

**PORT WASHINGTON
WATER DISTRICT
2024 BOND ISSUE**

**CAPITAL IMPROVEMENT PROJECTS
FOR YEARS 2024-2028**

NEED FOR WATER SUPPLY SYSTEM IMPROVEMENTS

- ▶ Third phase of capital improvement program proposed to begin implementation this year
- ▶ Builds upon projects which were initially identified in the Phase 1 bond in 2019 and Phase 2 bond in 2021
- ▶ Most projects in Phases 1 and 2 are either completed or at an advanced stage in their respective design or construction phases
- ▶ This bond issue is necessary for the design and construction phases of new bond projects proposed for Phase 3 and includes two contingency projects
- ▶ These projects have been identified as **CRITICAL** based on both need for emerging contaminants treatment and general infrastructure improvement

PHASE 1 - 2019 BOND AND PHASE 2 - 2021 BOND PROJECTS

Phase 1 - 2019 Bond Projects

- ▶ Neulist Station Repairs and Improvements
- ▶ Morley Park Station Repairs and Improvements
- ▶ Hewlett Station Repairs and Improvements
- ▶ Stonytown Station Repairs and Improvements

Phase 2 - 2021 Bond Projects

- ▶ Morley Park Station AOP Treatment System and Miscellaneous Improvements
- ▶ Sandy Hollow Station Raising of Well 2 Above Grade, Site Generator, Administration Building Improvements, Building Improvements, and Electrical Improvements
- ▶ Stonytown Station Combined AOP and Nitrate Treatment System and Misc. Improvements
- ▶ Soundview Drive Water Main Replacement Part 2
- ▶ Cow Neck Road Water Main Replacement
- ▶ Replacement of Undersized Water Mains
- ▶ 24-Inch PCCP Transmission Main Evaluation
- ▶ Sandy Hollow Station Tank Improvements
- ▶ SCADA System Improvements

NOTIFYING THE PUBLIC



The Notice of District Public Hearing was mailed to all residents as a postcard on May 20, 2024.

The Notice was also posted on the District website on May 20, 2024.

The Notice was printed as a legal ad in the Port Washington News on May 22, 2024.



Community Information Meetings
May 28, 2024

At Port Washington Library
and via Zoom:
9:30 a.m.

Via Zoom:
7 p.m.



District Public Hearing
June 5, 2024

At District Office
7 p.m.

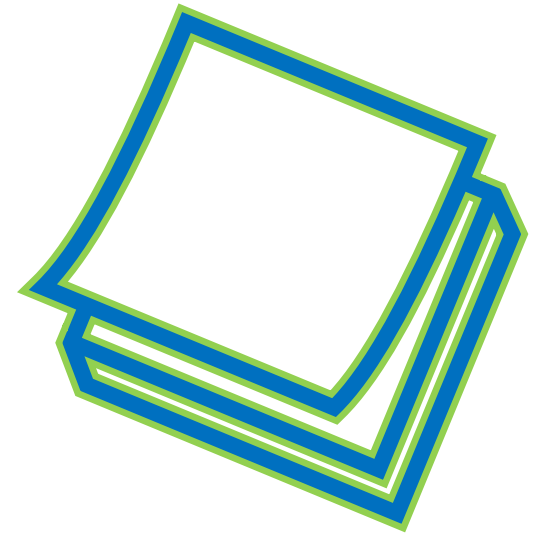


Town of North Hempstead
Public Hearing
July 2, 2024

At a regular Town Board meeting
7 p.m.

REGULATION OF EMERGING CONTAMINANTS IN DRINKING WATER

- ▶ The United States Environmental Protection Agency (USEPA) published new drinking water regulations in April 2024 (effective June 2024) which created Maximum Contaminant Levels (MCLs) at 4 parts per trillion (ppt) for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) and 10 ppt for perfluorohexanesulfonic acid (PFHxS), perfluorononanoic acid (PFNA), and hexafluoropropylene oxide dimer acid (HFPO-DA). In addition, the USEPA created a hazard index MCL of 1 for a mixture containing two or more of PFHxS, PFNA, HFPO-DA and perfluorobutane sulfonic acid (PFBS).
- ▶ These regulations have impacted some Port Washington Water District water supply wells which exhibit these contaminants at various concentrations.
- ▶ The District has implemented conservation requirements and will make operational changes to ensure the use of these wells are minimized or avoided while treatment is being planned and constructed.
- ▶ Many of the projects in this bond issue are driven in some way by these new regulations promulgated by the United States Environmental Protection Agency and locally enforced by the Nassau County Department of Health (NCDOH).
- ▶ Since 2020, ahead of the USEPA regulations, the District has been proactive regarding the presence of PFAS through the planning and design of granular activated carbon (GAC) treatment systems for these PFAS contaminants at all possible well stations. The District will continue to monitor other stations for any increased PFAS detections that would require PFAS treatment as well.



SANDY HOLLOW STATION WELLS 1 AND 2 PFAS TREATMENT ENHANCEMENT

- ▶ Sandy Hollow Wells 1 and 2 are located on the same site and have been impacted by some of the PFAS contaminants (PFOA and PFOS) included in the new USEPA regulations.
- ▶ The maximum levels historically detected for these contaminants are exceeding the USEPA MCLs.
- ▶ The site currently has a Granular Activated Carbon (GAC) treatment system which is successfully removing these contaminants, but the system cannot accommodate the full flow of the two wells, requiring the District to run the wells at reduced capacity.
- ▶ The design, construction and start-up of a new GAC treatment system is included in this bond issue. Other various improvements will also be done such as electrical upgrades, new site generator, water storage tank rehabilitation, well pump replacements, and miscellaneous building and site improvements.
- ▶ This project includes improvements originally proposed but not completed under the 2021 bond. Due to this elimination of work under the 2021 bond, the District will see a nearly \$5 million savings in the borrowing under the 2021 bond.



NEULIST STATION SITE, MECHANICAL, AND CHEMICAL IMPROVEMENTS

The Neulist Station is in need of mechanical and chemical improvements in order to replace aging equipment, standardize equipment across District facilities and improve chemical mixing ahead of the new flow meter.

- ▶ Other various improvements will be completed, including installation of a static mixer in the Well 1 building, caustic pump and piping upgrades, replacement of new chlorinators, consistent with the District's current standard, addition of a stairway adjacent to valve building/chemical room, roofing repair/replacement on the valve/caustic building, miscellaneous building repairs inside the valve/caustic building, and drainage improvements around the valve/caustic building.



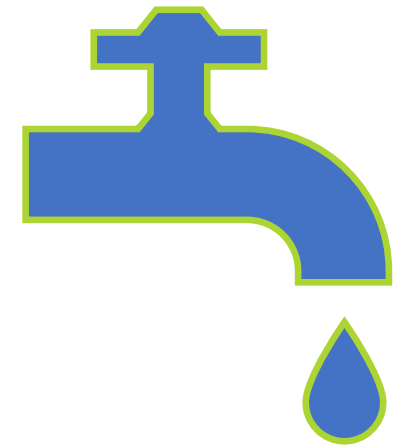
HEWLETT STATION WELL 4 PFAS TREATMENT ENHANCEMENT

- ▶ Hewlett Well 4 has been impacted by some of the PFAS contaminants (PFOA, PFOS, and PFNA) included in the new USEPA contaminant regulations.
- ▶ The maximum levels historically detected for these contaminants are exceeding the USEPA MCLs.
- ▶ The site currently has a Granular Activated Carbon (GAC) treatment system which is removing the volatile organic compound (VOC) contamination at the site, but the GAC treatment system will need to be upgraded to efficiently treat the PFAS contamination.
- ▶ The design, construction and start-up of a new GAC treatment system and building is included in this bond issue. Other various improvements will also be done such as chemical improvements, lighting improvements, SCADA upgrades and miscellaneous site improvements.



BAR BEACH STATION WELL 6 PFAS TREATMENT, RAISING OF WELL AND MISCELLANEOUS IMPROVEMENTS

- ▶ Bar Beach Well 6 has been impacted by some of the PFAS contaminants (PFOA and PFHxS) included in the new USEPA contaminant regulations.
- ▶ The maximum levels historically detected for these contaminants are approaching or exceeding the USEPA MCLs.
- ▶ The site currently has a packed tower aeration system (PTAS) for VOC removal but will need GAC treatment installed to treat the PFAS at the site.
- ▶ The design, construction and start-up of a new GAC treatment system and building is included in this bond issue. Other various improvements will also be done such as raising of the well, chemical improvements, lighting improvements, electrical improvements, new site generator, SCADA upgrades, pump and motor replacements, and miscellaneous site improvements.



RICKS STATION WELL 7 PFAS TREATMENT, RAISING OF WELL, AND MISCELLANEOUS IMPROVEMENTS

- ▶ Ricks Well 7 has been impacted by some of the PFAS contaminants (PFOA and PFOS) included in the new USEPA contaminant regulations.
- ▶ The maximum levels historically detected for these contaminants are approaching or exceeding the USEPA MCLs.
- ▶ The site does not have any existing GAC treatment system to treat the PFAS contamination at the site.
- ▶ The design, construction and start-up of a new GAC treatment system and building is included in this bond issue. Other various improvements will also be done such as raising of well above grade from its current vault, chemical storage/feed/safety systems, lighting improvements, SCADA upgrades, electrical improvements, new site generator, pump and motor replacements and miscellaneous building and site improvements.



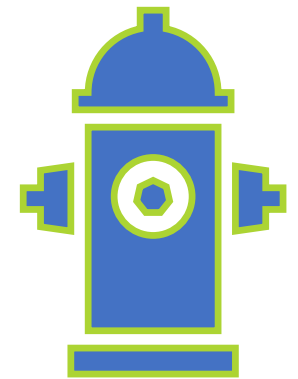
LONGVIEW BOOSTER STATION ELECTRICAL, LIGHTING AND SCADA UPGRADES, AND REPLACEMENT OF BILCO HATCHES AND STAIRS

- ▶ The Longview Booster Station provides boosted pressures for a high elevation portion of the District, utilizing booster pumps and pressure reducing valves located within three vaults. The existing electrical equipment, pumps, motors, lighting, hatches, and staircases for these vaults are nearing the end of their useful life and are in need of replacement.
- ▶ This project will replace the existing electrical equipment with new, wet environment electrical equipment, replace the existing booster pumps and motors, replace the existing lighting with LEDs, and replace the hatches and staircases on each vault.
- ▶ This project will renew the Longview Booster Station and ensure that it continues to provide reliable water pressure and conveyance into the future.



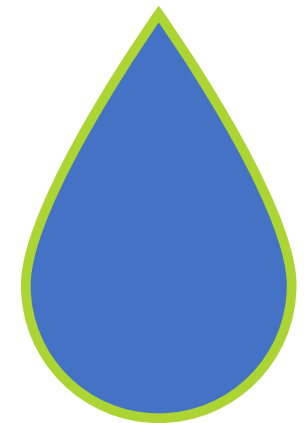
REPLACEMENT OF CAST IRON WATER MAINS

- ▶ The District distribution system includes many old cast iron water mains, some being 100 years old, which have a history of frequent breaks and have met the end of their useful life.
- ▶ Typically, main breaks can be contributed to pipe age, pipe material, soil conditions, pipe laying/bedding conditions, temperature, frost load, traffic loading conditions, and higher than normal operating pressures.
- ▶ Replacement of such mains is an initiative that the District strives to do each year to maintain the reliability of the distribution system.
- ▶ The District estimates that over 17,000 feet of main will be replaced as part of this project. The exact sections and sizes of water mains which would need replacement are under evaluation and will be formally identified in 2025, allowing the District to utilize the latest history of frequent breaks to identify water mains that are no longer reliable or efficient for the District to make emergency repairs.



SOUTHPORT STATION WATER STORAGE TANK REHABILITATION AND MISCELLANEOUS IMPROVEMENTS

- ▶ The Southport Station elevated water storage tank is a 1.0 million-gallon (MG), multi-legged steel tank constructed in 1973. A tank condition assessment was performed in 2021 and noted that the tank will require rehabilitation within the next three years.
- ▶ The rehabilitation work involves the replacement of the existing interior and exterior coating systems and other miscellaneous upgrades needed to bring the tank into compliance with current industry standards and regulations. This includes the installation of safety climb devices on all ladders, relocation of conduits, installation of intrusion alarms, and additional signage on the tank.
- ▶ The Southport tank provides additional emergency water supply capacity for the District. This added supply allows for adequate water for daily consumption and simultaneously provides emergency supply in case of fire. The work required to rehabilitate the tank is of utmost priority for the District to maintain the tank's reliability.



NEW WATER STORAGE TANK AND BOOSTER STATION ON TONH PROPERTY (CONTINGENCY PROJECT)

- ▶ The District Pressure Zone 1, AKA the Harbor Park Service Area, under fire-flow conditions, experiences lower pressure and has caused greater flow into adjacent water zones, resulting in rusty water complaints. To resolve this issue, the District proposes to construct a new ground water storage tank in that area.
- ▶ The District is evaluating the siting of a 0.75 MG tank at the Town of North Hempstead Solid Waste Management (TONH SWM) Facility. The tank would provide adequate water for a 5,000 GPM fire flow condition with a 25% factor of safety, address the existing pressure and water quality issues, and enable the PWWD to meet future water demands.



MORLEY PARK STATION PTAS BUILDING ROOF ENCLOSURE (CONTINGENCY PROJECT)

- ▶ The existing PTAS at the Morley Park Station (Wells 8, 9, and 11) is currently enclosed within a block building with the tops of the towers protruding through the flat roof. The District has had prior concerns about leakage through the flat roof around the tower protrusions and intends to enclose the tops of the towers.
- ▶ To achieve this goal, the protruding tops of the four packed towers would be enclosed within an extended roof structure with ventilation on all sides for the packed tower air discharge. The extended roof structure would also have a pitched top to facilitate rain runoff, drainage, and protection from falling objects.
- ▶ The roof enclosure would help to extend the operable life of the packed towers and the building in general.



SUMMARY OF BOND PROJECT COSTS

Project Description	Total Estimated Costs
Sandy Hollow Station Wells 1 and 2 PFAS Treatment Enhancement	\$17,520,000
Neulist Station Site, Mechanical and Chemical Improvements	\$1,240,000
Hewlett Station Well 4 PFAS Treatment Enhancement	\$7,498,650
Bar Beach Station Well 6 PFAS Treatment, Raising of Well, and Miscellaneous Improvements	\$8,527,450
Ricks Station Well 7 PFAS Treatment, Raising of Well, and Miscellaneous Improvements	\$8,189,600
Longview Booster Station Electrical, Lighting and SCADA Upgrades and Replacement of Bilco Hatches and Stairs	\$1,010,000
Replacement of Cast Iron Water Mains	\$10,240,000
Southport Station Water Storage Tank Rehabilitation and Miscellaneous Improvements	\$5,620,000
Subtotal	\$59,845,700
Bonding Costs	\$200,000
Legal Costs	\$15,000
Total Amount of Bond	\$60,060,700

*The total amount requested in the 2024 Bond does not include the relevant state and federal grant awards.

OTHER POTENTIAL FUNDING SOURCES

- ▶ The District has been awarded up to \$15,590,193 in federal Bipartisan Infrastructure Law Emerging Contaminants (BIL-EC) grants and state Water Infrastructure Improvement Act (WIIA) grants. This grant funding will be used for the projects that combat emerging contaminants such as those affecting the Sandy Hollow, Hewlett, Bar Beach and Ricks Stations.
- ▶ The District is engaged in lawsuits against the manufacturers of the chemicals contaminating the wells.
- ▶ The District is currently applying for a BIL-EC grant for the Hewlett Well 4 PFAS treatment system and a WIIA grant for the Ricks Well 7 PFAS treatment system in this open 2024 grant application period.
- ▶ If the District is successful in securing any additional grants or other funds, the total amount of the bond will be decreased accordingly.



MAXIMUM COST TO TYPICAL RESIDENT

PORT WASHINGTON WATER DISTRICT 2024 BOND ISSUE

Typical Residential Cost

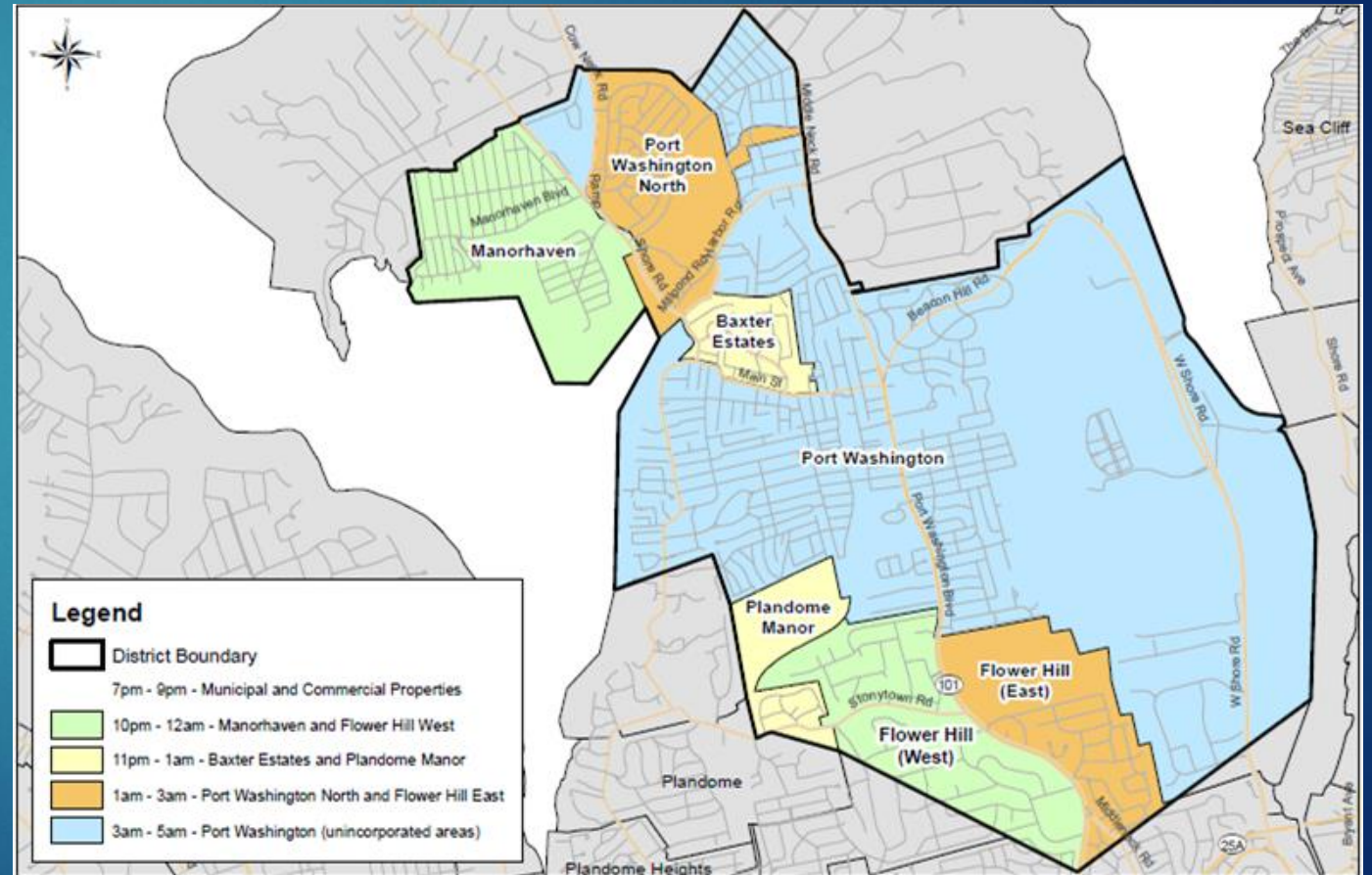
Home Value	Assessed Value	Maximum Annual Cost
\$ 700,000	\$ 700	\$ 281.50
\$ 800,000	\$ 800	\$ 321.72
\$ 900,000	\$ 900	\$ 361.93
\$ 1,000,000	\$ 1,000	\$ 402.15
\$ 1,500,000	\$ 1,500	\$ 603.22
\$ 2,000,000	\$ 2,000	\$ 804.30

Notes:

1. The annual costs above are the maximum that would be incurred if it was necessary for the District to borrow the full bond amount, assuming a bond rate of 4% over a 20-year period.
2. The District's current grant awards, up to \$15,590,193, have not been included in this calculation as the grant funding is received as reimbursements. However, the grants will ultimately reduce the total amount that needs to be borrowed, which will reduce annual cost, respectively.

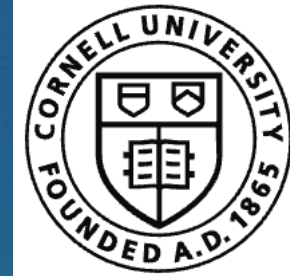
CLEAR AND WORKABLE WATER CONSERVATION REQUIREMENTS

- ▶ Transition to smart controllers
- ▶ Spread out watering by creating 5 zones
- ▶ Dedicated 2-hour watering block between 7 p.m. – 5 a.m.
- ▶ Cut back watering 4 minutes per zone
- ▶ Follow Nassau County odd/even watering schedule
- ▶ The District recently upgraded its irrigation ordinance in collaboration with both conservation needs and irrigation contractor comments – please our website www.pwwd.org for the latest version



TRANSITION TO SMART CONTROLLERS BY 2025

- ▶ As of 2016, all new systems require rain sensor and smart controller.
- ▶ As of 2025, all systems will require retrofit, meaning residents have less than one year to come into compliance



A predictive model could save

40%

of the water consumed by
traditional irrigation strategies.

- ▶ 347 rebates issued since August of 2017

ANNUAL SUSTAINABLE GARDEN TOUR

JUNE 15, 2024 AT 9:00 AM



DO IT FOR PORT
water conservation

UPCOMING
**Educational
Event**

Sustainable Garden Tour

The annual event by Rewild Long Island and the Port Washington Water District is back by popular demand!



June 15 at 9:00 am

Parking and Directions to Be Issued Upon Registration

Join us for a show and tell of beautiful, low water, earth-friendly landscapes around Port Washington. Feast your senses on bio-diverse and sustainable gardens that feature pollinator and bird-friendly native plants, strategies to reduce lawn footprint, composting, organic fruits and vegetables, smart sprinklers and more. Pick up ideas for your garden. You too can have a great-looking garden that uses less water and fewer chemicals while saving time and money.



Registration is required at: www.pwwd.org/gardentour2024

For questions about this event, please call 516-767-0171 or email info@pwwd.org.



IRRIGATION CONTRACTOR TRAINING WITH ROSLYN WATER DISTRICT



The Port Washington & Roslyn Water Districts Invite You to an
In-Person Irrigation Contractor Training Event



Help Port Washington and Roslyn residents come into compliance with the Districts' conservation guidelines this summer!

Why Attend?

- Expand business offerings with the Port Washington and Roslyn communities
- Help residents comply with mandatory irrigation schedule and switch to smart irrigation controllers by 2025
- Learn about important updates to PWWD regulations concerning the installation of irrigation systems
- Engage in a special presentation by IANY Board Trustee Mike Dwyer on emerging industry best practices
- Attendance will enter you into a raffle to win smart irrigation technology
- Be placed on a dedicated contractor list that is available to all PWWD and RWD customers

Meeting Info

- When: February 6, 2024 at 9:15 a.m.
- Where: Port Washington Public Library at 1 Library Drive, Port Washington, NY 11050
- Registration is free and free refreshments will be served
- Click the box below to RSVP or email Mike Conn at mconn@zccmail.com

[Click Here to RSVP](#)



QUESTIONS?

- ▶ Contact Information:

- ▶ Paul Prignano, Superintendent
Port Washington Water District
pprignano@pwwd.org
516-767-0171

