



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 6, 2018 in the designated areas.

The deadline for applicants to submit their applications for consideration is **4:30 p.m. on Wednesday, February 21, 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 IV

Senior Hydraulics Engineer
Region 2/District 3/Program Development
Highways Project Implementation
Ottawa

Attachments
42529

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, February 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: 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 IV	Salary:	\$5,800 - \$7,515*
Position Title:	Senior Hydraulics Engineer	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW114-23-53-303-40-01	IPR#:	42529

Office/Central Bureau/District/Work Address:

Office Highways Project Implementation / Region 2 / District 3 / Bureau of Program Development / 700 E. Norris Drive, Ottawa, IL

Description Of Duties:

This position is accountable for assisting the Bridge & Hydraulics Engineer in bridge and hydraulic analyses and designs, as well as reviewing and supervising bridge and drainage work completed by staff and consulting engineers.

Special Qualifications:

Required:

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

Desired:

- Six years of experience in civil engineering including four years of supervisory responsibility of which three years should be in highway engineering
- Skill in the design of highways, streets and structures and in making complete engineering plans and specifications
- Ability to resolve complex hydrologic and hydraulic problems or discrepancies
- Strong oral and written communication skills
- Ability to supervise, train, and motivate staff

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 19, 2018	POSITION:	Senior Hydraulics Engineer
APPROVED BY:	Kevin Marchek	OFFICE/DIVISION:	OHPI / Region 2 / District 3
CODE:	PW114-23-53-303-40-01	REPORTS TO:	Bridge & Hydraulics Engineer

Position Purpose

This position is accountable for assisting the Bridge & Hydraulics Engineer in bridge and hydraulic analyses and designs, as well as reviewing and supervising bridge and drainage work completed by staff and consulting engineers.

Dimensions

Subordinate Personnel:	Directly: None Indirectly: 1 – 4 Engineers and Technicians Consulting Engineer Contracts: 5 – 15
Annual Plan Development:	In-House Plans: 12 +/- Consultant Plans: 30 +/-
Annual Plan Value:	In-House: \$4 Million +/- Consultant: \$15 Million +/-

Nature and Scope

This position reports to the Bridge & Hydraulics Engineer. One to four engineers and technicians report to this position on an as-needed basis. The incumbent may also supervise consulting engineers related to bridge and hydraulic studies and reports.

This position assists in the preparation of more complex bridge and hydraulic reports/studies. The incumbent functions in a specialized area which requires specific knowledge and expertise in hydraulic and drainage structure design in addition to knowledge of roadway design. The incumbent operates in a position that requires flexibility due to changing priorities in the Annual and Multi-Year Programs, changes in scope of work of individual projects, and requests for field assistance to solve unexpected bridge and hydraulic-related problems, all which affect plans prepared and the number and type of reports completed. This position also assists in the review of permits and site plans to assure that hydraulically they conform to departmental policies and requirements.

The greatest challenge to this position is to ensure that each drainage structure is designed to serve its intended drainage function while ensuring that traffic flow is minimally affected and legal obligations are met. S/He is also challenged to ensure the design of a cost effective structure which complies with AASHTO, FHWA, and Department policies. Typical problems include maintaining flexibility within this unit to accommodate priority changes and adjusting to the seasonal fluctuation in the size of the workforce.

This position is personally responsible for obtaining the necessary data from field surveys and the drainage manual to prepare accurate hydraulic studies. H/She assists in the determination of more complex drainage requirements and special details required for complete designs and in applying for and reviewing waterway permits from the Regulatory Agencies. The incumbent is also responsible for training and supervising personnel who are assigned to him/her on an as-needed basis. H/She assists the Bridge & Hydraulics Engineer in solving hydraulic design problems, and various structure issues and TS&L's.

The incumbent accomplishes the accountabilities of this position through one to four engineers and technicians on an as needed basis.

In accomplishing the objectives of this position, the incumbent must operate within the limits of the design standards and specifications, hydraulic and bridge design policies, the Illinois highway drainage policies and practices, and the regulations placed on IDOT by the waterway permit agencies. H/She is constrained by all applicable departmental rules and regulations.

The incumbent's contacts include other design squads and units within the Bureau of Program Development to provide hydraulic data for design and project reports; the Bureau of Operations to resolve drainage complaints and issues; and the Bureau of Project Implementation to resolve drainage and bridge problems and review hydraulic studies. Additional contacts are with the Central Bridge Office and consulting engineers to coordinate the status of structure plans and reports and the waterway regulatory agencies to obtain permits. Less frequent contacts are with county and municipal officials and private parties to provide information pertaining to hydraulic improvements. The incumbent will travel district-wide to check sites where hydraulic improvements are being made and to check status of projects.

The effectiveness of this position is measured by the quantity and quality of reports and permits obtained in a timely manner to facilitate the letting of contracts on schedule.

Principal Accountabilities

1. Ensures data collected for hydraulic studies is accurate and complies with design policies, standards, and specifications.
2. Develops more complex hydraulic reports that are used to evaluate the scope of work and the structure type, size, and location using survey information and field trip data.
3. Reviews site developments for hydraulic concerns for the utility and access permit sections.
4. Provides technical review of drainage complaints and provide suggested responses.
5. Applies for required waterway permits and makes any contacts or responses required to obtain them.
6. Trains temporary subordinate personnel.
7. Provides technical review of structure and drainage improvement plans to ensure accuracy and compliance with design standards and specifications.
8. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
9. Performs other duties as assigned or required.