

SAN BERNARDINO MUNICIPAL WATER DEPARTMENT CLASSIFICATION SPECIFICATION

TITLE: ENGINEERING TECHNICIAN

DATE: 07/01/2021

JOB CODE: 21765

FLSA STATUS: NON-EXEMPT

UNIT REPRESENTATION: GENERAL

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.

DUTIES SUMMARY

Under general supervision to perform a variety of technical office and field engineering, planning, design and construction activities related to the development, design, construction, and coordination of public water utility, water reclamation, and sewer collection facilities.

DISTINGUISHING CHARACTERISTICS

The Engineering Technician is the journey technical level classification within the engineering series. Supervision is received from the Engineering Manager, or designee.

EXAMPLES OF DUTIES

The following duties are typical essential duties for positions in this classification. Any single position may not perform all of these duties and/or may perform similar related duties not listed here.

- Provide courteous and expeditious customer service to the general public and City and Department staff;
- Routinely adhere to and maintain a positive attitude toward City and Department goals;
- Perform plan checking, project coordination, survey work, project design, and design drafting;
- Assist in the preparation of reports and construction plans, specifications, and cost analyses for water, wastewater, sewer collection, geothermal, and reclaimed water facilities including pipelines, pumping stations, water storage tanks, water and wastewater treatment systems, pressure reducing stations, lift stations, force mains, and other related facilities;

- Coordinate with various public and private agencies including but not limited to developers, contractors, City and Department staff, and various consultants;
- Prepare, maintain, and report statistical, financial, technical, or analytical data for capital and developer installed projects;
- Perform construction related inspections and utility conflict problem solving at project job sites;
- Under limited supervision, conduct work requiring independent evaluation, selection, adaptation, and modification of standard techniques, procedures, and criteria;
- Assist with complex projects including, but not limited to, tract developments, water/sewer/force main pipeline extensions, wastewater treatment plant upgrades, and water and sewer master plans;
- Assist in submittal, Request for Information, Request for Change, construction submittal review, claims review, and draft responses for review by the Engineer/Construction Project Manager;
- Monitor and report on construction progress and participate in or conduct project meetings;
- Coordinate project work with Department staff, contractor, developer, and inspector;
- Provide technical scope and justification for contract changes;
- Assist in the resolution of design and construction field problems;
- Create maps with the use of ArcGIS;
- Create the Conditions of Approval for the water and sewer systems for developments proposed in the City of San Bernardino;
- Perform related work as required.

QUALIFICATIONS

Any combination of education, training, and experience that would likely provide the knowledge, skills, and abilities to successfully perform in the position is qualifying. A typical combination includes:

Knowledge of:

- English usage, spelling, grammar, and punctuation, including demonstrated proficiency with Microsoft Word;
- Principles and practices of land surveying including legal property descriptions;
- Principles and techniques for providing customer service and effectively dealing with the public, vendors, contractors, and Department staff;
- Drafting principles, methods and equipment, including demonstrated proficiency with AutoCAD and ArcGIS;
- Intermediate mathematics, including statistics, trigonometry, algebra, calculus, elementary mechanics, strength of material, and a demonstrated proficiency with Excel applications, and Windows;

- Appropriate safety practices, precautions and procedures;
- Basic public relations.

Ability to:

- Communicate effectively in English (written and oral) and write clear and concise technical reports;
- Understand and carry out oral and written instructions;
- Interpret and apply water and civil engineering principles practices, concepts, and standards to engineering problems in the design of water utility and sewer projects;
- Apply surveying techniques, horizontal control maps, global position systems, and be able to reconcile inconsistencies in existing horizontal control databases;
- Perform difficult digitizing and graphics work;
- Be proficient in Microsoft Office, Adobe PDF/Blue Beam;
- Organize and prioritize multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines/
- Prepare, understand, and interpret construction plans, specifications, drawings, and other engineering documents;
- Perform engineering and statistical calculations;
- Independently conduct comprehensive investigations and analyses; evaluate alternatives and make sound recommendations;
- Apply applicable federal, state and local laws, regulatory codes, ordinances, and procedures relevant to project;
- Adhere to and comply with safety standards and the proper use of safety equipment and PPE;
- Operate a vehicle observing legal and defensive driving practices;
- Work in the field in varying environmental and weather conditions and perform occasional moderately heavy physical labor;
- Establish and maintain effective relationships with those contacted in the course of work;
- Work under moderate or high stress conditions;
- Maintain a driving record that meets vehicle code standards and is acceptable to the Department and its insurance carrier.

MINIMUM QUALIFICATIONS

Education: Bachelor's degree in engineering, physical sciences, or related field;

OR

Education: Associate's degree in engineering physical sciences, or related field;

AND

Experience: Two (2) years of closely related engineering work experience.

OR

Experience: Four (4) years of closely related engineering work experience which would have provided the required level of knowledge, ability, and proficiency required to perform technical engineering duties.

Certificates: Must obtain and maintain a valid California State Water Resources Control Board (SWRCB) Water Treatment Operator Grade 1 certificate within 24 months of appointment.

AND

Must obtain and maintain a valid California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 2 within 24 months of appointment.

AND

Possession of a valid Class "C" California driver's license. For out of state applicants, a valid driver's license is required and a valid Class "C" California driver's license must be obtained within ten (10) days of appointment (CA Vehicle Code 12505c).

NECESSARY SPECIAL REQUIREMENTS

Must be able to respond to callouts or emergencies including being on-call.

PHYSICAL TASKS AND ENVIRONMENTAL CONDITIONS

Work involves exposure to potential physical harm, hazardous chemicals, and infectious disease. There is frequent need to stand, sit, stoop, walk, and perform other similar actions during the course of the workday.

Incumbents require sufficient mobility to work in variety of environmental and weather conditions; to climb stairs and ladders daily; to transport materials and supplies weighing up to 50 pounds; to work in a boom truck with lift of 30 to 60 feet; and to work to heights of 150 feet. Must be able to see in the normal visual range with or without correction. Must be able to hear in the normal audio range with or without correction. Employee accommodations for physical or mental disabilities will be considered on a case-by-case basis.

CAREER LADDER

From: Engineering Technician
To: Senior Engineering Technician

Job Description:

BOWC Approved:
Rev. Appr:

10/3/1995
12/4/2001
7/8/2003
5/1/2012
8/15/2017
6/22/2021

Testing Standards: App Review/ Supp App Review