

Report for the City Manager

Community Services: Engineering

Date: April 8, 2025

The purpose of this document is to summarize the work the City of Dover Engineering Division of the Community Services Department from March 1st through 31st, 2025.



Engineering

Community Services | Dover, NH

Ken Mavrogeorge, PE – City Engineer
Bill Boulanger – Special Projects Advisor
Jillian Semprini, PE – Deputy City Engineer
Krystian Kozlowski, PE – Assistant City Engineer
Eric Sanderson – Facilities Project Manager
Jamie Stevens – Waterfront Construction Manager
Jordan Chambers – Engineering Technician
Tim Puls, PE – Environmental Project Manager

Community Services Spotlight: Dover Water's Chief Operator

The Chief Water Operator for the City of Dover plays a pivotal role in safeguarding public health and ensuring the reliable delivery of clean drinking water to all residents and businesses. This critical position oversees the comprehensive management of the City's water infrastructure, encompassing the intricate systems responsible for pumping raw water, administering the necessary treatment processes to meet stringent quality standards, and distributing potable water throughout the municipality. The Chief Water Operator's responsibilities extend to proactive maintenance and strategic planning to optimize system efficiency and anticipate future needs, guaranteeing a consistent and safe water supply for the community.

Beyond routine operations, the Chief Water Operator serves a key role during any disruption or emergency affecting the City's water system. Whether it's a sudden equipment malfunction, a contamination concern, or a significant water main break, they are responsible for promptly assessing the situation and how it may affect the City's ability to serve its customers. During water outages, the Chief Water Operator is instrumental in managing water demands, implementing strategies to minimize disruption, and ensuring essential services are maintained while Community Services crews work tirelessly to restore water service to affected areas as quickly and efficiently as possible. Their leadership and expertise are crucial in maintaining the integrity and resilience of Dover's vital water infrastructure.

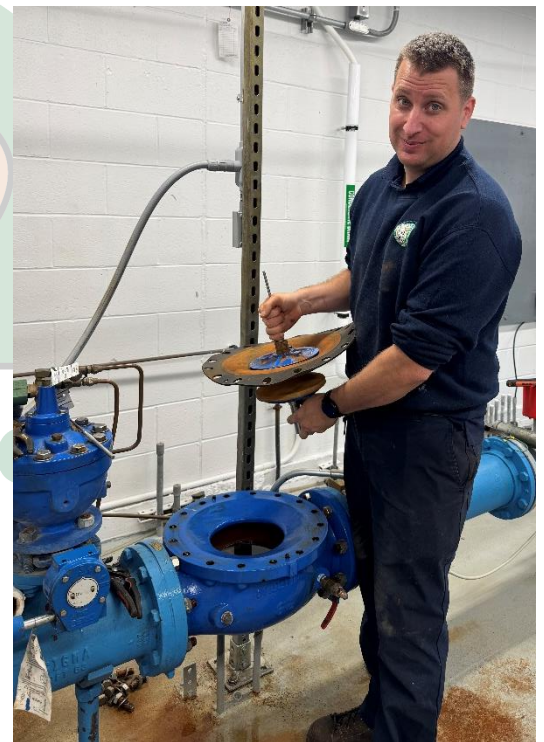


Figure 1: Dover's Chief Water Operator Seth Thompson.

Dover's Chief Water Operator, Seth Thompson, has been with the City since 2023 after transitioning from the York Water District; a class IV surface water treatment plant. Seth has a Class IV Treatment/Distribution/Collections license and brings a wealth of expertise to the critical task of ensuring the City's water supply meets stringent quality standards. Seth leads a dedicated crew in the continuous monitoring, management and comprehensive oversight of the 3-water treatment filtration process's (Greensand and GAC), 2 chemical injection sites, 12 well sites, 3 water storage tanks, 2 recharge facilities.

A key aspect of Seth's work involves the utilization of Supervisory Control and Data Acquisition (SCADA) systems. SCADA refers to industrial control systems that use computers, networked data communications, and graphical user interfaces for high-level supervision of processes. These systems allow Seth and his team to remotely monitor and control equipment, gather real-time data, and respond promptly to any deviations or anomalies at all hours of the day. By leveraging SCADA technology, Seth ensures compliance with regulatory requirements, optimizes system efficiency, and provides for the delivery of safe and reliable drinking water to the residents of Dover.

Please take a moment to think of the hard work that Seth and his staff do each time you reach for a glass of clean drinking water in Dover!

Interns on the Way!

Engineering staff sifted through many resumes this winter looking for high quality Engineering students to serve as paid interns for the 2025 summer season. The process was narrowed down through interviews and two interns were offered positions. Interns are anticipated to start in May. Their work is expected to focus on the water service line inventory, traffic signage assessments, archiving, and providing general support to the Engineering team. Internships for Engineering are great opportunities for students of varying experiences to gain real world experience especially in the public sector where career positions are less available than they may be in the private sector. Keep an eye out for updates from our interns in a future report!

SAVE THE DATE:

To kick off Public Works Week 2025, Community Services will be hosting a Touch-a-Truck Open House at their 271 Mast Road Facility! The event will be held on Saturday May 17th from 11 am until 2 pm. On and offsite parking will be available with a shuttle to the event being provided. Come meet members of the Community Services Team and see what we are up to!



SAVE THE DATE!
May 17, 2025
11am-2pm

Staff News:

Dover Utilities Commission (Krystian Kozlowski): The DUC met on March 3, 2025. Topics discussed at the meeting included the following:

- Abatement Review Team Report
- Utilities Report
- Finance Report
- The February water main break at the former Ear Craft Music store

The next DUC meeting is scheduled for April 21, 2025.

Planning Board (Ken Mavrogeorge): Planning Board met twice in March. The meetings were held on the 11th and 25th. Topics on the agendas included:

- Multiple Conditional Use Permit Applications
- A Request to Extend the Approvals for 47 Chestnut St
- Review of a Site Plan Application for 16 Industrial Park Drive



- Review of Amendments to Sections 153, 157, and 170 of the Dover Code and the Planning Board Operating Rules.
- A Minor Subdivision at County Farm Road.
- A lot Adjustment of property along Middle Road and Isaac Lucas Circle.

Transportation Advisory Committee (TAC) (Jillian Semprini): TAC met on March 24th. Topics discussed included:

- Pedestrian safety concerns (Sixth & Grove)
- NHDOT Roundabout Concerns
- Citizen correspondence RE: NHDOT changes to Rte 9/Rte 155 intersection
- River Run Condominium Association (Frances Drive) traffic concern
- Petition for COAST route serving Crosby Road industrial park area
- Stop sign request – Milk Street @ Mount Vernon Street

The next TAC meeting is scheduled for May 19, 2025.

Municipal Alliance for Adaptive Management (MAAM) (Director John Storer and Tim Puls): MAAM did not meet in March.

Seacoast Stormwater Coalition (SSC) (Tim Puls): There was an SSC meeting on March 19th. Dover’s representative did not attend. Topics discussed included public outreach on yard waste and fertilizer as well as industrial outreach. The next SSC meeting is scheduled for April 16th to discuss Nitrogen and Phosphorus BMP Implementation and Schedule.

Piscataqua Region Estuaries Partnership (PREP) (Tim Puls): PREP met on March 13th. Topics of the meeting included:

- Discussion on potential Federal Government shut downs and how that may affect PREP budgets
- Discussion and vote on FY 2026 PREP budget as well as what may need to be cut if federal funds are cut or reduced.
- Discussion and vote to accept new PREP voting member.
- PREP staff gave individual updates on what they are working on.
- Amy Sauber, UNH presented the Stormwater Tool Kit. Plan to launch late summer 2025. Currently in pilot stage and is on the PREP website.

TIF Advisory Committee/Cochecho Waterfront Development Committee (CWDAC)/Park Subcommittee (Jamie Stevens): There were no meetings in March.

Customer Service:

In addition to supporting other City Departments and working on Capital Projects, Engineering staff takes Service Calls from the public and responds to them as quickly as they can. The team meets regularly to review open Service Calls and discuss how to respond. The Table below shows the total Engineering related calls year to date and over the past month.

Time Period	Logged Service Calls	Resolved Service Calls
March 2025	11	8
2025 YTD	30	27



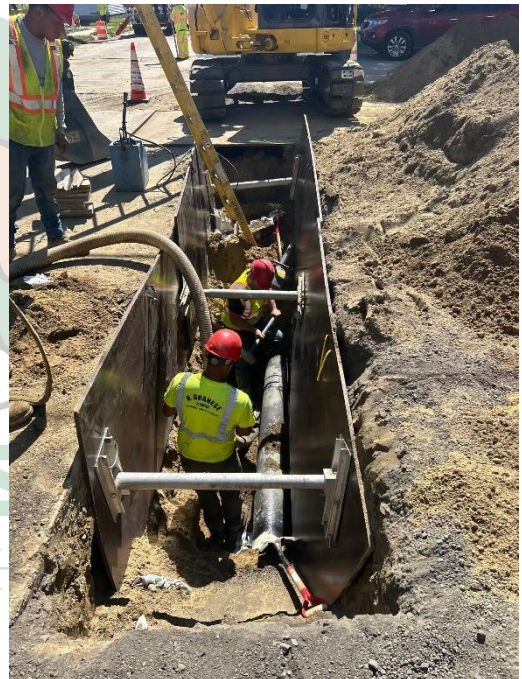
Prioritizing Safety in Public Works Construction



From laying vital water and sewer lines beneath Dover's streets to building the roads we all travel daily, and maintaining the infrastructure that underpins our communities, Community Services projects are the lifeblood of a functioning City of Dover. Yet, behind the tangible results lies an unwavering commitment to safety, a multifaceted endeavor that protects both the dedicated crews on the ground and the public they serve. Within the bustling

environment of a municipal public works facility, safety isn't just a regulation; it's a deeply ingrained culture, a shared responsibility that permeates every task, every decision, and every role.

Ensuring safety in public works construction is a not an easy task. It involves meticulous planning, training, and constant vigilance. The inherent nature of the work presents a multitude of potential hazards. Excavations can collapse, heavy equipment can malfunction, confined spaces can trap, and interactions with live traffic pose constant risks. Therefore, a robust safety program is a key part of what public works does. A program that encompasses comprehensive safety protocols, readily available personal protective equipment (PPE), and a proactive approach to hazard identification and mitigation. Regular safety meetings, toolbox talks, and ongoing training sessions are crucial for keeping safety top-of-mind and equipping crews with the knowledge and



skills to perform their jobs safely. This commitment extends beyond the immediate work zone, encompassing the safe storage and maintenance of equipment within the public works facility itself.



The responsibility for safety on a public works construction site is a collective one, yet each member of Dover's Community Services Department plays a distinct and vital role in upholding these crucial standards. The next time you drive by a construction site in Dover and see a group of workers around an open trench think about all the roles and responsibilities that each person has to ensure the safety of the entire team and the public.

At the helm is the **Superintendent**, who carries the responsibility for the overall safety of the project or task at hand. Their role begins long before the first shovel hits the ground. The

Superintendent is involved in the pre-planning phase, ensuring that safety considerations are integrated into the project design, schedule, and budget. They work closely with safety officers to develop site-specific safety plans, conduct risk assessments, and implement control measures. On a daily basis, the Superintendent oversees operations, ensuring that work is being performed according to safety protocols and addressing any potential hazards that arise. They must foster a culture of safety by leading by example, actively participating in safety briefings, and empowering their team to speak up about safety concerns they observe, as soon as they observe them. The Superintendent understands that a safe worksite is not only ethically imperative, but also contributes to project efficiency and success.

The **Foreman** acts as the direct supervisor of a specific crew or task. They are the boots on the ground, translating the overarching safety plan into actionable steps for their team. Before any work commences, the Foreman conducts detailed pre-task briefings, outlining the specific hazards associated with the day's activities and ensuring that each crew member understands the safe work procedures. They inspect the work area for potential dangers, verify that all necessary safety equipment is in place and in good working order, and ensure that their crew members are wearing the appropriate PPE, such as hard hats, safety glasses, high-visibility vests, and steel-toed boots. Throughout the workday, the Foreman actively monitors their crew, providing guidance and intervening immediately if unsafe practices are observed. They are the first line of defense against accidents, fostering a proactive safety mindset within their team and serving as a vital link between the field operations and the Superintendent.



The backbone of any public works construction project is the **Laborer**. Often involved in a wide range of physically demanding tasks, from digging and trenching to material handling and site cleanup, laborers face numerous potential hazards. Their commitment to safety is paramount for their own well-being and the safety of their colleagues. Laborers are responsible for understanding and following safety rules and procedures, participating actively in safety briefings, and using their PPE correctly. They are trained to recognize potential hazards in their immediate work environment and to immediately report a

ny unsafe conditions or practices to their Foreman. Their vigilance and adherence to safety protocols are crucial in preventing slips, trips, falls, struck-by incidents, and other common construction site injuries. The laborer's dedication to working safely ensures they return home to their families each day, contributing to the overall safety culture of the team.

The **Truck Driver** plays a critical role in the logistics of a public works project, transporting materials, equipment, and personnel to and from the worksite. Their responsibility for safety extends beyond the immediate construction zone to the public roadways. Truck drivers must adhere to all traffic laws, maintain their vehicles in safe operating condition through regular inspections, and be proficient in loading and unloading procedures to prevent shifting loads and potential accidents. On the worksite, they navigate often congested and uneven terrain, requiring careful maneuvering and constant awareness of their surroundings and the presence of other workers. They must be mindful of blind spots and utilize spotters when backing up or operating in tight spaces. The truck driver's commitment to safe driving practices protects both the public sharing the roads and the crews working on site.



The **Engineer** brings their technical expertise to the forefront of safety planning and implementation. During the design phase, engineers consider safety factors in the structural integrity of excavations, the stability of slopes, and the layout of the worksite to minimize potential hazards. They develop detailed plans and specifications that incorporate safety requirements and ensure compliance with relevant codes and regulations. On the job site, engineers may be involved in inspecting work to ensure it is being performed according to the safety specifications, conducting site surveys to identify potential hazards, and developing solutions to unforeseen safety challenges. Their understanding of engineering principles is crucial in mitigating risks associated with complex construction activities and ensuring the long-term safety of the infrastructure being built.



The collaborative efforts of all these individuals, prioritizing safety, create a protective shield around public works construction projects. The commitment extends beyond the workers themselves to the safety of the public. Work zones are carefully delineated with cones, barriers, and signage to warn motorists and pedestrians of construction activities and guide them safely through or around the area. Flaggers play a crucial role in directing traffic and ensuring the safe movement of both vehicles and

construction equipment. Public awareness campaigns often educate the community about work zone safety, upcoming disruptions to daily life, and encourage drivers to exercise caution.

By recognizing the inherent risks involved and the unwavering commitment to safety demonstrated by superintendents, foremen, laborers, truck drivers, and engineers we, together, can foster a deeper appreciation for the vital contributions of Dover’s Community Service employees. They are the unseen guardians of our communities, building and maintaining the foundations upon which our City thrives, always with a steadfast focus on ensuring the safety of themselves and the public they proudly serve. The next time you see a public works crew on the job, remember the intricate web of safety protocols and the dedicated individuals working diligently to keep our communities running smoothly and safely.

Engineering Projects:

Engineering staff is actively supporting a number of projects across the city. The following are some highlights on just some of the active projects.

Cochecho Waterfront Redevelopment:

The Cochecho Waterfront Redevelopment Project experienced a slight dip in momentum during early spring 2025 due to persistent wet weather. However, as March progressed and we welcomed warmer temperatures and extended daylight hours, the construction efforts have successfully regained their pace. Strides are being made on the exterior building construction, with crews nearing critical weather-tight milestones. Simultaneously, interior work is actively underway, encompassing essential elements such as framing, electrical wiring, and plumbing installations, signaling a steady progression towards the completion of the built structures.

Parallel to the building construction, notable advancements are occurring in the public improvement aspects of the project. Adjacent to the Makem



Figure 2: Construction continues on the waterfront as the pavilion takes shape.

Bridge, the construction of the Granite Bridge Deck Stairs is actively proceeding, marked by the ongoing Remedial Action Plan (RAP) closure and necessary subgrade adjustments, with the arrival of the granite stair blocks on-site. The installation of park walkway lighting is also in full swing, evidenced by the continued placement of light pole bases and the associated electrical supply conduits. Furthermore, the segmented closure of park areas with RAP is progressing in tandem with the installation of subsurface park elements.



Figure 3: Utility replacement work continues on Angle St.

Essential electrical infrastructure is also taking shape, with Eversource commencing the process of pulling wire for the electrical supply, an effort anticipated to span approximately one month.

Looking ahead, several key milestones are on the horizon. Northeast Earth has completed the site preparation for a sector cabinet pad, which will serve as a crucial power source for a single-family residence and the future Dredge Cell parking area lighting. In the area designated as Building "F" and the adjacent park space, subgrade adjustments are finalized, and the area awaits formal RAP closure. The City is actively collaborating with engineers to address shoreline restoration in the former Army Corp bulkhead area, with an upcoming meeting scheduled with the New Hampshire Department of Environmental Services (NHDES).

Preparations for the retaining wall and stair foundations for the pavilion are complete, granite stair foundations are installed, and wall construction is currently underway. Excitingly, Pine Brook Construction is poised to initiate the first stages of construction for the Pavilion Building in the coming weeks, with an anticipated completion timeframe in early winter 2025.

Angle St Water Main Replacement:

Special Project Advisor Bill Boulanger and Assistant City Engineer Krystian Kozlowski have been overseeing a project to replace a water main and stormwater underdrain on Angle Street which runs between Central Ave and Academy Street. Work on the project began at the end of January by SUR and is expected to last into early May.

Garrison Hill Water Tank Rehabilitation:

Sargent Corporation was the low bidder and was awarded the rehabilitation project in January 2025. In March the 4+ million gallon tank was drained, inspected, and repairs. The rehabilitation of the tank is possible due to the construction of the new elevated tank brought online earlier in 2024. Public access to the Garrison Hill Park and community garden may be limited during construction and parkgoers are encouraged to check with the City's website for updates on the park's availability.



Figure 4: Existing Garrison Hill Tank has been drained and inspected.

Sixth Street Bridge:

Engineering staff received and reviewed an Alternatives Analysis in February from their consultant VHB and determined a preferred alternative for the bridge replacement. The City gave VHB the go ahead to proceed with the development of final permitting documents with hopes to replace the bridge in 2026.

Mill St Pump Station Reconstruction:

Consultant, Woodard & Curran provided a contract amendment for the next phase of the Mill St Pump Station evaluation including the assessment of a fourth design alternative. The new alternative being considered is aimed at reducing the sewer demand on the River St pump station by redirecting sewer flows to the Varney Brook pump station. Work on the final design phase of the project is expected to begin in the summer of 2025 with construction of a replacement pump station starting in the spring of 2026.

Garrison Hill and Oak St. Water Main:

Special Project Advisor Bill Boulanger is working with engineering firm Underwood Engineering to design water main improvements in the Broadway area. The water main will run first from the Garrison Hill Tank down to Oak St. Then, from Oak St the water main will head east down towards Broadway before heading south towards Florence St. These water main upgrades will address numerous water main breaks that have occurred recently in this area due to pipe beyond their useful life. It is anticipated that the water main will be under construction summer of 2025 in conjunction with the improvements at the Garrison Hill Tank. Bids were opened at the end of March and SUR was awarded the project

Henry Law Avenue/Payne Street Reconstruction:

Permitting is expected will commence in spring and last for approximately 6-7 months for the reconstruction project. The project is expected to go out for bid in September with construction along the shoreline to begin in mid-October after Apple Harvest Day festivities. Engineering staff are working with other City Departments to minimize disruptions to activities in Henry Law Park including phasing construction to allow for safe use of amenities throughout construction.

Court and Union St Reconstruction:

The Court and Union St reconstruction project went out to bid in March. Bids will be opened at the end of April. The hope is that a successful bidder will be awarded the project in May 2025 with construction starting sometime in 2025 but no later than spring 2026.

Fifth and Grove Reconstruction:

Remobilization in April beginning with the removal of the median refuge island in Central Ave and finish work on curbing. Work is expected to last until early summer 2025.



Figure 5: Curbing work at Chestnut and Fifth.

Crosby Road Drainage Study:

Engineering staff met with consultant VHB to review the drainage model that was prepared for Crosby Rd. The model will be used to determine what sorts of best management practices or BMPs can be installed within City right of ways and as part of public private partnerships to manage stormwater runoff.

County Farm Road Drainage Study:

Engineering staff met with consultant APEX to review the culvert assessment and design alternatives. APEX will now incorporate the City’s comments into a final memo for discussions with the permitting agencies on a final design permitting requirements. Construction is anticipated to take place in the latter part of 2025.

Environmental and Facilities Projects:

Pet Waste Notification:

Environmental Project Manager, Tim Puls, worked with Media Services and the City Clerk’s office to get an updated pet waste flyer in the mail for annual pet registrations. The notification is part of the City’s annual MS4 permitting requirements.

City Recreation Field Preparation:

City Engineer Ken Mavrogeorge and Facilities Project Manager Eric Sanderson met with staff from Recreation and Facilities and Grounds to discuss regular maintenance activities to prepare City recreation fields for the spring youth sports season. Facilities and Grounds roto-tilled and rolled seven softball and baseball fields. City staff are also planning on providing additional infield mix and maintenance equipment at the fields so that volunteers from the various organizations can help maintain the fields this season. The City hopes to improve how maintenance is conducted on the fields so that they are safer for the athletes to play on.

In addition to preparing ballfields for the spring season, the City is actively planning improvements to other facilities around the City including Maglaras Park (2026), Spruce Lane Park, and Morningside Park (2026). Public meetings on park upgrades are being discussed and notices for such meetings will be posted when times and dates are set.



Figure 6: Updated Pet Waste Flyer.

Permits and Licenses:

Permit and License Summary for March 2025:

Driveway Permits:	9
Utility Licenses:	1
Paving Licenses:	4
Excavation Permits:	5
Certificate of Occupancy Inspections:	10
Construction:	0
Obstruction Permits:	2

Wastewater Permit Review Summary for March 2025:

Sewer Connection Permit:	0
Septic Design Reviews:	2



Figure 7: Lenox Dr.

Site Review/Project Oversight Support:

Technical Review Committee:

The City's Engineering staff typically takes between 1 to 4 hours for each review as part of the Technical Review Committee. The review focuses on engineering related design elements such as utilities (water and sewer), stormwater, parking lot layout and pedestrian pathways. To ensure that projects efficiently move through the TRC process, City Engineering staff is available for preapplication meetings with applicants. To schedule a meeting with staff, call 603-516-6450.



Figure 8: New Chase Bank on Weeks Lane.

Four (4) projects came to TRC in March required Engineering review:

- 30 Grapevine Dr.
- 52 Old Rochester Rd.
- 210 Tolend Rd.
- 512 Sixth St.

Preconstruction Meetings:

There was one (1) preconstruction meeting held in March 2025.

- Waterfront Development Park Pavilion

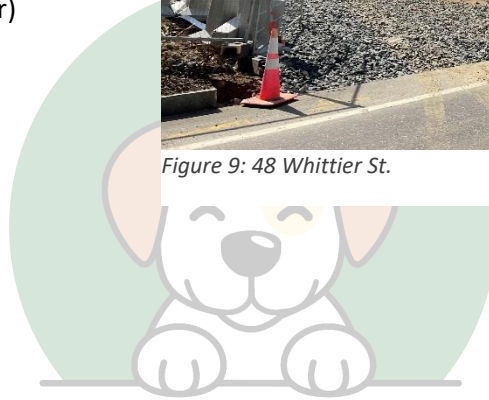
Construction Oversight:

Engineering Technician, Jordan Chambers, continues to conduct oversight of over 65 private construction projects approved by the Planning Board. Projects that are underway or have been completed include:

- 725 Central Ave Development (Central Ave and Brick Rd.)
- Northeast Credit Union (Education Way)
- Emerson Ridge (Old Oak St.)
- Ember Dr (New Rochester Rd.)
- Mixed Use Residential – The Station (2 Grove St)
- Waterfront Private Development
- Chase Bank on Central Ave
- Pointe Place
- Fisher St. Residential (Lenox Dr)
- 48 Whittier St. Residential
- McIntosh Commons
- 59 Tolend Rd.



Figure 9: 48 Whittier St.



Community Services
Dover, NH