# State of Michigan Civil Service Commission

Position Code 1. ENGSPL2

Capitol Commons Center, P.O. Box 30002 Lansing, MI 48909

# **POSITION DESCRIPTION**

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position. 8. Department/Agency 2. Employee's Name (Last, First, M.I.) MIL AFFR CENTRAL OFFICE 3. Employee Identification Number 9. Bureau (Institution, Board, or Commission) MI ARMY NATIONAL GUARD (MIARNG) 4. Civil Service Position Code Description 10. Division CONSTRUCTION & FACILITIES MANAGEMENT OFFICE Engineering Specialist 2 (CFMO) 5. Working Title (What the agency calls the position) 11. Section Engineering Specialist 13 Design 6. Name and Position Code Description of Direct Supervisor 12. Unit JORGENSEN, JON D; STATE ADMINISTRATIVE **CFMO** MANAGER-1 7. Name and Position Code Description of Second Level Supervisor 13. Work Location (City and Address)/Hours of Work HOUSE, SCOTT; NONSTATE SUPERVISOR 3423 N MARTIN LUTHER KING JR; LANSING, MI 48906 / 7:45 A.M. TO 4:30 P.M. M-F

# 14. General Summary of Function/Purpose of Position

This position serves as the second-level electrical engineering specialist for the Department of Military and Veterans Affairs (DMVA) within the Construction and Facilities Management Office (CFMO). As a recognized technical expert, the incumbent performs advanced and highly complex work involving the design, review, and implementation of electrical systems for state and federally funded construction projects across Michigan Army National Guard facilities.

The employee functions as a statewide resource in electrical engineering, applying independent judgment to solve challenging design and field problems, advising leadership on energy resilience and infrastructure improvements, and ensuring compliance with applicable codes and standards. This position requires professional expertise in facility-scale power systems, emergency generation, lighting, and low-voltage infrastructure. The incumbent also leads the integration of carbon reduction and energy resilience strategies consistent with state and federal goals.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

#### Duty 1

General Summary: Percentage: 70

Serve as lead electrical engineer and provide technical oversight for building electrical system design and interdisciplinary coordination within the CFMO design section.

#### Individual tasks related to the duty:

- Independently design and prepare construction drawings/specs for facility power distribution, lighting, emergency power, low-voltage, and communication systems.
- Use AutoCAD to develop construction drawings which includes including plans, details, and riser diagrams in accordance with applicable codes and UFC criteria.
- Prepare project specifications for all pertinent electrical sections of a project manual.
- Ensure electrical scopes integrate with architectural, mechanical, security and other related design efforts.
- · Review consultant drawings for accuracy and technical compliance.
- Review architectural and mechanical plans for coordination and code compliance.
- Provide code interpretation for NFPA, NEC, UFC, and related standards.
- · Coordinate with federal (e.g., NGB) and state stakeholders to ensure design intent is met.
- Lead internal reviews and provide technical input during early design phases.
   Provide expert consultation on complex electrical system upgrades, alternative energy readiness, and energy resilience goals.
- Develop and maintain internal design guides and standard specifications.
- · Support agency priorities related to energy modernization, carbon reduction, and sustainability.
- · Represent the agency in technical working groups or interagency coordination on electrical infrastructure.
- Substantial and regular driving throughout the State of Michigan.

#### Duty 2

General Summary: Percentage: 20

Support construction activities by reviewing and validating electrical components during active projects and sometimes existing or past projects. This position provides essential oversight and quality control during construction, ensuring adherence to design specifications, energy efficiency standards, and budgetary constraints through active participation in the construction process and technical guidance to contractors.

### Individual tasks related to the duty:

- · Participate in construction meetings, both on-site and remotely, to communicate best practices, project intent, and to clarify electrical design intent.
- Review shop drawings, electrical submittals and respond to RFIs for electrical scope items to ensure compliance with project specifications.
- · Troubleshoot electrical system installation concerns and coordinate field solutions with contractors and consultants.
- · Conducting field inspections and verify installation against contract documents.
- Approve contractor pay applications specific to electrical scope compliance.
- Maintain project folders with current versions of electrical drawings and related correspondence to ensure project documentation is properly contained within the project files.

## Duty 3

General Summary: Percentage: 10

Project close-out and as-built review: ensure completed projects meet performance and documentation standards.

#### Individual tasks related to the duty:

- Review and verify electrical as-built drawings and O&M data during project closeout.
- Participate in punch list and system commissioning review.
- · Assist with lessons learned documentation and identify standard detail updates.
- Support transition of new systems to facility maintenance teams.
- Provide technical support during commissioning and system start-up.
- Archive closeout documents and submit required reports to stakeholders.
- Other duties as assigned.

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| o. | . Describe the types d | of decisions made inde | penaently in this p | osition and tell who of | r what is affected by | those decisions.  |

Make independent technical decisions on a daily basis related to design, code compliance, constructability, and project coordination. These decisions directly affect the safety, functionality, and cost of building systems within Department of Military and Veterans Affairs (DMVA) facilities statewide.

Typical independent decisions include:

- Selecting appropriate electrical equipment, materials, and distribution strategies during design development
- Interpreting and applying electrical code and UFC criteria without supervisory direction
- Identifying constructability concerns and resolving design conflicts between disciplines
- Determining corrective actions in response to construction field conditions or RFIs
- Assessing contractor submittals for compliance with contract documents
- Advising agency leadership on technically complex infrastructure projects, energy resilience upgrades, and system replacements

These decisions impact a wide range of stakeholders, including building occupants (e.g., National Guard units and veterans), construction contractors, design consultants, facility maintenance personnel, and agency budget managers. Errors or poor judgment could result in unsafe systems, schedule delays, rework, or budget overruns.

Due to the technical depth and scope of the position, the incumbent must be able to function autonomously while maintaining alignment with agency standards and mission objectives.

## 17. Describe the types of decisions that require the supervisor's review.

While the incumbent operates with a high degree of autonomy, the Design Manager reviews decisions that involve significant financial implications, departures from established codes or agency standards, or projects with heightened visibility or complexity. Supervisor input is also required for:

- Scope changes that affect budget or schedule
- Selections of non-standard equipment or materials
- Interpretation of unclear policies or Unified Facilities Criteria
- · Resolution of consultant or contractor disputes involving risk or liability
- Cross-disciplinary decisions that impact other design or operations teams

The level of review is proportional to the sensitivity or impact of the issue. The Design Manager provides broad oversight while reserving direct involvement for those decisions with potential enterprise-level consequences or where elevated coordination is needed.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

This position requires a blend of office-based work and field activity. Approximately +90% of the employee's time is spent performing sedentary work at a desk, involving prolonged periods of sitting, computer use, and reviewing plans or technical specifications. The role also includes routine walking within office environments and construction sites.

The remaining 10% involves travel throughout the state for project site visits, inspections, meetings, and field assessments. This includes:

- Daily walking and occasional standing for extended periods during field investigations and site walks (moderate intensity)
- Occasional climbing of stairs, ladders, or scaffolding to access rooftops, equipment platforms, or mechanical spaces
- Occasional lifting of materials, equipment, or plan sets up to 20 lbs.
- Driving long distances to reach remote locations possibly in inclement, unpredictable weather conditions; occasional overnight travel is required for project oversight or training

Employees may be exposed to adverse weather conditions (rain, heat, cold, snow), as well as dusty, noisy, or uneven terrain typical of active construction environments

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

| 20. This position's | s responsibilities for the above-listed employees includes | the following (check | as many as apply): |
|---------------------|--|----------------------|--------------------|
| N                   | Complete and sign service ratings.                         | N                    | Assign work.       |

N Provide formal written counseling. N Approve work.

N Approve leave requests. N Review work.

N Approve time and attendance. N Provide guidance on work methods.

N Orally reprimand. N Train employees in the work.

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes, manager developed PD.

#### 23. What are the essential functions of this position?

This position serves as the subject matter expert/second level specialist in electrical engineering for the Michigan Department of Military and Veterans Affairs (DMVA), performing complex design, analysis, and coordination duties related to the planning, development, and execution of electrical systems in state and federally funded construction projects. The incumbent is responsible for producing and reviewing AutoCAD-based construction documents, technical specifications, and code-compliant designs for National Guard facilities and support infrastructure across the state. Essential functions include:

- Project Design & Technical Expertise: Independently develop and review construction documents for power distribution, lighting, controls, backup power systems, and renewable energy integration in compliance with applicable codes and state/federal funding requirements.
- Construction Administration: Provide technical oversight during bidding, construction, and closeout phases. Responsibilities
  include submittal review, field observation, and resolving conflicts between design intent and field conditions. Required
  regular and substantial driving throughout Michigan.
- Strategic Policy Integration: Support implementation of state and federal sustainability, energy resilience, and carbon reduction goals within project designs. This includes integrating systems that promote electrification, renewable power (solar, backup systems), and grid resilience for critical infrastructure.
- Interdisciplinary Collaboration: Coordinate with internal architecture and engineering staff, consultants, and federal and state agencies to ensure unified project delivery, while maintaining compliance with the Army National Guard's Real Property and Construction standards.
- Facility Modernization Support: Provide leadership in facility assessment and modernization planning, supporting long-term infrastructure investment goals, such as the Armory Transformation Initiative and MI Healthy Climate Plan targets.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

**New Position** 

#### 25. What is the function of the work area and how does this position fit into that function?

This position functions as a second-level electrical engineering specialist within the CFMO Design & Project Management team. It directly supports the office's mission by providing advanced technical expertise in power distribution, lighting systems, emergency backup power, and electrical integration of sustainable technologies such as solar and battery storage. The role leads design development in AutoCAD, ensures adherence to current codes and standards, and provides oversight throughout construction and closeout phases.

Additionally, the position helps fulfill broader State of Michigan goals related to carbon reduction, energy resiliency, and infrastructure modernization—priorities set by the Governor and supported by the Michigan National Guard. The engineer's work strengthens CFMO's capacity to deliver complex capital projects efficiently and in alignment with state energy and climate objectives.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

# EDUCATION:

Possession of a bachelor of science degree in engineering.

**EXPERIENCE:** 

## **Engineering Specialist 13**

Four years of professional experience equivalent to an Engineer, including two years equivalent to an Engineer P11 or one year equivalent to an Engineer 12.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge of methods of planning, developing, and administering programs.
- Knowledge of state, federal, and local laws, and legislative processes related to the work.
- Knowledge of the need, preparation, and use of reports.
- Knowledge of the principles and practices of engineering.
- Knowledge of terminology and symbols used in engineering, drafting, and design.
- Knowledge of the equipment, testing, and investigative methods and laboratory procedures related to environmental engineering.
- Knowledge of engineering office practices.
- Ability to perform research work and to make comprehensive recommendations on engineering issues.
- Ability to make mathematical computations and to design engineering projects.
- Ability to read, interpret, and prepare engineering plans, specifications and technical reports.
- Ability to organize, evaluate, and present information effectively.
- Ability to communicate effectively with others.
- Ability to maintain favorable public relations.

#### CERTIFICATES, LICENSES, REGISTRATIONS:

Ability to obtain and maintain a Common Access Card (CAC) issued by the federal government requiring a background check.

Maintain a valid Driver's License.

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

| I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position. |           |  |  |  |  |  |
|--|-----------|--|--|--|--|--|
| Supervisor   | Date      |  |  |  |  |  |
| TO BE FILLED OUT BY APPOINTING AUTHORITY   |           |  |  |  |  |  |
| Indicate any exceptions or additions to the statements of employee or supervisors. $\label{eq:NA} N/A$   |           |  |  |  |  |  |
| I certify that the entries on these pages are accurate and complete.   |           |  |  |  |  |  |
| MEGHAN FORD  | 9/26/2025 |  |  |  |  |  |
| Appointing Authority   | Date      |  |  |  |  |  |
| I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position. |           |  |  |  |  |  |
| Employee   | Date      |  |  |  |  |  |