JOB DESCRIPTION

Coachella Valley Water District

Date: February 11, 2002

TITLE: Associate Engineer,
Electric and Controls

SECTION: Irrigation/Stormwater/Electrical

DEPARTMENT: Engineering

REPORTING RELATIONSHIP:

Reports to: Engineer Manager

Supervises the following positions: Not applicable

DEFINITION: Under direction, performs complex professional engineering work related to the design and construction of District electrical facilities and control systems. Provides project supervision over engineering staff assigned to projects.

ESSENTIAL FUNCTIONS:

1. Assists in the administration of general construction projects such as wells, booster stations, treatment plants and other related projects. This includes executing contract summaries, negotiations in changes of contract scope, monitoring design costs and overall project budget and resolution of claims, disputes and outstanding issues.

2. Performs project management on district construction projects. Maintains quality assurance of consultant’s designs, drawings and specifications to district requirements. Ensures that inspection and quality assurance is performed on the construction and that the project is completed within budget cost and on schedule.

3. Maintains documentation for both contract administration and project management that includes correspondences, meeting minutes, requests for information, submittal reviews and other activities on the construction project.

4. Prepares plans and specifications for electrical and control systems.

5. Prepares studies for planning of new facilities.

6. Coordinates survey, operations, inspections, consultants and others pertaining to District projects.

7. Uses computers to prepare spread sheets, analyses, simulations and process control.

8. Gathers and compiles raw data and related information for the preparation of reports and studies.

9. Provides support and advice to other district engineers on electrical and control issues.
MINIMUM QUALIFICATIONS:

Licenses or Certificates: Valid California Operators license issued by the State Department of Motor Vehicles. Department of Motor Vehicles driving record may influence employment or classification. 

And

Possession of a valid Certificate of Registration as a Professional Electrical Engineer issued by the State of California.

Experience: Any combination of training and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain this would be to have five years of increasingly responsible electrical and control facilities experience.

Knowledge of:
- Principles and practices of electrical engineering;
- Design of electrical and control systems used in water and wastewater utilities;
- Principles and practices of electrical and control systems used in wastewater treatment, water pumping and telemetry supervisory control;
- Operational procedures and maintenance procedures utilized in water and wastewater systems;
- Mathematics, design methods, uses and strengths of construction materials, standard specifications and pertinent regulations related to the design and construction of district facilities and structures;
- Principles and practices of construction inspection including methods, materials, equipment, laws and safety requirements related to this area of engineering;
- Principles of supervision and training.

Abilities:
- Perform complex engineering work in the design and construction of district electrical facilities and control systems;
- Perform project management as a resident engineer;
- Prepare comprehensive technical reports and recommendations;
- Maintain accurate documentation of construction projects;
- Work cooperatively with others;
- Communicate effectively both verbally and in writing;
- Solve difficult engineering problems utilizing a variety of analytical techniques;
- Prepare engineering estimates, plans and specifications for proposed district projects.
JOB DESCRIPTION

Associate Engineer, Electric and Controls

Education: Bachelor of Science in Electrical Engineering or related field from an accredited college or university.

PHYSICAL REQUIREMENTS:

1. Drives district vehicle to job sites including over rough terrain.
2. Sits for prolonged periods.
3. May work in extreme weather conditions including heat and rain.
4. Operates computer workstation using keyboard and mouse.

See Human Resources for physical assessment form.