# EL DORADO IRRIGATION DISTRICT Class Specification

CLASS TITLE: Assistant Engineer/Associate Engineer/Associate Civil Engineer

### **DEFINITION**

Under supervision performs professional engineering work in the planning, permitting, design, construction and operation of District facilities including water and wastewater treatment plants, water and recycled water distribution and wastewater collection systems, and hydroelectric generation systems; performs a variety of technical engineering studies.

### DISTINGUISHING CHARACTERISTICS

<u>Assistant Engineer</u> - This is the entry level class in the Engineer series. Positions in this class typically have little or no directly related work experience. The Assistant Engineer class is distinguished from the Associate level by the performance of less than the full range of duties assigned to the Associate level. Incumbents work under general supervision while learning job tasks, progressing to direction as procedures and processes of assigned area of responsibility are learned.

<u>Associate Engineer</u> - This is the journey level class in the Engineer series and is distinguished from the Assistant level by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new, unusual or unique situations arise and are fully aware of the operating procedures and policies within the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the Assistant level.

<u>Associate Civil Engineer</u> – This the journey registered level in the Engineer series. This class is distinguished from Associate Engineer by the requirement for possession of registration as a professional engineer within the State of California and the ability to independently review, approve and stamp plans.

This class is distinguished from the Senior Civil Engineer in that the latter performs the most difficult and responsible types of duties assigned to classes within this series and may provide technical and functional supervision over assigned staff.

## SUPERVISION RECEIVED AND EXERCISED

# Assistant Engineer

Receives general supervision from the Engineering Manager; may receive technical and functional supervision from a Senior Engineer.

# Associate Engineer/Associate Civil Engineer

Receives direction from the Engineering Manager; may receive technical and functional supervision from a Senior Engineer. May exercise technical and functional supervision over assigned technical and administrative support personnel.

**EXAMPLES OF ESSENTIAL DUTIES:** the duties specified below are representative of the range of duties assigned to this class and are not intended to be an inclusive list.

Prepares plans and specifications for the design, construction, maintenance and operation of District facilities and projects, including water and wastewater treatment plants, water and recycled water distribution systems, wastewater collection systems, and hydroelectric generation systems; ensures conformance to District standards and practices, and relevant codes and regulations.

Administers construction projects, including overseeing and reviewing the work of construction management consultants or performing construction contract administrative duties; coordinates construction supervision and inspection and provides technical assistance to contractors and subcontractors by interpreting specifications, providing responses to requests for information, conducting submittal reviews, reviewing the quality of workmanship, verifying and approving progress payments, reviewing retainages, and authorizing certification of substantial and final completion.

Serves as project manager for a variety of capital improvement projects including the conception, feasibility evaluation, coordination of environmental review, design, scheduling, 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.

Prepares and makes presentations to the Board of Directors regarding project recommendation, award and updates.

Represents the District in meetings with regulatory agencies and the public regarding District projects.

Researches project design requirements and performs related calculations; conducts plan checks to ensure compliance with District and various environmental and regulatory standards; prepares time and material cost estimates.

Prepares engineering studies and reports; participates in and oversees District projects through conception, feasibility, design, scheduling, and construction phase with other District departments, divisions, outside agencies, consultants, and developers.

Confers with developers and engineers for review of proposed commercial and residential development plans.

Performs plan check of drawings submitted for commercial and residential development for conformance with specifications and standards drawings.

Prepares a variety of technical reports, documents, and correspondence; prepares technical specifications; assists with the preparation and revisions to design and construction standards; develops technical documents required by the local, State and Federal agencies to obtain permitting and licensing of District facilities.

Manages and directs the work of outside engineering and other related consultants to ensure District standards and requirements are met.

May plan, prioritize, and review the work of staff, develop schedules and methods to accomplish assignments, provide and coordinate staff training, and work with employees to correct deficiencies.

Builds and maintains positive working relationships with co-workers, other District employees and the public using principles of good customer service.

Performs related duties as assigned.

## **QUALIFICATIONS**

# Assistant Engineer

## Knowledge of:

Principles and practices of professional engineering as applied to a variety of utility projects. Basic methods, materials, and techniques used in the design, construction, and maintenance and operation of utilities projects and activities. Mathematics used in the engineering field. Current developments and trends related to professional engineering. Modern office procedures, methods and computer equipment, including use and application of word processing, spreadsheet, graphics, and database programs. English usage, spelling, punctuation, and grammar. Principles and practices of work safety.

### Skill/Ability to:

Perform professional engineering computations and learn to check, design, and prepare engineering plans, studies, profiles, and maps. Learn and apply District standards and regulations and engineering policies and procedures. Learn and apply applicable laws and regulations related to area of assignment. Learn to prepare accurate cost estimates. Learn to analyze and prepare technical reports. Ability to maintain reliable attendance is a condition of employment, subject to applicable medical and disability leave laws. Learn to obtain information through interview, to handle multiple assignments, to work with interruption, and to deal firmly and courteously with citizens, developers, consultants, and contractors. Establish and maintain effective working relationships with those contacted in the course of work. Communicate clearly and concisely, both orally and in writing. On a continuous basis, know and understand all aspects of the job; intermittently analyze work papers, reports and special projects; identify and interpret technical and numerical information; observe and problem solve operational and technical policy and procedures. On a continuous basis, sit at desk for long periods of time; intermittently twist to reach equipment surrounding desk; perform simple grasping and fine manipulation; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 10 pounds or less.

### Experience and Education:

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

### Experience:

Previous technical engineering experience is desirable.

### Education:

Equivalent to a Bachelor's degree from an accredited college or university in engineering or a related field.

## **SPECIAL QUALIFICATIONS**

## License and Certificate:

Possession of, or ability to obtain, a valid California driver's license at the time of appointment. Individuals who do not meet this requirement due to physical disability will be reviewed on a case-by-case basis.

Possession of a valid certificate as Engineer-in-Training issued by the State of California Board of Registration for Professional Engineers and Land Surveyors is desirable.

## Associate Engineer/Associate Civil Engineer

In addition to the qualifications for the Assistant Engineer:

## Knowledge of:

Methods, materials, and techniques used in the design, construction, and maintenance and operation of utility projects and activities. Budgeting techniques and capital project management. Pertinent local, State, Federal rules, regulations and laws related to area of engineering assignment, including those specific to District policies and practices. Practices of surveying and environmental assessment. Principles and practices of technical and functional supervision and training.

### Skill/Ability to:

Perform the full range of professional engineering duties with only occasional instruction or assistance as new or unusual situations arise. Interpret and apply District standards and regulations and engineering policies and procedures as well as applicable laws and regulations related to area of engineering assignment. Prepare accurate estimates of costs, schedules, personnel and materials related to engineering project responsibilities. Work effectively with a variety of internal and external customers to accomplish goals and objectives; deal firmly and courteously with citizens, developers, consultants, and contractors. Prepare concise and understandable written reports, studies, and other written materials, including Requests for Qualifications and Proposals. Provide technical and functional supervision over assigned staff; effectively train staff.

### Experience and Education:

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

# Experience and Certificates:

Associate Engineer: Two years of responsible experience similar to Assistant Engineer with the El Dorado Irrigation District, and possession of a valid certificate as Engineer-In-Training (EIT) issued by the State of California Board of Registration for Professional Engineers and Land Surveyors, or four years applicable engineering experience similar to the Assistant Engineer with the El Dorado Irrigation District.

Associate Civil Engineer: In addition to the experience and education guidelines for Associate Engineer, licensed as a Professional Engineer in Civil Engineering in the State of California.

## **Education**:

Equivalent to a Bachelor's degree from an accredited college or university in engineering or a related field.

# SPECIAL QUALIFICATIONS

### License:

Possession of, or ability to obtain, a valid California driver's license at the time of appointment. Individuals who do not meet this requirement due to physical disability will be reviewed on a case-by-case basis.

04/15/2017

Date

Human Resources Authority

Established: 08/18/2009

Revised: 04/15/2017

FLSA: Assistant Engineer: Non-Exempt; Associate Engineer: Exempt; Associate Civil Engineer: Exempt;

Unit: Non-Safety