

## 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.	
<b>2. Employee's Name (Last, First, M.I.)</b>	<b>8. Department/Agency</b> Transportation
<b>3. Employee Identification Number</b>	<b>9. Bureau (Institution, Board, or Commission)</b> Highway Operations
<b>4. Civil Service Position Code Description</b> Transportation Engineer E	<b>10. Division</b> Grand Region
<b>5. Working Title (What the agency calls the position)</b> Region Signals Engineer	<b>11. Section</b> Operations
<b>6. Name and Position Code Description of Direct Supervisor</b> PEPLINSKI, SUZETTE R; ENGINEER MANAGER LICENSED-3	<b>12. Unit</b> Traffic Safety and Operations
<b>7. Name and Position Code Description of Second Level Supervisor</b> TELLIER, THOMAS; STATE ADMINISTRATIVE MANAGER-1	<b>13. Work Location (City and Address)/Hours of Work</b> 1420 Front Ave. NW, Grand Rapids MI 49504 / 7:30 a.m. - 4:30 p.m. M-F Hours may vary
<b>14. General Summary of Function/Purpose of Position</b>	
<p>This position assists with coordinating and enhancing region traffic signal maintenance and operations and supports traffic signals activities for Grand Region and Transportation Service Center (TSC) staff, including signal systems such as Centracs, Signal Asset Management, and other systems. This could include support of Connected and Automated Vehicles (CAV) , Intelligent Transportation Systems (ITS) and Electrification activities in the region. This position also supports traffic signal maintenance by working with region electricians, vendors, and local agencies. This position works closely with the other region Traffic Safety &amp; Operations staff to advance arterial management and traffic operations throughout the region.</p> <p>This position requires possession of a valid driver's license to visit project sites within the Grand Region.</p>	

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: 35**

Support region traffic signal maintenance activities.

This duty requires possession of a valid driver's license to visit project sites.

**Individual tasks related to the duty:**

- Under direction of the region Traffic Safety and Operations (TSO) Engineer, coordinate regionwide traffic signal maintenance efforts.
- Meet and communicate with field maintenance personnel regarding ongoing signal maintenance.
- Review email infrastructure staking requests for traffic signal and other electronic device infrastructure, working with region electricians and vendors to ensure timely response to requests.
- Work with the TSO Engineer and Region Electricians to determine and document proactive and reactive signal maintenance activities.
- Prepare scoping documents and cost estimates and communicate with vendors to assist the TSO Engineer with traffic signal maintenance, including documenting communication.

**Duty 2**

**General Summary:**

**Percentage: 30**

Assist with region traffic signal operations and the operations of other electronic traffic control devices.

This duty requires possession of a valid driver's license to visit project sites.

**Individual tasks related to the duty:**

- Coordinate information between central office and region signals staff and respond to inquires.
- Under direction from region and TSC staff, assist with traffic signal studies and analysis, including data collection and modeling which involves the use of various data collection equipment and software.
- Attend plan review meetings, review project details, and ensure coordination with other planned and ongoing activities.
- Attend meetings and field reviews to assist TSCs with signal modernization projects.
- Use Centracs (or the Michigan Department of Transportation's (MDOT's) current central signal control system) to develop reports.
- Gather data to develop Signal Performance Measures.
- Support active traffic signal monitoring in the West Michigan Transportation Operations Center (WMTOC) by gathering and organizing data for the WMTOC and TSO Engineers.

**Duty 3**

**General Summary:**

**Percentage: 20**

Assist with traffic signal asset management.

**Individual tasks related to the duty:**

- Enter and update MDOT's signal asset management system with information gathered or provided by region electricians, TSCs, and local agencies.
- Assist region electricians with gathering and organizing field data regarding traffic signals and electronic traffic control devices.
- Enter data to update system mapping.
- Assist the region Traffic Safety and Operations Engineer with the preparation and submittal of the region projects for the annual traffic signals Call For Projects, including preparing project scoping and proposal documents.
- Research and recommend ideas for new innovative projects. Prepare white papers or proposals under direction of others in the Traffic Safety and Operations unit.
- Attend seminars and training as necessary to gain knowledge for improving system performance and safety, and to stay informed on new developments to traffic signal technology.

**Duty 4**

**General Summary:**

**Percentage: 15**

Support data coordination for Transportation System Management & Operations (TSMO) activities.

**Individual tasks related to the duty:**

- Attend training to gain proficiency in the use of Synchro (or other applicable software) for modeling traffic operations.
- Complete training to gain proficiency in use of the Regional Integrated Transportation Information System (RITIS) software platform for analysis and reporting of transportation data.
- Gather and prepare reports for incoming and outgoing data and prepare required performance measures within the region.
- Prepare reports for various operations studies and activities.
- Crosstrain with other region operations staff.
- Participate in Region work zone safety and mobility review and data needs.
- Assist with other coordination and duties in support of the region Traffic Safety & Operations section, including region efforts in the CAV and Electrification areas by researching technical information, assisting with proposals, and preparing presentation materials.

**16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.**

Decisions involve standard practices, procedures, and policies applying engineering principles and practices consistent with MDOT, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials (AASHTO) standards and guidelines.

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

- When there is deviation from the established procedures or situation arises that has not been dealt with before.
- When changes in policy are required or existing policy is unclear.
- Changes in previously approved project scope, cost, or schedules.
- Conflicts in engineering standards, practices, or legal requirements.
- Issues that may have State-wide impacts or could be precedent-setting.
- When a decision may be required from an executive level.

**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.**

Field work for site reviews requires exposure to live traffic, and exposure to the natural elements. Ability to traverse various terrain, transport materials up to 25 pounds, and may require extended periods of time working on a computer. This position requires possession of a valid driver's license and may require travel to meetings statewide. Position may require availability outside normal working hours based on operational needs.

**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 responsibilities for the above-listed employees includes the following (check as many as apply):**

- |   |  |
|---|--|
| <input type="checkbox"/> Complete and sign service ratings. | <input type="checkbox"/> Assign work.                      |
| <input type="checkbox"/> Provide formal written counseling. | <input type="checkbox"/> Approve work.                     |
| <input type="checkbox"/> Approve leave requests.            | <input type="checkbox"/> Review work.                      |
| <input type="checkbox"/> Approve time and attendance.       | <input type="checkbox"/> Provide guidance on work methods. |
| <input type="checkbox"/> Orally reprimand.                  | <input type="checkbox"/> 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.

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

This position assists with coordinating and enhancing region traffic signal maintenance and operations and supports traffic signals activities for Grand Region and Transportation Service Center (TSC) staff, including signal systems such as Centracs, Signal Asset Management, and other systems. This could include support of Connected and Automated Vehicles (CAV) and Electrification activities in the region. This position also supports traffic signal maintenance by working with region electricians, vendors, and local agencies. This position works closely with the other region Traffic Safety & Operations staff to advance arterial management and traffic operations throughout the region.

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

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

This position is within the Region Traffic Operations Unit which coordinates the traffic operations activities within the region, including Traffic Safety activities, system mobility, WMTOC, Intelligent Transportation System (ITS) technologies, and Traffic Signals. This position is a critical component of the region's operational initiatives consistent with the department's direction. The position works with TSC, Region, State, and transportation stakeholders to improve operations of the state roadway system to enhance mobility, modal connectivity, and safety.

**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:**

**Transportation Engineer 9**

No specific type or amount is required.

**Transportation Engineer 10**

One year of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer 9.

**Transportation Engineer P11**

Two years of professional engineering experience involved in transportation systems and programs equivalent to a Transportation Engineer, including one year equivalent to a Transportation Engineer 10.

**KNOWLEDGE, SKILLS, AND ABILITIES:**

Knowledge of:

- the requirements of the design, construction, and maintenance of transportation projects. Must possess effective organization, team building, facilitation, leadership, and communication skills both verbal and written
- traffic engineering practices and procedures
- computer applications and use

Ability to:

- interpret, and prepare engineering plans, specifications, and technical reports
- use relevant computer programs
- organize, evaluate, and present information effectively
- establish and maintain good partner relationships
- communicate effectively both orally and in writing
- establish and maintain favorable customer relations
- provide excellent customer service

**CERTIFICATES, LICENSES, REGISTRATIONS:**

- Possession of a valid driver's license is required.

**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.

***I certify that the entries on these pages are accurate and complete.***

\_\_\_\_\_  
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