ENGINEERING TECHNICIAN I

MAJOR FUNCTION

This is basic technical level work supporting higher-level technicians and professionals in the civil engineering, drafting, and environmental management fields. Work is performed under the direct supervision of an employee in a higher technical classification, with all work performed subject to technical professional review.

ESSENTIAL AND OTHER IMPORTANT JOB DUTIES

Essential Duties

Prepares civil engineering drawings of water lines, sewer lines and roadways in ink and in pencil on film and vellum from rough sketches, field survey notes or deed descriptions. Prepares utility and survey maps, plots legal descriptions. Operates blueline and photocopying machines. Files and maintains records of engineering plans. Maintains engineering library. Assists citizens and students with necessary information and/or reproduction. Calculates basic engineering data such as square feet, acreage and cross section cut and fill. Performs related work as required.

Environmental Management: Reviews, and analyzes reports generated by operating units to identify trends, exceedences and other abnormal occurrences. Makes targeted inquiries in order to generate appropriate graphs, charts and reports and update or reconcile information. Reviews Discharge Monitoring reports and obtains readings. Identifies faulty data, unjustifiable results and incorrect recordings as it relates to regulatory compliance data. Develops Access files to perform queries on air, water and solid waste information and provides written evaluation and documentation of query results with recommendations for program changes. Researches databases and compiles information and reports upon request. Reviews and updates Access database on an on-going basis. Prepares and files reports and other correspondence with regulatory agencies in accordance with set deadlines. Performs support tasks such as filing, typing and copying, as assigned. Perform duties in the field as assigned. Performs related work as required.

Other Important Duties

Delivers engineering documents as necessary. Coordinates purchase of engineering supplies and blueline reproductions with vendors. Assists with special projects as assigned. Performs related work as required.

DESIRABLE QUALIFICATIONS

Knowledge, Abilities and Skills

Knowledge of basic mathematics with emphasis on trigonometry. Knowledge of the principles, practices, techniques and instruments of civil engineering. Considerable knowledge of modern record keeping and reporting methods. Knowledge of downloading instrument data logs, post-processing data, data reduction, and proper input into spreadsheet databases, GIS, mapping and modeling software. Ability to read engineering plans. Ability to make computations quickly and accurately. Ability to operate lettering, blueline machines. Ability to plan, organize, and perform work independently. Ability to understand and follow complex oral and written instructions. Ability to communicate effectively, orally and in writing. Skills in drafting and design. Skill in the use of personal computers and associated software and program applications that are necessary for successful job performance.

Minimum Training and Experience

Possession of a high school diploma or an equivalent recognized certificate and one year of experience that includes drafting; or an equivalent combination of training and experience.

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Environmental Management: Successful completion of a two-year vocational or college-level business, technical, or scientific program and one year of computer data entry experience; or possession of a high school diploma or possession of an equivalent recognized certificate and three years of staff or higher level experience that includes data entry and use of database software systems; or an equivalent combination of training and experience.

Necessary Special Requirements

At the department director's discretion, a valid Class E State driver's license may be required at the time of appointment for designated positions allocated to this class.

Revised: 05-15-83 06-06-84 01-24-90 05-22-91 01-17-92 05-11-92 01-22-96 06-24-99 04-18-01 07-10-01 09-05-03 04-16-04* 08-06-10*