

# AUTAUGA COUNTY

## JOB DESCRIPTION

Job Title: Assistant County Engineer

Department: Engineering

FLSA: Grade: 9

Name: Minimum \$19.64 - Maximum \$29.66

Job Description Prepared: June 2014

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: None

Other Internal Contacts: County Administration; Department Heads; EMA; Sheriff; Solid Waste; County Shop

External Contacts: General Public; Utility Companies; Contractors; Supply Companies; Construction Companies; State/Federal DOT; FEMA; FHWA; ADEM; EPA; ALDPS; Alabama Department of Conservation and Natural Resources (CNR); Vendors; other County Engineers

### Job Summary

Under the direction of the County Engineer, the Assistant County Engineer uses a wide range of procedures to prepare plans for survey, traffic control and federal aid projects. Inspects and keeps accurate records of inspections for bridges, road construction and traffic signs; receives citizen complaints; and completes paperwork for permits. The employee supervises engineering personnel in the County Engineer's absence and makes decisions regarding project activities.

## Essential Functions

**ESSENTIAL FUNCTIONS:** The following list was developed through a job analysis; however, it is not exhaustive and other duties may be required and assigned. A person with a disability which is covered by the ADA must be able to perform the essential functions of the job unaided or with the assistance of a reasonable accommodation.

**ESSENTIAL FUNCTION: Engineering and Plan Preparation.** **Manages the development of major County road and bridge construction projects built by County workers or private contractors using computer, plans, specification and various documents following federal, state and local regulations and acceptable engineering practices and principles to ensure that projects comply with local, state, federal and professional guidelines.**

1. Manages contracted projects from planning through construction to include writing or reviewing contract specifications, compiling cost estimates, holding pre-construction conferences, ensuring that specifications or guidelines are followed, maintaining contract records and solving problems.
2. Works closely with the State Department of Transportation in establishing state and federally funded construction projects including processing of highway and bridge plans to construction, compiling and submitting cost estimates and filing for reimbursement of funds.
3. Assists in designing roadway and drainage structures including bridges, culverts, roadway alignment, traffic control, and base and pavement buildup.
4. Advises and directs County crews and/or contractors engaged in design, construction and maintenance of roads and bridges.
5. Assists in designing and preparing plans for federal, state and locally funded projects in accordance with appropriate specifications and requirements.
6. Conducts various types of engineering surveys (horizontal, vertical, topographical, construction) to determine parameters for projects, including determining the best locations, alignments and design.
7. Makes independent engineering judgments in the field concerning roadways, drainage and traffic control and speed limits.
8. Reviews engineering plans and inspects construction of new subdivisions to ensure compliance with County regulations.
9. Coordinates project development with local, state and federal officials throughout preliminary and construction phases of projects.
10. Coordinates and performs bridge inspections and evaluates data for work needed and design of repairs.
11. Evaluates projects to ensure that they are proceeding as scheduled.

12. Ensures compliance with ALDOT and FHWA regulations regarding inspections.
13. Determines appropriate bridge and roadway weight limits.
14. Ensures that signage regarding weight limits is posted; maintain signs according to ALDOT specifications.
15. Recommends bridge repairs; presents to the Commission as required.
16. Monitors and assists contractors in major bridge repairs as necessary.
17. Inspects bridges following accidents.
18. Maintains master list of bridge-related conditions, needs and repairs.
19. Assesses County-wide drainage needs.
20. Uses specialized equipment and techniques such as GIS, GPS, CAD software and surveys.

**ESSENTIAL FUNCTION: Financial Management and Cost Accounting. Performs estimating and accounting functions to monitor project and departmental funding.**

1. Prepares project budgets and cost justification for County, state and federally funded projects.
2. Monitors funding expenditures of state and federal project funds.
3. Prepares project estimates for contractors and County.
4. Supports County Engineer in developing and monitoring the department's annual budget.

**ESSENTIAL FUNCTION: General Administration. Performs administrative activities to ensure efficient, accurate documentation is prepared and maintained for County engineering projects.**

1. Maintains the biennial inspection schedule for County bridges to ensure all bridges are inspected according to the schedule.
2. Completes bridge inspection and FEMA forms; submits for the County.
3. Compiles bridge data and submits to ALDOT as required.
4. Prepares traffic control plans and summaries.
5. Prepares and completes all reports, paperwork, and files to closeout County engineering projects.
6. Completes various forms and forwards to appropriate state agency.
7. Maintains documentation for work accomplished by County crews and contractors on state and federal projects.
8. Prepares contract bid documents for bidding process.
9. Administers contracts with construction firms, ensures satisfactory completion of work, and documents work performed.
10. Corresponds with ADEM regarding underground storage tank (UST) regulatory compliance by County, old UST removal, new UST installations and monitoring of on-going leak investigations.
11. Monitors County maintained traffic signals and school flashers; coordinates repairs as necessary.

12. Drives a County-issued vehicle throughout the County to make site visits.
13. Researches professional sources for current practices and techniques.
14. Participates in professional associations and job-related organizations.
15. Enters citizen request and complaint information into the computer system.
16. Keeps requests/complaints organized; compiles citizen request reports by districts.
17. Maintains documents and records of all projects.
18. Maintains current credentials and knowledge of civil engineering practices.
19. Performs other related duties as assigned.

### Knowledge, Skills and Abilities

(\* Can be acquired on the job)

1. \*Knowledge of County rules, regulations, policies and procedures.
2. \*Knowledge of County road and bridge systems.
3. Knowledge of principles and practices of civil engineering.
4. Knowledge of laws associated with the practice of civil engineering.
5. Knowledge of civil engineering methods and practices related to road and bridge maintenance and construction.
6. Knowledge of current tools, equipment and techniques used in conducting projects associated with civil engineering.
7. Knowledge of surveying methods and techniques.
8. Knowledge of traffic safety laws, manuals and traffic control systems.
9. Knowledge of safety rules including accident causation and prevention and worksite safety regulations.
10. Reading skills to interpret technical manuals, construction plans, reports, textbooks, directions, ordinances, and codes.
11. Communication skills to effectively communicate internally and externally, both orally and in writing.
12. Writing skills to take field notes, write reports, correspondence and recommendations using correct English, grammar, punctuation, and spelling.
13. Math skills to perform complex engineering and survey calculations and measurements.
14. Verbal skills to communicate effectively with supervisor and co-workers.
15. Skills in solving design problems.
16. Skills in organizing, prioritizing and sequencing projects and tasks.
17. Skills to utilize GIS and GPS equipment and other industry technologies.
18. Skills to conduct surveys and utilize appropriate equipment for associated tasks.
19. Ability to develop, read and interpret blueprints, sub division layouts, drawings and other documents utilized in performing required engineering functions.
20. Ability to inspect bridges, roads, shoulders and slopes.

21. Ability to work outdoors for extended periods of time in varying extremes of weather conditions.
22. Ability to exercise independent judgment and initiative in planning and implementing work.
23. Ability to perform accounting and budgetary functions.
24. Ability to communicate effectively using written and oral methods, with peers, officials, employees, media and the general public.
25. Ability to use computers and office productivity software programs.
26. Ability to use CAD software.
27. Ability to develop and maintain records and reports using the computer.
28. Ability to manage hardcopy and computer files.
29. Ability to operate office equipment to include multi-line phones, copiers, fax machines, typewriter, and others.
30. Ability to work independently with little or no supervision.
31. Ability to direct and supervise the work of others.
32. Ability to manage time effectively and handle multiple projects.
33. Ability to use specialized equipment and tools.
34. Ability to lift and carry items weighing in excess of 50 pounds.
35. Ability to wear and utilize safety and protection equipment.
36. Ability to drive.

### Minimum Qualifications

1. Bachelor's degree in civil engineering from an accredited college or university and certification as an Engineer in Training (EIT) or;
2. Ten years of experience working in road/bridge construction, maintenance, inspection, and surveying; or any combination of education, training and experience that demonstrates the above listed knowledge, skills and abilities commensurate with the requirements of this job.
3. Possession of current and valid driver's license.
4. Possess Certified Bridge Inspector credentials and ability to maintain.
5. Ability to obtain certification as a Roadway Technician by ALDOT within one year of employment.
6. Able to travel over-night to attend meetings and training programs.
7. Ability to work extra hours, weekends or non-standard hours.
8. Possess a current P.E. designation is preferred.
9. Certified Concrete Technician and Qualified Credential Inspector preferred.

### Physical Demands

The work requires considerable and strenuous physical exertion such as frequent climbing of tall ladders, lifting heavy objects over 50 lbs., crouching or crawling in restricted areas.

## Work Environment

The work environment involves high risks with exposure to potentially dangerous situations or unusual environmental stress which require a range of safety and other precautions, e.g. working at great heights under extreme weather conditions, or similar situations where conditions cannot be controlled.