

## OFFICE OF THE COUNTY ENGINEER

COURTHOUSE, 8 E. PROSPECT  
PO BOX 316  
NEW HAMPTON, IOWA 50659-0316  
PHONE: 641-394-2321  
FAX: 641-394-5280

### **CHICKASAW COUNTY ENGINEER'S OFFICE & SECONDARY ROADS DEPT.** **JOB DESCRIPTION**

**Position:** Assistant to County Engineer/Engineering Technician

**Department:** Engineer's Office/Secondary Roads

**Reports to:** County Engineer

**FLSA Status:** Non-Exempt

**Date:** December, 2021

#### **Purpose of Position:**

Under supervision, performs professional design and related engineering services in the preparation of construction plans for bid such as bridges, box culverts, grading and paving projects using established design standards; uses and maintains various computer and technical manuals, standards, engineering aids and databases. Assist the County Engineer in all phases of contract administration, public relations and supervision of workforce as delegated.

#### **Essential Duties and Responsibilities:**

**The following duties are normal to this position. These are not to be construed as exclusive or all inclusive. Other duties may be required and assigned.**

Perform standard engineering practices in the planning, designing and material testing of all construction projects.

Utilizes knowledge and computer drafting skills to prepare detailed design drawings including plans for grading, bridge, paving and culvert projects; follows general guidelines from the County Engineer and complies with current standards.

Prepares and/or provides input to engineer(s) for the preparation of reports related to department operations as required by local, state and federal regulations.

Provides technical assistance and reviews completed work for accuracy and completeness.

Ability to research right-of-way records, property deeds, and necessary survey information required for preliminary project design and conduct field surveys for said projects.

Assist in evaluating field and office activities to assure compliance with established policies and procedures.

Performs or supervises lab and field testing on materials used on construction projects.

Examine quality of finished projects for conformity to standards. Inspect work of contractors on construction projects to verify compliance with plans and specifications, including traffic control for the safety of the contractor and the traveling public.

**Knowledge, Abilities, and Skills:**

Knowledge of all phases of construction inspection, plant inspection and monitoring, and engineering survey;  
Knowledge of elementary mathematics including algebra, geometry, and trigonometry;  
Knowledge of standards, specifications, supplemental specifications and special provisions of the county;  
Knowledge of elementary physical, mechanical, and earth science principles;  
Some knowledge of elementary engineering drawing techniques;  
Ability to deal tactfully and courteously with the public and contractors;  
Ability to work outdoors in all weather conditions;  
Ability to understand and execute oral and written instructions;  
Ability to record field notes accurately;  
Ability to train and supervise subordinate personnel;  
Ability to read and interpret plans and specifications;  
Ability to operate or learn to operate electronic survey equipment;  
Skill in the operation of specialized equipment related to civil engineering and engineering survey including computer aided drafting and mapping, word documents, spreadsheets, and DOT derived programs for record keeping.

**Education Experience and Special Requirements:**

Bachelor of Science Degree in Civil/Construction Engineering from an accredited college (preferred) or graduation from a (2) year program with emphasis in construction or civil engineering technology or employment experience equivalent to the two (2) year program or an equivalent combination of education and experience in civil engineering, construction engineering, or engineering survey. Must have or be able to acquire certification as PCC Technician 1 & 2, HMA Technician 1, Aggregate Technician 1 & 2, and work toward acquiring NBI Bridge Inspection Certification.

**Physical Demands:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations will be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to talk, hear, see and use hands and legs to operate motor vehicles and other equipment, perform sensitive operations with specialized survey and related equipment, exit and enter the vehicles throughout the day, and perform work functions in construction environments. The employee is periodically required to perform regular vehicle maintenance activities and non-scheduled work requiring the

ability to exert or lift 50 to 100 lbs. The employee is periodically required to use hand tools to perform maintenance activities. The employee is periodically required to be available during adverse weather conditions and nonstandard hours.

**Environment:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations will be made to enable individuals with disabilities to perform the essential functions.

The work environment will fluctuate with the weather conditions throughout the year. The employee may be subjected to extreme conditions for short periods of time. The employee may be subjected to working in road construction and maintenance activity environments with periodic high noise levels, dusty conditions and hazardous conditions.

**Availability:**

The employee may be subjected to extended periods of working independently or with a group. This job from time to time requires irregular hours depending on construction activities including emergency repair work. Job is subject to call 24 hours/day.

**Chickasaw County is an Equal Opportunity Employer.**