



ENGINEERING TECHNICIAN III JOB DESCRIPTION

Job Title: **Engineering Technician III**

Job Code: **EN311**

Pay Grade: **121**

Effective Date: **October 2007**

FLSA: **Non-Exempt**

Revision Date: **October 2009**

NATURE OF WORK

Under general supervision, performs a variety of paraprofessional technical civil engineering tasks including surveying, drafting, contract oversight and other assignments; performs work within scope of authority and training in assigned area of responsibility.

ESSENTIAL FUNCTIONS:

*The following duties **ARE NOT** intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.*

- Performs a variety of complex technical work in support of Public Works Department (PWD) engineering programs including survey, drafting and technical administrative work; performs work within scope of authority and training in assigned area of responsibility; duties may vary according to job assignment.
- Prepares and assists in the presentation of Departmental reports and project information; assures that information from external sources is integrated into County plans and documents.
- Prepares engineering designs, related drawings, specifications and construction project estimates; reviews project documentation and prepares monthly payments for project contractors.
- Performs research analysis and evaluations of designs, plans, reports, specifications and estimates; performs materials testing for construction projects to maintain quality assurance standards.
- Coordinates the work of a field survey crew; operates a full range of survey equipment including electronic measuring devices, and other technical engineering instruments and equipment.
- Maintains field notes of survey work performed; processes survey information and generates designs and drawings for various engineering and planning projects.
- Assists in the condition inspection of County roads, bridges and infrastructure as needed.
- Develops construction staking layout plans from approved engineering drawings.
- Manages technical engineering databases and project contracts; maintains the County Pavement Management program.
- Conducts research of ownership, legal descriptions or other such data needed to complete information required in preparation for construction projects.
- Prepares legal descriptions and plat maps for right-of-way and maintenance of section and grid control; resets section corners as needed to preserve section control.
- Inspects construction projects to verify compliance to safety and quality standards; observes safety and security procedures and reports potentially unsafe conditions to Supervisor.
- Coordinates assigned project activities with other County departments, consultants and developers.
- Operates a variety of trucks, equipment and hand tools in accordance with all safety regulations and procedures; assures all equipment is maintained according to County standards.
- Provides information to the public, contractors and consultants on PWD projects and technical matters.
- Environmental documentation preparation and management for Public Works Department projects and technical matters.

WORKING ENVIRONMENT / PHYSICAL DEMANDS:

Work is performed in an office environment and outdoors at construction sites and County facilities with exposure to inclement weather. Moderate physical demands; strength sufficient to lift and move items weighing up to fifty (50) pounds; may be exposed to safety hazards and dangerous tools and equipment.

DISTINGUISHING CHARACTERISTICS:

This is the Senior level classification in the Engineering Technician job series; work includes greater independence of action and judgment within established guidelines, and work assignments that are more complex in nature; multiple technical certifications are also required to qualify for Technician III classification.

EMPLOYMENT STANDARDS:

Associate's Degree in Engineering, Computer Science, or related field; AND two (2) years' experience as an Engineering Technician.

Must possess a valid Driver's License. Specific technical training and certifications are required, depending on area of responsibility.

KNOWLEDGE AND SKILLS:

Knowledge of:

- County policies and procedures.
- Principles and techniques of drafting, mapping, field inspection, surveying and materials testing.
- Advanced mathematics including geometry and trigonometry.
- Basic engineering design and construction theory and standards.
- Materials, methods, and techniques of modern construction and construction project inspection.
- Field data collection techniques.
- Engineering maps and technical records.
- Construction plans and specifications.
- Federal, state and county laws, regulations, policies and procedures governing public works projects, including County Road Administration Board (CRAB) regulations and standards.
- Computers and specialized engineering software applications and file management procedures.
- OSHA safety rules and regulations, and safety standards in hazardous environments.

Skills in:

- Interpreting technical information and producing engineering drawings.
- Technical writing and making mathematical computations.
- Reading and understanding plans, specifications and schematics.
- Evaluating the work of contractors for compliance with project plans, specifications, regulations and quality and safety standards.
- Safe and efficient operation and maintenance of trucks and equipment according to standard operating and safety procedures.
- Promoting and enforcing safe work practices.
- Assessing and prioritizing multiple tasks, projects and demands.
- Reading engineering instruments, meters and gauges and accurately recording findings.
- Maintaining records and files.
- Establishing and maintaining effective working relationships with co-workers.
- Communicating effectively and following verbal and written instructions.