

Effective Date: July 4 , 1999

STATE OF WISCONSIN
CLASSIFICATION SPECIFICATION
LIMITED TERM EMPLOYMENT

CIVIL ENGINEER-TRANSPORTATION SET

I. INTRODUCTION

This classification specification is the basic authority under Wisconsin Administrative Code 2.04 and 10.02 for making classification decisions relative to limited-term positions located at the Department of Transportation which function as Civil Engineer-Transportation SETs (Student Engineer Trainees).

II. DEFINITION

CIVIL ENGINEER-TRANSPORTATION SET

This is engineering-related work performed by limited-term employees who are enrolled in a college-level engineering curriculum. Positions allocated to this classification provide engineering support on multi-modal transportation projects and perform assignments in which the trainee applies basic engineering principles. Examples of work performed are:

Project Development

- Works as a member of Department of Transportation staff in the field administration of construction projects.
- Performs routine tests on materials in field laboratory.
- Observes material production and maintains production records.
- Keeps clear and accurate inspection diary records.
- Performs simple, repetitive computations.
- Performs or checks complex computations.
- Assists in the inspection of asphalt and concrete paving.
- Inspects various construction operations, such as gradings and storm sewers.
- Monitors and inventories traffic control devices.
- Inspects curb and gutter, storm sewer, and culvert installations.
- Monitors and inspects scales, ready-mix plants, and aggregate production plants.
- Operates level and transit; holds rod, range pole, or prism; and holds rear end of chain or reading tape when cross-sectioning.
- Assists in measuring various items for payment to contractors.
- Works as a member of a staking crew.
- Calculates alignments and trigonometric problems.
- Uses computers for roadway designs, hydraulic analyses, engineering cost estimates, and contract document development.
- Computes and checks quantities.
- Assists in assembling plans, specifications, and estimates (PS&Es).
- Computes and checks drainage studies.
- Computes and checks plan sheets.
- Assists in the development of roadway alignments and profiles.
- Prepares and checks roadway cross-sections.

- Prepares construction detail drawings.
- Inspects bridge and box culvert construction.

Technical Services

- Performs GPS data collection, data editing, and map composition assignments.
- Performs GIS production-related work, as needed.
- Computes and checks data computations of a routine nature.
- Places right-of-way posts in proper locations, according to right-of-way plat staking plans.
- Holds level, range pole, or prism.
- Takes lead end of chain when measuring distances.

Systems Planning and Operations

- Assists in performing bridge inspections, including conducting bridge deck delamination studies and underwater streambed graphing.
- Assists in developing bridge repair plans.
- Assists in developing traffic-related plans.
- Conducts traffic studies, including radar speed checks and accident analyses.
- Performs field work relating to structures by assisting in survey work for plan preparation and inspecting bridge rehabilitation projects.
- Assists in performing utility inspections, including inspecting utility permit compliance to state utility standards.
- Assists in construction inspection of cost reimbursement contract projects, including construction surveys, collection of materials for testing, and progress reports.
- Assists in organizing data, including converting paper data to digital data, building directory structures, and operating large format scanner.
- Assists in surveillance of state trunk highway system, reporting any safety hazards to area maintenance engineer.

III. QUALIFICATIONS

Minimum requirement: Civil Engineer-Transportation SETs must be enrolled in a college-level engineering curriculum.

IV. ADMINISTRATIVE INFORMATION

This classification was created effective July 4, 1999, and announced in Bulletin CLR/SC-101, in order to identify limited-term positions located at the Department of Transportation which function as civil engineer trainees.

SKN
94290