JOB TITLE:  Staff Engineer I/II

REPORTS TO:  Chief Engineer

STATUS:  Exempt

JOB SUMMARY:

This entry level position performs engineering assignments under specific supervision. Using prescribed methods, performs specific and limited portions of a broader assignment for an experienced engineer or as part of District work while developing professional work knowledge and abilities. Receives specific supervision and guidance on District policies, application of engineering skills, technical investigations, coordination with customer and stakeholder agencies, and overall mission of District. Gains familiarity with District operations and acquaintance with functions of District and District-operated facilities. Common tasks performed include data gathering and input, collection of information and documents, development of spreadsheets, simple report preparation, observation of construction, performance of simple survey work, interaction with staff, and participation in planning, construction or staff meetings.

ESSENTIAL FUNCTIONS:

1. Assists in coordinating construction and design issues with contractors and District project representatives on capital improvement and replacement projects and provides accurate documentation of completed projects.

2. Assists in determining conditions and providing accurate documentation of existing District physical assets, lands issues, and operation/maintenance practices and procedures.

3. Performs and conducts technical investigations and studies on existing or potential future water supply, infrastructure, and operations, including computer modeling and determining feasibility of projects.

4. Assists in coordinating technical details of agreements or studies with other agencies, consultants, and District personnel.

5. Coordinates and becomes familiar with the District project management process as well as the asset management program. Reviews plans, specifications, shop drawings, and as-built drawings and provides essential data and asset attributes for the asset registry.

MARGINAL FUNCTIONS:

1. Performs other related duties as assigned.
REQUIREMENTS:

Ability to make decisions independently on engineering problems and methods; ability to continually make evaluations on large and complex projects involving water supply, water supply alternatives, and recommendations to management which involve substantial expenditures for equipment, materials, and personnel.

Ability to identify and understand the significant technical, financial, operational, and organizational elements of a problem and the implications associated with various alternative approaches.

Ability to perform assignments of an especially complex nature or give technical guidance with limited supervision.

Ability to drive a vehicle and travel to various work sites and inspect construction in progress and/or coordinate with operation/maintenance personnel on various District facilities and/or projects; to review construction plans, specifications and operating procedures.

Ability to study various engineering plans and documents, compare to previous similar plans, and review for correction and approval.

Ability to monitor on-going agreements with state and federal agencies.

Ability to design various engineering features and prepare plans and specifications for constructions.

Ability to use/operate pen, pencil, PC computer, spreadsheet and wordprocessing software and to use various engineering computer software programs and/or computer models.

Ability to operate accurate surveying equipment.

Ability to be subject to outside environmental conditions: No effective protection from weather; subject to extreme heat (temperatures above 100 degrees for periods of more than one hour); subject to extreme cold (temperatures below 32 degrees for periods of more than one hour).

Ability to be subject to noise: There is sufficient noise to cause the worker to shout in order to be heard above the ambient noise level.

Ability to be subject to hazards: Includes a variety of physical conditions, such as proximity to moving mechanical parts, electrical current, working in high places, inside pipes and tunnels, on or near bodies of water (dams, reservoirs, etc.)

Ability to be subject to atmospheric conditions: One or more of the following conditions that affect the respiratory system of the skin: Fumes, odors, dusts, mists, gases or poor ventilation.

Ability to be subject to vibration: Exposure to oscillating movements of the extremities or whole body.
Ability to exert up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

Ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety of technical instructions in mathematical or other form. Deal with several abstract and concrete variables.

Using Algebra: Ability to work with exponents and logarithms, linear equations, quadratic equations, mathematical induction and binomial theorem, and permutations. Using Calculus: Ability to apply concepts of analytic geometry, differentiation and integration of algebraic functions with applications. Using Statistics: Ability to apply mathematical operations to frequency distributions, reliability and validity tests, normal curve, analysis of variance, correlation techniques, chi-square application and sampling theory, and factor analysis.

Ability to prepare business letters, proposals, summaries, and reports; using prescribed format and conforming to all rules of pronunciation, grammar, diction, and style; using all parts of speech.

Ability to communicate at interagency meetings and to make presentations with poise and control.

Ability to work with minimal supervision.

Ability to adapt to situations involving the interpretation of feelings, ideas, or facts in terms of personal viewpoint; to use creativity, self-expression, or imagination.

Ability to influence people in their opinions, attitudes, or judgments about ideas of things; to motivate, convince, or negotiate.

Ability to deal with people beyond giving and receiving instructions such as in a team, supervisory, or meeting setting.

Ability to supervise the work of consultants and/or staff on engineering projects.

Ability to adapt to situations requiring the precise attainment of set limits, tolerances, or standards; to be precise, thorough, exacting, or meticulous in regard to material worked; or in activities such as numerical determinations, record preparation, or inspecting.

Ability to perform a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure involving significant differences in technologies, techniques, procedures, environmental factors, physical demands, or work situations.

Ability to identify task requirements and monitor progress toward accomplishment.

Ability to maintain relationships that facilitate task accomplishment; to cooperate and resolve conflicts; to recognize needs and be sensitive of others.
Ability to receive guidance and supervision; follow workrules, safety practices, work procedures; meet deadlines, punctuality and attendance standards, etc.

**EDUCATION/EXPERIENCE/LICENSE/CERTIFICATION:**

Engineer I - Bachelors degree in Civil Engineering or related field plus certification of Engineer-in-training (EIT). Valid Utah driver's license required.

Engineer II - Bachelors degree in Civil Engineering or related field plus a minimum of two (2) years of related experience. Masters degree counts towards one (1) year experience. Certification as Engineer-in-training (EIT) and valid Utah driver's license required.