



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: February 5, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement February 7, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Thursday, February 22, 2018**. Applications will not be accepted after that time and date.

NOTE: 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.

ET IV

Aggregate/Physical Tests Supervisor
Region 5/District 9/Project Implementation
Highways Project Implementation
Carbondale

Attachments
42491

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, February 22, 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: 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.



Illinois Department of Transportation

An Equal Opportunity Employer

Position Summary Sheet

Classification:	Engineering Technician IV	Salary:	\$4,695 - \$6,735*
Position Title:	Aggregate/Physical Tests Supervisor	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW014-23-59-203-33-01	IPR#:	42491

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation/Region 5/District 9/Bureau of Project Implementation/2801 W Murphysboro Rd, Carbondale, IL

Description Of Duties:

This position is responsible for testing, inspecting, and reporting of various materials including aggregates, pre-cast concrete products, pre-cast pre-stressed concrete products, liquid asphalts, reinforcing steel, pipe culverts, and other miscellaneous materials originating within the district and incorporated into highway and bridge construction.

Special Qualifications:

Required:

- Valid driver's license
- 24/7 emergency call-out availability
- Extensive districtwide travel; occasional statewide travel; and occasional overtime during evening and weekends
- Heavy/repetitive lifting up to 50 lbs.
- Ability to work in confined spaces; climb steep terrain; wade in water; deal with poisonous plants, animals, insects, rodents, snakes; perform outdoor work in a variety of conditions including, but not limited to inclement weather (hot, cold, wet, windy, muddy), active construction sites and roadways open to traffic

Desired:

- An Associate Degree from an accredited two-year civil engineering technology program or two years of college in pre-engineering or civil engineering technology
- Eight years of experience in performing a variety of technical tasks of which at least four years should be related to civil engineering
- Extensive knowledge of the principles and practices of civil engineering and the application of engineering techniques to the design, construction, and maintenance of public works
- Extensive knowledge of mathematics
- Ability to operate engineering field and office instruments and physical laboratory testing equipment
- Strong oral and written communication skills
- Strong problem-solving and decision-making 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:	December 12, 2017	POSITION:	Aggregate/Physical Tests Supervisor
APPROVED BY:	<u>Keith Roberts</u>	OFFICE/DIVISION:	OHPI, District 9, Project Implementation
CODE:	PW014-23-59-203-33-01	REPORTS TO:	Physical Tests Engineer

Position Purpose

This position is responsible for testing, inspecting, and reporting of various materials including aggregates, pre-cast concrete products, pre-cast pre-stressed concrete products, liquid asphalts, reinforcing steel, pipe culverts, storm sewers, pavement marking materials, and other miscellaneous materials originating within the District and incorporated into highway and bridge construction.

Dimensions

Subordinate Personnel:	3
Materials and Product Sources:	70-100
Value of Materials Inspected:	\$15-\$30 Million
Average Annual Construction Program:	\$45 Million

Nature and Scope

This position reports to the Physical Tests Engineer. Reporting to this position are Field Inspection Technicians.

The incumbent in this position supervises a staff of inspectors who inspect all aggregates that will be used for highway and bridge construction and maintenance. The incumbent's primary responsibility is to ensure that aggregates produced within the district comply with the department's Aggregate Gradation Control System (AGCS) Policy, standard specifications, and contract special provisions through continuous and effective monitoring of the production process. The incumbent is also responsible for the inspection, testing, reporting, and acceptance of various other materials, including but not limited to, pre-cast concrete products, pre-cast pre-stressed concrete products, liquid asphalts, reinforcing steel, structural steel, pipe culverts, storm sewers, pavement marking materials, and erosion control materials produced and used in the district for incorporation into construction and maintenance projects. The incumbent's work is supported by the testing capability of the Central Bureau of Materials laboratory in Springfield for special miscellaneous materials.

Typical problems confronted by the incumbent involve the following: preventing contractors from incorporating unapproved or rejected materials into highway projects; reviewing faulty material with subordinates before final rejection when substantial quantities are involved; working with engineers to resolve inspection deficiencies and/or requirements; ensuring that subordinates are adequately trained to perform complex testing procedures before allowing them to make decisions which could be costly to producers and suppliers; and ensuring that subordinate inspectors are aware of special provisions that are applicable to a particular project. The greatest challenges to this position are in obtaining the cooperation of many people outside the department in assuring that all material used in state highway projects meets all of the applicable specifications and also diplomatically working with producers, suppliers, and engineers to ensure the materials have been inspected and certified.

The incumbent is responsible for overseeing the AGCS, approving laboratory testing facilities and equipment, and monitoring production. S/He surveys and establishes time schedules for quality testing of aggregates and ensures supervisors are informed of aggregate quality status and possible problems. The incumbent ensures the accuracy of aggregate reports along with the proper design and field control of aggregate testing. The incumbent must interpret material specifications to ensure materials comply with the certified products programs, related Quality Control/Quality Assurance (QC/QA) programs and contract special provisions. It is important that s/he anticipate potential non-compliant material or documentation problems and attempt to resolve them before materials are incorporated into a project. This position works directly with material producers and suppliers, contractors, and construction personnel to assure quality materials and appropriate documentation are supplied to IDOT and local agency projects.

The incumbent achieves his/her objectives through the following subordinate positions:

Field Inspection Technicians – who are accountable for testing and inspecting material in the field, documenting results, and assuring that all material meets applicable specifications.

This position operates under the Standard Specifications for Road and Bridge Construction, Highway Standards, AASHTO and ASTM Specifications, contract special provisions, Manual of Test Procedures for Materials, Manual for Materials Inspection, and IDOT policies. The incumbent is responsible for keeping supervisors informed of activities and problems occurring in the field, since many of these issues affect the financial interests of producers, contractors, and the department. S/He has some latitude in solving minor production and quality control problems. Major problems are referred to the Physical Test Engineer, along with recommended solutions. This position requires a valid driver's license; 24/7 emergency call-out availability; extensive travel within the district and some travel statewide; possible overtime; possible overnight stays for training; heavy/repetitive lifting up to 50 lbs; work in confined spaces; climb steep terrain; wade in water; deal with poisonous plants, animals, insects, rodents, snakes; perform outdoor work in a variety of conditions including, but not limited to inclement weather (hot, cold, wet, windy, muddy), active construction sites and roadways open to traffic.

Within the department, the incumbent has contact with Project Implementation, Operations, and Central Bureau of Materials personnel. External contacts include material producers and suppliers, local agency highway departments, consulting engineers, contractors, and other governmental agencies. Inspection services are also performed for other IDOT districts, Aeronautics, local agencies, and other agencies.

Performance is measured in terms of the quality of materials produced and supplied; the timeliness and accuracy of inspection, sampling, and documentation tasks; and the ability to maintain good working relationships with other individuals.

Principal Accountabilities

1. Ensures that materials used in highway and bridge construction and maintenance projects comply with applicable specifications.
2. Accurately and efficiently monitors and performs materials inspection and sampling according to department requirements, while considering construction activities.
3. Ensures district compliance with the certified products programs and related Quality Control/Quality Assurance programs.
4. Identifies non-compliant materials and/or potential material-related problems and informs the supervisor with recommended solutions.

5. Monitors and completes material documentation and performs data entry into IDOT's materials database in an accurate and timely fashion.
6. Provides technical assistance to material producers and manufacturers in solving production problems relating to quality, and the development and evaluation of new sources and products.
7. Manages, trains, motivates, and evaluates subordinate staff.
8. Performs other duties as assigned.
9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.