

Job Title: CIVIL ENGINEER V - GEOTECHNICAL ENGINEER - IPR#45791

Agency : Department of Transportation

Closing Date/Time: 12/16/2022

Salary: \$6,445 - \$10,210 Monthly

Job Type: Salaried Full Time

County: Lee

Number of Vacancies: 1

Plan/BU: NR916 - Protech Teamsters

This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.

All applicants who want to be considered for this position MUST apply electronically through the illinois.jobs2web.com website. State of Illinois employees should click the link near the top left to apply through the **SuccessFactors employee career portal.**

Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.

Agency Mission Statement:

The Illinois Department of Transportation is seeking to hire a Geotechnical Engineer.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities. Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

Job Responsibilities

This position is accountable for the supervision and direction of personnel engaged in the geotechnical activities of the district as they relate to the planning, design, construction, and maintenance of the highway system.

Subordinate Personnel	5-10 Technical Directly; 10-15
Technical Indirectly	
Number of earthworks, Stabilized Subbase and Soils Reports Annually:	85 - 50
Contract Value of Design Projects Requiring Soils Reports:	\$6 Million - \$50 Million

This position reports to the Materials Engineer. Reporting directly to this position is the Soils and Foundations Analyst, Embankment and Nuclear Technician, the Drill Crew Supervisor.

This position is accountable for supervising the geotechnical section which includes structure borings, soils investigation, coring operations and testing, and analyzing and interpreting the data obtained. These activities are performed within an environment of diverse conditions of terrain and weather which necessitate frequent scheduling and priority changes.

Typical problems are directing, motivating, and coordinating the section to accomplishing a soils program that is often shifted or accelerated by program pressures; establishing and maintaining a positive and responsible working relationship with engineering staffs from consulting firms and state, federal, and local governmental agencies; initiating and formulating solutions and subsequent recommendations for action to take when soil failures are anticipated or occur. The decisions often require immediate solution and the consequences of mistakes can be monumental. The greatest challenge is meeting geotechnical investigation demands generated by a large Five-Year Program where reprioritizing of projects for each year's lettings is frequently revised.

(Job Responsibilities continued)

The incumbent personally implements appropriate laboratory tests and develops parameters for forecasting soil behavior under different situations. From this base of information, the incumbent provides detailed analysis and recommendations regarding design criteria and construction procedures. The incumbent reviews design plans to ensure they have adequately addressed the soil requirements and follows through the construction phase to ensure soil treatment techniques are adequate. Priorities are established for the annual boring program and adjusted as necessary. The incumbent accepts or rejects borrowed materials, reviews soil reports submitted by consultants, and recommends treatment when soil or foundation problems are encountered during construction or on existing pavement and foundation structures. Pozzolanic mixtures, soil cement, lime modifications, and stabilization procedures for subgrade are designed and supervised by the incumbent through the construction phase. Nuclear density testing procedures for embankments are monitored for correct technical procedures and for meeting testing intervals.

The incumbent accomplishes his/her accountabilities through the following staff:

Soils and Foundations Analyst, who is accountable for subsurface investigations for structure foundation design, soil borings for roadway and pavement design, and preliminary surveys of pavement conditions for rehabilitation strategies.

Embankment and Nuclear Technician, who is accountable for soil and pavement investigations, analysis of data for and preparation of soil and coring reports used in the design, construction, and maintenance of highways in the District.

Drill Rig Supervisor, who is responsible for supervising and planning the field activities of the soil drilling crew(s). These crews consist of the drill rig supervisor, a drill rig operator, geologist, and one to two engineering and/or materials technicians.

The incumbent is given wide latitude in accomplishing all soil-related activities because of the highly specialized nature of the work. The incumbent is governed by state and federal standards and the principles and practices of soil mechanics. Only extraordinary technical problems of great impact are referred to the Section Chief or the central bureau for resolution. The incumbent has the responsibility for hiring, disciplining, and recommending salary increases and training for subordinates.

(Job Responsibilities continued)

The incumbent has frequent internal contacts with the Bureaus of: Program Development for field investigations and review and/or compiling of geological data, to provide soil reports and provide recommendations for construction, to provide geological data related to any sub-surface deposits; Operations for soil strength analysis for traffic signal foundations and for problems involving soil failures and drainage problems; and Project Implementation Construction Section for monitoring of field projects and recommendations on plan changes.

Outside contacts including boring contractors, consulting firms and contractors, as well as local and federal agencies for soil-related problems. Work is also performed for Capital Development Board (CDB), both in the design and construction phases of capital improvements.

The effectiveness of this position is measured by the prompt and accurate completion of soil reports, cost effective solutions to soil failure problems, and the successful completion of construction projects.

Principal Accountabilities

1. Ensure that various soil conditions are properly defined, evaluated, and interpreted for design applications.
2. Conducts investigations of soil problems encountered on construction projects and recommends remedial measures to correct the conditions.
3. Develops and implements district specifications and quality standards involving soil-structure conditions.
4. Compiles data, analyzes, and prepares geotechnical reports as required for highway improvements.
5. Reviews design plans and monitors embankment and foundation construction controls.
6. Prepares mixture designs and performs evaluation in the field for lime, pozzolanic and Portland cement, and modified subgrades.
7. Responsible for providing and maintaining a safe work environment for employees; trains, motivates, and evaluates staff.
8. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
9. All other duties as assigned.

Qualifications

Position Requirements

- Current registration as a Licensed Professional Engineer in the state of Illinois
- Five years of experience in civil engineering.
- Valid driver's license
- State-wide travel
- Overtime/nightwork on as needed basis

Position Desirables

- Nine years of experience of civil engineering of which at least five years should be in the specific area of geotechnical activities, three years of which should have been supervising engineering functions
- Ability to supervise staff engaged in the sampling and testing of materials
- Ability to maintain cooperative relationships with departmental and industry staff
- Strong oral and written communication skills.

Work Hours: 7:00 AM - 3:30 PM Monday-Friday (OT/nightwork as needed)

Work Location: 819 Depot Ave Dixon, IL 61021-3546

Office: Office of Highways Project Implementation/Region 2/District 2/Project Implementation

Agency Contact: DOT.CONTACTTHR@ILLINOIS.GOV

Job Family: Transportation

APPLICATION INSTRUCTIONS

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the Illinois.jobs2web.com homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the Illinois.jobs2web.com homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account.

If you have questions about how to apply, please see the following resources:

State employees: Log in to the [career portal](#) for State employees and review the [Internal Candidate Application](#)

[Job Aid](#)

Non-State employees: on Illinois.jobs2web.com – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your "junk mail", "spam", or "other" folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- donotreply@SIL-P1.ns2cloud.com
- systems@SIL-P1.ns2cloud.com