# 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.



#### **Drill Crew Engineering Technician 4**

Materials and Tests Division – Geotechnical Engineering Section \$57,912 annually

# **Job Overview**

The Drill Crew Engineering Technician 4 plays a crucial role as the senior field crew driller by coordinating, directing, and guiding a drill crew in the field. This position is an expert in all operations and in all equipment associated with geotechnical drilling operations. This position assists with identifying potential operational and equipment challenges and solutions in both the shop and field environment, minimizing variability in geotechnical analysis, and ensuring the sustainability of the Department's Work Program.

The Drill Crew Engineering Technician 4 assists the Geotechnical Engineering Section to ensure Department policies, technical guidance, and procedures are followed when conducting geotechnical drilling field work. This position must effectively articulate technical operational and equipment concepts through training, mentoring, and collaborating as part of a matrix organization.

# **Essential Job Responsibilities**

Assist with supporting Project Teams and the efficient delivery of TDOT's Work Program as the senior expert, guiding and directing drilling operations in the field. Assist with the development of workflows for all drilling equipment and provide troubleshooting assistance with equipment and software being utilized. Monitor the effectiveness and maintenance status of equipment and provide feedback to the Drill Crew Supervisor.

Integrate Quality Management into all deliverables to ensure all geotechnical drilling operations, samples, and products comply with accepted sampling and testing procedures. Independently direct and guide the drill crew ensuring consistency, quality, and desired accuracy.

Assist in the preparation of geotechnical drilling plans and schedules for the drill crew.

In coordination with the Drill Crew Technical Coordinator 1, assist in gathering project information and data to determine the appropriate and optimal geotechnical drilling operations in consultation with the Drill Crew Supervisor.

Independently perform equipment inventory and maintenance checks and assist with the retention of equipment records to ensure all equipment is adequately maintained. Maintain working knowledge of all equipment status and condition to enable effective decision-making when developing drilling schedules and plans. Participate in

developing equipment maintenance schedules with the Drill Crew Technical Coordinator 1 and Drill Crew Supervisor.

Remain current on geotechnical drilling operations and equipment trends.

Assist with maintaining and monitoring training schedules and generating reports on training activity and progress.

Provide exceptional customer service to project stakeholders and private landowners affected by drilling operations by exercising effective listening skills and communicating effectively.

## Qualifications

- High school diploma or equivalent
- 4 years of demonstrated competency in Geotechnical Drilling and Materials and Tests
- Completion of the Engineering Technician Proficiency Program levels I through III.

# OR

- High school diploma or equivalent
- 4 years of demonstrated competency in Geotechnical Drilling and Materials and Tests, including at least one
  (1) year of experience with guiding drill crews or teams on project sites and/or training employees, including effective communication through active listening, and providing verbal and written instructions.

#### OR

- Associate degree
- 2 years of demonstrated competency in Geotechnical Drilling and Materials and Tests, including at least one (1) year of experience with guiding drill crews or teams on project sites and/or training employees, including effective communication through active listening, and providing verbal and written instructions.

#### **Ideal Candidate**

The Drill Crew Engineering Technician 4 is proficient in all matters related to geotechnical drilling and associated equipment. They assist with creating an open environment that encourages communication and collaboration with the drill crew team and are a role model on drill crews driving accountability. The Drill Crew Engineering Technician 4 is collaborative and assists by guiding geotechnical drilling operations to ensure that all geotechnical drilling samples collected and managed by the Department are of the highest quality. They are passionate advocates for the importance of geotechnical drilling within TDOT.