THE CLARKE COUNTY COMMISSION WILL BE ACCEPTING APPLICATIONS FOR THE POSITION OF ASSISTANT COUNTY ENGINEER. JOB DESCRIPTIONS AND APPLICATIONS ARE AVAILABLE AT THE ALABAMA CAREER CENTER, 205 WALKER SPRINGS RD, JACKSON AL, 36545; PHONE NUMBER <u>251-246-2453</u>. YOU MAY ALSO CONTACT THE CLARKE COUNTY ROAD AND BRIDGE DEPARTMENT AT <u>251-275-3366</u> WITH ANY QUESTIONS YOU MAY HAVE.

CLARKE COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER.

# Clarke County JOB DESCRIPTION

Job Title: Assistant County Engineer

Department: Engineering and Road Maintenance

FLSA:

Grade:

Job Description Prepared: February 2008

Note: Statements included in this description are intended to reflect in general the duties and responsibilities of this job and are not to be interpreted as being all-inclusive. The employee may be assigned other duties that are not specifically included.

# **Relationships**

Reports to:	County Engineer
Subordinate Staff:	Engineering Assistants; Superintendents
Other Internal Contacts:	EMA; Sheriff's Department
External Contacts:	General Public; DOT; Contractors; Consultants

#### Job Summary

Under the direction of the County Engineer, the employee is responsible for providing expertise in engineering projects for the Engineering and Road Maintenance Department. Employee is primarily working in the field and is the technical authority for projects in the field on a daily basis. Employee also completes reports and maintains accurate and thorough records of all department projects.

# Job Domains

## A. Engineering

- 1. Estimates material quantities for bridges, bridge culverts, and road projects from preliminary survey data.
- 2. Calculates drainage areas and peak hour discharge values to size bridge culverts, pipes, flumes.
- 3. Establishes horizontal and vertical control for bridge and road projects using preliminary, topographic, and route survey data.
- 4. Inspects and rates all County bridges for structural soundness, adequacy, deterioration and maintenance needs.
- 5. Works in conjunction with other engineers and soil conservation specialists in the planning and design of roadside erosion control projects.
- 6. Designs and sizes footings, slabs, drainage structures, etc.

### B. Surveying

- 1. Directs and secures data on all phases of geodetic, topographic, route, and hydrographic surveys.
- 2. Makes field surveys and calculations.
- 3. Performs construction surveys such as bridge and road location and layout work.
- 4. Secures data for estimating amount of cut, fill, and/or burrow pit areas.
- 5. Furnishes contractors with horizontal and vertical line and grade during construction.

#### C. Inspection

- 1. Inspects all federal, state, and county projects to ensure all materials and work progress meet specifications.
- 2. Inspects road and bridge construction projects to see ensure all materials and work conform to construction plans and specifications.
- 3. Keeps daily records on all construction projects to ensure completeness of work and adequacy of materials used.

## D. Office Management

- 1. Directs superintendents work.
- 2. Maintains up-to-date bridge inventory.
- 3. Keeps records and files of Federal, State and County roadways and bridges.
- 4. Prepares equipment and labor transcripts for the department.

- 5. Keeps records of materials used on all projects.
- 6. Conducts special inventory of steel trusses.
- 7. Maintains current contract files and county project files.
- 8. Uses CAD system to draw plans for bridges, culverts; also uses system to draw topographic maps and sketches and plot plans.
- 9. Performs all other duties as assigned.

#### Knowledge, Skills and Abilities (\* Can be acquired on the job)

- 1. \*Knowledge of County and departmental policies, procedures, and guidelines.
- 2. Knowledge of the principles and practices of civil engineering, particularly as applied to the design, construction, and maintenance of road and bridge projects.
- 3. Knowledge of road and bridge engineering objectives, purposes and practices.
- 4. Verbal skills to effectively communicate with co-workers, supervisor, contractors, and the general public.
- 5. Math skills to calculate area and volume of road and bridge drainage, earth work, base, pave, and maintenance math formulas.
- 6. Writing skills to take field notes, write bridge and roadway inspection reports, inventories, estimates, and transcripts.
- 7. Drafting skills to prepare plans for resurfacing and widening roads and creating plans for bridges and culverts.
- 8. Ability to understand specifications memoranda, blueprints, plat, and property descriptions.
- 9. Ability to perform technical research and give reliable advice on difficult engineering problems.
- 10. Ability to organize engineering data and to present findings and recommendations clearly.
- 11. Ability to prepare and interpret engineering plans and specifications and to calculate stresses and deflections in structures.
- 12. Ability to lay out and supervise important engineering projects.
- 13. Ability to establish and maintain effective working relationships with other County officials and employees, contractors and the general public.
- 14. Ability to make field surveys, lift objects, use hand tools, repair flashing signals, and operate motor vehicle.

# Minimum Qualifications

- 1. Possession of a Bachelor's degree in Civil Engineering from an accredited college or university.
- 2. Successful completion of the Fundamentals in Engineering exam.
- 3. Possession of a current and valid Alabama driver's license.
- 4. Ability to remain on call 24/7.
- 5. Ability to travel to continuing education courses.

## Work Environment

The work involves moderate risks or discomforts which require special safety precautions, e.g., working around moving parts, carts, or machines; with contagious diseases or irritant chemicals, etc. Employees may be required to use protective clothing or gear such as masks, gowns, coats, boots, goggles, gloves or shields.

# Physical Demands

The work require some physical exertion such as long periods of standing; walking over rough, uneven, or rocky surfaces; recurring bending, crouching, stooping, stretching, reaching or similar activities; recurring lifting moderately heavy items such as record boxes. The work may require specific, but common, physical characteristics and abilities such as above-average agility and dexterity.