



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: June 1, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement June 5, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Monday, June 18, 2018**. Applications will not be accepted after that time and date.

NOTE: Official college transcripts or an Engineer Intern License in the State of Illinois must be included with the application. Applicants not submitting these documents by the posting deadline will not be considered. 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 III (3 positions) Squad Engineer
Region 3/District 5/Program Development
Office of Highways Project Implementation
Paris

Attachments
42870

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 **Monday, June 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: Official college transcripts or an Engineer Intern License in the State of Illinois must be included with the application. Applicants not submitting these documents by the posting deadline will not be considered. 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 III (3 Positions)	Salary:	\$5,320 - \$7,160*
Position Title:	Squad Engineer	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW113-23-55-303-10-01	IPR#:	42870

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation/Region 3/District 5/Bureau of Program Development/13473 IL Hwy 133 W., Paris, IL

Description Of Duties:

This position is accountable for the supervision and/or preparation of phase I project studies and phase I project reports of varying complexity levels, and for the preparation of contract plans, specifications, and estimates.

Special Qualifications:

Required:

- Valid driver's license
- Districtwide travel
- Four-year engineering degree from an ABET accredited college or Engineer Intern license in the state of Illinois

Desired:

- Four years of experience in the practice of civil engineering of which at least one year should be in highway engineering with emphasis in studies and plans
- Knowledge of the policies and procedures that govern the design of highway projects; and ability to analyze and solve highway engineering problems
- Strong oral and/or 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:	3/07/2018	POSITION:	Squad Engineer
APPROVED BY:		OFFICE/DIVISION:	OHPI/Region 3/District 5/Bureau of Program Development
CODE:	PW113-23-55-303-10-01	REPORTS TO:	Sr. Squad Leader

Position Purpose

This position is accountable for the supervision and/or preparation of phase I project studies and phase I project reports of varying complexity levels, and for the preparation of contract plans, specifications, and estimates.

Dimensions

Subordinate Technical Personnel:	Direct – 1 to 3 engineers or technicians Indirect – 1 to 3 seasonally
Number of Projects:	5-20 per year per year
Annual Construction Program Value:	\$10-15 Million per year

Nature and Scope

This position reports to the Sr. Squad Leader or Squad Leader.

This position functions in an environment which is characterized by fluctuations in the number of study and plan preparation assignments received, consultant studies and plans reviewed, seasonal manpower requirements, and prescribed time frames for the completion of assigned projects. These projects entail structures, highways, or projects in urban areas. This position may rotate to other bureaus within the district as part of a rotational training program.

Typical problems include working with subordinates and consultants to resolve technical problems related to studies and plans and developing timetables which facilitate the timely completion of projects assigned, and considering workload fluctuations due to program changes. The incumbent may also coordinate the efforts of the squad to facilitate the work flow from consulting engineers to ensure deadlines are met, and that studies and plans prepared by consultants are completed in the most cost-effective manner. The incumbent's greatest challenge is to prioritize projects to meet prescribed deadlines while ensuring studies and plans prepared for transportation facility improvements are completed in the most cost-effective manner.

The incumbent is accountable for the preparation and evaluation of alternative solutions that require applying appropriate design standards and principles and assuring that all environmental concerns have been properly analyzed to minimize harm. The incumbent is responsible for the determination of grade lines, drainage requirements, pavement design calculations, crash analysis, and special details required for complete studies and plans. The incumbent is responsible for the preparation of general notes and/or special provisions to clearly explain special design details or construction procedures. In addition, this position is responsible for the calculation of quantities for all pay items, assuring accuracy and completeness; preparing plan, profile, and cross section sheets; computation of earthwork quantities to obtain the most economical and adaptable designs; and conducting field reviews of affected section before, during, and after construction.

In accomplishing the objective of this position, the incumbent must operate within the limits of prescribed design standards and specifications. This, in conjunction with input from the project engineer, serves as the basic restriction to the squad leader's ability to make decisions and produce a final project. Recommendations pertaining to major changes in consultant-prepared plans, departures from the original contract design

specifications, and payments to consultants are referred to the project engineer for further consideration. The incumbent is responsible for training, motivating, assigning tasks, and evaluating subordinate personnel.

In performing these functions, the incumbent maintains contact within the district Bureaus of Program Development, Project Implementation, and Operations, as well as the Local Roads and Streets Section, the central office Bureaus of Design and Environment, and Safety Programs and Engineering, the Federal Highway Administration, municipal and county governments, community organizations, and the general public to answer specific questions and provide specific details to resolve conflicts in the design of alternatives. Districtwide travel is required.

The effectiveness of this position is measured by the accurate and timely completion of design reports; and the quantity, quality, and timeliness of the plans and contract documents prepared by the incumbent and his/her subordinates.

Principal Accountabilities

1. Responsible for ensuring studies and plans prepared, within the squad and those prepared by consultants, are accurate, complete, and in compliance with design standards and specifications depicting the most cost-effective designs for major projects.
2. Responsible for reviewing subordinate plans to ensure each project plan is complete and accurate.
3. Provides timely and accurate plans and contract documents in compliance with design standards and specifications depicting cost-effective designs.
4. Responsible for training, motivating, and evaluating subordinates.
5. May rotate to other bureaus within the district as part of a rotational training program.
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.