

CITY OF MEXICO JOB DESCRIPTION

Job Title: Civil Engineer

Department: Public Works

Pay Grade: 3

Reports to: City Engineer

Exempt: Yes

Date: 10/1/2018

JOB SUMMARY

Responsibilities include but are not limited to assisting City Engineer or Public Works Director by performing technical design work, construction inspection, and surveys.

SUPERVISION EXERCISED

None.

SUPERVISION RECEIVED

Works under the guidance and direction of the Public Works Director or City Engineer.

DUTIES AND RESPONSIBILITIES

The duties described below are indicative of what the Civil Engineer might be asked to perform. Other duties may be assigned. This job description is to incorporate any municipal ordinance setting out the duties and responsibilities of the Civil Engineer as they may be delegated.

General – Essential Functions:

- Performs field surveys for design, easements, and under the supervision of a land surveyor, boundaries.
- Performs computer aided drafting.
- Maintains various City maps and records through computer software systems such as CAD/GIS, or other database systems. Provides information to the public and various agencies, City departments.
- Performs traffic counts and studies.
- Computes and prepares quantities and cost estimates for various city projects including streets, cuts, fills, grade adjustments, sewer elevations and flow calculations.
- Conducts construction inspections of various City projects and improvements including streets, sewers, drainage facilities, stormwater, and other municipal projects.
- Facilitates design work for stormwater, streets, wastewater and transportation projects, other projects.
- Pulls construction samples and performs testing or arranges for testing for concrete, asphalt, other materials used in construction or maintenance projects.

- Supports other City departments with technical guidance and plans.
- Issues and inspects permits for work on City right of ways.
- Coordinates with other federal, state, and local agencies.
- Administers and enforces the City's storm water management ordinance.
- Provides project management and administration of City projects as assigned.
- Supports MS4 permit process and inspection.
- Supports and manages floodplain administration.
- Prepare and evaluate on a yearly basis condition of streets, and priority of projects.

Marginal Functions:

- Performs all other related duties as assigned.

Material and equipment used:

- Personal computer, word processing, spreadsheet, database software, drafting and design software, laser printer, calculator, telephone, copy machine, fax machine, car, truck, SUV.
- Plotter, surveying equipment, total station, GPS equipment, digital camera, material testing equipment, traffic counting equipment, sewer monitoring equipment.

QUALIFICATION REQUIREMENTS

To perform this job successfully, an individual must be able to perform each duty satisfactorily. The requirements listed below are representative of the knowledge, skill and/or ability required at the time of hire or for the continuation of employment. They represent the minimum requirements necessary.

Required Education and/or Experience:

- High school diploma or equivalent. Bachelor's degree from a four-year college or university; or equivalent combination of education and experience.
- Degree in Engineering or related field.
- Must have excellent driving record.
- Successful completion of a drug screening test.
- Must have an excellent work history and attendance record.

Preferred Education and/or Experience:

- Six years related experience and/or training; or a Bachelor's degree from a college or university plus two years of experience, or equivalent combination of education and experience.
- Survey experience.

Certifications, Licenses, and Other Requirements:

- Valid driver's license.
- Successful completion of Missouri Fundamentals of Engineering exam within 6 months of hire.

Skills and Abilities:

- Ability and willingness to learn new skills as needed.
- Ability to comprehend and follow both written and oral instructions.
- Ability to present/communicate effectively and tactfully with others.
- Ability to work independently and with a team.
- Knowledge of engineering software such as Intelli-Cad, Carlson, hydrology software, etc.
- Knowledge of general engineering principles in the transportation, environmental, geotechnical, and structural disciplines
- Knowledge of materials, methods, and the tools involved in the construction or repair of public facilities.
- Knowledge of design techniques, tools, and principles involved in production of engineering reports, plans, and specifications.
- Proficiency with typical office software such as Microsoft Office.
- React competently and manage emergency situations.

Language Skills:

- Ability to communicate effectively in both written and verbal form.
- Ability to communicate effectively, tactfully, and persuasively with other City employees and the general public in difficult situations.
- Ability to prepare and present technical reports and recommendations.
- Ability to speak, read and understand English.
- React competently in emergency situations.

Mathematical Skills:

- Ability to perform ordinary accounting, engineering and mathematical procedures in standard practical applications is required.

Reasoning Skills:

- Ability to define problems and discern solution alternatives.
- Ability to organize time and resources.
- Ability to think quickly and adapt.
- Ability to use good judgement.

PHYSICAL AND WORK ENVIRONMENT

The physical demands are representative of those that must be met by an employee to successfully perform the essential functions of this job. The work environment is representative of what may be experienced in the performance of the job.

Physical and Work Environment:

- Regularly required to use hands to finger to grasp, feel and handle object and equipment.
- Regularly must orally communicate.
- Ability to use optical instruments including survey instruments. Visual acuity with corrective lenses is required.
- Ability to lift and/ or move up to 70 pounds.
- Will frequently be required to walk, stoop, kneel, push and pull.

Work Environment:

- While performing the essential functions of this job, the employee is frequently exposed to outdoor weather conditions, dirty environment, improper illumination, awkward or confining workspaces, sedentary/repetitive activities, time pressure, work distractions and dealing with possible or unpleasant social situations. On occasion employee may be exposed to continuous noise, air contamination and high or low temperatures.
- The employee will be required to work with appropriate personal safety equipment.
- Must be able to respond to emergencies.
- May be required to work evenings or on weekends.

SELECTION GUIDELINES:

Formal application: review of education and experience; appropriate testing and oral interviews; background check; drug screening final selection and pre-employment medical examination.

NOTE: Appointees will be subject to completion of a standard probationary period.

The duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

The job description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.

Employee

Date

