

**MONTGOMERY COUNTY GOVERNMENT
ROCKVILLE, MARYLAND
CLASS SPECIFICATION**

**Code No. 004037
Grade 14**

ENGINEER TECHNICIAN TRAINEE

DEFINITION OF CLASS:

This is entry level paraprofessional engineering work in one of the major engineering specialties, e.g., civil, traffic, parking, environmental or fire protection. Contacts are with coworkers and personnel in other County offices, to exchange information and explain routine procedures or requirements. An incumbent offers limited direct service or assistance to the public.

Under the direction of higher-level employees, an employee in this class is responsible for performing various duties to support an engineering program such as: assisting in highway design by performing calculations and drawing plans; conducting limited traffic studies; preparing signal or sign and marking plans; reviewing plans, etc. Specific instructions are provided with assignments, and work is reviewed in progress and upon completion to ensure technical accuracy and compliance with instructions and established procedures. Specific guidelines include accepted engineering principles and practices, established industry standards, and State and County codes. The employee uses judgment to select and apply these guidelines, and refers all deviations or unusual situations to the supervisor. The complexity of work in this class is characterized by assignments involving analysis of the interrelationship of various steps or procedures, e.g., assisting with the preparation of engineering drawings for construction projects by assembling, translating, and plotting field engineering notes and other data. Efforts of employees in this class involve the execution of specific rules, regulations and procedures which affect the accuracy and acceptability of County engineering projects such as design of roads and construction of driveways and parking facilities. The work is primarily sedentary and performed in an office setting; however, exposure to some risks is present when employees are involved in periodic field visits to construction sites and work zones.

EXAMPLES OF DUTIES: (Illustrative Only)

Common to All Engineering Specialties

- Assembles, translates and plots field engineering notes and other data.
- Prepares correspondence for signature of senior personnel in response to citizen inquiries and complaints.

Civil Engineering

- Reviews residential driveway and street paving permits to ensure they are complete and in compliance with standard codes and criteria; makes recommendations to homeowners and developers concerning driveway standards and design; provides liaison between the permittee and the inspection personnel; and maintains permit files and records.
- Performs related duties as required.

Traffic Engineering:

- Collects data in traffic surveys and field investigations for traffic volume, capacity, origin and destination, vehicular speed, accident reports, and pedestrian counts; and prepares reports of recommendations.
- Reviews traffic counts and recommends new signal timings and phasings, traffic signs and pavement markings, traffic regulations, and other traffic control measures.
- Prepares work orders for the fabrication and installation of signs and signals.
- Maintains inspection logs for traffic inspections.
- Performs related duties as required.

Parking Engineering

- Performs parking surveys and field investigations related to facility usage, operational characteristics, parking layout, and meter installation to prepare draft reports and recommendations and prepare cost and quantity estimates.
- Prepares work orders for parking construction projects.
- Prepares diagrams of parking facilities as requested by senior personnel.
- Performs related duties as required.

Environmental Engineering

- Reviews and processes building permits for stormwater management facilities in accordance with established criteria; prepares monthly and quarterly reports of permit status.
- Maintains stormwater management list processing plats and transactions files.
- Collects payments of stormwater management contributions and issues receipts.
- Performs related duties as required.

Fire Protection Engineering

- Reviews portions of plans for standard fire protection systems such as sprinkler and alarm systems for renovations and office modifications to determine compliance with established codes, standards, and design criteria.
- Maintains appropriate records of each assigned project and the code requirements cited; maintains status logs of all construction projects submitted for review.
- Provides information on established codes to architects, engineers and construction personnel.
- Infrequently participates in acceptance testing of various fire suppression systems such as sprinkler systems, gaseous suppression systems, or chemical systems; and records results.
- Performs related duties as required.

KNOWLEDGE, SKILLS AND ABILITIES:

- Knowledge of basic mathematics, including algebra and geometry, and simple engineering methods and equipment.
- Knowledge of the County, State, and Federal laws, codes and regulations relating to the applicable area of employment.
- Skill in preparing accurate sketches and diagrams and ability to learn drafting techniques, including computer-aided design.
- Ability to read and interpret engineering plans and specifications and to convey their meaning to others.
- Ability to learn to access and manipulate data utilizing computers and engineering software.
- Ability to work with coworkers and County employees to obtain, clarify, and provide information.

MINIMUM QUALIFICATIONS:

Experience: One (1) year of experience in an applicable technical field that has required the application of principles of physical science and mathematics to assist engineers in solving civil, traffic or environmental engineering problems.

Education: Completion of high school or High School Certificate of completion recognized in the State of Maryland.

Equivalency: An equivalent combination of education and experience may be substituted.

LICENSE:

- Possession and maintenance at all times of a valid Class "C" (or equivalent) driver's license from the applicant's state of residence when required for job-related duties.

PROBATIONARY PERIOD:

Individuals appointed to this class will be required to serve a probationary period of six (6) months, during which time performance will be carefully evaluated. Continuation in this class will be contingent upon successful completion of the probationary period.

MEDICAL EXAM PROTOCOL: Medical History Review.

Class Established: December, 1973

Revised: July, 1980

August, 1987

August, 1992 (M)

May, 1997

April, 2010

August, 2013

Formerly Titled: "Engineer Technician I"