8222

HIGHWAY ENGINEER

Nature of Work

Under limited supervision, performs professional engineering work at the expert level as a staff assistant to a Chief Engineer, or as an assistant to District Engineer, or as the administrative head of a major engineering unit, or at a comparable level calling for demonstrated expertise within an engineering specialty. The responsibilities of the incumbent may extend to developing and implementing working policies and procedures for the area of assignment. Incumbent may be responsible for organizing, staffing, administering programs, and providing day-to-day direction according to the needs of the operation and the procedures of the Department. Performs related work as required.

Distinguishing Characteristics

The dual track career concept allows for progression to this level of the Highway Engineer series in recognition of (1) demonstrated expertise in a specialized area of transportation/civil engineering or (2) the assignment of administrative/supervisory duties as determined by the organizational setting of the position.

At the expert level, applies theories, principles and practices of transportation/civil engineering to the most complex engineering problems in the area of assignment or serves as staff assistant to the Chief Highway Engineer.

Examples of Work

- Supervises section activities and personnel in engineering and non-engineering areas.
- Visits projects and makes on-site engineering decisions.
- Trains and evaluates personnel to ensure quality work.
- Plans, schedules, and coordinates the activities of subordinate personnel.
- Reviews on-going work at major decision points with regard to problems or alternatives under consideration at that time.
- Investigates and responds to citizen complaints or requests.
- Represents the Department at internal and external meetings.

HIGHWAY ENGINEER (CONT'D)

Examples of Work (cont'd)

Serves as a senior level professional with recognized expertise which may include papers and/or credits published in nationally recognized transportation literature; presentations to national, regional or State professional groups, active membership in recognized national organizations or professional groups dealing with transportation engineering or other demonstrated expertise in a transportation engineering specialty such as concrete, steel, bituminous materials, environmental measurements, geotechnical evaluations, instrumental analysis, computer application, structural analysis, electronics, metalography, corrosion, welding and mathematical analysis, transportation systems analysis, route location, project evaluation, transportation planning, design, pavement, hydraulics, and other related fields.

Knowledge, Skills and Abilities

Knowledge of the principles and practices of transportation engineering as it relates to the planning, programming, operation, and administration in the area of assignment. Knowledge of current civil engineering practices and principles in the area of assignment.

Knowledge of modern design, construction, maintenance, planning, and management methods as they related to the specific job assignment.

Knowledge of the accumulated findings in the area of assignment.

Knowledge of engineering research techniques.

Knowledge of modern organizational leadership and management practices.

Ability to effectively administer and manage a major engineering force.

Ability to communicate effectively both orally and in writing.

Ability to establish and maintain effective working relationships with districts, divisions, industry, governmental units, public interest groups, and individuals.

Ability to conduct successful applied research in a specialized branch of highway engineering.

Ability to write professional quality papers, reports, research studies, and projects.

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HIGHWAY ENGINEER (CONT'D)

Minimum Qualifications

Training: Current license as a registered professional engineer in West Virginia.

Experience: Seven years of professional highway engineering experience involving the design, construction, or maintenance of highways.

Note: The experience may have been acquired after the bachelor's degree but may have occurred before or after registration as a professional engineer.

Substitution: Master's of science degree in civil engineering from a regionally accredited college or university may be substituted for one year of the required experience. Non highway professional engineering experience may be substituted for the highway engineering experience at the rate of two years of general experience for one year of highway related experience.

Established: 3/20/08
Effective: 5/1/08