

CITY OF OVERLAND PARK - POSITION DESCRIPTION

TITLE:	Civil Engineer, Senior (Flood Warning)	BAND/LEVEL:	PROF V
DEPARTMENT:	Public Works	JOB NO:	2915
DIVISION:	Engineering	DATE:	04/11/2017
REPORTS TO:	Supervisory Civil Engineer or Assistant City Engineer	FLSA STATUS:	Exempt
FT/PT/SEASONAL:	Full Time	COST CENTER:	311
REPLACES:	N/A	LAST REVISED DATE:	03/25/2012

JOB SUMMARY STATEMENT:

Manages the Flood Warning program to include oversight of system operations and information technology support and provides engineering support. Manages the design and construction of thoroughfare, street, bridge, storm sewer and maintenance projects with primary emphasis on stormwater maintenance and improvements. Prepares plans, specifications and contract documents for engineering projects. Provides leadership for all team-based activities to include project management team and task groups. Operates computer software to assist in the administration of Overland Park Municipal Codes. Responds to citizen inquiries. Assists in the operation and maintenance of the flood warning system.

DUTIES AND RESPONSIBILITIES:

- 1. Manages the the Flood Warning program. This includes oversight of system operations and information technology support; and providing engineering support for the flood warning system. System operations include overseeing and assisting in installation; configuration; troubleshooting; repair; and routine and emergency maintenance of remote environmental monitoring equipment. Information technology support includes serving as a liaison with the IT department in the configuration and maintenance of computer systems, software and databases used to operate the flood warning system. Also includes assisting in the maintenance and customization of the STORMWATCH website that disseminates information to the public. Engineering support includes hydrologic and hydraulic modeling, identification of areas prone to flooding, extent of flooding, water depth thresholds and post-storm event analyses to detail extent and impact of flooding. Also serves as liaison for compliance of agreements with other governmental agencies to include Johnson County, National Weather Service and KDOT. Assists in training public safety personnel in the system.
- 2. Prepares plans, specifications, and contract documents for engineering projects which comply with Overland Park Municipal Codes. Surveys the site and performs an engineering analysis for street grades, storm sewer design, and site design. Attends public meetings. Prepares construction plans. Supervises Engineering Technicians in the completion of the above project and monitors project progress. Continuously discusses project with affected public, and primary and sub-contractors. Coordinates efforts with other departments involved with project.
- 3. Directs project management team members, including private sector engineering consultants, during all phases of project life cycle activities.
- 4. Serves as project manager for assigned projects and supervises project team members in the performance of their duties to ensure that all design and construction is in conformance with the approved plans and Overland Park Municipal Codes. Provides technical assistance on construction material and acceptability of construction. Meets with inspector and contractor regarding disputes. Reviews city codes and standards.



- 5. Prepares preliminary engineering reports and costs. Performs preliminary field survey, gathers all necessary data, and performs engineering analysis. Reviews existing systems, researches design alternatives, and develops cost estimates. Supervises technicians in preparing drawings, discusses project with affected residents, and writes report. Discusses project with City Engineer. Presents and explains report to assist the governing body in planning and prioritizing public works projects.
- 6. Operates computer software, including ArcMap, HEC-1, HECRAS, Pondpack, TR-55, HY-8, Lucity, PAVER and office suite software. Maintains database, reviews available hardware and software development to enhance engineering operations. Uses database to develop information required for planning maintenance activities.
- 7. Responds to public inquiries on drainage complaints, streets, and sidewalk requirement and general engineering information. Discusses complaint with residents. Reviews request, requests inspection, evaluates reports, recommends necessary action and responds to inquiry. If required, performs engineering designs to resolve situation.
- 8. Organizes, supervises, and performs surveying work and construction staking on city projects. Discusses the type of surveying needed. Directs surveying crew and reviews survey results.
- 9. The employee must work the days and hours necessary to perform all assigned responsibilities and tasks. Must be available (especially during regular business hours or shifts) to communicate with subordinates, supervisors, customers, vendors and any other persons or organization with whom interaction is required to accomplish work and employer goals.
- 10. The employee must be punctual and timely in meeting all requirements of performance, including, but not limited to, attendance standards and work deadlines; beginning and ending assignments on time; and scheduled work breaks, where applicable.

GENERAL QUALIFICATIONS

EDUCATION & SPECIAL LICENSE(S)/CERTIFICATIONS:

- Bachelor's degree in civil engineering or a related engineering field of study with emphasis in hydrology and hydraulic analysis and design, street design, structural analysis and design, and other engineering principles and practices.
- Professional Engineer registration in the State of Kansas or registration in another state with State of Kansas registration required within one year of hiring.
- Possession of an appropriate valid driver's license. Must maintain an insurable driving record.

EXPERIENCE:

- Six years of experience in the civil engineering field and with use of computerized environmental monitoring systems or an equivalent level of experience
- Three years project management/engineering design/construction management preferred.

SKILLS:

- Good oral and written communication skills for dealing with the public, contractors and other city officials.
- Surveying skills.
- Mathematical aptitude needed to analyze complex engineering data.
- Computer skills.



MENTAL REQUIREMENTS:

- Ability to read and comprehend City codes.
- Ability to analyze complex engineering problems and recommend possible solutions.
- Analytical skills to perform high level mathematical calculations.
- Ability to work under distracting field conditions when surveying or inspecting.
- Understanding of computer hardware and software as it applies to engineering concepts.
- Exhibit diplomacy and judgement when working with citizens, contractors or other public officials.
- Ability to train and guide inspectors, summer interns and other subordinates.
- Abstract and logical reasoning.

PHYSICAL REQUIREMENTS:

- Ability to lift minimal weight and transport minimal distance.
- Hand/eye coordination to operate surveying equipment.
- Ability to traverse rough terrain.
- Exposure to extreme environmental conditions while surveying or conducting site inspection.
- Ability to travel to field locations.
- Ability to visually review engineering plans and reports.
- Ability to operate PC computer.
- Ability to make and receive phone calls.
- Ability to operate City vehicles.
- Visual stamina and acuity adequate to ascertain measurements.
- Climb, walk, stoop, bend.

SUPERVISORY RESPONSIBILITY (Direct & Indirect):

• Indirectly supervises personnel in the installation and maintenance of environmental monitoring stations.

The preceding job description has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees assigned to this job.