To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS
From: Dianna L. Taylor
        Bureau Chief of Personnel Management
Subject: Technical Vacancy/RECRUITMENT
Date: October 29, 2015

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement October 30, 2015 in the designated areas.

The deadline for applicants to submit their names for consideration is 4:30 p.m. on Friday, November 13, 2015. Applicants will not be accepted after that time and date.

NOTE: College transcripts must be included with application. Applicants possessing an Engineer Intern License must also include a copy with application.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Halie Zulauf or Denise Hamilton at 217/782-5594.

CET Studies and Plans Squad Member Trainee
Region 4/District 7/Program Development
Highways
Effingham

Attachments
40618
Technical Applications (PM 1080) must be received by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) by Friday, November 13, 2015, 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: College transcripts must be included with application. Applicants possessing an Engineer Intern License must also include a copy with application.

Position Summary Sheet

Classification: Civil Engineer Trainee/RECRUITMENT
Position Title: Studies & Plans Squad Member Trainee
Position Number: PW110-23-57-303-10-01

Salary Range: $4,275 - $4,655
Union Position: ☒ Yes ☐ No
IPR#: 40618

Office/Central Bureau/District/Work Address:
Division of Highways/ Region 4/ District 7/ Bureau of Program Development/ 400 West Wabash Ave., Effingham, IL

Description Of Duties:
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.

Special Qualifications:
The following criteria is required:

- A four-year degree from an ABET accredited college or must be a Licensed Engineer Intern in the State of Illinois
- Minimum 2.5 cumulative GPA in engineering related courses
- College transcripts indicating graduation date must be included with application (Official transcripts must be provided at time of hire.)
- Winter 2015 graduates must provide unofficial transcripts indicating graduation date at the time of interview
- Valid driver’s license

The following criteria is desired:
- Strong oral and written communication skills

Shift/Remarks:
8:00 am – 4:30 pm / Monday - Friday

*THIS IS AN ENTRY-LEVEL POSITION*
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
  $50,000 to $60,000,000 in contract value
- Public Meetings: 1-2 annually

Nature and Scope

This position reports to a Senior Studies and Plans Squad Leader or a Studies and Plans Squad Leader as do 10-20 other Studies and Plans Squad Members. There are no subordinates to this position.

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 insure 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 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 AASHTO Design Manual, the IDOT 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 Project 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.