

PORTAGE COUNTY
Water Resources

TITLE: Project Engineer

JOB OBJECTIVES: Incumbent is responsible for preparing plans, specifications, and other documents for new water and wastewater design and construction projects.

ESSENTIAL JOB FUNCTIONS:

- Design water and sewer facilities including sanitary sewers, waterlines, force mains, and pump stations.
- Prepare specifications and cost estimates for sanitary sewers, waterlines, force mains, and pump stations.
- Performs review and analysis of land development project consultant construction drawings for acceptable standards for sanitary sewer and water main infrastructure within a team review process.
- Prepares equipment and process research as needed to support the design and construction of water treatment and wastewater treatment facilities.
- Writes engineering reports for proposed and existing facilities.
- Obtains proposals from consultants or contractors for supplemental services.
- Conducts preliminary inspections, field measuring, and data collection.
- Prepares project bid packages and bid evaluations within a team process.
- Reviews shop drawings for compliance to project and department standards.
- Provides technical assistance to Construction Department including site investigations.

NON-ESSENTIAL JOB FUNCTIONS:

Performs related Essential and Non-Essential functions as needed.

I. JOB REQUIREMENTS

Equipment: Ability to use the following equipment: automobile, computer, printer, calculator, measuring tape, copier, and plotter.

Critical Skills/Expertise:

- Knowledge of engineering planning, design, and construction.
- Knowledge of Federal, State, and Local laws, codes, ordinances, and design standards.
- Knowledge of surveying.
- Knowledge of computers and related equipment.
- Ability to adapt engineering methods and standards.
- Ability to communicate effectively, both orally and in writing.

Job Standards: Bachelor's Degree in either Engineering, Engineering Technology, or Construction Engineering Technology is required, along with related experience. An Engineer Intern Certificate from the Ohio State Board of Registration for Professional Engineers and Surveyors within 1 year of hire.

Must possess a valid Ohio drivers' license and maintain continuing eligibility under the existing County drivers' eligibility standards.

II. DIFFICULTY OF WORK

Work consists of complex, varied, non-standardized tasks requiring the application of numerous laws, rules, regulations, and procedures.

III. RESPONSIBILITY

Supervisor provides detailed and technical instructions when needed, and reviews work regularly. Incumbent makes general decisions regarding work independently. Incumbent is responsible for implementing design schedule and budgets while providing detailed and technical instructions to the Design Technicians. Errors in work could cause a project to be re-designed or equipment failure.

IV. PERSONAL RELATIONSHIPS

Incumbent has contact with co-workers, employees in the department, public and private sector employees, and the general public. The purpose of these contacts is to coordinate design efforts, permits, operations and maintenance,

V. PHYSICAL EFFORT AND WORK ENVIRONMENT

Physical

Requirements: Incumbent performs sedentary work which may require lifting up to fifty (50) pounds occasionally.

Physical Activity: Incumbent performs the following physical activities: climbing, balancing, stooping, kneeling, crouching, crawling, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, feeling, talking, hearing, and repetitive motions.

Visual Activity: Incumbent performs work where the seeing job is close to the eyes.

Job Location: Incumbent works inside and outside with occasional exposure to temperatures that range from below 32 degrees to above 100 degrees for periods of more than one hour, noise loud enough to require shouting in order to be heard, vibrations, hazards, atmospheric conditions, and oil, and is sometimes required to wear a respirator.

PORTAGE COUNTY

Water Resources

TITLE: Design Engineer

JOB OBJECTIVES: Incumbent is responsible for ensuring that design of new water and wastewater facilities in Portage County occurs in a responsive and efficient fashion.

ESSENTIAL JOB FUNCTIONS:

- Respond to inquiries on available system capacity to potential new customers.
- Review plans for new development to maintain adherence to design standards and long-term plans.
- Maintain of general plan for sewer and water.
- Coordinate external design contracts.
- Investigate and survey sites.
- Prepare detailed plans and specifications.
- Prepare and obtain necessary easements.
- Participate in department wide TQM teams.
- Participate in County wide infrastructure committees.
- Review shop drawings and coordinate as-built drawings.
- Relating relative project priorities.
- Coordinate the scheduling of projects.
- Plan review and site inspections of commercial/industrial users to avoid negative impact from discharge on sewers or treatment facilities.
- Prepare and coordinate monthly progress updates.
- Troubleshoot treatment, collection, and distribution facilities.
- Prepare Grant & Loan applications for Issue 2, WPCLF, and CDBG.

NON-ESSENTIAL JOB FUNCTIONS:

Performs related Essential and Non-Essential functions as needed.

I. JOB REQUIREMENTS

Equipment: Ability to use the following equipment: computer, printer, calculator, fax machine, and various surveying and drafting equipment.

Critical Skills/Expertise:

- Knowledge of wastewater and water systems.
- Knowledge of design standards for wastewater and water systems.
- Ability to supervise people.
- Ability to prioritize work and handle multiple demands.

- Knowledge of surveying.
- Ability to communicate effectively, both orally and in writing.
- Knowledge of chemical compounds and properties.
- Knowledge of the Portage County Personnel Manual, the union contract, the Ohio Revised Code, PC Sewer Use Rules, Portage County Standard Specifications, Ten State Standards, and Ohio EPA Design Guidelines.

Job Standards: Bachelor's Degree in Civil Engineering is required, along with a minimum of three (3) years related experience and one (1) years supervisory experience. Management training, and wastewater and water operating certification are desired. Must possess a valid Ohio driver's license and maintain continuing eligibility under the existing County driver eligibility standards. Must obtain an Ohio Professional Engineering License within one year (1) of hire.

II. DIFFICULTY OF WORK

Work consists of complex, varied, non-standardized tasks requiring the application of numerous laws, rules, regulations, and procedures.

III. RESPONSIBILITY

Incumbent supervises and directs five (5) subordinates. Supervisor provides detailed and technical instructions regarding priorities, and reviews work upon completion. Incumbent makes most decisions regarding work independently. Errors in work could result in the destruction of a building, understanding of lines, pump stations, and treatment plants, which in turn could result in raw sewage discharges, building bans or sprinkling bans.

V. PERSONAL WORK RELATIONSHIPS

Incumbent has contact with co-workers, employees in the department, public and private sector employees, and the general public. The purpose of these contacts is to coordinate work, permits, construction, accounting, O & M, and administration.

V. PHYSICAL EFFORT AND WORK ENVIRONMENT

Physical

Requirements: Incumbent performs heavy work which may require lifting up to fifty (50) pounds occasionally.

Physical Activity: Incumbent performs the following physical activities: climbing, balancing, stooping, kneeling, crouching, crawling, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, feeling, talking, hearing, and repetitive motions.

Visual Activity: Incumbent performs work where the seeing job is close to the eyes.

Job Location: Incumbent works inside and outside with occasional exposure to temperatures that range from below 32 degrees to above 100 degrees for periods of more than one hour, noise loud enough to require shouting in order to be heard, vibrations, hazards, atmospheric conditions, and oil, and is sometimes required to wear a respirator.

SUPERVISORY AND MANAGERIAL FUNCTION

Span of Control: Incumbent supervises the following subordinates:

- (1) Project Engineer
- (1) Design Technician II
- (1) Design Technician I

Supervisory Functions:

Planning: Incumbent plans and coordinates the work load of the design team, capital improvement plans, and system improvement plans.

Organizing: Incumbent organizes and reviews design and construction costs and maintains monthly project status reports.

Budgeting: Incumbent determines Capital Improvements projects, equipment and supply needs, and staffing requirements for budgeting purposes, and coordinates project funding sources.

Directing: Incumbent directs the work of Project Engineers, developers, and engineers regarding the design of water and wastewater projects.

Instructing: Incumbent provides instructions regarding Portage County Standards and project requirements.

Reviewing: Incumbent reviews progress and completed work on projects of design.

Training: Incumbent arranges for training in the department when needed.

Counseling and Discipline: Incumbent conducts quarterly reviews and evaluations.

Other Personnel Functions: Incumbent assists with the hiring process when needed.

Supervision Received:

Work methods and related problems: Incumbent is responsible for maintaining professional work methods and preparing monthly project status updates.

Productivity: Incumbent is responsible for the productivity and efficiency of the department.

Quality of Work Produced: Incumbent is responsible for the quality of work in the department.

Budget: Incumbent is responsible for setting and working within the budget.

Staffing and/or Organizational Changes: Incumbent makes recommendations for staffing and organizational changes.

Departmental Objectives: Incumbent is responsible for maintaining design objectives.

Direction and/or guidance received from your supervisor: Incumbent receives direction and guidance from the Supervisor when needed.