

DESCRIPTION: Under general to limited supervision, performs supervisory and professional level engineering work for one or more central and/or field based engineering functions and/or projects. Work assigned involves coordination of multiple components, needs, and phrases related to transportation, facility, structural, water resources, utility-electrical-mechanical, industrial, or other professional level engineering work. Oversees completion of projects and supervises engineers-in-training, technical, and/or paraprofessional level engineering workers, or conducts engineering oversight or similar functions, both requiring advanced professional engineering knowledge. Work may encompass designing, planning, scheduling, construction, project management, renovation/maintenance, materials analysis, engineering research, and/or comparable civil engineering functions; performs related work as assigned.

DISTINGUISHING CHARACTERISTICS: (A position is assigned to this class based on the scope and level of work performed as outlined below.)

This is the third full performance classification level of the Engineer class series. Positions in this series perform work based on the application of professional engineering knowledge, skills, and abilities as indicated by the required possession of a four-year degree in a particular engineering discipline. The engineering work assigned can involve complex planning, designing, coordinating, and/or other functional activities involving roadway, aeronautical, structural (such as bridges, dams, or buildings), facility (such as electrical or mechanical), hydrology, water resources, industrial, or other professional level engineering fields. Positions at this level may be supervised by another professional engineer, or by an administrative official. Any Engineer classification level is distinguished from technical or paraprofessional engineering related job classes in which incumbents perform technical engineering or specialized support assignments that do not require the academic preparation of the Engineer class series.

Positions at this level, depending on the employing agency, supervise assigned employees and/or exercise functional oversight over private consultants or contractors, engaged in various engineering projects, where considerable latitude is exercised daily in project management and decision-making. Employees supervised and/or contracted workers monitored are engaged in project work and may include lower level Engineers and/or a variety of technical/paraprofessional engineering workers. Project or other operational work assigned requires advanced knowledge in one or more of the engineering disciplines. This level is distinguished from the lower levels of this series by required possession of a Professional Engineer (P.E.) license/registration. This level is distinguished from upper levels of this series, where positions are expected to supervise or oversee licensed professional level engineers and direct engineering work units, or to administer specialized engineering functions that are agency-wide or statewide in scope and impact.

EXAMPLES OF WORK: (A position may not be assigned all the duties listed, nor do the listed examples include all the duties that may be assigned.)

Plans, organizes, and directs operations and schedules of assigned engineering, maintenance, or other functions, work units, or projects to ensure development and construction/renovation activities conform to laws, regulations, and agency policies and standards; coordinates assigned functions/projects with employing agency divisions, offices, or sections, federal or State agencies, local governments, and/or other interested parties.

Coordinates assigned operations with other field and/or central office upper level engineers or managers to assist them in the administration of agency divisions, offices, or sections and to resolve project planning, design, bidding, and construction issues; recommends avoidance, minimization, and mitigation strategies to ensure effective development and management of engineering functions or projects.

Determines engineering function, work unit or project staffing requirements based on expertise required and specific work requirements; assigns work to, trains, supervises, and monitors assigned employees, contractors, or consultants to ensure timelines and fiscal constraints are met and projects are constructed according to plans, specifications, and special provisions; evaluates performance, addresses worker related problems, and recommends disciplinary or corrective actions.

Interprets plans for contractors and resolves problems, and organizes work activities to assist them; provides project construction information to contractors, landowners, public officials, and the public; manages and reviews work of consultants; negotiates and reviews agreements between the employing agency and local governments, utilities companies, railroads, other landowners, and/or consultants.

Reviews preliminary and final engineering plans, special provisions, and plan quantities to ensure constructability, completeness, accuracy, and conformance to standards and specifications; reviews consultant plans for federal aid or State supported projects; recommends solutions, changes, and ideas for construction to agency employees, consultants, and local government officials; works with them to make changes.

Conducts plan-in-hand and construction in-progress inspections to ensure construction in accordance with standards, plans, and specifications; enforces agency policies and procedures.

Collects and analyzes information on planning, design, bidding, and construction strategies; conducts research of current industry standards and test procedures; reviews professional engineering practices and policies and publications and develops/modifies engineering policies, procedures, standards and specifications, or other directives, manuals, and publications.

Serves as an expert for and provides professional engineering advice about specialized or advanced technical/professional engineering services, and presents technical information, program plans, and proposals to higher-level management; prepares analyses and reports about and provides technical expertise on engineering technologies, materials, and procedures to enhance agency processes and results.

Oversees special or long-term feasibility or professional engineering reviews or studies conducted in-house and examines such studies conducted by consulting firms, local governments, or other public agencies; prepares or evaluates documents, reports, and agreements related to these reviews or studies.

KNOWLEDGE, SKILLS, AND ABILITIES REQUIRED: (These are needed to perform the work assigned.)

Knowledge of: civil engineering theories, principles, and practices of civil engineering and design; modern methods and techniques of highway construction, maintenance, and materials; legal responsibilities and ramifications associated with the work performed; federal and agency design standards, specifications, and procedures; federal and state laws and regulations applicable to the function performed; practices and terminology of computer operations and Computer Aided Design and Drafting (CADD); Geographic Information Systems (GIS); mathematics, surveying and material testing; engineering properties of materials and surfacing types; rehabilitation and maintenance techniques; pavement management; and practical engineering concepts.

Ability to: interpret, understand and implement state and federal laws and regulations, and agency standards, policies, and procedures; read interpret and evaluate engineering plans and specifications; review and approve/stamp engineering plans; understand all levels of project design; organize, analyze, and evaluate available information and draw reasonable conclusions; develop procedures and determine the logical flow of work through the work unit; plan, organize, assign and direct the work of section/unit staff; provide direction and expertise to other engineering professionals and engineering technicians; evaluate the professional and/or technical skills of assigned team members and assign work accordingly; communicate information clearly and concisely; prepare, interpret, use, and explain civil engineering plans, maps, specifications and standards and reports, communicate with the public, contractors, consultants, agency staff at all levels, and local government officials; interact with assigned worker, other agency employees, local government representatives, contractors, consultants, and the public.

MINIMUM QUALIFICATIONS: (Applicants will be screened for possession of these qualifications. Applicants who need accommodation in the selection process should request this in advance.)

Professional experience in an engineering field applicable to the employing agency.

AND

Must possess a Professional Engineer (P.E.) license at the time of application, and be licensed by the Nebraska Board of Engineers and Architects at the time of employment or be able to obtain such license within 90 days of employment. [See also Legal Requirements.]

LEGAL REQUIREMENTS: (These qualifications are mandated by federal/state laws, statutes, and/or regulations.)

All positions in this classification are subject to Title 110, Nebraska Administrative Code, Chapter 2 – Engineering. The basic requirement is registration as a Professional Engineer (P.E.) by the Nebraska Board of Engineers and Architects, or the ability to obtain such registration within 90 days of employment. [Neb. Rev. Stat 81-3451.]

SPECIAL NOTES:

Bachelor's degrees outside of the United States must be ABET accredited at the time of application. Will also consider applicants with a Master's Degree in Engineering from an ABET accredited institution in the United States.

Specific positions may require an academic degree and/or professional license in a specific field of engineering. Recognized engineering fields include but are not limited to agricultural, chemical, civil, electrical, hydrology, industrial, mechanical, and structural.

State agencies are responsible to evaluate each of their positions to determine their individual overtime eligibility status as required by the Fair Labor Standards Act (FLSA).