



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

Senior Design Squad Engineer
Region 1/District 1/Design
Office of Highways Project Implementation
Schaumburg

Attachments
43101

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.



An Equal Opportunity Employer

Position Summary Sheet

Classification:	Civil Engineer IV	Salary:	\$5,800 - \$7,515*
Position Title:	Senior Design Squad Engineer	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW114-23-51-302-00-01	IPR#:	43101

Office/Central Bureau/District/Work Address:

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

Description Of Duties:

This position is accountable for the supervision and direction of a squad of designers within the Plan Preparations Section of the Bureau of Design; and ensures contract plans for highway improvements are prepared and designed in accordance with departmental policies, specifications, procedures and accepted engineering principles.

Special Qualifications:

Required:

- Current Illinois Professional Engineer license
- Valid driver's license

Desired:

- Six years' experience in civil engineering, including four years of supervisory responsibility, of which three years should be in highway engineering
- Experience in the contract plan preparations of highway improvement projects
- Ability to supervise the work of other engineers and technicians
- Strong oral and written communication skills

Shift/Remarks:

8:00 am - 4:15 pm / Monday - Friday (45-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:	July, 2018	POSITION:	Senior Design Squad Engineer
APPROVED BY:	Ken Eng	OFFICE/DIVISION:	OHPI/Region One/District One/ Bureau of Design
CODE:	PW114-23-51-302-00-01	REPORTS TO:	Plan Preparation Engineer

Position Purpose

This position is accountable for the supervision and direction of a squad of designers within the Plan Preparations section of the Bureau of Design; and ensures contract plans for highway improvements are prepared and designed in accordance with departmental policies, specifications, procedures and accepted engineering principles.

Dimensions

Subordinate Personnel:	6 – 17 Direct
# of Projects Annually:	20 – 30
Dollar Value of Projects Annually:	\$50M - \$70M

Nature and Scope

This position reports to one of three Plan Preparation Engineers. Reporting directly to each of the four Senior Design Squad Engineers are six to ten Designers, four to seven Design Technicians and several outside engineering consultants.

This position is responsible for directing the preparation of contract plans and specifications for major improvement projects, such as freeway and multi-lane repair and reconstruction, major intersection improvements, urban widening and resurfacing, and the widening and repair of structures. These responsibilities are accomplished in a rapidly developing urban and suburban area which is characterized by: high traffic volumes; rapidly changing land use; the existence of large, complex and interconnected roadways; the existence of numerous utility facilities; and a declining availability of rights-of-way. These factors enormously complicate the task of preparing plans and associated contract documents which minimize adverse effects on the environment.

A typical problem of this position is determining the appropriate design procedures and standards to be applied to the preparation of contract plans. This includes: coordinating with the Bureau of Programming to ensure the proper evaluation of Phase I project studies; coordinating with the Bureau of Construction to ensure that the proposed scope of work is compatible with the project site; and providing for the proper coordination with utility companies for the adjustment of utility facilities. Other problems include establishing productivity and work standards for subordinates to measure and evaluate their performance. The greatest challenge to this position is maintaining an effective level of staff performance to ensure timely completion.

The incumbent personally: plans and schedules work, assigning subordinate staff to ensure that established schedules are maintained; monitors work progress and adjusts schedules and work assignments to ensure timely completion; consults with and instructs subordinate staff in the solution of technical problems encountered; ensures that work by other district bureaus for inclusion in the plans is completed on time; reviews final plans, special provisions and associated documents to assure their accuracy and completeness; provides instruction and counseling for subordinate staff; and makes field checks as needed and manages projects that are prepared by consultants.

The incumbent accomplishes his/her accountabilities through the following subordinate staff:

- Designer (6 – 10): is, with varying levels of responsibility, responsible for: preparing design plans for minor highway improvements; reviewing Computer Aided Design & Drafting (CADD) reproduced topography and plot proposed roadway plans and cross sections for use in computing earthwork quantities; solving minor drainage problems; refining geometric layouts, intersection designs and horizontal and vertical alignments; recommending the elements to be included in improvement agreements; and ensuring the accuracy of input for design computer programs.
- Design Technician (4 – 7): is, with varying levels of responsibility, responsible for: checking quantity computations and the drafting of topography on plan and profile sheets; preparing input schedules for computer calculating and the drafting of plans; coordinating proposed roadway improvements with affected local municipalities; preparing data and input for computer programs relative to all phases of plan preparations; and preparing various alternatives such as typical sections, cost comparisons and median and shoulder treatments for supervisory consideration.

The incumbent is given considerable latitude in the interpretation of design policies during contract plan preparation. Occasionally, the complexity of assigned projects results in certain design problems which must be referred to the Plan Preparation Engineer.

Within the district, the incumbent maintains communication with the Bureaus of: Construction, Materials, Land Acquisition, Programming, Maintenance, and Traffic. Outside contracts with local and federal governmental agencies, utility companies, private organizations, engineering consultants and the general public are frequently required. The incumbent also has frequent contact with the central Bureau of Design & Environment.

The effectiveness of this position is measured by the ability of the squad to produce complete and accurate contract plans, specifications and estimates within designated time limits. The degree of difficulty experienced by the Resident Engineer during construction is also used to measure the performance of this position.

Principal Accountabilities

1. Plans, organizes and directs plan preparation to ensure projects are completed in an effective, efficient and timely manner.
2. Ensures that all plans and specifications are in accordance with design policies and procedures.
3. Ensures that other district bureaus complete plan preparation responsibilities to meet established letting dates.
4. Motivates, evaluates, organizes and assigns subordinates to properly perform their duties.
5. Provides subordinates with direction and training necessary for the performance of their duties.
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.