



City of Zion

Position Title: Engineering Technician
Classification: Administrative
Location: Public Works Facility

Job Status: Full-time
Reports To: Director of Public Works
Positions Supervised: None

POSITION SUMMARY

Regularly performs construction inspection, material testing, project planning, initial investigations of citizen inquiries/requests, and coordinates with sewer, streets, and parks divisions on maintenance projects.

ESSENTIAL FUNCTIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily.

Essential Functions:

- Applies principles, methods, and techniques of civil engineering as they relate to the design of drainage and stormwater systems, water main systems, sanitary sewer systems, roadways and other infrastructure. Performs construction inspection of public works, utility and development construction projects.
- Assist Project Engineers and Project Managers with project administrative activities, document controls and project scheduling.
- Work independently on design and production of construction plans, specifications, and cost estimates.
- Perform design and analysis for civil engineering projects using approved computer programs and manual computations in accordance with the accepted design practice.
- Work independently on design and production of construction plans, specifications, and cost estimates.
- Prepare and review design calculations quantity take-offs and cost estimates.
- Performs field investigations for engineering projects and studies, and construction survey work.
- Provides plan reviews of subdivision and commercial developments and project plans.
- Maintains plan records, as-built drawings, and other City utility and street related records.
- Performs drafting of engineering drawings and sketches.
- Provides assistance in enforcing the Municipal Code, engineering, subdivision and zoning ordinances.

- Investigates complaint problems, performs studies and prepares reports of findings with recommended solutions.
- Other assignments as needed.
- In addition to the responsibilities and duties listed, it is expected that employees maintain a consistent and reliable attendance record.

SKILLS & ABILITIES

Education: Requires knowledge, skill and mental development equivalent to graduation or a certificate from a two (2) year course in civil engineering technology.

Experience: Minimum five (5) years of progressive experience in the field of civil engineering technology consisting of municipal engineering or drafting, field work and construction inspection.

Certificates & Licenses: Requires possession of a valid Vehicle Operator's License.

Other Requirements:

- Participate in capital planning, asset management, survey, mapping, concept design, bid document assembly, construction observation, engineering design, utility coordination, construction documentation, consultant plan review, project management, cost estimating, report generation, studies, permitting, agency coordination, economic development, grant solicitations, budgeting, and inter-departmental coordination.
- Knowledge of the principles and practices of civil engineering, drafting (manual and computer assisted) and design as related to municipal public works activities.
- Knowledge of the methods, materials and tools of street, sewer, transportation, and other public works construction.
- Knowledge of the principles and practices of land surveying.
- Knowledge of the theory, practice and limitations of traffic control devices.
- Knowledge of the use and operation of personal computer equipment, MS-DOS, MS-Windows, CADD (Computer Aided Drafting & Design) software and techniques and GIS (Geographic Information Systems) software and principles.
- Ability to make independent investigations of engineering problems in connection with design work.
- Skill in the use of surveying and drafting instruments; skill in making engineering computations, estimates, and designs.
- Skill in oral communication and technical writing.

WORK ENVIRONMENT

Field work is performed in an outdoor environment, will require operation of a vehicle. May be required to perform a full range of motion with lifting and/or carrying items weighing up to 50 pounds. Some work is performed in a standard office environment. May require frequent sitting and continuous operation of a personal computer.