



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: January 8, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement January 10, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Wednesday, January 24, 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 IV (2 pos)

Senior CADD Technician
Bureau of Bridges & Structures
Office of Program Development
Springfield

Attachments
42416

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 **Wednesday, January 24, 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 IV (2 Positions)	Salary:	\$4,695 - \$6,735*
Position Title:	Senior CADD Technician	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW014-23-65-904-83-01	IPR#:	42416

Office/Central Bureau/District/Work Address:

Office of Program Development / Bureau of Bridges and Structures / 2300 S. Dirksen Parkway, Springfield, IL

Description Of Duties:

This position is responsible for the production of structural Type, Size, and Location (TS & L) plans, structural design plans, 3D structural models, and structural cell libraries using a Computer Aided Design and Drafting System (CADD). This position pursues new methods of detailing and modeling due to the rapid changes in technology and industry.

Special Qualifications:

Desired:

- Associate Degree from an accredited two-year civil engineering technology program or 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
- Experience in 3D modeling using CADD software
- 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:	October 4, 2017	POSITION:	Senior CADD Technician
APPROVED BY:	Jayne Schiff	OFFICE:	Program Development / Bureau of Bridges and Structures
CODE:	PW014-23-65-904-83-01	REPORTS TO:	CADD Manager

Position Purpose

This position is responsible for the production of structural Type, Size, and Location (TS & L) plans, structural design plans, 3D structural models, and structural cell libraries using a Computer Aided Design and Drafting System (CADD). This position pursues new methods of detailing and modeling due to the rapid changes in technology and industry.

Dimensions

Annual number of sheets to be produced:	200-250
Annual contract value:	\$20,000,000

Nature and Scope

This position reports to the CADD Manager.

This position is responsible for the development of planning TS & L's as well as design contract plans for all structure types and complexities. The incumbent develops these plans on CADD by interpretation and utilization of the planning or design computations and through quantity computations performed by the incumbent. S/He performs other technical duties as assigned to accomplish bureau's fiscal commitments.

The greatest challenge of this position is acquiring and maintaining knowledge of currently acceptable detailing methods and design policy while also envisioning the future application of technology changes as they occur and are made available. This requires continual training on various software titles and the attendance of occasional engineering-related seminars or workshops.

The incumbent transforms design computations into complete structural design plans that incorporate all design details, construction dimensions and bid item quantities. The incumbent is required to visualize configurations and design details from Planning TS & L's as well as from information provided by the districts and prepare working drawings which are used during the construction phase of the project. The incumbent develops, through extensive and continuous training, the skills necessary to fully and most efficiently utilize the CADD system in order to produce the complete structural design drawings which are utilized in the contract plans for the construction of bridge and traffic structures. S/He revises and updates existing plans to conform to new specifications and policy changes. This position provides the expertise required in the development and revisions of Highway Standards pertinent to structures. The incumbent is occasionally required to assist the bureau Policy Standards personnel in the development of various standard detail sheets ("base sheets"). These base sheets are used internally during the preparation of structure plans and also by consulting firms preparing structure plans for the Department.

Senior CADD Technician
Office of Program Development/Bureau of Bridges and Structures
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The incumbent has latitude to accomplish daily functions. S/He is constrained by applicable departmental/state/federal policies, practices and guidelines. Matters of a unique nature are referred to the supervisor with recommendations for resolution.

Internal contacts are primarily with members of the Bridge Design and Review and the Bridge Planning Units as well as occasional contact with other departmental bureaus and districts. External contacts include responding to and communicating with consulting firms as detailing questions or concerns arise.

The effectiveness of this position is measured by the incumbent's ability to interpret design computations for structures as well as produce accurate design drawings, standard base sheets and bid quantities.

Principal Accountabilities

1. Produces plan layouts of structural drawings of all types and complexities utilizing the Department's Computer Aided Design and Drafting system (CADD).
2. Assists in the development of a vision for the Bureau of Bridges and Structures due to changes in technology and industry.
3. Produces 3D models of proposed structures as required.
4. Calculates quantities for bid items on contract plans.
5. Develops and maintains standard design base sheets and potential Highway Standards as required.
6. Attends training to increase knowledge and abilities.
7. Revises and updates existing plans to conform to new specifications and policies.
8. Performs duties in compliance with departmental safety rules.
9. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
10. Performs other duties as required or assigned.