

**Civil Engineer Trainee (2 Positions)
Studies and Plans Squad Member Trainee**



IPR Number:	44588	Union Position:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Position Number:	PW110-23-57-303-10-01	Shift:	8:00 am – 4:30 pm Monday – Friday
Opening Date:	August 17, 2020		
Closing Date:	November 16, 2020	Salary:	\$4,365 – \$4,785 *

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation / Bureau of Program Development / Region 4 / District 7 / 400 West Wabash, Effingham, Illinois

Position Purpose:

This is an entry-level, trainee position responsible for performing detailed tasks associated with the preparation of design studies, contract plans, and specifications for highway improvement projects.

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 2020 or spring of 2021)
- Minimum 2.5 cumulative GPA in engineering related courses (If 2.0-2.5 GPA, candidate must have passed the Fundamentals of Engineering exam)
- Valid driver's license

Position Desirables:

- Working knowledge of the routine practices of civil engineering
- Working knowledge of mathematics as applied to engineering activities
- Basic skill in the use of engineering field and office instruments
- Ability to make relatively difficult technical computations and estimates

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 DOT.CO.BPM.EmploymentApplications@Illinois.gov by 4:30 pm on the closing date listed above. Applications will not be accepted after this date and time.

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.

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 16, 2020, October 16, 2020 and November 16, 2020. 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.

*Individual salary offers are computed based on an applicant's qualifications and experience relative to the posted title as well as internal equity of staff in the organizational unit.

**ILLINOIS DEPARTMENT OF TRANSPORTATION
POSITION DESCRIPTION**

DATE:	May 31, 2019	WORKING TITLE:	Studies and Plans Squad Member Trainee
POSITION CLASSIFICATION:	Civil Engineer Trainee	OFFICE/BUREAU:	OHPI/Program Development
POSITION NUMBER:	PW110-23-57-303-10-01	REGION/DISTRICT:	Region 4/District 7

Position Purpose

This is an entry-level, trainee position responsible for performing detailed tasks associated with the preparation of design studies, contract plans, and specifications for highway improvement projects.

Dimensions

Project Studies:	2-3 annually
Contract Plans:	2-6 annually
Contract Value:	\$50,000 to \$60,000,000
Public Meetings:	1-2 annually

Nature and Scope

This position reports to a Senior Project Squad Leader. No subordinates report to this position.

The position may be enrolled in a rotation program and will be assigned to various sections or bureaus in the district. These responsibilities may involve performing various assigned duties within the sections of Programming, Studies and Plans, Project Support, Land Acquisition, Constructions, Materials, Local Roads, Maintenance, Bridges, and Traffic. Upon completion of the rotation program, the district will consider bureau needs and their staffing levels, and work with the incumbent to determine a permanent bureau assignment.

The incumbent is a member of an interdisciplinary study team which is responsible for highway projects from initial planning work through preparation of contract plans and specifications. This function primarily involves tasks assigned by the Squad Leader which may involve review of alternate corridors and alignments for both new highway systems and the reconstruction of existing facilities, and the preparation of contract plans. Contract plans, and the special provisions must be accurate, complete, in accordance with design policy and predetermined schedules, and be done in such a manner that the plans and special provisions are clear in construction phasing and sequence to help contractors in preparing bids. The proposed design plans must be coordinated with other agencies so that completed plans may be ready for letting according to schedule.

Typical problems encountered by the incumbent include developing the parameters for the project studies that need to be made, determining what data is available, developing feasible alternates, resolving technical and procedural problems, developing hydraulic design of culverts and ditches, staging construction work to provide adequate working room for the contractor and to ensure convenience and safety for the traveling public, and coordinating the proposed design with the needs of other agencies. The incumbent's greatest challenge is to provide the most cost-effective design for the proposed transportation facility within the allotted time frames while weighing engineering design factors along with various social, economic, safety, and environmental factors.

Functions personally performed by the incumbent include gathering data for project studies and reports; determining design alternatives; evaluating adequacy, right-of-way requirements, costs, and environmental factors; preparing design reports which document the project study; determining grade lines; conducting

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drainage analysis for storm sewer design; developing special design details; preparing and checking earth work computations; and calculating quantities for all pay items.

The incumbent must perform his/her duties in accordance with the guidelines of the American Association of State Highway and Transportation Officials (AASHTO) Design Manual, the Illinois Department of Transportation Policy and Procedural Manual, and design policies and procedures. This position evaluates alternatives, including solving problems not covered under policies, and makes recommendations to the Squad Leader.

The incumbent has frequent contact with the district Bureaus of Operations and Implementation, as well as virtually every section within Program Development. Coordination outside the department is with outside agencies and property owners.

The effectiveness of this position is measured by the quality and timeliness of corridor, design, and combined reports, and the completion of contract plans and specifications by prescribed letting dates.

Principal Accountabilities

1. Prepares the engineering sections for corridor, design and combined location studies in an accurate and timely manner.
2. Prepares and recommends alternative designs for location studies.
3. Assists with information meetings, public hearings, and presentations to describe projects.
4. Ensures plans prepared are accurate, complete, and in compliance with design standards and specifications, and depict the most cost-efficient design.
5. Coordinates the activities of other sections within the bureau to ensure plans are completed in time to meet prescribed letting dates.
6. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
7. Performs other duties as assigned.

Subordinates of this position

Position Classification	Position Number	Working Title	Authorized Identical
N/A			

Supervisor of this position

Immediate Supervisor Position Classification: Civil Engineer IV

Working Title: Sr. Project Squad Leader

Position Number: PW114-23-57-303-10-01

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 (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.)
- Valid driver's license

Position Desirables

- Working knowledge of the routine practices of civil engineering
- Working knowledge of mathematics as applied to engineering activities
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Agency Approvals

 
Bureau Chief of Personnel Management


Secretary, Department of Transportation