



Effective Date: April 19, 2023

Organization: City of Barre, Vermont, USA

Position Title: Engineering Technician B

Engineer's Office

Department: DPW

Supervisor: Director of Public Works or their designee

Salary \$28.72 per Hour

Summary/Objective

The Department of Public Works Engineering Technician assists the Public Works Director and Assistant Public Works Director in the development of work plans, project plans, records and project management for all of the divisions of the DPW. In addition, the incumbent will assist in updating records of the Engineer's Office into modern formats of CADD and GIS.

Essential Functions

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. Skilled work performing engineering drawing, mapping, engineering data collection and analysis, report writing, construction inspection, traffic control, performing work with surveying equipment to collect information or field demark project elements. Information may involve transportation, water, wastewater or stormwater systems in addition to general survey.
2. Prepare simplified work plans for construction of engineered projects related to street rehabilitation activity, storm drain repairs and other transportation appurtenances for review and approval by the Director of Public Works or his designee. Work plans include estimating, budget, schedule and specialized resource requirements including permits for small to medium projects with supervisory support. Project plans for construction may result from work plan activities.
3. Assists in developing asset inventories, tracking asset conditions and formulating asset improvements on a scheduled basis across utility inventories in cooperation with the Director of Public works, Assistant Director or Superintendent of Water and Sewer Division. May be assigned specific asset inventories and specialty knowledge areas for primary responsibilities
4. Performs engineering data collection, analysis, recommendation and devises solutions for identified engineering problems. Deploys appropriate data acquisition techniques to provide meaningful input to decision making.

5. Performs clerk of the works functions for City DPW projects including inspections, approvals and verification of design objectives. Detects and seeks correction of materials, improper construction practices parts or questionable conditions to the department supervisor.
6. Creates or updates drawings for standard details for Barre City utilities and provides explanation of the details so that compliance is achieved by city staff or contractors.
7. Maintains the work area and equipment in a clean and orderly condition and follows prescribed safety regulations.
8. Locates sources of problems by observing processes in operation; listening or viewing for problems; using precision measuring and testing instruments in accordance with directions or written procedures.

Necessary Knowledge, Skills and Abilities

1) BS in engineering with 1 years' experience, or BS in a physical science or technology with 2 years' experience, or AS in any engineering discipline with 3 years' experience in performing engineering or technology related duties or HS diploma with 5 or more years of relevant experience with a combination of the following skills;

1. Ability to work collegially with others in complex and occasionally conflicting objectives related to public service and infrastructure. Accomplish work in a professional demeanor.
2. Ability to read and understand blueprints and related specifications and codes in written form about materials, construction techniques and safety practices.
3. Knowledge of civil engineering practices and procedures for infrastructure design, construction or operations.
4. Understanding of building sciences including structures, electricity, plumbing, and HVAC and controllers. Awareness of control theory as used in civil engineering systems.
5. Excellent levels of English reading, writing, speaking, and comprehension.
6. Moderate levels of active listening, critical thinking, coordinating, instructing, service orientation, installation, time management, and organization.
7. Positive attitude, strong work ethic, ability to work under pressure, and be a fast learner
8. Ability to work as a contributing member of a work team or environment
9. Complete a methodical approach to solving problems with note taking or recordkeeping
10. Ability to follow written and oral instructions and devise work approaches to assignments
11. Ability to establish and maintain effective working relationships with other employees and the public
12. Ability to communicate effectively, both verbally and in writing.
13. Display competence with the Microsoft Office Suite (Excel, Word and Outlook) and CADD or GIS software

Competencies

1. Must have ability to draw and modify electronic documents in CADD. Familiarity with GIS and data layers desired to support public works planning.
2. Must have critical thinking and logic-based analysis capacity
3. Must have a valid Driver License or the ability to obtain one within 6 months of hire.

Supervisory Responsibility

This position has no routine supervisory responsibility.

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

PHYSICAL ACTIVITY REQUIREMENTS			
<ul style="list-style-type: none"> • Employee is responsible for wearing and maintaining personal protective equipment. • This job requires the ability to stand for extended periods of time. • This job requires the ability to see, whether naturally or with vision correction tools (glasses, contacts). • This job requires the ability to hear, whether naturally or with hearing correction tools (hearing aid) in order to communicate with co-worker/supervisors/customers, and to recognize audible characteristics including abnormal sounds from mechanical equipment, warning devices from trucks and equipment and hazards present or common to the work area which are detectable by hearing. • Must have the ability to be on one's feet regularly and use hands, arms, and legs repeatedly on the job. • Specific vision abilities required by this job include: close vision, color vision, peripheral vision, depth perception and ability to adjust focus. • Work frequently occurs in confined areas. • The noise level in the work environment is sometimes loud. 			
Primary Physical Requirements		Other Physical Requirements	
Lift up to 10 lbs.:	Performed frequently	Twisting:	Occasionally performed
Lift 11 to 25 lbs.:	Performed routinely	Bending:	Performed frequently
Lift 26 to 50 lbs.:	Performed occasionally	Crawling:	Occasionally performed
Lift over 50 lbs.:	Performed occasionally	Squatting:	Occasionally performed
		Kneeling:	Occasionally performed
Carry up to 10 lbs.:	Performed frequently	Crouching:	NA
Carry 11 to 25 lbs.:	Performed regularly	Climbing:	Occasionally performed
Carry 25 to 50 lbs.:	Performed occasionally	Balancing:	Occasionally performed
Carry over 50 lbs.:	Performed occasionally	Work Surfaces	

		Standard flooring types and irregular outdoor surfaces that may be slippery at times.	
Reach above shoulder height:	Performed Routinely	In Avg. 8 hour Day Employee is Required to:	
Reach at shoulder height:	Performed frequently		
Reach below shoulder height:	Performed frequently	Sit	
		Consecutive Hrs.	1 2 3 4 5 6 7 8
Push/Pull:	Performed frequently	Total Hrs.	1 2 3 4 5 6 7 8
Hand Manipulation		Stand	
Grasping:	Performed frequently	Consecutive Hrs.	1 2 3 4 5 6 7 8
Handling:	Performed frequently	Total Hrs.	1 2 3 4 5 6 7 8
Torquing:	Rarely performed	Walk	
Fingering:	Performed regularly	Consecutive Hrs.	1 2 3 4 5 6 7 8
		Total Hrs.	1 2 3 4 5 6 7 8

Work Environment

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. While performing the duties of this job, the employee regularly works in an office setting. Nearly as often the employee will be outdoors in outside weather conditions. The employee regularly works near traffic, utilities and utility construction where s/he is frequently exposed to wet and/or humid conditions and vibration. The employee occasionally works in high, precarious places, steep slopes or snow and ice conditions and is occasionally exposed to fumes or airborne particles, toxic or caustic chemicals, and risk of electrical shock.
2. The noise level in the work environment is usually quiet but field work may be loud when on a construction site.

Position Type/Expected Hours of Work

This position is classified as non-exempt full-time. Standard days and hours of work are Monday through Friday, 7:00 a.m. to 3:30 p.m. However, the position requires the ability to work during nonstandard hours when the need arises. Some emergency call-in hours should be expected.

Travel

Local travel may be required between facilities, public works garage, job sites or to vendors may be required. Some travel for training may be required including use of personal vehicle.

Additional Eligibility Qualifications

None required for this position.

Work Authorization/Security Clearance (if applicable)

Must be authorized to legally work in the United States

Must be able to get to and from work on a consistent basis

AAP/EEO Statement

City of Barre provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, sex, national origin, age, disability or genetics. In addition to federal law requirements, City of Barre complies with applicable state and local laws governing nondiscrimination in employment in every location in which the City has facilities. This policy applies to all terms and conditions of employment, including recruiting, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation and training.

City of Barre expressly prohibits any form of workplace harassment based on race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, genetic information, disability, or veteran status. Improper interference with the ability of City of Barre's employees to perform their job duties may result in discipline up to and including discharge.

Other Duties

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities and activities may change at any time with or without notice.

Signatures

This job description has been approved by all levels of management:

Manager_____

HR_____

Employee signature below constitutes employee's understanding of the requirements, essential functions and duties of the position.

Employee_____ Date_____