

## Technical Vacancy Announcement

# Civil Engineer Trainee Hydraulics Engineer Trainee (1 position)

 IPR Number:
 43676
 Union Position:
 ⊠Yes
 □No

 Position Number:
 PW110-23-75-905-10-01
 Shift:
 8:00 am - 4:30 pm

Opening Date: September 3, 2019 Monday – Friday

Closing Date: December 2, 2019 Salary: \$4,275 - \$4,655\*

### Office/Central Bureau/District/Work Address:

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

### **Position Purpose:**

This position performs the hydrologic and hydraulic analysis required for the design of bridges and culverts over stream crossings.

#### **Qualifications:**

### Position Requirements:

- Completion of a master's or bachelor's degree in engineering from an ABET accredited college OR a current Engineer Intern License in the state of Illinois (includes those expecting to graduate in fall of 2019 or spring of 2020). (Note: Those applying with only a degree must have a minimum of 2.5 cumulative GPA in engineering related courses. If 2.0-2.5 GPA, applicants must have passed the Fundamentals of Engineering exam)
- Occasional overnight travel is required

### Position Desirables:

Strong oral and written communication skills

#### How to Apply/Remarks:

Technical Applications PM1080 (rev 8/23/19) 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 <a href="mailto:DOT.CO.BPM.EmploymentApplications@lllinois.gov">DOT.CO.BPM.EmploymentApplications@lllinois.gov</a> by 4:30 pm on the closing date listed above. Applications will not be accepted after this date and time. The previous application form revised 6/1/17, will be accepted until 4:30 pm on October 23, 2019.

Agency Contact: Bureau of Personnel Management, 217/782-5594

Unofficial college transcripts must be included with application. Official college transcripts must be submitted upon date of employment. Applicants possessing an Engineer Intern License must also include a copy with application. Applicants not submitting these documents by the posting deadline will not be considered for employment.

To be considered for a permanent position within IDOT, you must either be a US citizen or a non-citizen with permanent work authorization.

Only education/coursework and experience listed within the application will be considered for determining eligibility for this position.

Please be advised that if a high volume of applications is 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.

Applicants will be notified in writing to schedule interviews.

\*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.

Printed 8/22/2019 PM 1862 (Rev. 8/23 )

# ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

DATE:

January 15, 2019

**WORKING TITLE:** 

Hydraulics Engineer Trainee

POSITION

**CLASSIFICATION:** 

Civil Engineer Trainee

OFFICE/BUREAU:

Office of Highways Project Implementation / Bureau of

Bridges and Structures

POSITION NUMBER:

PW110-23-75-905-10-01

REGION/DISTRICT:

n/a

### Position Purpose

This position performs the hydrologic and hydraulic analysis required for the design of bridges and culverts over stream crossings.

### **Dimensions**

Annual projects:

30

### Nature and Scope

This position reports to the Hydraulics Group Engineer. There are no subordinates reporting to this position.

This position operates within an environment of basic hydrologic and hydraulic computations, learning and exercising engineering judgment, and displaying knowledge of hydraulic engineering theory.

The greatest challenge to this position is acquiring the technical knowledge and hydraulic expertise required to properly understand the various complex and unique hydraulic situations encountered. In order to accomplish this purpose, this position must continually strive to be well read and progress with the profession in new and innovative concepts and theories.

This position is personally responsible for assisting with projects of routine complexity. This position provides the hydrologic and hydraulic analysis for highway stream crossings utilizing examples of similar work previously performed. This position's work flow is initiated within the section. The incumbent is assigned hydraulic projects of a simple or routine nature and provides the technical expertise required to complete a detailed hydraulic report containing the necessary analysis and conclusions on such hydraulic features as flood magnitudes and frequencies, pertinent highwater elevations, scour potential and necessary erosion protection, structure skew, pier location and orientation, and effective waterway openings required to pass the design flood with a minimum amount of damage to adjacent property, the stream and floodplain environment, and the highway facility and satisfying project constraints originating from regulatory agencies.

This position functions under direct supervision and approval is required for all decisions.

This position has contact with other units within the bureau as well as district hydraulic staff. Occasional overnight travel is required.

The effectiveness of this position is measured by the technical expertise displayed by the incumbent in the solution of simple hydrologic and hydraulic analysis in the preparation of structure Hydraulic Reports and review of Hydraulic Reports.

### **Principal Accountabilities**

- 1. Understands hydrologic and hydraulic analysis of routine drainage situations.
- Completes Hydraulic Reports with recommendations to supervisor.
- 3. Within the scope of the incumbent's experience, reviews and analyzes Hydraulic Reports prepared by others.
- 4. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
- 5. Performs other duties as assigned.

Subordinates of this position (if applicable, list subordinate information in the chart below)

Position Classification	Position Number	Working Title	Authorized Identical
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### Supervisor of this position

Immediate Supervisor Position Classification: Civil Engineer V

Working Title: Hydraulics Group Engineer Position Number: PW115-23-75-905-10-01

### **Position Requirements**

- Completion of a master's or bachelor's degree in engineering from an ABET accredited college OR a current Engineer Intern License in the state of Illinois
- Minimum 2.5 cumulative GPA in engineering related courses (If GPA is between 2.0–2.5 candidate must have passed Fundamentals of Engineering Exam)
- Occasional overnight travel is required

### Position Desirables

Strong oral and written communication skills

Agency Approvals

Bureau Chieflof Personnel Management

Secretary, Department of Transportation

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