Missouri Department of Transportation Job Description

Job Title: Fabrication Inspector Title Code: R03057 Salary Grade: 8 Exemption Status: Non-Exempt Supervisory Responsibilities: None District/Division: Central Office - Bridge Effective Date: 02/01/2025 Replaces (Effective Date): 09/16/2024

General Summary

The fabrication inspector inspects steel fabrication shop work for steel structures to ensure the work meets the department's specifications and provisions. Responsibilities are performed under general supervision.

Minimum/Required Qualifications

- Two years of college or Associate's Degree: Computer Aided Drafting, Drafting, or engineering related field.
- Four years of experience in structural detailing, of which 1 year should be in reviewing fabricators' detail shop drawings and/or shop fabrication inspection. Structural welding experience may be substituted for structural detailing experience.
- Successful completion of a range of motion examination and a medical-physical examination.

Special Working Conditions/Job Characteristics

- Job requires continuous, statewide and/or national, overnight travel.
- Job requires significant physical stamina and endurance.
- Job requires exposure to physical hazards, health and safety risks, and/or adverse or otherwise undesirable characteristics in the environment including carrying out duties from elevated heights, near heavy machinery or equipment in hazardous areas, and exposure to loud noises.
- 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

- Acts as the department's primary on-site contact and representative with the fabricator in making and communicating operating decisions concerning the quality and acceptability of shop fabrications.
- **2.** Conducts prefabrication conferences and periodic progress meetings with the fabricator's representatives; interprets specification, special provisions, and other documents.
- **3.** Initiates, reviews, and responds to questions, letters, memorandums, and meeting minutes (in addition to daily diaries) to ensure effective documentation and communication of the department's positions concerning fabrication and structural performance issues.
- 4. Ensures successful utilization of the quality assurance inspection mode in the fabrication shop.
- 5. Witness non-destructive testing (such as dye penetrant, magnetic particle, ultrasonic, and reviews x-ray films) done by shop personnel, and performs visual inspection of shop welds and general workmanship for conformance to shop and design drawings.
- **6.** Reviews material mill test certifications, welder qualifications and welding procedures, nondestructive test records, and qualification of shop personnel for conformance to requirements of the contract documents.
- **7.** Observes shop assembly of bridge steel and drilling of field connections for conformity to the contract documents.
- 8. Reviews and approves fabricators detailed shop drawings, material certifications and weld procedures; performs calculations to ensure conformance to contract documents and assists in resolving material or fabrication problems.
- 9. Performs other responsibilities as required or assigned.