CITY OF OVERLAND PARK
POSITION DESCRIPTION

TITLE: Civil Engineer I (OPTCS)  BAND/LEVEL: Prof II
DEPARTMENT: Public Works  JOB NO: 2890
DIVISION: Traffic Services  DATE: 3/25/12
REPORTS TO: Supervisory Civil Engineer (OPTCS)  FLSA STATUS: EX
FULL-TIME: XXX  PART-TIME:  TEMPORARY:  COST CENTER: 320

REPLACES: Civil Engineer I (OPTCS)  DATE: 5/13/05

JOB SUMMARY STATEMENT:
Assists with developing, implementing, and monitoring all aspects of the Overland Park Traffic Control System (OPTCS). Coordinates timing plans and maintains/monitors all related equipment. Prepares and reviews plans, specifications, and contract documents for traffic signals and related ITS components including closed circuit television (CCTV) cameras, fiber optic interconnect conduit, communications network, and dynamic message signs. Assists with annual travel time survey and report. Develops computer models to simulate arterial traffic conditions to measure the impact of proposed changes.

DUTIES AND RESPONSIBILITIES:
1. Assists with developing computerized traffic control system coordination plans for each required time of day period for each arterial controlled by OPTCS based on traffic engineering software, engineering knowledge, and related traffic studies and data. Implements timing plans and monitors results. Makes adjustments as necessary.

2. Develops corridor simulation models based on existing conditions and proposed changes to measure the impact to the network. Prepares reports to document analysis and recommendations.

3. Assists with operating and monitoring OPTCS computer hardware and software to maintain optimum overall system performance and function. Maintains central software to ensure proper operation. Maintains database to accurately reflect field configurations. Reads and thoroughly understands software manuals. Clarifies procedures and operation with software consultants. Ensures proper operation of OPTCS communications sub-system by checking weekly each intersection’s communication and monitoring daily problems.

4. Performs various traffic engineering field studies using a variety of data collection methods and equipment. Examples include travel time studies, peak hour turning movement counts, video observation, delay studies, and license plate surveys. Summarizes results of data collection efforts.

5. Assists with preparation of written or oral reports on OPTCS operations. Submits reports to other members of staff and City council. Answers questions from citizens and responds to complaints about specific locations in need of adjustment. Assists with conducting tours of the traffic operations center.

6. Reviews new construction plans involving construction or installation of traffic signals for conformance with Overland Park Municipal Codes, standards and good engineering practice. Reviews catalog cuts submitted by contractors and approves or rejects their use.

7. Prepares plans, specifications, and contract documents for traffic engineering projects. Visits site and performs an engineering analysis of street grades, driver visibility, existing utility locations (overhead and underground), and site design. Provides project information to public and contractor(s). Coordinates efforts with other divisions or departments involved with the project.

8. Serves as project manager for assigned projects, directing all project activities, responsible for managing the project schedule, funding, and quality assurance. Prepares preliminary engineering reports and costs. Performs field reconnaissance, gathers all necessary data, and performs engineering analysis. Reviews existing systems, researches design alternatives, and develops cost estimates. Coordinates with technicians in preparing drawings.

9. Assists with training and supervision of technical staff assigned to OPTCS. Helps monitor workload.
10. 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.

11. 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 traffic engineering, civil engineering, or a related engineering field of study to gain formal knowledge of traffic engineering design, conducting various traffic related studies, field traffic data collection procedures, and design and other engineering principles and practices or additional equivalent experience. Possession of Engineer-In-Training Certification within twelve months of employment. Possession of an appropriate valid driver’s license. Must maintain an insurable driving record.

EXPERIENCE:
None

SKILLS:
1. Good oral and written communication skills for dealing with the public, contractors and other city officials
2. Mathematical aptitude needed to analyze complex engineering data
3. Computer skills to include knowledge of AutoCAD and expertise with spreadsheet and database software application programs

MENTAL REQUIREMENTS:
1. Ability to read and comprehend city codes
2. Ability to analyze complex engineering problems and recommend possible solutions
3. Analytical skills to perform high level mathematical calculations
4. Ability to work under distracting field conditions
5. Understanding of computer hardware and software as it applies to engineering concepts
6. Exhibit diplomacy and judgment when working with citizens, contractors or other public officials
7. Ability to train and guide subordinates
8. Abstract and logical reasoning.

PHYSICAL REQUIREMENTS:
1. Ability to lift minimal weight and transport minimal distance
2. Hand/eye coordination to operate data collection equipment
3. Exposure to extreme environmental conditions while conducting site inspection and collecting field data
4. Ability to travel to field locations
5. Ability to visually review engineering plans and reports
6. Ability to operate PC computer
7. Ability to make and receive phone calls
8. Ability to operate City vehicles
9. Visual stamina and acuity adequate to ascertain measurements
10. Climb, walk, stoop, bend

SUPERVISORY RESPONSIBILITY (Direct & Indirect):
Indirect: Traffic Engineering Technician/Senior Traffic Engineering Technician

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.