CLASS SPECIFICATION

POSITION TITLE: GEOGRAPHIC INFORMATION SYSTEM (GIS) SUPERVISOR

DEPARTMENT: OFFICE OF INFORMATION TECHNOLOGY

REPORTS TO: GIS DIVISION CHIEF

GENERAL DEFINITION OF WORK:
Performs difficult professional and technical work coordinating and supervising the technical operations of a Geographic Information System (GIS). Work involves developing and conducting feasibility studies, analysis, design, program development, testing, documentation, user training and support and system implementation; advising and assisting the GIS-user community to ensure the GIS is designed, implemented and operated to meet user needs and to maximize the potential for beneficial use; and organizing, coordinating and supervising the technical work and activities of the customer services counter staff and the plan review/addressing staff.

Work is performed under general supervision of the GIS Division Chief. Exercises supervision over designated technical or clerical personnel. May act as GIS Division Chief in their absence.

TYPICAL TASKS:
Supervises and coordinates the day-to-day technical operations and activities of the GIS program;
Assists in the planning, design, development, implementation and operation of the County’s Geographic Information System, with an emphasis on software data and applications development;
Develops and recommends appropriate methods, procedures and applications for the effective use of GIS Technology;
Designs, writes, tests, implements and maintains programs for standard and customized GIS applications;
Performs common analyses, modeling and simulation scenarios through the use of GIS software and data sets;
Coordinates the acquisition, compilation, development, and maintenance of automated map products, including aerial photography, digital orthophotography and digital parcel, planimetric, topographic and thematic maps;
Assists with the integration and re-engineering of GIS technology into other automated systems, data sets and ge-based applications;
Assists with the design and management of databases and data sets, including data structures, standards, procedures and documentation; May serve the GIS database administrator in their absence;
Provides recommendations and solutions to the design and implementation of data input and output methodologies; data processing, manipulation and analysis techniques; and data transfer and storage schemes;
Provides training, technical support and assistance to system users in the areas of GIS applications, GIS software and database usage;
Establishes and maintains effective working relationship with hardware and software vendors;
Manages hardware and software installation, upgrades, licensing, maintenance and technical support;
Attends and participates in training sessions to keep abreast of the latest technologies and methodologies in the GIS industry;
Develops and implements the GIS Customer Support Activity roles, responsibilities, operating procedures, training and cross-training;
Organizes, coordinates and supervises the technical work and activities of six staff members – the customer services counter staff and the plan review/addressing staff;
Develops a partnership with other land development agencies in the County to ensure that GIS is included at the earliest stages of a development project.
Manages resource allocation for special projects and be familiar with the County’s accounting policies and budget activities;
Interacts with developers and other County staff to determine street and addressing configurations that comply with County policies and meet public safety requirements.

KNOWLEDGE, SKILLS AND ABILITIES:
Thorough knowledge of the principles, practices and technologies of computer-based mapping and geographic information systems and their design, implementation and operation; thorough knowledge of the principles and techniques of systems development, including system analysis, design and programming (preferably VISUAL BASIC, MAP OBJECTS, C++, JAVA and HTML); thorough knowledge of relational databases (including INFO, ORACLE and ACCESS), operating systems (including UNIX, and Windows NT) and the integration and interchange of files between disparate databases and systems; general knowledge of principles, practices and theory of supervision; ability to plan, analyze situations and problems and to recommend and implement effective solutions to meet GIS user needs; ability to utilize products within the Arc/Info family of GIS products, including the Arc/INFO and Arc/Info system modules, ArcView, ArcCAD, Avenue and AML (Arc Macro Language); ability to conceptualize user needs and to design, develop, re-engineer, integrate and implement effective applications solutions; ability to communicate effectively, both orally and in writing; ability to communicate and convey complex, technical, and abstract concepts and issues into terms which can be understood by lay persons; ability to visualize and conceptualize large-scale technical and GIS-business information user requirements, both current and future; ability to participate as a team-player; ability to provide effective leadership as a focal point for GIS applications development; ability to establish and maintain effective working relationships.

EDUCATION AND EXPERIENCE:
Any combination of education and experience equivalent to a Bachelors Degree in Geographic Information Systems, cartography, geography, computer science, information systems, or other related fields; and 3-5 years experience in programming and system development, using AML, Avenue, Visual Basic and MapObjects; including 2-3 years in developing and implementing GIS programs using Arc/INFO and ArcView; and 1-2 years of first-level supervisory experience.

Special Requirements:
Must possess valid driver’s license;
Must pass DMV Record Check;
Requires a Police Background Investigation, Polygraph and a Criminal Record Check.

APPROVALS:

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The statements in this class specification are intended to describe the general nature and level of work being performed by incumbent(s) assigned to this classification. They are not intended to be construed as an exhaustive list of all responsibilities, duties, and skills required of personnel so classified.