# **Humboldt Bay Municipal Water District**

# Water Works Helper - Geographic Information System Internship GIS/CAD Technician

## DISTRICT BACKGROUND

The Humboldt Bay Municipal Water District operates two separate and distinct water delivery systems, one for supplying treated drinking water to wholesale and retail customers and a second for supplying raw water to Industrial users. The District operates the R.W Matthews Dam, and Ruth Reservoir, which are located in southern Trinity County, and serve as the District's supply source. The District operates pumping and control facilities on the Mad River at its John R. Winlzer Pumping and Control Center near Arcata including treatment and storage facilities. The domestic water system supplies water to seven wholesale customers in addition to 200 retail customers. For additional information on the District please visit us at www.hbmwd.com.

#### **GENERAL PURPOSE**

Under general supervision, perform a variety of information system work, in the water utility environment. This position will work with GIS administrator and District staff on projects involving document and data organization, updates, and integration into District geographic information system.

# **ESSENTIAL FUNCTIONS**

- 1. Perform updates to converted CAD files of District blueprints based on historical hand edited working copy blueprints.
- 2. Perform document scanning, linking and/or georeferencing in a GIS environment.
- 3. Perform editing and attribute table population to geodatabase feature classes, including all source metadata.
- 4. Work on database development for field reporting operations.
- 5. Import and export editable databases to and from a Trimble GPS unit.

### TRAINING AND EXPERIENCE

- 1. Working knowledge of AutoCAD/Turbo-CAD.
- 2. Ability to read and interpret engineering drawings, blueprints, and schematics for piping, control and electrical systems.
- 3. Experience and understanding of ESRI, ArcGIS 9.3 and/or 10 Desktop and ArcPad 10 software, running in a windows environment.
- 4. Experience and working knowledge of Microsoft Access, Excel, and Word.
- 5. Experience with Visual Basic within the Access environment.

## **DESIRABLE QUALIFICATIONS**

- 1. Ability to understand and communicate technical information pertaining to the field of water treatment, transmission, and distribution.
- 2. Ability to work under general supervision of GIS administrator on projects per specified instruction and guidelines.
- 3. An individual interested in civil engineering or water utility systems is a plus.

#### LEARNING AND EXPERIENCE OPPORTUNITIES

- 1. Will gain practical application of GIS in the water utility setting.
- 2. Will gain practical experience in use of CAD to produce drawing revisions as well as rendering and digitizing from them in the GIS environment.
- 3. Will gain an understanding of water utility infrastructure and system management principals
- 4. Will learn practical information about maintaining and updating records and the importance of accuracy and organization.
- 5. Will gain practical communication and teamwork skills that are necessary for a successful and productive work environment.

# START DATES, DURATION AND COMPENSATION

- April 1st 2011 until semester end or as GIS project work permits
- Up to 20 hours per week M-F with some work schedule flexibility.
- Rate of pay \$13.00

#### APPLICATION, RESUME, and APPLICATION PERIOD

- Applications accepted March 7th March 25<sup>th</sup>, 2011
- Must submit District application to be considered for position.
- Applications available from District website www.hbmwd.com
- Completed applications and resumes should be mailed or delivered to our Eureka office at: 828 Seventh Street, PO Box 95 Eureka, CA 95502.