

Job Title: CIVIL ENGINEER TRAINEE- SQUAD ENGINEER TRAINEE - IPR#45347

Agency: Department of Transportation

Closing Date/Time: 11/29/2021

Salary: \$4,365 - \$4,785 Monthly

Job Type: Salaried Full Time

County: Lee

Number of Vacancies: 5

Plan/BU: NR916

DO NOT APPLY ONLINE

****DO NOT CLICK THE APPLY BUTTON****

HOW TO APPLY:

Technical Applications PM1080 (rev 8/21/21) 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 the closing date listed above. The previous application form revised 3/8/21 will be accepted until October 2, 2021. Please visit <https://idot.illinois.gov/about-idot/employment-opportunities/employment/index> to download the Technical Application PM1080.

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.

In an attempt to fill the posted positions, IDOT will contact applicants during the posting period to schedule interviews. All postings will result in three interview pools, with application cut off dates of: September 27, 2021, October 27, 2021 and November 29, 2021. Those applicants that have been deemed qualified and have submitted a completed application with all required attachments will be invited to interview accordingly based on the date their application documents are received.

Please indicate IPR#45347 on the Technical Application PM1080.

Agency Mission Statement

The Illinois Department of Transportation is seeking to hire Squad Engineer Trainees.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

Employees enjoy excellent benefits, including health, vision and dental insurance; a retirement plan and deferred compensation options; state holidays and other time off; tuition reimbursement; flexible schedules; and pre-tax benefit programs. The department also offers extensive training and career advancement opportunities.

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

Job Responsibilities

This is a training position and part of a rotation program. The Squad Engineer Trainee will assist with the inspection and improvements to layouts on various construction projects and with preparation of location studies. They will also help with the preparation of plans for highways, lighting, bridges, landscaping, and resurfacing improvements.

This is an entry-level engineering trainee position. This position is responsible for performing detailed tasks associated with the preparation of design studies, contract plans, and specification for highway improvement plans. Additional responsibilities may include assisting the squad with preparation of exhibits, reports, plan sheets, and documents for highway and bridge improvements.

This position reports to the Squad Engineer and may report to a squad leader on a project basis. No subordinate personnel report to this position.

This position performs in an environment which is sensitive to public and municipal involvement. When proposing roadway improvements, h/she must seek input from all affected parties while remaining within design control value restraints. H/she must also have knowledge of highway technology as it relates to the planning functions of construction, maintenance, and traffic operations. Travel is required to check on project details, meeting with the public at informational meetings, and making field inspections of the various projects. The incumbent of this position performs in an environment of pre-determined and accelerated deadlines. H/She also performs in an area sensitive to quantity errors, incomplete plan assembly, and inadequate design which may result in an incomplete engineer's Cost Estimate, contractors bid or delayed letting schedules.

Understanding the requirements and reasoning behind the selection of specific design standards and providing a high level of accuracy in calculations are the most typical problems encountered by this position. Additional challenges include obtaining field data and properly transferring this data to the plan in a neat, accurate and timely manner. The greatest challenges to this position are learning the processes used for selecting design standards, to learn the plan assembly process, and to accomplish assigned duties in an effective manner to ensure completion of contract plans in time for proposed lettings.

This position is responsible for proposing highway improvements compatible with state policies and within the Design Control Value. This includes layout of design alignments, developing vertical gradelines, determining preliminary design elements, and estimating quantities and costs. All these responsibilities are subject to the review and approval of his/her supervisor. This position is also responsible for the justification and documentation of the proposal through the means of a Project Studies Report. He/she acts as liaison with the public and advises the project studies sub-squad leader of any project detail which could become publicly or ecologically controversial. H/she personally computes and verifies materials and earthwork quantities, establishes horizontal and vertical elevations, and under direction of the Squad Engineer, lends design input to plans.

(Job Responsibilities continued)

In accomplishing the objectives of this position, the incumbent must operate within the limits of prescribed department standards and specifications and the directions of the Squad Engineer. Any problems involving design details, quantity changes or deviations from departmental standards or policies should be referred to his/her supervisor.

Internal contacts include other sections within the Bureau of Program Development for the purpose of obtaining information relative to specific design projects and regarding right-of-way requirements. He/she has occasional contact with the Bureau of Operations for signing requirements and to obtain information regarding maintenance problems and landscaping requirements, and with the Bureau of Project Implementation for soil survey data. External contacts include local, county, and state agencies and the general public affected by the proposed designs being studied.

Performance on the job can be measured best through the quality of computations, roadway designs, and ability to learn the specifics of design report preparation, standard selection, and plan assembly.

Principal Accountabilities

1. Responsible for the preparation, completion, and processing of project studies reports that are technically feasible, cost effective, minimize adverse environmental effects, and are acceptable to the public.
2. Assists the Squad Engineer in the preparation of plans, specifications, and contract documents, while ensuring the proper design of road construction, reconstruction, and rehabilitation projects.
3. Verifies and computes plan quantities and prepares pay item quantity schedules to ensure the accuracy of plan submittals.
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 required.

Qualifications

Position Requirements

- Completion of a bachelor's degree in engineering from an ABET accredited college OR a master's degree in engineering OR
 - includes those expecting to graduate in fall 2021 or spring 2022
- A current Engineer Intern License in the state of Illinois
- Minimum 2.5 cumulative GPA in engineering related courses (If GPA is between a 2.0-2.5, candidate must have passed Fundamentals of Engineering Exam.)
- Valid driver's license.

Position Desirables

- Strong oral and written communication skills.

Work Hours: 8:00 AM - 4:30 PM Monday - Friday

Work Location: Dixon - 819 Depot Ave

Office: Office of Highways Project Implementation/Region 2/District 2/Program Development

Agency Contact: DOT.CO.BPM.EmploymentApplications@Illinois.gov

Job Function: Transportation

Collective Bargaining Agreement language applies to this requisition

We are currently transitioning our application process away from paper process to an electronic application process. This position has not been transitioned please follow the directions below when applying to this position.

Please visit the IDOT website at <http://www.idot.illinois.gov/about-idot/employment-opportunities/employment/index> to obtain the required bid forms and application forms.