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.

Geology Technical Specialist
Materials & Tests Division – Geotechnical Engineering Section
$59,700 - $69,636 annually

Job Overview

The Geology Technical Specialist will provide geology expertise, assistance, and advice to Project Teams directly responsible for delivering projects in accordance with the project's scope, schedule, and budget. This position will coordinate with internal and external customers to provide expert support with geology-related concerns and questions. Geology issues will range in complexity and risk from simple to highly complex. This position requires critical thinking to provide well-informed assistance that increases the safety, performance, sustainability, and efficient delivery of TDOT's transportation system. The Geology Technical Specialist role requires collaboration with TDOT divisions, Project Teams, consultants, contractors, and external stakeholders.

The Geology Technical Specialist assists on TDOT projects involving geology risks and pursues opportunities to identify, avoid, and/or minimize those risks. This position assists in implementing the Quality Assurance Program as part of the Geotechnical Engineering Section's activities. The Geology Technical Specialist assists in ensuring relevant Department specifications, policies, and technical guidance are incorporated into the project delivery process. This position must effectively articulate technical concepts through training, mentoring, and collaborating as part of a matrix organization.

Essential Job Duties of the TDOT Technical Specialist I, II, and III include:

Assist the Geotechnical Engineering Section in the management of external partners. Participate in the negotiation of contracts, review of consultant invoicing, development of scopes, management of contract tasks, compliance monitoring, and completion of consultant grading. Assist in producing geology recommendations within the project's scope, schedule, and budget.

Assist internal and external partners in the assessment of geology-related risk factors and potential mitigating solutions on projects and work with project teams to minimize potential impacts on project scope, schedule, and budget. Provide recommendations for foundations and geology-related construction concerns.

Assist in developing, maintaining, and updating TDOT's geology-related specifications, requirements, and standards.

Assist in the development and delivery of geology training and technical guidance that addresses acquired knowledge, risk management, technical design elements, and emerging technologies related to geology to improve team performance, creating a

stronger understanding of the transportation industry, inspiring new ideas, and developing skills. Provide expertise, training, and mentoring to TDOT staff, consultants, and local agencies regarding geology-related issues and considerations.

Assist Project Teams as part of a matrix organization by defining the scope of work related to geology tasks; provide recommendations to reduce geology-related project risks. Participate in the development of a consultant acquisition plan and assist in the oversight of external partners by serving on selection committees for professional engineering services as part of the Brooks Act, including participating with RFP development, attending project-specific marketing meetings, assisting with determining scoring criteria, participating with project information sessions, when applicable, serving as a scorer as part of the consultant acquisition process, and attending de-briefs for consultants where usable feedback must be provided.

Provide exceptional customer service to both internal and external customers, exercising effective listening skills and providing prompt responses. Support TDOT liaison efforts in teaming up with the industry. Provide support for emergency geohazards events. Participate in peer exchanges fostering collaboration both internally and with relevant partners to share ideas, skills, and insights relating to geology.

Assist in ensuring deliverables are aligned with TDOT's Quality Management procedures to ensure consistently high levels of quality and achievement, develop strategies to mitigate risk to the Department and establish a track record of success.

Remain current with applicable geology issues, design standards, and specifications. Assist with modifications to all applicable policies, procedures, design standards, standard drawings, specifications, and special provisions.

Additional Job Duties for the TDOT Technical Specialist II and III include:

Collaborate with Project Teams and internal project stakeholders to evaluate geology related conditions, risks, opportunities, and options. Update Project Teams regarding acquired knowledge relating to geology, foundations, geohazards, and potential impacts to projects. Collaborate with Project Teams, Regions, the Geology Team, and the Geotechnical Section to ensure consistent geology considerations are being used by the Regions and design consultants.

Address potential geology risk areas with Project Teams tailored to the project's complexity; identify appropriate geology testing and analysis requirements; verify testing data quality; verify test results; and complete geology related reports.

Additional Job Duties for the TDOT Technical Specialist III include:

Coordinate with the Geology Team Lead to assist the TDOT Technical Training Director in the development and delivery of geology and geohazard related training that addresses potential project and program specific impacts and analysis guidance, creating statewide transparency and consistency, inspiring new ideas, and developing skills. Provide mentoring and quality control to TDOT staff and consultant work with respect to geology and geohazards.

Perform quality assurance reviews of geology and geohazard analysis. Ensure all data-related activities and critical documents are saved, follow a consistent set of rules and procedures statewide, and align with TDOT performance objectives.

Coordinate with internal and external customers to identify and solve geology related complex issues and meet associated deadlines and timelines.

Qualifications

TDOT Technical Specialist I

- Bachelor's Degree in Geology

TDOT Technical Specialist II

- Bachelor's Degree in Geology
- 1 year of demonstrated competency in a geology related field.

TDOT Technical Specialist III

- Bachelor's Degree in Geology
- 2 years of demonstrated competency in a geology related field.

The Tennessee Department of Transportation reserves the sole right in determining the level of position based on the applicant's work experience, education, skill level, and all other appropriate factors, including business needs. Within 6 months of hire, employees must demonstrate successful mastery of corresponding work competencies and skill blocks of the Technical Specialist Competency Program for the level of worker for which they were hired. If skills and competencies are not met during that period, the employee can be demoted to the level of worker for which he/she is qualified.

Ideal Candidate

This position is a career path series within TDOT. The Geology Technical Specialist I, II, or III demonstrates a combination of technical expertise, analytical skills, and effective communication abilities. They possess technical capabilities and have a truly visionary approach to using data-driven insights to shape future transportation systems. They possess a collaborative spirit and can work effectively within a matrix organization, always willing to continuously update their knowledge as technology and data analytics advance.