Position: Civil Engineer II

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| **Department:** | Track and Structural Engineer |
| **Location:** | Headquarters |
| **Reports To:** | Manager, Track Engineering |

## POSITION SUMMARY

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| Under general supervision, performs intermediate level professional engineering work of moderate complexity involving the selection and application of engineering techniques, procedures, and criteria for the design, construction and maintenance of transportation infrastructure, track, and facilities projects. Manages routine projects.  |

## PRIMARY RESPONSIBILITIES

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|  | % time |  |
| 1 | 25% | Conducts field surveys to collect environmental data and reviews maps, blue prints, and reports for use in determining line, grade, and angular deviations on infrastructure projects including: drainage and sewage layouts, parking lots, bus terminals, buildings, tracks, etc.  |
| 2 | 25% | Prepares detailed drawings, scope, plans, designs, cost estimates, and specifications for projects of moderate size and magnitude in compliance with general engineering principles and applicable policies, codes, and ordinances. |
| 3 | 10% | Researches information to provide logical comprehensive solutions to moderately complex design, and construction problems. |
| 4 | 10% | Coordinates, schedules, and conducts inspections of work sites to assess project status, identify potential problems, and recommend solutions to keep projects within scope and budget. |
| 5 | 10% | Maintains project records and prepares detailed reports for management review. |
| 6 | 10% | May prepare or assists in preparing specifications for project materials and services. Acts as a liaison between manufacturers, contractors, consultants, and governmental representatives ensuring projects conform to plans, specifications, schedules, and budgets. |
| 7 | 5% | Assists senior level engineers in planning, developing, and coordinating projects.  |
| 8 | 5% | Performs related duties as assigned. |

## CHALLENGES

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| * Designing track components for maximum useful life to limit the disruption to our passengers.
* Keeping abreast of changes in scientific knowledge and engineering technology and utilizing changes in solving theoretical or practical civil engineering problems.
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## EDUCATION/EXPERIENCE REQUIREMENTS

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| * Bachelor’s degree in Civil Engineering or a related field plus two (2) years of related experience or an equivalent combination of training and experience provided the degree requirement is met.
* Valid State of Illinois Driver’s License.
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## PHYSICAL REQUIREMENTS

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| * Requires sitting for extended periods of time, standing, visual acumen, manual dexterity and fingering for working with computer key boards.
* Light physical effort required.
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## KNOWLEDGE, SKILLS, AND ABILITIES

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| * Working knowledge of Physics and construction design.
* Working knowledge of civil engineering principles, methods, and techniques.
* Working knowledge of materials, techniques, and municipal codes and ordinances as applied to design, construction, and maintenance of infrastructure and facilities projects.
* Good math skills including Algebra, Calculus, and geometry.
* Good research, attention to detail, and problem solving skills.
* Good verbal and written communication skills.
* Good surveying skills.
* Good critical thinking skills to assess how one change can affect the entire project.
* Intermediate skill using Auto Cad to create blue prints and schematic drawings.
* Intermediate skill using personal computer, engineering applications, and data management software.
* Intermediate skill using personal computer, engineering applications, and data management software.
* Ability to negotiate and resolve conflict.
* Ability to apply engineering knowledge to moderately complex civil engineering problems with versatility, judgment, and perception.
* Ability to organize, analyze, interpret, and evaluate routine engineering problems and provide practical and cost effective solutions.
* Ability to adapt well to change.
* Ability to work well with others.
* Ability to manage moderately complex engineering projects.
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## WORKING CONDITIONS

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| * General office environment.
* Works outdoors, in or near shop/garage/terminal areas and on elevated or ballasted track areas adjacent to energized contact rails and moving trains.
* Travels within the Chicago Metropolitan area and works various days and hours as assigned.
* Subject to prevailing weather conditions when conducting field inspections.
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## EQUIPMENT, TOOLS, AND MATERIALS UTILIZED

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| Standard office equipmentComputer, engineering software, calculator, technical manuals and survey equipment.  |