District agreed to provide short-term financing for design and construction of the North Windham Sewer Project. In order to maximize funding opportunities from the Clean Water State Revolving Fund program, the Town has applied for and will provide short-term funding for the Windham School Conveyance System. The new Memorandum of Agreement (MOA) outlines this proposed change from the 2020 MOU.

FISCAL REVIEW / FUNDING

No additional costs or funding are required to authorize this MOA.

LEGAL REVIEW

Corporation Counsel has reviewed the proposed motion and approved it as to form.

CONCLUSION(S)

Staff recommends that the Board authorize the General Manager to execute an MOA with the Town of Windham in substantial form as attached hereto. The Committee recommends that it be forwarded to the full Board for consideration.

ATTACHMENT(S)

- Supporting Information
- Draft Windham School Conveyance System MOA

SUPPORTING INFORMATION

PWD and the Town signed an original Memorandum of Understanding (MOU) (Order 20-020) at the beginning of the North Windham Sewer Project that outlined each party's responsibilities for the design, construction, operation, and maintenance of a decentralized system, interception, and collection system. The North Windham Sewer Project consists of multiple construction projects, including the WWTF Project and the Conveyance System defined below. Under the terms of the MOU, the District was required to investigate funding opportunities, including the Clean Water State Revolving Fund.

Under this MOU, the District has applied for and received funding from the Clean Water State Revolving Fund (CWSRF) program for the first phase of the North Windham Sewer Project, which included construction of the North Windham Wastewater Treatment Facility and initial collection system in the area of Route 302 & Route 115 ("WWTF Project"). The multi-year WWTF Project has been financed through multiple short-term bond anticipation notes. At the conclusion of the WWTF Project, the District will issue a long-term bond for the Project and include the bond payments in the Town's annual assessment.

The next phase of the North Windham Sewer Project is the Windham School Conveyance System ("Conveyance System"), which will convey wastewater from the new Windham Raymond Middle School, the existing Regional School Unit 14 campus, and the Windham Town Hall area to the North Windham WWTF. The Board authorized initial funding for the Conveyance System within the North Windham Sewer Project on January 27, 2025 (Order 25-002).

In order to maximize potential principal forgiveness for the Conveyance System through the CWSRF program, the Town applied for this funding in 2024 and 2025 instead of the District. The District will continue to contract engineering and construction services for the Conveyance System as it has for the WWTF Project. At the conclusion of the Conveyance System work, the Town intends to transfer and assign any CWSRF bonds issued by the Town for the Conveyance System to the District.

The Memorandum of Agreement (MOA) for the Conveyance System outlines the terms of the proposed change from the original 2020 MOU.

MEMORANDUM OF AGREEMENT
BETWEEN PORTLAND WATER DISTRICT AND
TOWN OF WINDHAM

This Memorandum of Agreement ("Agreement") is made this ____ day of ____, 2025, by and among the Portland Water District, a quasi-municipal corporation located at Portland, Maine ("District"); and the Town of Windham, a municipal corporation located at Windham, Maine ("Town").

RECITALS

- A. The Town has proposed a multi-phase, publicly funded, wastewater treatment system in the North Windham area of the Town to mitigate surface water and groundwater pollution and to provide for more economic growth opportunities ("North Windham System"); and
- B. The District will own and operate the North Windham System that will benefit the Town and Regional School Unit No. 14, a Maine regional school unit ("RSU"); and
- C. The RSU owns and operates an existing wastewater treatment system ("RSU WWTF") that serves as the central collection point for sewerage from the Windham Primary School, Windham High School, and Windham Middle School, which is soon to be replaced ("New Middle School"); and
- D. The District and Town entered into an agreement on May 26, 2020 ("System Agreement"), in which the District and Town agreed to various terms related to financing, design, ownership, service procurement, and other responsibilities for the construction of the North Windham System; and
- E. Under Provision Paragraph 4 of the System Agreement, the District agreed to, ~~more or less~~*inter alia*, finance the North Windham System project; enter into contracts for the engineering and construction of the North Windham System; and develop a budget to operate and maintain the North Windham System as part of the District's annual assessment to the Town; and
- F. Under Provision Paragraph 5 of the System Agreement, the Town agreed to, ~~more or less~~*inter alia*, acquire and convey required real estate interests to the District; and cooperate in obtaining licenses, permits, and approvals; and
- G. The District, Town, and Regional School Unit No. 14 ("RSU") entered into an agreement on June 30, 2022 ("WWTF Agreement"), in which the District, Town, and RSU agreed to various terms related to easements, operation, permitting, and approval of the North Windham System; and
- H. Under Provision Paragraph 4 of the WWTF Agreement, the Town agreed to provide to the RSU the following:
 - i. "B. Extend the North Windham System to the new Middle School and pay any cost incurred by connecting the New Middle School to the North Windham System in excess of the amount allocated for the New Middle School septic system, currently budgeted to be \$3M, and permit the RSU's contractor for the New Middle School to connect the New Middle School to the North Windham System"; and
 - ii. "C. Extend the North Windham System to the central collection point for waste water from the Windham Primary School, existing Windham Middle School, and Windham High School, install a pumping station, and any other necessary equipment or facilities for the connection and use of the North Windham System"; and

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Commented [JS1]: This is not really explicitly stated in the System Agreement.

- I. The District and Town desire to continue coordination as to the financing, engineering, and construction of the project to extend the North Windham System to the New Middle School and existing RSU WWTF ("Windham School Conveyance Project" or "Project"); and
- J. The Town has applied for and received Clean Water State Revolving Fund ("CWSRF") funding for the Project through the Maine Department of Environmental Protection ("DEP"); and
- K. The District, through its Request-for-Qualifications-based General Engineering Services program, has prequalified and entered into General Engineering Services Agreements with several Engineering Consultants that are qualified to perform the technical design and construction engineering in areas of expertise related to the scope of the Project; and
- L. The District contracted with Stantec to perform preliminary design for the Project as a Task Order (dated December 31, 2024) to the District and Stantec's General Engineering Services Agreement (dated March 15, 2024).

NOW THEREFORE, in consideration of the mutual covenants expressed herein and for other good and valuable consideration, the receipt and sufficiency of which the parties acknowledge, the parties hereby agree as follows:

1. The terms of the System Agreement apply to the Project except where changes or additional terms are noted in this Agreement.
2. The Town hereby authorizes and approves the General Engineering Services Agreement (dated March 15, 2024) and the Task Order (dated December 31, 2024) between the District and Stantec.
3. The Town will bond finance all costs associated with the design and construction of the Project.
4. The Town shall undertake the following additional actions related to the Project:
 - a. Finance the Project as the applicant for and ~~holder-issuer~~ of ~~any all~~ CWSRF bonds, grants, and other non-CWSRF funding opportunities, including debt, through the ~~end~~ completion of construction of the Project.
 - b. Reimburse the District for all costs and legal fees incurred by the District related to the Project, including but not limited to with respect to the engineering, construction, administration, and short-term financing of the Project, the assignment of the CWSRF bonds (as described below) and the entering into of this Agreement.
 - c. Following completion of construction of the Project, and with the approval of the Maine Municipal Bond Bank, transfer and assign to the District its obligations under any CWSRF bonds issued by the Town for the Project to the District, after the end of the Project
 - d. If any of the CWSRF bonds or other non-CWSRF debt are issued on a tax-exempt basis, The Town will do all things and take all actions necessary to establish that the interest on such the CWSRF bonds or other non-CWSRF debt is excludable from gross income for federal income tax purposes under the Internal Revenue Code of 1986, as amended (the "Code"), that the reimbursement of any preliminary expenditures is permitted under the Code, and that the such CWSRF bonds or other non-CWSRF debt are not private activity bonds or arbitrage bonds under the Code.
5. The District shall undertake the following actions related to the Project:

- a. Invoice the Town for all costs and legal fees, incurred by the District related to the Project, including but not limited to with respect to the engineering, construction, administration, and short-term financing of the Project, the assignment of the CWSRF bonds and the entering into of this Agreement.
- b. Following completion of construction of the Project, and with the approval of the Maine Municipal Bond Bank, Accept the transfer and assignment from the Town of any CWSRF bonds issued by theTown and related to ~~the project from the Town after the end of~~ the Project.
- c. Include ~~the debt~~ service payments and financing costs, including but not limited to legal fees, related to any CWSRF bonds, and the assignment thereof, for the Project in the District's annual assessment to the Town.

IN WITNESS WHEREOF, the parties hereto have caused this Memorandum of Agreement to be executed by their duly authorized representatives as of the day and year first written above.