

ENGINEERING TECHNICIAN I

MAJOR FUNCTION

This is a technical position relating to highway design involving the design and drafting of urban and rural highway projects, along with other public works projects.

ESSENTIAL FUNCTIONS

The following statements describe the principal functions of this job and its scope of responsibility, but should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including working in other functional areas to cover absences or relief, to equalize peak work periods, or otherwise to balance the work load.

- Prepares the initial drawings for road and site plan projects based on survey information.
- Operates a personal computer in a networked environment, using computer assisted drafting and design and related land development applications.
- Creates a complete working set of construction plans, including but not limited to plan/profile, cross sections and surface, based on the design provided by the Project Engineer.
- Calculates construction quantities and prepares bid schedules.
- Operates printers and copiers for reproduction of plans and other documents.
- Files drawings, maps, and improvement plans.
- Searches for specific and required project information within the department.
- Assists in preparation of applications for water management district permits.
- Sets up mechanical field traffic counters at various locations and retrieves data from counters.
- Collect, manually sort, scan, and retrieve accident reports for future studies.
- Required to report to work at the appointed hour, as scheduled, and to work the entire assigned schedule.

SECONDARY FUNCTIONS

- Aid in the development of the GIS Comprehensive Plan by providing the Marion County GIS Team with final roadway projects in a digital format.
- Aid in researching project specific data at the Marion County Courthouse and Property Appraiser's office.
- Train for Engineering Tech II responsibilities.
- Performs other duties as assigned.

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CUSTOMER SERVICE

This is a front-line position for providing excellent customer service to members of the general public and other County employees. Personal contact occurs with other employees of the unit, employees of other departments in the County, citizens, and customers of the department. Service is provided in person and by phone contact.

SUPERVISION

Position has no supervisory responsibilities.

EDUCATION, EXPERIENCE, LICENSES, CERTIFICATIONS

Education and Experience.

Associate degree in civil engineering technology; or equivalent from a two-year college or technical school; and one year related experience and/or training; or an equivalent combination of education and experience.

Licenses.

Must maintain a valid Florida Drivers License.

Certifications.

AutoCad Level I or ability to obtain within one year.

JOB SKILLS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements are representative of the required knowledge, skills, and abilities.

Language Skills

- Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedural manuals.
- Ability to write routine reports and correspondence.
- Ability to speak effectively before groups of customers or employees of organization.

Mathematical Skills

- Ability to work with mathematical concepts such as fundamentals of plane and solid geometry and trigonometry.
- Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

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Problem Solving Ability

- Ability to solve practical problems and deal with a variety of variables in situations where only limited standardization exists.
- Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule format.
- Interprets complex and detailed technical data.
- May participate in development of policy, plans, programs, or procedures.

Specialized Skills and Abilities

- Knowledge in CAD (Computer Aided Design) operation and ability to learn new programs.
- Basic understanding of engineering, surveying, and architectural principles and practices.
- Ability to read and interpret aerial maps, legal descriptions, and courthouse records.
- Ability to deal tactfully and effectively with the public, public officials, contractors, etc.
- Ability to analyze data and use land survey information to produce plans and drawings.
- Ability to plan and organize work and meet multiple deadlines.
- Ability to follow complex written and oral instructions.
- Ability to operate presentation media.
- Ability to remain calm in stressful situations.
- Ability to take a teamwork approach to the job by cooperating with others, offering to help others when needed, and considering larger organization or team goals rather than individual concerns. Includes the ability to build a constructive team spirit where team members are committed to the goals and objectives of the team.

Machines and Equipment

To accomplish the tasks of this position, the employee will be required to operate all types of drafting equipment, a computer, calculator, telephone, and hand-held radio, blueprinting equipment, digital camera, x-acto knife, plotter, scanner, and digital measuring instrument. This employee will also be required to drive an automobile and pick-up truck.

PHYSICAL DEMANDS

While performing the duties of this job, the employee will occasionally be required to stand, walk, climb

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or balance, and stoop, kneel, crouch, or crawl, and lift up to twenty-five pounds; and will frequently be required to sit, use hands to finger, handle, or feel, reach with hands and arms, and talk or hear. Special vision requirements are close, distance, color, and peripheral vision, depth perception, and the ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. While performing the duties of this job, the employee will occasionally be exposed to moving mechanical parts, fumes or airborne particles, toxic or caustic chemicals, and outdoor weather conditions. The noise level for this environment is moderate.

Established: 10/99

Pay grade: 10

Job Description Number: 3035

Category: 3

Status: NE

Revised: 6/2003