

POSITION DESCRIPTION

Position Title: Civil Engineering Technician
Department: Public Works
Division: Engineering
Retirement: KPERS
FLSA: Exempt
Date: February 22, 2022

GENERAL PURPOSE

Performs a wide variety of routine and complex technical engineering related work for environmental, water, sewer, street, and other public works projects and programs. This is a technical position in the area of construction inspection, interpretation of plans and specifications, documentation of construction activities and other related engineering work.

SUPERVISION RECEIVED

Works under the general guidance and direction of the Project Manager.

SUPERVISION EXERCISED

None.

ESSENTIAL DUTIES AND RESPONSIBILITIES

(Duties listed below do not include all tasks which may be performed.)

- Reviews project specifications and confers with City Engineer, Project Manager and/or Engineering Technician II concerning assistance required such as plan preparation, acceptance testing, evaluation of field conditions, design changes, and reports.
- Assists in project management for the construction of the municipal public works projects.
- Inspects new construction, renovation and repair work for quality, material and workmanship to ensure that all work complies with specifications, ordinances, City standards and contract documents.
- Acts as a liaison for the Public Works Department with contractors, utility companies, general public and other city agencies. Conducts on-site construction meetings with various entities involved.
- Conducts and/or verifies materials testing and analysis.
- Prepares reports detailing tests conducted and results. Drafts and calculates field notes to document quantities, alignment, grade and locations according to project plans or to document monthly and final progress pay estimates. Calculates dimensions, profiles, specifications, and quantities of materials such as pipe, concrete, and other construction materials.
- Assists in surveys of project sites to obtain and analyze topographical details of sites and prepares necessary drawings to communicate this information.
- Uses electronic or paper resources to research records, maps and other data to obtain such typical engineering data such as location of sewer stubs, water mains, hydrants, etc. and zoning district designations or special property assessments.
- Inspects construction site to determine conformance of site to design specifications including proper placement and maintenance of erosion control measures.

- Assists engineers to ensure that construction and repair of transportation, water or wastewater systems meet control requirements.
- Assists 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.
- Assists in the preparation of engineering plans and specifications.
- Assists in the bid process, which may include advertising, review of construction bids and recommendations and evaluation of vendors and consultants.
- Assists in the preparation of sanitary sewer, storm drainage, and street system maps, and databases.
- Assists in the maintenance of engineering and infrastructure records. Prepares and drafts as-built plans for street, sewer or light systems using digital and paper systems.
- Reviews applications for utility permits, street use permits, franchise utility permits, etc. Recommends to others on whether to issue or not to issue routine permits.
- Performs routine inspections related to land disturbance permits and erosion control measures and maintains related records.
- Assists in the evaluation of transportation and traffic impacts of development proposals, permits, rezones, plats, etc. Prepares traffic, utility and other studies and reports.
- Coordinates sidewalk inspection, maintenance and enforcement programs.
- Assists in the development of pavement management systems.
- Performs a variety of office related functions, including preparing permits, correspondence, maps, presentation materials, brochures, reducing field notes, printing materials, answering phones and responding to inquiries from contractors, developers, property owners, staff, and the general public.
- May perform other duties as assigned.

PERIPHERAL DUTIES

- May serve as a member of various employee committees.

MINIMUM QUALIFICATIONS

Education and Experience:

- (A) High School Diploma or GED Equivalent; and
- (B) Minimum of two (2) years general construction experience (footing/foundation walls/streets/sewers/bridges) with at least one of the following:
 - a. Graduation from an accredited four year engineering curriculum; or
 - b. Graduation from a NICET accredited two year technical curriculum or the ability to receive such certification within one year after hire; or
 - c. Certification by the Kansas Department of Transportation as a Level II-AC LPA Inspector; OR
- (C) An equivalent combination of related education and experience.

Necessary Knowledge, Skills and Abilities

- (A) 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 Division activities.
- (B) Demonstrated experience with field inspection or observation of construction projects.
- (C) Demonstrated skill in arriving at cost estimates on complex projects; Skill in operating the

- listed tools and equipment; Skill in basic drafting, surveying, and flagging.
- (D) 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.
 - (E) Possess functional literacy and/or familiarity with electronic software used in engineering environment, to include spreadsheets, word processing, GIS, GPS, ESRI and electronic drafting.

SPECIAL REQUIREMENTS

- (A) Must possess a valid driver's license at time of application (and maintain for duration of employment) and meet insurability standards under fleet insurance policy.
- (B) Must be physically capable of moving about on construction work sites.

DESIREABLE QUALIFICATIONS

- (A) Three or more years of general construction experience.
- (B) Three or more years' experience working with public or governmental agencies.
- (C) Familiarity with AutoCAD software

TOOLS AND EQUIPMENT USED

Personal computer or tablet, including word processing, spreadsheet and data base software; printers; standard drafting tools; engineering calculator; copy machine; scanner; mobile radio; motor vehicle; phone; nuclear density device.

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.

Work is performed equally in office and field/outdoor settings. Outdoor work is required in the inspection of various land use developments, construction sites, or public works facilities. Hand-eye coordination is necessary to operate drafting instruments, computers and various pieces of office equipment.

While performing the duties of this job, the employee is occasionally required to stand; 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 or balance; stoop, kneel, crouch, or 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

