

DESCRIPTION: Under limited supervision, reviews plans, specifications, and quantities for projects conducted or overseen by the Nebraska Department of Roads (NDOR), including the most complex, to ensure completeness, accuracy, and conformance to design guidelines; communicates with various design employees to interpret guidelines, clarify design concepts, solve problems with plan notes, and provide uniformity and clarity in documentation between projects; 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.)

Positions in this single full performance classification level are assigned technical engineering work during early phases of the development of construction, improvement, and renovation projects or related studies. The primary and predominant responsibility of these positions is to provide engineering services such as reviewing and evaluating plans, specifications, quantities, and other information; evaluating requirements and issues and recommending solutions for projects or studies; assembling data and preparing technical reports, letters, graphics, and other records; applying accepted engineering principles in standard situations or assisting professional engineers during major portions of complex engineering projects or studies. These projects or studies will vary in the full range of scope, complexity, and diversity. Contacts typically involve diverse professional and technical employees with varying needs and perspectives inside and outside the agency.

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).

Provides information and comprehensive advice in plan preparation to roadway, bridge, electrical, and landscape designers.

Reviews plans, quantities, and specifications for completeness, accuracy and conformance to NDOR guidelines for projects from minor culvert replacement to the very complex urban, designed by NDOR, cities, counties, or consultants including project elements for pavement, grading, culverts, bridges, lighting, traffic signals, landscaping, buildings, and other highway construction items.

Contacts designers, engineers, or consultants to discuss completeness and accuracy of information and documentation under review; explains required information and procedures for plan preparation, application of design standards, and quantity calculations; recommends revisions and/or revises plans to correct errors and deficiencies.

Searches multiple files and databases, and assembles plans packages in proper order for project team's reviews; reviews initial submittal for completeness; contacts designers or appropriate divisions for missing or incomplete items or plans.

Creates special provisions to modify Standard Specifications for Highway Construction when new concepts, materials, or procedures arise.

Consolidates all items required for Summary of Quantity sheets prior to incorporation into final plans.

Checks accuracy of Summary and Title sheets.

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

Knowledge of: activities, procedures, principles and terminology related to design and construction of highway and other transportation related projects, including engineering, surveying, hydrology, and geometrics; methods for calculating preliminary project costs; engineering review procedures; State and federal guidelines, policies, and regulations governing engineering and environmental elements of highway, bridge, culvert, and other transportation projects; NDOR Roadway Design Policies and Standards; Nebraska Standard Specifications for Highway Construction; Nebraska Board of Public Roads Classifications and Standards; agency program functions, business practices, and organizational structure; mathematical calculations including algebraic and geometric formulas and computations; basic highway planning and documentation practices.

Skill in: visualizing entire project to recognize incomplete plans; applying mathematical formulas and other techniques; organizing project assignments; writing clear and concise technical reports and letters; communicating with contacts in the public and private sectors to determine project requirements; operating personal computers and associated applications software.

Ability to: communicate in person and by telephone, email, and correspondence with various professional and technical engineering workers at different levels of an organization and the public; understand, interpret, and apply pertinent standards governing various components of transportation related projects; identify and summarize significant information from available sources such as survey notes, manuals, and standard specifications; compile relevant project information into clear and concise technical packages for administrative reviews; organize, plan, prioritize, and coordinate multiple assignments and activities relating to project scope definition; interact with agency employees and representatives of other agencies and private firms to maintain work relationships; query various databases and use applications software for analysis and reporting; document/record information in project correspondence file.

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

Experience in roadway design and/or highway construction and the use of personal computers to create design and/or civil engineering graphs, displays, maps, charts and drawings.

OR

Post high school coursework/training in civil engineering or construction practices and methods, and experience in operating personal computers to use various applications software and access computer databases to extract and prepare data and reports.

SPECIAL NOTE:

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).