LAKE COUNTY FOREST PRESERVE DISTRICT

**GIS SPECIALIST**

The GIS Specialist is responsible for data collection tasks utilizing Geographic Information Systems (GIS), Global Navigation Satellite System (GNSS) and unmanned aerial systems (UAS). These tasks are performed to support the District’s construction, engineering, land development, habitat restoration and boundary identification projects. Reports to the Land Preservation Manager.

**ESSENTIAL FUNCTIONS**

1. Collects, develops, maintains and imports geospatial data. Publishes online services and manages GIS web applications.
2. Performs detailed office and field tasks for boundary verification, topographic data collection and site planning. Tasks include locating, recording, and marking property boundaries, reviewing legal descriptions, and performing general site layout for restoration and site improvement projects.
3. Performs field data acquisition, collection, and verification tasks utilizing complex data collection equipment, including GNSS receivers.
4. Creates maps, plans and exhibits for public, staff, legal, Committee and Board of Commissioners use, utilizing data from GIS, GNSS, UAS, and Computer-Aided Design (CAD) sources.
5. Coordinates the management, use and maintenance of the District’s UAS, supporting land planning, land acquisition, construction, engineering, GIS, marketing, natural resource restoration and public safety related projects.
6. Uses GNSS and GIS to collect underground infrastructure assets, including telecommunications, electric, gas, water, drainage and sanitary sewer systems on District property.
7. Performs lifting tasks up to 50 pounds.
8. Drives a motorized vehicle to travel to different locations.
9. Performs tasks that will require walking, bending, stooping, standing, kneeling, climbing, reaching and sitting.

**MARGINAL FUNCTIONS**

1. Answers questions and addresses issues for District staff regarding GIS and GNSS software, hardware and tools.
2. Draws and interprets complex legal descriptions in ArcGIS Desktop.
3. May act as liaison in dealing with requests of other agencies, utility companies, contractors and general public, provides specific technical property survey information, and responds to GIS and CAD data requests from other agencies and organizations.

**QUALIFICATIONS**

1. Associates Degree in geography, environmental science, engineering, computer science, GIS, or related field. GIS/GNSS certificate preferred.
2. Two years of GIS experience.
3. Working knowledge of ESRI ArcGIS software. AutoCAD, Coordinate Geometry (COGO) tools, SQL and Python.
4. Ability to use complex data collection equipment including GNSS receivers.
5. Certified UAS remote pilot or ability to obtain FAA certification within six months of hiring.
6. Knowledge of engineering principles, practices and techniques.
7. Proficiency with Microsoft Office including the ability to prepare presentations, reports and exhibits.
8. Knowledge of safety regulations, principles, protocols, practices, and procedures.
9. Possess a valid motor vehicle driver’s license.

**PSYCHOLOGICAL CONSIDERATIONS**

1. Ability to manage multiple tasks simultaneously.

2. Handles confidential material.

3. Must be able to function effectively in a fast-paced office environment.

**PHYSIOLOGICAL CONSIDERATIONS**

1. Ability to climb, stoop, bend, reach, walk, sit, kneel or stand for long periods of time.

2. Ability to perform field inventories and inspections of District property, which may include dense vegetation, steep slopes, long hikes, wet areas and insects.

3. Ability to drive a motorized vehicle.

4. Ability to lift up to 50 pounds.

**COGNITIVE CONSIDERATIONS**

1. Ability to collect, compile and analyze facts and exercise sound judgment in arriving at conclusions and translating observations and results into clear, concise reports.

2. Must possess excellent interpersonal skills to communicate with all levels of employees, agencies and the general public.

**ENVIRONMENTAL CONSIDERATIONS**

1. Performs work outdoors, including exposure to inclement weather including heat, cold, and rain, and to hazardous or rugged field conditions.

2. Protective clothing and equipment may be required.

3. May be exposed to hazardous vegetation (e.g. poison ivy).

4. Performs activities indoors on a computer. Indoor environmental conditions will include lighting and temperature, work surface height, work area and seating.

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements.