

PRINCIPAL ENGINEERING TECHNICIAN

DEFINITION: Under general supervision, performs work of considerable difficulty in overseeing and performing a variety of administrative, supervisory and/or operational duties related to surveying, designing, construction and maintenance of public works projects; performs related work as assigned.

ESSENTIAL FUNCTIONS: This list is ILLUSTRATIVE ONLY and is not a comprehensive listing of all functions and tasks performed by incumbents of this class.

TASKS:

Plans, schedules and monitors work assignments; provides technical assistance and guidance to assigned staff; evaluates performance of staff; trains staff in the safe and proper use of equipment; provides and enforces safety regulations and procedures; conducts surveys; collects and downloads field survey data into computer; drafts or plots home sites, roads, business sites, land withdrawal sites, vicinity maps, topographic maps, highway right of way, construction sites, open dump sites and abandoned mine lands.

Performs calculations relating to intervals between specified monuments to obtain correct distances; verifies accuracy of drafts; maintains database of maps, records and files; interprets maps; conducts special studies; gathers applicable data; evaluates data to determine feasibility for construction, repair or rehabilitation; prepares plans, specifications, scope of work and cost estimates for projects; prepares required reports; evaluates projects and recommends repairs, rehabilitation or construction; inspects and monitors construction.

Tests radiological survey instruments; maintains radiation source station used for instrument calibration; correlates and calibrates radiological survey instruments; measures radiation levels related to abandoned mines, waste piles, and open pits; determines appropriate methods of reclamation; recognizes radiological and physical hazards not previously identified; assists with budget development and purchasing of equipment and supplies; meets with vendors and contractors to provide or receive technical assistance; maintains computer and software related to surveying.

KNOWLEDGE, SKILLS AND OTHER CHARACTERISTICS:

Knowledge of Geographical Information System (GIS) and Global Positioning System (GPS) methods and practices.

Knowledge of engineering plans, maps, and specifications.

Knowledge of computer hardware, software and peripherals related to area of assignment.

Knowledge of management and administration practices.

Knowledge of legal land descriptions.

Knowledge of surveying and mapping methods and practices.

Knowledge of research, analysis and interpretation of legal and technical reports.

Knowledge of recordkeeping and file maintenance practices.

Skill in utilizing verbal and written communication for development of reports and legal documents.

Skill in utilizing computer software to develop designs, drafting, maps and reports.

Skill in utilizing customer service techniques when responding to inquiries and complaints.

Skill in researching, analyzing, interpreting technical information and drawing valid conclusions.

Skill in prioritizing, scheduling, assigning, reviewing, and evaluating work.

Skill in developing, projecting costs, and implementing annual budgets

Skill in establishing and maintaining effective working relationships.

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PHYSICAL REQUIREMENTS AND WORK ENVIRONMENT: Work requires carrying up to 85 pounds of equipment when hiking several miles to sites for mapping and GPS surveys.

MINIMUM QUALIFICATIONS:

- An Associate's degree in Computer Science or related field; and three (3) years of senior engineering technician work experience, one (1) year of which must have been in a supervisory and/or management capacity.

PREFERRED QUALIFICATIONS:

- An Associate's degree in Pre-Engineering.
- A Bachelor's degree in Civil Engineering.
- Proficient in Microsoft Office software or other computer applications.

SPECIAL REQUIREMENTS:

- Possess a valid driver's license.

Supplemental Requirements:

- Incumbents hire must obtain a valid Navajo Nation Vehicle Operator's Permit.

Depending upon the needs of the Nation, some incumbents of the class may be required to demonstrate fluency in both the Navajo and English languages as a condition of employment.