STATE OF NEBRASKA CLASS SPECIFICATION EST: 12/95 - REV: 10/11

HIGHWAY DESIGN TECHNICIAN SUPERVISOR

<u>DESCRIPTION</u>: Under limited supervision, supervises a squad of Highway Design Technicians and performs the most complex Computer Aided Design (CAD) drafting; performs related work as required.

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

Plans, assigns, trains, and supervises the work activities of assigned Highway Design Technicians to attain work goals and to ensure consistent application of policies, procedures, and standards.

Supervises, approves leave, determines work schedules and assignments, and evaluates the work performance of assigned Highway Design Technicians; recommends personnel actions related to selection, discipline, and grievances.

Supervises and performs CAD drafting in the development of construction plans for highways and structures.

Interprets Nebraska Department of Roads Design Standards for assigned Highway Design Technicians.

Drafts 3D perspective drawings on CAD.

Recommends design changes based on drafting standards.

Performs the squad's CAD management, including file creation and parameters, archiving CAD files, creating cells, and managing cell libraries.

Writes procedures and manuals for new CAD and/or drafting techniques.

Coordinates squad's work with other units, sections, and/or divisions.

Performs complex engineering calculations and develops cost and material estimates for construction and repair projects.

Answers questions from consultants; reviews consultants' plans.

Assists in the creation, modification, and/or testing of new CAD menus or user commands.

Maintains drafting standards and controls quality of plans.

Manages and corrects files backed up to servers, such as duplication, designer files, naming convention.

Informs designers of changes in design policies.

HIGHWAY DESIGN TECHNICIAN SUPERVISOR (continued)

<u>FULL PERFORMANCE KNOWLEDGE, ABILITIES AND SKILLS REQUIRED</u>: (These may be acquired on the job and are needed to perform the work assigned.)

Knowledge of: personnel rules and regulations, union contract and related supervisory personnel policies and procedures; contents of and how to find specific information in Nebraska Department of Roads (NDOR) Roadway Design Manual, Drafting Procedures and Guidelines, Metric Conversion Manual, Board of Classification Manual; all forms of reprographics.

Ability to: effectively plan, assign, direct, and evaluate assigned staff; recognize inconsistencies in design and/or survey plans/information; relate whole-picture concepts in user groups.

Skill in: coordinating the work of others and maintaining an efficient work flow; creating and managing cell libraries; communicating with others to train in drafting policies and procedures.

<u>ENTRY KNOWLEDGE, ABILITIES, AND SKILLS REQUIRED</u>: (Applicants will be screened for possession of these through written, oral, performance, and/or other evaluations.)

Knowledge of: thorough knowledge of horizontal (spiral)/vertical alignment, equations, ties and coordinates; detailed knowledge of requirement for various construction plans; reprographics.

Ability to: visualize entire project to understand phasing requirements; instruct others on detailed procedures; locate proper resources to solve problems, get answers.

Skill in: coordinating the work of others and maintaining an efficient work flow, performing the most complex drafting calculations.

<u>JOB PREPARATION GUIDELINES</u>: (Entry knowledge, abilities, and/or skills may be acquired through, BUT ARE NOT LIMITED TO, the following coursework/training and/or experience.)

Any combination of training and/or experience that will enable the incumbent to possess the required knowledge, abilities and skills. A general qualification guideline for positions in this class is high school education or equivalent AND education or experience in civil drafting and/or design.