

## 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.



### **Resident Engineer**

District Operations – Construction

\$109,524 annually

#### **Job Overview**

The Region Resident Engineer provides construction-related technical expertise to Region Construction and Project Teams. This position collaborates with Project Teams by identifying design challenges in tandem with preconstruction activities, offering risk-based solutions and implementing innovative concepts that integrate with all disciplines. This position will actively participate in Alternative Delivery projects within their District by providing leadership and assuming ownership of the Alternative Delivery project outcomes, creating a collaborative environment that leads to innovation and mitigation of risk. The Resident Engineer is responsible for monitoring and managing the scope, schedule, and budgets of all construction projects within their District and for working with the Project Management Division to make the required adjustments as necessary to ensure that the work completed is in alignment with the Departments Asset Management and Strategic goals.

This position is responsible for partnering with the Professional Services Division to forecast outsourcing needs based on the Department's Work Program and staff utilization. The Resident Engineer will work with the construction offices to address contractor claims, change orders, and requests for time extensions. This position must ensure errors and omissions are thoroughly documented and processed.

Serving as a conduit for the State Construction Office, the Region Resident Engineer ensures Department policies, technical guidance, and procedures are incorporated into construction deliverables and assists in implementing the Quality Assurance Program as part of the Region's preconstruction activities. This position must effectively articulate technical engineering concepts through training, mentoring, and collaborating as part of a matrix organization.

#### **Essential Job Responsibilities**

Strengthen Region Construction Teams by providing construction-related expertise to District staff, the Local Programs Development Office, and the Freight and Logistics Division; evaluating and processing contractor claims; coordination of railroad flagging and payments; supporting final estimates; ensure environmental compliance is completed timely and thoroughly; and assisting with final records and project close-out.

Integrate Quality Management into all deliverables in compliance with the Project Delivery Network (PDN) for preconstruction activities with the purpose of reducing plan errors, Right-Of-Way delays, construction delays, and contractor claims; assist Project Teams by providing reviews as part of TDOT's Quality Assurance Program;

assist the Quality Team by serving as the Quality Assurance for Plan, Specifications, and Estimates (PS&E) Packages; and address errors and omissions for consultant-prepared construction plans by tracking, assessing, implementing solutions, and negotiating settlements.

Routinely identify, document, and effectively collaborate with Headquarters on acquired knowledge that includes maximizing project successes and avoiding past errors. Collaborate with applicable disciplines for the modification of standards, policies, specifications, and metrics to address and/or implement acquired knowledge.

Serve on Project Teams as part of a matrix organization in developing the project vision; defining critical goals and intended outcomes that provide for a competitive bidding environment, availability of materials, mitigation of risk for potential bidders, and appropriate contract size; supporting the Project Team as an expert witness when applicable; performing constructability reviews; assisting with risk assessments; reviewing construction estimates for consistency with market trends and material availability; and reviewing technical special provisions. For Project Teams associated with Alternative Delivery Contracts, assist in leading the development of the Request for Proposal (RFP) that maximizes the potential for innovation; forecasting the cause and effect of implementing Alternative Technical Concepts related to the (RFPs), project cost, and construction timing; and developing scoring criteria that encompasses the best value parameters.

Provide exceptional customer service to both internal and external customers, exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, and communicating effectively.

Remain current on revisions to standards, specifications, guidelines, and legislation related to transportation construction components and Alternative Delivery methods; collaborate with industry groups to maintain awareness of critical issues; and participate in peer reviews that provide for the implementation of innovative practices.

Assist in the development of training and technical guidance that addresses acquired knowledge, risk management, technical design elements, and emerging technologies related to transportation for the purpose of improving team performance, creating a stronger understanding of the transportation industry, inspiring new ideas, and developing skills.

Assist in the development of a Consultant Acquisition Plan (CAP) including the development, review, and workload projections for Construction Engineering and Inspection (CEI) services for your district, and assist in the oversight of external partners by serving on selection committees for Professional Engineering services as part of the Brooks Act, including assisting with RFP development, attending project-specific marketing meetings, assisting with determining scoring criteria, assisting with project information sessions, when applicable, serving as a scorer as part of the Consultant Acquisition process, and attending de-briefs with consultants during which usable feedback must be provided.

Assist in ensuring both Preconstruction and Construction deliverables are consistent, predictable, and repeatable to provide for consistently high levels of achievement, mitigation of risk, and an established track record of success.

### **Qualifications**

- Bachelor's degree in Engineering
- Licensed Professional Engineer (PE)
- 8 years of demonstrated competency in developing and/or construction transportation projects

## **Ideal Candidate**

The Region Resident Engineer is foundational to a Region's construction program. They are forward thinking, providing vision and insight to the tactical development of the construction project sequence. This insight ensures the project will be delivered as proposed. When the unexpected occurs, they are the go-to construction expert, providing the needed skill and innovation to solve the demanding and complex challenges. They serve as the primary organizer and communicators for the construction program in their District. Though the Region Resident Engineer's role has a strong technical component that requires them to grasp emerging technologies and construction best practices, they are also a coach and mentor. They are passionate about their program, projects, and people.