



Illinois Department of Transportation

Memorandum

To: DEPUTY SECRETARIES, DIRECTORS AND BUREAU CHIEFS
From: Becky Koehler
Bureau Chief of Personnel Management
Subject: Technical Vacancy
Date: February 5, 2018

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement February 7, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Thursday, February 22, 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 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 VI

Hydraulics Unit Chief
Bureau of Bridges & Structures
Office of Program Development
Springfield

Attachments
42626

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, February 22, 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 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:	Civil Engineer VI	Salary:	\$6,945 - \$8,983*
Position Title:	Hydraulics Unit Chief	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW116-23-65-905-10-01	IPR#:	42626

Office/Central Bureau/District/Work Address:

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

Description Of Duties:

This position is accountable for management of the Hydraulics Unit and hydraulic design of all pumping stations and all bridges and drainage facilities that fall under Bureau of Bridges & Structures' approval authority; and for initiation, development and implementation of drainage policies and procedures.

Special Qualifications:

Required:

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

Desired:

- Ten years' experience in the practice of civil engineering of which at least six years should be in bridges and structures, four years of which should include the planning and supervision of significant engineering work
- Extensive knowledge of civil engineering with an emphasis in hydraulics
- Ability to develop and maintain cooperative work relationships
- Strong oral and 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:	January 2, 2018	POSITION:	Hydraulics Unit Chief
APPROVED BY:	Patrik Claussen	OFFICE:	Program Development/Bureau of Bridges and Structures
CODE:	PW116-23-65-905-10-01	REPORTS TO:	Bridge Planning Section Chief

Position Purpose

This position is accountable for management of the Hydraulics Unit, for the hydraulic design of all pumping stations and all bridges and drainage facilities that fall under Bureau of Bridges & Structures' approval authority and for the initiation, development and implementation of drainage policies and procedures for the Department.

Dimensions

Staff:	1 Direct, 3 Indirect
Bridge Program:	\$130,000,000
Number of Projects: Bridge and Culvert Hydraulic Reports	75+
Special Hydraulic Studies:	10 – 15
Division of Water Resources Permits:	10 – 15

Nature and Scope

This position reports to the Bridge Planning Section Chief. Reporting to this position is the Hydraulics Group Engineer.

This position operates in an environment of accountability for the hydraulic design of all bridges and drainage facilities and of the initiation, development and implementation of all drainage policies of the Department to ensure compliance with applicable Federal and State laws and regulations, sound design practices, public safety and economic considerations. The position ensures that the technical hydrologic and hydraulic procedures used by the Department in the design of highway drainage structures is continually updated to reflect recent technological advances and provide quality design in an efficient, effective and economical manner. This position must respond to emergency maintenance and construction programs with immediate solutions to complicated problems. The incumbent serves as the Department's authority on all drainage matters and s/he is frequently requested to provide technical support for the districts in discussions with legislators, city officials, lawyers, property owners, outside agencies, and consultants.

The greatest challenge to this position is the management of personnel and project work flow to ensure the completion of all hydraulic design work in a timely manner to meet the plan development schedule while developing and maintaining up-to-date drainage policies and procedures which reflect current legal requirements, environmental and social concerns, technical advances, and monetary constraints of the Department. This position is typically called on to interpret revisions in the Federal Highway Administration (FHWA) policies and technical documents and develop or revise drainage policies and procedures to ensure compliance with the mandatory requirements for federal funding; evaluate district requests for deviations from policy for unusual circumstances; and evaluate new methods, technologies and research results that contribute to the preparation of design recommendations. An example of the demanding tasks given this position is the development, implementation and maintenance of a departmental Drainage Manual which will direct the consultants and personnel of the Department in the policies and design procedures for all highway drainage facilities.

This position is responsible for developing and implementing drainage policies and procedures. In addition, the incumbent serves as a liaison with the districts and their consultants in providing interpretations and instructions and in administering department policies, procedures and practices. The incumbent investigates drainage inquiries and complaints and prepares direct replies for the Bureau Chief of Bridges and Structures. The incumbent makes recommendations concerning research needs of the Department to the Bureau of Materials and the Transportation Research Boards. The incumbent may be required to serve as an instructor for the Department's specific task training program and determines course content for the Bridge and Culvert Hydraulics Class and the Fundamentals of Drainage Class. Another responsibility of the incumbent is to approve any changes or additions related to drainage in the Bridge Manual, Standards Specifications for Road and Bridge Construction, Bureau of Design and Environment Manual and the Drainage Manual. This position is also responsible for obtaining, renewing and revising permits for both the Illinois Department of Natural Resources (IDNR) statewide permit program and the regulatory floodplain permit program in a timely manner to ensure that permits are secured prior to the bid letting of projects.

Responsibilities are accomplished through the Hydraulics Group Engineer which is responsible for hydrologic and hydraulic analysis for the design of large and complex drainage systems involving bridges, culverts, detention basins, pumping stations, and storm sewer systems.

The incumbent exercises wide latitude in managing and directing hydraulic responsibilities. The incumbent is expected to pursue all available resources within and outside the Department in the completion of hydraulic responsibilities. The incumbent makes recommendations to the section chief concerning the hiring, disciplining, and training of subordinate personnel. Only matters of a highly sensitive nature are referred to their immediate supervisor for concurrence. The incumbent is a member of the AASHTO Technical Committee on Hydrology and Hydraulics which is charged with the task of writing a series of drainage guidelines for AASHTO and generating NCHRP and FHWA research topics and working with national FHWA staff to guide and inform policies and directives for the state DOT's.

Internal contacts include frequent contact with district personnel in the coordination, investigation and solution of assigned drainage projects and special drainage problems and with the Office of Chief Counsel to provide technical support concerning drainage litigation matters. External contacts include the IDNR for the purposes of negotiating policy matter, securing construction permits, and affecting the satisfactory resolution of cooperative projects; the U.S. Army Corps of Engineers, the U.S. Geological Survey, and the Natural Resources Conservation Service to discuss cooperative projects and to obtain available stream gaging data, design methods and new technologies and federal investigations of the flooding conditions of Illinois streams; and the FHWA. Travel may be required.

The effectiveness of this position is measured by the quality, accuracy and timely preparation of hydraulic reports for bridges, culverts, and special drainage projects on the state highway system; the quality of hydraulic studies; and by the development and successful implementation of practical and acceptable policies and procedures.

Principal Accountabilities

1. Ensures the development of policies and procedures which will yield practical, economical and environmentally acceptable designs meeting the goals and objectives of the Department.
2. Ensures the accurate and timely completion of hydraulic reports for bridges and culvert drainage structures assigned to the Hydraulics Unit.
3. Evaluates and approves hydraulic reports prepared by the districts or consultants.
4. Directs the development of economical and practical solutions to the unique and difficult drainage problems encountered by Central Bureaus of Construction, Operations, Design and Environment, Local Roads and Streets, various districts, and local agencies.
5. Evaluates, initiates and/or approves changes or additions concerning drainage in the Bridge Manual, Standard and Specifications for Road and Bridge Construction, the Bureau of Design and Environment Manual and, as chair of the IDOT Drainage Manual Committee, updates and maintains the IDOT Drainage Manual.
6. Motivates, evaluates and develops staff to maintain a high level of employee morale and work performance.
7. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
8. Performs other duties as assigned.