#### GUILFORD COUNTY SCHOOLS JOB DESCRIPTION

## JOB TITLE: GEOGRAPHIC INFORMATION SYSTEMS TECHNICIAN FACILITIES PLANNING DEPARTMENT

## GENERAL STATEMENT OF JOB

Under general supervision, utilizes Geographic Information Systems (GIS) and associated software to create, produce, display and analyze geographic information. Develops and maintains databases, reports and maps. Creates, organizes, manipulates and retrieves GIS data for reporting, analysis and presentation purposes. Ensures the completeness and accuracy of all attribute data via software testing, analysis and data management and performs related duties as assigned by Facilities Planning staff.

## SPECIFIC DUTIES AND RESPONSIBILITIES

## **ESSENTIAL JOB FUNCTIONS**

Performs mapping, analysis, and the production of visual displays using ArcGIS as required by assignments.

Successfully performs the editing processes necessary to update feature classes and related data sets within the Esri ArcGIS Desktop/Server environment.

Creates customized hard and softcopy maps, reports and data products for internal and external users.

Verifies the accuracy and completeness of current GIS datasets, researches and resolves discrepancies, and modifies existing databases using geoprocessing tools.

Responds to requests for address assignment verification and updates addresses in the GCS street assignment database.

Develops new GIS datasets as prescribed by current projects and work assignments.

Performs work with a high degree of accuracy to create spatially correct detailed data and maps.

Performs data collection and entry while ensuring quality using best data management practices.

Communicates with internal and external entities to procure updated documents and complete assignments (e.g., rezoning and annexation notices, updated GIS files, etc.).

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Works with software vendor and GCS Technology Services staff to continue updates and function of Guilford County Schools ArcGIS applications for Facilities Planning users.

Conducts field visits, as needed, to obtain information to ensure the accuracy of data.

## **ADDITIONAL JOB FUNCTIONS**

Performs other related work as required.

## MINIMUM TRAINING AND EXPERIENCE

A Bachelor's Degree with knowledge and experience using ArcGIS, or an Associate's degree with at least 5 years of experience utilizing GIS applications to maintain and update database information and develop mapping products.

# MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Must be able to regularly walk, stand or sit, talk or hear both in person and by telephone; use hands to repetitively finger, handle, feel or operate standard computers and other field and office equipment; and reach with hands and arms. The employee is occasionally required to lift objects weighing up to 10 pounds. Specific vision abilities required by this job include close vision, color vision and the ability to adjust focus. While performing the duties of this class, employees are regularly required to use and solve problems; use math and mathematical reasoning; observe and interpret situations; learn and apply new information or new skills; perform highly detailed work on multiple, concurrent tasks; and interact with District staff and other organizations and supervisors, co-workers, inspectors and employees in other departments and others encountered in the course of work.

<u>Data Conception:</u> Requires the ability to compare and/or judge the readily observable, functional, structural or composite characteristics (whether similar or divergent from obvious standards) of data, people or things.

<u>Interpersonal Communication:</u> Requires the ability to speak and/or signal people to convey or exchange information. Includes receiving instructions, assignments or directions from superiors.

<u>Language Ability:</u> Requires the ability to read correspondence, work orders, logs, diagrams, blueprints, schematics, etc. Requires the ability to prepare simple reports, activity logs, forms, etc. according to prescribed formats.

<u>Intelligence:</u> Requires the ability to apply principles of rational systems to solve practical problems and deal with a variety of concrete variables in situations where only limited

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standardization exists; to interpret a variety of instructions furnished in written, oral, diagrammatic or schedule form.

<u>Verbal Aptitude:</u> Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in standard English and electrical and mechanical terminology.

**Numerical Aptitude:** Requires the ability to utilize simple mathematical formulas; to add and subtract; multiply and divide; utilize decimals and percentages.

**Form/Spatial Aptitude:** Requires the ability to inspect items for proper length, width and shape.

<u>Motor Coordination:</u> Requires the ability to coordinate hands and eyes rapidly and accurately in using hand tools.

<u>Manual Dexterity:</u> Requires the ability to handle a variety of items such as hand tools. Must have minimal levels of eye/hand/foot coordination.

**Color Discrimination:** Requires the ability to differentiate between colors and shades of color.

<u>Interpersonal Temperament:</u> Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under stress and when confronted with persons acting under stress.

<u>Physical Communication:</u> Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear.) Must be able to communicate via telephone.

## **KNOWLEDGE, SKILLS AND ABILITIES**

Considerable knowledge of terminology, methods, practices, techniques and nomenclature of GIS.

Specific, operational knowledge of the current MS Windows environment for a desktop PC.

Familiarity with aerial photography.

Considerable knowledge of uses and operations of ArcGIS software and related applications.

Specific knowledge of the ArcGIS Desktop product line, specifically editing and geoprocessing tools and techniques.

Ability to utilize ArcGIS applications and tools to complete assigned projects efficiently and accurately.

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Considerable knowledge of basic database and system administration techniques as required for moving data and files between applications and repositories and performing database queries.

Knowledge of Geographic Information Sciences and associated technologies, including database manipulation.

Ability to comprehend legal documents, such as deeds, plats, rezoning notifications, and other documents that direct changes to geographic data.

Specific knowledge of the MS Windows Office suite, especially Excel and/or Access.

Ability to perform thorough, efficient, and highly-detailed data capture with a high degree of accuracy to create and maintain Facilities Planning Department's GIS data.

Excellent communication skills.

Ability to work effectively independently and as a team member.

Ability to establish and maintain effective working relationships with supervisors, co-workers, and employees in other departments, schools, and agencies, as well as others encountered in the course of work.

## **DISCLAIMER**

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 to this job.