Missouri Department of Transportation Job Description

Job Title: Senior Structural Technician

Title Code: R03059

Salary Grade: 6

Exemption Status: Non-Exempt

Supervisory Responsibilities: Lead Worker Only

District/Division: Central Office - Bridge

Effective Date: 01-16-2025

Replaces (Effective Date): 07-01-2022

General Summary

The senior structural technician performs advanced technical or paraprofessional duties in the preparation of detailed construction plans for highway bridges and related structures. Responsibilities are performed under general supervision.

Minimum/Required Qualifications

- Associate's Degree in Civil Engineering Technology, Drafting, or related field.
- Four years of experience in technical positions.

Special Working Conditions/Job Characteristics

 A postsecondary degree is the best measure to ensure candidates possess required knowledge in computer aided drafting; trigonometry, geometry, and physics; statics and strength of materials; surveying concepts; material quantity calculations, takeoffs, and unit pricing; and dimensioning concepts.

Examples of Work

- 1. Develops detailed construction plans for any type of highway structure, computes quantities of construction materials required for structures and computes reinforcing bar lists.
- 2. Reviews and approves detailed shop drawings and performs calculations to ensure conformance to contract documents; helps to solve any materials or fabrication problems and documents any problems and changes.
- 3. Details and dimensions plan view, elevation view and cross section of any bridge element using outline sketches provided by the designer.

- **4.** Prepares or revises written and graphic material for inclusion in division manuals utilizing computer aided drafting.
- **5**. Develops preliminary layout and details from designers' calculations for bridges and retaining walls.
- **6.** Supports and enhances user interfaces for computer aided drafting systems.
- 7. Initiates and answers routine correspondence related to area of assignment.
- 8. Acts as the department's primary contact and liaison with fabricators concerning approval and deficiency issues relating to the shop drawing review phase of projects.
- 9. Performs lead worker responsibilities, which may include providing general instruction, assigning and reviewing work, coaching and training, providing guidance and instruction in the proper and most efficient methods of accomplishing tasks, and providing input to the direct supervisor on staffing decisions and performance management.
- 10. Performs other responsibilities as required or assigned.