

Job Title: CIVIL ENGINEER V - BRIDGE MANAGEMENT GROUP ENGINEER - IPR#45844

Agency : Department of Transportation

Closing Date/Time: 03/17/2023

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

Job Type: Salaried Full Time

County: Sangamon

Number of Vacancies: 1

Plan/BU: NR916 - Protech Teamsters

***This position is covered by the Revolving Door Prohibition Policy**

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 Bridge Management Group 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 responsible for tracking the timeliness of all bridge inspection types required by departmental policy and meeting the National Bridge Inspection Standards (NBIS) requirements including routine, fracture critical, underwater, element level, special, in-depth, and complex inspections by the Illinois Department of Transportation (IDOT) personnel and non-IDOT personnel working for other state agencies, local public agencies (LPA), consultant firms, adjacent state departments of transportation (DOT), and various other entities.

Number of bridge inspections monitored annually:	>12,000
Number of bridge data records maintained annually:	>35,000
Number of bridge inspectors monitored:	> 850
Number of entities coordinated with:	> 500

This position reports to the Bridge Management and Inspection Unit Chief. Reporting to this position is the Senior Bridge Management Engineer, Senior Bridge Preservation Engineer, Bridge Management Engineer, and Bridge Management Group Technician.

This position is responsible to work with IDOT personnel and non-IDOT personnel from other state agencies, LPAs, consultant firms, adjacent state DOT's, and various other entities to ensure only qualified personnel inspect bridges. These bridges represent a massive investment of public funds. Proper inspection and maintenance help to preserve this investment, prevent structural failures, and increase the level of public safety. The incumbent works extensively with the Illinois Structures Information System (ISIS), Bridge Inspection System (BIS), Structural Information Management System (SIMS), and Bridge Management System (BMS) to accomplish these responsibilities.

The greatest challenge to this position is coordinating with the wide variety of entities throughout Illinois that own and maintain bridges and ensuring that all bridges are properly inspected and maintained to prolong their useful lifespans. Typical problems include ensuring that all inspection types are accomplished within allowable timeframes and in accordance with the NBIS requirements and IDOT bridge inspection policy and ensuring the BMS is implemented to best utilize limited monetary resources for the preservation of the state bridge infrastructure.

The incumbent maintains records of all certified NBIS program managers and team leaders in Illinois and ensures only qualified personnel inspect bridges. S/He manages the quality assurance (QA) program to ensure all bridges are being inspected in an appropriate manner. S/He determines bridge inspection training needs, including inspection refresher training, for all bridge inspection personnel.

(Job Responsibilities continued)

The incumbent informs bridge inspectors of qualifications, maintains class registration/attendance records for bridge inspection training classes, and schedules all bridge inspection training classes. S/He assists in providing technical support for the SIMS, SIMSCounty, and SIMSLink to non-IDOT personnel working for other state agencies, LPAs, consultant firms, adjacent state DOTs, and various other entities; and develops/reviews user SIMS queries/reports for internal and external use. The incumbent oversees the development, implementation, and administration of the BMS. S/He identifies bridge maintenance and construction programming needs using element level inspection data and the BMS to extend the service life of all structures on the public roadway system. S/He attends the annual national American Association of State Highway Transportation Officials (AASHTO) Ware Bridge Management (BrM) Users Group meetings and keeps abreast of developing bridge maintenance/management trends and practices. S/He is responsible for the administration and maintenance of the IDOT's bridge scour monitoring system. S/He is responsible for the periodic publication of the Structural Services Manual, Bridge Preservation Guide, and related documents and policies as well as distribution of policy updates to subscribers of the Bridge Management and Inspection Unit email subscription service. In addition to the Bridge Management and Inspection Unit Chief and the Bridge Inspection Group Engineer, the incumbent serves on the ISIS Committee and proposes revisions to the Structure Information and Procedures (SIP) Manual. The incumbent continually reviews and oversees the update and development, as required, for 20+ IDOT forms under the ownership of the Bridge Management and Inspection Unit Chief. The incumbent oversees the annual Load Posting and Closure Review of LPA bridges and reports any findings. S/He oversees content on the Bridge Management and Inspection Unit website. The incumbent assists in the review and comments on proposed updates to the NBIS, Federal Coding and Recording Guide, and AASHTO committee ballot items.

The incumbent accomplishes accountabilities through the following staff:

Senior Bridge Management Engineer who performs in-depth evaluations of the timeliness of all inspection types required by IDOT policy and NBIS requirements and coordinates with the applicable agency to ensure compliance. S/He assists in the implementation and administration of the web-based BIS and Bridge Watch scour monitoring system. S/He assists in the development, implementation, and administration of the BMS. S/He assists in the periodic publication of the Structural Services Manual and related documents and policies. S/He assists in the update and development of IDOT forms under the ownership of the Bridge Management and Inspection Unit Chief.

(Job Responsibilities continued)

Senior Bridge Preservation Engineer who implements and conducts the bridge preservation program based on the IDOT Transportation Asset Management Plan (TAMP) and the Illinois Bridge Preservation Guide. S/He educates various agencies and the public to understand the benefits of bridge preservation and is responsible for the content provided in the Bridge Preservation Guide for IDOT maintained bridge assets. S/He develops and implements bridge preservation policies based on evolving research and produces reports of bridges needing specific preservation work using inspection data through the knowledge and use of the AASHTO and BMS software or other bridge management software.

Bridge Management Engineer who assists in the development, implementation, and administration of the BMS and the formulation of bridge maintenance/management policies. S/He generates various reports for monitoring the Illinois bridge inspection program. S/He assists in the periodic publication of the Structural Services Manual and related documents and policies and provides technical support and training for SIMS, SIMSCounty, and SIMSLink. S/He coordinates the annual Load Posting and Closure Review with the applicable agencies, monitors progress, and provides a year-end report for submittal to the Federal Highway Administration (FHWA).

Bridge Management Group Technician who monitors and verifies the entry of all inspection types required by policy and NBIS requirements including routine, fracture critical, underwater, element level, special, in-depth, and complex inspections by state and non-IDOT personnel working for other state agencies, LPAs, consultant firms, adjacent state DOTs, and various other entities. S/He assists in the development, implementation, and administration of the BMS. S/He assists in the periodic publication of the Structural Services Manual, Bridge Preservation Guide, and related documents and policies. S/He assists in the update and development of the IDOT forms under the ownership of the Bridge Management and Inspection Unit Chief.

(Job Responsibilities continued)

The incumbent functions with minimal to no supervision or guidance and has a moderate degree of latitude in accomplishing accountabilities. Only matters of a highly critical or serious nature are referred to the Bridge Management and Inspection Unit Chief for resolution. The incumbent is constrained by departmental policies/procedures, federal bridge inspection standards, and national specifications.

Internal contacts include, but are not limited to, various personnel in the Bureau of Bridges and Structures and Bureau of Information Processing. S/He also has contact with both central and district office staff in the Bureaus of Planning, Programming, Operations, and Local Roads and Streets. External contacts include, but are not limited to, personnel from LPAs, consulting firms, the Illinois State Toll Highway Authority (ISTHA), FHWA, AASHTO software developers, and media organizations. S/He attends national conferences to stay current of advancements in bridge inspection and management technologies. Occasional statewide and out-of-state travel with overnight stays is required.

The effectiveness of this position can be measured by the FHWA's annual NBIS Metric Assessment of IDOT's bridge inspection program, progress in goals set forth in the NBIS Metric Improvement Plans and Plans of Corrective Action, the accurate and timely reports of bridge inventory and inspections, support to users of SIMS data and the BIS, and the efficiency of the recommendations of maintenance and repair activities for the National Highway System (NHS) structures.

Principal Accountabilities

1. Monitors the timeliness of all inspection types required by IDOT policy and meets NBIS requirements including routine, fracture critical, underwater, element level, special, in-depth, and complex inspections by IDOT and non-IDOT personnel working for other state agencies, LPAs, consultant firms, adjacent state DOTs, and various other entities.
2. Provides periodic reporting to the FHWA for inspection delinquency rates, NBIS Metric Improvement Plan updates, NBIS Metric Plans of Corrective Action updates, Load Posting and Closure Compliance, and other initiatives related to the NBIS.
3. Assists the Bridge Management and Inspection Unit Chief with the annual FHWA NBIS Metric Assessment (request for information, clarification, etc.).
4. Provides inspection due reports for all inspection types to IDOT and non-IDOT personnel working for other state agencies, LPAs, consultant firms, adjacent state DOTs, and various other entities.
5. Maintains the data records of all certified NBIS program managers and team leaders in Illinois.
6. Schedules bridge inspection training classes and maintains the bridge inspection class registration records within the BIS.
7. Oversees the BMS, IDOT's scour monitoring system, BIS, periodic publication of the Structural Services Manual, Bridge Preservation Guide, and content on the Bridge Management and Inspection Unit website.
8. Reviews bridge inspection policy and develops revised or new policy as necessary.
9. Reviews the SIP manual for coding structures in the ISIS and develops revised or new policy as necessary.
10. Oversees data reports generated to provide support for the Bureau of Bridges and Structures, IDOT executive management, IDOT central and district bureaus, FHWA, and LPAs as needed.
11. Assists in the review and comments on proposed updates to the NBIS, Federal Coding and Recording Guide, and AASHTO committee ballot items.
12. Reviews existing IDOT forms under the ownership of the Bridge Management and Inspection Unit Chief. Oversees revision of existing forms and development of new forms as required.
13. Remains current with NBIS and technological developments relating to bridge inspection.
14. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
15. Performs 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
- IL NBIS Program Manager - Element or Team Leader - Element Certification
- Valid driver's license
- Occasional statewide and out-of-state travel with overnight stays

Position Desirables

- Supervisory experience
- Extensive knowledge of IDOT Structural Services Manual Section 3 - Bridge Inspection
- Extensive knowledge of the IDOT SIP Manual and ISIS
- Extensive knowledge of the SIMS
- Extensive knowledge of the IDOT Bridge Preservation Guide
- Extensive knowledge of the NBIS
- Familiarity with the FHWA Annual NBIS Metric Assessments
- Familiarity with AASHTO Ware and BMS
- Familiarity with Bridge Watch (scour monitoring system)
- Current registration as a Licensed Structural Engineer in the state of Illinois
- Extensive experience using the Microsoft Office Suite, particularly Access, Word, and Excel
- Successful completion of National Highway Institute (NHI) 130078 Fracture Critical Inspection Techniques for Steel Bridges
- Strong oral and written communication skills
- Ability to develop and maintain harmonious relationships with employees and external contacts

Work Hours: 8:00 AM - 4:30 PM Monday - Friday

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

Office: Office of Highways Project Implementation/Bureau of Bridges and Structures

Agency Contact: DOT.CONTACTHR@ILLINOIS.GOV

Job Family: Transportation; Administration/Management; Sciences and Natural Resources

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