

LEAVENWORTH COUNTY JOB DESCRIPTION

TITLE: GIS Technician

DEPARTMENT: GIS Department

PAY LEVEL: Level 6 (\$25,861 to \$38,796)

EXEMPT/NON-EXEMPT: N

LOCATION: Leavenworth County Courthouse

SUPERVISOR: GIS Director

SUPERVISES: N/A

PERCENTAGE OF TIME

ACCOUNTABILITIES

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| 40% | 1. Technical Knowledge of GIS Software. Stays updated on ESRI ArcMap Software through classes and hands-on education. |
| 35% | 2. Public Relations. Professional relations with taxpayers, contractors, other offices and municipalities. Supply map information in a variety of mediums. |
| 15% | 3. Clerical. Maintain paperwork on billing, sales, petty cash, budget line items, etc. |
| 5% | 4. Personal Appearance. Projects a professional appearance by taste in dress and personal hygiene. |
| 5% | 5. Safety. Familiar with procedures related to use and handling of ammonia used in blue print machines. |

SCOPE

Read property legal descriptions, plats and surveys and draw them on mylar maps. Create and edit digital maps in coverages and shape files using ESRI ArcMap Software. Add annotation and text to digital map layers. Link excel spreadsheets created from downloading data from county Appraiser's CAMA files to make specific maps. Digitize subdivisions, agricultural maps, etc using a digitizer table. Create requested maps delineating parcels selected by graphic tools or querying map layers using ArcMap tools such as Buffer. Perform QC work on map layers using ArcCatalog and ArcView. Create ArcReader maps using ArcPublisher Software. Manage aerial photos and vector layers with ArcSDE. Convert Arc coverages to GeoDatabases. Plot large format paper maps from digital files.

KNOWLEDGE AND SKILLS: (*Required prior to employment)

1. Knowledge of office policies and procedures.
2. Knowledge of the principles, techniques and equipment used with ESRI ArcMap software.*
3. Knowledge of legal terminology concerning land descriptions.*
4. Knowledge of land surveying sufficient to convert data for mapping.*
5. Knowledge of property transaction records located in the County departments.
6. Knowledge of photogrammetry, geo referencing digital images.
7. Knowledge of data input and conversion capabilities to allow graphic and non-graphic data to be converted separately and linked together at a later date using Excel, Access, and ArcMap.

8. Knowledge of graphic routine that calculates the area of a parcel and the knowledge to locate database records by graphic element.
9. Skill in performing complex map drafting, and computing areas and closures from legal descriptions and maps using algebra, geometry and a trigonometry.*
10. Skill in operating and maintaining map reproduction equipment like blue print machines, large format plotters, scribe and radiograph pens, protractors, engineer's scales, land compass and other equipment necessary for map preparation.*
11. Skill in interpreting and reading various types of maps.*
12. Skill in verbal and written communications and in public speaking.*
13. Skill in computer data entry, access and revision.*
14. Skill in combining Orthophotos, and many other digital map layers in various world projections using ESRI ArcMap software to produce final maps.*
15. Skill in accessing the work station and file creation, setup and design of digital map layers.
16. Skill in business telephone etiquette.*
17. Skill in Microsoft Word, Excel and Access.

ILLUSTRATIVE TASKS (This is not an inclusive list; other tasks/duties may be assigned.)

1. Calculates and transfers the dimensions of properties onto Orthophoto maps, places Mylar overlays on Orthophoto maps and adjusts the overlay to real world coordinates. Computes measurements to map scale using engineer's scales, angles, protractors, templates and planimeter for square footage. Makes geometric and algebraic calculations to identify area radii, bearings, lengths, deflection angles and distances to points along curves. Depicts measurements by graphics for mapping, converts archaic measurement standards on old maps into standard measurement and compensates for photo distortion in calculations due to splicing or topography of the land.
2. Digitally creates and corrects property dimensions, lot numbers, plat blocks, etc as annotation in ESRI digital layers. Transforming and adjusting digital map layer in various map projections.
3. Operates and maintains map reproduction equipment, setting gauges to appropriate settings, adjusting timing switch to the proper speed, inserting Mylar overlay into blue print machinery and checks settings. Runs copy through developer operation and periodically replaces ammonia and bulbs and performs other routine maintenance.
4. Researches historical ownership of property by researching ownership books in the Register of Deeds Office.
5. Researches events and sites of historical significance in Leavenworth County through books, maps, records, and site visits.
6. Transfers data from Mylar maps through digitizing and using precision key-in to update geographical information system.
7. Creates cells and cell libraries for efficient computer use.
8. Manipulates reference files, and designs computer formats and graphic elements.
9. Establishes level symbols for future use according to text, line configuration, weight and color.
10. Merge new maps to the master base map files and uses plotters to plot maps.
11. Converts digital CAMA data to excel tables and links them together with ESRI software to create graphic maps and query data results.
12. Use graphic operations to maintain graphic and non-graphic data.
13. Creates clean digitizing line work through application software.

14. Logs all certificates of survey and new subdivisions in alphabetical order to update the database.
15. Performs back up files on daily work files.

ENVIRONMENTAL DEMANDS

Work is performed in a modern office setting.

MINIMUM QUALIFICATIONS

Must have High School Diploma/GED, and at least two years of drafting experience, which includes one year of computerized drafting and mapping using ESRI ArcMap software. Also refer to the asterisks in the KNOWLEDGE AND SKILLS section of this job description.

ADA/PHYSICAL DEMANDS

1. Vision. Must be adequate for data entry, drafting, digitizing, and reading microfiche and a variety of documents. Cannot be color blind.
2. Hearing. Must be adequate for normal conversation and telephone communication.
3. Speech. Must be able to speak English clearly and clarify or give detailed facts and information.
4. Standing. 20% of the time – some standing when filing or researching records or when doing on-site research.
5. Walking. 30% of the time – required when doing on site research and when going between work stations or when going to other departments.
6. Sitting. 50% of the time – while doing drafting, digitizing, and related clerical duties.
7. Lifting/Carrying 50 pounds – requires some lifting of records, inserting and retrieving Mylars from file drawers, loading paper rolls into plotters.
8. Pushing/Pulling 40 pounds – minimal requirement, inserting and retrieving Mylars from file drawers.
9. Climbing/Balancing Requires some ability to climb and walk through rural and undeveloped areas when doing on-site research.
10. Stooping/Kneeling Considerable stooping and kneeling required when filing and when photographing sites.
11. Reaching/Handling Considerable reaching and handling required on most tasks.

I have read the job description and understand the content.

Signature

Date