

ENCINA WASTEWATER AUTHORITY

# ENGINEER

REVISED:	September 2024
DEPARTMENT:	Office of the General Manager
<b>REPORTS TO:</b>	Engineering Services Manager
FLSA STATUS:	Exempt

## **POSITION SUMMARY:**

Under the general direction of the Engineering Services Manager, performs a variety of complex engineering duties in planning, design, construction, operations, and compliance of wastewater facilities, infrastructure, system and programs; oversees development of engineering designs, including plan, specification, and contract review; provides project management support for assigned projects to support Encina's Capital Improvements Program (CIP); researches a variety of engineering and/or compliance issues; compiles and analyzes data, and prepares reports; provides technical support to engineering and management staff; customarily and regularly exercises discretion, independent judgment, and decision making; and performs duties as assigned. This position requires interaction with, and responds to questions and inquiries from, the general public, developers, contractors, engineering professionals and Member Agency staff primarily regarding CIP projects.

**CLASS CHARATERISTICS:** This classification is the journey level of a professional engineering job series. Positions at this level perform diverse and complex professional duties in support of Encina's engineering programs and projects. This class is distinguished from the Associate Engineer in that the position applies advanced engineering or related technical principles, theories and concepts to develop advanced solutions to complex opportunities or problems and performs the more complex and difficult projects, analyses, and programs requiring registration as a professional engineer.

### **ESSENTIAL JOB DUTIES:**

The duties listed below are intended only as illustrations of the various types of work that may be performed.

- Promotes Encina's Mission, Vision and Values.
- Exhibits all leadership traits and ethical behaviors required of California local government staff.
- Provides day-to-day professionalism to ensure a high performance, customer service-oriented work environment that supports Encina's mission, vision, and values.
- Assists, and may lead, in planning, organizing, and directing Encina's CIP related administrative activities.
- Assists, and may lead, the design development of Encina projects. Understands scope of work; reviews proposals; conducts meetings and manages consultant work product.

- Meets with consultants, other agencies' representatives and other Encina departments to resolve problems relevant to assigned design development projects; reviews and approves progress payments from engineering consulting firms and contractors.
- Provides direction in the preparation of studies and reports on rehabilitation of existing facilities and on future projects.
- Prepares engineering calculations.
- Prepares, maintains, and communicates project schedules and financial tracking.
- Participates in the bid and proposal process for capital improvement projects, facilities equipment, and professional services agreements; assists with the preparation of detailed drawings and technical specifications and develops the scope of work; participates in the submittal process; reviews consultant proposals and recommends vendors; drafts staff reports and supplemental documentation for approval by the Board of Directors.
- Performs project management functions for various engineering projects: ensures compliance with contract specifications and regulatory permits; monitors the project schedule and budget; provides regular status reports on project progress; analyzes and negotiates change order requests and prepares and issues field change orders; facilitates project meetings and produces minutes.
- Participates in construction management activities to ensure projects are constructed in accordance with contract documents, permits, and relevant codes.
- Performs site visits and conducts inspections of wastewater treatment facilities and active construction sites.
- Coordinates commissioning activities, acceptance testing, and reliability acceptance testing; actively troubleshoots issues as they arise.
- Monitors, reviews and interprets the impacts of new and changing federal, state and local engineering/construction regulations on Encina's capital and rehabilitation projects.
- Develops, implements, and monitors tactical plan objectives that support the organization's Strategic Plan and mission.
- Assists with the development, updating, and revision of long-range planning studies, feasibility studies, master plans and other technical studies related to capital improvements.
- Performs project and policy analysis, which include conducting research; identifying and raising pertinent issues; summarizing findings; presenting results; reviewing, writing, and analyzing policies and procedures; administering assigned programs, agreements, and/or projects.
- Represents and makes presentations on behalf of Encina to regulatory agencies, the public, contractors and consultants.
- Acts as point of contact on capital improvement issues providing information and assistance to the Authority Board of Directors and its subcommittees, General Manager, Assistant General Manager, Directors, Managers, and other interested parties as appropriate.

- Performs administrative tasks for the organization as needed.
- Other duties as assigned.

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. Reasonable accommodation/s will be made to enable qualified individuals with disabilities to perform the essential functions.

## Specific Types of Knowledge, Skills and Physical Abilities Required for the Following Duties:

### Knowledge of:

- Applicable federal, state and local laws; codes, ordinances, and regulatory requirements as they pertain to the water and wastewater industry.
- Modern and advanced principles and practices of civil, electrical, mechanical, chemical, environmental, structural, and/or control systems engineering.
- Principles of project planning, management and budgeting.
- Principles of contract negotiation and/or contract administration.
- Principles and practices of engineering design and plan review and analysis.
- Principles and practices of asset management.
- Principles and practices of construction and project management including budget and contract management.
- Operations of wastewater management systems, including air pollution, solids management, odor control, and flow regimes.
- Principles of air dispersion, fate-transport, interceptor odor, and health risk analysis modeling.
- Computer-aided drafting (CAD) concepts and applications.
- Principles and applications of critical thinking and analysis.
- Principles of advanced mathematics and their application to engineering work.
- Current equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly and collaboratively.
- Effective leadership methods, principles of supervision and training, modern office procedures, methods and equipment including word processing, spreadsheets and database software programs.
- Principles and practices of budgeting and maintenance of public records; effective management and supervision concepts and techniques; and demonstrated experience using such knowledge.

• Relevant occupational health and safety regulations and guidelines, safe work methods and safety practices relevant to the work.

#### **Demonstrated Ability to:**

- Conduct engineering research projects, analyze problems, evaluate alternatives, make sound recommendations, and prepare technical staff reports.
- Analyze and make sound recommendations on engineering design, construction safety, regulatory, water quality, and management issues.
- Prepare clear, concise, and comprehensive correspondence, reports, studies and other written materials and exercise sound, expert, independent judgment within general policy guidelines. The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Establish and maintain effective working relationships with local public agencies, contractors, and construction personnel as well as with Encina managers, member agency managers, board members, employees, and the public.
- Establish and maintain a variety of filing, record keeping, and tracking systems.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Perform complex mathematical and engineering computations with precision.
- Effectively represent the department and Encina in meetings with governmental agencies, community groups, various business, professional, regulatory organizations, and in meetings with individuals.
- Operate a motor vehicle and travel to various Encina sites, projects, and/or meetings.
- Independently organize work, set priorities, and meet critical deadlines.
- Use tact, initiative, prudence, and independent judgment within general policy, legal, and procedural guidelines.
- Comply with safe work practices and procedures in the workplace.
- Provide a high level of customer service by effectively dealing with the public, vendors, contractors, and Encina staff.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

### EDUCATION AND EXPERIENCE REQUIREMENT:

Any combination of education and experience that provides the required knowledge, skills, and abilities necessary for acceptable job performance may be qualifying as determined by Encina. Example combination includes, but is not limited to:

- 1. Possession of a Bachelor's Degree from a college or university accredited by ABET (Accreditation Board of Engineering and Technology), with major coursework in civil, mechanical, chemical, or environmental engineering and,
- 2. Four years of increasingly responsible professional civil engineering work experience that includes planning, construction, and project management experience, including two years working as an engineer in support of a management level position within the wastewater or water treatment environment.

### LICENSE REQUIREMENT:

- Possession of a California Professional Engineers license (Civil, Mechanical, or other as approved by management).
- Possession of a valid California Class C Driver's License, and ability to be insured under the Authority's automobile insurance coverage.

### PHYSICAL AND MENTAL DEMANDS:

### **Physical Demands**

- While performing the duties of this position, an employee is regularly required to sit, stand and walk; talk or hear, in person, in meetings and by telephone; use hands and fingers to handle, feel or operate standard office equipment.
- Specific vision abilities required by this job include close and distance vision and the ability to adjust focus.
- Mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle and visit various Encina sites, projects, and/or meetings; primarily a sedentary office classification although standing in work areas and walking between work areas may be required; occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information; ability to lift, carry, push, and pull materials and objects up to 35 pounds.
- Mobility to work in changing site conditions; to sit, stand, and walk on level, uneven, or slippery surfaces; to reach, twist, turn, kneel, and bend, to climb and descend ladders.
- Perform light physical work; lift, carry, push, and pull materials and objects up to 50 pounds, and heavier weights with the use of proper equipment and/or assistance from other staff.
- Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment.
- Frequent walking in operational areas to identify problems or hazards.

#### **Mental Demands**

While performing the duties of this position, the employee is regularly required to use written and oral communication skills; read and interpret complex data, information and documents; analyze and solve problems; observe and interpret people and situations; use math and mathematical reasoning; learn and apply new information or skills; perform highly detailed work on multiple, concurrent tasks with constant interruptions; work under intensive deadlines and interact with other managers, board members, government officials, regulators, employees, and the public.

#### WORK ENVIRONMENT:

- The employee works under typical office conditions as well as construction or work sites in the course of inspecting and monitoring work or supervising work crews. The noise level in the office environment is usually quiet; work sites may be dirty, loud, and odorous.
- Field work with exposure to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, chemicals, mechanical and/or electrical hazards, hazardous physical substances and fumes, dust, and air contaminants.
- Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

**QUALIFICATIONS:** Ability to pass Authority pre-employment physical examination; possession of a good driving record and the ability to be insured by the Authority's insurance carrier; and the ability to read, write, speak and comprehend English.

Pre-Employment: All employment offers are contingent upon successful completion of Encina's preemployment process, which includes a background investigation, a physical examination, and a drug screen.