



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: October 2, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement October 4, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Thursday, October 18, 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 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.

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

CE IV (2 pos) Area Mixtures Control Supervisor
Region 1/District 1/Materials
Office of Highways Project Implementation
Schaumburg

Attachments
43104

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, October 18, 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 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.



**Illinois Department
of Transportation**

An Equal Opportunity Employer

Position Summary Sheet

Classification:	Civil Engineer IV (2 Positions)	Salary:	\$5,800 - \$7,515*
Position Title:	Area Mixtures Control Supervisor	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW114-23-51-703-00-01	IPR#:	43104

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation / Region One / District One / Bureau of Materials / 201 W. Center Ct., Schaumburg, IL

Description Of Duties:

This position is accountable for directing and coordinating, within a designated geographical area, all the activities related to the production, testing and reporting of all Portland Cement Concrete (PCC) and Hot Mix Asphalt (HMA) mixtures to ensure compliance with the Standard Specifications and all applicable contract Special Provisions; reviews contract plans and documents; reviews and approves annual Quality Control/Quality Assurance (QC/QA) plans, and contract specific Quality Control (QC) plans and addendums. This position acts as the departmental liaison with local agencies regarding mixture design verification, inspection, and testing within the designated geographical area.

Special Qualifications:

Required:

- Current Illinois Professional Engineer license
- Valid driver's license
- Ability to successfully complete the Hot Mix Asphalt (HMA) course through Level III and the Portland Cement Concrete (PCC) course through Level III within twelve months of hire date
- State-wide and district-wide travel; occasional night and weekend work hours

Desired:

- Six years of experience in civil engineering including four years of supervisory responsibility, of which three years should be in highway construction including experience supervising engineering functions
- Excellent oral and written communication skills
- Strong managerial skills and the ability to resolve conflicts

Shift/Remarks:

7:00 am - 3:30 pm / Monday - Friday (30-minute lunch)

*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:	February, 2017	POSITION:	Area Mixtures Control Supervisor
APPROVED BY:	George Houston	OFFICE/DIVISION:	OHPI/District One/Bureau of Materials
CODE:	PW114-23-51-703-00-01	REPORTS TO:	Mixtures Control Engineer

Position Purpose

This position is accountable for directing and coordinating; within a designated geographical area, all the activities related to the production, testing and reporting of all Portland Cement Concrete (PCC) and Hot Mix Asphalt (HMA) mixtures to ensure compliance with the Standard Specifications and all applicable contract Special Provisions. The position is also responsible for review of contract plans and documents, the review and approval of annual Quality Control/Quality Assurance (QC/QA) plans, and contract specific Quality Control (QC) plans and addendums. This position also acts as the departmental liaison with local agencies regarding mixture design verification, inspection, and testing within the designated geographical area.

Dimensions

Subordinate Personnel:	10 - 20 Direct; 1 - 3 Seasonally
Number of Project Annually:	25 - 100
Annual Value of Mixtures:	\$50 - 100 Million
Number of Plants:	9 - 17 HMA; 25 - 35 Concrete
Number of Consultants / Testing Agencies:	10 - 30

Nature and Scope

This position reports to the Mixtures Control Engineer. Reporting to this position are eleven Mixture Quality Assurance Engineers and eight Quality Assurance and Inspection Technicians. Additionally, this position may have one to three seasonally assigned personnel.

Due to the district's high and unique traffic demands, there is a need to research and produce a variety of mixtures to provide safe and skid resistant pavements such as Stone Matrix Asphalt (SMA), Polymerized HMA, and High-Performance Concrete Mixtures in order to accommodate the high volume of traffic. There is a need to use locally available by-product materials to decrease the demand for scarce materials. The incumbent is responsible for recommending equipment, materials, mixtures and lay-down processes to make this possible. The use of phase three consultants on large rehabilitation projects establishes a unique need for the incumbent to review consultant material inspections as well as equipment and personnel performance to ensure that acceptable PCC and HMA mixtures are produced, placed, and reported. The position is responsible for the review and approval of annual QC plans and addendums. This position coordinates the annual inspection and approval of consultant and supplier QC/QA laboratories. The incumbent will evaluate and approve all PCC and HMA mix designs. The position is also responsible for review of contract plans and documents to ensure that the PCC and HMA mixtures specified are adequate and in compliance with policies and procedures.

Typical duties performed in this position are: maintaining calibration list of PCC and HMA plants; determining the maximum capacity of plant operation; determining methods of testing new materials, processes or equipment; evaluating HMA and PCC mix designs to determine the need for possible changes based on strength and durability for various contracts; ensuring the adequacy of consultant testing equipment and consultant personnel engaged in materials testing, inspection, and reporting; ensuring the material inspection and testing by phase three consultants is properly reported and documented. The greatest challenge to this position is developing

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mixture designs to accommodate unusual project demands for optimum pavement durability and skid resistant properties.

The incumbent personally: schedules subordinates' work assignments; trains and advises assigned state and consultant personnel; reviews, tests, and evaluates new processes, materials, and equipment; reviews reports regarding materials and equipment inspections, rolling patterns, and nuclear density testing for completeness and accuracy; surveys material plants and records type of equipment used to ensure state requirements are met; reviews plans and contract documents; attends pre-construction conferences, progress and prepare meetings; investigates pavement failures for possible mixture or mixture design error; oversees plant calibrations and determines maximum capacity for operation; designs PCC and HMA mixtures to adapt to unusual project demands; reviews and approves contractor mix designs.

This position accomplishes accountabilities through the following personnel:

- Mixture Quality Assurance Engineer (11): is responsible for monitoring QC testing. This position performs QA testing to compare with and validate all QC testing and results at plant sites; is also accountable for conducting, coordinating, and approving density testing and rolling patterns for HMA mixtures to validate QC test results and ensuring compliance with appropriate specifications and special provisions. This position provides assistance in reviewing mix designs, reporting, QC plans, and addendums.
- Quality Assurance and Inspection Technician (8): is responsible for monitoring QC testing. This position performs QA testing to compare and validate all QC testing and results at plant sites; is also accountable for conducting, coordinating, and approving density testing and rolling patterns for HMA mixes to validate QC test results and ensuring compliance with appropriate specifications and special provisions. This position assists local agencies when federal, state, and Motor Fuel Tax funds are involved, by conducting PCC and HMA QA testing; it also provides assistance in reviewing mix designs and reporting.

The incumbent operates within guidelines included in the Standard Specifications and Special Provisions and is responsible for accurately interpreting specifications when needed. The incumbent is required to exercise considerable technical judgement in establishing methods for testing new processes, materials or equipment being considered for use in state projects.

The incumbent has frequent contact with: contractor/supplier personnel; phase three consultants; local agencies; local agency consultants; the Bureaus of Construction, Design, Local Roads, Maintenance, Programming, Materials, and the Federal Highway Administration (FHWA). The incumbent attends pre-construction meetings to inform contractors and the Resident Engineer of special materials requirements and specifications in contracts. Daily contact is made with consultants, material equipment suppliers, and contractors to ensure their understanding of state guidelines governing conditions of material acceptability, project compliance and job completion. The incumbent must be familiar with the department's QC/QA Program, AGCS program, QC program for precast, SuperPave procedures, and special mixture policies for implementation in projects. The incumbent is required to drive to various sites within the district and throughout the state to attend meetings and provide direction. Overtime and shift changes may be necessary to fulfill the duties of this position.

The effectiveness of this position can be measured by the attainment of quality mixtures, pavement life and safety which result in skid-resistant wearing capabilities of PCC and HMA pavements along with timely contract completions.

Principal Accountabilities

1. Assigns personnel to perform the required QC tests and to monitor, compare, and validate all QC tests on QC/QA projects to ensure the mixtures produced, tested, and reported are in accordance with the Standard Specifications and Special Provisions.

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2. Reviews reports on material testing, inspection, and densification procedures for completeness, accuracy and compliance with the Standard Specifications and Special Provisions.
3. Reviews and approves all QC plans and addendums.
4. Reviews and approves all contractor mix designs prior to their use in projects.
5. Evaluates and calibrates HMA and PCC plants to ensure compliance with state standards.
6. Recommends uses for new processes, materials, and equipment based on test results to improve the efficiency, viability, and quality of road construction.
7. Provides for subordinate development through on-the-job instruction and recommendation of specific training activities.
8. Ensures that subordinate staff performs duties in accordance with the "Employee Safety Code" and established work practices.
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.
10. Performs other duties as assigned.