



City of Laguna Niguel Job Description

ENGINEERING TECHNICIAN

Maintenance, Clerical, and Technical Unit
FLSA: Non-exempt

DEFINITION

Perform routine and complex technical engineering-related work for environmental, water, sewer, street, and other Public Works projects and programs; assist an Engineer in application of principles, methods, and techniques of civil engineering technology.

SUPERVISION RECEIVED AND EXERCISED

Receives general guidance and direction from an Engineer.

EXAMPLES OF IMPORTANT DUTIES AND RESPONSIBILITIES

Important responsibilities and duties may include, but are not limited to, the following:

- ◆ Review project specifications; confer with Civil Engineer concerning assistance required such as plan preparation, acceptance testing, evaluation of field conditions, design changes, and reports.
- ◆ Conduct materials testing and analysis.
- ◆ Prepare reports detailing tests conducted and results; draft and calculate field notes to document quantities, alignment, grade, and locations according to project plans or to document monthly and final progress estimates.
- ◆ Survey project sites to obtain and analyze topographical details of sites.
- ◆ Write legal descriptions for dedications, annexations, local improvement districts, easements, or condemnations.
- ◆ Research records, maps, and other data to obtain typical engineering data such as location of sewer stubs, water mains, hydrants, etc. and zoning district designations or special property assessments.
- ◆ Draft detailed dimensional drawings such as those needed for street, water, sewer, drainage, and other utility plans, systems, and projects.
- ◆ Calculate dimensions, profile specifications, and quantities of materials such as pipe, concrete, and asphalt.
- ◆ Inspect construction site to determine conformance of site to design specifications.
- ◆ Assist engineers to ensure that construction and repair of transportation, water, or wastewater systems meet control requirements.
- ◆ Assist in the review of private project development plans for compliance with codes, regulations, and standards, adequacy of applications for permits, and compliance with approved plans.
- ◆ Assist in the preparation of engineering plans and specifications; coordinate required advertising for bids; review construction bids; make necessary recommendations based on lowest and best bids, competency of vendors and consultants, and the selection criteria.

- ◆ Assist in project management for the construction of the municipal Public Works projects.
- ◆ Assist in the preparation of sanitary sewer, water, storm drainage, and street system maps, databases, and comprehensive plans.
- ◆ Assist in the maintenance of engineering and infrastructure records; prepare and draft as-built plans for street, water, sewer, or light systems.
- ◆ Review applications for utility permits, street use permits, franchise utility permits, etc.; issue routine permits.
- ◆ Assist in the evaluation of transportation and traffic impacts of development proposals, permits, rezones, plats, etc.; prepare traffic, utility, and other studies and reports.
- ◆ Coordinate sidewalk inspection, maintenance, and enforcement programs.
- ◆ Assists in intersection signal and channelization design.
- ◆ Assist in the development of pavement management systems.
- ◆ Perform a variety of office related functions including preparing permits, correspondence, maps, presentation materials, and brochures, reducing field notes, printing materials, answering phones, and responding to inquiries from contractors, developers, property owners, staff, and the general public.
- ◆ Serve as a drafter; make final sketch of proposed drawing; check dimension of parts, materials to be used, relation of one part to another, and relation of various parts to whole structure or project; make adjustments or changes.
- ◆ Ink in lines and letters on pencil drawings as required; draw charts for representation of statistical data; draw finished designs from sketches; use computer assisted drafting (CAD) equipment and software.
- ◆ Serve as a member of various employee committees.
- ◆ Serve as a member of survey crew or flagging as needed.
- ◆ Perform related duties as assigned.

QUALIFICATIONS

Knowledge of:

- ◆ Some knowledge of civil engineering principles, practices, and methods as applicable to a municipal setting
- ◆ Some knowledge of applicable City policies, laws, and regulations affecting Department activities.
- ◆ Considerable skill in arriving at cost estimates on complex projects.
- ◆ Some skill in basic drafting, surveying, and flagging.

Ability to:

- ◆ Ability to prepare, organize and maintain engineering field and office data, reports and systems; Ability to effectively communicate complex technical information, orally and in writing, to contractors, developers, property owners, employees, consultants, other governmental agency representatives, City officials and the general public.

Experience and Training:

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Two years related working experience.

Graduation from high school or GED, supplemented by two years of related technical or college training in drafting, Computer-Aided-Design (CAD), engineering technology, civil engineering, or a related field

Licenses:

Possession of a valid California Driver's License and an acceptable driving record.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is occasionally required to stand and walk; use hands to finger, handle, feel, or operate objects, tools, or controls; and reach with hands and arms. The employee is occasionally required to sit, climb, balance, stoop, kneel, crouch, crawl, talk, and hear.

The employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee occasionally works in outside weather conditions. The employee occasionally works near moving mechanical parts and in high, precarious places and is occasionally exposed to wet and/or humid conditions, fumes or airborne particles, toxic or caustic chemicals, risk of electrical shock, and vibration.

The noise level in the work environment is usually quiet to moderate.