TITLE: ENGINEERING TECHNICIAN II  
SECTION: DRAFTING

DEPARTMENT: ENGINEERING

REPORTING RELATIONSHIP:

Reports to: CAD/GIS Supervisor

Supervises the following positions: not applicable

DEFINITION: Under minimum supervision, responsible for basic planning, design, engineering calculations, drawing/specification review and construction related to limited tasks for varying scope domestic water, sanitation and irrigation/drainage projects.

Uses computer aided drafting (CAD), or GIS computer software, or manual drafting techniques to prepare, organize, and take responsibility for construction drawings, presentations, mapping assignments, and other related jobs.

ESSENTIAL FUNCTIONS:

1. Provide support services to Engineers and/or Engineering Managers for activities including planning, design, engineering calculations, drawing/specification review and construction.

2. Coordinate review of developer-sponsored domestic water, sanitation and irrigation/drainage facility drawings/specifications with Engineering, Development Services, Inspection, Operations and other Coachella Valley Water District (CVWD) departments and outside agencies.

3. Review and provides comment on domestic water, sanitation, and irrigation/drainage facility drawings/specifications to ensure compliance with CVWD standards.

4. Perform basic hydraulic calculations including fire flow, flow, pressure, hydraulic gradeline, and headloss to ensure proper line size, water pressure, flow, grade, etc.

5. Coordinate inclusion of proper easement and right-of-way requirements for domestic water, sanitation and irrigation/drainage projects with the Right-Of-Way Division and Development Services.

6. Coordinate construction activities including contact with the Inspection Division and contractors, field observation of construction work for compliance with drawings/specifications and monitoring of project schedules.

7. Gather and correlate basic engineering data and process and interpret data.
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**ESSENTIAL FUNCTIONS (Cont.):**

8. Review drawings in AutoCad and GIS environment and assist in developing hydraulic model analyses.

9. Prepare and maintain files, records, drawings, specifications, reports, budgets and other data related to engineering projects.

10. Operates various printing machines, including the Xerox Reader/Printer and HP large format printing machine or similar printing machines.

11. Uses Computer Aided Drafting (CAD), GIS software, and manual drafting for the preparation of construction drawings, plat maps, graphs, charts, and other related graphics.

12. Coordinates, updates, tracks, and prepares records for drawings, plats, construction drawings, and other related projects.

13. Coordinates and directs others in the preparation of exhibits and related art work for Board meetings, studies, and litigations.

14. Communicates and works effectively with others.

15. Performs related duties as assigned.

**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. A certificate of completed training in CAD drafting and/or GIS is preferred.

**Experience:** A minimum four years drafting experience including one year computer aided drafting (CAD) and/or one year GIS mapping, or any combination of training and technical experience which would likely provide the required knowledge and abilities is qualifying.

**Knowledge of:**

- CVWD drawing standards and specifications.
- Local ordinances and policies.
- Applicable codes, laws, and regulations.
- Basic engineering and construction practices.
- Civil engineering principles and techniques.
- Civil Engineering drafting techniques using CAD.
- Mapping techniques using GIS.
- Computer principles and advanced drafting systems.
- Geometry and trigonometry.
MINIMUM QUALIFICATIONS (Cont.):

Abilities: - Read and interpret drawings and specifications.
- Organize and coordinate plans and applications.
- Solve problems.
- Interpret and enforce codes.
- Use computers and related software including computer-aided drafting GIS software and hydraulic modeling.
- Communicate effectively both verbally and in writing to exchange or convey information and to receive work direction.

Education: High school diploma or equivalent. Associates Degree in Engineering or Engineering Technology or related field preferred.

PHYSICAL REQUIREMENTS:

Driving: Light

See Human Resources for physical assessment form.