CITY OF OVERLAND PARK  
POSITION DESCRIPTION

TITLE: Engineering Technician II  
BAND/LEVEL: Tech II  
DEPARTMENT: Public Works  
JOB NO: 3470  
DIVISION: Street Engineering and Construction  
DATE: 11/5/2013  
REPORTS TO: Assistant City Engineer or Supervisory Civil Engineer  
FLSA STATUS: NE  
FULL-TIME: X PART-TIME: ______ TEMPORARY: ______  
COST CENTER: 310/311  

REPLACES: Engineering Technician II  
DATE: 3/20/2013

JOB SUMMARY STATEMENT:
Designs and drafts construction plans for small projects, assists in the design and drafting of construction plans for more complex projects. Performs land surveys and assists in construction staking for storm sewer and street projects. Researches property ownership data and legal documents. Updates and maintains plat maps, storm sewer maps, and aerial maps. Assists the general public with questions or requests. Assists with emergency operations, including snow removal, as required.

DUTIES AND RESPONSIBILITIES:


2. Performs land surveying and topography surveys for storm sewer and street projects. Reviews plats, maps and construction plans. Computes surveying problems and calculations. Collects existing field data using a total station, digital level and data collector with survey software.

3. Performs construction staking for storm sewer and street projects. Determines proposed storm sewer or street locations from plans and stakes the location using surveying techniques and equipment. Computes surveying problems and calculations.

4. Researches property ownership and legal documents. Investigates existing right-or-way and easements through documents located in the county courthouse or accessed through city and county computer records.

5. Updates City plat maps by re-drawing right-of-way and easement information on both City plat maps and storm sewer maps. Updates storm sewer plat sheets with locations of new storm sewer facilities.

6. Organizes and manages archived construction plans and documents.

7. Assists the public with questions or requests for information requested over the phone or in person. Answers questions, retrieves copies of plat sheets, city maps, storm sewer sheet, aerial sheets and any other prints required.


9. Performs bridge inspections with assistance from assigned engineer. Ensures public safety and federal requirements.

10. Maintains City street inventory and condition index and generates City map and related maps. Generates reports and displays as required.


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14. Assists with emergency operations, including snow removal, when required.

15. 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 which interaction is required to accomplish work and employer goals.

16. 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:
High School Diploma or equivalent and 5 years of experience as an Engineering Technician OR an associates degree in the area of civil engineering, computer aided drafting, construction technology, surveying, or related field plus 2 year of experience as an engineering technician, OR equivalent combination of experience and education. Must have a valid driver’s license and maintain an insurable driving record. Must have or obtain a commercial driver’s license (CDL) within 12 months of employment with the City.

Certification in Autocad, GIS Mapping applications, surveying, or other certification relevant to job requirements is preferred.

EXPERIENCE:
See Education & Special Licenses/Certifications.

SKILLS:
1. Surveying skills
2. CAD skills
3. Manual drafting skills
4. Computer operation skills
5. Good oral and written communication skills for working within the office and with the public

MENTAL REQUIREMENTS:
1. Ability to compute mathematical calculations used in surveying and measuring
2. Ability to translate accumulated field data and engineering information into legible construction plans
3. Ability to read plat sheets and maps
4. Ability to read and comprehend City codes
5. Ability to analyze complex problems (OP Flood Warning System) and recommend possible solutions
6. Exhibit diplomacy and judgement when working with citizens, contractors, or other public officials
7. Ability to work under distracting conditions when surveying or construction staking
8. Ability to understand computer commands and generated reports

PHYSICAL REQUIREMENTS:
1. Hand/eye coordination to operate surveying equipment
2. Ability to place construction stakes with the use of manual tools
3. Ability to traverse rough terrain
4. Exposure to vehicle noise and fumes
5. Exposure to extreme environmental conditions
6. Ability to draw engineering plans manually or with the use of CAD
7. Ability to travel to field locations or other public buildings
8. Ability to visually review maps, plans and plats
9. Ability to operate print machine, plotter and other drafting equipment
10. Ability to operate City vehicles.

SEE ESSENTIAL FUNCTIONS BELOW FOR ADDITIONAL PHYSICAL REQUIREMENTS

SUPERVISORY RESPONSIBILITY (Direct & Indirect):
None

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.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DURATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing</td>
<td>Occ. - Const.</td>
<td>even and uneven surfaces</td>
</tr>
<tr>
<td>Walking</td>
<td>Occ. - Const.</td>
<td>even and uneven surfaces</td>
</tr>
<tr>
<td>Sitting</td>
<td>Occ. - Const.</td>
<td>motor vehicle operation / office environment</td>
</tr>
<tr>
<td>Driving</td>
<td>Occasional</td>
<td>motor vehicle operation; automatic transmission</td>
</tr>
<tr>
<td>Bending</td>
<td>Occ. - Freq.</td>
<td>Measuring / using misc. instruments</td>
</tr>
<tr>
<td>Stooping</td>
<td>Occ. - Freq.</td>
<td>Measuring / using misc. instruments</td>
</tr>
<tr>
<td>Twisting</td>
<td>Occasional</td>
<td>Misc. instrument use and material handling</td>
</tr>
<tr>
<td>Kneeling</td>
<td>Occasional</td>
<td>Misc. instrument use and material handling</td>
</tr>
<tr>
<td>Squatting</td>
<td>Occasional</td>
<td>Misc. instrument use and material handling</td>
</tr>
<tr>
<td>Crawling</td>
<td>Occasional</td>
<td>crawling in / through pipes</td>
</tr>
<tr>
<td>Stairs</td>
<td>Occasional</td>
<td>inlets</td>
</tr>
<tr>
<td>Ladders</td>
<td>Occasional</td>
<td>inlets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LIFTING</th>
<th>WEIGHT</th>
<th>HEIGHT</th>
<th>FREQUENCY</th>
<th>DURATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monument casting</td>
<td>75 lbs</td>
<td>ground to waist</td>
<td>variable</td>
<td>occasional</td>
<td>two person lift</td>
</tr>
<tr>
<td>Sledge hammer</td>
<td>10 lbs</td>
<td>floor to shoulder</td>
<td>variable</td>
<td>occasional</td>
<td>two hand lift</td>
</tr>
<tr>
<td>Traffic cones</td>
<td>25 lbs</td>
<td>0-49 inches</td>
<td>variable</td>
<td>occasional</td>
<td>one or two hand lift</td>
</tr>
<tr>
<td>Traffic barricade</td>
<td>22 lbs</td>
<td>0-49 inches</td>
<td>variable</td>
<td>occasional</td>
<td>one or two hand lift</td>
</tr>
<tr>
<td>Carbide blade</td>
<td>61 lbs</td>
<td>0-24 inches</td>
<td>variable</td>
<td>occasional</td>
<td>two person lift</td>
</tr>
<tr>
<td>Rubber blade</td>
<td>90 lbs</td>
<td>0-24 inches</td>
<td>variable</td>
<td>occasional</td>
<td>two person lift</td>
</tr>
<tr>
<td>Backing plate</td>
<td>150 lbs</td>
<td>0-24 inches</td>
<td>variable</td>
<td>occasional</td>
<td>two person lift</td>
</tr>
<tr>
<td>Material spinner</td>
<td>100 lbs</td>
<td>0-24 inches</td>
<td>variable</td>
<td>occasional</td>
<td>two person lift</td>
</tr>
<tr>
<td>Tailgate doghouse</td>
<td>95 lbs</td>
<td>0-61 inches</td>
<td>variable</td>
<td>occasional</td>
<td>two person lift</td>
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<tr>
<th>CARRYING</th>
<th>WEIGHT</th>
<th>DISTANCE</th>
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PUSHING/PULLING | FORCE | FRQNCY/DUR | DESCRIPTION
--- | --- | --- | ---
160 lb. man hole cover | 73 lbs. | occasional | 1 or 2 hands
Material spinner | 100 lbs. | occasional | two person push/pull - 0-20 inches
Snow plow | 40 lbs. | occasional | two hand push/pull

REACHING | DURATION | DESCRIPTION
--- | --- | ---
Below Knee Height | occasional | use of various tools
Below Waist Height | occasional | use of various tools
Forward > 2 Feet | occasional | use of various tools
Above Shoulder Height | occasional | use of various tools
Lateral Reach | occasional | use of various tools

FINE MOTOR | DURATION | DESCRIPTION
--- | --- | ---
Gripping | occ. - freq. | misc. tool usage; computer utilization; handling materials
Pinching | occ. - freq. | misc. tool usage; computer utilization; handling materials
Wrist Flexion & Extension | occ. - freq. | misc. tool usage; computer utilization; handling materials
Wrist Lateral Deviations | occ. - freq. | misc. tool usage; computer utilization; handling materials
Pronation & Supination | occ. - freq. | misc. tool usage; computer utilization; handling materials

OTHER IDENTIFIED ESSENTIAL FUNCTIONS:

1) Use of computer / keyboard / mouse device
2) Ability to drive and inspect necessary roads during snow event
3) Computer software would require some degree of visual color discrimination

The position of Engineering Technician is variable in nature related to the frequency and duration of all essential functions. Depending on the type of project that is ongoing, there will be time periods when an individual working in this position will spend up to 8 hours working in an office environment and within several days or a week will spend up to 8 hours in the field standing, walking, inspecting, measuring, etc. Therefore, it is difficult to identify an exact frequency and duration of many of the above identified tasks.