

## Who we are:

Transportation is so basic that many of us overlook its overwhelming importance in our daily lives. Practically everything used in our homes, offices, or schools across Tennessee – from furniture to food items to clothing – requires a large and complex transportation network. The Tennessee Department of Transportation provides citizens of Tennessee and travelers with one of the best transportation systems in the country. TDOT is a multimodal agency with responsibilities in building and maintaining roads, aviation, public transit, waterways, railroads, cycling and walking. Our involvement ranges from airport improvements to funding transit buses to planning for river ports. The Department of Transportation has approximately 3,500 employees with four statewide region facilities in Knoxville, Chattanooga, Nashville, and Jackson. TDOT Aeronautics is located near the John C. Tune Airport in Nashville, TN.



### **Bridge Design Team Lead**

Engineering Division – Bridge Design Section

Nashville, TN

\$109,200 annually

### **Job Overview**

The Bridge Design Team Lead will lead, mentor, and train the Bridge Design Team through empowerment, communication, and delegated authority. This position will implement work plans that align with the Bridge Design Section's strategic vision and will effectively delegate authority and responsibility, when applicable, while providing the resources needed for the Bridge Design Team to be successful. The Bridge Design Team Lead will take the lead in fostering the collaborative effort necessary for developing transportation projects that meet the scope, schedule, and budget.

This position will implement department policies, technical guidance, procedures, and manuals related to structural design elements for transportation projects. This position is responsible for completing complex structural design tasks for transportation projects, including complex structural analysis, plans and specifications development for unusual structures, and foundation design. The Bridge Design Team Lead will supervise technical staff and will implement performance plans, schedules, and budgets, ensuring the expected outcomes, performance, and accountability of each team member. The Bridge Design Team Lead will pilot national best practices within the Region Roadway Quality team and will report and recommend ideas that drive innovation and efficiency.

### **Essential Job Responsibilities**

Manage resources and staff utilization to allow the Bridge Design Team to perform their roles effectively and efficiently, optimizing the Team's ability to successfully address quality program and systemic issues, and collaborate with design teams to complete consultant grading with respect to Bridge Design.

Ensure all documents are finalized within the unit required for letting, including functional preliminary and final design plans, applicable specifications, and estimates within the allowable scope, schedule, and budget for each project. This includes coordinating with regional Project Teams regarding project kick-off, risk management, project scoping meetings, plan-in-hand field review meetings, etc.

Establish and ensure there is a direct relationship between quality and work outcomes by developing and implementing standards for the Structural Design Section in collaboration with the Engineering Division and Construction Division; ensure structural elements follow Department and Federal Highway Administration (FHWA) quality assurance process. Provide review and comments on consultant-prepared engineering documents, plans and design calculations according to Department and

FHWA standards, policies, procedures, guidelines and risk assessments. Provide interpretation and direction of structures design policies to consultants. Assists in the review and approval of structure permits for non-Department funded projects. Assist in the review of bridge design projects from the Local Programs Office and State Aid Office. Review requests for structural design exceptions and variations from Department standards. Review structural shop drawings for compliance according to contract plans and specifications. Assist in the review of contractor request for information (RFI), cost savings initiatives, and related fabrication/construction issues.

Assist in the development of a Consultant Acquisition Plan (CAP) by providing strategic leadership in utilizing consultants for program and project delivery and oversee consultant activities to ensure quality products and services are provided. Serve on selection committees for professional engineering services. Provide support in the development of the Request for Proposal (RFP) by attending project-specific marketing meetings, determining scoring criteria, participating in project information sessions, serving as a scorer as part of the consultant acquisition process, and attending de-briefs with consultants, including those projects for which Alternative Delivery methods are applied.

Lead the Bridge Design team in providing exceptional customer service to customers, exercise effective listening skills, provide prompt responses, maintain complete and accurate documentation, and communicate effectively.

Manage change by serving as the bridge between executive direction and the envisioned change, clarify the vision, take ownership of the change, communicate effectively, remain transparent, and hold yourself and others accountable throughout the process as part of the Bridge Design team.

Participate on Project Teams as part of a matrix organization in developing the project vision for those projects having the highest complexity; define critical quality goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager; effectively coordinating with other units within TDOT to mitigate constructability and maintenance concerns as part of the Functional Design Plans development per the Project Delivery Network (PDN); conduct post-design field visits to assess structural and constructability problems and attend meetings with construction staff. Proactively assess quality risk factors; and, for Project Teams associated with Alternative Delivery Contracts, forecast the quality effects of implementing Alternative Technical Concepts related to the RFPs, project cost, and construction timing.

Remain current on national best practices as it relates to the structural design guidelines, FHWA and American Association of State Highway and Transportation Officials (AASHTO) Design Codes, structures standard drawings, and other applicable Department guidelines and standards. Participate on Bridge-related collaboration committees between TDOT and industry. Perform the design and analysis of structures-related design components for complex projects having the highest degree of risk, including complex bridge replacements.

Guide the development and implementation of a tracking mechanism that ensures the contractual agreements, scope, schedule, budget, and quality of all Bridge Design projects support the delivery of the Department's Work Program while also ensuring compliance with Federal and State traffic design and regulations.

Provide oversight in the development of the Bridge Design deliverables that are consistent, predictable, and repeatable to provide for consistently high levels of achievement, mitigation of risk, and an established track record of success. Ensure alignment and compliance with Division and Section Metrics and Performance goals.

### **Qualifications**

- Bachelor's degree in Civil Engineering with an emphasis in Structural Engineering preferred.
- Licensed Professional Engineer (PE)
- 5 years of demonstrated competency in a transportation/structural engineering related field.

### **Ideal Candidate**

The Bridge Design Team Lead is a skilled problem solver with a proven track record of tackling complex concepts head-on. They excel in communicating technical information to their team and leadership, utilizing their analytical and detail-oriented approach to ensure precision and accuracy in every phase of the design process. The Bridge Design Team Lead thrives in being a leader and team player. They foster a productive work environment, promoting cohesion and innovation, which ultimately leads to successful and innovative bridge designs.