

FLORIN RESOURCE CONSERVATION DISTRICT/
ELK GROVE WATER DISTRICT
CLASS SPECIFICATION

*FRCD/EGWD is an equal opportunity employer.
Employment is at-will.*

POSITION:	Associate Engineer	Associate Civil Engineer/ Senior Civil Engineer
DEPARTMENT/DIVISION:	Technical Services	Technical Services
DIRECTLY REPORTS TO:	Associate Civil Engineer/Senior Civil Engineer	General Manager
FLSA:	Exempt	Exempt
DIRECTLY SUPERVISES:		Associate Engineer, Engineering Technician, Administrative Assistant II

Job Definition

Classifications in this series perform professional engineering work in planning, design and construction of District structures and facilities; provides project coordination and direction to technical engineering staff; and may serve as resident engineer on construction projects. Assumes varying degrees of responsibility for the engineering requirements of water system operations, pipeline distribution systems, pump stations and treatment facilities; and serves as a member of the District’s Leadership Team.

Distinguishing Characteristics

Associate Engineer This is the first level class in the Engineer series. Positions in this class work under general supervision while learning job tasks, progressing to relatively less supervision as procedures and processes of assigned area of responsibility are learned. Receives minimal supervision from the Senior Civil Engineer, or if that position vacant, the Associate Civil Engineer.

Associate Civil Engineer This is the journey level class in the Engineer series. Employees at this level receive relatively less instruction or assistance and are fully aware of the operating procedures and policies within the work unit. Positions in this class are normally filled by advancement from the Associate Engineer level once the individual meets the qualification and performance standard, including acquiring registration as a Professional Engineer within the State of California, demonstrates an ability to perform all facets of the position, and meets any other assessment requirements to move to the Associate Civil Engineer level. Receives direction from the Senior Civil Engineer, or if that position vacant, the General Manager.

Senior Civil Engineer This is the advanced journey level class in the Engineer series. Positions at this level are distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, by the amount of time spent performing the duties, and by the nature of the public contact made. Individuals in this class perform the most difficult and responsible types of duties assigned to classes within this series, including advanced project management and are required to be fully trained in all procedures related to assigned areas of responsibility. Receives direction from the General Manager.

Examples of Essential Duties

Duties may include, but are not limited to, the following:

- Manage a variety of projects simultaneously, from conception through construction, which involves developing project schedules, monitoring project progress and budget, obtaining necessary permits, preparing, and maintaining project files, monitoring quality of projects, and insuring deadlines are met.
- Develop and/or assist with the preparation of designs, plans and specifications for the construction and development of District structures and facilities.
- May supervise technical services support staff, including planning, assigning, reviewing, and evaluating work.
- Act as interface between District and its customers on various capital improvement projects including, but limited to, answering questions, providing information, reviewing disputes and/or claims, and recommending reasonable dispute and/or claims resolutions.
- Provide project coordination and direction for technical services support staff.
- Assist technical services support staff with the analysis and refinement of field data.
- Prepare estimates of materials and quantities.
- Order materials necessary for construction.
- Prepare environmental assessment reviews.
- Meet with developers and outside engineers and contractors with design and construction of domestic water and water treatment facilities.
- Analyze and interpret federal and state regulations pertaining to District projects.
- Prepare and maintain District long-range master plans.
- Prepare grant applications to obtain capital project funding from various state and/or federal agencies.
- Assist contractors and the general public with questions regarding water pressure, water quality, fire sprinkler systems, and related issues.
- Represent the District in coordination with other utilities, regulatory agencies, governmental bodies, planning agencies, trade and professional associations, technical groups, and developers.
- Sign and stamp project engineering designs, studies, and reports, as qualified, on behalf of the District as the individual in the lowest responsible charge.
- Prepare correspondence related to engineering functions.
- Represent the General Manager at meetings and conferences as delegated.
- Make presentations regarding engineering issues and/or capital improvement projects to the Board of Directors.
- Maintain project files.
- Prepare estimates of probable construction costs.
- Prepare analysis supporting District rates and charges.
- Perform computer modeling.
- Analyze groundwater hydrology, well operation and design.
- At the Associate Engineer level:
 - Perform Geographic Information System (GIS) duties to maintain the District's GIS maps.
- At the Associate Civil Engineer or Senior Civil Engineer level:
 - Plans, prioritizes, and reviews the work of staff and/or consultants assigned to a variety of professional engineering tasks associated with the planning, design, construction, maintenance, and operation of District facilities.

- Serves as project manager for the more complex projects including the development of Requests for Qualifications and Requests for Proposal, the development and monitoring of project budgets, management of outside design consulting firms and management of the construction phase.
- Develops, prepares, and implements the District's five-year Capital Improvement Program.

Qualifications

Associate Engineer

Knowledge of:

- Principles and practices of civil engineering as applied to a variety of utility projects.
- Methods, materials, and techniques used in the design, construction, maintenance and operation of utilities project and activities.
- Laws, rules, ordinances, and legislative processes including CEQA requirements governing water rights, water development, water quality, and water treatment.
- Contract development and administration.
- Principles and practices and water supply development, chemical and biological aspects of water pollution, and local water issues, including their relationships to State and regional plans.

Ability to:

- Participate in District engineering projects, particularly as they affect water distribution system development, water conservation, hydrogeology, water quality, and water treatment.
- Prepare and monitor project budgets.
- Prepare and develop plans using AutoCAD.
- Prepare and develop specifications and District engineering standards.
- Use ArcGIS to maintain and develop the District's GIS maps.
- Insure proper completion and inspection of major construction projects.
- Prepare and review a variety of engineering studies and reports and perform hydraulic modeling.
- Write reports, specifications, and contract documents.
- Use computer systems and software packages related to engineering, analysis, and functions.
- Regularly use a telephone for communication.
- Use office equipment such as copiers, fax and scanning machines.
- Effectively represent the District's engineering functions with the public, other governmental agencies, contractors, developers, and professional engineering consultants.
- Establish and maintain cooperative working relationships with outside agencies, outside vendors and contractors.
- Communicate proficiently with District management, co-workers, the public, outside vendors and contractors in written and oral form.

Associate Civil Engineer

In addition to the qualifications for the Associate Engineer, excluding GIS-related tasks:

Knowledge of:

- Principles and practices of civil engineering with particular emphasis on the design and construction of water development and distribution, water treatment, groundwater systems, and other hydraulic projects and facilities.

- Principles of engineering economics and their practical application to water development, water distribution, and water treatment projects.
- Public finance, budget development, and fiscal controls, and capital improvement fiscal planning.

Ability to:

- Plan, carry out, and coordinate District engineering projects, particularly as they affect water distribution system development, water conservation, hydrogeology, water quality, and water treatment.
- Develop long-range capital improvement plans.

Senior Civil Engineer

In addition to the qualifications for the Associate Civil Engineer:

Knowledge of:

- Advanced principles and practices of civil engineering with particular emphasis on the design and construction of water development and distribution, water treatment, groundwater systems, and other hydraulic projects and facilities.
- Principles and practices of technical and functional supervision and training.
- Budgeting techniques and capital project management.

Ability to:

- Perform the most complex duties related to planning, designing and construction of District projects.
- Prepare and develop plans, specifications, and District engineering standards.

Physical Requirements

- Using fine gross motor coordination in performing data entries into the computer while sitting for prolonged periods of time.
- Coordinate eyes, hands, and fingers to perform semi-skilled tasks including typing and calculating.
- Hear normal conversation in person and/on the telephone.
- Vision must be sufficient to accomplish the duties of the position, which may include operating a company vehicle.
- Lift, carry, push, and pull 50 pounds.
- Travel infrequently by vehicle for District related duties and activities.
- Intermittently twist and reach for office equipment.
- Frequently walks on uneven terrain, in an outdoor environment, making inspections of District facilities and construction projects.

Required Certifications and Licenses

Possession of a valid Class C Driver's License; and

Associate Engineer

- Possession of State of California Engineer in Training Certification.

Associate Civil Engineer

- Possession of State of California registration as a Professional Civil Engineer.

Senior Civil Engineer

- Possession of State of California registration as a Professional Civil Engineer.

Required Education and Experience

Associate Engineer

Possession of a bachelor's degree from an accredited college or university in Civil Engineering or another field of study applicable to the responsibilities and requirements of this job class, and

Minimum of three (3) years of responsible professional engineering experience in planning, design and construction of water system development and distribution, water treatment, and water treatment facilities.

Associate Civil Engineer

Possession of a bachelor's degree from an accredited college or university in Civil Engineering or another field of study applicable to the responsibilities and requirements of this job class, and

Minimum of five (5) years of responsible professional engineering experience in planning, design and construction of water system development and distribution, water treatment, and water treatment facilities.

Senior Civil Engineer

Possession of a bachelor's degree from an accredited college or university in Civil Engineering or another field of study applicable to the responsibilities and requirements of this job class, and

Minimum of seven (7) years of responsible professional engineering experience in planning, design and construction of water system development and distribution, water treatment, and water treatment facilities.