



**Engineering Technician IV (1 position)  
Senior Bridge Inspection Technician**

*Benny Koehler*

<b>IPR Number:</b>	<b>44675</b>	<b>Union Position:</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Position Number:</b>	<b>PW014-23-75-906-53-01</b>	<b>Shift:</b>	<b>6:30 am – 5:00 pm</b>
<b>Opening Date:</b>			<b>*See Remarks</b>
<b>Closing Date:</b>		<b>Salary:</b>	<b>\$4,790 – \$8,775 *</b>

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

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

**Position Purpose:**

This position serves as a member of the technical team which makes detailed inspections of bridges throughout the state to fulfill the requirements of the National Bridge Inspection Standards (NBIS) and documents deficiencies found to support load ratings and repairs.

**Qualifications:**

**Position Requirements:**

- Education/Experience
  - Completion of two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum PLUS five years of engineering experience; OR
  - Seven years of engineering experience
- Illinois Certified NBIS Team Leader or the ability to obtain the certification within twelve months of hire date
- Ability to work in confined spaces and at extreme heights over land and water
- Valid driver's license
- Continual statewide travel with overnight stays more than 50% of the year

**Position Desirables:**

- Successful completion of IDOT's Bridge Element Level Inspection Class or the FHWA 2-Day Introduction to Element Level Inspection Class
- Successful completion of NHI 130078 Fracture Critical Inspection Techniques for Steel Bridge
- Extensive knowledge of the NBIS
- Extensive knowledge of the IDOT SIP Manual
- Ability to operate bridge inspection equipment and nondestructive testing and confined space entry equipment
- Extensive knowledge of bridge nomenclature and ability to recognize structural problems in a variety of bridge types
- Strong oral and written communication skills
- Efficiency in Microsoft Word and Excel, and MicroStation

**How to Apply/Remarks:**

Technical Applications PM1080 (rev 8/23/19) 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](mailto:DOT.CO.BPM.EmploymentApplications@Illinois.gov) by 4:30 pm on the closing date listed above. Applications will not be accepted after this date and time.

**Agency Contact:** Bureau of Personnel Management, 217/782-5594

\*Work Schedule: Monday-Thursday, 6:30 am- 5:00 pm; 4-day work week; 10 hours/day with 30 min lunch break

To be considered for a permanent position within IDOT, you must either be a US citizen or a non-citizen with permanent work authorization.

Only education/coursework and experience listed within the application will be considered for determining eligibility for this position.

Please be advised that if a high volume of applications is 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.

Applicants will be notified in writing to schedule interviews.

\*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.

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
POSITION DESCRIPTION**

<b>DATE:</b>	August 15, 2020	<b>WORKING TITLE:</b>	Senior Bridge Inspection Technician
<b>POSITION CLASSIFICATION:</b>	Engineering Technician IV	<b>OFFICE/BUREAU:</b>	Office of Highways Project Implementation / Bureau of Bridges and Structures
<b>POSITION NUMBER:</b>	PW014-23-75-906-53-01	<b>REGION/DISTRICT:</b>	n/a

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***Position Purpose***

This position serves as a member of the technical team which makes detailed inspections of bridges throughout the state to fulfill the requirements of the National Bridge Inspection Standards (NBIS) and documents deficiencies found to support load ratings and repairs.

***Dimensions***

Detailed major bridge inspections and reports:	25 - 35 annually
Fracture critical bridge member inspections performed:	15 - 25 annually
Underwater bridge elements inspected:	25 - 35 annually

***Nature and Scope***

This position reports to the Bridge Inspection Group Technician. There are no subordinates reporting to this position.

This position operates in an environment that inspects major bridge structures throughout the state in adverse weather, debris, traffic conditions, and heights. The incumbent needs to be able to perform strenuous physical activities in an outdoor environment and can safely work at extreme heights and in confined spaces. The incumbent may act as the on-site NBIS Team Leader for bridge inspection activities required by the NBIS including routine, fracture critical, underwater, element level, and special inspections in the absence of the Bridge Inspection Group Technician. Access to many of the components of large bridges is difficult and at extreme height above ground and/or water. The incumbent needs to be able to operate under bridge and underwater inspection equipment as well as nondestructive testing and confined space entry equipment. Major bridges represent a substantial investment of public funds and proper inspection is required to preserve this investment, prevent structural failure, and increase the level of public safety. The incumbent needs to have extensive knowledge of bridge nomenclature and the ability to recognize structural problems in a variety of bridge types and report critical deficiencies immediately.

The greatest challenges for the incumbent are the ability to locate and detect visible and hidden defects that affect the structural integrity of the bridges, to utilize high technology testing methods, and to determine the cause for those problems.

The incumbent employs various nondestructive testing methods to determine deficiencies on bridge components. S/He performs duties under bridges and in confined spaces with inspection equipment over rough terrain and reviews design plans, shop drawings, and other bridge correspondence. The incumbent performs underwater inspections around river piers to detect scour, obtains channel cross-sections with sonar equipment, and evaluates bridge components below water. The incumbent needs to be aware of problems associated with bridge elements and detect and document deficiencies and general conditions through photographs and field drawings as necessary. In accordance with departmental standards, s/he needs to be aware of the necessary

traffic controls to protect both motorists and inspection crews and to minimize interference with highway traffic. The incumbent must keep abreast of policy and procedures in accordance with the Structure Information and Procedure (SIP) Manual, Illinois Department of Transportation (IDOT) Bridge Inspection Policy and Procedures, and the NBIS. The incumbent prepares detailed bridge inspection reports.

The incumbent is afforded some latitude in the accomplishment of duties and keeps the Bridge Inspection Group Technician apprised of any critical deficiencies encountered.

The incumbent has internal contacts with the staff of the Bureau of Bridges and Structures and the districts' bureau of operations. The incumbent has external contacts with local public agencies, the Federal Highway Administration (FHWA), the United States Coast Guard, and the public. This position requires continual statewide travel with overnight stays more than 50% of the year.

The effectiveness of this position can be measured by the accuracy of work performed, the quality and quantity of the inspection reports, and the efficiency of the inspection group under his/her direction. Effective performance in this position requires leadership to gain full cooperation of other inspection group members and a willingness to work in an adverse environment of weather, debris, traffic conditions, and heights.

**Principal Accountabilities**

1. Performs technical duties including instrument operation and precise measurements. Records observations in conjunction with detailed inspections of major bridge structures statewide.
2. In the absence of the Bridge Inspection Group Technician, the incumbent serves as the on-site NBIS Team Leader.
3. Performs visual inspections of bridges, including the use of nondestructive testing equipment to detect damaged or deteriorated components, records and photographs deficiencies, and makes recommendations for repair or structural analysis.
4. Prepares detailed bridge inspection reports.
5. Operates a variety of bridge inspection equipment.
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.

**Subordinates of this position**

Position Classification	Position Number	Working Title	Authorized Identical
n/a			

**Supervisor of this position**

Supervisor Position Classification: Engineering Technician V

Working Title: Bridge Inspection Group Technician

Position Number: PW015-23-75-906-53-01

**Position Requirements**

- Education/Experience
  - Completion of two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum **PLUS** five years of engineering experience; **OR**
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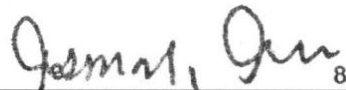
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**Agency Approvals**



Bureau Chief of Personnel Management



Secretary, Department of Transportation