ENGINEERING TECHNICIAN IV

Salary Group: A18
Class Code: 2125

GENERAL DESCRIPTION

Performs advanced (senior-level) engineering technician work. Work involves performing and/or overseeing surveys and inspections; collecting and correlating engineering and traffic data; and coordinating the installation, maintenance, and repair of electronic systems. May serve as a lead worker providing direction to others. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

Prepares and/or oversees the preparation and reporting of traffic data and the procurement, maintenance, and operation of traffic counting machines and other equipment.

Conducts inspections of maintenance and construction projects for compliance with specifications and requirements.

Conducts laboratory tests to verify whether construction materials conform to department specifications.

Conducts cost analysis studies.

Confers with contractors on plans, specifications, and quality of work.

Determines the methods, equipment, and project schedules required to repair or modify computer-based switching systems.

Audits construction project documents to ensure compliance with plans, specifications, and estimates.

Inspects materials, plant equipment, and production procedures; and examines the structural strength of manufactured items and materials.

Makes structural and design calculations for proposed projects, and assembles and reviews calculations from other sources.

Maintains construction project records.

Plans, organizes, schedules, and conducts engineering or traffic work projects.
Prepares estimates, plans, and specifications.

Prepares, processes, and maintains reports.

Tests and maintains systems using analog or digital microprocessing equipment.

May serve as a lead worker providing direction to others.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in surveying, traffic, or engineering work. Graduation from a standard senior high school or equivalent is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of surveying; of engineering principles, techniques, and procedures; of mathematics; of methods, procedures, equipment, and materials used in construction and maintenance work; of applicable inspection methods, procedures, and techniques; of laboratory testing procedures and methodologies; and of applicable safety requirements.

Skill in the operation of surveying tools and equipment, surveying instruments, and other tools of the trade.

Ability to conduct inspections and laboratory tests, to prepare reports, to perform mathematical calculations, to communicate effectively, and to serve as a lead worker providing direction to others.