To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS

From: Becky Koehler

Bureau Chief of Personnel Management

Subject: Technical Vacancy

Date: June 6, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement June 8, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m.** on **Thursday**, **June 21**, **2018**. Applications will not be accepted after that time and date.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

If you have any questions, please contact the Bureau of Personnel Management at 217/782-5594.

CE IV Senior Bridge Management Engineer

Bureau of Bridges & Structures

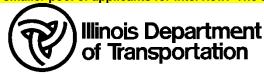
Office of Highways Project Implementation

Springfield

Attachments 42819

Technical Applications PM1080 rev 6/1/17\*\*must be received by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to DOT.CO.BPM.EmploymentApplications@Illinois.gov by Thursday, June 21, 2018, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



**Position Summary Sheet** 

An Equal Opportunity Employer

Classification: Civil Engineer IV Salary: \$5,800 - \$7,515\*

Position Title: Senior Bridge Management Engineer Union Position: X Yes No

Position Number: PW114-23-75-906-52-01 IPR#: 42819

### Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation/Bureau of Bridges and Structures/2300 South Dirksen Parkway, Springfield, IL

## **Description Of Duties:**

This position assists in the development, implementation and administration of the Bridge Management System (BMS) and the formulation of bridge maintenance/management policies. S/He attends the annual national AASHTOWare Bridge Management (BrM) Users Group meetings and keeps abreast of developing bridge maintenance/management trends and practices. S/He assists in the bi-annual publication of the Structural Services Manual and related documents and policies and provides technical support and training for the Structural Information Management System (SIMS), SIMSCounty and SIMSLink. S/He assists the Bridge Management Group Engineer with other duties as assigned.

### Special Qualifications:

#### Required:

- Current Illinois Professional Engineer license
- Valid driver's license
- Occasional travel with overnight stays

### Desired:

- Six years of experience in civil engineering of which three years should be in bridge planning, design and inspection
- Current Illinois Structural Engineer license
- Familiarity with the Illinois Highway Information System
- Experience with Microsoft Office software
- · Ability to develop and maintain cooperative relationships with departmental staff and the public
- Strong oral and written communication skills

### Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

\*Individual salary offers are computed based on an applicant's current position and experience level in comparison to the posted title as well as internal equity of staff in the organizational unit.

\*\*Technical Application PM1080 (revised 6/1/17) is required. No previous version of the PM1080 will be accepted

# ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

**DATE:** 3-5-2018 **POSITION:** Senior Bridge Management

Engineer

APPROVED BY: Timothy Armbrecht OFFICE/DIVISION: Office of Highways Project

Implementation/ Bureau of Bridges

& Structures

CODE: PW114-23-75-906-52-01 REPORTS TO: Bridge Management Group

Engineer

# Position Purpose

This position assists in the development, implementation and administration of the Bridge Management System (BMS) and the formulation of bridge maintenance/management policies. S/He attends the annual national AASHTOWare Bridge Management (BrM) Users Group meetings and keeps abreast of developing bridge maintenance/management trends and practices. S/He assists in the bi-annual publication of the Structural Services Manual and related documents and policies and provides technical support and training for the Structural Information Management System (SIMS), SIMSCounty and SIMSLink. S/He assists the Bridge Management Group Engineer with other duties as assigned.

### **Dimensions**

Number of State-Maintained Structures in IDOT Inventory: 7,852 Number of National Highway System structures: 4,815

Annual Bridge Replacement and Preservation Program: \$418,000,000

## Nature and Scope

This position reports to the Bridge Management Group Engineer. No staff reports to this position.

This position is responsible for monitoring the Bridge Element Inspection Program and BMS. The incumbent works extensively with the Illinois Structures Information System (ISIS), Bridge Inspection System (BIS), SIMS, and BMS to accomplish these responsibilities. The incumbent must be knowledgeable and experienced with Microsoft Access, Word and Excel and AASHTOWare Bridge Management (BrM). The incumbent should also be familiar with the Illinois Highway Information System (IHIS) manual.

The greatest challenge will be the review of BMS outputs and formulating maintenance and repair strategies to maximize the service lives of the bridge inventory in Illinois. The incumbent must also keep abreast of relevant research and publications regarding bridge management to keep the Illinois Department of Transportation (IDOT) policies current with the national trends. S/he also reviews field inspection data to ensure deterioration models are consistent with actual reported deterioration.

The incumbent will be personally responsible for providing training to district bridge inspection personnel in the use and operation of the BMS, and may be required to travel to the districts to provide this training. Since the districts have very limited budgets with which to make bridge maintenance decisions, it is imperative s/he be able to develop and present reports on bridge actions and/or bridge network management scenarios to the districts and upper management consistent with IDOT bridge management policies.

The incumbent functions with minimal supervision and guidance and has broad latitude in performing the duties assigned, referring only the most serious matters to his/her superior. The incumbent is guided by department policies and procedures, and National Bridge Inspection Standards (NBIS) and federal coding guides.

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The incumbent has internal contacts with the central and district Bureau of Operations, and the central Bureaus of Materials, Research, Planning and Programming, and the Office of Finance and Administration personnel for the purpose of accomplishing responsibilities. Externally, the incumbent has contacts with local public agencies, Federal Highway Administration (FHWA) and the public. To keep abreast of changing bridge management strategies and materials and to provide training to district personnel, the incumbent is required to travel both in Illinois and out of state.

The effectiveness of this position can be measured by developing maintenance and repair strategies with associated costs and the accuracy of the bridge deterioration models developed for the BMS to manage the state's bridge inventory. Effective performance in this position requires the ability to gain cooperation from other IDOT personnel in order to accomplish objectives.

## **Principal Accountabilities**

- 1. Works with the BMS and develops and presents reports to the districts showing appropriate bridge actions and bridge management network scenarios to assist them in making bridge maintenance decisions with a limited budget.
- 2. Responsible for being knowledgeable of the NBIS and technological developments relating to bridge inspection and bridge management.
- 3. Develops and disseminates maintenance cost data and creates and updates deterioration models as inputs for a comprehensive BMS.
- 4. Provides training to district personnel in the use and operation of the BMS software.
- 5. Keeps abreast of current research and publications regarding bridge management and makes recommendations to implement new ideas in IDOT's BMS.
- 6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
- 7. Performs other duties as assigned.