STATE OF WISCONSIN
CLASSIFICATION SPECIFICATION

COMPUTER AIDED DESIGN AND DRAFTING SYSTEMS SPECIALIST
(CADD SPECIALIST)

CLASSIFICATION SERIES

I. INTRODUCTION

A. Purpose of This Classification Specification

This classification specification is the basic authority under Wis. Admin. Code ER 2.04 for making classification decisions relative to positions primarily responsible for providing computer aided design and drafting (CADD) services on CADD systems, or comparable computer services on comparable systems. This classification specification is not intended to identify every duty which may be assigned to positions allocated to this classification series but is intended to serve as a framework for classification decision making in this occupational area. Classification decisions must be based on the “best fit” of the duties within the existing classification structure. The “best fit” is determined by the majority (i.e., more than 50%) of the work assigned to and performed by the position when compared to the class concepts and definitions of this specification or through other methods of position analysis. Position analysis defines the nature and character of the work through the use of any or all of the following: definition statements; listing of areas of specialization; representative examples of work performed; allocation patterns of representative positions; job evaluation guide charts, standards or factors; statements of inclusion and exclusion; licensure or certification requirements; and other such information necessary to facilitate the assignment of positions to the appropriate classification.

B. Inclusions

Positions allocated to this classification must meet the statutory definition of professional employee, as defined in s. 111.81(5), Wis. Stats. This series encompasses positions that perform computer aided design and drafting services for a majority of their time at a state agency or university.

C. Exclusions

Excluded from this classification series are the following types of positions:

1. Positions that require a Bachelor of Science degree in engineering or equivalent and require a professional engineer responsibility.

2. Positions that do not spend the majority of their time in the operation of a computer aided design and drafting systems or comparable computer systems.
3. Positions using computer aided graphics or drawing systems, but not utilized for highway or building structural designs, and which are more appropriately identified by other classification series such as Graphic Artist.

4. All other positions which are more appropriately identified by other classification series.

D. Entrance Into and Progression Through This Series

Employees typically enter this classification series by competition. Progression to the senior level may occur through reclassification. Progression to the advanced level will typically occur through some form of competition.

II. DEFINITIONS

CADD SPECIALIST

This is entry level work performed under close progressing to limited supervision. Positions at this level receive work assignments which have clearly defined objectives; have specific guidelines and instructions available; may involve complex projects from start to finish; and exercise limited discretion in decision making. The level of involvement in any work assignment is based on an assessment of the employee work by the immediate supervisor.

Positions perform a combination of the following duties: operating a Computer Aided Design and Drafting System (CADDS) work station using interactive Graphics Design Software or comparable computer system; performing manual drafting, and providing technical assistance to produce highway structural plans, building structural plans, or mechanical structural plans, engineering exhibits, detail drawings, and geometric and right-of-way plat sheets.

CADD SPECIALIST SENIOR

This is the objective level for positions which perform the duties identified in the representative positions below. All positions at this level function under general supervision.

Representative Positions:

Department of Administration: This is the objective level for positions which update, reconcile, and maintain space data and space utilization diagrams in a CADDS covering multiple state office buildings and another space management and planning software system. Document system use and reconciliation procedures and train other staff in this review process.

Department of Corrections: This is the objective level for positions which assist the Badger State Industries (BSI) sales staff, state agency representatives and space planners with space and office design layouts; incorporating existing customer equipment, electrical planning and building accommodations into the space plan layout. Provide preliminary and finished office layouts and bills of materials for customer presentation and installation in accordance with the customer’s modular furniture requirements.

Department of Natural Resources: These positions operate CADDS software, gather detailed specifications, and provide technical design assistance for the development and modification of specialized forest fire fighting equipment. Positions utilize basic mechanical design and engineering concepts, principles, associated mathematics, mechanical engineering concepts, metal fabrication, machine and vehicle design,
mechanical drafting rules and processes, technical illustration, hydraulic and electronic logic and standards and alternative methods of water movements relating to fire fighting apparatus to govern design process. May predict vehicle loading and equipment capabilities, write bid specifications for tanks, truck bodies and fire apparatus to be fabricated, and perform manual drafting when necessary.

**Department of Transportation**: These positions operate CADDs software and plotters for the development of a variety of highly complex transportation improvement plans, displays and associated documents. Documents include plan and plat sheets, horizontal and vertical alignments, storm sewer sheets, e-plans, GIS maps, and other public displays. Positions may provide training and direction to engineers on the use of CADDs equipment, policies and practices.

**University of Wisconsin**: This is the objective level for positions which perform mechanical drafting and development duties involving the design of scientific apparatus using CADDs or comparable. Collaborates with customer engineering and scientific staff to develop workable designs and all engineering drawings. Develop bills of materials and cost estimates. Maintain the computer files.

**CADD SPECIALIST ADVANCED**

This is the advanced level for positions which perform the duties identified in the representative positions below. All positions at this level function under general supervision.

**Representative Positions:**

**Department of Transportation**: These positions oversee the technical operation of the CADDs function for a region or bureau and direct employees in design drafting, functioning as a leadworker or sole coordinator in training, scheduling, assigning, and reviewing the work of CADDs units and/or training and reviewing the work of engineers in project development or related units; perform complex layout and detailing work as well as artistic sketches and renditions; operate and direct the operation of CADDs equipment for design drafting of technical plans, topographical layouts, detail sheets and other highway or airport construction documents; serve as the primary resource for questions, issues and problem resolution related to CADDs; and represents the bureau/region in CADDs user group meetings.

**III. QUALIFICATIONS**

The specific qualifications for a position will be determined at the time of recruitment. Such determinations will be made based on an analysis of the goals and worker activities performed, and by identification of the education, training, work or other life experience(s) which provide reasonable assurance that the knowledge and skills required upon appointment have been acquired. Education required may include a two year degree and two years of relevant work experience. Knowledge required may include architect or mechanical design mathematics, surveying nomenclature, highway or building structural engineering concepts, computer literacy, manual drafting and reading/comprehension techniques.

**IV. ADMINISTRATIVE INFORMATION**

This classification series was created effective October 12, 1997, and announced in Bulletin CC/SC-74 to describe positions which perform computer aided design and drafting work for a majority of the time. The creation of this classification series resulted from the Governor’s Human Resource Reform Commission recommendation to simplify the classification system. This action resulted in the abolishment of the CADD Specialist classification series (class codes 26001 through 26006).
This classification series was modified effective February 23, 2014, and announced in Bulletin OSER-0359-MRS/SC to include positions that update, reconcile, and maintain space data and space utilization diagrams at the Department of Administration.

This classification series was modified effective December 2014, and announced in Bulletin OSER-0384-CC/SC to create an Advanced level to replace the Advanced 1 and Advanced 2 levels.

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