

# Job Title: CIVIL ENGINEER III - REPAIR PLANS ENGINEER - IPR#45643

**Agency :** Department of Transportation

**Closing Date/Time:** 06/23/2022

**Salary:** \$5,430 - \$9,000 Monthly

**Job Type:** Salaried Full Time

**County:** Sangamon

**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](http://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 Repair Plans 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.

Employees enjoy excellent benefits, including health, vision and dental insurance; a retirement plan and deferred compensation options; state holidays and other time off; tuition reimbursement; flexible schedules; and pre-tax benefit programs. The department also offers extensive training and career advancement opportunities.

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 responsible for the structural analysis and design of bridge repair and rehabilitation projects, the review of structural repair designs prepared by others, structural investigations of deteriorated and damaged structures, and the preparation of emergency repair plans.

Annual projects: 75 - 100

Contract value: \$2,500,000 - \$5,000,000

This position reports to the Repair Plans Group Leader. There are no subordinates reporting to this position.

This position has the responsibility for performing the structural analysis and design of repairs and rehabilitation of structures. These structures may require detailed analysis and the development of unique and innovative repairs as well as solutions to many structural engineering problems. The incumbent operates within an environment of ensuring that repairs to damaged or deteriorated structures are designed economically, are structurally sound, and provide the traveling public with the least amount of inconvenience. S/He may be required to perform structural inspections and investigations of deteriorated or damaged structures and to prepare associated reports.

Typical problems encountered by the incumbent include the necessity to develop and maintain a comprehensive knowledge of structural engineering theories and principles so that s/he can design structural repairs. Repairs and retrofits designed by the incumbent are unique and the structure types vary in size and complexity. The greatest challenge faced by the incumbent is keeping abreast of the advancements in the various facets of bridge work through continued pursuance of information on bridge design, construction procedures, construction equipment, and fabrication and welding technology. The incumbent is also challenged to prepare or review emergency repair plans in the shortest possible time while ensuring structural integrity.

The incumbent is personally responsible for the preparation of structural repair plans for routine maintenance or structures damaged by vehicles or river traffic, and the review of repair and retrofit plans and documents prepared by other members of the Bridge Investigations and Repair Plans Unit or by the districts. S/He is responsible for the design of detailed structural repairs for deficiencies found during the annual state line joint maintenance inspections of border bridges and in-depth inspections of major structures within the state of Illinois. The incumbent also reviews and recommends approval and/or disapproval of contractor proposals for shoring, bracing, and jacking.

Under general supervision, the incumbent is guided by the American Association of State Highway Transportation Officials (AASHTO) specifications and current interim specifications and applicable departmental

### **(Job Responsibilities continued)**

policies. The incumbent must refer to the Repair Plans Group Leader for the resolution of problems concerning actual or potential deviations from accepted design practices, policies, specifications, and procedures.

The incumbent has internal contact with the districts when resolving structural problems occurring in the field. S/He also has frequent contact with the Bridge Ratings and Permit Unit and the Bridge Management and Inspection Unit in the Structural Services Section as well as the Bridge Design Section and Bridge Planning Section. The incumbent also will have occasional contacts with consultants or contractors doing work with the state. Occasional statewide travel with overnight stays is required.

The effectiveness of this position can be measured by the technical expertise displayed by the incumbent in the analyses required for the completion of repair projects, the incumbent's ability to solve varied types of structural engineering problems, and by the timely completion of assigned projects.

### **Principal Accountabilities**

1. Develops structural repairs for varied types of structures which incorporate innovative repair procedures with current methods and technology.
2. Prepares emergency repair plans for structures damaged by vehicles or river traffic.

3. Reviews repair and retrofit details prepared by others in the Structural Services Section or by district personnel.
4. Performs the structural analysis of defects discovered on structures.
5. Performs field investigations of damaged or deteriorated structures and recommends corrective action.
6. Reviews and recommends approval or disapproval of contract proposals for shoring, bracing, and jacking.
7. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
8. Performs other duties as assigned.

## **Qualifications**

### **Position Requirements**

- Completion of a bachelor's or master's degree in engineering from an ABET accredited college OR Engineer Intern license in the state of Illinois
- 43 months of civil engineering experience
- Valid driver's license
- Occasional statewide travel with overnight stays

### **Position Desirables**

- Thorough knowledge of bridge design
- Knowledge of construction and maintenance practices
- Knowledge of inspection technology
- Ability to coordinate multiple projects with variable emergency repair characteristics
- Ability to develop and maintain cooperative relationships with departmental staff, consultants, and contractors
- Strong oral and written communication skills

**Work Hours:** 8:00 A.M. - 4:30 P.M. Monday-Friday

**Work Location:** 2300 S Dirksen Pkwy Springfield, IL 62764-0001

**Office:** Office of Highways Project Implementation/Bureau of Bridges & Structures

**Agency Contact:** [DOT.CO.BPM.EmploymentApplications@Illinois.gov](mailto:DOT.CO.BPM.EmploymentApplications@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](http://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](http://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](http://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](mailto:donotreply@SIL-P1.ns2cloud.com)
- [systems@SIL-P1.ns2cloud.com](mailto:systems@SIL-P1.ns2cloud.com)

