

Assistant County Engineer

Benton County, Iowa

Job Title: Assistant County Engineer

Department: Secondary Roads

Supervisor: County Engineer

Duties of the Department: To Maintain the Secondary roads and bridges in Benton County.

General Job Description:

To assist the county engineer in the planning, designing, and execution of road and bridge maintenance and construction projects.

Major Duties and Responsibilities

- Develop plans and specifications for road, bridge, and drainage projects. Work may require structural and hydraulic analysis, determination of drainage area, basin slope, peak discharge, and related technical data, establishing road vertical and horizontal alignment, vertical and horizontal curvature, cross slopes and profiles, earth work calculations, drainage, and pavement marking and signage.
- Determine plan quantities required; submit plans and specifications to appropriate personnel/agencies for approval; prepare formal bidding documents for locally funded projects or facilitate bidding process with the Iowa Department of Transportation (DOT) for state and federally funded projects.
- Assist with easement records research; calculating area and cost of proposed right of way takes, temporary and permanent easements, and field survey staking of project areas during design and construction.
- Field verify construction and maintenance project work in process and upon completion for conformance to specifications. Also, ensure necessary inspection, testing, and documentation is completed during the project and submitted at project completion. Further, prepare and submit IDOT or other agency project close out audits.
- Utilize hydraulic modeling software and Iowa Department of Transportation (IDOT) Standards to develop bridge designs and evaluate existing designs for suitability. Also, maintain a folder of standard county bridge designs and records of their use.
- Utilize data to establish priorities for road construction and maintenance projects. Maintain project folders for all road construction projects.
- Manage bridge inspection data. Utilize information to establish priorities for road construction and maintenance projects. Requires working with an outside consultant and county maintenance crews.
- Maintain drainage structure (pipe and box culverts) inventory book. Establish priorities for drainage structure construction and maintenance projects.
- Build competency with various technical operating manuals, standards, and specifications related to road, bridge, and drainage structure construction and maintenance. Develop a strong knowledge of materials, road surface types, traffic control devices, field testing, and standard and innovative maintenance practices.

- Gain competency in IDOT procedures and processes as it relates to federal, state, and locally funding projects.
- Review utility permits submitted by various individuals or companies to use the Secondary Road right of way for such purposes as utility installation including communications, power transmission, and water line within the right of way and along and across county roads. Provide recommendation on utility permits to the County Engineer.
- Review work within right of way permits submitted by various individuals or companies to use the Secondary Road right of way for such purposes as roadway regrading, shaping, and placement of granular materials and drainage work along and across county roads. Provide recommendation on work within right of way permits to the County Engineer.
- Inspect permitted work by individuals or companies within the secondary road right-of-way. Provide feedback to the permittees and bring up disputed findings to the County Engineer. Also, document unpermitted work and provide findings to the County Engineer.
- Conducts traffic counts and studies and evaluates warrants for intersection design changes and roadway signage.
- Assist with the Secondary Roads Annual report submittal to IA DOT per Code of Iowa.
- Receive inquiries or complaints and complete various related public relations duties as assigned; aid Maintenance Superintendent in field construction and maintenance activities; perform related technical engineering duties as assigned by County Engineer.
- Assist in the maintenance of the GASB records for the County Engineer to report to the State Auditors.
- Assist in the maintenance of TPMS records on the Iowa County Engineers Service Bureau site.
- Assist the County Engineer in identifying and securing grants and other alternative funding sources.
- Responsible for knowing and following company policies and procedures as outlined in employee handbook and for following and adhering to instructions, requests, and task assignments as given by The County Engineer.
- Handle departmental personnel matters as they arise, working closely with the County Engineer and Human Resources as needed.

Minor Duties and Responsibilities

Assist Office Manager to help cover the phones and counter as needed

Qualifications for the Job

Education:

Bachelor's Degree in Civil Engineering or related engineering field from an accredited four-year college or university
Registered as an Engineer in Training (EIT) in the State of Iowa required. Registered Professional Engineer in the State of Iowa preferred.

Experience:

Proficient with Microsoft office (Excel, Access, and Word). Strong computer skills a plus.
Knowledge and experience with Autodesk AutoCAD Civil 3D preferred
Knowledge and experience with IDOT preferred
Knowledge and experience with hydraulic modeling software a plus
Basic knowledge of surveying and surveying equipment required

Other:

Ability to maintain a high level of confidentiality with sensitive information
Strong problem-solving skills with a high level of attention to detail and accuracy
Ability to adapt to a fast paced, changing work environment and respond well under stress to ensure all deadlines are met
Ability to effectively lead the work activities of others without authority.
Excellent communication and customer service skills required
Flexibility to work additional hours when needed or to provide support to staff
Must possess a valid Iowa driver's license and a good driving record
Obtain IDOT Aggregate Technician, PCC Plant and HMA Plant certificates within 12 months of employment
Knowledge of the inner workings of a county road department preferred

Key Competencies

Verifiable knowledge on the fundamentals of engineering; basic understanding on the preparation of plans, specifications, and administration of civil engineering projects; basic awareness of land and engineering survey techniques; proven ability to learn the standards of safety as related to civil engineering design and specifications; willingness to establish and maintain effective working relationships with engineers, contractors and public officials; ability to develop and complete verbal presentations and highly technical reports; ability to prepare cost estimates, material lists and specification data; ability to conduct engineering inspections.

Physical Requirements

Must be able to legally operate a County vehicle throughout the County.
Must be able to communicate effectively with individuals on the phone and/or county radio system.
Must be able to interact with individuals at the front counter with reasonable accommodations
Must be able to lift, carry, push, and pull objects greater than fifty (50) pounds.
Must be able to bend, stoop, and crouch in all weather conditions and terrains.
Must possess proficient typing skills