



CLASS SPECIFICATION

Class Title: Civil Engineer I
Department: Public Works
FLSA: Exempt

Class Code: 8814
Grade: 22
Eff. Date: 10/03/2006
Revised: 08/07/2007

GENERAL PURPOSE

Under general supervision from the Public Works Director and the Civil Engineer Manager, performs entry level engineering duties related to implementing and coordinating projects and activities in the Public Works Department.

EXAMPLE OF DUTIES

Coordinates the design, drafting, engineering calculations, construction reviews, and inspections of County construction projects (includes flood control channels, structures, culverts, roads, bridges). Prepares designs and ensures designs meet standards for construction and flood control projects/structures; studies site alternatives; computes design criteria calculations; computes stream measurements ensures regulation compliance; develops plans and maps. Creates schematic drawings, preliminary drawings, construction drawings, and as-built drawings for County flood control and County roads projects.

Develops predictive hydraulic modeling approaches; prepares and implements Gantt chart based work schedules for season and annual planning strategies.

Evaluates flood potential and performs assessments of channels; inventories flood control structures to determine feasibility and location of planned structures.

Prepares master plans and reports; defines and measures drainage areas; determines runoff coefficients; calculates channel/culvert sizes and determines future flood problems.

Responds to questions and resolves engineering concerns and problems relating to Davis County citizens, developers, government agencies, and other interested parties; presents information to Flood Control Technical Committee and County Commission, as required. Prepares and presents professional papers as necessary.

Performs related duties as assigned.

MINIMUM QUALIFICATIONS

1. Education and Experience:

Graduation from an accredited college or university with a Bachelor's Degree in Civil Engineering or directly related field. Preference given for training and/or experience in hydraulic software, open channel design, hydrology, and storm water flow.

2. Special Qualifications:

Must possess an EIT or FE certificate.

This is a career path position; further career advancement requires a Utah Professional Engineer license. Incumbents in this classification are required to become a licensed Professional Engineer in Utah.

Employees driving a personal or a County vehicle for job related travel must possess a valid driver license, maintain the minimum vehicle liability insurance as specified in the Utah Code, and must operate a motor vehicle in a safe manner; new employees with an out-of-state license must obtain a valid Utah Driver License within sixty (60) days of hire date (exceptions for military personnel and their dependents)

3. Necessary Knowledge, Skills and Abilities:

Knowledge of: engineering, surveying, and construction principles and applications; advanced computer-aided drafting and design applications and techniques; hydraulic software, open channel design, hydrology, and storm water flow; project management skills, problem solving skills; road construction practices, flood control, storm drainage, computer hardware and software applications, State and County rules and regulations relating to the operation of flood control and road construction projects.

Skill in: Auto-CAD, mapping, word processing, and surveying applications.

This position may require the driving of a motor vehicle; skill in operating a motor vehicle in a safe manner; ability to insure motor vehicle is operating in a safe manner; knowledge of Utah motor vehicle rules and regulations.

Ability to: apply fundamental engineering principles, theories, concepts and practices to engineering projects; identify and solve problems; perform field analysis and make appropriate engineering decisions; read specifications, blueprints, and construction plans; perform advanced math functions including algebra, geometry, trigonometry, and engineering calculations; assign and oversee the work of others; coordinate multiple tasks efficiently; communicate technical information effectively (orally and in writing); follow oral and written instructions; establish and maintain effective working relationships with supervisors, employees, other agencies, and the general public.

The above statements are intended to describe the general nature and level of work being performed by persons assigned to this job. They are not intended to be an exhaustive list of all duties, responsibilities and skills required of personnel so classified. **All requirements are subject to possible modifications to reasonably accommodate individuals with disabilities.**