Paradise Irrigation District

DISTRICT ENGINEER

Definition

Under general direction; to perform technical engineering work in the planning, design and construction of District structures and facilities; to provide project coordination; to serve as District inspector on construction projects; and to do related work as required.

Examples of Duties

- Develops designs, plans, specifications, and cost estimates for the construction and development of District pipeline structures and other facilities.
- Prepares engineering studies and reports on water service issues.
- Performs manual drafting of District maps and pipeline drawings. Has knowledge of and ability to develop CAD and GIS.
- Assists staff with the analysis and refinement of field data.
- Prepares estimates of materials and quantities in the development of plans, profiles, maps, and drawings for construction projects.
- Performs hydraulic modeling of District distribution system; analyzes the impact of proposed changes, updates and calibrates the hydraulic model.
- Prepares material lists necessary for construction.
- Serves a District inspector on construction projects.
- Assists contractors and the general public with questions regarding water pressure, and water quality.
- Represents the District in coordination with other utilities, regulatory agencies, governmental bodies, planning agencies, trade and professional associations, technical groups, and developers.
- Performs basic horizontal and vertical surveys for District projects.
- Prepares correspondence related to engineering functions.
- Makes presentations regarding engineering issues to the Board of Directors.
- Prepares property boundary and right of way description for District projects and reviews survey descriptions submitted to District..
- Collects basic survey control data on dams, assembles data on dams for submittal to Division of Safety of Dams (DSOD).

Typical Physical Activities

- Communicates orally with District management, co-workers, and the public in face-to-face, one-to-one and group settings.
- Uses office equipment such as personal computers, phones, radios, copiers, and fax machines.
- Frequently walks in uneven terrain, in an outdoor environment, making inspections of District facilities and construction projects.
- Sits for extended time periods.
- Hearing and vision within normal ranges.

Special Requirements

Possession of an appropriate California drivers license, Class C, issued by the State Department of Motor Vehicles. Possession and proof of a good driving record as evidenced by freedom from multiple or serious traffic violations or accidents for at least two (2) years duration. The driving record will not contribute to an increase in the District's automobile rates.

Possession of, or ability to obtain, an Engineer in Training (EIT) Certificate.

Employment Standards

Knowledge of:

- Principles and practices of civil engineering with particular emphasis on the design and construction of water development and distribution systems, pumping plants, and other hydraulic projects and facilities.
- Principles of engineering economics and their practical application to water development, water distribution.
- Laws, rules, ordinances, and legislative processes governing water rights and water development.
- Contract development and administration/inspection.

Ability to:

- Plan, design, carry out, and coordinate District engineering projects, particularly as they affect water distribution system development, water conservation, and water treatment.
- Coordinate assigned engineering projects with District activities and services.
- Use computer systems and software packages related to engineering analysis and functions; CAD, GIS, Word and Excel.
- Effectively represent the District's engineering functions with the public, other government agencies, contractors, developers, and professional engineering consultants.
- Establish and maintain cooperative work relationships.

Desirable Education and Experience

Any combination of education and experience which would likely provide the necessary knowledge and abilities is qualifying.

A typical way to obtain the knowledge and abilities would be:

Graduation from an accredited college or university with a degree in Civil Engineering or a related field, plus one year's experience in water utility engineering.

OR

Three (3) years of increasingly responsible technical engineering experience in design and construction of pipelines, related appurtenances, including pumping and distribution systems, and possession of an EIT certification.

The specific statements shown in each section of this description are not intended to be all inclusive. They represent typical elements and criteria necessary to successfully perform the job.