

STATE OF NEBRASKA CLASS SPECIFICATION
HIGHWAY PHOTOGRAMMETRIC TECHNICIAN II
PROVISIONAL

EST: 12/95 - REV: 10/11
CLASS CODE: M56732

DESCRIPTION: Under general supervision, performs photogrammetric tasks to establish stereo-models, create ground control and related duties using Computer Aided Design and Drafting (CADD) technology; 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.)

Not available at this time.

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.)

Creates ground control files for stereo- model setup.

Creates centerline/baseline file with annotation for the roadway survey.

Sets up stereo-models in instruments (e.g., stereo plotter, point transfer) utilizing analytical or digital programming methods.

Compiles planimetric or topographic maps, collects and records roadway cross-sections or break-line and random points for use in terrain program(s).

Communicates with the engineer or others in Nebraska Department of Roads (NDOR) to gather information and establish parameters needed to perform the survey.

Manipulates reference files to make use of other control or survey data during the mapping compilation.

Orders plots of planimetric or topographic maps by marking boundary in the design file, setting proper map scale, verifying final plot dimensions and processing electronic plot requests.

Archives completed survey file in the CADD computer system.

Uses "NEBRASKA TRAVERSE" to compute distance, angle and direction relationships between ground control points and centerlines or baselines in the roadway survey.

Cleans and maintains analytical stereo-plotters.

Converts all graphics and text of CADD design files from English to Metric scale values.

Uses comparator mode of stereo-plotting instrument to read machine coordinates of photographic images for use in the aerial analytical triangulation program.

Reviews consultant files for contract compliance.

Prepares and assembles photogrammetric survey materials for use by consultants.

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

Knowledge of: stereo photography; coordinate listings; survey notes; azimuths; centerline stationing; plan sheet formats; planimetric mapping; principles and techniques of cartography and photogrammetry as applied to highway engineering; mathematics, including geometry, trigonometry and survey computations; principles of photogrammetry stereo plotter program(s); state plane coordinates; IGRDS and IG94; curve/spiral data; analytical stereo-plotter applications; ground control points; Data Adjustment Factor (DAF); CADD levels.

Skill in: evaluating results from computations; manipulating files to detect errors in lines, cells, and/or text their placement.

Ability to: see stereoscopically; operate personal computer; place cells and text; read and understand alignment listings; use basic four-function math; operate an engineering calculator; measure distances and set right angles within a file; and reduce level notes; utilize CADD (e.g., Micro-station) technology in 2 space 3D with stereoscopic instruments and other computer systems; recognize the limits of photogrammetric methods; send and receive files on the network; use Nebraska Traverse Program; understand contract requirements.

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

Post high school coursework, training, or experience in surveying, imagery interpretation, and/or computer aided drafting.

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).