



Illinois Department of Transportation

Memorandum

To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS
From: Dianna L. Taylor
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: July 21, 2016

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement July 22, 2016 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Thursday, August 4, 2016**. Applicants 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.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Jennifer Sunderland or Denise Hamilton at 217/782-5594.

ET IV

Lead CADD Operator
Region 1/District 1/Design
Office of Highways Project Implementation
Schaumburg

Attachments
40924

Technical Applications (PM 1080) **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, August 4, 2016**, 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.



An Equal Opportunity Employer

Position Summary Sheet

Classification:	Engineering Technician IV	Salary Range:	\$4,695 - \$8,775
Position Title:	Lead CADD Operator	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW014-23-51-301-60-01	IPR#:	40924

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 technical duties in the generation of CADD drawings to meet current and future needs of the District. The position assists the CADD Coordinator in the scheduling and establishment of CADD priorities.

Special Qualifications:

The following criteria are desired:

- An associate degree from an accredited two-year civil engineering technology program. Knowledge, skill and mental development equivalent to the completion of two years of college in pre-engineering or civil engineering technology
- Eight years' experience in performing a variety of technical tasks of which at least four years should be related to civil engineering.
- Knowledge of the CADD system and programs; ability to fluently understand and apply tools within MicroStation and GEOPAK
- Considerable experience with civil drafting, highway plans and design, IDOT CADD standards, processing surveys, and defining horizontal & vertical alignments
- Firm understanding in the drafting of detail drawings such as topography, staging, pavement marking and proposed improvement plans as well as existing and proposed cross sections
- Strong oral communication skills are essential

Shift/Remarks:

8:00 am – 4:15 pm / Monday - Friday (45 minute lunch)

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	August 10, 2015	POSITION:	Lead CADD Operator
APPROVED BY:	Ken Eng	OFFICE/DIVISION:	Highways/District One/Schaumburg/Bureau of Design
CODE:	PW014-23-51-301-60-01	REPORTS TO:	CADD Coordinator

Position Purpose

This position is accountable for the technical duties in the generation of CADD drawings to meet current and future needs of the District. The position also assists the CADD Coordinator in the scheduling and establishment of CADD priorities.

Dimensions

Subordinate Personnel:	2
CADD Requests per Year:	1000
CADD Workstations/Plotters:	Workstations – 4-10; Plotters – 2-5
Plan Sheets Produced Annually:	1000-2000

Nature and Scope

This position reports to the CADD Coordinator as do up to five (5) or more other CADD Operators.

This position provides support functions of a technical nature in an ever changing environment to

produce

consistent high quality drawings, exhibits, and documents used by engineering professionals to convey information to contractors, utilities, government officials, attorneys, and laypersons. The drawings reflect work activity in an annual construction program of \$50 million to \$100 million, which frequently changes to meet current needs, but must provide documentation to address concerns that may arise during the long-term life of the project. This position is unique in that the incumbent identifies and advises management of CADD system capabilities, potential for enhancement, and tests any proposed enhancements.

Typical problems encountered by the incumbent include drafting complex highway plans, interpreting and organizing work request instructions in order to meet the designer's needs, assisting the Study and Plans Squads in the use of CADD as a design tool, assisting the CADD Unit Supervisor in keeping abreast of District program priorities to ensure work is properly scheduled, and resolving computer failures and CADD system operational problems in the absence of CADD Coordinator. Complex questions on CADD use by the designers are frequently referred to this position. The greatest challenge in this position is the timely production of high quality presentable plans and exhibits.

The incumbent consults with designers to discuss methods of using the CADD system; answers questions and resolves engineering problems to facilitate the use of the CADD system; and reviews plans produced to ensure that the drafting and related aspects of these plans meet established, accepted drafting, and design procedures and guidelines. A strong technical engineering background is required to enable the incumbent to interpret the design concepts intended by the project creator or designer, and to translate these concepts into plan format to both meet standard conventions and provide clarity to the intended audience. The technical engineering ability is critical to mentally model the desired product and further define unclear ideas or concepts required by the designer.

This position accomplishes its accountabilities through two (2) or more subordinate CADD Operators, who are accountable for the production of correctly drafted work which is requested from various functional units in the District. This position functions as a lead worker to the staff.

The incumbent maintains frequent contact with unit chiefs, section chiefs, personnel in Program Development, and personnel from the Bureaus of Project Implementation, and Operations in order to coordinate the flow of information and the drafting of plan sheets produced in the CADD Unit. External contacts are maintained with other organizations, other public and private, regarding the application of CADD systems to highway engineering work.

The incumbent exercises wide latitude in identifying and solving CADD production problems. The incumbent works directly with managers, supervisors, and designers so that CADD technology is applied in consistent and effective ways in producing drafted final contract plans.

The effectiveness of this position is measured by the incumbent's ability to produce a high volume of complete, correct drafting work within the time constraints imposed by designers and by scheduled letting dates.

Principal Accountabilities

1. Ensure accurate and timely completion of CADD drafting work assigned by the CADD Coordinator.
2. Identify and resolve CADD system problems as encountered.
3. Reviews subordinate performance and provide necessary training for current and new CADD Operators.
4. Motivate and develop subordinate personnel, and review and evaluate their performance.
5. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
6. Performs other duties as assigned.