JOB DESCRIPTION

Coachella Valley Water District

Date: May 15, 2013

TITLE: Associate Domestic Water Engineer

SRN 47:

SECTION: Domestic Water

DEPARTMENT: Engineering

REPORTING RELATIONSHIP:

Reports to: Senior Engineer

Supervises the following positions: Not Applicable

DEFINITION: Under direction, performs professional civil and mechanical engineering work related to the design and construction of District Domestic water facilities such as wells, reservoirs, pressure regulating and sustaining stations, booster stations, and pipelines. Provides project supervision over engineering staff assigned to projects.

ESSENTIAL FUNCTIONS:

1. Prepares plans, designs and specifications for construction projects.

2. Prepares plans and specifications for construction of domestic water facilities.

3. Coordinates work of other groups within the District such as surveying, drafting, operations, right-of-way, and outside consultants in the planning and construction of domestic water facilities.

4. Performs contract administration for construction of domestic water facilities.

5. Prepares computer models, reports, and studies for existing and proposed domestic water facilities and development projects.

6. Performs special projects as required.

7. Prepares and performs contract administration of domestic water construction projects, wells, reservoirs, booster stations, pressure regulating and sustaining stations, and other related projects. This includes preparation of bid documents, Board authorizations, contract summaries, negotiations in changes of contract scope, monitoring design costs and overall project budget, resolution of claims, disputes, and outstanding issues.

8. Performs project management on district domestic water related construction projects. Maintain quality assurance of consultants’ designs, drawings and specifications to district requirements. Ensure that the inspection and quality assurance are performed on the construction and that project is completed within budget and on schedule.
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ESSENTIAL FUNCTIONS (Cont.)

9. Maintain 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.

10. Prepares studies for planning of new facilities.

11. Uses computers to prepare InfoWater water model simulations, cad design, spread sheets, analyses, reports, contract summaries, project schedules, and memorandums

12. Gather, research and compile raw data and related information for the preparation of reports and studies.

13. Familiarity with the following software:
   - Microsoft Office (Excel, Word, PowerPoint, Project, Outlook)
   - AutoCAD 2010, prefer Civil3D
   - InfoWater
   - Adobe

MINIMUM QUALIFICATIONS:

License 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

Requires possession of a valid certificate as a Civil 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 would be to have at least five years of increasingly responsible domestic water facilities experience.

Knowledge of:

- Principles and practices of civil and mechanical engineering.
- Technical report writing.
- Principles of supervision and training.
- Design of hydraulic structures used in domestic water.
- Principles and procedures of domestic water production (wells), domestic water transmission, distribution and storage.
- Operational procedures and maintenance procedures utilized in domestic water systems.
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- Mathematics, design methods, uses and strengths of construction materials, standard specifications, and pertinent regulations related to the design and construction of domestic water facilities and structures.
- Principles and practices of surveying and construction inspection including methods, materials, practices, equipment, laws and safety requirements related to domestic water engineering.

MINIMUM QUALIFICATIONS (Cont.):

Abilities:

- Perform engineering work in the design and construction of District domestic water structures and facilities.
- High level of technical aptitude.
- Analyze problems accurately and take effective action.
- Make accurate drawings and maps and prepare comprehensive and technical reports.
- Work cooperatively with others.
- Resourcefulness in technical report preparation, comparative cost analysis, and domestic water system recommendations.
- Perform project management as a resident engineer.
- Prepare comprehensive technical reports and recommendations.
- Maintain accurate documentation of construction projects.
- Communicate effectively both verbally and in writing.
- Solve difficult engineering problems utilizing a variety of analytical techniques, including computer modeling simulations.
- Prepare engineering estimates, plans and specifications for proposed district projects.
- Self-sufficient.

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

PHYSICAL REQUIREMENTS:

1. Drives District vehicle to job sites including over rough terrain.

2. May work in extreme weather conditions including heat and rain.

3. Uses telephone and two-way radio to communicate.

See Human Resources for physical assessment form.