



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: August 7, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement August 8, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Tuesday, August 21, 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 V (2 pos)

Senior CADD Support Specialist
Bureau of Design and Environment
Office of Highways Project Implementation
Springfield

Attachments
43028

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 **Tuesday, August 21, 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 V (2 Positions)	Salary:	\$5,015 - \$7,085*
Position Title:	Senior CADD Support Specialist	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW015-23-75-307-60-01	IPR#:	43028

Office/Central Bureau/District/Work Address:

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

Description Of Duties:

This position performs complex technical support in maintenance and development of bureau and district Computer Aided Design and Drafting (CADD) data processing activities, including development and delivery of technological enhancements. Activities include analyzing and working with various applications, program interfaces, and assorted engineering software and hardware configurations related to CADD; managing the Illinois Department of Transportation's (IDOT) CADD environment, ProjectWise, and the CADD roadway and structures cell libraries; developing the use for, and maintenance of, the IDOT civil cell library; recommending revisions and process improvements to the IDOT CADD Manual; and preparing CADD Highway Standards and other necessary CADD details, when required. This position may also assist districts in the design of roadway plans using CADD.

Special Qualifications:

Required:

- Valid driver's license
- Occasional travel to meetings and training

Desired:

- Completion of three years of college with the major courses of study being in pre-engineering, completion of a two-year program in civil engineering technology or a four-year degree in a scientific program other than engineering
- Twelve years of experience in the management of complex data processing activities and technological systems, with special emphasis on highway design/plan preparation utilizing CADD software applications and management of CADD processes and functions, with a minimum of three years of progressively responsible supervisory experience
- Ability to develop and conduct training classes
- 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:	June 13, 2018	POSITION:	Senior CADD Support Specialist
APPROVED BY:	Dan Mlacnik	OFFICE/DIVISION:	Office of Highways Project Implementation/Bureau of Design and Environment
CODE:	PW015-23-75-307-60-01	REPORTS TO:	Technology Policy & Support Manager

Position Purpose

This position performs complex technical support in maintenance and development of bureau and district Computer Aided Design and Drafting (CADD) data processing activities, including development and delivery of technological enhancements. Activities include analyzing and working with various applications, program interfaces, and assorted engineering software and hardware configurations related to CADD; managing the Illinois Department of Transportation's (IDOT) CADD environment, ProjectWise, and the CADD roadway and structures cell libraries; developing the use for, and maintenance of, the IDOT civil cell library; recommending revisions and process improvements to the IDOT CADD Manual; and preparing CADD Highway Standards and other necessary CADD details, when required. This position may also assist districts in the design of roadway plans using CADD.

Dimensions

Bureau Personnel:	80-90	User Support/Training:	+/- 150
District CADD Managers:	+ 9	Software:	+\$125,000

Nature and Scope

This position reports to the Technology Policy & Support Manager. This position has no subordinates.

This position is impacted by the ever-changing technology of the electronic data processing environment, increasing workloads, and revised workflows. The incumbent provides new or improved information for users through computer application maintenance and development, technical support, and training resulting in improved production for departmental CADD users. The incumbent functions in an environment where both long-and short-term data processing needs must be met. These needs comprise the delivery of permanent information systems, including equipment, training and major system development and implementation, supporting the data processing functions of the department. The rapidly changing technology in computer science, and the frequent enhancement of both hardware and software demands that the incumbent remain proficient in the technical aspects of this position, have a firm understanding of engineering design and CADD software and hardware infrastructure and support, and understand bureau and district design, management, training and support functions.

The greatest challenge of this position is the ability to organize the diversification of departmental programs and technologies regarding need and format without delay to users. Additional challenges of this position are to ensure that correct and accurate CADD standards are produced, that CADD procedures are well developed and documented, and that individual engineering policies are integrated into pertinent departmental software applications. The incumbent must be familiar with the duties and many facets of the bureaus and districts, and with CADD processing systems, software, and equipment. Typical problems include providing expertise in solving complex computer software and hardware issues, developing technical training systems for departmental deployment, and recommending improvement to process deliverables, workflows, and CADD policies used by the bureaus, districts, consultants, and contractors.

This position personally consults with internal personnel to review department functions and work progress and to discuss and resolve work assignments, methods of using the CADD system, and questions regarding correct drafting policies and procedures. S/He actively pursues ways to update staff through training and technical support of new

equipment and software, including GEOPAK, MicroStation, OpenRoads, Autoturn, Microsoft Office, ADOBE Acrobat, and Geographic Information Systems (GIS). This position is responsible for the research, analyzation, development, technical support, user training, and maintenance of information processing systems used within the Bureau of Design and Environment (BDE) in the support of district and central office design functions. These responsibilities include providing department liaison capacity between bureau, district, and consultant users, pertinent department management staff, CADD application software vendors, engineering consultants, contractors, the Information Technology (IT) staff of other departments, and CADD users and managers from other states. The incumbent personally maintains system documentation and interacts with other department staff, Bureau of Information Processing (BIP) and district personnel, and vendor representatives to ensure overall system efficiency and effectiveness. S/He encourages users to work within the limitations set forth by the department's IT policy and reports situations in violation of that policy to the Policy & Procedures Section Chief.

Under general guidance of the Technology Policy & Support Manager, the incumbent is given a wide degree of latitude in the performance of his/her duties referring unusual situations to the supervisor. Controls on this position's freedom to act within his/her realm of responsibility is within the departmental policies and procedures.

The incumbent advises, coordinates efforts, and works closely with bureau and district personnel. External contacts are with other department IT staff, consultants, contractors, vendor representatives, and the general public. This position assists the Technology Policy & Support Manager in a liaison capacity with BIP and other bureaus and districts. The incumbent recommends workflow and policy revisions and updates to the IDOT CADD Manual, and may assist districts in the completion of roadway plans using CADD. Occasional travel is required.

The effectiveness of this position is demonstrated by the ability to provide timely and accurate technical services, information processing applications, policy recommendations, training programs, and deployment of technological advancements which will enable the department to carry out its responsibilities in a more timely and cost-effective manner. The effectiveness is further measured by the results achieved from coordination and communication of issues with department personnel, dissemination of information between vendor representatives and department staff, and implementation of potential solutions to technical problems. The incumbent must maintain confidentiality when dealing with the user's electronic information.

Principal Accountabilities

1. Develops, maintains, and supports CADD applications, including MicroStation, Geopak, OpenRoads, ProjectWise, and Autoturn for bureau and district users. Also uses Microsoft Office applications and GIS as appropriate in developing system needs and priorities, training programs, policy documents, and necessary technical presentations.
2. Determines technical informational system needs and establishes priorities for the diverse users and systems within the department, including contact and dissemination of information with representatives of other state CADD/technology departments, vendors, other agency IT departments, bureaus, and districts.
3. Plans, coordinates, and implements new or enhanced engineering technology systems and policies for departmental usage, and ensures engineering policies are fully integrated into software applications.
4. Assists in maintenance and development of the IDOT CADD environment, cell libraries, and civil cells.
5. Provides oversight and support for district roadway plan preparation and bureau policy development activities, including updates to bureau publications such as the IDOT CADD Manual, IDOT Highway Standards, and CADD drawings in the BDE Manual.
6. Provides department liaison capacity between bureau, central office, district, and consultant users and with pertinent department staff and CADD application software vendors and consultants.

7. Tracks best practices, program deliverables, and/or conducts specialized user training of computerized data and informational systems and works with diversified users both within and outside of the department, keeping all pertinent information confidential.
8. Provides and schedules training to ensure that department technical staff are aware of the capabilities of the engineering computer programs available.
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.