**JOB DESCRIPTION** FLSA Status - Exempt

Payroll Classification - Engineer III

No job description for a position can possibly include all duties that may be requested by clients or required by the company. The objective of all positions is to effectively provide the services requested by our internal and external customers. The following is a summary of the major responsibilities of the position.

**Title of Position: Senior Engineer-Structures**

**General Summary:**

Performs a variety of engineering design/check/review and supervisory functions.

**Essential Job Functions:**

* Perform structures engineering design functions without supervision and guidance, including engineering computations, specifications, cost estimates, checking, reviewing, report writing, etc.
* Directly assist Project Engineers and Work Group Leaders on all projects.
* Conduct and/or assist in visits to project sites, project status meetings, and public meetings.
* Assist in developing the skills and knowledge of coworkers.
* Assist with preparation of proposals, letters of interest, supplements, etc.
* Assist in preparation of specifications.
* Review design and/or shop drawings.
* Implement project work plan.
* Keep up-to-date with new design technology, construction equipment, and bridge design/construction advancements.
* Attend field views and meetings as required to provide technical input.
* May act as Work Group Leader on minor projects or portions of larger projects.
* May perform bridge inspection as abilities permit.
* Perform other duties as assigned.

**Knowledge, Skills, and Abilities:**

* Knowledge of PennDOT and other clients’ design manuals, procedures, specifications, standards, computer programs, applicable design codes, engineering software, and plan presentation format.
* Knowledge of technical report writing.
* Ability to use computer software and other online resources.
* Knowledge of Bentley MicroStation and InRoads design software.
* Knowledge of SAI Design and Office Procedures.
* Ability to perform complex structures design tasks independently.
* Ability to supervise other members of the structures design team.
* Ability to communicate with coworkers, clients, and the public in a courteous and professional manner.
* Ability to travel with infrequent overnight stays.
* Ability to check or review design and drawings of structural elements.
* Ability to assemble pre-TS&L, TS&L, and foundation reports.
* Knowledge of construction techniques, particularly regarding construction phasing during construction.
* Skilled in using word processing, spreadsheet applications, Bluebeam, and “MATHCAD.”

**Education and Experience Required:**

* BS degree in civil engineering.
* PE license.
* Minimum four (4) years of progressively responsible structures design experience.
* Attain training prerequisites according to SAI schedules.

**Relationship to Others:**

* Reports to Department Manager-Structures.
* Works with other Engineers, Designers, and Draftspersons.
* Receives assignments from Department Manager-Structures and Project Engineers.
* Receives guidance from Work Group Leaders.
* Provides guidance to Engineers, Designers, and Draftspersons.