

Humboldt Bay Municipal Water District

JUNIOR/ASSISTANT/ASSOCIATE ENGINEER - A6

Position Description

GENERAL PURPOSE

The Engineer job class will manage the District's regulatory permits, reporting, and analysis. In addition, this job class will manage projects, performing increasingly difficult engineering computations and analysis to support the District's overall business and operational functions. Based on the needs of the District, it is intended that only one staff engineer position be occupied at any given time. The three levels within the engineering series include: Junior, Assistant, and Associate Engineer. The distinguishing features, experience, and educational requirements are outlined below.

DISTINGUISHING FEATURES

Junior Engineer - This is the trainee level in the staff engineering series. Individuals in this position possess a bachelor's degree in an engineering field, but lack practical professional engineering experience (typically a recent college graduate). This position learns and performs less complex office and field engineering work in preparation for advancement to the Assistant Engineer level. Engineering assignments are generally limited in scope. This position is responsible for learning all regulatory requirements, obligations, and reporting requirements for the District. The complexity of some regulatory reports may necessitate the need to retain an outside consultant to complete the task. Under direct supervision and guidance, this position is responsible for all required regulatory reports and monitors and tracks all District operating permits, working with management staff to ensure the District remains current on all regulatory requirements.

Assistant Engineer - This is the entry level in the staff engineering series. Individuals in this position possess a bachelor's degree in an engineering field and have limited (minimum 2-years) professional engineering work experience but potentially little or no directly related work experience. This position completes all the same duties as the Junior Engineer position; however, individuals in this position are expected to require less supervision and less training. Employees work under general supervision while performing office and field work engineering assignments of more complex scope. This position should be able to complete complex regulatory reporting but may still occasionally require the assistance of an outside consultant.

Associate Engineer (P.E.) - This is the journey level class in the staff engineering series. Individuals in this position possess a bachelor's degree in an engineering field and have multiple years of professional engineering work experience, some of which directly relate to working for a municipal water agency. Individuals in this position possess a current certificate of registration as a Professional Engineer (P.E) in the State of California. This position completes all the same duties as the Junior and Assistant Engineer position, but with a larger range of professional engineering duties as well as the full range of regulatory and permit requirements. Employees in this position are expected to manage most, if not all regulatory reporting requirements in-house. Employees at this level are expected to need only occasional instruction or

assistance as new requirements arise. Individuals in this position are fully aware of the District's regulatory obligations.

ALL STAFF ENGINEER POSITIONS - ESSENTIAL FUNCTIONS AND DUTIES

1. Analytical

- a. Performs complex analyses and studies regarding the District's water supply, water use, cost-of-service, infrastructure financing, water rates, and other business, operational, or technical matters.
- b. Provides analytical support to the budget and Capital Improvement Plan processes.
- c. Presents results, conclusions, and recommendations from the analyses and studies concisely and accurately.

2. Business Information Systems

- a. Develops and maintains spreadsheets, databases, and other computer tools to input and retrieve data and to support a variety of business and operational needs.
- b. Business intelligence tools, application development platforms, project management software, and cloud computing platforms may be utilized to support District business and operational needs.
- c. Geographic Information System (GIS) principles and tools to build applications, analyze data, and automate workflows related to mapping and spatial analysis may be utilized.

3. Communication

- a. Prepares routine and complex correspondence, reports, and regulatory filings.
- b. Prepares and manages grant applications.
- c. Prepares presentation material to communicate to the District's wholesale customers, the Board of Directors, and other audiences.

4. Engineering

i. Junior Engineer - under direct supervision:

- (1) Analyze reports and special projects as assigned. Identify and interpret technical and numerical information as assigned.
- (2) Learn applicable laws and regulations related to the regulatory requirements of the District.
- (3) Learn to prepare accurate cost estimates and make related recommendations.
- (4) Prepare accurate, timely, and concise written correspondence and reports.
- (5) Perform related duties as assigned.

ii. Assistant Engineer - under minimal supervision:

- (1) All duties assigned to the Junior Engineer position
- (2) May check plans and specifications as needed; prepare and check engineering reports and studies.
- (3) May serve as project manager over assigned projects.
- (4) Analyze proposals and bids.
- (5) Provide technical assistance and support to District staff and District Engineer as needed.
- (6) Analyze problems and develop effective solutions.
- (7) Analyze and track project costs and recommend action on progress pay estimates.
- (8) Draft technical and administrative correspondence.
- (9) May conduct public meetings regarding District projects.

- (10) May inspect construction project sites.
- (11) Prepare bid documents and cost estimates.
- (12) Review and assist with the coordination of outside consultant's work.

iii. **Associate Engineer (P.E.) - under occasional supervision:**

- (1) All duties assigned to the Junior and Assistant Engineer positions.
- (2) Work directly with management staff regarding budgeting for capital projects.
- (3) Know all pertinent local, State, Federal regulatory requirements for all District facilities and work.
- (4) Monitor any outside consultants completing regulatory work, reporting progress to management on a regular basis.
- (5) On a continuous basis, analyze data for regulatory reporting, identify opportunities for improvement and streamlining.
- (6) Work with Essex staff as needed to maintain GIS database.
- (7) Work with the District Engineer to resolve complex engineering issues during plan review, assisting in the engineering design, as needed.
- (8) May prepare accurate estimates of costs, schedules, and other resources related to engineering project responsibilities and make recommendations related to existing or anticipated project budgets.
- (9) Work effectively with both internal and external customers to accomplish goals and objectives.
- (10) Prepare concise and understandable written reports, studies, and other written materials, including requests for qualifications/proposals (RFQ/RFP).

5. Regulatory

- a. Stay informed of existing or proposed regulations of interest to the District.
- b. To varying levels, depending on the position, prepares all required regulatory permits, reports, filings, and applications or coordinates with an outside consultant completing the work.
- c. Meets and confers with regulatory agency personnel.

6. Safety

- a. Eureka office Safety Coordinator - Oversees and monitors the Eureka office participation in the District's safety program.
- b. Work directly with Essex Safety Coordinator to ensure the District's Injury and Illness Prevention Plan (IIPP) and required safety practices meet all current and upcoming regulatory requirements.

7. Other

- a. May perform special projects as assigned by management staff.
- b. Assists the General Manager and Superintendent in Emergency Operations Center (EOC) activities or other emergency events.
- c. Responsible for maintaining the Emergency Action Plan (EAP) and coordinating with all interested stakeholders.
- d. Acts as Water Conservation Coordinator per UWMP requirements.
- e. All other duties as assigned.

REQUIRED KNOWLEDGE, SKILLS, and ABILITIES

1. Strong written communication skills including the use of proper English, spelling, grammar, and punctuation. Ability to compose complex and detailed correspondence and reports accurately.
2. Strong verbal communication and presentation skills.
3. Ability to work well and collaboratively with others.
4. Ability to meet deadlines, plan and adhere to a work plan.
5. Ability to prioritize, manage time effectively, and able to realign priorities as needed.
6. Ability to complete complex analyses and studies in an independent manner (e.g. define objectives, conduct research, collect data, analyze data, derive results, and formulate conclusions and recommendations).
7. Intermediate-to-advanced proficiency in Microsoft Office applications. Knowledge of Microsoft Access and ESRI's GIS software is highly desirable.

REQUIRED EDUCATION, TRAINING, AND EXPERIENCE

Junior Engineer

1. A bachelor's degree from an accredited college or university, preferably with major course work in civil or environmental engineering or a closely related field.
2. No professional experience is required; one year of technical engineering experience is desirable.
3. Knowledge of principles and practices of professional engineering as applied to a variety of public works, utilities, building/facilities construction, traffic, water quality, and/or private development projects.
4. Excellent written and oral communication skills.
5. Knowledge of principles and practices of work safety.
6. Ability to learn regulatory requirements and obligations of the District.
7. Ability to learn modern office procedures and computer equipment and software such as AutoCAD, ArcView GIS, PowerBI.

Assistant Engineer

1. A bachelor's degree from an accredited college or university, preferably with major course work in civil or environmental engineering or a closely related field.
2. Two years of responsible professional engineering work.
3. Excellent written and oral communication skills.
4. Knowledge of principles and practices of work safety.
5. Ability to learn modern office procedures and computer equipment and software such as AutoCAD, ArcView GIS, PowerBI and software related to specific department operations.
6. Pertinent local, State, federal rules, regulations and laws related to area of engineering assignment.
7. Methods, materials, and techniques used in engineering.

Associate Engineer

1. A bachelor's degree from an accredited college or university, preferably with major course work in civil or environmental engineering or a closely related field.
2. Possession of a current certificate of registration as a Professional Engineer in the State of California.
3. 2-8 years of experience working in the engineering field, with several years of working with municipal infrastructure.
4. Ability to check engineering plans and specifications; prepare and check engineering reports and studies.
5. Ability to obtain information through interview, to handle multiple assignments, and to work with interruption.
6. Excellent written and oral communication skills.
7. Experience with construction of municipal facilities.

SPECIAL REQUIREMENTS

1. Possession of a valid California Driver's license issued by the State Department of Motor Vehicles. Proof of a good driving record, free from multiple or serious violations or accidents, and in accordance with any standards of the District's insurance carrier. Compliance with these requirements and established District vehicle operation standards are a condition of employment.
2. Understand and carry out oral and written directions.
3. Communicate well with others, verbally and in writing.
4. Work cooperatively and get along well with others, the Board of Directors, District staff, customers, and the public.
5. Think critically to address complex business and regulatory assignments.
6. Must be available to work evenings, weekends, or holidays in the event of an emergency or other significant operational requirement.

ESSENTIAL PHYSICAL ABILITIES

Individuals selected for appointment to this position must pass a pre-employment medical examination which the District pays for. Because this position is not considered "safety sensitive" in nature, the person selected for appointment to this position will not be required to have a pre-employment drug screening. The medical examination is intended to evaluate the applicant's ability to meet the physical and health requirements for this classification.

A person employed in this position must be able to:

1. Operate a variety of office equipment, especially computers.
2. Sit for extended periods of time.
3. Perform minor physical activities which involve bending, lifting, and reaching.
4. Operate a motor vehicle.

