

ENGINEERING TECHNICIAN

This class specification indicates, in general terms, the type and level of work performed as well as the responsibilities of employees in this classification. The job functions described are not to be interpreted as being all-inclusive to any specific employee.

DEFINITION

Under general supervision, performs a variety of technical engineering support duties including coordinating the submittal review process, reviewing construction designs and specifications, and conducting basic project costing; maintains and coordinates the materials and services of the engineering library; provides information and assistance to contractors, developers, engineers, and the general public on OC San's engineering services and activities; performs a variety of technical tasks relative to assigned area of responsibility; and performs duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned supervisory and/or managerial staff. Exercises no direct supervision of staff.

CLASS CHARACTERISTICS

This classification is the first of two levels within the engineering technician job series. This class is responsible for performing the full range of paraprofessional engineering support duties assigned, working independently, and exercising judgment and initiative. Positions at this level receive only occasional instruction or assistance as new or unusual situations arise and are fully aware of the operating procedures and policies of the work unit. This class is distinguished from the Engineering Associate in that the latter performs the more complex paraprofessional engineering field and office duties in support of professional engineering staff from the design phase through the bidding process.

EXAMPLES OF ESSENTIAL JOB FUNCTIONS (Illustrative Only)

The following essential job functions are typical for this classification. Incumbents may not perform all of the listed job functions and/or may be required to perform additional or different job functions from those set forth below to address business needs and changing business practices.

- Coordinates the submittal review process between contractors and OC San staff; reviews submittals to determine accuracy in relationship to project specifications and plans; consolidates feedback from OC San staff for review by project engineer; distributes copies of reviewed submittals and feedback to OC San staff and returns to contractor as either approved or requiring resubmittal.
- Consolidates changes made on blueprints by consultants, engineers, and inspectors with contractor's as-built drawings; conducts field visits to confirm finished construction configuration; performs routine engineering, topographic, and mathematical calculations; makes appropriate notes of sizes, diameters, locations, and other significant information and returns to project engineer.

- Reads and interprets engineering drawings, plans, schematics, maps, and legal descriptions; assists in identifying equipment needs by researching submittals and as-built plans; receives and distributes operations and maintenance manuals after construction has been completed; may receive materials from contractor and coordinate testing between appropriate staff.
- Compiles and sends out request for proposals; monitors bid and submittal processes; communicates with bidders and contractors on document status and completeness; updates submittal tracking log and database system.
- Reviews change order requests to determine the accuracy of rates, material costs, and equipment rental rates; submits final data to engineer for approval.
- Inspects contractors' work in progress, reviews completed projects with engineers, and approves payments.
- Locates pipe locations in the field and on plans and enters into computer drafting/design software.
- Reviews and compiles maps, graphs, charts, report covers, and other visual aides for permanent documentation or meeting display.
- Assists the public, contractors, and staff, in person, by phone, or at the front counter by providing information and researching and answering construction engineering related questions; issues connection permits and receives fees.
- Works with other water agencies, regulatory agencies, and other divisions within OC San to gather information for the completion of various studies; obtains permits for study completion.
- Maintains engineering library and sewer atlas; arranges shop drawings; completes record drawings.
- Performs various office support tasks such as mailing and delivering plans and specifications, copying, answering telephones, and maintaining files.
- Ensures safety and health procedures and precautions are adhered to, corrects unsafe work conditions/practices, and/or reports unsafe work conditions/practices to assigned supervisory or managerial staff.
- Performs duties as assigned.

QUALIFICATIONS

Knowledge of:

- Basic design and construction practices and methods of underground facilities and related infrastructure.
- Principles and practices of technical civil engineering drafting and surveying support.
- Principles and procedures of record keeping and reporting.
- Technical engineering mathematics.
- Mechanical and computer drafting techniques.
- Methods, techniques, materials, equipment, and tools used in engineering and drafting.
- Applicable federal, state, and local laws, codes, and ordinances relevant to area(s) of responsibility.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Current equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Perform responsible technical engineering support work with accuracy, speed, and minimal supervision.
- Coordinate the submittal review process between contractors and OC San staff.
- Read and interpret maps, plans, sketches, schematics, diagrams, and blueprints.
- Identify and classify pipes and other pertinent construction materials.
- Use and understand alpha and numeric codes.

- Make mathematical calculations and basic engineering computations and drawings.
- Travel to various OC San sites, projects, and/or meetings.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy 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 OC San staff.
- Effectively learn and 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.

Employment Standards:

Any combination of education and experience that provides the required knowledge, skills, and abilities may be qualifying as determined by OC San.

1. High school diploma or G.E.D. supplemented by specialized training or coursework in engineering technology, computer drafting, or a related field.
2. One (1) year of work experience performing technical engineering support work, including reviewing and processing constructions plans and specifications.

Licenses and/or Certifications:

None.

Disaster Service Workers:

All Orange County Sanitation District employees are designated Disaster Service Workers through state law (California Government Code Section 3100-3109). Employment with the Orange County Sanitation District requires the affirmation of a loyalty oath to this effect. Employees are required to complete all related training as assigned, and to return to work as ordered in the event of an emergency.

PHYSICAL DEMANDS

- Mobility to work in a standard office setting and use standard office equipment, including a computer; visit various OC San 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.
- Vision to read printed materials and a computer screen.
- Vision to inspect site conditions and work in progress.
- Hearing and speech to communicate in person and over the telephone.
- Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment.
- Field work requiring frequent walking in operational areas to identify problems or hazards with exposure to hazardous materials in some site locations.

ENVIRONMENTAL ELEMENTS

- Office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances.
- Field work with exposure to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, and vibration.
- Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

OTHER REQUIREMENTS

- Probationary Period: All OC San employees, except classifications considered “at-will”, are subject to the probationary period provisions as specified in the applicable Memorandum of Understanding, policies, and/or resolutions. Employees who have not yet successfully completed their initial probationary period serve “at-will” and may be released from employment without cause or recourse to any appeal or grievance procedures.
- Pre-Employment: All employment offers are contingent upon successful completion of OC San’s pre-employment process, which includes a background investigation, a physical examination, and a drug screen.
- Work Location Assignment: Employees will be assigned to a work location based on business needs which may be located at any/all of OC San locations; this work location may be changed at any time.