# **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**

- 1. 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.